

Impacts of outdoor recreation on sensitive species in the Rocky Mountains of Western Canada

Project summary and implications for planning & management

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OUTDOOR RECREATION

- benefits community well-being
- fosters community connections
- draws and retains residents & businesses

Poorly managed or unplanned recreation can impact wildlife and recreation experiences

DATA GAPS

Lack of recreation data at scales need for management and planning

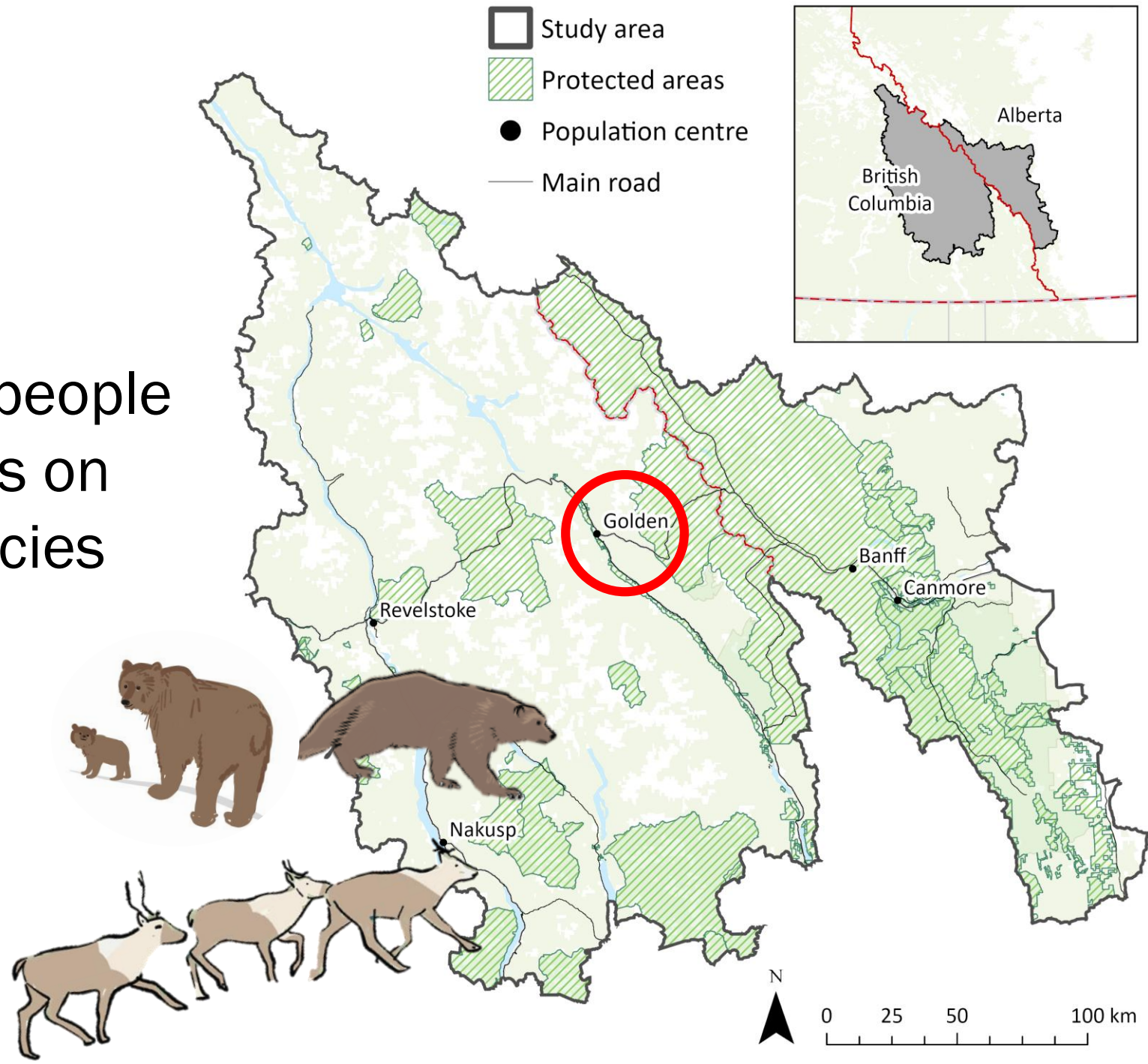
MONITORING

Tools and approaches for monitoring recreation and impacts on wildlife

MANAGEMENT

Creative approaches for managing and planning recreation, benefiting humans and wildlife

