Best Management Practices

Trapping Coyotes in the Eastern United States

UPDATED 2014

ASSOCIATION of FISH & WILDLIFE AGENCIES

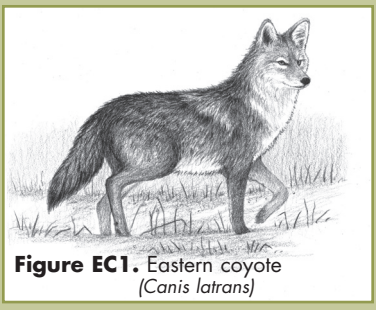

Figure EC1. Eastern coyote *(Canis latrans)*

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 Eastern Coyote at a Glance

Characteristics

The Eastern coyote is a medium to large member of the canid family (Figure EC1). Eastern coyotes are somewhat heavier than their Western relatives, and adults average 30-38 pounds. Individuals weighing as much as 60 pounds have been recorded in some Northeastern states. Adult males are generally larger than adult females. The scientific name is *Canis latrans*.

Range

Coyotes occur throughout North America from the edge of the northern tundra to Central America. In the United States, all 48 contiguous states and Alaska have populations, though densities vary with habitat quality. Densities are highest in the plains region and in the south-central states.

Habitat

Originally an inhabitant of the open grasslands and prairies of the western United States and southern Canada, the coyote has adapted to a wide range of habitat conditions from Southern swamps to Northern spruce-fir forests. They also occur in urban and suburban environments, including some of the largest cities in the United States.

Food Habits

Coyotes are opportunistic predators. They commonly prey upon small animals (mice, rabbits, reptiles and insects), and occasionally pets. They often consume scavenged food items and carrion, as well as fruits, seeds, and other plant material. Coyotes can also kill large mammals, such as white-tailed deer and livestock.

Reproduction

Breeding takes place during late January or February in the north and later in the South. Litters, which average three to six pups, are born about 60 days after breeding. Females normally do not breed until their second winter. Pairs may remain together for several years, and both parents care for pups. Young usually disperse from the home territory in the fall when they are about six months old.

Populations

Although coyote populations vary across the east, they are generally considered abundant as they increase in numbers and become less wary of people. Coyote densities are highly variable depending on habitat quality and range from one animal for every seven or eight square miles to an average of more than one animal per square mile. Adult coyotes may range over an area of 2-20 square miles, depending on the time of year. Family groups defend well-defined territories; pairs and solitary individuals do not.

Comments

Coyote range has expanded dramatically since the mid-1800s. Coyote populations spread from western grasslands north to Alaska, west across the Rocky Mountains to the Pacific Ocean, and east to the Atlantic coast. This increase in population and range occurred during a time of extensive habitat change and reduction in wolf numbers. Few mammals have shown such adaptability. As coyotes have occupied suburban areas they have become less wary of people, and in recent years, attacks on people have been documented.

General Overview of Traps Meeting BMP Criteria for Coyotes in the Eastern United States

Two basic types of traps were tested for coyotes: foothold restraining traps and cable devices (Table EC2). Examples, brief descriptions, and mechanical details of the various makes and models that meet BMP criteria are given in the next section.

Table EC2. Overview of traps meeting BMP criteria for coyotes in the eastern United States.

Trap Category	Jaw/Frame Characteristics	Inside Jaw/Frame Spread at Dog*	Inside Width at Jaw/Frame Hinge Posts*
Coil-spring	Padded	4 1/2 - 5 1/2	4 9/16 - 6 1/2
	Unmodified	5 - 5 1/4	5
	Offset, laminated and/or wide	4 1/2 - 5 1/2	4 3/4 - 6 3/8
Powered Cable Device	Smooth, round rod, 1/8 inch cable	6 3/8	6
	Cable Characteristics	**Loop Diameter**	**Locks**
Non-Powered Cable Devices	48 - 72 inches 3/32 or 1/8 inch diameter stranded cable	10 - 12 inches	Relaxing locks

