

Kim Poole, M.Sc., RPBio Certified Wildlife Biologist Aurora Wildlife Research

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Professional Profile

Current Position: Aurora Wildlife Research - Owner and Senior Wildlife Biologist since 2000.

Kim is a professional biologist (Registered Professional Biologist; RPBio) and Certified Wildlife Biologist (The Wildlife Society) with 33 years of experience in public and private sectors throughout western Canada, with extensive experience in the NWT/Nunavut and British Columbia. Fifteen years of work on a variety of species with the NWT government and 18 years as an independent consultant have provided Kim with a broad range of skills and experiences. Kim has demonstrated expertise in the areas of wildlife inventory and wildlife habitat assessment, and identification, mitigation and monitoring of environmental impacts related to the mining, forestry, and tourism industries. Since 2004 Kim has led and designed baseline studies as well as 3rd party reviews for a number of environmental impact assessments in NWT, Nunavut and British Columbia. He has experience conducting and leading research and management studies on species such as moose, mountain goats, bighorn sheep, mule deer, elk, caribou, muskoxen, grizzly bears, furbearers, and raptors. Kim has strong experience in study design, data analysis, and report writing, as demonstrated in authorship in over 50 refereed journal articles and well over 100 technical reports.

Education

- Master of Science in Ecology, University of Alberta, Edmonton, Alberta
- Bachelor of Science in Wildlife Biology, University of Guelph, Guelph, Ontario

Professional Affiliations

- College of Applied Biology of British Columbia
- The Wildlife Society

Relevant Experience

Wildlife Research

- Lead researcher, wildlife research and management: Designed, conducted, analyzed and published studies on a number of species, examples of which include: calving sites and winter habitat selection of moose (East Kootenay, BC); mineral lick use and winter habitat selection of mountain goats (East Kootenay, BC); range use by bighorn sheep associated with the Elk Valley coal mines (East Kootenay, BC); grizzly bear abundance and distribution (northeastern BC); Canada lynx demography (Mackenzie Bison Sanctuary, NWT); marten habitat use (central BC); ecology of raptors (Bathurst Inlet area, Nunavut).
- Inventory specialist, NWT, Nunavut and British Columbia (number of surveys approximate): Designed, conducted, analyzed and wrote up (and often published) inventories on raptors (>20 surveys; NWT and Nunavut); caribou and muskoxen (~5 surveys; NWT and Nunavut); grizzly bears (4 DNA inventories; Nunavut, NWT, and BC); wolverines (2 DNA inventories; Nunavut); moose (>10 surveys, BC), mountain goats (>30 surveys, BC), and bighorn sheep (3 surveys, BC).

- Principle Discipline Lead, Terrestrial Wildlife, MMG Resources Izok Corridor Project, Nunavut. Project discipline lead for the terrestrial baseline program for the High Lake and Izok projects as the project proceeded through the Nunavut Impact Review Board (NIRB) process, including technical support to client personnel. Developed the High Lake draft EIS to submission to NIRB. Responsible for study design and methodology, field research and monitoring, and preparation of baseline and assessment reports related to caribou/muskoxen, carnivores and raptors.
- Terrestrial Wildlife Design and Development: Back River, Hackett River, Hope Bay, Taltson River, Inuvik to Tuktoyaktuk Highway, Belcourt Saxon, and Blue River. Study design and methodology, and field research for these projects, related to caribou/muskoxen and other ungulates, carnivores and raptors.
- Terrestrial Lead, review of mining developments for northern First Nations. Reviewed and provided advice on terrestrial wildlife and cumulative effects segments for First Nations organizations on a number of mining projects, including Qikiqtani Inuit Association (Baffinland Mary River), Yellowknives Dene First Nation (De Beers Gahcho Kué), Kivalliq Inuit Association (AEM Meliadine; AREVA Kiggavik), Kitikmeot Inuit Association (Newmont Hope Bay), and the Skii km Lax Ha (Pretium Brucejack; Seabridge KSM).
- **Lead researcher on improving field techniques:** Developed field techniques to better quantify survey methodology for caribou, moose and mountains goats.

Wildlife Management and Planning

- Species at Risk status and reports and management plans: As lead author or coauthor, developed
 and wrote a number of status reports for territorial (GNWT: Peary caribou; Dolphin and Union
 caribou; barren-ground caribou) and federal governments (COSEWIC: barren-ground caribou (DU 3);
 Canada lynx). Lead author on the mountain goat management plan for British Columbia.
- **Developed mitigation and monitoring plans:** Lead author on mountain goat and grizzly bear management plans for the Pacific Trail Pipelines in northwestern British Columbia.
- Assessed DIAND Caribou Protection Measures: Coauthor on an assessment of DIAND's Caribou Protection Measures. Also tested mobile Caribou Protection Measures in the Sahtu region, NWT, and drafted mobile measures for Nunavut.
- Reviewed survey methodology for caribou in West Greenland: Conducted a critical review of West
 Greenland caribou survey methodology using data from past surveys and recent GPS collar data, and
 published recommendations to improve the methodology.
- Reviewed caribou distribution surveys: Assessed caribou distribution surveys for the NWT government and provided recommendations to improve these types of surveys.
- Parks Canada reviews on proposed park boundaries: Responsible for assessing caribou distribution relative to proposed national park boundaries for Thaidene Nene Reserve (East Arm of Great Slave Lake, NWT) and Qausuittuq National Park (Northern Bathurst Island, Nunavut).
- Director, Independent Environmental Monitoring Agency, Yellowknife. Focussed on terrestrial wildlife for IEMA, a public watchdog agency for environmental management of Dominion Diamond's Ekati Diamond Mine in the NWT. Appointed in 2006 – 2015.

