

A scenic view of a mountain range with snow patches and a clear blue sky. The foreground shows rocky terrain, and the background features multiple layers of mountain peaks under a bright blue sky with light clouds.

Western Montana

Big Game Hunting with Large Carnivores

Washington Department of Wildlife
Olympia - 2013

Most of western Montana Looks Like This!



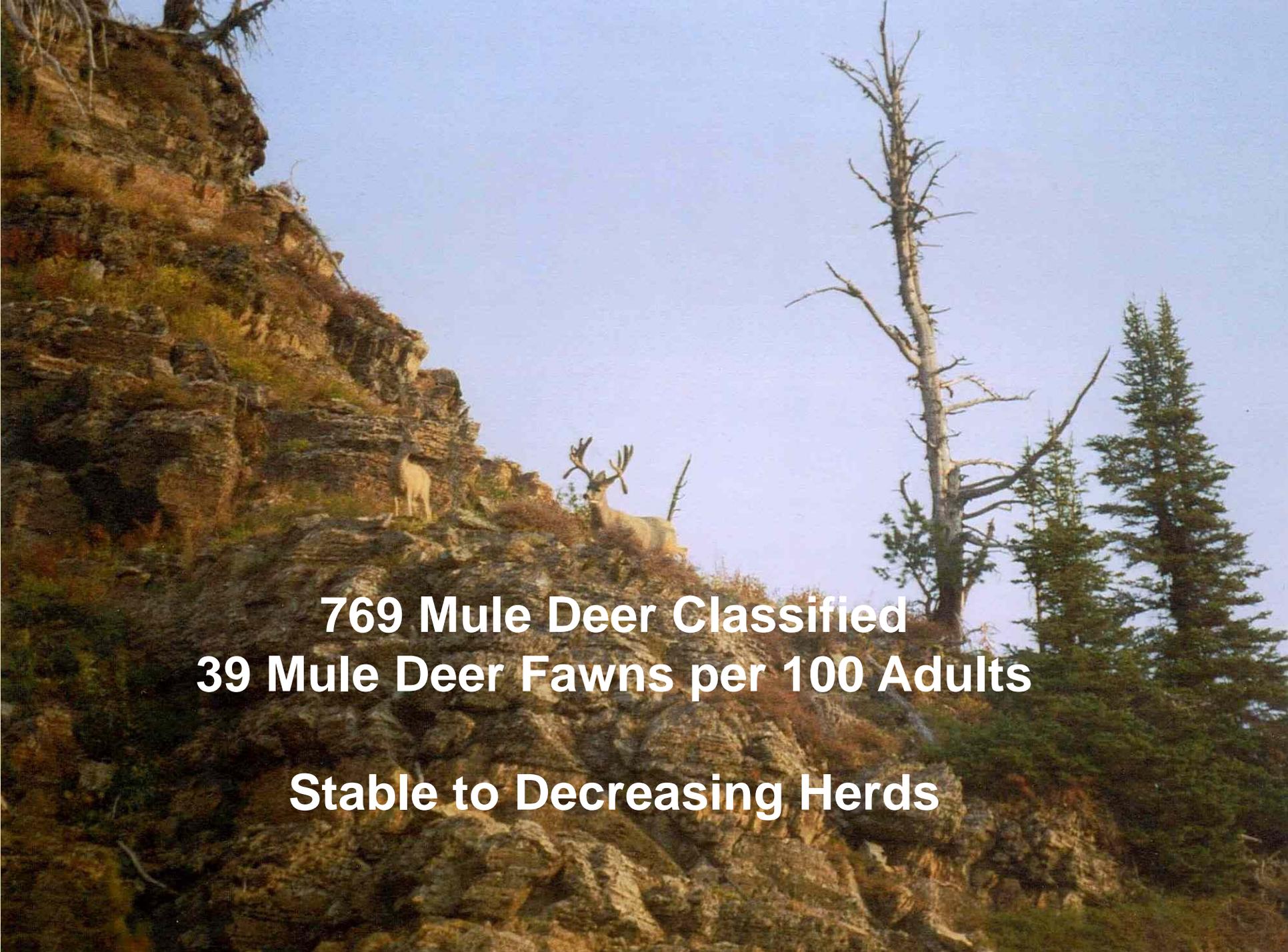


So we use a Helicopter or Ground Survey Routes

**3,271 Elk Classified
25 Calves per 100 Cows**

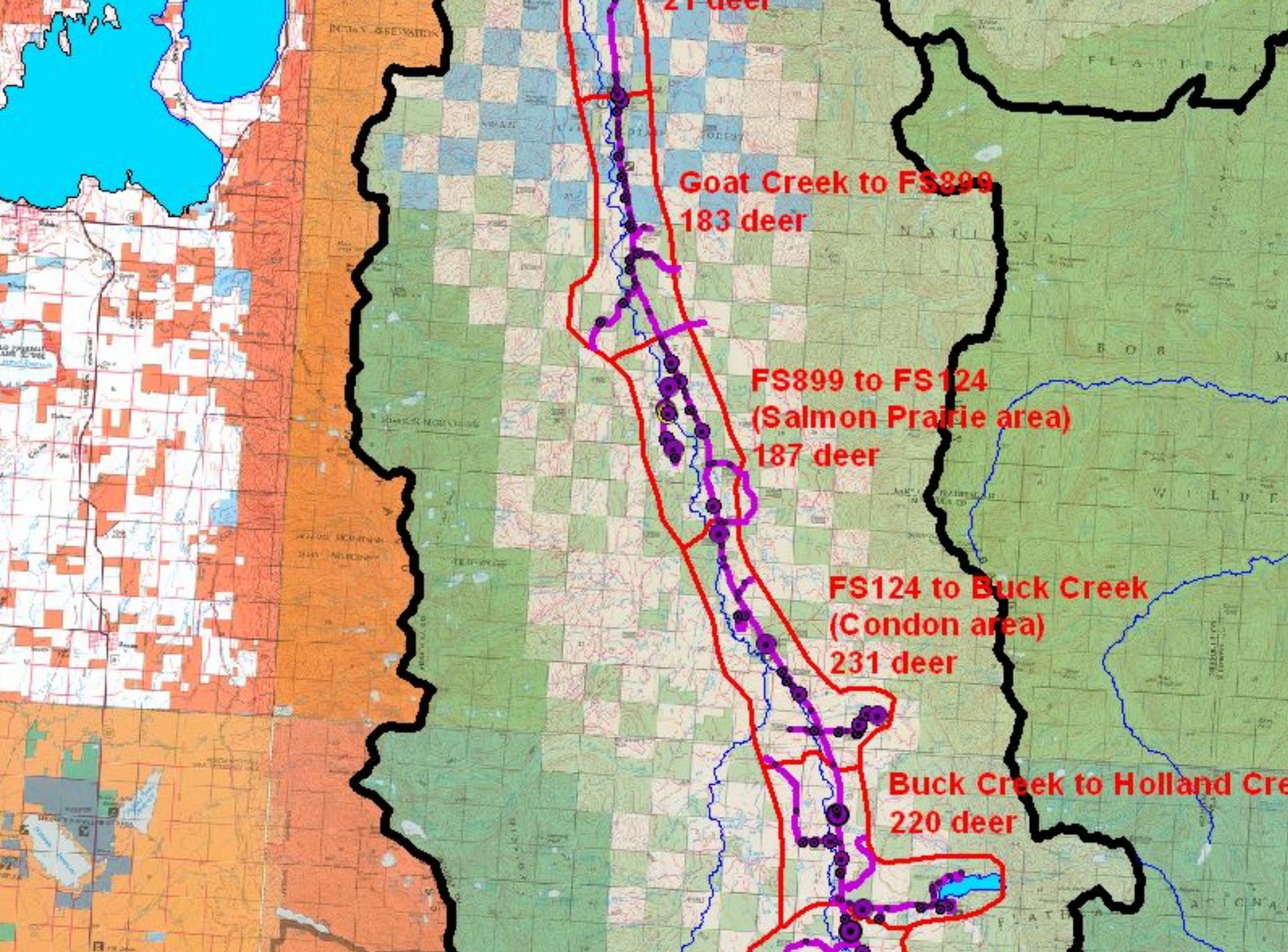
Stable Herds





**769 Mule Deer Classified
39 Mule Deer Fawns per 100 Adults**

Stable to Decreasing Herds



21 deer
Goat Creek to FS899
183 deer

FS899 to FS124
(Salmon Prairie area)
187 deer

FS124 to Buck Creek
(Condon area)
231 deer

Buck Creek to Holland Creek
220 deer

**4,904 WT Deer Classified
37 Fawns per 100 WT Adults**

Increasing Herd





WT Deer

*It's All About The **FAWNS***



A man with a white beard and glasses, wearing a red and green plaid shirt, blue jeans, and a dark cap, stands at a podium with a microphone. He is addressing a large audience of men seated in a hall. The audience members are dressed in casual, outdoor-style clothing like jackets and hats. The room has a drop ceiling with recessed lights. A green speech bubble is overlaid on the image, containing the text: "I think that wolves, bears, pumas, coyotes...".

I think that wolves,
bears, pumas, coyotes...