* Inches

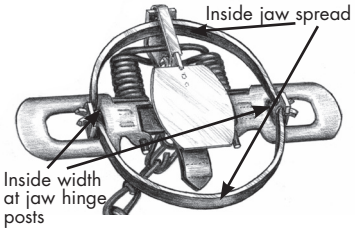

Figure EC3. Coil-spring trap

General Considerations When Trapping Eastern Coyotes

Jaw-Type Traps

- Many currently used trap models meet specifications
- Pan tension set to four pounds improves selectivity and foot placement in the trap
- Captures and holds animals alive, allowing for release

Powered Cable Devices (Foot Capture)

- Pan tension set to four pounds improves selectivity
- Can be used to capture several furbearer species
- Large cable-loop diameter minimizes capture of smaller species
- Cables require frequent replacement
- Captures and holds animals alive, allowing for release

Non-Powered Cable Devices

- The use of loop stops and breakaway devices can improve selectivity
- Cables require frequent replacement
- Captures and holds animals alive, allowing for release

Specifications of Traps Meeting BMP Criteria for Coyotes in the Eastern 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 EC3). 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 $^{1}/_{16}$ inch. There may be up to a $^{1}/_{8}$ 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.

Padded Jaws (Figures EC4–EC6)

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 round padded jaw
Jaw thickness: 3/8 inch
Padding: Manufacturer-supplied rubber pads
Main trap springs: Two 0.131 inch wire-diameter springs
Additional springs: Two 0.100 inch wire-diameter 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 the trap testing: 7 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 set so four pounds of pressure triggered the trap and 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.

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 wire-diameter springs
Additional springs: Two 0.115 inch wire-diameter 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.

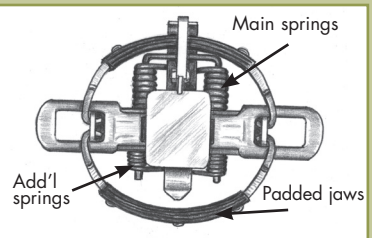

Figure EC4a. Padded jaw coil-spring trap (open)

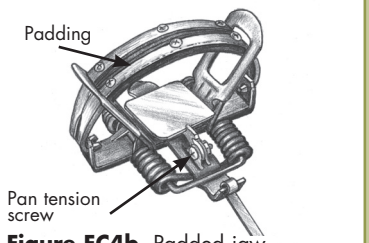

Figure EC4b. Padded jaw coil-spring trap (closed)

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, two shock springs, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so four pounds of pressure triggered the trap and 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 Western coyotes.

Figure EC5. Padded jaw coil-spring trap

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 1/2 inches
Inner width: 6 inches
Inside width at jaw hinge posts: 6 1/2 inches
Jaw width: 3/4 inch
Jaw thickness: 9/16 inch
Main trap springs: Four 0.150 inch diameter wire coil-spring
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 Jake™ Trap coil-spring trap (Figure EC5).

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 approximately four pounds of pressure triggered the trap, and was checked and readjusted as needed after 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 Western coyotes

Unmodified Jaws (Figures EC6a and EC6b)

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 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. 1.75 coil-spring.

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 set so four pounds of pressure triggered the trap and checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for red foxes and Western coyotes.

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 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. 2 coil-spring.

Additional Information:

- Chain attachment used in trap testing: 6 inch center-mounted with two swivels and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so four pounds of pressure triggered the trap, and checked and readjusted as needed after every capture.

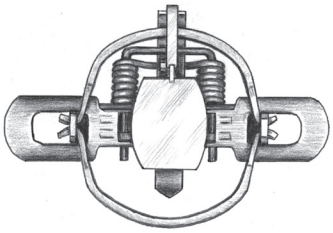

Figure EC6a. Unmodified jaw coil-spring trap (open)

Figure EC6b. Unmodified jaw coil-spring trap (closed)

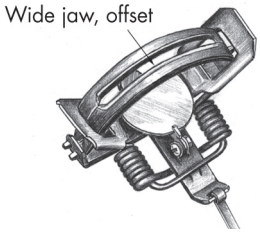

Figure EC7a. Wide jaw, offset trap

Offset, Laminated and/or Wide Jaws (Figures EC7– EC13)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 1/16 inches
Inner width: 4 5/16 inches
Inside width at jaw hinge posts: 4 3/4 inches
Jaw width: 3/8 inch smooth oval jaw
Jaw thickness: 1/4 inch
Jaw offset: 3/16 inch
Main trap springs: Two 0.145 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 Sleepy Creek™ No. 1 3/4 coil-spring, wide jaw, offset (Figure EC7a).