Refereed Publications (selected):

Poole, K.G., C. Cuyler, and J. Nymand. 2013. Evaluation of caribou *Rangifer tarandus groenlandicus* survey methodology in West Greenland. Wildlife Biology 19:225-239.

Gunn, A., Poole, K.G., Wierzchowski, J., Nishi, J.S., Adamczewski, J., Russell, D, and D'Hont, A. 2013. Have geographical influences and changing abundance led to sub-population structure in the Ahiak caribou herd, Nunavut, Canada? Rangifer 33, Special Issue No. 21:35-58.

- Species at Risk Committee. 2013. Species Status Report for Dolphin and Union Caribou (*Rangifer tarandus groenlandicus x pearyi*) in the Northwest Territories. Species at Risk Committee, Yellowknife, NT. (Scientific knowledge component prepared by A. Gunn and K. Poole).
- Russell, D.E., P.H. Whitfield, J. Cai, A. Gunn, R.G. White, and K. Poole. 2013. CARMA's MERRA-based caribou range climate database. Rangifer 33, Special Issue No. 21:145-152.
- Species at Risk Committee. 2012. Species Status Report for Peary Caribou (*Rangifer tarandus pearyi*) in the Northwest Territories. Species at Risk Committee, Yellowknife, NT. (Scientific knowledge component prepared by A. Gunn and K. Poole).
- Boulanger, J., K.G. Poole, A. Gunn, and J. Wierzchowski. 2012. Estimating the zone of influence of industrial developments on wildlife: a migratory caribou *Rangifer tarandus groenlandicus* and diamond mine case study. Wildlife Biology 18:164-179.
- Gunn, A., K.G. Poole, and J.S. Nishi. 2012. A conceptual model for migratory tundra caribou to explain and predict why shifts in spatial fidelity of breeding cows to their calving grounds are infrequent. Rangifer, Special Issue No. 20:259-267.
- Poole, K.G., D.M. Reynolds, G. Mowat, and D. Paetkau. 2011. Estimating mountain goat abundance using DNA from fecal pellets. Journal of Wildlife Management 75:1527-1534.
- Poole, K.G., A. Gunn, B.R. Patterson, and M. Dumond. 2010. Sea ice and migration of the Dolphin and Union caribou herd in the Canadian Arctic: an uncertain future. Arctic 63:414-428.
- Mountain Goat Management Team. 2010. Management plan for the mountain goat (*Oreamnos americanus*) in British Columbia. Prepared for the B.C. Ministry of Environment, Victoria, BC. (K.G. Poole lead author)
- Poole, K.G., K. Stuart-Smith, and I.E. Teske. 2009. Wintering strategies by mountain goats in interior mountains. Canadian Journal of Zoology 87:273-283.
- Poole, K.G., K. Stuart-Smith, and I.E. Teske. 2009. Wintering strategies by mountain goats in interior mountains. Canadian Journal of Zoology 87:273-283.
- Poole, K.G. 2007. Does survey effort influence sightability of mountain goats *Oreamnos americanus* during aerial surveys? Wildlife Biology 13:113-119.
- Poole, K.G., R. Serrouya, and K. Stuart-Smith. 2007. Moose calving strategies in interior montane ecosystems. Journal of Mammalogy 88:139-150.
- Poole, K.G., and K. Stuart-Smith. 2006. Winter habitat selection by female moose in western interior montane forests. Canadian Journal of Zoology 84:1823-1832.
- Poole, K.G., and K. Stuart-Smith. 2005. Fine-scale winter habitat selection by moose in interior montane forests. Alces 41:1-8.
- Poole, K.G., and G. Mowat. 2005. Winter habitat relationships of deer and elk in the temperate interior mountains of British Columbia. Wildlife Society Bulletin 33:1288-1302.
- Mowat, G., D.C. Heard, D.R. Seip, K.G. Poole, G. Stenhouse, and D.W. Paetkau. 2005. Grizzly and black bear densities in the interior mountains of North America. Wildlife Biology 11:41-58.
- Poole, K.G., G. Mowat, and D.A. Fear. 2001. DNA-based population estimate for grizzly bears *Ursus arctos* in northeastern British Columbia, Canada. Wildlife Biology 7:105-115.
- Poole, K.G., D.C. Heard, and G. Mowat. 2000. Habitat use by woodland caribou near Takla Lake in northeastern British Columbia. Canadian Journal of Zoology 78:1552-1561.
- Poole, K.G., G. Mowat, and D. Pritchard. 1999. Using GPS and GIS for navigation and mark-recapture for sightability correction in moose inventories. Alces 35:1-10.
- Poole, K.G. 1994. Characteristics of an unharvested lynx population during a snowshoe hare decline. Journal of Wildlife Management 58:608-618.