

Bear and Cougar 19.31.11 NMAC



April 28, 2023
State Game Commission Meeting

Stewart Liley, April 28, 2023

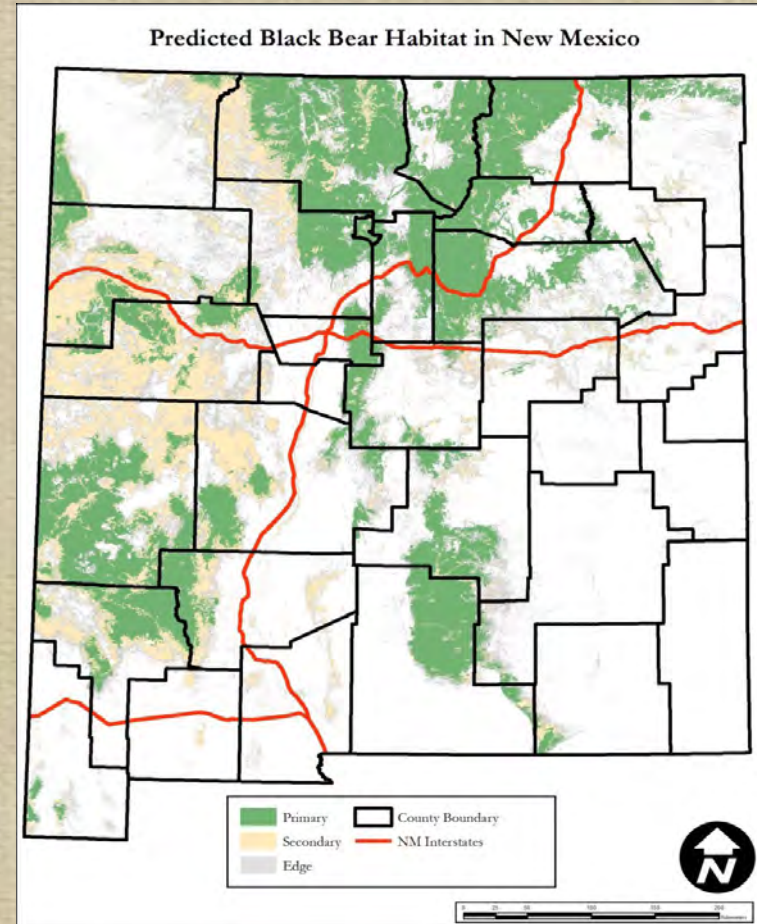
Rule Development Timeline

- **April, August, & October** – present at SGC meetings
- **April** – Rule opens, initial NMDGF ideas posted on the website
- **July** – Public meetings throughout the state
- **September** – Final NMDGF proposed rule posted on the website
- **October 20th** – Act on rule



