

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules; Comins III, James C., DGF](#)
Subject: Fwd: B&C RULE—Letter—Daniel Tichenor - Oct 10, 2019
Date: Thursday, October 10, 2019 3:27:01 PM
Attachments: [B&C RULE—Letter—Daniel Tichenor - Oct 10 2019 - 3-18 PM.pdf](#)
[ATT00001.htm](#)

Joanna Prukop

Sent from my iPad

Scanned with TurboScan.

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules; Comins III, James C., DGF](#)
Subject: Fwd: B&C RULE—Letter-David L Heft - Oct 10, 2019
Date: Thursday, October 10, 2019 3:25:47 PM
Attachments: [B&C RULE—Letter-David L Heft - Oct 10 2019 - 3-15 PM.pdf](#)
[ATT00001.htm](#)

Joanna Prukop

Sent from my iPad

Scanned with TurboScan.

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Killing any living being indigenous to the Americas should be illegal
Date: Wednesday, August 07, 2019 6:13:26 PM

NMDGF:

I am against the killing of any sentient beings in this Creation unless one is defending against direct attack, or is without food and must kill to survive. For the purpose of this email, I will merely emphasize the findings of APNM:

The Bear & Cougar rule dictates if and how bears and cougars can be killed in New Mexico. After years of pressure from Animal Protection of New Mexico's *Stop Cougar Trapping* campaign, the NMDGF is now taking steps to walk back its damaging 2015 rule changes, but there are more protections for cougars and bears needed.

I urge the NMDGF to:

1. **Eliminate ALL recreational cougar trapping.** Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.
2. **Reduce annual cougar kill limits.** The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on best available science to protect and conserve the notoriously hard-to-count cougar.
3. **Undo the double bag limits for cougars.** Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.
4. **Reduce annual bear kill limits.** Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.

Sincerely,

Yvette Tapp
[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Date: Tuesday, August 13, 2019 11:56:18 AM

I am against any ban on cougar trapping.

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: New Mexico's cougars and bears
Date: Thursday, August 08, 2019 11:44:35 AM

Dear New Mexico Department of Game and Fish:

1. **Eliminate ALL recreational cougar trapping.** Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.
2. **Reduce annual cougar kill limits.** The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on best available science to protect and conserve the notoriously hard-to-count cougar.
3. **Undo the double bag limits for cougars.** Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.
4. **Reduce annual bear kill limits.** Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.

Regards,
Debi A. Griepsma

[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: NEW RULES AND BAG LIMITS
Date: Thursday, August 08, 2019 10:10:35 AM

It is outrageous and bad science that at a time when so much of New Mexico's wildlife is stressed from droughts, fires and development you would even consider raising bag limits on bears and cougars. In addition, allowing horrible, indiscriminate, inhumane traps ANYWHERE for ANY reason is unconscionable. Please consider the following:

1. **Eliminate ALL recreational cougar trapping.** Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.
2. **Reduce annual cougar kill limits.** The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on best available science to protect and conserve the notoriously hard-to-count cougar.
3. **Undo the double bag limits for cougars.** Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.
4. **Reduce annual bear kill limits.** Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.

Sandra Jackson

[REDACTED]

[REDACTED]

Sent from [Mail](#) for Windows 10

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: No scientific reason to ban trapping of mountain lions
Date: Monday, August 12, 2019 8:44:53 AM

NM Game Commission,

There is no scientific reason to ban trapping of cougars, especially when trapping helps mitigate the loss to livestock and contributes to sound wildlife management practices and is supported by science. I hope the commission will vote against this rule. Trapping plays an important role in wildlife management.

Although trapping does not represent a large proportion of cougars taken, the state has been unable to meet harvest targets in many years. Cougars are increasingly involved in dangerous interactions with pets and even people, and are a natural predator for many wildlife species, including wild sheep, elk and mule deer; which makes the decision to ban trapping highly questionable.

New Mexico's political leadership is clearly targeting public-land hunters and trappers.

According to the New Mexico Department of Game & Fish (NMDGF), there are between 3,000 and 4,000 cougars in the state. Cougar harvest numbers, which are set by the New Mexico State Game Commission, have not reached state maximum thresholds since 2016. As a result, cougar numbers continue to increase and are becoming a greater threat to people, pets, livestock and populations of prey species.

In 2015, the United States Department of Agriculture found that cougars were the third largest threat to cattle in New Mexico. Banning trapping on private and public lands will likely increase livestock depredation by cougars because New Mexico ranchers often use state trust lands for grazing.

DO NOT PUT POLITICS ABOVE SCIENCE as you cast your vote that will affect all New Mexico residents. USE YOUR GOD GIVEN COMMON SENSE.

Thank you,

Jayson L. Grover, P.E.
[REDACTED]



From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#); [goose miller](#); [joe clayshulte](#); [daniel carver](#); [Steven Lines](#); [steven gomez](#); [Chris Cothran](#); [mouse](#); [Jake Pena](#)
Subject: OPPOSE ban of mountain lion trapping
Date: Monday, August 12, 2019 8:47:22 AM

NM Game Commission,

There is no scientific reason to ban trapping of cougars, especially when trapping helps mitigate the loss to livestock and contributes to sound wildlife management practices and is supported by science. I hope the commission will vote against this rule. Trapping plays an important role in wildlife management.

Although trapping does not represent a large proportion of cougars taken, the state has been unable to meet harvest targets in many years. Cougars are increasingly involved in dangerous interactions with pets and even people, and are a natural predator for many wildlife species, including wild sheep, elk and mule deer; which makes the decision to ban trapping highly questionable.

New Mexico's political leadership is clearly targeting public-land hunters and trappers.

According to the New Mexico Department of Game & Fish (NMDGF), there are between 3,000 and 4,000 cougars in the state. Cougar harvest numbers, which are set by the New Mexico State Game Commission, have not reached state maximum thresholds since 2016. As a result, cougar numbers continue to increase and are becoming a greater threat to people, pets, livestock and populations of prey species. In 2015, the United States Department of Agriculture found that cougars were the third largest threat to cattle in New Mexico. Banning trapping on private and public lands will likely increase livestock depredation by cougars because New Mexico ranchers often use state trust lands for grazing.

DO NOT PUT POLITICS ABOVE SCIENCE as you cast your vote that will affect all New Mexico residents. USE YOUR GOD GIVEN COMMON SENSE.

Thank you,

Jayson L. Grover, P.E.

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Please please stop hurting wild life !!
Date: Wednesday, August 07, 2019 10:47:03 PM

How can anyone in their right mind hurt these animals? oh I know the NRA wants to sell guns or Walmart wants to sell traps and poisons ya real smart , does everything have to be about money? I know one thing I'd rather have 7 billion wild life on this planet then 7 billion polluting humans that's for sure . This earth belongs to other species besides the human vermin and Mother Nature has them all here for a reason stop playing God and leave them alone !

Thank you
Sent from my iPhone

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Please update protection for bears and cougars
Date: Wednesday, August 07, 2019 2:18:03 PM

1. **Eliminate ALL recreational cougar trapping.** Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. **The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.**
2. **Reduce annual cougar kill limits.** The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on best available science to protect and conserve the notoriously hard-to-count cougar.
3. **Undo the double bag limits for cougars.** Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.
4. **Reduce annual bear kill limits.** Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.

Thank you for considering updating our laws to reflect current data and concerns of New Mexicans.

Dorothy Brown

Sent from [Mail](#) for Windows 10

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Proposed Changes To the Bear and Cougar Rules
Date: Wednesday, August 07, 2019 10:13:28 PM

1. **Eliminate ALL recreational cougar trapping.** Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. Sport Harvesting? Is that what we call animal cruelty now? NO! Traps and snares do not belong ANYWHERE!

2. **Reduce annual cougar kill limits.**

3. **Undo the double bag limits for cougars.**

4. **Reduce annual bear kill limits.**

Please keep our wildlife safe! I do NOT want to have to go to a zoo to see animals that belong in the wild. And I do NOT agree to cruelty in the name of sport. That is disgusting!

I VOTE!

Thank you.

Joyce Courtin
[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Proposed changes
Date: Wednesday, August 07, 2019 1:52:28 PM

I agree with the proposed changes. Please protect these wild creatures. They are part of our ecological balance. They are God's creatures and part of America's legacy.
Thank you for your time and support.
Sincerely
Therese OGorman
Sent from my iPhone

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Proposed revisions to bear and cougar rule
Date: Wednesday, August 07, 2019 1:39:43 PM

Here are 4 items to be considered:

1. **Eliminate ALL recreational cougar trapping.** Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.
2. **Reduce annual cougar kill limits.** The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on best available science to protect and conserve the notoriously hard-to-count cougar.
3. **Undo the double bag limits for cougars.** Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.
4. **Reduce annual bear kill limits.** Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.

Thank you,

Mary Shabbott

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Proposed revisions to the Bear and Cougar Rule
Date: Wednesday, August 14, 2019 11:26:11 PM

Our state's bears and cougars are vulnerable wildlife. I strongly urge the NMDGF to please enact more humane,

science-supported policies. Thank you for considering the animals first.

Catherine Jobling

[REDACTED]

■

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Proposed revisions to the Bear and Cougar Rule
Date: Monday, August 12, 2019 2:13:02 PM

Thank you for taking steps to reduce the damage to wildlife from the 2015 rule changes. However, I am asking that you go further and do the following:

1. **Eliminate all recreational cougar trapping** on both private and state trust lands. The use of traps and snares for "sport harvesting" is repugnant. Trapping is also indiscriminate, impacting other species, including endangered animals and domestic pets.
2. **Reduce annual cougar kill limits.** The department should rely on data and scientific literature which shows that the number of cougars in New Mexico has been overestimated with the result that the percentages of allowable kills/harvest limits is placing cougar populations at risk.
3. **Reverse the 2015 decision on double bag limits.** A double bag limit violates principles of judicious cougar management.
4. **Reduce annual bear kill limits.** As with cougars, the department should reexamine its approach and rely on science to manage bear populations. The current kill limits are unjustifiably high.

I appreciate your consideration of the foregoing.

Very truly yours,

Jaclyn Sinclair
[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: proposed revisions to the Bear and Cougar Rule
Date: Wednesday, August 07, 2019 2:51:07 PM

I would like to urge the New Mexico Department of Game and Fish (NMDGF) to:

1. **Eliminate ALL recreational cougar trapping.** Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.
2. **Reduce annual cougar kill limits.** The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on best available science to protect and conserve the notoriously hard-to-count cougar.
3. **Undo the double bag limits for cougars.** Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.
4. **Reduce annual bear kill limits.** Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.

Thank you.
Elizabeth Buchen
[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Proposed Revisions
Date: Wednesday, August 07, 2019 3:14:09 PM

I would like to ask the NMDGF to REVERSE the Game Commission's 2015 decision on Bears and Cougars. I would like to see the NMDGF; 1) eliminate All recreational cougar trapping, 2) reduce annual cougar kill limits, 3) undo the double bag limits for cougars, 4) reduce the annual bear kill limits. I would like the NMDGF to enact on more humane, science-supported policies to protect not only the Bears and Cougars, but all of our state's wildlife.

Please consider my comments
Sincerely
Kathy Vigil

Sent from myMail for iOS

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Protect Bears, Cougars and other wildlife
Date: Wednesday, August 07, 2019 4:14:06 PM

One of the things that makes New Mexico an interesting and beautiful place to live and visit is our nature and wildlife.

YOU - our lawmakers - MUST protect the animals that live in our forests, deserts, valleys and mountains.

I grew up in Santa Fe, I pay taxes through my small business, and I vote. I watch the candidates to see who supports our environment, and I am very vocal and supportive about those people.

Please do the right thing and protect bears and cougars. The future of our state depends on it.

Cheers,

Natalie Bovis



Sent from my device, please excuse random typos and bizarre autocorrect

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Protecting NM wildlife
Date: Thursday, August 08, 2019 8:12:21 AM

Dear New Mexico Department of Game and Fish Officials
Please consider correcting biased or unaccurate policies to protect NM most valuable wildlife by:

Eliminating ALL recreational cougar trapping.

Reducing annual cougar kill limits. NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits,. NMDGF needs to rely on best available science to protect and conserve cougars.

Unding the double bag limits for cougars. .

Reducing annual bear kill limits. Bears are being impacted by incorrect application of science. Refine numbers and revise approach to management of bears to ensure protection.

Sincerely

Mari Elvi

[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Cc: [Animal Protection of New Mexico](#)
Subject: Public Comment on the Proposed Revisions to the Bear and Cougar Rule
Date: Thursday, August 08, 2019 4:34:07 AM

I am greatly concerned about protection for the wildlife of New Mexico. Currently, a deep sense of loss persists with regard to our federal and state parks as well as the need to safeguard our wildlife. Please consider the following:

- 1. Eliminate ALL recreational cougar trapping. Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.**
- 2. Reduce annual cougar kill limits. The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on best available science to protect and conserve the notoriously hard-to-count cougar.**
- 3. Undo the double bag limits for cougars. Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.**
- 4. Reduce annual bear kill limits. Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.**

Thank you for your consideration.

Lesley Jorgensen
[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Public Comment
Date: Thursday, August 08, 2019 9:29:21 AM

To Whom It May Concern:

As Game and Fish is accepting public comments in locations throughout the state that are difficult for me to attend, I have chosen to submit my public comments via this medium instead. Under the Martinez Administration, during the last round of public comment meetings held throughout the state, any member of the public that didn't condone or champion the idea of maiming, torturing or killing New Mexico's wildlife just because we can, was dismissed. I know. I attended several meetings, including two in Silver City and one in Taos. Game and Fish responded to public outcry of sadistically killing predators under the guise of 'management' with derision.

There is no justifiable reason to kill bears or cougars in this day and age, except to maintain the profiteering practice of slaughtering them, to keep elk and deer populations unnaturally inflated, for people to buy permits to kill them in turn, and purportedly justify Game and Fish's existence. Management is the furthest thing from what Game and Fish actually does. I hope under the Lujan-Grisham Administration, the following will be addressed:

1) Eliminate ALL recreational cougar trapping. Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves. Also, when you've had a dog caught in a leg-hold trap on public land in New Mexico, and have to witness the suffering it causes, there is no way someone who isn't sadistic would condone the continued allowance of leg-hold traps, period.

2) Reduce annual cougar kill limits. The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on best available science to protect and conserve the notoriously hard-to-count cougar.

3) Undo the double bag limits for cougars. Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.

4) Reduce annual bear kill limits. Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.

I'd like to hope that Game & Fish will soon even try to implement the best practices above, and additionally be a part of the solution for wildlife they purport to be. If stewardship and sustainability ever become core tenants of Game & Fish, perhaps employees of the department will in future be hired based on their ability and interest in actually protecting wildlife for future generations, rather than as they currently are--for their ability to get on in the 'good 'ol boy' system.

Thank you for your consideration in this matter,

Sincerely,

April Lee

 ■

From: [REDACTED]
To: [REDACTED]
Cc: [Sloane, Michael B., DGF](#); [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] Bear Hunts
Date: Saturday, August 31, 2019 4:37:38 PM

Hello, Mr. Hansche,

Thank you for your comments and concern. I will make certain your email becomes a part of the public record on this matter and will discuss your comments with Department staff.

Sincerely,

Joanna Prukop, Chair
[REDACTED]

From: Bruce Hansche [REDACTED]
Sent: Tuesday, August 27, 2019 1:24 PM
To: Prukop, Joanna, DGF
Subject: [EXT] Bear Hunts

Dear Commissioner Prukop,

I am sure by now you have been given the facts from Bear Watch's Jan Hayes. As a long time hiker in the Sandias (over 30 years) I have been saddened by the severe drop in Bear sign in our woods. I used to see fresh scat, and hair bits and only rarely an actual bear. I enjoyed hiking in an alive viable forest.

For the last several years I have seen only very old scat on few occasions. Some of this was from drought I am sure. But it points out that the population has gotten really small.

Please try to turn that around,

Christina Husted
[REDACTED]

From: [REDACTED]
To: [REDACTED]
Cc: [Sloane, Michael B., DGF](#); [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] Bear Predation
Date: Monday, September 02, 2019 9:42:45 PM

Hello, Mr. LeRoy,,

Thank you for your comments and concern. I will make certain your email becomes a part of the public record on this matter and will discuss your comments with Department staff.

Sincerely,

Joanna Prukop, Chair
NM State Game Commission

Joanna Prukop, Chair
NM State Game Commission

From: Bing LeRoy [REDACTED]
Sent: Monday, September 2, 2019 10:56:46 AM
To: Prukop, Joanna, DGF
Subject: [EXT] Bear Predation

Please support lowering the limit of sows to be killed (including predation) to less than 100.

I feel the figures of Sandia Mountain Bear Watch are the most reliable. They are gathered from those who have resided in the area for many years, and have close contact with the wildlife. They have the opportunity to make very accurate observations, and can make observations in daily real life.

They have nothing to gain except the best practices, protection and control of the bears and other wildlife.

Sincerely.

From: [REDACTED]
To: [REDACTED]
Cc: [Soules, David, DGE](#); [Cramer, Gail, DGE](#); [Vesbach, Jeremy, DGE](#); [Bates, Jimmy, DGE](#); [Salazar-Henry, Roberta, DGE](#); [Lopez, Tirzio, DGE](#); [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] Bear Quotas and Cougar Trapping Ban
Date: Friday, October 04, 2019 12:51:01 PM

Hello, Adam,

Thank you very much for your comments. I will make certain they become a part of the official record and are discussed with Department staff.

Joanna Prukop, Chair
NM State Game Commission

Joanna Prukop
[REDACTED]

> On Sep 17, 2019, at 10:40 PM, Adam Sapp [REDACTED] wrote:

>

>

> Ladies and Gentlemen of the State Game Commission,

>

> I'd like to start by thanking you for your service in protecting and managing the wildlife and wild places of New Mexico on behalf of its residents, and continuing to support sustainable and ethical use of its wildlife resources.

>

> Now to the point.

>

> First, I would like to express my opposition to the proposed ban on cougar trapping, as I feel it is not motivated from a scientific basis or management scheme, but instead motivated by a short sighted emotional argument that fails to maturely address the issue of cougar management as a part of wildlife management as a whole. The only purpose that I can see for this ban is to chip at the rights of NM hunters and trappers for the sake of political correctness?

>

> Second I would like to express my opposition to a similar proposal from the New Mexico Bear Watch group members to lower the Sow mortality quota based on their distrust of the science based management plan put forth by the game and fish department regarding black bears. As a bear hunter I count on this hunt as an ethical source of food for me my family, especially in years when I'm not fortunate enough to draw, or harvest other big game. I support reasonable harvest quotas based on sound scientific population estimation techniques - not based on the emotional burden of people who either don't understand where food comes from or think they are justified in enforcing their values on others.

>

> Thank you for your time and your consideration of my concerns.

>

> Sincerely,

> Adam Sapp

>

From: [REDACTED]
To: [REDACTED]
Cc: [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] Bears being hunted
Date: Monday, September 16, 2019 4:39:15 PM

Hello, Ms. Desjardins,

Thank you for your email and comments. I will make sure they become part of the official record for the bear and cougar rule making process, and I will discuss them with Department staff working on the proposed rule.

Enjoy your day,

Joanna Prukop, [REDACTED]
[REDACTED]

From: Richard Desjardins [REDACTED]
Sent: Sunday, September 15, 2019 5:28 PM
To: Prukop, Joanna, DGF
Subject: [EXT] Bears being hunted

Good afternoon. Although 2019 has been a relatively good year for moisture, we have had a number of dry seasons in the recent past that have resulted in large numbers of bears being removed and destroyed. This was, of course, under an old administration. I live in the East Mountains, and am very concerned that the wild creatures be allowed to co-exist with the human inhabitants. I feel strongly that female bears in particular need protection so that the population can be restored and thrive. Nobody eats bear meat; there really is no rational or good reason at present to hunt them down and kill them. Please do your utmost to protect the bears moving forward, and reduce the hunting numbers currently allowed. I know I have observed far fewer signs this year and last of bear activity, though this used to be common.

Thank you for your consideration.

Sincerely,

Jill Desjardins

From: [REDACTED]
To: [REDACTED]
Cc: [Salazar-Henry, Roberta, DGF](#); [Bates, Jimmy, DGF](#); [Cramer, Gail, DGF](#); [Lopez, Tirzio, DGF](#); [Soules, David, DGF](#)
Subject: Re: [EXT] cougar trapping
Date: Friday, October 04, 2019 12:53:49 PM

Thank you very much for your comments. I will make certain they become a part of the official record and are discussed with Department staff.

Joanna Prukop, Chair
NM State Game Commission

On Sep 17, 2019, at 7:40 PM, CLAUDIA FISHER
[REDACTED] wrote:

Dear Commissioners:

I am requesting that you continue to allow the trapping of cougars on private land. As the Dept. itself stated, there is no biological or scientific reason to abolish cougar trapping. Regulating through social pressure is not good for animals or humans.

We have been requested by private landowners to remove predating cougars from their land which we were able to do and took care of a problem at no expense to the NMDGF. We were also able to use the pelt and meat which would not have been allowed under a depredation permit.

I urge you to continue cougar trapping.

Thank you

Claudia W. Fisher
[REDACTED]

From: [REDACTED]
To: [REDACTED] [Salazar-Henry, Roberta, DGF](#); [Bates, Jimmy, DGF](#); [Gail.Cramer@state.nn.us](#); [Tirzio.Lopez@state.nmus](#); [Soules, David, DGF](#); [Vesbach, Jeremy, DGF](#)
Cc: [Sloane, Michael B., DGF](#); [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] East Mountains and Bears.....
Date: Saturday, August 31, 2019 4:33:47 PM

Hello, MS. Jones,

Thank you for your comments and concern. I personally also greatly appreciate the long-time efforts Jan Hayes has made to help us understand bears and bear populations in New Mexico.

I will make certain your email becomes a part of the public record on this matter and will discuss your comments with Department staff.

Sincerely,

Joanna Prukop, [REDACTED]
[REDACTED]

From: Caroline Jones [REDACTED]
Sent: Tuesday, August 27, 2019 5:13 PM
To: Prukop, Joanna, DGF; Salazar-Henry, Roberta, DGF; Bates, Jimmy, DGF; Gail.Cramer@state.nn.us; Tirzio.Lopez@state.nmus; Soules, David, DGF; Vesbach, Jeremy, DGF
Subject: [EXT] East Mountains and Bears.....

Honorable Folk,

You are probably going to receive a few letters, so mine may not be much different. For several years I have watched Jan Hayes help educate the public about the value of bears in our East Mountains. The eco-system up here is both highly unique and fragile....especially due to our weather swings (one year productive food, next year early freezes killing off acorn buds).

My husband and I both live up here, walk up here, watch the cycles of life going on around us. The value of having enough bears is somewhat understood by people, and probably will never be fully understood as to the part every living thing plays. My belief is that, much like hunting out big horn sheep, when you take away a member you impact the health of this beautiful place. Every predator / prey / plant / micro-organism is adapted to this place, and uniquely work together --- from keeping prey animals in check, to even the "output" fertilizing the forest.

I have seen the counts done with barb wire (basically) that yields perhaps the same bear walking around an area. The counts are probably never exact from year to year.....but if you overdo the hunting, lack of new cubs produced along with the adults taken out will impact the overall health of the forest and mountains.

If you will take some time to look at information about the animals who live here, I would like to think you may come to agree.

Sincerely,

Caroline Jones
[REDACTED]

From: [REDACTED]
To: [shelly thedford](#)
Cc: [David Soules](#); [Lopez, Tirzio, DGF](#); [Vesbach, Jeremy, DGF](#); [R.Salazar-Henry](#); [Bates, Jimmy, DGF](#); [Cramer, Gail, DGF](#); [DGF-Furbearer-Rules](#)
Subject: Re: [EXT] Lion Trapping
Date: Friday, October 04, 2019 12:45:15 PM

Hello, Shelly,

Thank you very much for your comments. I will make certain they become a part of the official record and are discussed with Department staff.

Joanna Prukop, [REDACTED]
[REDACTED]

Joanna Prukop
[REDACTED]
[REDACTED]

On Sep 18, 2019, at 1:34 PM, shelly thedford [REDACTED] wrote:

As a New Mexico Trapper I am offended by the very lax use of the word recreational trapping. I don't trap as just a little thing to do. I trap to help my rancher protect his livestock. You are making it where my rancher can't call me to take a lion off his property. I have to tell him how sorry I am, but I will need to release this lion and you will have to call an already over loaded game and fish officer to take care of this, so let's just watch this lion continue take your cattle down until someone can get hear. The facts that you are missing, and mind you it's very important. As a trapper I purchase a lion tag to trap...and hear it is, the facts, read carefully!! #1 I purchase the tag. #2 I can only take 2 lion per trapping season. Not 30, not 15, not 45. 2!! #3 I can only take them on private and State Trust Land. I don't have access to all public land to use my lion tags like houndsman or hunter. #4 I can only trap from November to March. You are taking away a tool for me and my rancher.

Thank You,
Shelly Thedford

[Sent from Yahoo Mail for iPhone](#)

From: [REDACTED]
To: [Forman, Nicholas, DGF](#)
Subject: Re: [EXT] Looking for the Bear/Cougar rule change
Date: Wednesday, August 07, 2019 9:36:44 AM

Thanks Nick. Much appreciated.

On Wed, Aug 7, 2019 at 8:42 AM Forman, Nicholas, DGF <Nicholas.Forman@state.nm.us> wrote:

Hi Tim,

Sorry for the delayed response. The proposed changes can be found here: <http://www.wildlife.state.nm.us/commission/proposals-under-consideration/> under the Bear and Cougar Rule section. Additional details to the proposals will be added as information is gathered and recommendations are finalized.

Feel free to contact me if you have any additional questions or comments.

Thanks

Nick Forman

[REDACTED]

[REDACTED]

[REDACTED]

Support New Mexico's Wildlife...

Conserving New Mexico's Wildlife for Future Generations

CONFIDENTIALITY NOTICE: This e-mail, including all attachments is for the sole use of the intended recipient[s] and may contain confidential and/or privileged information. Any unauthorized review, use, copying, disclosure or distribution is prohibited, unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender at once and destroy all copies of this message.

From: TCF [mailto:[REDACTED]]
Sent: Monday, July 29, 2019 3:40 PM

To: DGF-Bear-Cougar-Rules

Subject: [EXT] Looking for the Bear/Cougar rule change

Hi,

I'm curious when you might post the rule change for bears and cougars? The first meeting is in a week and I'm sure folks are getting anxious.

Let me know.

Thanks.

From: [REDACTED]
To: [REDACTED]
Cc: [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] Mountain lions
Date: Monday, September 16, 2019 7:35:41 PM

Hello, Mr. Applegate,

Thank you for your email and comments. I will make certain they become a part of the official record for our current New Mexico bear and cougar rule development process. I will also discuss your comments with Department staff.

Thank you again,

Joanna Prukop, [REDACTED]
[REDACTED]

From: Bill Applegate [REDACTED]
Sent: Monday, September 16, 2019 7:10:48 PM
To: Prukop, Joanna, DGF
Subject: [EXT] Mountain lions

Dear Commissioner:

I have been harvesting mountain lions in Texas since 1992. Population estimates, based on genetic diversification studies conducted in the Trans Pecos area (West part of the state) conclude that numbers are stable. Stable enough that no further studies were deemed necessary and no attempts have been made to interfere with harvest.

Since the State does not attempt to control the numbers, landowners and tenants have the option to implement control measures, at no cost to the public, or to raise lions. This system has worked quite well, as those who want lions have them and those who prefer to raise deer, elk, aoudad, antelope, bighorn and other exotics may do so.

Revenue from hunting ungulates far exceeds any revenue that could be generated from a lion hunting program. The rule of thumb of a lion killing one deer per week is low and unrealistic as females raising kittens will clean up a carcass in one sitting. Further, during warm weather, kills will spoil quickly and lions typically do not return for a second feeding. Even using the low estimate of 52 kills per year, lions are significant competitors with humans for game and trophies.

Since lion numbers are held in check with this system, wildlife abounds and livestock attacks are infrequent. Further, the only reported attacks on humans have been in the Big Bend National Park, where they are completely protected.

Attempting to maintain lion numbers at a point that will give the public a rare opportunity to actually see

one will have adverse effects on many other wildlife species, livestock and people.

Sincerely,

Bill Applegate

From: [REDACTED]
To: [REDACTED] [Salazar-Henry, Roberta, DGF](#); [Bates, Jimmy, DGF](#); [Gail.Cramer@state.nn.us](#); [Tirzio.Lopez@state.nmus](#); [Soules, David, DGF](#); [Vesbach, Jeremy, DGF](#)
Cc: [Sloane, Michael B., DGF](#); [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] New Mexico Bears
Date: Saturday, August 31, 2019 4:30:23 PM

Hello, MS. Allen,

Thank you for your comments and concern. I will make certain your email becomes a part of the public record on this matter and will discuss your comments with Department staff.

Sincerely,

Joanna Prukop, [REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Wednesday, August 28, 2019 5:24 AM
To: Prukop, Joanna, DGF; Salazar-Henry, Roberta, DGF; Bates, Jimmy, DGF; Gail.Cramer@state.nn.us; Tirzio.Lopez@state.nmus; Soules, David, DGF; Vesbach, Jeremy, DGF
Subject: [EXT] New Mexico Bears

Dear Commissioners: I am a native New Mexican and currently live in the Sandia Mountains. I appreciate the work that you do preserving the mountain ecosystems and wildlife. I receive regular information from BearWatch and there is now concern about the current hunting practices regarding bears.

BearWatch now has a concern that too many bear sows are being killed statewide in the hunt. The sow limit is now set at 318, yet, for the last four years, the actual harvest averages about 180 not counting depredation deaths. The Game department is proposing no changes for bear for the next four years.

Given that the average ages of the sows being killed statewide are now a low (6.5 years) and dropping to the Red Line of age 6 (Hornocker bear study found NM's sows were on average 5.7 years old before their first cub) BearWatch has met with 6 Game Commissioners in recent weeks to address this concern. We proposed that no more than 100 sows, including depredation, be killed statewide in future harvests until harvested sow ages show that they are rebounding to viable age ranges.

Thank you for your consideration of this issue.

Sincerely

S. Jane Allen
[REDACTED]

From: [REDACTED]
To: [REDACTED] [Salazar-Henry, Roberta, DGF](#); [Bates, Jimmy, DGF](#); [Cramer, Gail, DGF](#); [Lopez, Tirzio, DGF](#); [Soules, David, DGF](#); Jeremy.Verbach@state.nm.us; [David Heft](#); loughton@sportsmensalliance.org; [REDACTED]
Cc: [Sloane, Michael B., DGF](#); [Liley, Stewart, DGF](#); [DGF-Furbearer-Rules](#)
Subject: Re: [EXT] New Mexico Wild Sheep Foundation Comments on Cougar Rule
Date: Tuesday, September 17, 2019 9:38:02 PM

Hello, Mr. Bartlett,

Thank you for your email and letter. I will make certain it becomes a part of the official record for the bear and cougar rule making process. I will also discuss it with Department staff.

Thank you again,

Joanna Prukop, [REDACTED]
[REDACTED]

From: Bryan Bartlett [REDACTED]
Sent: Tuesday, September 17, 2019 2:31:33 PM
To: Prukop, Joanna, DGF; Salazar-Henry, Roberta, DGF; Bates, Jimmy, DGF; Cramer, Gail, DGF; Lopez, Tirzio, DGF; Soules, David, DGF; Jeremy.Verbach@state.nm.us; David Heft; [REDACTED] Clay Brewer
Subject: [EXT] New Mexico Wild Sheep Foundation Comments on Cougar Rule

Attached please find the NMWSF comments on the proposed cougar rule changes.(2 pages)

If you need to contact us, our address is:

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

Thank You Bryan Bartlett, [REDACTED]

From: [REDACTED]
To: conservation@mountainlion.org; [DGF-Bear-Cougar-Rules](#)
Cc: [REDACTED]
Subject: Re: [EXT] New Mexico: Proposed Cougar Rule Changes
Date: Monday, September 16, 2019 3:39:18 PM

Hello, Ms. Domingo,

Thank you for your email and your organization's detailed letter. I will make sure they become part of the official record for the bear and cougar rule making process, and I will discuss them with Department staff working on the proposed rule.

Enjoy your day,

Joanna Prukop, [REDACTED]
[REDACTED]

From: [REDACTED]
Sent: Monday, September 16, 2019 1:36 PM
To: Prukop, Joanna, DGF; DGF-Bear-Cougar-Rules
Cc: Lynn Cullens
Subject: [EXT] New Mexico: Proposed Cougar Rule Changes

Dear Chairman Prukop and Members of the Wildlife Board,

Please see the Mountain Lion Foundation's comment letter (attached) regarding the **Proposed Cougar Rule Changes**.

I have CCed our Executive Director, Lynn Cullens, to this email if you have any questions.

Thank you for your consideration. Please make this comment letter a part of the official record regarding this decision.

Korinna

Korinna Domingo, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[FACEBOOK](#) | [TWITTER](#) | [INSTAGRAM](#)
PLEASE CONSIDER DONATING TO

From: [REDACTED]
To: [REDACTED]
Cc: [Sloane, Michael B., DGF](#); [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] New Mexico's bear population and hunt
Date: Saturday, August 31, 2019 4:36:29 PM

Hello, Ms. Garcia,

Thank you for your comments and concern. I will make certain your email becomes a part of the public record on this matter and will discuss your comments with Department staff.

Sincerely,

Joanna Prukop, [REDACTED]
[REDACTED]

From: Yolanda Garcia [REDACTED]
Sent: Tuesday, August 27, 2019 4:24 PM
To: Prukop, Joanna, DGF
Subject: [EXT] New Mexico's bear population and hunt

Commissioner Prukop, Chair
New Mexico Game & Fish Commission

Dear Commissioner Prukop:

Please accept this e-mail letter to you as my public input for the Commission's deliberation on statewide bear hunt.

First let me say, I do not campaign for nor support an anti-hunting posture. I am a life-long resident of New Mexico. I come from a long family line of hunters and sportsman, who take the view that all things (hunting) must be done in moderation and with sensibility.

I ask only for sensible and sound management to ensure a viable bear population. This can be done with reasonable, conservative bear management and implementation of the BearWatch's Recommendation to the New Mexico Game Commission for Black Bear Management, August 2019.

Please, stop the damage that is befalling New Mexico's bear population before it is too late and these magnificent creatures no longer exist in our beautiful state.

Respectfully,

Yolanda Garcia
[REDACTED]

From: [REDACTED]
To: [REDACTED] [R.Salazar-Henry](#); [Bates, Jimmy, DGF](#); [Cramer, Gail, DGF](#); [Lopez, Tirzio, DGF](#); [David Soules](#); [Vesbach, Jeremy, DGF](#)
Cc: [Sloane, Michael B., DGF](#); [Comins III, James C., DGF](#); [Liley, Stewart, DGF](#); [DGF-Bear-Cougar-Rule@state.nm.us](#); [DGF-Furbearer-Rules](#)
Subject: Re: [EXT] Opposed to all Trapping Restrictions & Bans
Date: Wednesday, September 11, 2019 10:19:16 AM

Good morning, Ms. Thedford,

Thank you for your comments. The other Commissioners and I, and Department staff, will take them into account and make them part of the official record for both the furbearer rule making and lion hunting rule making. I will also verify your comment that [sport] "Trappers only took 13 this past season. Out of those 13, 9 were depredation."

Thank you again for your input,

Joanna Prukop, [REDACTED]
[REDACTED]

From: shelly thedford [REDACTED]
Sent: Tuesday, September 10, 2019 7:07 PM
To: Prukop, Joanna, DGF; R.Salazar-Henry; Bates, Jimmy, DGF; Cramer, Gail, DGF; Lopez, Tirzio, DGF; David Soules; Vesbach, Jeremy, DGF
Subject: [EXT] Opposed to all Trapping Restrictions & Bans

There are so many reasons for me to oppose the recommended bans on lion trapping and all types of trapping in general. Now let's get started.

To start with, as a trapper and an individual of New Mexico I feel very judged, very ran the heck over, very bullied, very discriminated against because my way of life, my job, my living is so disregarded by so many. All the people who judge what I do are the same people who take and round up Ferrell cats and stray dogs, by live traps and catch poles, by the way, cut off and cut out their reproductive systems all in the name of supporting healthier animals and to prevent over population. Now, think about what I just said...altering the population of wild animals!! How is what I do any different than what they do. What I do creates healthier animals all the way around. Not to mention the growth of other species and the safety of livestock and the people in the areas I trap and no one pays me to do it. I pay our state to help manage and conserve wildlife.

Now that I have pointed out the Hypocrisy of the left, let's talk about the facts. The percentage of lions taken is considerable small. The overall take of lions is well under the allowed numbers across the state. Trappers only took 13 this past season. Out of those 13, 9 were depredation. Remember to do your research and read where all this "letting the left" and the "save all animals people" have gotten the great state of California. The California lion

is starving because the “save the whale people” are killing them. Run the Game Department by scientific facts and not by your heart.

Now for the restrictions. If everyone stays in their lanes and follows the laws, like NM leash laws for pets, and no one in their right mind let's their child run the NM desert from November 1st to March 15th barefooted, so that's a crock that kids are going to break their toes off from foothold traps. If this is happening, we don't have a trapping problem, we have a mental health problem in our state. If we as Trappers are 25 yards off marked trails and mapped roads and tanks and the hikers, bird watchers, and day walkers leash their pets and they don't tamper with traps (against the law) then everyone should be fine. Enforce that all nature and outdoors people buy permits and are required to take a safety class to identify where and how traps are set to avoid mishaps. I believe this to be true even in the areas you are considering closing down to trapping all together.

Don't bend to the LEFTIES!! Protect our wildlife! Conserve our wildlife!! Don't be CALIFORNIA!!

[Sent from Yahoo Mail for iPhone](#)

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Re: [EXT] RE: Request a meeting with BearWatch
Date: Wednesday, August 07, 2019 1:44:03 PM

From: Dennis Hayes [REDACTED]
Sent: Wednesday, July 31, 2019 10:10 AM
To: Bates, Jimmy, DGF
Subject: [EXT] RE: Request a meeting with BearWatch

Dear Com. Bates,

On behalf of BearWatch, I would very much like to meet with you sometime in the future.

BearWatch is trying to meet with all the NM&F Commissioners in regard to the future management of NM's bears.

I understand you live in the Albuquerque area. My husband Dennis and I live in the East Mountains.

Our calendar is clear from Aug. 9 to the 30th including Saturdays. You are welcome to meet with us at our home or if you prefer, we can find another location.

In response to some of our questions, we've received more pertinent info. from G&F Chief Liley since the last Commission meeting in Socorro that I believe you will find enlightening.

I look forward to hearing back from you.

Thank you for taking on the very difficult task of managing NM's wildlife.

Jan Hayes

[REDACTED]
[REDACTED]
[REDACTED]

From: [REDACTED]
To: [REDACTED]
Cc: [DGF-Bear-Cougar-Rules](#)
Subject: Re: Bear & Cougar Rule Development - APNM and HSUS Comments
Date: Monday, September 16, 2019 4:52:34 PM
Attachments: [image002.png](#)

Hello, Jessica,

Thank you for your email, comments and attachment. I will make sure they become part of the official record for the bear and cougar rule making process, and I will discuss them with Department staff working on the proposed rule.

Enjoy your day,

Joanna Prukop, [REDACTED]
[REDACTED]

From: Jessica Johnson [REDACTED]
Sent: Monday, September 16, 2019 4:12 PM
To: DGF-Bear-Cougar-Rules; Prukop, Joanna, DGF; Salazar-Henry, Roberta, DGF; Bates, Jimmy, DGF; Cramer, Gail, DGF; Lopez, Tirzio, DGF; Soules, David, DGF; Vesbach, Jeremy, DGF
Subject: [EXT] Bear & Cougar Rule Development - APNM and HSUS Comments

Dear Commissioners and New Mexico Department of Game & Fish,

Attached, please find initial written comments on the Bear & Cougar Rule development on behalf of Animal Protection of New Mexico and the Humane Society of the United States.

We thank you for your consideration and look forward to continuing to engage in this rulemaking process. Please don't hesitate to reach out if you have any questions about the comments we've provided here.

Sincerely,

Jessica Johnson
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Making Sure Animals Matter in Every New Mexican Community
Learn more by [viewing our video!](#)



From: [REDACTED]
To: [Forman, Nicholas, DGF](#)
Subject: RE: Bear and Cougar Rule Proposed Changes
Date: Tuesday, August 13, 2019 3:09:17 PM

Hi Nick,

Thank you so very kindly for taking the time to get back to me and for the information on comment submission.

Have a good week,
Denise

From: Forman, Nicholas, DGF [REDACTED]
Sent: Tuesday, 13 August, 2019 14:59
To: Denise Peterson [REDACTED]
Subject: RE: Bear and Cougar Rule Proposed Changes

Hi Denise,

The last day to officially submit public comment is the day before the Game Commission meeting in November where they will give their final decision, November 21st.

However, it is best to submit your comments prior to us making our final recommendations, that way we can incorporate your comment into our decision making process as we are making our final recommendations. So it is best to submit your comment for this rule before September 18th.

The best way to submit your comment is electronically through email, sent to the same address you asked this question: DGF-Bear-Cougar-Rules@state.nm.us

Thank you for your interest.

Nick Forman
Carnivore and Small Mammal Program Manager
[REDACTED]

Support New Mexico's Wildlife...
Conserving New Mexico's Wildlife for Future Generations

CONFIDENTIALITY NOTICE: This e-mail, including all attachments is for the sole use of the intended recipient[s] and may contain confidential and/or privileged information. Any unauthorized review, use, copying, disclosure or distribution is prohibited, unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender at once and destroy all copies of this message.

From: Denise Peterson [REDACTED]
Sent: Tuesday, August 13, 2019 8:43 AM
To: DGF-Bear-Cougar-Rules
Subject: Bear and Cougar Rule Proposed Changes

Hello,

I was wondering if you could please tell me when comment letters are due for the comment period regarding the proposed changes to the Bear and Cougar Rule? Also, is there anyone in particular that my comment letter will need to be addressed to?

Kindest regards,

Denise M. Peterson

[REDACTED]

From: [REDACTED]
To: [REDACTED]
Cc: [DGF-Furbearer-Rules](#)
Subject: Re: Black bear comments from the Humane Society of the United States
Date: Friday, September 13, 2019 7:40:09 PM

Thank you for submitting your comments. I am forwarding this email to ensure it becomes part of the public comments record. I will continue to review all data regarding bears in New Mexico as well as consider public comments.

Regards,
Roberta Salazar-Henry

[REDACTED]
[REDACTED]

On September 13, 2019, at 3:36 PM, Wendy Keefover <wkeefover@humanesociety.org> wrote:

Dear Com. Salazar-Henry,

Attached please find comments by the Humane Society of the United States concerning black bear management in New Mexico.

Given the paucity of black bear data in New Mexico,, we request that the black bear quota revert to 335 from 804. The number 804 has no basis in sound science and is far greater than hunters, predator control agents and others achieve annually, according to the NMDGF's own mortality data.

Black bears cannot withstand heavy persecution – they are super slow to reproduce. A female black bear in New Mexico doesn't begin reproduction until she is almost six years old, and then she will produce only a few cubs in her lifetime – many of whom do not survive their first year.

The data show that bears are valued by most New Mexicans. Most appreciate bears' sentience and intrinsic values—their devotion to their cubs and ability to maintain the biological diversity of their forest ecosystems.

Please do not hesitate to reach out if you need access to studies we cited, or if you have questions or comments!

Thank you for reviewing these comments!

Sincerely yours,

Wendy Keefover



Fight for all animals. The Humane Society of the United States is the nation's most effective animal protection organization, fighting for all animals for more than 60 years. To support our work, please make a [monthly donation](#), give in [another way](#) or [volunteer](#).



From: [REDACTED]
To: [REDACTED]
Cc: [DGF-Bear-Cougar-Rules](#)
Subject: Re: Cougar trapping
Date: Thursday, August 08, 2019 1:13:38 PM

Good afternoon Jon – I have shared your comments with the team that is compiling comments on the Bear and Cougar Trapping Rule.

Tristanna

Tristanna Bickford



Conserving New Mexico's Wildlife for Future Generations

To report a wildlife-law violation, please call the toll-free Operation Game Thief hotline at (800) 432-GAME (4263) or click in the logo here. Callers can remain anonymous and earn rewards for information leading to charges being filed.



CONFIDENTIALITY NOTICE: This e-mail, including all attachments is for the sole use of the intended recipient[s] and may contain confidential and/or privileged information. Any unauthorized review, use, copying, disclosure or distribution is prohibited, unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender at once and destroy all copies of this message.

From: Jon Gades [REDACTED]
Date: Tuesday, August 6, 2019 at 3:42 PM
To: "Bickford, Tristanna, DGF" [REDACTED]
Subject: Cougar trapping

Please don't stop trapping of cougars and other big predators.. It really is one of few controlling actions that work.. Save a few unlucky people maybe too cuz they see us as food sometimes..

From: [REDACTED]
To: [REDACTED]
Cc: [DGF-Bear-Cougar-Rules](#)
Subject: Re: Oppose cougar trapping ban
Date: Thursday, August 08, 2019 1:13:39 PM

Good afternoon Mitchell – I have shared your comments with the team that is compiling comments on the Bear and Cougar Trapping Rule.

Tristanna

Tristanna Bickford



Conserving New Mexico's Wildlife for Future Generations

To report a wildlife-law violation, please call the toll-free Operation Game Thief hotline at (800) 432-GAME (4263) or click in the logo here. Callers can remain anonymous and earn rewards for information leading to charges being filed.



CONFIDENTIALITY NOTICE: This e-mail, including all attachments is for the sole use of the intended recipient[s] and may contain confidential and/or privileged information. Any unauthorized review, use, copying, disclosure or distribution is prohibited, unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender at once and destroy all copies of this message.

From: Mitchell Simpson [REDACTED]
Reply-To: Mitchell Simpson [REDACTED]
Date: Tuesday, August 6, 2019 at 4:04 PM
To: "Bickford, Tristanna, DGF" [REDACTED]
Subject: Oppose cougar trapping ban

I support trapping cougars to control the population. Cougar populations continue to increase, even though there has been hunting and trapping seasons.

Mitchell Simpson

From: [REDACTED]
To: [REDACTED]; [Salazar-Henry, Roberta, DGF](#); [Bates, Jimmy, DGF](#); [Cramer, Gail, DGF](#); [Lopez, Tirzio, DGF](#); [Soules, David, DGF](#); [Vesbach, Jeremy, DGF](#)
Cc: [DGF-Bear-Cougar-Rules](#)
Subject: Re: Opposition to proposal from NMGF to ban lion trapping in NM
Date: Saturday, August 31, 2019 3:38:09 PM

Hello, Mr. Grover,

Thank you for your comments and concern. I will make certain your email becomes a part of the public record on this matter and will discuss your comments with Department staff.

Sincerely,

Joanna Prukop, [REDACTED]

[REDACTED] ■

From: jayson grover [REDACTED]
Sent: Wednesday, August 28, 2019 10:51 AM
To: Prukop, Joanna, DGF; Salazar-Henry, Roberta, DGF; Bates, Jimmy, DGF; Cramer, Gail, DGF; Lopez, Tirzio, DGF; Soules, David, DGF; Vesbach, Jeremy, DGF; jayson grover
Subject: [EXT] Opposition to proposal from NMGF to ban lion trapping in NM

Good Morning NM State Game Commission,

I recently listened in (via webcast) to one of your public meetings. I was a bit un-impressed with the logic the NM Dept. of Game and Fish gave for proposing to remove trapping as a means of legal take of mountain lions. The logic and reasoning given in the meeting I witnessed was that only a few people participate in it. I saw no scientific reasons to justify the change. I do not trap lions myself, but believe that others should be able to do so if needed. Please consider the following points as you consider this proposed rule change.

- Lion Trapping has not negatively affected the population
- During public meeting NMGF stated Lion Trapping does not threaten public health or safety
- According to NMGF statistics, Lion numbers continue to rise yet harvest rates have not met the take limit.
- Lion trapping was only recently made legal (I believe since 2016). Few in the state currently have the knowledge to attempt it but there are many wanting to and beginning to learn. Participation will continue to increase with time, but remember too that lions are one of the hardest animals to successfully trap, and to do so takes a considerable amount of time and effort. I am confident that there is currently quite a bit of participation though the harvest numbers may not suggest it yet. Our local sportsmen and women are still learning how to best go about it.

- Eliminating Lion trapping will further burden the NMGF department budget by requiring the department to contract with private individuals at an inflated rate for the removal of problematic Lions.
- With department statistics showing Lion numbers on the rise it would be irresponsible for NMGF to eliminate a method of harvest. This will potentially cause a negative impact to our wild ungulate herds as well as be a financial hardship to the department.
- Try to understand the motivations behind lion trapping. There is little to no value in their fur so I assure you it is not economics. Those I know who do try to trap lions do so to reduce livestock depredation and/or pressure on wild ungulate populations in areas of high lion density. Some are motivated by the extreme challenge and the opportunity to connect with the natural world in a way that cannot be understood by someone who has never participated in the activity themselves.
- **Bending to social pressure will only encourage for additional pressures to go against scientific biology and factual statistics.**

I would also like to encourage and respectfully ask you to focus on the following:

- Encourage NMGF to educate the public regarding trapping and all other forms of harvesting animals and its important contribution to the ecosystem.
- Improve the Trapping FACTS, information on the NMGF website to improve public perception and combat the falsehoods spread by media as a result of one sided reporting.
- Improve public understanding of the value of the North American Wildlife Management Model.

Thank you for your time and consideration,

Jayson L. Grover, P.E.

From: [REDACTED]
To: [REDACTED]
Cc: [DGF-Bear-Cougar-Rules](#)
Subject: Re: Reducing hunt limit for black bear sows
Date: Monday, September 16, 2019 4:41:50 PM

Hello, Mr. Jaeger,

Thank you for your email and comments. I will make sure they become part of the official record for the bear and cougar rule making process, and I will discuss them with Department staff working on the proposed rule.

Enjoy your day,

Joanna Prukop, [REDACTED]
[REDACTED]

From: cal jaeger [REDACTED]
Sent: Sunday, September 15, 2019 4:16 PM
To: Prukop, Joanna, DGF
Subject: [EXT] Reducing hunt limit for black bear sows

Chairwoman Joanna Prukop

My wife and I have lived in New Mexico for almost 40 years. We particularly love the diverse wildlife. I hope that you and the members of the NMSGC will adopt a reasonable, conservative bear management program. Bears in New Mexico are one of the most vulnerable species in the state because of their low reproductive rates. I am asking you to review the current bear sow hunt limit and adjust the current number to a lower number.

The current sow limit is 318 for the next four years yet the harvest average for the last four years is 180. The average age of sows being killed is 6.5 years and in New Mexico sows normally have their first cub at 5.7 years. For a healthy bear population to survive in New Mexico, I proposed that no more than 100 sows (including depredation) be killed statewide in future harvests until harvested sow ages show that they are rebounding to viable age ranges.

Thank you for your service to New Mexico by serving on the NMSGC. I am very pleased to see a person with your experience and knowledge leading the commission.

Best Regards,
BG Cal Jaeger (Ret), PhD

[REDACTED]
[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Reduce Annual Cougar and Bear Limits
Date: Wednesday, August 07, 2019 2:14:38 PM

Hi,

I was born, raised, and currently live in New Mexico. I'm writing to urge you to reduce the annual cougar and bear limits for individuals and to remove the double-bag rule on cougars. As scary as these animals can be to some, they are a necessary part of the ecosystem and an important part of the natural world around us. The increase in kill limits in 2015 was without scientific merit and it should be repealed.

Thanks,
Chris Collord

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Revisions to Bear and Cougar Rule
Date: Sunday, August 11, 2019 5:06:46 PM

Good evening.

I am writing in support of the below revisions to the Bear and Cougar Rule:

1. **Eliminate ALL recreational cougar trapping.** The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.
2. **Reduce annual cougar kill limits.** The latest data and scientific literature show that NM Dept of Game and Fish has overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills, putting cougar populations at risk.
3. **Undo the double bag limits for cougars.** Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met.
4. **Reduce annual bear kill limits.** Another species impacted by incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. The Dept should revise its approach to management of bears to ensure this important species is not decimated by irresponsible hunting allowances.

Thank you.

Stephanie Fuchs
[REDACTED]

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: rules regarding bears and cougars
Date: Wednesday, August 07, 2019 2:35:55 PM

Hi,

Please stop the use of traps and snares of cougars on public and private land. Use scientific evidence to determine limits on cougar kills. I think a double bag limit is unrealistic. The same goes for the killing of bears.

Peggy Keilman

From: [REDACTED]
To: [REDACTED]
Subject: seeking comment on proposed bear season dates
Date: Friday, August 30, 2019 2:33:21 PM

As you may have seen at last week's Game Commission meeting, the Department is considering shifting the bear season dates in BMZs 10, 12, and 13 2-weeks later. The new dates would be Sept 1 – December 15. We are seeking public input on this proposal. If you would like to provide input, you may email it to me directly. Thank you.

Elise Goldstein
Assistant Chief – Wildlife

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

CONSERVING NEW MEXICO'S WILDLIFE FOR FUTURE GENERATIONS

CONFIDENTIALITY NOTICE: This e-mail, including all attachments is for the sole use of the intended recipient[s] and may contain confidential and/or privileged information. Any unauthorized review, use, copying, disclosure or distribution is prohibited, unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender at once and destroy all copies of this message.

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Some Citizen input
Date: Wednesday, August 07, 2019 3:37:18 PM

I would like to submit my comments to the NM Dept of Game and Fish on the proposed revisions to the Bear and Cougar Rule.

I urge the NMDGF to:

- 1 -- Eliminate ALL recreational cougar trapping
 - 2 - Reduce annual cougar kill limits
 - 3 - Undo the double bag limits for cougars
- and
- 4 - Reduce annual bear kill limits.

We need to protect and respect these animals rather than using them for sport and recreation.

Thank-you!

Jill Cowley

[REDACTED]

From: [REDACTED]
To: [DGF-Furbearer-Rules](#)
Subject: Trapping Comments
Date: Wednesday, September 04, 2019 7:21:34 AM

I met again with a member of the NM Trappers Association. He patiently demonstrated the use of all the various traps. His main comment was that the Association would like to see NMDGF allow lion trapping on private land. His comment was that everyone who has used lion trapping on private land has done it solely for management purposes.

Thanks,

Gail Cramer

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Wildlife
Date: Wednesday, August 07, 2019 1:40:04 PM

Sent from my iPhone

Urging exploration of alternate means of managing cougars and bears (NONlethal)
Which are available.

There is no need for lethal and indiscriminate
Killing.

Karen Wolf

The Wolf Family

From: [REDACTED]
To: [DGF-Bear-Cougar-Rules](#)
Subject: Wildlife
Date: Wednesday, August 07, 2019 1:33:48 PM

1. **Please consider the following:**
2. **Eliminate ALL recreational cougar trapping.** Reverse the Game Commission's 2015 decision to allow the use of traps and snares as a method of cougar "sport harvesting" on both private and state trust lands. The vast majority of New Mexicans oppose cougar trapping, consider it cruel, and are concerned about impacts on other species like endangered Mexican wolves.
3. **Reduce annual cougar kill limits.** The latest data and scientific literature show that NMDGF has dangerously overestimated the number of cougars in New Mexico and applied inflated percentages of allowable kills (kill limits, or what NMDGF calls "harvest limits"), putting cougar populations at risk. NMDGF needs to rely on the best available science to protect and conserve the notoriously hard-to-count cougar.
4. **Undo the double bag limits for cougars.** Reverse the Game Commission's 2015 decision to allow cougar hunters who kill their bag limit of two cougars to then kill up to two more in cougar management zones where current unjustifiably high kill limits are not met. This move has not yielded the results NMDGF sought, and a double bag limit violates the precautionary principles that should guide careful cougar management.
5. **Reduce annual bear kill limits.** Another species impacted by the incorrect application of science, the annual number of bears killed in New Mexico never reach more than half of the current unjustifiably high kill limits. NMDGF should revise its approach to the management of bears to ensure this important species is not decimated by irresponsible hunting allowances.



MOUNTAIN LION FOUNDATION

Saving America's Lion

September 16, 2019

Executive Director

Lynn Cullens

Board of Directors

Bob McCoy
Chair

Elizabeth Sullivan
Vice Chair

Ann Hamilton
Treasurer

Donald Molde, M.D.
Secretary

Toby Cooper
Rabbi Joseph Hurwitz
Jonathan Naimon
Chris Tromborg, Ph.D.

Honorary Board

Robert Bateman
Mr. & Mrs. Gordon P. Getty
Sandy Lerner
Barry Lopez
Robert Redford
Dr. George Schaller
Robert Wagner

30
YEARS OF
Saving America's Lion
1986 ~ 2016

Joanna Prukop, [REDACTED]

Email: Joanna.Prukop@state.nm.us, DGF-Bear-Cougar-Rules@state.nm.us

RE: Proposed Cougar Rule Changes

Dear Chairman Prukop and Members of the Wildlife Board,

The Mountain Lion Foundation respectfully requests that you approve the proposed changes in the Cougar Rules (19.31.11.10 NMAC), which would no longer allow traps and foot snares for sport harvest on private and state trust lands. We appreciate the efforts to halt this cruel practice.

The concerns expressed below are the official position of the Mountain Lion Foundation as we represent our 7000 supporters nationwide.

Traps are inhumane and indiscriminate.

In the last three hunting seasons (2016-17, 2017-18, 2018-19), a total of 37 mountain lions were trapped and killed by trophy hunters. The infrequency and low participation of this cruel method of take shows that New Mexicans do not support this program.

Mountain lions caught in traps suffer tremendously from fear, pain, psychological stress, starvation, dehydration, or predation for extended periods of time. Whether they live or die, their experience is *inhumane*, reflecting the human capacity for cruelty.

Trap locations are not revealed to New Mexico Game and Fish, federal agents, or the general public. There is no requirement for trappers to post any signs informing or warning the public of where traps are located so they may protect themselves, their children, or their pets. Although there are mandatory set-back distances from trails, roads, and other human facilities, pets and non-target animals continue to be trapped. There is no requirement for reporting animals that are trapped or killed, including domestic pets, therefore there is no limit as to how many animals have suffered or will suffer in the future.

In addition to danger to unsuspecting humans and pets, traps also expose a dangerous threat to non-target animals. Horses, deer, bear, rabbits, quail, and endangered species are all vulnerable to trapping.

Although there is no current recommendation to increase the hunting limits on mountain lions in New Mexico, the state's current strategy for managing lions is based on invalid assumptions that mountain lion populations in New Mexico require human intervention in order to mitigate conflict.

Except in rare instance, mountain lion populations do not require management to control growth, because their populations are self-regulating based on the abundance of prey and the carrying capacity of the land to support prey populations. In other words, when prey populations decline, so do mountain lion populations. Because of these predator-prey dynamics, mountain lion populations do not need to be managed by humans.

Mountain lions occur at low densities relative to their primary prey (Stoner et al. 2006). In order to survive, mountain lions must increase or decrease the sizes of their territories relative to prey populations (Wallach et al. 2015). Lions kill other lions to defend territorial boundaries, or starve without a territory sufficient to meet their needs.

And recreational hunting is the wrong tool for addressing conflicts, because hunting targets the wrong lions.

Trophy hunting targets large adult lions with established territories and habits. Those lions are not only the least likely to come into repeated conflicts with humans, but their stable presence reduces the number of young dispersing lions most likely to enter human-occupied areas and to attack domestic animals.

Recent science has demonstrated that, because hunting results in a younger overall age structure, hunting pressure can predictably increase the number of conflicts with humans and domestic animals (Creel and Rotella 2010, Ausband et al. 2015, Darimont et al. 2015, Cooley et al. 2009).

A study in Washington State showed that, as wildlife officials increased quotas and lengthened hunting seasons, mountain lion complaints increased rather than decreased. The heavy hunting pressure resulted in a higher ratio of younger males in the population as a result of immigration and emigration (Tiechman et al. 2016). Contrary to popular belief, hunting mountain lions results in an increase in complaints and livestock depredation due to disruption of their social structure, and increased immigration of young dispersing lions (Tiechman et al. 2016, Peeble et al. 2013).

Conflicts with mountain lions are exceedingly rare, and coexistence is possible.

Throughout the West, people have learned to live alongside lion populations with little conflict. The same could be true in New Mexico if the state were to make a more concerted effort to bring valid biological and behavioral information about mountain lions to the attention of the public. With such additional understanding, the public will recognize that conflicts with mountain lions are exceedingly rare, easily resolved, and that the value of mountain lions is significant.

When conflict does occur, intervention can occur at the level of a specific lion, rather than at the population level, for more cost-effective and biologically sustainable conflict resolution. It makes much more sense to assess what might be done to limit the behavior of particular lions when and where a conflict happens, rather than to try to control entire populations in the vain hope that the unwanted behaviors of specific lions will be limited.

When one looks beyond simple counts of mountain lions, it becomes clear that a scientific assessment of the stability of subpopulations, age and sex ratios, and health and stability of breeding populations is essential. A rise in numbers alone might be indicative that stable breeding populations have been disrupted and replaced by unsustainable numbers of young dispersing lions fighting over territory and likely to create conflicts. Counterintuitively, if hunting were to cease, social structures and population size might stabilize and conflicts become less common.

Recreational hunting of mountain lions results in additive and unsustainable mortality.

Even though it is an ineffective tool, trophy hunting is unfortunately the greatest source of mortality for mountain lions throughout the majority of their range in the United States (WildFutures 2005). Hunting mountain lions results in additive mortality – rates that far exceed what would happen in nature – and can lead to population instability and decline (Vucetich et al. 2005, Eberhardt et al. 2007, Darimont et al. 2015).

In order to sustain viable populations of mountain lions, prevent human-wildlife conflict, and avoid compromising the long-term viability by failing to account for all human-caused sources of mortality, hunting of adult lion populations should not exceed the intrinsic growth rate of the population of interest (Beausoleil et al. 2013).

The intrinsic growth rate for mountain lion populations is established by researchers to be between 15-17% (Robinson and DeSimone 2011). Assuring that human-caused mortality is limited to well below this threshold facilitates the maintenance of home ranges and social stability, reducing the likelihood of increased conflict with humans and population decline (Maletzke et al. 2014).

Additionally, trophy hunting of mountain lions leads to an increase in kitten mortality in heavily hunted populations (Stoner et al. 2006, Wielgus et al. 2013). Killing an adult female with kittens results in the death of her dependent young by dehydration, malnutrition, predation and exposure; even those who are at least six months to a year old (Stoner et al. 2006). This impacts a population's ability to recruit new members if too many adult females are removed, making the population less resilient to hunting and other causes of mortality, both human-caused and natural (Anderson and Lindzey 2005).

Previous quotas set by NMDGF far exceed the sustainable threshold of 12-14% for **total** anthropogenic (human-caused) loss within a population that is widely accepted by western state agencies and the majority of mountain lion researchers (Beausoleil et al. 2013). In terms of this threshold, the word sustainable means that should anthropogenic mortality exceed the threshold over time, populations will decrease, and eventually extirpation will occur.

As of 2010, NMDGF estimated there were between 3,123 and 4,269 independent, adult cougars in the state. If the actual mountain lion population falls along the lower end of the confidence interval, then the 2016-20 Total Mortality Limit of 749 mountain lions would represent a 24% loss to the population, exceeding the 12-14% threshold set by experts by more than 12%.

There is ongoing research to estimate zone-specific mountain lion populations in New Mexico. Recent data and user-group input suggest densities used to set harvest limits are too high, require thorough review, and need to be updated. Failing to do so could result in unsustainable harvest, which can lead to sink populations.

The agency has also failed to consider other forms of anthropogenic mortality when setting quotas, including vehicle strikes, incidental snaring or trapping, poisoning, poaching, and public safety removal which all must be included in order to effectively stay below the extirpation threshold.

Using hounds to pursue mountain lions is unethical and is not considered to be fair chase.

Hounding is an inhumane and outdated sport that has been banned in two-thirds of the United States. Hounding poses significant risk to the hounds as well as to young wildlife, including dependent kittens and cubs, who may be attacked and killed by hounds (Lindzey et al. 1992, Logan and Sweanor 2001, Elbroch et al. 2013). Hounds also disturb or kill non-target wildlife and trespass onto private lands (Hristienko and McDonald 2007). This practice is not fair chase and is highly controversial, even among hunters (Posewitz 1994, Teel et al. 2002, WildFutures 2005).

Fair chase hunting is based upon the premise of giving the animal an equal opportunity to escape from the hunter (Posewitz 1994). Using hounds, especially those equipped with GPS collars, provides an unfair advantage to hunters.

Many proponents of hound hunting claim that hunters can be more selective using this technique. Since hunters can get so close to a treed animal, hound hunting advocates assert that hunters can determine the sex, size, and general age of an animal before determining whether or not they are permitted to harvest that individual. Knowing the sex and other demographic status of the individual being hunted could be helpful in maintaining a viable population. However, a review of 30 years of records from game managers throughout the

western United States found that, although technically feasible, most hunters could not tell the size and sex of an animal up a tree. Hunters had roughly 50% accuracy when determining sex; the same as if they had determined the sex with a coin toss.

We recognize that there is pressure to reduce mountain lion populations in order to satisfy deer hunters that they will not be competing with mountain lions for deer, and note that reduction of mountain lion populations will not increase ungulate populations unless lion populations are decreased unsustainably.

Hunting mountain lions has long been thought to bolster populations of game species like mule deer, while reducing competition for this shared resource.

On the East Coast of the United States, it has become clear that when mountain lions are extirpated entirely, deer populations do increase. However, it is not true that simply decreasing the number of mountain lions relative to deer populations will cause deer populations to increase or remain healthy over the long term. Mountain lions and deer have co-evolved to create a natural balance. Suitable available habitat will continue to determine deer numbers (even given limited long-term impacts from mountain lions), and lion numbers will fluctuate in response, unless mountain lions are nearly extirpated.