Additional Information

- Chain attachment on traps tested: 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 set so four pounds of pressure triggered the trap and checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for red foxes.

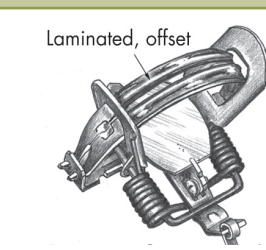

Figure EC7b. Laminated, offset trap (closed)

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 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.1.75 coil-spring trap modified with offset, laminated jaws (Figure EC7b).

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 set so four pounds of pressure triggered the trap and checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for red foxes and Western coyotes.

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 inches
Inner width: 4 11/16 inches
Inside width at jaw hinge posts: 5 inches
Jaw width: 3/8 inch wide, smooth round jaw
Jaw thickness: 3/16 inch
Jaw thickness at flat face: 1/4 inch
Jaw offset: 1/4 inch
Main trap springs: Two 0.142 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 Oneida-Victor™ No. 1.75 coil-spring trap, wide jaw, offset.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one shock spring, and anchored with a stake.
- Selectivity features: 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 meets BMP criteria for Eastern coyotes and Western coyotes.

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 1/4 inches
Inner width: 4 11/16 inches
Inside width at jaw hinge posts: 5 1/16 inches
Jaw width: 3/8 inch wide, smooth round jaw
Jaw thickness: 3/16 inch
Jaw thickness at flat face: 1/4 inch
Jaw offset: 3/16 inch
Main trap springs: Two 0.153 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 Oneida-Victor™ No. 2 coil-spring trap, wide jaw, offset.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one shock spring, and anchored with a stake.
- Selectivity features: 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 meets BMP criteria for Eastern coyotes and Western coyotes.

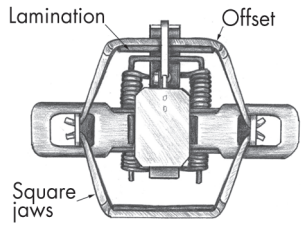

Figure EC7c. Laminated, offset trap (open)

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 hexagonal jaw
Jaw thickness: 1/16 inch
Jaw thickness with lamination: 7/16 inches
Lamination: 1/4 inch
Jaw offset: 3/16 inch
Main trap springs: Two 0.145 inch wire-diameter springs
Additional springs: Two 0.110 inch wire-diameter 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 modified with offset, laminated jaws, four-coiled (Figure EC7c).

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, two shock springs, and anchored with a stake.
- Selectivity features: Brass pan tension machine screw; pan tension set so four pounds of pressure triggered the trap and checked and readjusted as needed after every capture.
- Special considerations for practicality: This device also meets BMP criteria for Western coyotes and red foxes.

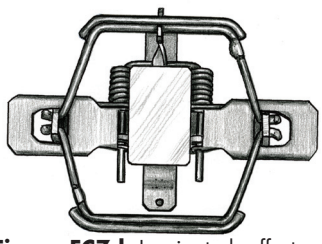

Figure EC7d. Laminated, offset dogless trap (open)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 3/4 inches
Inner width: 5 1/4 inches
Inside width at jaw hinge posts: 6 inches
Jaw width: 1/2 inch wide, square jaw
Jaw thickness: 3/16 inch
Jaw thickness with lamination: 1/2 inch
Lamination: 1/4 inch above-jaw lamination
Jaw offset: 3/16 inch
Main trap springs: Two 0.150 inch wire-diameter 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 Montana Special™ No. 3 dogless coil-spring trap modified with offset, laminated jaws (lamination on top of jaws) (Figures EC7d and EC7e).

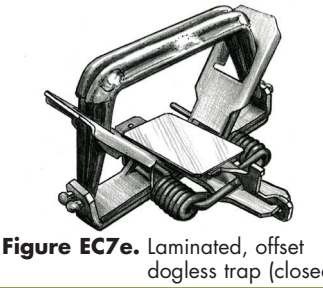

Figure EC7e. Laminated, offset dogless trap (closed)

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, one shock spring, and anchored with a stake.
- Selectivity features: 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 meets BMP criteria for Eastern coyotes and Western coyotes.

