



Province of British Columbia

Wolf Management for Caribou: 2017/2018 Yearly Summary

BACKGROUND:

Successful recovery of some endangered caribou populations requires removal of wolves, the caribou's primary predator. The most efficient and humane method is shooting from helicopters during winter while there is snow on the ground. Consistent with the Province's Grey Wolf Management Plan and the caribou plans, proactive wolf control was conducted this winter on a subset of provincial caribou herds (see Figure 1) in the South Selkirk, Columbia North, and South Peace.

The fourth year of a five-year program was conducted in the South Selkirk and South Peace. In the South Peace aerial wolf removal was expanded to include the Narraway herd. The second year of aerial wolf removal was conducted near the Columbia North Herd area to complement maternity penning recovery benefits.

Provincial Results

In total there were 151 wolves removed from eight different caribou herd areas in 2017/2018. The total cost of all wolf removal programs was \$593,333. The impact of these multi-year removal programs will continue to be assessed by monitoring caribou population trends in herds that have received predator control, and comparing them to population trends prior to initiation of wolf control, and population trends in nearby herds that did not have wolves removed. The results of these assessments will be used to guide future application of predator removal programs in the province.

Total provincial wolf removal by caribou herd

| Herd Name | Total Number of Wolves Removed |
|----------------|--------------------------------|
| South Selkirk | 4 |
| Columbia North | 18 |
| Burnt Pine* | 8 |
| Kennedy Siding | 14 |
| Moberly | 19 |
| Scott East | 30 |
| Narraway | 14 |
| Quintette | 44 |
| Total | 151 |

Herd Summary

South Selkirk

Wolf removal in the South Selkirk herd was continued to reduce the risk of predation on the small herd of 11 animals. Due to its small size, the South Selkirk herd is more susceptible to population level impacts from any rate of predation. The program in the South Selkirk was intended to run annually until the majority of the early seral in past cut blocks are in shade by growing conifers. As the logging in caribou habitat was mostly from 1970 – 2000, this process is well underway.

The removal program had a budget of \$60,000.00; of which, \$36,000 was spent. Wolf removal activities this year were limited by weather. Due to weather limitations on aerial removal, a total of four wolves were removed; two in June 2017 and two in March 2018. The South Selkirk area is being closely monitored, as there are now only 3 remaining female caribou. The results of the reason for the decline from 11 to 3 are being conducted, and next steps for these 3 caribou are currently being considered.

Columbia North

Wolf removal in the Columbia North herd area was conducted as a complementary management tool to the Revelstoke Caribou Maternity Pen Project. A combination of wolf collaring and aerial removal were used to identify packs and reduce the number of wolves in core and matrix caribou habitat areas surrounding the pen and the source herds for maternal pen cows. Wolf removal supports the maternity pen by reducing the risk of predation on animals leaving the pen area, and alleviating pressure on source herds to maximize the potential for the penning project. Wolf removal in the Columbia North herd area is complemented by primary prey reduction with the goal of reducing the number of wolves that need to be removed to maintain low wolf densities.

The budget for wolf control was \$100,000, which was fully spent to remove a total of 18 wolves; two wolves were removed in April 2017, and an additional 16 wolves were removed during February and March 2018.

The annual caribou survey in Columbia North could not occur in 2017/18 due to weather conditions. However, there are indications this year's wolf removal had positive impacts for caribou. There was only one incident of a wolf being captured on video camera at the maternity pen, compared to consistent wolf presence in previous years. The decrease in wolf presence was also noted by the guide outfitter that assists in maternity pen operations. Despite the reduction in wolves, one cow from the maternal pen was killed by a wolf after being released from the pen.

South Peace

Wolf removal projects in the South Peace area are continuations of ongoing predator reduction projects. The South Peace removal area includes the Scott East, Moberly, Kennedy Siding, Burnt Pine*, Quintette and Narraway caribou herd areas. Predator control for the Moberly herd is intended to reduce predation risk on caribou that are reared and released from the Klinse-Za maternity pen. Wolf removal in the Scott East, Kennedy Siding Herd and Burnt Pine* herd areas are intended to reduce predation risk on declining caribou populations within these herd areas, and reduce the potential of wolves moving

into the adjacent Moberly and Quintette herds. Wolf removal in the Quintette and Narraway herds is intended to support declining populations whose use of low elevation winter range put them at greater risk of wolf predation. The effect of wolf removal projects will be assessed by comparing population trends between South Peace herds with wolf control, and the nearby Graham herd that is not subject to wolf removal. All removal used a combination of GPS collaring and aerial hunting to reduce wolf populations.

During the 2017/2018 year there were a total of 129 wolves removed in the South Peace Area. Within the Scott East, Moberly, Kennedy Siding, Burnt Pine* and Quintette herd areas, 28 groups of wolves (ranging in size from two–17) were identified. A 92 per cent removal efficacy was achieved by removing 44 wolves from the Quintette herd area, 30 wolves from the Scott East, 19 from the Moberly, 14 from Kennedy Siding, and 8 from the Burnt Pine* herd area.

The wolf control project for the area had a total budget of \$400,000, of which \$376,295 was spent.

Within the Narraway herd area fourteen wolves were removed at an efficacy rate of 74 per cent and a cost of \$81,038.

**The Burnt Pine caribou herd was extirpated in 2014. Wolf removal continues in this area due to the Burnt Pine herd area's close proximity to other areas where wolf removal activity is required.*

CONCLUSION

Aerial wolf removal continues to be necessary to support caribou recovery in the short term. After Winter 2018/19 the results of the five-year project in the South Peace will be reviewed.

Figure 1 – Number of wolves removed in B.C. by herd area, 2017/18

