

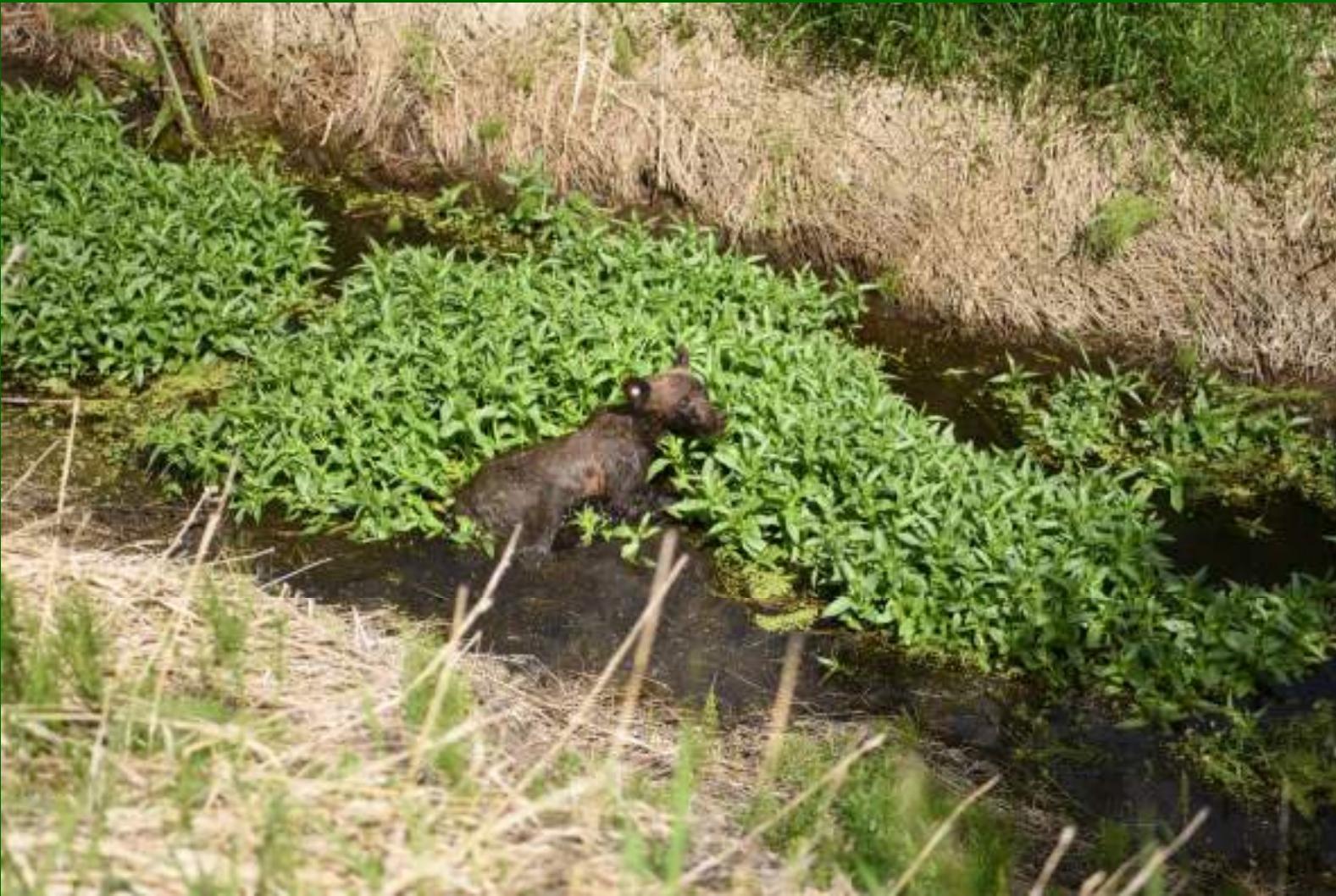
Grizzly bear corridors and valley bottoms, wetlands, riparian areas & biodiversity hotspots

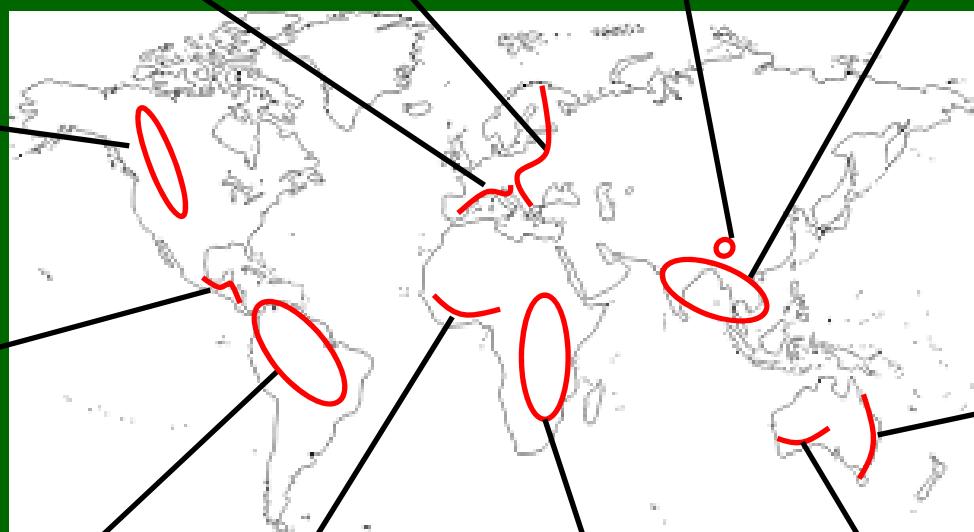
KOOTENAY CONNECT



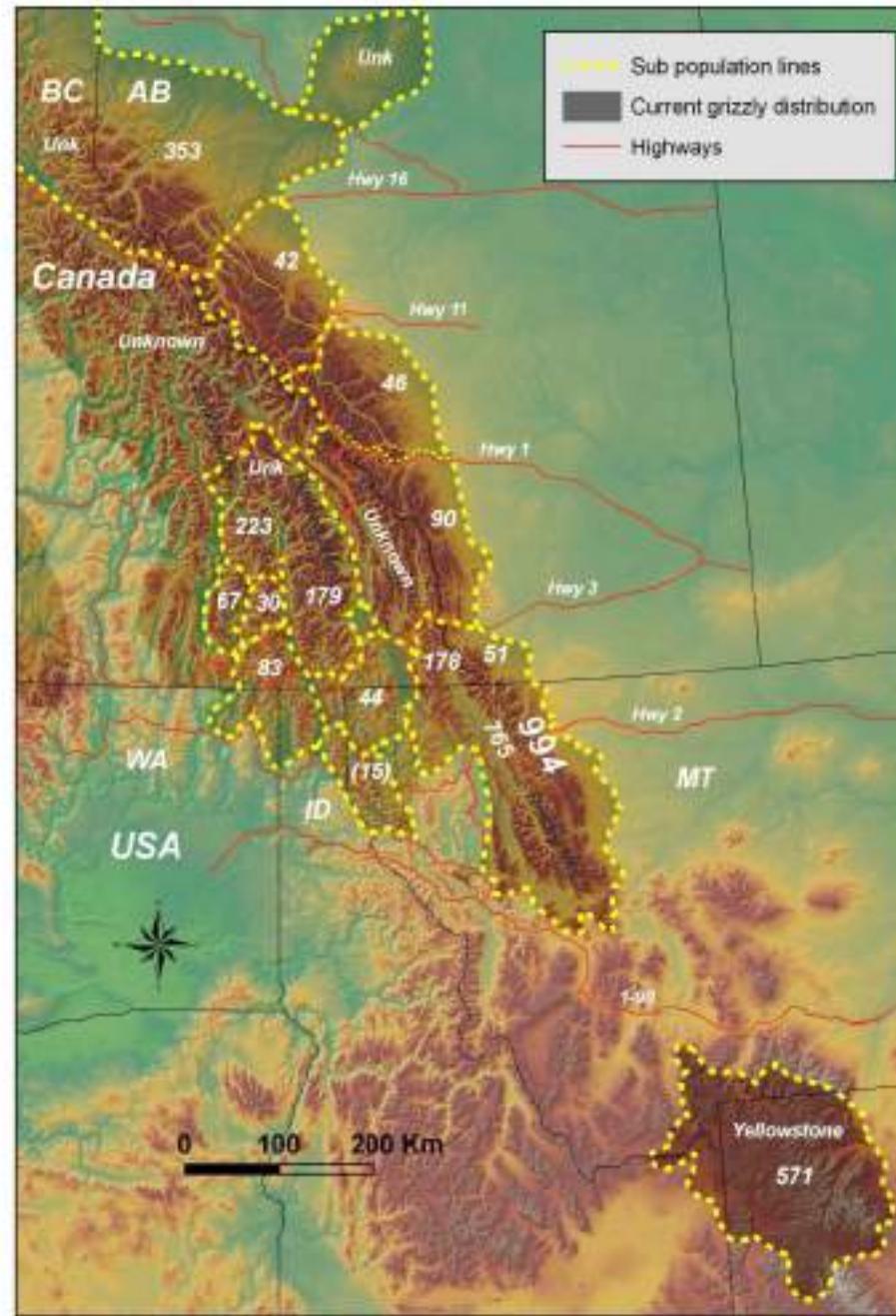
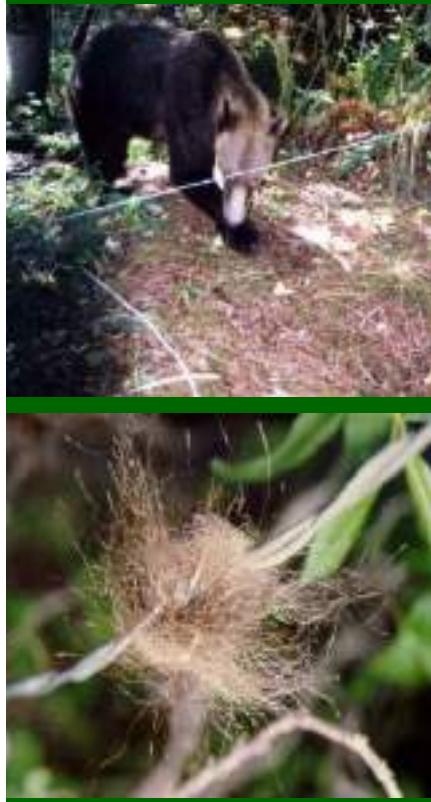
Michael Proctor

