

# Alberta and the Three Bears

By Ian Urquhart



**N**ews media have featured Alberta's threatened population of grizzly bears several times this year. That news hasn't been particularly positive. In September, a female grizzly was killed by a train between Castle Junction and Lake Louise. She was the mother of two cubs, both of which were presumed to have perished before she died. In late April, three grizzly cubs were orphaned when hunters shot their mother in the Porcupine Hills. She had charged them, presumably because she regarded the black bear hunters as threats to her cubs.

Those three, orphaned grizzly cubs inspire the questions at the heart of this article. Should wildlife managers consider rehabilitating and then releasing such cubs back into the wild? Or, as in the case of the three Porcupine Hills orphans, should cubs be sent to zoos? If zoos cannot be found, should the cubs be killed? After the Porcupine Hills cubs were rescued by Alberta Fish and Wildlife, they were sent to the Calgary Zoo. The Zoo cared for them until early summer. Then they were sent to the Greater Vancouver Zoo where they will spend the rest of their lives.

Before the cubs were sent to the B.C. zoo, I was one of 104 signatories to a letter from Bears Matter to Alberta Environment and Parks Minister Nixon. The letter urged him to put those cubs on a different path. We urged the Minister to rehabilitate the cubs with the view to releasing them back onto the Alberta landscape once they were old enough, skilled enough, to survive on their own in the wild. I still firmly believe that rehabilitation and release of grizzly bears should be a management alternative available to Alberta Fish and Wildlife. I hope

that, in the very near future, the Alberta government will abandon its prohibition against rehabilitating grizzly cubs. Instead, it should allow suitably designed wildlife rehabilitation facilities to try to put orphaned cubs on that different path.

Provincial policy has prohibited this option since 2010. That was the year the provincial government declared that wildlife rehabilitation permits could not be used to rehabilitate grizzly bears and a handful of other wildlife species. In a 2019 article, Shaun Fluker and Drew Yewchuk critiqued this prohibition against grizzly rehabilitation as "remarkable" since, ironically, 2010 also was the year when Alberta formally designated the grizzly as a species-at-risk in the province. Today, the grizzly bear retains that Threatened designation.

Until April 2018, orphaned black bear cubs also were on the province's prohibited species list. Events in 2017 shone a bright, unflattering light on Alberta's restrictive policy. That spring, three black bear cubs were discovered in a Banff National Park wash-room. Since Alberta prohibited cub rehabilitation the bears were shipped to Ontario's Aspen Valley Wildlife Sanctuary. Later that year, an injured black bear in the Spring-

bank area, nicknamed Russell, captured considerable public and media attention. The province came under fire again when it refused the Cochrane Ecological Institute's (CEI) requests for the government's permission to let the bear hibernate at its facilities. Lisa Dahlseide, the Institute's Education Director, saw the attention those bears received as an important catalyst for the government's decision to allow the rehabilitation of black bear cubs.

With respect to the three grizzly cubs orphaned this spring I invited a handful of people to add their signatures to the letter to Minister Nixon. One renowned conservation biologist's response surprised me. The biologist wrote: "This is NOT conservation. This is misplaced empathy. Look to the data. Sorry, Ian, but this is a really poor initiative." I thanked the academic for the email and for sharing the opinion there was no merit at all in trying to rehabilitate grizzly cubs.

Then, I took a look in the metaphorical mirror. Was this professor right? Was "misplaced empathy" looking back at me? Did the data support the conclusion that it was a "poor initiative" to consider the rehabilitation/release option rather than zoo captivity or killing the cubs?



Grizzly and three cubs in Canada's Rocky Mountain parks. CREDIT: Parks Canada <https://www.pc.gc.ca/en/pn-np/mtn/ours-bears/generaux-basics/grizzli-grizzly>

## Two “Good” Arguments Against Grizzly Bear Rehabilitation?

There are some unacceptable arguments for not considering changes to public policy. One of those is bureaucratic inertia, the idea that the status quo is good irrespective of its merits. Fluker and Yewchuk concluded, after examining the records received through a freedom of information request, that this helped to explain Alberta Environment and Parks’ reluctance to allow bear rehabilitation. They wrote: “The policy for wildlife rehabilitation in Alberta appears to be based more on inertia than a scientific consideration of the effectiveness of rehabilitation.”

