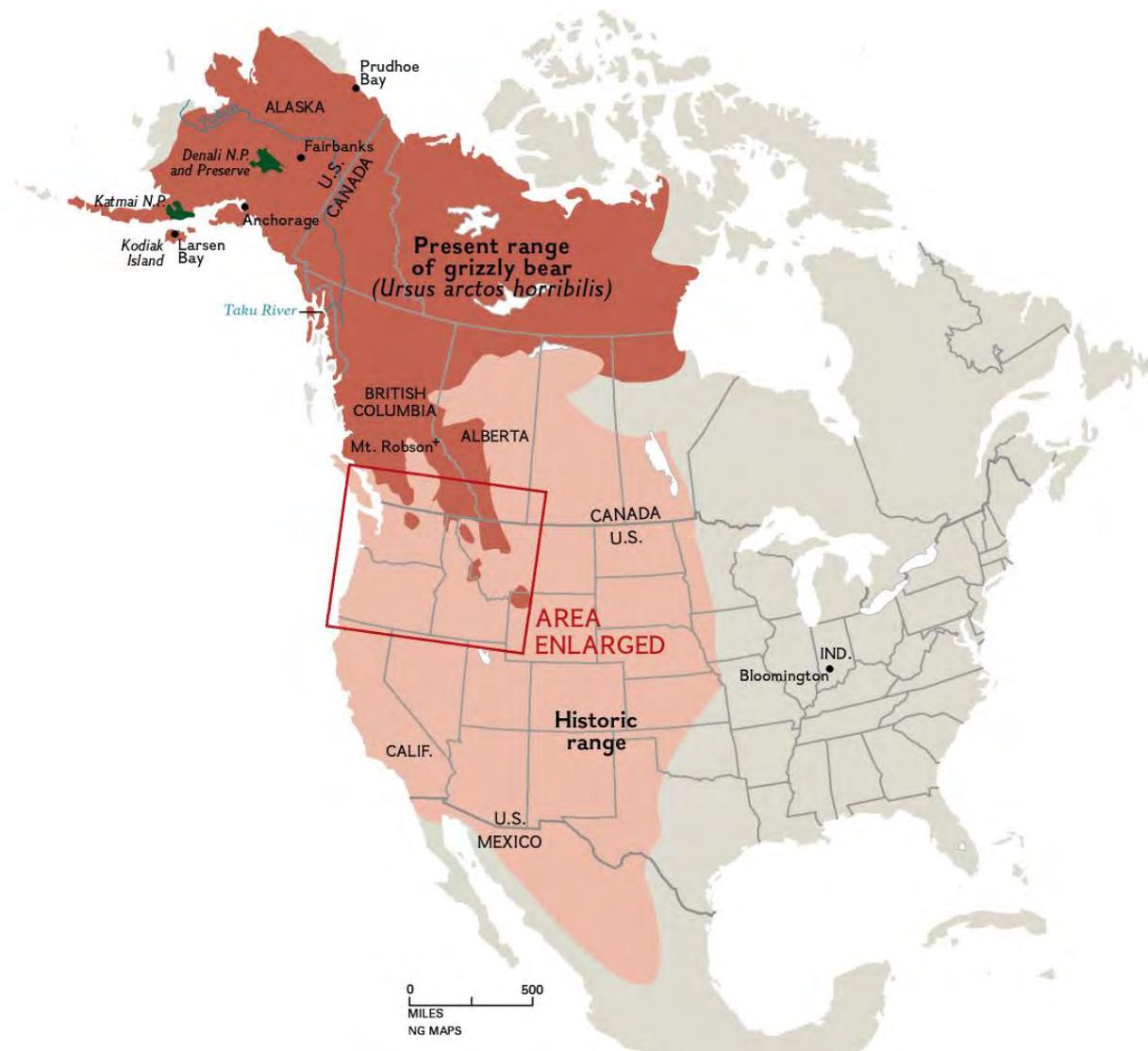
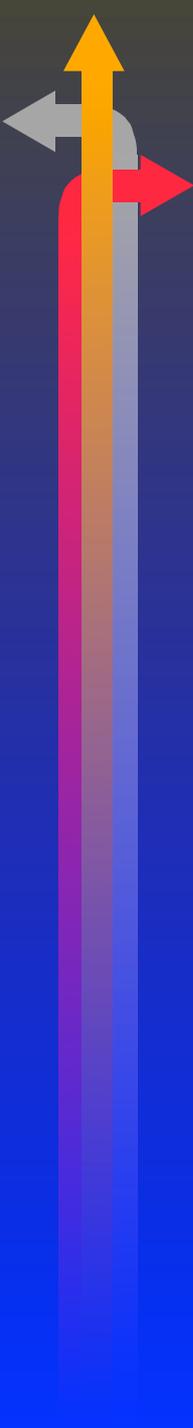


Chronology of events for the grizzly:

- First described by Lewis and Clark 1804
- Killed without limits until 1975 when listed under Endangered Species Act
- Formal recovery efforts began in 1981



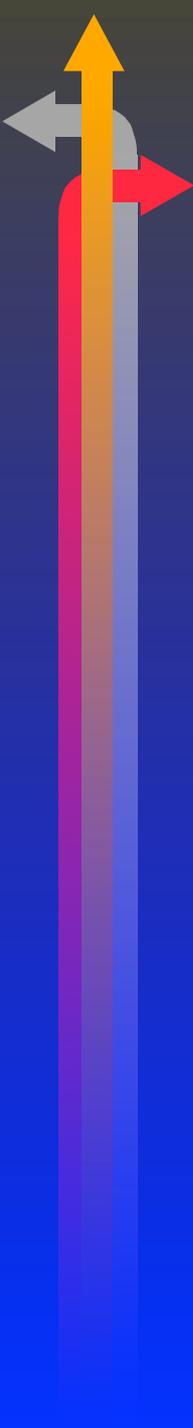
US Grizzly Range in 1922



Current grizzly range

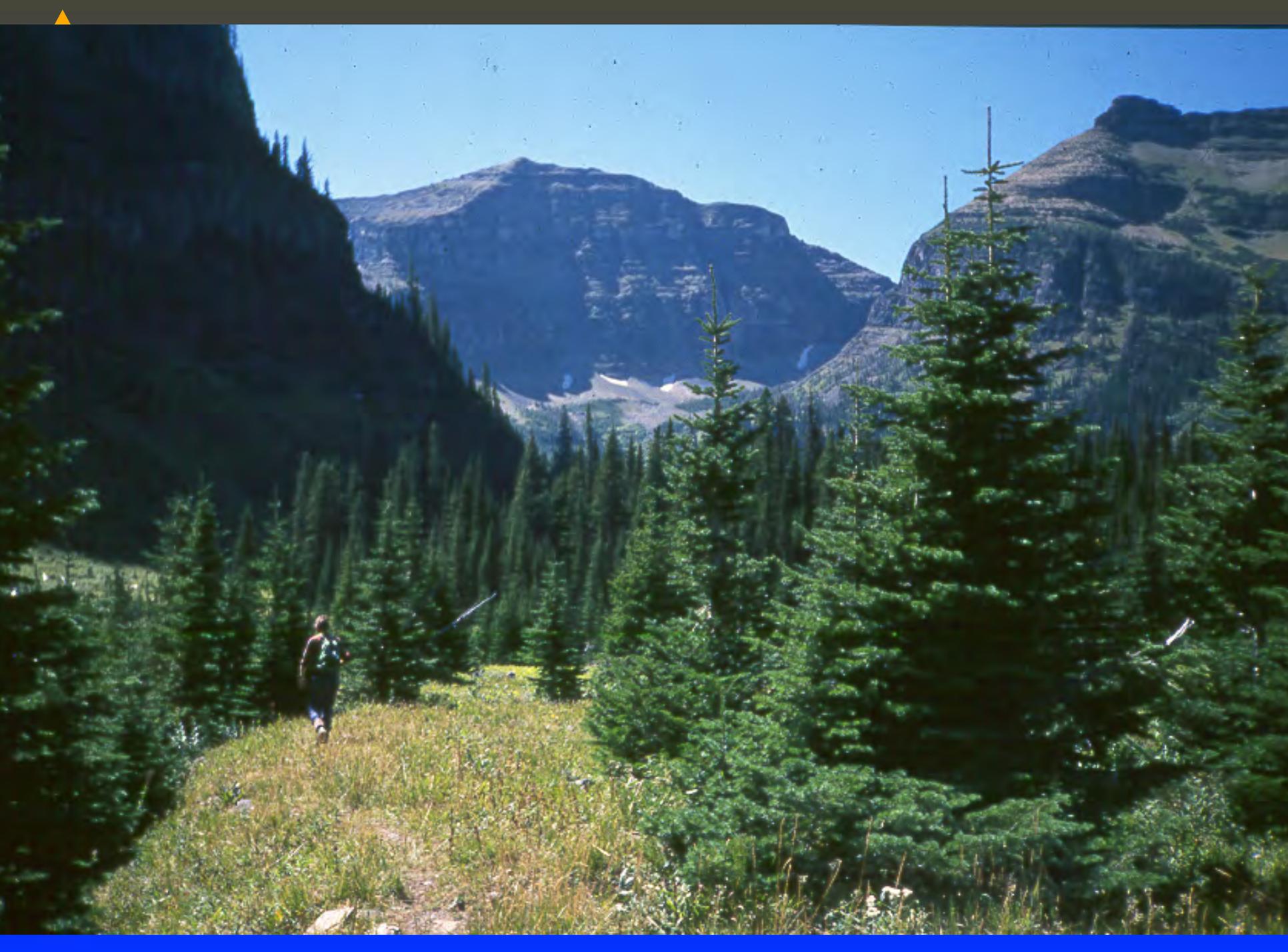


US populations are dependent on Canada!



Our recovery vision:

- Healthy grizzly populations linked together with each other and with Canadian populations.
- Public support for healthy grizzly populations.
- Integration of scientifically-based management into state wildlife management and public land management.





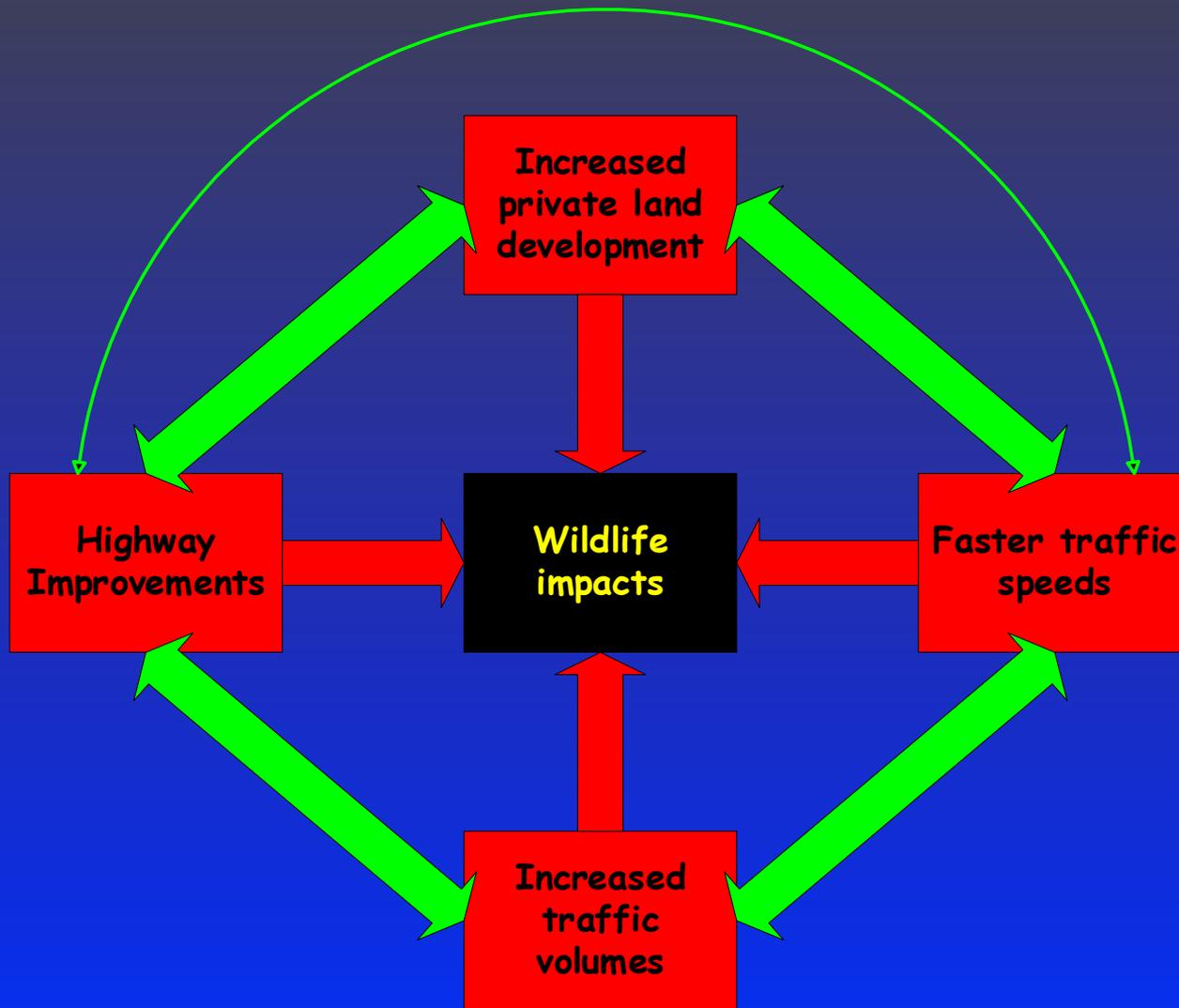
Highways are a problem...