**Connectivity as an ecological
process worth managing for and
protecting land for**





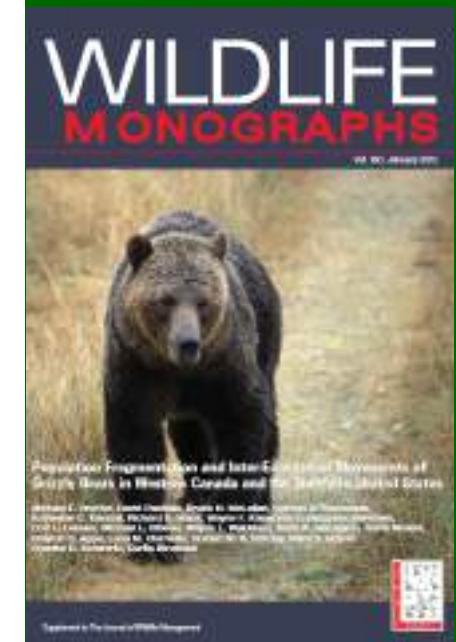
Fragmentation



3100 Genetic sampled bears

800 telemetry bears

Proctor et al 2012



What is causing the fragmentation?
Mostly mortality associated with conflicts

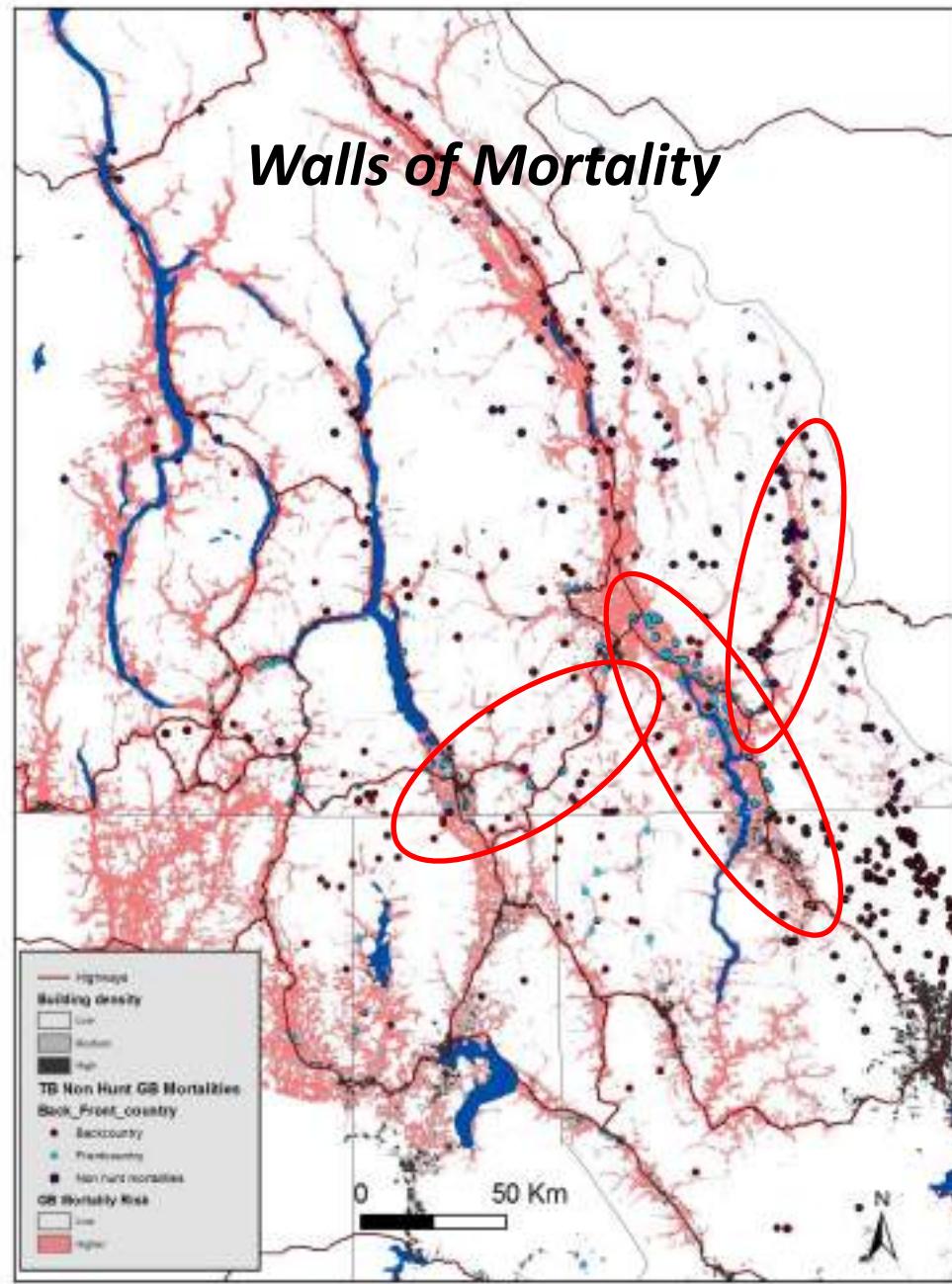


Non hunt Mortality risk

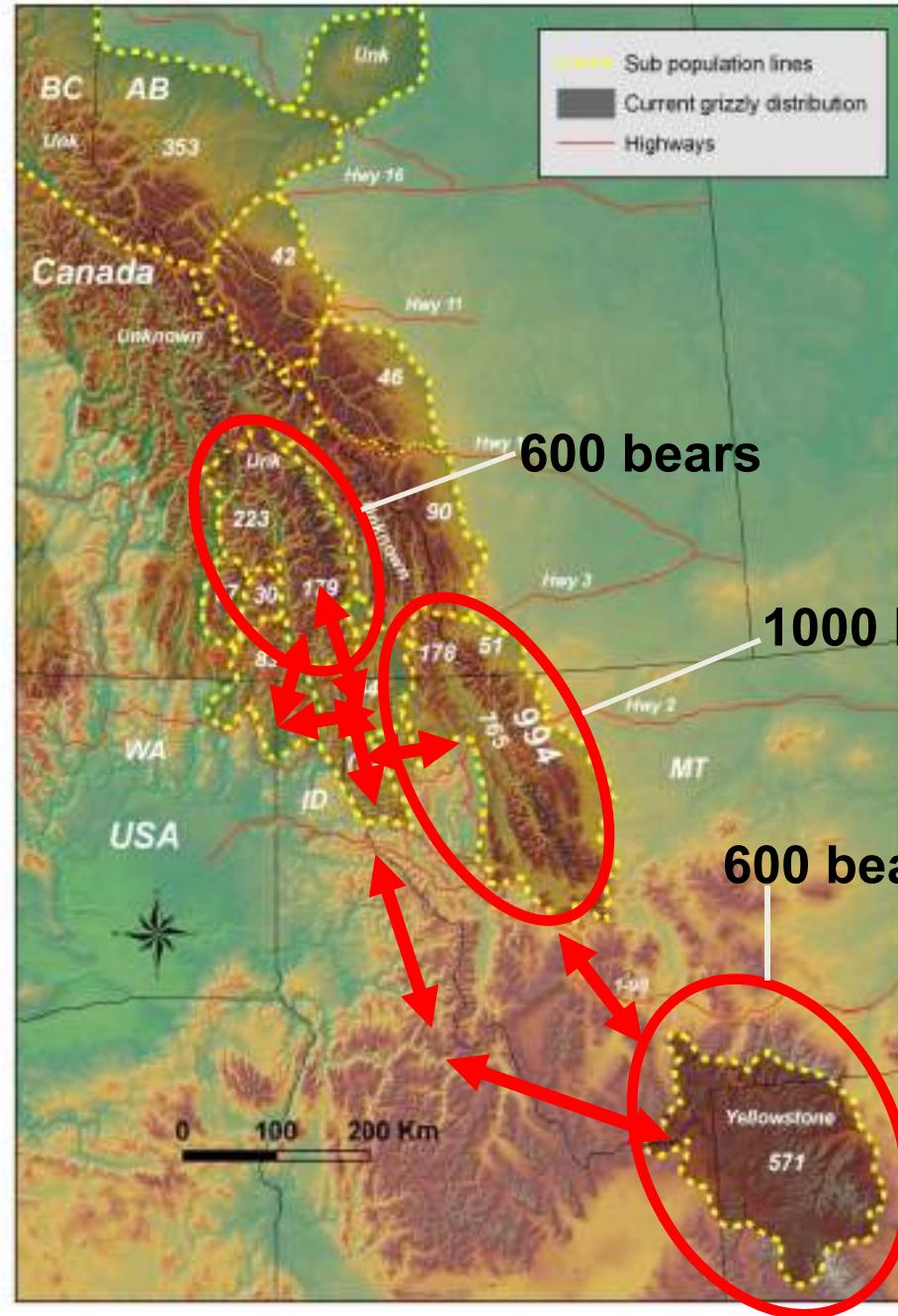
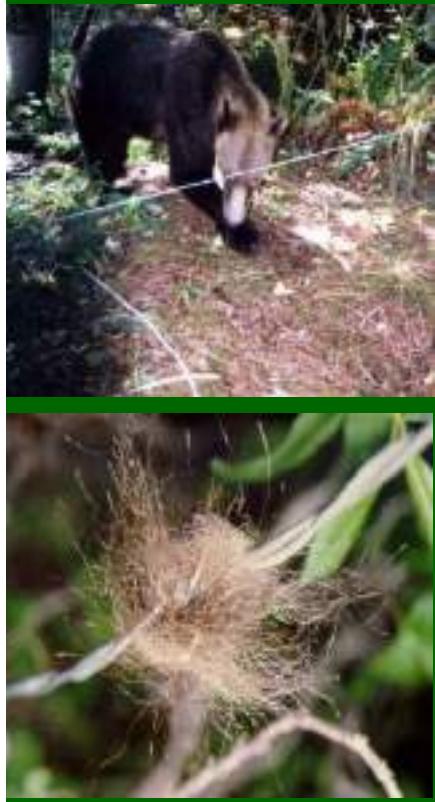
Reported and Unreported