There may be, however, good arguments against bear rehabilitation generally and grizzly cub rehabilitation in particular. Two possibly better arguments against trying to rehabilitate focus on safety and the development of grizzlies from birth to adulthood. Caution with respect to rehabilitating wildlife generally is needed because of the risks rehabilitation may pose to both humans and wildlife. On the eve of allowing Alberta wildlife rehabilitation facilities to care for orphaned black bear cubs, Alberta’s Deputy Minister of Environment and Parks said that his department’s approach was aimed “to ensure the safety of the public and wildlife.” He wrote: “Safety risks to humans and to wildlife species, including disease risks to both humans, (sic) are the most common reasons for the restriction of possession of certain wildlife species.”

Human-bear conflict, especially bear attacks on people or their property such as livestock, likely was more central than disease to the Deputy Minister’s assessment. Here, a major concern is that bears will become habituated to people during their time in a rehabilitation facility. This habituation or familiarity will embolden bears after their release. By removing or reducing a bear’s “fear factor” habituation will make it more likely that the released bear will become a problem bear. In the extreme, the problem bear – especially one that has not developed natural bear survival skills in a rehabilitation facility – may see humans as prey and attack them. Wildlife managers in Alberta have had zero tolerance for this risk.

The second argument is a developmental one. Like all the subspecies of brown bear (*Ursus arctos*), grizzly cubs in nature spend more time with their mothers than black bear cubs do. A grizzly cub is likely to stay with its



Aerial photo showing the outline of the grizzly rehabilitation facility enclosure and its distance from existing structures. PHOTO: © COCHRANE ECOLOGICAL INSTITUTE

mother for approximately 2 ½ years, roughly six months to one year longer than its typical black bear counterpart. Grizzly cubs in the wild, in other words, normally rely on a mother’s nurturing and teaching longer than black bear cubs do.

“Grizzly bears are different,” Alberta government carnivore specialist Paul Frame told reporter Colette Derworiz in 2018. “They have a different life history and they require more care.” More care likely means a longer stay at a rehabilitation facility and may increase, in the minds of some, the risks presumed to accompany habituation. John Muir, Communications Director for Alberta Environment and Parks, argued this when he was interviewed about rehabilitating the Porcupine Hills cubs. He claimed that the survival chances of orphaned grizzly cubs meant they needed to be kept in a rehabilitation facility longer than black bears. “This causes safety concerns because the longer the bear is in rehabilitation,” he told reporter Cathy Ellis, “the higher the risk of habituation and aggression when the bear is released.”

### And the Data?

The data don’t support these “good” arguments against grizzly bear rehabilitation and release. The most comprehensive study of the consequences of returning orphaned, captive-reared bears to their natural environment I found was published in the peer-reviewed *Journal of Wildlife Management* in 2015. A team of 13 authors gathered data from 12 bear

captive-rearing programs in the United States, Canada, Romania, Greece, India, and South Korea. The lead author was John J. Beecham. Beecham advised the Alberta government on the issue of rehabilitating black bear cubs; he also signed the letter urging Minister Nixon to approve rehabilitation/release as a management option.

The questions raised in this study are central to the concerns and interests of wildlife managers and the public alike. Are bears likely to survive after they’re released? What are the causes of their mortality? How prevalent are conflicts between humans and post-release bears? Where do bears go after their release? Do post-release bears reproduce? Post-release data for 550 bears over the period 1991 to 2012 was analyzed. Three species of captive-reared bears – American black bears (*Ursus americanus*), brown bears (*Ursus arctos*), and Asiatic black bears (*Ursus thibetanus*) – were studied. The bear population studied was made up of 424 American black bears, 64 brown bears (54 from Romania, 8 from B.C., and 2 from Greece), and 62 Asiatic black bears.

All of the bears included in this study were less than one year old when they entered a wildlife rehabilitation facility. They were kept for between two and 14 months and their care was guided by the International Fund for Animal Welfare protocols. Those protocols “primarily involved minimizing post-weaning human contact during their captivity.” All of these captive-reared bears were released into habitats occupied by their species. Those areas included “adequate natural food availability, cover, and low probability of encountering humans.” The brown bears were released during the first winter or sometime between the spring and September of their second year. Independence for those bears came considerably earlier than would have been the case if they were not orphans.

The human-bear conflicts data suggests that, if appropriately-rehabilitated bears are released into suitable habitats, the risk of a rehabilitated bear becoming a problem bear is very low. The vast majority of all the released black bears (94.2%) did not come into any conflict with people. None of the 64 brown bears re-

leased back into nature came into any sort of conflict with people. As for the type of conflicts between humans and black bears, none of those conflicts involved a bear attack. The most numerous examples of human-black bear conflicts came when captive-reared bears tried to get human foods that were not stored securely. Harm to livestock provided the second most numerous examples. Habituated black bears that approached humans looking for food was the third most important conflict category. Again, this small number of conflicts only involved black bears.

