Captive rearing of caribou: a novel approach to enhancing recruitment in a depressed population of woodland caribou

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Across their North American range, many populations of woodland caribou are in trouble. While the causes of the decline of woodland caribou herds are likely multi-factorial and herd-specific, poor calf survival due to predation is often a contributing factor in the failure of some herds to recover from population declines. Management techniques that can increase calf survival through the critical neo-natal period and subsequent recruitment into the population are highly sought after by managers faced with depressed or declining populations of woodland caribou.

Faced with a declining herd of woodland caribou along the Alaska/Yukon borderlands, the Chisana Herd, we sought to determine the most biologically and socially acceptable means of enhancing the population structure of the herd and promoting herd growth. Options were explored through a series of meetings among an ad hoc working group of partners: Yukon Dept of Environment, White River First Nations, Kluane First Nations, Canadian Wildlife Service, the Yukon Fish and Wildlife Management Board, Alaska Department of Fish & Game, Wrangell St. Elias National Park, USGS (Alaska) and big game outfitters from both Yukon and Alaska. We discuss the thought processes behind choosing a novel captive rearing experiment to recover the herd. Captive rearing entails capturing adult cow caribou, maintaining them in an enclosure in situ throughout calving and the neonatal period, and protecting them from predators. Cows and their calves are then released to rejoin the herd, once the young are through the critical neo-natal period.

Government-sponsored wolf control, captive breeding and reintroduction, or transplantation of animals from a nearby herd not in decline, are among the more obvious management techniques that can be used to recover a large ungulate population. We discuss the pros and cons of each of these approaches with that of captive rearing, and briefly outline our experience with a captive rearing experiment on the Chisana Herd.