

Best Management Practices for Trapping Mink in the United States



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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 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. 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 Mink at a Glance

Characteristics

The mink (*Mustela vison*) (Figure MN1) is a member of the Mustelidae family (weasels) along with several other small to medium-sized furbearers such as fisher, marten, otter, and weasel. Like other members of this family, the mink has a long thin cylindrical body with short and sturdy legs. The head is dorsoventrally flattened with short rounded ears and a pointed nose. The pelage is dark brown to black during winter, but lighter brown in summer. White patches that form individually unique patterns may be found on the abdomen, chin and chest. The tail is brown and thickly furred, growing gradually darker from base to tip, where it is nearly black. The dense underfur is short and grayish brown in color, while the guard hairs are long and glossy. Adults males are typically much larger than females (i.e., sexually dimorphic) as is common among mustelids. Adult males weigh on average from 1 ½ - 4 ½ pounds, with females averaging 1 ½ - 2 ½ pounds. Adults average 19 - 28 inches in overall length including a 5 - 8 inch tail. Highly developed anal scent glands are also present in mink, as in other mustelids.

Range

Mink are found throughout the United States except in the arid regions of the southwest. The species is also widely distributed across Canada except in the extreme north where they are rare or absent altogether. Populations have also been established through animals escaping from captivity (i.e., fur farms) in various other parts of the world including Great Britain, Iceland, Newfoundland, Russia and Scandinavia.

Habitat

Mink occupy wetland habitat, preferring wetland areas where woody or brushy shoreline and emergent vegetation are present. Areas including stream, river and lake borders as well as marshes and swamps provide prime habitat for mink.

Food Habits

Mink are predatory carnivores and consume a wide variety of small mammals (e.g., rabbits, muskrats, mice), aquatic invertebrates, fish, birds, reptiles and amphibians. Though the diet varies seasonally, small mammals are the most commonly consumed prey items year-round. In tidally influenced marshes, mink opportunistically forage in shallow pools of water or on mud flats exposed during low tide. In winter, fish make up a very important component of the diet, while birds and invertebrates are important in summer. The mink is a semi-aquatic forager and quite adept at catching fish and aquatic invertebrates such as crabs, crayfish and beetles. Mink are ferocious predators and often kill and cache more food than they are able to consume.

Reproduction

The timing of the mink breeding season is reflective of an increasing photoperiod (i.e., length of daylight) that varies with latitude. Mink may begin breeding in Louisiana in late January but not until April in Alaska. Mink are polygamous. Breeding is aggressive and sometimes violent with bites to the neck area of the female. Females produce one litter per year and may give birth to their first litter at one year of age. The gestation period averages 51 days with delayed implantation occurring in females bred early in the breeding season. Litter sizes range from 1 to 10, but the average is 2 to 6 kits. Kits are altricial at birth and weigh only 0.25 – 0.35 ounces. Deciduous teeth are developed and eyes are open by 21 days. Females attain adult weight within 6 to 9 months of birth, but males may continue to grow into their second year of life.

Populations

Mink are indigenous to the United States and Canada, but through accidental propagation, wild populations now exist in other parts of the world. In the U.S and Canada, mink populations appear to be secure throughout their range. Fifteen subspecies of mink occur in North America but only the Everglades mink is considered threatened. Although mink are commonly harvested for fur by trapping, the principal management concern for maintaining healthy mink populations relates to the conservation of wetland habitats. Mink are especially sensitive to environmental contaminants through biomagnification. Mercury, PCBs, Dioxin, organochlorine pesticides, and other persistent environmental contaminants have all been implicated in impacting mink populations. Degradation and loss of wetland habitat would have a negative impact on their populations across the continent.

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

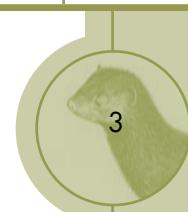
Two basic types of traps were tested for mink: foothold traps and bodygrip traps (Table MN1). Examples, brief descriptions, and mechanical details of the various devices are given in the next section.

Table MN1. Overview of traps meeting BMP criteria for mink in the United States.