With respect to the survival rates of bears released from rehabilitation facilities, the overall survival of the captive-reared brown bears in this study was similar to the survival rates of wild grizzlies in Montana reported in a 2012 study by Mace et al (0.682 for wild yearlings/0.852 for wild subadults in Montana versus 0.749 for the yearling brown bears released in Romania, B.C., and Greece). A 2016 report by Costello, Mace, and Roberts followed up on the 2012 study. It estimated that the wild cub survival rate in Montana from 2004 to 2014 was 0.553 and 0.639 for yearlings. The survival rate of captive-reared brown bears again compares favourably with those data.

The 2015 article by Beecham et al erodes, if not destroys, the foundation supporting the “good” arguments for the absolute prohibition against grizzly bear rehabilitation and release. Taken together, the similar survival rate between wild grizzlies and captive-reared brown bears, the successful release of brown bear yearlings, the total absence of any human-brown bear conflicts, and the absence

of any indication that black or brown bears returned to their rehabilitation facility area provide the data that should prompt Alberta government officials to add rehabilitation/release to their suite of management options. As Beecham et al wrote: “(o)ur analyses reduce many of the uncertainties surrounding the fate of bears released as yearlings and provide evidence that releasing captive-reared bears is a defensible management alternative.”

## **A Path Ahead for Orphaned Grizzly Cubs in Alberta**

The Cochrane Ecological Institute is one of the Alberta wildlife rehabilitation facilities licensed to rehabilitate and release black bear cubs. Under the leadership of the Smeeton family, the CEI was instrumental in putting the swift fox back on Canada’s prairie landscape. By the late 1970s, swift foxes were extirpated from Canada. Several years before the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) issued its extirpation decision, Miles and Beryl Smeeton had initiated a swift fox captive-breeding program in order to reintroduce swift foxes to their historic range. Thanks largely to CEI’s captive breeding program and the swift fox reintroductions the program enabled, the 2006 population of this endangered species in Alberta and Saskatchewan was estimated to be 647 animals.

Now under the leadership of Clio Smeeton, the CEI has set out on another pioneering venture – to be the first Alberta wildlife rehabilitation facility to rehabilitate and release orphaned grizzly cubs. With the help of a handful of major donors and volunteers, the CEI has constructed its “Grizzly Bear Cub Rehabilitation Facility” on the Institute’s property northwest of Cochrane (the donors and volunteers are listed here (<https://ceinst.org/grizzly-bear-cub-rehabilitation-project-donors/>)). The facility is made up of a four and one-half acre enclosure and a bear house. The enclosure is built on a landscape with features typical of the Rocky Mountain foothills: mixed aspen/spruce forest, white spruce forest, and open meadow. The facility is located in a secluded location at the Institute, over 100 metres from the nearest building, so it cannot be seen from any of the Institute’s other buildings or structures. An eight-foot heavy gauge wildlife

fence with a two-foot inward facing overhang runs around the perimeter of the enclosure. To discourage resident cubs from trying to dig under the fence, a four foot section of chain link fencing is attached to the fence and buried on the inside of the perimeter. The perimeter fencing and its overhang also will be electrified. Additionally, a 14 by 12 foot bear house adjoins the enclosure and will serve as a temporary shelter for cubs. Building on the information gathered from facilities around the world, including Canada’s only grizzly bear rehabilitation facility in B.C., the CEI has built an impressive facility.

## **Conclusion**

With the completion of this grizzly cub rehabilitation facility, the onus is now on the Minister of Environment and Parks to take the steps necessary to ensure that, if and when grizzly cubs in Alberta are orphaned again, the doors of CEI’s facility will open to its first temporary residents. The scientific data support the conclusion that rehabilitation and release is a viable management option and should be approved by the provincial government. That data helps me understand why so many natural scientists and bear experts lent their names to the Bears Matter letter endorsing this policy change. I suspect it’s the knowledge and expertise, not emotion, of scientists such as Drs. John Beecham, Stephen Herrero, Paul Paquet, Geoff Holroyd, Anthony Clevenger, and Lance Craighead – to name just a few – that led them and many others to conclude that grizzly bear rehabilitation is a path worth taking (for the complete list of the academics, bear experts, and conservationists who signed the letter see <https://bearmatters.com/open-letter-to-honourable-jason-nixon/>). ▲



*Perimeter fence, ground wire, and cub house. The ground wire is attached to the fence every 12 inches. It is now covered with soil so grass and other vegetation will grow there. PHOTO: © COCHRANE ECOLOGICAL INSTITUTE*



*Volunteers attaching the ground wire to the perimeter fence. PHOTO: © COCHRANE ECOLOGICAL INSTITUTE*