Direct impacts of animals on highways: road-killed wildlife

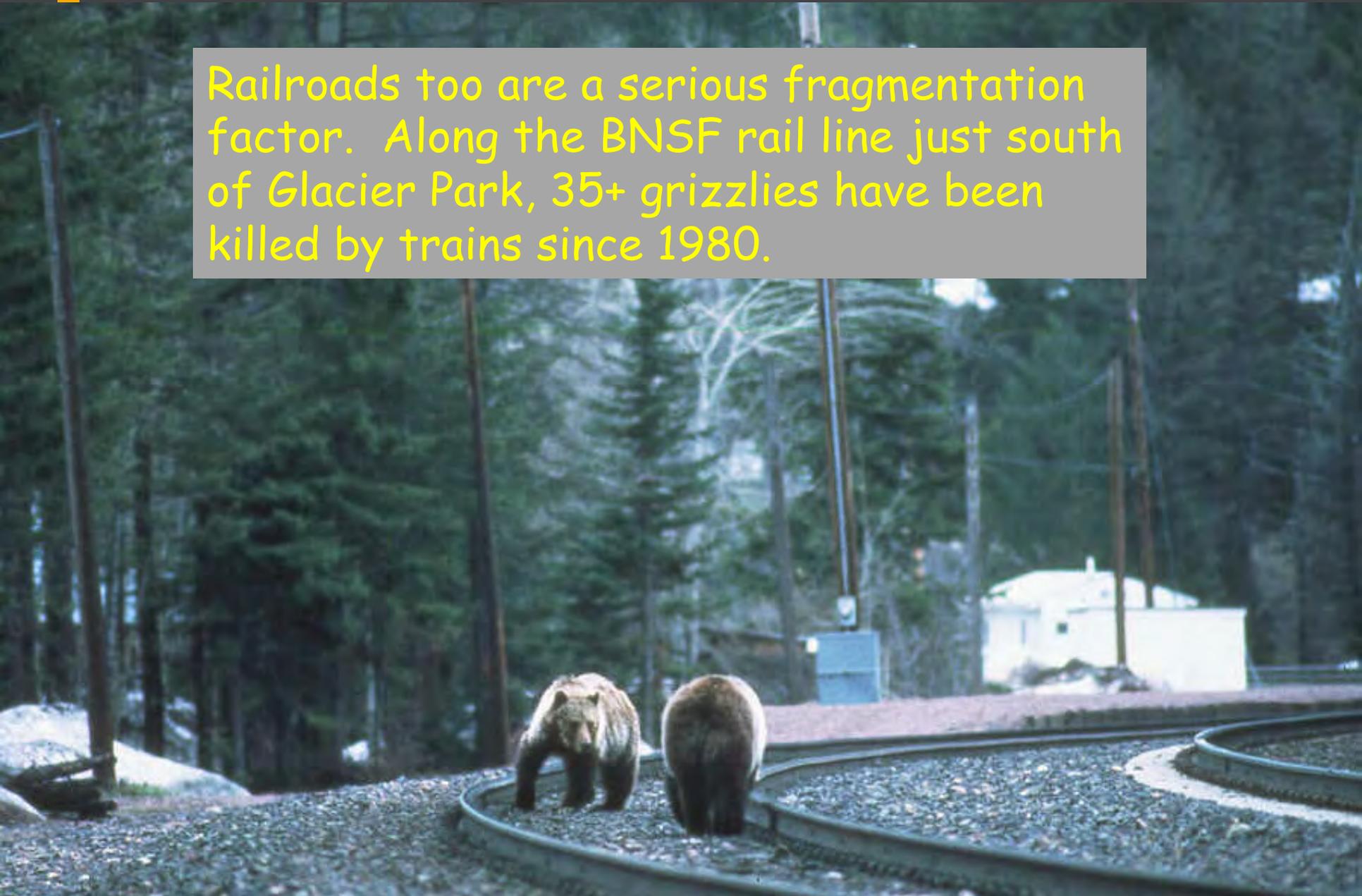


Compounded impacts increase problems for wildlife





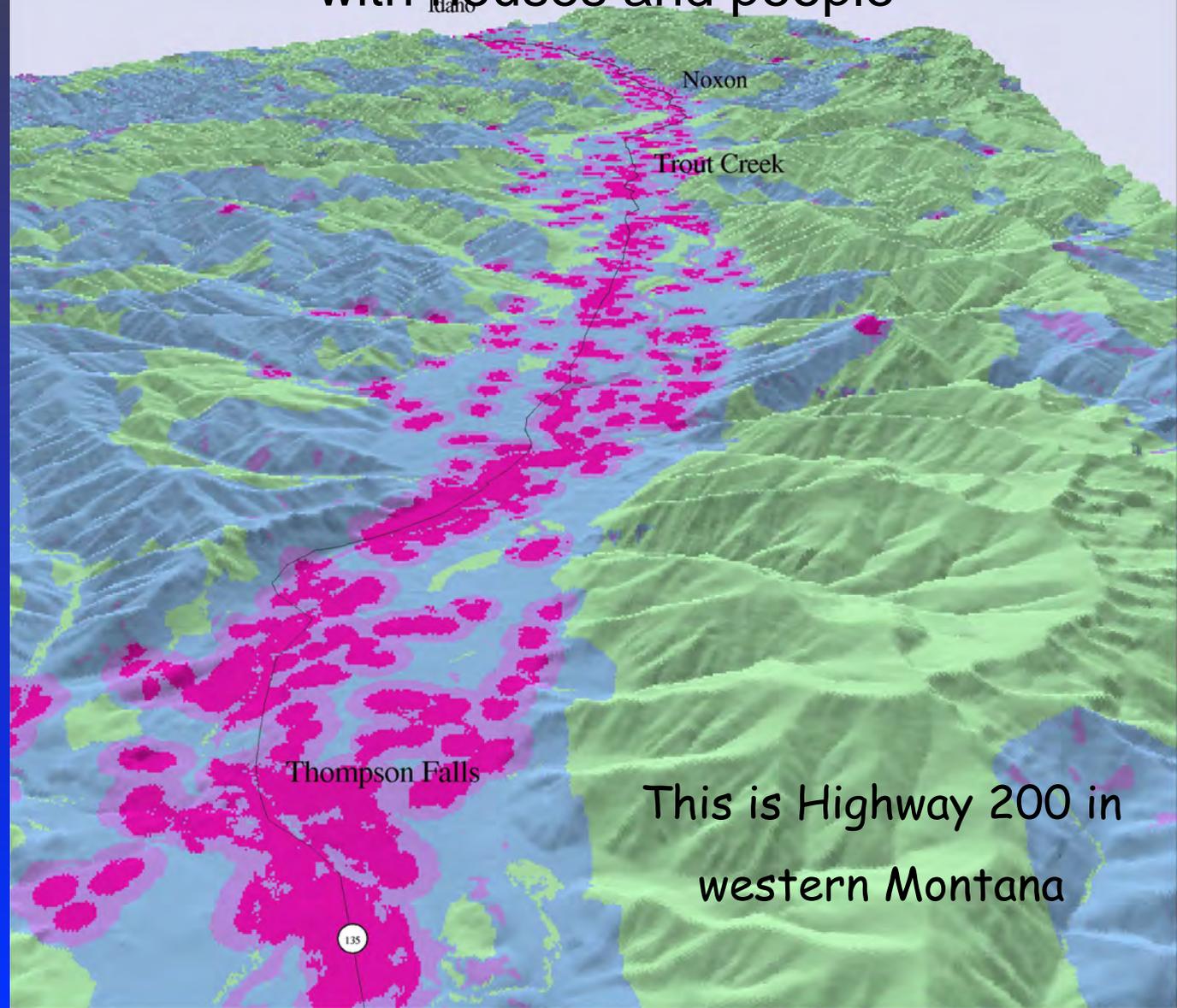
Railroads too are a serious fragmentation factor. Along the BNSF rail line just south of Glacier Park, 35+ grizzlies have been killed by trains since 1980.



Results of application of the linkage model from Thompson Falls, MT to the Idaho border. Every red dot represents a house.

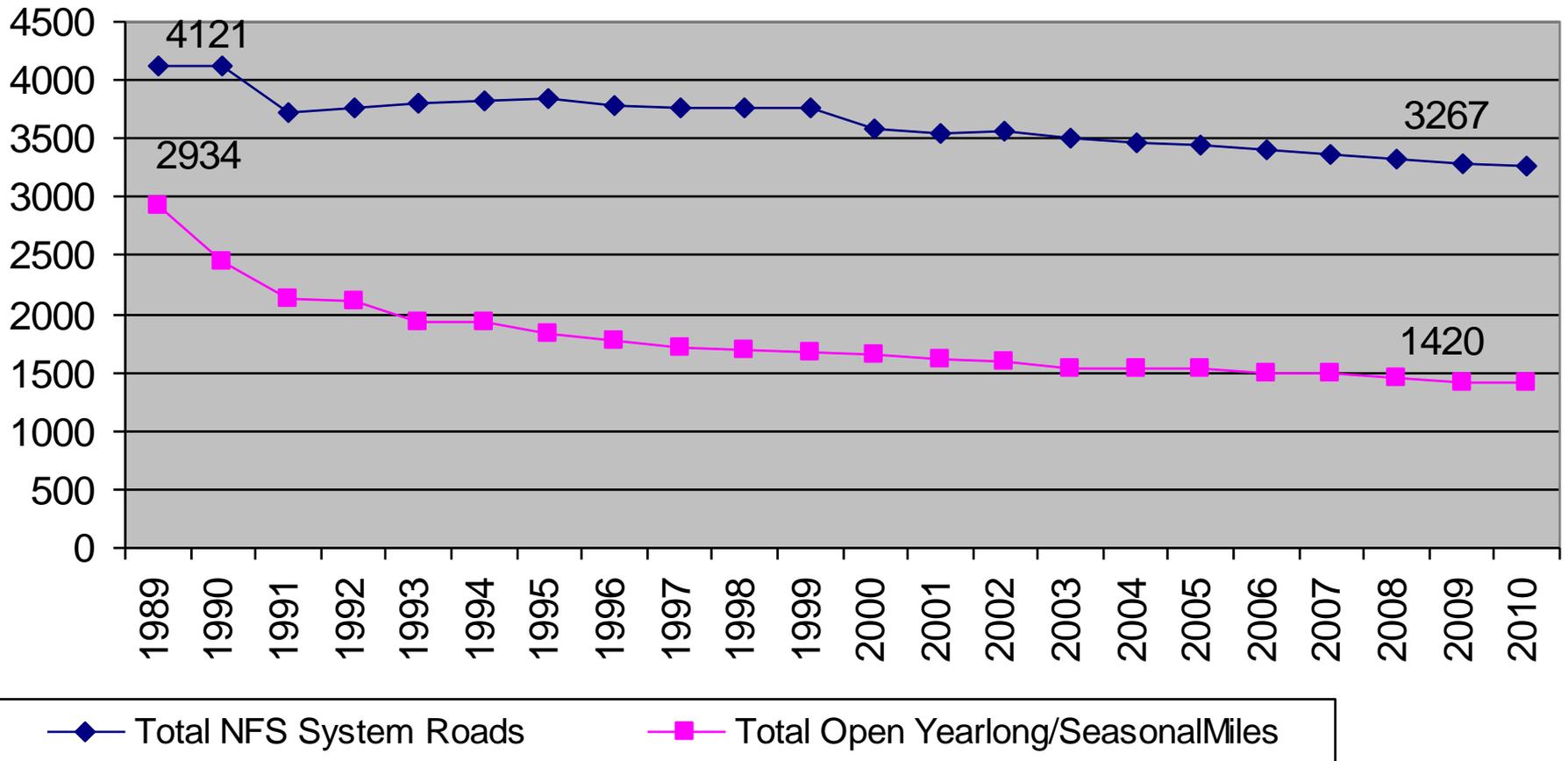
The linear distribution of houses in this valley create a fracture zone inhibiting or precluding wildlife movements and increasing mortality risk for any wildlife that use this valley.