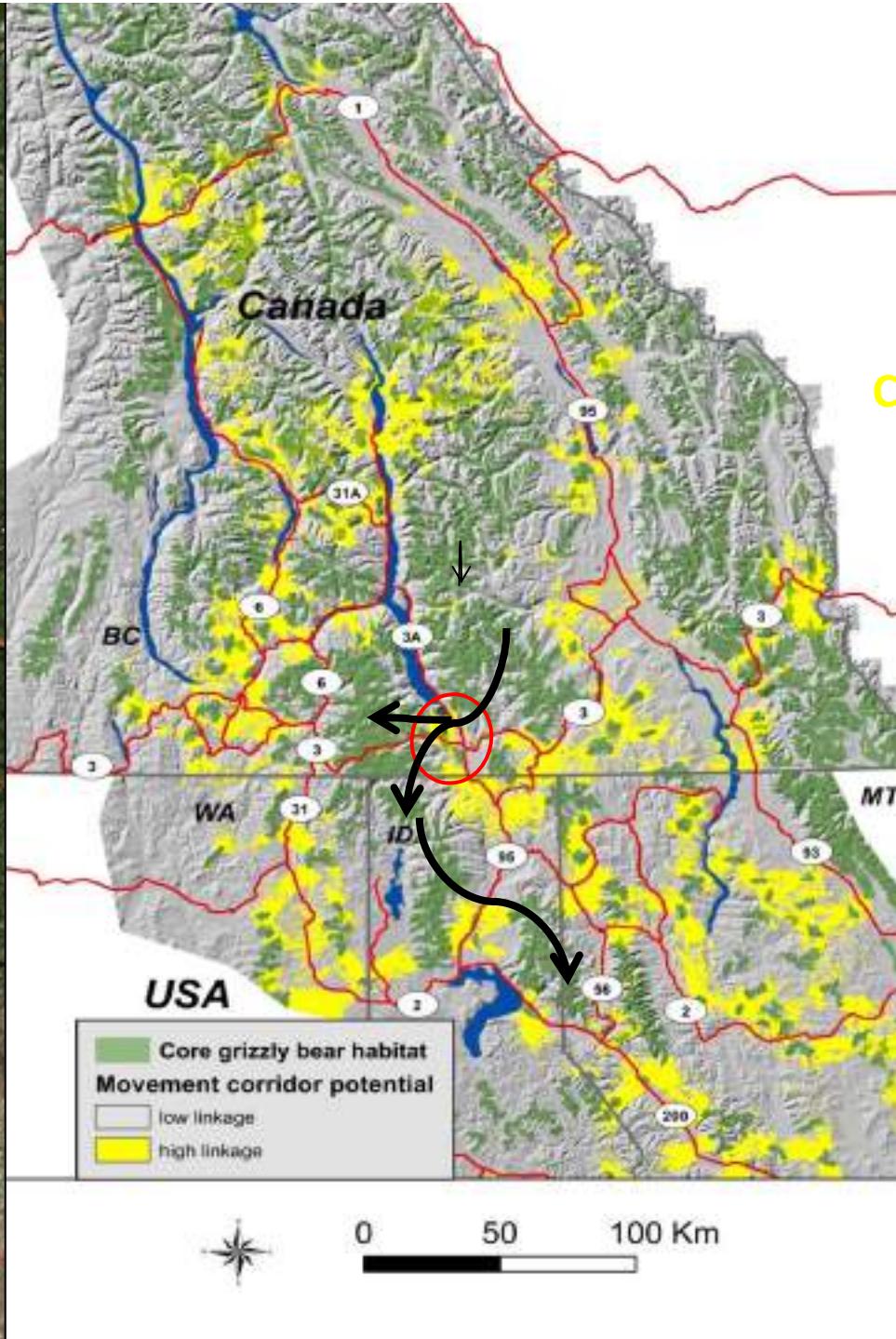
CAUSES:
Front country
attractants

Back country
poaching, ungulate
hunter conflicts



Fragmentation





Connectivity
GPS collared
bears
Ecological
modelling
Corridor predict

Proctor et al 2015

Grizzly bear connectivity mapping in the Canada-US trans-border region

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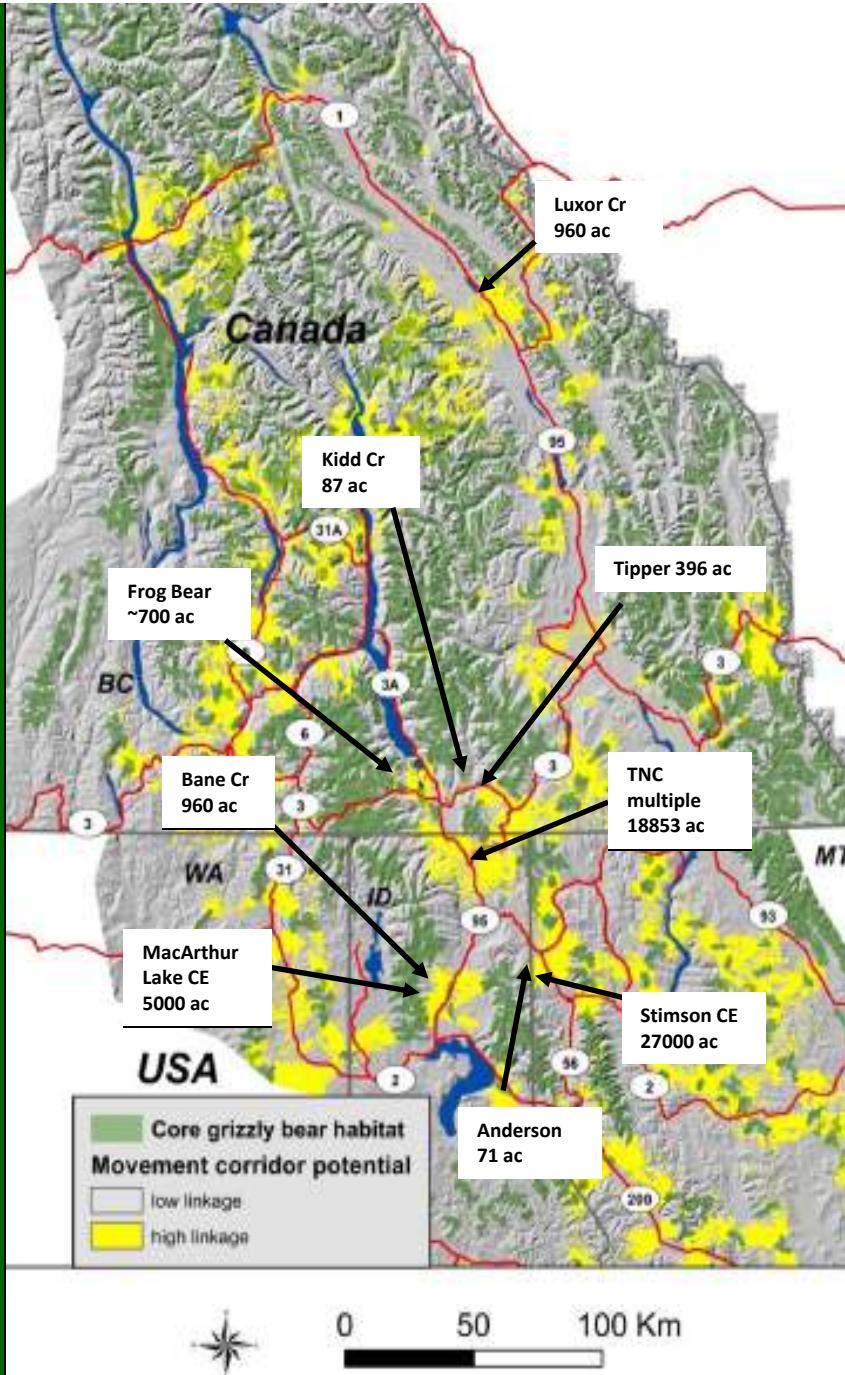
Conservation management

Need to manage **WILDLIFE & HABITAT & PEOPLE**



**Direct
purchased or
conservation
easements**

**21,000
hectares,
210 km²
37 properties
protected for
CONNECTIVITY**



Nature
Conservancy
Canada

Yellowstone to
Yukon

Vital Ground

The Nature
Conservancy
(US)

Nature Trust of
BC

Forest Legacy
(US)

Non lethal management



Grizzly bear non-lethal management 2004 – 2017

	Managed	alive	% success
Females	18	15	83
Males	17	11	65
total adults	35	26	74

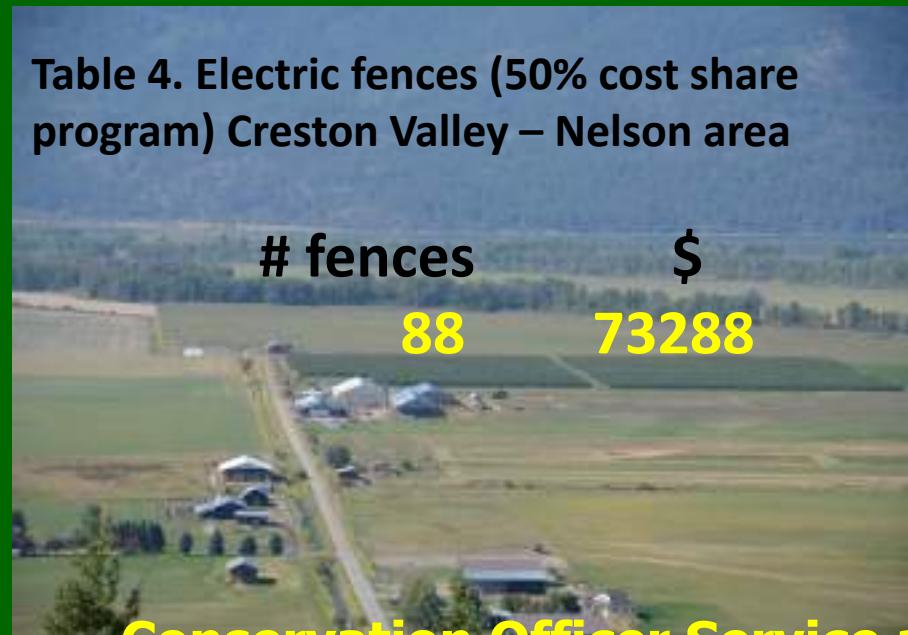
BC Conservation Office Service taking program Province-wide

