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 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 Ringtail at a Glance

Characteristics
Ringtails (*Bassariscus astutus*) (Figure 1), along with raccoons and coatis, are the only members of the Procyonidae family found in North America. Ringtails are much smaller and more slender than raccoons. The overall length, from tip of nose to tip of tail, is 24-32 inches, with a weight of 1.7 to 2.4 pounds. The ears and eyes are relatively large, and the face is pointed. Males are slightly larger than females but coloration is similar. The ringtail’s padded feet have hairy soles and semi-retractile claws. The long fluffy tail is generally equal in length to the body. The pelage is a tan or light buff color with black-tipped guard hairs along the back. The feet and underparts/belly are buffy white. White rings border the eyes and white spots are found below the ears. The tail is white with seven to eight black bands incompletely encircling it and terminating in a black tip. Ringtails are exceptional climbers and agile runners and are at home in trees and cliffs as well as on the ground. Ringtails are active year-round. They are primarily nocturnal and rarely move about during the day. When agitated or alarmed ringtails may release a strong smelling anal musk.

Range
Ringtails range throughout the southwestern United States and Mexico. Within the U.S., ringtails are found as far north as southwestern Oregon and throughout most portions of California, New Mexico, Arizona, Texas, Nevada, Utah, Colorado and Oklahoma. Scattered populations have also been reported in extreme southwestern Wyoming, and in portions of Arkansas and Louisiana on the margins of the ringtail range.

Habitat
Ringtails occupy a variety of habitats from sea level to approximately 9,200 feet of elevation. They are found in dense woodlands, riparian forests, chaparral and rocky desert areas, but they are generally most abundant in riparian forests. Surface water sources are not a limiting factor as the ringtail is able to meet its requirement for water through ingesting succulent vegetation. They den in brushpiles, hollows in trees, burrows, rocky crevices and caves.
Food Habits
Ringtails are omnivores and consume a variety of plant material and animals. Small mammals (rodents, ground squirrels, tree squirrels, cottontail rabbits, bats, pocket gophers), fruits (persimmons, juniper berries, hackberry, prickly pear, mistletoe), and arthropods make up the majority of the ringtail diet, but birds and reptiles are also consumed. While ringtails normally hunt and kill their prey, they will eat carrion opportunistically and have been known to feed on the carcasses of cattle, sheep and deer.

Reproduction
Ringtails begin breeding in February, but the breeding season may continue through early June with females being receptive for only 1-2 days during this time. Young are born between April and July after a gestation of eight weeks. Ringtails breed in their first year of life (sexually mature at 10 months) and females generally produce only one litter per year, but have been known to produce two. Young are born almost hairless with eyes and ear canals closed. There are normally 3-4 young per litter. Young are able to walk at six weeks and climb at eight weeks of age. The young are weaned by three months. The male ringtail remains with his mate and her young, after birth, and may help bring food to them for the first few months of life, until they are able to begin foraging. The young are independent after about six months. Whether ringtails mate for life is not known.

Populations
Ringtail populations appear to be stable in most states where they occur; however, ringtails may be protected in some states; check your state’s current trapping regulations. According to the International Union for Conservation of Nature (IUCN) Red List, the ringtail has a status of “least concern”. Ringtails have few predators and they do not pose a threat to the populations of any other species.
General Overview of Traps Meeting BMP Criteria for Ringtail in the United States

Cage and bodygrip traps were tested for Ringtail (Table 1). Examples, brief descriptions, and the mechanical details of the devices are given in the next section.

**Table 1.** Overview of traps meeting BMP criteria for Ringtail in the United States.

<table>
<thead>
<tr>
<th>Trap Category</th>
<th>Total Dimensions*</th>
<th>Door Size*</th>
<th>Mesh Size* / Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cage</td>
<td>32 x 10 x 12.75</td>
<td>10 x 12</td>
<td>1 x 2 / 12 Gauge Galvanized</td>
</tr>
<tr>
<td>Bodygrip</td>
<td>5 1/8</td>
<td>4 3/4</td>
<td>1/4</td>
</tr>
</tbody>
</table>

*measurements are in inches unless otherwise noted

**General Considerations When Trapping Ringtail**

**Cage Traps**
- Are bulky;
- Require bait (single door traps);
- Can be used to capture several furbearer species;
- Capture and hold animals alive, allowing for release.

**Bodygrip**
- Should be placed to achieve a double strike. Rotating trap jaws should close on the top and bottom of the captured animal’s neck and thorax (Figure 2a);
- Should be deployed in a baited cubby with a pan trigger (Figure 2b);
- May be used in locations and in weather conditions where other traps are less effective;
- May not be appropriate in some areas because captured animals are killed by the trap.

**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 programs. A setting tool (Figure 3a) 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 3b). 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 4a) should also be attached to the jaws when the jaws are moved to the set position (Figure 4b). 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 after 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 a setting tool in reach when setting and placing bodygrip traps. In the event you are not able to reach this tool or use it with one arm, you should always carry a four-foot piece of rope with a loop tied on one end in a pocket that can be easily accessed by either hand (a belt or boot lace could be used instead of a rope). You can use the rope to free yourself as follows:

1) Thread the rope through the eyes of one of the springs (Figure 5a).
2) Bring the rope around and thread it back through the eyes a second time (Figure 5b).
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 5c). You may need to do this to both springs to completely free yourself.

Specifications of Traps Meeting BMP Criteria for Ringtail 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 similar to 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 1/16 inch. There may be up to 1/8-inch variation in specifications among manufacturers. 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 size designations. The mechanical features of these traps are listed so that similar traps may be identified. The performance of anchoring systems was not specifically evaluated.
Cage Traps (Figure 6)
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 12.75 inches
Door size; single door (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 “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.

Additional Information
• Selectivity features: Limited opening size and length restricts large animals.
• Special considerations for practicality: Multiple set options (bailed sets; blind sets only with double doors); can be used for multiple fur bearer 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 fisher, opossum, raccoon, striped skunk, kit/swift fox and gray fox.

Bodygrip traps (Figure 7)
Average Mechanical Description and Attributes
Height of trap window: 5 1/8 inches
Width of trap window: 4 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 Oneida Victor Northwoods™ 155 bodygrip trap.

Additional Information
• Selectivity features: Baited cubbies and pan triggers may improve trap performance for capturing ringtail. Small trap jaw spread and use of a cubby limits access by most dog breeds. Proper setting techniques are best learned from trapper education materials or from experienced trappers.
• Safety considerations: Use of setting tongs, safety latches, and a safety gripper is recommended.