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| VIU acronym_and text | | **Advanced Diploma in GIS Applications**  **Practicum Opportunity Summary** | | |
| Project | Title: | Quantifying the extent and impacts of winter recreation on Watsíx (Northern mountain caribou) in the Atlin herd range | | |
| Organisation: | Taku River Tlingit First Nation | | |
| Location: | Atlin, BC | | |
| Sponsor | Name: |  | Title: | Wildlife Coordinator |
| Email: |  | Phone: |  |
| Project Overview | • Woodland caribou constitute an important cultural resource for Taku River Tlingit First Nation (TRTFN) and used to be an important food source before a voluntary hunting moratorium was declared in in the early 1990s.  • Traditional knowledge holders have voiced concern that the remaining caribou in the Atlin herd are negatively impacted by winter recreational activities.  • The herd range has seen increased recreational snowmobile and ski traffic, particularly in the last few years following the COVID-19 pandemic. A public cabin constructed recently by the Atlin Alpine Society will likely increase recreational traffic even more.  • The TRTFN Land Guardians have been monitoring caribou and recreation activities in the area of concern for several years, collecting various types of spatial data: aerial (fixed-wing) surveys to quantify snowmobile usage, high-resolution satellite imagery, ground-based caribou track surveys, as well as a joint caribou collaring project with the BC government in 2018. | | | |
| Task Summary  (Types of work involved) | This project is flexible based on student interests, but TRTFN is generally looking for analyses to:  • Examine three years of aerial recreation survey observations to understand intra- and inter-annual variation in locations and intensity of snowmobile activity  • Determine whether snowmobile tracks can be automatically detected from remote sensing data (i.e. satellite imagery)  • Determine whether tasking satellite imagery is an accurate alternative to aerial surveys for quantifying snowmobile tracks  • Assess overlap between winter recreation and caribou collar data (requires data sharing agreement with BC government due to sensitivity of caribou movement data) | | | |
| Additional Information  (Appealing Aspects) | * The majority of the work will occur remotely. However, TRTFN has funding to pay for a weeklong trip for the student to Atlin to meet the on-the-ground team and participate in fieldwork (e.g. fixed-wing aerial survey, snowmobile caribou track surveys). In addition, TRTFN will pay a small ($1,000) stipend to the student. | | | |
| Funding | None  Minor (< $3,000)  Major (>$3,000) | | | |
| Workplace | Off-site  Full-Time On-Site  Other/Mixture  Description (if Other): Opportunity for a site visit and participation in fieldwork. | | | |
| Student Selection | Faculty Selection (Student with highest grades selected from among those interested)  Shared Selection (Faculty and Sponsor make selection based on discussion of interested students)  Sponsor Competition (Sponsor interviews, in-person or via telephone, and selects from interested students) | | | |

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