Electric fence program



Table 4. Electric fences (50% cost share program) Creston Valley – Nelson area

# fences	\$
88	73288



**Conservation Officer Service and WildSafe BC taking program
Province-wide**

Creston Valley Bear Fair

Creston Valley Wildlife Management Area Visitors Center

Saturday Aug 20th, 11:00—4:00

12:00 and 2:30

Grizzly Bears in the
Creston Valley with
biologist Michael Proctor

12:30 and 3:00

Bear Safety and Bear
Spray Training

ALL DAY EVENTS:

Bear Coexistence Movies
Electric Fencing
WildSafeBC booth
Children's Activities
Lions Concession Booth



Hosted by the Transborder
Grizzly Bear Project

www.transbordergrizzlybearproject.com
Email: grizzlybearsolutions@gmail.com

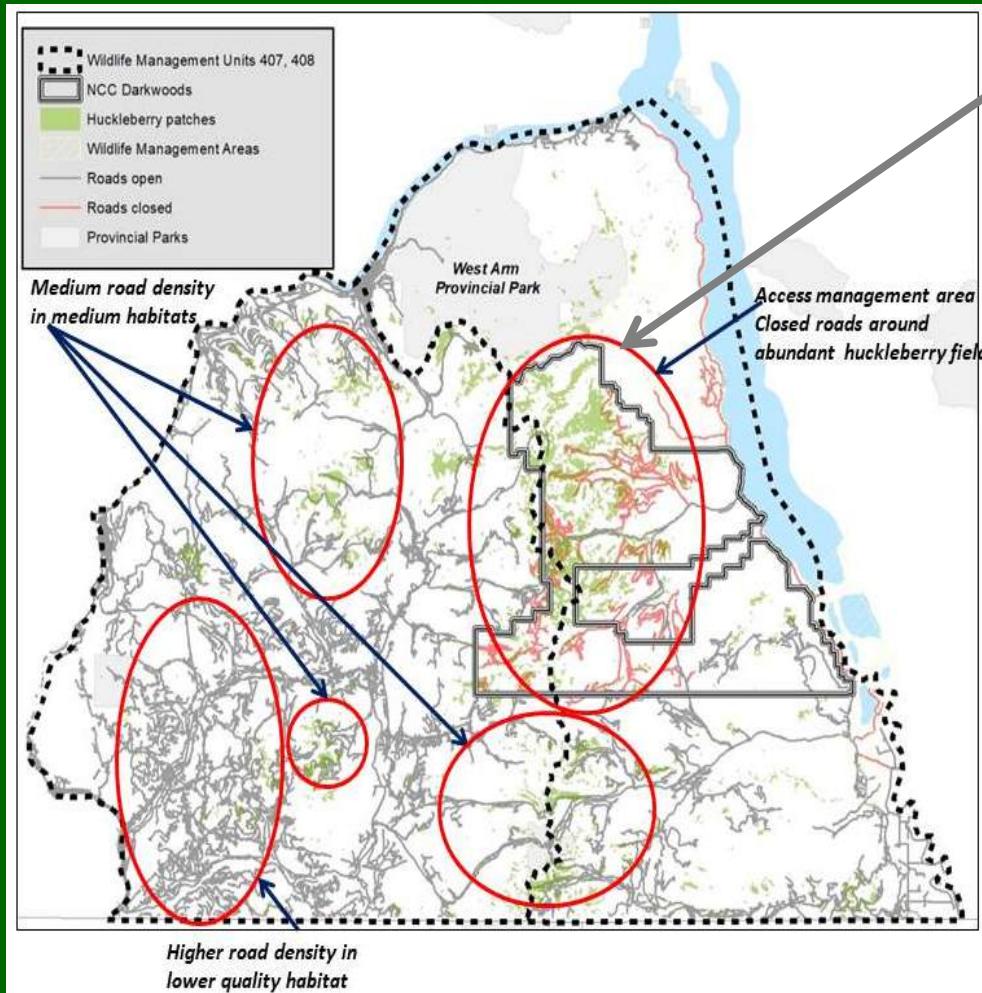
Columbia Basin **trust**



Bear safety education



Backcountry access management in critical foraging habitats



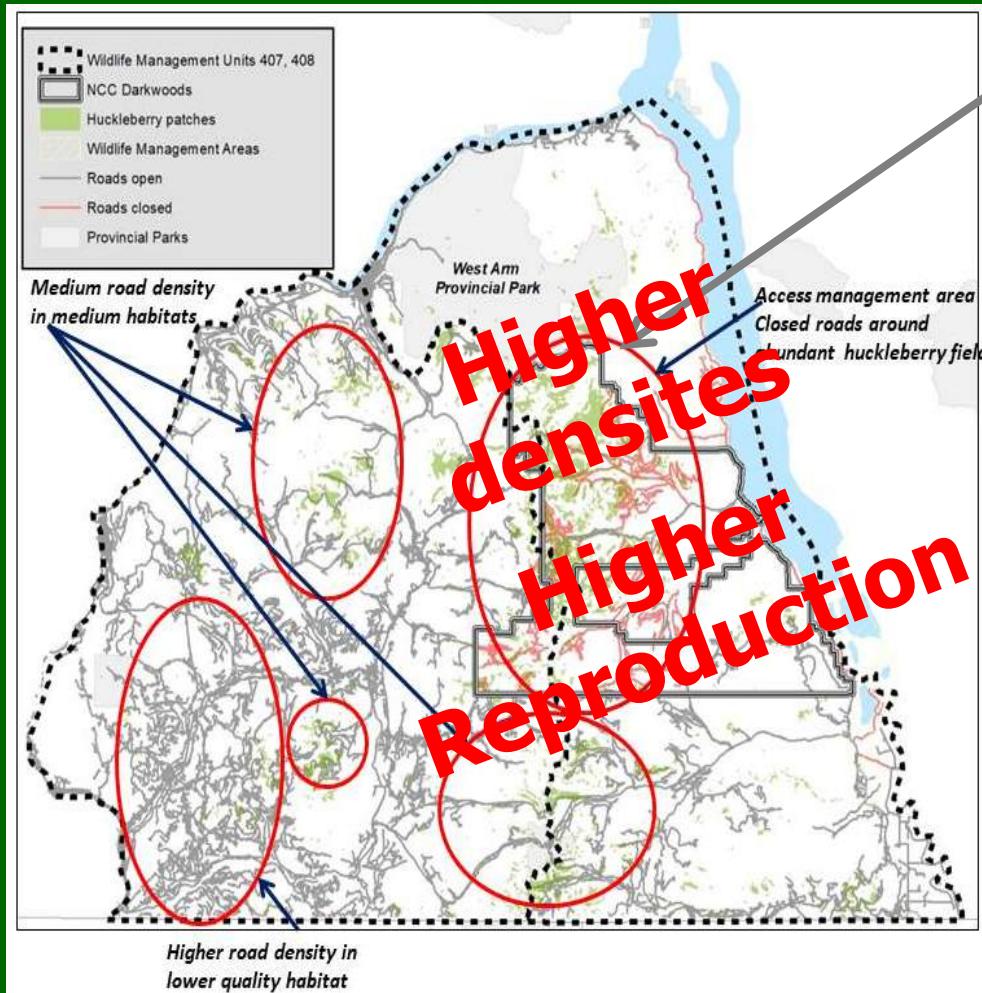
**Motorized access
controls around
important
huckleberry patches**



A close-up photograph of a whale's baleen plates and mouth. The whale's dark, textured skin is visible on the right, while its mouth is open, showing rows of long, thin, light-colored baleen plates. The water around the whale is a deep blue-green color.

How's it working?

Backcountry access management in critical foraging habitats

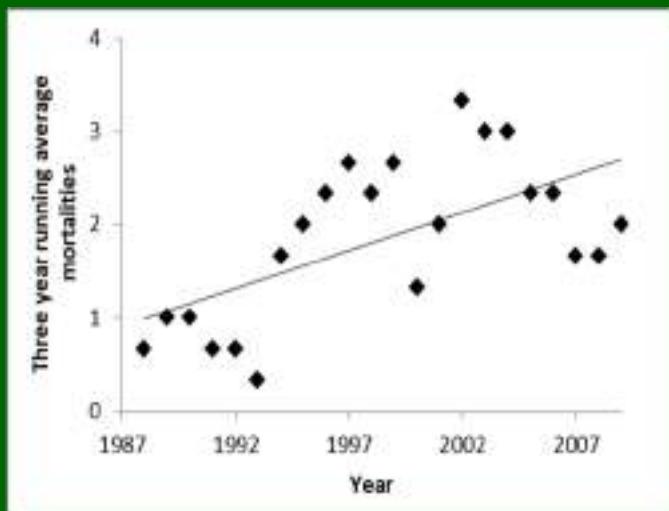


Motorized access
controls around
important
huckleberry patches

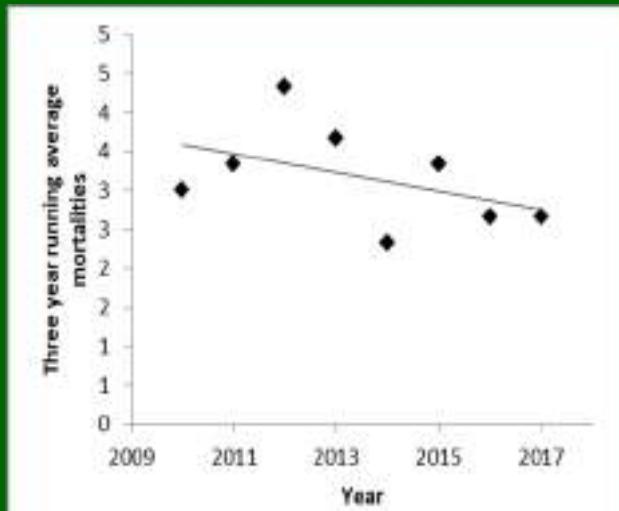


Grizzly bear human-caused mortality in South Selkirks

Pre 2006

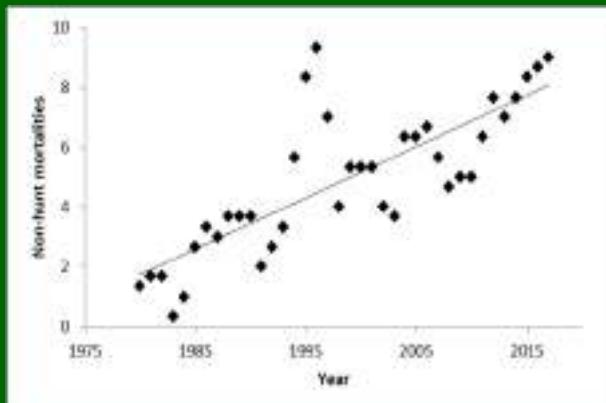


Post 2006



Rockies South population (Fernie, Sparwood, Elkford)

