

STATE GAME COMMISSION MEETING AND RULE MAKING NOTICE

The New Mexico State Game Commission ("Commission") has scheduled a regular meeting and rule hearing for Thursday January 17, 2020, beginning at 9:00 a.m. at the Farm and Ranch Heritage Museum, 4100 Dripping Springs Rd, Las Cruces, NM, 88011 to hear and consider action as appropriate on the following: 1) presentation of proposed changes to the Trapping and Furbearers rule; and 2) presentation of proposed changes to the Hunting and Fishing - Manner and Method of Taking rule.

Synopsis:

The proposals are to: 1) adopt a new Trapping and Furbearers rule, 19.32.2 NMAC, which will become effective April 1, 2020; and 2) amend the Hunting and Fishing - Manner and Method of Taking rule, 19.31.10 NMAC, which will become effective April 1, 2020. The current Trapping and Furbearers rule and the current Hunting and Fishing - Manner and Method of Taking rule are permanent rules.

The proposed new Trapping and Furbearers rule includes: 1) that the duration will be four years; 2) all furbearer hunters and trappers will be required to complete a trapper education course; 3) the nutria season will be April 1-March 31; 4) there will be a raccoon season May 16-Aug 31 with restricted trap types; 5) land sets will be prohibited on portions of Los Alamos County, the Sandia Ranger District, the eastern portion of Organ Mountain-Desert Peaks National Monument, within ½ mile of NM Hwy 475 on the Santa Fe National Forest, and within ½ mile of NM Hwy 150 on the Cason National Forest.

The following proposed provisions in the Trapping and Furbearers rule have been modified and transferred to the Hunting and Fishing - Manner and Method of Taking rule: 1) requiring a setback distance of 1/2 mile from trailheads, roadside rest areas, picnic areas, or occupied dwelling without permission of the landowner; 2) requiring water sets to be set fully in water; 3) requiring that no land set shall be placed within 30 feet of bait which is greater than two ounces in weight and visible to airborne raptors; 4) requiring all foothold traps to have at least two separate swivel points in the anchor chain; 5) requiring all foothold traps to have an anchoring or drag system that prevents a trapped animals from escaping with the trap; and 6) requiring break-away devices to be used for all snares set on land.

A full text of changes will be available on the Department's website at: www.wildlife.state.nm.us. Interested persons may submit comments on the proposed changes to the Trapping and Furbearers rule at: DGF-Furbearer-Rules@state.nm.us, or individuals may submit written comments to the physical address below. Comments are due by 9:00 a.m. on January 16, 2020. The final proposed rule will be voted on by the Commission during a public meeting on January 17, 2020. Interested persons may also provide data, views or arguments, orally or in writing, at the public rule hearing to be held on January 17, 2020.

Full copies of text of the proposed new rule, technical information related to proposed rule changes, and the agenda can be obtained from the Office of the Director, New Mexico Department of Game and Fish, 1 Wildlife Way, Santa Fe, New Mexico 87507, or from the Department's website at www.wildlife.state.nm.us/commission/proposals-under-consideration/. This agenda is subject to change up to 72 hours prior to the meeting. Please contact the Director's Office at (505) 476-8000, or the Department's website at www.wildlife.state.nm.us for updated information.

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the Department at (505) 476-8000 at least one week prior to the meeting or as soon as possible. Public documents, including the agenda and minutes, can be provided in various accessible formats. Please contact the Department at 505-476-8000 if a summary or other type of accessible format is needed.

Legal authority for this rulemaking can be found in the General Powers and Duties of the State Game Commission 17-1-14, et seq. NMSA 1978; Commission's Power to establish rules and regulations 17-1-26, et seq. NMSA 1978.

EXHIBIT

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Clean Copy - Initial Proposed Rule

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 32 TRAPPING AND FURBEARERS
PART 2 FURBEARERS

19.32.2.1 ISSUING AGENCY: New Mexico department of game and fish.
[19.32.2.1 NMAC - Rp, 19.32.1.1 NMAC, 4-1-2020]

19.32.2.2 SCOPE: Sportspersons interested in furbearer hunting and management. Additional requirements may be found in Chapter 17 NMSA 1978 and Title 19 NMAC.
[19.32.2.2 NMAC - Rp, 19.32.1.2 NMAC, 4-1-2020]

19.32.2.3 STATUTORY AUTHORITY: Sections 17-1-14, 17-1-26, 17-5-3, 17-5-4, and 17-5-5 NMSA 1978 provide that the New Mexico state game commission has the authority to establish rules and regulations that it may deem necessary to carry out the purpose of Chapter 17 NMSA 1978 and all other acts pertaining to protected species.
[19.32.2.3 NMAC - Rp, 19.32.1.3 NMAC, 4-1-2020]

19.32.2.4 DURATION: April 1, 2020 through March 31, 2024.
[19.32.2.4 NMAC - Rp, 19.32.1.4 NMAC, 4-1-2020]

19.32.2.5 EFFECTIVE DATE: April 1, 2020, unless a later date is cited at the end of a section.
[19.32.2.5 NMAC - Rp, 19.32.1.5 NMAC, 4-1-2020]

19.32.2.6 OBJECTIVE: Establishing open hunting seasons and regulation, rules and procedures governing the distribution and issuance of trapping licenses by the department.
[19.32.2.6 NMAC - Rp, 19.32.1.6 NMAC, 4-1-2020]

19.32.2.7 DEFINITIONS:

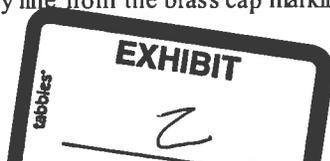
- A. **"Department"** shall mean the New Mexico department of game and fish.
 - B. **"Foothold trap"** shall mean a trap designed to capture a furbearer by the foot, but does not include foot encapsulating traps.
 - C. **"Foot encapsulating trap"** shall mean any trap with a push or pull-activated trigger located inside an enclosure recessed from an opening of no more than two inches in diameter, as measured across the opening from side to side, not corner to corner. Foot encapsulating traps include "dog proof" and "egg" traps.
 - D. **"Furbearer"** shall mean any quadruped defined as a fur-bearing animal in 17-5-2 NMSA 1978.
 - E. **"Land set"** shall mean any foothold trap or snare set on land.
 - F. **"Snare"** shall mean a wire or cable with a single closing device designed to capture a furbearer.
 - G. **"Trap"** shall mean any foothold trap, foot encapsulating trap, cage trap or body-grip trap set to capture a furbearer.
- [19.32.2.7 NMAC - Rp, 19.32.1.7 NMAC, 4-1-2020]

19.32.2.8 OPEN SEASONS:

- A. Badger, weasel, fox, ringtail and bobcat: November 1-March 15 statewide.
 - B. Raccoon:
 - (1) April 1-May 15 and September 1-March 31, statewide.
 - (2) Extended season: May 16-August 31 statewide, method restrictions per 19.31.10 NMAC.
 - C. Beaver and muskrat: April 1-April 30 and November 1-March 31, statewide.
 - D. Nutria: April 1-March 31 statewide.
- [19.32.2.8 NMAC - Rp, 19.32.1.8 NMAC, 4-1-2020]

19.32.2.9 CLOSED AREAS:

- A. No land set may be made on the Sandia ranger district portion of the Cibola national forest.
- B. No land set may be made within that portion of Los Alamos county bounded by a line beginning at a point on the county line common to Los Alamos and Sandoval counties, said point identified as lying 200 feet north along the county line from the brass cap marking the seven and one-half mile point on the east boundary of the



Baca location, said brass cap having New Mexico state plane coordinates (central zone) of X = 445,992.94 and Y = 1,782,659.28; and bearing northeasterly from the point of beginning to the northwestern corner of section 6, T. 19 N., R. 6 E, NMPM; thence easterly along the township line to the northeast corner of section 3, T. 19 N., R. 6 E., NMPM; then southwesterly to the first order traverse station "pinon"; thence N. 82 degrees, 26'30" E., a distance of 107.94 feet to the Los Alamos-Santa Fe county line; thence south, west and southeast along the eastern boundary of Los Alamos county to a point marked by a brass cap monument stamped A.P. 33 and shown on the "Boundary Plat, Survey of Tract A, Ramon Vigil Grant", filed for record with the U.S. department of the interior, general land office, Washington, D.C., January 10, 1939; thence southwesterly along a line 1,000 feet easterly of and parallel with the easterly boundary of the survey of White Rock, county of Los Alamos, New Mexico, as recorded in plat book 1, Page 62, on September 3, 1965, to the center line of Water canyon; thence southeasterly along the center line of Water canyon to the Los Alamos-Santa Fe county line; thence southwesterly, westerly and northerly along the Los Alamos county line to the point of beginning .

C. No land set may be made on the Organ Mountain-Desert Peaks national monument property within the following boundaries: Beginning at the junction of Interstate 25 (I-25) and US Highway 70, east along US Highway 70 to the White Sands Missile Range (WSMR) boundary, then south and east along the WSMR boundary to US Highway 54, then southwest along US Highway 54 to the Texas/New Mexico state line, then west along the state line to Interstate 10 (I-10), then north along I-10 to the junction with I-25 then north along I-25 to the junction of I-25 and US Highway 70.

D. No land set may be placed within one-half mile of New Mexico Highway 475 on the Santa Fe national forest, or New Mexico Highway 150 on the Carson national forest.

E. No beaver trapping is permitted on the Cibola, Gila or Lincoln national forests.
[19.32.2.9 NMAC - Rp, 19.32.1.9 NMAC, 4-1-2020]

19.32.2.10 MANDATORY FURBEARER EDUCATION:

A. Every person must successfully complete a department approved trapper education course before setting any trap or snare in New Mexico. Proof of successful completion of a trapper education course in any other state will also be accepted, but the person must pass a New Mexico law and species identification course.

B. Every person hunting furbearers must successfully complete either the New Mexico trapper education course, or a New Mexico law and species identification course.

C. Trapper education shall be offered free of charge to all residents. The department may charge a fee of not more than \$35 for each non-resident who takes a New Mexico trapper education course. The New Mexico law and species identification course shall be free for everyone.

[19.32.2.9 NMAC - Rp, 19.32.1.9 NMAC, 4-1-2020]

19.32.2.11 BAG LIMIT: Annual bag limits may be set by the director, with the verbal concurrence of the chairperson of the game commission or their designee, for any furbearer species to address significant changes in statewide populations or to address critical department management needs. Annual bag limits, if set, shall expire March 31st annually.

[19.32.2.10 NMAC - Rp, 19.32.1.10 NMAC, 4-1-2020]

19.32.2.12 EXEMPTIONS: The provisions of this rule shall not apply to department of game and fish personnel or designated agents who are acting in their official capacity in the control of depredating animals, for law enforcement purposes, to protect human health and safety, or for research or management purposes.

[19.32.2.11 NMAC - Rp, 19.32.1.11 NMAC, 4-1-2020]

HISTORY OF 19.32.2 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the State Records Center and Archives under: Regulation No. 490, Establishing Seasons On Protected Furbearers, filed 3/1/68; Regulation No. 511, Establishing Seasons On Protected Furbearers 1970-1971, filed 2/20/70; Regulation No. 521, Establishing Seasons On Protected Furbearers 1971-1972, filed 3/9/71; Regulation No. 533, Establishing Seasons On Protected Furbearers 1972-1973, filed 3/30/72; Regulation No. 544, Establishing Seasons On Protected Furbearers 1973-1974, filed 2/26/73; Regulation No 555, Establishing Seasons On Protected Furbearers 1974-1975, filed 3/4/74; Regulation No. 566, Establishing Seasons On Protected Furbearers, filed 3/24/75; Regulation No. 584, Establishing Seasons On Protected Furbearers, filed 2/9/77; Regulation No. 491, Establishing Seasons On Protected Furbearers, filed 2/15/78; Regulation No. 597, Establishing Seasons On Furbearers, filed 2/23/79; Regulation No. 604, Establishing 1980 Seasons On Furbearers, filed 2/22/80; Regulation No. 608, Establishing 1981 Seasons On

Furbearers, filed 3/5/81; Regulation No. 613, Establishing 1982 Seasons On Furbearers, filed 3/2/82; Regulation No. 623, Establishing 1983 Seasons On Furbearers, filed 3/9/83; Regulation No. 629, Establishing 1984 Seasons On Furbearers, filed 3/16/84; Regulation No. 633, Establishing 1985 Seasons On Furbearers, filed 4/15/85; Regulation No. 641, Establishing 1986 Seasons On Furbearers, filed 3/25/86; Regulation No. 646, Establishing 1987 Seasons On Furbearers, filed 10/27/86; Regulation No. 654, Establishing 1988 Seasons On Furbearers, filed 12/4/87; Regulation No. 665, Establishing 1989-1990 Seasons On Furbearers, filed 3/20/89; Regulation No. 675, Establishing 1990-1991 Seasons On Furbearers, filed 11/21/89; Regulation No. 684, Establishing 1991-1992 Seasons On Furbearers, filed 1/11/91; Regulation No. 690, Establishing 1992-1993 Seasons On Furbearers, filed 3/4/92; Regulation No. 701, Establishing 1993-1995 Seasons on Furbearers, filed 3/11/93.

Initial Proposed Rule

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 32 TRAPPING AND FURBEARERS
PART 2 METHOD, SEASON DATES, AND BAG LIMITS FURBEARERS

19.32.2.1 ISSUING AGENCY: New Mexico ~~Department of Game and Fish~~ department of game and fish.
[4-1-95; 19.32.2.1 NMAC - Rn, 19 NMAC 32.1.1 9-29-2000]

19.32.2.2 SCOPE: ~~Trappers and hunters of protected furbearers. Additional requirements may be found in Chapter 17, NMSA 1978 and Chapter 30, 31, and 33 of Title 19. Sports persons interested in furbearer hunting and management. Additional requirements may be found in Chapter 17 NMSA 1978 and Title 19 NMAC.~~
[4-1-95; 19.32.2.2 NMAC - Rn, 19 NMAC 32.1.2 9-29-2000]

19.32.2.3 STATUTORY AUTHORITY: ~~17-1-14 and 17-1-26 NMSA 1978 provide that the New Mexico state game commission has the authority to establish rules and regulations that it may deem necessary to carry out the purpose of Chapter 17 NMSA 1978 and all other acts pertaining to protected mammals, birds, and fish. Sections 17-1-14, 17-1-26, 17-5-3, 17-5-4, and 17-5-5 NMSA 1978 provide that the New Mexico state game commission has the authority to establish rules and regulations that it may deem necessary to carry out the purpose of Chapter 17 NMSA 1978 and all other acts pertaining to protected species.~~
[4-1-95; 19.32.2.3 NMAC - Rn, 19 NMAC 32.1.3 9-29-2000; A, 02-28-01]

19.32.2.4 DURATION: ~~Permanent~~ April 1, 2020 through March 31, 2024.
[4-1-95; A, 2-28-98; 19.32.2.4 NMAC - Rn, 19 NMAC 32.1.4 9-29-2000]

19.32.2.5 EFFECTIVE DATE: ~~April 1, 1995, unless a different date is cited at the end of a section.~~ 2020, unless a later date is cited at the end of a section.
[4-1-95; 19.32.2.5 NMAC - Rn, 19 NMAC 32.1.5 & A, 9-29-2000]

19.32.2.6 OBJECTIVE: ~~Establishing methods, open seasons, and bag limits for the harvest of protected furbearers. Establishing open hunting seasons and regulation, rules and procedures governing the distribution and issuance of trapping licenses by the department.~~
[4-1-95; 19.32.2.6 NMAC - Rn, 19 NMAC 32.1.6 9-29-2000]

19.32.2.7 DEFINITIONS:

- ~~A. "Land set," as used herein, shall mean any trap or snare set on land.~~
- ~~B. "Water set" shall mean any trap or snare set fully or partially in water.~~
- ~~C. "Body-gripping traps" shall mean a rotating jaw trap designed to capture an animal by the body.~~
- ~~D. "Agent" shall mean any New Mexico resident who is registered, by the trapper, with the department of game and fish. No fur dealer may act as an agent. Agents must have a valid trapper license.~~
- ~~E. "Lamination" shall mean modifying the jaw thickness of a foot hold trap by fastening a strip of metal (rod or flat stock) to the trap jaw that increases the contact surface area of the trap jaw.~~
- ~~F. "Off set" shall mean a space measuring a minimum of 3/16 inch between the contact surfaces of the closed jaws of a foot hold trap.~~
- ~~G. "Cubby set" shall mean a natural or man-made close ended hole, structure, bucket or declivity, or open ended "tunnel type" enclosure used for the purpose of trapping protected furbearers.~~
- ~~H. "Jaw spread" shall mean the distance between the jaws when measured across the center of the trap and perpendicular to a line drawn through the pivot points of the jaws when the trap is in the set position. Jaw spread for padded jaw traps shall be measured from the metal portion of the jaw in the manner previously described.~~
- ~~I. "Steel trap" shall mean a spring actuated device designed to capture an animal by the foot or body.~~
- ~~J. "Padded jaw" shall mean steel traps either constructed or modified so that the closure portion of the jaw is padded with a soft material such as rubber or canvas.~~
- ~~K. "Snare" shall mean a wire or cable with a single closing device set to capture a furbearer.~~
- ~~L. "Furbearer" shall mean any quadruped defined as a fur bearing animal in 17-5-2 NMSA 1978.~~
- ~~M. "Pursuit" shall mean to chase by dogs without the intent to kill.~~
- A. "Department" shall mean the New Mexico department of game and fish.

B. "Foothold trap" shall mean a trap designed to capture a furbearer by the foot, but does not include foot encapsulating traps.

C. "Foot encapsulating trap" shall mean any trap with a push or pull-activated trigger located inside an enclosure recessed from an opening of no more than two inches in diameter, as measured across the opening from side to side, not corner to corner. Foot encapsulating traps include "dog proof" and "egg" traps.

D. "Furbearer" shall mean any quadruped defined as a fur-bearing animal in 17-5-2 NMSA 1978.

E. "Land set" shall mean any foothold trap or snare set on land.

F. "Snare" shall mean a wire or cable with a single closing device designed to capture a furbearer.

G. "Trap" shall mean any foothold trap, foot encapsulating trap, cage trap or body grip trap set to capture a furbearer.

[4-1-95; 19.32.2.7 NMAC - Rn, 19 NMAC 32.1.7, 9-29-00; A, 4-1-03; A, 4-1-07; A, 8-15-11]

19.32.2.8 OPEN SEASONS AND OPEN AREAS:

A. Badger, weasel, fox, ringtail, and bobcat: November 1 through March 15, statewide.

B. Raccoon:

(1) Trapping and hunting: April 1-May 15 and September 1-March 31, statewide.

(2) Extended season: May 16-August 31 statewide, method restrictions per 19.31.10

NMAC.

(2) Pursuit only: April 1-March 31 statewide.

C. Beaver, nutria and muskrat: April 1-April 30 and November 1-March 31, statewide, provided that no beaver trapping shall be permitted on any public lands within the exterior boundaries of any national forest, except those public lands within the Carson and Santa Fe national forest.

D. Nutria: April 1-March 31 statewide.

D. Wildlife management areas shall only be open for taking of furbearers or other trapping activities as authorized by the director.

[4-1-95; 19.32.2.8 NMAC - Rn, 19 NMAC 32.1.8, 9-29-00; A, 02-28-01; A, 4-1-07; A, 8-15-11]

19.32.2.9 CLOSED AREAS:

A. No land set may be made on the Sandia ranger district portion of the Cibola national forest.

B. No land set may be made within that portion of Los Alamos county bounded by a line beginning at a point on the county line common to Los Alamos and Sandoval counties, said point identified as lying 200 feet north along the county line from the brass cap marking the seven and one-half mile point on the east boundary of the Baca location, said brass cap having New Mexico state plane coordinates (central zone) of X = 445,992.94 and Y = 1,782,659.28; and bearing northeasterly from the point of beginning to the northwestern corner of section 6, T. 19 N., R. 6 E. NMPM; thence easterly along the township line to the northeast corner of section 3, T. 19 N., R. 6 E., NMPM; then southwesterly to the first order traverse station "pinon"; thence N. 82 degrees, 26'30" E., a distance of 107.94 feet to the Los Alamos-Santa Fe county line; thence south, west and southeast along the eastern boundary of Los Alamos county to a point marked by a brass cap monument stamped A.P. 33 and shown on the "Boundary Plat, Survey of Tract A, Ramon Vigil Grant", filed for record with the U.S. department of the interior, general land office, Washington, D.C., January 10, 1939; thence southwesterly along a line 1,000 feet easterly of and parallel with the easterly boundary of the survey of White Rock, county of Los Alamos, New Mexico, as recorded in plat book 1, Page 62, on September 3, 1965, to the center line of Water canyon; thence southeasterly along the center line of Water canyon to the Los Alamos-Santa Fe county line; thence southwesterly, westerly and northerly along the Los Alamos county line to the point of beginning.

C. No land set may be made on the Organ Mountain-Desert Peaks national monument property within the following boundaries: Beginning at the junction of Interstate 25 (I-25) and US Highway 70, east along US Highway 70 to the White Sands Missile Range (WSMR) boundary, then south and east along the WSMR boundary to US Highway 54, then southwest along US Highway 54 to the Texas/New Mexico state line, then west along the state line to Interstate 10 (I-10), then north along I-10 to the junction with I-25 then north along I-25 to the junction of I-25 and US Highway 70.

D. No land set may be placed within one-half mile of New Mexico Highway 475 on the Santa Fe national forest, or New Mexico Highway 150 on the Carson national forest.

E. No beaver trapping is permitted on the Cibola, Gila or Lincoln national forests.

[4-1-95; 19.32.2.9 NMAC - Rn, 19 NMAC 32.1.9, 9-29-00; A, 4-1-07; A, 8-15-11]

~~19.32.2.9 BAG LIMIT: There shall be no bag limit on any furbearer. The director, with the verbal concurrence of the chairman or his designee, may set a bag limit for furbearers to address significant changes in population levels or to address critical department management needs.~~

~~[4-1-95; 19.32.2.9 NMAC - Rn, 19 NMAC 32.1.9, 9-29-00; A, 4-1-07; A, 8-15-11]~~

~~19.32.2.10 MANDATORY FURBEARER EDUCATION:~~

~~A. Every person must successfully complete a department approved trapper education course before setting any trap or snare in New Mexico. Proof of successful completion of a trapper education course in any other state will also be accepted, but the person must pass a New Mexico law and species identification course.~~

~~B. Every person hunting furbearers must successfully complete either the New Mexico trapper education course, or a New Mexico law and species identification course.~~

~~C. Trapper education shall be offered free of charge to all residents. The department may charge a fee of not more than \$35 for each non-resident who takes a New Mexico trapper education course. The New Mexico law and species identification course shall be free for everyone.~~

~~[4-1-95; 19.32.2.9 NMAC - Rn, 19 NMAC 32.1.9, 9-29-00; A, 4-1-07; A, 8-15-11]~~

~~19.32.2.10 MANNER AND METHOD OF TAKING FURBEARERS:~~

~~A. Legal methods of taking shall include dogs, firearms, crossbows, falconry, bows and arrows, or traps and snares.~~

~~B. The following restrictions on traps and snares shall apply to the setting of any trap or snare that could reasonably be expected to catch a furbearer.~~

~~(1) Each trap or snare set that could take furbearers must be either permanently marked with a user-identification number that is issued by the department of game and fish, or be permanently marked with the name and address of the trapper using the trap or snare.~~

~~(2) No foot hold trap with an outside spread larger than 7 inches if laminated above the jaw surfaces or tooth jawed traps, shall be used in making a land set. All foot hold traps with an inside jaw spread equal to or greater than 5.5 inches shall be offset unless they have padded jaws.~~

~~(3) No land set shall be placed within 1/4 mile of a designated and signed roadside rest area, picnic area or an occupied dwelling without prior, written permission of the occupant of the dwelling, except for a land set placed by a landowner on his own land.~~

~~(4) No land set shall be placed within 1/2 mile of an established and maintained public campground, or boat launching area.~~

~~(5) It shall be unlawful to make a land set within 25 yards of the edge of any public road or trail (including any culvert or structure located beneath it) except on private land with written permission from the landowner. Trail shall mean any path opened for public use and maintained annually by public funds or any path published on a map by a municipal, state or federal agency and open for public travel. Public road shall mean any thoroughfare that was constructed and annually maintained with public funds whether it is currently open or closed to vehicle use or any thoroughfare published on a map by a municipal, state or federal agency and open for public travel. When a fence is present within 25 yards of the edge of the road, sets may be made on the side of the fence opposite the road.~~

~~(6) No land set shall be placed within 50 yards of any man-made livestock or wildlife catchment, pond or tank containing water, except on private land with written permission from the landowner.~~

~~(7) No steel trap with an inside jaw spread larger than 7.5 inches or body gripping trap with a jaw spread greater than 12 inches shall be used in making a water set.~~

~~(8) It shall be illegal to place, set or maintain any steel trap or snare within 25 feet of bait that is visible from any angle and that consist of the flesh, hide, fur, viscera, or feathers of any animal unless used in conjunction with a cubby set where the bait cannot be seen except from a height of 3 feet or less above ground level and at a maximum distance of 25 feet. The bait must be inside the cubby but the steel trap or snare may be outside. Bones that are entirely free of flesh, hide, fur or feathers may be used as visible bait. The restriction on visible bait shall not apply to a trap flag that is suspended above the ground and that is made from materials other than animal parts.~~

~~(9) No body gripping trap with an inside jaw spread greater than 7 inches may be set on land. Body-gripping traps with inside jaw spreads of between 6 and 7 inches set on land shall be used in conjunction with a cubby set such that the trap trigger is recessed in the cubby at least 8 inches from an entrance.~~

~~(10) Shooting hours:~~

~~(a) Hunting and falconry 1/2 hour before sunrise to 1/2 hour after sunset.~~

~~(b) Trapping unrestricted.~~

~~[4-1-95; 19.32.2.10 NMAC - Rn, 19 NMAC 32.1.10, 9-29-00; A, 4-1-03; A, 4-1-07; A/E, 11-1-10; A, 8-15-11]~~

19.32.2.11 BAG LIMIT: Annual bag limits may be set by the director, with the verbal concurrence of the chairperson of the game commission or their designee, for any furbearer species to address significant changes in statewide populations or to address critical department management needs. Annual bag limits, if set, shall expire March 31st annually.

~~[4-1-95; 19.32.2.9 NMAC - Rn, 19 NMAC 32.1.9, 9-29-00; A, 4-1-07; A, 8-15-11]~~

~~**19.32.2.11 TRAP INSPECTION AND FURBEARER REMOVAL:**~~

~~A. A licensed trapper, or his/her agent, must make a visual inspection of each trap each calendar day and remove any captured wildlife. A release device or catchpole shall be carried to release captured animals. All traps must be personally checked by the trapper every other calendar day. Each trapper will be allowed multiple agents who must possess written permission from the trapper and a valid trapper license. The permission must include the trapper's full name, address, trapper's license number, trapper identification number(s), if appropriate, and general location or route of traps.~~

~~B. It shall be illegal to import any live furbearer into the state. It shall be illegal to hold any live furbearer in captivity except raccoons held under a valid New Mexico department of game and fish live animal permit. Upon written application, the director may issue a permit for retention of raccoon, or other activity permitted under 19.31.10 NMAC.~~

~~C. It shall be illegal to destroy, disturb or remove any trap, snare or trapped wildlife belonging to a licensed trapper without permission of the owner of the trap or snare, except that from March 16 to November 1 a landowner may remove any trap or snare from privately owned or leased land if such a trap or snare could endanger livestock. Nothing in this subsection shall prohibit a person from releasing any domestic animal from a trap.~~

~~[4-1-95; A, 2-28-98, A, 9-30-98; 19.32.2.11 NMAC - Rn, 19 NMAC 32.1.11, 9-29-00; A, 4-1-03; A, 4-1-07; A, 8-15-11]~~

19.32.2.12 EXEMPTIONS: The provisions of this regulation shall not apply to personnel of the department of game and fish or its designated agents who are acting in their official capacity in the control of depredating animals, for law enforcement purposes, to protect human health and safety, or for research or management purposes.

[4-1-95; A, 2-28-98, A, 12-31-99; 19.32.2.12 NMAC - Rn, 19 NMAC 32.1.12 9-29-2000]

~~**19.32.2.13 AREAS CLOSED TO FURBEARER TRAPPING:**~~

~~A. That portion of Los Alamos county bounded by a line beginning at a point on the county line common to Los Alamos and Sandoval counties, said point identified as lying 200 feet north along the county line from the brass cap marking the 7 1/2 mile point on the east boundary of the Baca location, said brass cap having New Mexico state plane coordinates (central zone) of X = 445,992.94 and Y = 1,782,659.28; and bearing northeasterly from the point of beginning to the northwest corner of section 6, T. 19 N., R. 6 E., NMPM; thence easterly along the township line to the northeast corner of section 3, T. 19 N., R. 6 E., NMPM; then southwesterly to the first order traverse station "pinon;" thence N. 82 degrees, 26'30" E., a distance of 107.94 feet to the Los Alamos-Santa Fe county line; thence south, west and southeast along the eastern boundary of Los Alamos county to a point marked by a brass cap monument stamped A.P. 33 and shown on the "Boundary Plat, Survey of Tract A, Ramon Vigil Grant", filed for record with the U.S. Department of the Interior, General Land Office, Washington, D.C., January 10, 1939; thence southwesterly along a line 1,000 feet easterly of and parallel with the easterly boundary of the survey of White Rock, county of Los Alamos, New Mexico, as recorded in plat book 1, Page 62, on September 3, 1965, to the center line of Water canyon; thence southeasterly along the center line of Water canyon to the Los Alamos-Santa Fe county line; thence southwesterly, westerly, and northerly along the Los Alamos county line to the point of beginning.~~

~~B. The portion as follows of the Wild Rivers recreation area is closed to furbearer trapping - an area bounded on the north by the power line from Bear Crossing to Red River hatchery, south along the Red River to the confluence of the Rio Grande and north along the Rio Grande to the power lines at Bear Crossing.~~

~~C. No furbearer trapping shall be permitted on the Valle Vidal addition to the Carson national forest and the Greenwood portion of the Vermejo ranch.~~

~~D. No furbearer trapping shall be permitted on the McGregor military range in unit 28 unless authorized by an authorized representative of the department of defense.~~

~~E. No furbearer trapping shall be allowed in the portion of game management unit 6 lying within the exterior boundaries of the Valles Caldera national preserve as described and/or posted by the U.S. forest service. [4-1-95; 19.32.2.13 NMAC - Rn, 19 NMAC 32.1.13 & A, 9-29-2000; A, 8-15-11]~~

19.32.2.14 TAGGING BOBCAT PELTS:

~~A. Every person who takes a bobcat in New Mexico shall present the pelt for tagging in New Mexico prior to leaving the state no later than April 14, annually.~~

~~B. Every person who presents a bobcat for tagging shall display a current trapper license except residents 11 years of age or younger. Tags may be obtained from department offices in Raton, Roswell, Las Cruces, Albuquerque and Santa Fe. In addition pelts may be tagged by New Mexico licensed furbearer dealers following policies set forth by the department.~~

~~C. No person shall transport across state lines, sell, barter, or otherwise dispose of any bobcat pelt taken in New Mexico unless it has been properly tagged.~~

~~D. It shall be unlawful to present for tagging, or to have tagged with a New Mexico tag, any pelt from a bobcat taken outside the state of New Mexico.~~

~~E. It shall be unlawful for fur dealers to tag any bobcat contrary to this rule.~~

~~[4-1-95; 19.32.2.14 NMAC - Rn, 19 NMAC 32.1.14, 9-29-00; A, 4-1-05; A, 4-1-07; A, 8-15-11]~~

HISTORY OF 19.32.2 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the State Records Center and Archives under: Regulation No. 490, Establishing Seasons On Protected Furbearers, filed 3/1/68; Regulation No. 511, Establishing Seasons On Protected Furbearers 1970-1971, filed 2/20/70; Regulation No. 521, Establishing Seasons On Protected Furbearers 1971-1972, filed 3/9/71; Regulation No. 533, Establishing Seasons On Protected Furbearers 1972-1973, filed 3/30/72; Regulation No. 544, Establishing Seasons On Protected Furbearers 1973-1974, filed 2/26/73; Regulation No 555, Establishing Seasons On Protected Furbearers 1974-1975, filed 3/4/74; Regulation No. 566, Establishing Seasons On Protected Furbearers, filed 3/24/75; Regulation No. 584, Establishing Seasons On Protected Furbearers, filed 2/9/77; Regulation No. 491, Establishing Seasons On Protected Furbearers, filed 2/15/78; Regulation No. 597, Establishing Seasons On Furbearers, filed 2/23/79; Regulation No. 604, Establishing 1980 Seasons On Furbearers, filed 2/22/80; Regulation No. 608, Establishing 1981 Seasons On Furbearers, filed 3/5/81; Regulation No. 613, Establishing 1982 Seasons On Furbearers, filed 3/2/82; Regulation No. 623, Establishing 1983 Seasons On Furbearers, filed 3/9/83; Regulation No. 629, Establishing 1984 Seasons On Furbearers, filed 3/16/84; Regulation No. 633, Establishing 1985 Seasons On Furbearers, filed 4/15/85; Regulation No. 641, Establishing 1986 Seasons On Furbearers, filed 3/25/86; Regulation No. 646, Establishing 1987 Seasons On Furbearers, filed 10/27/86; Regulation No. 654, Establishing 1988 Seasons On Furbearers, filed 12/4/87; Regulation No. 665, Establishing 1989-1990 Seasons On Furbearers, filed 3/20/89; Regulation No. 675, Establishing 1990-1991 Seasons On Furbearers, filed 11/21/89; Regulation No. 684, Establishing 1991-1992 Seasons On Furbearers, filed 1/11/91; Regulation No. 690, Establishing 1992-1993 Seasons On Furbearers, filed 3/4/92; Regulation No. 701, Establishing 1993-1995 Seasons on Furbearers, filed 3/11/93.

Final Adopted Rule

2020 JAN 24 AM 10: 44

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 32 TRAPPING AND FURBEARERS
PART 2 FURBEARERS

19.32.2.1 ISSUING AGENCY: New Mexico department of game and fish.
[19.32.2.1 NMAC - Rp, 19.32.1.1 NMAC, 4/1/2020]

19.32.2.2 SCOPE: Sportspersons interested in furbearer hunting and management. Additional requirements may be found in Chapter 17 NMSA 1978 and Title 19 NMAC.
[19.32.2.2 NMAC - Rp, 19.32.1.2 NMAC, 4/1/2020]

19.32.2.3 STATUTORY AUTHORITY: Sections 17-1-14, 17-1-26, 17-5-3, 17-5-4, and 17-5-5 NMSA 1978 provide that the New Mexico state game commission has the authority to establish rules and regulations that it may deem necessary to carry out the purpose of Chapter 17 NMSA 1978 and all other acts pertaining to protected species.
[19.32.2.3 NMAC - Rp, 19.32.1.3 NMAC, 4/1/2020]

19.32.2.4 DURATION: April 1, 2020 through March 31, 2024.
[19.32.2.4 NMAC - Rp, 19.32.1.4 NMAC, 4/1/2020]

19.32.2.5 EFFECTIVE DATE: April 1, 2020, unless a later date is cited at the end of a section.
[19.32.2.5 NMAC - Rp, 19.32.1.5 NMAC, 4/1/2020]

19.32.2.6 OBJECTIVE: Establishing open hunting seasons and regulation, rules and procedures governing the distribution and issuance of trapping licenses by the department.
[19.32.2.6 NMAC - Rp, 19.32.1.6 NMAC, 4/1/2020]

19.32.2.7 DEFINITIONS:

- A. "Department" shall mean the New Mexico department of game and fish.
 - B. "Foothold trap" shall mean a trap designed to capture a furbearer by the foot, but does not include foot encapsulating traps.
 - C. "Foot encapsulating trap" shall mean any trap with a push or pull-activated trigger located inside an enclosure recessed from an opening of no more than two inches in diameter, as measured across the opening from side to side, not corner to corner. Foot encapsulating traps include "dog proof" and "egg" traps.
 - D. "Furbearer" shall mean any quadruped defined as a fur-bearing animal in 17-5-2 NMSA 1978.
 - E. "Land set" shall mean any foothold trap or snare set on land.
 - F. "Snare" shall mean a wire or cable with a single closing device designed to capture a furbearer.
 - G. "Trap" shall mean any foothold trap, foot encapsulating trap, cage trap or body-grip trap set to capture a furbearer.
- [19.32.2.7 NMAC - Rp, 19.32.1.7 NMAC, 4/1/2020]

19.32.2.8 OPEN SEASONS:

- A. Badger, weasel, fox, ringtail and bobcat: November 1-March 15 statewide.
 - B. Raccoon:
 - (1) April 1-May 15 and September 1-March 31, statewide.
 - (2) Extended season: May 16-August 31 statewide, method restrictions per 19.31.10 NMAC.
 - C. Beaver and muskrat: April 1-April 30 and November 1-March 31, statewide.
 - D. Nutria: April 1-March 31 statewide.
- [19.32.2.8 NMAC - Rp, 19.32.1.8 NMAC, 4/1/2020]

19.32.2.9 CLOSED AREAS:

- A. No land set may be made on the Sandia ranger district portion of the Cibola national forest.
- B. No land set may be made within that portion of Los Alamos county bounded by a line beginning at a point on the county line common to Los Alamos and Sandoval counties, said point identified as lying 200 feet north along the county line from the brass cap marking the seven and one-half mile point on the east boundary of the

Baca location, said brass cap having New Mexico state plane coordinates (central zone) of X = 445,992.94 and Y = 1,782,659.28; and bearing northeasterly from the point of beginning to the northwestern corner of section 6, T. 19 N., R. 6 E., NMPM; thence easterly along the township line to the northeast corner of section 3, T. 19 N., R. 6 E., NMPM; then southwesterly to the first order traverse station "pinon"; thence N. 82 degrees, 26'30" E., a distance of 107.94 feet to the Los Alamos-Santa Fe county line; thence south, west and southeast along the eastern boundary of Los Alamos county to a point marked by a brass cap monument stamped A.P. 33 and shown on the "Boundary Plat, Survey of Tract A, Ramon Vigil Grant", filed for record with the U.S. department of the interior, general land office, Washington, D.C., January 10, 1939; thence southwesterly along a line 1,000 feet easterly of and parallel with the easterly boundary of the survey of White Rock, county of Los Alamos, New Mexico, as recorded in plat book 1, Page 62, on September 3, 1965, to the center line of Water canyon; thence southeasterly along the center line of Water canyon to the Los Alamos-Santa Fe county line; thence southwesterly, westerly and northerly along the Los Alamos county line to the point of beginning.

C. No land set may be made on the Organ Mountain-Desert Peaks national inonument property within the following boundaries: Beginning at the junction of Interstate 25 (I-25) and US Highway 70, east along US Highway 70 to the White Sands Missile Range (WSMR) boundary, then south and east along the WSMR boundary to US Highway 54, then southwest along US Highway 54 to the Texas/New Mexico state line, then west along the state line to Interstate 10 (I-10), then north along I-10 to the junction with I-25 then north along I-25 to the junction of I-25 and US Highway 70.

D. No land set may be placed within one-half mile of New Mexico Highway 475 on the Santa Fe national forest, or New Mexico Highway 150 on the Carson national forest.

E. No beaver trapping is permitted on the Cibola, Gila or Lincoln national forests.
[19.32.2.9 NMAC - Rp, 19.32.1.9 NMAC, 4/1/2020]

19.32.2.10 MANDATORY FURBEARER EDUCATION:

A. Every person must successfully complete a department approved trapper education course before setting any trap or snare in New Mexico. Proof of successful completion of a trapper education course in any other state will also be accepted, but the person must pass a New Mexico law and species identification course.

B. Every person hunting furbearers must successfully complete either the New Mexico trapper education course, or a New Mexico law and species identification course.

C. Trapper education shall be offered free of charge to all residents. The department may charge a fee of not more than \$35 for each non-resident who takes a New Mexico trapper education course. The New Mexico law and species identification course shall be free for everyone.

[19.32.2.9 NMAC - Rp, 19.32.1.9 NMAC, 4/1/2020]

19.32.2.11 BAG LIMIT: Annual bag limits may be set by the director, with the verbal concurrence of the chairperson of the game commission or their designee, for any furbearer species to address significant changes in statewide populations or to address critical department management needs. Annual bag limits, if set, shall expire March 31st annually.

[19.32.2.10 NMAC - Rp, 19.32.1.10 NMAC, 4/1/2020]

19.32.2.12 EXEMPTIONS: The provisions of this rule shall not apply to department of game and fish personnel or designated agents who are acting in their official capacity in the control of depredating animals, for law enforcement purposes, to protect human health and safety, or for research or management purposes.

[19.32.2.11 NMAC - Rp, 19.32.1.11 NMAC, 4/1/2020]

HISTORY OF 19.32.2 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the State Records Center and Archives under: Regulation No. 490, Establishing Seasons On Protected Furbearers, filed 3/1/68; Regulation No. 511, Establishing Seasons On Protected Furbearers 1970-1971, filed 2/20/70; Regulation No. 521, Establishing Seasons On Protected Furbearers 1971-1972, filed 3/9/71; Regulation No. 533, Establishing Seasons On Protected Furbearers 1972-1973, filed 3/30/72; Regulation No. 544, Establishing Seasons On Protected Furbearers 1973-1974, filed 2/26/73; Regulation No 555, Establishing Seasons On Protected Furbearers 1974-1975, filed 3/4/74; Regulation No. 566, Establishing Seasons On Protected Furbearers, filed 3/24/75; Regulation No. 584, Establishing Seasons On Protected Furbearers, filed 2/9/77; Regulation No. 491, Establishing Seasons On Protected Furbearers, filed 2/15/78; Regulation No. 597, Establishing Seasons On Furbearers, filed 2/23/79; Regulation No. 604, Establishing 1980 Seasons On Furbearers, filed 2/22/80; Regulation No. 608, Establishing 1981 Seasons On

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NMAC

Transmittal Form

Volume: Issue: Publication date: Number of pages: (ALD Use Only) Sequence No.

Issuing agency name and address: Agency DFA code:

Contact person's name: Phone number: E-mail address:

Type of rule action: (ALD Use Only)
New Amendment Repeal Emergency Renumber Most recent filing date:

Title number: Title name:

Chapter number: Chapter name:

Part number: Part name:

Amendment description (If filing an amendment):
Amendment's NMAC citation (If filing an amendment):

Are there any materials incorporated by reference? Yes No Please list attachments or Internet sites if applicable.

If materials are attached, has copyright permission been received? Yes No Public domain

Specific statutory or other authority authorizing rulemaking:

Notice date(s): Hearing date(s): Rule adoption date: Rule effective date:

2020 JAN 24 AM 10: 44

Concise Explanatory Statement For Rulemaking Adoption:

Findings required for rulemaking adoption:

Findings MUST include:

- Reasons for adopting rule, including any findings otherwise required by law of the agency, and a summary of any independent analysis done by the agency;
- Reasons for any change between the published proposed rule and the final rule; and
- Reasons for not accepting substantive arguments made through public comment.

The rulemaking was undertaken to adopt a new Trapping and Furbearers rule, 19.32.2 NMAC, which will become effective April 1, 2020, and to repeal the current rule which is a permanent rule.

The new Trapping and Furbearers rule includes: 1) that the duration will be four years; 2) all furbearer hunters and trappers will be required to complete a trapper education course; 3) the nutria season will be April 1-March 31; 4) there will be a raccoon season May 16-Aug 31 with restricted trap types; and 5) land sets will be prohibited on portions of Los Alamos County, the Sandia Ranger District, the eastern portion of Organ Mountain-Desert Peaks National Monument, within ½ mile of NM Hwy 475 on the Santa Fe National Forest, and within ½ mile of NM Hwy 150 on the Cason National Forest.

The following provisions in the Trapping and Furbearers rule have been modified and transferred to the Hunting and Fishing - Manner and Method of Taking rule: 1) requiring a setback distance of 1/2 mile from trailheads, roadside rest areas, picnic areas, or occupied dwelling without permission of the landowner; 2) requiring water sets to be set fully in water; 3) requiring that no land set shall be placed within 30 feet of bait which is greater than two ounces in weight and visible to airborne raptors; 4) requiring all foothold traps to have at least two separate swivel points in the anchor chain; 5) requiring all foothold traps to have an anchoring or drag system that prevents a trapped animals from escaping with the trap; and 6) requiring break-away devices to be used for all snares set on land. A full text of changes is available on the Department's website at: www.wildlife.state.nm.us

There have been no changes between the published proposed rule and the final rule. A wide array of public comments were submitted. To view public comments, please visit www.wildlife.state.nm.us/commission/meeting-agendas/ and click on the Hearing Archive tab. It was not possible to incorporate all of the comments into the final rule as many of the comments were mutually exclusive. The resulting rule was based on what was best for the resource and overall hunter satisfaction.

Issuing authority (If delegated, authority letter must be on file with ALD):

Name:

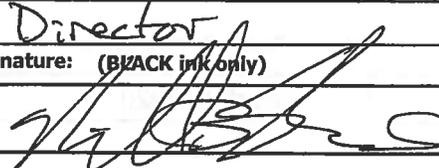
Michael B. Sloane

Check if authority has been delegated

Title:

Director

Signature: (BLACK ink only)



Date signed:

4/24/2020

NMAC Transmittal Form

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2020 JAN 24 AM 10: 42

Volume: Issue: Publication date: Number of pages: (ALD Use Only) Sequence No.

Issuing agency name and address: Agency DFA code:

Contact person's name: Phone number: E-mail address:

Type of rule action: New Amendment Repeal Emergency Renumber (ALD Use Only) Most recent filing date:

Title number: Title name:

Chapter number: Chapter name:

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Amendment's NMAC citation (If filing an amendment):

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If materials are attached, has copyright permission been received? Yes No Public domain

Specific statutory or other authority authorizing rulemaking:

Notice date(s): Hearing date(s): Rule adoption date: Rule effective date:

2020 JAN 24 AM 10: 42

Concise Explanatory Statement For Rulemaking Adoption:

Findings required for rulemaking adoption:

Findings MUST include:

- Reasons for adopting rule, including any findings otherwise required by law of the agency, and a summary of any independent analysis done by the agency;
- Reasons for any change between the published proposed rule and the final rule; and
- Reasons for not accepting substantive arguments made through public comment.

The rulemaking was undertaken to adopt a new Trapping and Furbearers rule, 19.32.2 NMAC, which will become effective April 1, 2020, and to repeal the current rule which is a permanent rule.

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Name:

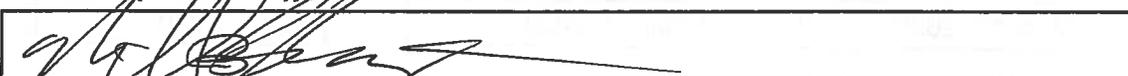
Michael B. Sloane

Check if authority has been delegated

Title:

Director

Signature: (BLACK ink only)



Date signed:

1/21/2020

NEW MEXICO STATE
RECORDS CENTER

2020 JAN 24 AM 10: 42

The State Game Commission at its 1/17/2020 meeting, repealed its rule 19.32.2 NMAC, Furbearers, filed 8/1/2011, and replaced it with 19.32.2 NMAC, Furbearers, adopted on 1/17/2020 and becomes effective 4/1/2020.

Clean Copy - Initial Proposed Rule

This is an amendment to 19.31.10 NMAC, sections 3, 7, 15, and 19 and a renumbering of sections 16, 17, 18, 20 and 21 effective April 1, 2020.

19.31.10.3 STATUTORY AUTHORITY: Sections 17-1-14, 17-1-26, 17-2-1, 17-2-2, 17-2-2.1, 17-2-4.2, 17-2-6, 17-2-10.1, 17-2-13, 17-2-14, 17-2-20, 17-2-32, 17-2-43, 17-3-2, 17-3-29, 17-3-31, 17-2A-3, 17-3-32, 17-3-33, 17-3-42, 17-4-33, 17-5-4, 17-5-5 and 17-6-3 NMSA 1978 provide that the New Mexico state game commission has the authority to establish rules and regulations that it may deem necessary to carry out the purpose of Chapter 17 NMSA 1978 and all other acts pertaining to protected species.
[19.31.10.3 NMAC - Rp, 19.31.10.3 NMAC, 4/1/2019; A, 4/1/2020]

19.31.10.7 DEFINITIONS:

- A.** “**Angling**” shall mean taking or attempting to take fish by angling hook and line, with the line held in the hand or attached to a pole or rod or other device that is held in the hand or closely attended.
- B.** “**Angling hook**” shall mean a single, double, or treble (triple) point attached to a single shank.
- C.** “**Any sporting arm**” shall mean any firearm, muzzle-loader, compressed air gun, shotgun, bow or crossbow. All firearms, except handguns, must be designed to be fired from the shoulder.
- D.** “**Arrow**” or “**Bolt**” shall mean only those arrows or bolts having broadheads with cutting edges except that “judo”, “blunt” or similar small game points may be used for upland game and migratory game bird hunting and arrows for bow fishing must have barbs to prevent the loss of fish.
- E.** “**Bag limit**” shall mean the protected species, qualified by species, number, sex, age, antler/horn requirement, or size allowed by state game commission rule that a legally licensed person may attempt to take or take.
- F.** “**Bait**” as used in section 19.31.10.15 NMAC shall mean the flesh, hide, fur or viscera of any animal. Bones free of flesh are not considered bait.
- G.** “**Bait**” as used in sections 12 and 13 of 19.31.10 NMAC shall mean any salt, mineral, grain, feed, commercially produced game attractant or any other organic material which is attractive to wildlife.
- H.** “**Baiting**” shall mean the placing, exposing, depositing, distributing, or scattering of any bait on or over areas where any person is attempting to take protected game mammals or game birds as defined in 17-2-3 NMSA 1978.
- I.** “**Bait fish**” is defined as those nongame fish which are not otherwise protected by statute or regulation.
- J.** “**Barbless lure or fly**” shall mean an artificial lure made of wood, metal, or plastic or an artificial fly made from fur, feathers, other animal or man-made materials to resemble or simulate insects, bait fish, or other foods. A barbless fly or lure may only bear a single hook, from which any or all barbs must be removed or bent completely closed, or which are manufactured without barbs. Living or dead arthropods and annelids or other foods are not considered barbless lures or flies.
- K.** “**Big game species**” shall mean Barbary sheep, bear, bighorn sheep, cougar, deer, elk, javelina, oryx Persian ibex, and pronghorn.
- L.** “**Big game sporting arms**” shall mean any centerfire firearm at least .22 caliber or larger, any muzzle-loading firearm at least .45 caliber or larger, any shotgun .410 caliber or larger firing a single slug (including muzzle-loading shotguns), any bow or any crossbow. All firearms, except handguns, must be designed to be fired from the shoulder.
- M.** “**Body-grip trap**” shall mean a rotating jaw trap designed to capture a furbearer by the body.
- N.** “**Bow**” shall mean compound, recurve, or long bow, which is not equipped with a mechanical device (draw lock) which locks the bow string at full draw. Sights on bows shall not project light, however, illuminated pins/reticles and scopes of any magnification are allowed.
- O.** “**Bow fishing**” shall mean taking or attempting to take game fish with arrows/bolts that are discharged above the surface of the water by a bow or crossbow. Arrows/bolts must be attached by string, line, or rope to facilitate fish retrieval.
- P.** “**Bullet**” shall mean a single projectile fired from a firearm which is designed to expand or fragment upon impact. Tracer or full metal jacket ammunition is not legal for the take or attempted take of any big game species.
- Q.** “**Cellular**”, “**Wi-Fi**” or “**satellite camera**” shall mean any remote camera which transmits or is capable of transmitting images or video wirelessly via a cellular, Wi-Fi or satellite connection.
- R.** “**Chumming**” is defined as a means of attracting fish by placing organic materials, non-injurious to aquatic life, into the water.

S. **“Compressed air gun”** shall mean any kind of gun that launches a single non-spherical projectile, pneumatically with compressed air or other gases that are pressurized mechanically without involving any chemical reaction.

T. **“Crossbow”** shall mean a device with a bow limb or band of flexible material that is attached horizontally to a stock and has a mechanism to hold the string in a cocked position. Sights on crossbows shall not project light, however, illuminated pins/reticles and scopes of any magnification are allowed.

U. **“Department”** shall mean the New Mexico department of game and fish.

V. **“Director”** shall mean the director of the New Mexico department of game and fish.

W. **“Drone”** is defined as any device used or designed for navigation or flight in the air that is unmanned and guided remotely or by an onboard computer or onboard control system. Drones may also be referred to as “unmanned aerial vehicle (UAV)” or “unmanned aerial vehicle systems (UAVS)”.

X. **“Established road”** is defined as follows:

(1) a road, built or maintained by equipment, which shows no evidence of ever being closed to vehicular traffic by such means as berms, ripping, scarification, reseeding, fencing, gates, barricades or posted closures; or

(2) a two-track road which shows use prior to hunting seasons for other purposes such as recreation, mining, logging, and ranching and which shows no evidence of ever being closed to vehicular traffic by such means as berms, ripping, scarification, reseeding, fencing, gates, barricades or posted closures.

Y. **“Foothold trap”** shall mean a trap designed to capture a furbearer by the foot, but does not include foot encapsulating traps.

Z. **“Foot encapsulating trap”** shall mean any trap with a push or pull-activated trigger located inside an enclosure recessed from an opening of no more than two inches in diameter, as measured across the opening from side to side, not corner to corner. Foot encapsulating traps include “dog proof” and “egg” traps.

AA. **“Furbearer”** shall mean any quadruped defined as a fur-bearing animal in 17-5-2 NMSA 1978.

BB. **“Game management unit” or “GMU”** shall mean those areas as described in 19.30.4 NMAC, Boundary Descriptions for Game Management Units.

CC. **“Jaw spread”** shall mean the distance between the jaws when measured across the center of the trap and perpendicular to a line drawn through the pivot points of the jaws when the trap is set.

DD. **“Laminated”** shall mean any modification to the jaw thickness of a foothold trap by fastening a strip of metal (rod or flat stock) to the trap jaw, or a trap that is manufactured with cast jaws, which increases the contact surface area of the jaw.

EE. **“Land set”** shall mean any foothold trap or snare set on land.

FF. **“License year”** shall mean the period from April 1 through March 31.

GG. **“Locate”** shall mean any act or activity, in which any person is searching for, spotting or otherwise finding a protected species from or with the aid of any aircraft or drone.

HH. **“Migratory game bird”** shall mean band-tailed pigeon, mourning dove, white-winged dove, sandhill crane, American coot, common moorhen, common snipe, ducks, geese, sora and Virginia rail.

II. **“Muzzle-loader” or “muzzle-loading firearms”** shall mean those sporting arms in which the charge and projectile(s) are loaded through the muzzle. Only blackpowder or equivalent blackpowder substitute may be used. Use of smokeless powder is prohibited.

JJ. **“Nets”** shall mean cast nets, dip nets, and seines which shall not be longer than 20 feet and shall not have a mesh larger than three-eighths of an inch.

KK. **“Non-toxic shot”** shall mean that non-toxic shot approved for use by the U. S. fish and wildlife service.

LL. **“Protected species”** shall mean any of the following animals:

(1) all animals defined as protected wildlife species and game fish under Section 17-2-3 NMSA 1978;

(2) all animals defined as furbearing animals under Section 17-5-2 NMSA 1978;

(3) all animals listed as endangered or threatened species or subspecies as stated in 19.33.6 NMAC: and

(4) all animals listed under Sections 17-2-13, 17-2-14 or 17-2-4.2 NMSA 1978.

MM. **“Retention” or “retain”** shall mean the holding of live protected species in captivity.

NN. **“Restricted muzzle-loading rifle”** shall mean any muzzle-loading rifle using open sights, black powder or equivalent propellant and firing a full bore diameter bullet or patched round ball. The use of in-line ignition, scopes and smokeless powder are prohibited.

OO. **“Shotgun”** shall mean any centerfire shotgun or muzzle-loading shotgun not larger than 10 gauge.