Trap Category	Jaw/Frame Characteristics	Inside Jaw/Frame Spread at Dog*	Inside Width At Jaw/Frame Hinge Posts*	
			Frame Wire*	Spring Wire*
Coil-spring**	Unmodified	3 $\frac{11}{16}$	3 $\frac{1}{2}$	
Longspring**	Unmodified	3 $\frac{7}{8}$	3 $\frac{7}{16}$	
	Height of Trap Window*	Width of Trap Window*	Frame Wire*	Spring Wire*
Bodygrip** (submersion sets only)	4 $\frac{5}{8}$	4 $\frac{3}{4}$	$\frac{3}{16}$	$\frac{3}{16}$
Bodygrip** (land or submersion sets)	4 $\frac{7}{8}$	4 $\frac{5}{8}$	$\frac{3}{16}$	$\frac{3}{16}$

* inches

** Any size foothold traps or bodygrip traps with these measurements or larger measurements, which are commonly used for Mink, also meet BMP criteria for use in submersion sets for this species; foothold trap sizes commonly designated as 1, 11, 1.5, 1.65, 1.75, 2, 3, and bodygrip trap sizes commonly designated 110, 120, 160, and 220.



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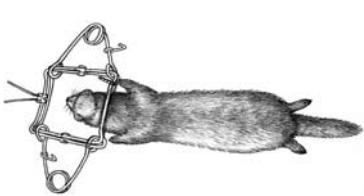


Figure MN2a. Proper strike location

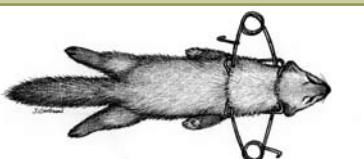


Figure MN2b. Proper double strike location

General Considerations When Trapping Mink

Foothold Traps (For use in submersion sets only)

- Many currently-used trap models meet specifications
- Loosening pan tension so that the pan moves freely may improve efficiency
- Can be used to capture several furbearer species

Bodygrip Traps

- Should be set so that the rotating jaws capture the animal by closing on the top and bottom of the captured animal's neck (Figure MN2a) or use a double strike set (Figure MN2b).
- Can be used in locations and in weather conditions where other traps are less effective
- Can be used to capture several furbearer species
- May not be appropriate in some areas (captures and kills animals, no release)

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.

A setting tool (Figure MN3) 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 MN3a). Most bodygrip traps 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 MN4) should also be attached to the jaws when the jaws are moved to the set position (Figure MN4b). 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 MN3. Setting tool

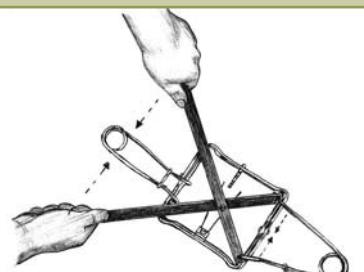


Figure MN3a. Using setting tool



Figure MN4. Safety gripper

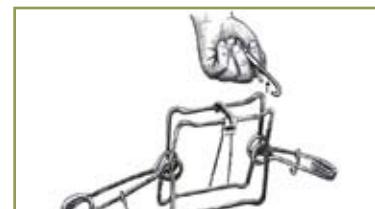


Figure MN4b. Using safety gripper

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 free 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 with a loop tied on one end (a belt or boot lace could be used instead of a rope) 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 MN5a).
- 2) Bring the rope around and thread it back through the eyes a second time (Figure MN5b).
- 3) Place your foot in the looped end of the rope and pull the other end with your free hand or teeth until you can set the safety latch for that spring (Figure MN5c). You may need to do this to both springs to completely free yourself. (Larger trap model used for demonstration; may not be a BMP trap for this species.)

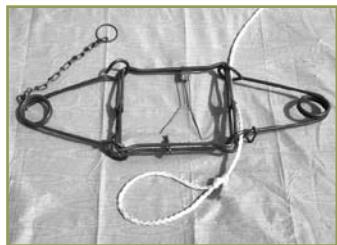


Figure MN5a. Step 1

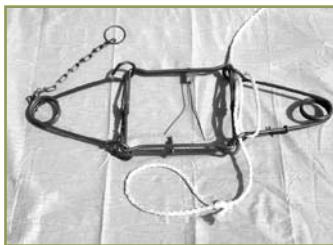


Figure MN5b. Step 2

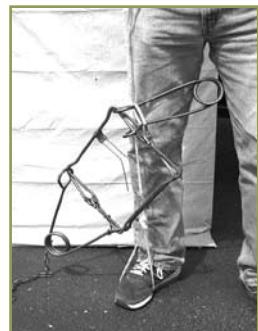


Figure MN5c. Step 3

Specifications of Traps Meeting BMP Criteria for Mink 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 MN6 and MN7). 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.