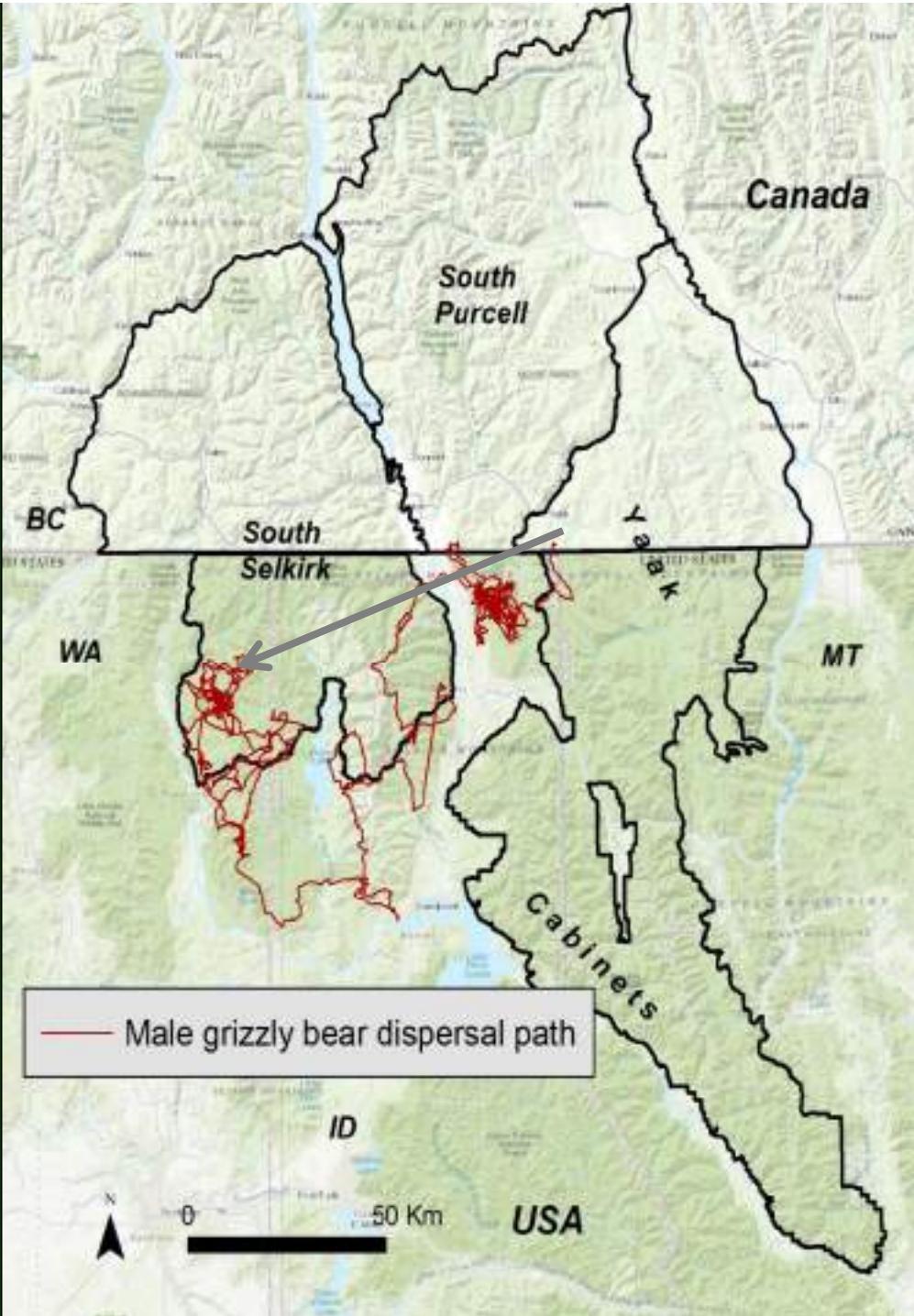
Control area



No enhanced management

**Increase in
inter-
population
movements**

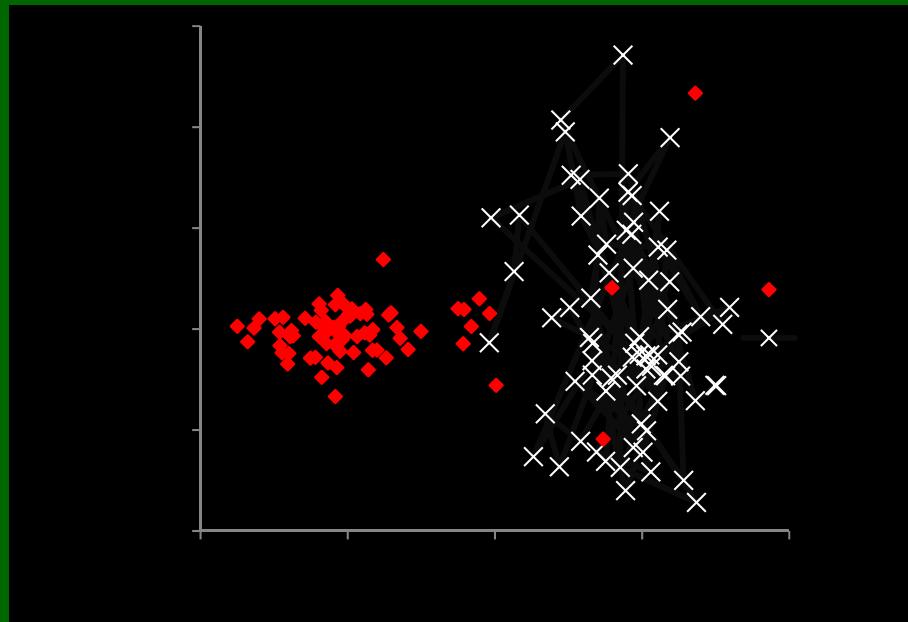
**Telemetry
monitoring**



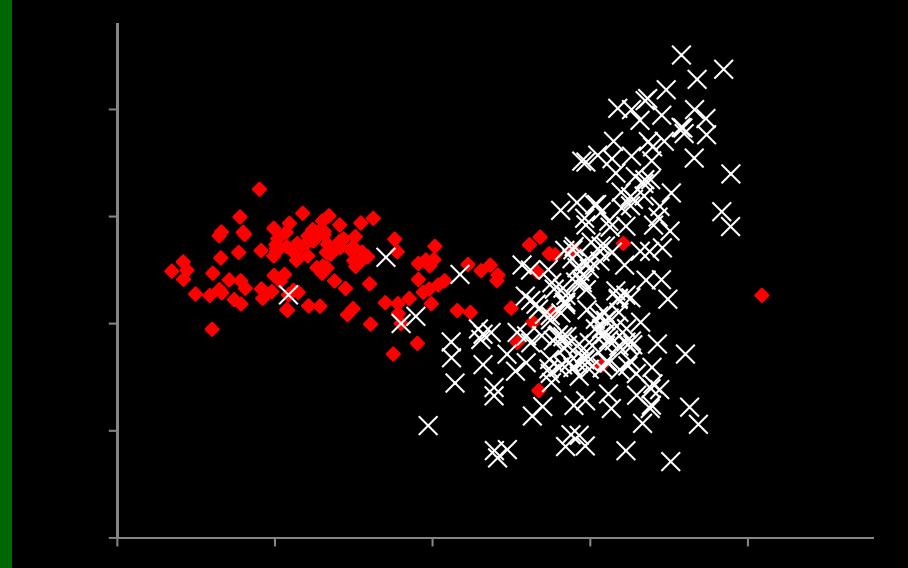
Evidence from inter-population assignments from genetic samples