- PP.** “Snagging” is the repeated or exaggerated jerking or pulling of the fishing line or angling hooks in any attempt to impale fish, whether or not it results in physically snagging a fish.
- QQ.** “Snare” shall mean a wire or cable with a single closing device designed to capture a furbearer.
- RR.** “Spear fishing” shall mean taking or attempting to take game fish with spears, gigs and arrows with barbs.
- SS.** “Sporting arm types” shall be designated in the hunt code as follows unless further restricted or allowed by state game commission rule:
- (1) all hunt codes denoted with -0- shall authorize use of any shotgun firing shot (ex. SCR-0-XXX);
 - (2) all hunt codes denoted with -1- shall authorize use of any big game sporting arm (ex. ELK-1-XXX);
 - (3) all hunt codes denoted with -2- shall authorize use of bows only (ex. ELK-2-XXX);
 - (4) all hunt codes denoted with -3- shall authorize use of bows, crossbows and muzzle-loading firearms (ex. ELK-3-XXX).
- TT.** “Take” shall mean to hunt, fish, kill or capture any protected species or parts thereof.
- UU.** “Trap” shall mean any foothold trap, foot encapsulating trap, cage trap or body-grip trap set to capture a furbearer.
- VV.** “Trotline” shall be synonymous with “set line” or “throw line” or “jug”, “Yo-Yo line” or “limb line”, and shall mean a fishing line that is used without rod or reel and that need not be held in the hand or closely attended.
- WW.** “Upland game” shall mean dusky grouse, Eurasian collared-dove, all protected squirrel species, all quail species, chukar and pheasant.
- XX.** “Water set” shall mean any trap or snare set fully in water.
- YY.** “Wildlife management area” or “WMA” shall mean those areas as described in 19.34.5 NMAC.
- ZZ.** “Written permission” shall mean a document (which may include a valid hunting, trapping or fishing license) that asserts the holder has permission from the private land owner or their designee to hunt, fish, trap or drive off road on the landowner’s property. The information on the document must be verifiable and include the name of the person(s) receiving permission, activity permitted, property’s location and name (if applicable), name of person granting permission, date and length of time the permission is granted, and phone number or e-mail of the person granting the permission. Licenses issued for private land which have the ranch name printed on them constitute written permission for that property and no other permission is required except for private land elk licenses in the secondary management zone pursuant to 19.30.5 and 19.31.14 NMAC.
- AAA.** “Zone” shall mean those bear or cougar hunt areas, consisting of one or more GMUs, as described in 19.31.11 NMAC.
[19.31.10.7 NMAC - Rp, 19.31.10.7 NMAC, 4/1/2019; A, 4/1/2020]

19.31.10.15 FURBEARERS:

- A.** Shooting hours:
- (1) Hunting and falconry – Restricted to the period one-half hour before sunrise to one-half hour after sunset except that a licensed furbearer hunter is authorized by the department to hunt for and take raccoons by use of artificial light while hunting at night with a rim-fire rifle or handgun no greater in size than a .22 caliber, shotgun, bow or crossbow during open season. The artificial light used for raccoon hunting must be a headlamp or hand-held flashlight. It is unlawful for any artificial light to be cast from a vehicle while raccoon hunting.
 - (2) Trapping – There are no restrictions on shooting hours for trapping.
- B.** Legal methods of taking furbearers shall include any sporting arm, falconry, traps and snares.
- C.** Dogs are allowed for hunting all furbearers during open season.
- D.** It is unlawful to kill any mink, otter, black-footed ferret, coatimundi or Pacific (pine) marten.
- E.** It is unlawful to kill any furbearer outside of the seasons established for that species, except as authorized by state statute or otherwise allowed by game commission rule.
- F.** Raccoon may be hunted or trapped during the extended season with a current trapper license. Only cage traps and foot encapsulating traps are allowed for raccoon trapping during this period. It is unlawful to hunt or trap raccoon during the extended season contrary to this section.
- G.** All land sets must be visually checked every calendar day. Water sets must be checked at least once every other calendar day. A licensed trapper may designate an agent to check their set traps and snares on

alternating check days, but the licensed trapper must personally check the traps every other check day. Any person may be designated as an agent for any licensed trapper, but the agent must possess written permission from the trapper and a valid trapper license. The permission must include the licensed trapper's full name, contact information, and the agent must know the location of traps.

H. It is unlawful for any person to trap for any furbearer without having successfully completed a department approved trapper education course.

I. It is unlawful for any person to hunt for any furbearer without having successfully completed either the New Mexico trapper education course or a New Mexico law and species identification course.

J. No person may hunt furbearers or nongame, or set any trap or snare on any wildlife management area (WMA), except prairie-chicken wildlife management areas (PCWMA), without a trapper license, habitat management access validation (HMAV) stamp and written permission from the department. Restrictions may be placed on this permission, and this permission may be rescinded at any time for violations of the restrictions. All PCWMA are open to furbearer, coyote and skunk hunting and trapping from November 1 to March 15 annually, without written permission, provided that every person hunting or trapping for any furbearer, coyote or skunk on a PCWMA must have a trapper license and HMAV stamp. It is unlawful to take or attempt to take any furbearer, coyote or skunk on any WMA contrary to this section, contrary to the restrictions written on any department issued permission or without a current trapper license and HMAV stamp.

K. It is unlawful to place or use restricted-use pesticides for the take of any furbearer.

L. The following restrictions shall apply to traps that could reasonably be expected to catch a furbearer:

(1) Each trap or snare must be either permanently marked with, or have a tag securely attached with, a department issued user-identification number or the name and address of the trapper using the trap or snare.

(2) No foothold trap with an outside jaw spread larger than six and one-half inches, or seven inches maximum if laminated above the jaw surfaces, or tooth-jawed trap may be used in making a land set.

(3) No body-grip trap with an inside jaw spread greater than seven inches may be set on land. Body-grip traps with inside jaw spreads of between six and seven inches set on land must be recessed in a cubby at least eight inches from the entrance.

(4) All foothold traps with an inside jaw spread equal to or greater than five and one-half inches used in making a land set shall be off-set a minimum of three-sixteenths of an inch between the contact surfaces of the closed jaws, unless they have been constructed or modified so that a portion of the jaw is padded with a soft material such as rubber or canvas.

(5) No land set shall be placed on public land within one-half mile of:

(a) an established and maintained public campground or boat-launching area;

(b) a designated and signed roadside rest area, public picnic area or trailhead.

“Trailhead” as used herein shall mean an officially designated, mapped, maintained and marked terminus of any trail closed to all vehicles having three or more wheels, and is published on the most current map issued by the state or federal land management agency responsible for that property;

(c) an occupied dwelling without written permission of the occupant of the dwelling.

(6) It shall be unlawful to make a land set within 75 feet of the edge of any public road or trail (including any culvert or structure located beneath it) if no right of way fence is present, except on private land. No land set shall be made within any right of way fence on any public road. “Public road” as used herein shall mean any road, street or thoroughfare open to motorized vehicle travel which was constructed and is maintained with public funds and is open to the public; or any road, street or thoroughfare open to motorized vehicle travel that is officially numbered or named on the most current published map issued by a municipal, state or federal agency and is open to the public. “Trail” as used herein shall mean any officially designated, mapped, maintained, and marked path open for public use and published on the most current map issued by a state or federal land management agency.

(7) No land set may be placed within 150 feet of any man-made livestock or wildlife catchment, pond or tank containing water, except on private land.

(8) It is unlawful to place, set or maintain any land set within 30 feet of any bait over two ounces in weight which is visible to airborne raptors. Bones that are entirely free of bait are legal.

(9) No foothold trap with an inside jaw spread larger than seven and one-half inches or body-grip trap with a jaw spread greater than 12 inches shall be used in making a water set.

(10) Body-grip traps used in water sets with a jaw spread of eight inches or more must be submerged in water to their jaw pivot or deeper.

(11) Any snare set on land must have a lock or break-away device which is designed to release or fail when a maximum of 350 pounds of pressure is applied to it. Locks or break-away devices must be attached in a way which leaves no part of the snare attached to an animal when it releases or fails. All snares must be securely anchored and cannot be attached to a drag. Exception: foot snares.

(12) Each foothold trap set on land must have at least two separate swivel points in the anchor chain. At least one of these swivel points must be within six inches of the trap.

M. A release device or catchpole shall be carried by trappers, and all captured animals must be removed or released from any trap or snare at the time of check. In cases where assistance is required for safe release of the animal, or when biological data is sought by the department, the department must be notified as soon as possible.

N. It is unlawful to set any trap or snare on land without stakes, chains, drags or other anchoring such that any furbearer, coyote or wolf caught will be prevented from escaping with the trap.

O. No person may kill any species listed in 19.33.6 NMAC - LIST OF THREATENED AND ENDANGERED SPECIES, including by the use of any body-grip trap or snare.

P. As long as the Mexican wolf is listed as a federally threatened or endangered species in the United States, any trapper who captures a Mexican wolf must report the capture to the U.S. fish and wildlife interagency field team:

(1) as soon as possible to arrange for radio-collaring and release of the wolf; or

(2) within 24 hours if the wolf is released or has pulled out of the trap.

Q. Tagging:

(1) Every person who takes a bobcat in New Mexico shall present the pelt for tagging in New Mexico prior to transporting the pelt out of the state, prior to selling the pelt, or no later than April 14, annually; whichever occurs first.

(2) Every person who presents a bobcat for tagging shall display a current New Mexico trapper license except residents 11 years of age or younger. Tags may be obtained from any conservation officer or any department office. In addition, pelts may be tagged by New Mexico licensed fur dealers following policies set forth by the department.

(3) It is unlawful for any person to transport across state lines, sell, barter, otherwise dispose of, or possess any bobcat pelt taken in New Mexico that has not been tagged in accordance with this rule.

(4) It is unlawful to present for tagging, or to have tagged with a New Mexico tag, any pelt from a bobcat taken outside of New Mexico.

(5) It is unlawful for any licensed fur dealer to charge a fee for tagging any bobcat. It is unlawful for a licensed fur dealer to refuse to tag a bobcat unless the licensed fur dealer has cause to believe the bobcat was taken in another state or jurisdiction, or the bobcat was unlawfully taken in New Mexico. Licensed fur dealers who believe a bobcat has been taken illegally, or has been presented for pelt tagging in New Mexico when it was taken in another state or jurisdiction, shall report the event to their local conservation officer immediately.

(6) It is unlawful for licensed fur dealers to tag any bobcat contrary to this rule, purchase any bobcat pelt which has not been tagged, or is not immediately pelt tagged at the time of purchase.

R. Tampering with traps: It is unlawful to destroy, damage, disturb, steal or remove any trap, snare or trapped wildlife without permission of the owner of the trap or snare. Nothing in this subsection shall prohibit a person from releasing any domestic animal from a trap or snare.

S. Exemptions: The provisions of this section shall not apply to personnel of the department of game and fish or designated agents who are acting in their official capacity in the control of depredating animals, for law enforcement purposes, to protect human health and safety, or for research or management purposes.

[19.31.10.15 NMAC - N, 4/1/2020]

19.31.10.16 LANDS AND WATERS OWNED, ADMINISTERED, CONTROLLED, OR MANAGED BY THE STATE GAME COMMISSION:

A. **Posting of signs:** The state game commission may prohibit, modify, condition or otherwise control the use of areas under its control by posting of signs as may be required in any particular area.

B. **Violating provisions of posted signs:** It is unlawful to violate the provisions of posted signs on areas under the control of, leased by or managed by the state game commission.

C. Trespass on state game commission owned lands: It is unlawful to enter upon state game commission owned lands unless licensed or as otherwise allowed by state game commission rule or as posted by the department.

[19.31.10.15 NMAC - Rp, 19.31.10.15 NMAC, 4/1/2019; Rn, 19.31.10.15 4/1/2020]

19.31.10.17 BOATS, OTHER FLOATING DEVICES, AND MOTORS: It is unlawful to operate, control or ride in any boat or other floating device contrary to sections A-D below.

A. Electric or gas motors allowed: On the following lakes controlled by the department, boats and other floating devices with electric or gas motors shall be permitted only during the season and hours when fishing is permitted. Boats or floating devices on these lakes shall not be operated at greater than normal trolling speed: **Clayton lake WMA, and McAllister lake WMA.**

B. Electric motors only: On the following lakes controlled by the department, only boats and other floating devices using electric motors or with gas motors that are not in use shall be permitted: **Bear canyon lake WMA, Bill Evans lake WMA, Green Meadow, Fenton lake WMA, Hopewell, Lake Roberts WMA, Morphy, Quemado, Snow, Conoco lakes and Tucumcari lake WMA.**

C. No motors allowed: On the following lakes controlled by the department, only boats and other floating devices using no motors shall be permitted: **Bernardo WMA, La Joya WMA, Jackson lake WMA, McGaffey, San Gregorio, Shuree ponds and Wagon Mound WMA.**

D. No boats or floating devices allowed: On the following lakes controlled by the department, no boats or other floating devices shall be permitted: **Bonito lake, Monastery lake, and Red River hatchery pond.**

E. Department personnel or persons authorized by the director may use gasoline powered motors on all waters in the state while performing official duties.

[19.31.10.17 NMAC - Rp, 19.31.10.17 NMAC, 4/1/2019; Rn, 19.31.10.16 4/1/2020]

19.31.10.18 HUNTING ON PRIVATE LAND WITHOUT WRITTEN PERMISSION AND SEIZURE OF GAME ANIMALS, FURBEARERS, GAME BIRDS, OR SHED ANTLERS:

A. It is unlawful to knowingly enter upon any private property to take or attempt to take any game animal, furbearer, game bird or game fish without possessing written permission from the landowner or person in control of the land or trespass rights unless otherwise permitted in rule or statute.

B. Any game animal, furbearer or game bird taken in violation of this section or Section 30-14-1 NMSA 1978 is unlawfully taken and shall be subject to seizure.

C. All shed antlers collected in violation of any New Mexico state game commission, state or federal land closure, in violation of Section 30-14-1 NMSA 1978 or in violation of any of the provisions of Chapter 17 NMSA 1978 or state game commission rule remain property of the State of New Mexico and shall be seized.

D. Exception: Written permission is not required on any property which is participating in a unitization, receives compensation for allowing public access, receives unit-wide authorizations or has agreed to a ranch-wide agreement when species being harvested is part of any of these agreements.

[19.31.10.18 NMAC - Rp, 19.31.10.18 NMAC, 4/1/2019; Rn, 19.31.10.17 4/1/2020]

19.31.10.19 MANNER AND METHOD PENALTY ASSESSMENTS: Individuals who commit the following violations shall be offered penalty assessments:

A. No habitat management and access validation stamp (HMAV), contrary to Section 17-4-34 NMSA 1978;

B. No habitat stamp (Sikes Act), contrary to 19.31.10 NMAC;

C. Size limit violations on fish, contrary to 19.31.10 NMAC;

D. Trotline violations, contrary to 19.31.10 NMAC;

E. Use of bait or prohibited lure or fly in a special trout water or noodling, contrary to 19.31.10 NMAC;

F. Disturbing the bottom "shuffling" in a special trout water, contrary to 19.31.10 NMAC;

G. Use of bait fish, contrary to 19.31.10 NMAC;

H. Release of bait fish, contrary to Section 17-3-28 NMSA 1978;

I. More than two lines or two lines without stamp, contrary to 19.31.10 NMAC;

J. Exceeding the daily bag limit or the possession limit of fish by two fish or less, contrary to 19.31.10 NMAC;

K. Snagging or keeping snagged game fish, contrary to 19.31.10 NMAC;

L. Spearfishing and bow fishing violations, contrary to 19.31.10 NMAC;

- M. Unlawfully fishing in waters with age or individuals with disabilities use restrictions, contrary to 19.31.10 NMAC;
- N. Boat or other floating device violation, contrary to 19.31.10 NMAC;
- O. Use of live protected species as a decoy, contrary to 19.31.10 NMAC;
- P. Use of an electronic calling device, contrary to 19.31.10 NMAC;
- Q. Use of unapproved shot or shotgun capable of holding more than three shells while hunting migratory game birds, contrary to 19.31.10 NMAC;
- R. Unlawful ammunition/ bullet/ shot or unlawful caliber, contrary to 19.31.10 NMAC;
- S. Hunting hours violations, contrary to 19.31.10 NMAC;
- T. Possession of game animal parts found in field, contrary to 19.31.10 NMAC;
- U. Shooting at artificial wildlife from the road, contrary to 19.31.10 NMAC;
- V. Harassing protected species, contrary to 19.31.10 NMAC;
- W. Driving off road or on a closed road, contrary to 19.31.10 NMAC;
- X. Violation of posted signs, contrary to 19.31.10 NMAC;
- Y. Unlawful use of dogs, contrary to 19.31.10 NMAC;
- Z. Unlawful use of cellular, Wi-Fi or satellite camera, contrary to 19.31.10 NMAC;
- AA. Angling with more than two flies in the San Juan, contrary to 19.31.10 NMAC: or
- BB. Any violation of section 15 of 19.31.10 NMAC.

[19.31.10.20 NMAC - Rp, 19.31.10.20 NMAC, 4/1/2019;Rn, 19.31.10.18 4/1/2020; A, 4/1/2020]

19.31.10.20 SEIZURE:

Any officer authorized to enforce Chapter 17 NMSA 1978 and state game commission rules shall seize unlawfully possessed or imported species, or any protected species or the carcass or parts of any protected species that is taken or possessed contrary to Chapter 17 NMSA 1978 or state game commission rule.

[19.31.10.20 NMAC - N, 4/1/2019; Rn, 19.31.10.19 4/1/2020]

19.31.10.21 DIRECTOR'S AUTHORITY TO ACCOMMODATE DISABILITY OR MEDICAL

IMPAIRMENT: The director may authorize reasonable modifications to the manner and method of take for any licensee who has a verifiable medical condition that, in the director's sole discretion, necessitates such accommodation. In order to apply for such accommodation, the licensee shall complete and submit any form, information and records required by the director. Any licensee granted an accommodation must adhere to all other state game commission rules as to manner and method of take that are not specifically waived by such accommodation; and shall adhere to any restrictions imposed by the director and shall carry a copy of any director granted accommodations on their person while hunting, fishing or trapping.

[19.31.10.21 NMAC - Rp, 19.31.10.21 NMAC, 4/1/2019; Rn, 19.31.10.20 4/1/2020]

HISTORY OF 19.31.10 NMAC:

Pre-NMAC History: The material in this part was derived from that previously file with the Commission of Public Records - State Records Center and Archives:

DFR 67-5 Basic Regulation No. 500, Concerning Method and Manner of Hunting, Taking, Possessing, Disposing, and Transporting of Game Animals, Birds, Fish or Bullfrogs, or parts thereof, Taken in New Mexico, Use and Occupancy of Lands and Waters Administered, Owned, Controlled or Managed by the State Game Commission, 5/25/1967.

DGF 68-11 Basic Regulation No. 525, Concerning Method and Manner of Hunting, Taking, Possessing, Disposing, and Transporting of Game Animals, Game Birds, Game Fish or Bullfrogs, or parts thereof, Taken in New Mexico, the Use and Occupancy of Lands and Waters Administered, Owned, Controlled or Managed by the State Game Commission, 8/21/1968.

DGF 72-6 Basic Regulation 550 Governing Water Pollution, Water Diversion, Animal Releases, Possession of Game, Manner of Hunting and Fishing, and Use of Department Lands, 5/31/1972.

Regulation No. 612 Basic Regulation Governing Water Pollution, Water Diversion, Animal Releases, Possession of Game, Manner of Hunting and Fishing, Use of Department Lands, Retention of Protected Species, Permits and Licenses Issued, and the Hunter Safety Certificate Requirement, 3/2/1982.

Regulation No. 677 Basic Regulation Governing Water Pollution, Possession of Game, Permits and Licenses Issued, Retention and Importation of Protected Species, Manner of Hunting and Fishing, Use of Department Lands, Hunter Training Course Required, Hunting License Revocation, Camping Near a Water Hole, 6/25/1990.

Order No. 5-91 Requiring that Live-Firing Courses be Taught only by Department of Game and Fish and Volunteer Hunter Education Instructors Certified in Live-Firing Instruction, 10/3/1991.

NMAC History:

- 19 NMAC 31.1, Hunting and Fishing - Manner and Method of Taking, 3/1/1995.
- 19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Amended 4/1/2018.
- 19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Replaced 4/1/2019.
- 19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Amended 4/1/2020.

History of Repealed Material:

- 19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Repealed 4/1/2007.
- 19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Repealed 11/7/2016.
- 19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Repealed 4/1/2019.

Initial Proposed Rule

This is an amendment to 19.31.10 NMAC, sections 3, 7, 15, and 19 and a renumbering of sections 16, 17, 18, 20 and 21 effective April 1, 2020.

19.31.10.3 STATUTORY AUTHORITY: Sections 17-1-14, 17-1-26, 17-2-1, 17-2-2, 17-2-2.1, 17-2-4.2, 17-2-6, 17-2-10.1, 17-2-13, 17-2-14, 17-2-20, 17-2-32, 17-2-43, 17-3-2, 17-3-29, **17-3-31**, 17-2A-3, 17-3-32, 17-3-33, 17-3-42, 17-4-33, 17-5-4, **17-5-5** and 17-6-3 NMSA 1978 provide that the New Mexico state game commission has the authority to establish rules and regulations that it may deem necessary to carry out the purpose of Chapter 17 NMSA 1978 and all other acts pertaining to protected species.
[19.31.10.3 NMAC - Rp, 19.31.10.3 NMAC, 4/1/2019; **A, 4/1/2020**]

19.31.10.7 DEFINITIONS:

- A.** “**Angling**” shall mean taking or attempting to take fish by angling hook and line, with the line held in the hand or attached to a pole or rod or other device that is held in the hand or closely attended.
- B.** “**Angling hook**” shall mean a single, double, or treble (triple) point attached to a single shank.
- C.** “**Any sporting arm**” shall mean any firearm, muzzle-loader, compressed air gun, shotgun, bow or crossbow. All firearms, except handguns, must be designed to be fired from the shoulder.
- D.** “**Arrow**” or “**Bolt**” shall mean only those arrows or bolts having broadheads with cutting edges except that “judo”, “blunt” or similar small game points may be used for upland game and migratory game bird hunting and arrows for bow fishing must have barbs to prevent the loss of fish.
- E.** “**Bag limit**” shall mean the protected species, qualified by species, number, sex, age, antler/horn requirement, or size allowed by state game commission rule that a legally licensed person may attempt to take or take.
- F.** “**Bait**” as used in section 19.31.10.15 NMAC shall mean the flesh, hide, fur or viscera of any animal. Bones free of flesh are not considered bait.
- [F]G.** “**Bait**” as used in sections 12 and 13 of 19.31.10 NMAC shall mean any salt, mineral, grain, feed, commercially produced game attractant or any other organic material which is attractive to wildlife.
- [G]H.** “**Baiting**” shall mean the placing, exposing, depositing, distributing, or scattering of any bait on or over areas where any person is attempting to take protected game mammals or game birds as defined in 17-2-3 NMSA 1978.
- [H]I.** “**Bait fish**” is defined as those nongame fish which are not otherwise protected by statute or regulation.
- [I]J.** “**Barbless lure or fly**” shall mean an artificial lure made of wood, metal, or plastic or an artificial fly made from fur, feathers, other animal or man-made materials to resemble or simulate insects, bait fish, or other foods. A barbless fly or lure may only bear a single hook, from which any or all barbs must be removed or bent completely closed, or which are manufactured without barbs. Living or dead arthropods and annelids or other foods are not considered barbless lures or flies.
- [J]K.** “**Big game species**” shall mean Barbary sheep, bear, bighorn sheep, cougar, deer, elk, javelina, oryx Persian ibex, and pronghorn.
- [K]L.** “**Big game sporting arms**” shall mean any centerfire firearm at least .22 caliber or larger, any muzzle-loading firearm at least .45 caliber or larger, any shotgun .410 caliber or larger firing a single slug (including muzzle-loading shotguns), any bow or any crossbow. All firearms, except handguns, must be designed to be fired from the shoulder.
- M.** “**Body-grip trap**” shall mean a rotating jaw trap designed to capture a furbearer by the body.
- [L]N.** “**Bow**” shall mean compound, recurve, or long bow, which is not equipped with a mechanical device (draw lock) which locks the bow string at full draw. Sights on bows shall not project light, however, illuminated pins/reticles and scopes of any magnification are allowed.
- [M]O.** “**Bow fishing**” shall mean taking or attempting to take game fish with arrows/bolts that are discharged above the surface of the water by a bow or crossbow. Arrows/bolts must be attached by string, line, or rope to facilitate fish retrieval.
- [N]P.** “**Bullet**” shall mean a single projectile fired from a firearm which is designed to expand or fragment upon impact. Tracer or full metal jacket ammunition is not legal for the take or attempted take of any big game species.
- [O]Q.** “**Cellular**”, “**Wi-Fi**” or “**satellite camera**” shall mean any remote camera which transmits or is capable of transmitting images or video wirelessly via a cellular, Wi-Fi or satellite connection.
- [P]R.** “**Chumming**” is defined as a means of attracting fish by placing organic materials, non-injurious to aquatic life, into the water.

[Q]S. “Compressed air gun” shall mean any kind of gun that launches a single non-spherical projectile, pneumatically with compressed air or other gases that are pressurized mechanically without involving any chemical reaction.

[R]T. “Crossbow” shall mean a device with a bow limb or band of flexible material that is attached horizontally to a stock and has a mechanism to hold the string in a cocked position. Sights on crossbows shall not project light, however, illuminated pins/reticles and scopes of any magnification are allowed.

[S]U. “Department” shall mean the New Mexico department of game and fish.

[T]V. “Director” shall mean the director of the New Mexico department of game and fish.

[U]W. “Drone” is defined as any device used or designed for navigation or flight in the air that is unmanned and guided remotely or by an onboard computer or onboard control system. Drones may also be referred to as “unmanned aerial vehicle (UAV)” or “unmanned aerial vehicle systems (UAVS)”.

[V]X. “Established road” is defined as follows:

(1) a road, built or maintained by equipment, which shows no evidence of ever being closed to vehicular traffic by such means as berms, ripping, scarification, reseeding, fencing, gates, barricades or posted closures; or

(2) a two-track road which shows use prior to hunting seasons for other purposes such as recreation, mining, logging, and ranching and which shows no evidence of ever being closed to vehicular traffic by such means as berms, ripping, scarification, reseeding, fencing, gates, barricades or posted closures.

Y. “Foothold trap” shall mean a trap designed to capture a furbearer by the foot, but does not include foot encapsulating traps.

Z. “Foot encapsulating trap” shall mean any trap with a push or pull-activated trigger located inside an enclosure recessed from an opening of no more than two inches in diameter, as measured across the opening from side to side, not corner to corner. Foot encapsulating traps include “dog proof” and “egg” traps.

AA. “Furbearer” shall mean any quadruped defined as a fur-bearing animal in 17-5-2 NMSA 1978.

[W]BB. “Game management unit” or “GMU” shall mean those areas as described in 19.30.4 NMAC, Boundary Descriptions for Game Management Units.

CC. “Jaw spread” shall mean the distance between the jaws when measured across the center of the trap and perpendicular to a line drawn through the pivot points of the jaws when the trap is set.

DD. “Laminated” shall mean any modification to the jaw thickness of a foothold trap by fastening a strip of metal (rod or flat stock) to the trap jaw, or a trap that is manufactured with cast jaws, which increases the contact surface area of the jaw.

EE. “Land set” shall mean any foothold trap or snare set on land.

[X]FF. “License year” shall mean the period from April 1 through March 31.

[Y]GG. “Locate” shall mean any act or activity, in which any person is searching for, spotting or otherwise finding a protected species from or with the aid of any aircraft or drone.

[Z]HH. “Migratory game bird” shall mean band-tailed pigeon, mourning dove, white-winged dove, sandhill crane, American coot, common moorhen, common snipe, ducks, geese, sora and Virginia rail.

[AA]II. “Muzzle-loader” or “muzzle-loading firearms” shall mean those sporting arms in which the charge and projectile(s) are loaded through the muzzle. Only blackpowder or equivalent blackpowder substitute may be used. Use of smokeless powder is prohibited.

[BB]JJ. “Nets” shall mean cast nets, dip nets, and seines which shall not be longer than 20 feet and shall not have a mesh larger than three-eighths of an inch.

[CC]KK. “Non-toxic shot” shall mean that non-toxic shot approved for use by the U. S. fish and wildlife service.

[DD]LL. “Protected species” shall mean any of the following animals:

(1) all animals defined as protected wildlife species and game fish under Section 17-2-3 NMSA 1978;

(2) all animals defined as furbearing animals under Section 17-5-2 NMSA 1978;

(3) all animals listed as endangered or threatened species or subspecies as stated in 19.33.6 NMAC: and

(4) all animals listed under Sections 17-2-13, 17-2-14 or 17-2-4.2 NMSA 1978.

[EE]MM. “Retention” or “retain” shall mean the holding of live protected species in captivity.

[FF]NN. “Restricted muzzle-loading rifle” shall mean any muzzle-loading rifle using open sights, black powder or equivalent propellant and firing a full bore diameter bullet or patched round ball. The use of in-line ignition, scopes and smokeless powder are prohibited.

[GG]OO. "Shotgun" shall mean any centerfire shotgun or muzzle-loading shotgun not larger than 10 gauge.

[HH]PP. "Snagging" is the repeated or exaggerated jerking or pulling of the fishing line or angling hooks in any attempt to impale fish, whether or not it results in physically snagging a fish.

OO. "Snare" shall mean a wire or cable with a single closing device designed to capture a furbearer.

[II]RR. "Spear fishing" shall mean taking or attempting to take game fish with spears, gigs and arrows with barbs.

[JJ]SS. "Sporting arm types" shall be designated in the hunt code as follows unless further restricted or allowed by state game commission rule:

(1) all hunt codes denoted with -0- shall authorize use of any shotgun firing shot (ex. SCR-0-XXX);

(2) all hunt codes denoted with -1- shall authorize use of any big game sporting arm (ex. ELK-1-XXX);

(3) all hunt codes denoted with -2- shall authorize use of bows only (ex. ELK-2-XXX);

(4) all hunt codes denoted with -3- shall authorize use of bows, crossbows and muzzle-loading firearms (ex. ELK-3-XXX).

[KK]TT. "Take" shall mean to hunt, fish, kill or capture any protected species or parts thereof.

UU. "Trap" shall mean any foothold trap, foot encapsulating trap, cage trap or body-grip trap set to capture a furbearer.

[LL]VV. "Trotline" shall be synonymous with "set line" or "throw line" or "jug", "Yo-Yo line" or "limb line", and shall mean a fishing line that is used without rod or reel and that need not be held in the hand or closely attended.

[MM]WW. "Upland game" shall mean dusky grouse, Eurasian collared-dove, all protected squirrel species, all quail species, chukar and pheasant.

XX. "Water set" shall mean any trap or snare set fully in water.

[NN]YY. "Wildlife management area" or "WMA" shall mean those areas as described in 19.34.5 NMAC.

[OO]ZZ. "Written permission" shall mean a document (which may include a valid hunting, trapping or fishing license) that asserts the holder has permission from the private land owner or their designee to hunt, fish, trap or drive off road on the landowner's property. The information on the document must be verifiable and include the name of the person(s) receiving permission, activity permitted, property's location and name (if applicable), name of person granting permission, date and length of time the permission is granted, and phone number or e-mail of the person granting the permission. Licenses issued for private land which have the ranch name printed on them constitute written permission for that property and no other permission is required except for private land elk licenses in the secondary management zone pursuant to 19.30.5 and 19.31.14 NMAC.

[PP]AAA. "Zone" shall mean those bear or cougar hunt areas, consisting of one or more GMUs, as described in 19.31.11 NMAC.

[19.31.10.7 NMAC - Rp, 19.31.10.7 NMAC, 4/1/2019; A, 4/1/2020]

19.31.10.15 FURBEARERS:

A. Shooting hours:

(1) Hunting and falconry – Restricted to the period one-half hour before sunrise to one-half hour after sunset except that a licensed furbearer hunter is authorized by the department to hunt for and take raccoons by use of artificial light while hunting at night with a rim-fire rifle or handgun no greater in size than a .22 caliber, shotgun, bow or crossbow during open season. The artificial light used for raccoon hunting must be a headlamp or hand-held flashlight. It is unlawful for any artificial light to be cast from a vehicle while raccoon hunting.

(2) Trapping – There are no restrictions on shooting hours for trapping.

B. Legal methods of taking furbearers shall include any sporting arm, falconry, traps and snares.

C. Dogs are allowed for hunting all furbearers during open season.

D. It is unlawful to kill any mink, otter, black-footed ferret, coatimundi or Pacific (pine) marten.

E. It is unlawful to kill any furbearer outside of the seasons established for that species, except as authorized by state statute or otherwise allowed by game commission rule.

F. Raccoon may be hunted or trapped during the extended season with a current trapper license. Only cage traps and foot encapsulating traps are allowed for raccoon trapping during this period. It is unlawful to hunt or trap raccoon during the extended season contrary to this section.

G. All land sets must be visually checked every calendar day. Water sets must be checked at least once every other calendar day. A licensed trapper may designate an agent to check their set traps and snares on alternating check days, but the licensed trapper must personally check the traps every other check day. Any person may be designated as an agent for any licensed trapper, but the agent must possess written permission from the trapper and a valid trapper license. The permission must include the licensed trapper's full name, contact information, and the agent must know the location of traps.

H. It is unlawful for any person to trap for any furbearer without having successfully completed a department approved trapper education course.

I. It is unlawful for any person to hunt for any furbearer without having successfully completed either the New Mexico trapper education course or a New Mexico law and species identification course.

J. No person may hunt furbearers or nongame, or set any trap or snare on any wildlife management area (WMA), except prairie-chicken wildlife management areas (PCWMA), without a trapper license, habitat management access validation (HMAV) stamp and written permission from the department. Restrictions may be placed on this permission, and this permission may be rescinded at any time for violations of the restrictions. All PCWMA are open to furbearer, coyote and skunk hunting and trapping from November 1 to March 15 annually, without written permission, provided that every person hunting or trapping for any furbearer, coyote or skunk on a PCWMA must have a trapper license and HMAV stamp. It is unlawful to take or attempt to take any furbearer, coyote or skunk on any WMA contrary to this section, contrary to the restrictions written on any department issued permission or without a current trapper license and HMAV stamp.

K. It is unlawful to place or use restricted-use pesticides for the take of any furbearer.

L. The following restrictions shall apply to traps that could reasonably be expected to catch a furbearer:

(1) Each trap or snare must be either permanently marked with, or have a tag securely attached with, a department issued user-identification number or the name and address of the trapper using the trap or snare.

(2) No foothold trap with an outside jaw spread larger than six and one-half inches, or seven inches maximum if laminated above the jaw surfaces, or tooth-jawed trap may be used in making a land set.

(3) No body-grip trap with an inside jaw spread greater than seven inches may be set on land. Body-grip traps with inside jaw spreads of between six and seven inches set on land must be recessed in a cubby at least eight inches from the entrance.

(4) All foothold traps with an inside jaw spread equal to or greater than five and one-half inches used in making a land set shall be off-set a minimum of three-sixteenths of an inch between the contact surfaces of the closed jaws, unless they have been constructed or modified so that a portion of the jaw is padded with a soft material such as rubber or canvas.

(5) No land set shall be placed on public land within one-half mile of:

(a) an established and maintained public campground or boat-launching area;

(b) a designated and signed roadside rest area, public picnic area or trailhead.

"Trailhead" as used herein shall mean an officially designated, mapped, maintained and marked terminus of any trail closed to all vehicles having three or more wheels, and is published on the most current map issued by the state or federal land management agency responsible for that property;

(c) an occupied dwelling without written permission of the occupant of the dwelling.

(6) It shall be unlawful to make a land set within 75 feet of the edge of any public road or trail (including any culvert or structure located beneath it) if no right of way fence is present, except on private land. No land set shall be made within any right of way fence on any public road. "Public road" as used herein shall mean any road, street or thoroughfare open to motorized vehicle travel which was constructed and is maintained with public funds and is open to the public; or any road, street or thoroughfare open to motorized vehicle travel that is officially numbered or named on the most current published map issued by a municipal, state or federal agency and is open to the public. "Trail" as used herein shall mean any officially designated, mapped, maintained, and marked path open for public use and published on the most current map issued by a state or federal land management agency.

(7) No land set may be placed within 150 feet of any man-made livestock or wildlife catchment, pond or tank containing water, except on private land.

(8) It is unlawful to place, set or maintain any land set within 30 feet of any bait over two ounces in weight which is visible to airborne raptors. Bones that are entirely free of bait are legal.

(9) No foothold trap with an inside jaw spread larger than seven and one-half inches or body-grip trap with a jaw spread greater than 12 inches shall be used in making a water set.

(10) Body-grip traps used in water sets with a jaw spread of eight inches or more must be submerged in water to their jaw pivot or deeper.

(11) Any snare set on land must have a lock or break-away device which is designed to release or fail when a maximum of 350 pounds of pressure is applied to it. Locks or break-away devices must be attached in a way which leaves no part of the snare attached to an animal when it releases or fails. All snares must be securely anchored and cannot be attached to a drag. Exception: foot snares.

(12) Each foothold trap set on land must have at least two separate swivel points in the anchor chain. At least one of these swivel points must be within six inches of the trap.

M. A release device or catchpole shall be carried by trappers, and all captured animals must be removed or released from any trap or snare at the time of check. In cases where assistance is required for safe release of the animal, or when biological data is sought by the department, the department must be notified as soon as possible.

N. It is unlawful to set any trap or snare on land without stakes, chains, drags or other anchoring such that any furbearer, coyote or wolf caught will be prevented from escaping with the trap.

O. No person may kill any species listed in 19.33.6 NMAC - LIST OF THREATENED AND ENDANGERED SPECIES, including by the use of any body-grip trap or snare.

P. As long as the Mexican wolf is listed as a federally threatened or endangered species in the United States, any trapper who captures a Mexican wolf must report the capture to the U.S. fish and wildlife interagency field team:

(1) as soon as possible to arrange for radio-collaring and release of the wolf; or

(2) within 24 hours if the wolf is released or has pulled out of the trap.

Q. Tagging:

(1) Every person who takes a bobcat in New Mexico shall present the pelt for tagging in New Mexico prior to transporting the pelt out of the state, prior to selling the pelt, or no later than April 14, annually, whichever occurs first.

(2) Every person who presents a bobcat for tagging shall display a current New Mexico trapper license except residents 11 years of age or younger. Tags may be obtained from any conservation officer or any department office. In addition, pelts may be tagged by New Mexico licensed fur dealers following policies set forth by the department.

(3) It is unlawful for any person to transport across state lines, sell, barter, otherwise dispose of, or possess any bobcat pelt taken in New Mexico that has not been tagged in accordance with this rule.

(4) It is unlawful to present for tagging, or to have tagged with a New Mexico tag, any pelt from a bobcat taken outside of New Mexico.

(5) It is unlawful for any licensed fur dealer to charge a fee for tagging any bobcat. It is unlawful for a licensed fur dealer to refuse to tag a bobcat unless the licensed fur dealer has cause to believe the bobcat was taken in another state or jurisdiction, or the bobcat was unlawfully taken in New Mexico. Licensed fur dealers who believe a bobcat has been taken illegally, or has been presented for pelt tagging in New Mexico when it was taken in another state or jurisdiction, shall report the event to their local conservation officer immediately.

(6) It is unlawful for licensed fur dealers to tag any bobcat contrary to this rule, purchase any bobcat pelt which has not been tagged, or is not immediately pelt tagged at the time of purchase.

R. Tampering with traps: It is unlawful to destroy, damage, disturb, steal or remove any trap, snare or trapped wildlife without permission of the owner of the trap or snare. Nothing in this subsection shall prohibit a person from releasing any domestic animal from a trap or snare.

S. Exemptions: The provisions of this section shall not apply to personnel of the department of game and fish or designated agents who are acting in their official capacity in the control of depredating animals, for law enforcement purposes, to protect human health and safety, or for research or management purposes.

[19.31.10.15 NMAC - N, 4/1/2020]

19.31.10.15 LANDS AND WATERS OWNED, ADMINISTERED, CONTROLLED, OR MANAGED BY THE STATE GAME COMMISSION:

A. **Posting of signs:** The state game commission may prohibit, modify, condition or otherwise control the use of areas under its control by posting of signs as may be required in any particular area.

B. **Violating provisions of posted signs:** It is unlawful to violate the provisions of posted signs on areas under the control of, leased by or managed by the state game commission.

C. Trespass on state game commission owned lands: It is unlawful to enter upon state game commission owned lands unless licensed or as otherwise allowed by state game commission rule or as posted by the department.

[19.31.10.15 NMAC - Rp, 19.31.10.15 NMAC, 4/1/2019; Rn, 19.31.10.15 4/1/2020]

19.31.10.16 **BOATS, OTHER FLOATING DEVICES, AND MOTORS:** It is unlawful to operate, control or ride in any boat or other floating device contrary to sections A-D below.

A. Electric or gas motors allowed: On the following lakes controlled by the department, boats and other floating devices with electric or gas motors shall be permitted only during the season and hours when fishing is permitted. Boats or floating devices on these lakes shall not be operated at greater than normal trolling speed: **Clayton lake WMA, and McAllister lake WMA**

B. Electric motors only: On the following lakes controlled by the department, only boats and other floating devices using electric motors or with gas motors that are not in use shall be permitted: **Bear canyon lake WMA, Bill Evans lake WMA, Green Meadow, Fenton lake WMA, Hopewell, Lake Roberts WMA, Morphy, Quemado, Snow, Conoco lakes and Tucumcari lake WMA.**

C. No motors allowed: On the following lakes controlled by the department, only boats and other floating devices using no motors shall be permitted: **Bernardo WMA, La Joya WMA, Jackson lake WMA, McGaffey, San Gregorio, Shuree ponds and Wagon Mound WMA.**

D. No boats or floating devices allowed: On the following lakes controlled by the department, no boats or other floating devices shall be permitted: **Bonito lake, Monastery lake, and Red River hatchery pond.**

E. Department personnel or persons authorized by the director may use gasoline powered motors on all waters in the state while performing official duties.

[19.31.10.17 NMAC - Rp, 19.31.10.17 NMAC, 4/1/2019; Rn, 19.31.10.16 4/1/2020]

19.31.10.17 **HUNTING ON PRIVATE LAND WITHOUT WRITTEN PERMISSION AND SEIZURE OF GAME ANIMALS, FURBEARERS, GAME BIRDS, OR SHED ANTLERS:**

A. It is unlawful to knowingly enter upon any private property to take or attempt to take any game animal, furbearer, game bird or game fish without possessing written permission from the landowner or person in control of the land or trespass rights unless otherwise permitted in rule or statute.

B. Any game animal, furbearer or game bird taken in violation of this section or Section 30-14-1 NMSA 1978 is unlawfully taken and shall be subject to seizure.

C. All shed antlers collected in violation of any New Mexico state game commission, state or federal land closure, in violation of Section 30-14-1 NMSA 1978 or in violation of any of the provisions of Chapter 17 NMSA 1978 or state game commission rule remain property of the State of New Mexico and shall be seized.

D. Exception: Written permission is not required on any property which is participating in a unitization, receives compensation for allowing public access, receives unit-wide authorizations or has agreed to a ranch-wide agreement when species being harvested is part of any of these agreements.

[19.31.10.18 NMAC - Rp, 19.31.10.18 NMAC, 4/1/2019; Rn, 19.31.10.17 4/1/2020]

19.31.10.18 **MANNER AND METHOD PENALTY ASSESSMENTS:** Individuals who commit the following violations shall be offered penalty assessments:

A. No habitat management and access validation stamp (HMAV), contrary to Section 17-4-34 NMSA 1978;

B. No habitat stamp (Sikes Act), contrary to 19.31.10 NMAC;

C. Size limit violations on fish, contrary to 19.31.10 NMAC;

D. Trotline violations, contrary to 19.31.10 NMAC;

E. Use of bait or prohibited lure or fly in a special trout water or noodling, contrary to 19.31.10 NMAC;

F. Disturbing the bottom "shuffling" in a special trout water, contrary to 19.31.10 NMAC;

G. Use of bait fish, contrary to 19.31.10 NMAC;

H. Release of bait fish, contrary to Section 17-3-28 NMSA 1978;

I. More than two lines or two lines without stamp, contrary to 19.31.10 NMAC;

J. Exceeding the daily bag limit or the possession limit of fish by two fish or less, contrary to 19.31.10 NMAC;

K. Snagging or keeping snagged game fish, contrary to 19.31.10 NMAC;

L. Spearfishing and bow fishing violations, contrary to 19.31.10 NMAC;

- M. Unlawfully fishing in waters with age or individuals with disabilities use restrictions, contrary to 19.31.10 NMAC;
- N. Boat or other floating device violation, contrary to 19.31.10 NMAC;
- O. Use of live protected species as a decoy, contrary to 19.31.10 NMAC;
- P. Use of an electronic calling device, contrary to 19.31.10 NMAC;
- Q. Use of unapproved shot or shotgun capable of holding more than three shells while hunting migratory game birds, contrary to 19.31.10 NMAC;
- R. Unlawful ammunition/ bullet/ shot or unlawful caliber, contrary to 19.31.10 NMAC;
- S. Hunting hours violations, contrary to 19.31.10 NMAC;
- T. Possession of game animal parts found in field, contrary to 19.31.10 NMAC;
- U. Shooting at artificial wildlife from the road, contrary to 19.31.10 NMAC;
- V. Harassing protected species, contrary to 19.31.10 NMAC;
- W. Driving off road or on a closed road, contrary to 19.31.10 NMAC;
- X. Violation of posted signs, contrary to 19.31.10 NMAC;
- Y. Unlawful use of dogs, contrary to 19.31.10 NMAC;
- Z. Unlawful use of cellular, Wi-Fi or satellite camera, contrary to 19.31.10 NMAC; ~~[or]~~
- AA. Angling with more than two flies in the San Juan, contrary to 19.31.10 NMAC ~~[or]~~ or
- BB. Any violation of section 15 of 19.31.10 NMAC.

[19.31.10.20 NMAC - Rp, 19.31.10.20 NMAC, 4/1/2019; Rn, 19.31.10.18 4/1/2020; A, 4/1/2020]

19.31.10.19]20 SEIZURE:

Any officer authorized to enforce Chapter 17 NMSA 1978 and state game commission rules shall seize unlawfully possessed or imported species, or any protected species or the carcass or parts of any protected species that is taken or possessed contrary to Chapter 17 NMSA 1978 or state game commission rule.

[19.31.10.20 NMAC - N, 4/1/2019; Rn, 19.31.10.19 4/1/2020]

19.31.10.20]21 DIRECTOR'S AUTHORITY TO ACCOMMODATE DISABILITY OR MEDICAL IMPAIRMENT: The director may authorize reasonable modifications to the manner and method of take for any licensee who has a verifiable medical condition that, in the director's sole discretion, necessitates such accommodation. In order to apply for such accommodation, the licensee shall complete and submit any form, information and records required by the director. Any licensee granted an accommodation must adhere to all other state game commission rules as to manner and method of take that are not specifically waived by such accommodation; and shall adhere to any restrictions imposed by the director and shall carry a copy of any director granted accommodations on their person while hunting, fishing or trapping.

[19.31.10.21 NMAC - Rp, 19.31.10.21 NMAC, 4/1/2019; Rn, 19.31.10.20 4/1/2020]

HISTORY OF 19.31.10 NMAC:

Pre-NMAC History: The material in this part was derived from that previously file with the Commission of Public Records - State Records Center and Archives:

DFR 67-5 Basic Regulation No. 500, Concerning Method and Manner of Hunting, Taking, Possessing, Disposing, and Transporting of Game Animals, Birds, Fish or Bullfrogs, or parts thereof, Taken in New Mexico, Use and Occupancy of Lands and Waters Administered, Owned, Controlled or Managed by the State Game Commission, 5/25/1967.

DGF 68-11 Basic Regulation No. 525, Concerning Method and Manner of Hunting, Taking, Possessing, Disposing, and Transporting of Game Animals, Game Birds, Game Fish or Bullfrogs, or parts thereof, Taken in New Mexico, the Use and Occupancy of Lands and Waters Administered, Owned, Controlled or Managed by the State Game Commission, 8/21/1968.

DGF 72-6 Basic Regulation 550 Governing Water Pollution, Water Diversion, Animal Releases, Possession of Game, Manner of Hunting and Fishing, and Use of Department Lands, 5/31/1972.

Regulation No. 612 Basic Regulation Governing Water Pollution, Water Diversion, Animal Releases, Possession of Game, Manner of Hunting and Fishing, Use of Department Lands, Retention of Protected Species, Permits and Licenses Issued, and the Hunter Safety Certificate Requirement, 3/2/1982.

Regulation No. 677 Basic Regulation Governing Water Pollution, Possession of Game, Permits and Licenses Issued, Retention and Importation of Protected Species, Manner of Hunting and Fishing, Use of Department Lands, Hunter Training Course Required, Hunting License Revocation, Camping Near a Water Hole, 6/25/1990.

Order No. 5-91 Requiring that Live-Firing Courses be Taught only by Department of Game and Fish and Volunteer Hunter Education Instructors Certified in Live-Firing Instruction, 10/3/1991.

NMAC History:

19 NMAC 31.1, Hunting and Fishing - Manner and Method of Taking, 3/1/1995.

19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Amended 4/1/2018.

19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Replaced 4/1/2019.

19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Amended 4/1/2020.

History of Repealed Material:

19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Repealed 4/1/2007.

19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Repealed 11/7/2016.

19.31.10 NMAC, Hunting and Fishing - Manner and Method of Taking - Repealed 4/1/2019.

Final Adopted Rule

2020 JAN 24 AM 10: 41

This is an amendment to 19.31.10 NMAC, sections 3, 7, a new section 15, and renumbered 19, effective April 1, 2020.

Explanatory paragraph: As a result of new section 15, previous sections 15 through 20 were renumbered to sections 16 through 21. With the exception of Section 19, no other changes were made to any of renumbered sections.

19.31.10.3 STATUTORY AUTHORITY: Sections 17-1-14, 17-1-26, 17-2-1, 17-2-2, 17-2-2.1, 17-2-4.2, 17-2-6, 17-2-10.1, 17-2-13, 17-2-14, 17-2-20, 17-2-32, 17-2-43, 17-3-2, 17-3-29, 17-3-31, 17-2A-3, 17-3-32, 17-3-33, 17-3-42, 17-4-33, 17-5-4, 17-5-5 and 17-6-3 NMSA 1978 provide that the New Mexico state game commission has the authority to establish rules and regulations that it may deem necessary to carry out the purpose of Chapter 17 NMSA 1978 and all other acts pertaining to protected species.
[19.31.10.3 NMAC - Rp, 19.31.10.3 NMAC, 4/1/2019; A, 4/1/2020]

19.31.10.7 DEFINITIONS:

- A.** "Angling" shall mean taking or attempting to take fish by angling hook and line, with the line held in the hand or attached to a pole or rod or other device that is held in the hand or closely attended.
- B.** "Angling hook" shall mean a single, double, or treble (triple) point attached to a single shank.
- C.** "Any sporting arm" shall mean any firearm, muzzle-loader, compressed air gun, shotgun, bow or crossbow. All firearms, except handguns, must be designed to be fired from the shoulder.
- D.** "Arrow" or "Bolt" shall mean only those arrows or bolts having broadheads with cutting edges except that "judo", "blunt" or similar small game points may be used for upland game and migratory game bird hunting and arrows for bow fishing must have barbs to prevent the loss of fish.
- E.** "Bag limit" shall mean the protected species, qualified by species, number, sex, age, antler/horn requirement, or size allowed by state game commission rule that a legally licensed person may attempt to take or take.
- F.** "Bait" as used in section 19.31.10.15 NMAC shall mean the flesh, hide, fur or viscera of any animal. Bones free of flesh are not considered bait.
- ~~[F]~~ **G.** "Bait" as used in sections 12 and 13 of 19.31.10 NMAC shall mean any salt, mineral, grain, feed, commercially produced game attractant or any other organic material which is attractive to wildlife.
- ~~[G]~~ **H.** "Baiting" shall mean the placing, exposing, depositing, distributing, or scattering of any bait on or over areas where any person is attempting to take protected game mammals or game birds as defined in 17-2-3 NMSA 1978.
- ~~[H]~~ **I.** "Bait fish" is defined as those nongame fish which are not otherwise protected by statute or regulation.
- ~~[I]~~ **J.** "Barbless lure or fly" shall mean an artificial lure made of wood, metal, or plastic or an artificial fly made from fur, feathers, other animal or man-made materials to resemble or simulate insects, bait fish, or other foods. A barbless fly or lure may only bear a single hook, from which any or all barbs must be removed or bent completely closed, or which are manufactured without barbs. Living or dead arthropods and annelids or other foods are not considered barbless lures or flies.
- ~~[J]~~ **K.** "Big game species" shall mean Barbary sheep, bear, bighorn sheep, cougar, deer, elk, javelina, oryx Persian ibex, and pronghorn.
- ~~[K]~~ **L.** "Big game sporting arms" shall mean any centerfire firearm at least .22 caliber or larger, any muzzle-loading firearm at least .45 caliber or larger, any shotgun .410 caliber or larger firing a single slug (including muzzle-loading shotguns), any bow or any crossbow. All firearms, except handguns, must be designed to be fired from the shoulder.
- M.** "Body-grip trap" shall mean a rotating jaw trap designed to capture a furbearer by the body.
- ~~[L]~~ **N.** "Bow" shall mean compound, recurve, or long bow, which is not equipped with a mechanical device (draw lock) which locks the bow string at full draw. Sights on bows shall not project light, however, illuminated pins/reticles and scopes of any magnification are allowed.
- ~~[M]~~ **O.** "Bow fishing" shall mean taking or attempting to take game fish with arrows/bolts that are discharged above the surface of the water by a bow or crossbow. Arrows/bolts must be attached by string, line, or rope to facilitate fish retrieval.

[N] P. "Bullet" shall mean a single projectile fired from a firearm which is designed to expand or fragment upon impact. Tracer or full metal jacket ammunition is not legal for the take or attempted take of any big game species.

[O] Q. "Cellular", "Wi-Fi" or "satellite camera" shall mean any remote camera which transmits or is capable of transmitting images or video wirelessly via a cellular, Wi-Fi or satellite connection.

[P] R. "Chumming" is defined as a means of attracting fish by placing organic materials, non-injurious to aquatic life, into the water.

[Q] S. "Compressed air gun" shall mean any kind of gun that launches a single non-spherical projectile, pneumatically with compressed air or other gases that are pressurized mechanically without involving any chemical reaction.

[R] T. "Crossbow" shall mean a device with a bow limb or band of flexible material that is attached horizontally to a stock and has a mechanism to hold the string in a cocked position. Sights on crossbows shall not project light, however, illuminated pins/reticles and scopes of any magnification are allowed.

[S] U. "Department" shall mean the New Mexico department of game and fish.

[F] V. "Director" shall mean the director of the New Mexico department of game and fish.

[U] W. "Drone" is defined as any device used or designed for navigation or flight in the air that is unmanned and guided remotely or by an onboard computer or onboard control system. Drones may also be referred to as "unmanned aerial vehicle (UAV)" or "unmanned aerial vehicle systems (UAVS)".

[V] X. "Established road" is defined as follows:

(1) a road, built or maintained by equipment, which shows no evidence of ever being closed to vehicular traffic by such means as berms, ripping, scarification, reseeding, fencing, gates, barricades or posted closures; or

(2) a two-track road which shows use prior to hunting seasons for other purposes such as recreation, mining, logging, and ranching and which shows no evidence of ever being closed to vehicular traffic by such means as berms, ripping, scarification, reseeding, fencing, gates, barricades or posted closures.

Y. "Foothold trap" shall mean a trap designed to capture a furbearer by the foot, but does not include foot encapsulating traps.

Z. "Foot encapsulating trap" shall mean any trap with a push or pull-activated trigger located inside an enclosure recessed from an opening of no more than two inches in diameter, as measured across the opening from side to side, not corner to corner. Foot encapsulating traps include "dog proof" and "egg" traps.

AA. "Furbearer" shall mean any quadruped defined as a fur-bearing animal in 17-5-2 NMSA 1978.

[W] BB. "Game management unit" or "GMU" shall mean those areas as described in 19.30.4 NMAC, Boundary Descriptions for Game Management Units.

CC. "Jaw spread" shall mean the distance between the jaws when measured across the center of the trap and perpendicular to a line drawn through the pivot points of the jaws when the trap is set.

DD. "Laminated" shall mean any modification to the jaw thickness of a foothold trap by fastening a strip of metal (rod or flat stock) to the trap jaw, or a trap that is manufactured with cast jaws, which increases the contact surface area of the jaw.

EE. "Land set" shall mean any foothold trap or snare set on land.

[X] FF. "License year" shall mean the period from April 1 through March 31.

[Y] GG. "Locate" shall mean any act or activity, in which any person is searching for, spotting or otherwise finding a protected species from or with the aid of any aircraft or drone.

[Z] HH. "Migratory game bird" shall mean band-tailed pigeon, mourning dove, white-winged dove, sandhill crane, American coot, common moorhen, common snipe, ducks, geese, sora and Virginia rail.

[AA] II. "Muzzle-loader" or "muzzle-loading firearms" shall mean those sporting arms in which the charge and projectile(s) are loaded through the muzzle. Only blackpowder or equivalent blackpowder substitute may be used. Use of smokeless powder is prohibited.

[BB] JJ. "Nets" shall mean cast nets, dip nets, and seines which shall not be longer than 20 feet and shall not have a mesh larger than three-eighths of an inch.

[CC] KK. "Non-toxic shot" shall mean that non-toxic shot approved for use by the U. S. fish and wildlife service.