In other words, an agency cannot adjust prey numbers by reducing predators without risking extirpation of the predator population.

A recent study evaluated the impacts that heavy hunting of mountain lion has on mule deer and elk. The study found that heavy hunting pressure on these apex predators had the opposite effect on mule deer (Elbroch and Quigley 2019). As trophy hunters often target the large, dominant male, they inadvertently reduce the age structure of mountain lions in the area, leaving younger, less experienced lions on the landscape. According to the study, these younger predators typically selected for mule deer instead of larger prey species like elk. As a result, the researchers noted that, despite increased survival of fawns and females, the removal of mountain lions did not yield a growth in the mule deer population. Instead, they suggested that hunting may actually be increasing the number of mountain lions that specialize in targeting deer.

Killing mountain lion kittens dependent upon nursing mothers is not acceptable to most New Mexico residents. However, current hunting rules make orphaning very common.

While it is not permitted in New Mexico to kill any females accompanied by spotted kittens, dependent young may not always be in the presence of their mother, and spotted kittens have been taken by hunters in the state. Without kittens in her presence, a hunter may not be aware that a female has offspring and may kill her. As mountain lions offspring are dependent on their mothers for survival up to around 18 months of age, the loss of their mother prior to reaching adulthood would likely result in the death of her young, even if they are around a year old.

A recent study has shown that delaying the start of hunting seasons until December 1 would protect about 91 percent of kittens from perishing as a result of being orphaned by hunters (O'Malley et al. 2018). By better aligning any hunting seasons with denning periods, hunters will have the best opportunity to identify females with kittens. This, ultimately, will benefit both mountain lions and hunters that want to ensure that their populations remain healthy into the future.

Based on the information above, the Mountain Lion Foundation respectfully requests that:

- **Approve the Cougar Rule changes that halt the use of traps and foot snares for sport harvest of mountain lions on private and state trust lands.**

- **The Department provide a comprehensive annual assessment of anthropogenic mortality in New Mexico, readily available to the public in a timely manner and well in advance of proposed changes to lion policy.**

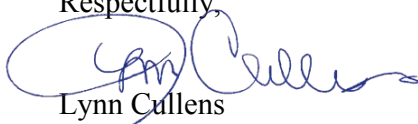
There is substantial and generally unavoidable human-caused mortality of mountain lions due to vehicle strike, incidental snaring or trapping, poaching, hunting on tribal lands, conflicts with domestic animals, public safety removal and other causes which have not been quantified in the draft plan. Because these numbers contribute the threshold for sustaining a mountain lion population without risk of extirpation, the Department and Commission should err on the side of caution to maintain the breeding population of lions in New Mexico.

This will require that the Department assess anthropogenic mortality more effectively, and make these numbers available for public scrutiny on a timely annual basis.

- **New Mexico suspend mountain lion hunting entirely, given high anthropogenic mortality, and the value of mountain lions to New Mexicans and to recolonization of eastern states.**
- **Restrict killing of mountain lions in all parts of the state to department issued permits or actions targeting individual lions in specific situations where it will demonstrably and effectively resolve a serious conflict.**
- **Hold multi-state discussions with other neighboring state agencies so that lions may recover in their historic ranges.**
- **If suspension of hunting is rejected, we ask that at a bare minimum the Department and Commission reconsider quotas annually and reduce quotas to below the 12% sustainable limit, less the full tally of annual anthropogenic mortality described above.**
- **Review and update mountain lion population estimates used to set harvest limits, and incorporate the latest research on best practices for mountain lions in the Department's modeling.**
- **Delay the start of all mountain lion hunting seasons until December 1 to protect dependent kittens from being orphaned by hunters, and that killing of mountain lions throughout the remainder of the state be similarly restricted to reduce orphaning.**
- **Eliminate the use of hounds to pursue mountain lions as a socially disruptive, inhumane and unethical practice.**
- **If the Commission decides to continue to allow the use of dogs then, at the very least, GPS collars should be prohibited as the practice does not align with fair chase values.**

Thank you for your consideration. Please make this comment letter a part of the official record regarding this decision.

Respectfully,


Lynn Cullens



Questions or requests regarding this comment letter may be directed to:



REFERENCES

- Anderson, C. R., and F. G. Lindzey. 2005. **Experimental evaluation of population trend and harvest composition in a Wyoming cougar population.** Wildlife Society Bulletin 33:179–188.
- Ausband, D. E., C. R. Stansbury, J. L. Stenglein, J. L. Struthers, and L. P. Waits. 2015. **Recruitment in a social carnivore before and after harvest.** Animal Conservation 18:415–423.
- Batavia, C., M. P. Nelson, C. T. Darimont, P. C. Paquet, W. J. Ripple, and A. D. Wallach. 2018. **The elephant (head) in the room: A critical look at trophy hunting.** Conservation Letters.
- Beausoleil, R. A., G. M. Koehler, B. T. Maletzke, B. N. Kertson, and R. B. Wielgus. 2013. Research to regulation: **Cougar social behavior as a guide for management.** Wildlife Society Bulletin.
- Cooley, H. S., R. B. Wielgus, G. M. Koehler, H. S. Robinson, and B. T. Maletzke. 2009. **Does hunting regulate cougar populations?** A test of the compensatory mortality hypothesis. Ecology 90:2913–2921.
- WildFutures. 2005. **Cougar Management Guidelines.** WildFutures, Bainbridge Island, WA.
- Creel, S., and J. J. Rotella. 2010. **Meta-Analysis of Relationships between Human Offtake, Total Mortality and Population Dynamics of Gray Wolves (*Canis lupus*).** PLoS ONE 5.
- Darimont, C. T., C. H. Fox, H. M. Bryan, and T. E. Reimchen. 2015. **The unique ecology of human predators.** Science. 349:858-860.
- Eberhardt, L. L., P. J. White, R. A. Garrott, and D. B. Houston. 2007. **A Seventy-Year History of Trends in Yellowstone's Northern Elk Herd.** Journal of Wildlife Management 71:594–602.
- Elbroch, L. M., and H. Quigley. 2019. **Age-specific foraging strategies among pumas, and its implications for aiding ungulate populations through carnivore control.** Conservation Science and Practice 1.
- Elbroch, L. M., B. D. Jansen, M. M. Grigione, R. J. Sarno, and H. U. Wittmer. 2013. **Trailing hounds vs foot snares: comparing injuries to pumas Puma concolor captured in Chilean Patagonia.** Wildlife Biology 19:210-216.
- Hristienko, H., and J. McDonald, John E. 2007. **Going in the 21st century: a perspective on trends and controversies in the management of the black bear Ursus.** 18:72-88.
- Larue, M. A., C. K. Nielsen, and B. S. Pease. 2019. **Increases in Midwestern cougars despite harvest in a source population.** Journal of Wildlife Management 83(6):1306-1313.
- Lindzey, F. G., W. D. Vansickle, S. P. Laing, and C. S. Mecham. 1992. **Cougar Population Response to Manipulation in Southern Utah.** Wildlife Society Bulletin 20:224-227.
- Logan K. A., L. L. Sweanor, J. F. Smith, B. R. Spreadbury, and M. G. Hornocker. 1990. **Ecology of an unexploited mountain lion population in a desert environment.** New Mexico Dep. Game and Fish. 141pp.

- Logan, K. A., L. L. Sweanor, T. K. Ruth, M. G. Hornocker. 1996. **Cougars of the San Andres Mountains, New Mexico**. Hornocker Wildlife Institute, Moscow, Idaho.
- Logan, K. A., and L. L. Sweanor. 2001. **Desert puma: evolutionary ecology and conservation of an enduring carnivore**. Island Press, Washington, DC.
- Maletzke, B. T., R. Wielgus, G. M. Koehler, M. Swanson, H. Cooley, and J. R. Alldredge. 2014. **Effects of hunting on cougar spatial organization**. Ecology and Evolution.
- New Mexico Department of Game and Fish [NMDGF]. 2006. **Mountain lion sign survey synopsis 2002 – 2004**.
- New Mexico Department of Game and Fish [NMDGF]. 2007. **Mountain lion sign survey synopsis 2005 – 2006**.
- New Mexico Department of Game and Fish [NMDGF]. 2010. **Management Strategy for Cougar Control to Protect Desert Bighorn Sheep**.
- New Mexico Department of Game and Fish [NMDGF]. 2011. **Cougar zone map and habitat model**.
- New Mexico Department of Game and Fish [NMDGF]. 2016. **Cougar management strategy for hunting seasons 2016-2020**.
- New Mexico Department of Game and Fish [NMDGF]. 2016. **Living with large predators**.
- New Mexico Department of Game and Fish [NMDGF]. 2019. **Cougar mortality 2012-2018**.
- New Mexico Department of Game and Fish [NMDGF]. 2019. **Cougar season harvest limit**.
- New Mexico Department of Game and Fish [NMDGF]. 2019. **Bear and cougar rule 2020 presentation at the Socorro, NM Commission Meeting on July 24, 2019**.
- New Mexico Department of Game and Fish [NMDGF]. **Evaluation of an 8-year mountain lion removal management action on endangered desert bighorn sheep recovery**.
- New Mexico Department of Game and Fish [NMDGF]. 2009. **Fra Cristobal Mountains: Evaluation of an 8-year mountain lion removal management action on endangered desert bighorn sheep recovery**.
- O'Malley, C., L. M. Elbroch, A. Kusler, M. Peziol, and H. Quigley. 2018. **Aligning mountain lion hunting seasons to mitigate orphaning dependent kittens**. Wildlife Society Bulletin 42:438–443.
- Peebles, K. A., R. B. Wielgus, B. T. Maletzke, and M. E. Swanson. 2013. **Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations**. PLoS ONE 8.
- Posewitz, J. 1994. **Beyond Fair Chase: The Ethic and Tradition of Hunting**. Falcon Press, Helena, Montana.
- Robinson, H. S., and R. DeSimone. 2011. **The Garnet Range Mountain Lion Study: Characteristics of a Hunted Population in West-Central Montana**. Final Report. Montana Fish, Wildlife & Parks. Helena, MT.
- Stoner, D. C., M. L. Wolfe, and D. M. Choate. 2006. **Cougar Exploitation Levels in Utah: Implications for Demographic Structure, Population Recovery, and Metapopulation Dynamics**. Journal of Wildlife Management 70:1588–1600.
- Teel, T. L., R. S. Krannich, and R. H. Schmidt. 2002. **Utah stakeholders' attitudes toward selected cougar and black bear management practices**. Wildlife Society Bulletin 30:2-15.

- Teichman, K. J., B. Cristescu, and C. T. Darimont. 2016. **Hunting as a management tool? Cougar-human conflict is positively related to trophy hunting.** BMC Ecology 16.
- Vucetich, J. A., D. W. Smith, and D. R. Stahler. 2005. **Influence of harvest, climate and wolf predation on Yellowstone elk, 1961-2004.** Oikos 111:259–270.
- Wallach, A. D., I. Izhaki, J. D. Toms, W. J. Ripple, and U. Shanas. 2015. **What is an apex predator?** Oikos 124:1453–1461.
- Wielgus, R. B., D. E. Morrison, H. S. Cooley, and B. Maletzke. 2013. **Effects of male trophy hunting on female carnivore population growth and persistence.** Biological Conservation 167:69–75.



BlackBearsMatter™

September 5, 2019

An open letter to the New Mexico Game Commissioners

We commend you for stepping up to be a Game Commissioner in our beautiful state. Yours is an important job and sometimes a thankless one. We all should have an ongoing, strong commitment to preserving our state's wildlife and to find a balance between 'harvesting' (killing) of our state animal, the Black Bear, and protecting its habitat and feeding range for future generations.

There are conflicting opinions on what is the 'right' number of bears to be hunted and killed each year. Some want more and others want less. One of the big problems is that we do not have accurate numbers of the Black Bear population in the state. Right now, there are too many groups at odds with each other, especially when it comes to the competing interests of ranchers, trappers, hunters and conservationists.

Bears are actually pretty shy creatures, though some will always venture into residential areas to look for food, and that's when the delicate balance between animals and people begins to break down. When bears look for food outside the forest many homeowners call the New Mexico Game & Fish Department (G&F) to intervene. Unfortunately, those interventions often end in the death of the animal, because for some, bears are regarded as 'nuisance animals' like coyotes. Our Black Bears live with a permanent death sentence hanging over their heads because the guidelines for killing them (G&F Memorandum of March 27, 2012 from James S. Lane, Director) are too general and give largely unchecked latitude to G&F when it comes to their destruction. They allow for the potentially indiscriminate destruction of bears that are just exhibiting normal behavior, especially during periods of meager food availability.

Several years ago, many bears were given the benefit of the doubt and a reprieve from execution. Many were relocated and not killed as they are today. During the last four-to-five years, mature female bears (sows) were being killed by hunters at lower rates, in the 30% range.

This year, however, G&F is allowing a marked increase in the number of sows that are allowed for destruction. The sow limit is now set at 318, a totally unrealistically high number when considering that for the past four years it was at 180 not counting depredation deaths (road kills and euthanization of 'bad bears.')

Those of us who believe that this will severely impact the bears' ability to sustain their numbers and thrive in our forests plead with you to intervene. We really do. We ask that you use your considerable influence to restrict and reduce the number of sow kills to 100 - a more reasonable and defensible figure, especially since we do not have an accurate count of the entire population. That said, we also ask that a new population study be undertaken to determine the real number of Black Bears in New Mexico.

The Commissioners have the power to effect real change and help solve New Mexico's 'bear problem.'

There are systemic problems with our bear management in New Mexico, but there are also some possible solutions to them. Consider these...

Problem: We kill too many bears and justify it by using faulty data.

Solution: Cooperate with other states and use their best practices to help craft a sound bear management program for New Mexico (Colorado has one) AND implement it.

Problem: Lack of transparency. Communities and neighborhoods have no way of seeing, in real time - on a daily basis - **where** specifically bears have been killed, for what reasons and how.

Solution: G&F can put up the data on these depredations (bear deaths other than hunting kills) on their website, on a daily basis, so that everyone can see it, and we urge the Commissioners to see that this is done.

Problem: We have bear destruction guidelines that don't favor relocation over destruction or mandate a kill justification.

Solution: Re-draft the guidelines and make officers accountable for each and every bear kill.

Problem: We don't insist that homeowners electrify their chicken coops or bear-proof their refuse containers.

Solution: Establish an outreach program of state-sponsored assistance through G&F to homeowners wishing to bear-proof their surroundings and animal pens and teach them how to interact with bears. (New Mexico Bear Watch has done much good work to inform homeowners about this issue, and kudos to them.)

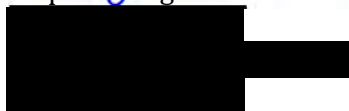
Problem: We have a 'bear as nuisance' culture in New Mexico instead of a 'bear as state treasure' culture and it is reflected in the alarming number of depredation kills and the higher-than-necessary hunting quotas.

Solution: Work to change the culture through more information, more compassionate bear encounters by G&F personnel and more interaction with the public.

Finally, the real enemy of our bears is our reluctance to cooperate with each other or confront the real issues facing our state's animal. By the simple act of saving, relocating or rehabilitating one bear we not only show respect for the creatures we are pledged to protect, but we also honor our commitment to ourselves as stewards of nature.



Stephan Helgesen





September 16, 2019

Joanna Prukop, Chair
Roberta Salazar-Henry, Commissioner
Jimmy Bates, Commissioner
Gail Cramer, Commissioner
Tirzio Lopez, Commissioner
David Soules, Commissioner
Jeremy Vesbach, Commissioner
New Mexico State Game Commission

Michael Sloane, Director
New Mexico Department of Game and Fish

via Electronic Mail

On behalf of the Humane Society of the United States (HSUS), Animal Protection of New Mexico (APNM), and each organization's members and supporters in New Mexico, we respectfully submit these comments on the New Mexico Department of Game and Fish's (NMDGF) most recent set of proposed changes to the Bear and Cougar Rule, dated September 5, 2019 ("Proposal"). These comments will address the cougar-related provisions of the Proposal only; bear-related provisions will be addressed under separate cover.

These comments do not represent an exhaustive analysis of the Proposal. The limited, incomplete, and preliminary information available to the public at this time precludes a full assessment of its scientific and policy merits. To provide an adequate opportunity for meaningful input during the upcoming formal public comment period, full information about the reasoning, scientific evidence, and management goals underlying the Proposal must be available. We provide specific examples of information that NMDGF needs to disclose prior to the public comment period in Section 3 below.

We enthusiastically support the decisions to no longer allow traps and foot snares as a method of sport harvest for cougar, and to no longer allow an additional two tags for cougar license holders who have already filled their two-cougar bag limit.

However, we have serious concerns about the Proposal's revised cougar quotas (or "harvest limits"). While we broadly support a reduction in quotas statewide, the Proposal contains substantial errors that upwardly distort the proposed quotas. To ensure that the proposed rule reflects sound science and management principles and does not needlessly repeat errors that

plagued prior iterations of the Bear and Cougar Rule, we strongly encourage NMDGF to correct these issues prior to the issuance of the proposed rule.

1. Updated Cougar Population Estimates Must Inform Quotas Statewide, Not Only in Zones B, F, and N

We support NMDGF's efforts to update its cougar population estimates using recent data. Previous estimates were based on scientifically unjustified assumptions about cougar population density; the Department itself has admitted in federal grant applications that they are "neither adequate nor reliable." These inadequate figures, derived from a cherry-picked and misinterpreted selection of sources, have led to inflated quotas in every Cougar Management Zone (CMZ) across the state.¹ Sound wildlife management demands that these estimates be revised using better and more recent scientific information, including a peer-reviewed study of New Mexico's cougar population density published earlier this year.²

Troublingly, however, the Proposal seems to indicate that NMDGF is only updating its population estimates for zones B, F, and N – while making no effort to revise and correct its estimates for the remaining 16 zones in the state, which together contain an overwhelming majority of New Mexico's cougar population. The proposed harvest limits for those 16 zones are consistent with a change in the *harvest rates* (the percentage of the total estimated population that may be removed in any one season), but not the estimated cougar population to which these rates are applied. A reduction in harvest rates is certainly warranted, as discussed more fully in Section 2 below. However, by neglecting to update the inflated population estimates, the Proposal only addresses one part of a two-part problem.

The fact that recent studies were conducted only in zones B, F, and N does not excuse ignoring those studies entirely for the purpose of developing population estimates for other zones. Indeed, NMDGF's existing population estimates for those zones were extrapolated from studies conducted in even smaller areas of the state³ – or outside the state entirely – and are even

¹ None of the sources that NMDGF claims to have relied on for its cougar population density estimates support the figures used to set quotas in the 2016-2020 Bear and Cougar Rule. This problem will be addressed more fully during the public comment period, after NMDGF releases its new estimates. But for a brief example, the Department assumes under the current model that there are 3-4 cougars per 100 square kilometers in "excellent"-quality habitat, and develops population estimates and quotas accordingly. Yet no research cited by NMDGF or known to HSUS or APNM supports this figure; at the time of that rulemaking, the leading study conducted New Mexico (Logan and Sweanor 1996) found a range of 0.84-2.1 cougars in "excellent" habitat, with others finding 1.8 (Pittman 2010), 1.6 (Beausoleil 2013), 1.2-3.2 (Choate *et al.* 2006), and 1.5-2.2 (Ross and Jalkotzy 2010). Murphy *et al.*'s 2019 study (see footnote 2 below) casts even more doubt on NMDGF's estimates.

² Murphy *et al.*, "Improving estimation of puma (*Puma concolor*) population density: clustered camera-trapping, telemetry data, generalized spatial mark-resight models," Scientific Reports 9:4590 (March 2019) (*available at* <https://www.nature.com/articles/s41598-019-40926-7>).

³ For example, Megan Pittman's unpublished 2010 master's thesis, relied on heavily by the Department to develop its most recent estimates, was based on a study of a single 100 square kilometer zone on the Ladder Ranch in Cougar Management Zone J.

narrower in their applicability. Incorporating and applying new data broadly could only improve, not reduce, the accuracy and reliability of estimates statewide.

There is no question that cougar quotas must be decreased in every CMZ, but the Proposal still falls short of what the science supports. We are gravely concerned that NMDGF has derived new quotas for most zones in the state by applying modestly decreased harvest rates to the same unsupportable and overinflated population estimates it has relied on in the past. This may represent a step in the right direction, but ultimately trades one arbitrary figure for another. There is no rational justification for continuing to use outdated and unsound population estimates in 16 out of 19 CMZs when more recent scientific evidence on population estimates exists and is in fact being used for the remaining 3 CMZs.

Moreover, we are unable to comment on the scientific validity of any revised population estimates for zones B, F, and N at this time because NMDGF has not published the estimates themselves or the data and statistical analysis from which they were derived. In fact, the new estimates for these zones do not even appear to be completed as of the date of this comment, alarmingly suggesting a rushed process that does not lend itself to transparency and scrutiny from the Commission or the public. This information must, at minimum, be made available during the formal public comment process in order to afford a full opportunity to assess the proposed rule; and the Commission must be prepared to reject the Proposal if this information is not available with adequate time for the Commission to require appropriate amendments based on those public comments if population estimates remain unjustifiably high.

2. NMDGF Must Disclose and Justify its Management Objectives and Further Reduce Harvest Rates

As discussed above, the Proposal's revised harvest limits reflect an adjustment in the harvest rates applied in each CMZ. But the current Proposal fails to explain or justify the management goals associated with the rates chosen. Under the previous Bear and Cougar Rule, NMDGF divided CMZs into two categories, separated by management objective. In CMZs where NMDGF sought to cause the population to decline,⁴ a 25 percent harvest rate was used to derive harvest limits. In CMZs where population stability⁵ was the objective, a 17 percent harvest rate was used.

Now, all but one of the CMZs that was previously managed for intentional population decline have been reduced from a 25 percent to a 17 percent harvest rate. Zone L, for which harvest limits have not changed, remains at a 25 percent rate and should at minimum be reduced in line with other CMZs. Setting aside the question of whether intentional population reduction can ever be justified when population estimates are so unreliable, we support this change. The best available science shows that a 25 percent harvest rate is excessive even where intentional population decline is the objective, and that any total mortality rate (e.g., trophy hunting,

⁴ CMZs D, F, G, H, K, L, P, and S.

⁵ CMZs A, B, C, E, I, J, M, N, O, Q, and R.

predator control, poaching and roadkill) above 14 percent is unsustainable and likely to cause population decline.⁶

But many of the zones that were previously managed for population stability remain at or near a 17 percent harvest rate. These include zones A, I, J, Q, and R – where harvest limits were not reduced, or reduced only very slightly. NMDGF appears to have concluded – correctly – that 17 percent represents an unsustainable rate of harvest that will cause population *decline*, not *stability*. Yet the Proposal irrationally maintains a 17 percent rate of harvest in both CMZs managed for stability and CMZs managed for decline.

This apparent disconnect between management objectives and harvest limits must be explained and corrected. While we support a reduction in harvest rates and harvest limits statewide, the Proposal is inconsistent in its approach and risks causing populations to decline even in zones where stability is an express objective. Harvest rates must be decreased to no more than 14 percent across the state—absent any clear and convincing evidence of the need to decrease the population in a particular CMZ, of which NMDGF has presented none.

3. Complete Information Must Be Provided Before the Public Comment Period Opens

Based on the information available at this time, those parts of the Proposal pertaining to trapping and bag limits are well-founded and should be adopted, while the revised harvest limits demand further consideration and adjustment. Yet, it is impossible to fully and adequately assess the Proposal based on the information available at this time. To ensure that the Commission and the public have an adequate opportunity to evaluate the Proposal before it is too late to make adjustments, NMDGF should release the following information with adequate time for public review *before* the proposed rule is published for public comment:

- Proposed harvest limits for CMZs B, F, and N (listed as “TBD” on current proposal);
- New data and analysis used to establish harvest limits for CMZs B, F, and N;
- Population estimates used to develop harvest limits for each CMZ;
- Harvest rates for each CMZ;
- Management objective (e.g. declining or stable population) for each CMZ.

In conclusion, HSUS and APNM support the decisions to no longer allow traps and foot snares as a method of sport harvest for cougar, and to no longer allow an additional two tags for cougar license holders who have already filled their two-cougar bag limit. Furthermore, while we

⁶ R. A. Beausoleil et al., "Research to Regulation: Cougar Social Behavior as a Guide for Management," *Wildlife Society Bulletin* 37, no. 3 (2013); R. B. Wielgus et al., "Effects of Male Trophy Hunting on Female Carnivore Population Growth and Persistence," *Biological Conservation* 167 (Nov 2013), <http://dx.doi.org/10.1016/j.biocon.2013.07.008>. H. S. Robinson and R. Desimone, "The Garnet Range Mountain Lion Study: Characteristics of a Hunted Population in West-Central Montana: Final Report," *Montana Fish, Wildlife & Parks* (2011); H. S. Robinson et al., "A Test of the Compensatory Mortality Hypothesis in Mountain Lions: A Management Experiment in West-Central Montana," *Journal of Wildlife Management* 78, no. 5 (Jul 2014), <http://dx.doi.org/10.1002/jwmg.726>; H. S. Robinson et al., "Sink Populations in Carnivore Management: Cougar Demography and Immigration in a Hunted Population," *Ecological Applications* 18, no. 4 (Jun 2008), <http://dx.doi.org/10.1890/07-0352.1>.

support the reduction in cougar harvest limits, we are concerned that such reductions remain insufficient to prevent trophy hunters from killing cougars at unsustainable levels. NMDGF must address this issue prior to the Proposal opening to public comment and provide complete information pertaining to how the proposed harvest limits were set, basing such decisions on the best available science on cougar management.

Thank you for the opportunity to comment. We look forward to continuing to engage with NMDGF and the Commission throughout this rulemaking process to ensure that the Bear and Cougar Rule represents reliable, peer-reviewed science.

Sincerely,

Jessica Johnson



Nicholas Arrivo



Final, October 2, 2008

Cougar Population Assessment and Harvest Management Matrix– Summary Perspective (2008-2011), New Mexico Department of Game and Fish. Baseline cougar management is set at 20% removal for each zone.

Zone	GMUs	Est. Hab. ^a(km²)	Pop Est.^{bc}	Management Objectives	Sustainable Total Mortality relative to Mgmt. Obj.^{de}	25% Female Sub-limit	2007-08 Harvest (females)	5 yr. avg. Removal	2007-08 Potential Pop. Growth
A	2, 7	13,742	108-161	Manage at a sustained pop. of 135	27	7	11 (5)	12	16 (2)
B	5, 50, 51	6,074	59-87	Manage at a sustained pop. of 73	15	4	13 (5)	16	2 (0)
C	43-46, 48, 49, 53-55	20,291	211-315	Manage at a sustained pop. of 263	53	13	41 (15)	35	12 (0)
D	41, 42, 47, 59	21,062	51-75	Manage at a sustained pop. of 63	13	3	5 (1)	6	8 (2)
E	9, 10	13,046	119-177	Manage at a sustained pop. of 148	30	8	7 (3)	2	23 (5)
F	6, 8	8,321	74-112	Manage at a sustained pop. of 93	19	5	12 (3)	16	7 (2)
G	13, 14, 17	18,747	185-275	Manage at a sustained pop. of 230	46	12	18 (7)	19	28 (5)
H	19, 20	17,636	89-130	Manage at a sustained pop. of 110	22	6	2 (0)	9	20 (6)
I	18, 36-38	21,586	136-204	Manage at a sustained pop. of 170	34	9	12 (5)	10	22 (4)
J	15, 16, 21, 25	27,758	275-410	Manage at a sustained pop. of 343	69	17	28 (12)	28	41 (5)
K	22-24	11,792	153-228	Manage at a sustained pop. of 191	38	10	14 (1)	19	24 (9)
L	26, 27	8,159	54-77	Manage at a sustained pop. of 66	13	3	4 (3)	10	9 (0)
M	31-33, 39, 40	54,290	140-209	Manage at a sustained pop. of 175	35	9	3 (0)	2	32 (9)
N	4, 52	2,937	38-57	Manage at a sustained pop. of 48	10	3	3 (1)	2	7 (2)
O	12	5,994	24-36	Manage at a sustained pop. of 30	6	2	0 (0)	1	6 (2)
P	56-58	8,744	45-68	Manage at a sustained pop. of 57	11	3	8 (3)	5	3 (0)

Final, October 2, 2008

Zone	GMUs	Est. Hab. ^a (km ²)	Pop Est. ^{bc}	Management Objectives	Sustainable Total Mortality relative to Mgmt. Obj. ^{de}	25% Female Sub-limit	2007-08 Harvest (females)	5 yr. avg. Removal	2007-08 Potential Pop. Growth
Q	28, 29, 30, 34	17,816	184- 274	Manage at a sustained pop. of 229	46	12	21 (12)	30	25 (0)
Totals:		289,507	2,041- 3,043		490	123	202 (76)	195 (85 females)	292 (47)

^a The quantity of the habitat was derived from a model designed by G&F, APNM, and Birdseyeviewgis, the habitat is classed as core, minimum patch, dispersal, and poor/marginal with core having an adult cougar density of 2.0-3.0/100km², min. patch having an adult cougar density of 0.89-1.2/100km², dispersal having an adult cougar density of 0.4-0.6/100km² and poor/marginal having an adult cougar density of 0.2-0.3/100km². In this model 92% of the state is considered cougar habitat, with 24% as the core, 4% as minimum patch and dispersal, and 60% being classed as poor/marginal.

^b The middle of the population estimate range is used for all management objectives and removal/harvest level calculations and may not reflect the true value for the population

^c Derived from density estimates as described in a.

^d Allowable sport harvest occurs in conjunction with other sources of mortality (i.e. depredation, roadkill, illegal take, private land kills, bighorn sheep removals, etc.) and does not exceed allowable sustainable total mortality, both harvest limits include 10% brackets below the harvest limit or sustainable harvest limit to allow for zone closures before limits have been reached

^e Female sub-limits restrict the female harvest to no more than 25% of the total harvest

References:

Anderson, C. R., Jr., and F. G. Lindzey. 2005. Experimental evaluation of population trend and harvest composition in a Wyoming cougar population. Wildlife Society Bulletin 33:179-188.

Beier, P. 1991. Cougar attacks on humans in the United States and Canada. Wildlife Society Bulletin 19:403-412.

Logan, K. A., and L. L. Sweanor. 2001. Desert puma: evolutionary ecology and conservation of an enduring carnivore. Island Press, Washington, D. C., USA.

Murphy, K. M. 1998. The ecology of the cougar (*Puma concolor*) in the northern Yellowstone ecosystem: Interactions with prey, bears, and humans. Dissertation, University of Idaho, Moscow, USA.

GRANT STATEMENT

STATE: New Mexico

GRANT NUMBER: W-93-R

GRANT TITLE: Big Game Surveys, Inventories and Management

SEGMENT NUMBER: 56

GRANT PERIOD: July 1, 2015 to June 30 2016

GRANT OBJECTIVE: To survey New Mexico's big game populations and their hunters and to manage these big game species according to the mission, goals and plans of the New Mexico State Game Commission (Commission) and the Department of Game and Fish (Department).

- A. **Need:** The W-93-R Grant provides programmatic guidance for fund expenditure to achieve the goals of the Department's big game management program.
- B. **Expected Results and Benefits:** The W-93-R Grant will continue to provide trend and distribution data on New Mexico's big game populations and their hunters. The information gathered will be used to prepare annual recommendations for big game management in accordance with the mission, goals and plans of the Commission and Department. Big game species covered under this grant include: Mule deer (*Odocoileus hemionus*), White-tailed deer (*O. virginianus*), Elk (*Cervus elaphus*), Pronghorn antelope (*Antilocapra americana*), Bighorn sheep (*Ovis canadensis*), Black bear (*Ursus americana*), Mountain lion or cougar (*Felis concolor*), Javelina (*Tayassu tajacu*), Persian ibex (*Capra aegagrus*), Oryx (*Oryx gazella*), and Barbary sheep (*Ammotragus lervia*).
- C. **Projects:**
1. Grant Administration and Coordination, Hunt Recommendations, and Private Land Programs.
 2. Population and Harvest Surveys, Inventories, and Big Game Management
- D. **Estimated Cost:** Estimated costs are presented in Table 1. Costs are itemized by budget category for each Segment. Expectations for development of the Department's budget for the proposed Grant Period remains the same. Tables have been readjusted to reflect current levels expenditures for W93R.

Table 1. Summary of estimated Grant expenditures by Project and budget categories for the period, July 1, 2015 through June 30, 2016, NMDGF.

Project	Salaries and Benefits	Contracts	Other Expenditures	Total
1	\$350,000.00	\$0.00	\$30,000.00	\$380,000.00
2	\$905,000.00	\$430,000.00	\$1,450,000.00	\$2,785,000.00
Totals	\$1,255,000.00	\$430,000.00	\$1,480,000.00	\$3,165,000.00

Density estimates, predictive habitat modeling and the relationship between mast production and reproductive success derived from an 8-year study of ecology and population dynamics of black bears in the Sangre de Cristo and Mogollon mountains in north-central and west-central New Mexico are currently incorporated into establishing harvest quotas for black bears in New Mexico (Black Bear Harvest Matrix 2010). Density (bears/100 km²) estimates were 17.0 and 9.4 in the Sangre de Cristo and Mogollon mountains, respectively. These density estimates, extrapolated across range of black bears in New Mexico and combined with the amount of primary bear habitat are used to estimate the population size of black bears within each of the six Bear Management Zones. Harvest limits, as a percentage of the estimated population, vary from year to year depending on the results of mast production surveys (Black Bear Harvest Matrix 2010), with lower harvest goals set following periods of low mast production and mast failure.

These density estimates and therefore the harvest objectives are considered by Department to be conservative (i.e., actual density is higher than estimated) because they are derived from calculations of minimum population size (i.e., not all bears within the study areas were captured). However, in spite of these efforts to incorporate biologically relevant data, based on a detailed research study, into determining harvest objectives for black bears there has still been concern and criticism voiced by some segments of the public that black bears are being overharvested in New Mexico. The basis for this concern primarily results from the extrapolation of data from two study areas to all six bear management zones. In addition to the uncertainty of extrapolating density estimates from one area of the state to another is the fact that the Department's 1990's study was conducted in prime bear habitat. Many studies that involve the capture and radio-collaring of animals often select study areas that are known *a priori* to have high population abundance, thus allowing for large sample sizes of radio-marked animals allowing for more precise estimates of vital rates and population parameters. However, there is concern that density estimates derived from these studies may not be applicable to larger areas or areas well outside of the primary study area where the research was conducted.

PROJECT GOALS: Our primary objective is to independently estimate the abundance and density of black bears >1year of age in primary bear habitat within 3 of the six bear management zones currently used by the Department to establish harvest objectives and manage black bears in New Mexico. We will then compare our density estimates to those derived from the 1990's study.

COUGAR

Similarly, the Department plans to initiate a study of cougar density and distribution in New Mexico, current tools simply extrapolate known densities in similar habitats from research conducted in New Mexico and other western states to estimate New Mexico's cougar population, based on the distribution of our available habitats. This method suffers from several unproven assumptions and although the information and method is necessary and efficient, respectively, it is neither adequate nor reliable. Our intent is to investigate the methodologies used in the fsdproposed study over the next 5 year period to evaluate them for use to manage cougars in New Mexico.

[REDACTED]
Sept. 13, 2019

New Mexico Dept. of Game and Fish
Attn: Bear and Cougar Rules Development
POB 25112
Santa Fe, New Mexico 87504

RE: Cougar Harvest Limit in Zone K

Dear Commissioner Prukop:

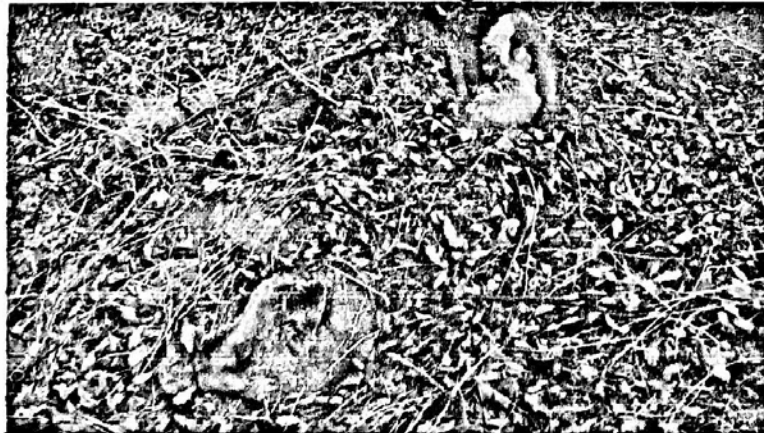
I strongly oppose the proposed reduction in the cougar harvest-limit in Zone K.

I have purchased a non-resident cougar licenses each year for the past 9 years. Friends from California, Texas, Arizona and Tennessee also purchase cougar licenses and hunt with me. In 2014 I purchased a house in Cliff, NM to hunt in Zone K.

There is no biological justification for reducing the harvest limit. Cougars are thriving in this zone. The dry conditions typical of this region make cougar hunting difficult. In dry ground tracks are hard to find and the success rate of completing the track is about 25%. Hence the harvest numbers are low.

Snow, which we rarely get in this zone, makes hunting much easier. Tracks are easy to find in snow, and the success rate of completing a track in snow is 90%. The harvest numbers depend on the snow conditions, not cougar density. We could take as many cougars in Zone K as in Zone J, if we had the same snow conditions. Last season we spent about 40 days hunting dry ground to tree 5 cougars. We had one day of fresh snow, on which we treed one cougar. The previous time we were aided by snow was January 22 & 23, 2017. We treed 3 cougars in those two days.

Cougar tracks and scats are commonly found in Zone K. The cougar density is high enough that they kill each other. I trailed a male cougar to this food cash in December



2017. (See photo) The male cougar had killed and cashed a female cougar. The second photo is the male cougar



that made this cash.

This is normal behavior for cougars. They are not over-sized house cats or people in fur coats as some people think of them. We expect this behavior in high cougar density.

In 2013 I met biologist, Jana Ashling, who had been hired by the Department to capture deer in the north edge of Silver City, where they congregate to avoid cougar predation, and move them to locations, where cougars had depleted the deer herd. She moved over 100 deer. Clearly, the cougar density is high enough to cause a problem with the management of the deer herd.

In 2014 I met a new hire in Zone K working for the Department. His job was to snare cougars and remove them to help mitigate the negative effects they were having on the deer and bighorn sheep. I was not happy about having competition from the Department for game I was hunting. But I support that activity, because we sport hunters, due to dry tracking conditions, were not able to remove enough cougars to keep the numbers in check. He later removed two cougars from the Big Dry Ranch, where I have permission to hunt.

Reducing the harvest limit to shorten our season favors the paid staff over those of us who pay the Department for hunting privileges. If this action is taken, it would be a clear case of governmental waste and bureaucratic dysfunction.

I urge you to consult the cougar biologist, the deer biologist and the bighorn sheep biologist in coming up with the harvest limits. Eric Rominger with NMDGF can provide information on the impact of cougars on bighorn sheep.

You would be making a big mistake to be swayed by vocal animal rights people, who champion their favorite species at the expense of other species. They come mostly from urban areas and do not have to live with the consequences of over-protected predators as rural people do. California is an example of where this path leads. A recent study titled *Black-Tailed Deer Population Assessment in the Mendocino National Forest, California Final Project Report December 2014, Wittmer et. al.* documents the continued decline of the deer herd at an annual rate of 11% to 18% with predation by cougars being a major factor.

I urge you to reject this ill-conceived proposal to reduce the cougar harvest limit in Zone K and base the harvest limits on biological data.

Respectfully Yours,

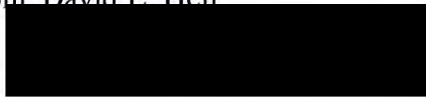
Daniel Tichenor

Daniel Tichenor, Ph.D.



September 6, 2019

From: David L. Heft



To: Jimmy Bates
New Mexico State Game Commission
P.O. Box 25112
Santa Fe, New Mexico 87504

Re: Lion Rule

Dear Commissioner Bates,

I would like to comment on the proposed lion rule as currently presented by the Department on its website. I would first like to comment on an error in the quota for Region Q which is the region I live in. The Department says there is no change proposed for this region but shows a proposed quota of 34 when the current quota is 35. The presentation before the commission showed the number remaining at 35 but the website proposal shows 34. A minor error but I presented the Department with copies of their own website showing another error between the website numbers and presentation numbers which they have now corrected. One thing I would like to point out before I make specific comments is that under the proposal and if the 10% closure limits are retained is that a maximum of only 15% of the state lion population is allocated for harvest by licensed hunters and trappers. The remaining 85% is essentially allocated to so called "non-consumptive" users already.

I am firmly opposed to the proposal to eliminate trapping as a legal harvest method for lion take. The numbers of lions taken by this method are low because it is not being used for "sport" trapping but is being used for livestock depredation prevention, native ungulate enhancement and human safety concerns. Trapping of lions is hard, time intensive work requiring a great deal of knowledge and expertise. Dog use is the prevalent method of harvest where snow is available because it is much easier to drive roads and turn dogs out on a track than to try to trap a lion. Trapping is also used almost exclusively by residents and not by non-residents contracted with the commercial hunting industry. Eliminating it just discriminates against residents and will shift more harvest to non-resident hunters which has been an on-going issue with the Department for years now. There is no biological justification or science behind this proposal as stated by the Department at the public meetings. The Department also continues to hire contractors to trap and remove lions over significant areas in the southern portion of the state for bighorn sheep management. The last figures I saw from the Department gave an average cost of \$5,100.00 per lion for this activity. I personally know one contractor who doesn't want any private license holders to take lions by hunting or trapping because those are "his lions" that the Department will pay him to remove. The Department currently spends over a million dollars a year on depredation and nuisance abatement. It seems to defy all common logic to add to that burden when New Mexico residents are willing to purchase multiple licenses and provide the service at no cost to the state. My recommendation would be that rather than eliminating this tool statewide that the commission retain it in lion zones G, H, K, L, and Q where the Department is currently using contractors for lion removal. This is a more targeted biologically justified management proposal and also removes the primary Mexican wolf zone from the area. The Department has mentioned on-going lawsuits but has also admitted in public meetings that eliminating lion trapping by private licensees will not make any lawsuit go away. This is not a valid reason to

propose this action.

I am also opposed to the elimination of the issuance of additional tags because again this discriminates against resident hunters/trappers and is not biologically supported or based on science. The current requirement that a zone not have met the quota for 2 of the previous 3 years ensures that the resource is equitably spread among license holders.


I would also like to comment as a hunter/trapper/biologist on 2 other items. I do not support a year round lion season. I have watched numerous changes over the last 40+ years in lion management in the state. Although I have seen this species population explode in my life time I believe we need to use the best available science to manage it in an integrated manner with the needs of other species while maintaining a viable lion population. Currently 95% of the lion harvest occurs from October through March. The 10 year San Andres study found that although lion births occurred year round that 41% occurred from July-September. I also feel that although so called "social science" should always be subordinate to actual biological science it needs to be considered and a year round season sends a message to the public that any such species is some how less deserving and of lower status. I would propose that we have an October through March season on lions. This would help potentially increase the protection of females with young kittens that may be away from them foraging. It also is more science based than proposals of tag reductions and eliminating legitimate harvest tools.

The last item I would comment on is my firm opposition to the Department's use of and authorizing of over-size large foothold traps in excess of fur harvest trap limits when doing research or issuing depredation permits for lion control on public lands. I have trained dozens of NMGF field officers over the years in the use of foot snares for lion take. This tool properly used is far more effective, humane, and presents less public conflict issues than oversize steel traps. The 10 year San Andres study also found this to be true as stated in the study particularly in impacts to non-target species. Foot snares can be rigged to prevent non-target capture and even self release in ways a steel trap cannot. I have heard the arguments from both Department personnel and their contractors for trap use and with 52 years of trapping experience I haven't heard anything to change my mind. Please use a little more oversight on some of the Department's activities as I know for a fact this action has resulted in multiple conflicts with public land users in the southwestern portion of the state. The result has been a call for increased restrictions on private fur trappers rather than addressing the issue of another government agency considering itself immune from the law and regulations.

Thank you,



David L. Heft



Your Community Voice in the Carson

Sept. 17, 2018



Carson Forest Watch

Joanna Bruck -
N.M. Game Commission
PO Box 25112
Santa Fe, N.M. 87504

on behalf of Carson Forest Watch Citizens Group in
Taos County, N.M., I am writing to urge the
N.M. Game Commission to increase protections
for our State's wildlife, and strengthen our State's
trapping regulations.

The current proposals are a step in the right
direction - but they do not go far enough to insure
that trapping in N.M. does not harm threatened &
endangered species, as well as public safety.
We remain concerned regarding threats to
non-target species, and pets, as well as important
predator species.

We support a ban on traps & snares on
all public land in New Mexico, and merely
→

"We abuse land
because we
regard it as a
commodity
belonging to us.
When we see
land as a
community to
which we belong,
we will begin to
use it with love
and respect."

— Aldo Leopold

A Sand County
Almanac

Moving traps further from roads & trails is not adequate to insure protection for our pets and wildlife.

Please address this concern and take steps to strengthen New Mexico trapping regs. We live in rural Taos County, adjacent to the Carson National Forest. Many of my neighbors raise livestock - yet also value our state wildlife and do not support traps on our public lands.

Thank you
Sincerely, Joanne Berde
for Carson Forest Watch

also - we request the Game Commission review and revise our State's Bear Hunt Quota - esp. for SOWS.

We remain concerned regarding the unsustainable harvest numbers of female bears and are concerned for the future health of our State's Bear population.

Recent drought & habitat loss threaten Bear reproduction & health and viability and forest of females only further puts future reproduction at risk.

Please review Bear Saw harvest numbers and reduce them to protect our Bear population into the future.

Please share this letter with other Commission members.
Thanks.

Sept. 27

Dear Chairwoman, Joanna Prueff,

I am writing to ask you to consider that no more than 100 bear sows be allowed to be killed, not 318.

This is critical since cub survival is only 15%.

I have always understood that population estimates are notoriously unreliable since they are so difficult.

Killing off so many sows in a year is counter productive, since many don't have their first cub until almost six years old.

Thank you for your consideration,

Karen Borch



Re: NM Game and Fish Bear rule review

September 9, 2019

Dear Commissioners and New Mexico Department of Game and Fish staff,

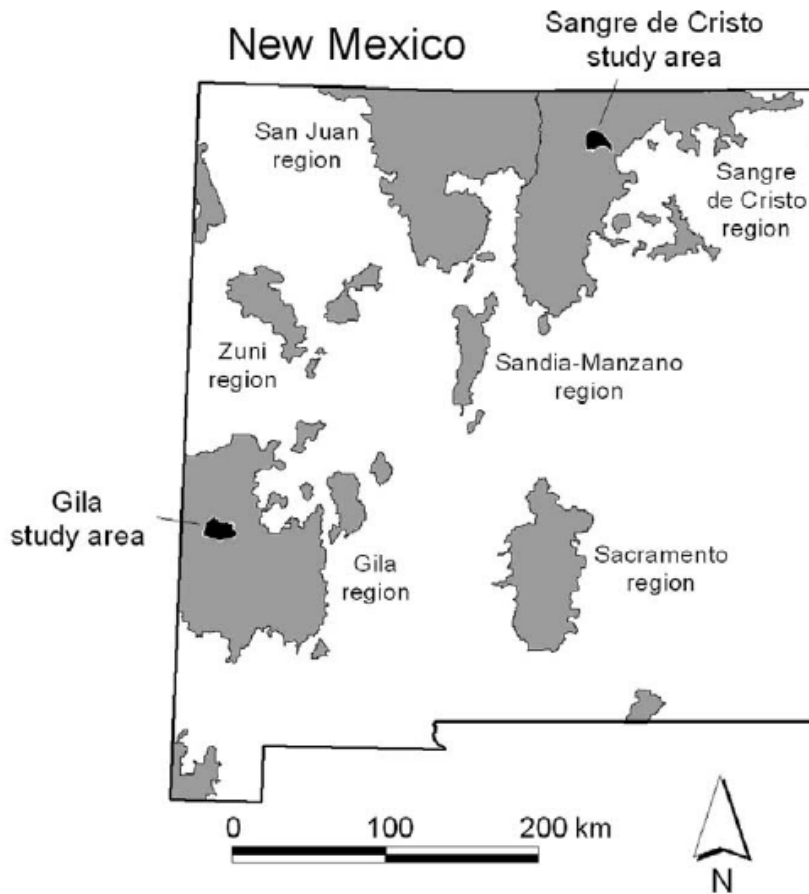
Please consider these comments about New Mexico Bear Management submitted on behalf of the Rio Grande Chapter of the Sierra Club, WildEarth Guardians, Animal Protection of New Mexico and our combined memberships of 19,800. The Black bear is an iconic species, the New Mexico state mammal and is featured in the logo of the NM Department of Game and Fish. The Black bear reproduces very slowly and populations are difficult to count and to monitor. The word "cryptic" is often used to describe the difficulty of gathering data on their populations. Hunting black bears is largely not done for sustenance, nor for science-based wildlife management purposes. It is trophy hunting and as such really should not be part of New Mexico's wildlife policy at all. Nevertheless, Because of uncertainty about how the bear population is trending in NM after recent years of high take especially of females, we are urging that the quotas be lowered and female black bears be better protected.

Background on how NM determines the number of bears in our state

1. Figuring out bear density:

A. To calculate bear density in some NMBear Management Zones, NMG&F relies in part on an 8-year study commenced in 1992. The results authored by Costello et al. were published in 2001.¹ It comprised 2 study areas, one in Northern NM east of Eagle's Nest of 310 km² and the other in Southern NM south of Reserve consisting of 423 km,² both in what was considered prime bear habitat.

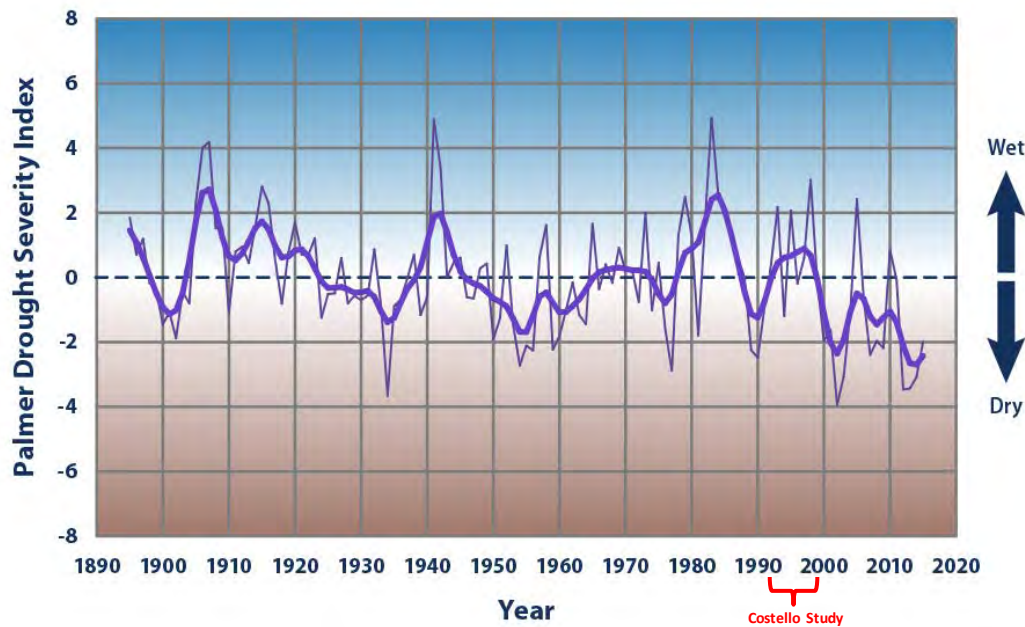
¹ <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/New-Mexico-Black-Bear-Study-Costello-et-al-2001%20.pdf>



During the study, bears were captured, fitted with radio transmitters, and reproductive data were obtained from den investigations. The study found that the average age for a female to produce her first litter is 5.7 years old. Often, the first litter is only one cub but in subsequent litters it is usually two though it can be up to three. A female of reproductive age will only breed *at most* every other year. Failure of mast production, acorns, juniper and other berries but especially acorns, in the fall was found to be highly associated with reproductive failure even if the 2-year interval was up.

Acorn and other mast failure can occur because of drought or late frost. We note that both of these are more likely more often as the climate warms and weather becomes more erratic. In fact, the Costello study beginning in 1992 occurred during modestly wet years. Years subsequent to the decade of the 90's during which the Costello study was conducted have been drier as the graph below shows which examined precipitation in the Southwest up to 2015.² This will unarguably have had an effect on mast production and thus bear reproduction and population numbers since the study. Bear food availability and the bear population will not be static through time and will be negatively impacted by the drier conditions brought on by climate change.

² <https://www.epa.gov/climate-indicators/southwest#>



The Costello study also attempted to estimate bear density but did not have the data for the traditional way this is done by capture and recapture. A subsequent study in New Mexico by Gould, et al. described some of the potential sources of error in the method used in the Costello study including the lack of a statistically based sample size which precluded the calculation of confidence levels, concluding that, " While Costello et al. (2001) was a progressive and highly informative study on New Mexico black bears, the capabilities of the technology at that time limited their ability to estimate abundance and density."³

Nevertheless, the density estimates from this 2001 study of a combined area of only 733 km² are what NMG&F uses for the entirety of Bear Management Zone 10 (where the southern study area was located), partially for Zone 3, and for Zones 1 and 2 though no density study exists at all for these zones. The Density estimate of Zone 9 was extrapolated by averaging the Costello density results between the northern and southern study areas assuming that the density of zone 9 would lie in between the two. No study results exist for this zone either. Taking an average value for bear density in this zone is pure speculation. (See Appendix 1 for the locations of Bear Management Zones).

B. The 2016 Gould, et al project provides for more recent and statistically significant bear density measurements using the snagging of bear hair samples at spatial intervals which were then analyzed to determine individual bear identities. This study sampled 7 areas as shown in this map lifted from the study as figure 1:⁴

³ <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/Estimating-Black-Bear-Density-in-New-Mexico-Gould-et-al-2016.pdf> page 5

⁴ <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/Estimating-Black-Bear-Density-in-New-Mexico-Gould-et-al-2016.pdf> page 25

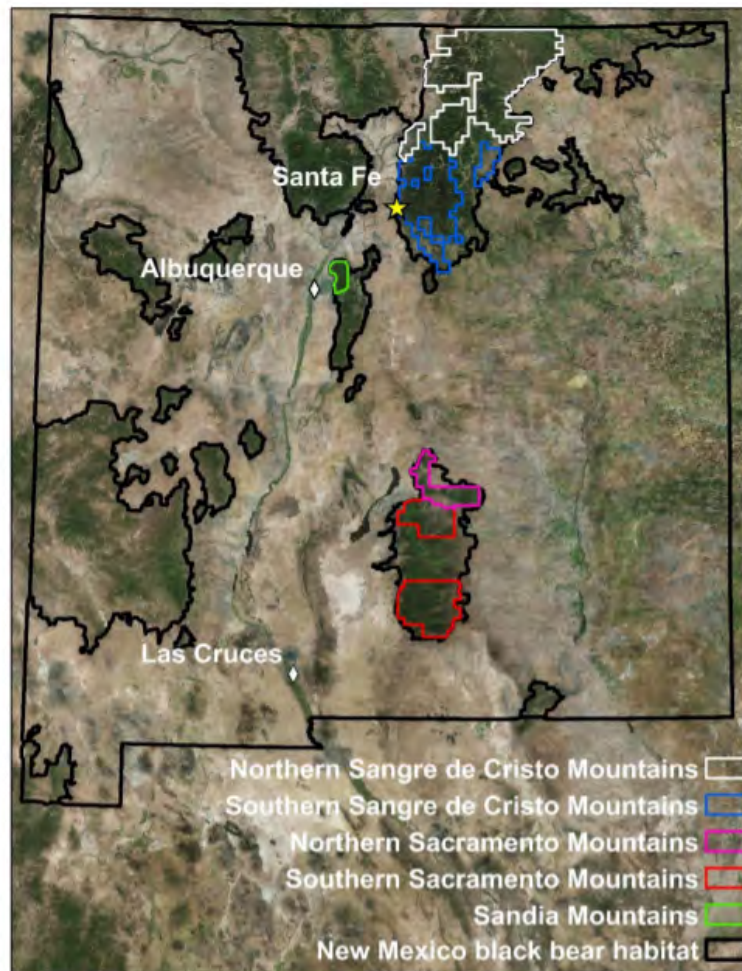


Figure 1. Aerial imagery of black bear habitat in New Mexico highlighting the study areas located within the Sangre de Cristo Mountains, Sandia Mountains, and Sacramento Mountains.

NM Game and Fish assigns the results of this study to zones 4, 5, 7, 8, 11, 12, 13 and 14. Note that zone 7 was not part of this density study but the results of that study are applied to it. It is not clear how the density value for zone 6 is derived but worth noting that NMG&F does assign this zone the lowest bear density in the state.

To summarize, the density estimates for zones 1,2, 9, 10 and part of 3 (roughly half of the bear habitat area in the state) come from the findings of the nearly 20-year-old 2001 Costello study which was not designed to calculate bear density. (please refer back to the map of this study to see how small the two study areas were). The density estimates for zones 4, 5, 7, 8, 11, 12, 13 and 14 come from the 2016 Gould study. It is not clear from where the value for zone 6 comes.

Additionally, the Gould study results for density were reported as a range of values where statistically, the actual density has a 95% probability of lying. NMG&F has chosen to assign the mean density value in this 95% confidence range to each bear zone to which it applies the Gould, et al study results. Using the minimum would be just as valid. Using the mean could introduce a bias toward a higher density than is present.

Importantly, density is not a measure of how the bear population is trending. It is a snapshot of a moment in time. Gould, et al specifically notes that, **"unless populations are extremely stable, we would expect density of a population to vary across space and with time."**⁵

⁵ <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/Estimating-Black-Bear-Density-in-New-Mexico-Gould-et-al-2016.pdf> page 12

2. Calculating the area of habitat that would have these densities of bears.

The 2001 Costello study used habitat modeling in conjunction with information gathered from 316 radio-collared bears across its 2 study areas **along with** mast production potential (production of acorns and berries) by habitat type, to predict primary, secondary, and edge bear habitat classifications across New Mexico. It found that 42,250 km² qualified as primary bear habitat. From this, it calculated that the statewide bear population was approximately 5200-6000 bears.

In 2015, different mapping methodology was used to create a new map of primary bear habitat. This method tapped into the LANDFIRE habitat models produced by a collaboration of the Forest Service and BLM. The LANDFIRE database was generated to better predict vegetation and fuels over the wide landscape in response to the increasing frequency and severity of wildfire.⁶ The land area of primary bear habitat was extrapolated from the LANDFIRE data based on canopy closure. A new habitat map was generated.⁷ It found that 60,298 km² qualified as primary bear habitat- an increase of over 40% over the Costello study (Figure 2. below).

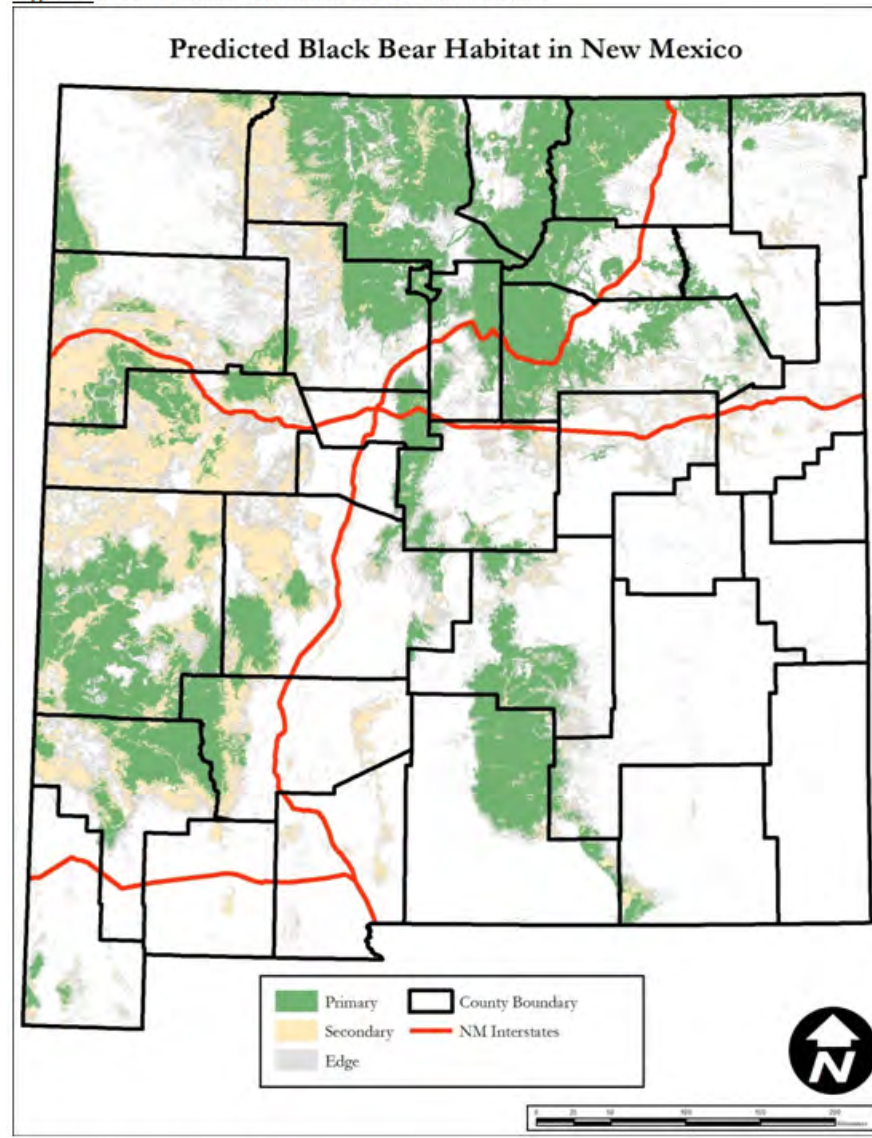
In comparing the two maps, the increase in the amount of primary bear habitat of the latter version appears to have come around the perimeter edges of that determined by Costello, et al and also from isolated and fragmented areas not previously considered primary bear habitat. It is a model. Whether these new areas actually have bears at the densities found in previous mapping has not been tested. Yet as a result of this mapping, the estimate of the number of bears in NM went up significantly from previous estimates.

This new methodology for mapping of primary bear habitat in New Mexico and the resulting habitat map do not appear to have been peer reviewed or published in the scientific literature.

⁶ <https://www.landfire.gov/about.php>

⁷ <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/New-Mexico-Bear-Habitat-Model.pdf>

Figure 2. Predicted black bear habitat in New Mexico 2015.



As an example of uncertainty, the new map created in 2015 used LANDFIRE data for the years 2008, 2010 and 2012. New Mexico had some extremely large wildfires just prior to and after the latest dataset in 2012, including the Las Conchas fire of 2011, the Little Bear Fire of 2012, The Whitewater-Baldy fire of 2012 and the Silver Fire of 2013. While low intensity wildfire is beneficial for wildlife in general including bears, a significant proportion of these fires burned at such high intensity that the forest may never return. Yet it appears that the areas where these large fires occurred are still considered primary bear habitat. The photo below shows just such an area of high intensity burn from the Las Conchas fire in 2017, 6 years after the blaze. It no longer appears to have the characteristics of primary bear habitat but looks to be still counted that way on the 2015 map.



A view of the Las Conchas fire scar 6 years after it burned.

3. Determining how many bears can be killed, the harvest limits:

A. Assuming NMG&F correctly estimates bear density over the correct area of bear habitat, an assumption that is based on modeling and extrapolation and guesswork, it then works out the number of bears that may be killed by hunters so as not to harm the estimated bear population. For this figure, it relies on a study by Miller (1990)⁸ that uses more modeling to estimate sustainable harvest levels. This study found that maximal sustainable annual hunting mortality for black bears was 14.2% in optimal temperate/boreal forest conditions. Given that NM has more arid and fluctuating conditions, the agency chose a lower figure that is nonetheless still a guess of 10% as its allowable sustainable harvest of the bear population. In Bear Zone 3, however it the quota is set at 12% presumably to intentionally shrink the bear population. This is of grave concern given that Miller notes in his study abstract that the consequence of error in population management is high as bears reproduce slowly and reduced populations will require many years to recover. (Specifically stating in the paper abstract that, "Simulation results where reproductive rates were generous, natural mortality rates were low, and harvests were 75% of maximum sustainable rates indicated that black bear populations reduced by half will still require more than 17 years to recover.") In zones 8 and 14 (the Sandias and Manzanos), the sustainable harvest rate is set at 8% to allow for bears lost to other causes such as road kill and depredation. Nevertheless, this percentage is also just a guess.

As yet unpublished research⁹ conducted in Washington state found a sustainable harvest rate for bears could be as low as only 6% of the population. So even what appears to be a conservative offtake by NMG&F may, in fact be too high.

⁸ Miller, S.D. 1990a. Population management of bears in North America. International Conference on Bear Research and Management 8:357-373. <https://pdfs.semanticscholar.org/61a1/44ab9275089ef38e89aef4f30e641f826a39.pdf>

⁹ Welfelt, Lindsay S. 2018. BLACK BEAR POPULATION DYNAMICS IN THE NORTH CASCADES. Washington State University, School of the Environment

B. The female sub-limits of the total quota for each zone are set at 40% of the total harvest. However, some research (Beecham and Rollman, 1994) indicates that for a stable population 35% or lower is more appropriate.¹⁰ The female sublimit is a very important parameter because females reproduce so slowly. Also, females tend to remain in the vicinity where they were born. If the females are lost, it is difficult for the population to replace them in that vicinity. Males roam widely. This is not to say that male bears are unimportant for population dynamics. They are the source of genetic diversity because their roaming prevents local inbreeding which is essential to population health.

