

Recreation in bear country: towards understanding spatio-temporal overlap of recreation and grizzly bear habitat

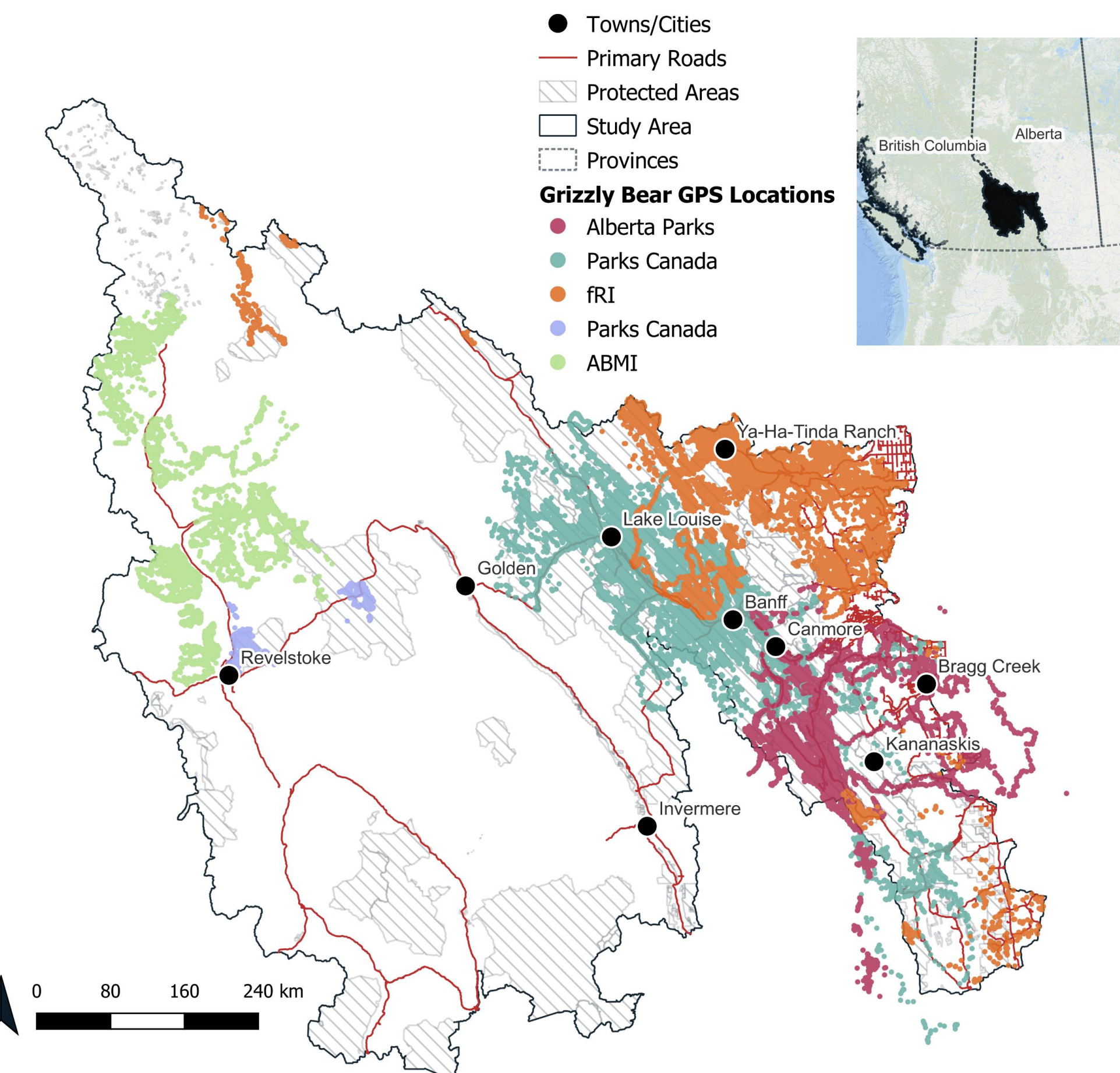
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Recreation Impact on Wildlife