Private land development is filling the mountain valleys of the Rocky Mountains with houses and people

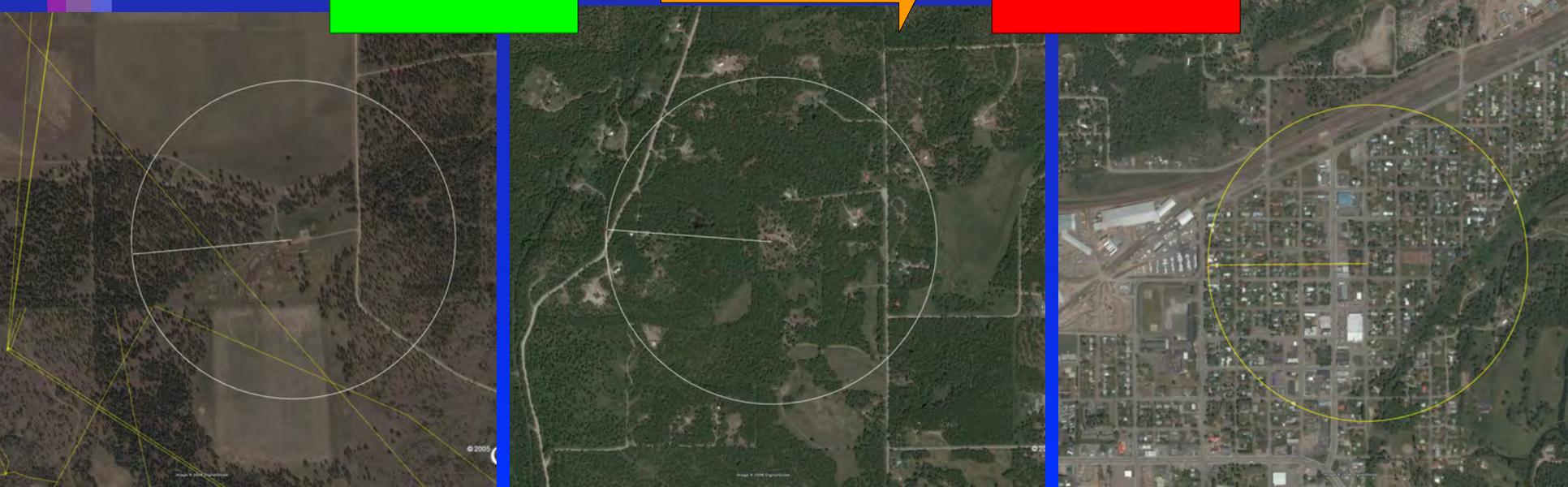


In 2011, open roads on the FNF are 52% of what was open in 1989

Flathead NF System Road Mileage

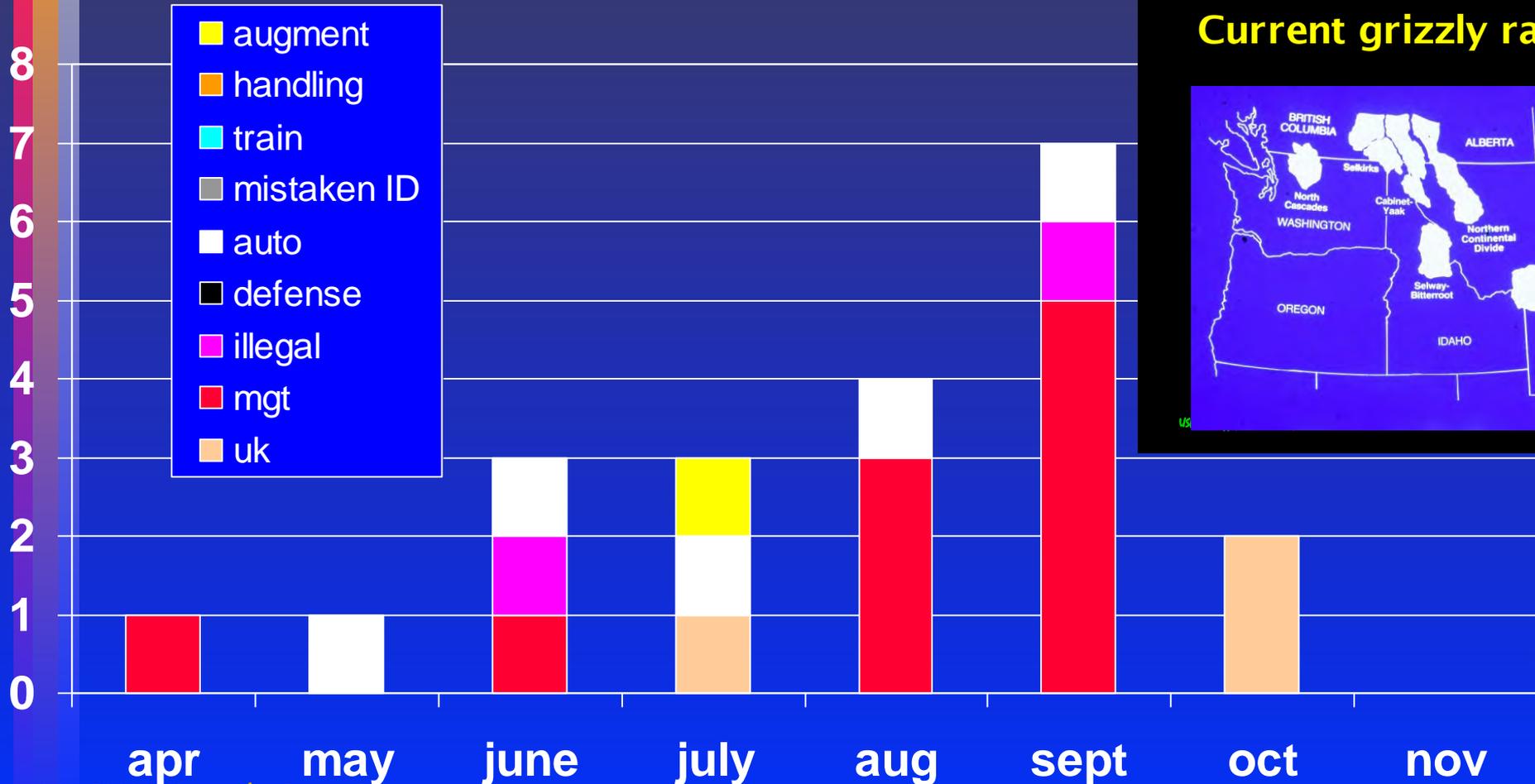


Can we determine the density at which risk from development precludes sensitive wildlife?



Mortality Cause by Month 2010

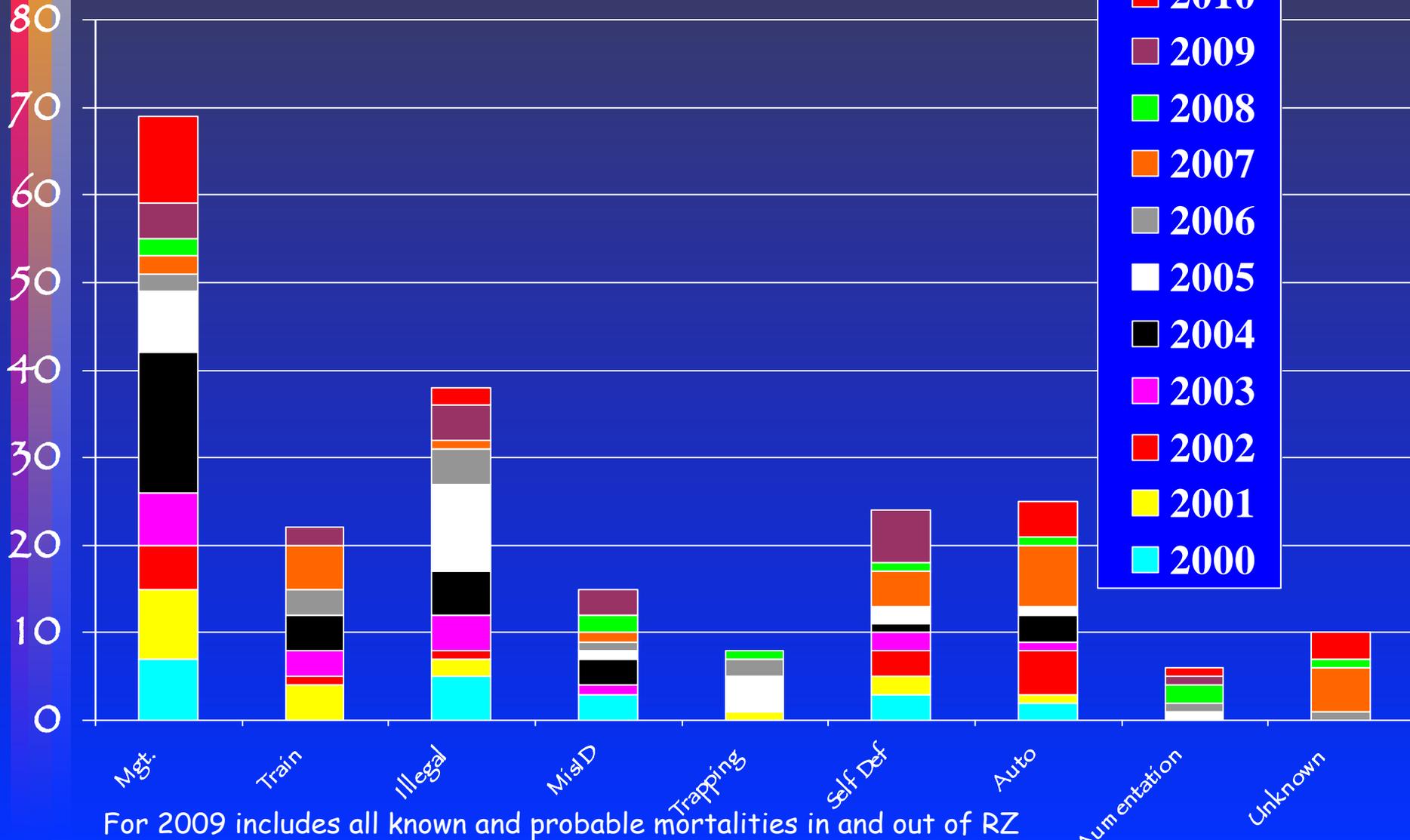
Inside the recovery zone and within 10 miles