[DD] LL. "Protected species" shall mean any of the following animals:

(1) all animals defined as protected wildlife species and game fish under Section 17-2-3 NMSA 1978;

(2) all animals defined as furbearing animals under Section 17-5-2 NMSA 1978;

NMAC: and (3) all animals listed as endangered or threatened species or subspecies as stated in 19.33.6

(4) all animals listed under Sections 17-2-13, 17-2-14 or 17-2-4.2 NMSA 1978.

~~[EE]~~ MM. "Retention" or "retain" shall mean the holding of live protected species in captivity.

~~[FF]~~ NN. "Restricted muzzle-loading rifle" shall mean any muzzle-loading rifle using open sights, black powder or equivalent propellant and firing a full bore diameter bullet or patched round ball. The use of in-line ignition, scopes and smokeless powder are prohibited.

~~[GG]~~ OO. "Shotgun" shall mean any centerfire shotgun or muzzle-loading shotgun not larger than 10 gauge.

~~[HH]~~ PP. "Snagging" is the repeated or exaggerated jerking or pulling of the fishing line or angling hooks in any attempt to impale fish, whether or not it results in physically snagging a fish.

QQ. "Snare" shall mean a wire or cable with a single closing device designed to capture a furbearer.

~~[H]~~ RR. "Spear fishing" shall mean taking or attempting to take game fish with spears, gigs and arrows with barbs.

~~[JJ]~~ SS. "Sporting arm types" shall be designated in the hunt code as follows unless further restricted or allowed by state game commission rule:

(1) all hunt codes denoted with -0- shall authorize use of any shotgun firing shot (ex. SCR-0-XXX);

(2) all hunt codes denoted with -1- shall authorize use of any big game sporting arm (ex. ELK-1-XXX);

(3) all hunt codes denoted with -2- shall authorize use of bows only (ex. ELK-2-XXX);

(4) all hunt codes denoted with -3- shall authorize use of bows, crossbows and muzzle-loading firearms (ex. ELK-3-XXX).

~~[KK]~~ TT. "Take" shall mean to hunt, fish, kill or capture any protected species or parts thereof.

UU. "Trap" shall mean any foothold trap, foot encapsulating trap, cage trap or body-grip trap set to capture a furbearer.

~~[LL]~~ VV. "Trotline" shall be synonymous with "set line" or "throw line" or "jug", "Yo-Yo line" or "limb line", and shall mean a fishing line that is used without rod or reel and that need not be held in the hand or closely attended.

~~[MM]~~ WW. "Upland game" shall mean dusky grouse, Eurasian collared-dove, all protected squirrel species, all quail species, chukar and pheasant.

XX. "Water set" shall mean any trap or snare set fully in water.

~~[NN]~~ YY. "Wildlife management area" or "WMA" shall mean those areas as described in 19.34.5 NMAC.

~~[OO]~~ ZZ. "Written permission" shall mean a document (which may include a valid hunting, trapping or fishing license) that asserts the holder has permission from the private land owner or their designee to hunt, fish, trap or drive off road on the landowner's property. The information on the document must be verifiable and include the name of the person(s) receiving permission, activity permitted, property's location and name (if applicable), name of person granting permission, date and length of time the permission is granted, and phone number or e-mail of the person granting the permission. Licenses issued for private land which have the ranch name printed on them constitute written permission for that property and no other permission is required except for private land elk licenses in the secondary management zone pursuant to 19.30.5 and 19.31.14 NMAC.

~~[PP]~~ AAA. "Zone" shall mean those bear or cougar hunt areas, consisting of one or more GMUs, as described in 19.31.11 NMAC.

[19.31.10.7 NMAC - Rp, 19.31.10.7 NMAC, 4/1/2019; A, 4/1/2020]

19.31.10.15 FURBEARERS:

A. Shooting hours:

(1) Hunting and falconry – Restricted to the period one-half hour before sunrise to one-half hour after sunset except that a licensed furbearer hunter is authorized by the department to hunt for and take raccoons by use of artificial light while hunting at night with a rim-fire rifle or handgun no greater in size than a .22 caliber, shotgun, bow or crossbow during open season. The artificial light used for raccoon hunting must be a headlamp or hand-held flashlight. It is unlawful for any artificial light to be cast from a vehicle while raccoon hunting.

(2) Trapping – There are no restrictions on shooting hours for trapping.

B. Legal methods of taking furbearers shall include any sporting arm, falconry, traps and snares.

C. Dogs are allowed for hunting all furbearers during open season.

D. It is unlawful to kill any mink, otter, black-footed ferret, coatimundi or Pacific (pine) marten.

E. It is unlawful to kill any furbearer outside of the seasons established for that species, except as authorized by state statute or otherwise allowed by game commission rule.

F. Raccoon may be hunted or trapped during the extended season with a current trapper license. Only cage traps and foot encapsulating traps are allowed for raccoon trapping during this period. It is unlawful to hunt or trap raccoon during the extended season contrary to this section.

G. All land sets must be visually checked every calendar day. Water sets must be checked at least once every other calendar day. A licensed trapper may designate an agent to check their set traps and snares on alternating check days, but the licensed trapper must personally check the traps every other check day. Any person may be designated as an agent for any licensed trapper, but the agent must possess written permission from the trapper and a valid trapper license. The permission must include the licensed trapper's full name, contact information, and the agent must know the location of traps.

H. It is unlawful for any person to trap for any furbearer without having successfully completed a department approved trapper education course.

I. It is unlawful for any person to hunt for any furbearer without having successfully completed either the New Mexico trapper education course or a New Mexico law and species identification course.

J. No person may hunt furbearers or nongame, or set any trap or snare on any wildlife management area (WMA), except prairie-chicken wildlife management areas (PCWMA), without a trapper license, habitat management access validation (HMAV) stamp and written permission from the department. Restrictions may be placed on this permission, and this permission may be rescinded at any time for violations of the restrictions. All PCWMA are open to furbearer, coyote and skunk hunting and trapping from November 1 to March 15 annually, without written permission, provided that every person hunting or trapping for any furbearer, coyote or skunk on a PCWMA must have a trapper license and HMAV stamp. It is unlawful to take or attempt to take any furbearer, coyote or skunk on any WMA contrary to this section, contrary to the restrictions written on any department issued permission or without a current trapper license and HMAV stamp.

K. It is unlawful to place or use restricted-use pesticides for the take of any furbearer.

L. The following restrictions shall apply to traps that could reasonably be expected to catch a furbearer:

(1) Each trap or snare must be either permanently marked with, or have a tag securely attached with, a department issued user-identification number or the name and address of the trapper using the trap or snare.

(2) No foothold trap with an outside jaw spread larger than six and one-half inches, or seven inches maximum if laminated above the jaw surfaces, or tooth-jawed trap may be used in making a land set.

(3) No body-grip trap with an inside jaw spread greater than seven inches may be set on land. Body-grip traps with inside jaw spreads of between six and seven inches set on land must be recessed in a cubby at least eight inches from the entrance.

(4) All foothold traps with an inside jaw spread equal to or greater than five and one-half inches used in making a land set shall be off-set a minimum of three-sixteenths of an inch between the contact surfaces of the closed jaws, unless they have been constructed or modified so that a portion of the jaw is padded with a soft material such as rubber or canvas.

(5) No land set shall be placed on public land within one-half mile of:

(a) an established and maintained public campground or boat-launching area;

(b) a designated and signed roadside rest area, public picnic area or trailhead.

"Trailhead" as used herein shall mean an officially designated, mapped, maintained and marked terminus of any trail closed to all vehicles having three or more wheels, and is published on the most current map issued by the state or federal land management agency responsible for that property;

(c) an occupied dwelling without written permission of the occupant of the dwelling.

(6) It shall be unlawful to make a land set within 75 feet of the edge of any public road or trail (including any culvert or structure located beneath it) if no right of way fence is present, except on private land. No land set shall be made within any right of way fence on any public road. "Public road" as used herein shall mean any road, street or thoroughfare open to motorized vehicle travel which was constructed and is maintained with public funds and is open to the public; or any road, street or thoroughfare open to motorized vehicle travel that is officially numbered or named on the most current published map issued by a municipal, state or federal agency and is open to the public. "Trail" as used herein shall mean any officially designated, mapped, maintained, and

marked path open for public use and published on the most current map issued by a state or federal land management agency.

(7) No land set may be placed within 150 feet of any man-made livestock or wildlife catchment, pond or tank containing water, except on private land.

(8) It is unlawful to place, set or maintain any land set within 30 feet of any bait over two ounces in weight which is visible to airborne raptors. Bones that are entirely free of bait are legal.

(9) No foothold trap with an inside jaw spread larger than seven and one-half inches or body-grip trap with a jaw spread greater than 12 inches shall be used in making a water set.

(10) Body-grip traps used in water sets with a jaw spread of eight inches or more must be submerged in water to their jaw pivot or deeper.

(11) Any snare set on land must have a lock or break-away device which is designed to release or fail when a maximum of 350 pounds of pressure is applied to it. Locks or break-away devices must be attached in a way which leaves no part of the snare attached to an animal when it releases or fails. All snares must be securely anchored and cannot be attached to a drag. Exception: foot snares.

(12) Each foothold trap set on land must have at least two separate swivel points in the anchor chain. At least one of these swivel points must be within six inches of the trap.

M. A release device or catchpole shall be carried by trappers, and all captured animals must be removed or released from any trap or snare at the time of check. In cases where assistance is required for safe release of the animal, or when biological data is sought by the department, the department must be notified as soon as possible.

N. It is unlawful to set any trap or snare on land without stakes, chains, drags or other anchoring such that any furbearer, coyote or wolf caught will be prevented from escaping with the trap.

O. No person may kill any species listed in 19.33.6 NMAC - LIST OF THREATENED AND ENDANGERED SPECIES, including by the use of any body-grip trap or snare.

P. As long as the Mexican wolf is listed as a federally threatened or endangered species in the United States, any trapper who captures a Mexican wolf must report the capture to the U.S. fish and wildlife interagency field team:

(1) as soon as possible to arrange for radio-collaring and release of the wolf; or

(2) within 24 hours if the wolf is released or has pulled out of the trap.

Q. Tagging:

(1) Every person who takes a bobcat in New Mexico shall present the pelt for tagging in New Mexico prior to transporting the pelt out of the state, prior to selling the pelt, or no later than April 14, annually; whichever occurs first.

(2) Every person who presents a bobcat for tagging shall display a current New Mexico trapper license except residents 11 years of age or younger. Tags may be obtained from any conservation officer or any department office. In addition, pelts may be tagged by New Mexico licensed fur dealers following policies set forth by the department.

(3) It is unlawful for any person to transport across state lines, sell, barter, otherwise dispose of, or possess any bobcat pelt taken in New Mexico that has not been tagged in accordance with this rule.

(4) It is unlawful to present for tagging, or to have tagged with a New Mexico tag, any pelt from a bobcat taken outside of New Mexico.

(5) It is unlawful for any licensed fur dealer to charge a fee for tagging any bobcat. It is unlawful for a licensed fur dealer to refuse to tag a bobcat unless the licensed fur dealer has cause to believe the bobcat was taken in another state or jurisdiction, or the bobcat was unlawfully taken in New Mexico. Licensed fur dealers who believe a bobcat has been taken illegally, or has been presented for pelt tagging in New Mexico when it was taken in another state or jurisdiction, shall report the event to their local conservation officer immediately.

(6) It is unlawful for licensed fur dealers to tag any bobcat contrary to this rule, purchase any bobcat pelt which has not been tagged, or is not immediately pelt tagged at the time of purchase.

R. Tampering with traps: It is unlawful to destroy, damage, disturb, steal or remove any trap, snare or trapped wildlife without permission of the owner of the trap or snare. Nothing in this subsection shall prohibit a person from releasing any domestic animal from a trap or snare.

S. Exemptions: The provisions of this section shall not apply to personnel of the department of game and fish or designated agents who are acting in their official capacity in the control of depredating animals, for law enforcement purposes, to protect human health and safety, or for research or management purposes.

[19.31.10.15 NMAC - N, 4/1/2020]

19.31.10.[18] 19 MANNER AND METHOD PENALTY ASSESSMENTS: Individuals who commit the following violations shall be offered penalty assessments:

A. No habitat management and access validation stamp (HMAV), contrary to Section 17-4-34 NMSA 1978;

B. No habitat stamp (Sikes Act), contrary to 19.31.10 NMAC;

C. Size limit violations on fish, contrary to 19.31.10 NMAC;

D. Trotline violations, contrary to 19.31.10 NMAC;

E. Use of bait or prohibited lure or fly in a special trout water or noodling, contrary to 19.31.10 NMAC;

F. Disturbing the bottom "shuffling" in a special trout water, contrary to 19.31.10 NMAC;

G. Use of bait fish, contrary to 19.31.10 NMAC;

H. Release of bait fish, contrary to Section 17-3-28 NMSA 1978;

I. More than two lines or two lines without stamp, contrary to 19.31.10 NMAC;

J. Exceeding the daily bag limit or the possession limit of fish by two fish or less, contrary to 19.31.10 NMAC;

K. Snagging or keeping snagged game fish, contrary to 19.31.10 NMAC;

L. Spearfishing and bow fishing violations, contrary to 19.31.10 NMAC;

M. Unlawfully fishing in waters with age or individuals with disabilities use restrictions, contrary to 19.31.10 NMAC;

N. Boat or other floating device violation, contrary to 19.31.10 NMAC;

O. Use of live protected species as a decoy, contrary to 19.31.10 NMAC;

P. Use of an electronic calling device, contrary to 19.31.10 NMAC;

Q. Use of unapproved shot or shotgun capable of holding more than three shells while hunting migratory game birds, contrary to 19.31.10 NMAC;

R. Unlawful ammunition/ bullet/ shot or unlawful caliber, contrary to 19.31.10 NMAC;

S. Hunting hours violations, contrary to 19.31.10 NMAC;

T. Possession of game animal parts found in field, contrary to 19.31.10 NMAC;

U. Shooting at artificial wildlife from the road, contrary to 19.31.10 NMAC;

V. Harassing protected species, contrary to 19.31.10 NMAC;

W. Driving off road or on a closed road, contrary to 19.31.10 NMAC;

X. Violation of posted signs, contrary to 19.31.10 NMAC;

Y. Unlawful use of dogs, contrary to 19.31.10 NMAC;

Z. Unlawful use of cellular, Wi-Fi or satellite camera, contrary to 19.31.10 NMAC; [øf]

AA. Angling with more than two flies in the San Juan, contrary to 19.31.10 NMAC; or

BB. Any violation of 19.31.10.15 NMAC.

[19.31.10.20 NMAC - Rp, 19.31.10.20 NMAC, 4/1/2019;Rn, 19.31.10.19, 4/1/2020; A, 4/1/2020]

2020 JAN 24 AM 10: 41



NMAC Transmittal Form

Volume: Issue: Publication date: Number of pages: (ALD Use Only) Sequence No.

Issuing agency name and address: Agency DFA code:

Contact person's name: Phone number: E-mail address:

Type of rule action: (ALD Use Only)
New Amendment Repeal Emergency Renumber Most recent filing date:

Title number: Title name:

Chapter number: Chapter name:

Part number: Part name:

Amendment description (If filing an amendment):
Amendment's NMAC citation (If filing an amendment):

Are there any materials incorporated by reference? Yes No Please list attachments or Internet sites if applicable.

If materials are attached, has copyright permission been received? Yes No Public domain

Specific statutory or other authority authorizing rulemaking:

Notice date(s): Hearing date(s): Rule adoption date: Rule effective date:

2020 JAN 24 AM 10: 41

Concise Explanatory Statement For Rulemaking Adoption:

Findings required for rulemaking adoption:

Findings MUST include:

- Reasons for adopting rule, including any findings otherwise required by law of the agency, and a summary of any independent analysis done by the agency;
- Reasons for any change between the published proposed rule and the final rule; and
- Reasons for not accepting substantive arguments made through public comment.

The rulemaking was undertaken to amend the Manner and Method of Taking rule, 19.31.10 NMAC, which will become effective April 1, 2020.

The following proposed provisions in the Trapping and Furbearers rule have been modified and transferred to the Hunting and Fishing - Manner and Method of Taking rule: 1) requiring a setback distance of 1/2 mile from trailheads, roadside rest areas, picnic areas, or occupied dwelling without permission of the landowner; 2) requiring water sets to be set fully in water; 3) requiring that no land set shall be placed within 30 feet of bait which is greater than two ounces in weight and visible to airborne raptors; 4) requiring all foothold traps to have at least two separate swivel points in the anchor chain; 5) requiring all foothold traps to have an anchoring or drag system that prevents a trapped animals from escaping with the trap; and 6) requiring break-away devices to be used for all snares set on land.

There have been no changes between the published proposed rule and the final rule. A wide array of public comments were submitted. To view public comments, please visit www.wildlife.state.nm.us/commission/meeting-agendas/ and click on the Hearing Archive tab. It was not possible to incorporate all of the comments into the final rule as many of the comments were mutually exclusive. The resulting rule was based on what was best for the resource and overall hunter satisfaction.

Issuing authority (If delegated, authority letter must be on file with ALD):

Name:

Michael B. Sloane

Check if authority has been delegated

Title:

Director

Signature: (BLACK Ink only)

[Handwritten Signature]

Date signed:

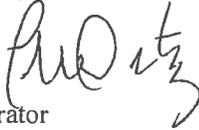
4/21/2020

NOTIFICATION OF MINOR, NON-SUBSTANTIVE CORRECTION

February 5, 2020

To: Michael B. Sloane, Director, Game and Fish Department
c/o Elise Goldstein, Assistant Chief, Wildlife

From: Matthew Ortiz, Administrative Law Division
by designation for the State Records Administrator



Re: **19.32.2 NMAC – Method, Season Dates and Bag Limits, Repeal, filed on January 24, 2020, published on February 11, 2020 and effective on April 1, 2020**

Pursuant to the authority granted under State Rules Act, Subsection D of Section 14-4-3 NMSA, please note that the following minor, non-substantive corrections to spelling, grammar and format have been made to all electronic copies of the above rule:

The part name in repeal statement of repealed part was changed from “Furbearers” to “Method, Season Dates and Bag Limits”.

A copy of this *Notification* will be filed with the official version of each of the above rules.

1205 Camino Carlos Rey | Santa Fe, NM 87507 | nmcpr.state.nm.us

Hon. Hector Balderas
Attorney General

Hon. Brian S. Colón
Chairman/State Auditor

Hon. Maggie Toulouse Oliver
Secretary of State

Debra Garcia y Griego
Department of Cultural Affairs

Kenneth Ortiz
General Services Department

Daniel Cordova
Interim Director, NM State Law Library

NOTICE OF MINOR, NONSUBSTANTIVE CORRECTION

The Game and Fish Department gives Notice of a Minor, Nonsubstantive Correction to its repeal statement to 19.32.2 NMAC.

Pursuant to the authority granted under State Rules Act, Subsection D of Section 14-4-3 NMSA, please note that the following minor, non-substantive corrections to spelling, grammar and format have been made to all electronic copies of the above rule:

The part name in repeal statement of repealed part was changed from "Furbearers" to "Method, Season Dates and Bag Limits".

A copy of this Notification will be filed with the official version of each of the above rules.

Trapping and Furbearer Rule Development 19.32.2 NMAC



January 17, 2020

New Mexico State Game Commission Meeting

Las Cruces, NM

Wildlife Management Division



Rule Development Timeline

- **August, October, November** – present at SGC meetings
- **August** – Initial NMDGF proposals posted on the website
- **October**– Public meetings throughout the state
- **December**- Final NMDGF proposed rule posted on the website
- **January**– Act on rule

Rule Development

- 5,002 comments received
 - From 2,024 unique senders
- The most common comments on the proposed changes addressed:
 - Increased setback distances and a setback distance from trailheads
 - Additional area closures
 - Mandatory trapper education

Modern Furbearer Management

- Trapping is the most efficient/effective method to manage furbearers
 - Used by researchers, managers, and the general public
 - Highly regulated
 - Guided by international standards

North American Model of Wildlife Management

- The North American Model guides furbearer management:
 - Wildlife held in public trust
 - Elimination of unregulated markets and overexploitation
 - Strict enforcement of regulations
 - Democracy of rule or law
 - Scientific Management

Regulation and Enforcement

- Harvest only for abundant populations; does not cause wildlife to become threatened or endangered
- Season length establishes a limited window for harvest
- License and reporting requirements
- Types, sizes and designs of traps are restricted
- Trap placement and frequency at which they're checked is regulated

International Standards and BMPs

- The U.S. and E.U. signed an Agreed Minute in 1997 concerning humane trapping standards
- Best Management Practices (BMPs) for humane traps and trapping practices
- Evaluated traps based on:
 - Animal Welfare
 - Practicality
 - Efficiency
 - Safety
 - Selectivity

Trapping and Furbearer Rule

- Proposing Trapping and Furbearer Rule be a four year rule



Mandatory Trapper Education

- Every trapper purchasing a furbearer license will be required to pass a trapper education course
 - General trapper education course
 - NM specific rules and regulations
 - NM species identification course



Area Closures

- Land sets will be prohibited on/within:
 - The Sandia Ranger District
 - Eastern portion of Organ Mountain-Desert Peaks National Monument
 - Forest Service lands within ½ mile of:
 - NM Hwy 475 on the Santa Fe National Forest
 - NM Hwy 150 on the Carson National Forest

Setback Distances

- Establish a setback distance of ½ mile from
 - Designated trailheads
 - Designated and signed roadside rest areas
 - Picnic areas
 - Occupied dwellings (unless permitted by occupant or set by the occupant)
 - Established and maintained public campgrounds or boat-launching areas

Manner and Method

- Traps must be permanently marked or have a tag securely attached with the trapper's identification information

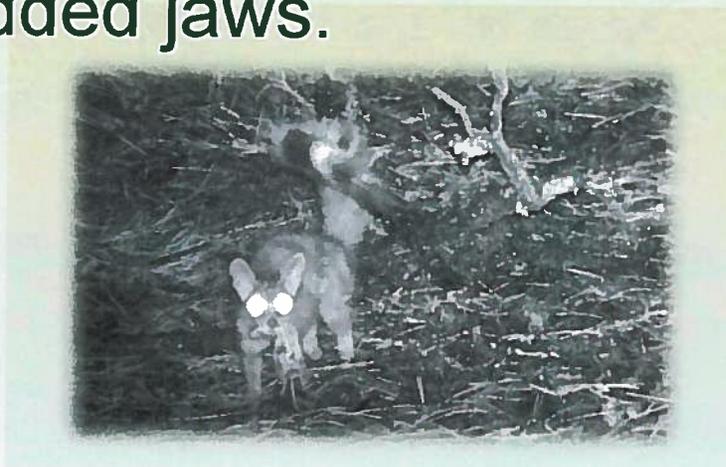


Manner and Method

- Require that water sets be fully in water
 - Body-gripping traps with jaw spread 8-12"
 - Foothold traps must be fully submerged in water and no greater than 7.5" inside jaw
- Make illegal any land set within 30 feet of bait which is > 2 ounces weight and visible to airborne raptors

Manner and Method

- Clarify that the following are illegal:
 - Land sets for foothold traps with an outside jaw spread of $> 6\frac{1}{2}$ " , or > 7 " maximum if laminated
 - Foot-hold traps with an inside jaw spread $\geq 5\frac{1}{2}$ " unless they are offset at least $\frac{3}{16}$ " or have padded jaws.



Manner and Method

- Require a break-away device for all snares on land
- Require ≥ 2 separate swivel points for all foothold traps, one of which must be within 6" of the trap
- Require an anchor or drag system that prevents escape with trap
- Require trappers to report incidental wolf capture

Manner and Method

- Prohibit use of poison for taking wildlife



Seasons and Bag Limits

- Prohibit take of NM Threatened & Endangered species
- Clarify it is unlawful to kill mink, otter, black-footed ferret, coatimundi, or American marten



Seasons and Bag Limits

- Raccoon – open May 16 – Aug 31 with restricted trap types during this time.
- Nutria – April 1 – March 31



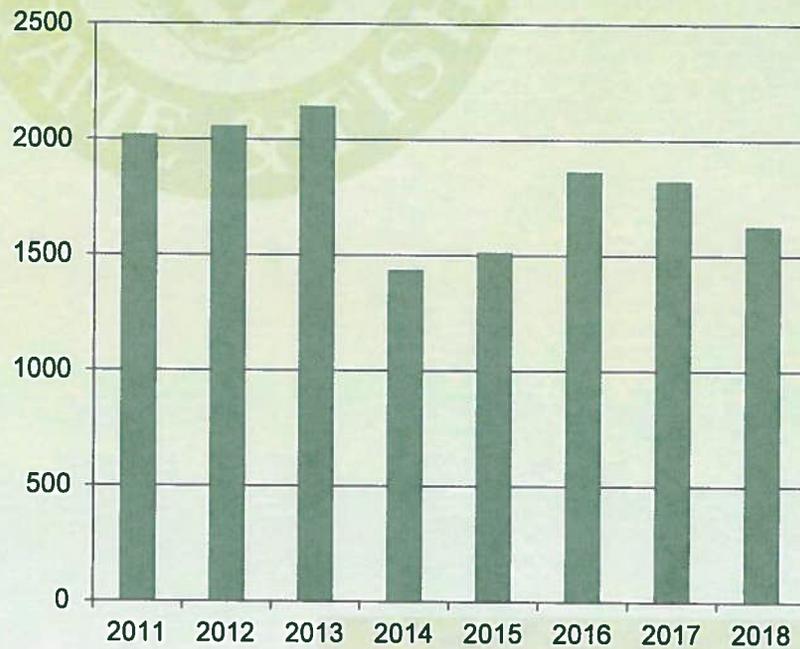
Seasons and Bag Limits

- Allow the Director, with verbal concurrence of the chairperson, to set a bag limit for a given species for one regulatory year

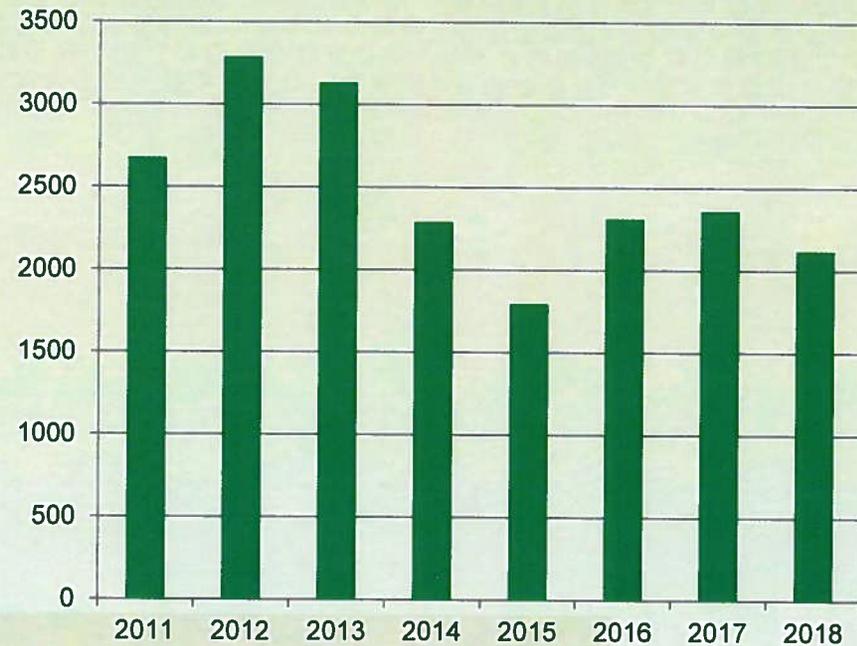


Statewide Harvest

Statewide Bobcat Harvest

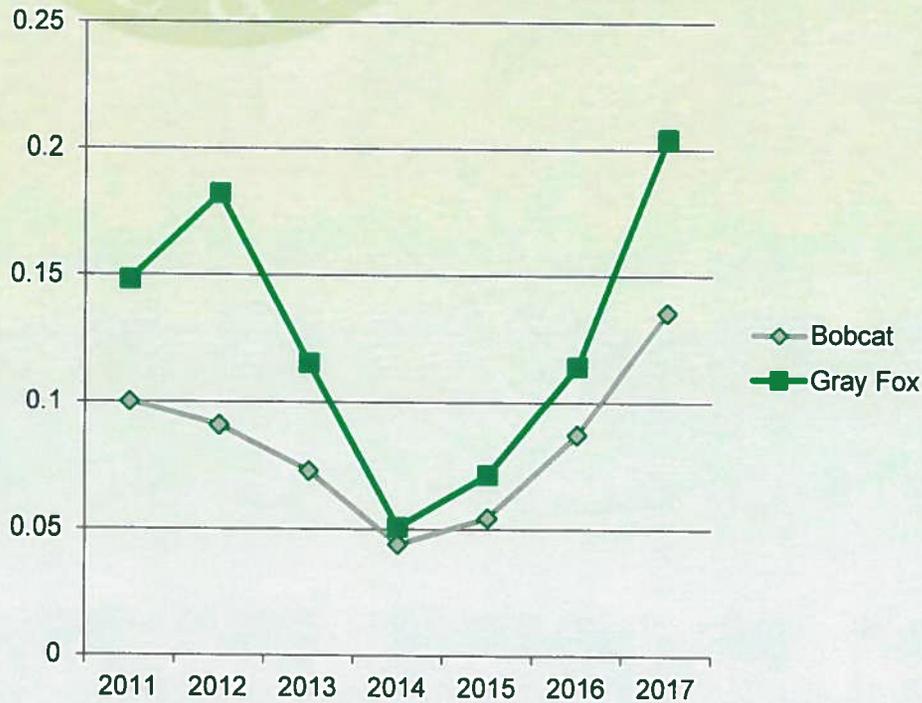


Statewide Gray Fox Harvest



Catch per Unit Effort

Catch Per Night from Mandatory Harvest Reporting

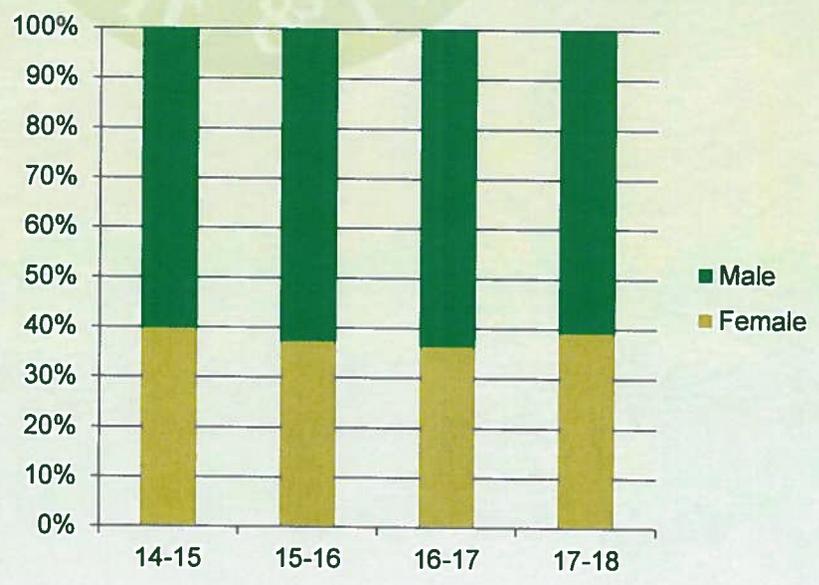


Trap Nights per Catch from CITES Pelt Tagging

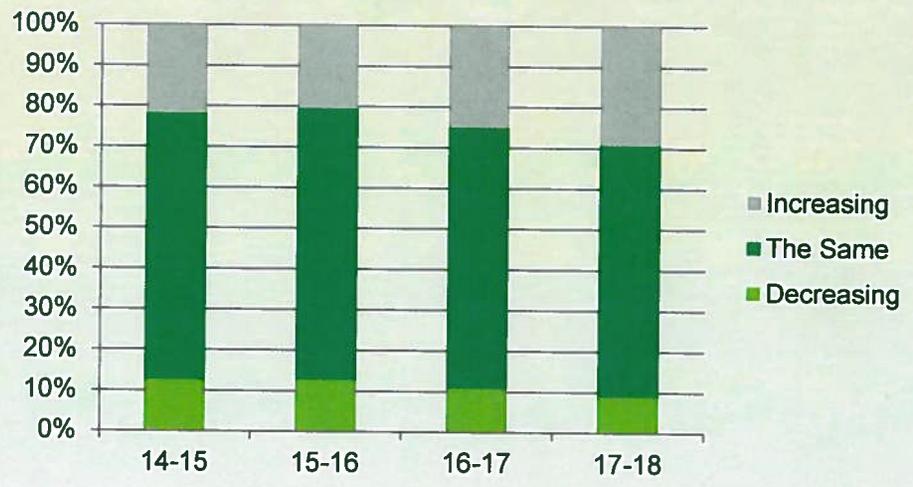


Statewide Harvest

Bobcat Harvest Sex Ratio

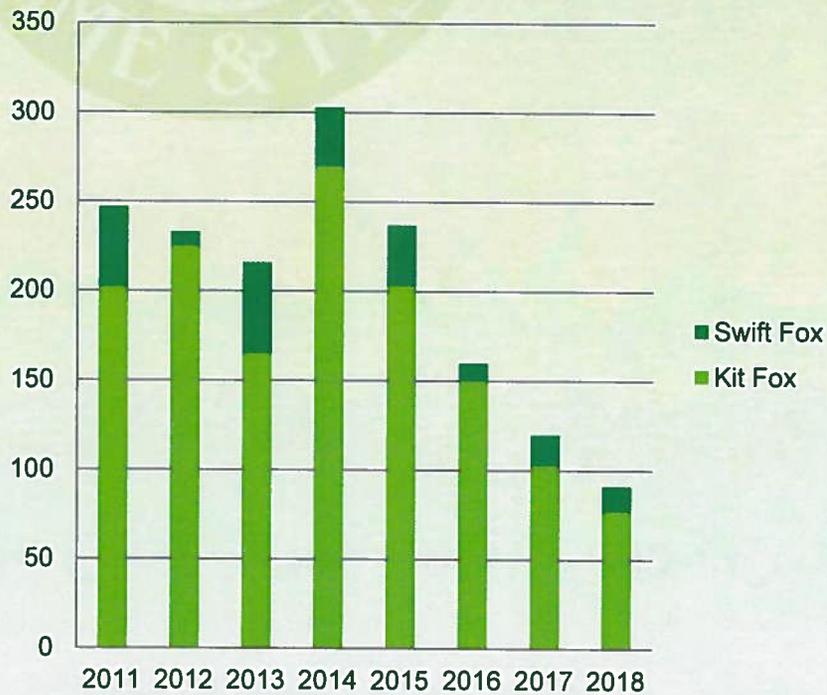


Trapper Opinion on Bobcat Population Trend Current vs 10 Years Prior

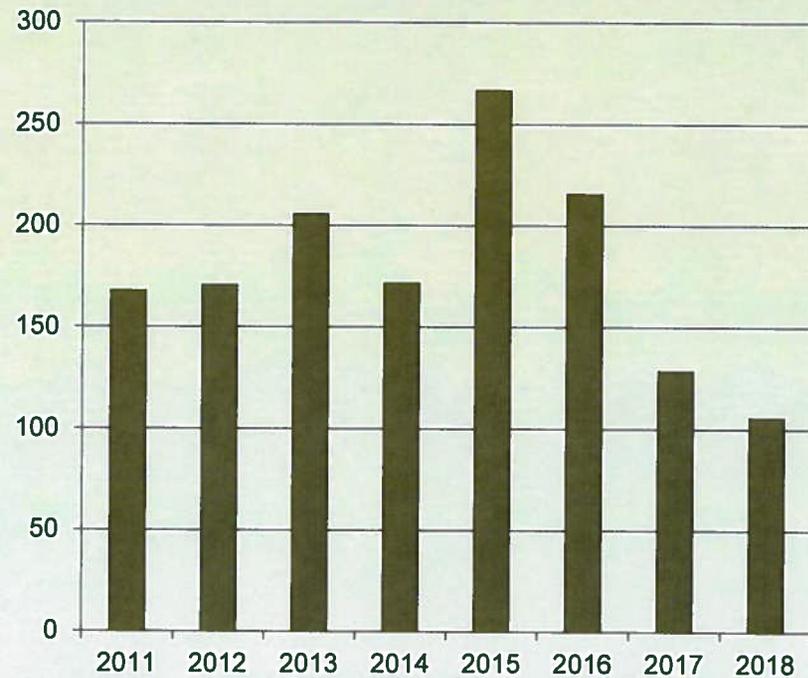


Statewide Harvest

Statewide Desert Fox Harvest

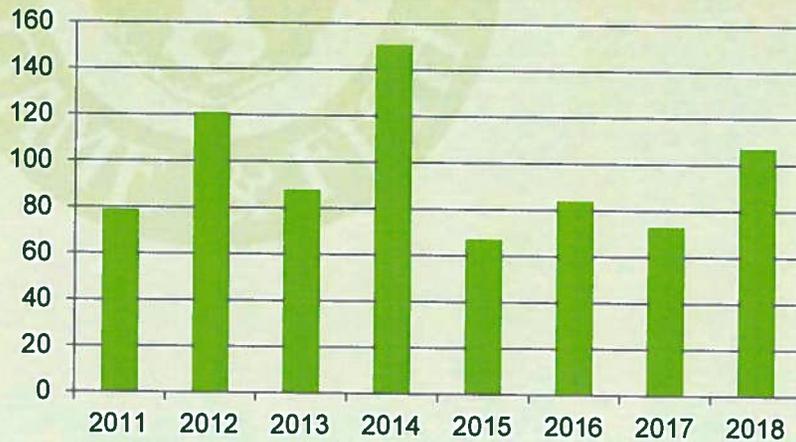


Statewide Badger Harvest

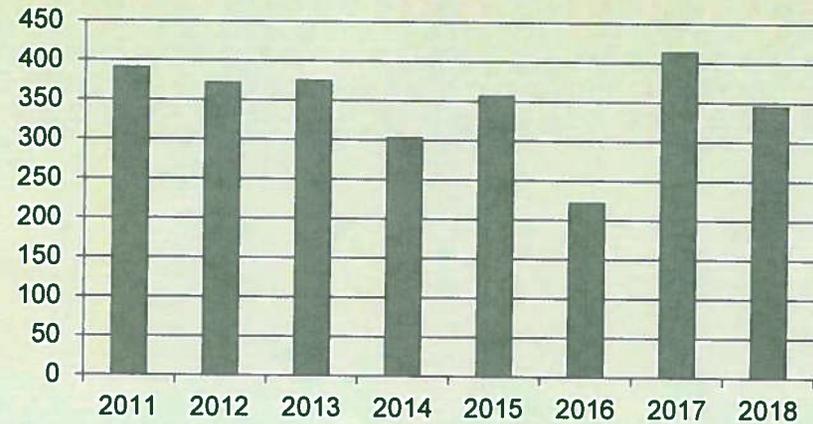


Statewide Harvest

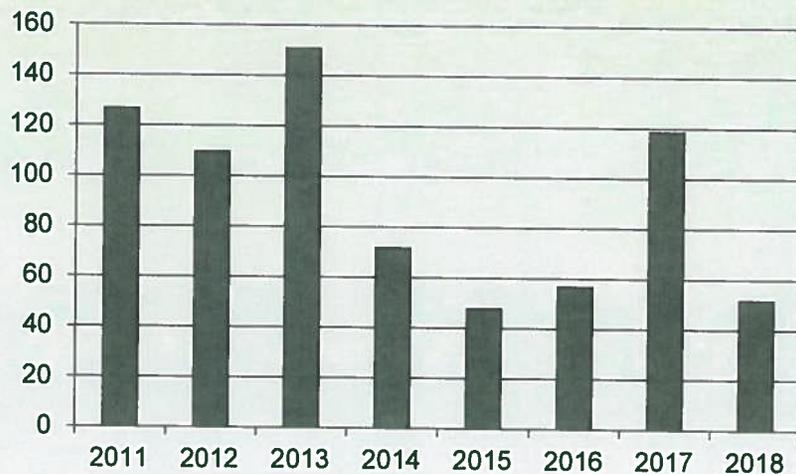
Statewide Beaver Harvest



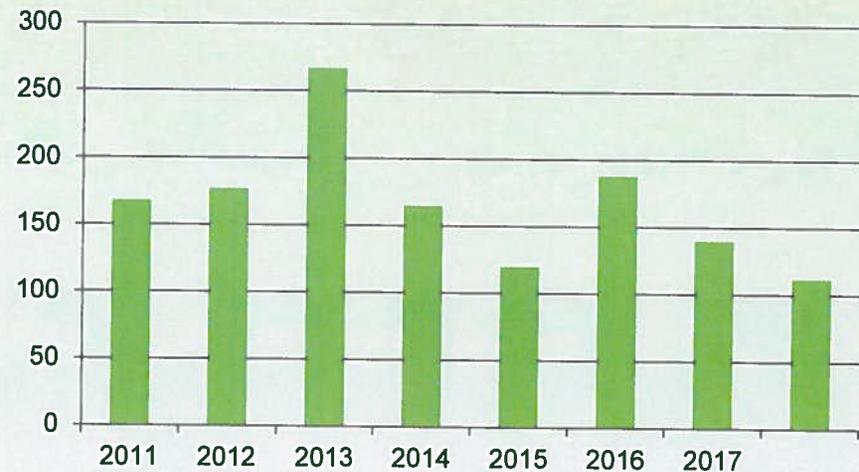
Statewide Raccoon Harvest



Statewide Ringtail Harvest



Statewide Red Fox Harvest



Questions?



TRAPPING AND FURBEARER RULE PROPOSED CHANGES, 2020-2024

General Rule

- Proposing that Trapping and Furbearer Rule be a four-year rule.
- Mandatory trapper education. Every trapper purchasing a furbearer license will be required to pass a trapper education course. There will be three components offered: (1) A general trapper education course, (2) a NM specific rules and regulations section, and (3) a NM species identification course.
- Area Closures. Land sets will be prohibited on/within the following high recreational use areas:
 - o The Sandia Ranger District
 - o The eastern portion of the Organ Mountain-Desert Peaks National Monument
 - o Forest Service lands within ½ mile of:
 - NM Hwy 475 (road to Ski Santa Fe) on the Santa Fe national Forest
 - NM Hwy 150 (road to Taos Ski Basin) on the Carson National Forest
- Setback Distances. The setback distance for land sets will be ½ mile from the following high recreational use features:
 - o Designated trailheads
 - o Designated and signed roadside rest areas
 - o Picnic areas
 - o Occupied dwellings (unless permitted by the occupant or set by the occupant)
 - o Established and maintained public campgrounds or boat-launching areas
- Bag limits
 - o Explicitly prohibit take of NM Threatened and Endangered Species
 - o Clarify that it is unlawful to intentionally take mink, river otter, black-footed ferret, coatimundi, or American marten
 - o Allow the director, with verbal concurrence of the chairperson, to set a bag limit for a given species for one regulatory year
- Seasons
 - o Raccoon: Open the May 16 – August 31 season to restricted trap types (cage traps and foot-encapsulating/dog proof traps)
 - o Nutria (an invasive species): April 1 – March 31

Manner and Method

- Traps must be permanently marked or have a tag securely attached with the trapper's identification information
- Water sets. Require that water sets be fully in water. A water set for a body-grip trap with jaw spread between 8-12 inches must be submerged in water above the pivot point. A water set for a foothold trap must be fully submerged in water, and can have an inside jaw-spread no greater than 7.5 inches.
- Visible bait. No land set shall be placed within 30 feet of bait which is greater than two ounces in weight and visible to airborne raptors.

- Regulations on trap type, sizes, and modifications that align with Best Management Practices developed as a result of the Agreed Minute signed by the United States and the European Union to identify more humane traps and trapping methods include:
 - o Clarifications on foothold trap size restrictions and modification requirements. The following are illegal:
 - Land set foothold traps with an outside jaw-spread greater than 6.5 inches if unlaminated, or greater than 7 inches if laminated.
 - Foothold traps with an inside jaw spread greater than 5.5 inches that are not modified with a 3/16 inch offset or padded jaws.
 - o All foothold traps must have at least two separate swivel points, one of which must be within 6 inches of the trap.
- Break-away devices will be required for all snares set on land.
- All traps are required to have an anchoring or drag system that prevents a trapped animal from escaping with the trap.
- It is mandatory that trappers report any incidental wolf capture
- Prohibit use of poison for taking wildlife

These proposed changes will be updated and posted to the Department website as further details become available.

If you would like to comment on the proposal, please send an email to:
dgf-furbearer-rules@state.nm.us



Technical info

— Exhibit 5 —

2006-07 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

**Rick Winslow, Large Carnivore and Furbearer Biologist
New Mexico Department of Game and Fish**

There were 1676 respondents to the mandatory furbearer license reporting requirement. 2111 licenses were purchased for the license year (2084 residents and 27 non-residents). This means approximately 79% of furbearer license holders/purchasers responded to the MANDATORY reporting requirement.

Total Number of Each Species Trapped from report

Species	Number Trapped
beaver	154
muskrat	192
nutria	8
red fox	191
swift fox	107
kit fox	77
Gray fox	3,907
Ringtail	280
Ermine	5
Long-tailed weasel	0
Badger	245
Bobcat	3,410
Raccoon	365
Coyote	6,156
Spotted skunk	37
Striped skunk	863
Hooded skunk	11
Hognose skunk	48
	16,056

- The number of bobcats harvested is derived from CITES tag reports and not the hunter harvest reporting system.

Total number of species trapped by county from report

<u>County</u>	<u>Beaver</u>	<u>Muskrat</u>	<u>Nutria</u>	<u>Red fox</u>	<u>Swift Fox</u>	<u>Kit Fox</u>	<u>Gray Fox</u>	<u>Ring tail</u>	<u>Ermine</u>	<u>Long- tailed Weasel</u>	<u>Badger</u>	<u>Bobcat</u>	<u>Raccoon</u>	<u>Covote</u>	<u>Spotted Skunk</u>	<u>Striped Skunk</u>	<u>Hooded Skunk</u>	<u>Hognose Skunk</u>	<u>Total</u>
Bernalillo							1							12					13
Catron					2	3	558	2			36	369	1	369		2		10	1352
Chaves		1			33	16	112	14	1		10	259	13	200	3	150	10	14	836
Cibola							150				3	169		280		6			608
Colfax	4	16		5	4	2	78	1			6	97	12	132		14			371
Curry												4	3	21		3			31
DeBaca						1	1					28	16	30					76
DonaAna					1	3	63	1			2	64	2	145		24			305
Eddy				4	24	10	269	87			9	329	12	457		62			1263
Grant						1	720	23	3		3	160	10	236	6	299	1	17	1479
Guadalupe				1			16	1			2	26		117		5			168
Harding							12					10		20					42
Hidalgo					15	11	85				14	114		304		67			610
Lea				1							2	3		81		5			92
Lincoln	2		8	1	13	7	324	1			13	128	81	121		35			734
Los Alam												3		2					5
Luna						5	103	2			3	51		180	5	40		3	392
McKinley				14			37				12	100		300					463
Mora				7			16					23	2	26		2			86
Otero							100				3	37	12	88		8			248
Quay							9				3	12	10	250		8			292
Rio Arriba	5			3			77	1			9	275	20	246	1				637
Roosevelt				1		2					21	2		246					272
San Juan	52	10		137		4	278	71			47	249	81	592	3	82			1606
San Migu				11			39	3				47	2	162					264
Sandoval	6	5				1	121				20	117		276		3			549
Santa Fe							16	1				9		75		3			104
Sierra							191	20			4	47	1	162	2	16		3	446
Socorro	36	81		1	5	8	324	35			15	155	30	448		12		1	1151
Taos	37	11		3			18	15	1			43	34	162	17	1			326
Torrance					9		84				4	41		185					323
Union				2	1		96				4	92	7	98		12			312
Valencia	12	68				2	9	2				18	12	133		4			260
Total	154	192	8	191	107	78	3907	280	5	0	245	3081	365	5910	37	863	11	48	

2007-08 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

**Rick Winslow, Large Carnivore and Furbearer Biologist
New Mexico Department of Game and Fish**

At the time of this report the mandatory furbearer license reporting reports were complete. 1,906 furbearer licenses were sold during the 2007-08 season and 1,242 license buyers responded to the mandatory harvest survey, which is a 65.2% response rate. Of the licenses purchased 43 were purchased by non-residents.

Total Number of Each Species Trapped from report

Species	Number Trapped
beaver	213
muskrat	28
nutria	32
red fox	84
swift fox	264
kit fox	142
Gray fox	6,234
Ringtail	268
Ermine	0
Long-tailed weasel	3
Badger	213
Bobcat	4,240
Raccoon	437
Coyote	6,235
Spotted skunk	26
Striped skunk	1,494
Hooded skunk	5
Hognose skunk	32

- The number of bobcats harvested is derived from CITES tag reports and not the hunter harvest reporting system.

2008-09 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

**Rick Winslow, Large Carnivore and Furbearer Biologist
New Mexico Department of Game and Fish**

At the time of this report the mandatory furbearer license reporting reports were complete. 2,123 furbearer licenses were sold during the 2008-09 season and 1,238 license buyers responded to the mandatory harvest survey, which is a 58% response rate.

Total Number of Each Species Trapped from report

Species	Number Trapped
beaver	83
muskrat	25
nutria	0
red fox	82
swift fox	133
kit fox	120
Gray fox	4,178
Ringtail	229
Ermine	0
Long-tailed weasel	0
Badger	182
Bobcat	3,218
Raccoon	303
Coyote	4,524
Spotted skunk	16
Striped skunk	429
Hooded skunk	1
Hognose skunk	67

- The number of bobcats harvested is derived from CITES tag reports and not the hunter harvest reporting system.

Total number of species trapped by county from report

<u>County</u>	<u>Beaver</u>	<u>Muskrat</u>	<u>Nutria</u>	<u>Red fox</u>	<u>Swift Fox</u>	<u>Kit Fox</u>	<u>Gray Fox</u>	<u>Ring tail</u>	<u>Ermine</u>	<u>Long- tailed Weasel</u>	<u>Badger</u>	<u>Bobcat</u>	<u>Raccoon</u>	<u>Covote</u>	<u>Spotted Skunk</u>	<u>Striped Skunk</u>	<u>Hooded Skunk</u>	<u>Hognose Skunk</u>	<u>Total</u>
Bernalillo		10					1					1	1	15		1			29
Catron				17	3		464	4			17	226		190	1	17			939
Chaves					8	2	91	4			21	123	3	267		3			522
Cibola				1			315	1			8	174		362	1	4			861
Colfax				7			183	1			1	83	4	136					415
Curry				7			2					1		17		3			30
DeBaca	5	5		2			25					9	19	21					86
DonaAna	3				11		82	5			12	137	4	138			1		393
Eddy					26	21	206	61			9	266	31	282	2	26		51	981
Grant						12	637	60			6	141	10	161	3	44		3	1077
Guadalupe							17				1	24		24					66
Harding							25	7				3		5		5			45
Hidalgo					24	30	111	7			10	94	1	279		61		2	619
Lea												19		38		6			63
Lincoln					32	5	271	6			6	202	48	98	1	64		2	735
Los Alam												2		7					9
Luna					3	6	41	10			4	21		181	3	8			277
McKinley				7			108	1			2	183	1	238		1			541
Mora	9						59					42		25					135
Otero						4	56	7			2	45	2	128					244
Quay							8				8	28	7	194		19		2	266
Rio Arriba	17	2		2			139				6	241	10	263	1	6			687
Roosevelt							1							35					36
San Juan	3			35			190	7			9	128	75	292	1	48		1	789
San Migu	19						175	6				80	2	230		9			521
Sandoval	3	1			5		82	5			34	143	13	325		14			625
Santa Fe							32	3				45	1	39	1				121
Sierra						2	419	11				167	2	41	2	7			651
Socorro		7			16		267	12			2	154	33	224		10		2	727
Taos	23			4			9	8				47	11	60					162
Torrance					1	33	98	3			19	63	1	76		60		4	358
Union					5		34				2	42		31					114
Valencia	1					4	30				1	13	24	102		13			188

2009-10 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

**Rick Winslow, Large Carnivore and Furbearer Biologist
New Mexico Department of Game and Fish**

At the time of this report the mandatory furbearer license reporting reports were complete. 1,730 furbearer licenses were sold during the 2009-2010 season and 1,109 license buyers responded to the mandatory harvest survey, which is a 64.1% response rate.

Total Number of Each Species Trapped from report

Species	Number Trapped
beaver	61
muskrat	83
nutria	15
red fox	78
swift fox	43
kit fox	67
Gray fox	1,694
Ringtail	184
Ermine	0
Long-tailed weasel	1
Badger	133
Bobcat	1,715
Raccoon	341
Coyote	4,609
Spotted skunk	13
Striped skunk	788
Hooded skunk	2
Hognose skunk	54
	9,881

- The number of bobcats harvested is derived from CITES tag reports and not the hunter harvest reporting system.

Total number of species trapped by county from report

<u>County</u>	<u>Beaver</u>	<u>Muskrat</u>	<u>Nutria</u>	<u>Red fox</u>	<u>Swift Fox</u>	<u>Kit Fox</u>	<u>Gray Fox</u>	<u>Ring tail</u>	<u>Ermine</u>	<u>Long- tailed Weasel</u>	<u>Badger</u>	<u>Bobcat</u>	<u>Raccoon</u>	<u>Covote</u>	<u>Spotted Skunk</u>	<u>Striped Skunk</u>	<u>Hooded Skunk</u>	<u>Hognose Skunk</u>
Bernalillo		25				3	11	2				4	1	22	1			
Catron							243				13	180	10	263		26		1
Chaves					4		26	4			1	40	26	118	1	7		
Cibola							84	3			2	53		171				
Colfax	20			2			83	3				58	2	105		3		
Curry				1										32				
DeBaca	3	40		1			6					4	33	38		7		
DonaAna	5					19	46	2			6	59	35	144	1	6		10
Eddy				7	14	8	90	43			2	95	24	402	3	31		21
Grant						1	129	33			7	98	3	467	4	395		6
Guadalupe							3					25		111				
Harding							26	4				5		8				
Hidalgo						9	42				7	59		322		104		
Lea				1			4				2	6		141		2		
Lincoln			15			1	127	4			3	105	82	95	2	91	2	12
Los Alam												6		1				
Luna							1				4			248				
McKinley				16		2	83				2	110	1	175		6		
Mora	1			1			52					5		138				
Otero						1	12	2			2	23	4	99		30		
Quay				1			14				6	18	9	138		24		4
Rio Arriba	10	3	12				131	1		1	2	113	4	159		11		
Roosevelt												1		17				
San Juan	3	7		34			115	32			12	56	29	221	1	1		
San Migu	3						23					20		188		2		
Sandoval						4	84	22			41	89	7	204				
Santa Fe							19	2			1	12	4	50				
Sierra						11	86	20			9	122	4	169				
Socorro	9	8				6	109	6			5	40	43	198				
Taos	9			1			9	1				15	1	49		1		
Torrance						2	9				2	26		39				
Union				1	17		18				1	16		33				
Valencia	3					8	9				3	12	19	44		2		

Furbearer Harvest Report 2010-11

At the time of this report the mandatory furbearer license reporting reports were complete. 1,133 furbearer licenses were sold during the 2010-2011 season and 827 license buyers responded to the mandatory harvest survey, which is a 73.0% response rate.

Total Number of Each Species Trapped from report

Species	Quantity
beaver	73
muskrat	212
nutria	8
red fox	75
swift fox	28
kit fox	75
Gray fox	2,447
Ringtail	133
Ermine	0
Long-tailed weasel	0
Badger	132
Bobcat	1,833
Raccoon	383
Coyote	3,835
Spotted skunk	26
Striped skunk	428
Hooded skunk	0
Hognose skunk	4

- The number of bobcats harvested is derived from CITES tag reports and not the hunter harvest reporting system.

Species trapped by county from report

County	Beaver	Muskrat	Nutria	Red fox	Swift Fox	Kit Fox	Gray Fox	Ring tail	Ermine	Long-tailed Weasel	Badger	Bobcat	Raccoon	Coyote	Spotted Skunk	Striped Skunk	Hooded Skunk	Hognose Skunk
Bernalillo		3					6					7	3	14				
Catron				1			197	4			6	161	11	172		8		
Chaves					5		149				5	71	14	90		14		
Cibola				1			104	1			6	84		114	6	10		
Colfax	3						137	4				51	4	49		11		
Curry																		
DeBaca	1			3			19					3	30			10		
DonaAna	8					4	52	4				53	20	214		46		
Eddy				3	25		85	16			11	96	29	259		39		
Grant						4	121	27			5	89	6	100		51		2
Guadalupe				1			31	3				17		42				
Harding					1		39	2				5		6		1		1
Hidalgo						15	112				3	62	39	264	2	95		
Lea						3	10				8	1		209		14		
Lincoln	3		8			14	158	3			3	103	62	100	15	88		
Los Alam													1					
Luna						23	5				5	30		157	1	20		
McKinley				3			86				8	121		197				
Mora	2						23					29	6	237		10		
Otero						4	9	1			3	37	3	55				
Quay							21					6	6	91				
Rio Arriba	11	14		7			104	6			4	130	18	273		1		
Roosevelt												1		11				
San Juan	8	14		55			131	18			22	64	26	248		60		
San Migu	2						54	4				51		37				
Sandoval						9	56	1			25	55	7	186		15		
Santa Fe												15	3	39				
Sierra	2					4	342	14			10	168	3	255	1	10		
Socorro	4	14				4	191	12			1	76	34	202		19		1
Taos	11			1			13	3				30	14	40				
Torrance						2	46	1			5	80	2	100		4		
Union							100	1			1	25		28		2		
Valencia	18	167				2	46	8			1	29	42	46	1	1		

2011-12 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

**Rick Winslow, Large Carnivore and Furbearer Biologist
New Mexico Department of Game and Fish**

At the time of this report the mandatory furbearer license reporting reports were complete. 1,334 furbearer licenses were sold during the 2011-2012 season and 1,090 license buyers responded to the mandatory harvest survey, which is an 81.7% response rate.

