MODULE 7

Deterrent Principles and Practices

Courtesy of “Polar Bears: A Guide to Safety”
7.0 POLAR BEAR DETERRENCE

Deterrence, or “hazing,” is the use of deterrent techniques and devices to move a bear away from a specific area or to discourage an undesirable activity. To be effective these bear responses must accomplish one of two basic purposes:

1) in the short-term, protect people and property;
2) in the long-term, teach bears to avoid humans and areas of human activity.

Each deterrent technique or device has limitations and is not effective in every situation. The most successful deterrent efforts use a combination of techniques and devices.

Persistence and a willingness to try various techniques are necessary to deter wildlife successfully.

In addition to effective and persistent responses, primary aspects of deterrence are:

- Prevention through attractant management;
- Early detection;
- Proper planning;
- Sound communications; and
- Prompt and accurate recording, reporting, and debriefing

Prevention

One of the most important prevention tools is the use of proper attractant management practices. The following simple actions can reduce the chance of conflict significantly:

- Keep kitchen and pantry doors closed; put food waste from all sources into bear-resistant containers and keep

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the lids closed so that bears access to human food or food related garbage is unlikely;

- Handle and store foods promptly so that bears cannot access these foods easily;
- Store any animal carcasses well away from areas occupied by humans;
- Keep vehicles and the beds of trucks free of food and food related garbage or garbage residue;
- Maintain sewage and gray water lines, especially those connected to kitchen facilities; and
- Store antifreeze and other chemicals inside secure containers and keep the doors of the containers closed.

The responsibility for implementing and maintaining proper attractant management practices lies with individuals, communities and companies operating in bear country. However, bear responders must monitor these practices to ensure that best practices are followed. Any improper practices need to be identified and rectified immediately. Bear responders must conduct follow up visits to ensure that things have been corrected.

It is much more effective to prevent potential conflict than it is to stop a problem once it has started.


Early Detection

The further a bear is from an area of human activity when it is first spotted, the more time the bear responder will have to evaluate the situation and determine an appropriate response. Early detection maximizes the number of deterrent options available to the responder.

When bears are not detected until they are already within an area of high risk, bear responders have less time to evaluate and plan a response. Also fewer deterrent options remain available.

Bear responders are better able to anticipate where bears are likely to first appear and to focus their detection efforts in the areas of the highest probability if they:

- are knowledgeable about the seasonal movements of polar bears in the area;
- are aware of changing sea ice conditions; and
- have reviewed previous years bear deterrence reports.

Planning

Bear responses must not be ad-hoc reactions but rather well planned events. Planning takes place long before any bears are spotted.
First bear responders must review the Polar Bear Interaction Plans and the Letters of Authorizations that apply to the site/operations. These documents might limit the types of deterrent actions that may be used.

Next, bear responders must map out and classify potential areas of risk on site (community or industrial) and identify the deterrence goals for the different areas of risk. For example, buildings or roads in an area may channel bears into a high-risk area. This area of wildlife entrapment would be mapped as a high-risk area and the assigned deterrence goal might be to immediately deter any bear that enters that area.

Prior to assigning a deterrence goal, responders should determine if there are ways to eliminate the potential risk. It is better to eliminate the risk than it is to manage it.

Mapping must also identify areas where bears may be allowed or even preferred, such as travel corridors that allow bears to move quickly around or through areas of human activity with minimum risk to people or bears.
When polar bears first come ashore they may be exhausted and need to recover before moving on. Mapping needs to identify the areas where bears will be allowed to rest temporarily.

Risk maps should be developed for communities and their immediate surroundings. For large developments, such as the North Slope Oil Fields risk mapping must be done at various scales, for instance specific development to project-wide.

Mapping potential risk allows communities and companies and their bear responders to come to agreement on the deterrence goals for the different areas as well as identify and communicate situations that might pose a risk to bear responders or others working in the area.
Individual bear deterrence actions must be planned based on the identified goals and risks ahead of having to take action. Bear responders must know what they want the bear to do, what they want people in the area to do, and what actions they will take to get the bear and people to do what is desired.

**Communications**

Bear responders planned action must be communicated to other bear response team members and others in the immediate area. One planned action may be that some people provide crowd control by directing people into safe shelter or stopping traffic from entering the area of the bear deterrence.

Bear responders working at an industrial site typically have access to a radio communication system that allows them to communicate warnings and expectations to people in the area, whether they are located inside or outside of buildings and vehicles. In a community, the bear responder’s ability to communicate with people in the area is more limited. Not everyone will monitor a common radio channel. The timing of people’s movements are less predictable than at an industrial site. Community bear response teams must always be prepared for the unexpected appearance of people.
Recording / Reporting and Debriefing

Recording and reporting of any bear deterrence action are standard requirements of Letters of Authorization. Bear responders must accurately record what occurred.

Records that help bear responders plan future deterrence actions include observations about:
- what led to a bear deterrence action;
- the reason specific actions were taken;
- the bear’s response to the various deterrent techniques and devices used; and
- any lessons learned.

Deterrence actions involving polar bears are subjected to a high level of scrutiny. Keeping accurate records and timely reporting helps bear responders verify actions. Without accurate records, assumptions may be made and seldom do these assumptions reflect positively on the bear responders.

Debriefing is an opportunity for bear response teams to review and evaluate the effectiveness of a deterrent action. Debriefings are not intended to assign blame or find fault. These sessions are intended as learning opportunities with the goal of improving and informing future deterrence actions.
POLAR BEAR DETERRENCE – PRINCIPLES

The goal of polar bear deterrence is to maintain human safety and welfare while reducing the likelihood of injury or death of polar bears.

The choice of deterrent technique or device is based on
- the bear’s behavior;
- prior history of that bear;
- the level of risk to humans or the bear; and
- the deterrence goal for the specific location.

POLAR BEAR DETERRENCE – PROTOCOLS

1. Ideally, a proper bear deterrence response requires a minimum of two trained bear responders.
   - One responder is responsible for firing deterrent rounds from a hazing pistol or the break action 12-gauge shotgun.
   - The second responder provides armed backup using the 12-gauge pump action shotgun loaded with killing rounds.

2. Prior to taking a deterrent action, the bear response team must try to determine:
   - why the bear is there. Is it simply trying to move around or through the area, or has it been attracted to the area by food or garbage?
   - the history of the bear. Has this bear been dealt with before? Has it received a food reward previously?

3. Prior to taking a deterrent action, bear responders must also:
   - have a clear plan of action including what they want the bear to do and what actions will be taken to get the bear to do what is wanted of it.
   - ensure that the bear has a clear and obvious escape route that is free of people. Make it easy for the bear to do the right thing.
   - alert the bear to their presence, if the bear doesn’t already know that they are there.

4. Deterrent actions should begin with the least aggressive technique and increase in aggressiveness only if the bear fails to move away.

All noise making deterrent devices become less effective with repeated use.
5. The greater the risk to people or the bear, the more aggressive the bear deterrence action has to be.

6. Once the bear does what the responder wants it to do, no further deterrence action is required. The short and long-term objective is to get the bear to move away from human activity.

7. A bear must be monitored as it moves off and the bear responder must be prepared to take further deterrent action if needed.

8. Bear responders must record and report the deterrence actions taken and the results of these actions.