When, where and how people recreate, and impacts on sensitive wildlife species

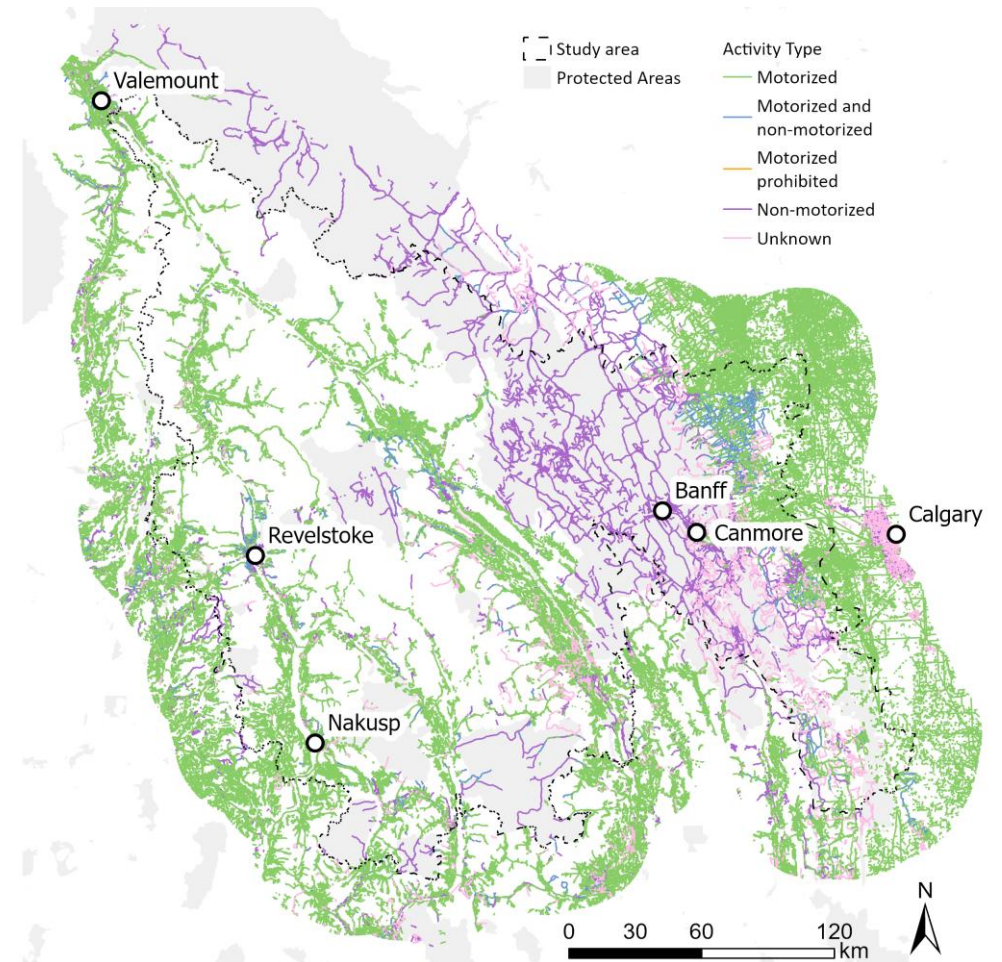


Data gaps in the recreation footprint

Government and non-government sources (online apps, websites.. etc).