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: 6 inches
Inside width at jaw hinge posts: 6 3/8 inches
Jaw width: 1/2 inch hexagonal jaw
Jaw thickness: 3/16 inch
Jaw thickness with lamination: 5/8 inch
Lamination: 3/16 inch above-jaw, 1/4 inch below-jaw
Jaw offset: 1/4 inch
Main trap springs: Two 0.160 inch wire-diameter springs
Additional springs: Two 0.115 inch wire-diameter 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, modified, offset (by manufacturer), double laminated, four-coiled.

Additional Information

- Chain attachment used in trap testing: 18 inch center-mounted with three swivels, two shock springs, and attached to a metal grapple.
- Selectivity features: Brass pan tension machine screw; pan tension set so four pounds of pressure triggered the trap and 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 3/8 inches
Inner width: 5 ¼ 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, round rod 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) (Figure EC8a and EC8b).

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 EC8c).
- Selectivity features: Pan tension set so two-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 Western coyotes and badgers.

Figure EC8a. Laminated, offset trap (open)

Figure EC8b. Laminated, offset trap (closed)

Figure EC8c

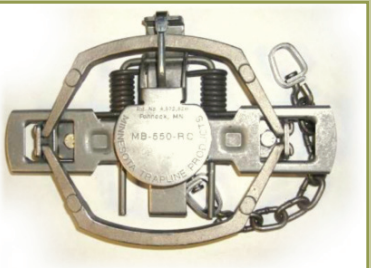

Figure EC9a. Laminated, offset trap (open)

Figure EC9b. Laminated, offset trap (closed)

Figure EC10a. Laminated, offset trap (open)

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 EC9a and EC9b).

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 Western coyotes and badgers.

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: 1/2 inch
Jaw thickness: 1/8 inch
Jaw thickness with lamination: 9/16 inch
Lamination: 3/16 inch above jaw and 1/4 inch below jaw
Jaw offset: 3/16 inch
Main trap springs: Four 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™ #1.75 equipped with 3/16-inch offset, double rounded steel jaw laminations (3/16-inch on topside of jaw and 1/4-inch on underside of jaws) and with 4 coil springs (Figure EC10a).

Additional Information

- Chain attachment used in trap testing; 9 inch chain center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Pan tension set so approximately 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 Western coyote.

Average Mechanical Description and Attributes
Inside jaw spread (at dog): 4 3/4 inches
Inner width: 6 inches
Inside width at jaw hinge posts: 6 1/8 inches
Jaw width: 1/2 inch
Jaw thickness: 3/16 inch
Jaw thickness with lamination: 5/8 inch
Lamination: 3/16 inch above jaw and 1/4 inch below jaw
Jaw offset: 3/16 inch
Main trap springs: 0.145 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™ #3 equipped with 3/16-inch offset, double rounded steel jaw laminations (3/16-inch on top side of jaw and 1/4-inch on underside of jaws) and with 2 coil springs (Figures EC10b and EC10c).

Additional Information
- Chain attachment used in trap testing; 9 inch chain center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Pan tension set so approximately 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 Western coyote.

Average Mechanical Description and Attributes
Inside jaw spread (at dog): 4 3/4 inches
Inner width: 6 inches
Inside width at jaw hinge posts: 6 1/8 inches
Jaw width: 1/2 inch
Jaw thickness: 3/16 inch
Jaw thickness with lamination: 5/8 inch
Lamination: 3/16 inch above jaw and ¼ inch below jaw
Jaw offset: 3/16 inch
Main trap springs: 0.145 diameter wire coil-springs
Additional springs: 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™ #3 equipped with 3/16-inch offset, double rounded steel jaw laminations (3/16-inch on topside of jaw and 1/4-inch on underside of jaws) and with 4 coil springs (Figures EC11a and EC11b).

Additional Information
- Chain attachment used in trap testing; 9 inch chain center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Pan tension set so approximately 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 Western coyote.