Current grizzly range

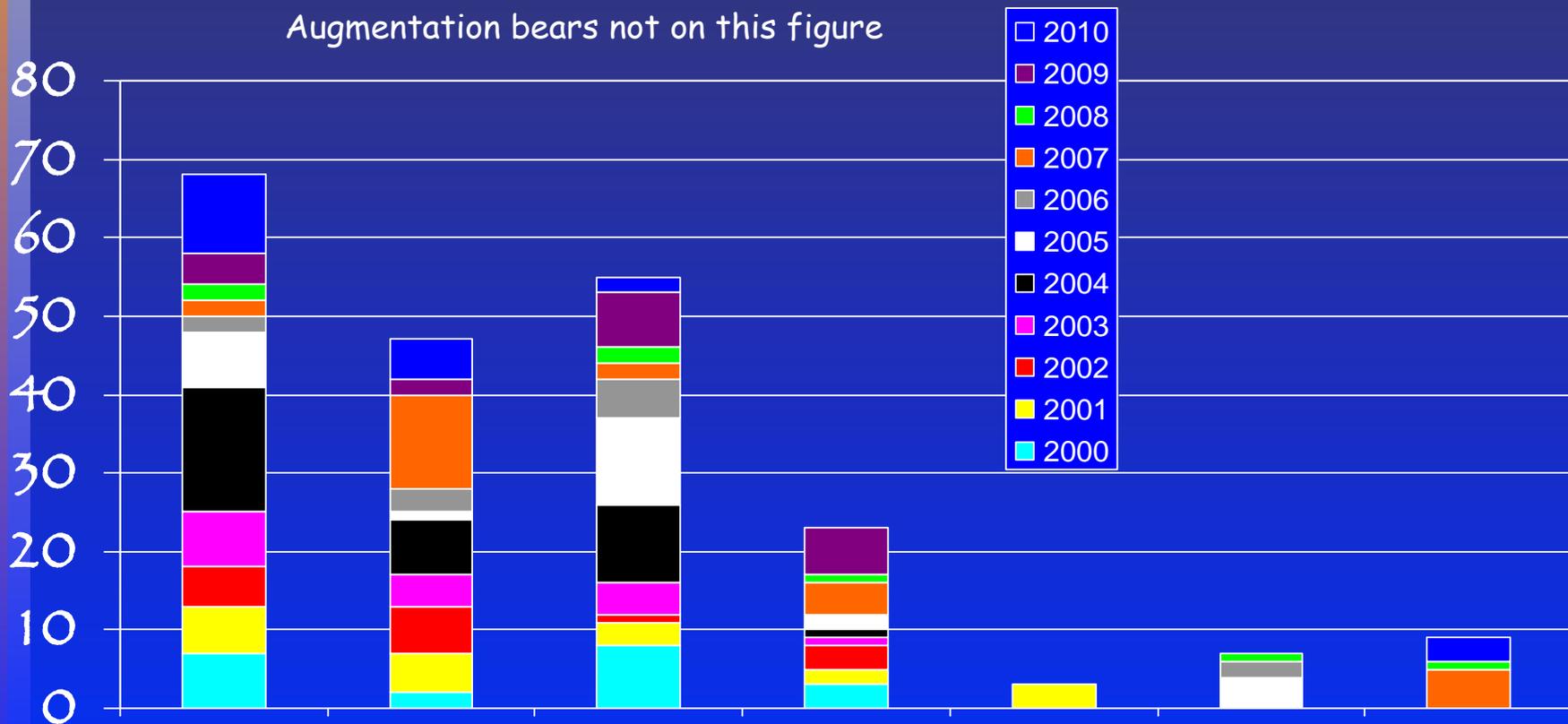


Causes of Mortality NCDE 2000-2010



Ultimate Reasons For Known Human-caused Loss NCDE 2000-2010

Augmentation bears not on this figure



Human food/stock

Trains Auto

illegal

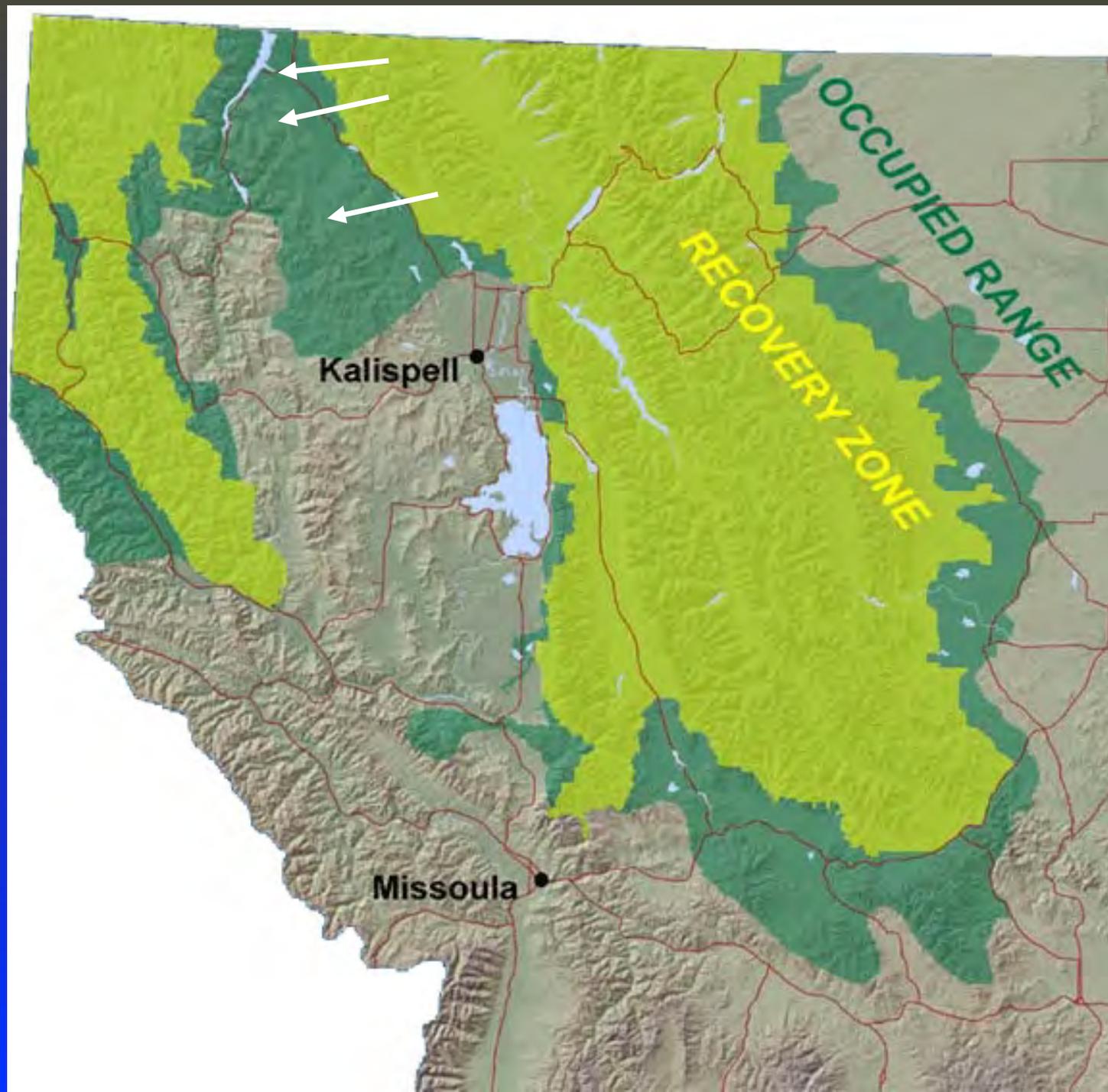
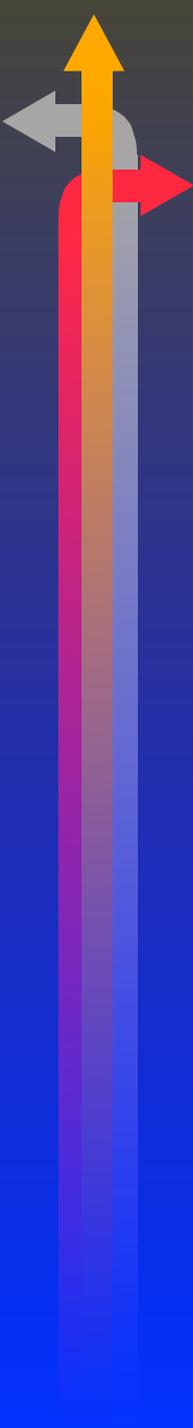
Self Defense