Mapped 53,436 km of trails and linear feature

27% of these recreation trails in the study area were undocumented



Wildlife

DATA COLLECTION

CARIBOU



GPS Collars



SPATIAL DATA / MODEL



RSF Model



HABITAT QUALITY



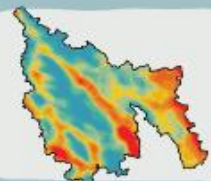
WOLVERINE



DNA Hair Snags



Synthesized Habitat Model



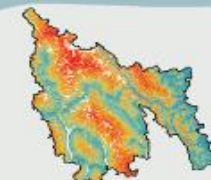
GRIZZLY BEAR



GPS & VHF Collars



RSF Model



Human Recreation

DATA COLLECTION



STRAVA METRO



AERIAL SURVEYS



CAMERA TRAPS



TRAIL COUNTERS



SPATIAL DATA / MODEL



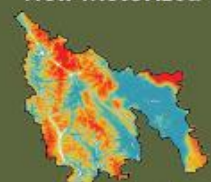
Integrated Species Distribution Model



RECREATION INTENSITY



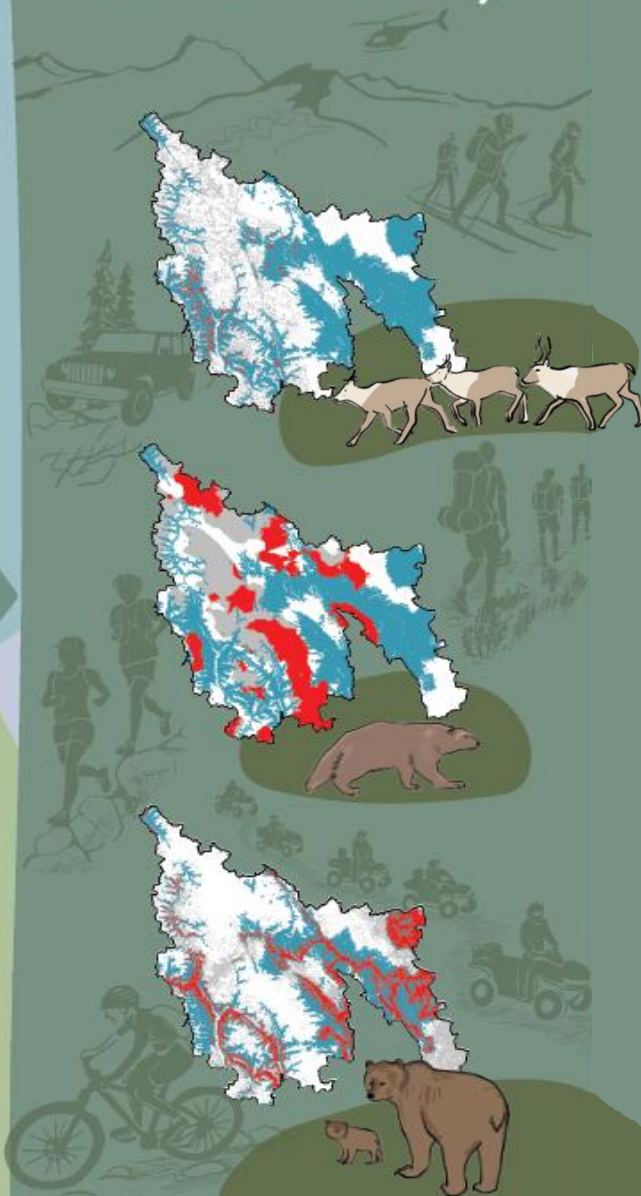
Non-Motorized



Motorized

HOT SPOTS:

Wildlife Habitat Quality + Recreation Intensity



LESSONS LEARNED

GET AHEAD OF THE CHALLENGES

Pro-active management as recreation intensity increases and climate change shifts available areas for recreation and wildlife habitat.

HARNESS THE POWER OF APPS

Ensure novel data sources properly used; better understand how apps can reach people with messages about responsible recreation

WHAT IS NEEDED?

Centralize and share data; standardized framework to monitor recreation

Guidelines for practitioners, including trail density thresholds & species specific responses to recreation (*but see Thompson et al. 2024; DOI: 10.1111/1365-2664.14837*)

FUNDERS & PARTNERS

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PROJECT WEBSITE

<http://y2y.net/RecEcology>