Nevertheless, it is important to note that a 40% female harvest limit is also based on population assumptions. A much lower sublimit is likely warranted.

4. Examining the results. Are current bear quotas demonstrably sustainable?

A. NMG&F compiles and reports on Hunter Catch per unit Effort or how many days on average are required for a hunter to kill a bear. Successful bear hunters must provide the Department with information about how many days they hunted. Hypothetically, this can show a population decline if hunter effort increases while the catch does not. However, **only successful hunters are required to report how many days they hunted.** In the last 4 years only between 9.5% and 9.9% of hunters have been successful (see following table) leaving a dataset of unsuccessful hunters comprising over 90% of license buyers out of the report.

Bear Hunter Success vs. Number of Bear Licenses Sold 2011-2019

Year	Hunter Success (Total Number of Licenses Sold)
2011-12	14.8% (3248)
2012-13	24.3% (2342)
2013-14	14.2% (3844)
2014-15	11.6% (4124)
2015-16	9.7% (4252)
2016-17	9.7% (4483)
2017-18	9.9% (4895)
2018-19	9.5% (4283)

This introduces a significant bias into how easy it is to hunt and kill a bear. Moreover, the hunter catch per unit effort will be markedly different depending on whether the hunter uses dogs or not, so much so that it is difficult to imagine the two being part of the same dataset much less using the results to attempt to quantify anything about bear density or population.

Starting in 2010, the bear quota was drastically raised to almost double the previous four years. It was raised again in 2012 to the current limit of 804 bears. This happened three Department directors ago, prior to the hair snare study and prior to re-evaluation of the area of primary bear habitat. The justifications back then seemed to center on the perception that because bear-human conflict was rising, the bear population was also rising. Research does not align with this perception. Conflict rates do not necessarily reflect numerical changes in populations.^{11 12} It is telling that in this time frame, despite a significant increase in the number of bear hunters, the percentage of successful hunters has dropped even though the high quotas are not being met. **This is a disturbing trend that speaks to the over hunting of bears potentially happening now.**

¹⁰ Beecham, J.J. and J. Rohlman. 1994. A shadow in the forest: Idaho's black bear. The University of Idaho Press, Idaho, 245pp

¹¹ Treves, A., Kapp, K.J., MacFarland, D.M., 2010. American black bear nuisance complaints and hunter take. *Ursus* 21, 30–42.

¹² Obbard, M.E., Howe, E.J., Wall, L.L., Allison, B., Black, R., Davis, P., Dix-Gibson, L., Gatt, M., Hall, M.N., 2014. Relationships among food availability, harvest, and human-bear conflict at landscape scales in Ontario, Canada. *Ursus* 25, 98–110.

B. **Strangely, the number of bears killed for depredation and road kill are not counted against the quotas.** Bears killed on highways or in response to nuisance or depredation are nonetheless part of the overall population. They should be included in any kill limit. Not doing so has no basis in biology.

C. No estimate is made for the number of bears killed illegally. Costello, et al. found that 4% of their collared bears were illegally killed in areas closed to hunting or outside of hunting season during the course of the study. New Mexico is a large state and it is not possible for law enforcement to be everywhere. Nevertheless, illegal kills may be an important source of black bear mortality in addition to road kill and depredation.

D. NM Game and Fish also uses harvest data to estimate hunting sustainability. By pulling a tooth from the remains of hunted bears, the bear's age can be determined. Gender is also noted. Researchers have suggested that the average age of females killed can represent a measure of population status and stability as can the gender ratio of killed bears. However, inferences from harvest data can be misleading because confoundingly, **both an increasing and a decreasing population can have the same age structure¹³ or sex ratio.¹⁴ Trends of these indices may not be consistent with the true population trajectory,^{15 16} or they will lag behind the true population trajectory^{17 18} allowing population damage to go undetected and thus become exacerbated over time.** In fact, Costello et.al, (2001) acknowledges in the first paragraph that "increasing, stable, and decreasing population trend were all plausible explanations for observed changes in harvest data" as a significant motivation to examine bears in the field.¹⁹ Sterling Miller said it very well in his conference report on bear research and management, "Detection of bear population trend from the sex and/or age structure of harvested bears is more often attempted than achieved,...the utility of (this data) is more frequently assumed than demonstrated."²⁰

By way of example of the unreliability of harvest data to show bear population trend, a recent study²¹ of Black Bears in an area surrounding Durango, Colorado captured and collared female bears and monitored their survival and reproduction by checking their dens for cubs during the 6-year study length. The study also integrated 4 years of DNA hair snare data in the same area. The purpose was to evaluate the combined effects of human development and food shortage on the abundance, population growth rate, and spatial distribution of female black bears- the females being crucial determinants of the status of the bear population.^{22 23} The availability of natural bear food was also monitored

¹³ Clark, J. D. 1999. Black bear population dynamics in the Southeast: some new perspectives on some old problems. Eastern Black Bear Workshop Proceedings 15:97–115.

¹⁴ Garshelis, D. L. 1991. Monitoring effects of harvest on black bear populations in North America: a review and evaluation of techniques. Eastern Workshop of Black Bear Research and Management 10:102–144.

¹⁵ Noyce, K. V, and D. L. Garshelis. 1997. Influence of natural food abundance on black bear harvests in Minnesota. Journal of Wildlife Management 61:1067–1074.

¹⁶ McLellan, B. N., G. Mowat, T. Hamilton, and I. Hatter. 2017. Sustainability of the grizzly bear hunt in British Columbia, Canada. Journal of Wildlife Management 81:218–229.

¹⁷ Harris, R. B., and L. H. Metzgar. 1987. Harvest age structures as indicators of decline in small populations of grizzly bears. Bears: Their Biology and Management 7:109–116.

¹⁸ Beston, J. A., and R. D. Mace. 2012. What can harvest data tell us about Montana's black bears? Ursus 23:30–41.

¹⁹ Costello, C.M., D.E. Jones, K.A. Green-Hammond, R.M. Inman, K.H. Inman, B.C. Thompson, R.A. Deitner, and H.B. Quigley. 2001. A study of black bear ecology in New Mexico with models for population dynamics and habitat suitability. Final Report, Federal Aid in Wildlife Restoration Project W-131-R, New Mexico Department of Game and Fish, Santa Fe, New Mexico, USA.

<http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/New-Mexico-Black-Bear-Study-Costello-et-al-2001%20.pdf> p ii.

²⁰ Miller, S.D. Population management of bears in North America. 1990. International Conf. Bear Research and Manage. 8:35–373.

²¹ Laufenberg, J., Johnson, H.E., Doherty, P.F., Breck, S.W., 2018. Compounding effects of human development and a natural food shortage on a large carnivore population along a human development-wildland interface. Biol. Conserv. 224, 188–198.

²² Freedman, A.H., Portier, K.M., Sunquist, M.E., 2003. Life history analysis for black bears (*Ursus americanus*) in a changing demographic landscape. Ecol. Model. 167, 47–64.

²³ Beston, J.A., 2011. Variation in life history and demography of the American black bear. J. Wildl. Manag. 75, 1588–1596

by evaluating mast production during August and September of each year.²⁴ During the study, in 2012, a natural food shortage was caused by a late spring freeze. As a result of this natural food shortage, bears sought out human food placing them at higher risk for depredation removal, road kill and human hunting. The end result was that the population of female bears in the study area declined by 57%. **The severe population decline detected in this study would have gone unnoticed from harvest data that are commonly collected and used to manage bears in Colorado (as well as in New Mexico), and was only detected due to monitoring efforts associated with this intense research project.**

Black bears do not need to be killed at the maximum sustainable level, even if we knew what the bear population was and could determine that level. Black bears are a self-limiting species: they kill each other. Numerous researchers have documented adult males killing sub-adult males as they disperse.^{25 26 27 28 29 30} Intra-specific predation has also been found to be a significant mortality source for adult females^{31 32} In a study in Arizona, adult male bears were found to be a significant source of mortality to young cubs.³³

Additionally, the hunting of black bears does not necessarily reduce conflict with humans. More bears in town and an increase in nuisance behavior in poor wild food years, does not mean the population has grown.³⁴ An analysis in several different Eastern states showed that increased bear hunting in response to conflict was perversely followed by increased complaints about bears. Alternatively, simply securing garbage in bear proof containers even in the absence of bear hunting, reduced complaints and nuisance removals to zero or nearly so.³⁵ The Durango, Colorado study found that bears are primarily drawn to development during periods of poor natural food availability.³⁶ In poor natural food years, bears move greater distances in search of food and are attracted to towns for that reason. Roadkill goes up, hunter mortality goes up and nuisance behavior goes up, not because there are more bears, but because the same number of bears are roaming in search of food and are more vulnerable to harm. Moreover, bears using urban areas in poor food years, reversed this behavior and used wildland areas in subsequent good food years. In general, bears prefer wild food if available. Hunting more bears in a poor food year has the potential to harm an already stressed population.

The Precautionary Principle declares that when an activity potentially threatens the environment, the proponent of the activity, rather than the public, should bear the burden of proof as to the harmlessness of the activity. Where there are

²⁴ Johnson, H.E., Lewis, D.L., Verzuh, T.L., Wallace, C.F., Much, R.M., Willmarth, L.K., Breck, S.W., 2017. Human development and climate affect hibernation in a large carnivore with implication for human-carnivore conflicts. *J. Appl. Ecol.* 55, 663–672

²⁵ Swenson, J. E. 2003. Implication of sexually selected infanticide for hunting of large carnivores. In M. Festa-Bianchet and M. Apollonio, eds. *Animal behavior and wildlife management*. Island Press, Covelo, CA, USA.

²⁶ Swenson, J. E., Sandegren, A. Soderberg, A. Bjarvall, R. Franzen, and P. Wabakken, 1997. Infanticide caused by hunting of male bears. *Nature*. 386 (3) 450-451.

²⁷ Jonkel, C. J., and I. M. Cowan. 1971. The black bear in Spruce-Fir forest. *Wildl. Monogr.* 27. 57 pp.

²⁸ Poelker, R. J. and H. D. Hartwell. 1973. Black Bear of Washington. *Wash. State Game Dept. Biol. Bull.* 14. 180 pp.

²⁹ Kemp, G. A. 1976. The dynamics and regulation of black bear, *Ursus americanus*, population in Northern Alberta. *Int. Conf. Bear Res. and Manage.* 3:191-197

³⁰ Rogers, L. L. 1987. Effects of food supply and kinship on social behavior, movements, and population growth of black bears in northeastern Minnesota. *Wildl. Monogr.* 97:72 pp.

³¹ Garshelis, D. L. 1994. Density-dependant population regulation of black bears. Pages 3-14 in M. Taylor, Ed. *Density-dependent population regulation of black, brown, and polar bears*. *Int. Conf. Bear Res. and Manage. Monogr. Series No. 3.* 43 pp.

³² Stafford, R. 1995. Preliminary observations on den selection by female and subadult black bears in Northwestern California. *Trans. West. Sec. Wild. Soc.* 31:63-67.

³³ LeCount, A. 1986. Causes of black bear mortality. Arizona Game and Fish Department, Phoenix, AZ. Pp. 75-82.

³⁴ Baruch-Mordo, S., Wilson, K.R., Lewis, D.L., Broderick, J., Mao, J.S., Breck, S.W., 2014. Stochasticity in natural forage production affects use of urban areas by black bears: implications to management of human-bear conflicts. *PLoS One* 9, e85122.

³⁵ Tavss, E. A., 2007. Correlation of reduction in nuisance black bear complaints with implementation of (a) a hunt vs. (b) a non-violent program. New Jersey Public Meeting on Black Bear Management. <http://www.bearsmart.com/docs/Tavss-v4.pdf>

³⁶ Laufenberg, J., Johnson, H.E., Doherty, P.F., Breck, S.W., 2018. Compounding effects of human development and a natural food shortage on a large carnivore population along a human development-wildland interface. *Biol. Conserv.* 224, 188–198.

threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent degradation. The state of New Mexico holds all wildlife, including bears, in trust for the people of the state. It has an obligation to ensure that bear populations remain viable and sustainable for future generations.


Given that NM does not really know what the actual bear population is and that bear density results or harvest data indices don't necessarily reflect the actual bear population trend, great caution should be applied especially in light of extremes in weather and bear food availability, bear habitat loss to development, fragmentation and degradation and especially to the vulnerability of the black bear to over-exploitation because of its naturally low reproductive rate. More resources need to be invested into monitoring bear population trends which means embarking on studies that follow female survival and cub production through time. We urge that if bears continue to be hunted:

- **That the current bear quota be returned to 2010 levels of 400 bears statewide.**
- **That consequently the number of female bears killed should also be reduced to no more than 100 until better trend data is available. We cannot be more emphatic that the females hold the key to bear population sustainability**
- **That all known bear deaths be included in the quotas: hunting, depredation and road kill**
- **That consideration of the unknowable level of illegal take also supports the reduction of quotas.**

The state of New Mexico does not need to worry that not enough bears will be killed by hunters. On the other hand, the risk of hunters killing too many in the absence of better population monitoring is reckless.

Sincerely,

Mary Katherine Ray



Chris Smith

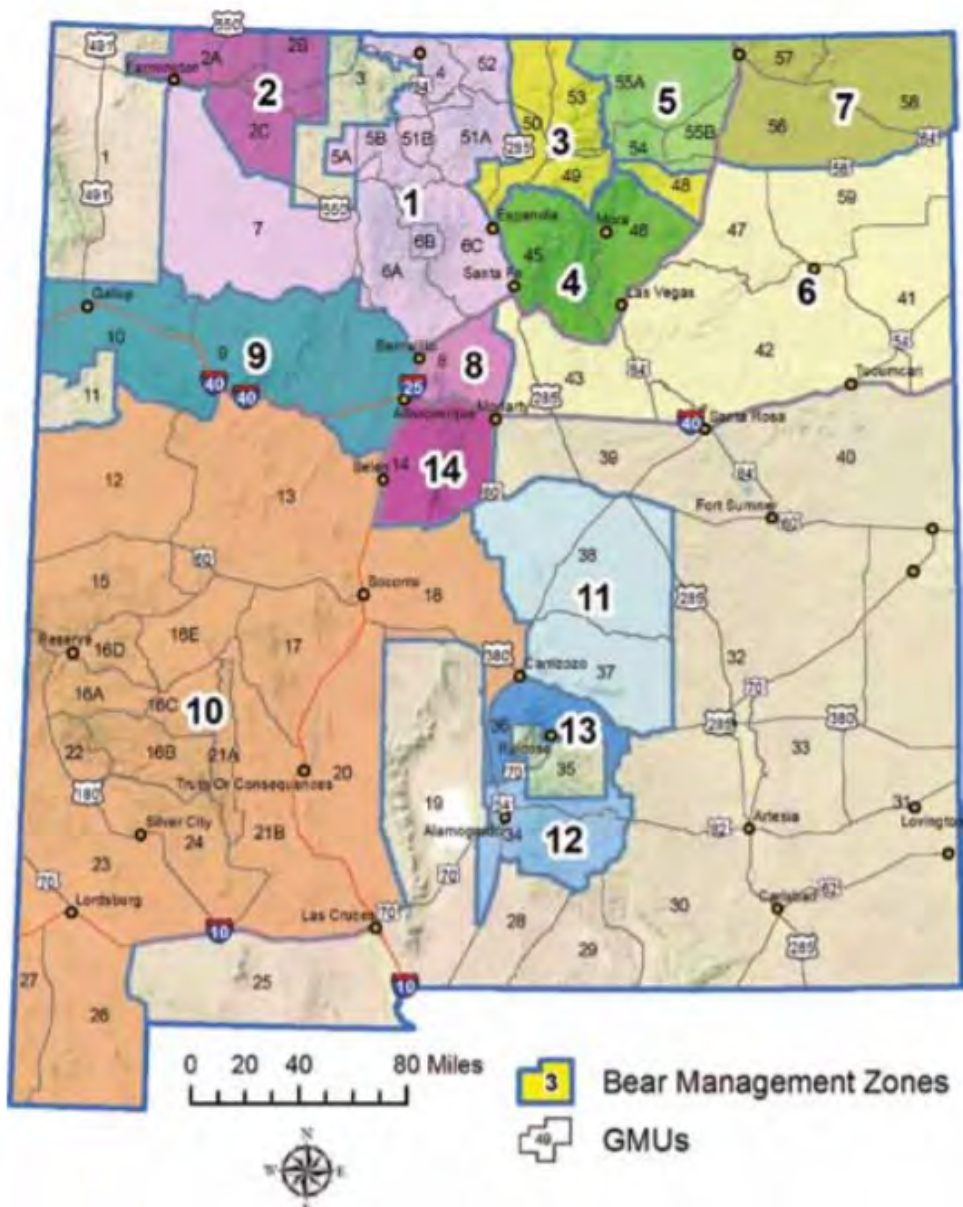


Jessica Johnson



Appendix 1:

Bear Management Zone and Game Management Unit Map





Oct. 1, 2019

New Mexico Department of Game and Fish

Attn: Bear and Cougar Rule Comments

Dear NMGF Personnel,

This letter is to document the New Mexico Wildlife Federation's support for the proposed April 1, 2020-March 31, 2024, bear and cougar rule as it stands subsequent to the Sept. 18, 2019, State Game Commission meeting in Cloudcroft.

COUGAR:

Harvest limits:

The Game and Fish Department's proposed amendments to the current rule are grounded in the most current, comprehensive data available. The agency biologists' recommendation to reduce the cougar harvest limits in many of the cougar management zones and, ultimately, statewide, is a professional, scientifically unbiased assessment of sustainable take.

Cougar trapping:

This organization opposed legalizing cougar trapping as a method of sport harvest when the State Game Commission imposed it in 2015, and we recommended its elimination when the rule reopened this year:

Our position is that the cougar's status as a prized game animal makes it worthy of rules enforcing fair chase, which would not include trapping and snaring. Further, most cougar hunting methods involve animals held at bay, allowing gender and age identification and selection, while trapping is less selective.

In terms of consumptive use, virtually nothing would be lost. Trapper participation was nominal, as demonstrated by the low sport-related take, and legalization triggered unnecessary litigation while bolstering general anti-trapping initiatives.

Livestock owners' concerns that eliminating this provision will somehow prevent them from addressing cougar depredation on livestock is simply wrong: Longstanding depredation statutes, rules and agency policies that predate that 2015 amendment remain in place. They have consistently provided well-tested, efficient and very adequate means of addressing livestock kills by cougars and will continue to do so. The number of cougars removed due to livestock depredation has not increased over the past 10 license years, hovering at 20-25 or fewer animals annually. This indicates that cougar depredation has not surged, as some people have suggested.

BEAR:

NMDGF recommendations include no substantive changes from the current rule, and here again reflect biologically sound limits based on current science. All data indicates that the bear harvest under current management protocols is and would continue to be sustainable and reasonable, and that New Mexico's bear population is stable and potentially increasing.

Sincerely,

John Crenshaw,

[REDACTED]

Jesse Deubel,

[REDACTED]

Guy Dicharry, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] -

September 18, 2019

Sent to:

DGE-Bear-Cougar-Rules@state.nm.us

Re: Cougar Rule Comment

Good afternoon:

I attended the Albuquerque public hearing on bear/cougar rule. I am a hunter/angler with New Mexico licenses for hunting and fishing, along with elk and deer tags this year.

Actions that should be considered by the New Mexico State Game Commission:

1. End the trapping and snaring of cougars on public and private lands.
 - Reduce harvest limits for all cougars but especially for female cougars. Reduce harvest limits in all zones not just some zones.
 - 75% of adult females may have dependent young since approximately 50% give birth each year while another 25% have dependent kittens from the previous year (NMDGF presentation)
 - Over 50% of cougars harvested were between 1-2 years old. Females begin reproducing when they're between 1½- 2½ years old, and they typically breed every other year (NMDGF presentation).
2. Reduce the bag limit from two to one
 - More research is needed on both cougar numbers and population densities in New Mexico.
 - Per the Biota Bison M report:

<u>Effects</u>	<u>Management Action</u>	<u>References</u>
Adverse	Sensitive to: habitat fragmentation	96
Adverse	Habitat Mgt; recreational dev.; camp/picnic areas	
Adverse	ANIMAL DAMAGE CONTROL (ADC) Chemical	
Adverse	ADC: Sodium Cyanide M-44	
Adverse	ANIMAL DAMAGE CONTROL (ADC) Non-Chemical	
Adverse	ADC: Leghold traps	
Adverse	CLIMATE CHANGE	
Adverse	Climate change: extreme events	
Adverse	Climate change: quantity of available habitat	

- Both Colorado and Arizona have a bag limit of one.

3. Create a season for cougars. Currently, cougars may be hunted year-round. At a minimum, a cougar season should be created which restricts cougar hunting between April – October.
 - Public safety is an issue. Many people are using public lands all over New Mexico during April through October. Manner and method of take for cougars has few restrictions on firearms that may be used. There is a significantly higher probability of user conflicts on public lands when year-round cougar hunting is allowed.
 - Mortality statistics for 2018-2019, show sport harvest and overall harvest death rates of 409 cougars. From 2016-2018, an average of 292 cougars were harvested. Compared to this average, 2018-19 cougar harvest increased by 29%. From 2001-2018 an average of 236 cougars were harvested. For 2018-19, this is an increase of 42%. Though cougars may give birth year-round, birth rates increase from July-September.
 - 75% of adult females may have dependent young since approximately 50% give birth each year while another 25% have dependent kittens from the previous year (NMDGF 2019 presentation).
 - According to the NMDGF Wildlife Management Division report, harvest numbers decrease significantly between April and October, indicating a substantial reduction in the numbers of people hunting cougars during those months.
4. Restricting cougar hunting in Sandia Ranger District of the Cibola National Forest in Units 8 and 14. Zone E–Unit 10 and Zone G,H,I–Units 13, 18, 19, 20. Continue closures in all areas listed in the 2018-2019 NMDGF Rules & Info publication.
5. Close populated and sensitive areas to cougar hunting to reduce potential user conflicts. Areas that should be considered for closing:
 - Cibola National Forest: Sandia R.D. and portions of the Mountainair R.D. that include the Manzanos, portions of the Magdalena R.D., and portions of the Mt. Taylor R.D.
 - Santa Fe National Forest: Jemez, Santa Fe/Santa Fe ski area and the Caja del Rio Area;
 - Carson National Forest: Rio Grande del Norte National Monument.
 - BLM lands: Ojito Wilderness, BLM lands west of Albuquerque, and BLM lands west of Santa Fe including BLM-managed portions of the Caja del Rio area.
 - Refer to paragraphs numbered 2 and 3 above for additional reasons to close certain areas.
6. Increase caliber size and weapon restrictions for cougars.
 - Smaller caliber ammunition for big game will lead to more initial wounding of the animal than will larger caliber ammunition. Current method and manner rules allow the use of .22 cal ammunition which is too small for big game.
7. Reviewing harvest limits and cougar hunting regulations more frequently such as annually or biennially.
 - According to the presentation by NMDGF, current harvest limits were set 8 years ago. Recent data and user-group input suggest population densities used to set those limits may have been over-estimated relative to actual populations and now need to be lowered.

Thank you for your consideration of these comments.

Sincerely yours,
Guy Dicharry

September 22, 2019

NM State Game Commission
PO Box 25112
Santa Fe, New Mexico 87504

Joanna Prukop
Roberta Salazar-Henry
Jimmy Bates
Gail Cramer
Tirzio Lopez
Davis Soules
Jeremy Vesbach

Subject: Comment on the proposed changes in the Cougar Rule,
19.31.11 NMAC

Dear NM Game Commissioners,

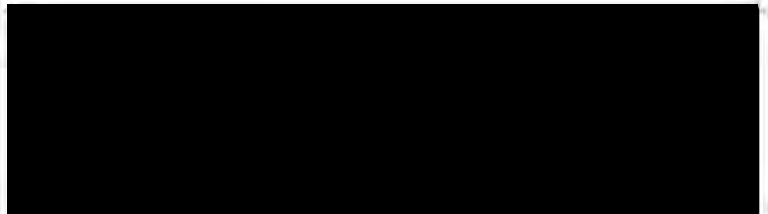
My letter is to support the view of the New Mexico Wild Sheep Foundation in opposition of the proposed cougar rule change. The views stated in their letter to you outline the facts of cougar control in New Mexico. You as Commissioners, are stewards of New Mexico's wildlife (ALL species). It is important to keep ratios amongst species in proportion and to look at the history of cougar control (or lack of it) to guide you in rule setting. Cougars are a major predator of wild sheep and deer particularly in sparsely vegetated areas like southern New Mexico and particularly the sheep ranges there. NMGF with the help of the NMWSF have worked hard and spent considerable monies to restore proper numbers of wild sheep (particularly desert bighorns) to their historic ranges. I have financially supported this endeavor through the Wild Sheep Foundation and a matching grant specifically to help keep these ratios in

balance. Traps and snares are an important part of this effective program. Sport hunters without these tools have proven to not be enough to keep the balance that your NMGF officers try so hard to maintain. I know that collectively you must balance the views of all your constituents, but as you already know, the hunting community and in particularly the NMWSF spend considerable time and effort to raise monies to support those goals.

Please do not eliminate traps and snares as a part of this conservation effort. History tells us that without this tool, we will all have wasted considerable moneys and destroyed part of the long-term efforts by the NMWSF, NMGF, all hunting conservationists, and your Leadership of the Game Commission.

Respectfully submitted,

J. Michael Goodart



Comments on Proposed Cougar Rule Changes

September 13, 2019

Submitted by Elisabeth Dicharry, RN, MS

I attended the public hearing in Albuquerque on the proposed bear/cougar rule changes. I hold an NMDGF hunting and fishing license.

I support:

1. Ending the trapping and snaring of cougars on public and private lands.
2. Reducing harvest limits for all cougars but especially for female cougars. **Reduce harvest limits in all zones not just some zones. (recommendations not currently being considered by NMDGF are in bold)**
 - 75% of adult females may have dependent young since approximately 50% give birth each year while another 25% have dependent kittens from the previous year (NMDGF)
 - Over 50% of cougars harvested were between 1-2 years old. Females begin reproducing when they're between 1½- 2½ years old, and they typically breed every other year (NMDGF).

3. Reducing the bag limit from two to one

Rationale:

- More research is needed on both cougar numbers and population densities in New Mexico.
- Per the Biota Bison M report:

Effects

Management Action

References

Adverse	Sensitive to: habitat fragmentation	96
Adverse	Habitat Mgt; recreational dev.; camp/picnic areas	
Adverse	ANIMAL DAMAGE CONTROL (ADC) Chemical	
Adverse	ADC: Sodium Cyanide M-44	
Adverse	ANIMAL DAMAGE CONTROL (ADC) Non-Chemical	
Adverse	ADC: Leghold traps	
Adverse	CLIMATE CHANGE	
Adverse	Climate change: extreme events	
Adverse	Climate change: quantity of available habitat	

- Both Colorado and Arizona have a bag limit of one.

4. No longer allowing additional tags for cougar license holders who have successfully filled their original tags.

5. **Creating a season for cougars. Currently, cougars may be hunted year-round. At a minimum, a cougar season should be created which restricts cougar hunting between April – October.**

Rationale:

- Public safety is an issue. Many people are using public lands all over New Mexico at this time. Per the NMDGF regulations, most weapons may be used to harvest cougars. This creates a dangerous environment for hikers and others using public lands.
- Mortality statistics for 2018-2019, show sport harvest and overall harvest death rates of 409 cougars. From 2016-2018, an average of 292 cougars were harvested. Compared to this average, 2018-19 cougar harvest increased by 29%. From 2001-2018 an average of 236 cougars were harvested. For 2018-19, this is an increase of 42%. Though cougars may give birth year-round, generally birth rates increase from July-September.
- 75% of adult females may have dependent young since approximately 50% give birth each year while another 25% have dependent kittens from the previous year (NMDGF).
- Per the NMDGF Wildlife Management Division report, harvest numbers decrease between April and October so why allow cougar harvesting during this time? (NMDGF 2019 presentation)

6. Restricting cougar hunting in Sandia Ranger District of the Cibola National Forest in Units 8 and 14. Zone E–Unit 10 and Zone G,H,I–Units 13, 18, 19, 20. Continue closures in all areas listed in the 2018-2019 NMDGF Rules & Info publication.

7. **Closing populated and sensitive areas to cougar hunting including but not limited to the Cibola National Forest especially the Sandias and Manzanos, portions of the Magdalena and Mt. Taylor ranger districts, Santa Fe National Forest especially the Jemez, Santa Fe/Santa Fe ski area and the Caja Del Rio Area, Taos County ski areas and Carson National Forest trails, the national monuments, wildlife refuges, along the Rio Grande which is a major wildlife corridor, and on BLM lands close to populated areas including the Ojito area, mesas west of Albuquerque, and BLM lands west of Santa Fe.**

Rationale:

- Public safety is an issue. Many people are using public lands all over New Mexico throughout the year. Per the NMDGF regulations, most weapons may be used to harvest cougars. This creates a dangerous environment for hikers and others using public lands.
- See other rationale especially Bison Report: Adverse effects

8. **Increasing caliber size and weapon restrictions for cougars.**

Rationale:

- Smaller caliber ammunition for big game causes more suffering than larger caliber ammunition. Current regulations allow the use of .22 cal ammunition which is too small for big game.

9. **Reviewing harvest limits and cougar hunting regulations more frequently such as annually or biennially.**

Rationale:

- Per the Presentation given by the NMDGF Wildlife Management Division: “Current harvest limits were set 8 years ago. Recent data and user-group input suggest densities used to set those limits may be too high.”



"Putting and Keeping Sheep on the Mountain."

Sept 16, 2019

NM State Game Commission
PO Box 25112
Santa Fe, NM 87504

Joanna Prukop
Roberta Salazar-Henry
Jimmy Bates
Gail Cramer
Tirzio Lopez
Davis Soules
Jeremy Vesbach

Subject: New Mexico Wild Sheep Foundation comment on the proposed changes in the Cougar Rule, 19.31.11 NMAC

Dear NM Game Commissioners,

The New Mexico Wild Sheep Foundation is a 501-c-3 non-profit organization established in 1992, dedicated to the restoration, preservation and conservation of wild bighorn sheep in New Mexico. We are a chapter of the Wild Sheep Foundation headquartered in Bozeman, MT. We work closely with the New Mexico Department of Game and Fish and other Wild Sheep Foundation chapters and affiliates to promote bighorn sheep conservation, increase BHS numbers, establish/restore new herds, protect BHS against disease and educate the public on BHS conservation.

The purpose of this letter is to express our opposition to the proposed cougar rule change. Specifically, we do not agree with the proposal to "No longer allow traps or foot snares as a method of sport harvest for cougar".

- Cougar management is a key component in increasing and maintaining bighorn sheep populations in New Mexico. This is especially important in Desert Bighorn Sheep (DBHS) areas. The need to manage cougar populations in DBHS ranges was clearly demonstrated in the Fra Cristobal Mountains between 1995-2000 and in a DBHS lamb mortality study conducted by NMSU/NMDGF in 2012-2014 in the Peloncillo Mountains.

In the Fra Cristobals, it was not until cougar management was initiated in 2001 that the DBHS population stabilized and started to increase. This included two significant transplants



"Putting and Keeping Sheep on the Mountain."

Therefore, we believe it is clear that cougar management is a key factor in successful DBHS population management.

- In 2019 a total of 43 cougars were sport harvested in CMZ's G, H, L and Q. These are zones that DBHS inhabit. Even though the number of cougars taken by trapping may be low within this total, this harvest represents an important part of the overall cougar management in those zones. If sport trapping is banned in these zones, the NMDGF will be required to make up the harvest shortfall, if it is to maintain the same level of DBHS/cougar management. This will result in significant increased cost and oversight for the NMDGF.
- The latest NMDGF desert bighorn sheep census indicates the population in the Hatchet and Peloncillos has decreased significantly. In the Hatchets the DBHS population has decreased by 35% over the last 4 years. This coincides with the increased observations of cougars both in the field and with field cameras. The probable cause is predation by cougars. Any reduction in sport harvested cougars in these two mountain ranges will only make the situation worse.
- Sport harvest of cougars includes a combination of bow/rifle hunting, hunting with dogs and trapping/snaring. In typical DBHS terrain the use of dogs in place of trapping/snaring is not practical. Dogs are not easily able to track and pursue cougars in our dry and, rocky mountain areas. Also the use of dogs represents a significant risk to houndsmen. Many houndsmen will not hunt cougars in the high-cliff areas for fear their dogs will be injured or killed. Therefore, the only practical alternative to trapping/snaring is hunting with firearms or bows. Once again, this highlights that any loss in sport harvesting of DBHS by trapping will require the NMDGF makeup the difference through their cougar management program.

Based on past studies/experience, current data and field observations, it is clear that the management of cougars, especially in desert bighorn habitat, is necessary to maintain or increase desert bighorn sheep populations. If adequate cougar management is eliminated, the DBHS population will decrease and will eventually be eliminated. Along with that loss of wild sheep will be the further deterioration of our mule deer populations, which are already at very low levels in our desert mountain ranges.

Therefore, we see no technical or scientific justification for eliminating the sport trapping of cougars, especially in desert bighorn sheep areas. The New Mexico Wild Sheep Foundation recommends the Cougar Rule 19.31.11 proposal not be implemented.

Thank you, and if you have comments or questions please feel free to contact me.

A handwritten signature in black ink, appearing to read "Bryan Bartlett", written over a solid black rectangular redaction box.

Bryan Bartlett, [REDACTED]



**THE HUMANE SOCIETY
OF THE UNITED STATES**

1255 23rd Street, NW
Suite 450
Washington, DC 20037
P 202-452-1100
F 202-778-6132
humanesociety.org

Susan Atherton
Co-Chair

Thomas J. Sabatino, Jr.
Co-Chair

Kitty Block
President and CEO and
Chief International Officer

G. Thomas Waite III
Treasurer
Chief Financial Officer and
Acting Chief Operating Officer

Katherine L. Karl
General Counsel and
Chief Legal Officer

Michaelen Barsness
Controller and
Deputy Treasurer

Johanie V. Parra
Secretary

DIRECTORS

Jeffrey J. Arciniaco
Susan Atherton
Georgina Bloomberg
J. Elizabeth Bradham
Jerry Cesak
Neil B. Fang, Esq., CPA
Caren M. Fleit
Cathy Kangas
Paula A. Kislak, D.V.M.
Charles A. Laue
Kathleen M. Linehan, Esq.
C. Thomas McMillen
Sharon Lee Patrick
Marsha R. Perelman
Thomas J. Sabatino, Jr.
David O. Wiebers, M.D.

September 13, 2019

Joanna Prukop, Madam Chair
Michael Sloane, Director
New Mexico Department of Game and Fish
PO Box 25112 Santa Fe, NM 87504
DGF-Bear-Cougar-Rules@state.nm.us

Re: 2020-2024 black bear rule

Dear Madam Chair Prukop and Director Sloane:

On behalf of the Humane Society of the United States and our supporters in New Mexico, we submit the following comments on New Mexico Department of Game and Fish's (NMDGF's) Proposed Rule on black bear (*Ursus americanus*) hunting for the 2020 to 2024 seasons. The staff's Proposed Rule recommends no changes to the previous rule but allows for a quota of 804 black bears with a female sublimit of 318 (representing 40 percent of the total). Given the recent droughts and fires in New Mexico and the worsening climate and extinction crises,¹ we request that the quota be reduced to 335—the number used by the agency in recent memory—given that New Mexico is operating in the dark about the extent of its likely tiny black bear population—but reliant on a non-peer-reviewed study with little veracity. We further request that the agency end the practice of hounding bears with packs of dogs because of myriad cruelty problems.

1. New Mexico's intelligent and familial black bears are susceptible to overkill

Large-bodied carnivores such as black bears are sparsely populated across vast areas—and in arid climates, it is even more pronounced. Bears invest in few offspring, provide extended parental care to their young, have a tendency towards infanticide, and bears limit reproduction. In light of these biological factors, they rely on social stability to maintain resiliency.²

¹ U.S. Global Change Research Program, "Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II" in <https://nca2018.globalchange.gov/chapter/front-matter-about/#>; ed. D.R. Reidmiller et al. (Washington, D.C., 2018); Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), "Nature's Dangerous Decline 'Unprecedented' Species Extinction Rates 'Accelerating': Current global response insufficient. 'Transformative changes' needed to restore and protect nature; Opposition from vested interests can be overcome for public good. Most comprehensive assessment of its kind; 1,000,000 species threatened with extinction," news release, May 6, 2019, 2019.

² J. L. Weaver, P. C. Paquet, and L. F. Ruggiero, "Resilience and conservation of large carnivores in the Rocky Mountains," *Conservation Biology* 10, no. 4 (Aug 1996), <Go to ISI>://A1996VC10300014; A. D. Wallach et al., "What is an apex predator?," *Oikos* 124, no. 11 (Nov 2015), <https://doi.org/10.1111/oik.01977>, <Go to ISI>://WOS:000363866900005.

Because of erratic weather events from the climate crisis including late season frosts or droughts, natural foods are increasingly unavailable to bears, and in one study area of a heavily monitored bear population in Colorado, 57 percent of females declined because of human-caused mortalities from vehicle collisions, trophy hunting and predator control—that *would not* have been detected by wildlife managers alone without the study in place.³

For all of these reasons, it makes no sense to hunt black bears and especially at such high levels, and in New Mexico with virtually no data. Bears are capable of self-regulation.⁴ Moreover, highly sentient, black bears have the largest brain size of any carnivore, and they spend prolonged periods raising and nurturing young.⁵ Bears know when they are hunted, and change behaviors, particularly when they need to concentrate on feeding to survive hibernation; instead they have to hide from hunters.⁶

Late to mature, females do not reach breeding age until they are between 4 and 6 years old, and in New Mexico, the mean age of females to reproduce for the first time is 5.7 years.⁷ An average female produces two cubs in her first litter, and she will give birth to an average of three cubs in successive litters. Bears have, however, extended intervals between litters, averaging two to three years between them, but more if there are droughts or other stochastic weather events.⁸ Thus, bears have a slow reproductive potential,⁹ and are highly susceptible to overkill.¹⁰

³ Jared S. Laufenberg et al., "Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface," *Biological Conservation* 224 (2018/08/01/ 2018), <https://doi.org/https://doi.org/10.1016/j.biocon.2018.05.004>, <http://www.sciencedirect.com/science/article/pii/S0006320717317093>.

⁴ Wallach et al., "What is an apex predator?."

⁵ Black bears are highly sentient. See e.g., John L. Gittleman, "Carnivore Life History Patterns: Allometric, Phylogenetic, and Ecological Associations," 127, no. 6 (1986), <https://doi.org/10.1086/284523>; T. E. Reimchen and M. A. Spoljaric, "Right paw foraging bias in wild black bear (*Ursus americanus kermodei*)," *Laterality: Asymmetries of Body, Brain and Cognition* 16, no. 4 (2011/07/01 2011), <https://doi.org/10.1080/1357650X.2010.485202>, <https://doi.org/10.1080/1357650X.2010.485202>; Jennifer Vonk, Stephanie E. Jett, and Kelly W. Mosteller, "Concept formation in American black bears, *Ursus americanus*," *Animal Behaviour* 84, no. 4 (2012/10/01/ 2012), <https://doi.org/https://doi.org/10.1016/j.anbehav.2012.07.020>, <http://www.sciencedirect.com/science/article/pii/S0003347212003284>; Jennifer Vonk and Michael J. Beran, "Bears 'count' too: quantity estimation and comparison in black bears, *Ursus americanus*," *Animal Behaviour* 84, no. 1 (2012/07/01/ 2012), <https://doi.org/https://doi.org/10.1016/j.anbehav.2012.05.001>, <http://www.sciencedirect.com/science/article/pii/S0003347212002126>; Rachel Mazur and Victoria Seher, "Socially learned foraging behaviour in wild black bears, *Ursus americanus*," *Animal Behaviour* 75, no. 4 (2008/04/01/ 2008), <https://doi.org/https://doi.org/10.1016/j.anbehav.2007.10.027>, <http://www.sciencedirect.com/science/article/pii/S0003347208000213>; M. Cattet et al., "An evaluation of long-term capture effects in ursids: Implications for wildlife welfare and research," Article, *Journal of Mammalogy* 89, no. 4 (Aug 2008), <https://doi.org/10.1644/08-mamm-a-095.1>, <Go to ISI>://WOS:000258765000019.

⁶ A. Ordiz et al., "Do bears know they are being hunted?," *Biological Conservation* 152 (Aug 2012), <https://doi.org/10.1016/j.biocon.2012.04.006>, <Go to ISI>://WOS:000307088200003.

⁷ D. L. Garshelis and H. Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend," *Ursus* 17, no. 1 (2006), <Go to ISI>://WOS:000237130100001; C. M. Costello et al., "A Study of Black Bear Ecology in New Mexico with Models for Population Dynamics and Habitat Suitability: Final Report: Federal Aid in Wildlife Restoration Project W-131-R," *New Mexico Department of Game and Fish* (2001).

⁸ Craig McLaughlin, "Black bear assessment and strategic plan," *Maine Department of Inland Fisheries and Wildlife* (1999); S. Dobey et al., "Ecology of Florida black bears in the Okefenokee-Osceola ecosystem," *Wildlife Monographs*, no. 158 (Jan 2005), <Go to ISI>://WOS:000228658000001. Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend."

⁹ Dobey et al., "Ecology of Florida black bears in the Okefenokee-Osceola ecosystem."

¹⁰ Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend."

2. NMDGF has a poor idea of the size of the New Mexico bear population

NMDGF has not accurately counted New Mexico's bears or determined their population trend. In 2015, the agency discarded all bear studies conducted in New Mexico,¹¹ including an eight-year study conducted by the Hornocker Wildlife Institute in conjunction with NMDGF and the New Mexico Cooperative Fish and Wildlife Research Unit.¹² The agency then took an unpublished student thesis, Gould (undated), now Gould et al. (2016), which was conducted in New Mexico's best bear habitats, to determine bear densities across the rest of the state¹³—to justify a quota increase to 804 from the prior quota of 335, which had been based on Costello et al. (2001). Fig. 1. Because the quota of 804 was never supported by sound science, it should be reverted to 335.

The density numbers in Gould et al. (2016) rival and even exceed bear densities found by Welfelt et al. (2019) in the Northern Cascades of Washington,¹⁴ which is biologically impossible because those habitats are far wetter and more productive than the xeric habitats of New Mexico. Figs. 1, 2.

Fig. 1 Density estimates bears/100 km ²		
	Costello et al. (2001)	Gould et al. (2016)
N. Sangre de Cristo	17	21.86 (95% CI 17.83 - 26.80)
S. Sangre de Cristo		19.74 (95% CI 13.77 - 28.30)
Sandia	ND	25.75 (95% CI 13.22 - 50.14)
N. Sacramento	9.4	21.86 (95% CI 17.83 - 26.80)
S. Sacramento		16.55 (95% CI 11.64 - 23.53)

¹¹ Conrad S. Zack, Bruce T. Milne, and William C. Dunn, "Southern Oscillation Index as an Indicator of Encounters between Humans and Black Bears in New Mexico," *Wildlife Society Bulletin* (1973-2006) 31, no. 2 (2003), <https://doi.org/10.2307/3784333>, <http://www.jstor.org/stable/3784333>; D. P. Onorato et al., "Phylogeographic patterns within a metapopulation of black bears (*Ursus americanus*) in the American Southwest," Article, *Journal of Mammalogy* 85, no. 1 (Feb 2004), [https://doi.org/10.1644/1545-1542\(2004\)085<0140:ppwamo>2.0.co;2](https://doi.org/10.1644/1545-1542(2004)085<0140:ppwamo>2.0.co;2), <Go to ISI>://WOS:000220140300022; C. M. Costello et al., "Sex-biased natal dispersal and inbreeding avoidance in American black bears as revealed by spatial genetic analyses," *Molecular Ecology* 17, no. 21 (Nov 2008), <https://doi.org/10.1111/j.1365-294X.2008.03930.x>, <Go to ISI>://WOS:000260345200012; C. M. Costello et al., "Reliability of the cementum annuli technique for estimating age of black bears in New Mexico," *Wildlife Society Bulletin* 32, no. 1 (Spr 2004), [https://doi.org/10.2193/0091-7648\(2004\)32\[169:rotcat\]2.0.co;2](https://doi.org/10.2193/0091-7648(2004)32[169:rotcat]2.0.co;2), <Go to ISI>://WOS:000221035300019; Cecily M. Costello et al., "Relationship of Variable Mast Production to American Black Bear Reproductive Parameters in New Mexico," *Ursus* 14, no. 1 (2003), <https://doi.org/10.2307/3872951>, <http://www.jstor.org/stable/3872951>; R. M. Inman et al., "Denning chronology and design of effective bear management units," *Journal of Wildlife Management* 71, no. 5 (Jul 2007), <https://doi.org/10.2193/2006-252>, <Go to ISI>://WOS:000248027800012.

¹² Costello et al., "A Study of Black Bear Ecology in New Mexico with Models for Population Dynamics and Habitat Suitability: Final Report: Federal Aid in Wildlife Restoration Project W-131-R."

¹³ M.J. Gould et al., "Estimating density of American black bears (*Ursus americanus*) in New Mexico using noninvasive genetic sampling-based capture-recapture methods," <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/Estimating-Black-Bear-Density-in-New-Mexico-Gould-et-al-2016.pdf> (2016).

¹⁴ Lindsay Welfelt, Richard Beausoleil, and Robert Wielgus, "Factors Associated with black bear density and implications for management," *The Journal of Wildlife Management* (08/25 2019), <https://doi.org/10.1002/jwmg.21744>.



Fig. 2 Density estimates of bears/100 km²	
	Welfelt et al. (2019)
E. Northern Cascades	19.2 (95% CI 15.0 - 24.7)
W. Northern Cascades	20.1 (95% 17.5 - 23.2)

The *Cougar Management Guidelines* (2005) provides an applicable warning: Density estimates from studies conducted in optimal quality habitat where animals are abundant can only be extrapolated cautiously to larger areas (including regions or entire states). Yet, NMDGF's took Gould et al. (2015) and extrapolated it to larger areas, and thereby failed to accommodate changes in vegetation, land use, topography, and management history.¹⁵

Welfelt et al. (2019) in their study of Washington bears found bear densities range widely by region, but managers had over-estimated the population of bears in western Washington—including cubs—by 50 percent.¹⁶ The implications for New Mexico are stark, given that black bear habitat in New Mexico is also varied by region.¹⁷ They also found that human density negatively correlates with bear density—even in prime bear habitats—again leading the wildlife agency to overestimate the bear population.¹⁸

NMDGF's black bear proposals offer neither population nor trend analysis, measurable objectives, evidence, transparency or sign of an independent review, the hallmarks of sound science.¹⁹ Instead, we and the Commission are left with a flimsy and entirely unaccountable approach, emblematic of NMDGF's unscientific black bear management policy and protocols designed to elevate bear killing but not conservation.²⁰ NMDGF's failure to rely on good quality population and trend data is a concern, if this is the foundation upon which hunting objectives are set. A study of states' trend and population data showed about half of the states miscalculated population trends. Garshelis and Hristienko (2006) write that many state wildlife managers fail to adequately investigate population sizes and trends, but rather rely on guesses.²¹

To emphasize: black bears can only sustain light losses to their population from all causes and amount between six and ten percent of their population.²² Yet the numbers of bears in New Mexico remains a mystery. The quotas are set so high that they are never achieved. In fact, all sources of mortality never come to 800 per year, except in 2013 when 778 bears were killed—likely at an unsustainable level. Fig. 3.

¹⁵ *Cougar Management Guidelines*, *Cougar Management Guidelines* (Bainbridge Island, WA: WildFutures, 2005), p. 47-8.

¹⁶ Welfelt, Beausoleil, and Wielgus, "Factors Associated with black bear density and implications for management."

¹⁷ Zack, Milne, and Dunn, "Southern Oscillation Index as an Indicator of Encounters between Humans and Black Bears in New Mexico."; Onorato et al., "Phylogeographic patterns within a metapopulation of black bears (*Ursus americanus*) in the American Southwest."; Costello et al., "Sex-biased natal dispersal and inbreeding avoidance in American black bears as revealed by spatial genetic analyses."; Costello et al., "Reliability of the cementum annuli technique for estimating age of black bears in New Mexico."; Costello et al., "Relationship of Variable Mast Production to American Black Bear Reproductive Parameters in New Mexico."; Inman et al., "Denning chronology and design of effective bear management units."

¹⁸ Welfelt, Beausoleil, and Wielgus, "Factors Associated with black bear density and implications for management."

¹⁹ Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend."; Kyle A. Artelle et al., "Hallmarks of science missing from North American wildlife management," *Science Advances* 4, no. 3 (2018), <https://doi.org/10.1126/sciadv.aao0167>, <http://advances.sciencemag.org/content/advances/4/3/eaao0167.full.pdf>.

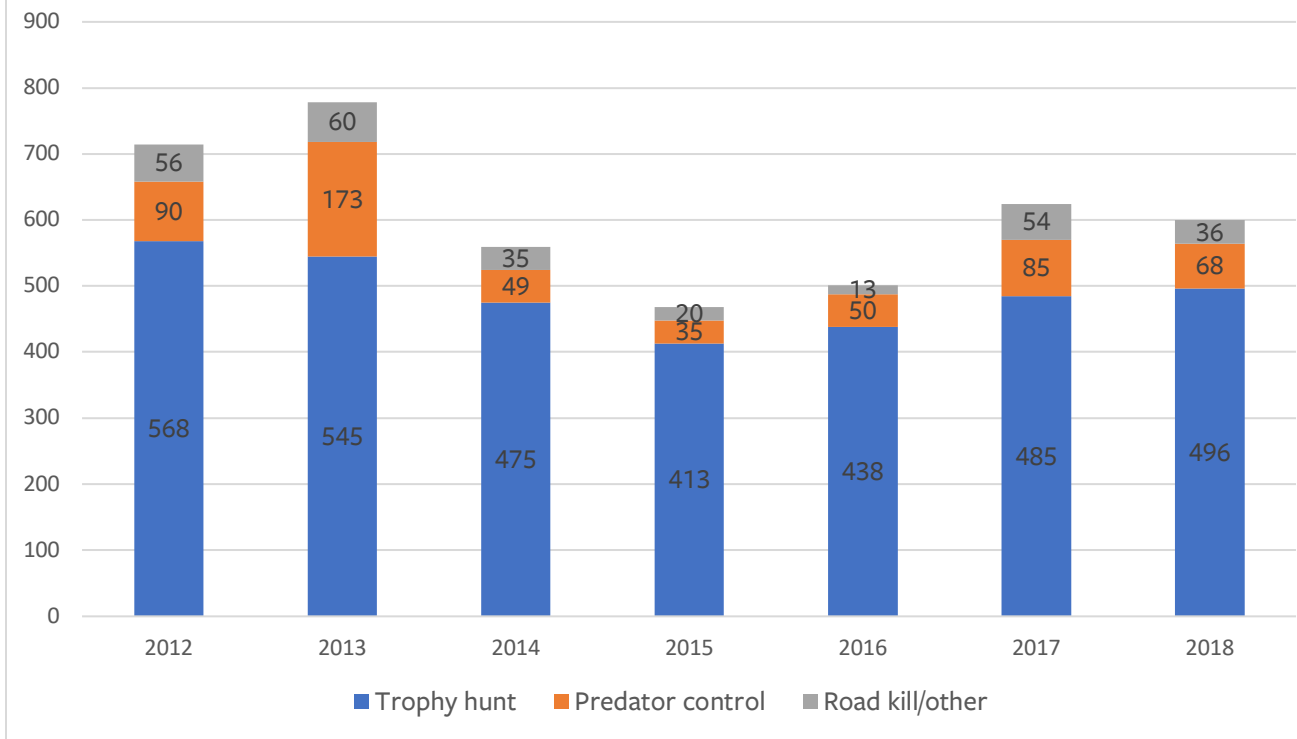
²⁰ Artelle et al., "Hallmarks of science missing from North American wildlife management."; Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend."

²¹ Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend," p. 6

²² Lindsay Suzanne Welfelt, "Black bear population dynamics in the North Cascades" (Doctor of Philosophy Dissertation, Washington State University, 2018), <https://search.proquest.com/openview/ec18d4337882347c86cd2eeb2a69ebd0/1.pdf?pq-origsite=gscholar&cbl=18750&diss=y>.



Fig. 3
Black bear mortality, New Mexico, 2012-2018 (Data from NMDGF)



3. NMDGF's quotas may be too drastic and will result in the overkill of New Mexico's beloved black bears

A safe offtake amount for black bears is between six and ten percent of the population; more than that is simply additive mortality because of harms to the female component of the population.²³ In a Washington study, where biologists used methods of capture-recapture and also collected hair samples to test bears' DNA (to discover emigrating and immigrating animals), authors compared the two areas in order to evaluate black bear survival. In both areas, despite agency predictions that the bear population was growing, it was not. Authors found that the "maximum sustainable hunter harvest" was indicated by the "intrinsic growth rate of 6-10% [which] was exceeded in both areas."²⁴ To emphasize, a total safe offtake amount, including hunting, predator control, poaching, roadkill and other, for black bears is likely only six to ten percent of the entire subpopulation because of the risk to the female component of the population.²⁵ This study is directly applicable to New Mexico.

Despite having little sense of its population,²⁶ each year in New Mexico hundreds of bears die at the hands of trophy hunters and predator control agents—some using packs of hounds—including 564 individuals who were legally hunted in 2018. Fig. 1.

²³ Welfelt, "Black bear population dynamics in the North Cascades."

²⁴ Welfelt, "Black bear population dynamics in the North Cascades," 38.

²⁵ Welfelt, "Black bear population dynamics in the North Cascades."

²⁶ Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend." Rather than a population or trend study (Garshelis and Hristienko (2006).

NMDGF's current proposal is also certainly not in the public's interest in wildlife management.²⁷ New Mexicans love their bears.²⁸ Bears are also valued for their considerable ecological and aesthetic purposes.²⁹ They are one of the most photographed and watched animals in Yellowstone National Park.³⁰

Brand new studies find that most Americans do not support black bear hunting.³¹ Manfredo et al. (2018) found that only 31 percent of New Mexicans support the killing of a black bear *even if it has attacked someone*.³² Therefore, we are forced to surmise NMDGF proposes to continue to hammer the black bear population under the false pretenses that doing so will alleviate human-bear conflicts and to provide opportunity to *trophy hunters* to kill sentient black bears for photo opportunities and to obtain and display bear parts, including, heads, hides, claws and capes.³³

4. NMDGF's proposals fail to consider poaching, wounding and other human-caused mortalities to bears

In a heavily monitored bear population, state bear biologists with the Washington Department of Fish and Wildlife reported that *approximately 20 percent* of their study bears were killed by poachers and even more died from wounding losses who were not accounted for by hunters to the state.³⁴

New Mexico must factor poaching and wounding loss metrics and total known mortalities into any reasonable quota. Allowing a cull of a species invariably induces and increases the numbers of animals killed by poachers.³⁵ In short, NMDGF must consider the massive but unknown numbers of human-induced mortalities as a result of vehicle

²⁷ Michael P. Nelson et al., "An Inadequate Construct? North American Model: What's Missing, What's Needed," *The Wildlife Professional*, no. Summer 2011 (2011); Kelly A. George et al., "Changes in attitudes toward animals in the United States from 1978 to 2014," *Biological Conservation* 201 (9// 2016), <https://doi.org/http://dx.doi.org/10.1016/j.biocon.2016.07.013>, <http://www.sciencedirect.com/science/article/pii/S0006320716302774>.

²⁸ M. J. Manfredo et al., *America's Wildlife Values: The Social Context of Wildlife Management in the U.S.*, (Fort Collins, Colorado: Colorado State University, Department of Natural Resources, 2018).

²⁹ L. E. F. Harrer and T. Levi, "The primacy of bears as seed dispersers in salmon-bearing ecosystems," Article, *Ecosphere* 9, no. 1 (Jan 2018), e02076, <https://doi.org/10.1002/ecs2.2076>, <Go to ISI>://WOS:000425731000024; M. S. Enders and S. B. Vander Wall, "Black bears *Ursus americanus* are effective seed dispersers, with a little help from their friends," *Oikos* 121, no. 4 (Apr 2012), <https://doi.org/10.1111/j.1600-0706.2011.19710.x>, <Go to ISI>://WOS:000301537200013; K. Takahashi and K. Takahashi, "Spatial distribution and size of small canopy gaps created by Japanese black bears: estimating gap size using dropped branch measurements," *Bmc Ecology* 13 (Jun 2013), 23, <https://doi.org/10.1186/1472-6785-13-23>, <Go to ISI>://WOS:000322126400001.

³⁰ K. Slagle et al., "Building tolerance for bears: A communications experiment," *Journal of Wildlife Management* 77, no. 4 (May 2013), <https://doi.org/10.1002/jwmg.515>, <Go to ISI>://WOS:000318028100022.

³¹ Responsive Management, "Americans' attitudes toward hunting, fishing, sport shooting and trapping 2019," <https://asafishing.org/wp-content/uploads/2019/04/Americans-Attitudes-Survey-Report-2019.pdf> (2019); Manfredo et al., *Short America's Wildlife Values: The Social Context of Wildlife Management in the U.S.*; George et al., "Changes in attitudes toward animals in the United States from 1978 to 2014."

³² Manfredo et al., *Short America's Wildlife Values: The Social Context of Wildlife Management in the U.S.*

³³ No one kill bears just to eat them. Hunters kill so they can engage in "show off" behaviors (Darimont et al. 2017). We define a "trophy hunt" as a hunt where a hunter's *primary motivation* is to kill an animal to display its parts (that is, their heads, hides or claws and even the whole stuffed animal); and for bragging rights (trophy hunters pose over the dead animal with their weapons for a portrait often for social media). Their primary motivation is not subsistence. Chris T. Darimont, Brian F. Coddling, and Kristen Hawkes, "Why men trophy hunt," *Biological Letters* 13, no. 3 (2017), <https://doi.org/10.1098/rsbl.2016.0909>, <http://rsbl.royalsocietypublishing.org/content/roybiolett/13/3/20160909.full.pdf>. Chelsea Batavia et al., "The elephant (head) in the room: A critical look at trophy hunting," *Conservation Letters* 0, no. 0 (2018), <https://doi.org/doi:10.1111/conl.12565>, <https://onlinelibrary.wiley.com/doi/abs/10.1111/conl.12565>.

³⁴ G. M. Koehler and D. J. Pierce, "Survival, cause-specific mortality, sex, and ages of American black bears in Washington state, USA," *Ursus* 16, no. 2 (2005), [https://doi.org/10.2192/1537-6176\(2005\)016\[0157:scmsaa\]2.0.co;2](https://doi.org/10.2192/1537-6176(2005)016[0157:scmsaa]2.0.co;2), <Go to ISI>://WOS:000233680300002.

³⁵ Guillaume Chapron and Adrian Treves, "Blood does not buy goodwill: allowing culling increases poaching of a large carnivore," *Proceedings of the Royal Society of London B: Biological Sciences* 283, no. 1830 (2016-05-11 00:00:00 2016), <https://doi.org/10.1098/rspb.2015.2939>, <http://rspb.royalsocietypublishing.org/content/royprsb/283/1830/20152939.full.pdf>.

collisions or by poachers before it continues down the path of an annual quota of nearly 1,000 bears.³⁶ In the absence of good data and a lack of knowledge about where the bear population is, we suggest that the quota be reduced to 335, a number previously set by the agency.

Human persecution of bears such as through trophy hunting and or predator control, is “super-additive,” meaning that kill rates exceed naturally-occurring mortalities.³⁷ This is because predator control agents and trophy hunters kill adult breeding animals, which disrupts animals’ social structure and leads to indirect effects such as increased infanticide by incoming subadult male bears, resulting in decreased recruitment of young.³⁸ NMDGF’s proposed quota fails to consider these added human-caused losses as part of its extreme bear quotas. Bears are not resilient to overkill. They can only withstand light losses to their populations.

5. Hounding black bears is unethical, scientifically indefensible and unsporting

Americans hold widely divergent standards around wildlife, but most highly value their conservation.³⁹ In numerous studies, both the general public and hunters themselves object to hunting activities that are viewed as unfair, unsporting, inhumane or unsustainable,⁴⁰ such as killing bears while they have dependent young or killing the young themselves. Many hunting advocates condemn such actions as a violation of the hunter’s ethical code because hunting naïve young and bear hounding are not perceived as “fair chase” hunting. Jim Posewitz explains the concept of “fair chase”: “The ethical hunter must make many fair-chase choices . . . luring animals with bait or hunting in certain seasons sometimes is viewed as giving unfair advantage to the hunter. . . . *If there is a doubt, advantage must be given to the animal being hunted.*”⁴¹

New Mexico has few limits on hounding, including the numbers of dogs permitted in a bear hunt. The only restriction is by some public lands and having a licensed hunter continuously present after the dogs have been released. Hounding, or using packs of dogs to pursue bears, is considered unsporting even among many hunters because it gives unfair advantage to the hunter.⁴²

³⁶ B. J. Bergstrom, “Carnivore conservation: shifting the paradigm from control to coexistence,” *Journal of Mammalogy* 98, no. 1 (Feb 2017), <https://doi.org/10.1093/jmammal/gyw185>, <Go to ISI>://WOS:000397232500001. Chapron and Treves, “Blood does not buy goodwill: allowing culling increases poaching of a large carnivore.”; D. E. Unger et al., “History and Current Status of the Black Bear in Kentucky,” *Northeastern Naturalist* 20, no. 2 (Jun 2013), <https://doi.org/10.1656/045.020.0206>, <Go to ISI>://WOS:000321563700006; Koehler and Pierce, “Survival, cause-specific mortality, sex, and ages of American black bears in Washington state, USA.” B. N. McLellan et al., “Rates and causes of grizzly bear mortality in the interior mountains of British Columbia, Alberta, Montana, Washington, and Idaho,” *Journal of Wildlife Management* 63, no. 3 (Jul 1999), <https://doi.org/10.2307/3802805>, <Go to ISI>://WOS:000081441500017; Caitlin M. Glymph, “Spatially explicit model of areas between suitable black bear habitat in east Texas and black bear populations in Louisiana, Arkansas, and Oklahoma” (Masters M.A., Stephen F. Austin State University, 2017), <https://scholarworks.sfasu.edu/etds/128/>; B. J. Wear, R. Eastridge, and J. D. Clark, “Factors affecting settling, survival, and viability of black bears reintroduced to Felsenthal National Wildlife Refuge, Arkansas,” *Wildlife Society Bulletin* 33, no. 4 (2005), [https://doi.org/10.2193/0091-7648\(2005\)33\[1363:FASSAV\]2.0.CO;2](https://doi.org/10.2193/0091-7648(2005)33[1363:FASSAV]2.0.CO;2), <http://pubs.er.usgs.gov/publication/70027414>.

³⁷ Vucetich et al. 2005, Creel and Rotella 2010, Creel et al. 2015, Darimont et al. 2015.

³⁸ Wielgus and Bunnell 1995, Creel and Rotella 2010, Wielgus et al. 2013, Ausband et al. 2015, Darimont et al. 2015, Elbroch et al. 2017a, Leclerc et al. 2017.

³⁹ Stephen R. Kellert, *The Value of Life* (Washington, D.C.: Island Press, 1996).

⁴⁰ Thomas D. Beck et al., “Sociological and ethical considerations of black bear hunting,” *Proceedings of the Western Black Bear Workshop* 5 (1995); T. L. Teel, R. S. Krannich, and R. H. Schmidt, “Utah stakeholders’ attitudes toward selected cougar and black bear management practices,” *Wildlife Society Bulletin* 30, no. 1 (Spr 2002), <Go to ISI>://000175200100002; C.W. Ryan, J.W. Edwards, and M.D. Duda, “West Virginia residents: Attitudes and opinions toward American black bear hunting,” *Ursus* 2 (2009).

⁴¹ Emphasis added. J. Posewitz, *Beyond Fair Chase: The Ethic and Tradition of Hunting* (Helena, Montana: Falcon Press, 1994), p. 61.

⁴² Ryan, Edwards, and Duda, “West Virginia residents: Attitudes and opinions toward American black bear hunting.”; Teel, Krannich, and Schmidt, “Utah stakeholders’ attitudes toward selected cougar and black bear management practices.”



While pursuing bears, hounds chase, startle and kill non-target wildlife.⁴³ Dogs may even chase bears into roadways, where oncoming vehicles could strike either. Hounds invariably trespass on lands—whether on private land or on special refuges such as national parks where hounds are not permitted. This creates strife between landowners and hunters.⁴⁴ Using hounds to chase bears pits dogs against bears, and either species can be injured or killed, particularly if the bear is bayed on the ground. Sometimes dogs kill the bears themselves, especially dependent cubs.

Pursuit during hot weather can cause physical stress to both dogs and bears.⁴⁵ Bears that have engaged in prolonged pursuits experience physiological stress because bears' pelts and fat layer (that they are building in anticipation of hibernation) can make them overheat—possibly leading to death or for pregnant bears, the loss of their fetuses. In poor food years, pursuing bears with hounds makes bears expend energy they require to survive hibernation. Hounds disrupt feeding patterns for bears who are chased and nearby bears who are not.⁴⁶

If bayed on the ground, hunters cannot identify the sex of the bear, which is a concern if it is a female with dependent cubs. If the mother is killed, young-of-the-year cubs will die from starvation, exposure or predation.⁴⁷ In research conducted in Maine, houndsmen were ineffective in determining if a female had cubs, because the mother would secure her cubs in a separate tree other than the one she occupied.⁴⁸

The main purpose of hounding is to tree the bears for the purpose of close-range identification and shooting. While some argue that hounding is a selective method for choosing the age or sex of an animal,⁴⁹ researchers who have done empirical study contend it is difficult for hunters to determine the age and sex of a treed bear.⁵⁰ Inman and Vaughan (2002) found that houndsmen accurately determined the sex of treed bears 67% of the time. In other words, approximately one-third of treed bear were wrongly sexed by houndsmen.⁵¹

So many aspects of hounding are unsavory. It causes stress and distress to wildlife, including non-target species, and to the hounds themselves. Hounds can kill bear cubs, and hounds can be killed by bears. Hounding disrupts bears when they should be foraging and not hiding from hunters in order to survive wintertime hibernation. Hounding can cause fertilized females to lose embryos. Neither hounds nor bears sweat; to dissipate heat to prevent damage to their brains, they must either pant (which is inefficient) or find a body of water to cool off.⁵² In short, hounding is an incredibly cruel and barbaric sport that should end in New Mexico.