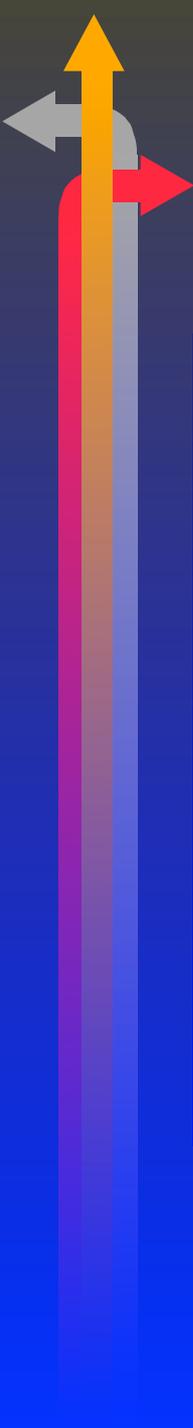
Human fatal

handling

Unknown

For 2009 includes all known and probable mortalities in and out of RZ



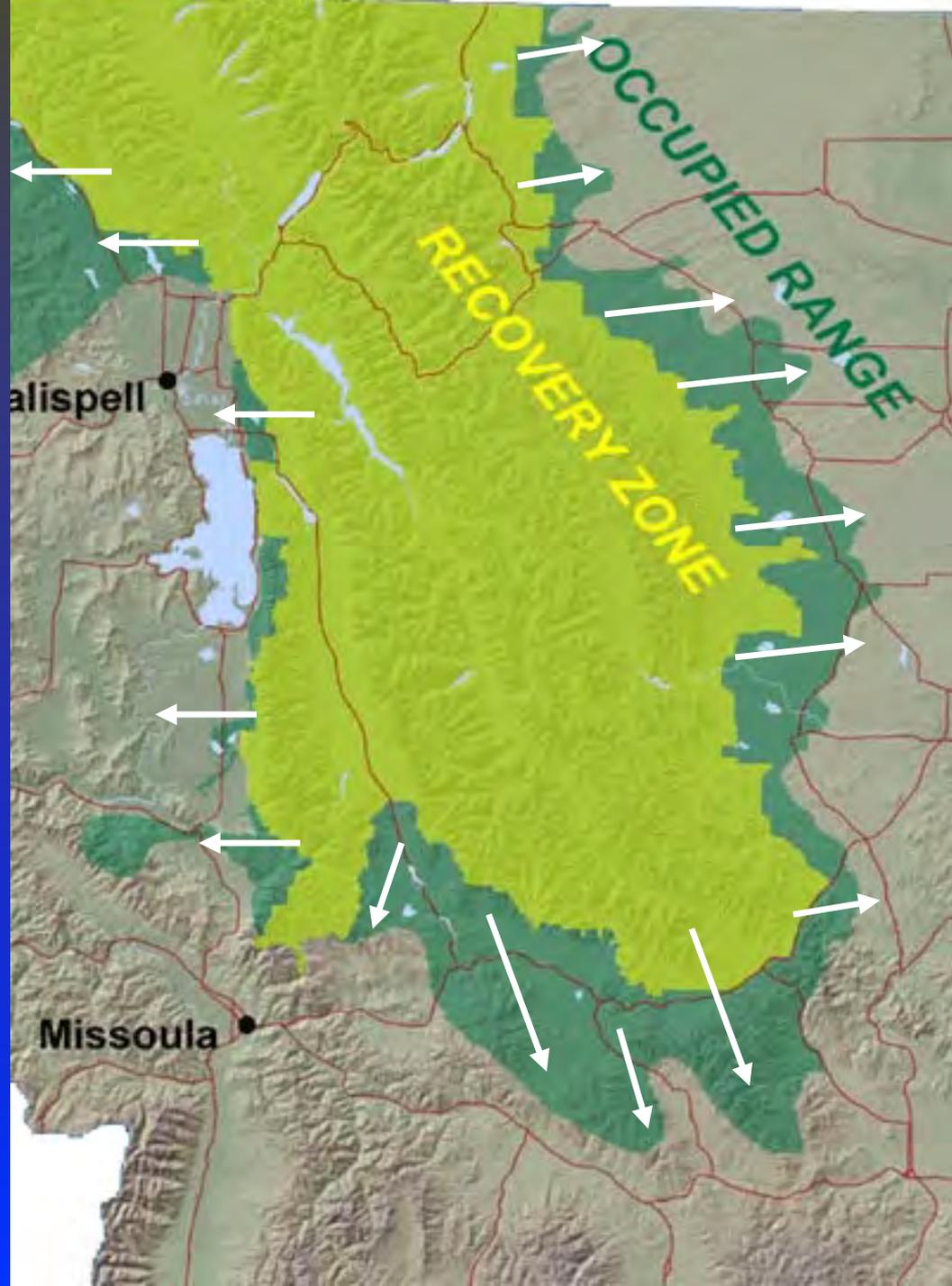


The NCDE population is expanding

Light green is recovery zone

Dark green is current range

White arrows are main expansion areas





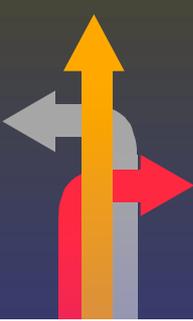
Imagery Date: Mar 5, 2005

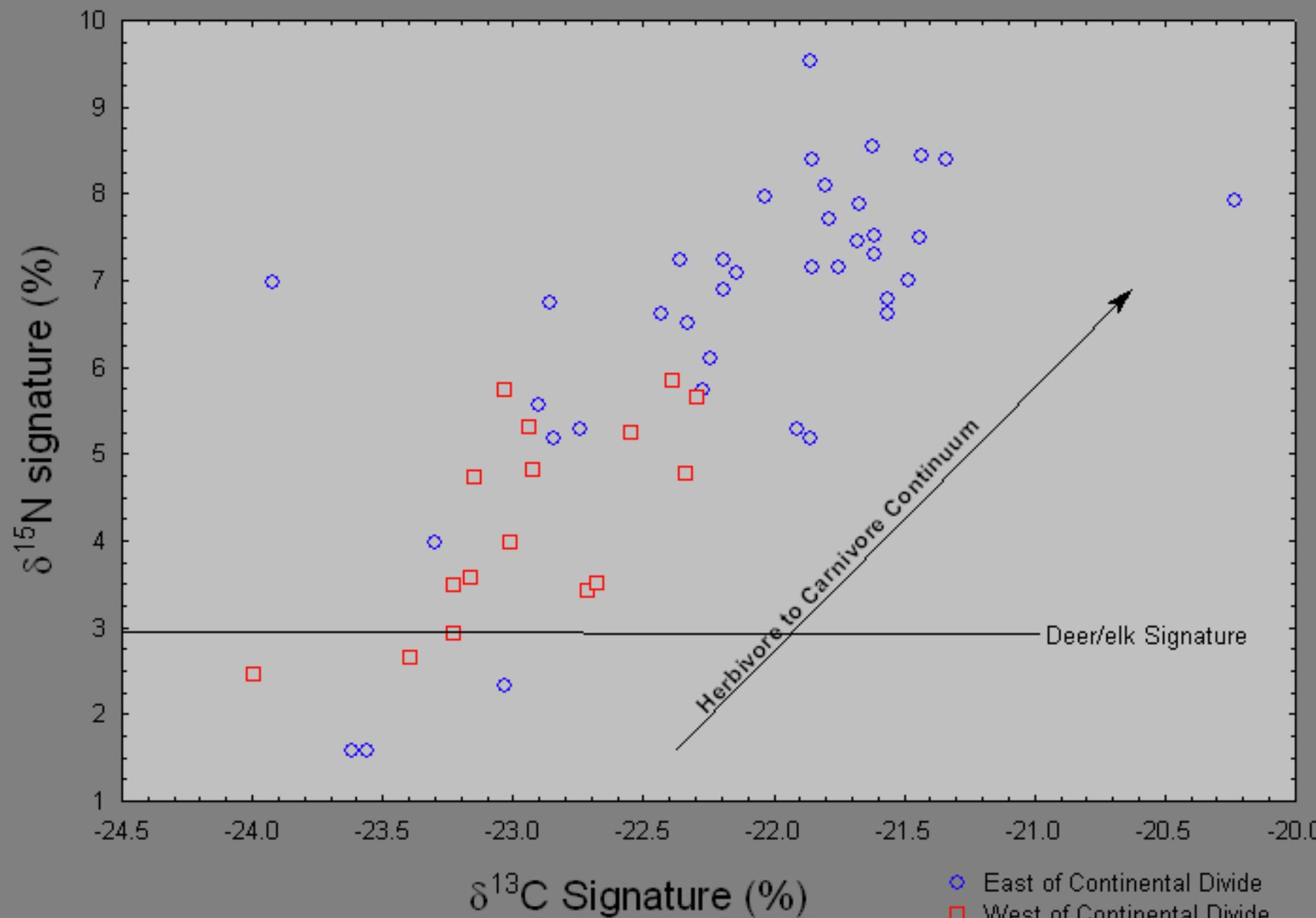
© 2010 Google
12 T 455204.88 m E 5307253.46 m N elev 3380 ft

Eye alt 18.30 mi







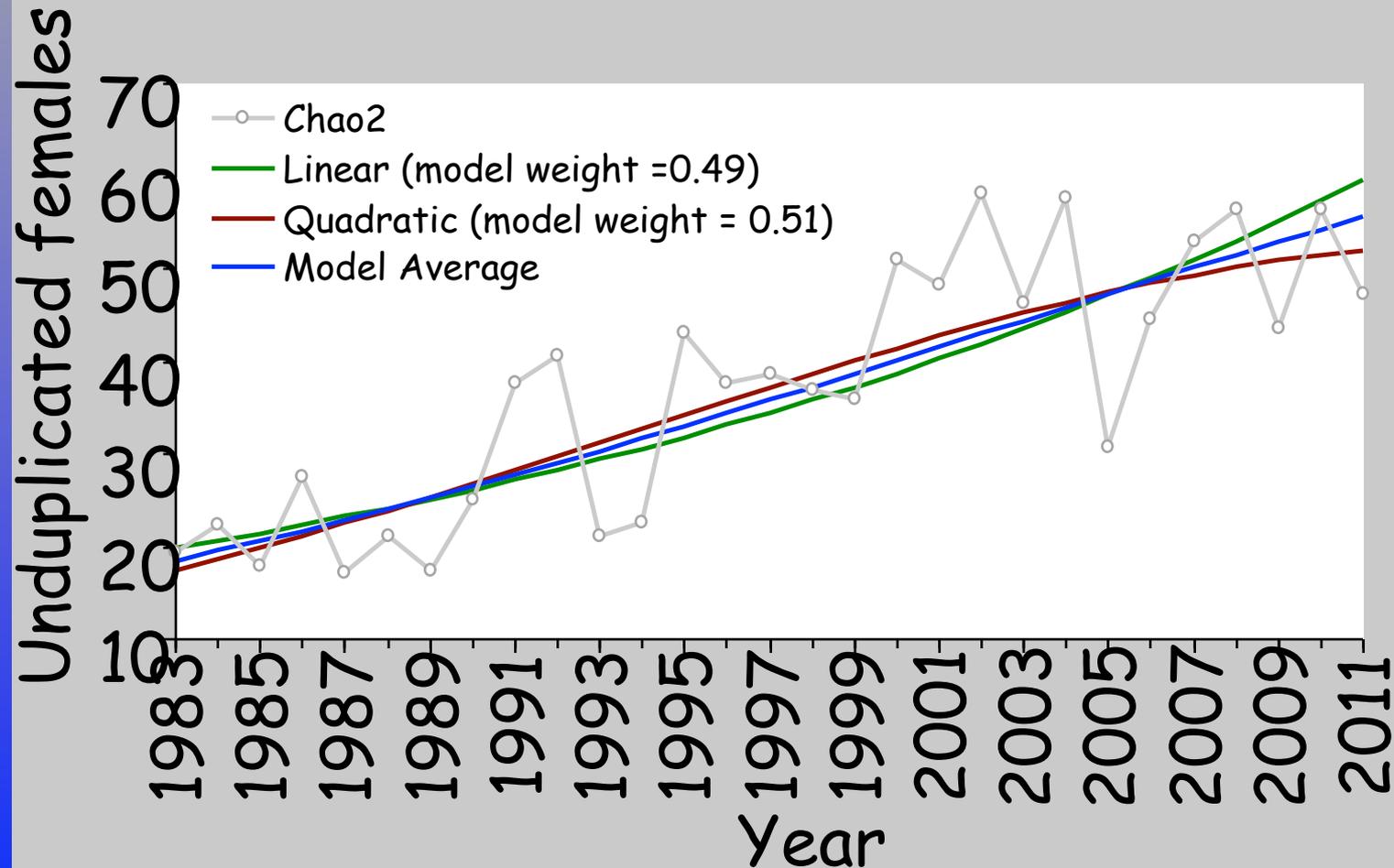




2008/04/12
06:36:20

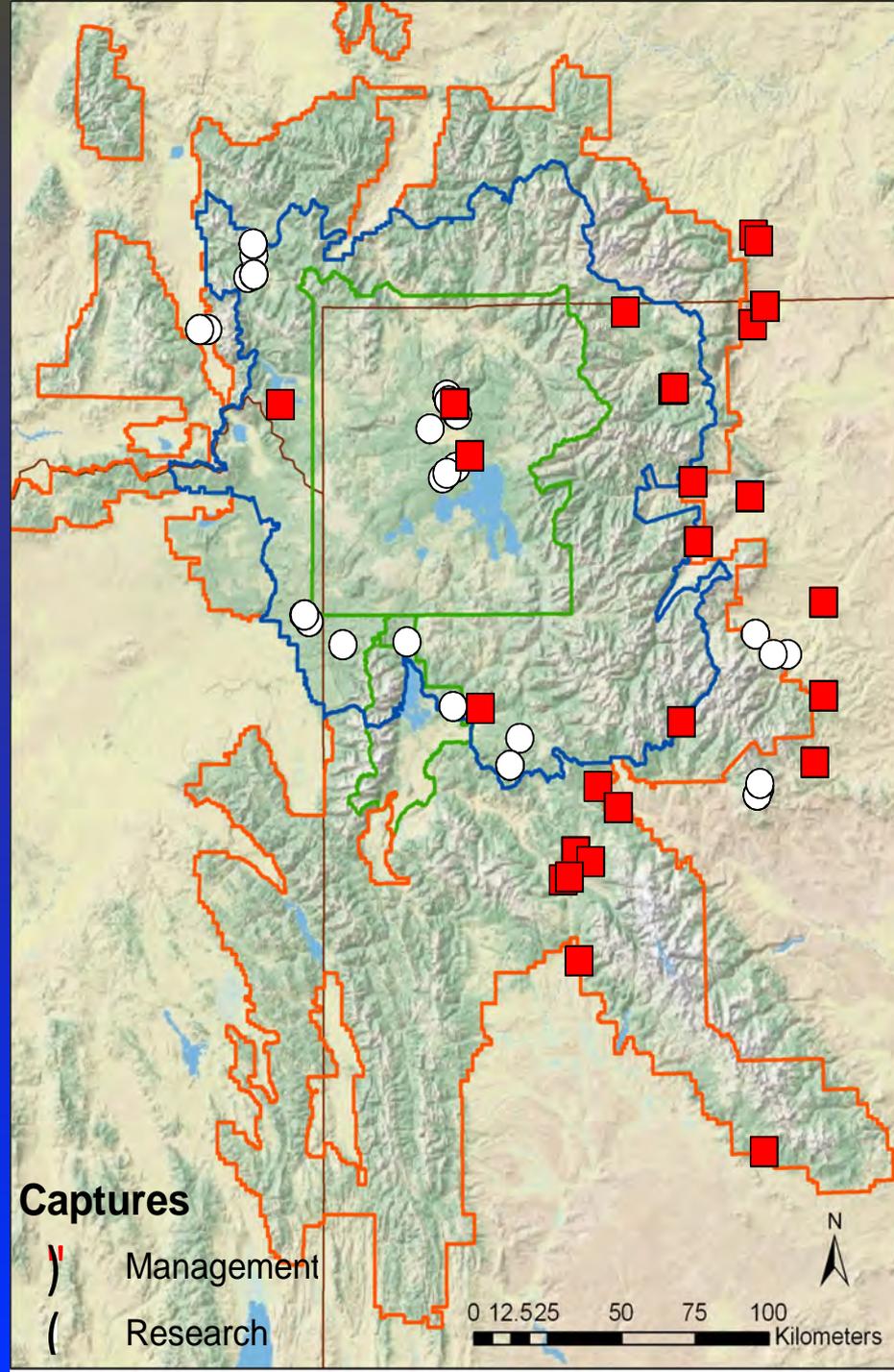
Yellowstone Ecosystem

Trend in the number of $FCOY_{Chao2}$ during 1983-2011 using linear, quadratic, and model-averaged estimates