Total Number of Each Species Trapped from report

Species	Quantity
beaver	79
muskrat	42
nutria	10
red fox	168
swift fox	55
kit fox	192
Gray fox	2,549
Ringtail	107
Ermine	0
Long-tailed weasel	0
Badger	168
Bobcat*	1,980 (2,274)
Raccoon	384
Coyote	4,642
Spotted skunk	13
Striped skunk	470
Hooded skunk	0
Hognose skunk	23

*The number of bobcats harvested is derived from CITES tag reports and is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK.

2012-13 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

**Rick Winslow, Large Carnivore and Furbearer Biologist
New Mexico Department of Game and Fish**

At the time of this report the mandatory furbearer license reporting reports were complete. 1,455 furbearer licenses were sold during the 2012-2013 season and 1,223 license buyers responded to the mandatory harvest survey, which is an 84.0% response rate, 255 license purchasers did not hunt or trap furbearers. Harvest report records were accessed July 31, 2013.

12,394 individual furbearers were harvested this season by 968 harvest survey respondents who hunted or trapped furbearers. Of this harvest, 29.5% was harvested by the use of hunting, and 70.5% was harvested by trapping.

Total Number of Each Species Trapped from report

Species	Quantity
beaver	121
muskrat	71
nutria	15
red fox	177
swift fox	82
kit fox	147
Grey fox	3,288
Ringtail	110
Ermine	0
Long-tailed weasel	0
Badger	171
Bobcat*	2,057 (2,455)
Raccoon	373
Coyote	5,311
Spotted skunk	3
Striped skunk	435
Hooded skunk	1
Hognose skunk	28

*The number of bobcats harvested is derived from CITES tag reports and is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Differences in the reported bobcat harvest and the CITES tagged bobcats are accounted for by several different factors, such as: trappers from reservation lands that tag their cats but do not have state licenses, poor recollection of the number of animals taken during the season and non-reporters who do not intend to trap the following year.

Species trapped by county from report

<u>County</u>	<u>Beaver</u>	<u>Muskrat</u>	<u>Nutria</u>	<u>Red fox</u>	<u>Swift Fox</u>	<u>Kit Fox</u>	<u>Gray Fox</u>	<u>Ring tail</u>	<u>Ermine</u>	<u>Long- tailed Weasel</u>	<u>Badger</u>	<u>Bobcat</u>	<u>Raccoon</u>	<u>Covote</u>	<u>Spotted Skunk</u>	<u>Striped Skunk</u>	<u>Hooded Skunk</u>	<u>Hognose Skunk</u>
Bernalillo							5	1				4	8	7		1		
Catron							455	1			15	197	10	291	2	30		
Chaves					22		86				2	26	12	109		9		
Cibola				4			155	1			5	108		187				
Colfax				7	9		94	3			9	42	3	152	1	3		6
Curry											1			124				
DeBaca	8				2		20					18	58	61		9		
DonaAna	23					24	150	10			8	51	67	206		67		5
Eddy					44		64	6			2	113	16	428		19		
Grant	2			1		26	482	22			7	157	1	233		10	1	1
Guadalupe							107	2				27	1	162				
Harding					2		54	1				24		51		2		
Hidalgo						38	45	4				54		122		4		1
Lea				3							4	1		109				
Lincoln	4		15	22		1	178	14			5	128	59	173		92		14
Los Alam																		
Luna						14	31	1			3	23	7	159				
McKinley				15		5	40	1			21	63		208				
Mora	43	5			3		30					19		83				
Otero						3	50	3			1	96	8	217		18		
Quay							67				22	70	11	216		2		
Rio Arriba	24	14		29			111	4			10	149	24	310		7		
Roosevelt							2				2	2		95				
San Juan	5	38		79		10	114	5			12	69	28	366		122		
San Migu	2						142	3				96	16	150		14		
Sandoval				1		2	66	3			5	31	1	176		6		1
Santa Fe	4			3			25	2			1	15	2	41		1		
Sierra						7	218	14			10	158		224		8		
Socorro	2					13	353	6			15	137	7	399		15		
Taos		1		11			9	1				23	4	31				
Torrance							50				9	65	1	64				
Union				2			11				1	39	1	66		2		
Valencia	4	13				4	8	2			1	24	28	91		1		
Total	121	71	15	177	83	147	3,288	110	0	0	171	2,057	373	5,311	3	435	1	28

2013-14 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

Elise Goldstein, Furbearer Biologist
New Mexico Department of Game and Fish

At the time of this report the mandatory furbearer license reporting reports were complete. 1,831 furbearer licenses were sold during the 2013-2014 season. Harvest report records were accessed July 31, 2013. 13,318 individual furbearers were harvested this.

Total Number of Each Species Trapped

<u>Species</u>	<u>Quantity</u>
beaver	88
muskrat	156
nutria	5
red fox	267
swift fox	76
kit fox	140
Grey fox	3,133
Ringtail	151
Ermine	0
Long-tailed weasel	0
Badger	206
Bobcat*	2,057 (2,145)
Raccoon	376
Coyote	6,235
Spotted skunk	18
Striped skunk	291
Hooded skunk	3
Hognose skunk	28

*The number of bobcats harvested is derived from CITES tag reports and is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Differences in the reported bobcat harvest and the CITES tagged bobcats are accounted for by several different factors, such as: trappers from reservation lands that tag their cats but do not have state licenses, poor recollection of the number of animals taken during the season and non-reporters who do not intend to trap the following year.

Species Trapped by County

<u>County</u>	<u>Beaver</u>	<u>Muskrat</u>	<u>Nutria</u>	<u>Red fox</u>	<u>Swift Fox</u>	<u>Kit Fox</u>	<u>Gray Fox</u>	<u>Ring tail</u>	<u>Ermine</u>	<u>Long-tailed Weasel</u>	<u>Badger</u>	<u>Bobcat</u>	<u>Raccoon</u>	<u>Coyote</u>	<u>Spotted Skunk</u>	<u>Striped Skunk</u>	<u>Hooded Skunk</u>	<u>Hognose Skunk</u>
Bernalillo		3					15	1				3	9	19				
Catron						7	300	2			11	188	1	329		40		
Chaves					20	14	67	1			2	37	54	346		13		
Cibola				7			108	6				49	3	161				
Colfax	2			17		11	130	12			2	59	8	157	1	12	2	
Curry							26				2	1		152				
DeBaca	3						6					6	19	30		2		
DonaAna	4				5	20	97				3	89	7	143		3		
Eddy		2		9	9	1	54	8			6	92	7	283				
Grant				2	3	15	434	26			14	201	4	408	1	38	1	8
Guadalupe						1	118					33		271				
Harding							68				2	51		54				
Hidalgo					1	21	35					16	1	142		2		
Lea				2		5	3				2	8	10	12				
Lincoln	3		5		3	1	163	24			7	112	50	184	1	20		3
LosAlamos							1											
Luna				1	4		12					16	2	87				
McKinley	2			24		12	57	2			16	89		349	4	1		
Mora	16			3	1	1	85				2	66	2	83		6		
Otero					1	9	92	8			3	137	15	198		3		
Quay				2			159	1			21	85	8	352		26		16
Rio Arriba	14			24			142	7			25	182	17	469	4	19		
Roosevelt							5					1		11				
San Juan	21	77		162			128	21			17	121	74	382	7	19		
San Migu	3						206	3				62	9	182		9		
Sandoval				3			103	7			10	47	6	213		17		

Santa Fe							38					27	4	101				1
Sierra					2	8	95	9			4	48	11	158			21	
Socorro	1	15		7	4	12	170	8			34	109	2	433			5	
Taos	19	5		4			10	1			1	58	1	66				
Torrance					10		91				4	65	1	95			2	
Union					11	2	102				14	71	14	333			33	
Valencia		54			2		13	4			4	16	37	32				
Total	88	156	5	267	76	140	3133	151	0	0	206	2145	376	6235	18	291	3	28

W-137-R-14 Furbearer Surveys, Inventory and Management
July 1, 2013 through June 31, 2014

2014-15 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

Elise Goldstein, Carnivore and Small Mammal Program Manager
New Mexico Department of Game and Fish

1,768 furbearer licenses were sold during the 2014-2015 season, and 1,562 (88%) furbearer license holders responded to the mandatory furbearer harvest survey. Harvest report records were accessed August 26, 2014. 5,013 individual protected furbearers were harvested this season. There is no mandatory reporting requirement for unprotected furbearer species, therefore they are not included in this report.

Table 1. Total Number of Each Species Trapped

Species	Quantity
beaver	151
muskrat	119
nutria	0
red fox	165
swift fox	96
kit fox	207
Grey fox	2,290
Ringtail	72
Ermine	0
Long-tailed weasel	0
Badger	172
Bobcat*	1,649 (1,437)
Raccoon	304

*The number of bobcats harvested is derived from CITES tag reports and is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Differences in the reported bobcat harvest and the CITES tagged bobcats are accounted for by several different factors, such as: trappers from reservation lands that tag their cats but do not have state licenses, poor recollection of the number of animals taken during the season and non-reporters who do not intend to trap the following year.

Table 2. Number of each species trapped by county

<u>County</u>	<u>Badger</u>	<u>Beaver</u>	<u>Bobcat</u>	<u>Ermine</u>	<u>Grey Fox</u>	<u>Kit Fox</u>	<u>Red Fox</u>	<u>Swift Fox</u>	<u>Muskrat</u>	<u>Raccoon</u>	<u>Ringtail</u>	<u>Long-tailed Weasel</u>
Bernalillo		4	5		17				17	11		
Catron	11		124		295	36						
Chaves	4		13		29	10		16		33		
Cibola	5	3	39		89	4		5		1	1	
Colfax	3	1	20		73	2	8		3	7	4	
Curry												
DeBaca	4	8	30		15		2	6	6	32		
DonaAna	3		111		147	8		17		20		
Eddy	1		79		52	13		9		36	4	
Grant	9		77		332	36	2			5	18	
Guadalupe			12		47							
Harding			12		25							
Hidalgo	4		48		45	16		5		5		
Lea	2											
Lincoln	6		36		76	1	5	6		2	5	
LosAlamos												
Luna	2		10		15							
McKinley	11		52		49	30	8					
Mora		1	30		29	1				1	1	
Otero	7		74		81	9				9	4	
Quay	13		31		77					19	2	
Rio Arriba	11	69	135		129		7		17	10	19	
Roosevelt			1		15		7					
San Juan	12	49	85		83	1	113			17	4	
San Migu	1	2	69		91					8		
Sandoval	9	3	75		87	6	2			1		
Santa Fe	2	4	37		44					4		

Sierra	6		46		118	19	1			2	3	
Socorro	35		84		153		1	27		3	4	
Taos	2		38		21		7		1	3		
Torrance	4		38		27	4		1			1	
Union		7	13		27	11	2	1		3		
Valencia	5		13		2			3	75	72	2	
Total	88	156	5	76	140	3133	151	0	206	2145	376	28

2015-16 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

Elise Goldstein, Assistant Chief, Wildlife Section, Wildlife Management Division
New Mexico Department of Game and Fish

1,671 furbearer licenses were sold during the 2015-2016 season, and 1,451 (87%) furbearer license holders responded to the mandatory furbearer harvest survey. Harvest report records were accessed August 19, 2016. 4,474 individual protected furbearers were harvested this season. There is no mandatory reporting requirement for unprotected furbearer species; therefore they are not included in this report.

Table 1. Total Number of Each Species Trapped

Species	Quantity
beaver	67
muskrat	66
nutria	0
red fox	120
swift fox	52
kit fox	185
grey fox	1,796
ringtail	48
ermine	0
long-tailed weasel	1
badger	267
bobcat*	1,661 (1,514)
raccoon	358

*The number of bobcats harvested is derived from CITES tag reports and is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Differences in the reported bobcat harvest and the CITES tagged bobcats are accounted for by several different factors, such as: trappers from reservation lands that tag their cats but do not have state licenses, poor recollection of the number of animals taken during the season and non-reporters who do not intend to trap the following year.

Table 2. Number of each species trapped by county

<u>County</u>	<u>Badger</u>	<u>Beaver</u>	<u>Bobcat</u>	<u>Ermine</u>	<u>Grey Fox</u>	<u>Kit Fox</u>	<u>Red Fox</u>	<u>Swift Fox</u>	<u>Muskrat</u>	<u>Raccoon</u>	<u>Ringtail</u>	<u>Long-tailed Weasel</u>
Bernalillo	1	0	3	0	3	0	0	0	0	3	0	0
Catron	10	0	167	0	237	2	0	1	0	0	1	0
Chaves	23	0	76	0	39	5	0	20	0	147	0	0
Cibola	1	0	26	0	54	0	0	0	0	2	1	0
Colfax	1	1	49	0	39	0	18	3	0	0	0	0
Curry	7	0	0	0	0	0	0	0	0	0	0	0
DeBaca	0	0	27	0	8	9	4	0	2	12	0	0
DonaAna	7	0	14	0	26	29	0	1	0	5	1	0
Eddy	10	0	66	0	55	8	0	3	0	7	5	0
Grant	11	0	94	0	236	41	0	0	0	12	22	0
Guadalupe	0	0	12	0	19	0	0	0	0	0	0	0
Harding	0	0	28	0	15	0	0	0	0	0	0	0
Hidalgo	5	0	17	0	12	3	0	0	0	4	1	0
Lea	6	0	2	0	0	0	0	0	0	0	0	0
Lincoln	19	0	55	0	46	0	1	0	0	11	0	0
LosAlamos	0	0	0	0	0	0	0	0	0	0	0	0
Luna	16	0	13	0	13	10	0	0	0	0	3	0
McKinley	11	0	55	0	61	11	11	13	0	0	0	0
Mora	3	0	28	0	78	1	0	0	0	0	0	0
Otero	2	0	60	0	32	1	0	3	0	0	1	0
Quay	10	0	30	0	51	0	0	0	0	7	0	0
Rio Arriba	15	33	171	0	56	0	8	0	1	18	0	0
Roosevelt	1	0	0	0	0	0	0	0	0	0	0	0
San Juan	19	5	74	0	107	0	72	0	8	2	3	1
San Miguel	13	0	116	0	141	0	4	0	0	50	0	0
Sandoval	17	0	53	0	79	1	1	0	1	4	3	0
Santa Fe	3	4	17	0	17	1	0	0	1	4	0	0

Sierra	2	0	39	0	199	6	0	1	0	3	3	0
Socorro	26	1	126	0	119	26	0	1	0	2	0	0
Taos	2	0	30	0	9	0	0	0	0	0	0	0
Torrance	23	0	25	0	19	20	0	5	0	1	1	0
Union	1	8	37	0	20	11	1	0	0	11	0	0
Valencia	2	9	4	0	6	0	0	1	53	53	3	0
Total	267	67	1514	0	1796	185	120	52	66	358	48	1

2016–2017 New Mexico Hunter Harvest Report Program Summary of Results – Furbearers

Sean M. Murphy, Ph.D.
Carnivore and Small Mammal Program Manager
Wildlife Management Division
New Mexico Department of Game and Fish

A total of 1,892 trapper (furbearer) licenses were sold during the 2016–2017 season; 1,536 (81%) of those license holders responded to the mandatory harvest reporting. Harvest records were accessed October 27, 2017; a total of 4,879 individual protected furbearers were harvested. No mandatory reporting requirement exists for unprotected furbearers; therefore, those species are not included in this report.

Total Number of Each Species Harvested.

Species	Total
American beaver	82
Muskrat	43
Nutria	0
Red fox	188
Swift fox	18
Kit fox	149
Grey fox	2,192
Ringtail	57
Ermine	0
Long-tailed weasel	1
American badger	203
Bobcat*	1,978 (1,736)
Raccoon	210

The number of bobcats harvested based on CITES tags is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Discrepancy in the reported bobcat harvest compared to the CITES-tagged bobcat harvest is the result of the following: trappers from reservation lands that CITES-tag their bobcat pelts but are not required to purchase state licenses; poor recollection of the number of individuals harvested during the season by individual hunters; and non-reporters who do not intend to trap during the subsequent year.

Table 2. Protected furbearers harvested in New Mexico counties during 2016–2017.

<u>County</u>	<u>Badger</u>	<u>Beaver</u>	<u>Bobcat</u>	<u>Ermine</u>	<u>Grey Fox</u>	<u>Kit Fox</u>	<u>Red Fox</u>	<u>Swift Fox</u>	<u>Muskrat</u>	<u>Raccoon</u>	<u>Ringtail</u>	<u>Long-tailed Weasel</u>
Bernalillo	0	0	3	0	0	0	0	0	0	6	0	0
Catron	0	0	59	0	130	0	0	0	0	0	0	0
Chaves	6	0	217	0	96	88	0	2	0	11	0	0
Cibola	8	0	64	0	123	2	0	0	3	0	5	0
Colfax	6	0	36	0	94	0	40	6	0	1	0	0
Curry	6	0	1	0	3	0	3	0	0	0	0	0
De Baca	11	0	52	0	16	0	3	0	0	7	1	0
Dona Ana	14	0	47	0	43	6	0	0	0	11	0	0
Eddy	11	0	177	0	83	3	0	0	0	37	11	0
Grant	9	0	75	0	238	1	1	0	0	1	11	0
Guadalupe	0	0	7	0	11	0	1	0	0	0	0	0
Harding	3	0	13	0	25	0	0	0	0	0	0	0
Hidalgo	0	0	24	0	13	0	0	0	0	7	0	0
Lea	0	0	2	0	0	0	0	0	0	0	0	0
Lincoln	5	2	90	0	129	4	0	0	0	37	7	0
Los Alamos	0	0	2	0	0	0	0	0	0	0	0	0
Luna	20	0	22	0	27	5	0	0	0	2	2	0
McKinley	10	0	62	0	94	9	6	0	0	0	0	0
Mora	0	0	31	0	41	0	0	2	0	0	0	0
Otero	3	0	51	0	10	0	0	0	0	6	6	0
Quay	10	0	42	0	142	0	0	0	0	5	2	0
Rio Arriba	6	12	76	0	82	0	23	0	1	11	1	1
Roosevelt	0	0	2	0	0	0	0	0	0	0	0	0
San Juan	9	52	103	0	120	0	109	0	22	21	6	0
San Miguel	2	5	47	0	47	0	0	0	0	0	1	0
Sandoval	6	0	59	0	47	1	1	0	0	0	0	0
Santa Fe	1	2	8	0	21	0	0	0	2	4	0	0
Sierra	31	0	143	0	270	15	0	8	0	0	1	0
Socorro	8	0	57	0	158	7	0	0	0	3	1	0
Taos	0	0	32	0	4	0	1	0	0	1	0	0
Torrance	4	0	52	0	49	6	0	0	0	4	2	0
Union	12	9	79	0	70	0	0	0	0	10	0	0
Valencia	2	0	1	0	2	2	0	0	15	25	0	0
Total	203	82	1736	0	2192	149	188	18	43	210	57	1

2017–2018 New Mexico Hunter Harvest Report Program Summary of Results – Furbearers

Nicholas Forman
Carnivore and Small Mammal Program Manager
Wildlife Management Division
New Mexico Department of Game and Fish

A total of 2,037 state furbearer licenses were sold during the 2017–2018 season; 1,662 (81%) of those license holders responded to the mandatory harvest reporting. Harvest records were accessed July 25, 2018; a total of 5,185 individual protected furbearers were harvested. During the last segment, we reported that a total of 1,892 state furbearer licenses were sold during the 2016–2017 season; 1,350 (71%) of those license holders responded to the mandatory harvest reporting. This record was incomplete based on an inaccurate database query. The correct numbers are a total of 1,892 trapper (furbearer) licenses were sold during the 2016–2017 season; 1,536 (81%) of those license holders responded to the mandatory harvest reporting. Harvest records were accessed October 27, 2017; a total of 4,879 individual protected furbearers were harvested. No mandatory reporting requirement exists for unprotected furbearers; therefore, those species are not included in this report.

Total Number of Each Species Harvested 2017-18

Species	Total
American Badger	129
American Beaver	73
Bobcat	1814 (1817)
Ermine	0
Grey Fox	2353
Kit Fox	81
Red Fox	140
Swift Fox	39
Long-tailed Weasel	0
Muskrat	22
Nutria	0
Raccoon	415
Ringtail	119

The number of harvested bobcats based on CITES tag reports is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Mandatory harvest reporting is not required for individuals with tribal permits who harvest on tribal lands. However, those individuals are required to obtain a CITES pelt tag for each bobcat they intend to transport out of New Mexico, and thus a record is made for those harvested animals through CITES pelt tag reporting.

Table 2. Number of protected furbearers harvested in New Mexico counties during 2017–2018.

<u>County</u>	<u>Badger</u>	<u>Beaver</u>	<u>Bobcat</u>	<u>Ermine</u>	<u>Grey Fox</u>	<u>Kit Fox</u>	<u>Red Fox</u>	<u>Swift Fox</u>	<u>Muskra t</u>	<u>Nutria</u>	<u>Raccoon</u>	<u>Ringtail</u>	<u>Long-tailed Weasel</u>
Bernalillo	1	0	4	0	6	0	0	0	0	0	0	3	0
Catron	7	0	89	0	241	0	0	0	0	0	0	3	0
Chaves	8	0	52	0	39	9	0	0	0	0	153	0	0
Cibola	14	0	71	0	151	2	1	2	0	0	0	6	0
Colfax	5	1	62	0	73	11	8	0	0	0	0	5	0
Curry	10	0	0	0	5	0	0	0	0	0	0	0	0
De Baca	0	2	20	0	6	0	0	0	9	0	10	1	0
Dona Ana	9	4	28	0	24	15	0	0	0	0	13	0	0
Eddy	3	0	169	0	79	1	0	14	0	0	11	7	0
Grant	2	0	166	0	258	4	0	13	0	0	6	31	0
Guadalupe	0	0	18	0	26	0	0	0	0	0	0	5	0
Harding	0	0	21	0	33	0	1	0	0	0	3	0	0
Hidalgo	2	0	21	0	36	6	0	0	0	0	0	0	0
Lea	2	0	1	0	10	0	0	1	0	0	0	0	0
Lincoln	5	0	74	0	95	0	2	0	0	0	4	3	0
Los Alamos	0	0	3	0	0	0	0	0	0	0	0	0	0
Luna	1	0	14	0	14	0	0	0	0	0	0	5	0
McKinley	12	0	112	0	65	13	14	0	0	0	0	0	0
Mora	2	0	35	0	41	0	1	0	0	0	0	2	0
Otero	0	0	67	0	45	2	0	1	0	0	12	0	0
Quay	4	0	51	0	30	0	0	1	0	0	3	1	0
Rio Arriba	13	37	138	0	84	1	15	0	1	0	16	1	0
Roosevelt	0	0	1	0	1	0	0	0	0	0	0	0	0
San Juan	6	17	143	0	194	0	94	0	8	0	56	5	0
San Miguel	0	0	83	0	122	0	0	0	0	0	0	2	0
Sandoval	1	0	39	0	75	0	1	0	0	0	0	0	0
Santa Fe	0	2	15	0	9	0	1	0	2	0	7	0	0
Sierra	2	0	60	0	149	6	0	7	0	0	4	2	0
Socorro	9	1	69	0	235	4	0	0	0	0	5	21	0
Taos	0	9	18	0	10	0	1	0	2	0	3	0	0
Torrance	8	0	64	0	29	1	0	0	0	0	0	0	0
Union	3	0	91	0	145	4	1	0	0	0	12	0	0
Valencia	0	0	15	0	23	2	0	0	0	0	97	16	0
Total	129	73	1814	0	2353	81	140	39	22	0	415	119	0

2018–2019 New Mexico Hunter Harvest Report Program Summary of Results – Furbearers

Nicholas Forman
Carnivore and Small Mammal Program Manager
Wildlife Management Division
New Mexico Department of Game and Fish

A total of 2,022 state furbearer licenses were sold during the 2018–2019 season; 1,686 (83.4%) of those license holders responded to the mandatory harvest reporting. Harvest records were accessed August 21, 2019; a total of 4,572 individual protected furbearers were harvested. No mandatory reporting requirement exists for unprotected furbearers; therefore, those species are not included in this report.

Total Number of Each Species Harvested 2018-19

Species	Total
American Badger	106
American Beaver	107
Bobcat	1630 (1855)
Ermine	1
Grey Fox	2121
Kit Fox	77
Red Fox	112
Swift Fox	14
Long-tailed Weasel	0
Muskrat	6
Nutria	0
Raccoon	346
Ringtail	52

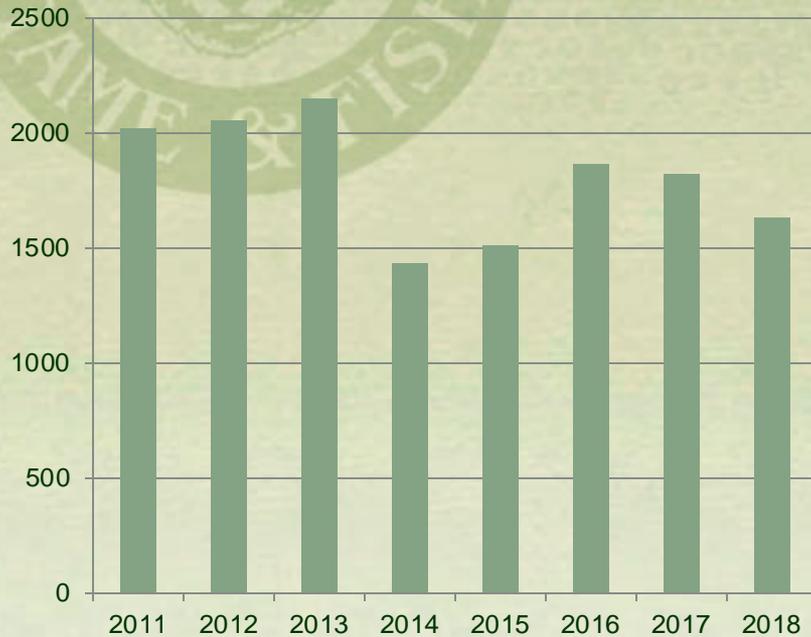
The number of harvested bobcats based on CITES tag reports is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Mandatory harvest reporting is not required for individuals with tribal permits who harvest on tribal lands. However, those individuals are required to obtain a CITES pelt tag for each bobcat they intend to transport out of New Mexico, and thus a record is made for those harvested animals through CITES pelt tag reporting.

Table 2. Number of protected furbearers harvested in New Mexico counties during 2018–2019.

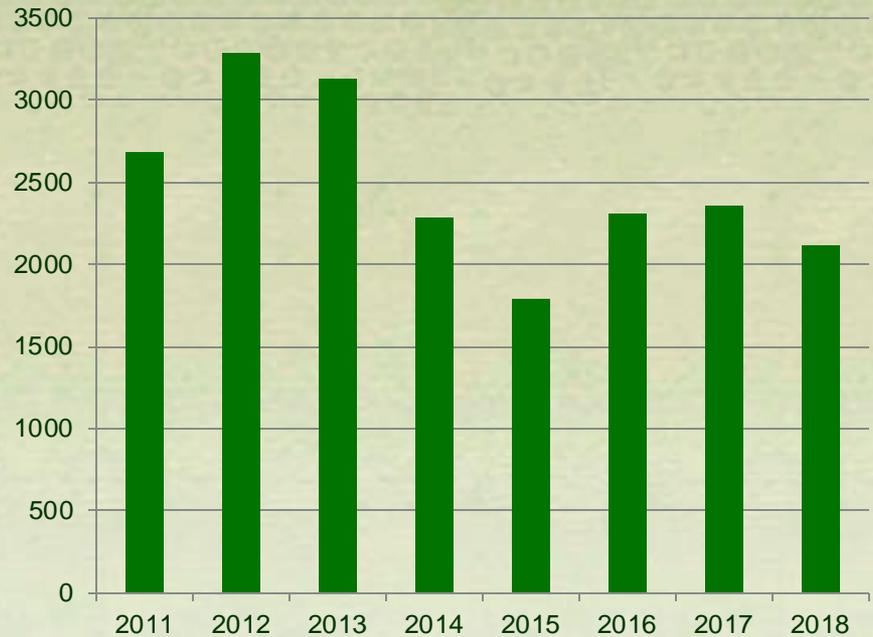
<u>County</u>	<u>Badger</u>	<u>Beaver</u>	<u>Bobcat</u>	<u>Ermine</u>	<u>Grey Fox</u>	<u>Kit Fox</u>	<u>Red Fox</u>	<u>Swift Fox</u>	<u>Muskrat</u>	<u>Nutria</u>	<u>Raccoon</u>	<u>Ringtail</u>	<u>Long-tailed Weasel</u>
Bernalillo	0	0	2	0	0	0	0	0	0	0	0	0	0
Catron	4	0	92	0	118	4	0	0	0	0	0	1	0
Chaves	4	0	77	0	13	4	0	7	0	0	110	0	0
Cibola	5	0	36	0	129	0	4	0	0	0	1	1	0
Colfax	0	0	78	1	155	0	10	0	0	0	2	3	0
Curry	1	0	0	0	1	0	0	0	0	0	1	0	0
De Baca	3	0	33	0	24	0	1	0	0	0	8	0	0
Dona Ana	15	2	159	0	137	16	0	2	0	0	19	1	0
Eddy	0	0	153	0	57	6	0	2	0	0	32	5	0
Grant	3	0	94	0	279	2	0	4	0	0	2	18	0
Guadalupe	0	0	10	0	24	0	0	0	0	0	0	0	0
Harding	0	0	12	0	15	0	0	0	0	0	0	0	0
Hidalgo	3	0	31	0	11	1	0	0	0	0	0	4	0
Lea	1	0	11	0	0	0	0	0	0	0	0	0	0
Lincoln	0	0	81	0	108	0	0	0	0	0	12	5	0
Los Alamos	0	0	0	0	1	0	0	0	0	0	0	0	0
Luna	5	0	23	0	16	12	0	3	0	0	0	3	0
McKinley	6	0	70	0	92	7	14	0	0	0	0	2	0
Mora	0	6	23	0	28	0	0	0	0	0	1	0	0
Otero	0	0	26	0	19	1	0	0	0	0	6	0	0
Quay	9	3	40	0	54	0	0	0	0	0	0	0	0
Rio Arriba	17	49	105	0	119	0	4	0	0	0	25	4	0
Roosevelt	3	0	1	0	0	0	0	0	0	0	0	0	0
San Juan	10	43	99	0	83	0	74	0	0	0	41	2	0
San Miguel	1	0	62	0	169	0	0	0	0	0	0	1	0
Sandoval	3	0	57	0	86	0	3	0	0	0	2	0	0
Santa Fe	0	3	13	0	17	0	0	2	4	0	3	0	0
Sierra	1	0	39	0	148	10	1	0	0	0	0	0	0
Socorro	1	0	38	0	85	2	1	0	2	0	5	2	0
Taos	0	0	19	0	5	0	0	0	0	0	0	0	0
Torrance	7	0	46	0	31	0	0	3	0	0	5	0	0
Union	4	0	97	0	96	0	0	0	0	0	4	0	0
Valencia	0	1	3	0	1	3	0	0	0	0	67	0	0
Total	106	107	1630	1	2121	68	112	23	6	0	346	52	0

Statewide Harvest

Statewide Bobcat Harvest



Statewide Gray Fox Harvest

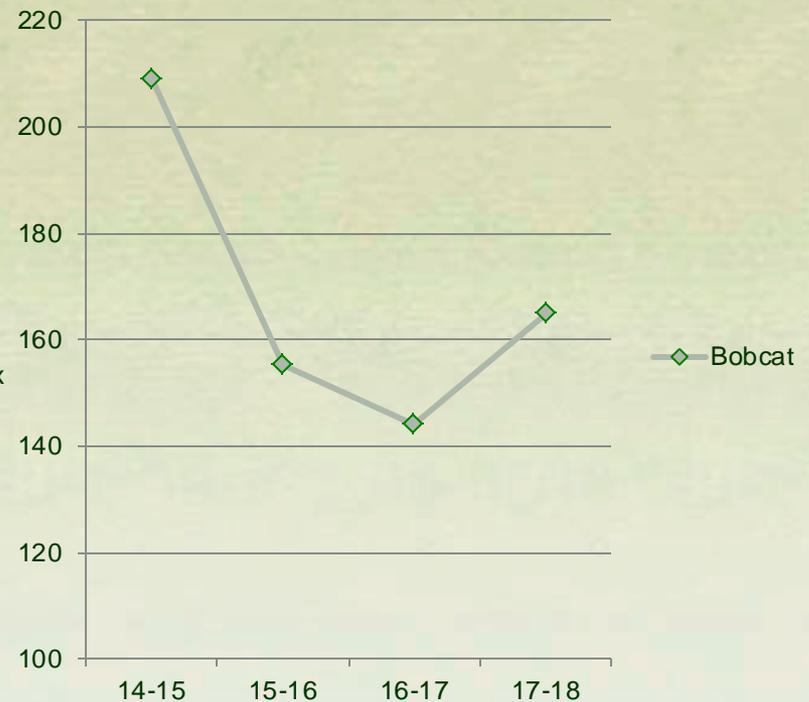


Catch per Unit Effort

Catch Per Night from Mandatory Harvest Reporting



Trap Nights per Catch from CITES Pelt Tagging

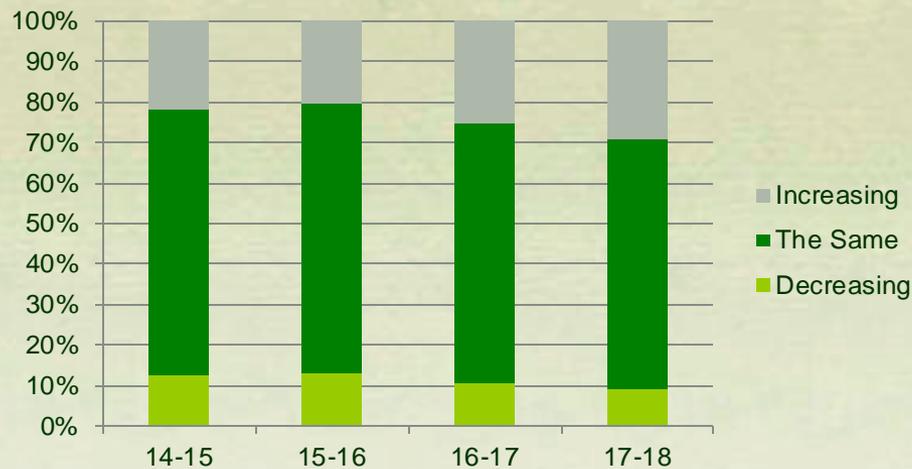


Statewide Harvest

Bobcat Harvest Sex Ratio



Trapper Opinion on Bobcat Population Trend Current vs 10 Years Prior

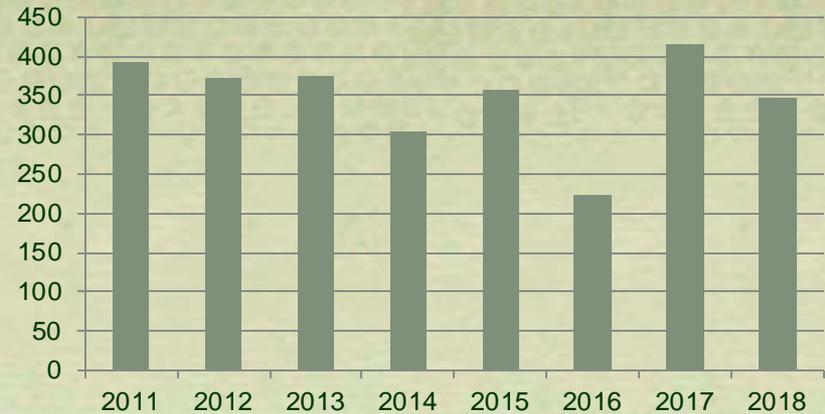


Statewide Harvest

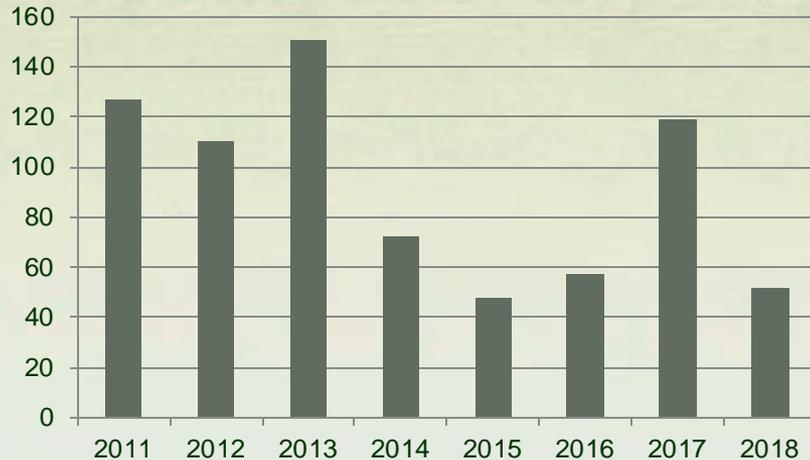
Statewide Beaver Harvest



Statewide Raccoon Harvest

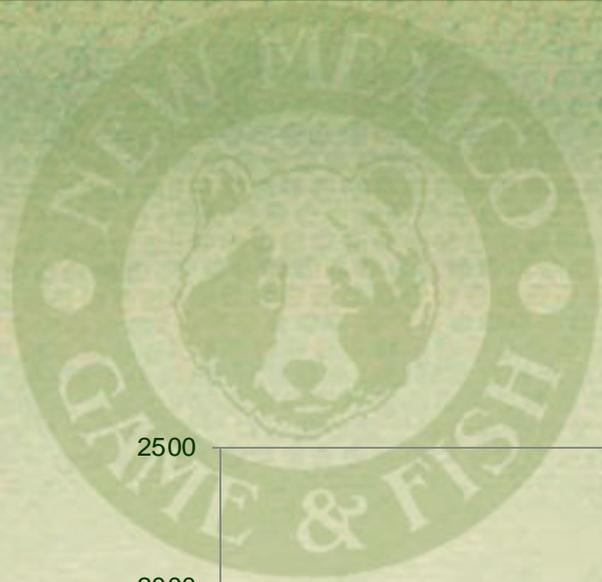


Statewide Ringtail Harvest

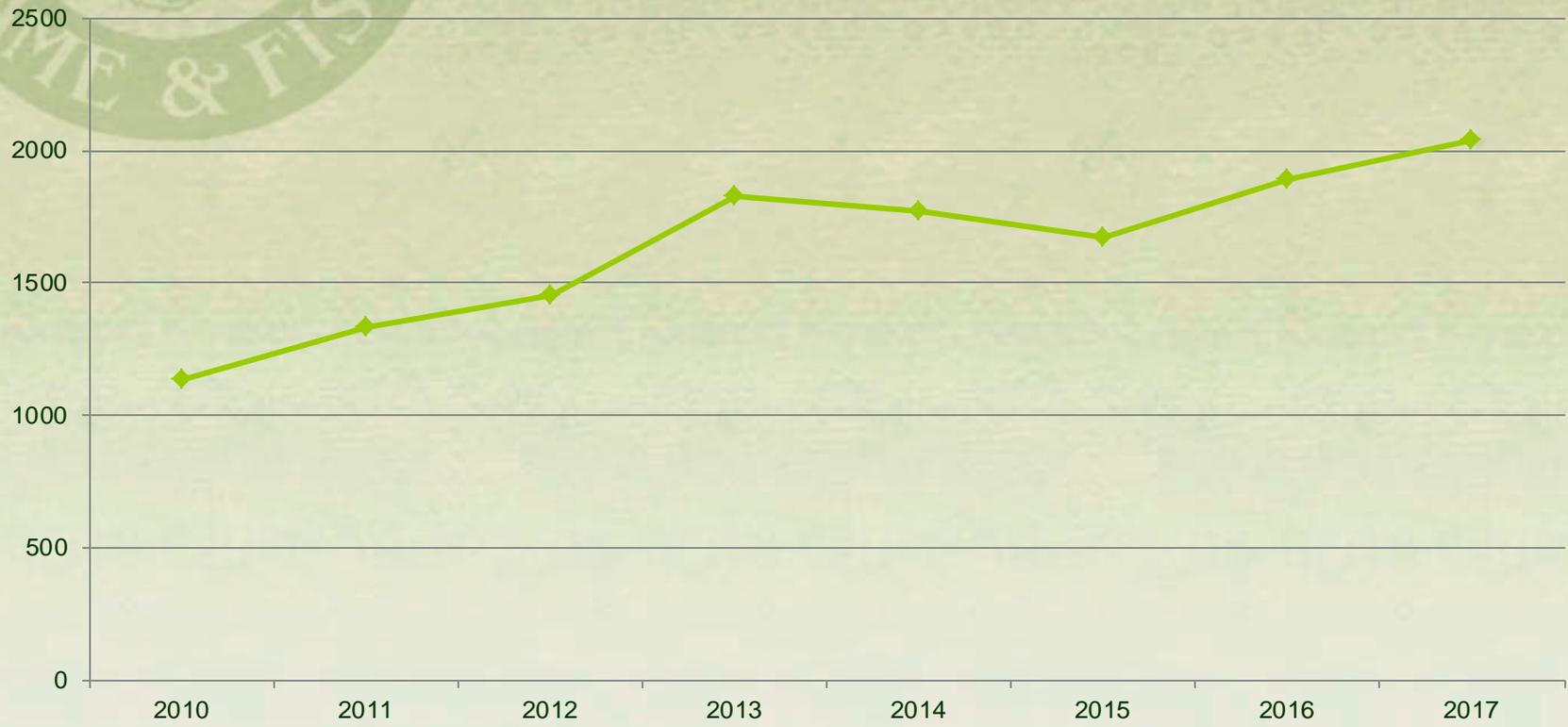


Statewide Red Fox Harvest





Furbearer Licenses Sold



INTERIM PERFORMANCE REPORT

State: New Mexico **Grant Number:** W-137-R-13

Grant Title: Furbearer Surveys, Inventory and Management

Contract Period: July 1, 2017 through June 30, 2018

I. Program Narrative Objective:

To develop, implement, and monitor programs and/or projects designed to manage resident furbearer resources and their associated habitats such that viable population levels are maintained for their recreational, educational, scientific, and/or intrinsic value. These activities have included participation at the state, regional, national and international level.

II. Abstract

Resident furbearing species (e.g., badger, beaver, bobcat, coatimundi, ermine, gray fox, kit fox, long-tailed weasel, muskrat, nutria, raccoon, red fox, ringtail, and swift fox) are integral biological, ecological, and recreational components of native ecosystems in New Mexico. Any activity associated with these wildlife (e.g., trapping, hunting, habitat manipulation, recreation, scientific collection, depredation/nuisance abatement) must be evaluated and supported by data-driven science, thereby precluding detrimental impacts on their populations. Thus, continuous population and harvest monitoring must occur to develop and implement appropriate and sustainable management.

III. Summary of Progress:

Job 1

a) *Grant administration and coordination*

Grant personnel administered and coordinated grant activities among Department divisions, regional staff, and outside entities by attending meetings and maintaining contact by telephone and email on matters concerning resident furbearer management. Hours worked were tracked, and grant personnel coordinated with Federal Grant Managers to monitor grant projects to ensure the grant project and Department mission, goals, and objectives were being met. Information was distributed to various public and private entities regarding resident furbearer management, furbearer biology, and furbearers as a resource.

b) *Develop and monitor staff resources*

A new employee was hired during October 2016 as the Carnivore and Small Mammal Program Manager to oversee furbearer management and research in New Mexico. Annual, sick, personal, and holiday leave was taken by the Program Manager.

c) *Monitor the procurement process for goods and services*

We purchased remote cameras to be used in estimating furbearer population numbers. They were purchased at this time because our operating budget allowed for it. However, we do not have a specific project for which these will be used at this time. Once the project is developed, appropriate documentation will be submitted to Federal Aid for approval.

d) *Disseminate information*

Information was disseminated to Department employees, wildlife managers at other state and federal agencies, and the public via mail, reports, website updates, meetings, telephone conversations, Commission and legislative requests, fur auctions, public information requests, and other methods. The Department provided written support of the CITES program for the U.S. Fish and Wildlife Service's review, and has supplied the Service with annual furbearer harvest data for monitoring efforts. Additionally, the Carnivore and Small Mammal Program Manager has worked closely with the Association of Fish and Wildlife Agencies Furbearer Working Group to update publications and reports.

e) *Plan surveys and other field work, analyze data, and prepare management recommendations*

Simulations were conducted to develop a logistically feasible, cost-efficient clustered camera trapping survey design in a spatial mark-resight framework to estimate density and abundance of bobcats and coyotes in the Ft. Stanton area of New Mexico. The survey was implemented during April–June 2017 by deploying 84 remote cameras at 42 camera trap stations to detect individual bobcats and coyotes. Although this project was charged to the Big Game grant (W93 R57) because the intent is to evaluate the impacts of said furbearers on pronghorn fawn survival, the study will allow evaluation of novel methods for monitoring and managing density and abundance of bobcat populations throughout New Mexico, as well as provide said estimates for the Ft. Stanton area.

Work was initiated on revising the Department's Beaver Translocation Policy to make the policy more reflective of beaver biology and ecology, and to improve logistics of future restoration efforts in New Mexico.

Program direction was evaluated and a Program Overview was written to establish goals and priority projects for furbearer research and management over the next 2–3 years. Initial work was also done on developing a survey design for estimating demographics and population genetics of swift fox populations.

f) *Harvest monitoring and reporting*

The number and species of furbearers harvested (Table 1) by county throughout New Mexico was compiled from the mandatory hunter harvest reporting system. A total of 1,892 furbearer licenses were sold during the 2016–2017 season, and 3,336 protected furbearers were harvested (Appendix A).

Table 1. New Mexico furbearer harvest by species from 2010–2011 to 2017–2018.

Year	Beaver	Badger	Bobcat	Ermine	Fox, grey	Fox, kit	Fox, red	Fox, swift	Long-tailed weasel	Muskrat	Nutria	Raccoon	Ringtail
17-18	73	129	1,814	0	2,353	81	140	39	0	22	0	415	119
16-17	77	136	1,244	0	1,420	46	173	10	1	43	0	136	50
15-16	67	267	1,514	0	1,796	185	120	52	1	66	0	358	48
14-15	151	172	1,437	0	2,290	207	165	96	0	119	0	304	72
13-14	88	206	2,145	0	3,133	140	267	76	0	156	5	376	151
12-13	121	171	2,057	0	3,288	147	177	82	0	71	15	373	110
11-12	79	168	1,980	0	2,549	192	168	55	0	42	10	384	107
10-11	73	132	1,833	0	2,447	75	75	28	0	212	8	383	133

Job 2

Field Data Collection, Summary of Activities

A second season of spatial mark-resight survey was conducted to estimate population density, abundance, and home range size of bobcats and coyotes in the Ft. Stanton area. A total of 8 bobcats were live-captured and outfitted with GPS-collars, and monitoring of those individuals will continue for 2.5 years, or until animal death. This work is in conjunction with a larger pronghorn fawn survival and cause-specific mortality study; thus, work for this project was charged under a different grant (W93 R57).

Additionally, a collaborative study with New Mexico State University in which scat detection dogs are being used to collect cougar fecal DNA resulted in the non-target collection of 170 bobcat scats across 4 study areas during the reporting period. Although this data collection was charged to W93 R57 because it occurred while searching for cougar samples, plans are in place to genotype the collected bobcat samples to individual ID and use spatial capture-recapture models to estimate bobcat density and abundance across the study areas.

IV. Significant Deviations:

No significant deviations occurred.

V. Conclusions and Recommendations:

Furbearers are so named because of their commercially valuable skins; thus, their harvest is inherently utilitarian in intent and provides a source of income for many New Mexicans. Further, a number of furbearers are ecologically important because they exert top-down forces on ecosystems that maintain community structure and balance (e.g., trophic cascades). Sustainable management is critical to the perpetuation of furbearers as a resource and functioning ecological member into the future. Science-

based research and management of most furbearing species in North America, however, has been hindered by a lack of financially efficient and logistically feasible sampling methods until recently. The development of noninvasive sampling methods (e.g., camera trapping, scat detection dogs, etc.) combined with advancements in spatial capture-recapture models has established a foundation for such research and management to occur. The Carnivore and Small Mammal Program Manager and other NMDGF staff are working to develop additional sampling methods and models within the spatial capture-recapture framework that allow large, management-scale estimates of density, abundance, survival, recruitment, and population growth to be unbiasedly estimated for multiple furbearers in New Mexico.

The need for said work is increasingly mounting as recent litigation filed by Non-Government Organizations over the U.S. Fish and Wildlife Service's administration of the CITES program represents a major threat to furbearer management across the United States. Furthermore, a continued effort by Non-Government Organizations to ban the practice of furbearer trapping on public lands puts the future of this management/recreational activity into question. Consequently, developing and conducting statistically rigorous surveys to monitor furbearer population trends will be critical to the future of furbearer management in New Mexico.

Signature Page

Prepared by: _____

Nicholas Forman

Carnivore and Small Mammal Program Manager

Approved by: _____

Stewart Liley

Chief Wildlife Management Division

Approved by: _____

Federal Assistance Coordinator

APPENDIX A
2017–2018 New Mexico Hunter Harvest Report Program
Summary of Results – Furbearers

Nicholas Forman
Carnivore and Small Mammal Program Manager
Wildlife Management Division
New Mexico Department of Game and Fish

A total of 2,037 state furbearer licenses were sold during the 2017–2018 season; 1,662 (81%) of those license holders responded to the mandatory harvest reporting. This is a very low response rate. Reporting may increase when trappers/hunters applying for hunting and trapping licenses next license year are obligated to respond before they are able to purchase a license, although at this time we do not know. Harvest records were accessed July 25, 2018; a total of 5,185 individual protected furbearers were harvested. No mandatory reporting requirement exists for unprotected furbearers; therefore, those species are not included in this report.

Total Number of Each Species Harvested.

Species	Total
American Badger	129
American Beaver	73
Bobcat	1814 (1817)
Ermine	0
Grey Fox	2353
Kit Fox	81
Red Fox	140
Swift Fox	39
Long-tailed Weasel	0
Muskrat	22
Nutria	0
Raccoon	415
Ringtail	119

The number of harvested bobcats based on CITES tag reports is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Discrepancy in the reported bobcat harvest compared to the CITES-tagged bobcat harvest is the likely result of unusually low response rate to the mandatory harvest reporting at this time, and trappers from reservation lands that CITES-tag their bobcat pelts but are not required to purchase state licenses..

Table 2. Number of protected furbearers harvested in New Mexico counties during 2017–2018.

County	Badger	Beaver	Bobcat	Ermine	Grey Fox	Kit Fox	Red Fox	Swift Fox	Muskrat	Nutria	Raccoon	Ringtail	Long-tailed Weasel
Bernalillo	1	0	4	0	6	0	0	0	0	0	0	3	0
Catron	7	0	89	0	241	0	0	0	0	0	0	3	0
Chaves	8	0	52	0	39	9	0	0	0	0	153	0	0
Cibola	14	0	71	0	151	2	1	2	0	0	0	6	0
Colfax	5	1	62	0	73	11	8	0	0	0	0	5	0
Curry	10	0	0	0	5	0	0	0	0	0	0	0	0
De Baca	0	2	20	0	6	0	0	0	9	0	10	1	0
Dona Ana	9	4	28	0	24	15	0	0	0	0	13	0	0
Eddy	3	0	169	0	79	1	0	14	0	0	11	7	0
Grant	2	0	166	0	258	4	0	13	0	0	6	31	0
Guadalupe	0	0	18	0	26	0	0	0	0	0	0	5	0
Harding	0	0	21	0	33	0	1	0	0	0	3	0	0
Hidalgo	2	0	21	0	36	6	0	0	0	0	0	0	0
Lea	2	0	1	0	10	0	0	1	0	0	0	0	0
Lincoln	5	0	74	0	95	0	2	0	0	0	4	3	0
Los Alamos	0	0	3	0	0	0	0	0	0	0	0	0	0
Luna	1	0	14	0	14	0	0	0	0	0	0	5	0
McKinley	12	0	112	0	65	13	14	0	0	0	0	0	0
Mora	2	0	35	0	41	0	1	0	0	0	0	2	0
Otero	0	0	67	0	45	2	0	1	0	0	12	0	0
Quay	4	0	51	0	30	0	0	1	0	0	3	1	0
Rio Arriba	13	37	138	0	84	1	15	0	1	0	16	1	0
Roosevelt	0	0	1	0	1	0	0	0	0	0	0	0	0
San Juan	6	17	143	0	194	0	94	0	8	0	56	5	0
San Miguel	0	0	83	0	122	0	0	0	0	0	0	2	0
Sandoval	1	0	39	0	75	0	1	0	0	0	0	0	0
Santa Fe	0	2	15	0	9	0	1	0	2	0	7	0	0
Sierra	2	0	60	0	149	6	0	7	0	0	4	2	0
Socorro	9	1	69	0	235	4	0	0	0	0	5	21	0
Taos	0	9	18	0	10	0	1	0	2	0	3	0	0
Torrance	8	0	64	0	29	1	0	0	0	0	0	0	0
Union	3	0	91	0	145	4	1	0	0	0	12	0	0
Valencia	0	0	15	0	23	2	0	0	0	0	97	16	0
Total	129	73	1814	0	2353	81	140	39	22	0	415	119	0

INTERIM PERFORMANCE REPORT

State: New Mexico **Grant Number:** W-137-R-13

Grant Title: Furbearer Surveys, Inventory and Management

Contract Period: July 1, 2016 through June 30, 2017

I. Program Narrative Objective:

To develop, implement, and monitor programs and/or projects designed to manage resident furbearer resources and their associated habitats such that viable population levels are maintained for their recreational, educational, scientific, and/or intrinsic value. These activities have included participation at the state, regional, national and international level.

II. Abstract

Resident furbearing species (e.g., badger, beaver, bobcat, coatimundi, ermine, gray fox, kit fox, long-tailed weasel, muskrat, nutria, raccoon, red fox, ringtail, and swift fox) are integral biological, ecological, and recreational components of native ecosystems in New Mexico. Any activity associated with these wildlife (e.g., trapping, hunting, habitat manipulation, recreation, scientific collection, depredation/nuisance abatement) must be evaluated and supported by data-driven science, thereby precluding detrimental impacts on their populations. Thus, continuous population and harvest monitoring must occur to develop and implement appropriate and sustainable management.

III. Summary of Progress:

Job 1

a) *Grant administration and coordination*

Grant personnel administered and coordinated grant activities among Department divisions, regional staff, and outside entities by attending meetings and maintaining contact by telephone and email on matters concerning resident furbearer management. Hours worked were tracked, and grant personnel coordinated with Federal Grant Managers to monitor grant projects to ensure the grant project and Department mission, goals, and objectives were being met. Information was distributed to various public and private entities regarding resident furbearer management, furbearer biology, and furbearers as a resource.

b) *Develop and monitor staff resources*

A new employee was hired during October 2016 as the Carnivore and Small Mammal Program Manager to oversee furbearer management and research in New Mexico. Annual, sick, personal, and holiday leave was taken by the Program Manager.

c) *Monitor the procurement process for goods and services*

We purchased remote cameras to be used in estimating furbearer population numbers. They were purchased at this time because our operating budget allowed for it. However, we do not have a specific project for which these will be used at this time. Once the project is developed, appropriate documentation will be submitted to Federal Aid for approval.

d) *Disseminate information*

Information was disseminated to Department employees, wildlife managers at other state and federal agencies, and the public via mail, reports, website updates, meetings, telephone conversations, Commission and legislative requests, fur auctions, public information requests, and other methods. The Department provided written support of the CITES program for the U.S. Fish and Wildlife Service's review, and has supplied the Service with annual furbearer harvest data for monitoring efforts. Additionally, the Carnivore and Small Mammal Program Manager has worked closely with the Association of Fish and Wildlife Agencies Furbearer Working Group to update publications and reports.

e) *Plan surveys and other field work, analyze data, and prepare management recommendations*

Simulations were conducted to develop a logistically feasible, cost-efficient clustered camera trapping survey design in a spatial mark-resight framework to estimate density and abundance of bobcats and coyotes in the Ft. Stanton area of New Mexico. The survey was implemented during April–June 2017 by deploying 84 remote cameras at 42 camera trap stations to detect individual bobcats and coyotes. Although this project was charged to the Big Game grant (W93 R57) because the intent is to evaluate the impacts of said furbearers on pronghorn fawn survival, the study will allow evaluation of novel methods for monitoring and managing density and abundance of bobcat populations throughout New Mexico, as well as provide said estimates for the Ft. Stanton area.