⁴³ Hank Hristienko and Jr. McDonald, John E., "Going in the 21st century: a perspective on trends and controversies in the management of the black bear," *Ursus* 18, no. 1 (2007).

⁴⁴ Hristienko and McDonald, "Going in the 21st century: a perspective on trends and controversies in the management of the black bear."

⁴⁵ Hristienko and McDonald, "Going in the 21st century: a perspective on trends and controversies in the management of the black bear."

⁴⁶ Beck et al., "Sociological and ethical considerations of black bear hunting." Ordiz et al., "Do bears know they are being hunted?."

⁴⁷ Cubs will stay with their mothers between 14-18 months. Born in the den between January and February, bears leave the den usually in late April, but they are not weaned until the months between July and September. The cubs will go back into the den for their second winter with their mother. They will stay with her until May – July, when the family breaks up (because the female goes back into estrus). Considered subadults at that point, the cubs must find their own home range, which is more difficult of males as they have to disperse further from the natal area – to avoid inbreeding.

⁴⁸ Beck et al., "Sociological and ethical considerations of black bear hunting."

⁴⁹ Hristienko and McDonald, "Going in the 21st century: a perspective on trends and controversies in the management of the black bear."

⁵⁰ Beck et al., "Sociological and ethical considerations of black bear hunting."; M. C. Boulay, D.H. Jackson, and D.A. Immell, "Preliminary assessment of a ballot initiative banning two methods of bear hunting in Oregon: Effects on bear harvest," *Ursus* 11 (1999).

⁵¹ K. H. Inman and M. R. Vaughan, "Hunter effort and success rates of hunting bears with hounds in Virginia," *Ursus* 13 (2002), <Go to ISI>://WOS:000229925700022.

⁵² Bernd Heinrich, *Why we run: A natural history* (Harper Perennial, 2002).

6. The climate crisis necessitates a new look at privileging non-lethal approaches over killing

Wildlife management agencies often wrongly presume that an increase in human conflicts is a result of a growing bear population, but bears may simply be modifying their behaviors in response to urgent environmental circumstances—a lack of food.⁵³ Unless intensively studying a bear population, agencies poorly assess the total mortality that bears sustain, and may increase quotas when they should be decreasing them.⁵⁴ Despite available habitat, bears may not be in them because of human presence, or they are unevenly distributed across that state's particular black bear habitat.⁵⁵

As Johnson et al. (2018) and others suggest, because North American habitats are altered by human development and changed by the climate crisis, wildlife managers must adapt and work to reduce human-bear conflicts, rather than rely upon lethal removals.⁵⁶ The problems associated with a warming climate and bears coming into contact with an expanding human population is problematic. When bears must live alongside humans, their chances for survival decrease dramatically because of vehicle collisions and agency actions.⁵⁷ Large native carnivores face extinction⁵⁸—it is incumbent upon wildlife agencies to conserve rather than over-exploit them. Expanded human development into bear habitats during the climate crisis exacerbates bear mortalities, and then agencies react by increasing trophy hunting quotas, when they should be reducing overall black bear mortalities.⁵⁹

The time bears spend in the den is tied to air temperature and food availability (both natural and anthropogenic subsidies).⁶⁰ Study authors found that the warmer the temperatures and the more food is available, the longer the time bears will spend active as they maximize their opportunities to forage.⁶¹ With a warming climate, black bears reduce

⁵³ H. E. Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts," Article, *Journal of Applied Ecology* 55, no. 2 (Mar 2018), <https://doi.org/10.1111/1365-2664.13021>, <Go to ISI>://WOS:000424881800020; H. E. Johnson et al., "Shifting perceptions of risk and reward: Dynamic selection for human development by black bears in the western United States," *Biological Conservation* 187 (Jul 2015), <https://doi.org/10.1016/j.biocon.2015.04.014>, <Go to ISI>://WOS:000357234100019; M. E. Obbard et al., "Relationships among food availability, harvest, and human-bear conflict at landscape scales in Ontario, Canada," *Ursus* 25, no. 2 (2014), <https://doi.org/10.2192/ursus-d-13-00018.1>, <Go to ISI>://WOS:000347670000002.

⁵⁴ Laufenberg et al., "Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface."; Welfelt, Beausoleil, and Wielgus, "Factors Associated with black bear density and implications for management."

⁵⁵ Welfelt, Beausoleil, and Wielgus, "Factors Associated with black bear density and implications for management."

⁵⁶ Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts."; D. L. Lewis et al., "Modeling black bear population dynamics in a human-dominated stochastic environment," Article, *Ecological Modelling* 294 (Dec 2014), <https://doi.org/10.1016/j.ecolmodel.2014.08.021>, <Go to ISI>://WOS:000345821100006.

⁵⁷ Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts."; Johnson et al., "Shifting perceptions of risk and reward: Dynamic selection for human development by black bears in the western United States."; J. P. Beckmann and J. Berger, "Rapid ecological and behavioural changes in carnivores: the responses of black bears (*Ursus americanus*) to altered food," *Journal of Zoology* 261 (Oct 2003), <https://doi.org/10.1017/s0952836903004126>, <Go to ISI>://WOS:000186327700010.

⁵⁸ J. A. Estes et al., "Trophic Downgrading of Planet Earth," *Science* 333, no. 6040 (Jul 2011), <https://doi.org/10.1126/science.1205106>, <Go to ISI>://WOS:000292732000031; Chris T. Darimont et al., "The unique ecology of human predators," *Science* 349, no. 6250 (2015); William J. Ripple et al., "Extinction risk is most acute for the world's largest and smallest vertebrates," *Proceedings of the National Academy of Sciences* 114, no. 40 (October 3, 2017 2017), <https://doi.org/10.1073/pnas.1702078114>, <http://www.pnas.org/content/114/40/10678.abstract>; Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), "Nature's Dangerous Decline 'Unprecedented' Species Extinction Rates 'Accelerating': Current global response insufficient. 'Transformative changes' needed to restore and protect nature; Opposition from vested interests can be overcome for public good. Most comprehensive assessment of its kind; 1,000,000 species threatened with extinction."

⁵⁹ Laufenberg et al., "Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface."

⁶⁰ Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts."

⁶¹ Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts."

their hibernation times and increase their active times, and in coming years, human-bear conflicts will likely become more pronounced resulting in greater black bear mortalities, including from hunters and agency removals, resulting in greater black bear population declines.⁶²

Again, black bear biologists warn that managers must limit recreational black bear killing to reduce total mortality, and especially during years of poor natural food production, which is readily predicted by weather events.⁶³

To emphasize, the total annual mortality that a black bear population can sustain is only between six and ten percent of the population; more than that is simply super additive mortality.⁶⁴ Female bears rarely migrate—they prefer to live near their natal areas, and this compounds the harms from trophy hunting and other sources of mortality that affect black bear populations.⁶⁵ The loss of females reduces a bear population’s ability to bounce back as they are the key to sustaining the population.⁶⁶

7. Food availability plays a large role in the presence of bears in urban areas; human food sources are the root cause of human-bear conflicts

In their study of Aspen, Colorado bears, Baruch-Mordo et al. (2014) found that black bears who came to Aspen to prevent their starvation because of a native food failure subsequently reversed their behaviors and returned to the wilds when their native foods were again available.⁶⁷ Johnson et al. (2015), in their study of bears in three cities, Tahoe, Durango and Aspen, found that bears consistently changed their food-foraging behaviors, based upon food availability. In these cities, **bears used human foods as a subsidy rather than a staple**. They argue that bears who are labeled “nuisance”, might not be “problem” bears all of the time. They also suggest that people need to make human foods less available to bears, especially in poor food years.⁶⁸ In short, despite claims that once bears have eaten food in urban areas that they are forever tainted, **studies show that bears will leave these areas once natural foods are again available**.⁶⁹ Bears weigh energy budgets and their safety when making decisions about where to forage.⁷⁰

While some indicate that urban areas serve as a refuge for bears when there are food failures, Aspen, Colorado was not a refuge but an “ecological and evolutionary trap.” Because adult females were removed by agency personnel in Aspen,

⁶² Johnson et al., “Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts.”; Johnson et al., “Shifting perceptions of risk and reward: Dynamic selection for human development by black bears in the western United States.”; Lewis et al., “Modeling black bear population dynamics in a human-dominated stochastic environment.”

⁶³ Johnson et al., “Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts.”

⁶⁴ Welfelt, “Black bear population dynamics in the North Cascades.”

⁶⁵ Laufenberg et al., “Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface.”

⁶⁶ Laufenberg et al., “Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface.”

⁶⁷ S. Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts,” *Plos One* 9, no. 1 (Jan 2014), e85122, <https://doi.org/10.1371/journal.pone.0085122>, <Go to ISI>://WOS:000329862500218.

⁶⁸ Johnson et al., “Shifting perceptions of risk and reward: Dynamic selection for human development by black bears in the western United States.”

⁶⁹ J. S. Lewis et al., “Interspecific interactions between wild felids vary across scales and levels of urbanization,” Article, *Ecology and Evolution* 5, no. 24 (Dec 2015), <https://doi.org/10.1002/ece3.1812>, <Go to ISI>://WOS:000368136600018; Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts.”

⁷⁰ Lewis et al., “Interspecific interactions between wild felids vary across scales and levels of urbanization.”; Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts.”

it became a black bear population sink.⁷¹ In their synthesis article, Elfstrom et al. (2014) suggest that some bears, particularly females with cubs and subadults, use urban areas as a calculated trade-off to avoid death from despotic larger bears.⁷² Urban areas are an unsustainable bear sink because so many breeding females are removed in food-poor years.⁷³

8. NMDGF cannot successfully hunt its way out of human-bear conflicts

Agencies believe that hunting bears will reduce conflicts with humans. Yet, nine separate studies demonstrate that hunting bears will not resolve human-bear conflicts (“HBC”) unless a bear population is reduced to an unsustainable level. While policymakers claim that opening or extending bear trophy hunts will result in fewer bears expanding into urban areas where they may cause problems,⁷⁴ studies show that bear hunting will only reduce conflicts in cases where the bear population is reduced below sustainable levels.⁷⁵ Obbard et al. (2014) write:

We found no significant correlations between harvest and subsequent HBC human-bear conflicts. Although it may be intuitive to assume that harvesting more bears should reduce HBC, empirical support for this assumption is lacking despite considerable research (Garshelis 1989, Treves and Karanth 2003, Huygens et al. 2004, Tavss 2005, Treves 2009, Howe et al. 2010, Treves et al. 2010).⁷⁶

Research clearly demonstrates that black bear hunting simply does not reduce HBC. Pienaar et al. (2015) write:

Members of the public are likely to believe that bear management and alteration of bear behavior are the solution to human-bear conflicts. They tend to favor trapping and relocating bears, opening a bear hunting season, and improving habitat In contrast, wildlife management agencies recognize that both lethal and non-lethal management of bears tend to be costly, time consuming, and difficult to implement in urban locations. Agencies also understand that these measures are ineffective in addressing root causes of human-bear conflicts, such as increased development of habitat, diverse public attitudes about bear management, and human food conditioning of bears (Peine 2001, Gore et al. 2006, Agree and Miller 2009, Don Carlos et al. 2009, Lowery et al. 2012).⁷⁷

⁷¹ Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts,” 8.

⁷² M. Elfstrom et al., “Ultimate and proximate mechanisms underlying the occurrence of bears close to human settlements: review and management implications,” *Mammal Review* 44, no. 1 (Jan 2014), <https://doi.org/10.1111/j.1365-2907.2012.00223.x>, <Go to ISI>://WOS:000327796800002; Marcus Elfström et al., “Does despotic behavior or food search explain the occurrence of problem brown bears in Europe?,” *The Journal of Wildlife Management* 78, no. 5 (2014), <https://doi.org/10.1002/jwmg.727>, <http://dx.doi.org/10.1002/jwmg.727>.

⁷³ Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts.”

⁷⁴ Hank Hristienko and Jr. McDonald, John E., “Going in the 21st Century: A Perspective on Trends and Controversies in the Management of the Black Bear,” *Ursus* 18, no. 1 (2007); A. Treves, K. J. Kapp, and D. M. MacFarland, “American Black Bear Nuisance Complaints and Hunter Take,” *Ursus* 21, no. 1 (2010).

⁷⁵ M. E. Obbard et al., “Relationships among Food Availability, Harvest, and Human-Bear Conflict at Landscape Scales in Ontario, Canada,” *Ursus* 25, no. 2 (2014); E. J. Howe et al., “Do Public Complaints Reflect Trends in Human-Bear Conflict?” *Ursus* 21, no. 2 (2010).

⁷⁶ Obbard et al., Relationships among Food Availability, Harvest, and Human-Bear Conflict at Landscape Scales in Ontario, Canada.”

⁷⁷ Elizabeth F. Pienaar, David Telesco, and Sarah Barrett, “Understanding People’s Willingness to Implement Measures to Manage Human-Bear Conflict in Florida,” *Journal of Wildlife Management* 79, no. 5 (2015), p. 798.

Bear hunts do not reduce conflicts because trophy hunters generally remove non-problem bears from the population; that is, the individuals not involved in nuisance behaviors.⁷⁸ Instead, hunters attempt to target large, male bears to acquire an impressive trophy,⁷⁹ but those bears are not the ones living near humans.⁸⁰

9. Solutions to alleviate human-bear conflicts must be multi-faceted for success

A host of biologists and social scientists suggest that bear aware campaigns must focus on the benefits to society as a result of maintaining healthy bear populations, along with co-existence education.⁸¹ Tolerance for bears increases when residents learn the benefits of bears and have positive interactions with them, whereas intolerance stems from elevated risk perceptions, negative interactions and a greater trust in wildlife managers, dominionistic values and age.⁸²

Florida state biologists Barrett et al. (2014) emphasized that in working with homeowners and others, an **“all-or-none approach”** in neighborhoods was necessary to prevent negative human-bear encounters. That is, everyone needed to properly use bear-resistant trashcans and prevent attracting bears with other food sources. Barrett et al. (2014) write:

Proactive measures (e.g. securing trash, electrical fencing, education) dealing with human behavior are much more efficient than reactive methods (e.g., aversive conditioning, relocation, euthanasia) in reducing human-bear incidents because changing or managing human behavior is more likely to provide longer-term solutions than managing a wildlife species alone (Baruch-Mordo et al. 2009).⁸³

Studies from Colorado find the same. Everyone must work in concert. That involves providing bear resistant trash cans to residents, educating them and using law enforcement against scofflaws.⁸⁴

Washington’s successful Karelian bear dog program, which is entirely funded with private donations, is a huge success and brings great goodwill to that agency.⁸⁵

Bear conflict mitigation for landowners involves employing commonsense, non-lethal solutions across entire landscapes, such as using the right kind of electric fencing around calving and lambing pens, boneyards, stored animal feed and around crops. Other strategies include using bear-proof trash receptacles and creating secured dumps in rural

⁷⁸ A. Treves, K. J. Kapp, and D. M. MacFarland, “American black bear nuisance complaints and hunter take,” *Ursus* 21, no. 1 (2010), <https://doi.org/10.2192/09gr012.1>, <Go to ISI>://WOS:000277602700004; M. Elfström et al., “Ultimate and proximate mechanisms underlying the occurrence of bears close to human settlements: review and management implications,” *Mamm Rev.* 44 (2014), <https://doi.org/10.1111/j.1365-2907.2012.00223.x>, <http://dx.doi.org/10.1111/j.1365-2907.2012.00223.x>.

⁷⁹ Darimont, Coddington, and Hawkes, “Why men trophy hunt.”; Darimont et al., “The unique ecology of human predators.”

⁸⁰ Elfstrom et al., “Ultimate and proximate mechanisms underlying the occurrence of bears close to human settlements: review and management implications.”

⁸¹ Slagle et al., “Building tolerance for bears: A communications experiment.”; Bruskotter Jeremy T. and Wilson Robyn S., “Determining Where the Wild Things will be: Using Psychological Theory to Find Tolerance for Large Carnivores,” *Conservation Letters* 7, no. 3 (2014), <https://doi.org/doi:10.1111/conl.12072>, <https://onlinelibrary.wiley.com/doi/abs/10.1111/conl.12072>; Stacy A. Lischka et al., “Understanding and managing human tolerance for a large carnivore in a residential system,” *Biological Conservation* 238 (2019/10/01/ 2019), <https://doi.org/https://doi.org/10.1016/j.biocon.2019.07.034>, <http://www.sciencedirect.com/science/article/pii/S0006320718316276>.

⁸² Lischka et al., “Understanding and managing human tolerance for a large carnivore in a residential system.”

⁸³ M. A. Barrett et al., “Testing Bear-Resistant Trash Cans in Residential Areas of Florida,” Article, *Southeastern Naturalist* 13, no. 1 (Mar 2014), <https://doi.org/10.1656/058.013.0102>, <Go to ISI>://WOS:000333891100005., p. 36.

⁸⁴ Heather Johnson et al., “Assessing Ecological and Social Outcomes of a Bear-Proofing Experiment,” *The Journal of Wildlife Management* (10/01 2018), <https://doi.org/10.1002/jwmg.21472>.

⁸⁵ Washington Department of Fish and Wildlife, “Karelian Bear Dog Program,” <https://wdfw.wa.gov/enforcement/kbd/cash.html>; <https://www.inlander.com/spokane/meet-washington-states-karelian-bear-dogs/Slideshow/2772624> (2018).

communities. And perhaps most importantly, cleaning up calving areas and making boneyards inaccessible to native carnivores.⁸⁶

In Yosemite National Park, Breck et al. (2007) used radio collars to trip remote alarms to keep bears successfully out of campgrounds.⁸⁷

Temporary diversionary feeding may even be feasible given inevitable food shortages because of the climate crisis. Garshelis et al. (2017) and Elfstrom et al. (2014) have found that diversionary feeding of starving bears is an effective tool for reducing and preventing human-bear conflicts. Those foods must be supplied outside of a conflict area, inside a bear's home range, and the food cannot be associated with people.⁸⁸ Managers should supply foods that are similar to natural foods such as fruits and nuts, but avoid long-term feeding, which can grow the population.⁸⁹

New Mexico cannot kill its way out of human-bear conflicts—to do so would mean black bear extirpation.⁹⁰ As Stringham (2013) suggests, agencies' policies for black bears and other wildlife such as mountain lions are often too rigid and simplistic to conform with modern societal values that prioritize humaneness and conservation over wanton killing.⁹¹ For instance, he suggests that agencies should not kill bears unless they are a true public safety hazard—and not because someone felt frightened when they saw one.⁹²

While food is the root cause of most negative human-bear interactions, Herrero et al. (2011) write: "Each year, millions of interactions between people and black bears occur without any injury to a person, although by 2 years of age most black bears have the physical capacity to kill a person."⁹³

10. Black bears are an important umbrella species and ecological actors who increase biodiversity

Black bears are important in maintaining the ecological systems in their forests. They disperse seeds across vast distances—even more seeds than birds,⁹⁴ open up canopies, and amend soils through their various behaviors. Black bears eat fruits and deposit them across long distances (and mice assist by removing the seeds from bear feces, where they would otherwise mildew, and cache them in soil where some will grow).⁹⁵ Bears cause small-scale ecological disturbance to the canopy that allows sun to filter to the forest floor, which creates greater biological diversity.⁹⁶ Bears

⁸⁶ S. M. Wilson, E. H. Bradley, and G. A. Neudecker, "Learning to live with wolves: community-based conservation in the Blackfoot Valley of Montana," Article, *Human-Wildlife Interactions* 11, no. 3 (Win 2017), <Go to ISI>://WOS:000422844800010.

⁸⁷ S. W. Breck et al., "An automated system for detecting and reporting trespassing bears in Yosemite National Park," *Ursus* 18, no. 2 (2007), [https://doi.org/10.2192/1537-6176\(2007\)18\[230:aasfda\]2.0.co;2](https://doi.org/10.2192/1537-6176(2007)18[230:aasfda]2.0.co;2), <Go to ISI>://WOS:000251772900010. Oscar C. Huygens and Hidetake Hayashi, "Using electric fences to reduce Asiatic black bear depredation in Nagano Prefecture, Central Japan," *Wildlife Society Bulletin* 27, no. 4 (1999).

⁸⁸ D. L. Garshelis et al., "Is diversionary feeding an effective tool for reducing human-bear conflicts? Case studies from North America and Europe," Article, *Ursus* 28, no. 1 (2017), <https://doi.org/10.2192/ursu-d-16-00019.1>, <Go to ISI>://WOS:000409564500004; Elfstrom et al., "Ultimate and proximate mechanisms underlying the occurrence of bears close to human settlements: review and management implications."

⁸⁹ Garshelis et al., "Is diversionary feeding an effective tool for reducing human-bear conflicts? Case studies from North America and Europe."

⁹⁰ E. J. Howe et al., "Do public complaints reflect trends in human-bear conflict?," *Ursus* 21, no. 2 (2010), <https://doi.org/10.2192/09gr013.1>, <Go to ISI>://WOS:000284520900001; Obbard et al., "Relationships among food availability, harvest, and human-bear conflict at landscape scales in Ontario, Canada."

⁹¹ Stephen R. Stringham, "Managing risk from bears and other potentially lethal wildlife: predictability, accountability, and liability," *Human-Wildlife Interactions* 7, no. 1 (2013).

⁹² Stringham, "Managing risk from bears and other potentially lethal wildlife: predictability, accountability, and liability."

⁹³ S. Herrero et al., "Fatal Attacks by American Black Bear on People: 1900-2009," *Journal of Wildlife Management* 75, no. 3 (Apr 2011): 599, <https://doi.org/10.1002/jwmg.72>, <Go to ISI>://WOS:000291007800015.

⁹⁴ Harrer and Levi, "The primacy of bears as seed dispersers in salmon-bearing ecosystems."

⁹⁵ Enders and Vander Wall, "Black bears *Ursus americanus* are effective seed dispersers, with a little help from their friends."

⁹⁶ Takahashi and Takahashi, "Spatial distribution and size of small canopy gaps created by Japanese black bears: estimating gap size using dropped branch measurements."



**THE HUMANE SOCIETY
OF THE UNITED STATES**

break logs while grubbing, which helps the decomposition process and facilitates the return of nutrients to the soil. In one study, researchers found that black bears were the dominant species moving salmon from streams into riparian zones. Bears ate about half of the salmon, leaving remnants which contributed to greater tree ring growth. They also found higher plant growth along the riparian areas where bear trails existed and where bears' urine deposit was high.⁹⁷

11. Conclusion

The Commission must appreciate the massive contributions bears make to conserving the biological diversity of their forest ecosystems. They are highly sentient and deserving of their intrinsic rights to live and not be harassed by trophy hunters and packs of hounds. We ask the Commission to reject the proposed rule and instead reduce the state's entire quota to 335, consistent with prior and better-supported quotas in the state.

If you need access to any of the studies cited herein, please contact me at the email address below.

Sincerely,

Wendy Keefover
Senior Strategist, Native Carnivore Protection
The Humane Society of the United States

⁹⁷ T. E. Reimchen and C. H. Fox, "Fine-scale spatiotemporal influences of salmon on growth and nitrogen signatures of Sitka spruce tree rings," *Bmc Ecology* 13 (Oct 2013), 38, <https://doi.org/10.1186/1472-6785-13-38>, <Go to ISI>://WOS:000325284000001.

Bibliography

- Artelle, Kyle A., John D. Reynolds, Adrian Treves, Jessica C. Walsh, Paul C. Paquet, and Chris T. Darimont. "Hallmarks of Science Missing from North American Wildlife Management." *Science Advances* 4, no. 3 (2018).
<https://doi.org/10.1126/sciadv.aao0167>.
<http://advances.sciencemag.org/content/advances/4/3/eaao0167.full.pdf>.
- Barrett, M. A., D. J. Telesco, S. E. Barrett, K. M. Widness, and E. H. Leone. "Testing Bear-Resistant Trash Cans in Residential Areas of Florida." [In English]. Article. *Southeastern Naturalist* 13, no. 1 (Mar 2014): 26-39.
<https://doi.org/10.1656/058.013.0102>. <Go to ISI>://WOS:000333891100005.
- Baruch-Mordo, S., K. R. Wilson, D. L. Lewis, J. Broderick, J. S. Mao, and S. W. Breck. "Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts." *Plos One* 9, no. 1 (Jan 2014): e85122. <https://doi.org/10.1371/journal.pone.0085122>. <Go to ISI>://WOS:000329862500218.
- Batavia, Chelsea, Michael Paul Nelson, Chris T. Darimont, Paul C. Paquet, William J. Ripple, and Arian D. Wallach. "The Elephant (Head) in the Room: A Critical Look at Trophy Hunting." *Conservation Letters* 0, no. 0 (2018): e12565. <https://doi.org/doi:10.1111/conl.12565>. <https://onlinelibrary.wiley.com/doi/abs/10.1111/conl.12565>.
- Beck, Thomas D., David S. Moody, Donald B. Koch, John J. Beecham, Gary R. Olson, and Timothy Burton. "Sociological and Ethical Considerations of Black Bear Hunting." *Proceedings of the Western Black Bear Workshop* 5 (1995): 119-31.
- Beckmann, J. P., and J. Berger. "Rapid Ecological and Behavioural Changes in Carnivores: The Responses of Black Bears (*Ursus Americanus*) to Altered Food." *Journal of Zoology* 261 (Oct 2003): 207-12.
<https://doi.org/10.1017/s0952836903004126>. <Go to ISI>://WOS:000186327700010.
- Bergstrom, B. J. "Carnivore Conservation: Shifting the Paradigm from Control to Coexistence." *Journal of Mammalogy* 98, no. 1 (Feb 2017): 1-6. <https://doi.org/10.1093/jmammal/gyw185>. <Go to ISI>://WOS:000397232500001.
- Boulay, M. C., D.H. Jackson, and D.A. Immell. "Preliminary Assessment of a Ballot Initiative Banning Two Methods of Bear Hunting in Oregon: Effects on Bear Harvest." *Ursus* 11 (1999): 179-84.
- Breck, S. W., N. Lance, J. Bourassal, S. Matthews, and V. Seher. "An Automated System for Detecting and Reporting Trespassing Bears in Yosemite National Park." *Ursus* 18, no. 2 (2007): 230-35. [https://doi.org/10.2192/1537-6176\(2007\)18\[230:aasfda\]2.0.co;2](https://doi.org/10.2192/1537-6176(2007)18[230:aasfda]2.0.co;2). <Go to ISI>://WOS:000251772900010.
- Cattet, M., J. Boulanger, G. Stenhouse, R. A. Powell, and M. L. Reynolds-Hogland. "An Evaluation of Long-Term Capture Effects in Ursids: Implications for Wildlife Welfare and Research." [In English]. Article. *Journal of Mammalogy* 89, no. 4 (Aug 2008): 973-90. <https://doi.org/10.1644/08-mamm-a-095.1>. <Go to ISI>://WOS:000258765000019.
- Chapron, Guillaume, and Adrian Treves. "Blood Does Not Buy Goodwill: Allowing Culling Increases Poaching of a Large Carnivore." *Proceedings of the Royal Society of London B: Biological Sciences* 283, no. 1830 (2016-05-11 00:00:00 2016). <https://doi.org/10.1098/rspb.2015.2939>.
<http://rspb.royalsocietypublishing.org/content/royprsb/283/1830/20152939.full.pdf>.
- Costello, C. M., S. R. Creel, S. T. Kalinowski, N. V. Vu, and H. B. Quigley. "Sex-Biased Natal Dispersal and Inbreeding Avoidance in American Black Bears as Revealed by Spatial Genetic Analyses." *Molecular Ecology* 17, no. 21 (Nov 2008): 4713-23. <https://doi.org/10.1111/j.1365-294X.2008.03930.x>. <Go to ISI>://WOS:000260345200012.
- Costello, C. M., K. H. Inman, D. E. Jones, R. M. Inman, B. C. Thompson, and H. B. Quigley. "Reliability of the Cementum Annuli Technique for Estimating Age of Black Bears in New Mexico." *Wildlife Society Bulletin* 32, no. 1 (Spr 2004): 169-76. [https://doi.org/10.2193/0091-7648\(2004\)32\[169:rotcat\]2.0.co;2](https://doi.org/10.2193/0091-7648(2004)32[169:rotcat]2.0.co;2). <Go to ISI>://WOS:000221035300019.
- Costello, C. M., D. E. Jones, K.A. Hammond, K. H. Inman, B. C. Thompson, R.A. Deitner, and H.B. Quigley. "A Study of Black Bear Ecology in New Mexico with Models for Population Dynamics and Habitat Suitability: Final Report: Federal Aid in Wildlife Restoration Project W-131-R." *New Mexico Department of Game and Fish* (2001).
- Costello, Cecily M., Donald E. Jones, Robert M. Inman, Kristine H. Inman, Bruce C. Thompson, and Howard B. Quigley. "Relationship of Variable Mast Production to American Black Bear Reproductive Parameters in New Mexico." *Ursus* 14, no. 1 (2003): 1-16. <https://doi.org/10.2307/3872951>. <http://www.jstor.org/stable/3872951>.
- Cougar Management Guidelines. *Cougar Management Guidelines*. Bainbridge Island, WA: WildFutures, 2005.



- Darimont, Chris T., Brian F. Coddington, and Kristen Hawkes. "Why Men Trophy Hunt." *Biology Letters* 13, no. 3 (2017): <http://rsbl.royalsocietypublishing.org/content/13/3/20160909>. <https://doi.org/10.1098/rsbl.2016.0909>. <http://rsbl.royalsocietypublishing.org/content/roybiolett/13/3/20160909.full.pdf>.
- Darimont, Chris T., Caroline H. Fox, Heather M. Bryan, and Thomas E. Reimchen. "The Unique Ecology of Human Predators." *Science* 349, no. 6250 (2015): 858-60.
- Dobey, S., D. V. Masters, B. K. Scheick, J. D. Clark, M. R. Pelton, and M. E. Sunquist. "Ecology of Florida Black Bears in the Okefenokee-Osceola Ecosystem." *Wildlife Monographs*, no. 158 (Jan 2005): 1-41. <Go to ISI>://WOS:000228658000001.
- Elfström, M., A. Zedrosser, O. G. Støen, and J. E. Swenson. "Ultimate and Proximate Mechanisms Underlying the Occurrence of Bears Close to Human Settlements: Review and Management Implications." *Mamm Rev.* 44 (2014). <https://doi.org/10.1111/j.1365-2907.2012.00223.x>. <http://dx.doi.org/10.1111/j.1365-2907.2012.00223.x>.
- Elfstrom, M., A. Zedrosser, O. G. Stoen, and J. E. Swenson. "Ultimate and Proximate Mechanisms Underlying the Occurrence of Bears Close to Human Settlements: Review and Management Implications." *Mammal Review* 44, no. 1 (Jan 2014): 5-18. <https://doi.org/10.1111/j.1365-2907.2012.00223.x>. <Go to ISI>://WOS:000327796800002.
- Elfström, Marcus, Andreas Zedrosser, Klemen Jerina, Ole-Gunnar Støen, Jonas Kindberg, Lara Budic, Marko Jonozović, and Jon E. Swenson. "Does Despotism Behavior or Food Search Explain the Occurrence of Problem Brown Bears in Europe?". *The Journal of Wildlife Management* 78, no. 5 (2014): 881-93. <https://doi.org/10.1002/jwmg.727>. <http://dx.doi.org/10.1002/jwmg.727>.
- Enders, M. S., and S. B. Vander Wall. "Black Bears *Ursus Americanus* Are Effective Seed Dispersers, with a Little Help from Their Friends." *Oikos* 121, no. 4 (Apr 2012): 589-96. <https://doi.org/10.1111/j.1600-0706.2011.19710.x>. <Go to ISI>://WOS:000301537200013.
- Estes, J. A., J. Terborgh, J. S. Brashares, M. E. Power, J. Berger, W. J. Bond, S. R. Carpenter, *et al.* "Trophic Downgrading of Planet Earth." *Science* 333, no. 6040 (Jul 2011): 301-06. <https://doi.org/10.1126/science.1205106>. <Go to ISI>://WOS:000292732000031.
- Garshelis, D. L., S. Baruch-Mordo, A. Bryant, K. A. Gunther, and K. Jerina. "Is Diversionary Feeding an Effective Tool for Reducing Human-Bear Conflicts? Case Studies from North America and Europe." [In English]. Article. *Ursus* 28, no. 1 (2017): 31-55. <https://doi.org/10.2192/ursu-d-16-00019.1>. <Go to ISI>://WOS:000409564500004.
- Garshelis, D. L., and H. Hristienko. "State and Provincial Estimates of American Black Bear Numbers Versus Assessments of Population Trend." *Ursus* 17, no. 1 (2006): 1-7. <Go to ISI>://WOS:000237130100001.
- George, Kelly A., Kristina M. Slagle, Robyn S. Wilson, Steven J. Moeller, and Jeremy T. Bruskotter. "Changes in Attitudes toward Animals in the United States from 1978 to 2014." *Biological Conservation* 201 (9// 2016): 237-42. <https://doi.org/http://dx.doi.org/10.1016/j.biocon.2016.07.013>. <http://www.sciencedirect.com/science/article/pii/S0006320716302774>.
- Gittleman, John L. "Carnivore Life History Patterns: Allometric, Phylogenetic, and Ecological Associations." 127, no. 6 (1986): 744-71. <https://doi.org/10.1086/284523>. <https://www.journals.uchicago.edu/doi/abs/10.1086/284523>.
- Glymph, Caitlin M. "Spatially Explicit Model of Areas between Suitable Black Bear Habitat in East Texas and Black Bear Populations in Louisiana, Arkansas, and Oklahoma." Masters M.A., Stephen F. Austin State University, 2017. <https://scholarworks.sfasu.edu/etds/128/>.
- Gould, M.J., III Cain, J.W., G.W. Roemer, W.R. Gould, and S.G. Liley. "Estimating Density of American Black Bears (*Ursus Americanus*) in New Mexico Using Noninvasive Genetic Sampling-Based Capture-Recapture Methods." <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/Estimating-Black-Bear-Density-in-New-Mexico-Gould-et-al-2016.pdf> (2016).
- Harrer, L. E. F., and T. Levi. "The Primacy of Bears as Seed Dispersers in Salmon-Bearing Ecosystems." [In English]. Article. *Ecosphere* 9, no. 1 (Jan 2018): 15 e02076. <https://doi.org/10.1002/ecs2.2076>. <Go to ISI>://WOS:000425731000024.
- Heinrich, Bernd. *Why We Run: A Natural History*. Harper Perennial, 2002.
- Herrero, S., A. Higgins, J. E. Cardoza, L. I. Hajduk, and T. S. Smith. "Fatal Attacks by American Black Bear on People: 1900-2009." *Journal of Wildlife Management* 75, no. 3 (Apr 2011): 596-603. <https://doi.org/10.1002/jwmg.72>. <Go to ISI>://WOS:000291007800015.



- Howe, E. J., M. E. Obbard, R. Black, and L. L. Wall. "Do Public Complaints Reflect Trends in Human-Bear Conflict?" *Ursus* 21, no. 2 (2010): 131-42. <https://doi.org/10.2192/09gr013.1>. <Go to ISI>://WOS:000284520900001.
- Hristienko, Hank, and Jr. McDonald, John E. "Going in the 21st Century: A Perspective on Trends and Controversies in the Management of the Black Bear." *Ursus* 18, no. 1 (2007): 72-88.
- Huygens, Oscar C., and Hidetake Hayashi. "Using Electric Fences to Reduce Asiatic Black Bear Depredation in Nagano Prefecture, Central Japan." *Wildlife Society Bulletin* 27, no. 4 (1999): 959-64.
- Inman, K. H., and M. R. Vaughan. "Hunter Effort and Success Rates of Hunting Bears with Hounds in Virginia." *Ursus* 13 (2002): 223-30. <Go to ISI>://WOS:000229925700022.
- Inman, R. M., C. M. Costello, D. E. Jones, K. H. Inman, B. C. Thompson, and H. B. Quigley. "Denning Chronology and Design of Effective Bear Management Units." *Journal of Wildlife Management* 71, no. 5 (Jul 2007): 1476-83. <https://doi.org/10.2193/2006-252>. <Go to ISI>://WOS:000248027800012.
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). "Nature's Dangerous Decline 'Unprecedented' Species Extinction Rates 'Accelerating': Current Global Response Insufficient. 'Transformative Changes' Needed to Restore and Protect Nature; Opposition from Vested Interests Can Be Overcome for Public Good. Most Comprehensive Assessment of Its Kind; 1,000,000 Species Threatened with Extinction." news release, May 6, 2019, 2019.
- Johnson, H. E., S. W. Breck, S. Baruch-Mordo, D. L. Lewis, C. W. Lackey, K. R. Wilson, J. Broderick, J. S. Mao, and J. P. Beckmann. "Shifting Perceptions of Risk and Reward: Dynamic Selection for Human Development by Black Bears in the Western United States." *Biological Conservation* 187 (Jul 2015): 164-72. <https://doi.org/10.1016/j.biocon.2015.04.014>. <Go to ISI>://WOS:000357234100019.
- Johnson, H. E., D. L. Lewis, T. L. Verzuh, C. F. Wallace, R. M. Much, L. K. Willmarth, and S. W. Breck. "Human Development and Climate Affect Hibernation in a Large Carnivore with Implications for Human-Carnivore Conflicts." [In English]. Article. *Journal of Applied Ecology* 55, no. 2 (Mar 2018): 663-72. <https://doi.org/10.1111/1365-2664.13021>. <Go to ISI>://WOS:000424881800020.
- Johnson, Heather, David Lewis, Stacy Lischka, and Stewart Breck. "Assessing Ecological and Social Outcomes of a Bear-Proofing Experiment." *The Journal of Wildlife Management* (10/01 2018). <https://doi.org/10.1002/jwmg.21472>.
- Kellert, Stephen R. *The Value of Life*. Washington, D.C.: Island Press, 1996.
- Koehler, G. M., and D. J. Pierce. "Survival, Cause-Specific Mortality, Sex, and Ages of American Black Bears in Washington State, USA." *Ursus* 16, no. 2 (2005): 157-66. [https://doi.org/10.2192/1537-6176\(2005\)016\[0157:scmsaa\]2.0.co;2](https://doi.org/10.2192/1537-6176(2005)016[0157:scmsaa]2.0.co;2). <Go to ISI>://WOS:000233680300002.
- Laufenberg, Jared S., Heather E. Johnson, Paul F. Doherty, and Stewart W. Breck. "Compounding Effects of Human Development and a Natural Food Shortage on a Black Bear Population Along a Human Development-Wildland Interface." *Biological Conservation* 224 (2018/08/01/ 2018): 188-98. <https://doi.org/https://doi.org/10.1016/j.biocon.2018.05.004>. <http://www.sciencedirect.com/science/article/pii/S0006320717317093>.
- Lewis, D. L., S. W. Breck, K. R. Wilson, and C. T. Webb. "Modeling Black Bear Population Dynamics in a Human-Dominated Stochastic Environment." [In English]. Article. *Ecological Modelling* 294 (Dec 2014): 51-58. <https://doi.org/10.1016/j.ecolmodel.2014.08.021>. <Go to ISI>://WOS:000345821100006.
- Lewis, J. S., L. L. Bailey, S. VandeWoude, and K. R. Crooks. "Interspecific Interactions between Wild Felids Vary across Scales and Levels of Urbanization." [In English]. Article. *Ecology and Evolution* 5, no. 24 (Dec 2015): S946-S61. <https://doi.org/10.1002/ece3.1812>. <Go to ISI>://WOS:000368136600018.
- Lischka, Stacy A., Tara L. Teel, Heather E. Johnson, and Kevin R. Crooks. "Understanding and Managing Human Tolerance for a Large Carnivore in a Residential System." *Biological Conservation* 238 (2019/10/01/ 2019): 108189. <https://doi.org/https://doi.org/10.1016/j.biocon.2019.07.034>. <http://www.sciencedirect.com/science/article/pii/S0006320718316276>.
- Manfredo, M. J., L. Sullivan, A.W. Don Carlos, A. M. Dietsch, T. L. Teel, A.D. Bright, and J. Bruskotter. *America's Wildlife Values: The Social Context of Wildlife Management in the U.S.* Fort Collins, Colorado: Colorado State University, Department of Natural Resources, 2018.
- Mazur, Rachel, and Victoria Seher. "Socially Learned Foraging Behaviour in Wild Black Bears, *Ursus Americanus*." *Animal Behaviour* 75, no. 4 (2008/04/01/ 2008): 1503-08.



<https://doi.org/https://doi.org/10.1016/j.anbehav.2007.10.027>.

<http://www.sciencedirect.com/science/article/pii/S0003347208000213>.

- McLaughlin, Craig. "Black Bear Assessment and Strategic Plan." *Maine Department of Inland Fisheries and Wildlife* (1999).
- McLellan, B. N., F. W. Hovey, R. D. Mace, J. G. Woods, D. W. Carney, M. L. Gibeau, W. L. Wakkinen, and W. F. Kasworm. "Rates and Causes of Grizzly Bear Mortality in the Interior Mountains of British Columbia, Alberta, Montana, Washington, and Idaho." *Journal of Wildlife Management* 63, no. 3 (Jul 1999): 911-20. <https://doi.org/10.2307/3802805>. <Go to ISI>://WOS:000081441500017.
- Nelson, Michael P., J.A. Vucetich, P.C. Paquet, and JK Bump. "An Inadequate Construct? North American Model: What's Missing, What's Needed." *The Wildlife Professional*, no. Summer 2011 (2011): 58-60.
- Obbard, M. E., E. J. Howe, L. L. Wall, B. Allison, R. Black, P. Davis, L. Dix-Gibson, M. Gatt, and M. N. Hall. "Relationships among Food Availability, Harvest, and Human-Bear Conflict at Landscape Scales in Ontario, Canada." *Ursus* 25, no. 2 (2014): 98-110. <https://doi.org/10.2192/ursus-d-13-00018.1>. <Go to ISI>://WOS:000347670000002.
- Onorato, D. P., E. C. Hellgren, R. A. Van Den Bussche, and D. L. Doan-Crider. "Phylogeographic Patterns within a Metapopulation of Black Bears (*Ursus Americanus*) in the American Southwest." [In English]. Article. *Journal of Mammalogy* 85, no. 1 (Feb 2004): 140-47. [https://doi.org/10.1644/1545-1542\(2004\)085<0140:ppwamo>2.0.co;2](https://doi.org/10.1644/1545-1542(2004)085<0140:ppwamo>2.0.co;2). <Go to ISI>://WOS:000220140300022.
- Ordiz, A., O. G. Stoen, S. Saebo, J. Kindberg, M. Delibes, and J. E. Swenson. "Do Bears Know They Are Being Hunted?." *Biological Conservation* 152 (Aug 2012): 21-28. <https://doi.org/10.1016/j.biocom.2012.04.006>. <Go to ISI>://WOS:000307088200003.
- Pienaar, Elizabeth F., David Telesco, and Sarah Barrett. "Understanding People's Willingness to Implement Measures to Manage Human-Bear Conflict in Florida." *Journal of Wildlife Management* 79, no. 5 (2015): 798-806.
- Posewitz, J. *Beyond Fair Chase: The Ethic and Tradition of Hunting*. Helena, Montana: Falcon Press, 1994.
- Program, U.S. Global Change Research. "Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II", [https://nca2018.globalchange.gov/chapter/front-matter-about/#\(2018\)](https://nca2018.globalchange.gov/chapter/front-matter-about/#(2018)).
- Reimchen, T. E., and C. H. Fox. "Fine-Scale Spatiotemporal Influences of Salmon on Growth and Nitrogen Signatures of Sitka Spruce Tree Rings." *Bmc Ecology* 13 (Oct 2013): 38. <https://doi.org/10.1186/1472-6785-13-38>. <Go to ISI>://WOS:000325284000001.
- Reimchen, T. E., and M. A. Spoljaric. "Right Paw Foraging Bias in Wild Black Bear (*Ursus Americanus* Kermodei)." *Laterality: Asymmetries of Body, Brain and Cognition* 16, no. 4 (2011/07/01 2011): 471-78. <https://doi.org/10.1080/1357650X.2010.485202>. <https://doi.org/10.1080/1357650X.2010.485202>.
- Responsive Management. "Americans' Attitudes toward Hunting, Fishing, Sport Shooting and Trapping 2019." <https://asafishing.org/wp-content/uploads/2019/04/Americans-Attitudes-Survey-Report-2019.pdf> (2019).
- Ripple, William J., Christopher Wolf, Thomas M. Newsome, Michael Hoffmann, Aaron J. Wirsing, and Douglas J. McCauley. "Extinction Risk Is Most Acute for the World's Largest and Smallest Vertebrates." *Proceedings of the National Academy of Sciences* 114, no. 40 (October 3, 2017 2017): 10678-83. <https://doi.org/10.1073/pnas.1702078114>. <http://www.pnas.org/content/114/40/10678.abstract>.
- Ryan, C.W., J.W. Edwards, and M.D. Duda. "West Virginia Residents: Attitudes and Opinions toward American Black Bear Hunting." *Ursus* 2 (2009): 131-42.
- Slagle, K., R. Zajac, J. Bruskotter, R. Wilson, and S. Prange. "Building Tolerance for Bears: A Communications Experiment." *Journal of Wildlife Management* 77, no. 4 (May 2013): 863-69. <https://doi.org/10.1002/jwmg.515>. <Go to ISI>://WOS:000318028100022.
- Stringham, Stephen R. "Managing Risk from Bears and Other Potentially Lethal Wildlife: Predictability, Accountability, and Liability." *Human-Wildlife Interactions* 7, no. 1 (2013): 5-9.
- T., Bruskotter Jeremy, and Wilson Robyn S. "Determining Where the Wild Things Will Be: Using Psychological Theory to Find Tolerance for Large Carnivores." *Conservation Letters* 7, no. 3 (2014): 158-65. <https://doi.org/doi:10.1111/conl.12072>. <https://onlinelibrary.wiley.com/doi/abs/10.1111/conl.12072>.
- Takahashi, K., and K. Takahashi. "Spatial Distribution and Size of Small Canopy Gaps Created by Japanese Black Bears: Estimating Gap Size Using Dropped Branch Measurements." *Bmc Ecology* 13 (Jun 2013): 23. <https://doi.org/10.1186/1472-6785-13-23>. <Go to ISI>://WOS:000322126400001.



- Teel, T. L., R. S. Krannich, and R. H. Schmidt. "Utah Stakeholders' Attitudes toward Selected Cougar and Black Bear Management Practices." *Wildlife Society Bulletin* 30, no. 1 (Spr 2002): 2-15. <Go to ISI>://000175200100002.
- Treves, A., K. J. Kapp, and D. M. MacFarland. "American Black Bear Nuisance Complaints and Hunter Take." *Ursus* 21, no. 1 (2010): 30-42. <https://doi.org/10.2192/09gr012.1>. <Go to ISI>://WOS:000277602700004.
- Unger, D. E., J. J. Cox, H. B. Harris, J. L. Larkin, B. Augustine, S. Dobey, J. M. Guthrie, *et al.* "History and Current Status of the Black Bear in Kentucky." *Northeastern Naturalist* 20, no. 2 (Jun 2013): 289-308. <https://doi.org/10.1656/045.020.0206>. <Go to ISI>://WOS:000321563700006.
- Vonk, Jennifer, and Michael J. Beran. "Bears 'Count' Too: Quantity Estimation and Comparison in Black Bears, *Ursus Americanus*." *Animal Behaviour* 84, no. 1 (2012/07/01/ 2012): 231-38. <https://doi.org/https://doi.org/10.1016/j.anbehav.2012.05.001>. <http://www.sciencedirect.com/science/article/pii/S0003347212002126>.
- Vonk, Jennifer, Stephanie E. Jett, and Kelly W. Mosteller. "Concept Formation in American Black Bears, *Ursus Americanus*." *Animal Behaviour* 84, no. 4 (2012/10/01/ 2012): 953-64. <https://doi.org/https://doi.org/10.1016/j.anbehav.2012.07.020>. <http://www.sciencedirect.com/science/article/pii/S0003347212003284>.
- Wallach, A. D., I. Izhaki, J. D. Toms, W. J. Ripple, and U. Shanas. "What Is an Apex Predator?". *Oikos* 124, no. 11 (Nov 2015): 1453-61. <https://doi.org/10.1111/oik.01977>. <Go to ISI>://WOS:000363866900005.
- Wear, B. J., R. Eastridge, and J. D. Clark. "Factors Affecting Settling, Survival, and Viability of Black Bears Reintroduced to Felsenthal National Wildlife Refuge, Arkansas." *Wildlife Society Bulletin* 33, no. 4 (2005): 1363-74. [https://doi.org/10.2193/0091-7648\(2005\)33\[1363:FASSAV\]2.0.CO;2](https://doi.org/10.2193/0091-7648(2005)33[1363:FASSAV]2.0.CO;2). <http://pubs.er.usgs.gov/publication/70027414>.
- Weaver, J. L., P. C. Paquet, and L. F. Ruggiero. "Resilience and Conservation of Large Carnivores in the Rocky Mountains." *Conservation Biology* 10, no. 4 (Aug 1996): 964-76. <Go to ISI>://A1996VC10300014.
- Welfelt, Lindsay, Richard Beausoleil, and Robert Wielgus. "Factors Associated with Black Bear Density and Implications for Management." *The Journal of Wildlife Management* (08/25 2019). <https://doi.org/10.1002/jwmg.21744>.
- Welfelt, Lindsay Suzanne. "Black Bear Population Dynamics in the North Cascades." Doctor of Philosophy Dissertation, Washington State University, 2018. <https://search.proquest.com/openview/ec18d4337882347c86cd2eeb2a69ebd0/1.pdf?pq-origsite=gscholar&cbl=187508&diss=y>.
- Wildlife, Washington Department of Fish and. "Karelian Bear Dog Program." <https://wdfw.wa.gov/enforcement/kbd/cash.html>; <https://www.inlander.com/spokane/meet-washington-states-karelian-bear-dogs/Slideshow/2772624> (2018).
- Wilson, S. M., E. H. Bradley, and G. A. Neudecker. "Learning to Live with Wolves: Community-Based Conservation in the Blackfoot Valley of Montana." [In English]. Article. *Human-Wildlife Interactions* 11, no. 3 (Win 2017): 245-57. <Go to ISI>://WOS:000422844800010.
- Zack, Conrad S., Bruce T. Milne, and William C. Dunn. "Southern Oscillation Index as an Indicator of Encounters between Humans and Black Bears in New Mexico." *Wildlife Society Bulletin (1973-2006)* 31, no. 2 (2003): 517-20. <https://doi.org/10.2307/3784333>. <http://www.jstor.org/stable/3784333>.



September 16, 2019

Joanna Prukop, Chair
Roberta Salazar-Henry, Vice-Chair
Jimmy Bates, Commissioner
Gail Cramer, Commissioner
Tirzio Lopez, Commissioner
David Soules, Commissioner
Jeremy Vesbach, Commissioner
New Mexico State Game Commission

Michael Sloane, Director
New Mexico Department of Game and Fish

via Electronic Mail

On behalf of the Humane Society of the United States (HSUS), Animal Protection of New Mexico (APNM), and each organization's members and supporters in New Mexico, we respectfully submit these comments on the New Mexico Department of Game and Fish's (NMDGF) most recent set of proposed changes to the Bear and Cougar Rule, dated September 5, 2019 ("Proposal"). These comments will address the cougar-related provisions of the Proposal only; bear-related provisions will be addressed under separate cover.

These comments do not represent an exhaustive analysis of the Proposal. The limited, incomplete, and preliminary information available to the public at this time precludes a full assessment of its scientific and policy merits. To provide an adequate opportunity for meaningful input during the upcoming formal public comment period, full information about the reasoning, scientific evidence, and management goals underlying the Proposal must be available. We provide specific examples of information that NMDGF needs to disclose prior to the public comment period in Section 3 below.

We enthusiastically support the decisions to no longer allow traps and foot snares as a method of sport harvest for cougar, and to no longer allow an additional two tags for cougar license holders who have already filled their two-cougar bag limit.

However, we have serious concerns about the Proposal's revised cougar quotas (or "harvest limits"). While we broadly support a reduction in quotas statewide, the Proposal contains substantial errors that upwardly distort the proposed quotas. To ensure that the proposed rule reflects sound science and management principles and does not needlessly repeat errors that

plagued prior iterations of the Bear and Cougar Rule, we strongly encourage NMDGF to correct these issues prior to the issuance of the proposed rule.

1. Updated Cougar Population Estimates Must Inform Quotas Statewide, Not Only in Zones B, F, and N

We support NMDGF's efforts to update its cougar population estimates using recent data. Previous estimates were based on scientifically unjustified assumptions about cougar population density; the Department itself has admitted in federal grant applications that they are "neither adequate nor reliable." These inadequate figures, derived from a cherry-picked and misinterpreted selection of sources, have led to inflated quotas in every Cougar Management Zone (CMZ) across the state.¹ Sound wildlife management demands that these estimates be revised using better and more recent scientific information, including a peer-reviewed study of New Mexico's cougar population density published earlier this year.²

Troublingly, however, the Proposal seems to indicate that NMDGF is only updating its population estimates for zones B, F, and N – while making no effort to revise and correct its estimates for the remaining 16 zones in the state, which together contain an overwhelming majority of New Mexico's cougar population. The proposed harvest limits for those 16 zones are consistent with a change in the *harvest rates* (the percentage of the total estimated population that may be removed in any one season), but not the estimated cougar population to which these rates are applied. A reduction in harvest rates is certainly warranted, as discussed more fully in Section 2 below. However, by neglecting to update the inflated population estimates, the Proposal only addresses one part of a two-part problem.

The fact that recent studies were conducted only in zones B, F, and N does not excuse ignoring those studies entirely for the purpose of developing population estimates for other zones. Indeed, NMDGF's existing population estimates for those zones were extrapolated from studies conducted in even smaller areas of the state³ – or outside the state entirely – and are even

¹ None of the sources that NMDGF claims to have relied on for its cougar population density estimates support the figures used to set quotas in the 2016-2020 Bear and Cougar Rule. This problem will be addressed more fully during the public comment period, after NMDGF releases its new estimates. But for a brief example, the Department assumes under the current model that there are 3-4 cougars per 100 square kilometers in "excellent"-quality habitat, and develops population estimates and quotas accordingly. Yet no research cited by NMDGF or known to HSUS or APNM supports this figure; at the time of that rulemaking, the leading study conducted New Mexico (Logan and Sweanor 1996) found a range of 0.84-2.1 cougars in "excellent" habitat, with others finding 1.8 (Pittman 2010), 1.6 (Beausoleil 2013), 1.2-3.2 (Choate *et al.* 2006), and 1.5-2.2 (Ross and Jalkotzy 2010). Murphy *et al.*'s 2019 study (see footnote 2 below) casts even more doubt on NMDGF's estimates.

² Murphy *et al.*, "Improving estimation of puma (*Puma concolor*) population density: clustered camera-trapping, telemetry data, generalized spatial mark-resight models," Scientific Reports 9:4590 (March 2019) (*available at* <https://www.nature.com/articles/s41598-019-40926-7>).

³ For example, Megan Pittman's unpublished 2010 master's thesis, relied on heavily by the Department to develop its most recent estimates, was based on a study of a single 100 square kilometer zone on the Ladder Ranch in Cougar Management Zone J.

narrower in their applicability. Incorporating and applying new data broadly could only improve, not reduce, the accuracy and reliability of estimates statewide.

There is no question that cougar quotas must be decreased in every CMZ, but the Proposal still falls short of what the science supports. We are gravely concerned that NMDGF has derived new quotas for most zones in the state by applying modestly decreased harvest rates to the same unsupportable and overinflated population estimates it has relied on in the past. This may represent a step in the right direction, but ultimately trades one arbitrary figure for another. There is no rational justification for continuing to use outdated and unsound population estimates in 16 out of 19 CMZs when more recent scientific evidence on population estimates exists and is in fact being used for the remaining 3 CMZs.

Moreover, we are unable to comment on the scientific validity of any revised population estimates for zones B, F, and N at this time because NMDGF has not published the estimates themselves or the data and statistical analysis from which they were derived. In fact, the new estimates for these zones do not even appear to be completed as of the date of this comment, alarmingly suggesting a rushed process that does not lend itself to transparency and scrutiny from the Commission or the public. This information must, at minimum, be made available during the formal public comment process in order to afford a full opportunity to assess the proposed rule; and the Commission must be prepared to reject the Proposal if this information is not available with adequate time for the Commission to require appropriate amendments based on those public comments if population estimates remain unjustifiably high.

2. NMDGF Must Disclose and Justify its Management Objectives and Further Reduce Harvest Rates

As discussed above, the Proposal's revised harvest limits reflect an adjustment in the harvest rates applied in each CMZ. But the current Proposal fails to explain or justify the management goals associated with the rates chosen. Under the previous Bear and Cougar Rule, NMDGF divided CMZs into two categories, separated by management objective. In CMZs where NMDGF sought to cause the population to decline,⁴ a 25 percent harvest rate was used to derive harvest limits. In CMZs where population stability⁵ was the objective, a 17 percent harvest rate was used.

Now, all but one of the CMZs that was previously managed for intentional population decline have been reduced from a 25 percent to a 17 percent harvest rate. Zone L, for which harvest limits have not changed, remains at a 25 percent rate and should at minimum be reduced in line with other CMZs. Setting aside the question of whether intentional population reduction can ever be justified when population estimates are so unreliable, we support this change. The best available science shows that a 25 percent harvest rate is excessive even where intentional population decline is the objective, and that any total mortality rate (e.g., trophy hunting,

⁴ CMZs D, F, G, H, K, L, P, and S.

⁵ CMZs A, B, C, E, I, J, M, N, O, Q, and R.

predator control, poaching and roadkill) above 14 percent is unsustainable and likely to cause population decline.⁶

But many of the zones that were previously managed for population stability remain at or near a 17 percent harvest rate. These include zones A, I, J, Q, and R – where harvest limits were not reduced, or reduced only very slightly. NMDGF appears to have concluded – correctly – that 17 percent represents an unsustainable rate of harvest that will cause population *decline*, not *stability*. Yet the Proposal irrationally maintains a 17 percent rate of harvest in both CMZs managed for stability and CMZs managed for decline.

This apparent disconnect between management objectives and harvest limits must be explained and corrected. While we support a reduction in harvest rates and harvest limits statewide, the Proposal is inconsistent in its approach and risks causing populations to decline even in zones where stability is an express objective. Harvest rates must be decreased to no more than 14 percent across the state—absent any clear and convincing evidence of the need to decrease the population in a particular CMZ, of which NMDGF has presented none.

3. Complete Information Must Be Provided Before the Public Comment Period Opens

Based on the information available at this time, those parts of the Proposal pertaining to trapping and bag limits are well-founded and should be adopted, while the revised harvest limits demand further consideration and adjustment. Yet, it is impossible to fully and adequately assess the Proposal based on the information available at this time. To ensure that the Commission and the public have an adequate opportunity to evaluate the Proposal before it is too late to make adjustments, NMDGF should release the following information with adequate time for public review *before* the proposed rule is published for public comment:

- Proposed harvest limits for CMZs B, F, and N (listed as “TBD” on current proposal);
- New data and analysis used to establish harvest limits for CMZs B, F, and N;
- Population estimates used to develop harvest limits for each CMZ;
- Harvest rates for each CMZ;
- Management objective (e.g. declining or stable population) for each CMZ.

In conclusion, HSUS and APNM support the decisions to no longer allow traps and foot snares as a method of sport harvest for cougar, and to no longer allow an additional two tags for cougar license holders who have already filled their two-cougar bag limit. Furthermore, while we

⁶ R. A. Beausoleil et al., "Research to Regulation: Cougar Social Behavior as a Guide for Management," *Wildlife Society Bulletin* 37, no. 3 (2013); R. B. Wielgus et al., "Effects of Male Trophy Hunting on Female Carnivore Population Growth and Persistence," *Biological Conservation* 167 (Nov 2013), <http://dx.doi.org/10.1016/j.biocon.2013.07.008>. H. S. Robinson and R. Desimone, "The Garnet Range Mountain Lion Study: Characteristics of a Hunted Population in West-Central Montana: Final Report," *Montana Fish, Wildlife & Parks* (2011); H. S. Robinson et al., "A Test of the Compensatory Mortality Hypothesis in Mountain Lions: A Management Experiment in West-Central Montana," *Journal of Wildlife Management* 78, no. 5 (Jul 2014), <http://dx.doi.org/10.1002/jwmg.726>; H. S. Robinson et al., "Sink Populations in Carnivore Management: Cougar Demography and Immigration in a Hunted Population," *Ecological Applications* 18, no. 4 (Jun 2008), <http://dx.doi.org/10.1890/07-0352.1>.

support the reduction in cougar harvest limits, we are concerned that such reductions remain insufficient to prevent trophy hunters from killing cougars at unsustainable levels. NMDGF must address this issue prior to the Proposal opening to public comment and provide complete information pertaining to how the proposed harvest limits were set, basing such decisions on the best available science on cougar management.

Thank you for the opportunity to comment. We look forward to continuing to engage with NMDGF and the Commission throughout this rulemaking process to ensure that the Bear and Cougar Rule represents reliable, peer-reviewed science.

Sincerely,

Jessica Johnson



Nicholas Arrivo





November 19, 2019

Joanna Prukop, Chair
New Mexico State Game Commission
1 Wildlife Way
Santa Fe, NM 87507

Mike Sloane, Director
New Mexico Department of Game and Fish
1 Wildlife Way
Santa Fe, NM 8750

Submitted via electronic mail: DGF-Bear-Cougar-Rules@state.nm.us

Re: Proposed Changes to Black Bear Hunting Under Rule 19.31.11 NMAC

Dear Madame Chair Prukop, Director Sloane and Members of the Commission,

On behalf of the Humane Society of the United States (“HSUS”), Animal Protection of New Mexico (“APNM”), and each organization’s members and supporters in New Mexico, we submit this second set of comments on New Mexico Department of Game and Fish’s (“NMDGF”) Proposed Rule on black bear (*Ursus americanus*) hunting for the 2020 to 2024 seasons. The staff’s Proposed Rule recommends no changes to the previous rule but allows for a quota of 804 black bears with a female sublimit of 318 (representing 40 percent of the total). Given the recent droughts and fires in New Mexico and the worsening climate and extinction crises,¹ we request that the quota be reduced to 335—the number used by the agency in recent memory—given that New Mexico is operating in the dark about the extent of its likely tiny black bear population—but reliant on a paper which implausibly contends that some of New Mexico’s black bear subpopulations are denser than those occurring in habitat-rich Washington state. We further request that the agency end the practice of hounding bears with packs of dogs because of myriad cruelty problems.

NMDGF released an over 1,000-page document of cougar and bear studies.² The document was not presented in a cohesive manner, and the purpose of the document is not known either to the decisionmaker nor the public. It is the job of the agency to make such documents and their intent transparent. Furthermore, while some of the studies seem excellent, others are woefully outdated or controversial.

Because the agency has failed to show how it has relied on these studies, such as through cohesive documents giving cites to these studies (including updated management plans for both bears and cougars), we cannot comment on this document in any meaningful way and we feel this document should be discarded by the Commission. Simply put, it is the duty of the agency to explain the purpose of this document and to put it into a cohesive order including by subject matter.

¹ U.S. Global Change Research Program, "Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II " in <https://nca2018.globalchange.gov/chapter/front-matter-about/#>, ed. D.R. Reidmiller et al. (Washington, D.C., 2018); Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), "Nature’s Dangerous Decline ‘Unprecedented’ Species Extinction Rates ‘Accelerating’: Current global response insufficient. ‘Transformative changes’ needed to restore and protect nature; Opposition from vested interests can be overcome for public good. Most comprehensive assessment of its kind; 1,000,000 species threatened with extinction," news release, May 6, 2019, 2019.

² See NMDGF’s 1,000 page jumble here: http://www.wildlife.state.nm.us/download/commission/rule-development/bear-cougar/Technical-Info-Bear-and-Cougar-Rule-2020_2024.pdf

We include all the studies we cite in this comment as part of the administrative record and will gladly share any study with wildlife managers upon request.

1. New Mexico's intelligent and familial black bears are susceptible to overkill

Large-bodied carnivores such as black bears are sparsely populated across vast areas—and in arid climates, it is even more pronounced. Bears invest in few offspring, provide extended parental care to their young and have low reproduction rates. In light of these biological factors, they rely on social stability to maintain resiliency.³

Because of erratic weather events from the climate crisis including late season frosts or droughts, natural foods are increasingly unavailable to bears. In southwestern Colorado, the female cohort of the bear population declined by 57 percent because of human-caused mortalities from vehicle collisions, trophy hunting and predator control, which coincided with widespread unavailability of natural foods. This *would not* have been detected by wildlife managers without the rigorous population monitoring study in place.⁴

For these reasons, it makes no sense to hunt black bears, especially at such high levels, in New Mexico where population data is limited to non-existent. Bears are capable of self-regulation.⁵ Moreover, highly sentient, black bears have the largest brain size of any carnivore, and they spend prolonged periods raising and nurturing young.⁶ Bears know when they are hunted and change behaviors in response, particularly when they need to concentrate on feeding to survive hibernation; instead they have to hide from hunters.⁷

Late to mature, females do not reach breeding age until they are between 4 and 6 years old, and in New Mexico, the mean age of females to reproduce for the first time is 5.7 years.⁸ An average female produces two cubs in her first litter, and she will give birth to an average of three cubs in successive litters. Bears have, however, extended intervals between litters, averaging two to three years between them, but more if there are

³ J. L. Weaver, P. C. Paquet, and L. F. Ruggiero, "Resilience and conservation of large carnivores in the Rocky Mountains," *Conservation Biology* 10, no. 4 (Aug 1996), <Go to ISI>://A1996VC10300014; A. D. Wallach et al., "What is an apex predator?," *Oikos* 124, no. 11 (Nov 2015), <https://doi.org/10.1111/oik.01977>, <Go to ISI>://WOS:000363866900005.