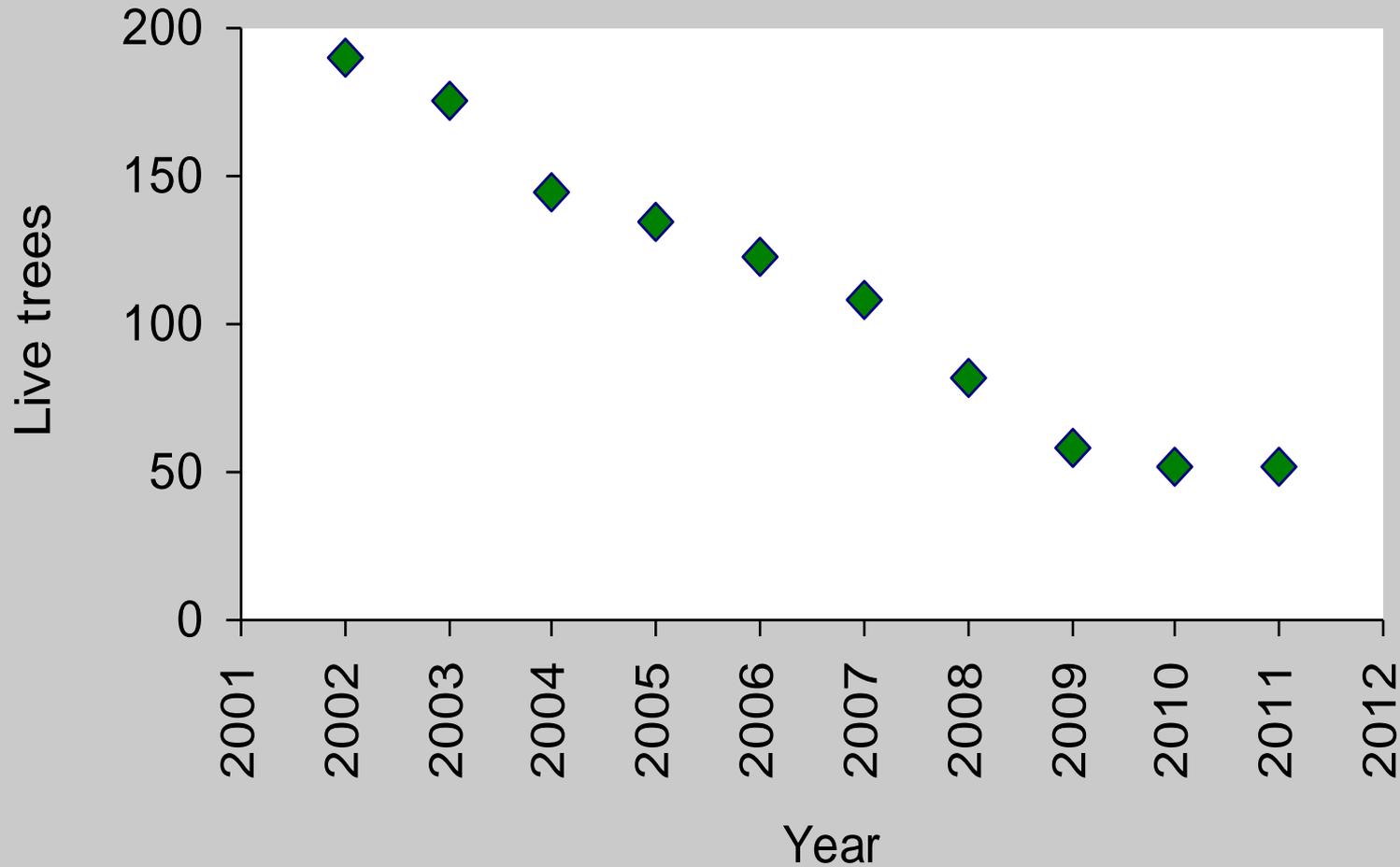


Distribution of grizzly bear captures during 2011 (10/11/11)

- Total captures = 91
 - Research = 56
 - Management = 35
- Individuals bears = 70
 - Females = 23 (14 adults)
 - Males = 47 (35 adults)
- New bears = 36



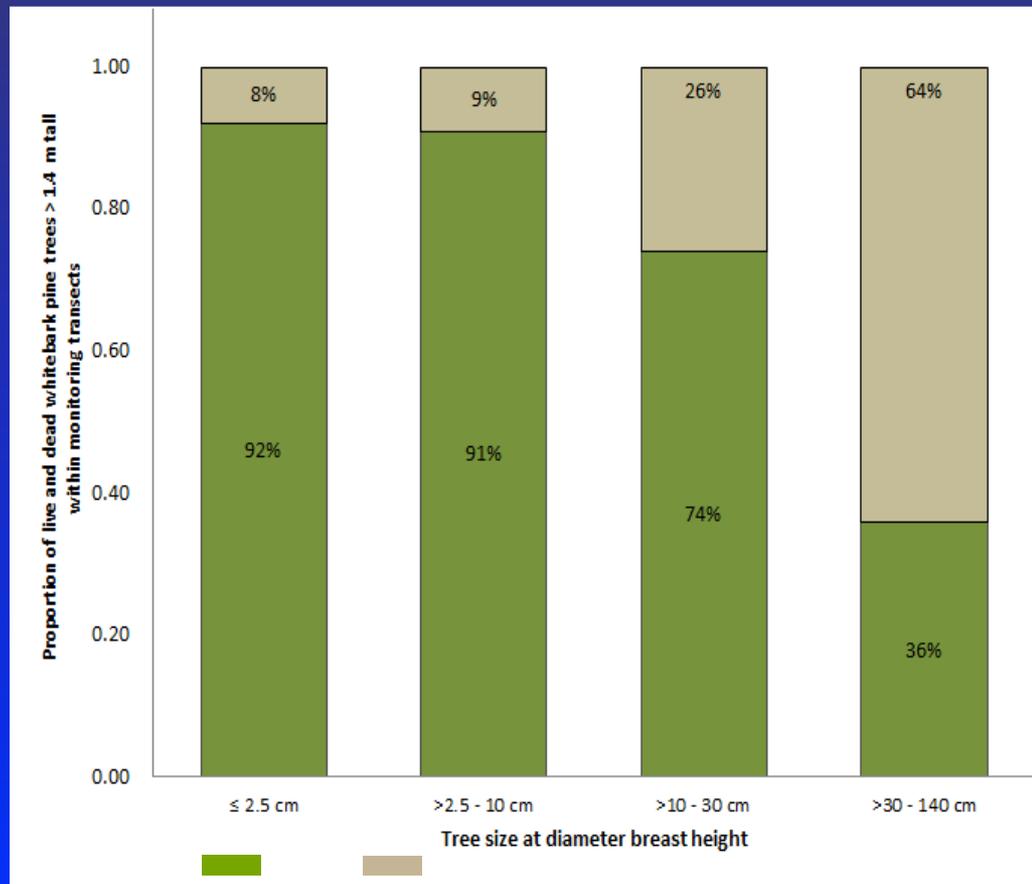
Whitebark pine mortality on cone production transect for individual trees monitored since 2002



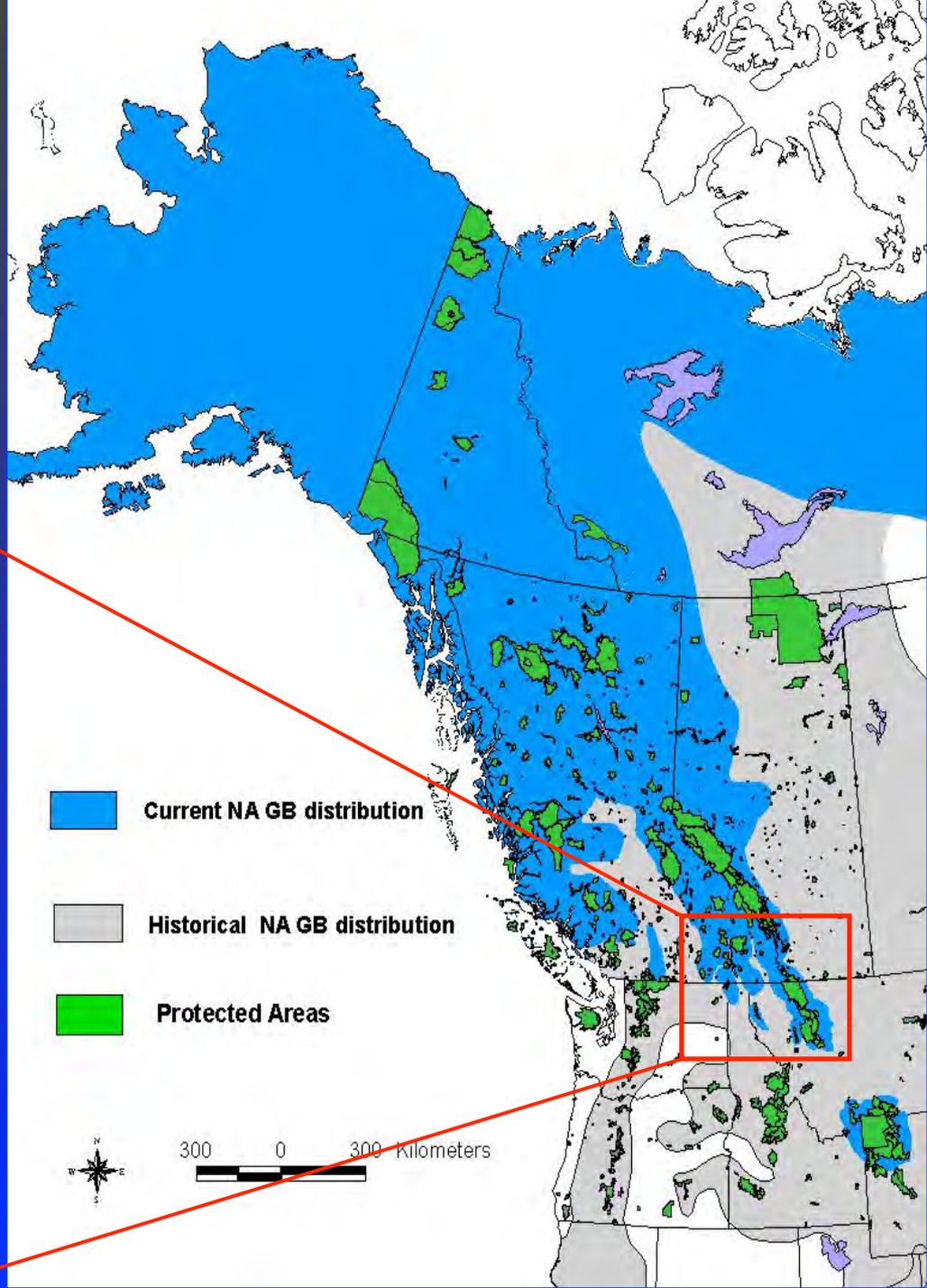
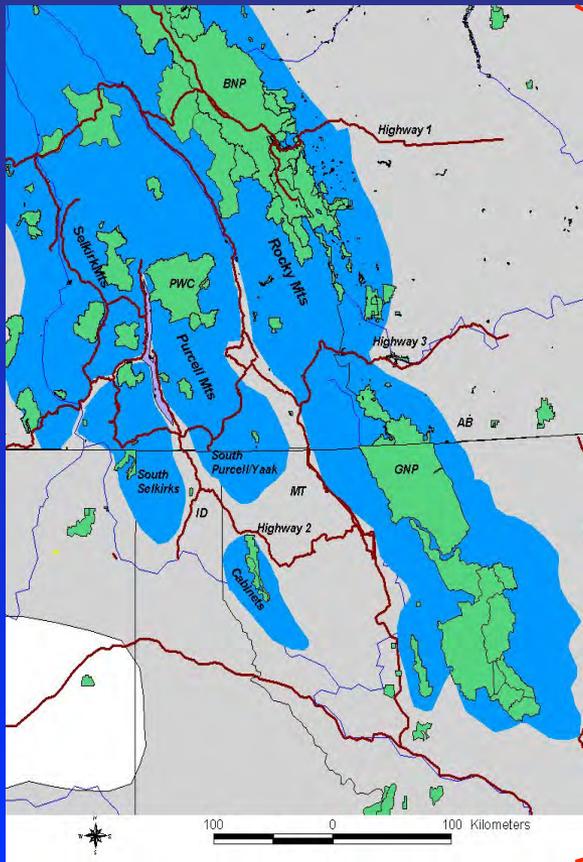
Percent Live and Dead Tagged Whitebark Pine by Size Class¹