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Program direction was evaluated and a Program Overview was written to establish goals and priority projects for furbearer research and management over the next 2–3 years. Initial work was also done on developing a survey design for estimating demographics and population genetics of swift fox populations.

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The number and species of furbearers harvested (Table 1) by county throughout New Mexico was compiled from the mandatory hunter harvest reporting system. A total of 1,892 furbearer licenses were sold during the 2016–2017 season, and 3,336 protected furbearers were harvested (Appendix A).

Table 1. New Mexico furbearer harvest by species from 2010–2011 to 2016–2017.

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16-17	77	136	1,244	0	1,420	46	173	10	1	43	0	136	50
15-16	67	267	1,514	0	1,796	185	120	52	1	66	0	358	48
14-15	151	172	1,437	0	2,290	207	165	96	0	119	0	304	72
13-14	88	206	2,145	0	3,133	140	267	76	0	156	5	376	151
12-13	121	171	2,057	0	3,288	147	177	82	0	71	15	373	110
11-12	79	168	1,980	0	2,549	192	168	55	0	42	10	384	107
10-11	73	132	1,833	0	2,447	75	75	28	0	212	8	383	133

Job 2

Field Data Collection, Summary of Activities

A second season of spatial mark-resight survey was conducted to estimate population density, abundance, and home range size of bobcats and coyotes in the Ft. Stanton area. A total of 8 bobcats were live-captured and outfitted with GPS-collars, and monitoring of those individuals will continue for 2.5 years, or until animal death. This work is in conjunction with a larger pronghorn fawn survival and cause-specific mortality study; thus, work for this project was charged under a different grant (W93 R57).

Additionally, a collaborative study with New Mexico State University in which scat detection dogs are being used to collect cougar fecal DNA resulted in the non-target collection of 170 bobcat scats across 4 study areas during the reporting period. Although this data collection was charged to W93 R57 because it occurred while searching for cougar samples, plans are in place to genotype the collected bobcat samples to individual ID and use spatial capture-recapture models to estimate bobcat density and abundance across the study areas.

IV. Significant Deviations:

No significant deviations occurred.

V. Conclusions and Recommendations:

Furbearers are so named because of their commercially valuable skins; thus, their harvest is inherently utilitarian in intent and provides a source of income for many New Mexicans. Further, a number of furbearers are ecologically important because they exert top-down forces on ecosystems that maintain community structure and balance (e.g., trophic cascades). Sustainable management is critical to the perpetuation of furbearers as a resource and functioning ecological member into the future. Science-based research and management of most furbearing species in North America, however, has been

hindered by a lack of financially efficient and logistically feasible sampling methods until recently. The development of noninvasive sampling methods (e.g., camera trapping, scat detection dogs, etc.) combined with advancements in spatial capture-recapture models has established a foundation for such research and management to occur. The Carnivore and Small Mammal Program Manager and other NMDGF staff are working to develop additional sampling methods and models within the spatial capture-recapture framework that allow large, management-scale estimates of density, abundance, survival, recruitment, and population growth to be unbiasedly estimated for multiple furbearers in New Mexico.

The need for said work is increasingly mounting as recent litigation filed by Non-Government Organizations over the U.S. Fish and Wildlife Service's administration of the CITES program represents a major threat to furbearer management across the United States. Furthermore, a continued effort by Non-Government Organizations to ban the practice of furbearer trapping on public lands puts the future of this management/recreational activity into question. Consequently, developing and conducting statistically rigorous surveys to monitor furbearer population trends will be critical to the future of furbearer management in New Mexico.

Signature Page

Prepared by: _____

Sean Murphy

Carnivore and Small Mammal Program Manager

Approved by: _____

Stewart Liley

Chief Wildlife Management Division

Approved by: _____

Federal Assistance Coordinator

APPENDIX A
2016–2017 New Mexico Hunter Harvest Report Program
Summary of Results – Furbearers

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A total of 1,892 state furbearer licenses were sold during the 2016–2017 season; 1,350 (71%) of those license holders responded to the mandatory harvest reporting. This is a very low response rate. Reporting may increase when trappers/hunters applying for hunting and trapping licenses next license year are obligated to respond before they are able to purchase a license, although at this time we do not know. Harvest records were accessed August 16, 2017; a total of 3,336 individual protected furbearers were harvested. No mandatory reporting requirement exists for unprotected furbearers; therefore, those species are not included in this report.

Total Number of Each Species Harvested.

Species	Total
American beaver	77
Muskrat	43
Nutria	0
Red fox	173
Swift fox	10
Kit fox	46
Grey fox	1,420
Ringtail	50
Ermine	0
Long-tailed weasel	1
American badger	136
Bobcat*	1,978 (1,244)
Raccoon	136

The number of harvested bobcats based on CITES tag reports is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Discrepancy in the reported bobcat harvest compared to the CITES-tagged bobcat harvest is the likely result of unusually low response rate to the mandatory harvest reporting at this time, and trappers from reservation lands that CITES-tag their bobcat pelts but are not required to purchase state licenses..

Table 2. Number of protected furbearers harvested in New Mexico counties during 2016–2017.

County	Badger	Beaver	Bobcat	Ermine	Grey Fox	Kit Fox	Red Fox	Swift Fox	Muskrat	Nutria	Raccoon	Ringtail	Long-tailed Weasel
Bernalillo	0	0	3	0	0	0	0	0	0	0	0	0	0
Catron	0	0	25	0	76	0	0	0	0	0	0	0	0
Chaves	4	0	152	0	21	0	0	2	0	0	9	0	0
Cibola	5	0	45	0	101	2	0	0	3	0	0	5	0
Colfax	5	0	22	0	56	0	25	6	0	0	1	0	0
Curry	3	0	1	0	3	0	3	0	0	0	0	0	0
De Baca	3	0	49	0	16	0	3	0	0	0	6	1	0
Dona Ana	14	0	30	0	20	6	0	0	0	0	11	0	0
Eddy	11	0	124	0	61	3	0	0	0	0	29	8	0
Grant	9	0	69	0	230	1	1	0	0	0	0	11	0
Guadalupe	0	0	6	0	9	0	1	0	0	0	0	0	0
Harding	3	0	13	0	25	0	0	0	0	0	0	0	0
Hidalgo	0	0	24	0	13	0	0	0	0	0	7	0	0
Lea	0	0	2	0	0	0	0	0	0	0	0	0	0
Lincoln	5	0	55	0	71	4	0	0	0	0	1	4	0
Los Alamos	0	0	1	0	0	0	0	0	0	0	0	0	0
Luna	11	0	17	0	18	5	0	0	0	0	2	1	0
McKinley	10	0	52	0	89	9	6	0	0	0	0	0	0
Mora	0	0	31	0	41	0	0	2	0	0	0	0	0
Otero	3	0	50	0	10	0	0	0	0	0	6	6	0
Quay	10	0	35	0	61	0	0	0	0	0	3	2	0
Rio Arriba	6	12	69	0	70	0	23	0	1	0	11	1	1
Roosevelt	0	0	2	0	0	0	0	0	0	0	0	0	0
San Juan	7	52	100	0	112	0	109	0	22	0	21	6	0
San Miguel	2	2	30	0	25	0	0	0	0	0	0	1	0
Sandoval	6	0	59	0	46	1	1	0	0	0	0	0	0
Santa Fe	1	2	8	0	21	0	0	0	2	0	4	0	0
Sierra	0	0	16	0	54	0	0	0	0	0	0	1	0
Socorro	0	0	26	0	72	7	0	0	0	0	3	1	0
Taos	0	0	29	0	4	0	1	0	0	0	1	0	0
Torrance	4	0	21	0	23	6	0	0	0	0	4	2	0
Union	12	9	77	0	70	0	0	0	0	0	10	0	0
Valencia	2	0	1	0	2	2	0	0	15	0	7	0	0
Total	136	77	1244	0	1420	46	173	10	43	0	136	50	1

PERFORMANCE REPORT

State: New Mexico **Grant Number:** W-137-R-12
Grant Title: Furbearer Surveys, Inventory and Management
Contract Period: July 1, 2015 through June 30, 2016

I. Program Narrative Objective:

To develop, implement, and monitor programs and/or projects designed to manage resident furbearer resources and their associated habitats such that viable population levels are maintained for their recreational, educational, scientific, and/or intrinsic value. These activities have included participation at the state, regional, national and international level.

II. Abstract

Resident furbearing species (i.e., badger, beaver, bobcat, coatimundi, ermine, gray fox, kit fox, long-tailed weasel, muskrat, nutria, raccoon, red fox, ringtail, and swift fox) are integral biological, recreational, and economic components of New Mexico's ecosystems. It is important that any activity associated with these resources (e.g., trapping, hunting, habitat manipulation, recreation, scientific collection, depredation/nuisance abatement) utilize sound biological bases in order to preclude detrimental impacts to these populations. Activities that support hunting and trapping, research, and management require continuous population and harvest trend monitoring, the distribution of new results and information, and development and implementation of appropriate management practices.

III. Summary of Progress:

Job 1

a) *Grant Administration and Coordination*

Grant personnel administered and coordinated grant activities among Department Divisions, Area staff and outside entities by attending meetings and maintaining contact by telephone and email on matters concerning resident furbearer management. Hours worked were tracked, and grant personnel coordinated with Federal Grant Managers to monitor grant projects to ensure the grant project, and Department mission, goals and objectives were being met. Information was distributed to various publics regarding resident furbearer management, furbearer biology, and furbearer foundational resource base.

b) *Develop and monitor staff resources*

One employee attended the National Fur Trapper's Association Trapper's College to increase knowledge of on the ground trapping skills. In addition, annual, sick, personal, and holiday leave was taken by the furbearer biologist.

c) *Monitor the procurement process for goods and services*

Field supplies were purchased for furbearer monitoring and data gathering.

d) *Disseminate information*

Information was disseminated to Department employees, wildlife managers at other state and federal agencies, and the general public. Information was distributed via mail, reports, websites, meetings, telephone conversations, Commission and legislative requests, the fur auction, and other methods as needed.

e) *Plan surveys and other field work, analyze data, and prepare management recommendations*

Time was spent learning statistical theory, software, and project design, and implementation for a recently developed class of mark recapture population estimation techniques. An extensive literature review was conducted, and project design methodologies were learned.

f) *Harvest Reporting*

The number and species of furbearers harvested (Table 1) by county throughout New Mexico was derived from the mandatory hunter harvest report. Time was spent on revising the questions presented for the report, and it should be activated during the next segment. 1,671 furbearer licenses were sold during the 2015-2016 season, and 4,474 protected furbearers were harvested (Appendix A).

Table 1. NM furbearer harvest by species 2010-11 through 2015-16 harvest season.

Year	Beaver	Badger	Bobcat	Ermine	Fox, grey	Fox, kit	Fox, red	Fox, swift	Long-tailed weasel	Muskrat	Nutria	Raccoon	Ringtail
2015-16	67	267	1,514	0	1,796	185	120	52	1	66	0	358	48
2014-15	151	172	1,437	0	2,290	207	165	96	0	119	0	304	72
2013-14	88	206	2,145	0	3,133	140	267	76	0	156	5	376	151
2012-13	121	171	2,057	0	3,288	147	177	82	0	71	15	373	110
2011-12	79	168	1,980	0	2,549	192	168	55	0	42	10	384	107
2010-11	73	132	1,833	0	2,447	75	75	28	0	212	8	383	133

Job 2

Field Data Collection, Summary of Activities

Field work associated with spatial mark recapture techniques was implemented in the Ft. Stanton area to estimate coyote and bobcat population sizes. This is in conjunction with a larger pronghorn fawn mortality study and therefore work for this project was charged under a different grant (W93 R56).

IV. Significant Deviations:

No significant deviations occurred.

V. Conclusions and Recommendations:

A continued effort by animal advocacy groups to ban the practice of trapping on public lands puts the future of this management/recreational activity into question. It is important that statistically rigorous surveys be implemented in order to provide biological basis for resident furbearer management and recreational activities conducted with the resource.

Signature Page

Prepared by: _____

Elise Goldstein
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Approved by: _____

Stewart Liley
Chief Wildlife Management Division

Approved by: _____

Gail Craven
Federal Assistance Coordinator

APPENDIX A
2015-16 New Mexico Hunter Harvest Report Program
Summary of Results--Furbearers

Elise Goldstein, Chief, Wildlife Section, Wildlife Management Division
New Mexico Department of Game and Fish

1,671 furbearer licenses were sold during the 2015-2016 season, and 1,451 (87%) furbearer license holders responded to the mandatory furbearer harvest survey. Harvest report records were accessed August 19, 2016. 4,474 individual protected furbearers were harvested this season. There is no mandatory reporting requirement for unprotected furbearer species; therefore they are not included in this report.

Table 1. Total Number of Each Species Trapped

Species	Quantity
beaver	67
muskrat	66
nutria	0
red fox	120
swift fox	52
kit fox	185
grey fox	1,796
ringtail	48
ermine	0
long-tailed weasel	1
badger	267
bobcat*	1,661 (1,514)
raccoon	358

*The number of bobcats harvested is derived from CITES tag reports and is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Differences in the reported bobcat harvest and the CITES tagged bobcats are accounted for by several different factors, such as: trappers from reservation lands that tag their cats but do not have state licenses, poor recollection of the number of animals taken during the season and non-reporters who do not intend to trap the following year.

Table 2. Number of each species trapped by county

<u>County</u>	<u>Badger</u>	<u>Beaver</u>	<u>Bobcat</u>	<u>Ermine</u>	<u>Grey Fox</u>	<u>Kit Fox</u>	<u>Red Fox</u>	<u>Swift Fox</u>	<u>Muskrat</u>	<u>Raccoon</u>	<u>Ringtail</u>	<u>Long-tailed Weasel</u>
Bernalillo	1	0	3	0	3	0	0	0	0	3	0	0
Catron	10	0	167	0	237	2	0	1	0	0	1	0
Chaves	23	0	76	0	39	5	0	20	0	147	0	0
Cibola	1	0	26	0	54	0	0	0	0	2	1	0
Colfax	1	1	49	0	39	0	18	3	0	0	0	0
Curry	7	0	0	0	0	0	0	0	0	0	0	0
DeBaca	0	0	27	0	8	9	4	0	2	12	0	0
DonaAna	7	0	14	0	26	29	0	1	0	5	1	0
Eddy	10	0	66	0	55	8	0	3	0	7	5	0
Grant	11	0	94	0	236	41	0	0	0	12	22	0
Guadalupe	0	0	12	0	19	0	0	0	0	0	0	0
Harding	0	0	28	0	15	0	0	0	0	0	0	0
Hidalgo	5	0	17	0	12	3	0	0	0	4	1	0
Lea	6	0	2	0	0	0	0	0	0	0	0	0
Lincoln	19	0	55	0	46	0	1	0	0	11	0	0
LosAlamos	0	0	0	0	0	0	0	0	0	0	0	0
Luna	16	0	13	0	13	10	0	0	0	0	3	0
McKinley	11	0	55	0	61	11	11	13	0	0	0	0
Mora	3	0	28	0	78	1	0	0	0	0	0	0
Otero	2	0	60	0	32	1	0	3	0	0	1	0
Quay	10	0	30	0	51	0	0	0	0	7	0	0
Rio Arriba	15	33	171	0	56	0	8	0	1	18	0	0
Roosevelt	1	0	0	0	0	0	0	0	0	0	0	0
San Juan	19	5	74	0	107	0	72	0	8	2	3	1
San Miguel	13	0	116	0	141	0	4	0	0	50	0	0
Sandoval	17	0	53	0	79	1	1	0	1	4	3	0
Santa Fe	3	4	17	0	17	1	0	0	1	4	0	0
Sierra	2	0	39	0	199	6	0	1	0	3	3	0
Socorro	26	1	126	0	119	26	0	1	0	2	0	0
Taos	2	0	30	0	9	0	0	0	0	0	0	0
Torrance	23	0	25	0	19	20	0	5	0	1	1	0
Union	1	8	37	0	20	11	1	0	0	11	0	0
Valencia	2	9	4	0	6	0	0	1	53	53	3	0
Total	267	67	1514	0	1796	185	120	52	66	358	48	1

INTERIM REPORT

State: New Mexico **Grant Number:** W-137-R-11

Grant Title: Furbearer Surveys, Inventory and Management

Contract Period: July 1, 2014 through June 30, 2015

I. Program Narrative Objective:

To develop, implement, and monitor programs and/or projects designed to manage resident furbearer resources and their associated habitats such that viable population levels are maintained for their recreational, educational, scientific, and/or intrinsic value. These activities have included participation at the state, regional, national and international level.

Abstract

Resident furbearing species (i.e., badger, beaver, bobcat, coatimundi, ermine, gray fox, kit fox, long-tailed weasel, muskrat, nutria, raccoon, red fox, ringtail, and swift fox) are important biological, recreational, and economic components of New Mexico's ecosystems. It is important that any activity associated with these resources (e.g., trapping, hunting, habitat manipulation, recreation, scientific collection, depredation/nuisance abatement) utilize sound biological bases in order to preclude detrimental impacts to these populations. Activities that support hunting and trapping, research, and management require continuous population and harvest trend monitoring, the distribution of new results and information, and development and implementation of appropriate management practices.

II. Summary of Progress:

Activity 1: Grant Administration and Coordination:

Grant personnel administered and coordinated grant activities among Department Divisions, Area staff and outside entities by attending meetings and maintaining contact by telephone and email on matters concerning resident furbearer management. Monthly reports were completed, equipment, field and office supplies were purchased, and hours worked were tracked. Grant personnel coordinated with Federal Grant Managers to monitor grant projects, and to ensure the grant project, and Department mission, goals and objectives were being met. Information was distributed to various publics regarding resident furbearer management, furbearer biology, and furbearer foundational resource base.

Activity 2: Beaver Habitat Mapping

The beaver habitat mapping project is complete. Grant personnel communicated with the US Forest Service and NGOs regarding suitable beaver habitat locations and the process for translocating beavers.

Activity 3: *Scent Post Surveys*

The project objective is to determine furbearer population trends in the four geographic quadrants of New Mexico as divided by counties. Department personnel conducted scent post surveys on 16 kilometer sections of rural and forest roads throughout the state. The scent post surveys consisted of placing scent stations and prepared tracking surfaces every 1.6 kilometers one day and then returning to record visitation the following morning. During this reporting segment 358 scent station nights were completed.

Transects comprised of 10 scent stations, each spaced 1.6 km apart, were established starting approximately August 15 and finishing by Nov. 15, 2014, along randomly selected primitive or unimproved roads. These road types were selected to reduce bias induced by heavy volumes of traffic. The distance between stations limits the probability of a single animal visiting more than one station between checks and being counted twice (Nottingham et al. 1989, Sergeant et al. 1998). Up to 12 survey lines were established in each of the state's 4 geographic quadrants (Northwest, Northeast, Southwest, Southeast) divided by counties. Each station consisted of a 1 m diameter area in which vegetation was removed and replaced with mixed sand and mineral oil to record track impressions. In the center was placed a plaster of paris disk scented with either Cat-Man-Do lure (Milligan Brand, Inc., Chama, NM) or fatty acid (Pocatello Supply, Pocatello, ID). Each scent attracts a different suite of furbearer species. Stations were prepared in the afternoon and checked for tracks the following morning. Tracks of each furbearer species were identified and recorded on a survey form. Each transect was surveyed once. Results were based on visitation rates by quadrant and an overall visitation rate (Table 1 below and Appendix A.).

Recent developments in field techniques and statistical analyses led to the grant leader spending time researching and developing new survey techniques, and studying new statistical methods. These new techniques will be implemented in the next grant segment.

Table 1. Percent of scent-post stations visited by furbearers in 2014 in New Mexico

Northwest Quadrant	22.1%
Northeast Quadrant	10.0%
Southwest Quadrant	39.2%
Southeast Quadrant	12.7%
Statewide Visitation Rate	25.0%

Activity 4: *Harvest Reporting*

The project objective was to determine the number and species of furbearers harvested by county throughout the State of New Mexico. At the time of this report the mandatory furbearer license reporting reports were complete. 1,768 furbearer licenses were sold during the 2014-2015 season, and 5,013 protected furbearers were harvested (Appendix B).

III. Significant Deviations:

No significant deviations occurred.

IV. Conclusions and Recommendations:

A continued effort by animal advocacy groups to ban the practice of trapping on public lands puts the future of this management/recreational activity into question. The Department has developed a resource foundational matrix outlining resident furbearers by species, population, habitat, management, etc. in order to more easily visualize and implement the management of each resident furbearing species subject to harvest. Therefore it is important that statistically rigorous surveys be implemented in order to provide biological basis for resident furbearer management and recreational activities conducted with the resource.

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Federal Assistance Coordinator

Date: _____

APPENDIX A

State Quadrants and Percent Relative Abundance of Furbearers, 2014

Table 1. Northwest Quadrant (@ 90 scent station nights) in San Juan, McKinley, and Rio Arriba Counties

Species	Visits	% Visitation
Badger	1	1.1%
Coyote	7	7.8%
Gray Fox	3	3.3%
Swift/Kit Fox	3	3.3%
Red Fox	1	1.1%
Bobcat		
Cougar		
Raccoon	1	1.1%
Ringtail		
Skunk	2	2.2%
Weasel	2	2.2%
Total	20	22.1%

Table 2. Northeast Quadrant (@ 30 scent station nights) in Quay County

Species	Visits	% Visitation
Badger	1	3.3%
Coyote		
Gray Fox		
Swift/Kit Fox	2	6.7%
Red Fox		
Bobcat		
Cougar		
Raccoon		
Ringtail		
Skunk		
Weasel		
Total	3	10.0%

Table 3. Southwest Quadrant (@ 120 scent station nights) in Catron, Grant, Dona Ana, & Socorro Counties

Species	Visits	% Visitation
Badger	2	1.7%
Coyote	14	11.7%
Gray Fox	16	13.3%
Swift/Kit Fox	7	5.8%
Red Fox		
Bobcat		
Cougar		
Raccoon		
Ringtail	2	1.7

Skunk	6	5.0
Weasel		
Total	47	39.2%

Table 4. Southeast Quadrant (@ 80 scent station nights) in Eddy, Lincoln & Otero Counties

Species	Visits	% Visitation
Badger		
Coyote	1	1.3%
Gray Fox	4	5.0%
Swift/Kit Fox	1	1.3%
Red Fox		
Bobcat	1	1.3%
Cougar		
Raccoon		
Ringtail	1	1.3%
Skunk	2	2.5%
Weasel		
Total	10	12.7%

Table 5. Percent of scent-post stations visited by furbearers in 2014 in New Mexico

Northwest Quadrant	22.1%
Northeast Quadrant	10.0%
Southwest Quadrant	39.2%
Southeast Quadrant	12.7%
Statewide Visitation Rate	25.0%

Table 6. Percent of scent-post stations visited by 9 furbearers in 2014 in New Mexico

Badger	1.25%
Coyote	6.9%
Gray Fox	7.2%
Swift/Kit Fox	4.1%
Red Fox	0.31%
Bobcat	0.31%
Ringtail	1.25%
Skunk	3.10%
Weasel	0.63%
Overall Visitation	25.0%

APPENDIX B

2014-15 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

Elise Goldstein, Carnivore and Small Mammal Program Manager
New Mexico Department of Game and Fish

At the time of this report the mandatory furbearer license reporting reports were complete. 1,768 furbearer licenses were sold during the 2014-2015 season. Harvest report records were accessed August 26, 2014. 5,013 individual protected furbearers were harvested this season. There is no mandatory reporting requirement for unprotected furbearer species, therefore they are not included in this report.

Table 1. Total Number of Each Species Trapped

Species	Quantity
beaver	151
muskrat	119
nutria	0
red fox	165
swift fox	96
kit fox	207
Grey fox	2,290
Ringtail	72
Ermine	0
Long-tailed weasel	0
Badger	172
Bobcat*	1,649 (1,437)
Raccoon	304

*The number of bobcats harvested is derived from CITES tag reports and is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Differences in the reported bobcat harvest and the CITES tagged bobcats are accounted for by several different factors, such as: trappers from reservation lands that tag their cats but do not have state licenses, poor recollection of the number of animals taken during the season and non-reporters who do not intend to trap the following year.

Table 2. Number of each species trapped by county

<u>County</u>	<u>Badger</u>	<u>Beaver</u>	<u>Bobcat</u>	<u>Ermine</u>	<u>Grey Fox</u>	<u>Kit Fox</u>	<u>Red Fox</u>	<u>Swift Fox</u>	<u>Muskrat</u>	<u>Raccoon</u>	<u>Ringtail</u>	<u>Long-tailed Weasel</u>
Bernalillo		4	5		17				17	11		
Catron	11		124		295	36						
Chaves	4		13		29	10		16		33		
Cibola	5	3	39		89	4		5		1	1	
Colfax	3	1	20		73	2	8		3	7	4	
Curry												
DeBaca	4	8	30		15		2	6	6	32		
DonaAna	3		111		147	8		17		20		
Eddy	1		79		52	13		9		36	4	
Grant	9		77		332	36	2			5	18	
Guadalupe			12		47							
Harding			12		25							
Hidalgo	4		48		45	16		5		5		
Lea	2											
Lincoln	6		36		76	1	5	6		2	5	
LosAlamos												
Luna	2		10		15							
McKinley	11		52		49	30	8					
Mora		1	30		29	1				1	1	
Otero	7		74		81	9				9	4	
Quay	13		31		77					19	2	
Rio Arriba	11	69	135		129		7		17	10	19	
Roosevelt			1		15		7					
San Juan	12	49	85		83	1	113			17	4	
San Migu	1	2	69		91					8		
Sandoval	9	3	75		87	6	2			1		
Santa Fe	2	4	37		44					4		

Sierra	6		46		118	19	1			2	3	
Socorro	35		84		153		1	27		3	4	
Taos	2		38		21		7		1	3		
Torrance	4		38		27	4		1			1	
Union		7	13		27	11	2	1		3		
Valencia	5		13		2			3	75	72	2	
Total	172	151	1437	0	2290	207	165	96	119	304	72	0

INTERIM REPORT

State: New Mexico **Grant Number:** W-137-R-14

Grant Title: Furbearer Surveys, Inventory and Management

Contract Period: July 1, 2013 through June 30, 2014

I. Program Narrative Objective:

To participate in the development, implementation, and monitoring of programs and/or projects designed to manage resident furbearer resources and their associated habitats such that viable population levels are maintained for their recreational, educational, scientific, and/or intrinsic value. These activities have included participation at the state, regional, national and international level.

Abstract

Resident furbearing species (i.e., badger, beaver, bobcat, coatimundi, ermine, gray fox, kit fox, long-tailed weasel, muskrat, nutria, raccoon, red fox, ringtail, swift fox) are important biological, recreational, and economic components to the ecosystems of New Mexico. It is important that any activity associated with these resources (e.g., trapping, hunting, habitat manipulation, recreation, scientific collection, depredation/nuisance abatement) utilize sound biological bases in order to minimize potential detrimental impacts to the resource base. Activities that support regulatory implementation, research, and management issues on these resources require continuous participation in monitoring of population and harvest trends, the accumulation and distribution of new results and information, and the development and implementation of appropriate management practices.

II. Summary of Progress:

Activity 1: *Grant Administration and Coordination:*

Elise Goldstein was hired as the new Furbearer Biologist and assumed duties in May 2014.

Grant personnel administered and coordinated grant activities among Department Divisions, Area staff and outside entities by attending meetings and maintaining contact by telephone and email on matters concerning resident furbearer management.

Grant personnel also completed monthly reports, maintained inventories and

equipment, purchased field and office supplies and tracked sick, annual, personal and holiday leave.

Grant personnel coordinated with Federal Grant Managers periodically to monitor grant projects, plans to ensure the grant project, and Department mission, goals and objectives being met.

Grant personnel corresponded through available media and distributed information to various publics regarding resident furbearer management, furbearer biology, furbearer foundational resource base and management.

Activity 2: Beaver Habitat Mapping

Determine the extent of beaver populations in riparian areas in New Mexico and locate areas of beaver activity.

The Large Carnivore and Furbearer Biologist worked with Department GIS staff to map beaver habitat. Communication with outside agencies and or NGOs was also made regarding beaver habitat mapping, beaver management and status of current beaver populations.

Activity 3: Scent Post Surveys

The project objective is to determine furbearer population trends in the four geographic quadrants of New Mexico as divided by counties. This is a new division based upon actual harvest of furbearers by county and more accurately reflects any population level changes that may occur due to furbearer harvest.

Department personnel conducted scent post surveys on 16 kilometer sections of rural and forest roads throughout the state. The scent post surveys consisted of placing scent stations and prepared tracking surfaces every 1.6 kilometers one day and then returning to record visitation the following morning. During this reporting segment 358 scent station nights were completed.

Transects comprised of 10 scent stations, each spaced 1.6 km apart, were established starting approximately Sept. 1 and finishing by Nov. 15, 2012, along random selected primitive or unimproved roads. These road types were selected to reduce bias induced by heavy volumes of traffic. The distance between stations limits the probability of a single animal visiting more than one station between checks and being counted twice (Nottingham et al. 1989, Sergeant et al. 1998). Up to 12 survey lines were established in each of the states 4 geographic quadrants (Northwest, Northeast, Southwest, Southeast) divided by counties. Each station consisted of a 1 m. diameter area in which vegetation was removed and replaced with mixed sand and

mineral oil to record track impressions. In the center was placed a plaster of paris disk scented with either Cat-Man-Do lure (Milligan Brand, Inc., Chama, NM) or fatty acid (Pocatello Supply, Pocatello, ID). Each scent attracts a different suite of furbearer species. Stations were prepared in the afternoon and checked for tracks the following morning. Tracks of each furbearer species were identified and recorded on a survey form. Each transect was surveyed once. Results were based on visitation rates by quadrant and an overall visitation rate (Table 1 below and Appendix A.).

TABLE 1. 2013 Results

Visitation Rates by Quadrant

Northwest Quadrant	40.0%
Northeast Quadrant	66.7%
Southwest Quadrant	46.7%
Southeast Quadrant	31.1%
Overall Visitation Rate	46.1%

Activity 4: Harvest Reporting

The project objective was to determine the number and species of furbearers harvested by county throughout the State of New Mexico.

At the time of this report the mandatory furbearer license reporting reports were complete. 1,831 furbearer licenses were sold during the 2013-2014 season (Appendix B).

Other Management Activities

Grant personnel participated in the development, administration, implementation, and monitoring of management plans/programs/projects that provide protection and/or enhancement of the status of resident furbearers and/or their associated habitats. The department continues to track and analyze furbearer resources, habitat, and population densities statewide.

Grant personnel participated in the design, implementation, and monitoring of the public involvement process to gather public input on the management of resident furbearer resources in New Mexico. Comments were requested via the Department's website, public meetings, public media, telephone and cooperation with outside entities.

III. Significant Deviations:

No significant deviations occurred.

IV. Conclusions and Recommendations:

A continued effort by animal advocacy groups to ban the practice of trapping on public lands puts the future of this management/recreational activity somewhat into question. Much public input was received during this segment and the preceding one both in support and in opposition to the practice of harvesting furbearers. The Department has developed a resource foundational matrix outlining resident furbearers by species, population, habitat, management, etc. in order to more easily visualize and implement the management of each resident furbearing species subject to harvest.

The public involved in the campaign against harvest of furbearers have repeatedly stated that their goal is not to improve the management of furbearers and trapping, but to ban trapping on public lands for perceived threats to the safety of humans and pets.

This campaign culminated in at least one lawsuit against the department and in an effort to ban trapping on public lands statewide in the legislature, both of these efforts were defeated, though at a cost to the sportsmen of the state of time and legal funds used by the Department. Therefore it is important that these surveys continue in order to provide biological basis for resident furbearer management and recreational activities conducted with the resource.

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Date: _____

APPENDIX A.

State Quadrants and Percent Relative Abundance of Furbearers, 2013

Northwest Quadrant (@ 90 scent station nights)

Cibola, McKinley and Rio Arriba Counties

Species	Visits	% Visitation
Badger	2	2.2%
Coyote	13	14.4%
Gray Fox	9	10%
Swift/Kit Fox	2	2.2%
Red Fox		
Bobcat	2	2.3%
Cougar		
Raccoon		
Ringtail		
Skunk	5	5.5%
Weasel	3	3.3%
Total	36	40.0%

Northeast Quadrant (@ 60 scent station nights)

Quay & San Miguel Counties

Species	Visits	% Visitation
Badger		
Coyote	9	10.0%
Gray Fox	7	11.7%
Swift/Kit Fox	13	21.7%
Red Fox		
Bobcat		
Cougar		
Raccoon		
Ringtail	1	1.7%
Skunk	10	16.7%
Weasel		
Total	40	66.7%

Southwest Quadrant (@ 120 scent station nights)

Catron, Grant, Sierra & Socorro Counties

Species	Visits	% Visitation
Badger		
Coyote	10	8.3%

Gray Fox	24	20.0%
Swift/Kit Fox	11	9.2%
Red Fox		
Bobcat	1	0.8%
Cougar		
Raccoon		
Ringtail		
Skunk	9	7.5%
Weasel	1	0.8%
Total	56	46.7%

Southeast Quadrant (@ 90 scent station nights)

Eddy, Lincoln & Otero Counties

Species	Visits	% Visitation
Badger		
Coyote	4	4.4%
Gray Fox	10	11.1%
Swift/Kit Fox	3	3.3%
Red Fox		
Bobcat		
Cougar	1	1.1%
Raccoon	1	1.1%
Ringtail		
Skunk	9	10.0%
Weasel		
Total	28	31.1%

Visitation Rates by Quadrant

Northwest Quadrant	40.0%
Northeast Quadrant	66.7%
Southwest Quadrant	46.7%
Southeast Quadrant	31.1%
Overall Visitation Rate	46.1%

Visitation Rates by Species

Badger	0.55%
Coyote	10.0%
Gray Fox	13.9%
Swift/Kit Fox	8.05%

Bobcat	0.83%
Ringtail	0.28%
Skunk	9.17%
Weasel	1.11%
Overall Visitation Rate	44.44%

APPENDIX B.

2013-14 New Mexico Hunter Harvest Report Program Summary of Results--Furbearers

Elise Goldstein, Furbearer Biologist
New Mexico Department of Game and Fish

At the time of this report the mandatory furbearer license reporting reports were complete. 1,831 furbearer licenses were sold during the 2013-2014 season. Harvest report records were accessed July 31, 2014. 13,318 individual furbearers were harvested this season.

Total Number of Each Species Trapped

Species	Quantity
beaver	88
muskrat	156
nutria	5
red fox	267
swift fox	76
kit fox	140
Grey fox	3,133
Ringtail	151
Ermine	0
Long-tailed weasel	0
Badger	206
Bobcat*	2,057 (2,145)
Raccoon	376
Coyote	6,235
Spotted skunk	18
Striped skunk	291
Hooded skunk	3

*The number of bobcats harvested is derived from CITES tag reports and is indicated in RED. The number of bobcats from the hunter harvest reporting system is in BLACK. Differences in the reported bobcat harvest and the CITES tagged bobcats are accounted for by several different factors, such as: trappers from reservation lands that tag their cats but do not have state licenses, poor recollection of the number of animals taken during the season and non-reporters who do not intend to trap the following year.

Species Trapped by County

County	Beaver	Muskrat	Nutria	Red fox	Swift Fox	Kit Fox	Gray Fox	Ring tail	Ermine	Long-tailed Weasel	Badger	Bobcat	Raccoon	Covote	Spotted Skunk	Striped Skunk	Hooded Skunk	Hognose Skunk
Bernalillo		3					15	1				3	9	19				
Catron						7	300	2			11	188	1	329		40		
Chaves					20	14	67	1			2	37	54	346		13		
Cibola				7			108	6				49	3	161				
Colfax	2			17		11	130	12			2	59	8	157	1	12	2	
Curry							26				2	1		152				
DeBaca	3						6					6	19	30			2	
DonaAna	4				5	20	97				3	89	7	143		3		
Eddy		2		9	9	1	54	8			6	92	7	283				
Grant				2	3	15	434	26			14	201	4	408	1	38	1	8
Guadalupe						1	118					33		271				
Harding							68				2	51		54				
Hidalgo					1	21	35					16	1	142		2		
Lea				2		5	3				2	8	10	12				
Lincoln	3		5		3	1	163	24			7	112	50	184	1	20		3
LosAlamos							1											
Luna				1	4		12					16	2	87				
McKinley	2			24		12	57	2			16	89		349	4	1		
Mora	16			3	1	1	85				2	66	2	83			6	
Otero					1	9	92	8			3	137	15	198			3	
Quay				2			159	1			21	85	8	352		26		16
Rio Arriba	14			24			142	7			25	182	17	469	4	19		
Roosevelt							5					1		11				
San Juan	21	77		162			128	21			17	121	74	382	7	19		
San Migu	3						206	3				62	9	182		9		
Sandoval				3			103	7			10	47	6	213		17		
Santa Fe							38					27	4	101				1
Sierra					2	8	95	9			4	48	11	158		21		

Socorro	1	15		7	4	12	170	8			34	109	2	433		5		
Taos	19	5		4			10	1			1	58	1	66				
Torrance					10		91				4	65	1	95		2		
Union					11	2	102				14	71	14	333		33		
Valencia		54			2		13	4			4	16	37	32				
Total	88	156	5	267	76	140	3133	151	0	0	206	2145	376	6235	18	291	3	28

W-137-R-14 Furbearer Surveys, Inventory and Management
July 1, 2013 through June 31, 2014

Best Management Practices for Trapping in the United States

INTRODUCTION



ASSOCIATION *of*
FISH & WILDLIFE
AGENCIES

The Association of Fish and Wildlife Agencies (AFWA), formerly the International Association of Fish and Wildlife Agencies (IAFWA), was founded in 1902. It is an organization of public agencies charged with the protection and management of North America's fish and wildlife resources. The 50 state fish and wildlife agencies, as well as provincial and territorial governments in Canada, are members. Federal natural resource agencies in Canada and the United States are also members. The Association has been a key organization in promoting sound resource management and strengthening state, provincial, federal, and private cooperation in protecting and managing fish and wildlife and their habitats in the public interest.

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Acknowledgements

Best Management Practices (BMPs) for Trapping in the United States was written by the Furbearer Conservation Technical Work Group of the Association of Fish & Wildlife Agencies. Development of this document would not have been possible without the cooperation and participation of many state wildlife agencies, expert trappers and trapper organizations. State agency personnel provided on-the-ground coordination and supervision in those states where BMP trap testing occurred, and many agency staff members provided constructive comments on earlier drafts of this document. We thank the wildlife veterinarians at the University of Georgia, the University of Wyoming and Wildlife Health Associates who completed evaluations of captured animals.

We thank the members of trapper associations, individual trappers and technicians who took part in field-testing that supported the development of these BMPs. Their hard work and commitment to the continued improvement of trapping in the United States was an essential contribution to the success of this project. We also appreciate the involvement of the National Trappers Association from the inception of the BMP process and would like to acknowledge their continuing assistance and support.

We are indebted to the Fur Institute of Canada (FIC) for providing valuable information on the animal welfare of furbearers captured in bodygrip traps and the mechanical attributes of both bodygrip and foothold traps. Their research has provided the information needed for inclusion of many important trapping devices in the respective BMPs and would have been practically impossible to obtain otherwise.

We also extend our appreciation to the many cooperating landowners who permitted BMP trap testing to be conducted on their property. They have made a significant contribution to the future of furbearer management in the United States.

The U.S. Department of Agriculture (USDA) provided funding for trapping BMP research and development. The International Fur Trade Federation provided additional funding, and many state agencies made substantial in-kind contributions.

Mission Statement

The Furbearer Conservation Technical Work Group is composed of wildlife biologists from state fish and wildlife agencies throughout the United States. Regional representation is from the Northeast, Southeast, Midwest, West and Alaska.

The mission of the Furbearer Conservation Technical Work Group of the Association of Fish & Wildlife Agencies is to maintain the regulated use of trapping as a safe, efficient and acceptable means of managing and harvesting wildlife for the benefits it provides to the public, while improving the welfare of trapped animals.



Introduction

The purpose of the BMP process is to scientifically evaluate the traps and trapping systems used for capturing furbearers in the United States. Evaluations are based on animal welfare, efficiency, selectivity, practicality and safety. Results of this research are provided as information to state and federal wildlife agencies and trappers.

The goals of this document are:

- To promote regulated trapping as a modern wildlife management tool
- To identify practical traps and trapping techniques that continue to improve efficiency selectivity, and the welfare of trapped animals
- To provide specifications for traps that meet BMP criteria for individual species in various regions of the United States
- To provide wildlife management professionals with information to evaluate trapping systems in the United States
- To instill public confidence in and maintain public support for wildlife management and trapping through distribution of science-based information

BMPs serve as a reference guide to wildlife management agencies, conservation organizations, tribal nations, researchers, trapper organizations, individual trappers and others interested in the continued improvement of traps and trapping systems.

Benefits of Trapping

Trapping is a highly regulated activity. Anyone who traps must follow strict rules established and enforced by state fish and wildlife agencies. Restrictions on species that may be harvested, harvest seasons, trap types, trapping methods and areas open to trapping are some examples of the guidelines and regulations that state agencies regularly review, implement and enforce.

Trapping is an element of many wildlife management programs. In some cases, local populations of furbearers are controlled, thereby helping to minimize human-wildlife conflicts and mitigate habitat changes brought about by certain furbearer species. Similarly, trapping contributes to the protection of threatened and endangered species by controlling predators. Trapping also is used to relocate animals to and restore populations in areas where conditions are suitable for the species to thrive.

Scientists collect important ecological information about wildlife through the use of trapping. Preferred habitats, migration patterns and population indices for some species of wildlife are determined through mark and recapture programs and by monitoring regulated harvest levels. In addition, trapping can help reduce the exposure of humans and pets to rabies and other diseases. Trapping is widely recognized by the wildlife conservation community as a beneficial outdoor activity, providing food, clothing, cosmetic items, artists' supplies and other products.

BMPs are intended to inform people about traps and trapping systems considered to be state of the art in animal welfare and efficiency. Through the use of BMP guidelines, trappers can continue to play an important role in furbearer management programs across the United States.

BMPs are based on the most extensive study of animal traps ever conducted in the United States. Test traps were selected based on knowledge of commonly used traps, previous research findings and input from expert trappers. Statisticians from universities and federal and state agencies developed rigorous study designs. Experienced wildlife biologists and trappers developed study procedures, supervised or participated in field research and provided insight and expert technical advice on trapping methods to ensure the completion of each project. Data collection, including safety evaluations, was undertaken following widely accepted international standards for testing traps specified in the International Organization for Standardization (ISO) Documents 10990-4 and 10990-5. Wildlife biologists and statisticians assisted in data analysis and interpretation during the development of this document.

Although many details of trap testing procedures and results are available in other documents, some understanding of the procedures is important and can be gained by reading this document.

Best Management Practices

Wildlife professionals, trappers and trapper associations historically have worked to improve trapping. Most of the advancements used today come from the efforts of trappers. Wildlife agencies have a long history of regulating trapping to assure that the traps and trapping systems being used are the best available. State fish and wildlife agencies must continue to take a lead role by establishing a practical and effective plan for the improvement of trapping systems in order to maintain trapping as a valuable wildlife management practice.

The BMP framework provides a structure and criteria for identifying and documenting trapping methods and equipment that will continue to improve trapping. The trapping BMP project is intended to provide wildlife management professionals in the United States with the data necessary to ensure improved animal welfare in trapping programs. Trapping BMPs are based on scientific research and professional experience regarding currently available traps and trapping technology. Trapping BMPs identify both techniques and traps that address the welfare of trapped animals and allow for the efficient, selective, safe and practical capture of furbearers.

Trapping BMPs are intended to be a practical tool for trappers, wildlife biologists, wildlife agencies and anyone interested in improved traps and trapping systems. BMPs include technical recommendations from expert trappers and biologists and a list of specifications of traps that meet or exceed BMP criteria. BMPs provide options, allowing for discretion and decision making in the field when trapping furbearers in various regions of the United States. They do not present a single choice that can or must be applied in all cases. The suggestions contained in this document include practices, equipment and techniques that will continue to ensure the welfare of trapped animals, avoid unintended captures of other animals, improve public confidence in trappers and wildlife managers, and maintain public support for trapping and wildlife management.

Trapping BMPs are recommendations to be implemented in a voluntary and educational approach. The trapping BMPs are the product of ongoing work that may be updated as additional traps are identified in the future. BMPs are intended to compliment and enhance trapper education programs. It is recommended that all trappers participate in a trapper education course. Trapping BMPs provide additional technical and practical information to help trappers and managers identify and select the best traps available for a given species and provide an overview of methods for proper use.

Criteria for Evaluation of Trapping Devices

For the purpose of developing trapping BMPs, thresholds were established by the Furbearer Conservation Technical Work Group of AFWA for several trap performance criteria. These thresholds were derived from reference standards annexed to the 1997 understanding reached between the United States of America and the European Community and with input from wildlife biologists and wildlife veterinarians involved in this effort. These thresholds provide a common framework for evaluating progress toward the use of more humane traps and trapping methods. Assessments of injury were undertaken in the furtherance of such common framework.

Restraining Devices

All types of traps used on land to hold live animals were evaluated using five performance criteria: animal welfare, efficiency, selectivity, practicality and safety. Live restraining devices included cage traps; foothold traps; enclosed foothold devices, such as the EGG trap™; and powered and non-powered cable devices, including modified designs like the Belisle™ foot snare.

Animal Welfare

Trauma scales used to determine a level of animal welfare performance for restraining traps are presented as guidelines in ISO (International Organization for Standardization) Document 10990-5. One scale allocates points to specific injuries, including a zero score for uninjured animals. The other scale groups specific injuries into classes ranging from none to severe. A combination of both systems was used in this evaluation process. The primary species captured in traps that meet BMP performance criteria must have an average cumulative score of 55 points or less according to one scale. According to the other scale, 70% or more of those in the sample must have no injuries or only have trauma described as mild or moderate.

Efficiency

Traps meeting BMP criteria must be able to capture and hold at least 60% of the primary species of interest that activate the trap. An activated trap is one that has been sprung. An activated cable device is one that has the cable loop closed.

$$\text{Efficiency} = \frac{\text{Number of primary species captured}}{\text{Number of activations by primary species}} \geq 60\%$$

Selectivity

Traps should be set and used in a fashion that limits the risk of capturing non-furbearers, including domestic animals, while increasing the chances of capturing desired furbearer species. Data concerning selectivity were collected in field studies and used to identify those traps that have features that influence selectivity. These features and any special considerations are provided in the Mechanical Description and Attributes section for each BMP-designated trap.

Practicality

Traps should be practical for use in the field under trapline conditions. After a particular BMP trap test, each trapper was asked for information regarding practicality. These comments were then reviewed to detect any traps with consistently poor scores. In addition, a panel of experienced trappers and wildlife biologists evaluated each trap and considered the following:

- Cost of initial purchase and maintenance
- Replacement of parts, ease in setting and resetting
- Ease of transport and storage
- Weight and dimensions
- Reliability
- Versatility
- Expected usable life span
- Need for specialized training prior to use

Any special considerations are described in the Mechanical Description and Attributes section for each BMP designated trap.

Traps were selected for testing based on their relative use among trappers surveyed by IAFWA (now AFWA) in 1992 and 2004 and in consultation with wildlife biologists and expert trappers. Commonly used trap models and modifications and new, readily available designs that may improve animal welfare were given priority for testing. Experienced local trappers tested traps during regulated trapping seasons using daily trap checks to provide for consistent, repeatable and reliable data for the most accurate analysis possible. Technicians accompanied trappers and recorded data. Teams worked under field conditions throughout the United States during regulated trapping seasons. Wildlife veterinary pathologists examined captured animals for trap-related injuries using full-body necropsies following international trap testing guidelines. A minimum of 20 specimens were examined for each trap evaluated.

The development of trapping BMPs is an ongoing work that is flexible and adaptable as existing trap models are improved and additional models are tested. Criteria to identify BMP traps are standardized. Trap models that were tested and met these criteria are included in the BMPs for individual furbearers.

Other commercially available traps, modified traps, or other capture devices not yet tested may perform as well as or better than the listed BMP traps. Recommendations to wildlife agencies, biologists and trappers may be updated as additional devices are identified in the future. The listing of specific commercially available BMP traps is not an endorsement by the Association of Fish and Wildlife Agencies or that of any of our member agencies.

Safety

Traps should not present a significant risk to the user, and if necessary, should have appropriate safety features, safety tools, or a combination of the two that can be used easily under normal trapline conditions. Each trapper testing traps for the BMP project was asked to judge whether tested traps posed an unreasonable risk to the user or others who might come into contact with the trap. A panel of experienced trappers and wildlife biologists then evaluated each trap. Safety issues, if any, are described in more detail in the Mechanical Description and Attributes section for each BMP-designated trap.

Mechanically Powered Killing Devices

Mechanically powered killing traps, commonly called bodygrip or rotating-jaw traps (e.g., Conibear™ traps), are designed to kill an animal when two rotating jaws close on either side of the animal's neck or chest. Most of the mechanical testing and research on killing traps has been conducted at the Alberta Research Council facility in Canada. Field-testing of killing traps has been conducted throughout the United States. Killing traps are evaluated with the same five criteria as restraining traps (animal welfare, efficiency, selectivity, practicality and safety), but killing traps must meet different performance standards for animal welfare and safety.

The animal welfare performance standard for killing traps set on land is that the trap must cause irreversible loss of consciousness in 70% of the sample animals within 300 seconds. Killing traps must meet two additional performance standards for safety. First, a trapper must be able to release him/herself from an accidentally fired trap without assistance and second, the forces generated by the trap should not be likely to cause significant human injury. Performance standards for commonly used killing devices are comparable to those described for restraining devices.

Submersion Trapping Systems

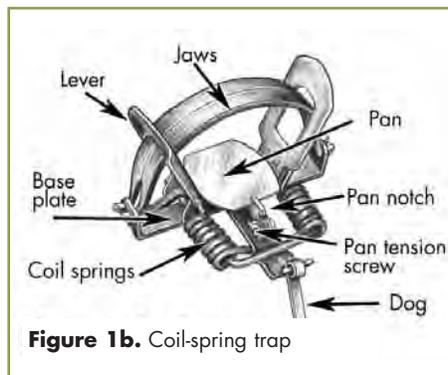
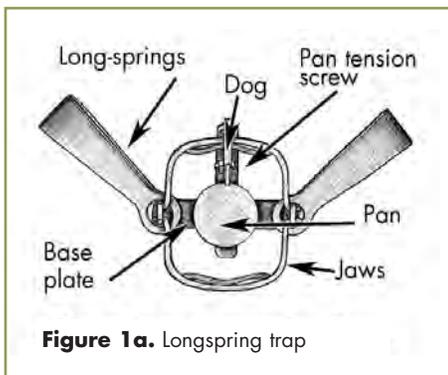
Submersion trapping systems are frequently used for furbearers that are found in or near waterways. These systems consist of traps, equipment and techniques that allow or cause furbearers, when trapped, to quickly and irreversibly submerge until death occurs. Submersion systems can employ bodygrip traps, cage traps, cable devices or foothold traps of the appropriate size and weight. Traps are either set underwater at a depth that prevents the captured animal from reaching the surface, or they are set in shallow water near shore and attached with a one-way sliding lock to a cable anchored in deep water.

The animal welfare performance standard for submersion trapping systems is that the equipment must prevent the animal from surfacing once it has submerged. Performance standards for submersion trapping systems are comparable to those used for restraining and killing devices.

Capture Devices

Foothold Traps

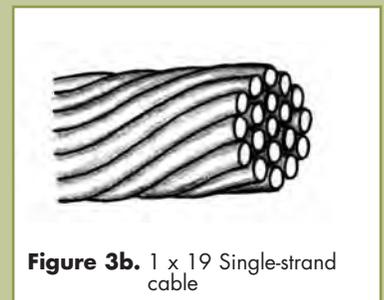
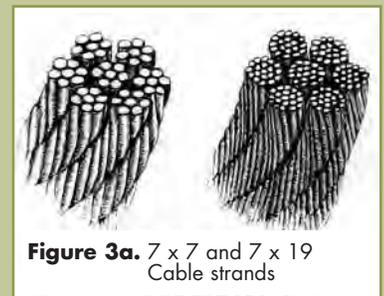
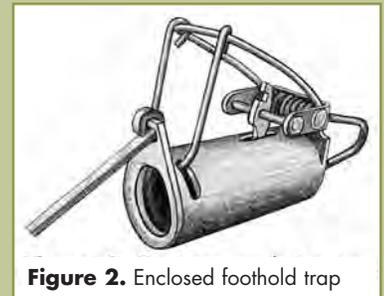
Longspring and coil-spring traps (Figures 1a and 1b) are the most commonly used trap types, as they can be used in a myriad of set types on land and in water. The basic design of foothold traps has two jaws attached to a baseplate with a pan-trigger device. Longspring traps are powered by either one or two springs while the standard coil-spring trap is fitted with two small springs. Many modifications can be made to affect the performance of these traps, as described in the next section. Some coil-spring traps are designed to encapsulate the animal's foot, and some have a bar trigger that is either pulled or pushed for activation. These foot-encapsulating traps (Figure 2) are highly species selective by design.



Cable Devices

A cable device is made of stranded steel cable set in a manner so that a loop of cable encircles the animal's body or limb. Like foothold traps, they can be used in a variety of set types on land and in water. Modern cable devices are made from stranded steel cable. Various sizes are used, three examples of which are: the 7 x 7 design that has 7 bundles of 7 wires each, the 7 x 19 design that has 7 bundles of 19 wires each (Figure 3a), and the 1 x 19 single-strand design that consists of 7 wires (twisted right) wrapped by 12 wires (twisted left) (Figure 3b). These cable types can be used effectively as cable devices.

A non-powered cable device uses the forward movement of the animal to place and close the loop on its body or limb. The powered cable device uses a mechanical feature, such as a spring, to place or close the loop of the cable on an animal's body or limb. An example of a powered cable device is the coil-spring activated Belisle™ Foot Snare (Figure 4a), which employs a foothold-like pan system to activate springs that throw a cable around the animal's foot.



Each region of the country may have conditions that affect trapping, and BMPs are developed with this in mind. An example is the difference in coyotes (i.e. behavior, size, habitat and management programs across the U.S.), resulting in two coyote BMPs (Eastern and Western). Both trappers and governmental agencies are encouraged to use BMP traps that are best suited for their purposes. All trappers should consult state trapping regulations to be sure the devices and techniques recommended in the BMPs are permitted in their state.

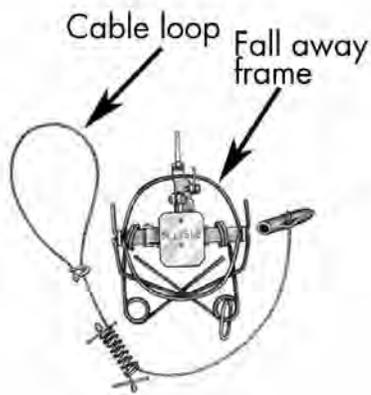


Figure 4a. Belisle foot snare

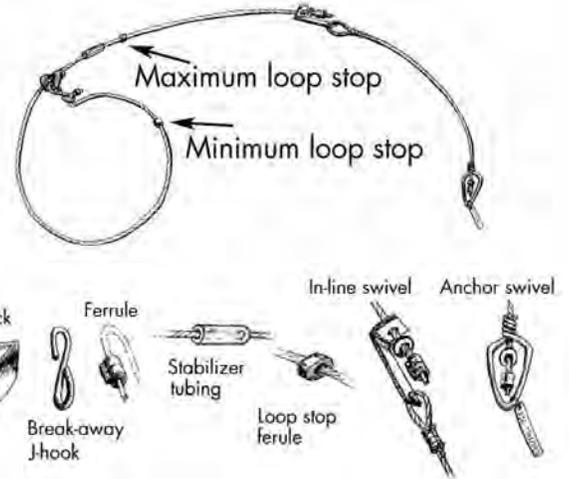


Figure 4b. Non-powered cable device components

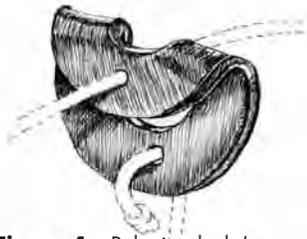


Figure 4c. Relaxing lock (example)



Figure 4d. Typical break-away

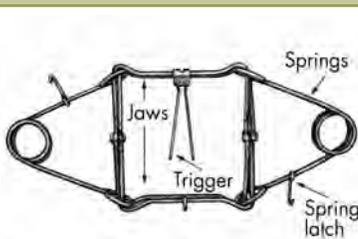


Figure 5. Standard bodygrip trap

Cable devices can be designed in several ways and may have one or more of the following components: relaxing lock; break-away J-hook S-hook, or ferrule; stabilizer tubing; loop stop ferrule, in-line swivel; and/or anchor swivel (Figure 4b). Relaxing locks allow the loop of the cable device to draw smaller as the animal pulls against it but does not continue to close when the animal stops pulling (Figure 4c). Many types of relaxing locks are available. Ferrules are used for several purposes, such as to hold the lock or swivel on the cable or as a breakaway device. Ferrules can be made from many materials, including a steel nut, wire or aluminum cylinders. Break-away devices are components that allow an animal to escape from the cable device if it pulls against it with sufficient force (Figure 4d). Ferrules and J-hooks are two examples of breakaway devices. Loop stops may be made from heavy gauge wire, steel nuts or crimped ferrules and may be used to maintain the cable loop at a minimum or maximum diameter, or both (Figure 4b). The maximum loop stop prevents larger animals from entering the cable loop, while the minimum loop prevents the cable loop from closing around an animal's foot.

