

Appendix M. Sample Spike Camp Bear Management Plan M-2

M.1. Training M-2

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Appendix M. Sample Spike Camp Bear Management Plan

To reduce conflicts with bears at spike camps and to provide a safe environment for the people and bears, the following plan of action for the trail crew and park staff shall be implemented. Five areas need to be addressed as part of a bear management plan:

1. Training
2. Food and Garbage Storage
3. Bear Sightings
4. Adverse Conditioning
5. Documentation

M.1. Training

Prior to setting up the camp, training on bear behavior, human/bear conflicts, and the park's bear management program will be provided by park staff to the trail crew, crew leader, and project leader, or the outside agency crew and crew supervisors. This training will be provided by appropriate staff knowledgeable in bear behavior and activity in the park.

Additional bear sensitivity training and spike camp operation procedures for trail crew members will be held at the spike camp. The training will be given by the trails supervisor, bear management program coordinator, and/or the supervising environmental scientist.

M.2. Food and Garbage Storage

The following steps must be taken to properly store all food, garbage, and other scented items (e.g., soap, toothpaste, deodorants, shampoo, and lip balm), collectively "attractants".

- All attractants not in the immediate possession of a crew member shall be secured in bear-proof storage containers certified by the International Grizzly Bear Committee (IGBC) and/or guarded by kitchen personnel at all times. (See www.IGBConline.org for more information.)
- No personal attractants shall be left unattended unless contained in bear-proof storage boxes.
- No attractants shall be kept or stored in sleeping tents.
- Personal packs shall be emptied of all attractants at the end of each work day and stored in bear-proof containers or hung on bear poles.
- Cold food storage shall be in IGBC certified ice chests equipped with padlocks.
- Kitchen staff must be vigilant for bears attracted to food odors. When food is being prepared, never leave it unattended. An air horn shall be readily available to kitchen staff for the purpose of discouraging bears from approaching the kitchen area.
- Crew leaders, project leaders, outside agency crew supervisors, and kitchen staff shall be trained in the use of IGBC-certified bear pepper spray in the event that a bear does not respond to the Level 1 bear deterrent methods identified below.

- All kitchen cooking apparatus (stoves, ovens, grills, etc.) must be cleaned immediately after meal preparation to eliminate food particles, grease, and odors.
- Similarly, dishes and eating and cooking utensils must be washed immediately after use.
- Scented laundry shall be washed or stored in sealed plastic bags. All effort should be made to avoid scented clothing.
- As much as possible, all odoriferous food and garbage shall be sealed in plastic bags.
- Garbage shall be stored in bear-proof containers and transported to the nearest bear-proof garbage storage facility prior to becoming malodorous.
- Bear-proof garbage storage containers shall be cleaned and sprayed with a 20% ammonium solution after being emptied.
- If permissible, all burnable garbage shall be burned to immediately eliminate odors and reduce accumulations.
- Weekly inspections shall be performed by the trail supervisor for compliance of food and garbage guidelines set forth here.

M.3. Bear Sightings

- Report all bear sightings to the bear management program coordinator or dispatch.
- Communication of a bear sighting is a high priority. If cell phone communications are not possible, a satellite phone and/or two hand-held radios shall be assigned to the spike camp. The satellite phone or one radio shall remain in camp at all times to report sightings. In addition, a vehicle radio shall be stationed at the nearest road access.
- Bear sightings shall be documented by completing a Bear Observation Reporting Form and submitting that form to the Bear Management Program Coordinator for investigation (see link to form below).

M.4. Adverse Conditioning

There are two levels of adverse conditioning. Level 1 may be implemented by all personnel associated with spike camp operations. Level 2 may be implemented only by approved personnel trained in black bear ecology and aversive conditioning techniques.

Prior to any aversive conditioning measures being implemented, the following must occur:

- A safe avenue of retreat for the bear will be identified. The aversion will aim to move the bear in that direction, as well as deliver a negative stimulus.
- All non-essential personnel should move away from camp in a direction opposite to the bear's identified retreat.

Level 1.

Only noise and physical appearance deterrence are permitted. Throwing or the use of projectile objects of any kind is NOT allowed, including throwing items toward but not at

a bear. People may deter a bear by making their appearance larger through actions such as raising arms overhead, raising a backpack, or holding a jacket open. These actions help to establish dominance by the human. Making noise is encouraged and includes yelling or banging items such as pots and pans. Noisemakers such as air horns are also useful.

Level 2. ONLY TO BE CONDUCTED BY SPECIALLY TRAINED PERSONNEL.

Level 2 actions are usually performed by State Park Rangers but road and trail personnel may also perform actions not involving lethal ammunition, if properly trained. Level 2 pairs Level 1 actions, especially yelling, with chasing and the use of projectiles or pepper spray. Yelling is part of every aversion activity. Projectiles include wrist rockets, paint balls, pepper balls, and less-than-lethal ammunition. At no time should these tools be aimed at a bear's head or intentionally used to cause permanent injury to the bear. The appropriate projectile will be determined by the State Park Ranger responding, based on the situation.

After any action of aversive conditioning the following must occur:

- Identify the stimulus (e.g., smells) that brought the bear into the developed area and remove it, if possible.
- Complete appropriate paperwork (e.g., Bear Aversion Reporting Form, see link to form below) to document the incident.

Links to Reporting Forms

- [Bear Observation Reporting Form](#)
- [Bear Aversion Reporting Form](#)