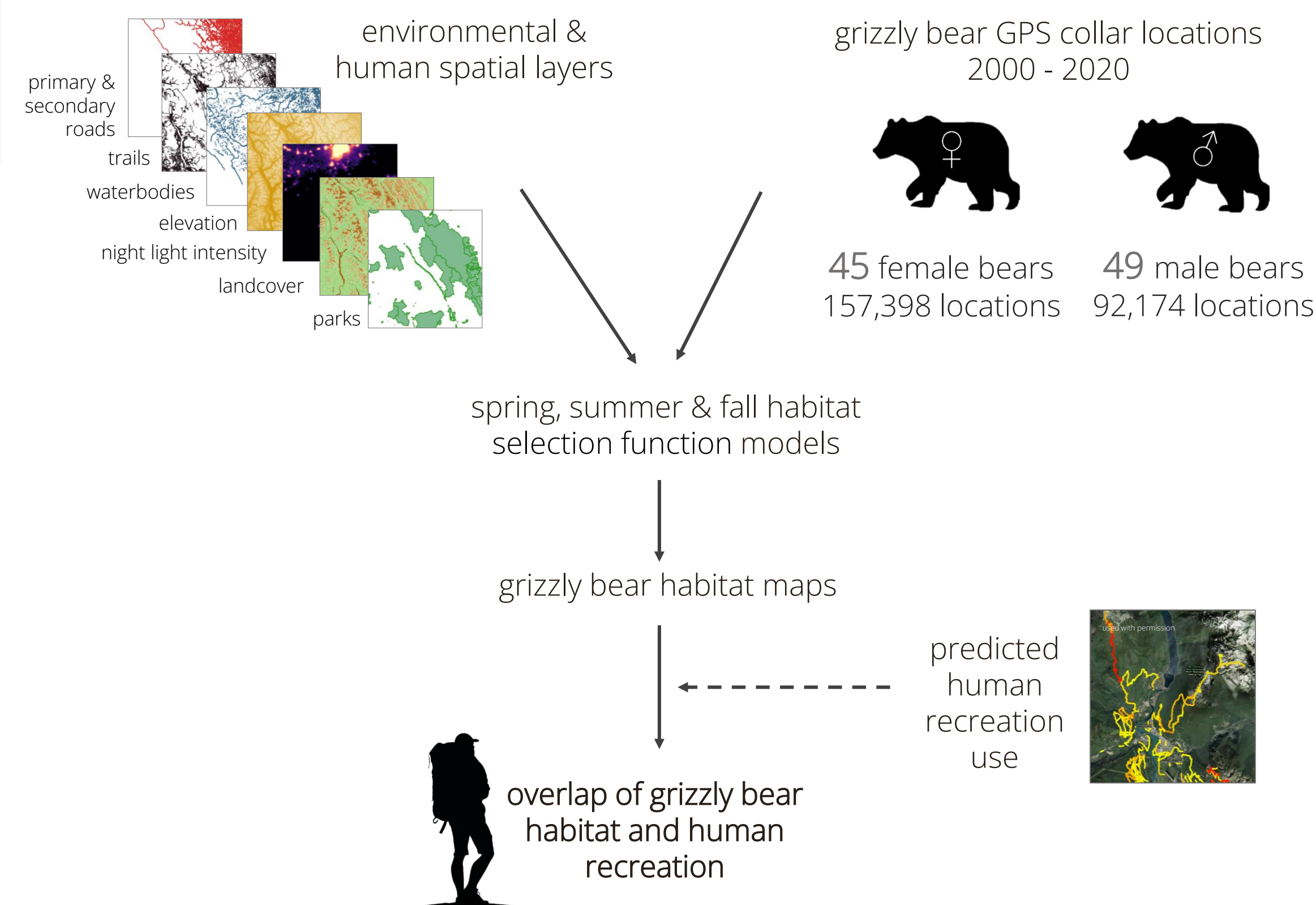
- Well managed outdoor recreation creates spaces for both humans and wildlife – including grizzly bears
- Coexistence of grizzly bears and humans is becoming increasingly challenging as recreation expands into grizzly bear habitat
- Managers face increasing difficulties balancing demands for recreational opportunities with grizzly bear conservation and management

We bring together 20 years of grizzly bear GPS location data from five monitoring and research projects. Color dots represent different data projects.