Bodygrip Traps

Bodygrip traps (Figure 5) are designed to kill an animal quickly when one or two rotating jaws strike the animal's neck or chest. These traps may be powered by one or two springs. Bodygrip traps operate in a manner similar to the common mouse trap.

Cage or Box Trapping Systems

A cage trap or box trap is designed in such a manner that the animal enters the trap through a door that closes, preventing the animal from exiting (Figure 6). These traps can be used for multiple species, limited by the door size and length. They are difficult to conceal and may be avoided by some animals. Some of these traps can be used to transport animals where permitted by law.

Components of Foothold Trap and Cable Device Systems

Swivels

Proper swiveling is the key to preventing the chain or cable of an anchoring system from binding at the stake, drag or grapple. This is important because it minimizes injury to the captured animal, reduces fur damage and may prevent cable breakage. On a foothold trap, the anchoring system should be attached with a swivel to the center of the base plate of the trap. The anchoring system of most restraining devices should include one or more swivels along the length of the anchoring system, including one at the anchor point. At least two or more swivels are recommended along the anchoring system of a foothold trap (Figure 7a). For cable device systems, at least one swivel at the anchor point and one in-line swivel along the cable are recommended (Figure 7b).

Trap Anchoring Systems

The anchoring system should always be strong enough to hold the largest furbearer that might be captured. When stakes are used to anchor traps, they must be of sufficient length to prevent the captured animal from pulling the stake. If there is doubt that a stake will hold (e.g. in sandy soils), use two stakes with a cross-staking method to ensure the stakes will not move after the catch (Figure 8). Cable stakes are also effective. Drags or grapples may be used effectively in some terrain and may also allow the captured animal to find cover. Similarly, when using a submersion system, the chain length must be short enough and the terminal end of the anchoring system deep enough to keep the animal underwater.

The use of in-line shock springs on anchoring systems, whether they are stakes or drags, may reduce injury and/or prevent escape (Figure 9). Shock springs should be of high quality and adequate strength to resist a captured animal's ability to destroy the spring. By cushioning lunges of a captured animal, shock springs may minimize the chance of cuts and joint injuries. This cushioning action may also decrease "stake pumping," reducing the chances that the captured animal will escape.

Foothold Trap Modifications

Several BMP traps are conventional models that have been modified. Examples of modifications include: laminating and/or offsetting the jaws, adding extra coil spring, using pan-stops or reinforcing the base plate. Most trap manufacturers and suppliers now offer modified traps or will modify traps upon request. Trappers also can modify their own traps to replicate the BMP trap models in this document. In any case, sturdy materials should be used to ensure durability in the field.

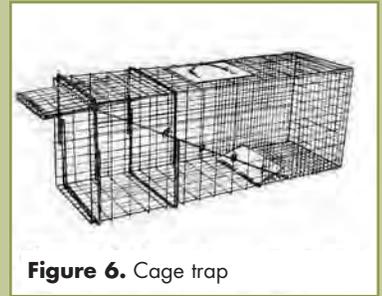


Figure 6. Cage trap

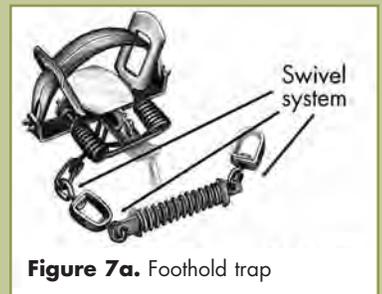


Figure 7a. Foothold trap

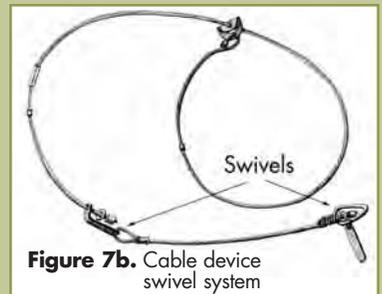


Figure 7b. Cable device swivel system

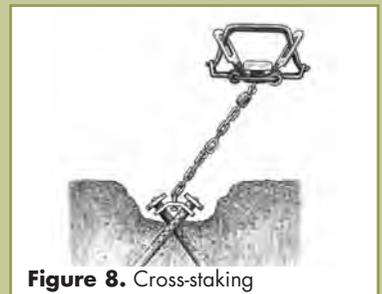


Figure 8. Cross-staking

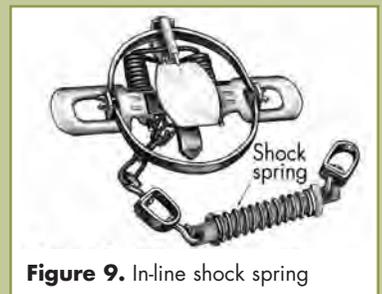


Figure 9. In-line shock spring



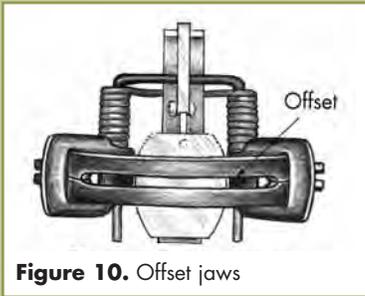


Figure 10. Offset jaws

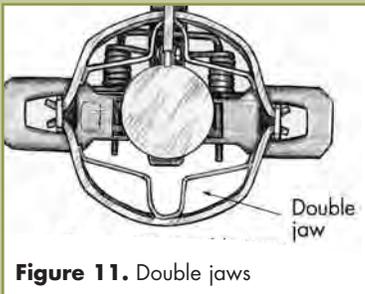


Figure 11. Double jaws

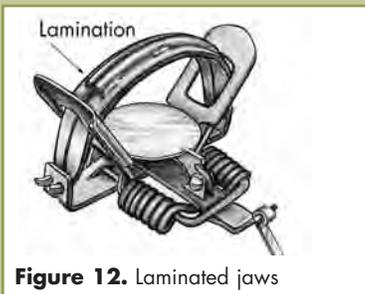


Figure 12. Laminated jaws

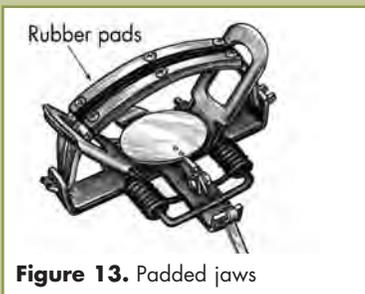


Figure 13. Padded jaws

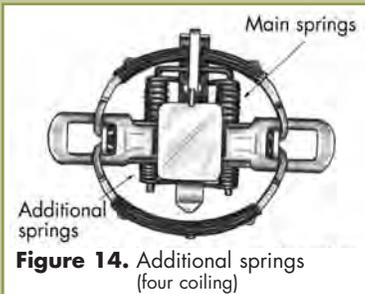


Figure 14. Additional springs (four coiling)

Offset Jaws

Offset jaws contain a space between the gripping surfaces on the closed jaws of a foothold trap. Typically, the offset ranges from $\frac{1}{8}$ to $\frac{1}{4}$ inch (Figure 10). Offset jaw models allow spring levers on coil-spring traps and spring eyes on longspring traps to close higher upon capture, thereby reducing the chance that the captured animal will escape. In addition, clamping pressure is slightly reduced when levers are fully raised which may improve animal welfare under some conditions.

Double Jaws

Using a foothold trap with a double jaw configuration improves animal welfare for some species. The double jaw configuration decreases the distance between the jaw and trap pan, limiting access to the restrained foot. Single jaw traps of the appropriate size can be modified to this configuration by adding a second jaw below the primary jaw (Figure 11).

Lamination and Padding

Expanding the trap jaw thickness with lamination or the addition of rubber pads will increase the surface area of the jaw on a trapped animal's foot and may influence both animal injury and capture efficiency. Lamination may be attached above and/or below the trap jaws, to expand the jaw thickness by welding on an additional strip of metal rod (Figure 12). Lamination typically is an after-market addition, though some trap suppliers provide this service. Padded traps are usually prefabricated. Replacement or repair of rubber pads is periodically required, especially after captures (Figure 13).

Additional Springs

Sufficient trap strength is needed to hold an animal by the foot. Some coil-spring traps may perform better with the addition of two extra coil springs, commonly referred to as "four-coiling." Four-coiling also makes the trap more stable when bedded. Recommended spring wire diameters are provided in the Mechanical Description and Attributes section for each trap meeting BMP criteria (Figure 14).

Pan Stops

The use of a pan stop assembly decreases the distance between the trap jaw and pan after the trap is sprung, limiting access to the restrained foot and reducing the chance of injury (Figures 15a and 15b). Pan stops also prevent the animal from stepping too far into the trap, ensuring optimal jaw placement on the restrained foot.

Reinforced Base Plates

Trap base plates can be reinforced by welding a piece of flat steel to the bottom of the trap frame, thereby strengthening the trap frame and preventing it from bending. The reinforcement plate also can be used as a point of attachment for center swiveling.

Trap Tuning, Preparation and Maintenance

Inspection of Foothold Traps

Most new traps require some minor adjustments to operate correctly. New traps may have sharp edges or burrs that must be removed to avoid injuries to the trapped animal. The upper and lower corners of jaw faces should be filed to remove sharp, squared edges. On offset jaw models, jaw contact points also should be rounded as necessary, though not so much as to reduce the width of the offset. Similarly, used traps and attachments should be inspected for wear before each season (Figure 16).

- Weak coil springs should be replaced
- Trap components, such as swivels, J-hooks, and S-hooks, must be of sufficient strength, must operate freely without binding, and must not be damaged
- J-hooks should be welded shut when trapping large, strong animals such as coyotes
- Sharp edges on jaws or any part of the trap should be smoothed with a file

Leveling Trap Pans

A level pan is important because it optimizes the angle of capture of the animal's foot. When the trap is set, the trap pan should be level with the jaws. If the pan rests too high or too low, it should be adjusted (Figure 17).

Short Pan Throw

The amount of space where the trap dog (trigger) fits into the pan notch determines how far the trap pan must drop before the trap activates (Figure 18). A file can be used to "square" the trigger slot and the end of the dog to produce a short pan throw and crisp action. A short pan throw, used in conjunction with the correct pan tension for the target species, will result in desired capture positions on the animal's foot.

Inspection of Cable Devices

Cable devices and all components should be inspected before use for kinks or other imperfections that may keep them from closing smoothly. After capturing an animal, discard the used cable and inspect the other parts of the cable device for damage or weakening before using them again.

Treating and Handling Traps and Cable Devices

New foothold traps, bodygrip traps, and cable devices are often coated with oil that must be removed before use. A good method to remove the oil is to boil the devices in water mixed with baking soda (for cable devices), or mixed with detergent (for traps). This process will dull the finish, remove unnatural odors, and allow traps to begin forming a light coat of rust. Rusted traps can then be dyed and waxed, with the exception of bodygrip traps and cable devices, which should never be waxed. Some trappers also boil cable in water a second time with logwood crystals or other plant materials to darken the wire and add some natural scent. Cage or box traps are sometimes spray painted to help with concealment. After treatment, handle cable and traps with gloves that are free of scent and store them in a dry place where no unnatural odors will be absorbed. Many techniques for treating traps and cable are available and are best learned from trapper education materials or experienced trappers.

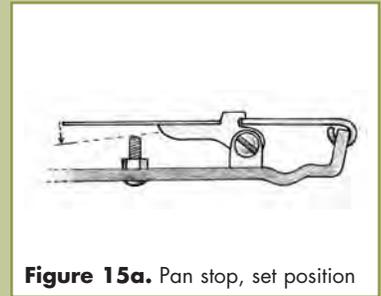


Figure 15a. Pan stop, set position

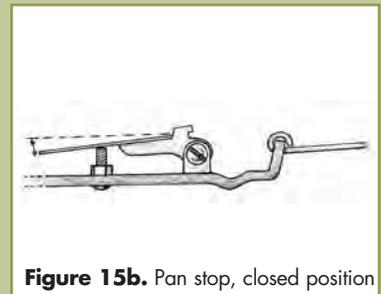


Figure 15b. Pan stop, closed position

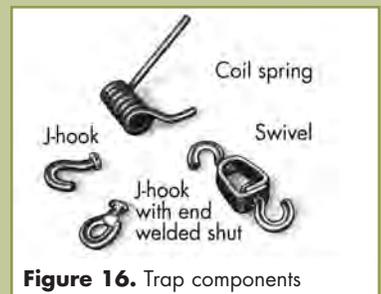


Figure 16. Trap components

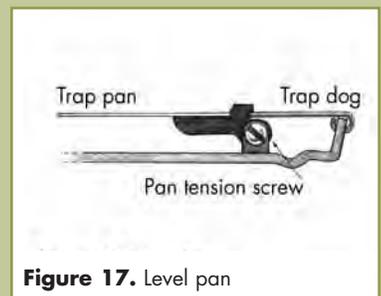


Figure 17. Level pan



Figure 18. Short pan throw

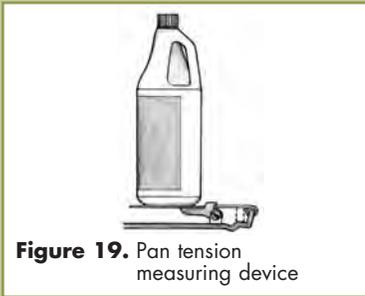


Figure 19. Pan tension measuring device

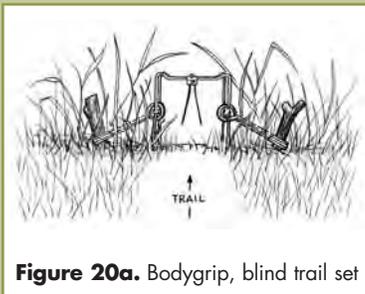


Figure 20a. Bodygrip, blind trail set

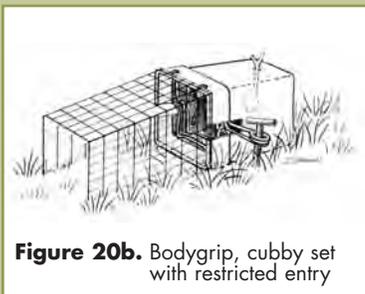


Figure 20b. Bodygrip, cubby set with restricted entry

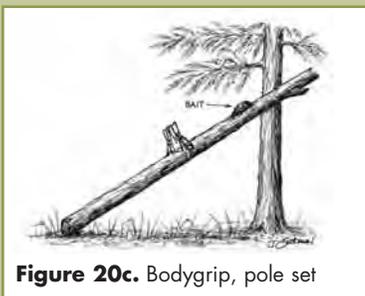


Figure 20c. Bodygrip, pole set

Trapping Techniques

Using the correct size and type of restraining trap is essential to achieving a high level of efficiency and minimizing the risk of injuring the captured animal. How an individual trapper chooses to use a trap also is critical. Likewise, the correct size and type of bodygrip trap or cable device will allow for efficient capture while meeting animal welfare criteria.

Presented here are techniques and practices recommended by experienced trappers and wildlife biologists that provide for improved animal welfare, selectivity, efficiency and user safety. These suggestions may be familiar to some but new to others.

All trappers are strongly encouraged to use as many of these techniques as practical. More detailed information on recommended techniques is available through various trapper education manuals, manufacturer's documents, instructional videos and trade publications.

Set Location for Traps

Careful choice of trap location can influence animal welfare, efficiency and selectivity of trap sets. Trappers should choose set locations that:

- Prevent entanglement with fences or other objects that might result in injury
- Minimize the chance that objects or debris will prevent swivels from functioning properly
- Minimize the capture of non-furbearers
- Minimize the captured animal's exposure to domestic animals and human activities (e.g. avoid trails used by people)

Lure, Bait and Attractants

Careful placement and selection of baits, lures, and other attractants can greatly increase capture efficiency and selectivity. Certain baits or lures (e.g. meat-based attractants) may be more attractive to pets and hunting dogs and should be used cautiously.

Many states prohibit setting traps near large carcasses, or using exposed baits or fur or feather attractants. Be sure to comply with state regulations concerning the use of baits and attractants. Consult trapper education materials to learn how to use baits, lures, and attractants to improve the selectivity and efficiency of your sets.

Proper Pan/Treadle Tension – Foothold and Cage Traps

Pan tension influences trap selectivity. Most new traps have pan tension bolts and those that do not can typically be fitted with commercially available or homemade pan tension devices. Pan tension can be adjusted so certain weights are required to depress the pan and trigger the trap, thereby affecting trap selectivity. The pan likely will need readjustment after each capture. Devices for measuring pan tension are commercially available or may be easily constructed (Figure 19). To test pan tension with the type of device shown in Figure 19, the proper amount/weight of material (sand, water, etc.) should be added to the jug to depress the pan at the desired pan tension weight (e.g. 2 pounds., 4 pounds., etc.). Recommendations for appropriate pan-tension are given in the species chapters.

Bodygrip Trap Considerations

Different species have different shapes and behaviors that influence how they approach bodygrip traps. Trigger systems on bodygrip traps can be configured to improve trap efficiency and animal welfare (time to irreversible unconsciousness) by affecting strike locations. The selectivity of bodygrip traps also can be impacted by trigger configurations, as the shape and location of the trigger can be modified to avoid certain species while capturing others.

Bodygrip traps on land are sometimes used in blind trail sets (Figure 20a) or in conjunction with cubbies (Figure 20b) or in above-ground sets (Figure 20c) to avoid capture of certain species either because of species size or behavior. Further, many states prohibit setting bodygrip traps on land unless they are used in conjunction with one or more of these techniques. Be sure to comply with state regulations concerning the use of these traps. Consult trapper education material to learn how to use cubbies and trap placement to improve the selectivity and efficiency of your sets.

Avoiding Entanglements

Foothold traps and cable devices when staked should be set so the captured animal cannot entangle the anchoring system in any object. These devices should not be set near fences or farm equipment. Trap sites should be cleared of all objects (e.g. rocks, logs, and rooted, woody stems) that could be reached by the captured animal and become entangled in the anchoring chain or cable. This usually means some clearing work with pruning shears, a hatchet, or a saw. The area that needs to be free of entangling objects depends on the size of the target animal and the length of the anchoring system (Figure 21). If the trap anchoring system becomes entangled with objects at the set, the swiveling system may become inoperable.

Trap Safety

Restraining foothold devices have excellent safety records, but as with any tools, precautions should be taken in handling them. Use of available safety equipment, such as gloves and safety glasses, should be considered while setting traps.

Personal safety is more of an issue when handling bodygrip traps, especially the larger sizes. Bodygrip traps must close with considerable force to meet animal welfare performance standards. Trappers should be familiar with the safe and efficient use of bodygrip traps. We recommend the use of spring latches (Figure 22) on both springs and a safety gripper on trap jaws (Figure 23) when setting bodygrip traps. Most bodygrip traps are equipped with spring latches, and these should be engaged when the springs are compressed. A variety of safety locks are available for the jaws, and one should be attached when the jaws are moved to the set position. These safety devices protect the trapper and make it easier to position and anchor the trap. Safety devices should be disengaged only when the set is completed. It is also recommended that trappers carry one of the commonly available setting tools to help free oneself if accidentally caught.

Checking and removing the set should always be done carefully. Spring the trap or engage the safety latches before removing sets. Never reach under the ice to check bodygrip traps, particularly if the hole in the ice is too small to pull the trap through. Never use your hands or feet to locate a bodygrip trap that is underwater, under ice or out of sight.

Releasing or Dispatching Captured Animals

Restraining devices give trappers the option of either releasing or dispatching captured animals. A capture pole is one of several tools that a trapper can use to release animals. Using these devices, animals can be safely released from restraining traps. Techniques for release and dispatch are best learned from a trapper education program or from experienced trappers.

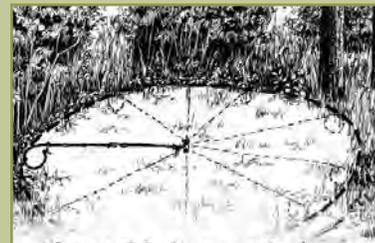


Figure 21. Restraint circle

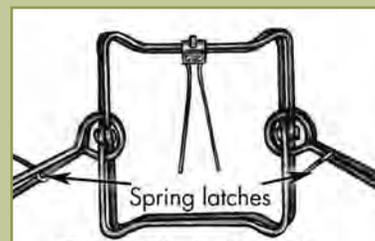


Figure 22. Spring latches



Figure 23. Bodygrip safety gripper

Best Management Practices

for Trapping Badger in the United States

UPDATED 2014



Best Management Practices (BMPs) are carefully researched educational guides designed to address animal welfare and increase trappers' efficiency and selectivity. The extensive research and field-testing used to develop BMPs are described in the Introduction. The evaluation methods used to develop BMPs have been standardized, enabling BMPs to be easily updated and revised as new traps and techniques become available. All traps listed in the BMPs have been tested and meet performance standards for animal welfare, efficiency, selectivity, practicality, and safety.

Trapping BMPs provide options that allow for discretion and decision-making in the field. Best Management Practices are meant to be implemented in a voluntary and educational approach, and do not present a single choice that can or must be applied in all cases. BMPs are the product of on-going work that may be updated as additional traps are identified through future scientific testing.

The Badger at a Glance

Characteristics

The badger (*Taxidea taxus*) (Figure B1), sometimes referred to as the American badger or North American badger (to distinguish it from the Eurasian and Honey badgers) is a member of the Mustelidae family. Badgers have physical characteristics common to other mustelids such as short, powerful legs, and a stout, compact, low-slung body. Badgers have huge foreclaws (measuring up to two inches in length) which they use for digging burrows and hunting prey. Males are typically larger than females with females averaging 15.5 pounds and males averaging up to 20 pounds. In general, badgers measure between 24 to 29.5 inches in length. Badgers are covered with a grizzled, silvery coat of coarse hair over the upper body. Feet are black and the belly and under-tail are yellowish. The face displays a distinctive black and white pattern, with black "badges" marking the white cheeks and a white stripe extending from the nose to the base of the head. It should be noted that there are four subspecies of badgers in North America and these vary slightly in size and color as well as distinctive markings. For example, in one of the subspecies, typically found in the lower mid-western and southwestern states, *T. t. berlandieri*, the distinctive white head stripe extends the full length of the body instead of ending at the base of the head.

Range

Badgers range throughout the western and central United States, north into central Canada and south into northern Mexico.

Habitat

Badgers prefer open grasslands, tallgrass and shortgrass prairie regions and parklands. They may also be found in deserts, forest glades, mountain meadows, and brushy areas with soils that allow them to easily dig for prey and dig burrows. Burrows are used for denning and provide protection from weather, concealment from predators, and a safe place to raise young. Burrows may be up to 30 feet in length and 10 feet deep.

Food Habits

Badgers are fossorial (adapted to life underground) carnivores. These predators prey primarily on small rodents (ground squirrels, prairie dogs, etc.), but they also consume reptiles and amphibians, ground nesting birds, carrion, and insects. They are opportunistic feeders and have been known to eat fish and some plant material including mushrooms, corn, and sunflowers.



Figure B1. Badger (*Taxidea taxus*)

Reproduction

Badgers are solitary animals for most of the year, but they expand their territories to actively seek out mates during the breeding season. Males usually do not breed until their second year of life and may breed with more than one female. Females typically breed after their first year. The breeding season occurs from late summer to early fall. Badgers experience delayed implantation, typical of Mustelids, so actual pregnancies are suspended until December or as late as February with young usually being born from late March to early April. Litters average three young but may range from one to five. Badgers are altricial (blind and essentially helpless) at birth. Young badgers do not emerge from the den on their own until five to six weeks of age. Juveniles disperse from the end of June to August. Badgers often live nine to 10 years in the wild.

Populations

The North American badger is listed as a species of least concern by the International Union for Conservation of Nature (IUCN) and populations appear to be stable over most of the United States. However, in California, the badger is listed as a species of special concern due to an apparent reduction in range and number in areas where it was common formerly. In Canada, two badger subspecies (*T.t. jacksoni* and *T.t. jeffersoni*) are listed as endangered. Humans are the major source of mortality for adult badgers though predators occasionally kill them. Human/wildlife conflicts arise with this species primarily as a result of their burrowing activities whereby they damage farm and ranch lands and pose a hazard to livestock. Animal damage control efforts are often required to reduce these conflicts.

General Overview of Traps Meeting BMP Criteria for Badger in the United States

Only foothold restraining traps were used to capture badgers (Table 1) and examples, brief descriptions, and mechanical details of the various devices are given in the next section.

Table 1. Overview of traps meeting BMP criteria for badgers in the United States.

Trap Category	Jaw/Frame Characteristics	Inside Jaw/Frame Spread at Dog*	Inside Width at Jaw/Frame Hinge Posts*
Foothold	Unmodified	5 1/4	5
	Padded	5 3/16	6 7/16
	Offset, laminated and/or wide	5 1/16 - 5 13/16	5 1/16 - 5 7/8

*inches



General Considerations When Trapping Badger

Foothold Traps

- Many currently-used trap models meet specifications
- Pan-tension set between two and four pounds may improve selectivity and foot placement in the trap
- Can be used to capture several furbearer species
- Captures and holds animals alive, allowing for release
- Badgers are wide-bodied and short-legged. To accommodate this body shape and potentially improve catch rate, make trap sets a few inches right or left of a main trail

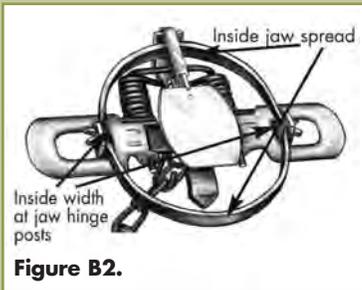


Figure B2.

Specifications of Traps Meeting BMP Criteria for Badger in the United States

As more capture devices are tested and new information becomes available, they will be added to an updated list. Mechanical descriptions of tested traps are given as an aid to trappers or manufacturers who may wish to measure, build or modify traps to meet these specifications (Figure B2). Also, other commercially available traps, modified traps, or other capture devices not yet tested may perform as well as, or better than the listed BMP traps. References to trap names are provided to identify the specific traps tested. The following list is provided for information purposes only, and does not imply an endorsement of any manufacturer.

Average mechanical measurements are rounded to the nearest $\frac{1}{16}$ inch. There may be up to $\frac{1}{8}$ inch variation in specifications on the part of the manufacturer. Manufacturers use recognizable names, such as "No. 2" coil-spring, to identify certain traps. However, there is no standardized system linking mechanical design features with trap names. The mechanical features of these traps are listed so that similar traps may be identified. The performance of anchoring systems was not specifically evaluated, however, methods of attachment are described for informational purposes.

Unmodified jaw trap (Figure B3)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): $5 \frac{1}{4}$ inches

Inner width: $4 \frac{9}{16}$ inches

Inside width at jaw hinge posts: 5 inches

Jaw width: $\frac{1}{2}$ inch smooth round jaw

Jaw thickness: $\frac{1}{8}$ inch

Main trap springs: Two 0.145 inch diameter wire coil-springs

Base plate: Reinforced, D-ring chain attachment.

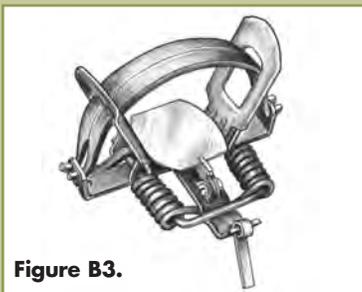


Figure B3.

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4–6) needs to be considered as well. The trap tested was the Oneida-Victor™ No. 1.75 coil-spring.

Additional Information

- Chain attachment used in trap testing: 30 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two–four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for bobcats, red foxes, Eastern coyotes and Western coyotes.



Padded jaw trap (Figure B4)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ³/₁₆ inches

Inner width: 6 ¹/₁₆ inches

Inside width at jaw hinge posts: 6 ⁷/₁₆ inches

Jaw width: ⁹/₁₆ inch round padded jaw

Jaw thickness: ³/₈ inch

Padding: Manufacturer supplied rubber pads

Main trap springs: Two 0.145 inch diameter wire coil-springs

Additional springs: Two 0.115 inch diameter wire coil-springs

Base plate: Reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4–6) needs to be considered as well. The trap tested was the Oneida-Victor™ No. 3 Softcatch™ modified coil-spring, four-coiled.

Additional Information

- Chain attachment used in trap testing: 30 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two–four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based trap dye directly on the rubber pads. This device also meets BMP criteria for bobcats, red foxes, Eastern coyotes and Western coyotes.

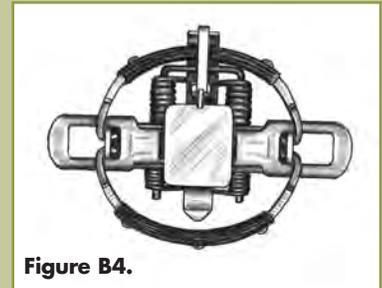


Figure B4.



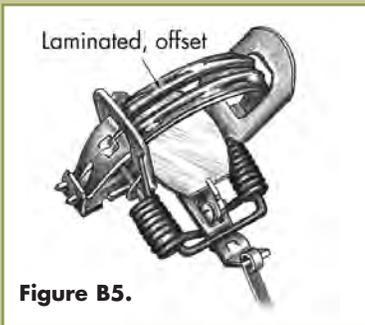


Figure B5.

Offset, Laminated and/or Wide jaws (Figure B5–B11)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ¹/₁₆ inches

Inner width: 4 ⁹/₁₆ inches

Inside width at jaw hinge posts: 5 ¹/₁₆ inches

Jaw width: ⁷/₁₆ inch wide, smooth round jaw

Jaw thickness: ⁵/₁₆ inch

Jaw thickness with lamination: ¹/₂ inch

Lamination: ³/₁₆ inch above-jaw lamination

Jaw offset: ³/₁₆ inch

Main trap springs: Two 0.135 inch diameter wire coil-springs

Base plate: Reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4–6) needs to be considered as well. The trap tested was the Oneida-Victor™ No. 1.75 coil-spring trap modified with offset, laminated jaws (lamination on top of jaws) (Figure B5).

Additional Information

- Chain attachment used in trap testing: 30 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two–four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for bobcats, red foxes, Eastern coyotes and Western coyotes.

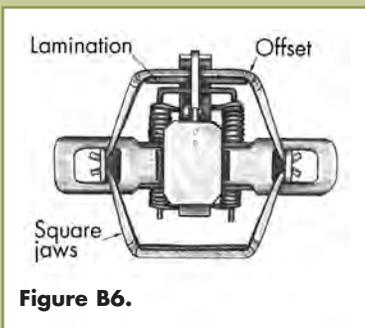


Figure B6.

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ¹/₂ inches

Inside jaw spread (between below-jaw lamination): 5 inches

Inner width: 5 ¹/₁₆ inches

Inside width at jaw hinge posts: 5 ⁹/₁₆ inches

Jaw width: ⁷/₁₆ inch square jaw

Jaw thickness: ³/₁₆ inch

Jaw thickness with lamination: ⁷/₁₆ inches

Lamination: ¹/₄ inch below-jaw lamination

Jaw offset: ³/₁₆ inch

Main trap springs: Two 0.145 inch diameter wire coil-springs

Additional springs: Two 0.110 inch diameter wire coil-springs

Base plate: Reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Bridger™ No. 2 coil-spring trap with square jaw, modified with offset, laminated jaws (lamination on bottom of jaws), and four-coiled (Figure B6).

Additional Information

- Chain attachment used in trap testing: 30 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for bobcats, red foxes, Eastern coyotes and Western coyotes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ¹³/₁₆ inches

Inner width: 5 ⁷/₁₆ inches

Inside width at jaw hinge posts: 5 ⁷/₈ inches

Jaw width: 1/2 inches smooth round jaw

Jaw thickness: ³/₈ inches

Jaw offset: ³/₁₆ inches

Main Trap Springs: Four 0.146 inch diameter wire coil-springs

Base Plate: Reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Sterling™ MJ600 offset coil-spring trap, four-coiled.

Additional Information

- Chain attachment used in trap testing: 30 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Special considerations for practicality: This device also meets BMP criteria for bobcats and Western coyotes.





Figure B7.



Figure B8.



Figure B9.

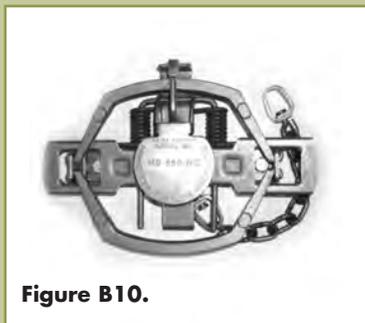


Figure B10.



Figure B11.

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ³/₈ inches
 Inner width: 5 ¹/₄ inches
 Inside width at jaw hinge posts: 5 ⁵/₁₆ inches
 Jaw width: ⁹/₁₆ inch
 Jaw thickness: ³/₁₆ inch
 Jaw thickness with lamination: ³/₈ inch
 Lamination: ³/₁₆ inch above-jaw lamination
 Jaw offset: ¹/₄ inch
 Main trap springs: Four 0.125 inch diameter wire coil-springs
 Base plate: Reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the KB Compound 5.5™ coil-spring trap modified with offset, laminated jaws (lamination on top of jaws) (Figures B7–B9).

Additional Information

- Chain attachment used in trap testing; 11 inch chain mounted at either end of compound levers on trap base, two swivels, and anchored with a stake.
- Unique features: Compound levers attached to the underside of trap base act as a shock spring. When extended (due to captured animal lunging or pulling), the compound levers also increase tension on trap jaws (Figure B9).
- Selectivity features: Pan tension set so two to four pounds of pressure triggered the trap, and was checked and readjusted as needed after capture.
- Special considerations for practicality: This device also meets BMP criteria for Eastern coyotes and Western coyotes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 ³/₄ inches
 Inner width: 5 ⁷/₈ inches
 Inside width at jaw hinge posts: 6 ¹/₄ inches
 Jaw width: ¹/₂ inch wide, smooth jaw
 Jaw thickness: ³/₈ inch
 Jaw offset: ³/₁₆ inch
 Main trap springs: Two 0.145 inch diameter wire coil-springs
 Base plate: Reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the MB 550-RC™ coil-spring trap with offset jaws (Figures B10–B11).

Additional Information

- Chain attachment used in trap testing; 18 inch chain center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Pan tension set so ~3.2 pounds of pressure triggered the trap
- Special considerations for practicality: This device also meets BMP criteria for Eastern coyotes and Western coyotes.

Best Management Practices for Trapping Beaver in the United States

UPDATED 2016





Figure BV1. Beaver
(*Castor canadensis*)

Best Management Practices (BMPs) are carefully researched educational guides designed to address animal welfare and increase trappers' efficiency and selectivity. The extensive research and field-testing used to develop BMPs are described in the Introduction section of this manual. The evaluation methods used to develop BMPs have been standardized, enabling them to be easily updated and revised as new traps and techniques become available. All traps listed in the BMPs have been tested and meet performance standards for animal welfare, efficiency, selectivity, practicality and safety.

Trapping BMPs provide options, allowing for discretion and decision making in the field. BMPs are meant to be implemented in a voluntary and educational approach and do not present a single choice that can or must be applied in all cases. BMPs are the product of ongoing work that may be updated as additional traps are identified through future scientific testing.

The Beaver at a Glance

Characteristics

The beaver (*Castor canadensis*) (Figure BV1) is the only member of the Castoridae family found in North America. It is the largest of the rodents of North America with adults weighing between 26 and 90 pounds, and ranging from 34 to 54 inches in length. Individuals weighing over 100 pounds have been documented. The sexes cannot be distinguished based on size or other external physical characteristics, except for lactating females. The pelage color of most beavers is reddish dark brown, though the fur may be black, pale silver or even blonde.

Range

Beaver occur throughout North America with the exception of arid and desert environments and the Florida peninsula. The range extends far into Canada, but excludes the area above the Arctic Circle. Beavers are rarely encountered in Mexico, except in isolated pockets along the United States border.

Habitat

The beaver is highly adapted to freshwater environments and will rarely venture far from a water source. Beavers live in and along lakes, wetlands, rivers and streams. In locations where slow running water is present, extensive dams are often constructed. In such environments, beavers will often construct a den in a high stream bank. In still waters beavers often build lodges from tree limbs and other debris.

Food Habits

Beavers are strict herbivores and their food habits depend highly on the season. In the spring and fall, their diet is about half woody vegetation and half non-woody vegetation. In the summer months the amount of non-woody vegetation increases to about 90 percent. In the winter months, woody vegetation makes up 100 percent of the diet. When consuming woody plants, beavers generally eat the bark and cambium layer above the wood layer.

Reproduction

The breeding season for beavers varies based on latitude. In the southern United States the breeding season occurs from October through March, while farther north breeding begins in January or February, generally concluding by late March. The gestation period is 105 to 107 days, with only one litter per year being produced. The average litter size is three to four young (kits), with extremes of one to eight. Large litters are typically born in favorable environmental conditions and to older, larger females. Beavers do not reach sexual maturity until they are 18-21 months of age. Individuals do not breed until at least their second year of life, but it is more common to begin breeding in the third year. Young rarely leave the den before one month of age.

Populations

Prior to European settlement, an estimated 60 million beaver inhabited the species' North American range, and in favorable habitat a density of 50 beavers per square mile was possible. However, unregulated harvest of beaver and major habitat changes related to intensive logging and grazing resulted in many populations being vastly reduced or exterminated by 1900. As a result of reintroductions, protection and regulated harvest, beaver populations rebounded across their North American range in the latter part of 20th century. Populations continue to thrive today to the extent that intensive management is often required to prevent damage to private and public properties and to protect public drinking water supplies due to flooding caused by beavers.

How to Avoid Capturing River Otter When Trapping Beavers

Because river otter and beaver often use the same habitat, and harvest regulations often vary by species, there may be times/places when trappers need to avoid capturing river otter. While no method can completely eliminate accidental river otter captures, there are methods that can help reduce the risk of accidental capture, and considering these methods will improve the ability to manage both beaver and river otter populations. The following ideas are offered as a guide to improving selectivity, recognizing that each may have advantages/disadvantages depending on the situation and location. There may be other methods equally (or more) useful and trappers are encouraged to use whatever method seems most effective for the given situation.

When there is a need to avoid river otter while beaver trapping, consider the following suggestions:

- Stay alert for the presence of river otter sign on your trap line.
- Be cautious about using trap sets at high probability river otter travel-ways, particularly dam crossings, inlets and outlets to ponds/lakes, narrow streams and ditches that connect to other water bodies, crossover trails along shorelines, dikes and culverts and the entrances to inactive beaver bank dens or lodges.
- Use baited beaver sets where possible.
- Avoid using beaver lures that may also attract river otters to the set.
- Consider using a "side-parallel" position (Figure BV2) for the trigger wires on beaver bodygrip traps. Also consider the use of tension-adjustable triggers, or two-way triggers (those that don't spring when pushed sideways).
- Offset the trigger to one side on a bodygrip trap and place a stick in the mud directly in front of the trigger (make sure the stick is outside the closing radius of the trap). River otter will typically swim around the stick and avoid the trigger.
- Use castor mound sets with foothold traps set 8 to 10 inches deep for hind foot catches on beaver (to avoid river otter).

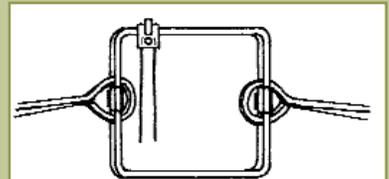


Figure BV2: Moving the trigger to one side of a bodygrip trap should decrease the likelihood of capturing a river otter.

- When using cable devices, use a 9 to 10 inch loop. Add loop “stops” to prevent the loop from closing tighter than a four inch diameter. At the water’s edge or on land, particularly if not using stops, place the bottom of the loop close to the ground. Also consider positioning the lock farther back from top-center to decrease the sensitivity of the device. Do not “load” snares; this will further reduce sensitivity.
- Gang-set active beaver areas (set an equal number of traps for the anticipated number of beavers). Catch beaver as fast as possible, and remove traps. Avoid leaving traps set for extended periods trying to catch the last beaver.
- When trapping under ice, make baited sets between active lodges/dams and food caches/piles.
- Carry a catchpole or other device to assist with releasing live-restrained river otter.
- For more information on river otter avoidance and proper trigger configurations to use for bodygrip traps to capture beaver, see the *Trapper Education Student Manual: A Guide for Trappers in the United States* published by the Association of Fish and Wildlife Agencies at http://www.fishwildlife.org/furbearer_resources.html
- Always check your state’s trapping regulations for guidance, specific restrictions or prohibitions related to river otter take while beaver trapping.

General Overview of Traps Meeting BMP Criteria for Beavers in the United States

Four basic types of traps were tested for beaver: foothold traps, cage traps, bodygrip traps and non-powered cable devices. Examples, brief descriptions, and mechanical details of the various devices are given in the next section.

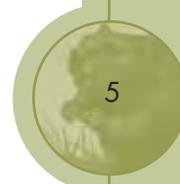
Table BV1. Overview of traps meeting BMP criteria** for beavers in the United States.

Trap Category (recommended use)	Jaw/Frame Characteristics	Inside Jaw/Frame Spread at Dog*	Inside Width at Jaw/Frame Hinge Posts*	
Coil-spring (submersion only)	Unmodified	5 - 7 1/4	5 - 7 3/4	
Longspring (submersion only)	Unmodified	3 7/8	3 7/16	
	Double jaw	3 7/8	3 7/16	
	Dimensions*: Length X Width X Height	Mesh Size*/Gauge		
"Suitcase" Type or Cage (live restraint or submersion)	39 x 43 x 15	2 x 2 16 gauge galvanized		
	Height of Trap Window*	Width of Trap Window*	Frame Wire*	Spring Wire*
†Bodygrip (on land or submersion)	6 7/8 - 11	7 - 12	1/4 - 5/16	1/4 - 5/16
	Cable Characteristics	Loop Diameter*	Lock Type	
Non-Powered Cable Devices (live restraint or submersion/under ice)	3/32" diameter 7 x 7 and 1 x 19 weave	9 - 10	relaxing	
	1/8" diameter 7 x 7 weave		relaxing	
	(For use in submersion/under ice sets only) 1/16" diameter 1 x 19 weave		relaxing or non-relaxing	

* Inches

**Any size foothold traps or bodygrip traps with these or larger measurements, which are commonly used for beavers, also meet BMP criteria for use in submersion sets for this species; foothold sizes commonly designated as 11, 1.5, 1.65, 1.75, 2, 3, 4, 5, and bodygrip sizes commonly designated as 220, 280, 330, and 440. Cable devices and cage traps with the above or similar measurements are also approved for use in submersion sets.

†All bodygrip traps tested had two springs.



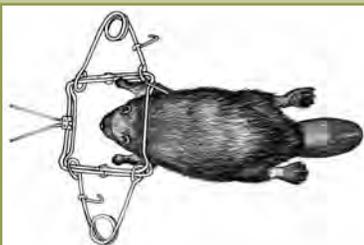


Figure BV3. Bodygrip proper strike location



Figure BV4a. Setting tool



Figure BV4b. Using setting tool



Figure BV5a. Safety gripper



Figure BV5b. Using safety gripper

General Considerations When Trapping Beavers

Foothold (coil-spring and longspring) Traps (for submersion sets only)

- Many currently-used trap models meet specifications
- Can be used to capture several furbearer species

Cage or "Suitcase" Type Cage Traps

- Allow for use in locations and in weather conditions where other traps are less effective
- Capture and hold animals alive, allowing for release, or may be used in submersion sets
- Are large, cumbersome and expensive

Bodygrip Traps

- Should be placed so that the rotating jaws close on the top and bottom of the captured animal's neck (Figure BV3)
- Trigger configurations can be modified for species selective capture
- Allow for use in locations and in weather conditions where other traps are less effective
- May not be appropriate in some areas as land sets (captures and kills animals, no release)
- May require trigger replacements after several captures

Non-Powered Cable Devices

- Cables require frequent replacement
- Capture and hold animals alive, allowing for release, or may be used in submersion/under ice sets

Safe Use of Bodygrip Traps

By design, bodygrip traps must close with considerable force to humanely dispatch and efficiently capture wild furbearers. This is particularly true of larger sized and "magnum" type bodygrip traps. As a result, users should take special precautions to avoid potential injury when using these devices. Trappers should be familiar with the safe and efficient use of bodygrip traps and these are best learned in trapper education courses.

A setting tool (Figure BV4a) should be used to compress trap springs when setting large and magnum bodygrip traps. Use of a setting tool will not only make setting traps easier, it will make setting traps safer by allowing the trapper to keep hands and fingers away from the jaws (Figure BV4b). Most bodygrip traps that have double springs are equipped with spring latches that hold each spring compressed, and the trapper should use these latches on both trap springs. A safety gripper (Figure BV5a) should also be attached to the jaws when the jaws are moved to the set position (Figure BV5b). This will prevent the trap from accidentally closing. The above safety devices protect the trapper and make it easier to set, position and anchor the trap safely. Safety devices should be disengaged only when the set is completed.

If you are accidentally caught in a bodygrip trap you need to know how to free yourself. A setting tool is the most effective means to freeing yourself and should be used to compress the springs or jaws. You should always have one in reach when setting and placing bodygrip traps. In the event you are not able to reach one or use it with one arm, you should always carry a four foot piece of rope. The rope should have a loop tied on one end and should be stored in a pocket that can be easily accessed by either hand. You can use the rope to free yourself as follows:

- 1) Thread the rope through the eyes of one of the springs (Figure BV6a).
- 2) Bring the rope around and thread it back through the eyes a second time (Figure BV6b).
- 3) Place your foot in the looped end of the rope and pull the other end with your free hand until you can set the safety latch for that spring. (Figure BV6c).
You may need to do this to both springs to completely free yourself.

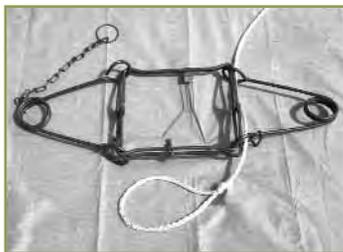


Figure BV6a. Step 1



Figure BV6b. Step 2



Figure BV6c. Step 3

Specifications of Traps Meeting BMP Criteria for Beavers in the United States

As more capture devices are tested and new information becomes available, the list of devices will be updated. Mechanical descriptions of traps are given as an aid to trappers or manufacturers who may wish to measure, build or modify traps to meet these specifications (Figures BV7a and BV7b). Also, other commercially available traps, modified traps, or other capture devices not yet tested may perform as well as, or better than the listed BMP traps. References to trap names are provided to identify the specific traps tested. This list is provided for information purposes only and does not imply an endorsement of any manufacturer.

Average mechanical measurements are rounded to the nearest $\frac{1}{16}$ inch. There may be up to a $\frac{1}{8}$ inch variation in specifications on the part of the manufacturer. Manufacturers use recognizable names, such as "No. 2" coil-spring, to identify certain traps. However, there is no standardized system linking mechanical design features with trap names. The mechanical features of these traps are listed so that similar traps may be identified. The performance of anchoring systems was not specifically evaluated, however, methods of attachment are described for informational purposes.

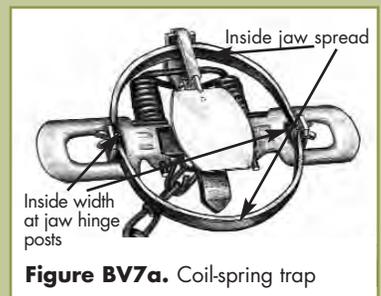


Figure BV7a. Coil-spring trap

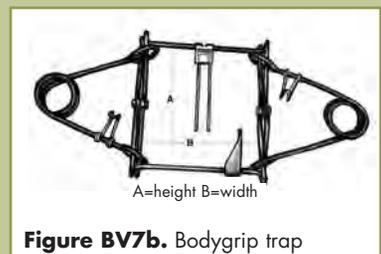


Figure BV7b. Bodygrip trap

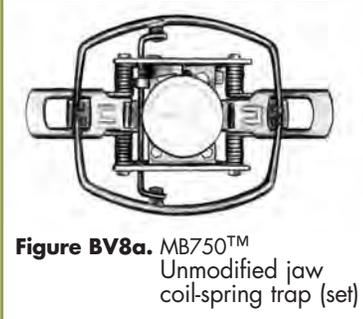


Figure BV8a. MB750™
Unmodified jaw
coil-spring trap (set)

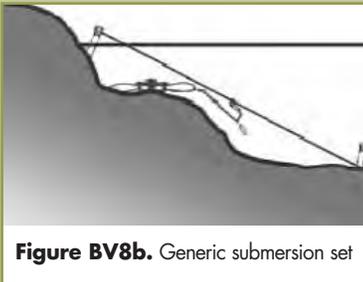


Figure BV8b. Generic submersion set

Submersion sets:

See the *Trapper Education Student Manual: A Guide for Trappers in the United States* at http://www.fishwildlife.org/furbearer_resources.html for more information on submersion sets.

Foothold Traps

Unmodified Jaw (Figures BV8a, BV8b and BV8c)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 7 1/4 inches

Inner width: 7 1/4 inches

Inside width at jaw hinge posts: 7 3/4 inches

Jaw width: 7/16 inch

Jaw thickness: 3/16 inch

Main trap springs: Four 0.160 inch diameter wire coil-springs

Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Minnesota Brand MB750™ coil-spring trap.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 30 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake. When using submersion sets (Figure BV8b), chain length should be short enough to prevent captured animals from resurfacing.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two to four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 inches

Inner width: 4 1/2 inches

Inside width at jaw hinge posts: 5 inches

Jaw width: 1/2 inch smooth round jaw

Jaw thickness: 1/8 inch

Main trap springs: Two 0.145 inch diameter wire coil-springs

Base plate: Not reinforced

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 2 coil-spring.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 12 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake. When using submersion sets, chain length should be short enough to prevent captured animals from resurfacing.

- Selectivity features: Brass pan tension machine screw; pan tension was set so two to four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for river otter (live restraint or submersion), mink, muskrat and nutria in submersion sets, and Eastern coyotes.



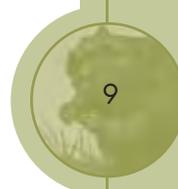
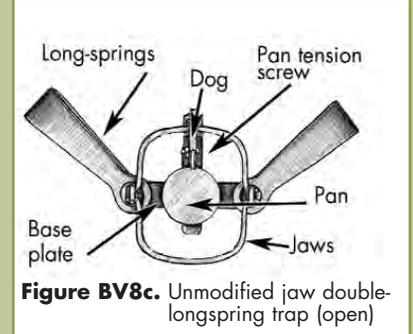
Average Mechanical Description and Attributes

- Inside jaw spread (at dog): 3 ⁷/₈ inches
- Inner width: 3 ¹/₈ inches
- Inside width at jaw hinge posts: 3 ⁷/₁₆ inches
- Jaw width: ¹/₂ inch
- Jaw thickness: ¹/₈ inch
- Length of main trap springs: 4 ³/₈ inches
- Thickness of main trap springs: ¹/₁₆ inch
- Width of main trap springs: 1 ¹/₂ inches narrowing to ⁵/₈ inch
- Base plate: Not reinforced
- Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek™ No. 11 double-longspring trap.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 12 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake. When using submersion sets, chain length should be short enough to prevent captured animals from resurfacing.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two to four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for river otter, mink, muskrat and nutria in submersion sets.



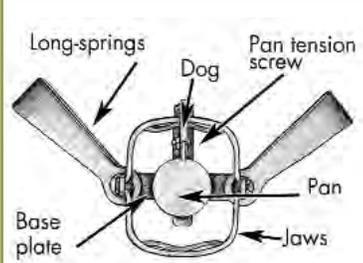


Figure BV9. Double jaw double-longspring trap (open)

Double Jaw (Figure BV9)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 3 ⁷/₈ inches

Inner width: 3 ¹/₈ inches

Inside width at jaw hinge posts: 3 ⁷/₁₆ inches

Jaw width: ¹/₂ inch

Jaw thickness: ¹/₈ inch

Length of main trap springs: 4 ³/₈ inches

Thickness of main trap springs: ¹/₁₆ inch

Width of main trap springs: 1 ¹/₂ inches narrowing to ⁵/₈ inch

Base plate: Not reinforced

Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek™ No. 11 double-longspring trap with double-jaws.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 12 to 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake. When using submersion sets, chain length should be short enough to prevent captured animals from resurfacing.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two to four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for river otter (live restraint or submersion), mink, muskrat and nutria in submersion sets.



Figure BV10a. Hancock™ live trap (set)



Figure BV10b. Hancock™ live trap (closed)

"Suitcase" Type or Cage Traps (Figures BV10-BV13)

Average Mechanical Description and Attributes

Length open or closed: 39 inches

Width closed: 21 ¹/₂ inches

Width open: 43 inches

Mesh size: 2 x 2 inch, 16 gauge galvanized

Weight: 33 pounds

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Hancock™ Live Trap (Figures BV10a - BV10b).

Additional Information

- Safety considerations: Users should follow manufacturer's safety precautions.
- Special considerations for practicality: Traps are large, cumbersome and expensive. May require repair after capture.
- Anchoring: Traps should be securely wired at the vertical mesh to something solid such as a tree, culvert, grate, re-rod stake, etc.





Average Mechanical Description and Attributes

Dimensions (inches): 39L x 18W x 12H

Mesh size: 2 x 2 inch, 12.5 gauge

Weight: 23 pounds



Figure BV 11. Comstock™ Beaver Trap

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Comstock™ Beaver Trap (Figure BV 11).

Additional Information

- Anchoring: Traps should be securely anchored to something solid such as a tree, culvert grate, re-rod stake, etc.
- Safety considerations: Users should follow manufacturer’s safety precautions.
- Special considerations for practicality: Traps are large and cumbersome.



Average Mechanical Description and Attributes

Dimensions (inches): 25L x 37W x 6H

Mesh size: 2 x 2 inch, galvanized

Weight: 25 pounds



Figure BV 12. Koro™ Live Beaver Trap

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Koro™ Live Beaver Trap (Figure BV12).

Additional Information

- Anchoring: Traps should be securely wired to something solid such as a tree, culvert grate, re-rod stake, etc.
- Safety considerations: Users should follow manufacturer’s safety precautions.
- Special considerations for practicality: Traps are large and cumbersome.



Average Mechanical Description and Attributes

Dimensions (inches): 36L x 29W x 15H

Mesh size: 2 x 2 inch, 12 gauge with 1x2 inch welded mesh floor

Weight: 25.6 pounds



Figure BV 13. EZee Set™ Live Beaver Trap

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the EZee Set™ Live Catch Beaver Trap (Figure BV13).

Additional Information

- Anchoring: Traps should be securely wired to something solid such as a tree, culvert grate, re-rod stake, etc.
- Safety considerations: Users should follow manufacturer’s safety precautions.
- Special considerations for practicality: Traps are large and cumbersome.



Bodygrip Traps (Figures BV14 - BV15)

Average Mechanical Description and Attributes

Height of trap window: 8 ¹/₈ inches

Width of trap window: 8 ³/₁₆ inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: None, but does have a magnum bend which eliminates the gap between the jaws when the trap is closed.

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Belisle™ Super X 280 bodygrip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended, and trappers should familiarize themselves with emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for submersion sets for river otter.



Average Mechanical Description and Attributes

Height of trap window: 10 inches

Width of trap window: 10 inches

Diameter of frame wire: ⁵/₁₆ inch

Diameter of spring wire: ⁵/₁₆ inch

Additional clamping bar: None

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Belisle™ Classic 330 bodygrip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for submersion sets for river otter.



Most bodygrip traps approved in this BMP were tested via computer simulation modeling relative to animal welfare performance. As a result, trap anchoring information does not exist for these traps. However, bodygrip traps should always be securely anchored. Anchoring information is provided on specific traps that were field tested.