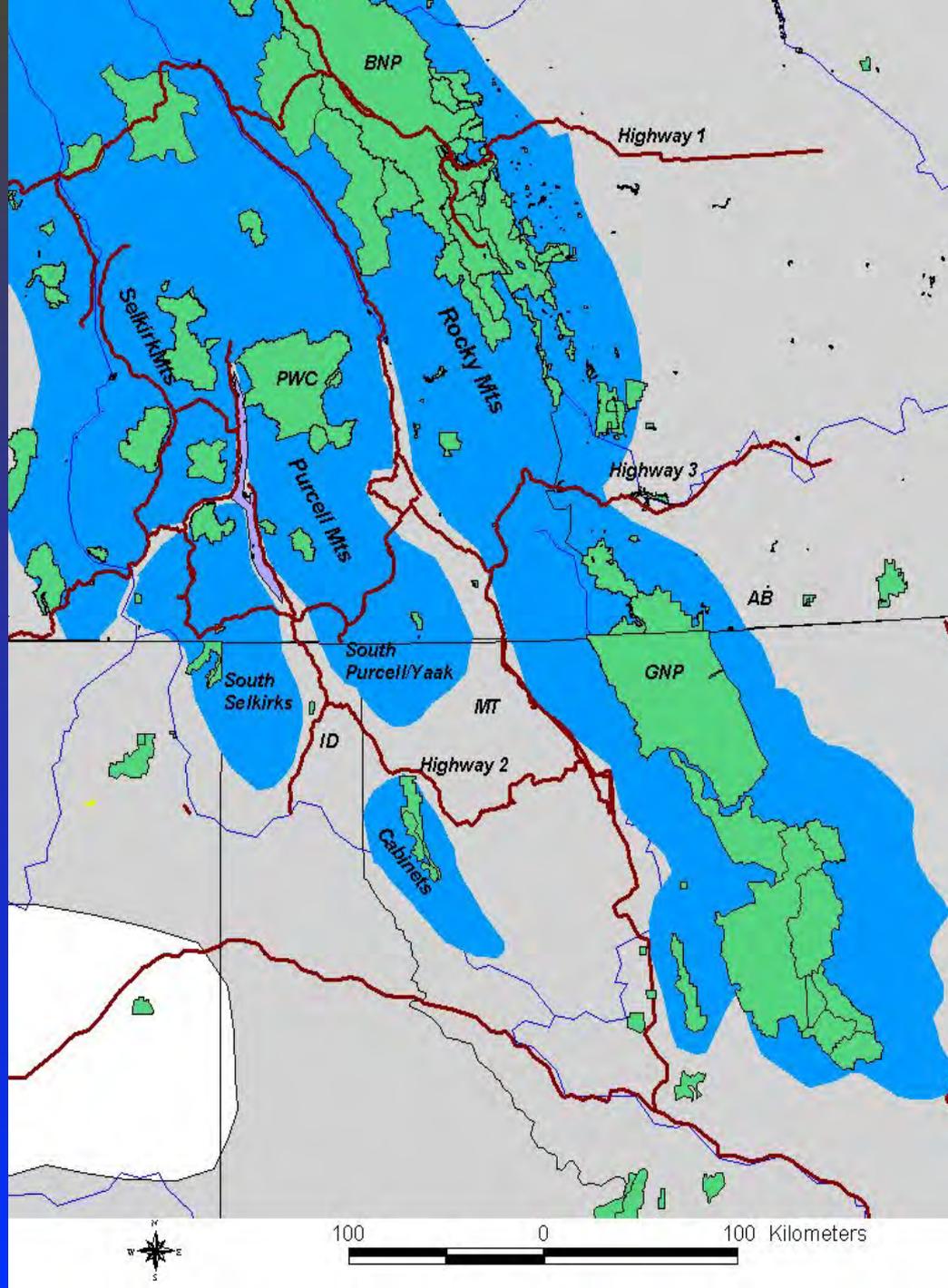
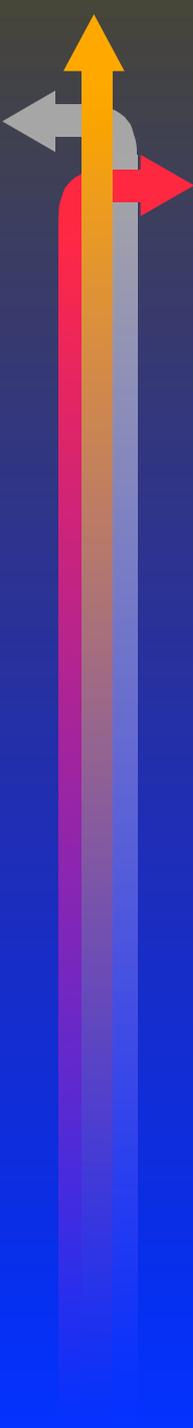
Preliminary results from the Interagency long-term monitoring program for Whitebark Pine Health

Greater Yellowstone Network



Western North American grizzly bear distribution and protected areas

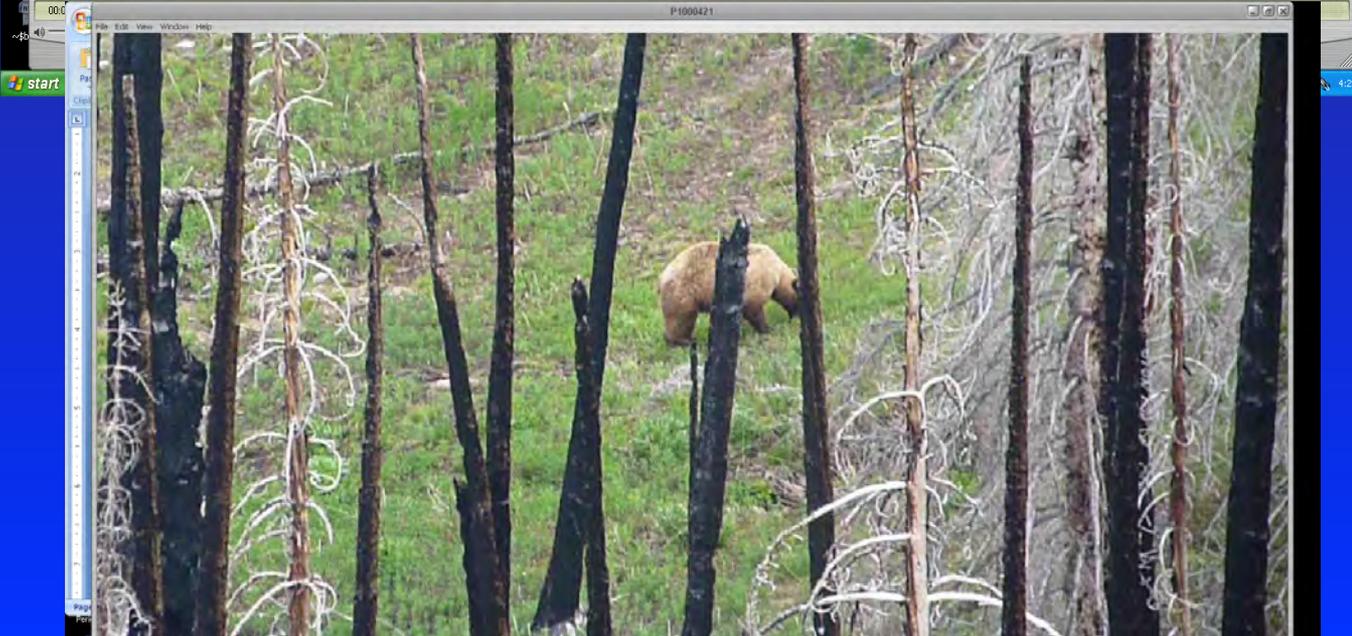
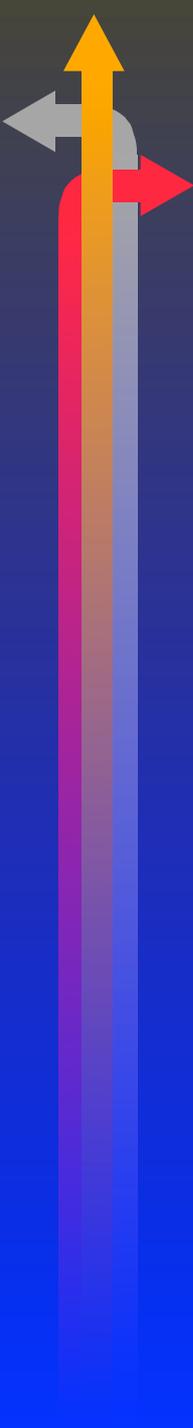




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RC55 RAPIDFIRE



Area for Bitterroot Recovery

- Wilderness is the core and only area for reintroduction
- Size of wilderness core is 5600 sq. mi.
- Wilderness larger than Connecticut and Rhode Island combined
- Bears would also occur outside wilderness and be accommodated with existing uses







395

Spokane

95

90

2

10

93

89

Image © 2007 TerraMetrics
© 2007 Europa Technologies
Image © 2007 DigitalGlobe
© 2007 Tele Atlas