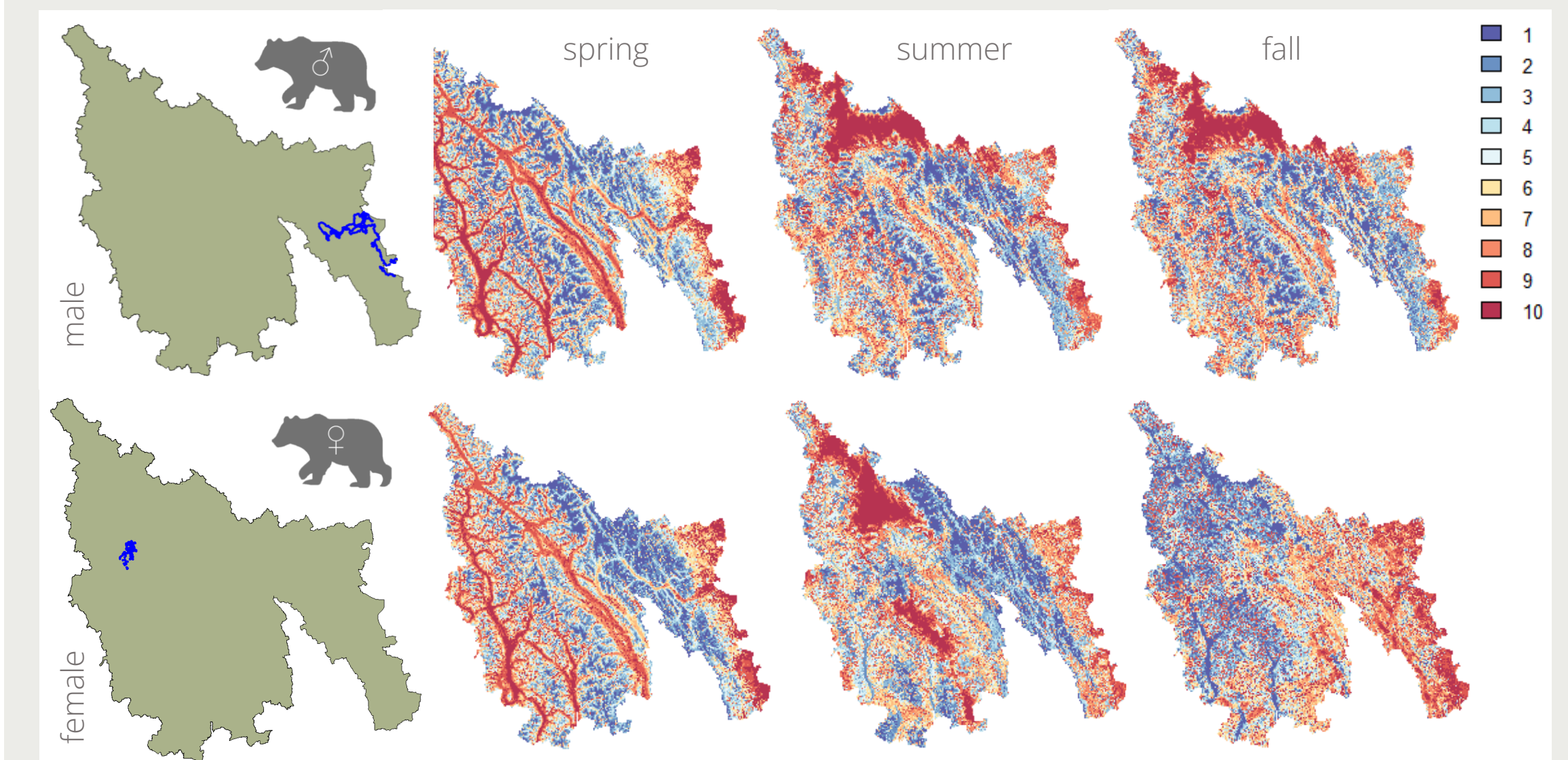
Mapping Grizzly Bear Habitat

We built seasonal grizzly bear habitat selections maps. These maps will be combined with predictions of human recreation use to identify overlap between human recreation and grizzly bear habitat.