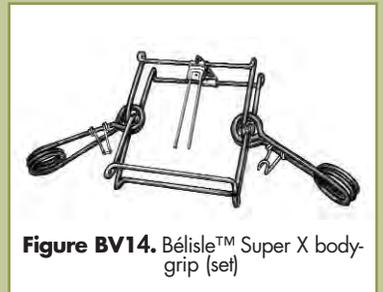


Figure BV14. Belisle™ Super X bodygrip (set)

Average Mechanical Description and Attributes

Height of trap window: 10 ¹/₈ inches

Width of trap window: 10 ⁷/₁₆ inches

Diameter of frame wire: ⁵/₁₆ inch

Diameter of spring wire: ⁵/₁₆ inch

Additional clamping bar: None, but does have a magnum bend which eliminates the gap between the jaws when the trap is closed

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Belisle™ Super X 330 body-grip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended, and trappers should familiarize themselves with emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for submersion sets for river otter.



Average Mechanical Description and Attributes

Height of trap window: 8 ³/₈ inches

Width of trap window: 8 ³/₈ inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: None

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the BMI™ 280 bodygrip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 9 3/4 inches
Width of trap window: 10 3/8 inches
Diameter of frame wire: 5/16 inch
Diameter of spring wire: 5/16 inch
Additional clamping bar: None
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the BMI™ 330 bodygrip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



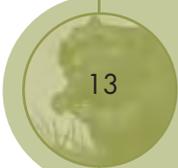
Average Mechanical Description and Attributes

Height of trap window: 8 3/4 inches
Width of trap window: 10 1/2 inches
Diameter of frame wire: 5/16 inch
Diameter of spring wire: 5/16 inch
Additional clamping bar: None
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bridger™ 330 bodygrip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 8 ³/₈ inches

Width of trap window: 10 ¹/₂ inches

Diameter of frame wire: ⁵/₁₆ inch

Diameter of spring wire: ⁵/₁₆ inch

Additional clamping bar: None

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Duke™ 330 bodygrip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 8 ³/₁₆ inches

Width of trap window: 8 ⁹/₁₆ inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: None

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the LDL™ C280.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended, and trappers should familiarize themselves with emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 8 ³/₁₆ inches

Width of trap window: 8 ⁹/₁₆ inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: Yes

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the LDL™ C280 Magnum.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended and trappers should familiarize themselves with the emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 9 ¹³/₁₆ inches

Width of trap window: 10 ³/₈ inches

Diameter of frame wire: ⁵/₁₆ inch

Diameter of spring wire: ⁵/₁₆ inch

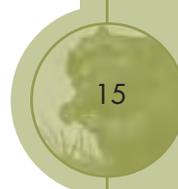
Additional clamping bar: Yes

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the LDL™ C330 Magnum.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended and trappers should familiarize themselves with the emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 9 ¹³/₁₆ inches

Width of trap window: 10 ³/₈ inches

Diameter of frame wire: ⁵/₁₆ inch

Diameter of spring wire: ⁵/₁₆ inch

Additional clamping bar: None

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the LDL™ C330.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended, and trappers should familiarize themselves with emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 8 ¹/₈ inches

Width of trap window: 8 ¹/₈ inches

Diameter of frame wire: ⁵/₁₆ inch

Diameter of spring wire: ⁵/₁₆ inch

Additional clamping bar: None

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Rudy™ 280.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 10 1/4 inches
Width of trap window: 10 inches
Diameter of frame wire: 5/16 inch
Diameter of spring wire: 5/16 inch
Additional clamping bar: None
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Rudy™ 330.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 8 inches
Width of trap window: 8 inches
Diameter of frame wire: 5/16 inch
Diameter of spring wire: 1/4 inch
Additional clamping bar: Yes
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ 2001-8 bodygrip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended, and trappers should familiarize themselves with emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 10 inches
Width of trap window: 9 inches
Diameter of frame wire: $\frac{5}{16}$ inch
Diameter of spring wire: $\frac{5}{16}$ inch
Additional clamping bar: Yes
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Species Specific™ 330 Dislocator Half-Magnum bodygrip trap.

Additional Information

- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended, and trappers should familiarize themselves with emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: $8 \frac{3}{8}$ inches
Width of trap window: $8 \frac{3}{8}$ inches
Diameter of frame wire: $\frac{1}{4}$ inch
Diameter of spring wire: $\frac{5}{16}$ inch
Additional clamping bar: None
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream Oneida Victor 280 Conibear™ bodygrip trap.

Additional Information

- Anchoring: 18 inch chain anchored with a stake.
- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

- Height of trap window: 9 3/4 inches
- Width of trap window: 10 3/8 inches
- Diameter of frame wire: 5/16 inch
- Diameter of spring wire: 5/16 inch
- Additional clamping bar: None
- Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream Oneida Victor 330 Conibear™ bodygrip trap.

Additional Information

- Anchoring: 18 inch chain anchored with a stake.
- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This trap also meets BMP criteria for river otter.



Bodygrip Traps (for submersion only)

Average Mechanical Description and Attributes

- Height of trap window: 6 7/8 inches
- Width of trap window: 7 inches
- Diameter of frame wire: 1/4 inch
- Diameter of spring wire: 1/4 inch
- Additional clamping bar: None
- Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream Oneida Victor 220 Conibear™ bodygrip trap.

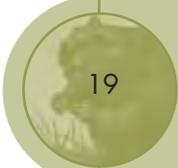
Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 18 inch chain anchored with a stake.
- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets and raccoon.



Submersion sets:

See the Trapper Education Student Manual: *A Guide for Trappers in the United States* at http://www.fishwildlife.org/furbearer_resources.html for more information on submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 9 inches
Width of trap window: 12 inches
Diameter of frame wire: $\frac{5}{16}$ inch
Diameter of spring wire: $\frac{5}{16}$ inch
Additional clamping bar: Yes
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Species Specific™ 440 Dislocator Half-Magnum bodygrip trap.

Additional Information

- For use in submersion sets only.
- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended, and trappers should familiarize themselves with emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 11 inches
Width of trap window: 11 inches
Diameter of frame wire: $\frac{5}{16}$ inch
Diameter of spring wire: $\frac{5}{16}$ inch
Additional clamping bar: Yes
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ 2001-11 bodygrip trap.

Additional Information

- For use in submersion sets only.
- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: This trap has complete jaw closure. The use of safety devices such as setting tongs and a safety gripper is highly recommended, and trappers should familiarize themselves with emergency release methods discussed in the "Safe Use of Bodygrip Traps" section.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Average Mechanical Description and Attributes

- Height of trap window: 11 inches
- Width of trap window: 11 inches
- Diameter of frame wire: 5/16 inch
- Diameter of spring wire: 5/16 inch
- Additional clamping bar: None
- Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ 1000-11F body-grip trap.

Additional Information

- For use in submersion sets only.
- Selectivity features: Species selective trigger configurations may improve selectivity.
- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for river otter in submersion sets.



Non-Powered Cable Devices (Figure BV16)

Average Mechanical Description and Attributes

- Cable diameter: 3/32 inch, 7 X 7 weave
- Cable length: 36 inch capture cable, 50 inch extension cable
- Cable lock: Relaxing
- Catch loop size: 9 – 10 inches

Any cable device that has similar specifications may be considered a BMP device regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. Locks tested consisted of a reverse bend washer lock with an outside diameter of 1 1/4 inches.

Additional Information

- Anchoring was achieved by a 50 inch extension of 3/32 cable with two swivel points and anchored with a stake. One swivel was located between the capture cable and the extension, while the other swivel was located at the anchoring end of the extension.
- Selectivity Features: A 9 to 10 inch diameter loop was set resting on the ground perpendicular to the line of travel of an approaching beaver, and supported with a guide stick or wire (Figure BV17).
- Special Considerations for Practicality: Cables will typically need to be replaced after each capture. Minimally, the cable should be closely inspected for kinks or damage before reuse.

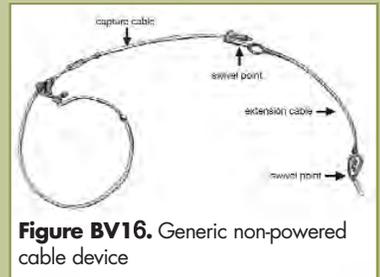


Figure BV16. Generic non-powered cable device

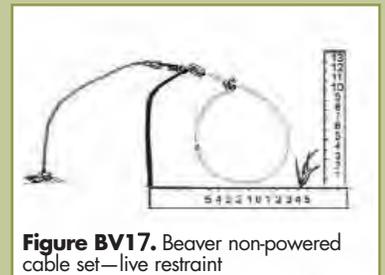


Figure BV17. Beaver non-powered cable set—live restraint



Average Mechanical Description and Attributes

Cable diameter: $\frac{3}{32}$ inch, 7 X 7 weave

Cable length: 42 inch capture cable, 44 inch extension cable

Cable lock: Relaxing

Catch loop size: 9 – 10 inches

Any cable device that has similar specifications may be considered a BMP device regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. Lock consisted of a cam lock with no spring.

Additional Information

- Anchoring was achieved by a 44 inch extension of $\frac{3}{32}$ cable with two swivel points and anchored with a stake. One swivel was located between the capture cable and the extension, while the other swivel was located at the anchoring end of the extension.
- Selectivity Features: A 9 to 10 inch diameter loop was set resting on the ground perpendicular to the line of travel of an approaching beaver, and supported with a guide stick or wire (Figure BV17).
- Special Considerations for Practicality: Cables will typically need to be replaced after each capture. Minimally, the cable should be closely inspected for kinks or damage before reuse.



Average Mechanical Description and Attributes

Cable diameter: $\frac{3}{32}$ inch, 7 X 7 weave

Cable length: 42 inch capture cable, 44 inch extension cable

Cable lock: Relaxing

Catch loop size: 9 – 10 inches

Any cable device that has similar specifications may be considered a BMP device regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. Lock consisted of the BMI Slide Free™ Lock.

Additional Information

- Anchoring was achieved by a 44 inch extension of $\frac{3}{32}$ cable with two swivel points anchored with a stake. One swivel was located between the capture cable and the extension, while the other swivel was located at the anchoring end of the extension.
- Selectivity Features: A 9 to 10 inch diameter loop was set resting on the ground perpendicular to the line of travel of an approaching beaver, and supported with a guide stick or wire (Figure BV17).
- Special Considerations for Practicality: Cables will typically need to be replaced after each capture. Minimally, the cable should be closely inspected for kinks or damage before reuse.



Average Mechanical Description and Attributes

Cable diameter: 1/8 inch, 7 X 7 weave
Cable length: 42 inch capture cable, 44 inch extension cable
Cable lock: Relaxing
Catch loop size: 9 – 10 inches

Any cable device that has similar specifications may be considered a BMP device regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. Lock consisted of a cam lock with no spring.

Additional Information

- Anchoring was achieved by a 44 inch extension of 3/32 cable with one swivel point and anchored with a stake. One swivel was located between the capture cable and the extension.
- Selectivity Features: A 9 to 10 inch diameter loop was set resting on the ground perpendicular to the line of travel of an approaching beaver, and supported with a guide stick or wire (Figure BV17).
- Special Considerations for Practicality: Cables will typically need to be replaced after each capture. Minimally, the cable should be closely inspected for kinks or damage before reuse.



Average Mechanical Description and Attributes

Cable diameter: 3/32 inch, 1 X 19 weave
Cable length: 72 inch capture cable
Cable lock: Relaxing
Catch loop size: 9 – 10 inches

Any cable device that has similar specifications may be considered a BMP device regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. Lock consisted of Raymond Thompson Co. standard neck lock.

Additional Information

- Anchoring was achieved with a stake.
- Selectivity Features: A 9 to 10 inch diameter loop was set resting on the ground perpendicular to the line of travel of an approaching beaver, and supported with a guide stick or wire (Figure BV17).
- Special Considerations for Practicality: Cables will typically need to be replaced after each capture. Minimally, the cable should be closely inspected for kinks or damage before reuse.



Submersion sets:

See the *Trapper Education Student Manual: A Guide for Trappers in the United States* at http://www.fishwildlife.org/furbearer_resources.html for more information on submersion sets.

Non-Powered Cable Devices (for submersion only)*Average Mechanical Description and Attributes*

Cable diameter: $\frac{1}{16}$ inch, 1 X 19 weave

Cable length: 48 inch capture cable

Cable lock: Relaxing

Catch loop size: 9 – 10 inches

Any cable device that has similar specifications may be considered a BMP device regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. Lock consisted of the BMI Slide Free™ Lock.

Additional Information

- This device was tested "under ice" and is recommended for use in submersion/under ice sets only.
- Anchoring was achieved by securing cable to a stabilizing pole.
- Selectivity Features: Loop size may affect selectivity.
- Special Considerations for Practicality: Cables will typically need to be replaced after each capture. Minimally, the cable should be closely inspected for kinks or damage before reuse.

Best Management Practices for Trapping Bobcats in the United States

UPDATED 2014





Figure BC1. Bobcat
(*Lynx rufus*)

Best Management Practices (BMPs) are carefully researched recommendations designed to address animal welfare and increase trappers' efficiency and selectivity. The extensive research and field-testing used to develop BMPs are described in the Introduction section of this manual. The evaluation methods used to develop BMPs have been standardized, enabling them to be easily updated and revised as new traps and techniques become available. All traps listed in the BMPs have been tested and meet performance standards for animal welfare, efficiency, selectivity, practicality and safety.

Trapping BMPs provide options, allowing for discretion and decision making in the field. BMPs are meant to be implemented in a voluntary and educational approach and do not present a single choice that can or must be applied in all cases. BMPs are the product of ongoing work that may be updated as additional traps are identified through future scientific testing.

The Bobcat at a Glance

Characteristics

The bobcat is a medium-sized member of the cat (Felidae) family (Figure BC1). Adult males are generally larger than adult females; males range from 12-68 pounds and average 20-28 pounds, while females range from 9-34 pounds and average 14-20 pounds. The average length for adults is 28-37 inches. The base coloration of the bobcat is typically reddish brown with darker fur traversing the middle of the back. Both sexes can be differentiated from similar species by a bobbed tail (about five inches) that is black at the very tip only on the top and sides, but pale or white on the bottom. The scientific name of the bobcat is *Lynx rufus*, although the bobcat may be classified as *Felis rufus* in some texts.

Range

The bobcat is the most widely distributed native felid in North America and is found in all 48 of the contiguous United States, in Canadian provinces bordering the United States and in non-tropical Mexico.

Habitat

The adaptability and wide prey base of the bobcat allows for the occupation of a wide range of habitats. Assuming adequate cover, forests, grasslands, deserts and mountainous regions are all suitable bobcat habitats. Large areas of intense cultivation or human development are less desirable habitats. Rough, rocky country interspersed with dense cover seems to be the preferred habitat.

Food Habits

Bobcats are opportunistic and effective predators. Primarily carnivorous, their most common prey includes small mammals, such as mice, rats and rabbits, but reptiles, birds and domestic cats are preyed upon as well. Bobcats also prey on deer fawns, and are capable of preying on adult deer, particularly when heavy snow cover favors the bobcat's mobility and hunting techniques. They rarely scavenge but will cache surplus food under snow or leaves for later feeding.



Reproduction

Breeding may occur over a seven-month period from December to June, with a usual peak in March. Typically, two to three young are born after a 50 to 70 day gestation period. Females breed beginning at one or two years of age and may produce a single litter every year thereafter. Males do not breed until two years of age. Young usually stay with the female until fall or later.

Populations

Bobcat populations vary across the United States. While the highest densities are found in the Southeastern states and coastal region of California, the lowest densities are found in Midwestern states. Bobcat mortality is most often human-related (e.g. hunting, trapping and vehicle collisions), with natural mortality being of secondary importance in most populations. However, at times of low prey density, starvation of kittens and inexperienced juveniles can be a significant source of mortality. Predation of adult bobcats by larger carnivores, domestic dogs, or other bobcats rarely occurs, although predation of bobcat kittens by coyotes, great-horned owls, and especially adult male bobcats is more common. Adult bobcats live solitary lives except during the breeding season.

General Overview of Traps Meeting BMP Criteria for Bobcats in the United States

Three basic types of traps were tested for bobcats: foothold restraining traps, a powered cable devices for foot capture and a cage trap (Table BC1). Examples, brief descriptions, and mechanical details of the various devices are given in the next section.

Table BC1. Overview of traps meeting BMP criteria for bobcats in the United States.

Trap Category	Jaw/Frame Characteristics	Inside Jaw/Frame Spread at Dog*	Inside Width at Jaw/Frame Hinge Posts*
Coil-spring	Unmodified	4 1/2 - 6 1/8	4 5/8 - 6 3/8
	Padded	4 1/2 - 5 3/16	4 9/16 - 6 7/16
	Offset, laminated and/or wide	5 1/16 - 6 1/16	5 1/16 - 6 3/8
Longspring	Unmodified	5 7/16	5 9/16
Powered Cable Device (foot capture)	Smooth, round rod, 3/32 inch cable	6 3/8	5 3/4
Cage	Total Dimensions* Length x Width x Height	Door Size* Width x Height	Mesh Size*/Gauge
	42 x 15 x 20	15 x 19 1/4	1 x 2 12 gauge galvanized

* Inches



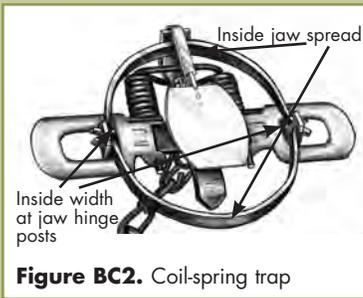


Figure BC2. Coil-spring trap

General Considerations When Trapping Bobcats

Foothold Traps

- Many currently used trap models meet specifications
- Pan tension set at two to four pounds may improve selectivity and foot placement in the trap
- Can be used to capture several furbearer species
- Captures and holds animals alive, allowing for release

Powered Cable Devices (foot capture)

- Pan-tension set at two to four pounds may improve selectivity
- Can be used to capture several furbearer species
- Use of a loop stop (plastic sleeve) minimizes capture of smaller species
- Cables require frequent replacement after capture
- Captures and holds animals alive, allowing for release

Cage Traps

- Bulky
- Requires bait or lure
- Can be used to capture several furbearer species
- Captures and holds animals alive, allowing for release

Specifications of Traps Meeting BMP Criteria for Bobcats in the United States

As more capture devices are tested and new information becomes available, they will be added to an updated list. Mechanical descriptions of tested traps are given as an aid to trappers or manufacturers who may wish to measure, build or modify traps to meet these specifications (Figure BC2). Also, other commercially available traps, modified traps, or other capture devices not yet tested may perform as well as or better than the listed BMP traps. References to trap names are provided to identify the specific traps tested. The following list is provided for information purposes only and does not imply an endorsement of any manufacturer.

Average mechanical measurements are rounded to the nearest $\frac{1}{16}$ inch. There may be up to a $\frac{1}{8}$ inch variation in specifications (Figure BC2) on the part of the manufacturer. Manufacturers use recognizable names, such as "No. 2" coil-spring, to identify certain traps. However, there is no standardized system linking mechanical design features with trap names. The mechanical features of these traps are listed so that similar traps may be identified. The performance of anchoring systems was not specifically evaluated, however, methods of attachment are described for informational purposes.



Unmodified Jaws (Figures BC3a and BC3b)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 1/2 inches

Inner width: 4 1/4 inches

Inside width at jaw hinge posts: 4 5/8 inches

Jaw width: 7/16 inch smooth round jaw

Jaw thickness: 1/8 inch

Main trap springs: Two 0.130 inch diameter wire coil-springs

Base plate: Not reinforced

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 1/2 coil-spring.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for red foxes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 1/4 inches

Inner width: 4 9/16 inches

Inside width at jaw hinge posts: 5 inches

Jaw width: 1/2 inch smooth round jaw

Jaw thickness: 1/8 inch

Main trap springs: Two 0.145 inch diameter wire coil-springs

Base plate: Not reinforced

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1.75 coil-spring.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for red foxes, Eastern coyotes and Western coyotes.

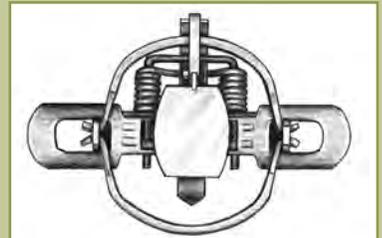


Figure BC3a. Unmodified jaw coil-spring trap (open)



Figure BC3b. Unmodified jaw coil-spring trap (closed)



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 inches
Inner width: 4 1/2 inches
Inside width at jaw hinge posts: 5 inches
Jaw width: 1/2 inch smooth round jaw
Jaw thickness: 1/8 inch
Main trap springs: Two 0.145 inch diameter wire coil-springs
Base plate: Not reinforced

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 2 coil-spring.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for Eastern coyotes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 6 1/8 inches
Inner width: 5 7/8 inches
Inside width at jaw hinge posts: 6 3/8 inches
Jaw width: 5/8 inches square jaw
Jaw thickness: 3/16 inches
Main trap springs: Two 0.160 inch diameter wire coil-springs
Base plate: Not reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bridger™ No. 3 coil-spring.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for Western coyotes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ⁷/₁₆ inches
Inner width: 5 ¹/₄ inches
Inside width at jaw hinge posts: 5 ⁹/₁₆ inches
Jaw width: ⁹/₁₆ inch
Jaw thickness: ³/₁₆ inch
Length of main trap springs: 6 ¹/₂ inches
Thickness of main trap springs: ¹/₈ inch
Width of main trap springs: 1 ³/₁₆ narrowing to ⁵/₈ inches
Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek™ No. 3 double-longspring.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.



Padded Jaws (Figures BC4a and BC4b)

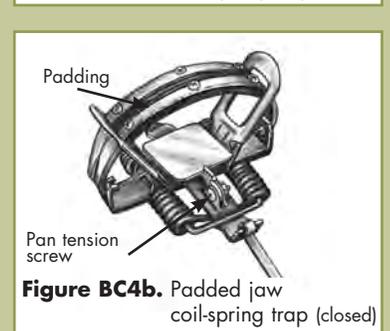
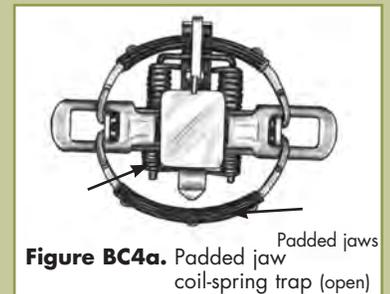
Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 ¹/₂ inches
Inner width: 4 ⁷/₈ inches
Inside width at jaw hinge posts: 4 ⁹/₁₆ inches
Jaw width: ⁹/₁₆ inch padded jaw
Jaw thickness: ³/₈ inch
Padding: Manufacturer-supplied rubber pads
Main trap springs: Two 0.131 inch diameter wire coil-springs
Additional springs: Two 0.100 inch diameter wire coil-springs
Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 ¹/₂ Softcatch™ modified coil-spring, four-coiled.

Additional Information

- Chain attachment used in trap testing: 18 inch, center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based dye directly on the rubber pads. This device also meets BMP criteria for red foxes, Eastern coyotes, gray foxes and opossums.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ³/₁₆ inches

Inner width: 6 ¹/₁₆ inches

Inside width at jaw hinge posts: 6 ⁷/₁₆ inches

Jaw width: ⁹/₁₆ inch round padded jaw

Jaw thickness: ³/₈ inch

Padding: Manufacturer-supplied rubber pads

Main trap springs: Two 0.145 inch diameter wire coil-springs

Additional springs: Two 0.115 inch diameter wire coil-springs

Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 3 Softcatch™ modified coil-spring, four-coiled.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based dye directly on the rubber pads. This device also meets BMP criteria for red foxes, Eastern coyotes and Western coyotes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 inches

Inner width: 6 ¹/₈ inches

Inside width at jaw hinge posts: 6 ⁷/₁₆ inches

Jaw width: ⁹/₁₆ inch round padded jaw

Jaw thickness: ³/₈ inch

Padding: manufacturer supplied rubber pads

Trap springs: Two 0.145 inch diameter wire coil-springs

Base plate: Reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Oneida-Victor™ No. 3 Softcatch™.



Additional Information

- Chain attachment used in trap testing: Nine inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two-four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based dye directly on the rubber pads. This trap also meets BMP criteria for Canada lynx.



Offset, Laminated and/or Wide Jaws (Figures BC5–BC8)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ¹/₁₆ inches

Inner width: 4 ⁹/₁₆ inches

Inside width at jaw hinge posts: 5 ¹/₁₆ inches

Jaw width: ⁷/₁₆ inch wide, smooth round jaw

Jaw thickness: ⁵/₁₆ inch

Jaw thickness with lamination: ¹/₂ inch

Lamination: ³/₁₆ inch above-jaw lamination

Jaw offset: ³/₁₆ inch

Main trap springs: Two 0.135 inch diameter wire coil-springs

Base plate: Not reinforced

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1.75 coil-spring trap modified with offset, laminated jaws (lamination on top of jaws) (Figure BC5).

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for gray foxes, red foxes, Eastern coyotes and Western coyotes.

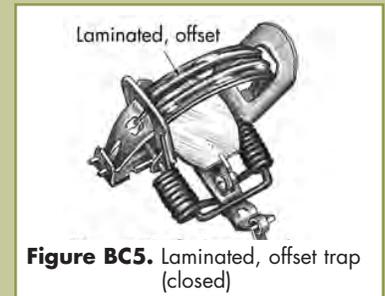


Figure BC5. Laminated, offset trap (closed)



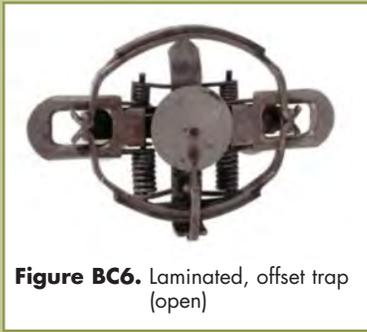


Figure BC6. Laminated, offset trap (open)

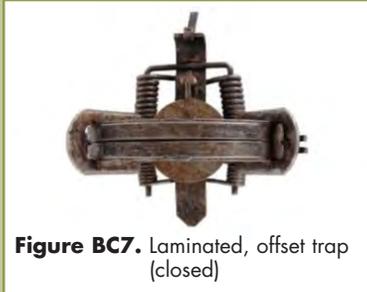


Figure BC7. Laminated, offset trap (closed)

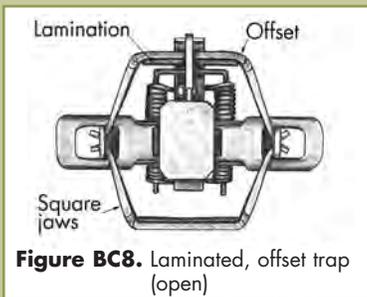


Figure BC8. Laminated, offset trap (open)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ½ inches
 Inner width: 6 inches
 Inside width at jaw hinge posts: 6 1/8 inches
 Jaw width: ½ inch
 Jaw thickness: 3/16 inch
 Jaw thickness with lamination: 5/16 inch
 Lamination: 1/8 inch thick, above jaw (flat bar)
 Main trap springs: Two 0.145 inch diameter wire coil-springs
 Additional springs: Two 0.115 inch diameter wire coil-springs
 Base plate: Reinforced, D-ring chain attachment.

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Oneida-Victor™ No. 3 coil-spring with above- jaw lamination, four coiled (Figures BC6–BC7).

Additional Information

- Chain attachment used in trap testing: Nine inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two-four pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This trap also meets BMP criteria for Canada lynx.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ½ inches
 Inside jaw spread (between below-jaw lamination): 5 inches
 Inner width: 5 1/16 inches
 Inside width at jaw hinge posts: 5 9/16 inches
 Jaw width: 7/16 inch square jaw
 Jaw thickness: 3/16 inch
 Jaw thickness with lamination: 7/16 inches
 Lamination: 1/4 inch below-jaw lamination
 Jaw offset: 3/16 inch
 Main trap springs: Two 0.145 inch diameter wire coil-springs
 Additional springs: Two 0.110 inch diameter wire coil-springs
 Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Bridger™ No. 2 coil-spring trap with square jaw, modified with offset, laminated jaws (lamination on bottom of jaws), and four-coiled (Figure BC8).



Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for red foxes, Eastern coyotes and Western coyotes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): $6 \frac{1}{16}$ inches

Inner width: $5 \frac{7}{8}$ inches

Inside width at jaw hinge posts: $6 \frac{3}{8}$ inches

Jaw width: $\frac{1}{2}$ inch square jaw

Jaw thickness: $\frac{3}{16}$ inch

Jaw offset: $\frac{3}{16}$ inch

Main trap springs: Two 0.160 inch diameter wire coil-springs

Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bridger™ No. 3 coil-spring trap modified with an offset.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): $6 \frac{1}{16}$ inches

Inner width: $5 \frac{7}{8}$ inches

Inside width at jaw hinge posts: $6 \frac{3}{8}$ inches

Jaw width: $\frac{1}{2}$ inch square jaw

Jaw thickness: $\frac{3}{16}$ inch

Jaw thickness with lamination: $\frac{7}{16}$ inch

Lamination: $\frac{1}{4}$ inch above-jaw lamination

Jaw offset: $\frac{3}{16}$ inch

Main trap springs: Two 0.160 inch diameter wire coil-springs

Additional trap springs: Two 0.110 inch diameter wire coil-springs

Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bridger™ No. 3 coil-spring trap modified with offset, laminated jaws (lamination on top of jaws).



Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): $6 \frac{1}{16}$ inches

Inner width: $5 \frac{7}{8}$ inches

Inside width at jaw hinge posts: $6 \frac{3}{8}$ inches

Jaw width: $\frac{1}{2}$ inch square jaw

Jaw thickness: $\frac{3}{16}$ inch

Jaw thickness with lamination: $\frac{7}{16}$ inch

Lamination: $\frac{1}{4}$ inch above-jaw lamination

Main trap springs: Two 0.160 inch diameter wire coil-springs

Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bridger™ No. 3 coil-spring trap modified with laminated jaws (lamination on top of jaws).

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): $5 \frac{3}{4}$ inches

Inner width: $5 \frac{5}{16}$ inches

Inside width at jaw hinge posts: $5 \frac{13}{16}$ inches

Jaw width: $\frac{1}{2}$ inch

Jaw thickness: $\frac{3}{8}$ inch

Jaw offset: $\frac{1}{4}$ inch

Main trap springs: Four 0.148 inch diameter wire coil-springs

Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Minnesota Brand MB650™ offset coil-spring, four-coiled.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for Western coyotes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): $5 \frac{13}{16}$ inches

Inner width: $5 \frac{7}{16}$ inches

Inside width at jaw hinge posts: $5 \frac{7}{8}$ inches

Jaw width: $\frac{1}{2}$ inches smooth round jaw

Jaw thickness: $\frac{3}{8}$ inches

Jaw offset: $\frac{3}{16}$ inches

Main trap springs: Four 0.146 inch diameter wire coil-springs

Base plate: Reinforced with D-ring

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sterling™ MJ600 offset coil-spring trap, four-coiled.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Special considerations for practicality: This device also meets BMP criteria for Western coyotes.

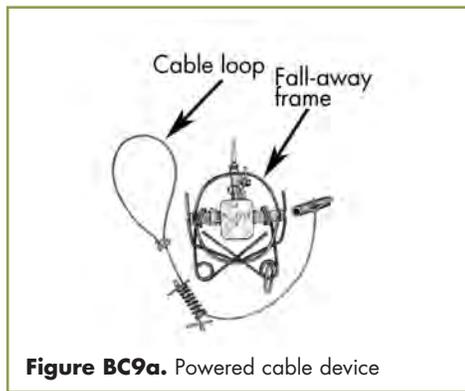


Figure BC9a. Powered cable device

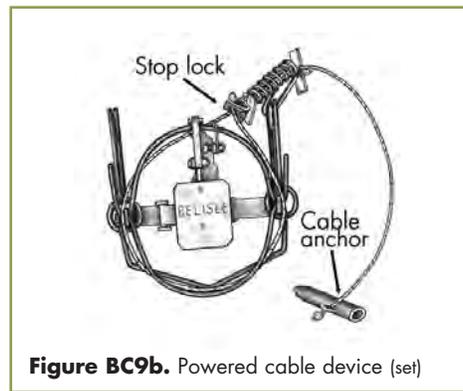


Figure BC9b. Powered cable device (set)

Powered Cable Devices (Foot Capture) (Figures BC9a and BC9b)

Average Mechanical Description and Attributes

Inside cable retention frame spread (at dog): $6 \frac{3}{8}$ inches

Inner width: $5 \frac{3}{4}$ inches

Inside width at frame hinge posts: 6 inches

Cable retention frame width: $\frac{1}{8}$ inch, smooth round rod

Cable retention frame thickness: $\frac{1}{8}$ inch rod

Main trap springs: Two 0.188 inch diameter rod quick-release springs

Cable diameter: $\frac{3}{32}$ inch cable

Minimum loop circumference: 2 inches

Base plate: Not reinforced



Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Belisle™ Foot Snare.

Additional Information

- Cable attachment on device tested: Swivel and shock spring with a cable anchor.
- Selectivity features: Pan tension machine screw; pan tension was set so two to four pounds of pressure triggered the trap and was checked and readjusted as needed after every capture. Large cable diameter and available plastic sleeve work to prevent the cable from closing to a small diameter, thus eliminating the incidental take of small mammals, such as squirrels, skunks, etc.
- Special considerations for practicality: Some damage and kinking of cables should be expected following capture and will require frequent replacement as a normal part of trap maintenance and upkeep. This device also meets BMP criteria for red foxes, gray foxes, Eastern coyotes and Western coyotes.



Figure BC10. Cage trap

Cage Traps (Figure BC10)

Average Mechanical Description and Attributes

Cage material, and mesh size: 12 gauge galvanized steel wire mesh, 1 x 2 inches

Cage size (length x width x height): 42 x 15 x 20 inches

Door size (width x height): 15 x 19 1/4 inches

Weight: 21 pounds

Door closure: Spring operated

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Tomahawk™ Cage Trap, No. 109.5.

Additional Information

- Selectivity features: Opening size and length allows capture of large animals.
- Special considerations for practicality: Versatile set options (baited sets and blind sets only with double doors); can be used for multiple furbearer species in same sets; large and easily seen (difficult to conceal completely); bulky—requires space for transport and storage; easy to operate—requires little training; can be used to transport captured animals; captured animals are easily released; continues to operate in freezing weather conditions.

Best Management Practices for Trapping Gray Foxes in the United States

UPDATED 2014



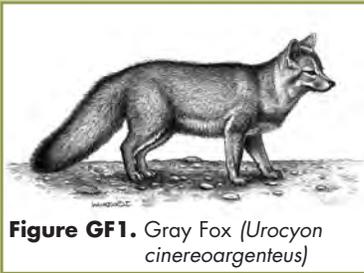


Figure GF1. Gray Fox (*Urocyon cinereoargenteus*)

Best Management Practices (BMPs) are carefully researched recommendations designed to address animal welfare and increase trappers' efficiency and selectivity. The extensive research and field-testing used to develop BMPs are described in the Introduction section of this manual. The evaluation methods used to develop BMPs have been standardized, enabling BMPs to be easily updated and revised as new traps and techniques become available. All traps listed in the BMPs have been tested and meet performance standards for animal welfare, efficiency, selectivity, practicality, and safety.

Trapping BMPs provide options, allowing for discretion and decision making in the field. BMPs are meant to be implemented in a voluntary and educational approach and do not present a single choice that can or must be applied in all cases. BMPs are the product of ongoing work that may be updated as additional traps are identified through future scientific testing.

The Gray Fox at a Glance

Characteristics

The gray fox (Figure GF1) is a member of the Canidae family and is similar in size to the red fox. Adults on average range from 6 1/2 to 15 pounds, with an average length of 31 to 44 inches. Adult males are generally larger than adult females. The gray fox can be differentiated from the red fox by its silvery-gray coat and black-tipped tail versus the orange-red coat with white-tipped tail of the red fox. The scientific name is *Urocyon cinereoargenteus*.

Range

The gray fox is found throughout the contiguous United States, with the exception of the mountainous portions of the northwestern states. Populations can also be found in extreme southern Canada, as well as throughout Mexico and Central America.

Habitat

In the eastern United States, the gray fox prefers to inhabit areas of deciduous forest and areas with a mix of deciduous forest and farmland. In the west, brushlands and streamside forests are preferred.

Food Habits

The gray fox is the most omnivorous of the North American canid species, consuming a wide variety of plant and animal matter. In most ecosystems, various rodents, rabbits and birds form the majority of the diet. When seasonally available, fruits, nuts, and vegetables are consumed as an important food source. The gray fox will also feed on carrion, and food items not consumed during one meal are often buried to be consumed later.

Reproduction

The breeding season occurs from January to May, but mating peaks in March. After a gestation period of 53 days, a litter of three to five young is born. The pups leave the den after approximately three months, and family groups disband after approximately six to seven months. Reproduction occurs only once a year, and gray foxes typically breed the first year following birth.



Populations

During the last half century, the gray fox range has extended northward and into the Great Plains region. The areas of range expansion were formerly unoccupied by this species or were areas where the species had been extirpated. It preys upon far less domestic livestock and poultry than the red fox, causing little economic loss to humans.

Aside from humans and domestic dogs, gray foxes have few natural predators, though coyotes may occasionally prey upon them. Diseases such as canine distemper and rabies may also impact populations locally. Unique among members of the canid family, the gray fox is an excellent climber and often spends time sunning on tree branches.

General Overview of Traps Meeting BMP Criteria for Gray Foxes in the United States

Three basic types of traps were tested for gray foxes: foothold restraining traps, a powered cable device for foot capture, and a cage trap (Table GF1). Examples, brief descriptions, and mechanical details of the various devices are given in the next section.

Table GF1. Overview of traps meeting BMP criteria for gray foxes in the United States.

Trap Category	Jaw/Frame Characteristics	Inside Jaw/Frame Spread at Dog*	Inside Width at Jaw/Frame Hinge Posts*
Coil-spring	Padded	3 ⁵ / ₁₆ - 4 ¹ / ₂	3 ⁷ / ₁₆ - 5
	Double	4 ¹ / ₂	4 ¹ / ₂
	Offset, laminated and/or wide	3 ³ / ₄ - 5 ¹ / ₁₆	3 ¹ / ₂ - 5 ¹ / ₁₆
Powered Cable Device (foot capture)	Smooth, round rod, ¹ / ₈ inch cable	6 ³ / ₈	5 ³ / ₄
Cage	Total Dimensions* Length x Width x Height	Door Size* Width x Height	Mesh Size*/ Gauge
	32 x 10 x 12.75	10 x 12	1 x 2 12 gauge galvanized

* Inches



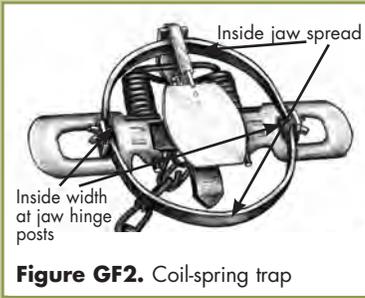


Figure GF2. Coil-spring trap

General Considerations When Trapping Gray Foxes

Foothold Traps

- Many currently used trap models meet specifications
- Pan tension set at two pounds may improve selectivity and foot placement in the trap
- Can be used to capture several furbearer species
- Captures and holds animals alive, allowing for release

Powered Cable Devices (foot capture)

- Pan tension set to two pounds may improve selectivity
- Use of a loop stop (plastic sleeve) and large diameter cable minimizes capture of smaller species
- Cables require frequent replacement after capture
- Can be used to capture several furbearer species
- Captures and holds animals alive, allowing for release

Cage Traps

- Bulky
- Often requires bait or lure
- Can be used to capture several furbearer species
- Captures and holds animals alive, allowing for release

Specifications of Traps Meeting BMP Criteria for Gray Foxes in the United States

As more capture devices are tested and new information becomes available, they will be added to an updated list. Mechanical descriptions of tested traps are given as an aid to trappers or manufacturers who may wish to measure, build or modify traps to meet these specifications (Figure GF2). Also, other commercially available traps, modified traps, or other capture devices not yet tested may perform as well as or better than the listed BMP traps. References to trap names are provided to identify the specific traps tested. The following list is provided for informational purposes only and does not imply an endorsement of any manufacturer.

Average mechanical measurements are rounded to the nearest $\frac{1}{16}$ inch. There may be up to a $\frac{1}{8}$ inch variation in specifications (Figure GF2) on the part of the manufacturer. Manufacturers use recognizable names, such as "No. 2" coil-spring, to identify certain traps. However, there is no standardized system linking mechanical design features with trap names. The mechanical features of these traps are listed so that similar traps may be identified. The performance of anchoring systems was not specifically evaluated, however, methods of attachment are described for informational purposes.



Padded Jaws (Figures GF3a–GF5b)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): $3 \frac{5}{16}$ inches

Inner width: $3 \frac{3}{16}$ inches

Inside width at jaw hinge posts: $3 \frac{7}{16}$ inches

Jaw width: $\frac{9}{16}$ inch padded jaw

Jaw thickness: $\frac{1}{4}$ inch padded jaw

Main trap springs: Two 0.084 inch diameter wire coil-springs

Base plate: Not reinforced

Padding: Manufacturer-supplied rubber pads

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 Softcatch™ coil-spring (Figures GF3a–GF3b).

Additional information

- Chain attachment used in trap testing: 8 inch, center mounted with two swivels, one shock spring and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was loosened so that the pan moved freely, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based dye directly on the rubber pads. This device also meets BMP criteria for use in submersion sets for beaver, otter, muskrat, and mink, and nutria on land or in submersion sets.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): $4 \frac{1}{2}$ inches

Inner width: $4 \frac{7}{8}$ inches

Inside width at jaw hinge posts: $4 \frac{7}{16}$ inches

Jaw width: $\frac{9}{16}$ inch padded jaw

Jaw thickness: $\frac{3}{8}$ inch

Main trap springs: Two 0.135 inch diameter wire coil-springs

Base plate: Not reinforced

Padding: Manufacturer-supplied rubber pads

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 $\frac{1}{2}$ Softcatch™ coil-spring, with 0.135 inch diameter wire coil-springs (Figure GF4).



Figure GF3a. Padded jaw coil-spring trap (open)



Figure GF3b. Padded jaw coil-spring trap (closed)

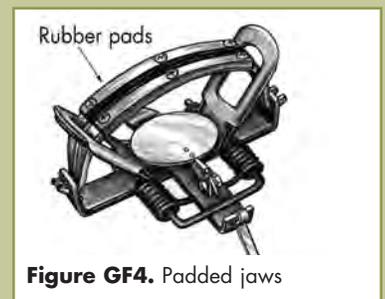


Figure GF4. Padded jaws

Additional Information

- Chain attachment used in trap testing: 6 inch, center-mounted with three swivels, one shock spring and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based dye directly on the rubber pads.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 1/2 inches

Inner width: 4 7/8 inches

Inside width at jaw hinge posts: 4 9/16 inches

Jaw width: 9/16 inch padded jaw

Jaw thickness: 3/8 inch

Main trap springs: Two 0.131 inch diameter wire coil-springs

Additional springs: Two 0.100 inch diameter wire coil-springs

Base plate: Reinforced with D-ring

Padding: Manufacturer-supplied rubber pads

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 1/2 Softcatch™ modified coil-spring, four-coiled (Figures GF5a–GF5b).

Additional Information

- Chain attachment used in trap testing: 6 inch, center-mounted with three swivels, two shock springs, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. This device also meets BMP criteria for opossums, red foxes, Eastern coyotes and bobcats.

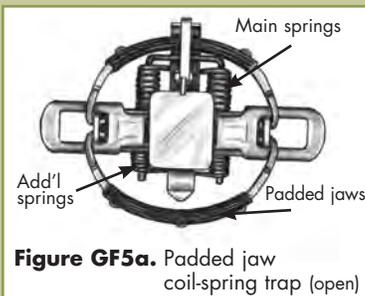


Figure GF5a. Padded jaw coil-spring trap (open)

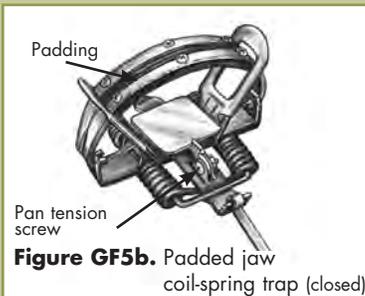


Figure GF5b. Padded jaw coil-spring trap (closed)



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 ⁵/₁₆ inches

Inner width: 4 ¹/₄ inches

Inside width at jaw hinge posts: 4 ⁹/₁₆ inches

Jaw width: ¹/₂ inch smooth round jaw

Jaw thickness: ¹/₄ inch

Main trap springs: Two 0.122 inch diameter wire coil-springs

Base plate: Not reinforced

Padding: Commercially available, post-production rubber pads

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 ¹/₂ coil-spring trap with Humane Hold™ pads.

Additional Information

- Chain attachment used in trap testing: 6 inch, center-mounted with two swivels, one shock spring and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. During BMP trap testing, Humane Hold™ pads were attached to trap jaws with plastic cable ties. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based dye directly on the rubber pads. This device also meets BMP criteria for red foxes.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 ¹/₂ inches

Inner width: 4 ⁵/₈ inches

Inside width at jaw hinge posts: 5 inches

Jaw width: ⁵/₈ inch padded jaw

Jaw thickness: ³/₈ inch

Main trap springs: Two 0.137 inch diameter wire coil-springs

Base plate: Not reinforced

Padding: Manufacturer-supplied rubber pads

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the BMI No. 2 Cushion Catch™ padded coil-spring.



Additional Information

- Chain attachment used in trap testing: 6 inch, center-mounted with two swivels, one shock spring and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based dye directly on the rubber pads. This device also meets BMP criteria for red foxes.



Double Jaws (Figures GF7a and GF7b)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 1/2 inches

Inner width: 4 15/16 inches

Inside width at jaw hinge posts: 4 1/2 inches

Jaw width: 9/16 inch

Jaw thickness: 5/16 inch

Main trap springs: Two 0.125 inch diameter wire coil-springs

Base plate: Not reinforced

Padding: Manufacturer-supplied rubber pads

Pan stop: Yes

Distance from trap pan with pan stop to bottom of auxiliary jaw when closed: 1 inch

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 1/2 Softcatch™ coil-spring, modified with double jaws and a pan stop (Figures GF7a–GF7b).

Additional Information

- Chain attachment used in trap testing: 6 inch, center-mounted with two swivels, one shock spring and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: Some damage to trap pads should be expected and will require occasional replacement as a normal part of trap maintenance and upkeep. Special care should be taken to prevent odor contamination of the rubber jaws. Avoid using petroleum-based dye directly on the rubber pads. This device also meets BMP criteria for opossums.

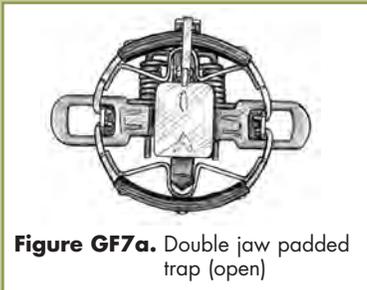


Figure GF7a. Double jaw padded trap (open)

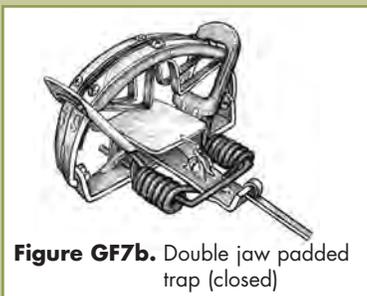


Figure GF7b. Double jaw padded trap (closed)



Offset, Laminated and/or Wide Jaws (Figures GF8—GF10b)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 3 ³/₄ inches

Inner width: 3 ³/₁₆ inches

Inside width at jaw hinge posts: 3 ¹/₂ inches

Jaw width: ³/₈ inch smooth round jaw

Jaw thickness: ¹/₈ inch

Jaw thickness with lamination: ⁵/₁₆ inch

Lamination: ³/₁₆, above-jaw lamination

Main trap springs: Two 0.120 inch diameter wire coil-springs

Base plate: Not reinforced

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 coil-spring, modified with laminated jaws (lamination on top) (Figure GF8).

Additional Information

- Chain attachment used in trap testing: 6 inch, center-mounted with two swivels, one shock spring and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 ¹/₁₆ inches

Inner width: 4 ⁹/₁₆ inches

Inside width at jaw hinge posts: 5 ¹/₁₆ inches

Jaw width: ⁷/₁₆ inch smooth round jaw

Jaw thickness: ⁵/₁₆ inch

Jaw thickness with lamination: ¹/₂ inch

Jaw offset: ³/₁₆ inch

Lamination: ³/₁₆, above-jaw lamination

Main trap springs: Two 0.135 inch diameter wire coil-springs

Base plate: Not reinforced

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1.75 coil-spring, modified with offset, laminated jaws (lamination on top) (Figure GF9).

Additional Information

- Chain attachment used in trap testing: 9 ¹/₂ inch, center-mounted with two swivels, one shock spring and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for bobcats, red foxes, Eastern coyotes and Western coyotes.

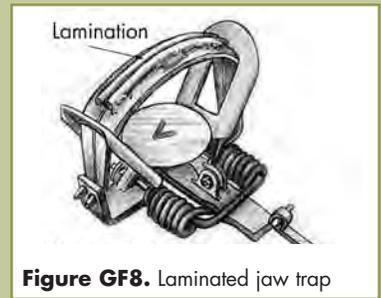


Figure GF8. Laminated jaw trap

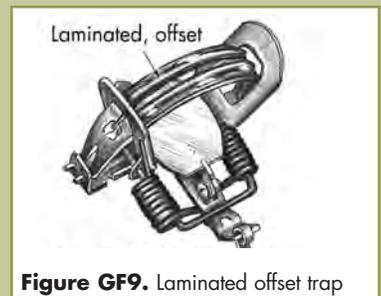


Figure GF9. Laminated offset trap



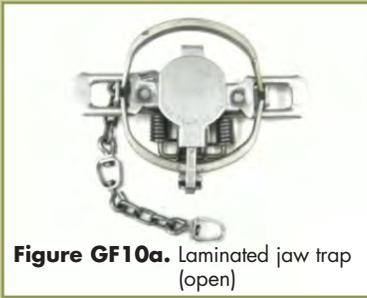


Figure GF10a. Laminated jaw trap (open)



Figure GF10b. Laminated offset trap (closed)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 ³/₈ inches
 Inner width: 4 ³/₈ inches
 Inside width at jaw hinge posts: 4 ¹¹/₁₆ inches
 Jaw width: ¹/₂ inch wide, smooth jaw
 Jaw thickness: ⁵/₁₆ inch
 Main trap springs: Two 0.125 inch diameter wire coil-springs
 Base plate: Reinforced, D-ring chain attachment

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the MB-450-FOX™ coil-spring trap (Figures GF10a and GF10b).

Additional Information

- Chain attachment used in trap testing; 12 inch chain center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Pan tension set so two-four pounds of pressure triggered the trap, and was checked and readjusted as needed after capture.



Powered Cable Devices (Foot Capture) (Figures GF11a and GF11b)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 6 ³/₈ inches
 Inner width: 5 ³/₄ inches
 Inside width at frame hinge posts: 6 inches
 Cable retention frame width: ¹/₈ inch, smooth round rod
 Cable retention frame thickness: ¹/₈ inch rod
 Main trap springs: Two 0.188 inch diameter rod quick release springs
 Cable diameter: ¹/₈ inch cable
 Minimum loop circumference: 2 inches
 Base plate: Not reinforced

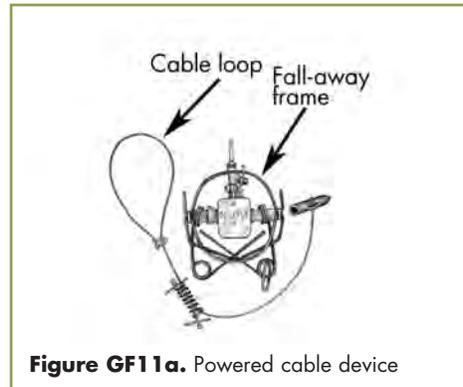


Figure GF11a. Powered cable device

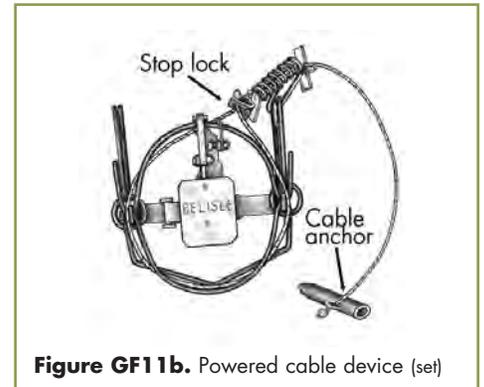


Figure GF11b. Powered cable device (set)

Any cable device that has similar specifications may be considered a BMP device regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Belisle™ Foot Snare.



Additional Information

- Cable attachment on device tested: Swivel and shock spring with a cable anchor.
- Selectivity features: Pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap and was checked and readjusted as needed after every capture; large cable diameter and available plastic sleeve work to prevent the cable from closing to a small diameter, thus eliminating the incidental take of small mammals, such as squirrels, skunks, etc.
- Special considerations for practicality: Some damage and kinking of cables should be expected following capture and will require frequent replacement as a normal part of trap maintenance and upkeep. This device also meets BMP criteria for red foxes, bobcats, Eastern coyotes and Western coyotes.



Cage Traps (Figure GF10)

Average Mechanical Description and Attributes

Cage material, and mesh size: 12 gauge galvanized steel wire mesh, 1 x 2 inches

Cage size (length x width x height): 32 x 10 x 12 ³/₄ inches

Door size (width x height): 10 x 12 inches

Weight: 14 pounds

Door closure: Spring operated

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Tomahawk™ Cage Trap, No. 108.

Additional Information

- Selectivity features: Limited opening size and length restricts large animals.
- Special considerations for practicality: Versatile set options (baited sets and blind sets only with double doors); can be used for multiple furbearer species in same sets; large and easily seen (difficult to conceal completely); bulky—requires space for transport and storage; easy to operate—requires little training; can be used to transport captured animals; captured animals are easily released; continues to operate in freezing weather conditions. This device also meets BMP criteria for raccoons and opossums.



Figure GF12. Cage trap



Best Management Practices for Trapping Muskrats in the United States

UPDATED 2014





Figure MK1. Muskrat
(*Ondatra zibethicus*)

Best Management Practices (BMPs) are carefully researched educational guides designed to address animal welfare and increase trappers' efficiency and selectivity. The extensive research and field-testing used to develop BMPs are described in the Introduction section of this manual. The evaluation methods used to develop BMPs have been standardized, enabling them to be easily updated and revised as new traps and techniques become available. All traps listed in the BMPs have been tested and meet performance standards for animal welfare, efficiency, selectivity, practicality and safety.

Trapping BMPs provide options, allowing for discretion and decision making in the field. BMPs are meant to be implemented in a voluntary and educational approach and do not present a single choice that can or must be applied in all cases. BMPs are the product of ongoing work that may be updated as additional traps are identified through future scientific testing.

The Muskrat at a Glance

Characteristics

The muskrat (*Ondatra zibethicus*) (Figure MK1) is a semiaquatic rodent and member of the Cricetidea family along with mice and voles. Adults weigh between 1 1/2 and 4 pounds, and range from 16 to 25 inches in total length. Adult males are generally larger than adult females. The muskrat has a laterally flattened tail and webbed hind feet, indications of its aquatic nature. Pelage color varies from light brown to black. A thick waterproof under-layer of fur is overlain by long, glossy guard hairs.

Range

Muskrats inhabit all of North America except the eastern Gulf states, and much of Nevada, California and Texas. The species is rarely found in Mexico, but the range extends north to the Arctic Circle. Musk rats were introduced to Europe early in the 20th century, and now inhabit many parts of Eurasia.

Habitat

The muskrat is an aquatic mammal and prefers to inhabit still or slow-moving bodies of water. Common habitat types are marshes, sloughs, streams, lakes, ponds and various other types of wetlands. Typically, they prefer freshwater, but in coastal areas, muskrats will inhabit brackish marsh. Where bank slope is adequate, muskrats often build dens in the bank of a water body, but commonly build houses of vegetation in marshes and sloughs.

Food Habits

The muskrat is chiefly herbivorous, but in some parts of its range it is known to eat freshwater clams, crayfish, fish, frogs and other small animals. When consuming aquatic vegetation, muskrats often eat the shoots, leaves, bulbs and rootstocks of plants. They prefer emergent vegetation such as cattails, three-cornered sedge and bulrush, but often feed on submergent vegetation as well. Musk rats are also known to eat corn and other agricultural plants when available.

Reproduction

Depending on the geographic location of a population, a restricted breeding season may occur (northern part of range), or breeding may occur year round (southern part of range). After mating, there is a gestation period of 28 to 30 days. A litter normally consists of three to nine young. The muskrat may birth up to six litters per year, though most have only two or three litters annually. Weaning occurs at three to four weeks after birth. Young are the same size as adults at six months and normally breed after the first year.