⁴ Jared S. Laufenberg et al., "Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface," *Biological Conservation* 224 (2018/08/01/ 2018), <https://doi.org/https://doi.org/10.1016/j.biocon.2018.05.004>, <http://www.sciencedirect.com/science/article/pii/S0006320717317093>.

⁵ Wallach et al., "What is an apex predator?."

⁶ Black bears are highly sentient. See e.g., John L. Gittleman, "Carnivore Life History Patterns: Allometric, Phylogenetic, and Ecological Associations," 127, no. 6 (1986), <https://doi.org/10.1086/284523>, <https://www.journals.uchicago.edu/doi/abs/10.1086/284523>; T. E. Reimchen and M. A. Spoljaric, "Right paw foraging bias in wild black bear (*Ursus americanus kermodei*)," *Lateralidad: Asymmetries of Body, Brain and Cognition* 16, no. 4 (2011/07/01 2011), <https://doi.org/10.1080/1357650X.2010.485202>, <https://doi.org/10.1080/1357650X.2010.485202>; Jennifer Vonk, Stephanie E. Jett, and Kelly W. Mosteller, "Concept formation in American black bears, *Ursus americanus*," *Animal Behaviour* 84, no. 4 (2012/10/01/ 2012), <https://doi.org/https://doi.org/10.1016/j.anbehav.2012.07.020>, <http://www.sciencedirect.com/science/article/pii/S0003347212003284>; Jennifer Vonk and Michael J. Beran, "Bears 'count' too: quantity estimation and comparison in black bears, *Ursus americanus*," *Animal Behaviour* 84, no. 1 (2012/07/01/ 2012), <https://doi.org/https://doi.org/10.1016/j.anbehav.2012.05.001>, <http://www.sciencedirect.com/science/article/pii/S0003347212002126>; Rachel Mazur and Victoria Seher, "Socially learned foraging behaviour in wild black bears, *Ursus americanus*," *Animal Behaviour* 75, no. 4 (2008/04/01/ 2008), <https://doi.org/https://doi.org/10.1016/j.anbehav.2007.10.027>, <http://www.sciencedirect.com/science/article/pii/S0003347208000213>; M. Cattet et al., "An evaluation of long-term capture effects in ursids: Implications for wildlife welfare and research," Article, *Journal of Mammalogy* 89, no. 4 (Aug 2008), <https://doi.org/10.1644/08-mamm-a-095.1>, <Go to ISI>://WOS:000258765000019.

⁷ A. Ordiz et al., "Do bears know they are being hunted?," *Biological Conservation* 152 (Aug 2012), <https://doi.org/10.1016/j.biocon.2012.04.006>, <Go to ISI>://WOS:000307088200003.

⁸ D. L. Garshelis and H. Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend," *Ursus* 17, no. 1 (2006), <Go to ISI>://WOS:000237130100001; C. M. Costello et al., "A Study of Black Bear Ecology in New Mexico with Models for Population Dynamics and Habitat Suitability: Final Report: Federal Aid in Wildlife Restoration Project W-131-R," *New Mexico Department of Game and Fish* (2001).

droughts or other stochastic weather events.⁹ Thus, bears have a slow reproductive potential,¹⁰ and are highly susceptible to overkill¹¹—including by trophy hunters and predator-control agents.

2. NMDGF has a poor idea of the size of the New Mexico bear population

NMDGF has not accurately counted New Mexico's bears or determined their population trend. In 2015, the agency discarded all bear studies conducted in New Mexico,¹² including an eight-year study conducted by the Hornocker Wildlife Institute in conjunction with NMDGF and the New Mexico Cooperative Fish and Wildlife Research Unit.¹³ At the time, the agency relied upon results of a report by a student from New Mexico State University that was produced from research conducted in New Mexico's best bear habitats, and then extrapolated across the rest of the state.¹⁴ NMDGF used these results to justify a 140 percent quota increase to 804 from the prior quota of 335, which had been based on Costello et al. (2001). Fig. 1. Because the quota of 804 was not supported by sound science, we request that the Commission revert the quota to 335.

The density numbers in Gould et al. (2018),¹⁵ however, rival and even exceed bear densities found by Welfelt et al. (2019) in the Northern Cascades of Washington,¹⁶ which on its face seems ecologically implausible, because Washington's habitats are far wetter and more productive than the xeric habitats of New Mexico. Figs. 1, 2.

Fig. 1: Density estimates bears/100 km ²		
	Costello et al. (2001)	Gould et al. (2018)
N. Sangre de Cristo	17	21.9 (95% CI 17.8 - 26.8)
S. Sangre de Cristo		19.7 (95% CI 13.8 - 28.3)
Sandia	ND	25.7 (95% CI 13.2 - 50.1)
N. Sacramento	9.4	21.9 (95% CI 17.83 - 26.80)
S. Sacramento		16.5 (95% CI 11.6 - 23.5)

⁹ Craig McLaughlin, "Black bear assessment and strategic plan," *Maine Department of Inland Fisheries and Wildlife* (1999); S. Dobey et al., "Ecology of Florida black bears in the Okefenokee-Osceola ecosystem," *Wildlife Monographs*, no. 158 (Jan 2005), <Go to ISI>://WOS:000228658000001. Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend."

¹⁰ Dobey et al., "Ecology of Florida black bears in the Okefenokee-Osceola ecosystem."

¹¹ Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend."

¹² Conrad S. Zack, Bruce T. Milne, and William C. Dunn, "Southern Oscillation Index as an Indicator of Encounters between Humans and Black Bears in New Mexico," *Wildlife Society Bulletin* (1973-2006) 31, no. 2 (2003), <https://doi.org/10.2307/3784333>, <http://www.jstor.org/stable/3784333>; D. P. Onorato et al., "Phylogeographic patterns within a metapopulation of black bears (*Ursus americanus*) in the American Southwest," Article, *Journal of Mammalogy* 85, no. 1 (Feb 2004), [https://doi.org/10.1644/1545-1542\(2004\)085<0140:ppwamo>2.0.co;2](https://doi.org/10.1644/1545-1542(2004)085<0140:ppwamo>2.0.co;2), <Go to ISI>://WOS:000220140300022; C. M. Costello et al., "Sex-biased natal dispersal and inbreeding avoidance in American black bears as revealed by spatial genetic analyses," *Molecular Ecology* 17, no. 21 (Nov 2008), <https://doi.org/10.1111/j.1365-294X.2008.03930.x>, <Go to ISI>://WOS:000260345200012; C. M. Costello et al., "Reliability of the cementum annuli technique for estimating age of black bears in New Mexico," *Wildlife Society Bulletin* 32, no. 1 (Spr 2004), [https://doi.org/10.2193/0091-7648\(2004\)32\[169:rotcat\]2.0.co;2](https://doi.org/10.2193/0091-7648(2004)32[169:rotcat]2.0.co;2), <Go to ISI>://WOS:000221035300019; Cecily M. Costello et al., "Relationship of Variable Mast Production to American Black Bear Reproductive Parameters in New Mexico," *Ursus* 14, no. 1 (2003), <https://doi.org/10.2307/3872951>, <http://www.jstor.org/stable/3872951>; R. M. Inman et al., "Denning chronology and design of effective bear management units," *Journal of Wildlife Management* 71, no. 5 (Jul 2007), <https://doi.org/10.2193/2006-252>, <Go to ISI>://WOS:000248027800012.

¹³ Costello et al., "A Study of Black Bear Ecology in New Mexico with Models for Population Dynamics and Habitat Suitability: Final Report: Federal Aid in Wildlife Restoration Project W-131-R.."

¹⁴ M.J. Gould et al., "Estimating density of American black bears (*Ursus americanus*) in New Mexico using noninvasive genetic sampling-based capture-recapture methods," <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/Estimating-Black-Bear-Density-in-New-Mexico-Gould-et-al-2016.pdf> (2016).

¹⁵ Matthew J. Gould et al., "Density of American black bears in New Mexico," *The Journal of Wildlife Management* 82, no. 4 (2018), <https://doi.org/10.1002/jwmg.21432>, <https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/jwmg.21432>.

¹⁶ Lindsay Welfelt, Richard Beausoleil, and Robert Wielgus, "Factors Associated with black bear density and implications for management," *The Journal of Wildlife Management* (08/25 2019), <https://doi.org/10.1002/jwmg.21744>.

Fig. 2: Density estimates of bears/100 km²	
	Welfelt et al. (2019)
E. Northern Cascades	19.2 (95% CI 15.0 - 24.7)
W. Northern Cascades	20.1 (95% 17.5 - 23.2)

Density estimates from studies conducted in optimal quality habitats where animals are abundant can only be extrapolated cautiously to larger areas with similar habitats and landscape characteristics. NMDGF should instead conduct density estimates in all management zones, and quotas should be reduced until such research can be conducted.

Welfelt et al. (2019) in their study of Washington bears found bear densities range widely by region, but managers had over-estimated the population of bears in western Washington—including cubs—by 50 percent.¹⁷ The implications for New Mexico are stark, given that black bear habitat in New Mexico is also varied by region.¹⁸ They also found that human density negatively correlates with bear density—even in prime bear habitats—again leading the wildlife agency to overestimate the bear population.¹⁹

NMDGF's black bear proposals offer neither population nor trend analysis, measurable objectives, evidence, transparency or sign of an independent review, the hallmarks of sound science.²⁰ Instead, we and the Commission are left with a flimsy and entirely unaccountable approach, emblematic of NMDGF's unscientific black bear management policy and protocols designed to elevate bear killing but not conservation.²¹ NMDGF's failure to rely on good quality population and trend data is a concern, if this is the foundation upon which hunting objectives are set. A study of states' trend and population data showed about half of the states miscalculated population trends. Garshelis and Hristienko (2006) write that many state wildlife managers fail to adequately investigate population sizes and trends, but rather rely on guesses.²²

To emphasize: black bears can only sustain light losses to their population from all human-caused mortality and amount between six and ten percent of their population.²³ Yet the numbers of bears in New Mexico remains a mystery. The quotas are set so high that they are never achieved. In fact, all sources of mortality never come to 800 per year, except in 2013 when 778 bears were killed—likely at an unsustainable level. While the agency believes there are not enough bear hunters to meet this quota, the likely reality is that there are not enough bears on the landscape to justify an annual quota of more than 800 bears. Fig. 3.

¹⁷ Welfelt, Beausoleil, and Wielgus, "Factors Associated with black bear density and implications for management."

¹⁸ Zack, Milne, and Dunn, "Southern Oscillation Index as an Indicator of Encounters between Humans and Black Bears in New Mexico."; Onorato et al., "Phylogeographic patterns within a metapopulation of black bears (*Ursus americanus*) in the American Southwest."; Costello et al., "Sex-biased natal dispersal and inbreeding avoidance in American black bears as revealed by spatial genetic analyses."; Costello et al., "Reliability of the cementum annuli technique for estimating age of black bears in New Mexico."; Costello et al., "Relationship of Variable Mast Production to American Black Bear Reproductive Parameters in New Mexico."; Inman et al., "Denning chronology and design of effective bear management units."

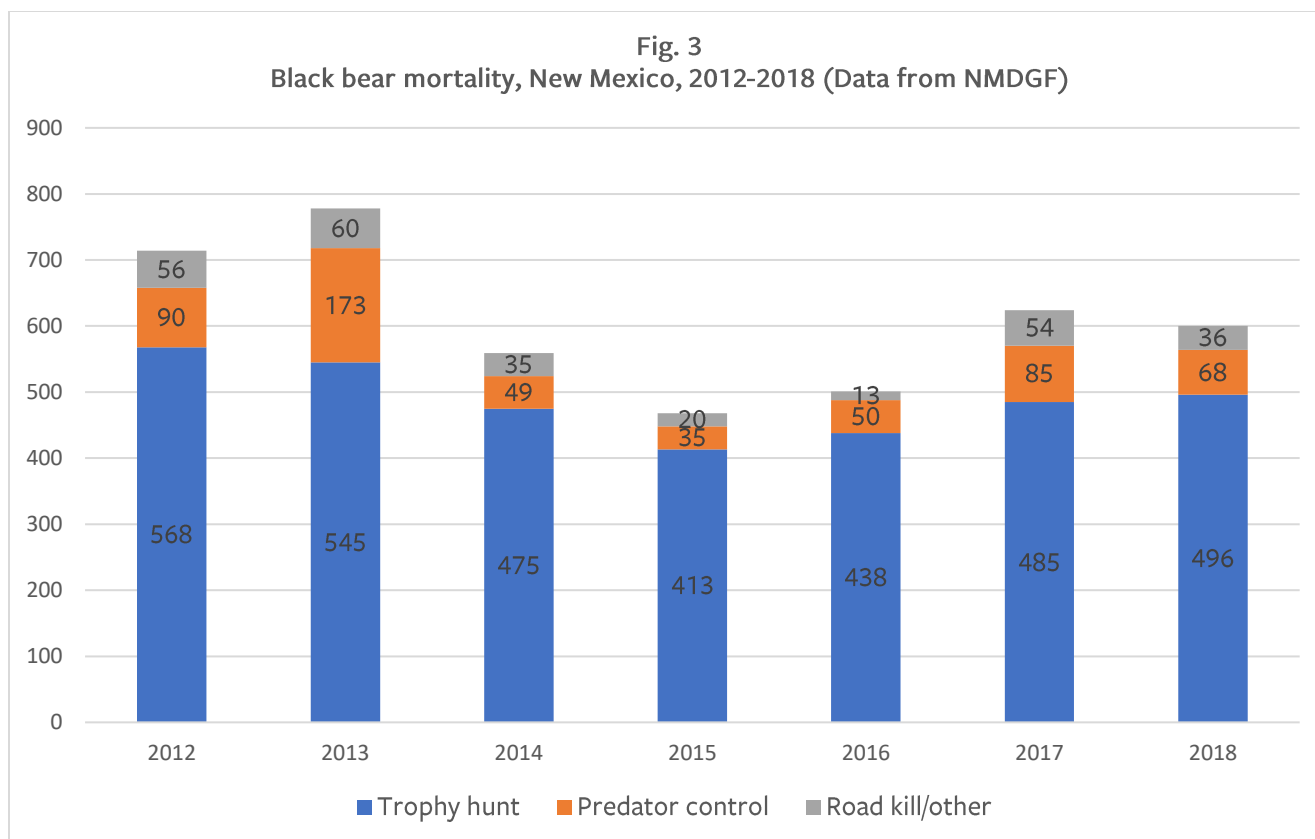
¹⁹ Welfelt, Beausoleil, and Wielgus, "Factors Associated with black bear density and implications for management."

²⁰ Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend."; Kyle A. Artelle et al., "Hallmarks of science missing from North American wildlife management," *Science Advances* 4, no. 3 (2018), <https://doi.org/10.1126/sciadv.aao0167>, <http://advances.sciencemag.org/content/advances/4/3/eaao0167.full.pdf>.

²¹ Artelle et al., "Hallmarks of science missing from North American wildlife management."; Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend."

²² Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend.", p. 6

²³ Lindsay Suzanne Welfelt, "Black bear population dynamics in the North Cascades" (Doctor of Philosophy Dissertation, Washington State University, 2018), <https://search.proquest.com/openview/ec18d4337882347c86cd2eeb2a69ebd0/1.pdf?pq-origsite=gscholar&cbl=18750&diss=y>.



3. NMDGF's quotas may be too drastic and will result in the overkill of New Mexico's beloved black bears

Human-caused mortality of black bears must be limited to six and ten percent of the population; more than that is simply additive mortality because of harms to the female component of the population.²⁴ In a Washington study, where biologists used methods of capture-recapture and also collected hair samples to test bears' DNA (to discover emigrating and immigrating animals), authors compared the two areas in order to evaluate black bear survival. In both areas, despite agency predictions that the bear population was growing, it was not. Authors found that the "maximum sustainable hunter harvest" was indicated by the "intrinsic growth rate of 6-10% [which] was exceeded in both areas."²⁵ To emphasize, a total safe offtake amount, including hunting, predator control, poaching, roadkill and other, for black bears is likely only six to ten percent of the entire subpopulation because of the risk to the female component of the population.²⁶ This study is directly applicable to New Mexico.

Despite having little sense of its population trend,²⁷ each year in New Mexico hundreds of bears die at the hands of trophy hunters and predator control agents—some using packs of hounds—including 564 individuals who were legally hunted in 2018. Fig. 1.

²⁴ Welfelt, "Black bear population dynamics in the North Cascades."

²⁵ Welfelt, "Black bear population dynamics in the North Cascades," 38.

²⁶ Welfelt, "Black bear population dynamics in the North Cascades."

²⁷ Garshelis and Hristienko, "State and provincial estimates of American black bear numbers versus assessments of population trend." Rather than a population or trend study (Garshelis and Hristienko (2006).

NMDGF's current proposal is also certainly not in the public's interest in wildlife management.²⁸ New Mexicans love their bears.²⁹ Bears are also valued for their considerable ecological and aesthetic purposes.³⁰ They are one of the most photographed and watched animals across the state and continent.³¹

Brand new studies find that most Americans do not support black bear hunting.³² Manfredo et al. (2018) found that only 31 percent of New Mexicans support the killing of a black bear *even if it has attacked someone*.³³ Therefore, we are forced to surmise NMDGF proposes to continue to hammer the black bear population under the false pretenses that doing so will alleviate human-bear conflicts and to provide opportunity to *trophy hunters* to kill sentient black bears for photo opportunities and to obtain and display bear parts, including, heads, hides, claws and capes.³⁴

4. NMDGF's proposals fail to consider poaching, wounding and other human-caused mortalities to bears

In a heavily monitored bear population, state bear biologists with the Washington Department of Fish and Wildlife reported that *approximately 20 percent* of their study bears were killed by poachers and even more died from wounding losses, who were not accounted for by hunters to the state.³⁵

New Mexico must factor poaching and wounding loss metrics and total known mortalities into any reasonable quota. Allowing a cull of a species invariably induces and increases the numbers of animals killed by poachers.³⁶ In short, NMDGF must consider the massive but unknown numbers of human-induced mortalities as a result of vehicle collisions or by poachers before it continues down the path of an annual quota of nearly 1,000 bears.³⁷ In the absence of good data and a lack of knowledge about where the bear population is, we suggest that the quota be reduced to 335, a number previously set by the agency.

²⁸ Michael P. Nelson et al., "An Inadequate Construct? North American Model: What's Missing, What's Needed," *The Wildlife Professional*, no. Summer 2011 (2011); Kelly A. George et al., "Changes in attitudes toward animals in the United States from 1978 to 2014," *Biological Conservation* 201 (9// 2016), <http://www.sciencedirect.com/science/article/pii/S0006320716302774>.

²⁹ M. J. Manfredo et al., *America's Wildlife Values: The Social Context of Wildlife Management in the U.S.*, (Fort Collins, Colorado: Colorado State University, Department of Natural Resources, 2018).

³⁰ L. E. F. Harrer and T. Levi, "The primacy of bears as seed dispersers in salmon-bearing ecosystems," Article, *Ecosphere* 9, no. 1 (Jan 2018), e02076, <https://doi.org/10.1002/ecs2.2076>, <Go to ISI>://WOS:000425731000024; M. S. Enders and S. B. Vander Wall, "Black bears *Ursus americanus* are effective seed dispersers, with a little help from their friends," *Oikos* 121, no. 4 (Apr 2012), <https://doi.org/10.1111/j.1600-0706.2011.19710.x>, <Go to ISI>://WOS:000301537200013; K. Takahashi and K. Takahashi, "Spatial distribution and size of small canopy gaps created by Japanese black bears: estimating gap size using dropped branch measurements," *Bmc Ecology* 13 (Jun 2013), 23, <https://doi.org/10.1186/1472-6785-13-23>, <Go to ISI>://WOS:000322126400001.

³¹ K. Slagle et al., "Building tolerance for bears: A communications experiment," *Journal of Wildlife Management* 77, no. 4 (May 2013), <https://doi.org/10.1002/jwmg.515>, <Go to ISI>://WOS:000318028100022.

³² Responsive Management, "Americans' attitudes toward hunting, fishing, sport shooting and trapping 2019," <https://asafishing.org/wp-content/uploads/2019/04/Americans-Attitudes-Survey-Report-2019.pdf> (2019); Manfredo et al., *Short America's Wildlife Values: The Social Context of Wildlife Management in the U.S.*; George et al., "Changes in attitudes toward animals in the United States from 1978 to 2014."

³³ Manfredo et al., *Short America's Wildlife Values: The Social Context of Wildlife Management in the U.S.*

³⁴ No one kill bears just to eat them. Hunters kill so they can engage in "show off" behaviors (Darimont et al. 2017). We define a "trophy hunt" as a hunt where a hunter's *primary motivation* is to kill an animal to display its parts (that is, their heads, hides or claws and even the whole stuffed animal); and for bragging rights (trophy hunters pose over the dead animal with their weapons for a portrait often for social media). Their primary motivation is not subsistence. Chris T. Darimont, Brian F. Coddling, and Kristen Hawkes, "Why men trophy hunt," *Biology Letters* 13, no. 3 (2017), <https://doi.org/10.1098/rsbl.2016.0909>, <http://rsbl.royalsocietypublishing.org/content/roybiolett/13/3/20160909.full.pdf>. Chelsea Batavia et al., "The elephant (head) in the room: A critical look at trophy hunting," *Conservation Letters* 0, no. 0 (2018), <https://doi.org/doi:10.1111/conl.12565>, <https://onlinelibrary.wiley.com/doi/abs/10.1111/conl.12565>.

³⁵ G. M. Koehler and D. J. Pierce, "Survival, cause-specific mortality, sex, and ages of American black bears in Washington state, USA," *Ursus* 16, no. 2 (2005), [https://doi.org/10.2192/1537-6176\(2005\)016\[0157:scmsaa\]2.0.co;2](https://doi.org/10.2192/1537-6176(2005)016[0157:scmsaa]2.0.co;2), <Go to ISI>://WOS:000233680300002.

³⁶ Guillaume Chapron and Adrian Treves, "Blood does not buy goodwill: allowing culling increases poaching of a large carnivore," *Proceedings of the Royal Society of London B: Biological Sciences* 283, no. 1830 (2016-05-11 00:00:00 2016), <https://doi.org/10.1098/rspb.2015.2939>, <http://rspb.royalsocietypublishing.org/content/royprsb/283/1830/20152939.full.pdf>.

³⁷ B. J. Bergstrom, "Carnivore conservation: shifting the paradigm from control to coexistence," *Journal of Mammalogy* 98, no. 1 (Feb 2017), <https://doi.org/10.1093/jmammal/gyw185>, <Go to ISI>://WOS:000397232500001. Chapron and Treves, "Blood does not buy

Human persecution of bears such as through trophy hunting and or predator control, is “super-additive,” meaning that kill rates exceed naturally-occurring mortalities.³⁸ This is because predator control agents and trophy hunters kill adult breeding animals, which disrupts animals’ social structure and leads to indirect effects such as increased infanticide by incoming subadult male bears, resulting in decreased recruitment of young.³⁹ NMDGF’s proposed quota fails to consider these added human-caused losses as part of its extreme bear quotas. Bears are not resilient to overkill. They can only withstand light losses to their populations.

5. Hounding black bears is unethical, scientifically indefensible and unsporting

Americans hold widely divergent standards around wildlife, but most highly value their conservation.⁴⁰ In numerous studies, both the general public and hunters themselves object to hunting activities that are viewed as unfair, unsporting, inhumane or unsustainable,⁴¹ such as killing bears while they have dependent young or killing the young themselves. Many hunting advocates condemn such actions as a violation of the hunter’s ethical code because hunting naïve young and bear hounding are not perceived as “fair chase” hunting. Jim Posewitz explains the concept of “fair chase”: “The ethical hunter must make many fair-chase choices . . . luring animals with bait or hunting in certain seasons sometimes is viewed as giving unfair advantage to the hunter. . . . *If there is a doubt, advantage must be given to the animal being hunted.*”⁴²

New Mexico has few limits on hounding, including the numbers of dogs permitted in a bear hunt. The only restriction is by some public lands and having a licensed hunter continuously present after the dogs have been released. Hounding, or using packs of dogs to pursue bears, is considered unsporting even among many hunters because it gives unfair advantage to the hunter.⁴³

While pursuing bears, hounds chase, startle and kill non-target wildlife.⁴⁴ Dogs may even chase bears into roadways, where oncoming vehicles could strike either. Hounds invariably trespass on lands—whether on private land or on special refuges such as national parks where hounds are not permitted. This creates strife between landowners and hunters.⁴⁵ Using hounds to chase bears pits dogs against bears, and either species can

goodwill: allowing culling increases poaching of a large carnivore.”; D. E. Unger et al., “History and Current Status of the Black Bear in Kentucky,” *Northeastern Naturalist* 20, no. 2 (Jun 2013), <https://doi.org/10.1656/045.020.0206>, <Go to ISI>://WOS:000321563700006; Koehler and Pierce, “Survival, cause-specific mortality, sex, and ages of American black bears in Washington state, USA.” B. N. McLellan et al., “Rates and causes of grizzly bear mortality in the interior mountains of British Columbia, Alberta, Montana, Washington, and Idaho,” *Journal of Wildlife Management* 63, no. 3 (Jul 1999), <https://doi.org/10.2307/3802805>, <Go to ISI>://WOS:000081441500017; Caitlin M. Glymph, “Spatially explicit model of areas between suitable black bear habitat in east Texas and black bear populations in Louisiana, Arkansas, and Oklahoma” (Masters M.A., Stephen F. Austin State University, 2017), <https://scholarworks.sfasu.edu/etds/128/>; B. J. Wear, R. Eastridge, and J. D. Clark, “Factors affecting settling, survival, and viability of black bears reintroduced to Felsenthal National Wildlife Refuge, Arkansas,” *Wildlife Society Bulletin* 33, no. 4 (2005), [https://doi.org/10.2193/0091-7648\(2005\)33\[1363:FASSAV\]2.0.CO;2](https://doi.org/10.2193/0091-7648(2005)33[1363:FASSAV]2.0.CO;2), <http://pubs.er.usgs.gov/publication/70027414>.

³⁸ Vucetich et al. 2005, Creel and Rotella 2010, Creel et al. 2015, Darimont et al. 2015.

³⁹ Wielgus and Bunnell 1995, Creel and Rotella 2010, Wielgus et al. 2013, Ausband et al. 2015, Darimont et al. 2015, Elbroch et al. 2017a, Leclerc et al. 2017.

⁴⁰ Stephen R. Kellert, *The Value of Life* (Washington, D.C.: Island Press, 1996).

⁴¹ Thomas D. Beck et al., “Sociological and ethical considerations of black bear hunting,” *Proceedings of the Western Black Bear Workshop* 5 (1995); T. L. Teel, R. S. Krannich, and R. H. Schmidt, “Utah stakeholders’ attitudes toward selected cougar and black bear management practices,” *Wildlife Society Bulletin* 30, no. 1 (Spr 2002), <Go to ISI>://000175200100002; C.W. Ryan, J.W. Edwards, and M.D. Duda, “West Virginia residents: Attitudes and opinions toward American black bear hunting,” *Ursus* 2 (2009).

⁴² Emphasis added. J. Posewitz, *Beyond Fair Chase: The Ethic and Tradition of Hunting* (Helena, Montana: Falcon Press, 1994), p. 61.

⁴³ Ryan, Edwards, and Duda, “West Virginia residents: Attitudes and opinions toward American black bear hunting.”; Teel, Krannich, and Schmidt, “Utah stakeholders’ attitudes toward selected cougar and black bear management practices.”

⁴⁴ Hank Hristienko and Jr. McDonald, John E., “Going in the 21st century: a perspective on trends and controversies in the management of the black bear,” *Ursus* 18, no. 1 (2007).

⁴⁵ Hristienko and McDonald, “Going in the 21st century: a perspective on trends and controversies in the management of the black bear.”

be injured or killed, particularly if the bear is bayed on the ground. Sometimes dogs kill the bears themselves, especially dependent cubs.

Pursuit during hot weather can cause physical stress to both dogs and bears.⁴⁶ Bears that have engaged in prolonged pursuits experience physiological stress because bears' pelts and fat layer (that they are building in anticipation of hibernation) can make them overheat—possibly leading to death. In poor food years, pursuing bears with hounds makes bears expend energy they require to survive hibernation. Hounds disrupt feeding patterns for bears who are chased and nearby bears who are not.⁴⁷

If bayed on the ground, hunters cannot identify the sex of the bear, which is a concern if it is a female with dependent cubs. If the mother is killed, young-of-the-year cubs will die from starvation, exposure or predation.⁴⁸ In research conducted in Maine, houndsmen were ineffective in determining if a female had cubs, because the mother would secure her cubs in a separate tree other than the one she occupied.⁴⁹

The main purpose of hounding is to tree the bears for the purpose of close-range identification and shooting. While some argue that hounding is a selective method for choosing the age or sex of an animal,⁵⁰ researchers who have done empirical study contend it is difficult for hunters to determine the age and sex of a treed bear.⁵¹ Inman and Vaughan (2002) found that houndsmen accurately determined the sex of treed bears 67% of the time. In other words, approximately one-third of treed bear were wrongly sexed by houndsmen.⁵²

So many aspects of hounding are unsavory. It causes stress and distress to wildlife, including non-target species, and to the hounds themselves. Hounds can kill bear cubs, and hounds can be killed by bears. Hounding disrupts bears when they should be foraging and not hiding from hunters in order to survive wintertime hibernation. Neither hounds nor bears sweat; to dissipate heat to prevent damage to their brains, they must either pant (which is inefficient) or find a body of water to cool off.⁵³ In short, hounding is an incredibly cruel and barbaric sport that should end in New Mexico.

6. The climate crisis necessitates a new look at privileging non-lethal approaches over killing

Wildlife management agencies often wrongly presume that an increase in human conflicts is a result of a growing bear population, but bears may simply be modifying their behaviors in response to deleterious environmental circumstances—a lack of food.⁵⁴ Unless intensively studying a bear population, agencies

⁴⁶ Hristienko and McDonald, "Going in the 21st century: a perspective on trends and controversies in the management of the black bear."

⁴⁷ Beck et al., "Sociological and ethical considerations of black bear hunting." Ordiz et al., "Do bears know they are being hunted?."

⁴⁸ Cubs will stay with their mothers between 14-18 months. Born in the den between January and February, bears leave the den usually in late April, but they are not weaned until the months between July and September. The cubs will go back into the den for their second winter with their mother. They will stay with her until May – July, when the family breaks up (because the female goes back into estrus). Considered subadults at that point, the cubs must find their own home range, which is more difficult of males as they have to disperse further from the natal area – to avoid inbreeding.

⁴⁹ Beck et al., "Sociological and ethical considerations of black bear hunting."

⁵⁰ Hristienko and McDonald, "Going in the 21st century: a perspective on trends and controversies in the management of the black bear."

⁵¹ Beck et al., "Sociological and ethical considerations of black bear hunting."; M. C. Boulay, D.H. Jackson, and D.A. Immell, "Preliminary assessment of a ballot initiative banning two methods of bear hunting in Oregon: Effects on bear harvest," *Ursus* 11 (1999).

⁵² K. H. Inman and M. R. Vaughan, "Hunter effort and success rates of hunting bears with hounds in Virginia," *Ursus* 13 (2002), <Go to ISI>://WOS:000229925700022.

⁵³ Bernd Heinrich, *Why we run: A natural history* (Harper Perennial, 2002).

⁵⁴ H. E. Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts," Article, *Journal of Applied Ecology* 55, no. 2 (Mar 2018), <https://doi.org/10.1111/1365-2664.13021>, <Go to ISI>://WOS:000424881800020; H. E. Johnson et al., "Shifting perceptions of risk and reward: Dynamic selection for human development by black bears in the western United States," *Biological Conservation* 187 (Jul 2015), <https://doi.org/10.1016/j.biocon.2015.04.014>, <Go to ISI>://WOS:000357234100019; M. E. Obbard et al., "Relationships among food availability, harvest, and human-bear conflict at landscape scales in Ontario, Canada," *Ursus* 25, no. 2 (2014), <https://doi.org/10.2192/ursus-d-13-00018.1>, <Go to ISI>://WOS:000347670000002.

poorly assess the total mortality that bears sustain, and may increase quotas when they should be decreasing them.⁵⁵ Despite available habitat, bears may not be in them because of human presence or past failures, or they are unevenly distributed across that state's particular black bear habitat.⁵⁶

As Johnson et al. (2018) and others suggest, because North American habitats are altered by human development and changed by the climate crisis, wildlife managers must adapt and work to reduce human-bear conflicts, rather than rely upon lethal removals.⁵⁷ The problems associated with a warming climate and bears coming into contact with an expanding human population is problematic. When bears must live alongside humans, their chances for survival decrease dramatically because of vehicle collisions and agency actions.⁵⁸ Large native carnivores face extinction⁵⁹—it is incumbent upon wildlife agencies to conserve rather than overexploit them. Expanded human development into bear habitats during the climate crisis exacerbates bear mortalities, and then agencies react by increasing trophy hunting quotas, when they should be reducing overall black bear mortalities.⁶⁰

Again, black bear biologists warn that managers must limit recreational black bear killing to reduce total mortality, and especially during years of poor natural food production, which is readily predicted by weather events.⁶¹

To emphasize, the total annual human-caused mortality that a black bear population can sustain is only between six and ten percent of the population; more than that is simply super additive mortality.⁶² Female bears rarely migrate—they prefer to live near their natal areas, and this compounds the harms from trophy hunting and other sources of mortality that affect black bear populations.⁶³ The loss of females reduces a bear population's ability to bounce back as they are the key to sustaining the population.⁶⁴

⁵⁵ Laufenberg et al., "Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface."; Welfelt, Beausoleil, and Wielgus, "Factors Associated with black bear density and implications for management."

⁵⁶ Welfelt, Beausoleil, and Wielgus, "Factors Associated with black bear density and implications for management."

⁵⁷ Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts."; D. L. Lewis et al., "Modeling black bear population dynamics in a human-dominated stochastic environment," Article, *Ecological Modelling* 294 (Dec 2014), <https://doi.org/10.1016/j.ecolmodel.2014.08.021>, <Go to ISI>://WOS:000345821100006.

⁵⁸ Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts."; Johnson et al., "Shifting perceptions of risk and reward: Dynamic selection for human development by black bears in the western United States."; J. P. Beckmann and J. Berger, "Rapid ecological and behavioural changes in carnivores: the responses of black bears (*Ursus americanus*) to altered food," *Journal of Zoology* 261 (Oct 2003), <https://doi.org/10.1017/s0952836903004126>, <Go to ISI>://WOS:000186327700010.

⁵⁹ J. A. Estes et al., "Trophic Downgrading of Planet Earth," *Science* 333, no. 6040 (Jul 2011), <https://doi.org/10.1126/science.1205106>, <Go to ISI>://WOS:000292732000031; Chris T. Darimont et al., "The unique ecology of human predators," *Science* 349, no. 6250 (2015); William J. Ripple et al., "Extinction risk is most acute for the world's largest and smallest vertebrates," *Proceedings of the National Academy of Sciences* 114, no. 40 (October 3, 2017 2017), <https://doi.org/10.1073/pnas.1702078114>, <http://www.pnas.org/content/114/40/10678.abstract>; Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), "Nature's Dangerous Decline 'Unprecedented' Species Extinction Rates 'Accelerating': Current global response insufficient. 'Transformative changes' needed to restore and protect nature; Opposition from vested interests can be overcome for public good. Most comprehensive assessment of its kind; 1,000,000 species threatened with extinction."

⁶⁰ Laufenberg et al., "Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface."

⁶¹ Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts."

⁶² Welfelt, "Black bear population dynamics in the North Cascades."

⁶³ Laufenberg et al., "Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface."

⁶⁴ Laufenberg et al., "Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface."

7. Food availability plays a large role in the presence of bears in urban areas; human food sources are the root cause of human-bear conflicts

In their study of bears in central Colorado, Baruch-Mordo et al. (2014) found that black bears who came to Aspen to prevent their starvation because of a native food failure subsequently reversed their behaviors and returned to the wilds when their native foods were again available.⁶⁵ Johnson et al. (2015), in their study of bears in three cities, Tahoe, Durango and Aspen, found that bears consistently changed their food-foraging behaviors, based upon food availability. In these cities, **bears used human foods as a subsidy rather than a staple**. They argue that bears who are labeled “nuisance”, might not be “problem” bears all of the time. They also suggest that people need to make human foods less available to bears, especially in poor food years.⁶⁶ In short, despite claims that once bears have eaten food in urban areas that they are forever tainted, **studies show that bears will leave these areas once natural foods are again available**.⁶⁷ Bears weigh energy budgets and their safety when making decisions about where to forage.⁶⁸

While some indicate that urban areas serve as a refuge for bears when there are food failures, Aspen, Colorado was not a refuge but an “ecological and evolutionary trap.” Because adult females were removed by agency personnel in Aspen, it became a black bear population sink.⁶⁹ In their synthesis article, Elfstrom et al. (2014) suggest that some bears, particularly females with cubs and subadults, use urban areas as a calculated trade-off to avoid death from despotic larger bears.⁷⁰ Urban areas are an unsustainable bear sink because so many breeding females are removed in food-poor years.⁷¹

8. NMDGF cannot successfully hunt its way out of human-bear conflicts

Agencies believe that hunting bears will reduce conflicts with humans. Yet, nine separate studies demonstrate that hunting bears will not resolve human-bear conflicts (“HBC”) unless a bear population is reduced to an unsustainable level. While policymakers claim that opening or extending bear trophy hunts will result in fewer bears expanding into urban areas where they may cause problems,⁷² studies show that bear hunting will only reduce conflicts in cases where the bear population is reduced below sustainable levels.⁷³ Obbard et al. (2014) write:

⁶⁵ S. Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts,” *Plos One* 9, no. 1 (Jan 2014), e85122, <https://doi.org/10.1371/journal.pone.0085122>, <Go to ISI>://WOS:000329862500218.

⁶⁶ Johnson et al., “Shifting perceptions of risk and reward: Dynamic selection for human development by black bears in the western United States.”

⁶⁷ J. S. Lewis et al., “Interspecific interactions between wild felids vary across scales and levels of urbanization,” Article, *Ecology and Evolution* 5, no. 24 (Dec 2015), <https://doi.org/10.1002/ece3.1812>, <Go to ISI>://WOS:000368136600018; Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts.”

⁶⁸ Lewis et al., “Interspecific interactions between wild felids vary across scales and levels of urbanization.”; Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts.”

⁶⁹ Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts,” 8.

⁷⁰ M. Elfstrom et al., “Ultimate and proximate mechanisms underlying the occurrence of bears close to human settlements: review and management implications,” *Mammal Review* 44, no. 1 (Jan 2014), <https://doi.org/10.1111/j.1365-2907.2012.00223.x>, <Go to ISI>://WOS:000327796800002; Marcus Elfström et al., “Does despotic behavior or food search explain the occurrence of problem brown bears in Europe?,” *The Journal of Wildlife Management* 78, no. 5 (2014), <https://doi.org/10.1002/jwmg.727>, <http://dx.doi.org/10.1002/jwmg.727>.

⁷¹ Baruch-Mordo et al., “Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts.”

⁷² Hank Hristienko and Jr. McDonald, John E., “Going in the 21st Century: A Perspective on Trends and Controversies in the Management of the Black Bear,” *Ursus* 18, no. 1 (2007); A. Treves, K. J. Kapp, and D. M. MacFarland, “American Black Bear Nuisance Complaints and Hunter Take,” *Ursus* 21, no. 1 (2010).

⁷³ M. E. Obbard et al., “Relationships among Food Availability, Harvest, and Human-Bear Conflict at Landscape Scales in Ontario, Canada,” *Ursus* 25, no. 2 (2014); E. J. Howe et al., “Do Public Complaints Reflect Trends in Human-Bear Conflict?” *Ursus* 21, no. 2 (2010).

We found no significant correlations between harvest and subsequent HBC human-bear conflicts. Although it may be intuitive to assume that harvesting more bears should reduce HBC, empirical support for this assumption is lacking despite considerable research (Garshelis 1989, Treves and Karanth 2003, Huygens et al. 2004, Tavss 2005, Treves 2009, Howe et al. 2010, Treves et al. 2010).⁷⁴

Research clearly demonstrates that black bear hunting simply does not reduce HBC. Pienaar et al. (2015) write:

Members of the public are likely to believe that bear management and alteration of bear behavior are the solution to human-bear conflicts. They tend to favor trapping and relocating bears, opening a bear hunting season, and improving habitat . . . In contrast, wildlife management agencies recognize that both lethal and non-lethal management of bears tend to be costly, time consuming, and difficult to implement in urban locations. Agencies also understand that these measures are ineffective in addressing root causes of human-bear conflicts, such as increased development of habitat, diverse public attitudes about bear management, and human food conditioning of bears (Peine 2001, Gore et al. 2006, Agree and Miller 2009, Don Carlos et al. 2009, Lowery et al. 2012).⁷⁵

Bear hunts do not reduce conflicts because trophy hunters generally remove non-problem bears from the population; that is, the individuals not involved in nuisance behaviors.⁷⁶ Instead, hunters attempt to target large, male bears to acquire an impressive trophy,⁷⁷ but bears living near humans are typically unavailable to hunters because hunting is not permitted in urban areas.⁷⁸

9. Solutions to alleviate human-bear conflicts must be multi-faceted for success

A host of biologists and social scientists suggest that bear aware campaigns must focus on the benefits to society as a result of maintaining healthy bear populations, along with co-existence education.⁷⁹ Tolerance for bears increases when residents learn the benefits of bears and have positive interactions with them, whereas intolerance stems from elevated risk perceptions, negative interactions and a greater trust in wildlife managers, dominionistic values and age.⁸⁰

Florida state biologists Barrett et al. (2014) emphasized that in working with homeowners and others, an “**all-or-none approach**” in neighborhoods was necessary to prevent negative human-bear encounters. That is, everyone needed to properly use bear-resistant trashcans and prevent attracting bears with other food sources. Barrett et al. (2014) write:

⁷⁴ Obbard et al., Relationships among Food Availability, Harvest, and Human-Bear Conflict at Landscape Scales in Ontario, Canada."

⁷⁵ Elizabeth F. Pienaar, David Telesco, and Sarah Barrett, "Understanding People's Willingness to Implement Measures to Manage Human-Bear Conflict in Florida," *Journal of Wildlife Management* 79, no. 5 (2015), p. 798.

⁷⁶ A. Treves, K. J. Kapp, and D. M. MacFarland, "American black bear nuisance complaints and hunter take," *Ursus* 21, no. 1 (2010), <https://doi.org/10.2192/09gr012.1>, <Go to ISI>://WOS:000277602700004; M. Elfström et al., "Ultimate and proximate mechanisms underlying the occurrence of bears close to human settlements: review and management implications," *Mamm Rev.* 44 (2014), <https://doi.org/10.1111/j.1365-2907.2012.00223.x>, <http://dx.doi.org/10.1111/j.1365-2907.2012.00223.x>.

⁷⁷ Darimont, Coddington, and Hawkes, "Why men trophy hunt."; Darimont et al., "The unique ecology of human predators."

⁷⁸ Elfstrom et al., "Ultimate and proximate mechanisms underlying the occurrence of bears close to human settlements: review and management implications."

⁷⁹ Slagle et al., "Building tolerance for bears: A communications experiment."; Bruskotter Jeremy T. and Wilson Robyn S., "Determining Where the Wild Things will be: Using Psychological Theory to Find Tolerance for Large Carnivores," *Conservation Letters* 7, no. 3 (2014), <https://doi.org/doi:10.1111/conl.12072>, <https://onlinelibrary.wiley.com/doi/abs/10.1111/conl.12072>; Stacy A. Lischka et al., "Understanding and managing human tolerance for a large carnivore in a residential system," *Biological Conservation* 238 (2019/10/01/ 2019), <https://doi.org/https://doi.org/10.1016/j.biocon.2019.07.034>, <http://www.sciencedirect.com/science/article/pii/S0006320718316276>.

⁸⁰ Lischka et al., "Understanding and managing human tolerance for a large carnivore in a residential system."

Proactive measures (e.g. securing trash, electrical fencing, education) dealing with human behavior are much more efficient than reactive methods (e.g., aversive conditioning, relocation, euthanasia) in reducing human-bear incidents because changing or managing human behavior is more likely to provide longer-term solutions than managing a wildlife species alone (Baruch-Mordo et al. 2009).⁸¹

Studies from Colorado find the same. Everyone must work in concert. That involves communities finding funding for bear resistant trash cans for all residents, educating them and using law enforcement against scofflaws.⁸²

Washington's successful Karelian bear dog program, which is entirely funded with private donations, is a huge success and brings great goodwill to that agency.⁸³

Bear conflict mitigation for landowners involves employing commonsense, non-lethal solutions across entire landscapes, such as using the right kind of electric fencing around calving and lambing pens, boneyards, stored animal feed and around crops. Other strategies include using bear-proof trash receptacles and creating secured dumps in rural communities. And perhaps most importantly, cleaning up calving areas and making boneyards inaccessible to native carnivores.⁸⁴

New Mexico cannot kill its way out of human-bear conflicts—to do so would mean black bear extirpation.⁸⁵ As Stringham (2013) suggests, agencies' policies for black bears and other wildlife such as mountain lions are often too rigid and simplistic to conform with modern societal values that prioritize humaneness and conservation over wanton killing.⁸⁶ For instance, he suggests that agencies should not kill bears unless they are a true public safety hazard—and not because someone felt frightened when they saw one.⁸⁷

While food is the root cause of most negative human-bear interactions, Herrero et al. (2011) write: "Each year, millions of interactions between people and black bears occur without any injury to a person, although by 2 years of age most black bears have the physical capacity to kill a person."⁸⁸

10. Black bears are an important umbrella species and ecological actors who increase biodiversity

Black bears are important in maintaining the ecological systems in their forests. They disperse seeds across vast distances—even more seeds than birds,⁸⁹ open up canopies, and amend soils through their various behaviors. Black bears eat fruits and deposit them across long distances (and mice assist by removing the seeds from bear feces, where they would otherwise mildew, and cache them in soil where some will grow).⁹⁰ Bears cause small-scale ecological disturbance to the canopy that allows sun to filter to the forest floor, which

⁸¹ M. A. Barrett et al., "Testing Bear-Resistant Trash Cans in Residential Areas of Florida," Article, *Southeastern Naturalist* 13, no. 1 (Mar 2014), <https://doi.org/10.1656/058.013.0102>, <Go to ISI>://WOS:000333891100005., p. 36.

⁸² Heather Johnson et al., "Assessing Ecological and Social Outcomes of a Bear-Proofing Experiment," *The Journal of Wildlife Management* (10/01 2018), <https://doi.org/10.1002/jwmg.21472>.

⁸³ Washington Department of Fish and Wildlife, "Karelian Bear Dog Program," <https://wdfw.wa.gov/enforcement/kbd/cash.html>; <https://www.inlander.com/spokane/meet-washington-states-karelian-bear-dogs/Slideshow/2772624> (2018).

⁸⁴ S. M. Wilson, E. H. Bradley, and G. A. Neudecker, "Learning to live with wolves: community-based conservation in the Blackfoot Valley of Montana," Article, *Human-Wildlife Interactions* 11, no. 3 (Win 2017), <Go to ISI>://WOS:000422844800010.

⁸⁵ E. J. Howe et al., "Do public complaints reflect trends in human-bear conflict?," *Ursus* 21, no. 2 (2010), <https://doi.org/10.2192/09gr013.1>, <Go to ISI>://WOS:000284520900001; Obbard et al., "Relationships among food availability, harvest, and human-bear conflict at landscape scales in Ontario, Canada."

⁸⁶ Stephen R. Stringham, "Managing risk from bears and other potentially lethal wildlife: predictability, accountability, and liability," *Human-Wildlife Interactions* 7, no. 1 (2013).

⁸⁷ Stringham, "Managing risk from bears and other potentially lethal wildlife: predictability, accountability, and liability."

⁸⁸ S. Herrero et al., "Fatal Attacks by American Black Bear on People: 1900-2009," *Journal of Wildlife Management* 75, no. 3 (Apr 2011): 599, <https://doi.org/10.1002/jwmg.72>, <Go to ISI>://WOS:000291007800015.

⁸⁹ Harrer and Levi, "The primacy of bears as seed dispersers in salmon-bearing ecosystems."

⁹⁰ Enders and Vander Wall, "Black bears *Ursus americanus* are effective seed dispersers, with a little help from their friends."

creates greater biological diversity.⁹¹ Bears break logs while grubbing, which helps the decomposition process and facilitates the return of nutrients to the soil. In one study, researchers found that black bears were the dominant species moving salmon from streams into riparian zones. Bears ate about half of the salmon, leaving remnants which contributed to greater tree ring growth. They also found higher plant growth along the riparian areas where bear trails existed and where bears' urine deposit was high.⁹²

11. Conclusion

The Commission must appreciate the massive contributions bears make to conserving the biological diversity of their forest ecosystems. They are highly sentient and deserving of their intrinsic rights to live and not be harassed by trophy hunters and packs of hounds. We ask the Commission to reject the proposed rule and instead reduce the state's entire quota to 335, consistent with prior and better-supported quotas in the state.

Sincerely,

Elisabeth Jennings

[REDACTED]

Wendy Keefover

[REDACTED]

[REDACTED]

⁹¹ Takahashi and Takahashi, "Spatial distribution and size of small canopy gaps created by Japanese black bears: estimating gap size using dropped branch measurements."

⁹² T. E. Reimchen and C. H. Fox, "Fine-scale spatiotemporal influences of salmon on growth and nitrogen signatures of Sitka spruce tree rings," *Bmc Ecology* 13 (Oct 2013), 38, <https://doi.org/10.1186/1472-6785-13-38>, <Go to ISI>://WOS:000325284000001.

References

- Artelle, Kyle A., John D. Reynolds, Adrian Treves, Jessica C. Walsh, Paul C. Paquet, and Chris T. Darimont. "Hallmarks of Science Missing from North American Wildlife Management." *Science Advances* 4, no. 3 (2018). <https://doi.org/10.1126/sciadv.aao0167>. <http://advances.sciencemag.org/content/advances/4/3/eaao0167.full.pdf>.
- Barrett, M. A., D. J. Telesco, S. E. Barrett, K. M. Widness, and E. H. Leone. "Testing Bear-Resistant Trash Cans in Residential Areas of Florida." [In English]. Article. *Southeastern Naturalist* 13, no. 1 (Mar 2014): 26-39. <https://doi.org/10.1656/058.013.0102>. <Go to ISI>://WOS:000333891100005.
- Baruch-Mordo, S., K. R. Wilson, D. L. Lewis, J. Broderick, J. S. Mao, and S. W. Breck. "Stochasticity in Natural Forage Production Affects Use of Urban Areas by Black Bears: Implications to Management of Human-Bear Conflicts." *Plos One* 9, no. 1 (Jan 2014): e85122. <https://doi.org/10.1371/journal.pone.0085122>. <Go to ISI>://WOS:000329862500218.
- Batavia, Chelsea, Michael Paul Nelson, Chris T. Darimont, Paul C. Paquet, William J. Ripple, and Arian D. Wallach. "The Elephant (Head) in the Room: A Critical Look at Trophy Hunting." *Conservation Letters* 0, no. 0 (2018): e12565. <https://doi.org/doi:10.1111/conl.12565>. <https://onlinelibrary.wiley.com/doi/abs/10.1111/conl.12565>.
- Beck, Thomas D., David S. Moody, Donald B. Koch, John J. Beecham, Gary R. Olson, and Timothy Burton. "Sociological and Ethical Considerations of Black Bear Hunting." *Proceedings of the Western Black Bear Workshop* 5 (1995): 119-31.
- Beckmann, J. P., and J. Berger. "Rapid Ecological and Behavioural Changes in Carnivores: The Responses of Black Bears (*Ursus Americanus*) to Altered Food." *Journal of Zoology* 261 (Oct 2003): 207-12. <https://doi.org/10.1017/s0952836903004126>. <Go to ISI>://WOS:000186327700010.
- Bergstrom, B. J. "Carnivore Conservation: Shifting the Paradigm from Control to Coexistence." *Journal of Mammalogy* 98, no. 1 (Feb 2017): 1-6. <https://doi.org/10.1093/jmammal/gyw185>. <Go to ISI>://WOS:000397232500001.
- Boulay, M. C., D.H. Jackson, and D.A. Immell. "Preliminary Assessment of a Ballot Initiative Banning Two Methods of Bear Hunting in Oregon: Effects on Bear Harvest." *Ursus* 11 (1999): 179-84.
- Breck, S. W., N. Lance, J. Bourassal, S. Matthews, and V. Seher. "An Automated System for Detecting and Reporting Trespassing Bears in Yosemite National Park." *Ursus* 18, no. 2 (2007): 230-35. [https://doi.org/10.2192/1537-6176\(2007\)18\[230:aasfda\]2.0.co;2](https://doi.org/10.2192/1537-6176(2007)18[230:aasfda]2.0.co;2). <Go to ISI>://WOS:000251772900010.
- Cattet, M., J. Boulanger, G. Stenhouse, R. A. Powell, and M. L. Reynolds-Hogland. "An Evaluation of Long-Term Capture Effects in Ursids: Implications for Wildlife Welfare and Research." [In English]. Article. *Journal of Mammalogy* 89, no. 4 (Aug 2008): 973-90. <https://doi.org/10.1644/08-mamm-a-095.1>. <Go to ISI>://WOS:000258765000019.
- Chapron, Guillaume, and Adrian Treves. "Blood Does Not Buy Goodwill: Allowing Culling Increases Poaching of a Large Carnivore." *Proceedings of the Royal Society of London B: Biological Sciences* 283, no. 1830 (2016-05-11 00:00:00 2016). <https://doi.org/10.1098/rspb.2015.2939>. <http://rspb.royalsocietypublishing.org/content/royprsb/283/1830/20152939.full.pdf>.
- Costello, C. M., S. R. Creel, S. T. Kalinowski, N. V. Vu, and H. B. Quigley. "Sex-Biased Natal Dispersal and Inbreeding Avoidance in American Black Bears as Revealed by Spatial Genetic Analyses." *Molecular Ecology* 17, no. 21 (Nov 2008): 4713-23. <https://doi.org/10.1111/j.1365-294X.2008.03930.x>. <Go to ISI>://WOS:000260345200012.
- Costello, C. M., K. H. Inman, D. E. Jones, R. M. Inman, B. C. Thompson, and H. B. Quigley. "Reliability of the Cementum Annuli Technique for Estimating Age of Black Bears in New Mexico." *Wildlife Society Bulletin* 32, no. 1 (Spr 2004): 169-76. [https://doi.org/10.2193/0091-7648\(2004\)32\[169:rotcat\]2.0.co;2](https://doi.org/10.2193/0091-7648(2004)32[169:rotcat]2.0.co;2). <Go to ISI>://WOS:000221035300019.
- Costello, C. M., D. E. Jones, K.A. Hammond, K. H. Inman, B. C. Thompson, R.A. Deitner, and H.B. Quigley. "A Study of Black Bear Ecology in New Mexico with Models for Population Dynamics and Habitat Suitability: Final Report: Federal Aid in Wildlife Restoration Project W-131-R." *New Mexico Department of Game and Fish* (2001).

- Costello, Cecily M., Donald E. Jones, Robert M. Inman, Kristine H. Inman, Bruce C. Thompson, and Howard B. Quigley. "Relationship of Variable Mast Production to American Black Bear Reproductive Parameters in New Mexico." *Ursus* 14, no. 1 (2003): 1-16. <https://doi.org/10.2307/3872951>. <http://www.jstor.org/stable/3872951>.
- Cougar Management Guidelines. *Cougar Management Guidelines*. Bainbridge Island, WA: WildFutures, 2005.
- Darimont, Chris T., Brian F. Coddling, and Kristen Hawkes. "Why Men Trophy Hunt." *Biology Letters* 13, no. 3 (2017): <http://rsbl.royalsocietypublishing.org/content/13/3/20160909>. <https://doi.org/10.1098/rsbl.2016.0909>. <http://rsbl.royalsocietypublishing.org/content/roybiolett/13/3/20160909.full.pdf>.
- Darimont, Chris T., Caroline H. Fox, Heather M. Bryan, and Thomas E. Reimchen. "The Unique Ecology of Human Predators." *Science* 349, no. 6250 (2015): 858-60.
- Dobey, S., D. V. Masters, B. K. Scheick, J. D. Clark, M. R. Pelton, and M. E. Sunquist. "Ecology of Florida Black Bears in the Okefenokee-Osceola Ecosystem." *Wildlife Monographs*, no. 158 (Jan 2005): 1-41. <Go to ISI>://WOS:000228658000001.
- Elfström, M., A. Zedrosser, O. - G. Støen, and J. E. Swenson. "Ultimate and Proximate Mechanisms Underlying the Occurrence of Bears Close to Human Settlements: Review and Management Implications." *Mamm Rev.* 44 (2014). <https://doi.org/10.1111/j.1365-2907.2012.00223.x>. <http://dx.doi.org/10.1111/j.1365-2907.2012.00223.x>.
- Elfstrom, M., A. Zedrosser, O. G. Stoen, and J. E. Swenson. "Ultimate and Proximate Mechanisms Underlying the Occurrence of Bears Close to Human Settlements: Review and Management Implications." *Mammal Review* 44, no. 1 (Jan 2014): 5-18. <https://doi.org/10.1111/j.1365-2907.2012.00223.x>. <Go to ISI>://WOS:000327796800002.
- Elfström, Marcus, Andreas Zedrosser, Klemen Jerina, Ole-Gunnar Støen, Jonas Kindberg, Lara Budic, Marko Jonozovič, and Jon E. Swenson. "Does Despotic Behavior or Food Search Explain the Occurrence of Problem Brown Bears in Europe?". *The Journal of Wildlife Management* 78, no. 5 (2014): 881-93. <https://doi.org/10.1002/jwmg.727>. <http://dx.doi.org/10.1002/jwmg.727>.
- Enders, M. S., and S. B. Vander Wall. "Black Bears *Ursus Americanus* Are Effective Seed Dispersers, with a Little Help from Their Friends." *Oikos* 121, no. 4 (Apr 2012): 589-96. <https://doi.org/10.1111/j.1600-0706.2011.19710.x>. <Go to ISI>://WOS:000301537200013.
- Estes, J. A., J. Terborgh, J. S. Brashares, M. E. Power, J. Berger, W. J. Bond, S. R. Carpenter, *et al.* "Trophic Downgrading of Planet Earth." *Science* 333, no. 6040 (Jul 2011): 301-06. <https://doi.org/10.1126/science.1205106>. <Go to ISI>://WOS:000292732000031.
- Garshelis, D. L., and H. Hristienko. "State and Provincial Estimates of American Black Bear Numbers Versus Assessments of Population Trend." *Ursus* 17, no. 1 (2006): 1-7. <Go to ISI>://WOS:000237130100001.
- George, Kelly A., Kristina M. Slagle, Robyn S. Wilson, Steven J. Moeller, and Jeremy T. Bruskotter. "Changes in Attitudes toward Animals in the United States from 1978 to 2014." *Biological Conservation* 201 (9// 2016): 237-42. <http://www.sciencedirect.com/science/article/pii/S0006320716302774>.
- Gittleman, John L. "Carnivore Life History Patterns: Allometric, Phylogenetic, and Ecological Associations." 127, no. 6 (1986): 744-71. <https://doi.org/10.1086/284523>. <https://www.journals.uchicago.edu/doi/abs/10.1086/284523>.
- Glymph, Caitlin M. "Spatially Explicit Model of Areas between Suitable Black Bear Habitat in East Texas and Black Bear Populations in Louisiana, Arkansas, and Oklahoma." Masters M.A., Stephen F. Austin State University, 2017. <https://scholarworks.sfasu.edu/etds/128/>.
- Gould, M.J., III Cain, J.W., G.W. Roemer, W.R. Gould, and S.G. Liley. "Estimating Density of American Black Bears (*Ursus Americanus*) in New Mexico Using Noninvasive Genetic Sampling-Based Capture-Recapture Methods." <http://www.wildlife.state.nm.us/download/hunting/species/bear/publications/Estimating-Black-Bear-Density-in-New-Mexico-Gould-et-al-2016.pdf> (2016).
- Gould, Matthew J., James W. Cain III, Gary W. Roemer, William R. Gould, and Stewart G. Liley. "Density of American Black Bears in New Mexico." *The Journal of Wildlife Management* 82, no. 4 (2018):

- 775-88. <https://doi.org/10.1002/jwmg.21432>.
<https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/jwmg.21432>.
- Harrer, L. E. F., and T. Levi. "The Primacy of Bears as Seed Dispersers in Salmon-Bearing Ecosystems." [In English]. Article. *Ecosphere* 9, no. 1 (Jan 2018): 15 e02076. <https://doi.org/10.1002/ecs2.2076>. <Go to ISI>://WOS:000425731000024.
- Heinrich, Bernd. *Why We Run: A Natural History*. Harper Perennial, 2002.
- Herrero, S., A. Higgins, J. E. Cardoza, L. I. Hajduk, and T. S. Smith. "Fatal Attacks by American Black Bear on People: 1900-2009." *Journal of Wildlife Management* 75, no. 3 (Apr 2011): 596-603. <https://doi.org/10.1002/jwmg.72>. <Go to ISI>://WOS:000291007800015.
- Howe, E. J., M. E. Obbard, R. Black, and L. L. Wall. "Do Public Complaints Reflect Trends in Human-Bear Conflict?" *Ursus* 21, no. 2 (2010): 131-42. <https://doi.org/10.2192/09gr013.1>. <Go to ISI>://WOS:000284520900001.
- Hristienko, Hank, and Jr. McDonald, John E. "Going in the 21st Century: A Perspective on Trends and Controversies in the Management of the Black Bear." *Ursus* 18, no. 1 (2007): 72-88.
- Huygens, Oscar C., and Hidetake Hayashi. "Using Electric Fences to Reduce Asiatic Black Bear Depredation in Nagano Prefecture, Central Japan." *Wildlife Society Bulletin* 27, no. 4 (1999): 959-64.
- Inman, K. H., and M. R. Vaughan. "Hunter Effort and Success Rates of Hunting Bears with Hounds in Virginia." *Ursus* 13 (2002): 223-30. <Go to ISI>://WOS:000229925700022.
- Inman, R. M., C. M. Costello, D. E. Jones, K. H. Inman, B. C. Thompson, and H. B. Quigley. "Denning Chronology and Design of Effective Bear Management Units." *Journal of Wildlife Management* 71, no. 5 (Jul 2007): 1476-83. <https://doi.org/10.2193/2006-252>. <Go to ISI>://WOS:000248027800012.
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). "Nature's Dangerous Decline 'Unprecedented' Species Extinction Rates 'Accelerating': Current Global Response Insufficient. 'Transformative Changes' Needed to Restore and Protect Nature; Opposition from Vested Interests Can Be Overcome for Public Good. Most Comprehensive Assessment of Its Kind; 1,000,000 Species Threatened with Extinction." news release, May 6, 2019, 2019.
- Johnson, H. E., S. W. Breck, S. Baruch-Mordo, D. L. Lewis, C. W. Lackey, K. R. Wilson, J. Broderick, J. S. Mao, and J. P. Beckmann. "Shifting Perceptions of Risk and Reward: Dynamic Selection for Human Development by Black Bears in the Western United States." *Biological Conservation* 187 (Jul 2015): 164-72. <https://doi.org/10.1016/j.biocon.2015.04.014>. <Go to ISI>://WOS:000357234100019.
- Johnson, H. E., D. L. Lewis, T. L. Verzuh, C. F. Wallace, R. M. Much, L. K. Willmarth, and S. W. Breck. "Human Development and Climate Affect Hibernation in a Large Carnivore with Implications for Human-Carnivore Conflicts." [In English]. Article. *Journal of Applied Ecology* 55, no. 2 (Mar 2018): 663-72. <https://doi.org/10.1111/1365-2664.13021>. <Go to ISI>://WOS:000424881800020.
- Johnson, Heather, David Lewis, Stacy Lischka, and Stewart Breck. "Assessing Ecological and Social Outcomes of a Bear-Proofing Experiment." *The Journal of Wildlife Management* (10/01 2018). <https://doi.org/10.1002/jwmg.21472>.
- Kellert, Stephen R. *The Value of Life*. Washington, D.C.: Island Press, 1996.
- Koehler, G. M., and D. J. Pierce. "Survival, Cause-Specific Mortality, Sex, and Ages of American Black Bears in Washington State, USA." *Ursus* 16, no. 2 (2005): 157-66. [https://doi.org/10.2192/1537-6176\(2005\)016\[0157:scmsaa\]2.0.co;2](https://doi.org/10.2192/1537-6176(2005)016[0157:scmsaa]2.0.co;2). <Go to ISI>://WOS:000233680300002.
- Laufenberg, Jared S., Heather E. Johnson, Paul F. Doherty, and Stewart W. Breck. "Compounding Effects of Human Development and a Natural Food Shortage on a Black Bear Population Along a Human Development-Wildland Interface." *Biological Conservation* 224 (2018/08/01/ 2018): 188-98. <https://doi.org/https://doi.org/10.1016/j.biocon.2018.05.004>.
<http://www.sciencedirect.com/science/article/pii/S0006320717317093>.
- Lewis, D. L., S. W. Breck, K. R. Wilson, and C. T. Webb. "Modeling Black Bear Population Dynamics in a Human-Dominated Stochastic Environment." [In English]. Article. *Ecological Modelling* 294 (Dec 2014): 51-58. <https://doi.org/10.1016/j.ecolmodel.2014.08.021>. <Go to ISI>://WOS:000345821100006.
- Lewis, J. S., L. L. Bailey, S. VandeWoude, and K. R. Crooks. "Interspecific Interactions between Wild Felids Vary across Scales and Levels of Urbanization." [In English]. Article. *Ecology and Evolution* 5, no. 24 (Dec 2015): S946-S61. <https://doi.org/10.1002/ece3.1812>. <Go to ISI>://WOS:000368136600018.