Black Bear Management Structure, Monitoring and Research

- In the past, bear density estimates applied only to primary habitat

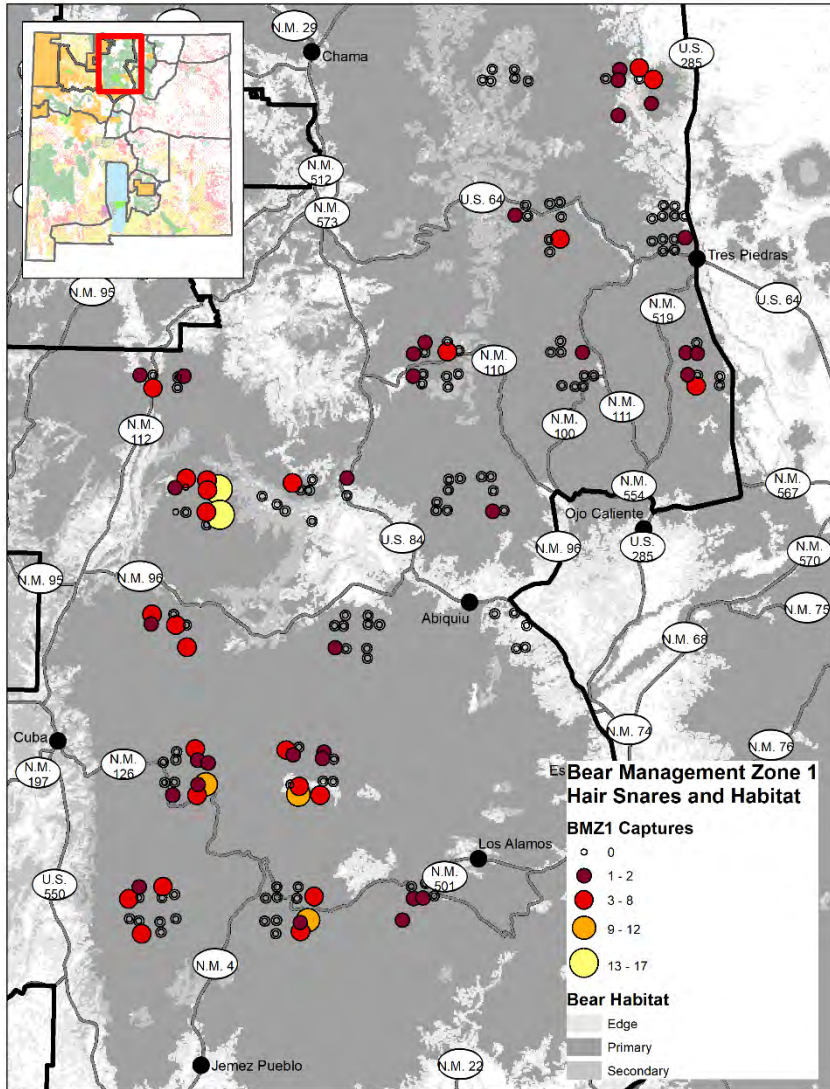


Primary habitat = 54,793 km² (18% of NM)