Populations

Populations vary considerably depending on habitat availability, geographic location, weather conditions and variability in market demand. Muskrat populations undergo regular cycles of fluctuations varying from five years in some parts of the United States to 10 to 14 years in others. The prolific reproductive capabilities of the muskrat help in recovery from any population decline. Muskrats may cause extensive damage in dikes, pond dams and other hydraulic structures as a result of constructing bank dens.

General Overview of Traps Meeting BMP Criteria for Muskrats in the United States

Three basic types of traps were tested for muskrats: foothold traps (for submersion sets only), bodygrip traps and cage traps (Table MK1). Examples, brief descriptions and mechanical details of the various devices are given in the next section.

Table MK1. Overview of traps meeting BMP criteria** for muskrats in the United States.

Trap Category	Jaw/Frame Characteristics	Inside Jaw/Frame Spread at Dog*	Inside Width at Jaw/Frame Hinge Posts*	
Coil-spring (Figure MK7a)	Unmodified	3 11/16	3 1/2	
Longspring (Figures MK7b and MK8)	Padded	3 3/8	3 5/8	
	Double-jaw	3 7/8	3 7/16	
	Unmodified	3 7/8	3 7/16	
	Height of Trap Window*	Width of Trap Window*	Frame Wire*	Spring Wire*
Bodygrip (Figures MK9a – MK9i)	4 1/4 – 5	4 1/4 – 4 3/4	3/16 – 1/4	3/16 – 1/4
	Total Dimensions* Length x Width x Height	Door Size* Width x Height	Mesh Size*/Gauge	
Cage+ (Figure MK10)	24 x 7 x 7	7 x 7	1 x 1 12 gauge galvanized	

* Inches

**Any size foothold traps or bodygrip traps with the above measurements or larger measurements, which are commonly used for muskrats, also meet BMP criteria for use in submersion sets for this species; foothold sizes commonly designated as 11, 1, 1.5, 1.65, 1.75, 2, 3 and bodygrip sizes commonly designated as 110, 120, 160 and 220.

+ Cage traps of these dimensions meet BMP criteria for live restraint or use in submersion sets.

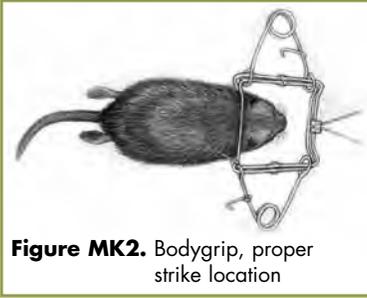


Figure MK2. Bodygrip, proper strike location



Figure MK3a. Setting tool

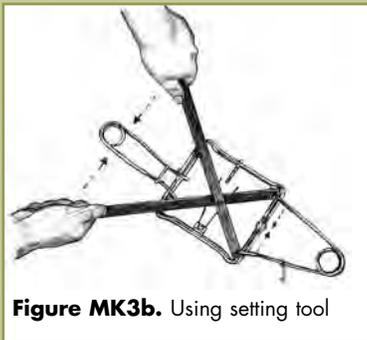


Figure MK3b. Using setting tool

General Considerations When Trapping Muskrats

Foothold Traps

- Many currently-used trap models meet specifications for use in submersion sets
- Loosening pan tension so that the pan moves freely may improve efficiency
- Can be used to capture several furbearer species

Bodygrip Traps

- Should be placed so that the rotating jaws capture the animal by closing on the top and bottom of the captured animal's neck (Figure MK2)
- Can be used in locations and in weather conditions where other traps are less effective
- May not be appropriate in some areas (captures and kills animals, no release)

Cage Traps

- Can be used to capture several furbearer species
- Can be used in baited sets or trailsets
- Captures and holds animals alive, allowing for release or can be used in submersion sets

Safe Use of Bodygrip Traps

By design, bodygrip traps must close with considerable force to humanely dispatch and efficiently capture wild furbearers. This is particularly true of larger sized and "magnum" type bodygrip traps. As a result, users should take special precautions to avoid potential injury when using these devices. Trappers should be familiar with the safe and efficient use of bodygrip traps and these are best learned in trapper education courses.

A setting tool (Figure MK3a) should be used to compress trap springs when setting large and magnum bodygrip traps. Use of a setting tool will not only make setting traps easier, it will make setting traps safer by allowing the trapper to keep hands and fingers away from the jaws (Figure MK3b). Most bodygrip traps that have double springs are equipped with spring latches that hold each spring compressed, and the trapper should use these latches on both trap springs. A safety gripper (Figure MK4a) should also be attached to the jaws when the jaws are moved to the set position (Figure MK4b). This will prevent the trap from accidentally closing. The above safety devices protect the trapper and make it easier to set, position and anchor the trap safely. Safety devices should be disengaged only when the set is completed.



Figure MK4a. Safety gripper



Figure MK4b. Using safety gripper

If you are accidentally caught in a bodygrip trap you need to know how to free yourself. A setting tool is the most effective means to freeing yourself and should be used to compress the springs or jaws. You should always have one in reach when setting and placing bodygrip traps. In the event you are not able to reach one or use it with one arm, you should always carry a four foot piece of rope. The rope should have a loop tied on one end and should be stored in a pocket that can be easily accessed by either hand. You can use the rope to free yourself as follows:

- 1) Thread the rope through the eyes of one of the springs (Figure MK5a).
- 2) Bring the rope around and thread it back through the eyes a second time (Figure MK5b).
- 3) Place your foot in the looped end of the rope and pull the other end with your free hand until you can set the safety latch for that spring. (Figure MK5c). You may need to do this to both springs to completely free yourself.



Figure MK5a. Step 1



Figure MK5b. Step 2



Figure MK5c. Step 3

Specifications of Traps Meeting BMP Criteria for Muskrats in the United States

As more capture devices are tested and new information becomes available, they will be added to an updated list. Mechanical descriptions of tested traps are given as an aid to trappers or manufacturers who may wish to measure, build or modify traps to meet these specifications (Figure MK6a and MK6b). Also, other commercially available traps, modified traps, or other capture devices not yet tested may perform as well as, or better than the listed BMP traps. References to trap names are provided to identify the specific traps tested. The following list is provided for information purposes only and does not imply an endorsement of any manufacturer.

Average mechanical measurements are rounded to the nearest $\frac{1}{16}$ inch. There may be up to a $\frac{1}{8}$ inch variation in specifications on the part of the manufacturer. Manufacturers use recognizable names, such as "No. 2" coil-spring, to identify certain traps. However, there is no standardized system linking mechanical design features with trap names. The mechanical features of these traps are listed so that similar traps may be identified. The performance of anchoring systems was not specifically evaluated, however, methods of attachment are described for informational purposes.



Figure MK6a. Coil-spring trap



Figure MK6a. Bodygrip trap

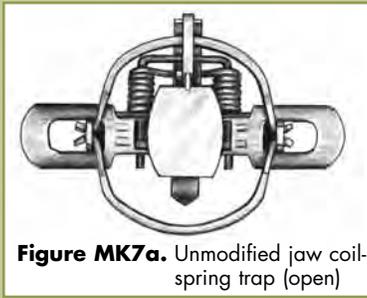


Figure MK7a. Unmodified jaw coil-spring trap (open)

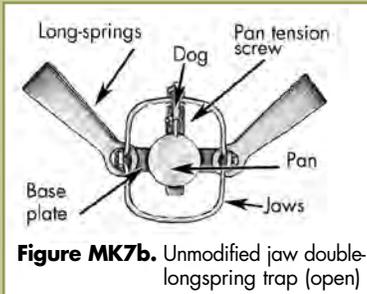


Figure MK7b. Unmodified jaw double-longspring trap (open)

Unmodified Jaws (Figures MK7a and MK7b)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 3 ¹¹/₁₆ inches

Inner width: 3 ³/₁₆ inches

Inside width at jaw hinge posts: 3 ¹/₂ inches

Jaw width: ³/₈ inch smooth round jaw

Jaw thickness: ¹/₈ inch

Main trap springs: Two 0.113 inch diameter wire coil-springs

Base plate: Not reinforced

Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 coil-spring.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: six inch center-mounted with two swivels, one in-line shock spring, and anchored with a stake. When using submersion sets, chain length should be short enough to prevent captured animals from resurfacing.
- Selectivity features: Brass pan tension machine screw; pan tension was loosened so that the pan moved freely, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for raccoons in the southeastern United States, and mink and nutria in submersion sets.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 3 ⁷/₈ inches

Inner width: 3 ¹/₈ inches

Inside width at jaw hinge posts: 3 ⁷/₁₆ inches

Jaw width: ¹/₂ inch

Jaw thickness: ¹/₈ inch

Length of main trap springs: 4 ³/₈ inches

Thickness of main trap springs: ¹/₁₆ inch

Width of main trap springs: 1 ¹/₂ inches narrowing to ⁵/₈ inch

Base plate: Not reinforced

Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek No. 11 double-longspring trap.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 12 inch center-mounted with two swivels, one in-line shock spring, and anchored with a stake. When using submersion sets, chain length should be short enough to prevent captured animals from resurfacing.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for beaver in submersion sets and for restraining or submersion sets for river otter.

Padded Jaws

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 3 ³/₈ inches

Inner width: 3 ¹/₄ inches

Inside width at jaw hinge posts: 3 ⁵/₈ inches

Jaw width: ⁵/₈ inch

Jaw thickness: ³/₈ inch

Length of main trap springs: 5 inches

Thickness of main trap springs: ¹/₁₆ inch

Width of main trap springs: 1 ¹/₄ inches narrowing to ⁵/₈ inch

Base plate: Not reinforced

Pan stop: No

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream Oneida Victor™ No. 11 double-longspring trap, padded.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 18 inch corner-mounted, and anchored with a stake. When using submersion sets, chain length should be short enough to prevent captured animals from resurfacing.
- Selectivity features: Pan tension was loosened so that the pan moved freely, and was checked and readjusted as needed after every capture.



Double Jaws (Figure MK8)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 3 ⁷/₈ inches

Inner width: 3 ¹/₈ inches

Inside width at jaw hinge posts: 3 ⁷/₁₆ inches

Jaw width: ¹/₂ inch

Jaw thickness: ¹/₈ inch

Length of main trap springs: 4 ³/₈ inches

Thickness of main trap springs: ¹/₁₆ inch

Width of main trap springs: 1 ¹/₂ inches narrowing to ⁵/₈ inch

Base plate: Not reinforced

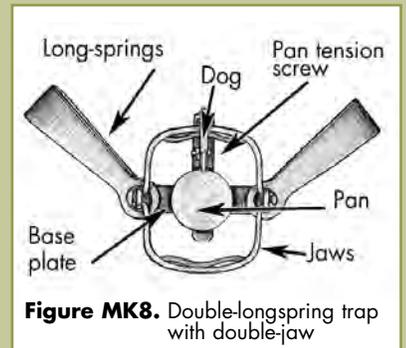
Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek No. 11 double-longspring, double-jaw trap.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 12 inch center-mounted with three swivels, one in-line shock spring, and anchored with a stake. When using submersion sets, chain length should be short enough to prevent captured animals from resurfacing.
- Selectivity features: Brass pan tension machine screw; pan tension was set so two pounds of pressure triggered the trap, and was checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for restraining and submersion sets for river otter, and submersion sets for mink, beaver and nutria.

Best Management Practices for Trapping in the United States



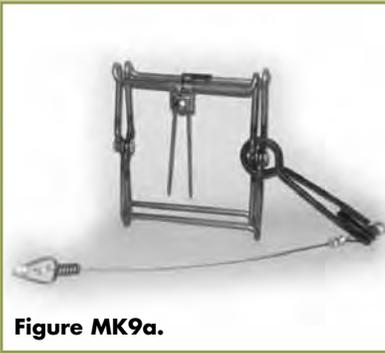


Figure MK9a.

Bodygrip Traps (Figures MK9a–MK9i)

Average Mechanical Description and Attributes

Height of trap window: 4 ⁷/₈ inches

Width of trap window: 4 ⁵/₈ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None, but does have a magnum bend which eliminates the gap between the jaws when the trap is closed.

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Belisle Super X™ 110 bodygrip trap (Figure MK9a).

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.



Figure MK9b.

Average Mechanical Description and Attributes

Height of trap window: 4 ¹/₄ inches

Width of trap window: 4 ¹/₄ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Rudy™ 110 bodygrip trap (Figure MK9b).

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.

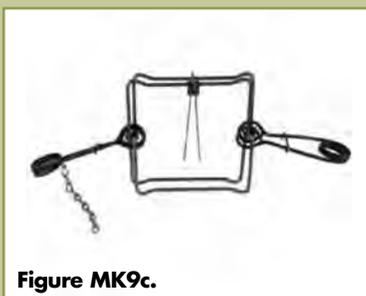


Figure MK9c.

Average Mechanical Description and Attributes

Height of trap window: 4 ¹/₄ inches

Width of trap window: 4 ¹/₄ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Rudy™ 120 bodygrip trap (Figure MK9c).

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.

Average Mechanical Description and Attributes

Height of trap window: 4 ⁷/₈ inches

Width of trap window: 4 ⁵/₈ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None, but does have a magnum bend which eliminates the gab between the jaws when the trap is closed.

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Belisle™ Super X 120 bodygrip trap (Figure MK9d).

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This trap also meets BMP criteria for marten and fisher.



Average Mechanical Description and Attributes

Height of trap window: 4 ⁵/₈ inches

Width of trap window: 4 ³/₄ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the B.M.I™ 120 bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 4 ⁵/₈ inches

Width of trap window: 4 ³/₄ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None, but does have a magnum bend

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the B.M.I™ 120 Magnum bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.

Most bodygrip traps approved in this BMP were tested via computer simulation modeling relative to animal welfare performance. As a result, trap anchoring information does not exist for these traps. However, bodygrip traps should always be securely anchored. Anchoring information is provided on specific traps that were field tested.



Figure MK9d. Belisle™ Super X bodygrip (set)



Figure MK9e. B.M.I™ 120 bodygrip trap

Average Mechanical Description and Attributes

Height of trap window: 4 ³/₄ inches

Width of trap window: 4 ³/₄ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None, but does have a magnum bend which eliminates the gap between the jaws when the trap is closed.

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the B.M.I.™ 126 Magnum body-grip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for marten.

Average Mechanical Description and Attributes

Height of trap window: 4 ¹/₂ inches

Width of trap window: 4 ¹/₂ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bridger™ 120 bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 4 ¹/₂ inches

Width of trap window: 4 ¹/₂ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Duke™ 120.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.

Average Mechanical Description and Attributes

Height of trap window: 4 ¹³/₁₆ inches
Width of trap window: 4 ³/₄ inches
Diameter of frame wire: ³/₁₆ inch
Diameter of spring wire: ³/₁₆ inch
Additional clamping bar: Yes
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the LDL™ B 120 Magnum bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for marten.



Average Mechanical Description and Attributes

Height of trap window: 4 ¹/₄ inches
Width of trap window: 4 ¹/₄ inches
Diameter of frame wire: ¹/₄ inch
Diameter of spring wire: ³/₁₆ inch
Additional clamping bar: Yes
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Rudy™ 120 Magnum bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for marten and fisher.



Average Mechanical Description and Attributes

Height of trap window: 4 ¹/₂ inches
Width of trap window: 4 ¹/₂ inches
Diameter of frame wire: ³/₁₆ inch
Diameter of spring wire: ¹/₄ inch
Additional clamping bar: Yes
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ C120 bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.

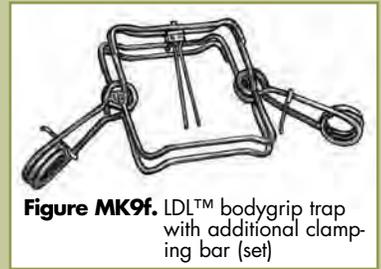


Figure MK9f. LDL™ bodygrip trap with additional clamping bar (set)



Figure MK9g. Sauvageau™ bodygrip trap with additional clamping bar (set)

Average Mechanical Description and Attributes

Height of trap window: 5 inches
Width of trap window: 4 1/2 inches
Diameter of frame wire: 3/16 inch
Diameter of spring wire: 1/4 inch
Additional clamping bar: Yes
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ C 120 Magnum bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This trap also meets BMP criteria for marten.



Average Mechanical Description and Attributes

Height of trap window: 5 inches
Width of trap window: 4 1/2 inches
Diameter of frame wire: 1/4 inch
Diameter of spring wire: 1/4 inch
Additional clamping bar: Yes
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ 2001-5 bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.
- Special considerations for practicality: This trap also meets BMP criteria for marten and fisher.



Average Mechanical Description and Attributes

Height of trap window: 4 5/8 inches
Width of trap window: 4 3/4 inches
Diameter of frame wire: 3/16 inch
Diameter of spring wire: 3/16 inch
Additional clamping bar: None
Safety features: None

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream Oneida Victor 110 Conibear™ bodygrip trap.

Additional Information

- Chain attachment used in trapping: 18 inch, anchored with a stake.



Figure MK9h. Woodstream Oneida Victor 110 Conibear™ bodygrip trap (open)

Average Mechanical Description and Attributes

Height of trap window: 4 ⁵/₈ inches

Width of trap window: 4 ³/₄ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: None

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream Oneida Victor 120 Conibear™ bodygrip trap.

Additional Information

- Safety considerations: Use of setting tongs and safety gripper is recommended.



Cage Trap (Figure MK10)

Average Mechanical Description and Attributes

Cage material and mesh size: 12 gauge galvanized steel wire mesh, 1 x 1 inches

Cage size (length x width x height): 24 x 7 x 7 inches

Door size; double doors (width x height): 7 x 7 inches

Weight: 5 pounds

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 3-4) needs to be considered as well. The trap tested was the Tomahawk™ Cage Trap, No. 105.5.

Additional Information

- Selectivity features: Limited opening size and length restricts large animals.
- Special considerations for practicality: Multiple set options (baited sets; blind sets with double doors; submersion sets); can be used for multiple furbearer species in same sets; easily seen (difficult to conceal completely); bulky – requires space for transport and storage; easy to operate – requires little training; can be used to transport captured animals; captured animals are easily released; continues to operate in freezing weather conditions. Traps should be tuned often to insure that doors close simultaneously. This trap also meets BMP criteria for live restraint of striped skunks.



Figure MK10. Cage Trap

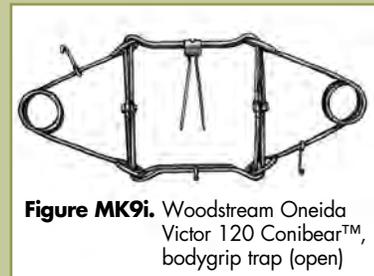


Figure MK9i. Woodstream Oneida Victor 120 Conibear™, bodygrip trap (open)

Best Management Practices

Trapping Raccoons in the United States

UPDATED 2014



ASSOCIATION *of*
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AGENCIES



Figure RA1: Raccoon (*Procyon lotor*)

Best Management Practices (BMPs) are carefully researched recommendations designed to address animal welfare and increase trappers' efficiency and selectivity. The extensive research and field-testing used to develop BMPs are described in the Introduction section of this manual. The evaluation methods used to develop BMPs have been standardized, enabling BMPs to be easily updated and revised as new traps and techniques become available. All traps listed have been tested and meet performance standards for animal welfare, efficiency, selectivity, practicality and safety.

Trapping BMPs provide options, allowing for discretion and decision making in the field. They do not present a single choice that can or must be applied in all cases. They are meant to be implemented in a voluntary and educational approach. BMPs are the product of ongoing work that may be updated as additional traps are identified through future scientific testing.

The Raccoon at a Glance

Characteristics

The raccoon is a medium-sized mammal with a short, stocky build (Figure RA1). Adults generally range from 9-20 pounds and are smallest in the southeastern United States; a few may reach 40 pounds in the Northern portions of their range. Raccoons are active at night and rest in dens during the day. They are excellent climbers and strong swimmers. Raccoons have a well-developed ability to grasp and manipulate objects with their front paws. Raccoons will den in groups and remain dormant during extreme winter weather, but they do not hibernate. Large deposits of fat accumulated during late summer and fall allow raccoons to survive periods of food scarcity during winter. The scientific name is *Procyon lotor*.

Range

Raccoons occur throughout most of southern Canada and the United States except for the deserts of the southwest and higher elevations of the Rocky Mountains. They range southward into Central America.

Habitat

Raccoons are adaptable and use many habitat types. They prefer hardwood forests with numerous den sites and are usually most abundant around water, especially bottomland hardwood forests along streams, hardwood swamps, and edges of reservoirs, marshes, and ponds. Raccoons are also at home in agricultural landscapes and urban and suburban areas. They prefer hollow trees for dens, but readily use abandoned woodchuck burrows, caves, and artificial structures, such as barns, attics and culverts.

Food Habits

Raccoons are omnivorous. They will eat fish, crayfish and mussels, as well as a variety of fruits, nuts, grains, other plant material, carrion, garbage, birds, eggs, small animals (mice, rabbits, snakes, turtles, frogs and insects) and most foods prepared for human or animal consumption. Raccoons are significant predators of ground-nesting birds.



Reproduction

Breeding season extends from January to June and occurs later in the South than in the North. Most litters are born in April and May, but young can be born as late as September. In the far Southeast (Florida, South Carolina, and Alabama), some young are probably born throughout the year. Cubs are born about 63 days after breeding. Litter size ranges from two to eight and averages four. Weaning starts at about eight weeks, and by four months of age, most cubs are large enough to be on their own. Many family groups stay together through the young's first winter.

Populations

Raccoons are considered abundant throughout their range. Under ideal conditions, population density may reach one raccoon for every two acres of habitat. Home range size varies with habitat, seasonal food availability, and weather. Home ranges can be as small as 0.02 square miles in some urban settings to over 18.75 square miles in the prairies of North Dakota.

Comments

Raccoons are highly susceptible to canine distemper and rabies, and outbreaks of these diseases can significantly reduce local populations. Raccoons also harbor the raccoon roundworm (*Baylisascaris procyonis*), a nematode that can cause serious illness in humans.

General Overview of Traps Meeting BMP Criteria for Raccoons in the United States

Four basic types of traps were tested for raccoons: jaw-type foothold restraining traps, enclosed foothold restraining traps, bodygrip traps, and cage traps (Table RA2). Examples, brief descriptions, and mechanical details of the various makes and models tested that met BMP criteria are given in this section.

Table RA2. Overview of traps meeting BMP criteria for raccoon in the United States.

Trap Category	Jaw/Frame Characteristics	Inside Jaw/Frame Spread at Dog*	Inside Width at Jaw/Frame Hinge Posts*	
Coil-spring	Unmodified	3 ¹¹ / ₁₆	3 ¹ / ₂	
	Double-jaw	4 ⁵ / ₁₆ - 4 ⁹ / ₁₆	4 ⁵ / ₈ - 4 ¹³ / ₁₆	
Longspring	Double-jaw	3 ⁷ / ₈	3 ⁷ / ₁₆	
Enclosed Foothold	Round Bar* (diameter)	Opening Diameter*	Depth of Trigger*	
	0.118 - .162	1 ¹ / ₄ - 1 ¹ / ₂	2 ¹ / ₈ - 2 ⁷ / ₈	
Cage	Total Dimensions*	Door Size*	Mesh Size/Gauge*	
	(length x width x height) 32 x 10 x 12.75	10 x 12	1x1 - 1x2 12-14 gauge galvanized	
Bodygrip	Height of Trap Window*	Width of Trap Window*	Frame Wire*	Spring Wire*
	5 - 8	4 ³ / ₁₆ - 8 ³ / ₁₆	³ / ₁₆ - ⁵ / ₁₆	³ / ₁₆ - ⁵ / ₁₆

* Inches



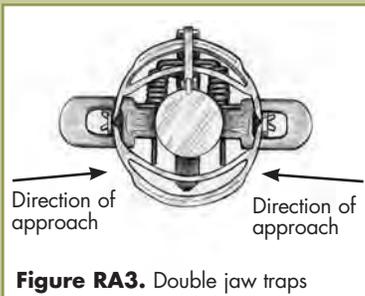


Figure RA3. Double jaw traps

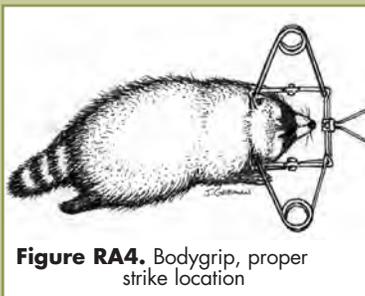


Figure RA4. Bodygrip, proper strike location

General Considerations When Trapping Raccoons

Jaw-Type Traps (Double-Jaw Type and Small Jaw Traps for Raccoons)

- Many currently used trap models can be modified by adding a second “jaw” (i.e. double jaw) below the primary jaw to meet criteria. The primary jaw restrains the foot, and the second “jaw” limits access to the foot when the trap is in the sprung position
- Double-jaw traps should be oriented when set so that an approaching animal will step between the jaws rather than over them (Figure RA3)
- Pan stops limit the range of foot placement in the trap
- Can be used in unbaited blind sets
- Can be used to capture several furbearer species
- Minimizing area between jaw and pan when closed improves animal welfare
- Captures and holds animals alive, allowing for release

Enclosed Foothold Traps

- Requires use of baits
- Highly selective for raccoons and opossums
- Design reduces potential to capture dogs or cats
- Captures and holds animals alive, allowing for release

Cage Traps

- Cumbersome
- Can be used to capture several furbearer species
- Often requires bait
- Captures and holds animals alive, allowing for release

Bodygrip Traps

- Bodygrip trap should be placed so that the rotating jaws close on either side of the captured animals neck (Figure RA4)
- Selectivity features can be enhanced by use of recessed sets (in cubby or cage), restricted openings, or elevated sets
- Trigger configurations can be modified
- Allows for use in locations and in weather conditions where other traps are less effective
- May not be appropriate in some areas (captures and kills animals, no release)

Specifications of Traps Meeting BMP Criteria for Raccoons in the United States

As more capture devices are tested and new information becomes available, they will be added to an updated list. Mechanical descriptions of tested traps are given as an aid to trappers or manufacturers who may wish to measure, build or modify traps to meet these specifications. Also, other commercially available traps, modified traps or other capture devices not yet tested may perform as well as or better than the listed BMP traps. References to trap names are provided to identify the specific traps tested. This list is provided for information purposes only and does not imply an endorsement of any manufacturer.

These are average mechanical measurements which are rounded to the nearest $\frac{1}{16}$ inch. There may be up to a $\frac{1}{8}$ inch variation in specifications on the part of the manufacturer. Manufacturers use recognizable names, such as “No. 2” coil-spring, to identify certain traps. However, there is no standardized system linking mechanical design features with trap names. The mechanical features of these traps are listed so that similar traps may be identified. The performance of anchoring systems was not specifically evaluated. However, methods of attachment are described for informational purposes.

Unmodified Jaws (Figures RA5a and RA5b)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 3 ¹¹/₁₆ inches

Inner width: 3 ³/₁₆ inches

Width at jaw hinge posts: 3 ¹/₂ inches

Jaw width: ³/₈ inch smooth round jaw

Jaw thickness: ¹/₈ inch

Main trap springs: Two 0.110 inch wire-diameter springs

Base plate: Not reinforced

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Victor No. 1 coil-spring trap, and it only met BMP criteria in the southeast region: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Virginia and Tennessee.

Additional Information

- Chain attachment used in trap testing: 6 ¹/₂ inch center-mounted with two swivels, one shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set to two pounds for testing, and checked and readjusted as needed after every capture; small jaw spread.
- Special considerations for practicality: Can be set in shallow water to improve selectivity.



Double Jaws (Figures RA6a, RA6b, RA6c, RA6d, RA6e, RA6f, RA6g)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 ⁵/₁₆ inches

Inner width: 4 ⁷/₁₆ inches

Width at jaw hinge posts: 4 ¹³/₁₆ inches

Jaw width: ¹/₂ inch

Jaw thickness: ¹/₈ inch

Main trap springs: Two 0.131 inch wire-diameter springs

Base plate: Not reinforced

Distance from trap pan with pan stop to bottom of auxiliary jaw when closed: 1 inch

Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek™ No. 1 ¹/₂ coil-spring, modified with double-jaw.

Additional Information

- Chain attachment used in trap testing: 20 inch center-mounted with two swivels and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set to two pounds for testing and checked and readjusted as needed after every capture.
- Special considerations for practicality: Can be set in shallow water to improve selectivity.

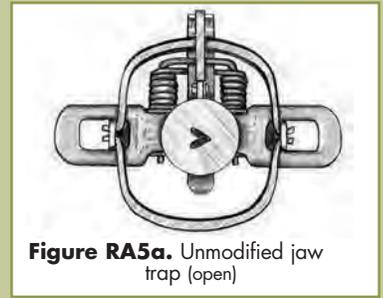


Figure RA5a. Unmodified jaw trap (open)



Figure RA5b. Unmodified jaw trap (closed)

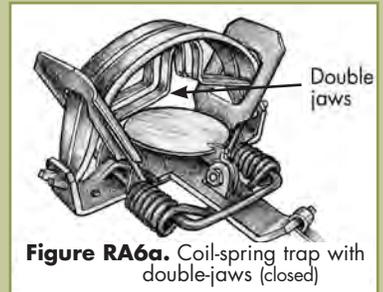


Figure RA6a. Coil-spring trap with double-jaws (closed)

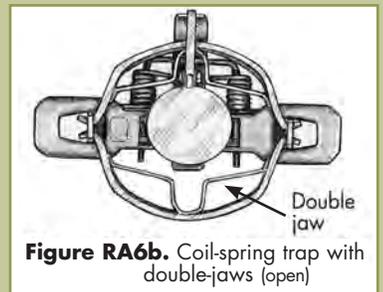


Figure RA6b. Coil-spring trap with double-jaws (open)



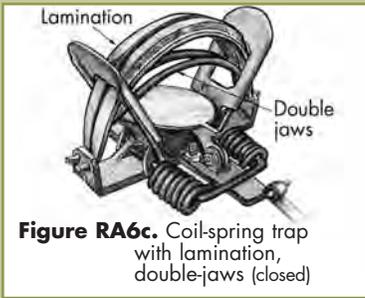


Figure RA6c. Coil-spring trap with lamination, double-jaws (closed)

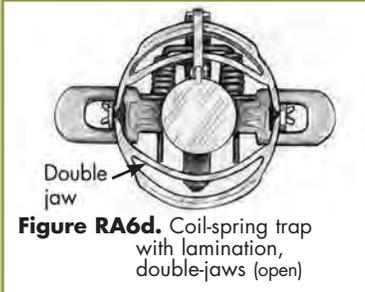


Figure RA6d. Coil-spring trap with lamination, double-jaws (open)

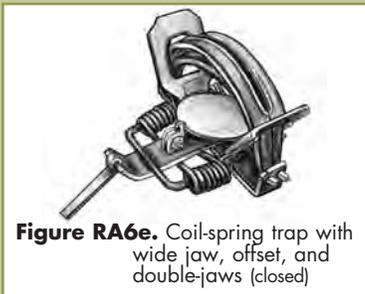


Figure RA6e. Coil-spring trap with wide jaw, offset, and double-jaws (closed)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 ⁹/₁₆ inches
 Inner width: 4 ⁵/₁₆ inches
 Width at jaw hinge posts: 4 ⁵/₈ inches
 Jaw width: ⁷/₁₆ inch
 Jaw thickness: ¹/₈ inch
 Jaw thickness with lamination: ⁵/₁₆ inch
 Lamination: ³/₁₆ inch, above-jaw lamination
 Main trap springs: Two 0.130 inch wire-diameter springs
 Base plate: Not reinforced
 Distance from trap pan with pan stop to bottom of auxiliary jaw when closed: 1 ¹/₈ inches
 Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Duke No. 1 ¹/₂ coil-spring trap, modified with double-jaw, laminated.

Additional Information

- Chain attachment used in trap testing: 30 inch center-mounted with two swivels and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set to two pounds for testing and checked and readjusted as needed after every capture. Small jaw spread.
- Special considerations for practicality: Can be set in shallow water to improve selectivity.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 ¹/₂ inches
 Inner width: 4 ⁵/₁₆ inches
 Width at jaw hinge posts: 4 ¹¹/₁₆ inches
 Jaw width: ³/₈ inch
 Jaw thickness: ¹/₄ inch
 Jaw offset: ³/₁₆ inch
 Main trap springs: Two 0.122 inch wire-diameter springs
 Base plate: Reinforced with D-ring
 Distance from trap pan with pan stop to bottom of auxiliary jaw when closed: 1 ¹/₂ inches
 Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek™ No. 1 ¹/₂ coil-spring, wide jaw, offset, modified with double-jaw.

Additional Information

- Chain attachment used in trap testing: 30 inch center-mounted with two swivels and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set to two pounds for testing and checked and readjusted as needed after every capture.
- Special considerations for practicality: Can be set in shallow water to improve selectivity.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 4 1/2 inches

Inner width: 4 5/16 inches

Width at jaw hinge posts: 4 11/16 inches

Jaw width: 3/8 inch

Jaw thickness: 1/4 inch

Jaw offset: 3/16 inch

Main trap springs: Two 0.131 inch wire-diameter springs

Additional springs: Two 0.101 inch wire-diameter springs

Base plate: Reinforced with D-ring

Distance from trap pan with pan stop to bottom of auxiliary jaw when closed: 1 1/2 inches

Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek™ No. 1 1/2 coil-spring, wide jaw, offset, modified with double-jaw, four-coiled.

Additional Information

- Chain attachment used in trap testing: 30 inch center-mounted with two swivels, one shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set to two pounds for testing and checked and readjusted as needed after every capture.
- Special considerations for practicality: Can be set in shallow water to improve selectivity.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): 3 7/8 inches

Inner width: 3 1/8 inches

Width at jaw hinge posts: 3 7/16 inches

Jaw width: 1/2 inch

Jaw thickness: 1/8 inch

Jaw offset: 1/8 inch

Length of main trap springs: 4 3/8 inches

Thickness of main trap springs: 1/16 inch

Width of main trap springs: 1 1/2 narrowing to 5/8 inches

Base plate: Not reinforced

Distance from trap pan with pan stop to bottom of auxiliary jaw when closed: 7/8 inches

Pan stop: Yes

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sleepy Creek™ No. 11 long-spring, double-jaw, offset.

Additional Information

- Chain attachment used in trap testing: 6 1/2 inch center-mounted with two swivels, one shock spring, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension was set to two pounds for testing and checked and readjusted as needed after every capture.
- Special considerations for practicality: Can be set in shallow water to improve selectivity.

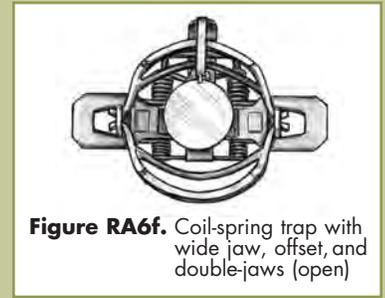


Figure RA6f. Coil-spring trap with wide jaw, offset, and double-jaws (open)



Figure RA6g. Longspring trap with offset, and double-jaws (open)





Figure RA7. EGG Trap™

Enclosed Foothold Traps (Figures RA7–RA12)

Average Mechanical Description and Attributes

Casing material: Plastic
 Opening diameter: 1 1/2 inches
 Round-bar diameter: 0.125 inch
 Depth of trigger: 2 7/8 inches
 Trap springs: 0.125 inch

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the EGG™ Trap (Figure RA7).

Additional Information

- Chain attachment used in trap testing: 15 inch cable center-mounted with two swivels and anchored with a stake.
- Selectivity features: Opening to trigger restricted to 1 1/2 inches; enclosed trigger, recessed 2 7/8 inches from opening; trigger is pull-activated but can be modified for two-way action; and bait enclosed in casing of trap (hidden from view and access).
- Special considerations for practicality: Requires use of setting tools; disassembly required to set trap and to remove animal from trap; species-selective, best used for raccoons and opossums; requires use of bait or lure; some type of lubricant should be used on internal metal parts during storage; trap continues to function in freezing weather conditions; and can be set above ground to prevent trap from freezing solid into the ground during extreme cold.



Figure RA8. Duffer Trap™
rear view

Average Mechanical Description and Attributes

Casing material: Metal
 Opening diameter: 1 1/2 inches
 Round-bar diameter: 0.162 inch
 Depth of trigger: 2 1/8 inches
 Trap springs: 0.162 inch

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Duffer Trap™ (Figure RA8).

Additional Information

- Chain attachment used in trap testing: 6 1/2 inch center-mounted with two swivels and anchored with a stake.
- Selectivity features: Opening to trigger restricted to 1 1/2 inches; enclosed trigger, recessed 2 1/8 inches from opening; trigger is pull-activated; and bait enclosed in casing of trap (hidden from view and access).
- Special considerations for practicality: Does not require setting tools; disassembly required to bait or remove animals; species-selective, best used for raccoons and opossums; requires use of bait or lure; some type of lubricant should be used on trigger mechanism during storage; trap continues to function in freezing weather conditions; and can be set above ground to prevent trap from freezing solid into the ground during extreme cold.



Average Mechanical Description and Attributes

Casing material: Metal
Opening diameter: 1 1/2 inch
Round-bar diameter: 0.118 inch
Depth of trigger: 2 9/16 inches
Trap springs: 0.118 inch

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Lil' Grizz Get'rz™ Trap (Figure RA9).

Additional Information

- Chain attachment used in trap testing: 6 1/2 inch center-mounted with two swivels, one shock spring, and anchored with a stake.
- Selectivity features: Opening to trigger restricted to 1 1/2 inches; enclosed trigger, recessed 2 9/16 inches from opening; trigger is pull-activated; and bait enclosed in casing of trap (hidden from view and access).
- Special considerations for practicality: Does not require setting tools or disassembly to bait or remove animals; species-selective, best used for raccoons and opossums; requires use of bait or lure; some type of lubricant should be used on trigger mechanism during storage; and trap continues to function in freezing weather conditions. To prevent trap from freezing solid into ground, trap can be anchored into a block of wood set on top of the ground.



Average Mechanical Description and Attributes

Casing material: Metal
Opening diameter: 1 1/4 inches
Round-bar diameter: 0.120 inch
Depth of trigger: 2 9/16 inches
Trigger activation: Pull
Trap springs: 0.120 inch

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Duke "DP" Dog Proof Raccoon Trap™ (Figure RA10).

Additional Information

- Chain attachment used in trap testing: 12 inch center-mounted with two swivels, one shock spring, and anchored with a stake.
- Selectivity features: Opening to trigger restricted to 1 1/4 inches; enclosed trigger, recessed 2 9/16 inches from opening; trigger is pull-activated; bait enclosed in casing of trap (hidden from view and access).
- Special considerations for practicality: Does not require setting tools, or disassembly to bait or remove animals; species-selective, best used for raccoons and opossums; requires use of bait or lure; some type of lubricant should be used on trigger mechanism during storage; trap continues to function in freezing weather conditions. To prevent trap from freezing solid into ground, trap can be anchored into a block of wood set on top of the ground.



Figure RA9. Lil' Grizz Get'rz™ trap (unset)



Figure RA10.





Figure RA11.

Average Mechanical Description and Attributes

Casing material: Metal
 Opening diameter: 1 ¼ inches
 Round-bar diameter: 0.120 inch
 Depth of trigger: 2 ⅜ inches
 Trigger activation: Push or pull
 Trap springs: 0.120 inch

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Z-Trap™ (Figure RA11).

Additional Information

- Chain attachment used in trap testing: 12 inch center-mounted with two swivels, one shock spring, and anchored with a stake.
- Selectivity features: Opening to trigger restricted to 1 ¼ inches; enclosed trigger, recessed 2 ⅜ inches from opening; trigger is pull-activated; bait enclosed in casing of trap (hidden from view and access).
- Special considerations for practicality: Does not require setting tools, or disassembly to bait or remove animals; species-selective, best used for raccoons and opossums; requires use of bait or lure; some type of lubricant should be used on trigger mechanism during storage; trap continues to function in freezing weather conditions. To prevent trap from freezing solid into ground, trap can be anchored into a block of wood set on top of the ground.



Figure RA12.

Average Mechanical Description and Attributes

Casing material: Metal
 Opening diameter: 1 ⅜ inches
 Round-bar diameter: 0.120 inch
 Depth of trigger: 2 ⅝ inches
 Trigger activation: Pull
 Trap springs: 0.120 inch

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Bridger T-3 Raccoon Trap™ (Figure RA12).

Additional Information

- Chain attachment used in trap testing: 12 inch center-mounted with two swivels, one shock spring, and anchored with a stake.
- Selectivity features: Opening to trigger restricted to 1 ⅜ inches; enclosed trigger, recessed 2 ⅝ inches from opening; trigger is pull-activated; bait enclosed in casing of trap (hidden from view and access).
- Special considerations for practicality: Does not require setting tools, or disassembly to bait or remove animals; species-selective, best used for raccoons and opossums; requires use of bait or lure; some type of lubricant should be used on trigger mechanism during storage; trap continues to function in freezing weather conditions. To prevent trap from freezing solid into ground, trap can be anchored into a block of wood set on top of the ground.



Bodygrip Traps (Figures RA13–RA24)

Average Mechanical Description and Attributes

Height of trap window: 6 inches

Width of trap window: 6 ³/₁₆ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Bélisle™ Super X 160 (Figure RA14).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 ³/₁₆ inches

Width of trap window: 6 ⁵/₁₆ inches

Diameter of frame wire: ³/₁₆ inch

Diameter of spring wire: ³/₁₆ inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the BMI™ 160.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.

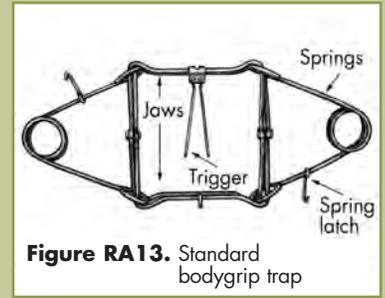


Figure RA13. Standard bodygrip trap

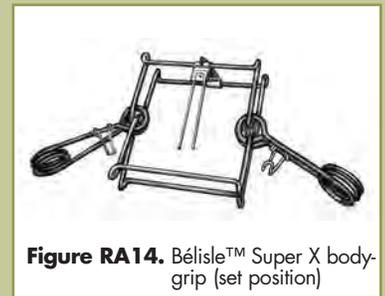


Figure RA14. Bélisle™ Super X bodygrip (set position)



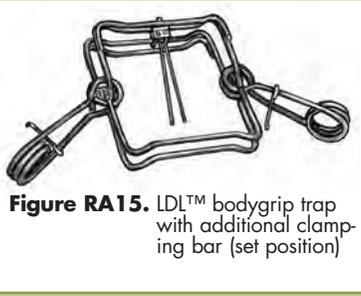


Figure RA15. LDL™ bodygrip trap with additional clamping bar (set position)

Average Mechanical Description and Attributes

Height of trap window: 6 1/16 inches
 Width of trap window: 6 1/8 inches
 Diameter of frame wire: 3/16 inches
 Diameter of spring wire: 3/16 inch
 Additional clamping bar: No
 Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the LDL™ 160 (Figure RA15).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 inches
 Width of trap window: 6 inches
 Diameter of frame wire: 1/4 inch
 Diameter of spring wire: 3/16 inch
 Additional clamping bar: No
 Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6)) needs to be considered as well. The trap tested was the Rudy™160.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 ¹/₁₆ inches
Width of trap window: 6 inches
Diameter of frame wire: ¹/₄ inch
Diameter of spring wire: ¹/₄ inch
Clamping bar: Yes
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ 2001-6 (Figure RA16).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 inches
Width of trap window: 6 ¹/₁₆ inches
Diameter of frame wire: ³/₁₆ inch
Diameter of spring wire: ³/₁₆ inch
Additional clamping bar: No
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Oneida Victor 160.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Figure RA16. Sauvageau™ bodygrip trap with additional clamping bar (set position)



Average Mechanical Description and Attributes

Height of trap window: 7 1/2 inches

Width of trap window: 7 1/8 inches

Diameter of frame wire: 1/4 inch

Diameter of spring wire: 1/4 inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bélisle™ Classic 220.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 7 1/8 inches

Width of trap window: 7 1/8 inches

Diameter of frame wire: 1/4 inch

Diameter of spring wire: 1/4 inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bélisle™ Super X 220.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 ⁵/₈ inches

Width of trap window: 7 ³/₈ inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Bridger™ 220.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 7 ¹/₁₆ inches

Width of trap window: 7 ⁵/₁₆ inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the BMI™ 220.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 7 inches
Width of trap window: 7 ³/₈ inches
Diameter of frame wire: ¹/₄ inch
Diameter of spring wire: ¹/₄ inch
Additional clamping bar: No
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the BMI™ 220 Magnum.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 7 ¹/₈ inches
Width of trap window: 7 ¹/₈ inches
Diameter of frame wire: ¹/₄ inch
Diameter of spring wire: ¹/₄ inch
Additional clamping bar: Yes
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the LDL™ 220.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 ³/₄ inches

Width of trap window: 7 ¹/₄ inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Rudy™ 220.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 7 inches

Width of trap window: 7 inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: Yes

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ 2001-7.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 ⁵/₈ inches

Width of trap window: 7 inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Species Specific™ 220 Half-Magnum.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 ¹⁵/₁₆ inches

Width of trap window: 7 inches

Diameter of frame wire: ¹/₄ inch

Diameter of spring wire: ¹/₄ inch

Additional clamping bar: No

Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: "Criteria for Evaluation of Trapping Devices" pages 4-6) needs to be considered as well. The trap tested was the Woodstream™ Oneida Victor 220.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 8 inches
Width of trap window: 8 ³/₁₆ inches
Diameter of frame wire: ⁵/₁₆ inch
Diameter of spring wire: ⁵/₁₆ inch
Additional clamping bar: Yes
Safety features: Spring latches

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Sauvageau™ 2001-8.

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity or set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Practicality considerations: Can be set along trails, in a tree or above ground.
- Safety considerations: Use of setting tongs, safety latches and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 5 inches
Width of trap window: 4 ¹³/₁₆ inches
Diameter of frame wire: ³/₁₆ inch
Diameter of spring wire: ³/₁₆ inch
Additional clamping bar: None
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Northwoods™ 155 bodygrip trap (Figure RA17).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity; can be set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Safety considerations: Use of setting tongs, safety latches, and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for American marten

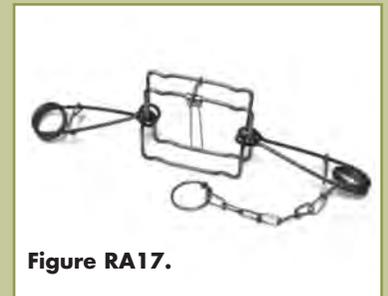


Figure RA17.





Figure RA18.

Average Mechanical Description and Attributes

Height of trap window: 6 1/8 inches
 Width of trap window: 6 inches
 Diameter of frame wire: 3/16 inch
 Diameter of spring wire: 3/16 inch
 Additional clamping bar: None
 Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Bridger™ 160 bodygrip trap (Figure RA18).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity; can be set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Safety considerations: Use of setting tongs, safety latches, and safety gripper is recommended.



Figure RA19.

Average Mechanical Description and Attributes

Height of trap window: 5 7/8 inches
 Width of trap window: 5 7/8 inches
 Diameter of frame wire: 3/16 inch
 Diameter of spring wire: 3/16 inch
 Additional clamping bar: None
 Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Duke™ 160 bodygrip trap (Figure RA19).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity; can be set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Safety considerations: Use of setting tongs, safety latches, and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 inches
Width of trap window: 6 1/16 inches
Diameter of frame wire: 3/16 inch
Diameter of spring wire: 3/16 inch
Additional clamping bar: None
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the LDL C™ 160 Magnum bodygrip trap (Figure RA20).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity; can be set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Safety considerations: Use of setting tongs, safety latches, and safety gripper is recommended.



Average Mechanical Description and Attributes

Height of trap window: 6 ¼ inches
Width of trap window: 5 7/8 inches
Diameter of frame wire: 3/16 inch
Diameter of spring wire: 3/16 inch
Additional clamping bar: None
Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Rudy™ 160 Plus bodygrip trap (Figure RA21).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity; can be set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Safety considerations: Use of setting tongs, safety latches, and safety gripper is recommended.

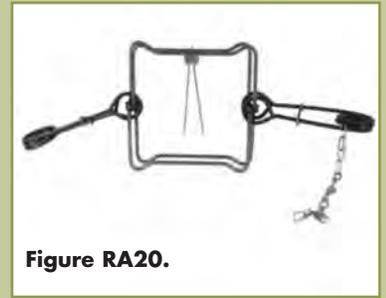


Figure RA20.

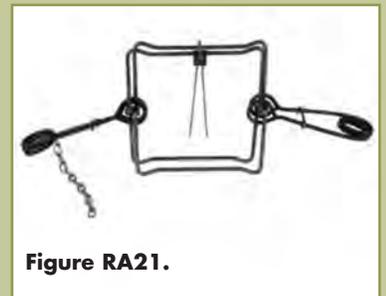


Figure RA21.



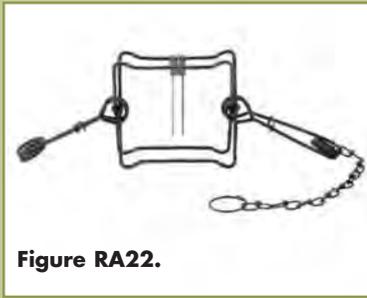


Figure RA22.

Average Mechanical Description and Attributes

Height of trap window: 6 1/8 inches
 Width of trap window: 7 3/4 inches
 Diameter of frame wire: 1/4 inch
 Diameter of spring wire: 1/4 inch
 Additional clamping bar: None
 Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Duke™ 220 bodygrip trap (Figure RA22).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity; can be set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Safety considerations: Use of setting tongs, safety latches, and safety gripper is recommended.

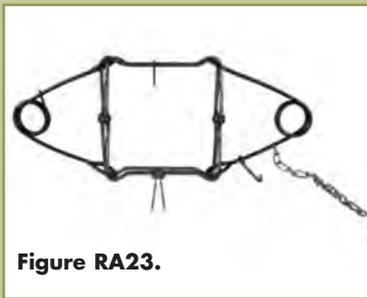


Figure RA23.

Average Mechanical Description and Attributes

Height of trap window: 7 inches
 Width of trap window: 7 1/16 inches
 Diameter of frame wire: 1/4 inch
 Diameter of spring wire: 1/4 inch
 Additional clamping bar: None
 Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the LDL C™ 220 Magnum bodygrip trap (Figure RA23).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity; can be set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Safety considerations: Use of setting tongs, safety latches, and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for fisher and river otter



Average Mechanical Description and Attributes

Height of trap window: 7 inches

Width of trap window: 7 inches

Diameter of frame wire: ¼ inch

Diameter of spring wire: ¼ inch

Additional clamping bar: None, but does have a magnum bend which eliminates the gap between the jaws when the trap is closed.

Safety features: Safety latches on springs

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Rudy™ 220 Plus bodygrip trap (Figure RA24).

Additional Information

- Selectivity features: Small jaw spread limits access by most dog breeds; can be recessed in a cubby to increase selectivity; can be set in a tree or above ground. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
- Safety considerations: Use of setting tongs, safety latches, and safety gripper is recommended.
- Special considerations for practicality: This device also meets BMP criteria for fisher and river otter.



Cage Traps (Figure RA25–RA32)

Average Mechanical Description and Attributes

Cage material, and mesh size: 12 gauge galvanized steel wire mesh, 1 x 2 inches

Cage size (height x width x length): 12.75 x 10 x 32 inches

Door size (width x height): 10 x 12 inches

Weight: 14 pounds

Collapsed size (if applicable): Non-collapsing (rigid)

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see Introduction: “Criteria for Evaluation of Trapping Devices” pages 4-6) needs to be considered as well. The trap tested was the Tomahawk™ Cage Trap, No. 108.

Additional Information

- Selectivity features: Limited opening size and length restricts large animals; Can be set in shallow water to improve selectivity.
- Special considerations for practicality: Versatile set options (baited sets and blind sets only with double doors); can be used for multiple furbearer species in same sets; large and easily seen (difficult to conceal completely); bulky—requires space for transport and storage (though folding models are available); easy to operate, requires little training; can be used to transport captured animals; captured animals are easily released; and continues to operate in freezing weather conditions.

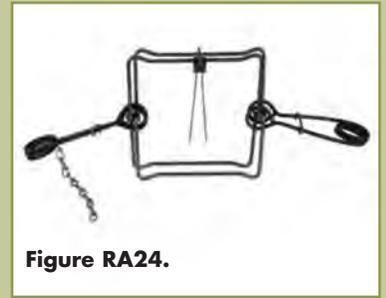


Figure RA24.



Figure RA25. Cage trap



Figure RA26.

Average Mechanical Description and Attributes

Cage material, and mesh size: 12 gauge galvanized steel wire mesh, 1 x 2 inches
 Cage size (length x width x height): 32 x 10 x 12 inches
 Door size (width x height): 10 x 12
 Door material: solid metal
 Weight: 13 pounds
 Collapsed size (if applicable): Non-collapsing (rigid)

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Havahart™ Cage Trap, No 1079 (Figure RA26).

Additional Information

- Selectivity features: Limited opening size and length restricts large animals; Can be set in shallow water to improve selectivity.
- Special considerations for practicality: Versatile set options (baited sets; blind sets only with double doors); can be used for multiple furbearer species in same sets; large and easily seen (difficult to conceal completely); bulky—requires space for transport and storage (though folding models are available); easy to operate—requires little training; can be used to transport captured animals; captured animals are easily released; continues to operate in freezing weather conditions.



Figure RA27.

Average Mechanical Description and Attributes

Cage material, and mesh size: 14 gauge galvanized steel wire mesh, 1 x 1 inches
 Cage size (length x width x height): 42 x 15 x 15 inches
 Door size (width x height): 15 x 15
 Door material: Wire mesh
 Weight: 15 pounds
 Collapsed size (if applicable): Non-collapsing (rigid)

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see "Criteria for Evaluation of Trapping Devices": Introduction pages 4-6) needs to be considered as well. The trap tested was the Havahart™ Cage Trap, No 1081 (Figure RA27).

Additional Information

- Selectivity features: Limited opening size and length restricts large animals; Can be set in shallow water to improve selectivity.
- Special considerations for practicality: Versatile set options (baited sets; blind sets only with double doors); can be used for multiple furbearer species in same sets; large and easily seen (difficult to conceal completely); bulky—requires space for transport and storage (though folding models are available); easy to operate—requires little training; can be used to transport captured animals; captured animals are easily released; continues to operate in freezing weather conditions.



Average Mechanical Description and Attributes

Cage material, and mesh size: 12 gauge galvanized steel wire mesh, 1 x 2 inches

Cage size (length x width x height): 32 x 10 ½ x 12 inches

Door size (width x height): 10 ½ x 12

Door material: Solid metal

Weight: 13 pounds

Collapsed size (if applicable): Non-collapsing (rigid)

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Havahart™ Cage Trap, No 1085 (Figure RA28).

Additional Information

- Selectivity features: Limited opening size and length restricts large animals; Can be set in shallow water to improve selectivity.
- Special considerations for practicality: Versatile set options (baited sets; blind sets only with double doors); can be used for multiple furbearer species in same sets; large and easily seen (difficult to conceal completely); bulky—requires space for transport and storage (though folding models are available); easy to operate— requires little training; can be used to transport captured animals; captured animals are easily released; continues to operate in freezing weather conditions.



Average Mechanical Description and Attributes

Cage material, and mesh size: 12 gauge galvanized steel wire mesh, 1 x 2 inches

Cage size (length x width x height): 42 x 12 x 12 inches

Door size (width x height): 12 x 12

Door material: Wire mesh

Weight: 14 pounds

Collapsed size (if applicable): Non-collapsing (rigid)

Any trap that has similar specifications may be considered a BMP trap regardless of brand or source of modification, although performance information on all other BMP criteria (see “Criteria for Evaluation of Trapping Devices”: Introduction pages 4-6) needs to be considered as well. The trap tested was the Tomahawk™ Cage Trap, No 108.5 (Figure RA29).

Additional Information

- Selectivity features: Limited opening size and length restricts large animals; Can be set in shallow water to improve selectivity.
- Special considerations for practicality: Versatile set options (baited sets; blind sets only with double doors); can be used for multiple furbearer species in same sets; large and easily seen (difficult to conceal completely); bulky—requires space for transport and storage (though folding models are available); easy to operate—requires little training; can be used to transport captured animals; captured animals are easily released; continues to operate in freezing weather conditions.

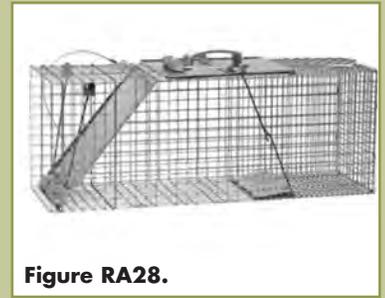


Figure RA28.



Figure RA29.