



Southern BC Cougar Project

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The longest monitored animal on the project is C7 (above). This female was first collared 3 years ago in the West Okanagan as a 2-year-old in 2019 and then dispersed to the Boundary where it has since given birth to 2 litters.

Adult monitoring

To date we have fit GPS collars on 44 cougars (32F, 12M). We have collared 19 cougars in the West Okanagan (15F, 4M), 12 in the Boundary (8F, 4M), and 13 in the Kootenays (9F, 4M). We have also completed 13 collar replacements for a total of 57 captures.

We have documented 10 mortalities to date (5F, 5M). Human-caused mortalities include 3 hunter harvests, 2 rodenticide poisonings, 1 incidental

snaring, and 1 killed due to livestock conflict. Natural-caused mortalities include 2 cougars that were killed by other cougars, and 1 cougar that was killed by an elk.

There are currently 21 cougars that are alive with working collars in the study area. We are currently monitoring 8 adults in the West Okanagan (8F), 8 in the Boundary (7F, 1M), and 5 in the Kootenays (4F, 1M). Capture efforts are now focused on

collar replacements to monitor those individuals for as long as possible.

Survival and reproduction rates of these collared animals will be used along with local density estimates to monitor population size and trend using a new Integrated Population Model being developed. The results of the 2021/2022 West Okanagan population inventory should be in the next spring update.



Kitten monitoring



C30, a 4-year-old female, carrying kitten C30C to a new den site near Apex last summer (above).

To date we have monitored 45 kittens belonging to collared females. We have monitored 24 kittens in the West Okanagan, 8 in the Boundary, and 13 in the Kootenays.

Of those 45 kittens, 22 are confirmed or suspected to have died before they reached dispersal age of 1-2 years. Known mortality causes include wildfire, predation by black bears, infanticide by

other cougars, abandonment by the female, becoming orphaned due to the female dying, and being killed due to livestock conflict.

We have documented 19 newborn litters to date (9 in the West Okanagan, 3 in the Boundary, and 7 in the Kootenays). We tagged 13 of those litters when the kittens were 1-month-old while the other 6 litters died prior

to that age. We have tagged 13 kittens in the West Okanagan (8F, 5M), 5 in the Boundary (1F, 4M), and 10 in the Kootenays (6F, 4M).

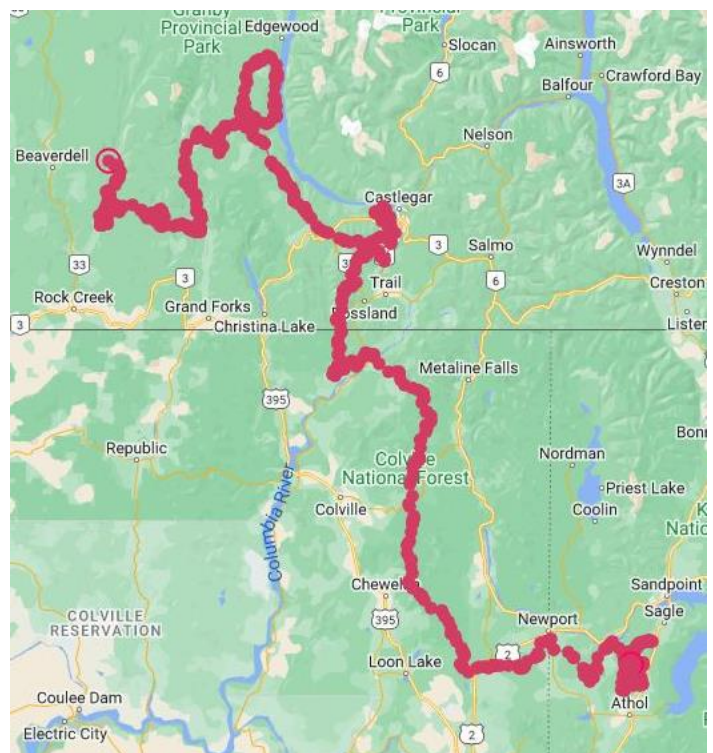
We will continue to monitor reproductive rates and kitten survival by installing remote cameras at the females' kills. We will also deploy GPS collars on tagged kittens just prior to them dispersing so that we can monitor them into adulthood.



C21A and C21B, tagged in June, are 3rd generation kittens on the project (above). They are the offspring of C21, who is the offspring of C5. C21 is now a 3-year-old with its first litter, and C5 died as a 6-year-old last winter.

Dispersal

To date we have documented 9 subadults disperse from their natal territory, including 4 disperse out of the study area to Washington and Idaho. The furthest disperser so far is C49. This male was collared as a 2-year-old in the Christian Valley last winter and then dispersed over the summer, travelling more than 550 km, to near Sandpoint, Idaho (see map on right).