Streaming [|||||] 100%

© 2007

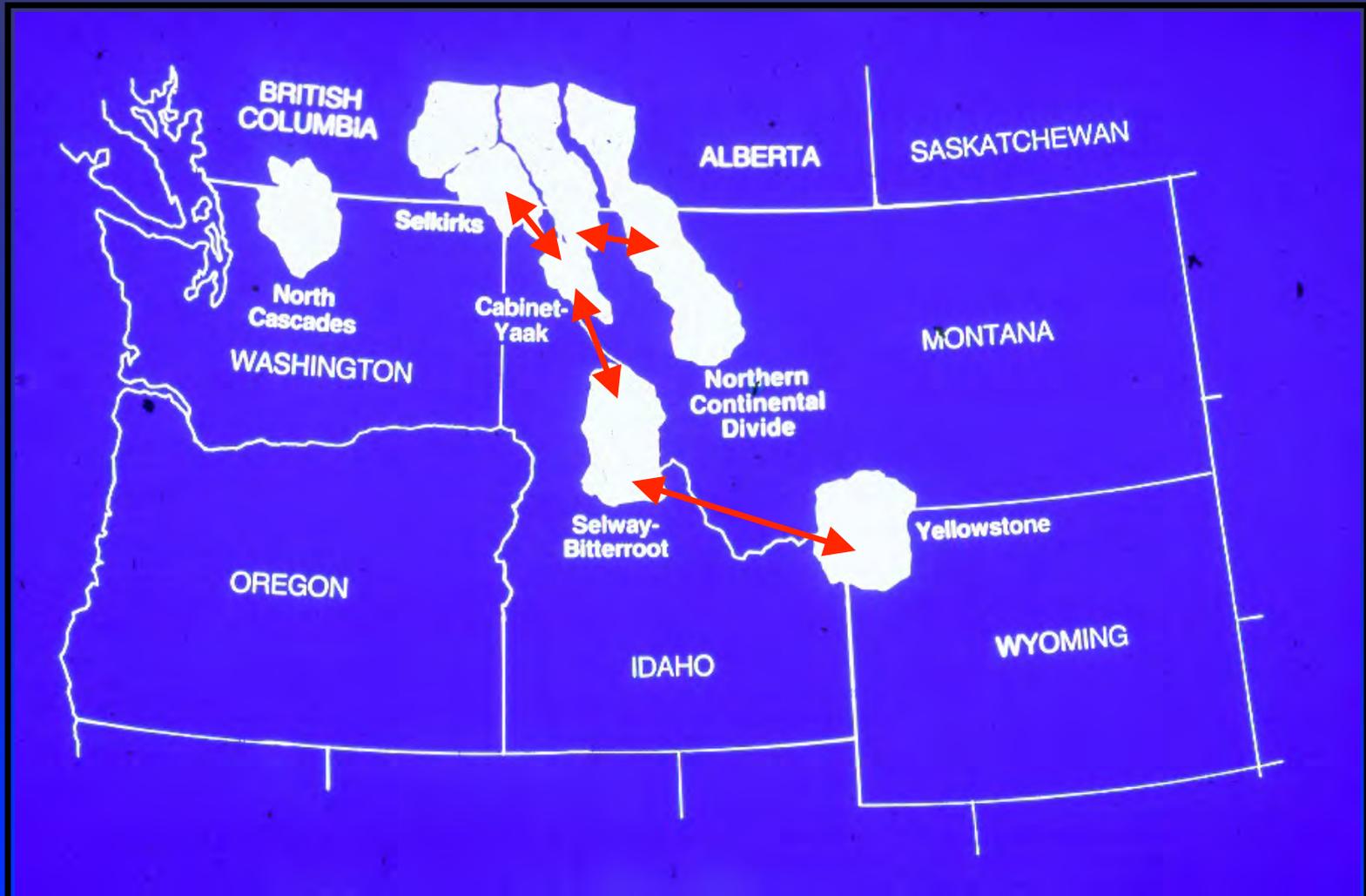
Google

115°50'02.17" W elev 4858 ft

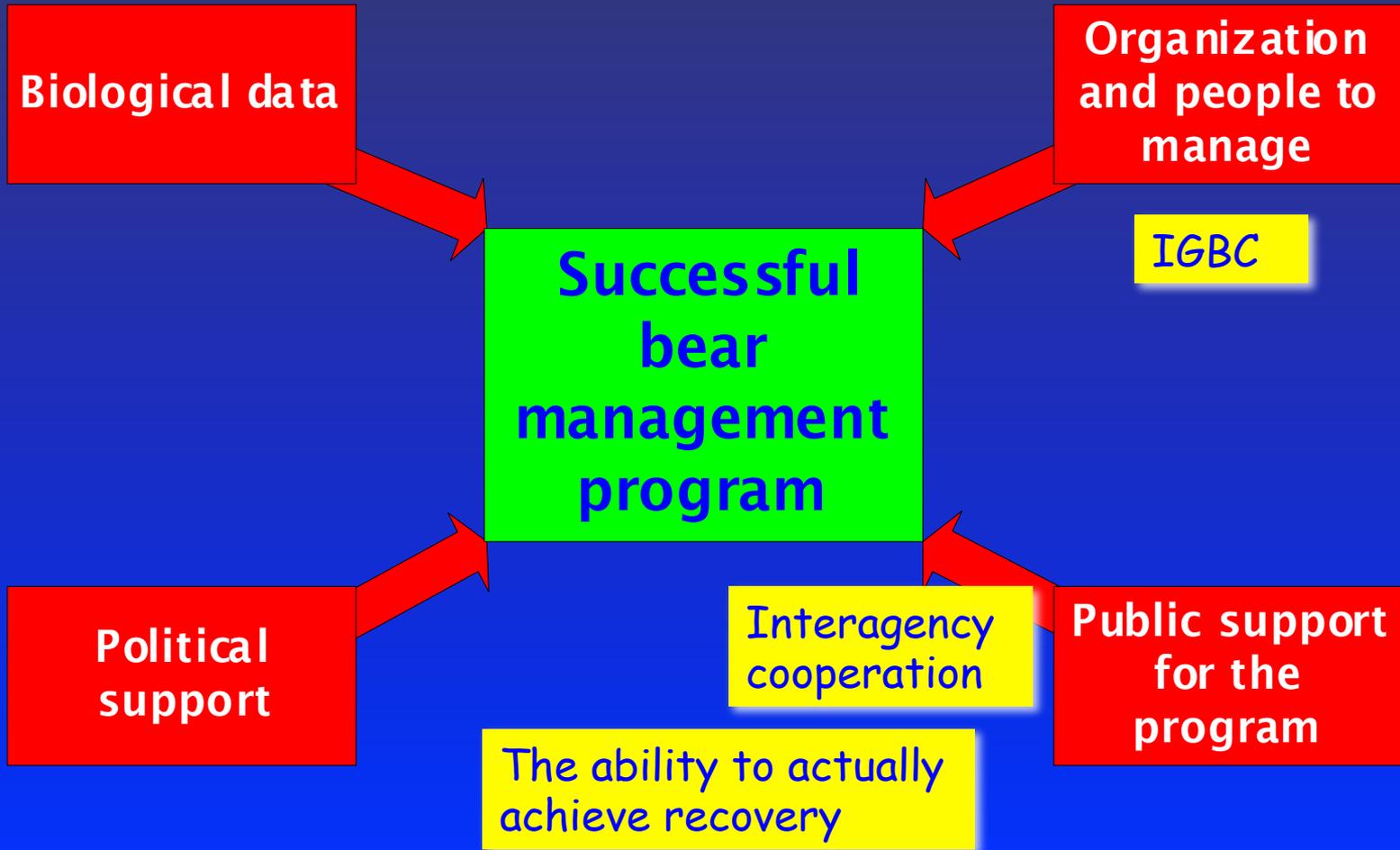
195

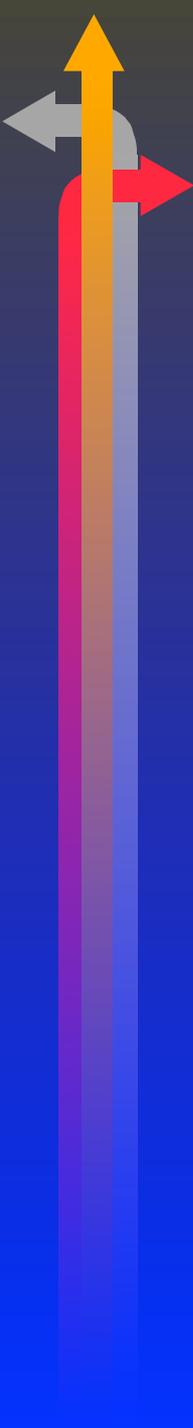
Eye at

Linkage zones are areas where movement of wildlife is still possible between existing ecosystems



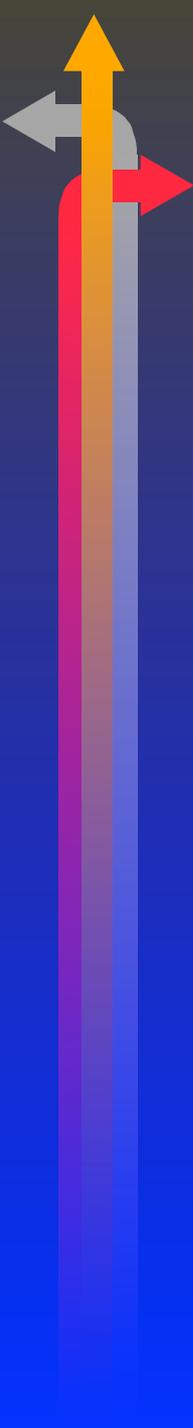
Successful Bear Management Requires 4 Things:





What did it take to achieve success?

- Political commitment - leaders had to decide that this was something that they could support and then do so
- Science and monitoring - to tell us what was happening and highlight what needed to be done. We invest in the best science!
- Adaptive management - apply the science to management decisions and change management in response to monitoring data as necessary



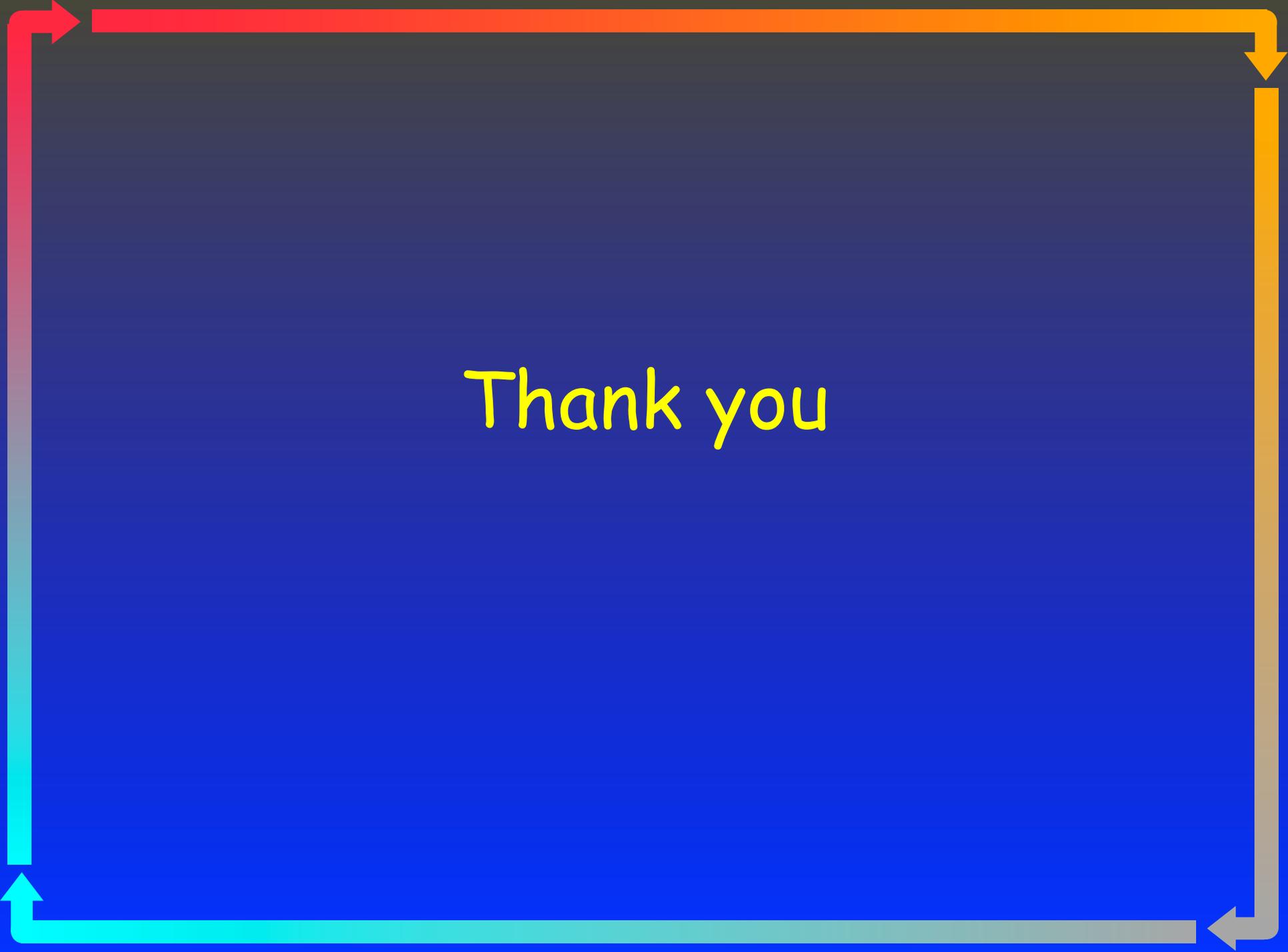
What did it take to achieve success?

- Build public support - understand the interests of the public and build on those. Recognize that there will be user groups that do not agree with decisions. Slow steady, progress will achieve results.
- Emphasize successes - this helps people and agencies realize that the investments of time and trouble are paying off. It also results in more partners - everyone wants to be on a winning team.





It's Their World Too...



Thank you