Pre 2006

411 bear
21 loci
genotypes

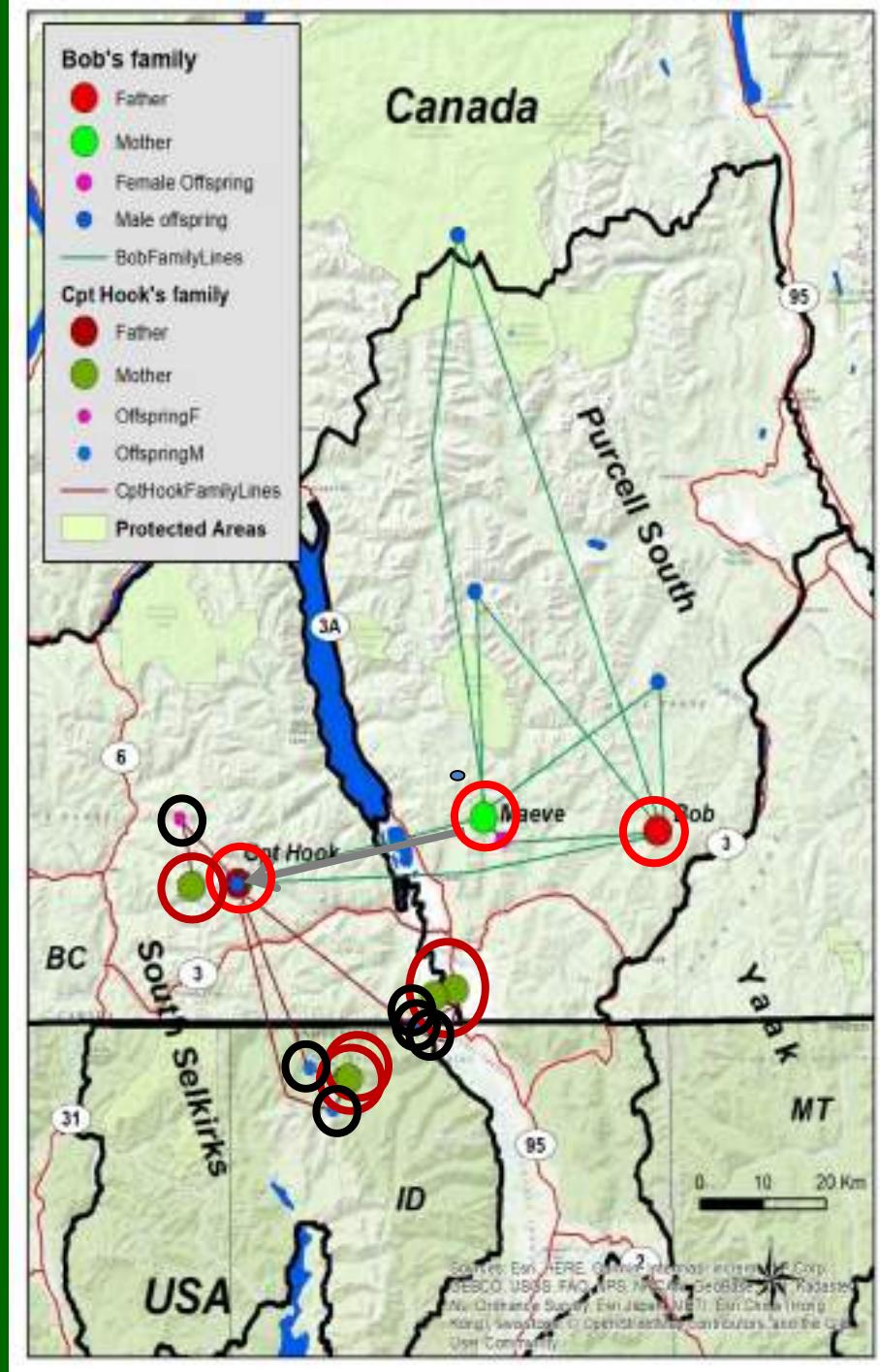


Post
2006



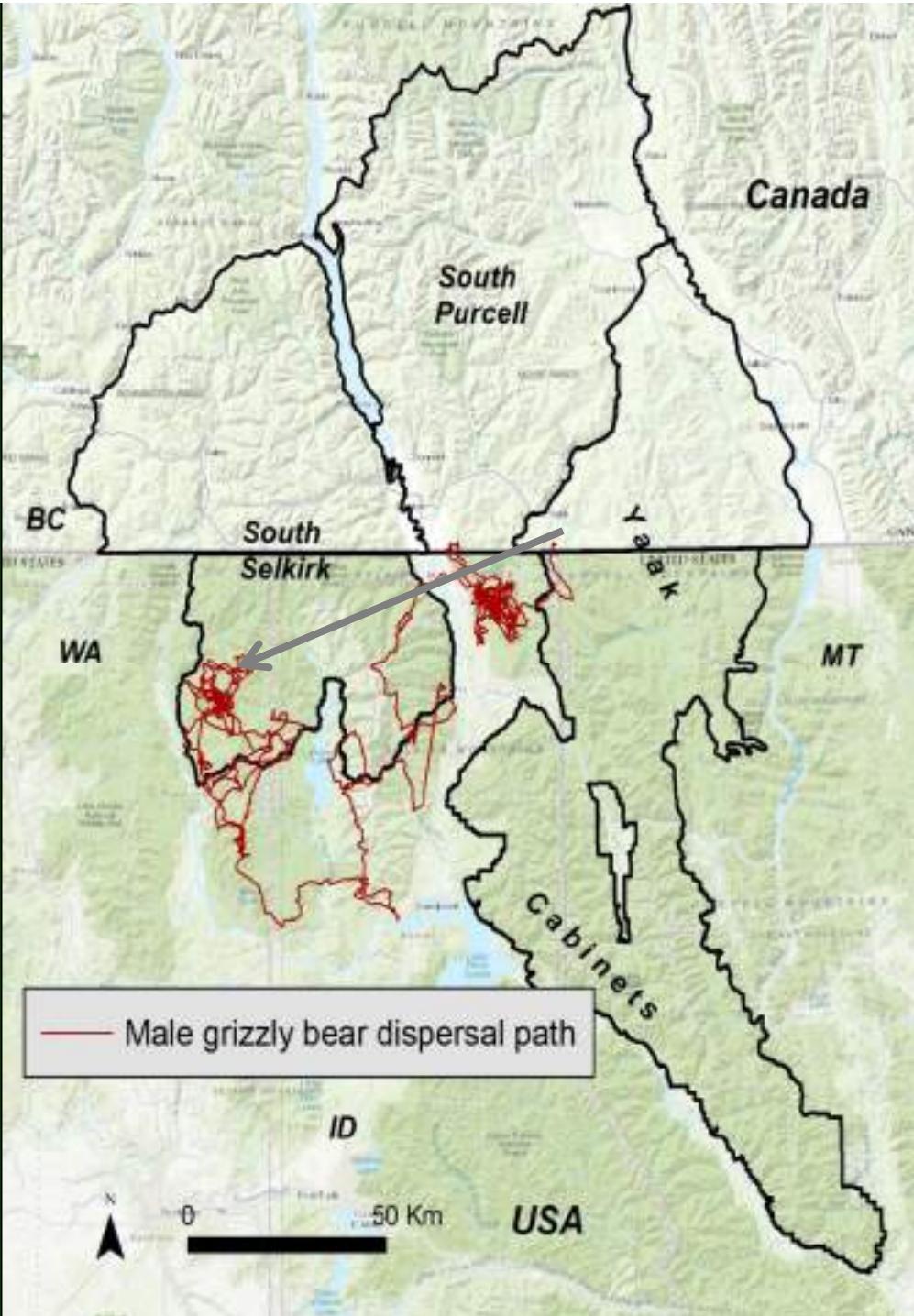
Evidence from genetic-based pedigrees and family units

4 recent
family
groups
between
populations



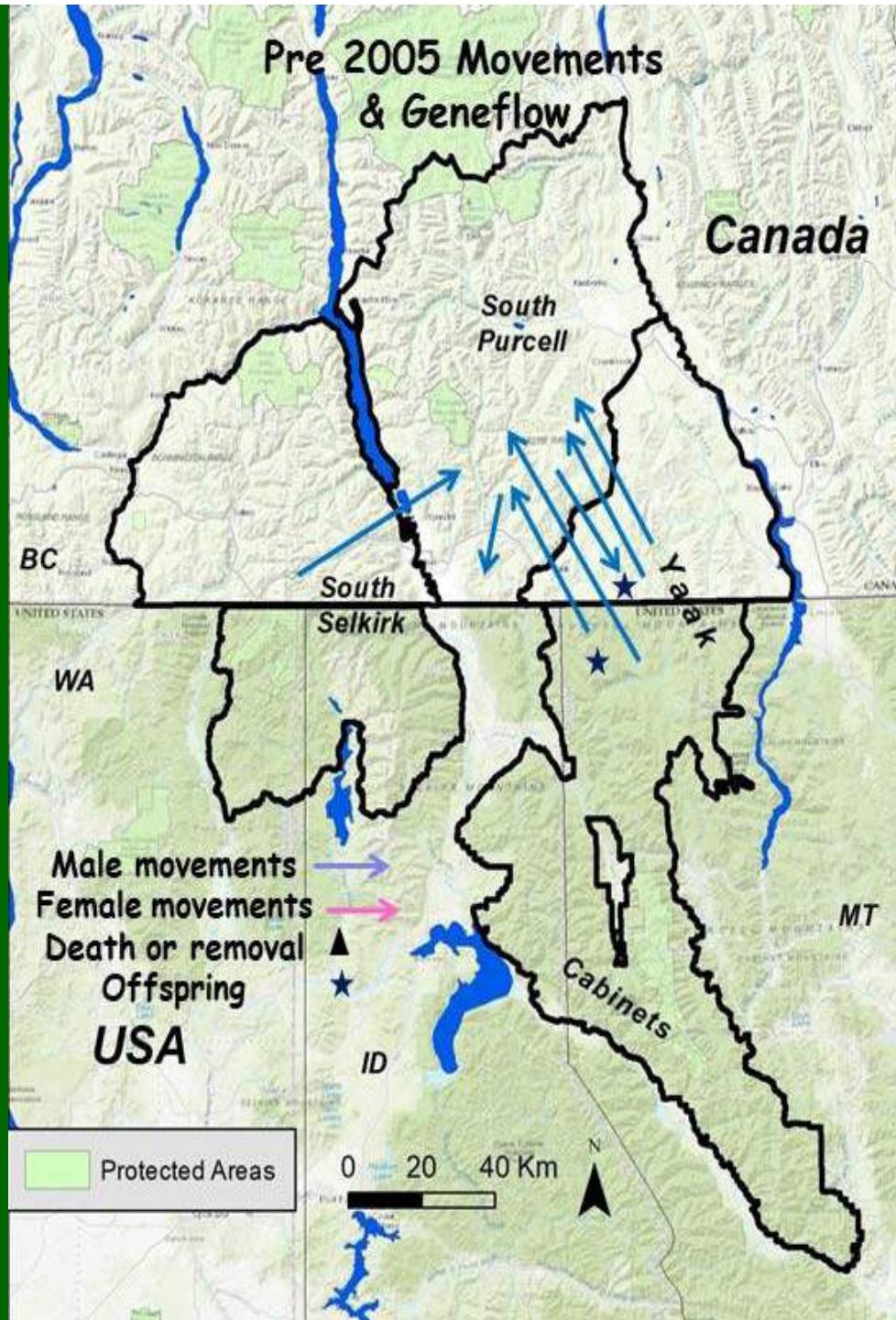
**Increase in
inter-
population
movements**