Figure EC10b. Laminated, offset trap

Figure EC10c. Laminated, offset trap

Figure EC11a. Laminated, offset trap

Figure EC11b. Laminated, offset trap

Figure EC12a. Laminated, offset trap (open)

Figure EC12b. Laminated, offset trap (closed)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 1/8 inches
Inner width: 5 1/4 inches
Inside width at jaw hinge posts: 5 3/8 inches
Jaw width: 1/2 inch
Jaw thickness: 3/16 inch
Jaw thickness with laminations: 3/8 inch
Lamination: 3/16 inch above jaw
Jaw offset: 3/16 inch
Main trap springs: 0.135 inch diameter wire coil-springs
Additional springs: 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 Bridger™ 165 Offset Modified (with 3/16-inch offset, 3/16-inch above jaw lamination and with 4 coil-springs) (Figures EC12a and EC12b).

Additional Information

- Chain attachment used in trap testing; 9 inch chain center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Pan tension set so approximately 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 Western coyote.

Figure EC13a. Laminated, offset trap (open)

Figure EC13b. Laminated, offset trap (closed)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): 5 3/4 inches
Inner width: 5 5/16 inches
Inside width at jaw hinge posts: 5 5/16 inches
Jaw width: 1/2 inch
Jaw thickness: 3/8 inch
Jaw thickness with laminations: 9/16 inch
Lamination: 3/16 inch above jaw and 5/16 inch below jaw
Jaw offset: 1/4 inch
Main trap springs: Four 0.148 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 Minnesota Brand™ MB650 OLIL (with 1/4-inch offset, double lamination (3/16-inch on topside of jaw and 3/16-inch on underside of jaws) and with 4 coil springs (Figures EC13a and EC13b).

Additional Information

- Chain attachment used in trap testing; 9 inch chain center-mounted with three swivels, one in-line shock spring, and anchored with a stake.
- Selectivity features: Pan tension set so approximately 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 Western coyote.

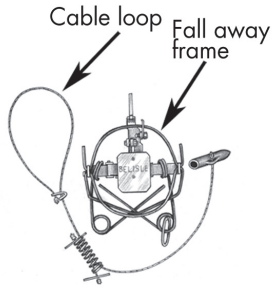

Figure EC14a. Powered cable device

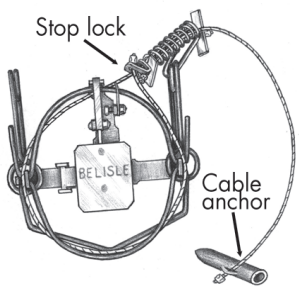

Figure EC14b. Powered cable device (set)

Powered Cable Devices (Foot Capture) (Figures EC14a and EC14b)

Average Mechanical Description and Attributes

Inside cable retention frame 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 wire-diameter rod quick-release springs
Cable diameter: 1/8 inch cable
Cable loop stop size: 2 inches
Base plate: Not reinforced

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 lunge spring with a cable anchor.
- Selectivity features: Pan tension machine screw; large cable diameter and available plastic sleeve work to prevent the cable from closing to a small diameter, thus allowing small animals such as squirrels, skunks and some raccoons to escape.
- Special considerations for practicality: Some damage and kinking of cable should be expected and will require frequent replacement as a normal part of trap maintenance and upkeep. This device also meets BMP criteria for red foxes and Western coyotes.

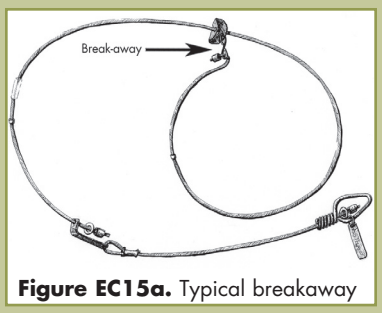

Figure EC15a. Typical breakaway

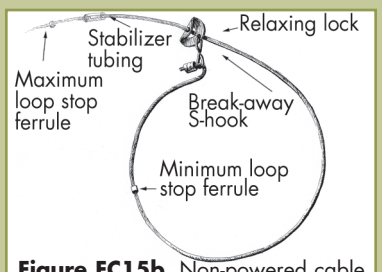

Figure EC15b. Non-powered cable device

Non-Powered Cable Devices (Figures EC15a and EC15b)

Average Mechanical Description and Attributes

Cable diameter: $^{3}/_{32}$ inch, 7 x 7 or 7 x 19 stranded cable
Cable length: 48 and 60 inches
Cable loop stop size: 2 $^{1}/_{2}$ inches
Cable lock: Relaxing locks
Catch loop size: 10-12 inches
Stop button: $^{3}/_{32}$ inch ferrule

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. Relaxing locks used were the Reichart™ washer lock, #4 Gregerson™ lock and the BMI™ Slide Free lock.