- Lischka, Stacy A., Tara L. Teel, Heather E. Johnson, and Kevin R. Crooks. "Understanding and Managing Human Tolerance for a Large Carnivore in a Residential System." *Biological Conservation* 238 (2019/10/01/ 2019): 108189. <https://doi.org/https://doi.org/10.1016/j.biocon.2019.07.034>.
<http://www.sciencedirect.com/science/article/pii/S0006320718316276>.
- Manfredo, M. J., L. Sullivan, A.W. Don Carlos, A. M. Dietsch, T. L. Teel, A.D. Bright, and J. Bruskotter. *America's Wildlife Values: The Social Context of Wildlife Management in the U.S.* Fort Collins, Colorado: Colorado State University, Department of Natural Resources, 2018.
- Mazur, Rachel, and Victoria Seher. "Socially Learned Foraging Behaviour in Wild Black Bears, *Ursus Americanus*." *Animal Behaviour* 75, no. 4 (2008/04/01/ 2008): 1503-08.
<https://doi.org/https://doi.org/10.1016/j.anbehav.2007.10.027>.
<http://www.sciencedirect.com/science/article/pii/S0003347208000213>.
- McLaughlin, Craig. "Black Bear Assessment and Strategic Plan." *Maine Department of Inland Fisheries and Wildlife* (1999).
- McLellan, B. N., F. W. Hovey, R. D. Mace, J. G. Woods, D. W. Carney, M. L. Gibeau, W. L. Wakkinen, and W. F. Kasworm. "Rates and Causes of Grizzly Bear Mortality in the Interior Mountains of British Columbia, Alberta, Montana, Washington, and Idaho." *Journal of Wildlife Management* 63, no. 3 (Jul 1999): 911-20. <https://doi.org/10.2307/3802805>. <Go to ISI>://WOS:000081441500017.
- Nelson, Michael P., J.A. Vucetich, P.C. Paquet, and JK Bump. "An Inadequate Construct? North American Model: What's Missing, What's Needed." *The Wildlife Professional*, no. Summer 2011 (2011): 58-60.
- Obbard, M. E., E. J. Howe, L. L. Wall, B. Allison, R. Black, P. Davis, L. Dix-Gibson, M. Gatt, and M. N. Hall. "Relationships among Food Availability, Harvest, and Human-Bear Conflict at Landscape Scales in Ontario, Canada." *Ursus* 25, no. 2 (2014): 98-110. <https://doi.org/10.2192/ursus-d-13-00018.1>. <Go to ISI>://WOS:000347670000002.
- Onorato, D. P., E. C. Hellgren, R. A. Van Den Bussche, and D. L. Doan-Crider. "Phylogeographic Patterns within a Metapopulation of Black Bears (*Ursus Americanus*) in the American Southwest." [In English]. Article. *Journal of Mammalogy* 85, no. 1 (Feb 2004): 140-47. [https://doi.org/10.1644/1545-1542\(2004\)085<0140:ppwamo>2.0.co;2](https://doi.org/10.1644/1545-1542(2004)085<0140:ppwamo>2.0.co;2). <Go to ISI>://WOS:000220140300022.
- Ordiz, A., O. G. Stoen, S. Saebo, J. Kindberg, M. Delibes, and J. E. Swenson. "Do Bears Know They Are Being Hunted?". *Biological Conservation* 152 (Aug 2012): 21-28.
<https://doi.org/10.1016/j.biocom.2012.04.006>. <Go to ISI>://WOS:000307088200003.
- Pienaar, Elizabeth F., David Telesco, and Sarah Barrett. "Understanding People's Willingness to Implement Measures to Manage Human-Bear Conflict in Florida." *Journal of Wildlife Management* 79, no. 5 (2015): 798-806.
- Posewitz, J. *Beyond Fair Chase: The Ethic and Tradition of Hunting*. Helena, Montana: Falcon Press, 1994.
- Program, U.S. Global Change Research. "Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume Ii ", [https://nca2018.globalchange.gov/chapter/front-matter-about/#\(2018\)](https://nca2018.globalchange.gov/chapter/front-matter-about/#(2018)).
- Reimchen, T. E., and C. H. Fox. "Fine-Scale Spatiotemporal Influences of Salmon on Growth and Nitrogen Signatures of Sitka Spruce Tree Rings." *Bmc Ecology* 13 (Oct 2013): 38.
<https://doi.org/10.1186/1472-6785-13-38>. <Go to ISI>://WOS:000325284000001.
- Reimchen, T. E., and M. A. Spoljaric. "Right Paw Foraging Bias in Wild Black Bear (*Ursus Americanus* Kermodei)." *Laterality: Asymmetries of Body, Brain and Cognition* 16, no. 4 (2011/07/01 2011): 471-78. <https://doi.org/10.1080/1357650X.2010.485202>. <https://doi.org/10.1080/1357650X.2010.485202>.
- Responsive Management. "Americans' Attitudes toward Hunting, Fishing, Sport Shooting and Trapping 2019." <https://asafishing.org/wp-content/uploads/2019/04/Americans-Attitudes-Survey-Report-2019.pdf> (2019).
- Ripple, William J., Christopher Wolf, Thomas M. Newsome, Michael Hoffmann, Aaron J. Wirsing, and Douglas J. McCauley. "Extinction Risk Is Most Acute for the World's Largest and Smallest Vertebrates." *Proceedings of the National Academy of Sciences* 114, no. 40 (October 3, 2017 2017): 10678-83. <https://doi.org/10.1073/pnas.1702078114>.
<http://www.pnas.org/content/114/40/10678.abstract>.

- Ryan, C.W., J.W. Edwards, and M.D. Duda. "West Virginia Residents: Attitudes and Opinions toward American Black Bear Hunting." *Ursus* 2 (2009): 131-42.
- Slagle, K., R. Zajac, J. Bruskotter, R. Wilson, and S. Prange. "Building Tolerance for Bears: A Communications Experiment." *Journal of Wildlife Management* 77, no. 4 (May 2013): 863-69. <https://doi.org/10.1002/jwmg.515>. <Go to ISI>://WOS:000318028100022.
- Stringham, Stephen R. "Managing Risk from Bears and Other Potentially Lethal Wildlife: Predictability, Accountability, and Liability." *Human-Wildlife Interactions* 7, no. 1 (2013): 5-9.
- T., Bruskotter Jeremy, and Wilson Robyn S. "Determining Where the Wild Things Will Be: Using Psychological Theory to Find Tolerance for Large Carnivores." *Conservation Letters* 7, no. 3 (2014): 158-65. <https://doi.org/doi:10.1111/conl.12072>.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/conl.12072>.
- Takahashi, K., and K. Takahashi. "Spatial Distribution and Size of Small Canopy Gaps Created by Japanese Black Bears: Estimating Gap Size Using Dropped Branch Measurements." *Bmc Ecology* 13 (Jun 2013): 23. <https://doi.org/10.1186/1472-6785-13-23>. <Go to ISI>://WOS:000322126400001.
- Teel, T. L., R. S. Krannich, and R. H. Schmidt. "Utah Stakeholders' Attitudes toward Selected Cougar and Black Bear Management Practices." *Wildlife Society Bulletin* 30, no. 1 (Spr 2002): 2-15. <Go to ISI>://000175200100002.
- Treves, A., K. J. Kapp, and D. M. MacFarland. "American Black Bear Nuisance Complaints and Hunter Take." *Ursus* 21, no. 1 (2010): 30-42. <https://doi.org/10.2192/09gr012.1>. <Go to ISI>://WOS:000277602700004.
- Unger, D. E., J. J. Cox, H. B. Harris, J. L. Larkin, B. Augustine, S. Dobey, J. M. Guthrie, *et al.* "History and Current Status of the Black Bear in Kentucky." *Northeastern Naturalist* 20, no. 2 (Jun 2013): 289-308. <https://doi.org/10.1656/045.020.0206>. <Go to ISI>://WOS:000321563700006.
- Vonk, Jennifer, and Michael J. Beran. "Bears 'Count' Too: Quantity Estimation and Comparison in Black Bears, *Ursus Americanus*." *Animal Behaviour* 84, no. 1 (2012/07/01/ 2012): 231-38. <https://doi.org/https://doi.org/10.1016/j.anbehav.2012.05.001>.
<http://www.sciencedirect.com/science/article/pii/S0003347212002126>.
- Vonk, Jennifer, Stephanie E. Jett, and Kelly W. Mosteller. "Concept Formation in American Black Bears, *Ursus Americanus*." *Animal Behaviour* 84, no. 4 (2012/10/01/ 2012): 953-64. <https://doi.org/https://doi.org/10.1016/j.anbehav.2012.07.020>.
<http://www.sciencedirect.com/science/article/pii/S0003347212003284>.
- Wallach, A. D., I. Izhaki, J. D. Toms, W. J. Ripple, and U. Shanas. "What Is an Apex Predator?". *Oikos* 124, no. 11 (Nov 2015): 1453-61. <https://doi.org/10.1111/oik.01977>. <Go to ISI>://WOS:000363866900005.
- Wear, B. J., R. Eastridge, and J. D. Clark. "Factors Affecting Settling, Survival, and Viability of Black Bears Reintroduced to Felsenthal National Wildlife Refuge, Arkansas." *Wildlife Society Bulletin* 33, no. 4 (2005): 1363-74. [https://doi.org/10.2193/0091-7648\(2005\)33\[1363:FASSAV\]2.0.CO;2](https://doi.org/10.2193/0091-7648(2005)33[1363:FASSAV]2.0.CO;2).
<http://pubs.er.usgs.gov/publication/70027414>.
- Weaver, J. L., P. C. Paquet, and L. F. Ruggiero. "Resilience and Conservation of Large Carnivores in the Rocky Mountains." *Conservation Biology* 10, no. 4 (Aug 1996): 964-76. <Go to ISI>://A1996VC10300014.
- Welfelt, Lindsay, Richard Beausoleil, and Robert Wielgus. "Factors Associated with Black Bear Density and Implications for Management." *The Journal of Wildlife Management* (08/25 2019). <https://doi.org/10.1002/jwmg.21744>.
- Welfelt, Lindsay Suzanne. "Black Bear Population Dynamics in the North Cascades." Doctor of Philosophy Dissertation, Washington State University, 2018. <https://search.proquest.com/openview/ec18d4337882347c86cd2eeb2a69ebd0/1.pdf?pq-origsite=gscholar&cbl=18750&diss=y>.
- Wildlife, Washington Department of Fish and. "Karelian Bear Dog Program." <https://wdfw.wa.gov/enforcement/kbd/cash.html>; <https://www.inlander.com/spokane/meet-washington-states-karelian-bear-dogs/Slideshow/2772624> (2018).

- Wilson, S. M., E. H. Bradley, and G. A. Neudecker. "Learning to Live with Wolves: Community-Based Conservation in the Blackfoot Valley of Montana." [In English]. Article. *Human-Wildlife Interactions* 11, no. 3 (Win 2017): 245-57. <Go to ISI>://WOS:000422844800010.
- Zack, Conrad S., Bruce T. Milne, and William C. Dunn. "Southern Oscillation Index as an Indicator of Encounters between Humans and Black Bears in New Mexico." *Wildlife Society Bulletin (1973-2006)* 31, no. 2 (2003): 517-20. <https://doi.org/10.2307/3784333>. <http://www.jstor.org/stable/3784333>.



November 19, 2019

Joanna Prukop, Chair
New Mexico State Game Commission
1 Wildlife Way
Santa Fe, NM 87507

Mike Sloane, Director
New Mexico Department of Game and Fish
1 Wildlife Way
Santa Fe, NM 87507

Submitted via electronic mail: DGF-Bear-Cougar-Rules@state.nm.us

Re: Proposed Changes to Cougar Hunting Under Rule 19.31.11 NMAC

Dear Madame Chair Prukop, Director Sloane and Members of the Commission,

On behalf of the Humane Society of the United States (“HSUS”), Animal Protection of New Mexico (“APNM”), and each organization’s members and supporters in New Mexico, we respectfully submit these comments on the New Mexico Department of Game and Fish’s (“NMDGF”) most recent set of proposed changes to the Bear and Cougar Rule 19.31.11 NMAC, dated October 15, 2019 (“Proposal”). These comments will address the cougar-related provisions of the Proposal only; bear-related provisions will be addressed under separate cover.

As stated in previous comments our organizations submitted to the Commission on September 16, 2019,¹ we enthusiastically support the decisions to no longer allow traps and foot snares as a method of trophy hunting for cougar, and to no longer allow an additional two tags for cougar license holders who have already filled their two-cougar bag limit. For this reason, we ask that you please approve those portions of the Proposal.

However, we remain concerned about the Proposal’s revised cougar quotas (or “harvest limits”). Though we broadly support quota reductions statewide, the Proposal contains substantial errors that upwardly distort NMDGF’s presumed cougar densities for multiple zones and therefore the proposed quotas. NMDGF permits high levels of *trophy-hunting*² for cougars while operating with exaggerated, unsupported population estimates in most Cougar Management Zones (CMZs), threatening the sustainability of New Mexico’s cougar population. Such killing is counter to science-based large carnivore management and research shows that high rates of killing may increase cougar conflicts with humans, pets and livestock. Furthermore, NMDGF’s proposed quotas continue to exceed the trophy hunting quota thresholds recommended by the best available research on cougar management.³

¹ Attachment A.

² The hunting of cougars is done primarily for trophy purposes and is therefore considered “trophy hunting.” The Humane Society of the United States defines trophy hunting as the practice of killing—or pursuing with the intent to kill—wild animals to display their body parts, not primarily for food or subsistence (The Humane Society of the United States 2017).

³ R. A. Beausoleil et al., “Research to Regulation: Cougar Social Behavior as a Guide for Management,” *Wildlife Society Bulletin* 37, no. 3 (2013).

For the reasons that follow, we call on NMDGF to correct these errors prior to the issuance of future proposed rules, which we argue should be brought forth for consideration by the Commission and New Mexico public every two years, rather than the current four-year timeframe.

1. The Commission is legally obligated to establish science-based cougar management rules

Under New Mexico law, cougars must be managed based on the best available science and must be conserved for all citizens. It is axiomatic that “agencies are created by statute, and limited to the power and authority expressly granted or necessarily implied by those statutes.” *Qwest Corp. v. New Mexico Pub. Reg. Comm’n*, 140 N.M. 440, 446 (N.M. 2006). Thus “the Legislature, not the administrative agency, declares the policy and establishes...standards to which the agency must conform.” *State ex rel. Taylor v. Johnson*, 125 N.M. 343, 349 (N.M. 1998). Here, the New Mexico Legislature created the Commission in order “to provide an adequate...system for the protection of the game and fish of New Mexico” and “to provide for their...protection, regulation, and conservation...” N.M.S.A. § 17-1-1. In promulgating rules and regulations pertaining to hunting, the state legislature expressly directed the Commission to give “due regard” to “the distribution, abundance...and breeding habits” of particular species. N.M.S.A. § 17-1-26. And, like all New Mexico agencies, the Commission may not establish rules that are “not supported by substantial evidence” or that are enacted “arbitrary or capriciously.” N.M.S.A. § 39-3-1.1(D).

Taken together, the statutory scheme authorizing this rulemaking requires evidence-driven, scientific management that seeks to sustainably conserve wildlife populations. Adoption of a final rule that lacks evidentiary support or is contrary to the best available science would violate state law and be subject to vacatur by a reviewing court.

2. The Proposal relies on inflated and unsupported population estimates and hunting thresholds to set quotas in most CMZs

We support NMDGF’s efforts in recent years to acquire reliable cougar population estimates for CMZs B and F based on the best available science and using contemporary data. However, population estimates for the rest of the state still have not been obtained for this rulemaking cycle. Instead, management for the other 17 zones remain premised on the unsupported density derivations that plagued prior iterations of the Proposal. As was the case in previous rulemaking cycles, these arbitrary and inflated population densities have caused NMDF to propose unsustainably high quotas for 17 zones that collectively cover most of New Mexico’s land area and contain the majority of its cougar population.

In addition to relying on unsupported density derivations throughout most CMZs, NMDGF is proposing trophy hunting quotas that continue to exceed thresholds recommended by the best available science on cougar management. Washington Department of Fish and Wildlife biologists recommend a trophy hunting quota of no more than 14% to avoid overkill of cougars, based on the species’ sustainable growth rates.⁴ NMDGF are recommending quotas of 17% or more in almost every CMZ throughout the state. In the newly combined CMZs B and F, NMDGF is proposing a quota of 22%, undercutting its good work developing an updated population estimate by applying an unsustainably high target rate.

We strongly encourage the Commission to reduce quotas in those 17 zones for which no contemporary population estimates exist, as well reduce the quota in CMZ B, not exceeding a 14% population growth rate. Doing so is the only way to bring the Proposal in line with sound science, and avoid committing to another four years of inflated quotas in which unsustainable trophy hunting would overshadow and outweigh the positive steps that have been made for cougar management in CMZs B and F.

⁴ Ibid.

Moreover, the Proposal retreats – without explanation – from a scientifically sound change made in the 2008 version of the Cougar Rule.⁵ There, the Department applied a total sustainable mortality rate of 20% **from all sources** to each CMZ in the state, meaning that the limit applied to trophy hunting, removals for livestock conflict and bighorn sheep protection, and other sources of mortality. Trophy hunting quotas represented only a subset of this mortality limit, in some zones comprising as little as 0%-6% of the total mortality limit where high levels of non-hunting mortality were anticipated. But the current Proposal does away with this sensible approach, instead allocating the entire mortality limit (up to 22% in some CMZs) to trophy hunting. By failing to account for non-hunting sources of mortality, the Proposal risks allowing for substantial overharvest where high hunting mortality coincides with high mortality from other sources.

Finally, the derived cougar population sizes and densities that NMDGF has carried through from the prior Cougar Rule to this Proposal are based on erroneous assumptions about cougar population density that lack scientific support, and in fact contradict, all scientific cougar population ecology studies that have been conducted in New Mexico and the majority of studies conducted elsewhere in the western United States. In 2015, NMDGF submitted a grant application in which the Department admitted that its cougar population data was “neither adequate nor reliable,” and requested federal funds to conduct further studies, scheduled to be completed by 2020.⁶

Since then, new scientific evidence generated by Murphy et al. (2019) demonstrated that the cougar densities that NMDGF had been applying for management in CMZs B and F overestimated the population size by 102%. Consequently, the quotas that NMDGF has been applying to those CMZs since 2016 actually represents an 82% hunting rate, which is more than 3-fold greater than the 25% hunting rate that NMDGF claimed was the intended target in the previous Cougar Rule and represents considerable overhunting. In the current proposed rule, NMDGF has applied those research findings to appropriately revise the quota for CMZs B and F, reducing it by **66%** for a new combined zone B/F, which we support.

However, despite the above overwhelming evidence of substantial overhunting that NMDGF was completely unaware of prior to the study by Murphy et al. (2019), NMDGF continues to follow its previous practice of extrapolating densities from unknown sources to derive population sizes and set quotas for the other 17 CMZs. This approach relies on multiple unverified and likely implausible assumptions about cougar biology, prey resource availability, and habitat availability and use. Experts warn that “ignoring and/or not evaluating...assumptions” can lead to critical errors like authorization of unsustainable hunting on a mass scale that may have devastating results for the population.⁷

For example, more than thirty-seven percent of the 186,972 km² of total cougar habitat in New Mexico – 69,180 km² – is categorized by the Department as “excellent” habitat, with the derived population based on that categorization.⁸ Under the Department’s model, an increase in the applied density of a mere one-half more cougar per 100 km² for “excellent” habitat alone will raise the overall assumed state population estimate by 346 adult cougars, or about 10% above the Department’s already inflated number. In other words, even fractional shifts in the density estimates chosen can wildly swing population estimates – and consequently, hunting quotas and management goals – statewide.

⁵ Attachment B.

⁶ Attachment C.

⁷ Perry, T. W. Mountain lion habitat model and population estimate for New Mexico 2010. Study conducted for New Mexico Department of Game and Fish. 20Pp; Cougar Management Guidelines, *Cougar Management Guidelines* (Bainbridge Island, WA: WildFutures, 2005).

⁸ Perry, T. W. Mountain lion habitat model and population estimate for New Mexico 2010. Study conducted for New Mexico Department of Game and Fish. 20Pp.

In short, under NMDGF's model, even small errors in the densities applied to cougar habitat will lead to dangerously inflated quotas that risk population-level harm. In spite of their critical importance, NMDGF has elected in this Proposal to carry forward the previous Cougar Rule's unsupported and unreliable density extrapolations as the basis for setting quotas across 17 CMZs, even though better alternatives exist. In the absence of CMZ-specific density estimates, such as those produced by Murphy et al. (2019) for CMZs B and F, managers should err on the side of caution. Considering density estimates have not been produced for 17 CMZs, NMDGF should therefore apply the estimate of 0.84 cougar per 100 km² from Murphy et al. (2019) to those other 17 CMZs to set quotas. The estimate from that study is the only peer-reviewed estimate ever produced for cougars in New Mexico and was for the largest geographical study area that cougar density has been estimated for in New Mexico. This Comment will explain three separate but related reasons why NMDGF's legacy population estimates should not be relied upon to establish quotas during this rulemaking cycle.

a. NMDGF has failed to disclose all of the sources of its population estimates

NMDGF has never explained the methods or sources used to arrive at its derived and extrapolated population estimates for the 17 CMZs beyond B and F. Although it is clear that NMDGF relies on the habitat quality model developed by Perry (2010), the sources for the population densities plugged into that model to arrive at zone-specific population estimates remains a mystery.⁹ NMDGF assumes a cougar population density of 3.0-4.0 cougars per 100km² in "excellent" habitat, 1.2-1.7 in "good" habitat, 0.6-0.9 in "moderate" habitat, and 0.4-0.5 in "fair" habitat.¹⁰ NMDGF states that these figures are "derived from studies conducted in New Mexico," but does not specify which studies, or what method was used to "derive" these figures from the results of those studies. Perplexingly, only *one* population density study "conducted in New Mexico" even appears in the technical information accompanying the Proposal: Murphy et al. (2019), whose findings were only applied to CMZs B and F, but explicitly not the rest of the state. Thus, NMDGF has either misrepresented that its population density figures are based on studies conducted in New Mexico, or it has withheld key scientific information from the Commission and the public during this period. Neither is acceptable.

The remainder of the "technical information" provided by NMDGF offers no clarification as to the source of NMDGF's figures. Nowhere among its disorganized thousand pages does NMDGF indicate which studies it has relied on in deriving population estimates for the 17 CMZs outside of B and F, explain its rationale for preferring the results of some studies over others (or including some studies in the "technical information," but not others), or justify any departure from the scientific literature in the population estimates used to develop quotas. At best, the "technical information" represents a grab bag of studies that leaves the public guessing as to where – if anywhere – the actual support for NMDGF's figures lie. Proceeding despite this lack of scientific evidence would violate the Commission's duty to give "due regard" to "the distribution, abundance...and breeding habits" of cougars, N.M.S.A. § 17-1-26, as well as the prohibition on rules "not supported by substantial evidence" or that are enacted "arbitrary or capriciously." N.M.S.A. § 39-3-1.1(D).

A final unanswered question is when and for what reason NMDGF upwardly amended its density derivations, as reported in the original Perry (2010) study:

⁹ Technical Info Bear and Cougar Rule 2020-2024, p. 540

¹⁰ Technical Info Bear and Cougar Rule 2020-2024, p. 953.

Table 1: Unexplained rise in NMDGF cougar density estimates between 2010 and present

	“Excellent” habitat	“Good” habitat	“Moderate” habitat	“Fair” habitat
NMDGF Density Estimates per Perry (2010) (Technical Info, at 543)	2.0-3.0	0.89-1.2	0.4-0.6	0.2-0.3
Current NMDGF Density Estimates (Technical Info, at 953)	3.0-4.0	1.2-1.7	0.6-0.9	0.4-0.5

It appears that NMDGF, without explanation or evidence, subjectively increased the population densities used for extrapolation by a significant enough amount to have substantial effects on population estimates and quotas statewide (Table 1). At the very minimum, the Commission and the public deserve a detailed explanation for why NMDGF believes that such a dramatic shift was justified.

b. NMDGF’s population derivations and extrapolation are not supported by science

NMDGF’s unacceptable lack of transparency regarding the sources of its derived population densities used for extrapolation and quota setting for 17 CMZs might be explained by the near-total lack of scientific support for those figures: NMDGF cannot clearly or rationally explain them, because no justifiable explanation exists. Contrary to NMDGF’s bald assertion that its figures for the 17 CMZs beyond B and F are “derived from studies conducted in New Mexico,” those densities have no basis in scientific studies ever conducted in New Mexico. Instead, the derived and extrapolated densities for “excellent” habitat far exceed the findings of all known studies on cougar population density in New Mexico, including Logan et al.’s (1996) seminal study of cougars in the San Andres mountains, which was not even included in the technical information (Table 2):

Table 2: Comparing NMDGF estimates to studies conducted in New Mexico

	“Excellent” habitat	“Good” habitat	“Moderate” habitat	“Fair” habitat
Logan et al. (1996)	0.84-2.1 ¹¹			
Pittman (unpublished student thesis, 2010)	1.8-2.1 ¹²			
Murphy et al. (2019) ¹³	0.84			
NMDGF Derived Densities (Technical Info, at 953)	3.0-4.0	1.2-1.7	0.6-0.9	0.4-0.5

The application of excellent new estimates from Murphy et al. (2019) to CMZs B and F should have been a flashing-red warning sign that the Department’s population estimates for the other 17 CMZs are vastly overinflated. After incorporating the population estimate from Murphy et al. (2019), NMDGF substantially reduced the quotas for CMZs B and F (Table 3).

¹¹ Logan et al.’s study area in the San Andres mountains is classified as almost entirely “excellent” quality cougar habitat under the NMDGF / Perry (2010) model.

¹² Pittman’s study area on the eastern slope of the Black Range in the Aldo Leopold Wilderness of the Gila National Forest is classified as “excellent” quality cougar habitat under the NMDGF / Perry (2010) model.

¹³ The majority of the 15,000 km² study area investigated by Murphy *et al.* (2019) is classified as “excellent” or “good” habitat.

Table 3: Updated data leads to massive decrease in population estimate and quota in zones B and F

	Population Estimate (midpoint)	Quota
2016-2020 Cougar Rule (based on NMDGF density model)	349	74
Proposal (based on Murphy et al. (2019))	110 (68% reduction)	25 (66% reduction)

It is laudable and encouraging that NMDGF has taken steps to correct its figures for CMZs B and F. However, the adjustments necessary to bring quotas in line with high-quality research conducted in New Mexico reveal just how inflated NMDGF's prior estimates are, which it continues to rely upon for the 17 other CMZs. We also question why research results from Murphy et al (2019) were not also applied to CMZs C, E and S given that a portion of the estimation area included portions of these zones as well.

NMDGF's figures also far exceed the cougar population density numbers reported in the majority of their self-selected sample of studies and state management plans. The cases where the studies and plans seem to support NMDGF's high derived densities – like the Utah Cougar Management Plan (2015) – are only superficial; those studies include juvenile cougars, whereas NMDGF (along with most researchers and professional managers) does not. The danger of this apples-to-oranges comparison is well-documented: as Davidson et al. (2014) note, the inclusion of juveniles substantially inflates density numbers: “because of the inclusion of mobile juveniles, direct comparisons of density estimates from this study to density estimates obtained from different methods should be taken with caution. Adding mobile juveniles...could increase traditional population estimates...by approximately 30%.” When computing population sizes and densities for the purpose of setting trophy hunting quotas, dependent young should be excluded, because juveniles are not a legally trophy hunted cohort of cougar populations in New Mexico.

A myriad of other reasons, such as habitat type, prey availability, hunting pressure, access to private land, and methodological differences in data gathering can also affect density estimates. For example, data gathered through intensive marking studies likely represent minimum densities, as not all portions of a cougar population are sampled because some animals are harder to detect or occur in remote areas.¹⁴ Therefore, it is necessary for NMDGF to conduct ongoing research on the state's cougar population, expanding on the research conducted by Murphy et al. (2019) to accurately estimate cougar densities in all of New Mexico's CMZs.

c. NMDGF violates the precautionary principle by inflating population estimates when faced with uncertainty

We recognize that population estimates are necessarily imprecise and are not asking NMDGF to perform the impossible task of perfectly counting every cougar in the state. Where the Department errs is how it responds to this uncertainty. The precautionary principle counsels a conservative approach to wildlife management when only inexact information is available. This is especially the case where such information is used to establish trophy hunting quotas, because trophy hunting has additive and super-additive mortality effects to which cougars are particularly sensitive (as discussed in Section 5). Wolfe et al. (2015) warn: “We recommend a conservative management approach be adopted to preclude potential over-harvest . . . ”

¹⁴ Alldredge, M. W., Blecha, T. and Lewis, J. H. (2019), Less invasive monitoring of cougars in Colorado's front range. Wildl. Soc. Bull., 43: 222-230. doi:10.1002/wsb.971.

By erring on the side of inflated estimates (and thus overhunting) in the face of uncertainty about cougar populations, NMDGF ignores the precautionary principle and its specific application in the cougar management literature. It is clear that NMDGF's legacy density derivations are unsupported and overinflated; a conclusion that was confirmed by Murphy et al.'s (2019) research findings and NMDGF's subsequent, long-overdue quota revisions for CMZs B and F. The risks of re-committing to four more years of a trophy hunting regime based on unsupported densities is too high. The fact that zone-specific studies have not yet been completed throughout the state is not a valid reason to rely on the legacy numbers, which recent research findings demonstrate are substantially inflated. NMDGF should embrace the precautionary principle and proactively reduce its population estimates and trophy hunting quotas for the other 17 CMZs. We call upon NMDGF to rely on the 0.84 cougar per 100 km² estimate from Murphy et al. (2019), which was the most precise cougar density estimate ever produced throughout the species' range, as the foundation for deriving conservative cougar population estimates for the remaining CMZs until zone-specific studies can be conducted. We also recommend that the State Game Commission review and approve the Cougar and Bear Rule every two years, rather than every four, to adjust quotas as new research becomes available in the state.

3. Trophy hunting and predator control increases human-cougar conflict and livestock depredation

Research shows that cougar conflicts with humans, pets and livestock is higher in areas where trophy hunting occurs.¹⁵ Trophy hunting and predator control of cougars results in increased conflicts because cougars' social structure is destabilized.¹⁶ A recent review of predator-removal studies found that the practice is "typically an ineffective and costly approach to conflicts between humans and predators" and, as a long-term strategy, will result in failure.¹⁷ Instead, the authors concluded, non-lethal alternatives to predator removal, coupled with coexistence (husbandry techniques) may resolve conflicts.¹⁸

A Washington state study shows that as cougar complaints increased, wildlife officials lengthened seasons and increased bag limits to respond to what they believed was a rapidly growing cougar population. However, the public's perception of an increasing population and greater numbers of livestock depredations was actually the result of declining numbers of females and increasing numbers of males in the population.¹⁹ Heavy hunting of cougars skewed the sex-age structure of the population to a domination of young males by facilitating compensatory immigration, even though it resulted in no net change in the population size.²⁰

Study authors found that sport hunting of cougars to reduce complaints and livestock depredations had the opposite effect. Killing cougars disrupted their social structure and increased both complaints and livestock depredations.²¹ Peebles et al. (2013) write:

¹⁵ Kristine J. Teichman, Bogdan Cristescu, and Chris T. Darimont, "Hunting as a Management Tool? Cougar-Human Conflict Is Positively Related to Trophy Hunting," *BMC Ecology* 16, no. 1 (2016); R. J. Lennox et al., "Evaluating the Efficacy of Predator Removal in a Conflict-Prone World," *Biological Conservation* 224 (2018).

¹⁶ Kaylie A. Peebles et al., "Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations," *Plos One* 8, no. 11 (2013); Teichman, Cristescu, and Darimont, "Hunting as a Management Tool? Cougar-Human Conflict Is Positively Related to Trophy Hunting."; L. Mark Elbroch and Howard Quigley, "Social Interactions in a Solitary Carnivore," *Current Zoology* 63, no. 4 (2017).

¹⁷ Lennox et al., "Evaluating the Efficacy of Predator Removal in a Conflict-Prone World."

¹⁸ Lennox et al.

¹⁹ Peebles et al., "Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations.", citing Lambert et al. 2006 and Robinson et al. 2008

²⁰ Teichman, Cristescu, and Darimont, "Hunting as a Management Tool? Cougar-Human Conflict Is Positively Related to Trophy Hunting."

²¹ Peebles et al., "Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations."

... each additional cougar on the landscape increased the odds of a complaint of livestock depredation by about 5%. However, contrary to expectations, each additional cougar killed on the landscape increased the odds by about 50%, or an order of magnitude higher. By far, hunting of cougars had the greatest effects, but not as expected. Very heavy hunting (100% removal of resident adults in 1 year) increased the odds of complaints and depredations in year 2 by 150% to 340%.²²

Hunting disrupts cougars' sex-age structure and tilts a population to one that is comprised of younger males, who are more likely to engage in livestock depredations and infanticide than cougars in stable, older populations.²³

In March 2019, the Humane Society of the United States published a report on livestock losses from cougars using the U.S. Department of Agriculture's data.²⁴ For New Mexico's sheep and cattle ranchers, 2014 and 2015 data show that most losses came from maladies (illnesses, birthing problems, weather and theft) with far fewer losses coming from native carnivores and domestic dogs together.²⁵

In 2015, only 2.11 percent of unwanted cattle losses in New Mexico were from cougars, compared with more than 86 percent from maladies, according to the USDA.²⁶ In 2014, zero percent of unwanted sheep losses in New Mexico were from cougars.²⁷ Even with these low predation numbers, the USDA reports are likely exaggerated because of their faulty methodology; we compared U.S. Fish and Wildlife Service and states' data to the USDA and found the latter to be excessive in their attribution of livestock deaths to native carnivores and domestic dogs.²⁸

4. Trophy hunting cougars does not boost prey populations but it could exacerbate ungulate diseases

The best available science demonstrates that killing native carnivores is unlikely to boost ungulate populations. Numerous recent studies demonstrate that predator removal actions "generally had no effect" in the long term on ungulate populations.²⁹ Because ecological systems are complex, heavily persecuting cougars will fail to address the underlying malnutrition problems that deer face.³⁰

Furthermore, New Mexico's ungulates would benefit from further research on the effects of human development, including from oil and gas, and housing and road construction on habitat use and migration patterns. Residential and energy development has reduced all ungulates across the West, particularly on winter ranges.³¹ Although the precise connections between human development and population-level effects are still imperfectly understood, research has shown that development affects ungulate habitat use

²² Peebles et al., p.6

²³ Peebles et al.

²⁴ The Humane Society of the United States, "Government Data Confirm That Cougars Have a Negligible Effect on U.S. Cattle & Sheep Industries," (2019).

²⁵ The Humane Society of the United States (2019)

²⁶ The Humane Society of the United States (2019)

²⁷ The Humane Society of the United States (2019)

²⁸ The Humane Society of the United States (2019)

²⁹ T. D. Forrester and H. U. Wittmer, "A Review of the Population Dynamics of Mule Deer and Black-Tailed Deer *Odocoileus hemionus* in North America," *Mammal Review* 43, no. 4 (2013), p. 300, Lennox et al., "Evaluating the Efficacy of Predator Removal in a Conflict-Prone World."

³⁰ e.g. K. L. Monteith et al., "Life-History Characteristics of Mule Deer: Effects of Nutrition in a Variable Environment," *Wildlife Monographs* 186, no. 1 (2014); Forrester and Wittmer, "A Review of the Population Dynamics of Mule Deer and Black-Tailed Deer *Odocoileus hemionus* in North America."; K. F. Robinson et al., "Can Managers Compensate for Coyote Predation of White-Tailed Deer?," *Journal of Wildlife Management* 78, no. 4 (2014).

³¹ Heather E. Johnson et al., "Increases in Residential and Energy Development Are Associated with Reductions in Recruitment for a Large Ungulate," *Global Change Biology* (2016).

and migration patterns by causing location avoidance³² and creating “semi-permeable” barriers to migration routes.³³ Rather than relying on trophy hunting to attempt to bolster ungulate populations by reducing populations of cougars and other native carnivores, which will have negligible long-term benefit, NMDGF should be focusing its efforts on research to evaluate the effects of human development on prey populations and ways to mitigate those effects.

Additionally, cougars help maintain the health and viability of ungulate populations by preying on sick individuals, reducing the spread of disease such as chronic wasting disease (CWD) and brucellosis. Cougars also reduce vehicle collisions with deer, saving drivers \$1.1 million in collision costs annually in South Dakota.³⁴

Persecuting cougars will not help bighorn sheep recruitment, either. It is clear from the literature that bighorn sheep populations are in decline in the U.S. because of trophy hunting, disease from domestic sheep,³⁵ resource competition by livestock, and loss of habitat.³⁶ The Payette National Forest’s Update to the Draft Supplemental Environmental Impact Statement (January 2010), provides an excellent literature review on sheep die offs attributed to domestic livestock and recommend that wild and domestic sheep and goats be separated.³⁷

³² P.E. Lendrum et al., "Habitat Selection by Mule Deer During Migration: Effects of Landscape Structure and Natural-Gas Development," *Ecosphere* 3, no. 9 (2012).

³³ Hall Sawyer et al., "Mule Deer and Energy Development—Long-Term Trends of Habituation and Abundance," *Global Change Biology* (2017); H. Sawyer et al., "A Framework for Understanding Semi-Permeable Barrier Effects on Migratory Ungulates," *Journal of Applied Ecology* 2013 (2013).

³⁴ Sophie L. Gilbert et al., "Socioeconomic Benefits of Large Carnivore Recolonization through Reduced Wildlife-Vehicle Collisions," *Conservation Letters* (2016).

³⁵ “Severe pneumonia outbreak kills bighorn sheep: Lamb survival to be closely monitored for several years” <http://www.avma.org/onlnews/javma/may10/100501c.asp>

³⁶ Kerry Murphy and Toni Ruth, "Diet and Prey Selection of a Perfect Predator," in *Cougar: Ecology and Conservation*, ed. Maurice Hornocker and Sharon Negri (Chicago and London: University of Chicago Press, 2010); Kenneth A. Logan and Linda L. Sweeney, *Desert Puma: Evolutionary Ecology and Conservation of an Enduring Carnivore* (Washington, DC: Island Press, 2001); K. L. Monteith et al., "Effects of Harvest, Culture, and Climate on Trends in Size of Horn-Like Structures in Trophy Ungulates," *Wildlife Monographs* 183, no. 1 (2013); Becky Lomax, "Tracking the Bighorns," *Smithsonian* 38, no. 12 (2008); Luis S. Warren, *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America* (New Haven: Yale University Press, 1997).

³⁷ http://www.fs.fed.us/r4/payette/publications/big_horn/index.shtml. It states: Bighorn sheep are a New World species and are closely related to domestic sheep, which are an Old World species. Domestication and intense artificial selection have probably helped domestic sheep develop a resistance to important diseases (Jessup 1985). However, bighorn sheep can be highly susceptible to diseases carried by domestic sheep. A long history of large-scale, sudden, all-age die-offs in bighorn sheep exists across Canada and the United States, many associated with domestic animal contact (Shackleton 1999). Although limited knowledge of transmission dynamics exists (Garde et al. 2005), extensive scientific literature supports the relationship between disease in bighorn sheep populations and contact with domestic sheep, including both circumstantial evidence linking bighorn die-offs in the wild to contact with domestic animals and controlled experiments where healthy bighorn sheep exposed to domestic sheep displayed subsequently high mortality rates (Foreyt 1989, 1990, 1992; Foreyt et al. 1994; Onderka et al. 1988; Onderka and Wishart 1988; Garde et al. 2005). In a summary of risk to wild sheep from *Pasteurella* and *Mannheimia* spp., Garde et al. (2005) makes the following conclusions:

1. These bacteria can cause pneumonia in bighorn sheep, but there are benign commensal strains in the upper respiratory tract
2. Domestic sheep, goats, and llamas have been reported with these bacteria species
3. Wild sheep and mountain goats have been reported with these bacteria species
4. Transmission is by direct contact and aerosolization
5. These bacteria species do not persist in the environment
6. Acute-to-chronic die-offs in bighorn sheep can result in low to 100% mortality, although they can be present in healthy sheep
7. These bacteria are considered opportunistic and can result in pneumonia outbreaks
8. These bacteria can cause clinical disease in domestic sheep and goats, but are rarely primary pathogens.

Management Recommendations: The separation, either spatially, temporally, or both of bighorn sheep from domestic sheep has been recommended by leading bighorn sheep disease experts (Schommer and Woolever 2001, Garde 2005, Singer 2001). Experts also recommend developing site-specific solutions for each bighorn sheep population and domestic sheep allotment, and to develop a management strategy appropriate for the complexity of the management situation (Schommer and Woolever

Sawyer and Lindzey (2002) surveyed over 60 peer-reviewed articles concerning predator-prey relationships involving bighorn sheep and cougars, concluding that while predator control is often politically expedient, it often does not address underlying environmental issues, including habitat loss, loss of migration corridors, and inadequate nutrition.³⁸ In total, the best available science suggests that persecuting cougar populations is not a solution toward enhancing bighorn sheep numbers. That is because cougar predation upon bighorn sheep is a learned behavior conducted by only a few individuals who may not repeat their behavior.³⁹

NMDGF can better plan for bighorn sheep management by selecting relocation sites for bighorn sheep that have little stalking cover.⁴⁰ Escape terrain that contains cliffs, rocks, and foliage makes excellent ambush cover for a cougar⁴¹ and should be avoided. Also, the amount of cougar predation is generally greater on small-sized bighorn sheep populations (those that are under 100 individuals) than on other larger bighorn sheep populations.⁴² A host of authors reviewed by McKinney et al. (2006) and Ruth and Murphy (2010) recommend only limited cougar removals to benefit bighorn sheep populations.⁴³

5. NMDGF must no longer authorize a trophy hunting season on cougars as the practice is unsustainable and harmful to family groups

Trophy hunting is the greatest source of mortality for cougars throughout the majority of their range across the western and midwestern United States.⁴⁴ The practice is harmful to more than just the wild cats who are killed. Conservation biologists have derided this practice as unnecessary and wasteful. Batavia et al. (2018) write: Compelling evidence shows that the animals hunted as trophies have sophisticated levels of “intelligence, emotion and sociality” which is “profoundly disrupted” by trophy hunting.⁴⁵ For these reasons, NMDGF must not allow trophy hunting of cougars in our state:

- 1.) *Trophy hunting is unsustainable and cruel:* Large-bodied carnivores are sparsely populated across vast areas, invest in few offspring, provide extended parental care to their young, have a tendency

2001).

³⁸ Hall Sawyer and Frederick Lindzey, "Review of Predation on Bighorn Sheep (*Ovis Canadensis*)," *Prepared for Wyoming Animal Damage Management Board, Wyoming Domestic Sheep and Bighorn Sheep Interaction Working Group, Wyoming Game and Fish Department.* (2002).

³⁹ Logan and Sweanor, *Desert Puma: Evolutionary Ecology and Conservation of an Enduring Carnivore*; Ted McKinney, Thorry W. Smith, and James C. deVOS, "Evaluation of Factors Potentially Influencing a Desert Bighorn Sheep Population," *Wildlife Monographs* 164 (2006); Toni Ruth and Kerry Murphy, "Cougar-Prey Relationships," in *Cougar: Ecology and Conservation*, ed. Maurice Hornocker and Sharon Negri (Chicago and London: University of Chicago Press, 2010).

⁴⁰ Kerry Murphy and Toni Ruth, "Diet and Prey Selection of a Perfect Predator," *ibid.*; McKinney, Smith, and deVOS, "Evaluation of Factors Potentially Influencing a Desert Bighorn Sheep Population.", Sawyer et al., "Mule Deer and Energy Development—Long-Term Trends of Habituation and Abundance."

⁴¹ Ted McKinney et al., "Mountain Lion Predation of Translocated Desert Bighorn Sheep in Arizona," *Wildlife Society Bulletin* 34, no. 5 (2006).

⁴² Sawyer and Lindzey, "Review of Predation on Bighorn Sheep (*Ovis Canadensis*)."; McKinney, Smith, and deVOS, "Evaluation of Factors Potentially Influencing a Desert Bighorn Sheep Population."; Ruth and Murphy, "Cougar-Prey Relationships."

⁴³ "Cougar-Prey Relationships.", McKinney, Smith, and deVOS, "Evaluation of Factors Potentially Influencing a Desert Bighorn Sheep Population."; McKinney et al., "Mountain Lion Predation of Translocated Desert Bighorn Sheep in Arizona."

⁴⁴ See e.g., The Humane Society of the United States, "State of the Mountain Lion: A Call to End Trophy Hunting of America's Lion," (Washington, DC2017); Cougar Management Guidelines, *Cougar Management Guidelines*.

⁴⁵ Batavia et al. (2018) write: "...nonhuman animals are not only physically, socially, and emotionally disrupted [by trophy hunters], but also debased by the act of trophy hunting. Commoditized, killed, and dismembered, these individuals are relegated to the sphere of mere things when they are turned into souvenirs, oddities, and collectibles. We argue this is morally indefensible. Nonhuman animals are not mere objects but living beings with interests of their own, to whom we owe at least some basic modicum of respect (Regan, 1983). To transform them into trophies of human conquest is a violation of duty and common decency; and to accept, affirm, and even institutionalize trophy hunting, as the international conservation community seems to have done, is to aid and abet an immoral practice." Authors then argue that trophy hunting cannot be "presumed [to be] integral to conservation success."

towards infanticide, females limit reproduction, and social stability promotes their resiliency.⁴⁶ Human persecution affects their social structure⁴⁷ and harms their persistence.⁴⁸

Research shows that trophy hunting results in *additive mortality*—trophy hunters increase the total mortality to levels that far exceed what would occur naturally.⁴⁹ In fact, the effect of human persecution is “super additive,” meaning that hunter kill rates on large carnivores has a multiplier effect on the ultimate increase in total mortality over what would occur in nature due to intraspecific strife, starvation, breeder loss, social disruption and its indirect effects, including increased infanticide and decreased recruitment of their young.⁵⁰ When trophy hunters remove the stable adult cougars from a population, it encourages subadult males to immigrate, leading to greater aggression between cats and mortalities to adult females and subsequent infanticide.⁵¹

- 2.) *Trophy hunting is particularly harmful to kittens and their mothers:* In heavily hunted populations, female cougars experience higher levels of intraspecific aggression (fights with other cats) resulting in predation on themselves and their kittens.⁵² Over-hunting harms a population’s ability to recruit new members if too many adult females are removed.⁵³ A Utah study showed that trophy hunting

⁴⁶ e.g., A. D. Wallach et al., "What Is an Apex Predator?," *Oikos* 124, no. 11 (2015); R. B. Wielgus et al., "Effects of Male Trophy Hunting on Female Carnivore Population Growth and Persistence," *Biological Conservation* 167 (2013); D. Stoner, M. L. Wolfe, and D. Choate, "Cougar Exploitation Levels in Utah: Implications for Demographic Structure, Population Recovery, and Metapopulation Dynamics," *Journal of Wildlife Management* 70 (2006); S. Creel et al., "Questionable Policy for Large Carnivore Hunting," *Science* 350, no. 6267 (2015); J. L. Weaver, P. C. Paquet, and L. F. Ruggiero, "Resilience and Conservation of Large Carnivores in the Rocky Mountains," *Conservation Biology* 10, no. 4 (1996).

⁴⁷ Stoner, Wolfe, and Choate, "Cougar Exploitation Levels in Utah: Implications for Demographic Structure, Population Recovery, and Metapopulation Dynamics."; Peebles et al., "Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations."; Wallach et al., "What Is an Apex Predator?"; Heather M. Bryan et al., "Heavily Hunted Wolves Have Higher Stress and Reproductive Steroids Than Wolves with Lower Hunting Pressure," *Functional Ecology* (2014); C. T. Darimont et al., "Human Predators Outpace Other Agents of Trait Change in the Wild," *Proceedings of the National Academy of Sciences of the United States of America* 106, no. 3 (2009); Sterling D. Miller et al., "Trends in Intensive Management of Alaska's Grizzly Bears, 1980-2010," *Journal of Wildlife Management* 75, no. 6 (2011).

⁴⁸ Chris T. Darimont et al., "The Unique Ecology of Human Predators," *Science* 349, no. 6250 (2015).

⁴⁹ J. A. Vucetich, D. W. Smith, and D. R. Stahler, "Influence of Harvest, Climate and Wolf Predation on Yellowstone Elk, 1961-2004," *Oikos* 111, no. 2 (2005); G. J. Wright et al., "Selection of Northern Yellowstone Elk by Gray Wolves and Hunters," *Journal of Wildlife Management* 70, no. 4 (2006); L. L. Eberhardt et al., "A Seventy-Year History of Trends in Yellowstone's Northern Elk Herd," *ibid.* 71, no. 2 (2007); Darimont et al., "The Unique Ecology of Human Predators."

⁵⁰ Scott Creel and Jay Rotella, "Meta-Analysis of Relationships between Human Offtake, Total Mortality and Population Dynamics of Gray Wolves (*Canis Lupus*)," *PLoS ONE* 5, no. 9 (2010); D. E. Ausband et al., "Recruitment in a Social Carnivore before and after Harvest," *Animal Conservation* 18, no. 5 (2015); Darimont et al., "The Unique Ecology of Human Predators."

⁵¹ H. S. Robinson and R. Desimone, "The Garnet Range Mountain Lion Study: Characteristics of a Hunted Population in West-Central Montana: Final Report," *Montana Fish, Wildlife & Parks* (2011); H. S. Robinson et al., "A Test of the Compensatory Mortality Hypothesis in Mountain Lions: A Management Experiment in West-Central Montana," *Journal of Wildlife Management* 78, no. 5 (2014); H. S. Cooley et al., "Does Hunting Regulate Cougar Populations? A Test of the Compensatory Mortality Hypothesis," *Ecology* 90, no. 10 (2009); Wielgus et al., "Effects of Male Trophy Hunting on Female Carnivore Population Growth and Persistence."; C. M. S. Lambert et al., "Cougar Population Dynamics and Viability in the Pacific Northwest," *Journal of Wildlife Management* 70 (2006); Teichman, Cristescu, and Darimont, "Hunting as a Management Tool? Cougar-Human Conflict Is Positively Related to Trophy Hunting."

⁵² D. C. Stoner et al., "Dispersal Behaviour of a Polygynous Carnivore: Do Cougars Puma Concolor Follow Source-Sink Predictions?," *Wildlife Biology* 19, no. 3 (2013); Wielgus et al., "Effects of Male Trophy Hunting on Female Carnivore Population Growth and Persistence."; Stoner et al., "Dispersal Behaviour of a Polygynous Carnivore: Do Cougars Puma Concolor Follow Source-Sink Predictions?."

⁵³ C. R. Anderson and F. G. Lindzey, "Experimental Evaluation of Population Trend and Harvest Composition in a Wyoming Cougar Population," *Wildlife Society Bulletin* 33, no. 1 (2005).

adult females orphans their kittens, leaving them to die by infanticide, dehydration, malnutrition, and/or exposure.⁵⁴ Kittens are reliant upon their mothers beyond 12 months of age.⁵⁵

- 3.) *Trophy hunting harms entire cougar communities:* A recent study on cougars in the Teton region of Wyoming shows that cougars are quite social animals and live in “communities,” with females sharing kills with other females, their kittens and even with the territorial adult males. In return for these meals, the adult males protect the females and their kittens from incoming, competing subadult males.⁵⁶ Disrupting these communities leads to deadly intraspecific strife, including infanticide on the kittens, and social chaos within the family groups.⁵⁷ Trophy hunting destabilizes cougar populations, which may cause increased conflicts with humans, pets and livestock.⁵⁸
- 4.) *Trophy hunting is unnecessary, as cougars are a self-regulating species:* Cougars occur at low densities relative to their primary prey, making them sensitive to bottom-up (prey declines) and top-down (human persecution) influences.⁵⁹ Their populations must stay at a smaller size relative to their prey’s biomass or risk starvation.⁶⁰ They do this by regulating their own numbers.⁶¹ When prey populations decline, so do cougar populations.⁶² Cougar populations also require expansive habitat, with individual cats maintaining large home ranges that overlap with one another.⁶³
- 5.) *Killing large numbers of cougars halts their ability to create trophic cascades in their ecosystems, which benefits a wide range of flora, fauna and people:* Cougars serve important ecological roles, including providing a variety of ecosystem services.⁶⁴ As such, conserving these large cats on the landscape creates a socio-ecological benefit that far offsets any societal costs.⁶⁵ Their protection and conservation has ripple effects throughout their natural communities. Researchers have found that by

⁵⁴ Stoner, Wolfe, and Choate, "Cougar Exploitation Levels in Utah: Implications for Demographic Structure, Population Recovery, and Metapopulation Dynamics."

⁵⁵ L. M. Elbroch and H. Quigley, "Observations of Wild Cougar (Puma Concolor) Kittens with Live Prey: Implications for Learning and Survival," *Canadian Field-Naturalist* 126, no. 4 (2012); L. Mark Elbroch et al., "Adaptive Social Strategies in a Solitary Carnivore," *Science Advances* 3, no. 10 (2017).

⁵⁶ "Adaptive Social Strategies in a Solitary Carnivore."

⁵⁷ Robinson and Desimone, "The Garnet Range Mountain Lion Study: Characteristics of a Hunted Population in West-Central Montana: Final Report."; Robinson et al., "A Test of the Compensatory Mortality Hypothesis in Mountain Lions: A Management Experiment in West-Central Montana."; Cooley et al., "Does Hunting Regulate Cougar Populations? A Test of the Compensatory Mortality Hypothesis."; Wielgus et al., "Effects of Male Trophy Hunting on Female Carnivore Population Growth and Persistence."; Lambert et al., "Cougar Population Dynamics and Viability in the Pacific Northwest."; Creel et al., "Questionable Policy for Large Carnivore Hunting."; Ausband et al., "Recruitment in a Social Carnivore before and after Harvest."; Darimont et al., "The Unique Ecology of Human Predators."

⁵⁸ Peebles et al., "Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations."

⁵⁹ Stoner, Wolfe, and Choate, "Cougar Exploitation Levels in Utah: Implications for Demographic Structure, Population Recovery, and Metapopulation Dynamics."

⁶⁰ I. A. Hatton et al., "The Predator-Prey Power Law: Biomass Scaling across Terrestrial and Aquatic Biomes," *Science* 349, no. 6252 (2015).

⁶¹ Wallach et al., "What Is an Apex Predator?."

⁶² Stoner, Wolfe, and Choate, "Cougar Exploitation Levels in Utah: Implications for Demographic Structure, Population Recovery, and Metapopulation Dynamics."

⁶³ K. Hansen, *Cougar: The American Lion* (Flagstaff, AZ: Northland Publishing, 1992); A. Kitchener, *The Natural History of the Wild Cats* (Ithaca, New York: Cornell University Press, 1991).

⁶⁴ e.g., Weaver, Paquet, and Ruggiero, "Resilience and Conservation of Large Carnivores in the Rocky Mountains."; W.J. Ripple and R.L. Beschta, "Linking a Cougar Decline, Trophic Cascade, and Catastrophic Regime Shift in Zion National Park," *Biological Conservation* 133 (2006); J. A. Estes et al., "Trophic Downgrading of Planet Earth," *Science* 333, no. 6040 (2011); L. Mark Elbroch and Heiko U. Wittmer, "Table Scraps: Inter-Trophic Food Provisioning by Pumas," *Biology Letters* 8, no. 5 (2012); L. Mark Elbroch et al., "Nowhere to Hide: Pumas, Black Bears, and Competition Refuges," *Behavioral Ecology* 26, no. 1 (2015); L. M. Elbroch et al., "Vertebrate Diversity Benefiting from Carrion Provided by Pumas and Other Subordinate Apex Felids," *Biological Conservation* 215 (2017); Christopher J. O'Bryan et al., "The Contribution of Predators and Scavengers to Human Well-Being," *Nature Ecology & Evolution* 2, no. 2 (2018).

⁶⁵ Gilbert et al., "Socioeconomic Benefits of Large Carnivore Recolonization through Reduced Wildlife-Vehicle Collisions."; O'Bryan et al., "The Contribution of Predators and Scavengers to Human Well-Being."

modulating deer populations, cougars prevented overgrazing near fragile riparian systems, resulting in greater biodiversity.⁶⁶ Additionally, carrion left from cougar kills feeds scavengers, beetles, foxes, bears and other wildlife species, further enhancing biodiversity.⁶⁷

6. Killing cougars is not economically sound or supported by the majority of Americans who want to see wildlife protected

Killing cougars deprives citizens of their ability to view or photograph wild cougars.⁶⁸ Nonconsumptive users are a rapidly growing stakeholder group who provide immense economic contributions to the communities in which they visit.⁶⁹ The U.S. Fish and Wildlife Service's 2016 wildlife-recreation report indicates that wildlife watchers nationwide have increased 20% from 2011, numbering 86 million and spending \$75.9 billion, while all hunters declined by 16%, with the biggest decline in big game hunter numbers, from 11.6 million in 2011 to 9.2 million in 2016.⁷⁰ Altogether, hunters spent \$25.6 billion in 2016, about one-third that spent by wildlife watchers (Table 4).⁷¹

Table 4: Wildlife Recreation Participation & Expenditures, U.S. Fish and Wildlife Service, 2011 vs. 2016 data			
	2011	2016	Percent Change
Wildlife Watcher Numbers	71.8M	86.0M	20
Wildlife Watcher Expenditures	\$59.1B	\$75.9B	28
All Hunter Numbers	13.7M	11.5M	-16
Big Game Hunter Numbers	11.6M	9.2M	-21
Hunter Expenditures	\$36.3B	\$25.6B	-29
Hunters by type	2011	2016	No. Change
Big Game	11.6M	9.2M	-2.4M
Small Game	4.5M	3.5M	-1M
Migratory Birds	2.6M	2.4M	-0.2M
Other animals	2.2M	1.3M	-0.9M

The public values cougars and views them as an indicator of healthy environments while posing little risk to people living near them.⁷² A new study indicates that Americans highly value wildlife, including top

⁶⁶ Ripple and Beschta, "Linking a Cougar Decline, Trophic Cascade, and Catastrophic Regime Shift in Zion National Park."; Elbroch and Wittmer, "Table Scraps: Inter-Trophic Food Provisioning by Pumas."

⁶⁷ Elbroch et al., "Vertebrate Diversity Benefiting from Carrion Provided by Pumas and Other Subordinate Apex Felids." Connor O'Malley et al., "Motion-Triggered Video Cameras Reveal Spatial and Temporal Patterns of Red Fox Foraging on Carrion Provided by Mountain Lions," *PeerJ* 6 (2018); Elbroch and Wittmer, "Table Scraps: Inter-Trophic Food Provisioning by Pumas."

⁶⁸ While rarely seen in the wild by the general public, wildlife photographers have brought cougars closer to us than ever before. Photographers such as Steve Winter (<https://www.stevewinterphoto.com/>) and Tom Mangelsen (<http://mangelsen.com/>) are helping people understand just how magnificent these iconic wild cats truly are.

⁶⁹ M. L. Elbroch et al., "Contrasting Bobcat Values," *Biodiversity and Conservation* (2017); U.S. Fish and Wildlife Service, "2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation: National Overview," ed. U.S. Fish and Wildlife Service (2017).

⁷⁰ "2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation," ed. U.S. Department of the Interior (2016); "2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation," ed. U.S. Department of the Interior (2011).

⁷¹ U.S. Department of the Interior (2016)

⁷² Harry C. Zinn et al., "Societal Preferences for Mountain Lion Management Along Colorado's Front Range. Colorado State University, Human Dimensions in Natural Resources Unit," *5th Mountain Lion Workshop Proceedings* (1996).

carnivores such as cougars, and are concerned about their welfare and conservation.⁷³ Surveys also show that the majority of Americans do not support trophy hunting.⁷⁴ Authorizing a trophy hunting season is not in the best interest of New Mexicans, who prefer that these large cats remain on the landscape, without threat of persecution.

7. Conclusion

The HSUS and APNM support the decisions to no longer allow traps and foot snares as a method of trophy hunting for cougar, and to no longer allow an additional two tags for cougar license holders who have already filled their two-cougar bag limit. Furthermore, while we support the reduction in cougar trophy hunting quotas, we are concerned that such reductions remain insufficient to prevent trophy hunters from killing cougars at unsustainable levels. NMDGF must address this issue prior to any future proposals on this Rule. We recommend the Rule be open for consideration on a two-year basis to adjust for updated research within New Mexico's CMZs that more accurately identify cougar densities in these regions. Thank you for the opportunity to comment.

Sincerely,

Elisabeth Jennings

Nicholas Arrivo

⁷³ Kelly A. George et al., "Changes in Attitudes toward Animals in the United States from 1978 to 2014," *Biological Conservation* 201 (2016).

⁷⁴ Remington Research Group, "Trophy Hunting: U.S. National Survey," (2015); The Humane Society of the United States, "State of the Mountain Lion: A Call to End Trophy Hunting of America's Lion."; "New Poll Reveals Majority of Americans Oppose Trophy Hunting Following Death of Cecil the Lion," news release, 2015, http://www.humanesociety.org/news/press_releases/2015/10/poll-americans-oppose-trophy-hunting-100715.html?referrer=https://www.google.com/; The Economist/YouGov, "Moral Acceptability of Various Behaviors - Hunting Animals for Sport," ed. The Economist (2018).

References

- Anderson, C. R., and F. G. Lindzey. "Experimental Evaluation of Population Trend and Harvest Composition in a Wyoming Cougar Population." *Wildlife Society Bulletin* 33, no. 1 (Spr 2005): 179-88.
- Ausband, D. E., C. R. Stansbury, J. L. Stenglein, J. L. Struthers, and L. P. Waits. "Recruitment in a Social Carnivore before and after Harvest." *Animal Conservation* 18, no. 5 (2015): 415-23.
- Beausoleil, R. A., G. M. Koehler, B.T. Maletzke, B.N. Kertson, and R.G. Wielgus. "Research to Regulation: Cougar Social Behavior as a Guide for Management." *Wildlife Society Bulletin* 37, no. 3 (2013): 680-88.
- Bryan, Heather M., Judit E.G. Smits, Lee Koren, Paul C. Paquet, Katherine E. Wynne-Edwards, and Marco Musiani. "Heavily Hunted Wolves Have Higher Stress and Reproductive Steroids Than Wolves with Lower Hunting Pressure." *Functional Ecology* (2014): 1-10.
- Cooley, H. S., R. B. Wielgus, G. M. Koehler, H. S. Robinson, and B. T. Maletzke. "Does Hunting Regulate Cougar Populations? A Test of the Compensatory Mortality Hypothesis." *Ecology* 90, no. 10 (Oct 2009): 2913-21.
- Cougar Management Guidelines. *Cougar Management Guidelines*. Bainbridge Island, WA: WildFutures, 2005.
- Creel, S., M. Becker, D. Christianson, E. Droge, N. Hammerschlag, M. W. Hayward, U. Karanth, *et al.* "Questionable Policy for Large Carnivore Hunting." *Science* 350, no. 6267 (Dec 2015): 1473-75.
- Creel, Scott, and Jay Rotella. "Meta-Analysis of Relationships between Human Offtake, Total Mortality and Population Dynamics of Gray Wolves (*Canis Lupus*)." *PLoS ONE* 5, no. 9 (2010).
- Darimont, C. T., S. M. Carlson, M. T. Kinnison, P. C. Paquet, T. E. Reimchen, and C. C. Wilmers. "Human Predators Outpace Other Agents of Trait Change in the Wild." *Proceedings of the National Academy of Sciences of the United States of America* 106, no. 3 (Jan 2009): 952-54.
- Darimont, Chris T., Caroline H. Fox, Heather M. Bryan, and Thomas E. Reimchen. "The Unique Ecology of Human Predators." *Science* 349, no. 6250 (2015): 858-60.
- Eberhardt, L. L., P. J. White, R. A. Garrott, and D. B. Houston. "A Seventy-Year History of Trends in Yellowstone's Northern Elk Herd." *Journal of Wildlife Management* 71, no. 2 (Apr 2007): 594-602.
- Elbroch, L. M., C. O'Malley, M. Peziol, and H. B. Quigley. "Vertebrate Diversity Benefiting from Carrion Provided by Pumas and Other Subordinate Apex Felids." *Biological Conservation* 215 (2017): 123-31.
- Elbroch, L. M., and H. Quigley. "Observations of Wild Cougar (Puma Concolor) Kittens with Live Prey: Implications for Learning and Survival." *Canadian Field-Naturalist* 126, no. 4 (Oct-Dec 2012): 333-35.
- Elbroch, L. Mark, Patrick E. Lendrum, Maximilian L. Allen, and Heiko U. Wittmer. "Nowhere to Hide: Pumas, Black Bears, and Competition Refuges." [In English]. *Behavioral Ecology* 26, no. 1 (2015): 247-54.
- Elbroch, L. Mark, Michael Levy, Mark Lubell, Howard Quigley, and Anthony Caragiulo. "Adaptive Social Strategies in a Solitary Carnivore." *Science Advances* 3, no. 10 (2017).
- Elbroch, L. Mark, and Howard Quigley. "Social Interactions in a Solitary Carnivore." *Current Zoology* 63, no. 4 (2017): 357-62.
- Elbroch, L. Mark, and Heiko U. Wittmer. "Table Scraps: Inter-Trophic Food Provisioning by Pumas." [In English]. *Biology letters* 8, no. 5 (2012 Oct 23 2012): 776-79.
- Elbroch, M. L., L. Robertson, K. Combs, and J. Fitzgerald. "Contrasting Bobcat Values." *Biodiversity and Conservation* (2017).
- Estes, J. A., J. Terborgh, J. S. Brashares, M. E. Power, J. Berger, W. J. Bond, S. R. Carpenter, *et al.* "Trophic Downgrading of Planet Earth." *Science* 333, no. 6040 (Jul 2011): 301-06.