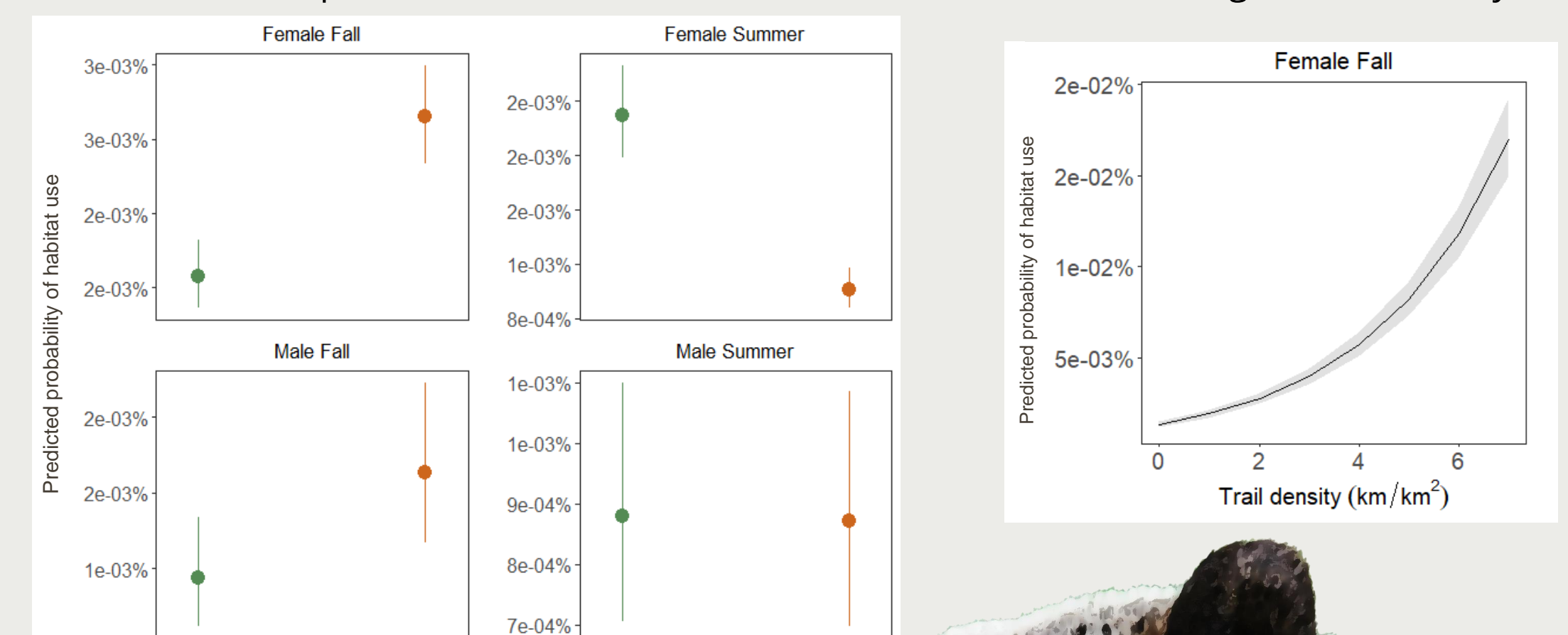
Preliminary Results

Grizzly bear habitat quality
1 - low relative probability of selection
10 - high relative probability of selection



Bears select to be **inside** parks in the fall but **outside** parks in the summer

In the fall, female bears select for areas of higher trail density



Achieving coexistence of recreationists and grizzly bears starts with an understanding of where recreation activities overlap with wildlife habitats

- This research highlights seasonal differences in the role of environmental and human factors in shaping grizzly bear habitat selection
- These maps can be used to identify areas of overlap between high quality grizzly bear habitat and human recreation in protected and non-protected areas
- This information can guide recreation and land-use management and access decisions to minimize impacts on important grizzly bear habitat while allowing for high quality recreation experiences

