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Peary caribou Recovery Strategy. The aim is to address key knowledge gaps for terrestrial habitat protection to aid with the species' recovery. Our partnership includes 12 Inuit/Inuvialuit organizations, 4 Universities and several federal and territorial agencies. Our ultimate goal is to help with a national Recovery Strategy for Peary caribou. This research will generate knowledge to inform policy on the protection of habitat deemed critical for the survival and recovery of Peary caribou. Our partners will use the knowledge to inform regional wildlife plans and management.

We will use emerging technologies and methods to co-develop and co-apply Inuit/Inuvialuit knowledge on the Arctic ecosystem with that of western science. This will be done to quantify how climate change is impacting the Arctic landscape (snow and vegetation) and how those landscape changes are influencing the distribution and abundance of predators (wolves, polar bears and grizzly bears) and their primary prey (muskoxen and Peary caribou). Inuit/Inuvialuit Knowledge shared in workshops and interviews that describe changes in the distribution and abundance of the species and their habitat preferences will drive statistical models. Model outputs will be used to test the efficacy of different habitat conservation strategies to Peary caribou persistence.

The participants will be adult residents of 10 Arctic communities (Grise Fiord, Resolute Bay, Gjoa Haven, Cambridge Bay, Kugaaruk, Taloyoak, Ulukhaktok, Sachs Harbour, Paulatuk and Tuktoyaktuk) who are frequently on the land and have knowledge/ have made observations of Peary caribou, muskoxen and predators over the last 30 years. Four workshops will be held in each of the 10 partner communities at the beginning of the project. Data collection will be conducted in the winter of 2022 with follow up as needed with communities in following years. Following workshops will provide opportunities to address knowledge gaps, discuss results, and validate modelled outputs. Locally trained coordinators will help lead the workshops. Workshops will include semi-structured interview questions to the group to stimulate discussion with all participants along with participatory mapping (to document historical and seasonal space use patterns) and proportional piling exercises (to identify temporal changes in abundance).

Data will be stored in HTO/HTC archives or by federal government collaborators. Computer-based information will be stored in a locked office in password-protected folders, computers and a network drive. The dataset and raw information may be used by the HTO/HTCs and communities following the completion of this research. The results will be shared annually or more frequently if needed through presentations in meetings with communities and partners and written reports for local partner organizations and communities. We will also share results through community presentations, social media (e.g. Facebook) and infographic pamphlets.