

Why Rehabilitation is important for American Black Bears (*Ursus americanus*)

by Marissa Hansen

From seeing them while driving through Banff National Park or seeing the famous Smokey the bear statue in Minnesota, bears have always been a center piece for North American wildlife.



When I was younger, I remember hearing the story of the bear that walked into the bakery at Lake Louise and recently there was a bear that went into a bakery in Colorado and ate some pies. While at the time I thought these were cute funny stories, I now understand the negative connotations that these incidents had for these bears and other bears that are affected by humans. Although bears are an incredibly popular animal, this popularity can be harmful to them due to a lack of animal safety education for the general public.

Image by Marissa Hansen, 2021

American Black Bears (*Ursus americanus*)

All bears species, from giant pandas to American black bears have stemmed from the same ancestral bear, Dawn bear¹. American black bears along with six other species diverged from the group called “True Bears” which excludes giant pandas. Canada and the United States are home to three types of bears including brown, black, and polar bears¹. Black bears (*Ursus americanus*) are the smallest of the North American bears but contain the most diversity within size and

color¹. These bears can reside in a variation of climates such as tundra, prairies, forests, and urban environments¹. This versatility in habitat allows black bears to be found in lots of different areas across North America. Physiology of black bears include short tails, legs, and neck, and large paws with long non-retractable claws¹. Black bears in the wild exhibit unique behaviours to help them survive in their habitats¹.

Behaviours

Denning and hibernation and the times at which these occur are an important aspect of their behavioural cycle². Each year depending on the weather, black bears will enter their dens between mid-October- November and typically do not come out of this den until March-April ².

These dens are made from digging holes in soils under tree stumps, below the root mass of a blown-over tree, and beneath brush piles ². Dens are not typically used more than once, as spring tends to melt the surrounding snow and cause the collapse of the den². This means that dens need to be created every year beginning in the fall ².

Black bears also choose specific habitats that allow them to find resources such as food, dens, and mates ³. Black bears are omnivores, which means that they eat both plants and other animals. This includes fish, berries, roots, succulents, and Canadian ungulates³. Most of a bear's time is spent foraging, collecting foods which are typically dependent on the season and food availability³.

Rehabilitation

Unfortunately, due to their popularity and the over arching urbanization occurring within Canada and the United States bears are becoming more and more threatened over the years¹. Conflict



Image by Marissa Hansen, 2021

with humans has increased in the past 30 years due to the presence of urbanization consuming black bear habitat as well as climate change causing their habitats to shrink⁴. The largest threats to black bears are hunting, trapping, poaching, vehicular accidents, and government animal control with 80% of the Pacific Northwest's hunted black bears being killed due to forestry interest¹. These factors are all contributing to the increased need for black bear rehabilitation within North America.

Black bear rehabilitation centres were created to give care to injured or orphaned black bears until they were ready to re-enter the wild. As with most human intervention campaigns with animals, there was backlash about how the bears would behave once released into the wild, and if the rehabilitation by humans would have negative connotations to their survival within the wild. It was believed that the bears would become habituated with humans and once released would want to continue to rely on human resources. There was also a concern that orphaned cubs would not learn typical bear behaviours such as when to begin denning, where to find resources, where to create a home range, from their mother, and in turn would not know these behaviours once released.

There are only three organizations across North America that focus on the rescue, rehabilitation, release, and relocation of black bears. BWU, Bear with us, founded in Ontario, acts as both a rehabilitation/rescue centre, as well as a permanent home for bears who were unable to return to the wild⁵. There is also IBRR, Idaho Black Bear Rescue, who have helped with the rehabilitation of over 200 cubs in the United States⁵. Lastly ABR is the Appalachian Bear Rescue, who work to rescue black bears using a variety of enclosures to help rehabilitate the bears and work on habituating them to as close to wild-life as possible⁵. This ensures the bears do not get used to human contact or condition them to associate food with humans.

Research on behaviours post rehabilitation release



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Many researchers have begun looking into the behavioral outcomes of rehabilitation for black bears. For these studies they looked at various behaviours to compare the rehabilitated bears to the wild reared ones. These behaviours included denning and conflict with humans due to resources.

Denning is an important behaviour to their lifestyle and has come from evolutionary adaptive traits to adjust to food shortages and cold weather¹.

Specifically denning, and the timing of denning compared between rehabilitated bears and wild-reared bears^{2,6}. To study this, researchers used GPS collars

and ear tags to track their bear's movement and the timing of their denning cycle. The results of these studies showed that rehabilitated bears entered their dens within the same two-week period as wild-reared bears². These results showed that even though the bears had developed within rehabilitation or without maternal influences, they still understood when to begin denning, likely due to changes in temperature and resource abundance².

Conflict due to resource and habitat selection is also a worry of rehabilitators. It is thought that the bears would become habituated to humans and begin seeking out human resources⁷. To study this, researchers used GPS collars and ear tags to track their bear's movement from the release site and their foraging habits. The results showed that rehabilitated bears matched behaviours of wild bears in terms of finding proper resources and habitats and did not stray to far from the release site⁸. The number of conflict behaviours were also shown to not increase within the rehabilitated bears and the bears were not more likely to seek out human resources². The rehabilitation of these bears did not result in the habituation of bears with humans, meaning that releasing them was not creating any extra danger for humans or the bears themselves⁹.

Conclusions

Overall, the results of numerous studies have shown that the rehabilitation of black bears does not have negative effects on the animals once they have been released. This study has allowed me to come to two conclusions outside the scientific ones seen in the research. The first being that more support needs to go into black bear rehabilitation within North America. All the results from the studies showed that there were no negative connotations to rehabilitation and bears

were able to survive in the wild after release. Rehabilitation seems like a greater solution than killing the animals. The organizations that are helping are obviously doing an amazing job, however, with the increase in conflict events occurring, black bears are going to require more help soon. This help could come in the form of government support through funding more rehabilitation centers, possibly ones in Alberta. The only black bear rehabilitation center found in Canada right now is in Ontario, which is about a 15-hour drive from the Rocky Mountains. While we do have centers such as Alberta Institute for Wildlife Conservation (AIWC), I think it would be advantageous to put government money into a center to help with black bears specifically as I know AIWC cannot hold many bears at a time. My second conclusion is that humans are the problem. The studies showed that urbanization is destroying bear habitats and causing confrontations between bears and humans to happen more often. While some habitats are protected such as national parks, hunting laws, especially in the United States, are in my opinion absurd. I personally don't feel that there should be any hunting of bears being done, especially because they have now been listed on the Convention on International Trade in Endangered Species list¹.

As a community there are ways that we can help black bears across North America. Public education is a huge step we can take to better inform the public about bears and their behaviours. Take the time to reach out to organizations in your area that focus on the conservation of these animals, such as the Calgary Zoo, Parks Canada, the Alberta Institute for Wildlife Conservation. If entering black bear habitats, it is also a good idea to understand standard bear safety measures and keep your distance if coming across one. We need to respect these animals and understand that if we don't want them walking into our bakeries, we probably shouldn't be walking into their homes, so if you really want to see a black bear in real life, go visit a zoo.

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