**Telemetry
monitoring**



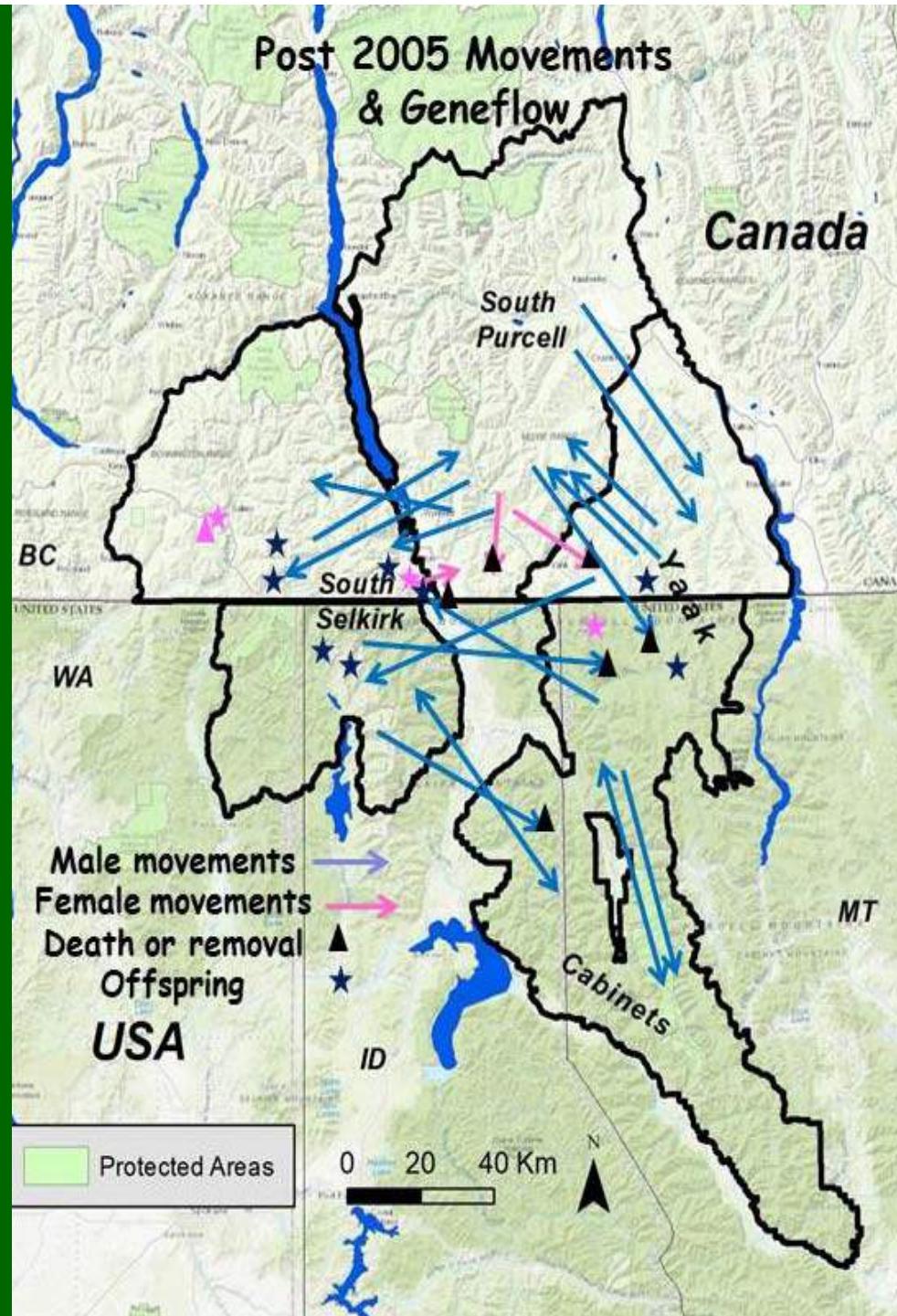
Cumulative evidence, all sources

Pre 2006



Cumulative evidence, all sources

Post 2006

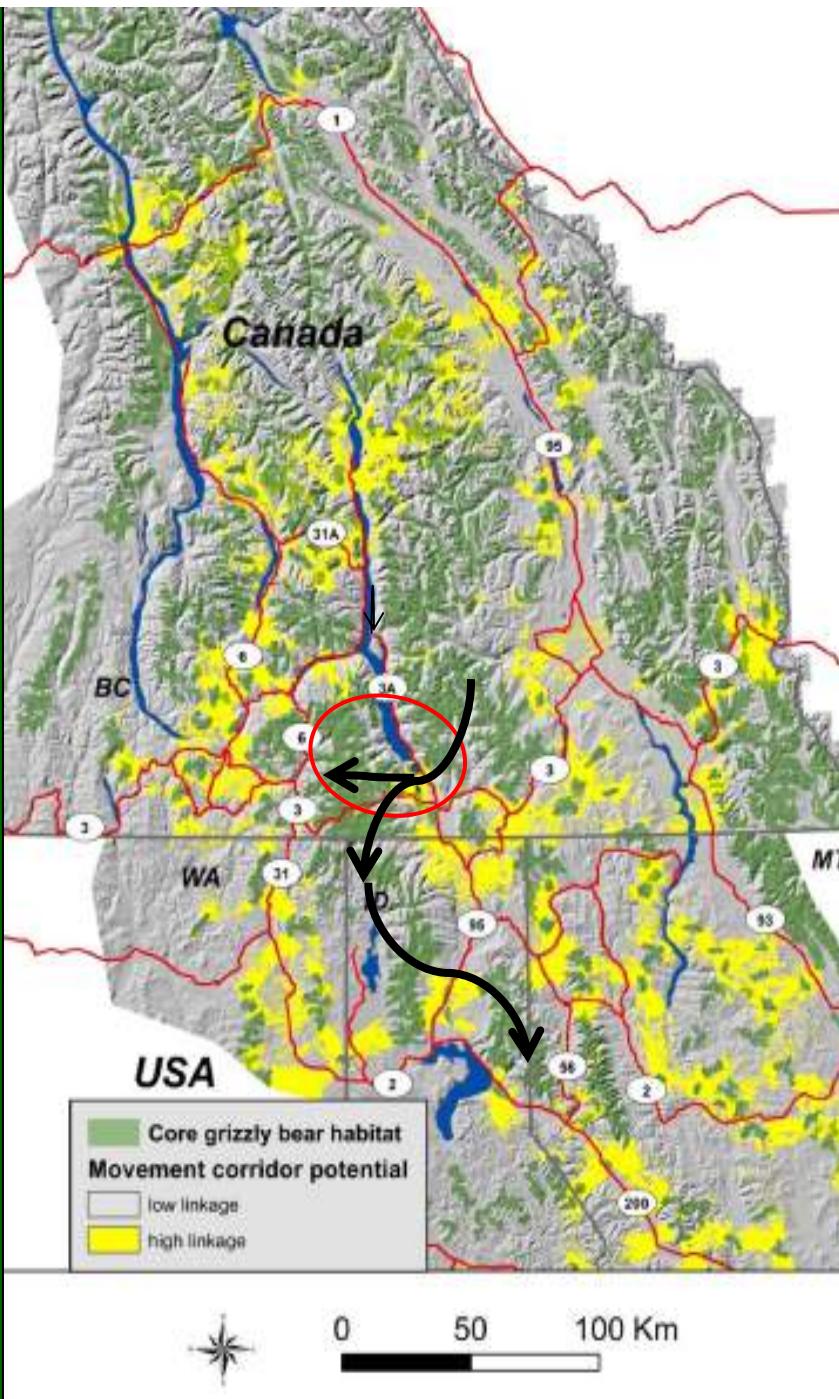


Connectivity SCIENCE

Proctor et al 2015

Grizzly bear connectivity mapping in the
Canada-US trans-border region

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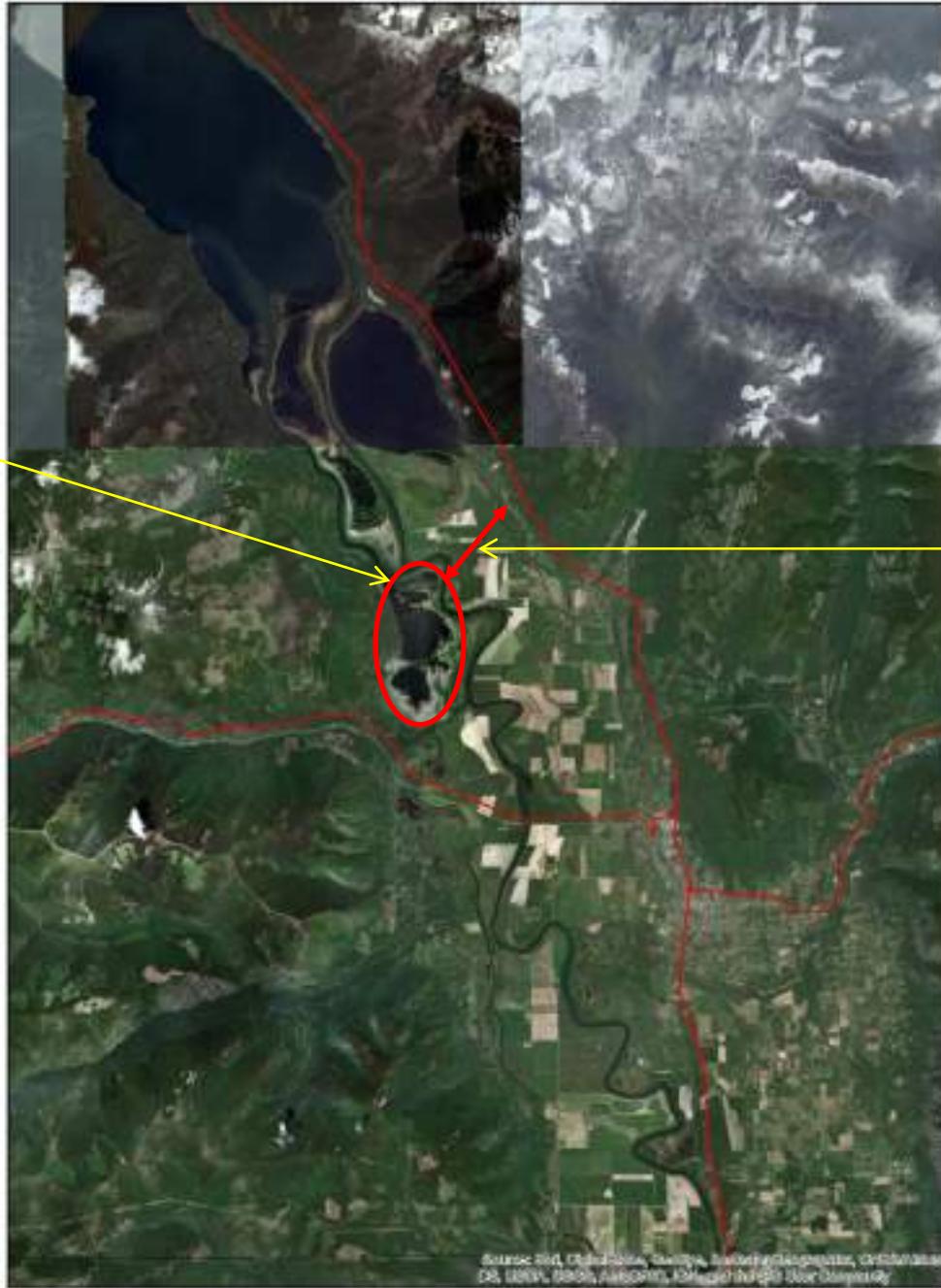


