



Capturing and Handling Grizzly Bears

Why capture wild animals?

Many different wildlife species are captured and handled by biologists to learn more about the biology and behaviour of the animal. Often animals are fitted with radio, GPS or satellite collars as part of a study. Using collars to track bears helps biologists count population sizes and learn about where these animals spend time in different seasons of the year. Collars have been used on the Yukon North Slope to study bears, wolves, muskox, wolverine and caribou to show movements and important habitat that would otherwise be difficult or impossible to measure. Government biologists work closely with Hunters and Trappers Committees to monitor the impacts of collaring programs. The Parks Canada Animal Care Committee, as well as veterinarians and researchers with extensive experience capturing animals, approved the Capture and Handling Protocol which outlines safe practices for the capture and handling of wildlife.

How is a bear captured?

Biologists and veterinarians travel by helicopter to find a bear that is on safe ground. The helicopter needs to be within 30 feet of the animal to safely inject drugs with a dart gun. The helicopter and crew stay close to the bear while the drugs start to take effect—usually within about five minutes. The biologists and veterinarians have lots of experience capturing large animals and have special training in wildlife handling and drugging. Animals are treated with great care and respect when they are captured and handled.

Why use drugs to capture bears?

For the wellbeing of the animal and the safety of the handlers, it is best that the animal be relaxed and unaware of what is going on when it is handled. Using drugs to put an animal into a sleep-like state is the most widely accepted and humane way of handling large, powerful animals.

What drugs are used to capture bears?

A drug often used by biologists to capture grizzly bears in many parts of the world, including the Yukon North Slope, is called Telazol. It is considered to be very safe for the animal as well as safe for the humans who handle it. Another drug used is Medetomidine. This is a newer drug and is more potent than Telazol. These drugs are sometimes used together and allow biologists to use smaller amounts of drugs. Biologists can reverse the effects of this drug combination by injecting a reversal drug, so that if there are any problems, the bear can be woken up quickly.





What happens when a bear is drugged?

When bears are captured using these drugs, it is easy to tell when they are beginning to fall asleep. It takes about five minutes for the drugs to take effect. If the bear does not fall asleep, the drugs may not have been injected properly and the biologist may give the bear more drugs. The drugs allow the bear to breathe normally when it is unconscious. Maintaining a normal breathing rate during a capture is important to keep the bear's body temperature at the right level. Every effort is made to keep the handling time as short as possible, and usually the biologists handle a bear for 40 minutes. If a reversal drug is given, the bear is back on its feet within 10 minutes. If a reversal drug is not given, the bear is back on its feet within a few hours. Biologists watch from a distance or return later to make sure the bear is back to normal when the drugs wear off.

When are bears captured?

Grizzly bears are captured when they are out on the land from late spring to early fall. Bears are not captured when they are in their dens, which can be up to seven and a half months of the year.



Bears captured in the spring and early summer usually have less fat which makes it easier to inject the drugs into their muscle. The drugs take effect faster when they are injected straight into the muscle. This reduces the possibility of the bear running too far away or injuring itself. Late spring captures can be tricky because there are lots of melt-water ponds on the land. If the animal's head drops into a pond while the drugs take effect, the bear could drown in a few seconds unless rescued by the biologists in time. Because of this hazard, biologists always try to dart bears in dry areas and on gentle slopes.

Capturing bears in the fall involves different kinds of challenges and potential problems. Bears have more fat in the fall which can cause them to get hot quickly. But on the Yukon North Slope, temperatures in the fall time are usually cool, which helps prevent overheating. Thick fat also makes it hard for the drug needle to get straight into the muscle, so biologists usually use a dart with a longer needle. An advantage to capturing bears in the fall is that there are fewer ponds in which bears could drown, as many dry up throughout the summer. Fitting a collar in the fall when the bear's neck is at its largest size means that it is not likely the collar will become too tight later on. Biologists never try to capture bears when the temperature is above 20°C and generally try to do most of their captures below 10°C. A captured bear's temperature is monitored to make sure the animal doesn't overheat, or get too cold.

Bears wear the collar for two to four years. When the study is finished, biologists capture the bear again to remove the collar.

What risks are involved with capturing bears?

Rarely do animals die from drug or capture complications. These deaths are difficult to prevent as they are usually a result of poor body condition, a bad reaction to the drug or stress. The drugged animal is closely monitored for vital signs (heart rate, breathing rate and circulation) when it is handled. Parks Canada and Yukon Government investigate any incident resulting in the death of an animal.

How could the drugs affect the land, other animals and people?

The drugs used to put bears asleep are very safe. The effects are not long lasting and the drugs don't build up in the environment. If a bear that has been drugged is killed or dies soon after handling, any animal eating it would have to eat a lot before it felt the effects of the drugs. If the animal did eat a lot, it might feel sleepy for a few hours, but probably would not die or be seriously hurt. The drugs break down very quickly if they are on the ground, in an animal or in the dart. However, as an added safety measure, people are advised not to eat any animal that has been drugged within the last year. Hunters who see a bear that is wearing a collar, has a tattoo on its lip or a tag on its ear, should assume that it has been drugged. Hunters can contact Environment Yukon or NWT Environment and Natural Resources to find out when the bear was captured using drugs.

What should I do if I find a drug dart on the land?

If a dart used to inject the drug misses the animal or falls out, every effort is made to find it. Many times, the dart gets buried deep underground. In most cases the drugs are probably released into the ground or air and the dart is empty except for some residue. Even while in the dart, the drugs break down quickly. A person would have to be directly injected with the drugs to cause serious effects. However, if you find a dart, **DO NOT TOUCH IT**. Mark the location and contact the nearest wildlife office.

Why do biologists capture bears?

Animals that wear or have worn collars are very important. They give us information that helps us understand them, the way they use the land, their relationship with other species and how human activities affect them. These animals should be protected and deserve our respect for the information they have provided and continue to provide about themselves and their species.



Government of Yukon, Department of Environment,

can provide more information about the capture and handling of Grizzly Bears.

Contact the Regional Biologist in your area

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