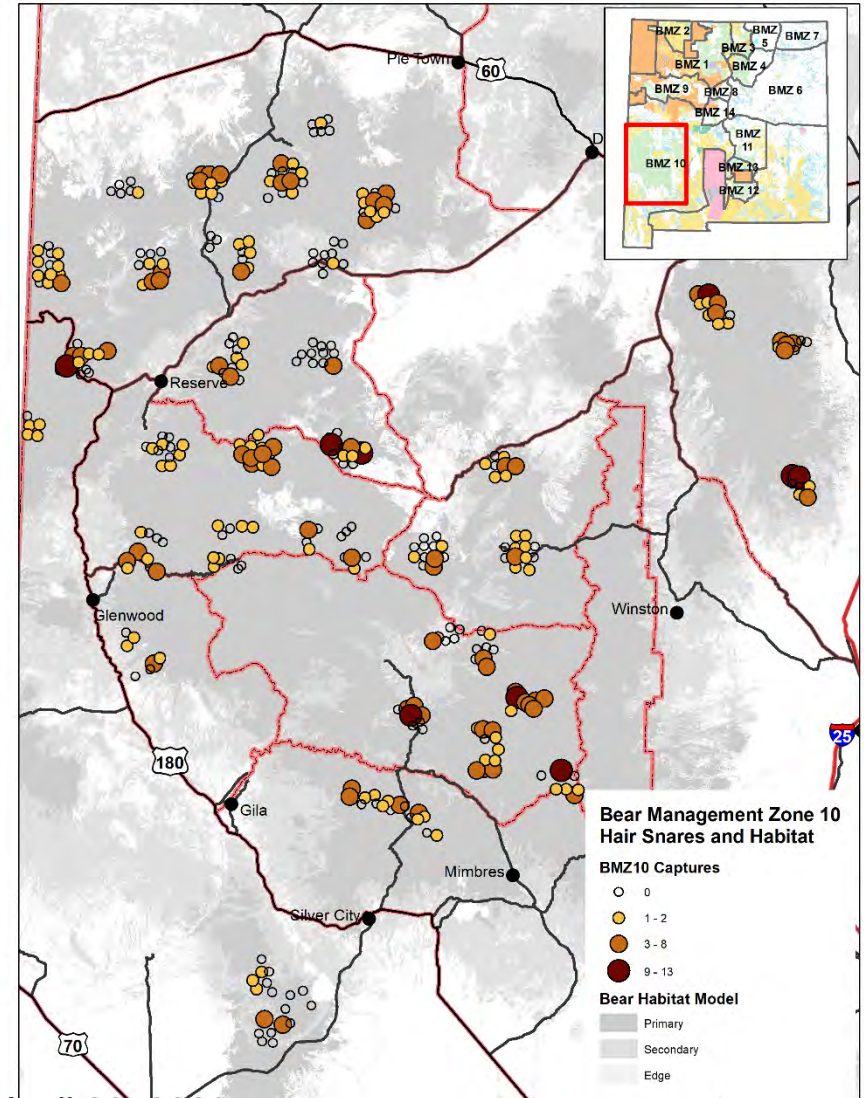


Map of Study Areas

BMZ 1 - 2019



BMZ 10 - 2020 & 2021



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NMDGF Bear Hair Snare Studies

- **BMZ 1, 2019:** 180 sites, 1,097 samples, 66% ID rate, 94 bears (49F:45M)
- **BMZ 10, 2020:** 239 sites, 1,241 samples, 72% ID rate, 152 bears (74F:78M)
- **BMZ 10, 2021:** 110 sites, 694 samples, 71% ID rate, 118 bears (63F:55M)
- **BMZs 5 & 7, 2022:** 124 sites, 729 samples

Bears from hair and harvest (total bears from hair)

BMZ	2019	2020	2020
1	8 (94)	4 (86)	1 (82)
10	N/A	9 (152)	5+1 (143+118)



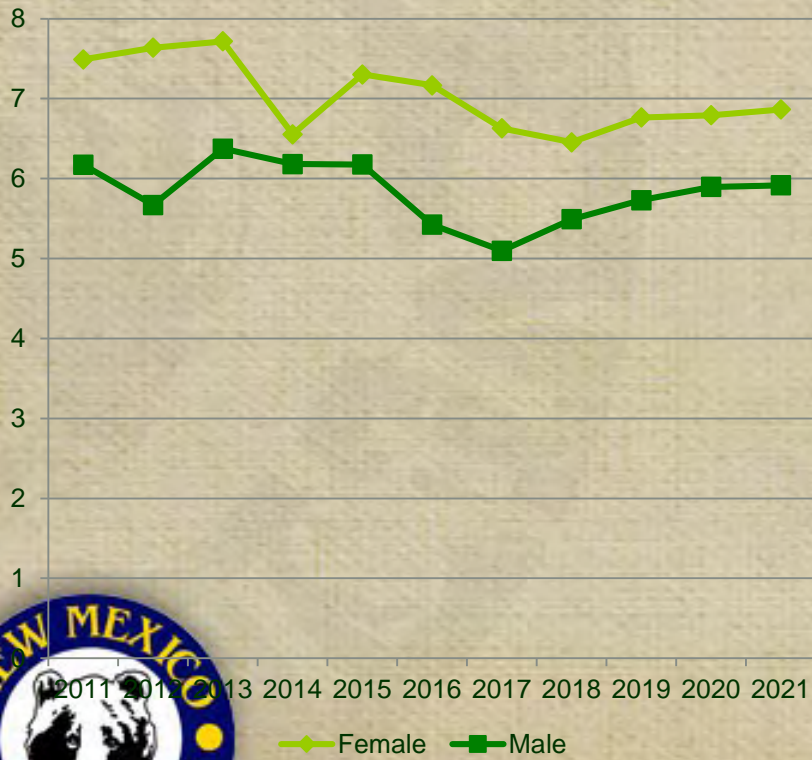
Bear Harvest

Year	Sport Harvest (females)	Max Allowable Harvest	Depredation	Other	Total	# of Zones Closed
2019	473 (172)	804	40	22	535	3
2020	603 (240)	804	100	41	745	6
2021	502 (192)	804	60	18	580	3
2022	523 (194)	804	83	31	637	4
AVG	525 (201)	804	71	28	624	4