- Forrester, T. D., and H. U. Wittmer. "A Review of the Population Dynamics of Mule Deer and Black-Tailed Deer *Odocoileus Hemionus* in North America." *Mammal Review* 43, no. 4 (Oct 2013): 292-308.
- George, Kelly A., Kristina M. Slagle, Robyn S. Wilson, Steven J. Moeller, and Jeremy T. Bruskotter. "Changes in Attitudes toward Animals in the United States from 1978 to 2014." *Biological Conservation* 201 (9// 2016): 237-42.
- Gilbert, Sophie L., Kelly J. Sivy, Casey B. Pozzanghera, Adam DuBour, Kelly Overduijn, Matthew M. Smith, Jiakou Zhou, Joseph M. Little, and Laura R. Prugh. "Socioeconomic Benefits of Large Carnivore Recolonization through Reduced Wildlife-Vehicle Collisions." *Conservation Letters* (2016).
- Hansen, K. *Cougar: The American Lion*. Flagstaff, AZ: Northland Publishing, 1992.
- Hatton, I. A., K. S. McCann, J. M. Fryxell, T. J. Davies, M. Smerlak, A. R. E. Sinclair, and M. Loreau. "The Predator-Prey Power Law: Biomass Scaling across Terrestrial and Aquatic Biomes." *Science* 349, no. 6252 (2015): doi:<http://0-dx.doi.org/libraries.colorado.edu/10.1126/science.aac6284>
- Johnson, Heather E., Jessica R. Sushinsky, Andrew Holland, Eric J. Bergman, Trevor Balzer, James Garner, and Sarah E. Reed. "Increases in Residential and Energy Development Are Associated with Reductions in Recruitment for a Large Ungulate." *Global Change Biology* (2016).
- Kitchener, A. . *The Natural History of the Wild Cats*. Ithaca, New York: Cornell University Press, 1991.
- Lambert, C. M. S., R.B. Wielgus, H.S. Robinson, D.D. Katnik, H.S. Cruickshank, R. Clarke, and J. Almack. "Cougar Population Dynamics and Viability in the Pacific Northwest." *Journal of Wildlife Management* 70 (2006): 246-54.
- Lendrum, P.E., C.R. Anderson, R.A. Long, J.G. Jie, and R.T. Bowyer. "Habitat Selection by Mule Deer During Migration: Effects of Landscape Structure and Natural-Gas Development." *Ecosphere* 3, no. 9 (2012): 82.
- Lennox, R. J., A. J. Gallagher, S. Cooke, and E. G. Ritchie. "Evaluating the Efficacy of Predator Removal in a Conflict-Prone World." *Biological Conservation* 224 (2018): 277-89.
- Logan, Kenneth A., and Linda L. Sweanor. *Desert Puma: Evolutionary Ecology and Conservation of an Enduring Carnivore*. Washington, DC: Island Press, 2001.
- Lomax, Becky. "Tracking the Bighorns." *Smithsonian* 38, no. 12 (2008): 21-24.
- McKinney, Ted, James C. deVOS, Warren B. Ballard, and Sue R. Boe. "Mountain Lion Predation of Translocated Desert Bighorn Sheep in Arizona." *Wildlife Society Bulletin* 34, no. 5 (2006): 1255-63.
- McKinney, Ted, Thorry W. Smith, and James C. deVOS. "Evaluation of Factors Potentially Influencing a Desert Bighorn Sheep Population." *Wildlife Monographs* 164 (2006): 1-36.
- Miller, Sterling D., John W. Schoen, Jim Faro, and David R. Klein. "Trends in Intensive Management of Alaska's Grizzly Bears, 1980-2010." [In English]. *Journal of Wildlife Management* 75, no. 6 (Aug 2011 2011): 1243-52.
- Monteith, K. L., V. C. Bleich, T. R. Stephenson, B. M. Pierce, M. M. Conner, J. G. Kie, and R. T. Bowyer. "Life-History Characteristics of Mule Deer: Effects of Nutrition in a Variable Environment." *Wildlife Monographs* 186, no. 1 (Jul 2014): 1-62.
- Monteith, K. L., R. A. Long, V. C. Bleich, J. R. Heffelfinger, P. R. Krausman, and R. T. Bowyer. "Effects of Harvest, Culture, and Climate on Trends in Size of Horn-Like Structures in Trophy Ungulates." *Wildlife Monographs* 183, no. 1 (Feb 2013): 1-28.
- Murphy, Kerry, and Toni Ruth. "Diet and Prey Selection of a Perfect Predator." Chap. 9 In *Cougar: Ecology and Conservation*, edited by Maurice Hornocker and Sharon Negri, 118-37. Chicago and London: University of Chicago Press, 2010.
- O'Malley, Connor, L. Mark Elbroch, Patrick E. Lendrum, and Howard Quigley. "Motion-Triggered Video Cameras Reveal Spatial and Temporal Patterns of Red Fox Foraging on Carrion Provided by Mountain Lions." [In eng]. *PeerJ* 6 (2018): e5324-e24.

- O'Bryan, Christopher J., Alexander R. Brackowski, Hawthorne L. Beyer, Neil H. Carter, James E. M. Watson, and Eve McDonald-Madden. "The Contribution of Predators and Scavengers to Human Well-Being." *Nature Ecology & Evolution* 2, no. 2 (2018/02/01 2018): 229-36.
- Peebles, Kaylie A., Robert B. Wielgus, Benjamin T. Maletzke, and Mark E. Swanson. "Effects of Remedial Sport Hunting on Cougar Complaints and Livestock Depredations." *Plos One* 8, no. 11 (Nov 19 2013).
- Remington Research Group. "Trophy Hunting: U.S. National Survey." (2015).
- Ripple, W.J., and R.L. Beschta. "Linking a Cougar Decline, Trophic Cascade, and Catastrophic Regime Shift in Zion National Park." *Biological Conservation* 133 (2006): 397-408.
- Robinson, H. S., and R. Desimone. "The Garnet Range Mountain Lion Study: Characteristics of a Hunted Population in West-Central Montana: Final Report." *Montana Fish, Wildlife & Parks* (2011): 102pp.
- Robinson, H. S., R. Desimone, C. Hartway, J. A. Gude, M. J. Thompson, M. S. Mitchell, and M. Hebblewhite. "A Test of the Compensatory Mortality Hypothesis in Mountain Lions: A Management Experiment in West-Central Montana." *Journal of Wildlife Management* 78, no. 5 (Jul 2014): 791-807.
- Robinson, K. F., D. R. Diefenbach, A. K. Fuller, J. E. Hurst, and C. S. Rosenberry. "Can Managers Compensate for Coyote Predation of White-Tailed Deer?". *Journal of Wildlife Management* 78, no. 4 (May 2014): 571-79.
- Ruth, Toni, and Kerry Murphy. "Cougar-Prey Relationships." In *Cougar: Ecology and Conservation*, edited by Maurice Hornocker and Sharon Negri, 138-62. Chicago and London: University of Chicago Press, 2010.
- Sawyer, H., M.J. Kauffman, A.D. Middleton, T.A. Morrison, R.M. Nielson, and T.B. Wyckoff. "A Framework for Understanding Semi-Permeable Barrier Effects on Migratory Ungulates." *Journal of Applied Ecology* 2013 (2013): 50.
- Sawyer, Hall, Nicole M. Korfanta, Ryan M. Nielson, Kevin L. Monteith, and Dale Strickland. "Mule Deer and Energy Development—Long-Term Trends of Habituation and Abundance." *Global Change Biology* (2017): n/a-n/a.
- Sawyer, Hall, and Frederick Lindzey. "Review of Predation on Bighorn Sheep (*Ovis Canadensis*). Prepared for Wyoming Animal Damage Management Board, Wyoming Domestic Sheep and Bighorn Sheep Interaction Working Group, Wyoming Game and Fish Department. (2002).
- Stoner, D. C., M. L. Wolfe, C. Mecham, M. B. Mecham, S. L. Durham, and D. M. Choate. "Dispersal Behaviour of a Polygynous Carnivore: Do Cougars *Puma Concolor* Follow Source-Sink Predictions?". *Wildlife Biology* 19, no. 3 (Sep 2013): 289-301.
- Stoner, D., M. , M.L. Wolfe, and D. Choate. "Cougar Exploitation Levels in Utah: Implications for Demographic Structure, Population Recovery, and Metapopulation Dynamics." *Journal of Wildlife Management* 70 (2006): 1588-600.
- Teichman, Kristine J., Bogdan Cristescu, and Chris T. Darimont. "Hunting as a Management Tool? Cougar-Human Conflict Is Positively Related to Trophy Hunting." *BMC Ecology* 16, no. 1 (2016): 44.
- The Economist/YouGov. "Moral Acceptability of Various Behaviors - Hunting Animals for Sport." edited by The Economist, 2018.
- The Humane Society of the United States. "Government Data Confirm That Cougars Have a Negligible Effect on U.S. Cattle & Sheep Industries." 2019.
- . "New Poll Reveals Majority of Americans Oppose Trophy Hunting Following Death of Cecil the Lion." news release, 2015, http://www.humanesociety.org/news/press_releases/2015/10/poll-americans-oppose-trophy-hunting-100715.html?referrer=https://www.google.com/.
- . "State of the Mountain Lion: A Call to End Trophy Hunting of America's Lion." Washington, DC, 2017.
- U.S. Fish and Wildlife Service. "2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation." edited by U.S. Department of the Interior, 2011.

- . "2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation." edited by U.S. Department of the Interior, 2016.
- . "2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation: National Overview." edited by U.S. Fish and Wildlife Service, 2017.
- Vucetich, J. A., D. W. Smith, and D. R. Stahler. "Influence of Harvest, Climate and Wolf Predation on Yellowstone Elk, 1961-2004." *Oikos* 111, no. 2 (Nov 2005): 259-70.
- Wallach, A. D., I. Izhaki, J. D. Toms, W. J. Ripple, and U. Shanas. "What Is an Apex Predator?". *Oikos* 124, no. 11 (Nov 2015): 1453-61.
- Warren, Luis S. *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America* New Haven: Yale University Press, 1997.
- Weaver, J. L., P. C. Paquet, and L. F. Ruggiero. "Resilience and Conservation of Large Carnivores in the Rocky Mountains." *Conservation Biology* 10, no. 4 (Aug 1996): 964-76.
- Wielgus, R. B., D. E. Morrison, H. S. Cooley, and B. Maletzke. "Effects of Male Trophy Hunting on Female Carnivore Population Growth and Persistence." [In English]. *Biological Conservation* 167 (Nov 2013): 69-75.
- Wright, G. J., R. O. Peterson, D. W. Smith, and T. O. Lemke. "Selection of Northern Yellowstone Elk by Gray Wolves and Hunters." *Journal of Wildlife Management* 70, no. 4 (Aug 2006): 1070-78.
- Zinn, Harry C., Michael J. Manfredo, Jim Jones, and Linda Sikorowski. "Societal Preferences for Mountain Lion Management Along Colorado's Front Range. Colorado State University, Human Dimensions in Natural Resources Unit." *5th Mountain Lion Workshop Proceedings* (1996).



NEW MEXICO FARM & LIVESTOCK BUREAU

2220 N. Telshor Blvd • Las Cruces, New Mexico 88011 • (575) 532-4700 • Fax (575) 532-4710

New Mexico Department of Game & Fish
1 Wildlife Way
Santa Fe, NM 87507

August 15, 2019

Re: 2019 Bear and Cougar Rule Development

New Mexico Farm & Livestock Bureau (NMF&LB) submit these comments on behalf of our 19,000 member-families. NMF&LB is New Mexico's largest agriculture organization, representing members involved in all aspects of agriculture from dairy, livestock, fruits and vegetables. Our mission is to promote and protect agriculture in the great State of New Mexico. We are charged with the important task of representing our members' interests when it comes to impeding regulations.

NMF&LB does not support the removal of sport trapping from the current rule. Sport trapping provides many benefits for New Mexico farmers and ranchers. Mountain lions are large predators that can devastate livestock very quickly. Sport trapping is a valuable tool used to keep those predators from harming livestock and humans. Removing sport trapping can also have a negative economic impact for farmers and ranchers as hunts contribute to their operational revenue.

Additionally, NMF&LB would appreciate the department's consideration in taking steps to reduce the number of bear and lion by increasing license permits and extending hunting dates for both species. Many of our farmers and ranchers are being overrun by these predators causing them to lose thousands of dollars from livestock losses every year.

The New Mexico Farm & Livestock Bureau appreciates the opportunity to share the concerns of our organization. We must work together to find a balance between wildlife and livestock. We respectfully request that these comments and the concerns of farmers and ranchers affected by these predators be taken into consideration as the Bear and Cougar rule is revisited.

Respectfully submitted,

Tanner Anderson





August 6, 2019

Commissioner Joanna Prukop
PO BOX 25112
Santa Fe, NM 87504

Dear Chairwoman Prukop:

As it has for more than 40 years, the Sportsmen's Alliance continues to be the leading organization fighting coast to coast against any action that threatens hunting, fishing or trapping, while at the same time, proactively advancing and supporting initiatives that allow more opportunities for sportsmen and women. The Sportsmen's Alliance, on behalf of its New Mexico members, urge you to oppose Bear and Cougar Rule Development 19.31.11, a regulation proposal which would ban the use of commonly used traps and snares on private land and state trust lands which make up roughly 98 percent of hunt-able public land.

According to the New Mexico Department of Game & Fish (NMDGF) there is an estimated population of 3,000 to 4,000 cougars residing in the state. Additionally, cougar harvest numbers which are set by the New Mexico State Game Commission, have not reached state maximum thresholds in years. As a result, cougar numbers continue to increase becoming a greater threat to people, pets and livestock. Grazing is currently utilized on state trust lands by cattle ranchers and provides funding to the office of the New Mexico State Lands Office for education and other public school funding. According to the United States Department of Agriculture, cougars ranked the 3rd top predator for cattle related deaths in 2015. As apex predators, cougars have a great impact on iconic wildlife as well including mule deer, pronghorn antelope and elk.

Trapping offers a safe way to help mitigate depredation and lowers unwanted interactions between cougars, pets, people and livestock. Banning trapping on private property and the nearly 9 million acres of state trust lands will only create an environment where there is a greater risk of unwanted encounters with cougars.

It is for these reasons we would ask you to stand with the Sportsmen's Alliance and oppose Bear and Cougar Rule Development 19.31.11, regulation proposal. I would be happy to discuss the matter with you further.

Sincerely,

A handwritten signature in black ink, appearing to read "Luke Houghton", with a stylized flourish at the end.

Luke Houghton

[Redacted]

[Redacted]
[Redacted] [Redacted] [Redacted]
[Redacted]



CC: Commissioner Roberta Salazar-Henry
Commissioner Jimmy Bates
Commissioner Gail Cramer
Commissioner Tirzio Lopez
Commissioner David Soules
Commissioner Jeremy Vesbach

[REDACTED]



Washington cougar attack

A cougar attack near North Bend, Washington on May 18, 2018 resulted in the first human death from a cougar attack in the U.S. state of Washington in more than 90 years. The cougar initially attacked then fled. It came back for the fatal attack. Two cyclists were in a wooded area when a cougar bit the head of one man. [Wikipedia](#)

Videos



www.cnn.com

YouTube · USA TODAY



YouTube · The



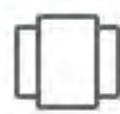
Home



Updates



Search



Recent



More



cougar attacks



ALL

VIDEOS

NEWS

IMAGES

SHOPPING

Washington cougar attack



A cougar attack near North Bend, Washington on May 18, 2018 resulted in the first human death from a cougar attack in the U.S. state of Washington in more than 90 years. The cougar initially attacked then fled. It came back for the fatal attack. Two cyclists were in a wooded area when a cougar bit the head of one man. [Wikipedia](#)

Videos

YouTube · USA TODAY

YouTube · The



Home



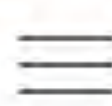
Updates



Search



Recent



More



FOR THE FIRST TIME IN OREGON, POLICE SAY
A COUGAR HAS KILLED SOMEONE IN THE WILD



50%Off Last Day
Ad permanentify....

SHOP NOW



Oregon's first known fatal cougar attack in the wild

26K views



74



23



Share



Download



Save



The Oregonian
141K subscribers

SUBSCRIBE

Up next

Autoplay



Email Marketing
Software - Find T...



Ad discoverlocal.net





cougar attacks



instinct to chase, or if a person plays dead. Standing still however may cause the cougar to consider a person easy prey.

Before 1970

1970s

1980s

1990s

2000s



Outside Online › ... › Adventure

Are Mountain Lion Attacks on the Rise? | Outside Online

Apr 11, 2019 · Mountain lions sure are in the news a lot, right? There was the deadly attack outside Seattle last May, the woman who ...



TOP STORIES

USA TODAY

'I tried to get it in the eye'



Home



Updates



Search



Recent



More



cougar attacks



TOP STORIES

 **USA TODAY**

'I tried to get it in the eye':
Boy, 8, mauled by mountain
lion, fought it off with a stick

1 day ago

**Coloradoan.**

'I tried to get it in the eye':
Colorado boy mauled by
mountain lion recalls attack

1 day ago

[More News](#)

OregonLive.com › news › 2019/06

Child escapes cougar attack in Washington
mostly unscathed ...



Home



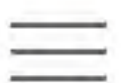
Updates



Search



Recent




More



cougar attacks



about cougar or mountain lion sightings in areas where the cats ...

The Spokesman-Review 

Cougar attacks child in Leavenworth; boy's dogs drive big cat off

Jun 3, 2019 · A cougar attacked a child Saturday evening in a city park in Leavenworth, Wash. The boy's two dogs fought ...



Outdoor Life › killer-cougars

Cougar Attacks Family | Outdoor Life

The myths and realities of cougar attacks in the great outdoors.



Home



Updates



Search



Recent



More

From: Pamela Canyonrivers [REDACTED]
Date: August 8, 2019 3:18:10 PM MDT
To: DGF-Bear-Cougar-Rules@state.nm.us
Subject: **Bear and Cougar trapping and killing rules**

August 8, 2019
Pamela Marshall
[REDACTED]

NM Game and Fish Hearing re Bears and Cougars:

I am unable to attend your hearings on this issue . We need and want a hearing in Santa Fe.

This issue is of utmost importance to me and our precious wildlife in New Mexico! I ask that you count my voice as one in OPPOSITION to the recreational trapping, hunting and killing of Bears and Cougars!! And that you update your policies to eliminate hunting and trapping. This is almost 2020. And Climate disruption from global warming is upon us and our wildlife here in New Mexico and elsewhere is in the survival boat with us not against us.

Heres why:

1. Our state wildlife is a precious resource and these magnificent animals do not deserve nor should they be hunted and killed for sport. This is 2019 and we are no longer a hunting and gathering society. It appears that some employees at Fish and Game, are so uneducated as to believe that we are an itinerant band of traveling peoples hunting for their livelihood. Please educate them. Our civilization has grown carelessly and edged our wildlife out of their habitat and reduced their food supply. (see also Climate Disruption below) .

Our pesticides are killing our bee pollinators and thus are source of honey which we as well as bears eat. Our forest fires push them out of their habitat as well as lack of water and shelter and food.

Our highways, like I-25 have no wildlife crossings to protect them from semi trucks and other vehicles when crossing to get to water and food from their dens. Wildlife does not recognize our foolish roads and borders, only their habitual crossings and seasonal passages.. SEND HUNTERS TO THE STORE TO BUY MEAT AND STOP GLORIFYING THE KILLING OF WILDLIFE!

2. CLIMATE DISRUPTION IS CAUSING MASSIVE MELTING OF EARTHS GLACIERS. THIS AFFECTS US HERE IN NEW MEXICO EVEN THOUGH WE DONT HAVE GLACIERS.

GLACIAL MELTING AND RUNOFF PROVIDE WATER FOR VEGETATION AD WILDLIFE AT LOWER ELEVATIONS WHERE SMALLER WILDLIFE LIVE. SOME OF THIS WILDLIFE IS FOOD FOR COUGARS AND BEARS, ETC. THE COLDER

AIR FROM THE GLACIAL ELEVATIONS IS WARMING AND THIS PROMPTS MORE TREES TO GROW AT HIGHER ELEVATIONS AND THEY REQUIRE MORE WATER. THE WARMER AIR AND TEMPERATURES ARE NOT GOOD FOR CERTAIN WILDLIFE SPECIES. COUNTLESS NUMBERS OF WILDLIFE AND BIRDS ASWELL AS FISH ARE BECOMING EXTINCT DUE TO CLIMATE DISRUPTION CAUSED BY GLOBAL WARMING. THESE FACTORS ALONE ARE ENOUGH TO CHALLENGE BEARS AND COUGARS. AND SERIOUSLY THREATEN THEIR SURVIVAL. Climate Disruption will not only control populations, it is rendering many species extinct. Trapping, hunting and killing are not needed to control populations of bears and cougars. There is already a natural progression toward extinction occurring.

3. WE DO NOT NEED TRAPPING, POISONING AND KILLING TO CONTROL POPULATION OF THESE MAGNIFICENT ANIMALS. TRAPPING AND POISONING AND KILLING ARE NOT ONLY CRUEL DEATHS, THEY KILL CUBS AND FEMALES TENDING BABIES. THIS IS AN INHUMANE , OUTDATED PRACTICE. AND ONCE AGAIN I IMPORE YOU TO STOP PANDERING TO RANCHERS. THERE ARE A NUMBER OF RESEARCHED, TRIED AND PROVEN STRATEGIES AND TECHNIQUES TO PROTECT LIVESTOCK AND CALVES, ETC. WITHOUT RESORTING TO TRAPPING, POISONING AND HUNTING. WE HAVE EACH YEAR BROUGHT THIS INFORMATION REGARDING THESE ALTERNATIVE METHODS TO THE LEGISLATURE. PLEASE EDUCATE YOURSELVES!

4. THE FISH AND GAME DIVISION NEEDS TO REVIEW ITS MISSION AND WE AS CITIZENS WILL CHALLENGE YOUR MISSION AND ITS NEED FOR REFORM IN THE COMING YEARS JUST AS SOON AS TRUMP LEAVES OFFICE ONE WAY OR ANOTHER.YOUR MISSION IS NOT IN CONCERT WITH THIS PLANETS CURRENT NEEDS AND AGENDA. YOU NEED REFORM AND WE INTEND TO MAKE THAT HAPPEN. PLEASE RECRUIT PROGRESSIVE, AWARE AND EDUCATED PERSONNEL.

5. YOUR AGENCY NEEDS TO BE EDUCATING CITIZENS HOW AND WHY TO LEARN TO LIVE POSITIVELY WITH OUR DWINDLING WILDLIFE. I LIVE ON THE EDGE OF THE NATIONAL FOREST IN EAST PECOS. I KNOW WHAT IT IS TO LIVE WITH BEARS, FOXES, COYOTES, RACONS, SKUNKS , WILD TURKEYS AND COUGARS(OF WHICH I HAVE SEEN NONE) WHILE THE OTHERS I WITNESS AND HONOR. BUT DO NOT ENCOURAGE TO LINGER . THEY COME FOR WATER AND FOR FRUIT AND PROBABLY THE BIRD SEED BECAUSE THEY ARE HUNGRY AND THIRSTY. I RESPECT THEM. THEY WERE HERE LONG BEFORE US. PLEASE TEACH CITIZENS TO HONOR AND RESPECT WILDLIFE, NOT TRAP AND KILLS WILDLIFE FOR SENSELESS EGO SATISFYING SPORT. I CAN GENUINELY SAY THAT I HAVE ABSOLUTELY NO RESPECT FOR YOUR TRAPPERS AND HUNTERS AND THOSE YOUR POLICIES ATTRACT FROM OUT OF STATE ON HUNTING SPREES. THOUSANDS OF PEOPLE GO TO NATIONAL PARKS TO WITNESS WILDLIFE THEY DO NOT WISH TO KILL. THIS RECREATION OF RESPECT AND HONOR AND DESIRE TO SUPPORT IS IN LARGER NUMBERS THAN THE SPORT OF WILDLIFE KILLING. RE -EDUCATE OUR CITIZENS THAT ARE OBSESSED WITH KILLING.

6. KNOWLEDGE OF THE ECOSYSTEM AS A WHOLE AND OF ITS SEPARATE AND INTERRELATED PARTS OF GENETICS, BREEDING, HABITAT, AND MIGRATION IS WHAT IS REQUIRED and all of these are now within the context and parameters of global warming and climate disruption. Please demonstrate your agency to be on the forefront of this awareness and take appropriate action for the survival of our planet, our species and its precious wildlife facing extinction, along with us.

7. Fight for universal survival and do not contribute to a dead planet that cannot sustain Life.

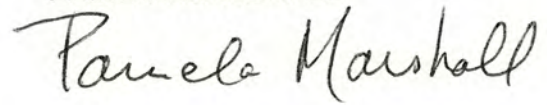
IN OTHER WORDS, GET WITH THE PLANETARY PROGRAM AND PULL YOUR HEADS OUT OF THE SAND. STOP ACTING LIKE FOOLS AND MORE LIKE THE INTELLIGENT AND HUMANE PEOPLE I KNOW YOU CAN BE.

Change those trapping and hunting policies and update them to the current century and the current needs of our planet. Do so for the sustainability of Bears and Cougars and do so for the Earth because deep in your heart you must know that it is the right thing to do and that CHANGE is the reality we need to respond to NOW!

THANK YOU FOR THE OPPORTUNITY TO RESPOND.

SINCERELY,

PAMELA MARSHALL

A handwritten signature in cursive script that reads "Pamela Marshall". The signature is written in dark ink and is positioned below the printed name.



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9

PLEASE PRINT

Name: Steve Prather
Address: [REDACTED]
City: [REDACTED] State: NM Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: Prather Ranch
(Organization(s))
Your Title: _____
Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

I second Mr. Tim Jennings comment.
Eas well as a hunting disorder
my livelihood a sheep rancher.
You have lost left because
of predators lion coyotes etc.

trapping lions on private property

predators taking deer from

1



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9

PLEASE PRINT

Name: Tim Jennings
Address: [REDACTED]
City: [REDACTED] State: NM Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: Panisco River Ranch
(Organization(s))
Your Title: Ranch Owner
Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Tim & Cougar Bear Rife

Tim D. Trappan + Fur brand

for me its my life - out of sheep
business w/ lion & coyotes

forage is changing - invasive
species - no deer to help
w/ this = predators

look at what you're doing

best sheep country in US

don't take livelihood



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM Lion 9 PLEASE PRINT

Name:	Wesley BURRIS		
Address:	[REDACTED]		
City:	State:	Zip:	
Phone:	[REDACTED]		
Email:	@		
Officially Representing:	(Organization(s))		
Your Title:	trapper		
Do you wish to be heard?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

WRITTEN COMMENT (Below or Attached)

maintain lion trapping
traps on private property
trapping is not a sport



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9 PLEASE PRINT

Name:	Shawn Carrell		
Address:	[REDACTED]		
City:	State:	Zip:	
Phone:	[REDACTED]		
Email:	@		
Officially Representing:	(Organization(s))		
Your Title:	[REDACTED]		
Do you wish to be heard?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

WRITTEN COMMENT (Below or Attached)

as an indiv today
let private l



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

2

PLEASE PRINT

Name:	Lloyd Linchick		
Address:	[REDACTED]		
City:	State:	Zip:	
Phone:	[REDACTED]		
Email:	[REDACTED]		
Officially Representing:	98 (Organization(s))		
Your Title:			
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
WRITTEN COMMENT (Below or Attached)			
Removing Trapping as a method of Take for mta fons			
Thank you - appreciate presentation			
Keep lion sport trapping			



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name:	KATE FRY		
Address:	[REDACTED]		
City:	State:	Zip:	
Phone:	[REDACTED]		
Email:	[REDACTED]		
Officially Representing:	SANDIANTA BEARWATCH (Organization(s))		
Your Title:	Board member		
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
WRITTEN COMMENT (Below or Attached)			
stats = down trend in avg age of harvested sows			
byp avg sow age			
100 sows State wide			
hunt stay as it is - but eliminate Aug & Dec			



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9 **PLEASE PRINT**

Name: Lucy Pearce Eggert

Address:

City: State: Zip:

Phone:

Email: @

Officially Representing:
(Organization(s))

Your Title:

Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

2005- Alamogordo-Commission
mt lions- Mtg
- young man attacked by lion
scalped
she had mt lion killing
carcasses killed by lions
(deer + antelope) in corn
fields

rules set on social sentiments
Aggie segment - econ importance
Common sense



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9-10 **PLEASE PRINT**

Name: John Bell

Address:

City: State: Zip:

Phone:

Email:

Officially Representing: West Canyon District
- Silver Lake (Organization(s))

Your Title: Product Manager

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

HQ
When the Southern Nevada left
was seen as significant increase
of lions - Based on our data
they have eliminated the deer
population
Decrease lion pop
We request the NM Game Com
increase the harvest for
both bear & cougar in our area
and
We need trappers to help control
especially coyotes - other predators
in our area.



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name: Jessica Johnson

Address:

City: State: Zip:

Phone:

Email: @

Officially Representing: Animal Protection of NM
(Organization(s))

Your Title:

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Submitted written comments
on bear & cougar rule

support lion sport trapping
& repeal

support extra 2 tag charge

appreciate reduction in
harvest limit
17% - but would like
to see 14% harvest limit



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name: Jim Ellett

Address:

City: State: Zip:

Phone:

Email:

Officially Representing: (Organization(s))

Your Title: Ranch owner

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Cougar & lion they
are a problem

Rancher
near Tim Jennings

other trappers are a help

preventative lion control for
sheep - what about us

Carib trap - would like



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9
Bear Lion

PLEASE PRINT

Name:

TRAVIS CHICAGO

Address:

City:

St:

Zip:

Phone:

Email:

Officially Representing:

(Organization(s))

Your Title:

trapper

Do you wish to be heard?

☐ Yes

☐ No

WRITTEN COMMENT (Below or Attached)

*opposes banning lion trapping
science ~ not emotion
peer reviewed studies
by TWS*



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name:

TRAVIS FREEMAN

Address:

City:

State:

Zip:

Phone:

Email:

Officially Representing:

(Organization(s))

Your Title:

OWNER

Do you wish to be heard?

☒ Yes

☐ No

WRITTEN COMMENT (Below or Attached)

*Out fitter
hounds pushed into all the
other elk hunts
bear season - stay the
same*



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name: JAMES R DAUGER

Address:

City: State: Zip:

Phone:

Email: @

Officially Representing: (Organization(s))

Your Title:

Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

lion - no changes

*Cost dept \$\$ if change.
Cuz paying people to trap
them*



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name: Mrs. Katherine

Address:

City: State: Zip:

Phone:

Email: @

Officially Representing: (Organization(s))

Your Title: *wild life chair*

Do you wish to be heard? ☐ Yes ☐ No



WRITTEN COMMENT (Below or Attached)

Bear - do know # in bear pop

*index catch/unit
avg age at mortality not
a good indicator*

*Quotas too high
90% hunter unsuccessful*

*depredation needs to be incl
in quota*



Sept. 14, 2019

NMDGF
Cougar Rules
POB 25112
Santa Fe, New Mexico 87504

Dear Sir:

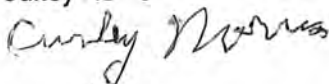
I strongly object to cutting the lion quota in this zone.


I am 89 years old, and I have hunted lions all my life to protect my livestock. As a boy I remember the famous lion hunter, Ben Lily. He was a white bearded old man, who hunted with my Dad and Uncle Owen up Bear Creek.

We don't need to increase the lion population here in Zone K. There are plenty of lions here. They kill calves and hurt the deer herd. I hope you will leave the lion quota as it is.

Yours Truly,

Curley Norris




Sept. 14, 2019

NMDGF
Bear and Cougar Rules
POB 25112
Santa Fe, New Mexico 87504

RE: Lion quota in Zone K

Dear Sir or Madam:

I strongly oppose reducing the lion quota for females from 33 to 14. I have lived here in Sycamore Canyon all my life, and we have to deal with these big cats. There is no need to try and increase their numbers. They are thriving here.

The lion season should remain unchanged, so we can keep the lion population in check for the benefit of the deer as well as our livestock.

Please reject his proposal.

Sincerely Yours,

Jay Norris 9-16-2019

Jay Norris

New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

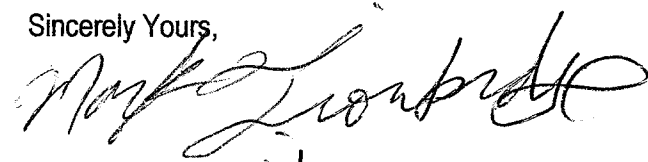
Dear Commissioners:

I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.

I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,



Mark Trowbridge

New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

Dear Commissioners:

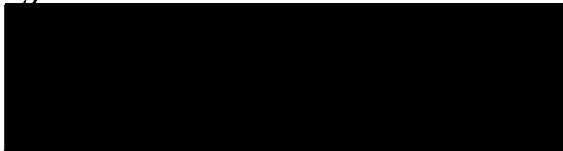
I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.

I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,

Jeanne Dickerson



9-15-19

New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

Dear Commissioners:

I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.

I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,

Billie Wellman



X

✍

New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

Dear Commissioners:

I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.

I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,

Wayne Dickerson
as all small



New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

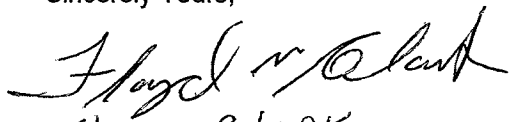
Dear Commissioners:

I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.

I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,


FLOYD CLARK

New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

Dear Commissioners:

I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.

I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,

Robert McCauley

Robert McCauley


September 11, 2019

NMDGF
Bear and Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

RE: Lion Quota in Zone K

Dear Sir:

I strongly oppose the proposal to decrease the quota for female lions from 33 to 14 in Zone K. The lions are a great threat to our livestock which we deal with every day of our lives as ranchers who have lived here for decades. Cutting the quota is going to increase the population and we can't afford to lose more livestock. We have paid for hunting licenses to New Mexico for decades and hope that you will consider our deep concerns.

Please reject this proposal.

Yours Truly,

Randy Reed



New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

Dear Commissioners:

I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.

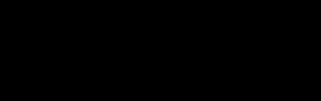
I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,

A handwritten signature in cursive script that reads "Jona Reed". The signature is written in dark ink and is positioned above the printed name.

JONA REED


Sept. 12, 2019

NMDGF

Attn: Bear & Cougar Rules

P.O. Box 25112

Santa Fe, NM 87504

Dear Sir or Madam:

I am writing to tell you that I am against reducing the female lion quota from 33 to 14. During the past 3 lion seasons, 5 lions have been taken off of the Wallace Ranch. All of these lions were taken on out-of-state lion licenses, which benefits you as well as us ranchers. Clearly we need to keep the lions in check and the sport harvest is the most efficient way to do it.

I urge you to leave the total lion quota and the female quota as it is.

Sincerely Yours,

John Wallace

John Wallace

*Signed By Jona Reed POA
Attorney in fact*



September 12, 2019

NMDGF
Bear and Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Dear Commissioners:

I am writing to express my strong opposition to the proposed decrease in the female lion quota from 33 to 14. There is no need to reduce the quota at all. The drastic proposed reduction is absurd.

Generations of ranchers have lived in this area and worked hard to raise cattle and keep them from being killed by bears and lions. The people I let hunt on the McCauley Ranch buy out-of-state lion licenses and contribute to your income, while providing a service to us ranchers. The last thing you should do is cut out the people who benefit all of us.

There are plenty of mountain lion in this area as we see lion tracks and scats routinely. They are thriving and need to be kept in check. I urge you to leave the quota unchanged.

Sincerely,

Rusty Reed



New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

Dear Commissioners:

I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.

I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,

Brenda Clark

BRENDA CLARK



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

811

PLEASE PRINT

Name:

Donna Louise

Address:

[Redacted]

City:

[Redacted]

Phone:

[Redacted]

Email:

@

Officially Representing:

(Organization(s))

Your Title:

Do you wish to be heard?

☐

Yes

☐

No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

11

PLEASE PRINT

Name:

Craig McElroy

Address:

[Redacted]

City:

State: Zip:

Phone:

[Redacted]

Email:

@

Officially Representing:

(Organization(s))

Your Title:

BLACK BEAR BUREAU CEO

Do you wish to be heard?

☒

Yes

☐

No

WRITTEN COMMENT (Below or Attached)

TAPPING - STOP IT

Bear Rule -

Leave Kill tag

#5

Range age for take

70 2 + yes

No phone call disturbance



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

11

PLEASE PRINT

Name:

Mark Belcher

Address:

[Redacted]

City:

State: Zip:

Phone:

[Redacted]

Email:

[Redacted]

Officially Representing:

(Organization(s))

Your Title:

Do you wish to be heard?

☒

Yes

☐

No

WRITTEN COMMENT (Below or Attached)



New Mexico State Game Commission Meeting

AGENDA ITEM 11

PLEASE PRINT

Name: Jessica Johnson

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Email: _____ @ _____

Officially Representing: Animal Protection
of New Mexico
(organization(s))

Your Title: Chief Legislative Officer

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Peak
+ must too high

Compare
writing on Neulite

Don't harvest too high
Could be waiting on results



New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM _____

PLEASE PRINT

Name: CRYL HASTINGS
Address: [REDACTED]
City: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: SELF
(Organization(s))
Your Title:
Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

#OR A \$20 Pigeon
#BIRD CAN TRAP
UNLITTED MICEBONES!

THIS CONSTITUTES THE
CORRESPONDENCE OF
WILLIAMS TO BENEFIT
VERY FEW PEOPLE
BEAR + COGNATE

FOR A 20 PAGE A
PERSON CAN TRAP
UNLIMITED MICE.
THIS CONSTITUTES THE
COMMERCIALIZATION OF
WILDLIFE TO BENEFIT
VERY FEW PEOPLE
PEAR + COORBAR



New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 11

PLEASE PRINT

Name:	Mary Katherine Ray	
Address:	Winston Nw	
City:	State:	Zip:
Phone:		
Email:	@	
Officially Representing:	Sparks Club (Organization(s))	
Your Title:	Wildlife Chair	
Do you want to be heard?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

WRITTEN COMMENT (Below or Attached)

[illegible]



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 11

PLEASE PRINT

Name:	<u>Tom Fisher</u>
Address:	[REDACTED]
City:	<u>Albuquerque</u>
Phone:	<u>505 268 7139</u>
Email:	<u>@</u>
Officially Representing:	(Organization(s))
Your Title:	
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
WRITTEN COMMENT (Below or Attached)	
<u>Also Marilyn Stone</u>	
<u>Sandra -</u>	
<u>Please close</u>	



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 11

PLEASE PRINT

Name:	<u>John Crossman</u>
Address:	[REDACTED]
City:	[REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone:	[REDACTED]
Email:	[REDACTED]
Officially Representing:	<u>Wildlife Fed</u> (Organization(s))
Your Title:	<u>President</u>
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
WRITTEN COMMENT (Below or Attached)	



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 11

PLEASE PRINT

Name:	<u>Rita Gentry</u>
Address:	[REDACTED]
City:	[REDACTED]
Phone:	[REDACTED]
Email:	[REDACTED]
Officially Representing:	(Organization(s))
Your Title:	
Do you wish to be heard?	<input type="checkbox"/> Yes <input type="checkbox"/> No
WRITTEN COMMENT (Below or Attached)	
<u>through the</u>	
<u>I ask the</u>	
<u>Commission to</u>	
<u>provide strong</u>	
<u>leadership to</u>	
<u>protect the bear</u>	
<u>and cougar</u>	
<u>population</u>	
<u>now in trouble</u>	
<u>and the cougar</u>	
<u>population. The</u>	
<u>public needs to</u>	
<u>learn about bear</u>	
<u>behavior from</u>	
<u>the department</u>	



PLEASE PRINT

[illegible]

PLEASE PRINT

Name: Michael Murphy
Address: [REDACTED]
City: [REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: Wichita County
(Organization(s))
Your Title: MS
Do you wish to be heard? ☐ Yes ☒ No
WRITTEN COMMENT (Below or Attached)
[REDACTED]
You and/or we are not allowed
to be listed in the letter
of appointment or impression
(see attached) + note
that there is no discussion
of Bureau + Bureau, you
persons of individuals that if we
do discuss political discussion
can not find information from
the internet with these questions
had information of the and
that we cannot do write
that we are not allowed to be
listed in the letter. You
are not allowed to be listed

MM Game Commission: RM 317 STATE CAPITOL

Re Proposed Changes: Pamela Marshall, Pecos, NM.

I do not support your proposals as presented..

THEY demonstrate a lack of understanding OF WILDLIFE survival IN THE CONTEXT OF SPECIES DIVERSITY, THREATS TO EXTINCTION FROM CLIMATE CHANGE, LOSS OF HABITAT, BIOLOGY AND GENETICS AND HEALTHY ENVIRONMENTAL RELATIONSHIPS. THEY ARE WOEFULLY OUT OF STEP WITH THE TIMES, And they REVEAL YOUR LACK OF EDUCATION, YOUR LACK OF respect for wildlife AND YOUR OBSESSION WITH KILLING AS A METHOD OF POPULATION CONTROL.

Wildlife is facing Loss of food from vegetation die offs and other species declines in the food chain, loss OF water FROM TEMPERATURE CHANGES AND GLACIAL MELTING and habitat that is altered due to climate change temperature increases and human sprawl. To add unchecked hunting and vicious trapping to this menu of challenges our native wildlife face is reprehensible.

Item 13
the Failure to ban traps, snares and leg and body holds and to impose no bagging limits is an inadequate disgrace. You are signing a death warrant for wildlife that is increasingly threatened by climate disruption,. And you are doing so for 20 dollars a pop, encouraging all the wrong people to come to NM for all the wrong reasons. Our state is woefully behind in efforts to protect wildlife from extinction and you are doing precious little to address this.

Item 11
Oppose hunting of beaver & caribou during birthing season!
We are not a hunting and gathering society, we are a technological society in the midst of global warming crisis of survival.. and your basal cave man focus is absurd. The utter reprehensible cruelty of traps that kill and maim is the signature of lazy and unethical hunting . there is NO sport in the taking of wildlife by trapping. We have been reporting to you for years of the atrocities these traps inflict And the public safety hazards that have repeatedly occurred.

Your current proposals present AND AN EXTREME THREAT to our NATIVE WILDLIFE POPULATIONS. NM WILDLIFE SHOULD BE HELD IN TRUST FOR ALL NEW MEXICANS I request that you GET WITH THE global PROGRAM.

This means You should be educating citizens about wildlife protection, threats of extinction, affects of climate disruption and devise state wide educational programs to teach folks how to live with wildlife.

IF YOU CANNOT EDUCATE YOURSELVES ON These realities and scientific facts that wildlife biologists and climate scientists research indicates, THEN I suggest you Take your guns and your traps with you as you leave. Because we will work incessantly

to CHANGE THE composition of this commission and its backward focus from FROM KILLING TO WILDLIFE PROTECTION AND SPECIES DIVERSITY in the context of ecosystem relationships, and the current impacts of climate change on declining wildlife populations. Worldwide.

YOUR proposals DO NOTHING TO ADDRESS THESE CONCENRS. I REQUEST THAT YOU REWRITE THESE PROPOSALS keeping the modern day paramaeters I have drawn to your attention IN MIND, to present New Mexicans with proposals worthy of our precious native wildlife and citizen concerns regarding the acknowledgment of scientific facts. In short, PLEASE Do your homework or respectively resign from this commission to create space for folks who can broaden the issue of wildlife from the singular perspective of game and "taking" to one of species diversity and survival in the age of global warming.

BEAR & COUGAR Rule - Public Input Meeting

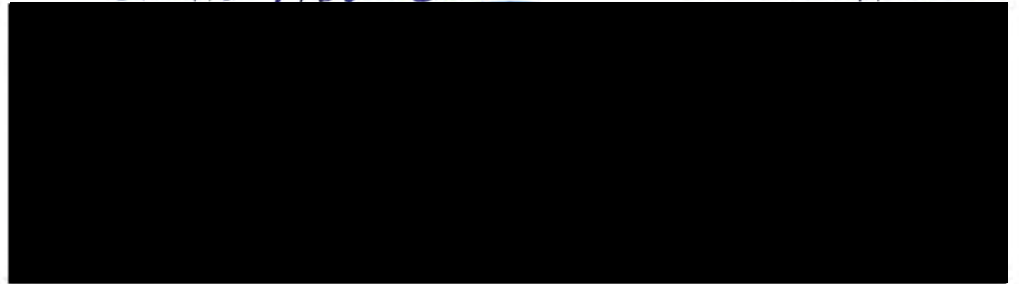


NAME

EMAIL ADDRESS

AFFILIATION

DAVID HEFT
Steve Jones
Travis Carlson



BEAR & COUGAR RULE - Public Input Meeting



<u>NAME</u>	<u>EMAIL ADDRESS</u>	<u>AFFILIATION</u>
JOE COPPOLO		
TANNER ANDERSON		
Mario Jimenez		
Theo Carzaz		
Christopher		
Gloria L. Hecker		
Casey Jobling		
Roberta Salazar Hernandez		
Ralph Ramos		
Blu Prentiss		
Brenda Prentiss		
Kevin Bixby		
Roger DiCamillo		
John Clayshulte		
MIKE ROOT		
CHRIS DEANSON		
Chance Thedford		
DAVID HEFT		
curtis Davidson		

Bear and cougar Rule Public Meeting
August 13, 2019

Name

Affiliation

Email

DAVID MUSKA

Richard Wilson

SCBA

Kevin Patterson

~~Kevin Patterson~~

Rosemary Lowe

Marc Bedner

Marilynn Szydlowski

Susan Ostlie co-leader

Cameron Weber

Guy Dicharry

Elizabeth Dicharry

Elise Van Arsdale

Rex Stone

MARILYN STONE

Bob Cornish

Linda Starr

Janet & Dushan Mitrovich



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: John Chenshaw
Address: [Redacted]
City: [Redacted] State: [Redacted] Zip: [Redacted]
Phone: [Redacted]
Email: [Redacted]
Officially Representing: New Mexico (Organization(s))
Your Title: President
Do you wish to be heard? ☐ Yes ☒ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: MIKE ROOY
Address: [Redacted]
City: [Redacted] State: [Redacted] Zip: [Redacted]
Phone: [Redacted]
Email: [Redacted]
Officially Representing: [Redacted] (Organization(s))
Your Title:
Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: Mike Hand
Address: [Redacted]
City: [Redacted] State: [Redacted] Zip: [Redacted]
Phone: [Redacted]
Email: [Redacted]
Officially Representing: [Redacted] (Organization(s))
Your Title:
Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Longer Predation #3
impact tag unity



(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 16

PLEASE PRINT

Name: Bondhusack
Address: [REDACTED]
City: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: [REDACTED] (Organization(s))
Your Title: Owner
Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

[illegible]

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

PLEASE PRINT

Name:	SESSÉ DOUBEL	
Address:		
City:	State:	Zip:
Phone:		
Email:	@	nmwf
Officially Representing:		(Organization(s))
Your Title:	Executive Director	
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

WRITTEN COMMENT (Below or Attached)

[illegible]

SPEAKER'S CARD
New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)



SPEAKER'S CARD
New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 10

PLEASE PRINT

Name:	Mary Katherine Roy	
Address:	[REDACTED]	
City:	State:	Zip:
Phone:		
Email:	@	
Officially Representing:	Rio Grande Chapter (organization(s))	
Your Title:	Secretary	
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

WRITTEN COMMENT (Below or Attached)

[illegible]

SPEAKER'S CARD
New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 10

PLEASE PRINT

Name:	Mary Katherine Rony	
Address:	[REDACTED]	
City:	State:	Zip:
Phone:		
Email:	@	
Officially Representing:	R.O Grande Chapter (Organization(s))	
Your Title:	Stevia Club wildlife steward	
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

WRITTEN COMMENT (Below or Attached)

[illegible]

SPEAKER'S CARD
New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 10

PLEASE PRINT

Name:	Marc Bedner		
Address:	[REDACTED]		
City:	[REDACTED]	State:	Zip:
Phone:			
Email:	@		
Officially Representing:	(Organization(s))		
Your Title:			
Do you wish to be heard?	<input type="checkbox"/> Yes <input type="checkbox"/> No		

WRITTEN COMMENT (Below or Attached)

[illegible]

SPEAKER'S CARD
New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 10

DI FACE PRINT

Name:	Rosemary Love		
Address:	[REDACTED]		
City:	[REDACTED]	State:	Zip:
Phone:	[REDACTED]		
Email:	@		
Officially Representing:	(Organization(s))		
Your Title:			
Do you wish to be heard?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

WRITTEN COMMENT (Below or Attached)

[illegible]



SPEAKER'S CARD
New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

PLEASE PRINT

10

PLEASE PRINT

WRITTEN COMMENT (Below or Attached)

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD
New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

PLEASE PRINT

10

PLEASE PRINT

WRITTEN COMMENT (Below or Attached)

WRITTEN COMMENT (Below or Attached)

September 6, 2019

From: David L. Heft

To: Jimmy Bates
New Mexico State Game Commission
P.O. Box 25112
Santa Fe, New Mexico 87504

Re: Lion Rule

Dear Commissioner Bates,

I would like to comment on the proposed lion rule as currently presented by the Department on its website. I would first like to comment on an error in the quota for Region Q which is the region I live in. The Department says there is no change proposed for this region but shows a proposed quota of 34 when the current quota is 35. The presentation before the commission showed the number remaining at 35 but the website proposal shows 34. A minor error but I presented the Department with copies of their own website showing another error between the website numbers and presentation numbers which they have now corrected. One thing I would like to point out before I make specific comments is that under the proposal and if the 10% closure limits are retained is that a maximum of only 15% of the state lion population is allocated for harvest by licensed hunters and trappers. The remaining 85% is essentially allocated to so called "non-consumptive" users already.

I am firmly opposed to the proposal to eliminate trapping as a legal harvest method for lion take. The numbers of lions taken by this method are low because it is not being used for "sport" trapping but is being used for livestock depredation prevention, native ungulate enhancement and human safety concerns. Trapping of lions is hard, time intensive work requiring a great deal of knowledge and expertise. Dog use is the prevalent method of harvest where snow is available because it is much easier to drive roads and turn dogs out on a track than to try to trap a lion. Trapping is also used almost exclusively by residents and not by non-residents contracted with the commercial hunting industry. Eliminating it just discriminates against residents and will shift more harvest to non-resident hunters which has been an on-going issue with the Department for years now. There is no biological justification or science behind this proposal as stated by the Department at the public meetings. The Department also continues to hire contractors to trap and remove lions over significant areas in the southern portion of the state for bighorn sheep management. The last figures I saw from the Department gave an average cost of \$5,100.00 per lion for this activity. I personally know one contractor who doesn't want any private license holders to take lions by hunting or trapping because those are "his lions" that the Department will pay him to remove. The Department currently spends over a million dollars a year on depredation and nuisance abatement. It seems to defy all common logic to add to that burden when New Mexico residents are willing to purchase multiple licenses and provide the service at no cost to the state. My recommendation would be that rather than eliminating this tool statewide that the commission retain it in lion zones G, H, K, L, and Q where the Department is currently using contractors for lion removal. This is a more targeted biologically justified management proposal and also removes the primary Mexican wolf zone from the area. The Department has mentioned on-going lawsuits but has also admitted in public meetings that eliminating lion trapping by private licensees will not make any lawsuit go away. This is not a valid reason to

September 22, 2019

NM State Game Commission
PO Box 25112
Santa Fe, New Mexico 87504

Joanna Prukop
Roberta Salazar-Henry
Jimmy Bates
Gail Cramer
Tirzio Lopez
Davis Soules
Jeremy Vesbach

Subject: Comment on the proposed changes in the Cougar Rule,
19.31.11 NMAC

Dear NM Game Commissioners,

My letter is to support the view of the New Mexico Wild Sheep Foundation in opposition of the proposed cougar rule change. The views stated in their letter to you outline the facts of cougar control in New Mexico. You as Commissioners, are stewards of New Mexico's wildlife (ALL species). It is important to keep ratios amongst species in proportion and to look at the history of cougar control (or lack of it) to guide you in rule setting. Cougars are a major predator of wild sheep and deer particularly in sparsely vegetated areas like southern New Mexico and particularly the sheep ranges there. NMGF with the help of the NMWSF have worked hard and spent considerable monies to restore proper numbers of wild sheep (particularly desert bighorns) to their historic ranges. I have financially supported this endeavor through the Wild Sheep Foundation and a matching grant specifically to help keep these ratios in



Fur Takers of America

Dave Hastings [REDACTED] [REDACTED]

TO: New Mexico Game And Fish Commission
FROM: Dave Hastings, President, Fur Takers of America
RE: Proposed Rule Changes 2020-2024
Cougars and trapping

As a representative of our organization, the Fur Takers of America, speaking for over 90 Chapters and affiliates across the country, and in general, the 200,000+ trappers nationally, I am compelled to urge you NOT to incorporate the Proposed Rule Changes regarding the Cougar in New Mexico.

Decisions such as the Cougar issue should be based on data, science, wildlife needs, and the best interests of the New Mexico residents. The livestock industry, for example, has data to indicate that cougar are the third highest predator regarding sheep and cattle depredation. To have the cougar "protected" flies in the face of the needs of the New Mexico residents who are the source of food for the state and the nation.

To date, I see no data backing this issue; no science, or any clear defense of this proposal. In other words, this is a value position that one demographic group seems to have proffered because it fits what they feel is the way things should be. I am all for democratic inclusion, but such should have a basis in fact and data. Again, the data does not support the removal of trapping for cougar.

It may seem odd to have a national organization weigh in on this topic, but I would be quick to point out that we are doing so directly and for the record. Large national anti-hunt and anti-trap groups have been working in New Mexico for a decade(at least), investing a good bit of money, time and expertise to attack fur harvest as we know it, and generally the North American Model of Wildlife Management. The difference is that those national groups are not clearly expressing their value issues directly, but rather they do so through like-minded residents.

Feel free to contact me for any questions or additional data. I appreciate your willingness to serve New Mexico's wildlife, and its residents.

Thanks for your attention to this matter.

Sincerely,

Dave Hastings, President
Fur Takers of America

The cruelest thing we can do to wildlife is to fail to manage it.

New Mexico Department of Game and Fish Director and Game Commission.

Number 4 in the NMTA mission statement reads "To oppose any proposed rule or legislation which would impose unreasonable restrictions on the taking of furbearing or predator animals, or the sale of their pelts; to demand the revision or repeal of any existing law or regulation of the same nature."


To ban trapping of lions, especially on private property would remove a very important tool for predator management for cattle, sheep and goat ranchers in the state of New Mexico. I have heard the statement "Trappers are not utilizing it anyway". To a degree this is true, but out of the thirteen lions taken in the last year, I personally know of nine that were taken due directly because of predation. Our ranchers should be able to seek help from knowledgeable private trappers, to deal with a cougar kills on livestock.

The NMTA has been told by animal welfare groups that they will never stop coming after us until there is a complete trapping ban. They have stated that new/stricter regulations will not slow them down. I personally believe that they will see them as momentum and cause them to come after us and other sportsmen even harder.

Chance Thedford



Wesley E. BURRIS



July 29, 19

New Mexico Dept. of Game and Fish

Bear and Cougar Rule Development

To The Director and The Commission:

I am a native New Mexican raised on a ranch here in the middle of N. M. Out of high school I went to work for the U.S. Fish + Wildlife in 1959 and worked there until 1972.

I have been involved with wildlife all my life. For the past 45 years I have worked on farms and ranches doing animal damage control work as a second job.

Since 1965 when the cougar or mountain lion was put on the protected list its population has increased, some years more than others depending on the food base. It has never decreased.

Prior to 1965 the cougar was trapped and hunted by government trappers and ranchers 365 days a year.

In the early 1900s the Biological Survey was started. Later on it was Animal Damage Control and today it is known as Wildlife Services.

In all this time the cougar was never close

To being eliminated. IT has always been a predatory animal causing a lot of damage, as much so now as a hundred years ago.

Today hunters using dogs or calling or any other method don't take enough lion to hold the population from expanding. This is a problem!

Talk to the farmers and ranchers and people that live and make their livelihood from the open ranges. They are not lying to you!

More lion need to be taken. That is the reason Trappers were allowed to take one or two lion by an incidental take in traps they had set for coyote or bobcat. This happens several times a year ~~and it should remain this way~~. Being able to take by trapping this way should remain in place. IT should also be made legal on BLM, and Forest Lands. Foot snarles should also be legal.

The bear population also needs to be held down because there ^{are} more bear problems happening all the time. This is a territorial problem. There is not enough open space to accommodate all bears, so they go to town.

Wildlife Management

Sincerely
Spesley E Burris



NEW MEXICO FARM & LIVESTOCK BUREAU

New Mexico Department of Game & Fish
1 Wildlife Way
Santa Fe, NM 87507

August 15, 2019

Re: 2019 Bear and Cougar Rule Development

New Mexico Farm & Livestock Bureau (NMF&LB) submit these comments on behalf of our 19,000 member-families. NMF&LB is New Mexico's largest agriculture organization, representing members involved in all aspects of agriculture from dairy, livestock, fruits and vegetables. Our mission is to promote and protect agriculture in the great State of New Mexico. We are charged with the important task of representing our members' interests when it comes to impeding regulations.

NMF&LB does not support the removal of sport trapping from the current rule. Sport trapping provides many benefits for New Mexico farmers and ranchers. Mountain lions are large predators that can devastate livestock very quickly. Sport trapping is a valuable tool used to keep those predators from harming livestock and humans. Removing sport trapping can also have a negative economic impact for farmers and ranchers as hunts contribute to their operational revenue.

Additionally, NMF&LB would appreciate the department's consideration in taking steps to reduce the number of bear and lion by increasing license permits and extending hunting dates for both species. Many of our farmers and ranchers are being overrun by these predators causing them to lose thousands of dollars from livestock losses every year.

The New Mexico Farm & Livestock Bureau appreciates the opportunity to share the concerns of our organization. We must work together to find a balance between wildlife and livestock. We respectfully request that these comments and the concerns of farmers and ranchers affected by these predators be taken into consideration as the Bear and Cougar rule is revisited.

Respectfully submitted,

Tanner Anderson





© Mora/San Miguel Farm & Livestock Bureau
[Redacted]

New Mexico Department of Game & Fish
1 Wildlife Way
Santa Fe, NM 87507

September 5, 2019

Esteemed Commissioners:

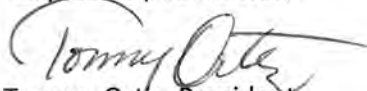
Mora/San Miguel County Farm & Livestock Bureau submits these comments on behalf of our 400 member-families. M/SMCF&LB represents agriculture throughout the county. We are proud to promote and protect agriculture and represent our members' interests when it comes to impeding regulations.


M/SMCF&LB does not support the removal of sport trapping as a method of take from the cougar rule. Sport trapping provides many benefits for farmers and ranchers within our county. Cougars can devastate livestock herds, cause livestock to become stressed and lead to poor production or sickness in livestock. While it is not a frequently used method, it is still a valuable tool.

In addition to sport trapping being another form of depredation, it also provides an economic benefit to farmers and ranchers in our county, as we are able to sell those hunts to interested trappers/hunters and earn extra income for our operation. This is especially valuable in times where the livestock market is not favorable.

M/SMCF&LB would like to express our appreciation to the department in allowing us to address our concerns on this rule. We ask that you take our comments into consideration and allow sport trapping of cougars to remain within the Bear & Cougar rule.

Respectfully submitted,


Tommy Ortiz, President
[Redacted]


September 12, 2019

NMDGF
Bear and Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Dear Commissioners:

I have been informed that you are considering a proposal to decrease the mountain lion quota from 33 to 14 in Zone K. I am very strongly opposed to this change.

We ranchers have lived here for generations, and we work hard to raise our cattle and keep them safe from mountain lions. I don't know where you got the idea of drastically reducing the quota on lions. Most people here don't know this is happening, but they would all agree with me if they knew. I cannot image any reason for this change.

This will cause the mountain lion population to increase and make life more difficult for us. We see lion tracks and scats regularly, clearly indicating that the lion population is doing well and does not need further protection.

The deer population is drastically reduced by lion as well. This is not good for our state. Reduce the number of lion harvested and you will reduce the already dwindling deer population.

Please reject this proposal and do not decrease the lion quota in this area.

Sincerely,



J. T. Hollimon



NMDGF

Bear and Cougar Rules

P.O. Box 25112

Santa Fe, NM 87504

Dear Commissioners:

I have been informed that you are considering a proposal to decrease the mountain lion quota from 33 to 14 in Zone K. I am very strongly opposed to this change.

We ranchers have lived here for generations, and we work hard to raise our cattle and keep them safe from mountain lions. I don't know where you got the idea of drastically reducing the quota on lions. Most people here don't know this is happening, but they would all agree with me if they knew. I cannot image any reason for this change.

This will cause the mountain lion population to increase and make life more difficult for us. We see lion tracks and scats regularly, clearly indicating that the lion population is doing well and does not need further protection.

The deer population is drastically reduced by lion as well. This is not good for our state. Reduce the number of lion harvested and you will reduce the already dwindling deer population.

Please reject this proposal and do not decrease the lion quota in this area.

Sincerely,



Dale Spurgeon

New Mexico Dept. of Game & Fish
Bear & Cougar Rules
P.O. Box 25112
Santa Fe, NM 87504

Re: Mountain Lion Quota in Zone K

Dear Commissioners:

I am writing to express my opposition to the proposed reduction in the mountain lion quota in Zone K.


I live in Zone K, where the abundance of mountain lions is made clear by the lion tracks and scats that we see frequently. We do not need to increase the lion population in this area, as long as it is necessary to remove lions at public expense to protect the deer herd, bighorn sheep and livestock.

Please reject this proposal and leave the quota unchanged.

Sincerely Yours,

Duston L. Hunt Jr.

Wesley E. BURRIS



July 29, 19

New Mexico Dept. of Game and Fish
Bear and Cougar Rule Development

To The Director and The Commission:

I am a native New Mexican raised on a ranch here in the middle of N. M. Out of high school I went to work for the U.S. Fish + Wildlife in 1959 and worked there until 1972.

I have been involved with wildlife all my life. For the past 45 years I have worked on farms and ranches doing animal damage control work as a second job.

Since 1965 when the cougar or mountain lion was put on the protected list its population has increased, some years more than others depending on the food base. It has never decreased.

Prior to 1965 the cougar was trapped and hunted by government trappers and ranchers 365 days a year.

In the early 1900s the Biological Survey was started. Later on it was Animal Damage Control and today it is known as Wildlife Services.

In all this time the cougar was never close

To being eliminated. IT has always been a predatory animal causing a lot of damage, as much so now as a hundred years ago.

Today hunters using dogs or calling or any other method don't take enough lion to hold the population from expanding. This is a problem!

Talk to the farmers and ranchers and people that live and make their livelihood from the open ranges. They are not lying to you!

More lion need to be taken. That is the reason trappers were allowed to take one or two lion by an incidental take in traps they had set for coyote or bobcat. This happens several times a year ~~and it should remain this way~~. Being able to take by trapping this way should remain in place. IT should also be made legal on BLM, and Forest Lands. Foot snares should also be legal.

The bear population also needs to be held down because there ^{are} more bear problems happening all the time. This is a territorial problem. There is not enough open space to accommodate all bears, so they go to town.

Wildlife Management

Sincerely
Spesley E Burris

RECEIVED
8-12-19
WMD

Dr. & Mrs. Dennis W. Holland
[REDACTED]

August 9, 2019

New Mexico Game and Fish Commission
Bear and Cougar Rule Development
PO Box 25112
Santa Fe, New Mexico 87504

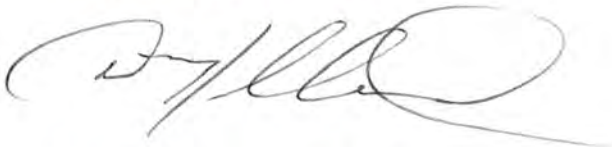
Commission Members:

This is regarding your current public meetings on revisions to the bear and cougar rules. The importance of large predators to our fragile ecosystems is critical. After years of unscientific and politically driven pressure on these animals I laud your efforts to seek appropriate and science-based revisions to the current rule. Accordingly, I recommend you consider the following.

1. Eliminate recreational cougar trapping. Such a change would protect cougar populations and reflect on the desires of the majority of New Mexicans who generally oppose trapping.
2. Reduce cougar kill limits. Current limits risk decimation of cougar populations and further damage to healthy ecosystems.
3. Reverse the 2015 decision to allow double bag limits for cougar hunters.
4. Reduce annual bear kill limits. Again, current limits pose risks to maintaining viable and appropriate bear populations.

Thank you for your consideration and willingness to undertake this important project.

Respectfully submitted,



Dennis W. Holland, Ph.D.
[REDACTED]

Dear Director Spear,

Please eliminate

sport trapping of Bear
and cougar completely.
Killing public wildlife for
profit is unacceptable. Traps
are cruel and inhumane!

Tom Haecker 1734 Sincerely,
5318 Canada Vista
A-BQ 87120 PNM Tom Haecker

~~Please~~ Eliminate sport trapping
of bear & cougar completely
How is this sport??

Tom Haecker

11/17/19

Dear Director Slane

Trapping for Sport is different than for food or to protect. Please reduce the # of sport trapping permits AND raise the fees substantially.