Additional Information

- $^{3}/_{32}$ inch diameter cable extensions made of 7 x 7 stranded cable of 12, 14, 16, or 24 inches in length were used for anchoring cable restraint devices, connected by a #9 swivel.
- The bottom of the cable restraint catch loop should be ≥ 10 inches to ≤ 12 inches from the surface directly below the set.
- Special considerations for selectivity: Breakaway devices allow escape with sufficient force; the use of a maximum loop stop prevents larger animals from entering the restraint, while the minimum loop prevents the restraint from closing around an animal's foot. Breakaway amounts may vary based on regional needs where the potential capture of protected mammals and/or livestock exists.*
- Special considerations for practicality: Some damage and kinking of cable should be expected and will require frequent replacement as a normal part of maintenance and upkeep. This device also meets BMP criteria for red foxes.

Average Mechanical Description and Attributes

Cable diameter: 1/8 inch, 7 x 7 or 7 x 19 stranded cable
Cable length: 48 and 60 inches
Cable loop stop size: 2 1/2 inches
Cable lock: Relaxing locks
Catch loop size: 10-12 inches
Stop button: 1/8 inch ferrule

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. Relaxing locks used were the Reichart™ washer lock, #4 Gregerson™ lock, and the BMI™ Slide Free lock.

Additional Information

- 1/8 inch diameter cable extensions made of 7 x 7 stranded cable of 12, 14, 16, or 24 inches in length were used for anchoring cable restraint devices, connected by a #9 swivel.
- The bottom of the cable restraint catch loop should be ≥ 10 inches to ≤ 12 inches from the surface directly below the set.
- Special considerations for selectivity: Breakaway devices allow escape with sufficient force; the use of a maximum loop stop prevents larger animals from entering the restraint while the minimum loop prevents the restraint from closing around an animal's foot. Breakaway amounts may vary based on regional needs where the potential capture of protected mammals and/or livestock exists.*
- Special considerations for practicality: Some damage and kinking of cable should be expected and will require frequent replacement as a normal part of maintenance and upkeep. This device also meets BMP criteria for red foxes.

* Breakaways ("S" hooks, "J" hooks and ferrules) used with manufacturer ratings of 185 pounds and 285 pounds.

Average Mechanical Description and Attributes

Cable diameter: 3/32 inch, 7 x 7 stranded cable
Cable length: 72 inches
Cable loop stop size: 2 1/2 inches
Cable lock: Relaxing locks
Catch loop size: 10-12 inches
Stop button: 1/8 inch ferrule

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 "Criteria for Evaluation of Trapping Devices": Introduction pp.4-6) needs to be considered as well. Relaxing locks used were the Kaatz Relax-a-Lock™ the Berkshire™ 90 degree bend washer lock, Micro Lock™, and a standard 1" diameter 90 degree bend washer lock.

Additional Information

- Devices were a total of 6 feet in length composed of two parts: a 38" catch loop cable and a 34" extension cable. A No. 8 barrel swivel was used to connect the loop and extension cables, 38" from the cable loop end (to create a maximum catch loop diameter of 12").

  A ferrule stop was placed 8" from the cable loop end to create a 2 1/2" diameter loop stop (deer stop), where required by regulations. A No. 9 wire end swivel was attached for staking. Vinyl tubing was used as the snare support collar.
- The bottom of the cable restraint catch loop should be > 10 inches to < 12 inches from the surface directly below the set.
- Special considerations for selectivity: Break-away devices allow escape with sufficient force; the use of a maximum loop stop prevents larger animals from entering the restraint while the minimum loop prevents the restraint from closing around an animal's foot. Break away amounts may vary based on regional needs where the potential capture of protected mammals and/or livestock exists.
- Special considerations for practicality: Some damage and kinking of cable should be expected and will require frequent replacement as a normal part of maintenance and upkeep.