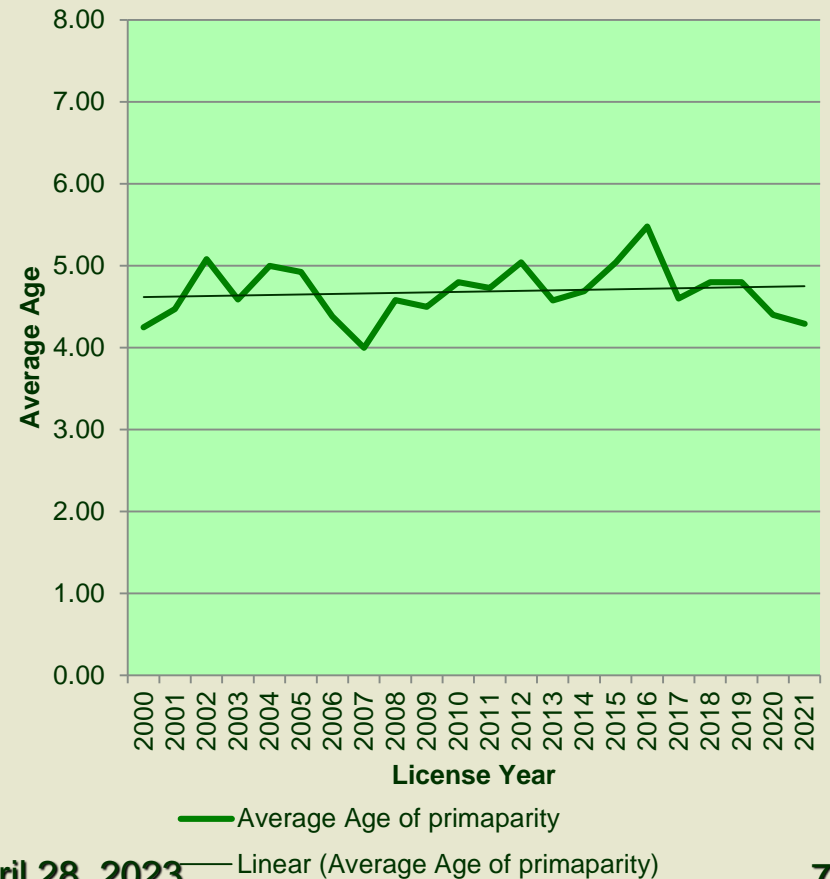


Bear Age at Mortality

Bear Average Age at Harvest Statewide 2011-2021



Average Age of first cub production in New Mexico



Bear Harvest Limits

BMZ	Current Total Limit (Female Sub-limit)	Proposed Total Limit (Female Sub-limit)
1	158 (63)	TBA
2	15 (6)	15 (6)
3	65 (26)	65 (26)
4	109 (43)	109 (43)
5	92 (37)	92 (37)
6	33 (13)	33 (13)
7	35 (14)	35 (14)
8	11 (4)	11 (4)
9	36 (14)	36 (14)
10	146 (58)	TBA
11	36 (14)	36 (14)
12	33 (13)	33 (13)
13	16 (6)	16 (6)
14	19 (7)	19 (7)