**Now beyond the
Creston Valley and
beyond bears**



Source: SRTM DEM, Google Earth, Esri, USGS, USGS Elevation Model, GTOPO30
DB, USGS, BIA, USGS, USGS Elevation Model

**Endangered
Leopard Frog
population**

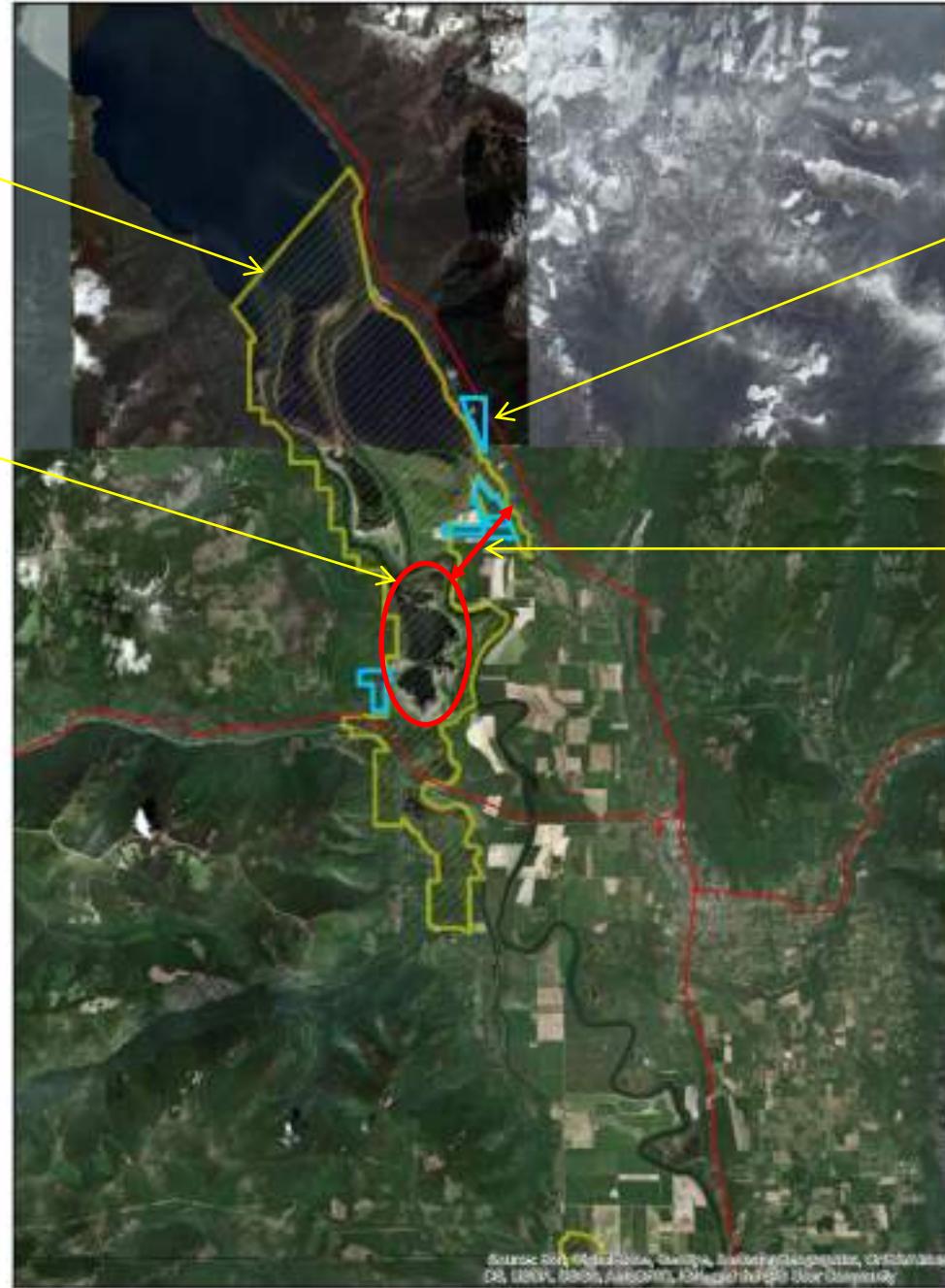


**Leopard Frog
Corridor**



Creston Valley
WMA

Endangered
Leopard Frog
population



NCC
Connectivity
lands

Leopard Frog
Corridor



Safe Passage
THE FROG-BEAR CONSERVATION CORRIDOR

BEAR

BROWN BEAR
MOTHER OF THE FOREST
In the forest, there's a place where bears live. It's a place where they can find food and shelter. They're part of the ecosystem, just like us. They help keep the forest healthy by eating insects and small animals.

CORRIDOR SPOTS
The corridor is a network of interconnected habitats that allow frogs and bears to move safely between different areas. It includes wetlands, forests, and mountains. The corridor is important because it helps protect these animals from habitat loss and fragmentation.

BEAR IN THE FOREST
Bears are intelligent animals that live in the forest. They have strong claws and sharp teeth. They eat berries, roots, and insects. They also hunt for small mammals like rabbits and mice.

EXPLORATION
Exploration is an important part of life for bears. They use their sense of smell to find food and water. They also use their sense of sight to look for danger. They are curious animals that like to explore new places.

BEAR BETWEEN HABITATS
Bears are adaptable animals that can live in many different habitats. They can live in forests, mountains, and even deserts. They are excellent climbers and swimmers. They also have strong jaws and teeth to help them eat tough food like berries and roots.

NATURE CANADA

THE FROG-BEAR CONSERVATION CORRIDOR
Welcome to a place of safe passage.

The Frog-Bear Conservation Corridor is made up of 2,160 acres of protected areas:

- BAKER LAKE FOREST
- GRASS PRAIRIES
- LAKESIDE FOREST
- FORESTED HILLS
- FROG BEAR
- FOOTAGE AREA

BEAR AS A SYMBOL
Bears are symbols of strength and resilience. They are often seen as protectors of the forest. They are also symbols of the importance of conservation. By protecting the Frog-Bear Conservation Corridor, we are protecting these animals and their habitats.

NATURE CANADA

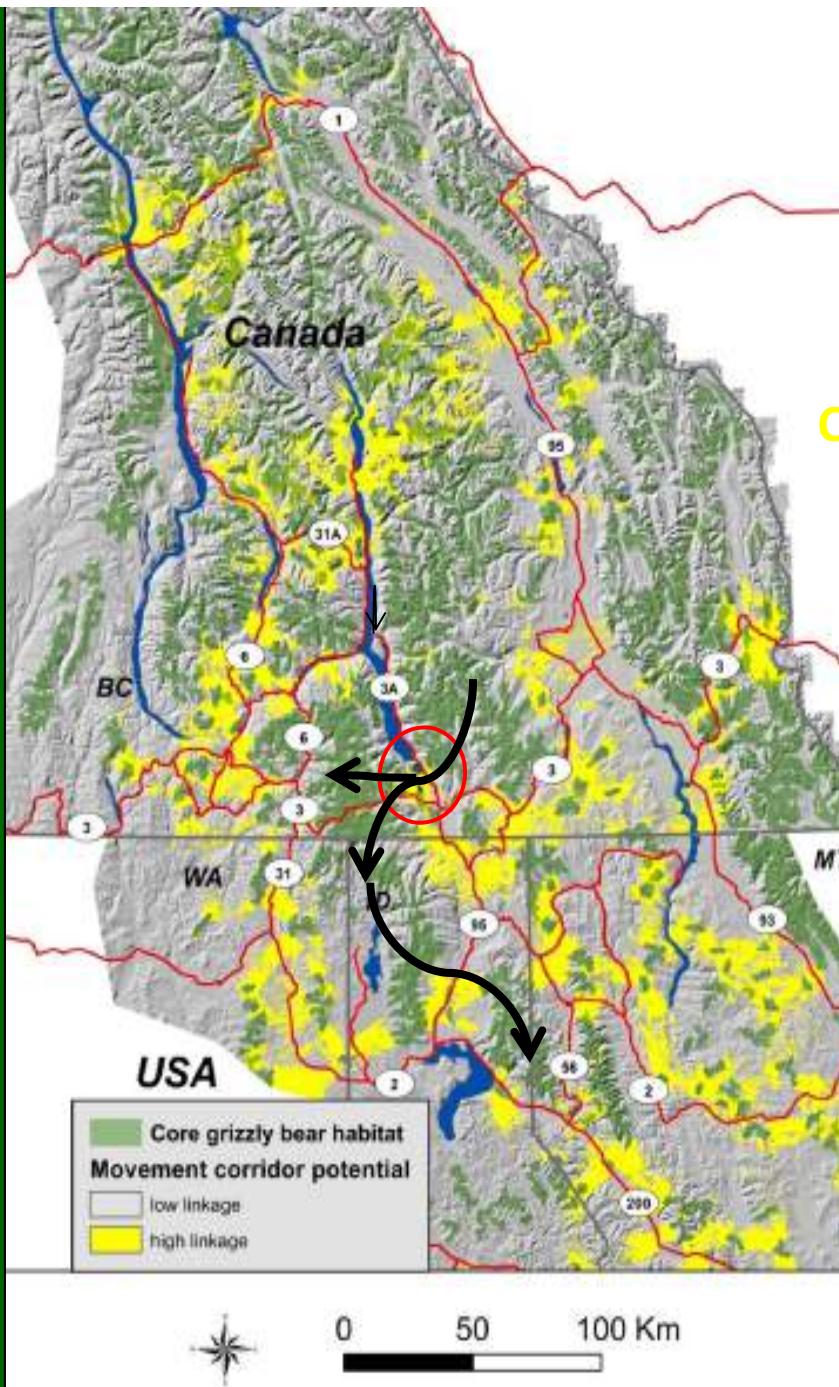
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SLIDE REMOVED BECAUSE OF LARGE SIZE

SLIDE REMOVED BECAUSE OF LARGE SIZE