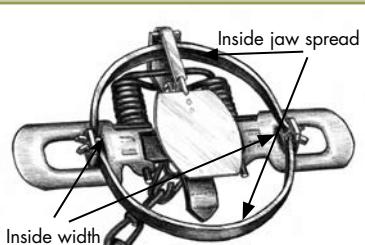


Figure MN6. Coil-spring trap

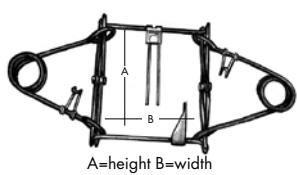


Figure MN7. Bodygrip trap



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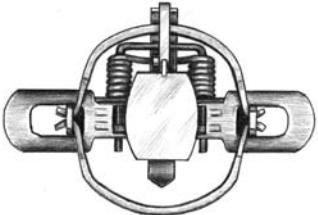


Figure MN8. Unmodified jaw coil-spring trap(open)

Unmodified Jaws (Figure MN8 & MN9)

Average Mechanical Description and Attributes

Inside jaw spread (at dog): $3\frac{11}{16}$ inches

Inner width: $3\frac{3}{16}$ inches

Inside width at jaw hinge posts: $3\frac{1}{2}$ inches

Jaw width: $\frac{3}{8}$ inch

Jaw thickness: $\frac{1}{8}$ inch

Main trap springs: Two 0.110 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 "Criteria for Evaluation of Trapping Devices": Introduction pages 3-4) needs to be considered as well. The trap tested was the Woodstream Oneida™ Victor No. 1 coil-spring.

Additional Information

- For use in submersion sets only.
- Chain attachment used in trap testing: 6 inch, center mounted with two swivels and one shock spring.
- 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 for use in submersion sets for muskrat and nutria.



Average Mechanical Description and Attributes

Inside jaw spread (at dog): $3\frac{7}{8}$ inches

Inner width: $3\frac{1}{8}$ inches

Inside width at jaw hinge posts: $3\frac{7}{16}$ inches

Jaw width: $\frac{1}{2}$ inch

Jaw thickness: $\frac{1}{8}$ inch

Thickness of main trap springs: $1\frac{1}{2}$ narrowing to $\frac{5}{8}$ inches

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 "Criteria for Evaluation of Trapping Devices": Introduction pages 3-4) 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.
- Selectivity features: Brass pan tension machine screw.
- Special considerations for practicality: This device also meets BMP criteria for beaver, river otter, muskrat, and nutria in submersion sets.

Bodygrip Traps (Figure MN10 & MN11)

Average Mechanical Description and Attributes

Height of trap window: 4 $\frac{5}{8}$ inches

Width of trap window: 4 $\frac{3}{4}$ inches

Diameter of frame wire: $\frac{3}{16}$ inch

Diameter of spring wire: $\frac{3}{16}$ 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 "Criteria for Evaluation of Trapping Devices": Introduction pages 3-4) needs to be considered as well. The trap tested was the Woodstream Oneida™ Victor Conibear™ 110 bodygrip trap.

Additional Information

- For use in submersion sets only.
- Safety considerations: Use of setting tongs and safety gripper is recommended for safest operation.
- This device also meets BMP criteria for muskrat on land or in submersion sets.



Average Mechanical Description and Attributes

Height of trap window: 4 $\frac{7}{8}$ inches

Width of trap window: 4 $\frac{5}{8}$ inches

Diameter of frame wire: $\frac{3}{16}$ inch

Diameter of spring wire: $\frac{3}{16}$ 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 "Criteria for Evaluation of Trapping Devices": Introduction pages 3-4) needs to be considered as well. The trap tested was the Belisle™ Super X 120 bodygrip trap.

Additional Information

- Selectivity features: Limited opening size.
- Safety considerations: Use of setting tongs and safety gripper is recommended for safest operation.
- Special considerations for practicality: May be used on land or underwater. Versatile set options (blind sets, cubby sets); can be used for multiple furbearer species in same sets; easy to operate-requires some training; continues to operate in freezing weather conditions (when placed in a cubby). Restricts large animals, including most dogs. This device also meets BMP criteria for muskrat, marten and fisher.



Figure MN10. Conibear™ 110 bodygrip trap



Figure MN11. Belisle™ Super X 120 bodygrip trap



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