Bear Proposals

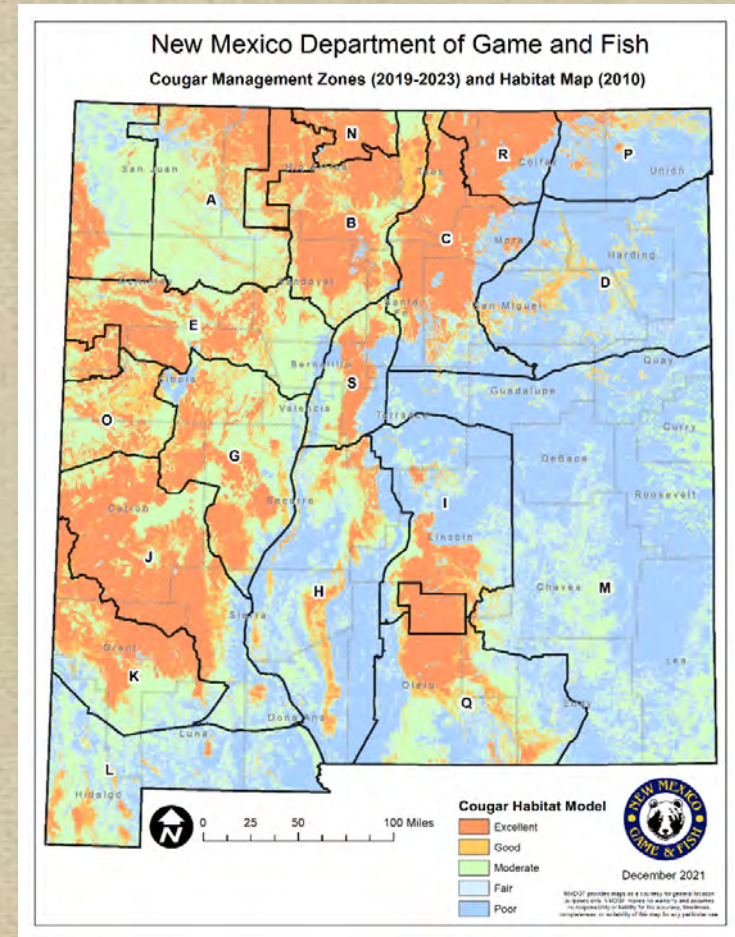


- Possible changes to bear harvest limits based on recent NMDGF research
- Possible changes to Bear Management Zones
- Possible changes to draw hunt licenses
- Possible changes to open WMAs for bear hunting during specific times
- Possible changes to start dates in BMZ 12&13



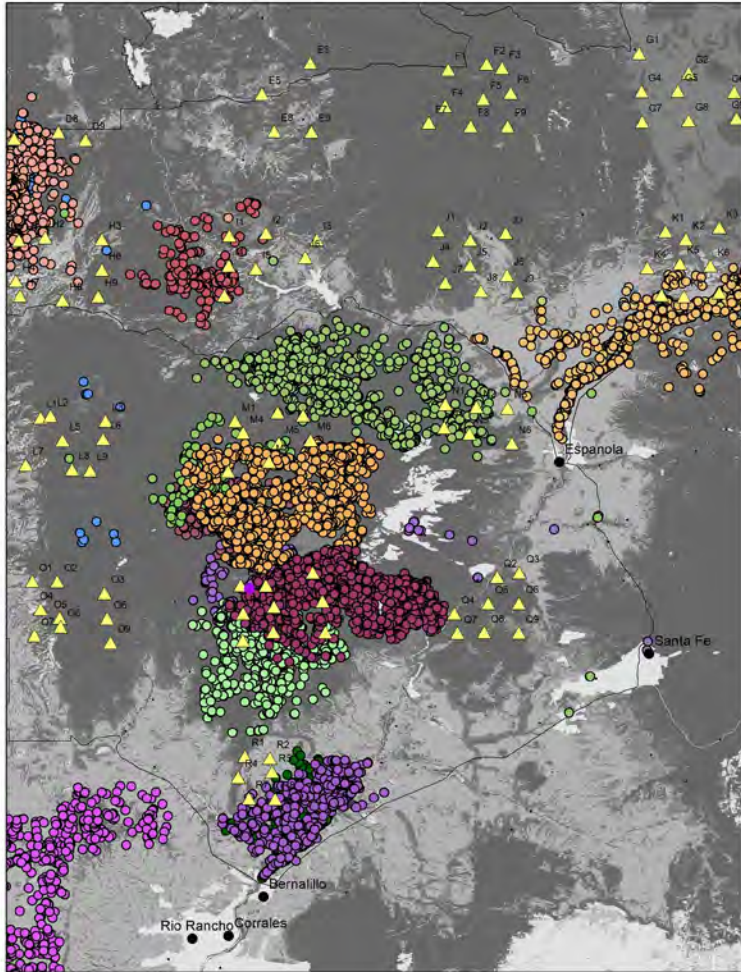
Cougar Management Structure, Monitoring and Research

- Cougar population size = density estimates applied to habitat map (different densities for different habitats)