Cluster investigations

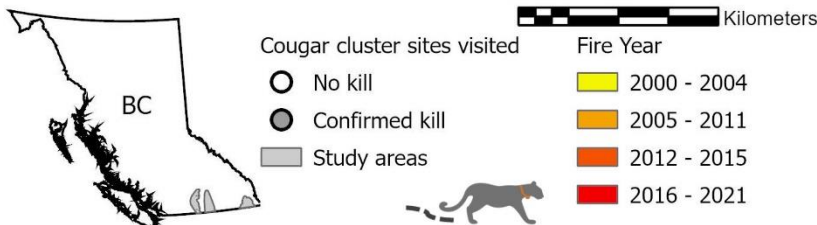
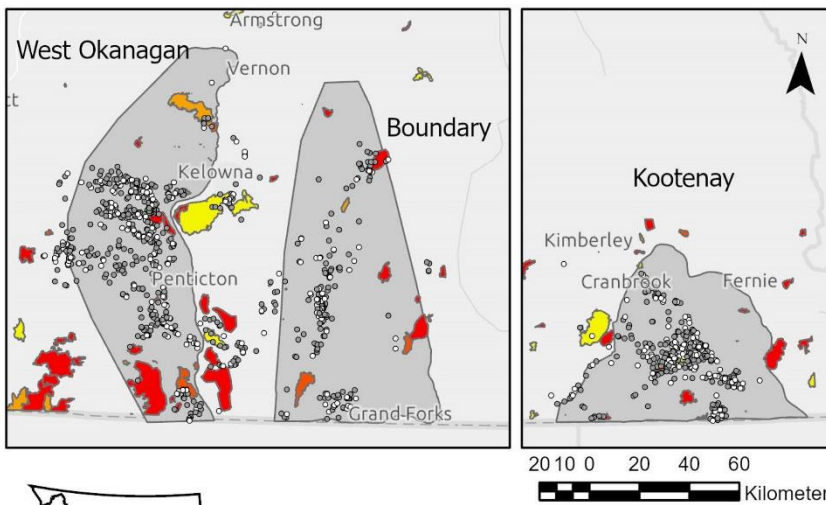
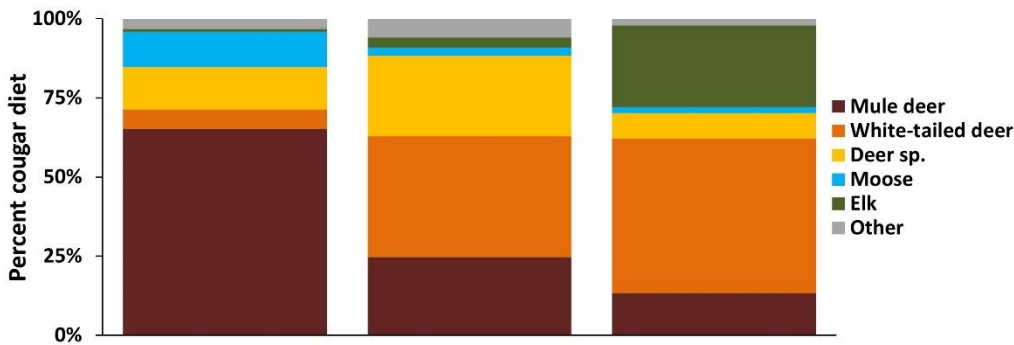
To date we have investigated 1,270 clusters of cougar GPS locations and have found cougar kills at 850 clusters.

The most common prey species are mule deer and moose in the Okanagan, white-tailed deer and mule deer in the Boundary, and

white-tailed deer and elk in the Kootenays (see graph below).

Other prey species documented include bighorn sheep, livestock, coyotes, beavers, racoons, porcupines, snowshoe hares, grouse, magpies, and other cougars.

We wrapped up our final field season investigating clusters last summer. After 2.5 years of collecting data, our focus has now turned to the analysis phase of the project. We will continue to investigate clusters of denning females, and kills opportunistically.



Visit our website to read previous project updates, blog posts, news articles, listen to interviews, and watch webinars:

bccougarproject.weebly.com



You can also reach project coordinator Siobhan Darlington at: bccougarproject@gmail.com



Forest Enhancement Society of British Columbia



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Acknowledgements

Funding for this project is provided by the University of British Columbia Okanagan, BC Ministry of Forests, Habitat Conservation Trust Foundation, Forest Enhancement Society of BC, Natural Sciences and Engineering Research Council, Canada Foundation for Innovation, BC Conservation Foundation, Okanagan Chapter of the BC Wildlife Federation, Abbotsford Fish and Game Club, Summerland Sportsmen’s Association, Oceola Game Club, and the South Okanagan Sportsmen’s Association.

We thank the dedicated hound handlers who make this work possible, Grant Hiebert for donating camera bear guards, and the hard-working field crews who have collected data on this project: J. Andrian, K. Braid, B. Briere, S. Clow, C. Dolman, R. Embree (below, left),

K. Falck (right), A. Fosbery, K. Hancock, E. Ingham, T. Koehle, M. Jones, C. Kielpinski, A. Kruger, B. Maher, T. Malish, K. Mancuso, E. Matthew (below, right), M. Mueller, S. Peterson, L. Robertson, S. Werden, and K. Zaretski. We also thank the Okanagan Nation Alliance, BC Conservation Officer Service, BC Wildlife Health Program, local Guide Outfitters, and the countless volunteers for their support.