Sincerely,
Wendy

Dear Director Slane,
In amending the Bear + Cougar Rule, PLEASE eliminate sport trapping of bears + cougars completely. Killing public wildlife is unacceptable to me because traps are cruel and indiscriminate.

Sincerely,
Danelle Tanner

Dear Director Slane,

Please consider eliminating sport trapping - it is cruel & unacceptable.

Attorney Davis

Dear Director Slane,

In amending the Bear and Cougar Rule, please eliminate sport trapping of bear and cougar completely. It seems best to outlaw the killing of public wildlife for profit, and particularly to outlaw the cruel practice of trapping.

Thank you for your consideration of this,
Brenda Mueller

Dear Director Sloane,

In amending the Bear and Cougar Rule, please eliminate sport-trapping of bear and cougar completely. Killing public wildlife for private profit is unacceptable to me, and traps are cruel and indiscriminate. At the very least, end cougar trapping and place much stricter limits on bear trapping.

Thank you,
Don Sues-Jones

11/17/19

Director Sloane

No Tears!

Thank You
T. Davis

Dear Director Sloane,

In amending the Bear and Cougar Rule, please eliminate sport trapping of bear and cougar completely. Killing public wildlife for private profit is UNACCEPTABLE! Traps are cruel and indiscriminate. At the very least, end cougar trapping and place much stricter limits on bear trapping.

Niccie Crespin

Dear Director Sloane,

In amending the Bear and Cougar Rule, please eliminate sport trapping of bear and cougar completely. Killing public wildlife for private profit is unacceptable to me, and traps are cruel and indiscriminate. At the very least, end cougar trapping and place a much stricter limit on bear trapping. Thank you.

Sincerely, Mark Nolan

Dear Director Sloane,

In amending the Bear & Cougar Rule please eliminate sport trapping of bear and cougar completely. Killing public wildlife for private profit is unacceptable to me, and traps are cruel and indiscriminate. At the very least, end cougar trapping and place much stricter limits on bear trapping.

Bill McAllen

Dear Director Sloane,

Please eliminate sport trapping of bear & cougar. This is cruel & unnecessary. It also threatens endangered species like wolves.

Thank you,

Tim Evans

Dear Director Sloane,

In amending the Bear and Cougar Rule, please eliminate sport trapping of bear and cougar completely. Killing public wildlife for private profit is unacceptable and inhumane and traps are cruel and indiscriminate. At the very least, end cougar trapping and place much stricter limits on bear trapping.

Pat Joyce

It is stupid and ignorant
and inhumane to put out
a trap that can and does
KILL WHATEVER COMES NEAR
We in our majority took
steps to bear co-sleeping -
I want you to stop this
NOW! Carpenter

Dear Director Sloane,

I am writing to urge & encourage you to please, please eliminate sport trapping of bear & cougar completely. Killing public wildlife for private profit is unacceptable to me. It is barbaric, cruel & indiscriminate. At the very least, end cougar trapping & put much stricter limits on bear trapping. Thank you.

Dear Director Sloane,

In amending the Bear & Cougar Rule, please eliminate sport trapping of bear & cougar completely. Killing public wildlife for private profit is unacceptable to me and traps are cruel & indiscriminate. At the very least, end cougar trapping & place much stricter limits on bear trapping. Respectfully,

Sharon Cordova

ANIMALS ARE A CREATION OF GOD. THEY ARE INNOCENT ANIMALS ROAMING THE EARTH.

THEY MEAN NO HARM, RAISED TO SURVIVE THROUGH COLD / HOT AREAS. THEY MAY NOT KNOW WHAT WE KNOW. PLEASE ALLOW THEM TO BE FREE ACCORDINGLY TO THEIR BEHAVIOR. CHILDREN LOVE ANIMALS, AND WE LOVE CHILDREN. GOD TOLD US TO LOVE ONE ANOTHER. TREATING ANIMALS IS WISE.

Thank You

Dear Director Sloane

In amending the bear and cougar rule, please eliminate sport trapping of bear and cougar completely. Killing public wildlife for private profit is unacceptable and traps are cruel and indiscriminate. At the very least, end cougar trapping and place much stricter limits on bear trapping.

Sincerely,

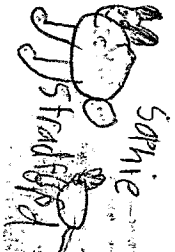
Brycen Williams MD

D. r. Sloan:

In amending Bear & Cougar Rule
pls. eliminate SPOUT?! trapping
of bear & cougar. Traps are
cruel, animals are precious.
Thank you.

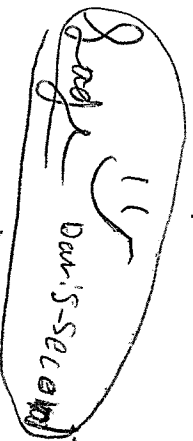
Bonnie Carpenter

Stop killing our
animals. Stop killing
the ~~whole~~
ecosystem.
Aachen



Sophie
Sichna
Carrie

Please save our world!
Biodiversity affects ecosystem.
Wendy



Please eliminate sport trapping
of bear and cougar!

Shade Newby-Torres

RE: Bear & Cougar Rule

Dear Director Sloan,

As a Christian concerned about
God's creation, I respectfully
ask that the sport trapping of bear
& cougar be eliminated. Thank
you for your attention to this
matter.

Sincerely, Constance
~~Constance~~ Marshney

Director Sloan,

11-12-18

Trapping for spout is much
different than for food for families
It would be good to
reduce the amount of spouting
permits. Killing of wildlife for
profit is not good for conservation.

Thanks
Iris Castagna

Dear Director Sloane,

Please eliminate sport trapping of bear and cougar completely. Traps are cruel and unnecessary and are unspantmanlike. Trapped animals will panic, sometimes chew off their paws to escape.

Killing animals in this way must be eliminated.

Thank you

Dear Director Sloane,

In amending the Bear + Cougar Rule, please eliminate sport trapping of bear and cougar completely. Killing public wildlife for private profit is unacceptable to me, and traps are cruel and discriminate.

Kim + Chandy

Dear Director Sloane,

In amending the Bear and Cougar Rule, please eliminate sport trapping of bear and cougar completely. Killing public wildlife for private profit is unacceptable, and traps are cruel and indiscriminate. At the very least, and cougar trapping and place much stricter limits on bear trapping.

Thank you
Smith-Van Ness

Dear Director Sloane,

In amending the Bear and Cougar rule, please eliminate sport trapping of bear and cougar entirely. I believe that killing public wildlife is wrong. Thank you for reading this.

Sincerely,
Grace
Hibbs

Dear Director Stone -
In Amending the Bear and Cougar Rule,
Please eliminate the Sport trapping of
bear and cougar completely. Killing public
wildlife for private profit is unacceptable
to me, and traps are cruel and indiscriminate.
At the very least, end cougar trapping and
place much stricter limits on bear trapping.

Dear Director Stone -

In amending the Bear + Cougar Rule,
Please eliminate Sport trapping of the
bear and cougar completely. Killing
public wildlife for private profit is
totally unacceptable to me; traps are
cruel and indiscriminate.

Dear Director Stone:
In amending the Bear and Cougar Rule,
Please eliminate Sport trapping of
bear and cougar completely. Killing
wildlife for private profit is unacceptable
and traps are cruel and indiscriminate.
At the very least, end cougar trapping and
place much stricter limits on bear trapping.

Dear Director Stone:

Please eliminate the sport trapping
of bears and cougars. This "sport"
only serves to message the eyes
of those who feel they must
demonstrate their superiority over
God's creation. It does not
serve the general public, nor
does it serve the animals.
Thank you.
Maggie Dwyer

Bear Director Stone

In amending the Bear and Cougar Rule,
please eliminate sport trapping of
bear and cougar completely.
At the very least end cougar trapping.
Definitely raise all trapping fees to
much higher rates or eliminate
trapping all together.

Bear Director Stone,

In amending the Bear & Cougar
Rule, please eliminate sport
trapping of bear & cougar
immediately. Killing public
wildlife for ~~profit~~ private profit
is unacceptable to me & traps are
cruel & indiscriminate. At the least,
end cougar trapping & place stricter
limits on bear trapping. - Laurie May 11

Bear Director Stone

I am appalled that NM allows killing
public wildlife for private profit. This is
unacceptable to me! Traps are cruel and en-
danger animals of all kinds. Please end
snare animals of all kinds. Please
cougar trapping and place stricter limits
on bear trapping if you can't eliminate
sport trapping of these animals completely.
Sincerely,

The Rev. B. Syd Frohman

11/17/2019

Bear Director Stone

In amending the Bear & Cougar Rule,
please eliminate sport trapping of
bear and cougar completely. Killing
public wildlife for private profit is un-
acceptable to me, and traps are cruel
and indiscriminate. At the very
least, end cougar trapping and place
much stricter limits on bear trapping.
Paul O'Donoghue

Dear Director Sloane,

In amending the Bear and Cougar Rule, please eliminate sport trapping of bear and cougar completely. I am opposed to the trapping of public wildlife for sport. Traps are cruel and indiscriminate. At the very least, end cougar trapping and place much stricter limits on bear trapping. I am concerned about non-target animals being caught in traps. Thank you, Adelia Humme

Dear Director Sloane,


Nov. 17, 2019

Traps are cruel and indiscriminate. Please eliminate the sport trapping of bear and cougar completely in the amendment of the Bear and Cougar Rule. At the very least, end cougar trapping and place much stricter limits on bear trapping.

Thank you for your consideration.

Sincerely, Claudie D'Arset

Dear Director Sloane -

Please eliminate sport trapping of bear & cougar completely, when amending the Bear & Cougar Rule. Killing public wildlife for profit is absolutely wrong to me - I please do not collaborate with cruel & indiscriminate killing! At least, end cougar trapping & place much stricter limits on bear trapping. Thank you, 

Dear Director Sloane,

11/17/19

In amending the Bear and Cougar Rule, please eliminate sport ~~trapping~~ trapping of bear and cougar. Animal trapping is cruel and not good reflection on our humanity. Please the traps are indiscriminate.

Thank you, Robin Gump, M.D.,

Dear Director Sloane,

I'm writing to voice my support in eliminating sport trapping of bear & cougar completely. At a minimum I encourage you to and cougar trapping place stricter limits on bear trapping.

Katie Wilman

Dear Director Sloane,

One of our state's most beautiful and necessary resources is our wildlife population. We should not allow or expand sport trapping. Stop this cruel practice that endangers other wildlife like wolves.

Dear Director Sloane,

In amending the Bear and Cougar Rule, please eliminate sport trapping completely. Killing public wildlife for private profit is unacceptable to me, and traps are cruel and indiscriminate. At least place much stricter limits on bear trapping.

Karen R. Smith

Name: Marc Redner

Address:

City: State: Zip:

Phone:

Email: @

Officially Representing:
(Organization(s))

Your Title:

Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Name: Randy Lack

Address:

City: State:

Phone:

Email:

Officially Representing:
(Organization(s))

Your Title: OWNER

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: Mary Katherine Roy

Address: [REDACTED]

City: State: Zip:

Phone:

Email: @

Officially Representing: Rio Grande Chapter
(Organization(s))

Your Title: Wildcat Cheerleader

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: Rosemary Lowe

Address: [REDACTED]

City: [REDACTED] State: Zip:

Phone:

Email: [REDACTED]

Officially Representing: [REDACTED]
(Organization(s))

Your Title:

Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: ~~XXXXXXXXXX~~ Katie De Lorenzo

Address: [REDACTED]

City: [REDACTED] State: [REDACTED] Zip: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED] @ [REDACTED]

Officially Representing: BHA (Organization(s))

Your Title: Chairman

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

HEARING

#10

PLEASE PRINT

Name: Jessica Johnson

Address: [REDACTED]

City: [REDACTED] State: [REDACTED] Zip: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Officially Representing: Animal Protection NM (Organization(s))

Your Title: Chief legislative officer

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: TANNER ANDERSON

Address: [REDACTED]

City: [REDACTED]

State: [REDACTED]

Zip: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

@

Officially Representing: NMFLD

(Organization(s))

Your Title:

Do you wish to be heard?

☒

Yes

☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: MIKE ROOT

Address: [REDACTED]

City: [REDACTED]

State: [REDACTED]

Zip: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Officially Representing:

(Organization(s))

Your Title:

Do you wish to be heard?

☒

Yes

☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: John Crenshaw
Address: [REDACTED]
City: [REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: AMCO
(Organization(s))
Your Title: President
Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

10

PLEASE PRINT

Name: Mike Hand
Address: [REDACTED]
City: [REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: [REDACTED]
(Organization(s))
Your Title: [REDACTED]
Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Cougar Predation #s
impact tag limits

Name: JESSE DEWBEL

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Email: _____ @ _____

Officially Representing: NMWF
(Organization(s))

Your Title: Executive Director

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 11

PLEASE PRINT

Name:	<u>Pamela Marshall</u>
Address:	[REDACTED]
City:	[REDACTED] State: [REDACTED]
Phone:	[REDACTED]
Email:	[REDACTED]
Officially Representing:	<u>Wildlife Bear League</u> (Organization(s))
Your Title:	<u>MS</u>
Do you wish to be heard?	<input type="checkbox"/> Yes <input type="checkbox"/> No

WRITTEN COMMENT (Below or Attached)

Your proposals are woefully understated in the context of climate disruption impacts (see attached) + pose great threat to the survival of Bears + bison. Your proposal indicates lack of awareness of species biological diversity, keystone food innovation, food web disruption with loss of genetic diversity and extinction. I demand that you ~~revise~~ revise to write your proposals in forward thinking perspective. They are an insult to Wildlife + New Mexicans in this age of global warming. You have

minus zero respect for
wildlife + are solely
focussed on killing as a
method of population
control. Our precious
wildlife has many challenges
(see attached) to their
survival. To add
no bagging limits (+ trapping)
to this menu is reprehensible.

If you cannot educate
yourselves about these
factors that climate scientists
+ wildlife biologists have
provided, then PLEASE

Resign from this commission
to make space for more
progressive minded folks.
to move your focus from killing
to species diversity + global
warming impacts on wildlife
worldwide. I'm 100%
behind in this matter.

MM Game Commission: RM 317 STATE CAPITOL

Re Proposed Changes: Pamela Marshall, Pecos, NM.

I do not support your proposals as presented..

THEY demonstrate a lack of understanding OF WILDLIFE survival IN THE CONTEXT OF SPECIES DIVERSITY, THREATS TO EXTINCTION FROM CLIMATE CHANGE, LOSS OF HABITAT, BIOLOGY AND GENETICS AND HEALTHY ENVIRONMENTAL RELATIONSHIPS. THEY ARE WOEFULLY OUT OF STEP WITH THE TIMES, And they REVEAL YOUR LACK OF EDUCATION, YOUR LACK OF respect for wildlife AND YOUR OBSESSION WITH KILLING AS A METHOD OF POPULATION CONTROL.

Wildlife is facing Loss of food from vegetation die offs and other species declines in the food chain, loss OF water FROM TEMPERATURE CHANGES AND GLACIAL MELTING and habitat that is altered due to climate change temperature increases and human sprawl. To add unchecked hunting and vicious trapping to this menu of challenges our native wildlife face is reprehensible.

the Failure to ban traps, snares and leg and body holds and to impose no bagging limits is an inadequate disgrace. You are signing a death warrant for wildlife that is increasingly threatened by climate disruption,. And you are doing so for 20 dollars a pop, encouraging all the wrong people to come to NM for all the wrong reasons. Our state is woefully behind in efforts to protect wildlife from extinction and you are doing precious little to address this.

We are not a hunting and gathering society, we are a technological society in the midst of global warming crisis of survival.. and your basal cave man focus is absurd.

The utter reprehensible cruelty of traps that kill and maim is the signature of lazy and unethical hunting. there is NO sport in the taking of wildlife by trapping. We have been reporting to you for years of the atrocities these traps inflict And the public safety hazards that have repeatedly occurred.

Your current proposals present AND AN EXTREME THREAT to our NATIVE WILDLIFE POPULATIONS. NM WILDLIFE SHOULD BE HELD IN TRUST FOR ALL NEW MEXICANS I request that you GET WITH THE global PROGRAM.

This means You should be educating citizens about wildlife protection, threats of extinction, affects of climate disruption and devise state wide educational programs to teach folks how to live with wildlife.

IF YOU CANNOT EDUCATE YOURSELVES ON These realities and scientific facts that wildlife biologists and climate scientists research indicates, THEN I suggest you Take your guns and your traps with you as you leave. Because we will work incessantly

to CHANGE The composition of this commission and its backward focus from FROM KILLING TO WILDLIFE PROTECTION AND SPECIES DIVERSITY in the context of ecosystem relationships, and the current impacts of climate change on declining wildlife populations. Worldwide.

YOUR proposals DO NOTHING TO ADDRESS THESE CONCENRS. I REQUEST THAT YOU REWRITE THESE PROPOSALS keeping the modern day paramaeters I have drawn to your attention IN MIND,.to present New Mexicans with proposals worthy of our precious native wildlife and citizen concerns regarding the acknowledgment of scientific facts. In short, PLEASE Do your homework or respectively resign from this commission to create space for folks who can broaden the issue of wildlife from the singular perspective of game and" taking" to one of species diversity and survival in the age of global warming.



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 8/1

PLEASE PRINT

Name: Rosemary Lowe

Address: [REDACTED]

City: [REDACTED] State: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Officially Representing: [REDACTED]
(Organization(s))

Your Title: [REDACTED]

Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 11

PLEASE PRINT

Name: Mara Bedner

Address: [REDACTED]

City: [REDACTED] State: [REDACTED] Zip: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Officially Representing: [REDACTED]
(Organization(s))

Your Title: [REDACTED]

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)



(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 11

PLEASE PRINT

Name: Murphy Katherine Ray
Address: [REDACTED]
City: _____ State: _____ Zip: _____
Phone: _____
Email: _____ @ _____
Officially Representing: Sierra Club
(Organization(s))
Your Title: wildlife chair
Do you wish to be heard? ☐ Yes ☒ No
WRITTEN COMMENT (Below or Attached)



(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 11

PLEASE PRINT

Name: Craig McClure

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Email: _____ @ _____

Officially Representing: _____
(Organization(s))

Your Title: BLACK BEAR Bureau CEO

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Tapping - STOP it!

Bear Rules -
Lower Kill tag
#5
Raise age for take
to 2+ yrs
No phone call denudations



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

11

PLEASE PRINT

Name: Jessica Johnson

Address:

City: State: Zip:

Phone:

Email:

Officially Representing: Animal Protection
of New Mexico
(Organization(s))

Your Title: Chief Legislative Officer

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Bear
Harvest too high

Cougar
waiting on results



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

11

PLEASE PRINT

Name: CHERYL HASTINGS

Address: PO BOX 207

City: State: Zip:

Phone:

Email:

Officially Representing: SELF
(Organization(s))

Your Title:

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

FOR A \$20 PERMIT A
PERSON CAN TRAP
UNLIMITED NUMBERS!

THIS CONSTITUTES THE
COMMERCIALIZATION OF
WILDLIFE TO BENEFIT
VERY FEW PEOPLE

BEAR + COUGAR



Name: John Crenshaw
Address: [REDACTED]
City: [REDACTED] St: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
E: [REDACTED]
Officially Representing: Wildlife Fed (Organization(s))
Your Title: President
Do you wish to be heard? ☒ Yes ☐ No
WRITTEN COMMENT (Below or Attached)



Name: Tom Fisher
Address: [REDACTED]
City: [REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: [REDACTED] (Organization(s))
Your Title:
Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Also Marjorie Stone
Sandias —
please close



(Please Place Form in Appropriate Agenda Slot)

PLEASE PRINT

Name: MARILYN STONE
Add: [REDACTED]
City: [REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: SIERRA CLUB
(Organization(s))
Your Title:
Do you wish to be heard? ☒ Yes ☐ No
WRITTEN COMMENT (Beaver Attached)
[REDACTED]



(Please Place Form in Appropriate Agenda Slot)

PLEASE PRINT

Name: Rifa Gentry
Address: [REDACTED]
City: [REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: [REDACTED] (Organization(s))
Your Title: [REDACTED]
Do you wish to be heard? ☐ Yes ☐ No
WRITTEN COMMENT (Below or Attached)
~~Oppose the~~
I ask the Commission to provide strong leadership to protect the bear sow population now in trouble and the cougar population. The public needs to learn about bear behavior from the department



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9

PLEASE PRINT

Name: Tom Jennings
Address: [REDACTED]
City: [REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: Penixco River Ranch
(Organization(s))
Your Title: Ranch Owner
Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Item 9 Cougar Best Rpt

Item 10 Trapping & Furber

for me its my life - out of sheep
business w/ lion & cougar

forage is changing - invasive
species - no deer to help
w/ this = predator

look at what you're doing

best sheep country in US

don't take livelihood



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9

PLEASE PRINT

Name: Steve Prather
Address: [REDACTED]
City: [REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone: [REDACTED]
Email: [REDACTED]
Officially Representing: Prather Ranches
(Organization(s))
Your Title:
Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

I second Mr. Tom Jennings comment.
For well as a rancher I understand
my livelihood as a sheep rancher.
You have no deer left because
of predators lions eagles cougars

trapping lions on private land

predators taking deer fawns



(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

Lion 9

PLEASE PRINT

Name: Wesley BURRIS

Address: [REDACTED]

City: [REDACTED] Sta [REDACTED] Z [REDACTED]

Phone: [REDACTED]

Email: [REDACTED] @ [REDACTED]

Officially Representing: [REDACTED] (Organization(s))

Your Title: *trapper*

Do you wish to be heard? ☐ Yes ☒ No

WRITTEN COMMENT (Below or Attached)

*Maintain live trapping
traps on private property
trapping is not a sport*



(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name: Shawn Carrell

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Email: _____ @ _____

Officially Representing: _____
(Organization(s))

Your Title: _____

Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

as an indiv today
let private l



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 2

PLEASE PRINT

Name:	LLOYD LINDBECK
Address:	[REDACTED]
City:	[REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone:	[REDACTED]
Email:	[REDACTED]
Officially Representing:	[REDACTED] (Organization(s))
Your Title:	
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

WRITTEN COMMENT (Below or Attached)

Remove Trapping
as a method
of Take for
Mtn Lions

Thank you - appreciate presentation
Keep Lion sports trapping



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9

PLEASE PRINT

Name:	KATE FRY
Address:	[REDACTED]
City:	[REDACTED] State: [REDACTED] Zip: [REDACTED]
Phone:	[REDACTED]
Email:	[REDACTED]
Officially Representing:	SANDIA MOUNTAIN BEARNATCH (Organization(s))
Your Title:	Board member
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

WRITTEN COMMENT (Below or Attached)

stats = down trend in avg age
of harvested Sours
keep avg sour age

100 Sours Start wide

hunt stay as it is - but
eliminate Aug & Dec



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9 *Representative*

PLEASE PRINT

Name: *Andy Prince Lopez*

Address:

City: State: Zip:

Phone:

Email: @

Officially Representing: (Organization(s))

Your Title:

Do you wish to be heard? ☐ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

*2005- Alamogordo - Commission
mt lions - Mtg
- young men attacked by lion
scalped
she had mt lion killing calves
carcasses killed by lions
(deer & antelope) in corn
fields*

*rules set on social sentiments
Agre. segment - econ importance
use
Common sense*



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9-10

PLEASE PRINT

Name: *Tom Bell*

Address:

City: State: Zip:

Phone:

Email:

Officially Representing: *Wood County Forest
& Silver Creek (Organization(s))*

Your Title: *Forest owner*

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

*Went the Southern Nevada Mts
has seen a significant increase
of coyotes - Between our Mts
They have decreased the deer
population
decrease lion pop
We Request the NM Commission
increase the harvest for
lions to help control
coyotes
We need traps to help control
especially coyotes - other predators
in our area.*



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name:	Alan Ellett		
Address:	[REDACTED]		
City:	[REDACTED]	State:	[REDACTED]
Zip:	[REDACTED]		
Phone:	[REDACTED]		
Email:	[REDACTED]		
Officially Representing:	(Organization(s))		
Your Title:	Ranch owner		
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
WRITTEN COMMENT (Below or Attached)			
Cougars & how they are a problem			
henscher			
near Tim Jennings			
other trappers are a help			
preventative lion control for sheep - what about no			
Carib trap - would like			



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name:	Jessica Johnson		
Address:			
City:		State:	Zip:
Phone:			
Email:			
Officially Representing:	Animal Protection of NM (Organization(s))		
Your Title:			
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
WRITTEN COMMENT (Below or Attached)			
Submitted written comments on lion & cougar rule			
support lion sport trapping & repeal			
support extra 2 tag change			
appreciate reduction in harvest limits			
17% - but would like to see 14% har limits			



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9
Bear Lion

PLEASE PRINT

Name:	TRAVIS CHICKS		
Address:	[REDACTED]		
City:	[REDACTED]	State:	[REDACTED]
Phone:	[REDACTED]		
Email:	[REDACTED]		
Officially Representing:	(Organization(s))		
Your Title:	Trapper		
Do you wish to be heard?	<input type="checkbox"/> Yes <input type="checkbox"/> No		

WRITTEN COMMENT (Below or Attached)

opposes banning lion trapping
science ~ not emotion
peer reviewed studies
by TW5



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

9

PLEASE PRINT

Name:	TRAVIS FREEMAN		
Address:	[REDACTED]		
City:	[REDACTED]	State:	[REDACTED]
Phone:	[REDACTED]		
Email:	[REDACTED]		
Officially Representing:	TIMBERLATIC OUTITTERS (Organization(s))		
Your Title:	OWNER		
Do you wish to be heard?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

WRITTEN COMMENT (Below or Attached)

Out fitter
hounds pushed into all the
other elk hunts
bear season - stay the
same



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9

PLEASE PRINT

Name:	Mary Katherine		
Address:	Key		
City:		State:	
Zip:			
Phone:			
Email:	@		
Officially Representing:	Sierra Club (Organization(s))		
Your Title:	wild life chair		
Do you wish to be heard?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
WRITTEN COMMENT (Below or Attached)			
Bear - do know # in bear pop			
index catch limit			
avg age of mortality not			
a good indicator			
Quotas too high			
90% hunters unsuccessful			
depreciation needs to be included			
in quota			



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 9

PLEASE PRINT

Name:	JAMES R DAUNER		
Address:			
City:		State:	
Zip:			
Phone:			
Email:	@		
Officially Representing:	(Organization(s))		
Your Title:			
Do you wish to be heard?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
WRITTEN COMMENT (Below or Attached)			
Lion - no changes			
Cost dept ## if change			
Cuz paying people to trap			
them			

SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM

PLEASE PRINT

Name: JESSE DEIBEL

Address: [REDACTED]

City: [REDACTED] State: [REDACTED] Zip: [REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Officially Representing: NMWF
(Organization(s))

Your Title: EO

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Ben -
Season dates stay the
same - hunter opp
re. if didn't draw



MEETING SIGN-IN SHEET

New Mexico State Game Commission

(Sign-in to be in the official record as having attended this meeting. Mark the box if you wish to be added to the meeting notifications mailing list.)

PLEASE PRINT

HEARING 2A-BEAR AND COUGAR RULE

NAME	ADDRESS CITY, STATE, ZIP	E-MAIL ADDRESS	PHONE	ADD TO MAILING LIST
Logan McGarran	39 Lake Van Dr Dexter, NM 88230	loganmcgarrah@gmail.com	(505) 840-5884	<input type="checkbox"/>
DAVID HEFT	P.O. BOX 13 Mayhill, NM 88339	dshett82@ptn.net	(505) 687-4407	<input type="checkbox"/>
Joel Gay		@	() -	<input type="checkbox"/>
Kevin Lockhart	36 La Luz Canyon La Luz, NM 88337	@	() -	<input type="checkbox"/>
Mike Casabonne	P.O. Box 1416 Hope, NM 88250	@	() -	<input type="checkbox"/>
Randall Major	Magdalena PO Box 11395 ABQ NM 87192	Rmajor@majorrandall.com laura@apn.miora	(505) 888-3016 (6) -	<input type="checkbox"/>
Laura Bonar		@	() -	<input type="checkbox"/>
		@	() -	<input type="checkbox"/>
		@	() -	<input type="checkbox"/>
		@	() -	<input type="checkbox"/>
		@	() -	<input type="checkbox"/>
		@	() -	<input type="checkbox"/>
		@	() -	<input type="checkbox"/>

EXHIBIT

7

tabbles



SPEAK

New Mexico

(Please Place)

EXHIBIT

tabbies

8

AGENDA ITEM

Hearing Item 34

PLEASE PRINT

Name: Logan McGarrath

Address: 39 Lake View Dr

City: Dexter State: NM Zip: 88230

Phone: 575-840-5889

Email: loganmcgarrath@gmail.com

Officially Representing:

(Organization(s))

Your Title:

Do you wish to be heard?

☐ Yes

☒ No

I Had to leave

WRITTEN COMMENT (Below or Attached)

First, I would like to thank the Commission for the continued support of bond hunting in NM. I would propose including BAZII in the zones that will no longer have an Aug. Hunt. This would allow a more equitable distribution of hunters. I am worried that having only one BAZ open in Aug. In the Southern half of the State will overly concentrate hunters. (over)

I believe having
a fall (Aug.) hunt in
the northern half of
the State and not
one in the South
~~is~~ makes the most
sense. Thank you!

SPEAKER'S CARD

(Please Place Form in Appropriate Agenda Slot)

AGENDA ITEM 2a PLEASE PRINT

PLEASE PRINT

Name: Randell Major

Address: _____

City: Magdalena State: NM Zip: _____

Phone: 505 838 3016

Email: Rmajor@NMAGORLANDERS.COM

Officially Representing: _____ (Organization(s))

Your Title: President Elect
Cattle Growers

Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

NMCG
does not support reduction



SPEAKER'S CARD

New Mexico State Game Commission Meeting

(Please Place Form in Appropriate Hearing Slot)

HEARING 2(a) PLEASE PRINT

PLEASE PRINT

Name: Kevin Lockhart
Address: 36 La Luz Canyon Rd
City: La Luz State: NM Zip: 88347
Phone:
Email: @
Officially Representing: BHA (Organization(s))
Your Title:
Do you wish to be heard? ☒ Yes ☐ No
WRITTEN COMMENT (Below or Attached)
Will give oral comment
Backcountry H&A



Name: Laura Bonar
Address: PO Box 11395
City: ABQ State: NM Zip: 87192
Phone: 505 401 8936
Email: laura @ apnm.org
Officially Representing: Animal Protection of NM
(Organization(s))
Your Title: Chief program & policy officer
Do you wish to be heard? ☒ Yes ☐ No

WRITTEN COMMENT (Below or Attached)

Please see written comment sent via email to Directors Sloane and Commissioners on November 19 2019 as well.

NEW MEXICO STATE GAME COMMISSION

Thursday, November 21, 2019

Roswell Game & Fish Office

1615 West College Blvd

Roswell, NM 88201

19.31.11 NMAC

APPEARANCES:

Commissioner Jimmy Bates

Commissioner Gail Cramer

Madame Chair Joanna Prukop

Vice-Chair Roberta Salazar-Henry

Commissioner David Soules

Commissioner Tirzio Lopez

Commissioner Jeremy Vesbach

1 MADAME CHAIR: We'll call the meeting to order
2 now, please. If everyone would take a seat. The
3 first item on the agenda is roll call of the
4 Commissioners.

5 COMMISSIONER BATES: Here.

6 THE DIRECTOR: Commissioner Cramer?

7 Commissioner Lopez?

8 MADAME CHAIR: Tirzio, can you hear us?

9 COMMISSIONER LOPEZ: Yes, I can.

10 DIRECTOR SLOAN: Yes, he's here.

11 Commissioner Soules?

12 COMMISSIONER SOULES: Here.

13 DIRECTOR SLOAN: Commissioner Vesbach?

14 COMMISSIONER VESBACH: Here.

15 DIRECTOR SLOAN: Vice Chair Salazar-Henry?

16 COMMISSIONER SALAZAR-HENRY: Here.

17 DIRECTOR SLOAN: Commissioner Prukop?

18 MADAME CHAIR: Here.

19 DIRECTOR SLOAN: We have a quorum.

20 (19.31.11 NMAC)

21 MADAME CHAIR: So this is agenda

22 item -- excuse me, it is hearing item number 2 A,

23 the rule making hearing on the final bear and

24 cougar rule, 19.31.11. This hearing will please

25 come to order. My name is Joanna Prukop, chair of

1 the commission. I will be serving as the hearing
2 officer and will be advised by the Commission's
3 counsel from the Office of the Attorney General,
4 John Kay.

5 The purpose of this hearing is for
6 consideration of final adoption of the following
7 proposed rule by the Commission. The hearing item
8 is for the Commission to receive public comment on
9 the proposed bear and cougar rule title 19, chapter
10 31, part 11 of the New Mexico Administrative Code.
11 The bear and cougar rule will become effective, if
12 passed, on April 1, 2020. These hearings are being
13 conducted in accordance with provisions of the Game
14 & Fish Act and the State Rules Act.

15 These hearings are being audiotaped and video
16 recorded. Anyone interested in a copy of the
17 audiotape or video recording should contact Drisana
18 Beckford with the Game & Fish Department.
19 Please -- public notice of this hearing was
20 advertised in a New Mexico registrar, the
21 Albuquerque Journal, the New Mexico Sunshine
22 Portal, and on the Department's website. Copies of
23 the proposed new rules have been available on the
24 Department's website. Those wishing to comment
25 here today, please sign the attendance sheet for

1 this item at the back of the room, which will later
2 be entered into the record as an exhibit.

3 In terms of the hearing procedures, these
4 hearing rules will be conducted in the following
5 manner: staff will present prefiled exhibits.
6 Exhibits admitted into evidence are available for
7 review by the public but exhibits may not be
8 removed from this room. After all exhibits are
9 entered, we will proceed to the presentation of the
10 proposed rule, after which testimony will be taken
11 from the audience.

12 In order to ensure that the hearing is
13 accurately recorded, only one person at a time
14 shall be allowed to speak and any person recognized
15 to speak is asked to identify themselves by name,
16 who you are affiliated with for the record each
17 time you are recognized. Speak loudly and clearly
18 to accurately record your comments. After a person
19 has offered comment, they will stand for questions
20 from the hearing officer. The audience may also
21 ask questions of anyone offering comments after
22 being recognized by the Chair.

23 These hearings are not subject to judicial
24 rules of evidence, however, in the interest of
25 efficiency I reserve the right to limit any

1 testimony deemed irrelevant, redundant, or unduly
2 repetitious. The Commission may discuss the
3 proposed new rules after the public comment portion
4 of the hearing.

5 Final Commission action, including adoption of
6 the rule may occur after the completion of the
7 presentation and public comment period of each
8 hearing.

9 So those are the instructions and now for the
10 beginning of the hearing. In the preliminary
11 matter of hearing item number 2, informational, the
12 rule making hearing on the bear and cougar rule,
13 19.31.11 NMAC. This hearing is now open. Are
14 there any exhibits for proposed new rule of
15 19.31.11 for the record?

16 MR. LILEY: Madame Chair, I wish to enter six
17 exhibits into the record. Exhibit 1 being the copy
18 of the notice of rule making that was posted in the
19 New Mexico Registrar. Exhibit 2, the copy of the
20 proposed rule that was posted on the Department's
21 website. Exhibit 3, the copy of the presentation
22 that be given today. Exhibit 4, the summary of the
23 proposed changes that have been posted on the
24 Department's website. Exhibit 5, the technical
25 information that we relied upon to develop the

1 rule. And Exhibit 6, the 277 public comments
2 received in the record.

3 MADAME CHAIR: Okay, six exhibits are admitted
4 into the record.

5 With that, Stewart, can you please introduce
6 the proposed new rule, 19.31.11?

7 MR. LILEY: Madame Chair, Members of the
8 Commission, you all have heard this at multiple
9 meetings. Today is the conclusion of it, so I
10 appreciate bearing through it for all summer and
11 the last four months. We did have four public
12 meetings. We did receive 277 comments on the rule.
13 Again, this is bear and cougar, so some of those
14 comments were specifically just bear, some were
15 cougar, some were both bear and cougar.

16 In terms of bear, I'll break it out bear and
17 cougar separately. In terms of bear, the biggest
18 comment we heard was as it revolved around a
19 proposed change of no change in the harvest limit,
20 both in favor of and both opposed. And those
21 opposed both saying that the harvest limits are too
22 low. Those also saying the harvest limits are too
23 high. So we had commented surrounding both that.
24 And in terms of bear, the other comment we most
25 frequently received was change to the start and end

1 dates in bear management zones 10, 12, and 13 were
2 proposing starting their -- any legal weapon season
3 after that archery season on September 25th. We
4 had comments both in favor and in opposition to
5 that, so no -- again, like you'll see, no one-way
6 comments specific to it.

7 In terms of the bear proposals, again, as
8 we -- I just said on the comments, we're not
9 proposing any changes to the bear harvest limits.
10 We are proposing changing the season start and end
11 dates in bear management zones 10, 12, and 13.
12 Those seasons specific to the any legal sporting
13 arm. That season now would run from September 25th
14 to December 15th. So removing the 15
15 August -- 15-day August season and extending the
16 end date by 15 days.

17 One of the other things that we're proposing
18 is including Yuraka wildlife management area as
19 part of the northeast area draw specific hunts.

20 You all -- we have discussed this at multiple
21 meetings, but real quick, for people here, the way
22 we determine harvest limits is we estimate bears
23 within the primary -- or primary habitat. 18
24 percent of New Mexico we delineate as primary bar
25 habitat. We then apply a harvest rate of 10

1 percent of the pop -- estimated population on the
2 total harvest with no more of that to be 40 percent
3 female. So we're pretty conservative in that we
4 only estimate bears in the primary habitat. We
5 know there's bears in the secondary habitat but
6 we're only setting the harvest limits upon bears in
7 the primary habitat.

8 We then take another conservative approach by
9 only allowing a 10 percent harvest of the estimated
10 population. That ranges anywhere in the west
11 from -- from no harvest limit to up to 15 percent
12 is the suggested. And then again we do a sub limit
13 of that 10 percent, another 40 percent. So a
14 pretty conservative approach when we get into
15 delineating harvest levels.

16 One of the big things that we undertook at the
17 previous rule making was getting at densities or
18 better information at densities using non-invasive
19 genetic sampling. You have seen -- so I won't
20 present it today, but you've previously seen some
21 of the graphs where we have our study areas where
22 we put hair snares across to try to get at
23 densities. Those are the densities we apply to the
24 primary bear habitat. You'll see on that
25 right-hand side of the column, those of our most

1 recent estimates compared to the old 20 -- that
2 data collected in the late '90s, final analyzed in
3 2001.

4 What it's been showing is our bear populations
5 have been growing through time, which is not
6 surprising. Probably the old estimate way of doing
7 it of actually physically captioning the bear,
8 putting a radio collar on it and having to
9 recapture bias, the estimate is low is most likely
10 whereas this, just putting a barb wire snare out
11 and having a lure, a scent lure in there where the
12 bears go and collect hares, it's less biassed and
13 probably more accurate and reflective of the
14 population. So those are the densities. That's
15 the density of what we see of bears per 100 square
16 kilometers.

17 Real quick, under the previous four-year rule
18 that's the end of this season, we're averaging a
19 harvest of about 470 bears on an annual basis with
20 about 173 being sows. The harvest limits of
21 maximum allowed is about 800. Why we don't reach
22 out 800 is a multiple fold, some of that being that
23 some areas access is an issue in trying to get into
24 it because it's all private land per se in certain
25 GMUs or certain zones or some of it might be a

1 heavy wilderness area. Some of it is we won't
2 reach the total limit because we reached the female
3 sub limit well before the total limits so you're
4 never going to get to it. So those are a lot of
5 the factors.

6 The other thing is we close any zone when it's
7 within 10 percent of reaching the limit. So we try
8 to not overshoot the harvest. Just for your
9 information, the season is about ready to end next
10 week. Our harvest this year is at 471 bears. It's
11 not on that graph with 168 sows. So we're right in
12 line with the average over the last four years,
13 nothing out of the ordinary this year. One of the
14 things I would like to -- most likely a function of
15 a good overwinter moisture, a decent mass crop this
16 year. Our depredation was down to 37 depredation
17 bears this year. So a very small number in terms
18 of overall depredation but nothing out of the
19 ordinary.

20 You know, in those zones where we don't have
21 the update hare snare studies, we do look like
22 other things like average age of harvest of the
23 animals, both male and female. You'll see through
24 that time that graph is pretty static, averaging
25 around an age of 6 for both males and females,

1 females being a little bit higher between 6 to 7
2 years old.

3 What -- what this is, is the specific bear
4 management zones and those GMUs, the primary
5 habitat in there, and then the harvest limits
6 that's going to be in the rule that we're proposing
7 in front of you today. Again, no change from the
8 previous rule. So that is for bear.

9 I'll move straight into cougar, if you would
10 like, Madame Chair, and then we could do questions
11 at end.

12 MADAME CHAIR: Yes, that would be fine. Thank
13 you.

14 MR. LILEY: So in terms of cougar, again, same
15 as bear, we received 277 total comments, some was
16 just bear, some was cougar, some was both. The
17 most commented upon proposals was no longer
18 allowing footholds as a means for sport harvest to
19 cougars, and then also reducing cougar harvest
20 limits in the zones. We reduced them across most
21 zones in the state for about 20-some percent
22 reduction overall. Again, commented both in favor
23 and opposed. Not one sided comment one way or the
24 other.

25 I just mentioned the first two. I'll get into

1 it in a little bit more detail, but we also did do
2 some cougar management zone adjustments both in L
3 and J. That's to reflect the GMU 25 where the
4 Floridas are, putting that down into zone L.
5 That's more of a desert habitat south of I-10
6 versus J, which is more of the Jila, Mogion Rim
7 country, kind of more reflective of the population.

8 And then proposing combining B and F into a
9 single zone. That's based upon GPS, approximately
10 30 GPS collared cougars that we had in that area
11 that suggests those are not two separate zones in
12 terms of population and more should be treated by
13 harvesting the one management zone.

14 Again, in the biggest manner and method
15 restriction that we're proposing is no longer
16 allowing foot snares to support harvest. What
17 you'll see there is the take over the last years on
18 that. It would still allow the Department to issue
19 traps as a means for dealing with depredation or
20 protection, for example, big horn sheep. So it
21 doesn't limit that but it does limit it as a means
22 for -- for a sport harvest.

23 Cougar harvest, you'll see there over the
24 last -- this last rule, what you'll see is last
25 year we had a pretty significant uptick, up to 344.

1 That's mostly driven, or my speculation is that
2 it's snow. If you remember last winter we had
3 snow, consistent snow, and snow on top of snow,
4 which is conducive to a higher harvest. That
5 happens in the north zones. We didn't see much
6 change in the harvest in the southern zones where
7 it's mainly dry land dogs and harvest is pretty
8 consistent.

9 In terms of the harvest limits, as you'll
10 recall, we went into a new methodology to estimate
11 cougar populations across the landscape by GPS
12 collaring our cougars in those management zones,
13 putting up camera rays, or camera trapper rays,
14 what we consider it, and trying to do a mark
15 recapture on trying to get at how many cougars are
16 within those zones and where they move around those
17 zones to better estimate those populations.

18 We did that in zones B and F primarily in this
19 last rule cycle, and that's why we got to that
20 combining B and F into one zone. Those GPS collars
21 on those cats show that they were more indicative
22 of one, and it also got down to that harvest limit
23 where you'll see double asterisk is that's
24 estimating cougars at about 1.1 cougars per 100 per
25 square kilometers in those zones. Take into

1 consideration those zones are in the Jemez
2 mountains and north up into kind of where the San
3 Juan's start. A lot of snow, consistent snow, a
4 lot of public land, high road density, so it's not
5 surprising that we have a little bit lower density
6 in those zones than some of our desert zones where
7 harvest is probably much less.

8 We've realigned some of the other harvest, as
9 you'll see in terms of proposed changes. Under the
10 previous rule there was a concerted effort to try
11 to increase take above what would be considered
12 sustainable to try to reduce the populations. We
13 never got into some of those. We're basically
14 saying let's take the midpoint of the estimate on
15 all these at least at a minimum, and that's where
16 we align the harvest limits to based off of that.

17 We're continuing to move our GPS collaring
18 cats and camera rays across the state. The area
19 we're working in right now is kind of to the east
20 of here, south of here as well, looking more in a
21 desert-type habitat up into the Sacramentos as
22 well. When that data comes in, if it's within the
23 limits that we put in front of here during this
24 rule there will be no need to amend the rule, but
25 if it is we'll come back to an amendment

1 potentially later as we get new funding to update
2 the information as it pertains to harvest limits.

3 And with that I would take questions.

4 MADAME CHAIR: Questions from the
5 Commission -- or excuse me, public. I'm sorry, I
6 need to go back to the script. Okay. Would anyone
7 like to comment on the new rule, title 19, chapter
8 31, part 11? And at this point I'm asking the
9 public, and I do have some cards. And I guess the
10 first one will be Mike Castelone and then if we
11 could have Randall Major, Kevin Lockhart, and David
12 Heft up. We may as well call everyone. Then
13 there's Logan Migara and Laura Bonner, if we could
14 just all come to the left up here. And we'll start
15 with Mike.

16 MR. CASTELONE: Okay. Thank you, Madame
17 Chairman, Members of the Commission. I realize
18 that this is a hearing, not public input on
19 changing the rule as proposed, so what you have to
20 vote on is what is before you, I understand. But I
21 just wanted to go on record that -- that I -- I
22 don't think it's a good idea to be decreasing the
23 limits in any area because I think there are plenty
24 of cougars in the state. And I think that there's
25 no evidence that there is an overharvest.

1 And then the only other comment I would make
2 concerns the elimination of foothold traps and
3 snares for the sport taking of cougars. Since the
4 data shows that there are very few that are taken
5 by that method, it seems that eliminating that,
6 there's no real need to eliminate that method
7 because there's not an overabundance of cougars
8 being taken by that method and it still would leave
9 open that one method for sport trappers to be able
10 to use sport trappers and hunters to use, so I
11 don't see the rationale for eliminating that. And
12 I just wanted to put that in the record. Thank
13 you.

14 MADAME CHAIR: Thank you very much.

15 Randall Major?

16 MR. MAJOR: Madame Chair, Commissioners, for
17 thank you for this opportunity to speak to you, and
18 I would like to make this comment. The New Mexico
19 Cattle Goers Association does not support the
20 reduction in the total bag limit for cougar. Bag
21 limits should be based upon scientific data
22 regarding the state's population data on the
23 species. In recent years that data has indicated
24 that the appropriate bag limit should be at 700.
25 We have seen no new studies or data that supports

1 this reduction.

2 The state needs to protect its tax paying
3 citizens, and we hope that the Commission will
4 reconsider this bag limit, although the bag limit
5 has not reached in some time the flexibility to
6 address catastrophic population growth. We
7 recognize that there is some flexibility available
8 to the director and the Commission. The load bag
9 numbers will impact flexibility as well.

10 We also want to make sure that none of the
11 proposed changes in the rule in no way impacts
12 livestock producer's ability to protect their
13 livestock and pets. Thank you.

14 MADAME CHAIR: Thank you, sir.

15 Kevin Lockhart?

16 MR. LOCKHART: Thank you, Madame Chair,
17 Commissioners. I'm Kevin Lockhart with Back
18 Country Hunters and Anglers. I want to thank you
19 the Commission for their work to shape the proposed
20 bear and cougar rule specifically when it comes to
21 setting the harvest numbers by using the best
22 available science. We think that is sound.

23 That being said, we oppose the portion of the
24 rule concerning the proposed band on the sport
25 trapping of cougars on private land. If enacted,

1 this rule change will take what we consider a
2 legitimate harvest method and essentially declare
3 it illegitimate. There may be circumstances that
4 would warrant the prohibition of an otherwise
5 legitimate harvest method such as if the method was
6 so advantageous to hunters and trappers that it
7 resulted in an unsustainable effect on the population
8 of the targeted species.

9 However, I've heard testimony at prior
10 meetings, and I believe I heard Chief Liley state
11 and others testify that even accounting for the
12 sport harvest over the last three years the total
13 cougar harvest statewide is below the Department's
14 quota. Therefore, there doesn't seem to be a
15 scientific justification for this rule change.

16 Absent a scientific justification another
17 potential reason for a change could be to increase
18 public safety. For instance, such as with the
19 setback requirements for traps with regard to trail
20 heads, rest areas, et cetera, that were discussed
21 on the previous trapper and fur bear rule.

22 However, seeing as this band has targeted an
23 activity primarily occurring on private lands, it
24 is difficult to see how this change would better
25 serve public safety of hikers, campers, et cetera.

1 So seeing as how there appears to be little
2 justification based in science -- in the science of
3 population management and little basis for the
4 concern for public safety, we would oppose this
5 proposed band on the sport trapping of cougars
6 because we have seen no compelling reason to
7 eliminate what we believe to be a legitimate method
8 of cougar harvest. Thank you.

9 MADAME CHAIR: Thank you, sir.

10 David Heft?

11 MR. HEFT: Madame Chair, Commissioners, I'll
12 just make a few comments. You all have received
13 comments from me already, as has the Department. I
14 was not trying to repeat myself, but I'll
15 also -- you all know my standing on the use of foot
16 snare and traps for the harvest of cougars. I'm
17 opposed to banning that.

18 I would like to bring up a couple of items
19 after finally seeing the final rule that do concern
20 me. There were 14 articles listed as supporting
21 documentation for this rule. Only three of them
22 were from New Mexico. The other eleven were from
23 the northern Rockies and the Pacific Northwest.
24 What was absent and really stood out was the fact
25 there was no supporting documentation from research

1 done in our neighboring states of Arizona and
2 Texas, which would be far more applicable to this
3 state.

4 Another concern for me, and I hope none of you
5 think that lion populations in northern New Mexico
6 adjacent to Colorado are the same as lion
7 populations down here in the southern part of the
8 state. One of the other big differences we have
9 down here in the southern part of the state is we
10 have -- we are afflicted, and I'm using that term
11 deliberately with thousands upon thousands of
12 non-native exotic (inaudible) acting as an
13 additional food resource for cougars down here.
14 That potentially increases the cougar population
15 above what would normally be natural levels and
16 causes more impacts to native wildlife. None of
17 that has been taken into consideration in the rule.

18 Now, my colleagues, I have a lot of respect
19 and I really like my colleagues in the Game & Fish,
20 although I told Stewart this morning I was going to
21 disagree with him, as you can see him smiling,
22 so -- but we're still friends. But this does
23 concern me because we have a uniform harvest level
24 that's now been set across the state. Every zone
25 is the same quota. There seems to be no

1 integration with other species needs which is one
2 of the recommendations from the supporting
3 documents that the Department attached to this rule
4 proposal. So this is of concern to me.

5 I realize we're late in the cycle, but I would
6 hope you would consider these concerns in the
7 future. Thank you.

8 MADAME CHAIR: Thank you, sir.

9 Is Mr. Logan Migara here? Is he still here?
10 If not, I'm going to read his comments after we
11 hear from Laura.

12 MS. BONNER: Hello again, Madame Chair,
13 Members of the Commission. Regarding the cougar
14 rule, we enthusiastically support the decisions to
15 no longer allow traps and foot snares as a method
16 of trophy hunting for cougar and to no longer allow
17 an additional two tags for cougar license holders
18 who have already fulfilled their two cougar bag
19 limit.

20 Trophy hunting is the greatest source of
21 mortality for cougars throughout the majority of
22 their range across the western and mid western
23 United States. We all know that trophy hunting
24 harms wildcats and their family groups and
25 scientific research also confirms that it increases

1 human/cougar conflict and livestock depredation.

2 Conservation biologists have derived this
3 practice as unnecessary and wasteful. Killing
4 cougars is not only economically -- is not
5 economically sound or supported by the majority of
6 Americans who want to see wildlife protected. So
7 while we are glad the Department is proposing a
8 reduction in cougar trophy hunting quotas, we are
9 gravely concerned the proposed quota reduction
10 doesn't go nearly far enough. The written comments
11 we've submitted provide ample explanation for our
12 concerns, and we believe the Department must
13 address this issue before any future proposes on
14 this rule.

15 Further, to allow for the abundance of caution
16 that should be applied to cougar management because
17 of many uncertainties in managing the species we
18 recommend that the cougar rule be open for
19 consideration on a two-year basis to adjust for
20 updated research within New Mexico CMZs, the more
21 accurately identified cougar densities in these
22 regions.

23 Regarding the proposed bear rule, given the
24 droughts and fires in New Mexico and the worsening
25 climate and extinction crises, we request that the

1 quota be reduced to 335, the number used by the
2 agency in recent memory. Given that New Mexico is
3 operating in the dark about the extent of our
4 likely tiny black bear population, and we further
5 request that the agency end the practice of
6 hounding bears with packs of dogs because of myriad
7 cruelty problems.

8 Black bears are important in maintaining the
9 ecological systems in our forests. They disburse
10 seeds across vast distances, even more seeds than
11 birds, open up canopies and amend soils through
12 their various behaviors. The Commission must
13 appreciate the massive contributions bears make to
14 conserving the biological diversity of their forest
15 ecosystems.

16 We ask the Commission to reduce the quota to
17 335, consistent with prior and better supported
18 quota in the state. Thank you.

19 MADAME CHAIR: Thank you.

20 Also, I'll go ahead and read Mr. Migara's
21 comments because he did write them out on a card.
22 First, I would like to thank the Commission for
23 their continued support of hound hunting in New
24 Mexico. I would propose including bear management
25 zone 11 in the zones that will no longer have an

1 August hunt. This would allow a more equitable
2 distribution of hunters. I am worried that having
3 only one bear management zone open in August will
4 concentrate hunters in that zone.

5 And he goes on to say that I believe having a
6 fall or August hunt in the northern half of the
7 state but not one in the south makes the most
8 sense. Thank you.

9 So that concludes the comment from the public
10 as far as I can tell. Would anyone else in the
11 audience like to make public comment on this rule?
12 Hearing none, there -- are there any other exhibits
13 anyone wants to enter into the record at this time?
14 Are these cards exhibits?

15 LEGAL REPRESENTATIVE: They are.

16 MADAME CHAIR: Okay. And that sheet as well?

17 LEGAL REPRESENTATIVE: Correct.

18 MADAME CHAIR: So is that two exhibits or is
19 that one or is that multiple?

20 LEGAL REPRESENTATIVE: One. Oops, two. I'm
21 getting two different answers. I hear one from the
22 back. Two from the front. Go for one. You could
23 go either way, probably.

24 MADAME CHAIR: All of the exhibits in your
25 hand shall be entered as evidence, and --

1 LEGAL REPRESENTATIVE: Madame Chair, I think
2 the --

3 MADAME CHAIR: Yes?

4 LEGAL REPRESENTATIVE: Just for the sake of a
5 clean record I think it might be better just to do
6 it as two.

7 MADAME CHAIR: Two.

8 LEGAL REPRESENTATIVE: You can do it either
9 way, but just for a clean record, you might be --

10 MADAME CHAIR: We'll do it as two because it's
11 two separate stacks.

12 LEGAL REPRESENTATIVE: 7 and 8.

13 MADAME CHAIR: Okay. So two exhibits are
14 admitted into the record. So at this point I'm
15 going to close the hearing.

16 Has anyone -- has everyone present signed the
17 attendance sheet, which is the sheet that Mike just
18 used as an exhibit? At this time the attendance
19 sheet shall be marked as Exhibit --

20 DIRECTOR SLOAN: 7.

21 MADAME CHAIR: 7.

22 If there are no questions, I will admit the
23 attendance sheet as Exhibit 7. The comments
24 submitted and testimony heard at this rule hearing
25 will be reviewed by the Commission and discussed

1 during the open session of today's meeting. The
2 Commission will vote on the proposed rule at this
3 time.

4 I would like to thank everyone present for
5 their participation today and let the record show
6 that the rule making hearing was adjourned at 3:42
7 PM.

8 Okay. Given that, now we come back to the
9 Commission for any further discussions or questions
10 of Stewart or others about this final rulemaking
11 step.

12 Yes, Commissioner Salazar-Henry?

13 COMMISSIONER SALAZAR-HENRY: It's probably to
14 our AG John. Because we received such a late
15 request to move a zone out of the August time frame
16 into the September/October time frame, does that
17 constitute a may major change that we would have to
18 keep it open for more input or is --

19 MADAME CHAIR: We'd have to start over.

20 COMMISSIONER SALAZAR-HENRY: Would we have to
21 start over?

22 LEGAL REPRESENTATIVE: I don't think that it
23 rises to that level. I mean, I think that because
24 it was a comment that was submitted through the
25 commenting process, I think you can make a change

1 based on that. You know, the Commission has the
2 authority to make alterations to the rule in
3 accordance with public comment. So I don't think
4 that you would have to start the rule over again,
5 no.

6 MADAME CHAIR: Thank you for that comment,
7 John, and for the question, Commissioner
8 Salazar-Henry. This is the first time this
9 particular Commission is dealing with a rulemaking
10 process where there actually has been meaningful
11 public comment during this phase, and so we are
12 learning what our abilities are at this point in
13 the process.

14 LEGAL REPRESENTATIVE: Yeah, and just to
15 clarify, so I mean, I do recommend that the
16 Commission discuss the comments that were
17 submitted. I think that that's something that's
18 highly advisable. As far as what your options are
19 today, I mean, you have the option to, you know,
20 following your discussion you can approve the rules
21 that's been proposed to you. You can decline to
22 adopt the rule. You can amend the rule in
23 accordance with public comment. Another thing that
24 some clients will do when -- especially when
25 they're received a large number of public comment,

1 if they don't feel they're ready to make a
2 decision, you can take this under advisement, take
3 it up at the next, you know, meeting. That's up to
4 the Commission.

5 You know, I would say that any non-minor -- I
6 mean, you can always make grammatical changes and
7 things like that. Anything other than that should
8 be either in accordance with public comment or
9 somehow to accommodate public comment.

10 COMMISSIONER SALAZAR-HENRY: So I'm going to
11 summarize this. This last comment about moving
12 zone 11 into the same time frames as zone 10, 12,
13 and 13, that is considered a minor alteration. It
14 is not something that we have to go back out and
15 repost?

16 LEGAL REPRESENTATIVE: I wouldn't consider it
17 a minor alteration. I would consider it a public
18 comment, and so you might be able -- I mean --

19 COMMISSIONER SALAZAR-HENRY: I just don't want
20 to get back into saying, oh, if I want to consider
21 this we have to go and post this again and we're
22 not meeting until January, we have a deadline to
23 get our hunts and our --

24 LEGAL REPRESENTATIVE: Because it was
25 submitted through public comment, you probably have

1 the ability to make that change depending on the
2 will of the Commission and the information that you
3 have at hand. I would like at all the comments
4 that were submitted, you know, and the presentation
5 that's been submitted. If it's not -- if that's
6 not a comment that is consistent with the evidence
7 that you had, I probably would not make that
8 change. You know, but you probably have the
9 authority to do that.

10 COMMISSIONER SALAZAR-HENRY: Okay. Stewart,
11 is this the first time you've ever heard that? Do
12 we get anybody else wanting to shift hunt dates?

13 MR. LILEY: Madame Chair, Commissioner
14 Salazar-Henry, it's -- that specific zone I would
15 have to look. It is not the only time we've heard
16 other zones being proposed. I wouldn't say it's
17 the preponderance of the public comment that we
18 heard on the rulemaking on this, though, in terms
19 of the 277 comments submitted to the record, but it
20 is not the first time that we've heard of a
21 discussion on that.

22 MADAME CHAIR: I think I remember us going
23 back and forth on it a little bit in Cloudcroft
24 when we discussed this item there, but we did not
25 make any changes that I --

1 MR. LILEY: Madame Chair, Commissioner
2 Salazar-Henry, I might also comment to that a
3 little bit on why we didn't propose that.

4 COMMISSIONER SALAZAR-HENRY: Yes. Yes, that
5 was my next question.

6 MR. LILEY: Zone 11, which is referenced is
7 GMUs 37 and 38. Those zones do not close, and so
8 that's why we didn't propose change -- if you
9 recall, we moved some of those zone closures to
10 start later because they close early. It doesn't
11 give the opportunity for hunters to hunt with a
12 combined elk or bear hunt. Those kind of examples.

13 Again, zone 11 stays open until the end of the
14 season, which is November 30th right now. What the
15 lot of zone 10, 12, and 13 did, for example, zone
16 10, I think, closed within two days of October and
17 some of those other ones closed quite early. So
18 that was the discrepancy that we were having there
19 is the desire was to extend the open periods in
20 which the zone was open from the public comment.

21 By doing -- not having that 15 days in August
22 it theoretically will keep the season open later
23 into October is what the bigger comments were on
24 that.

25 COMMISSIONER SALAZAR-HENRY: So Chief Liley,

1 you don't -- you don't have a fear of I can't hunt
2 until September 25th in zone 10, 12, or 13 so I'm
3 going to zone 11 and try to get one there and then
4 go back to --

5 MR. LILEY: Madame Chair, Commissioner
6 Salazar-Henry, I would take -- I would say no. And
7 why I would say that is based on our experience
8 from the north. For example, our most
9 popular -- one of our most populated bear zones, in
10 terms of bear population is in the Chama area,
11 including GMU 52, et cetera. That currently
12 doesn't open until the September 25th, but other
13 zones around it do and we don't see this huge
14 influx around there. So from previous experience
15 from the north, I wouldn't say that this is enough
16 of an issue to where we might want to consider it.

17 COMMISSIONER SALAZAR-HENRY: Thank you. I
18 appreciate that.

19 I'm good.

20 MADAME CHAIR: Any other questions or comments
21 from Commissioners?

22 Yes, Commissioner Vesbach?

23 COMMISSIONER VESBACH: Just a comment, Madame
24 Chair. You know, we've received a lot of comments
25 and, you know, a lot of challenges to the -- to the

1 science. And I went through all of those and
2 really spent time chasing down those comments, and
3 I just want to commend the Department. I think
4 you've really gone through and applied the science.
5 And, you know, whether it meant we increase the
6 harvest or decrease the harvest, we have followed
7 the science and have been impressed through the
8 process. And I appreciate all the public comment
9 we've got that, you know, this is what it's all
10 about. This is the -- I'm talking about the North
11 American model. This is the democracy right here
12 where we hear from the public, we get a chance to
13 look at it. But going through all that, I was just
14 impressed with the process.

15 MADAME CHAIR: Thank you, Commissioner
16 Vesbach.

17 Others? Hearing none, this is the time at
18 which we take action to basically accept or reject
19 this rule unless anyone wanted to modify a portion.
20 That would be allowable today. So based on that,
21 is -- let's -- do we -- let's do a roll call vote
22 on this, please, Mr. Director.

23 DIRECTOR SLOAN: Madame Chair, I think you
24 motion.

25 LEGAL REPRESENTATIVE: Madame Chair, I would

1 recommend somebody make a motion and then a second.
2 And then -- I was hoping that was a warning for me
3 to (inaudible) there.

4 MADAME CHAIR: Yes, that is a warning for Mike
5 to get out his list.

6 COMMISSIONER SALAZAR-HENRY: I fell down on my
7 job again.

8 LEGAL REPRESENTATIVE: Pick up the slack here.

9 MADAME CHAIR: Okay. Knowing that this is
10 final action on this rule, as presented today and
11 discussed by Stewart, are we ready to have a motion
12 on what is essentially the bear and cougar rule?

13 COMMISSIONER: Madame Chair, I would move to
14 repeal and replace 19.31.11 NMAC as presented by
15 the Department and allow the Department to make
16 minor corrections to comply with filing this rule
17 with the state records and archives.

18 MADAME CHAIR: Do I hear a second?

19 COMMISSIONER CRAMER: Second.

20 MADAME CHAIR: Commissioner Cramer provides
21 the second.

22 Commissioner Lopez, are you still with us?

23 COMMISSIONER LOPEZ: I am.

24 MADAME CHAIR: Good for you.

25 Okay. Mr. Chair, we would -- I mean,

1 Director, we would like to do a roll call vote on
2 this, please.

3 DIRECTOR SLOAN: I'm almost there.

4 Commissioner Bates?

5 COMMISSIONER BATES: Yes.

6 DIRECTOR SLOAN: Commissioner Cramer?

7 COMMISSIONER CRAMER: Yes.

8 DIRECTOR SLOAN: Commissioner Lopez?

9 COMMISSIONER LOPEZ: Yes.

10 DIRECTOR SLOAN: Commissioner Soules?

11 COMMISSIONER SOULES: Yes.

12 DIRECTOR SLOAN: Commissioner Vesbach?

13 COMMISSIONER VESBACH: Yes.

14 DIRECTOR SLOAN: Vice Chair Salazar-Henry?

15 COMMISSIONER SALAZAR-HENRY: Yes.

16 DIRECTOR SLOAN: Chair Prukop?

17 MADAME CHAIR: Yes.

18 DIRECTOR SLOAN: Unanimous.

19 MADAME CHAIR: Thank you. The rule is
20 adopted.

21 Thank you, Stewart. I'm so glad you don't
22 have to make this presentation again this year.

23 [The recording concludes.]

24

25

1 In Re:

2 Roswell Game & Fish Meeting Rule 19.31.11

3

4

5

C E R T I F I C A T E

6

7

8

I, Lisa Reinicke, New Mexico Certified
Stenotranscriptionist, DO HEREBY CERTIFY that the
above captioned transcription was prepared by me;
that the RECORDING was reduced to typewritten
transcript by me; that I listened to the entire
RECORDING; that the foregoing transcript is a
complete record of all material included thereon,
and that the foregoing pages are a true and correct
transcription of the recorded proceedings, to the
best of my knowledge and hearing ability. The
recording was of GOOD quality.

I FURTHER CERTIFY that I am neither employed
by nor related to nor contracted with (unless
excepted by the rules) any of the parties or
attorneys in this matter, and that I have no
interest whatsoever in the final disposition of
this matter.

17

18

/s/ Lisa Reinicke
Lisa Reinicke,
Certified Stenotranscriptionist

19

20

21

22

23

24

25