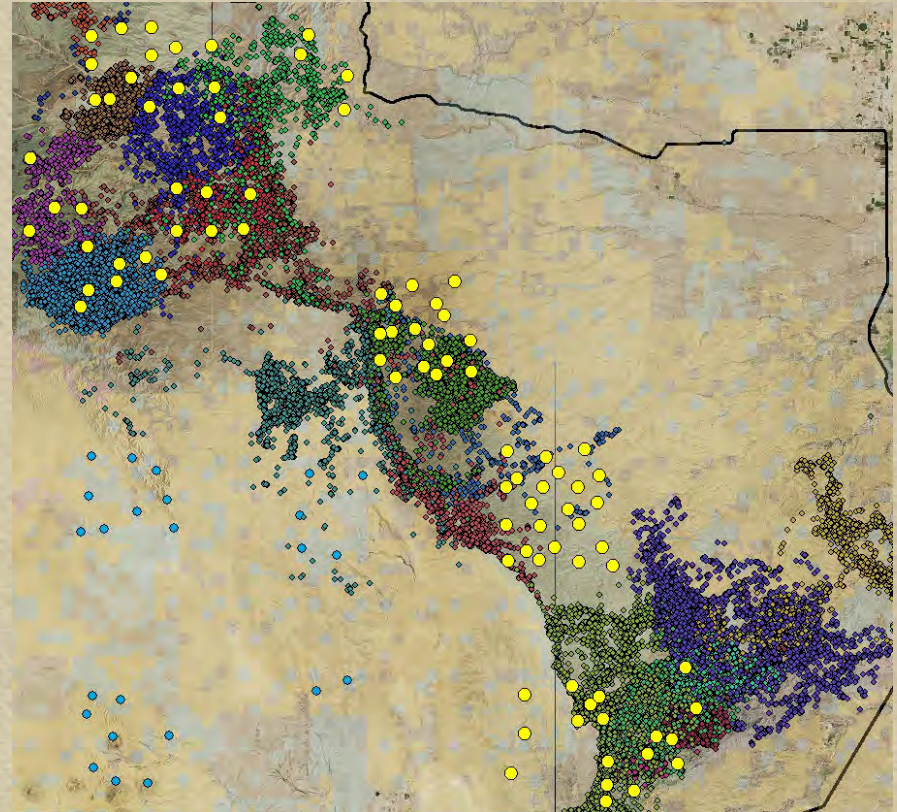


Map of Study Areas

CMZ BF – 2017-18



CMZ Q – 2019-21



Cougar Collar and Cameras

- **CMZs B & F, 2018:** 128 camera sites, 14 lions collared
- **CMZ Q, 2019-21:** 157 camera sites, 25 lions collared
- **CMZs J & K, 2021- ongoing:** 81 camera sites, 34 lions collared
- **CMZ R, 2023 - ongoing:** 8 lions collared



Cougar Integrated Population Models (IPMs)

- Another advanced statistical approach to look at population dynamics
 - Uses all available data sources
- NMDGF access to long-term, extensive data sets:
 - 20+ years of data from harvest
 - Multiple university studies with collared lions
- Provides details on annual population metrics, as well as long-term trends



Cougar Sport Harvest Limits

CMZ	2020-24 Total Limit (Female Sub-limit)	2024-28 Proposed Total Limit (Female Sub-limit)
A	42 (13)	42 (13)
B	25 (8)	TBD
C	57 (17)	57 (17)
D	15 (5)	15 (5)
E	42 (13)	42 (13)
F	Combined with B	TBD
G	50 (15)	50 (15)
H	29 (9)	29 (9)
I	24 (7)	24 (7)
J	84 (25)	84 (25)*
K	45 (14)	45 (14)
L	19 (6)	19 (6)
M	25 (7)	25 (7)
N	15 (5)	15 (5)
O	17 (5)	17 (5)
P	14 (7)	14 (7)
Q	34 (11)	TBD
R	26 (8)	26 (8)
S	17 (5)	17 (5)



*On-going GPS collaring and trail camera study
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Cougar Harvest

Year	Sport Harvest (females)	Max Allowable Harvest	Depredation	Other	Total	# of Zones Closed
2019	282 (112)	740	8	33	323	3
2020	272 (122)	580	17	42	331	9
2021	262 (91)	580	24	35	321	7
2022	304 (105)	580	21	48	373	6
AVG	280 (108)	---	18	40	337	8





Cougar Proposals

- Possible changes to cougar harvest limits based on recent NMDGF research
- Evaluating current CMZ boundaries



QUESTIONS



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