FYSTER
UNIVERSITY

HOONAH
ALASKA

EXIT



EATEN ALIVE

SPEED LIMIT 30

Brian Schweitzer
Max Baucus
NO MORE WOLVES

ENUF IS ENUF

SAVE OUR GAME

DOES ANYONE CARE ABOUT OUR DEER? ELU HERDS

WOLVES OUT CONTROL MONTANA OUT OF BUSINESS PATIENTS

Jon Tester Denny Rehberg
NO MORE WOLVES

TAKE YOUR WOLF AND STUFF IT!

IS 1 WOLF worth 300 DEER?

Denny Rehberg
NO MORE WOLVES

Brian Schweitzer
Max Baucus
NO MORE WOLVES

Jon Tester
Denny Rehberg
NO MORE WOLVES

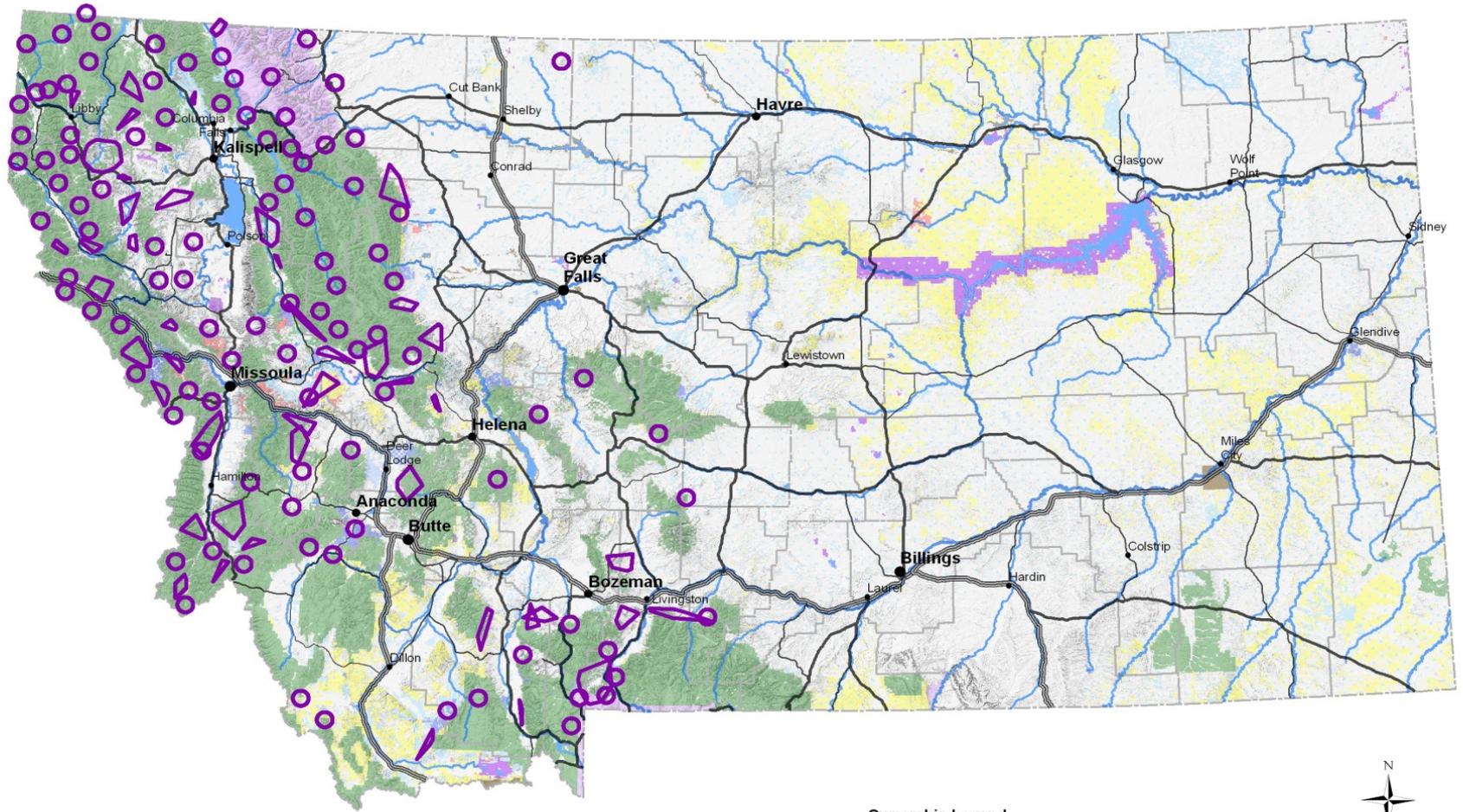
GOVERNOR SCHWARTZ HELP

ENVIRONMENTAL MOVEMENT!

ONLY 19+ ARE PRO-WOLVES

IN MONTANA ALONE!

2012 Montana Wolf Pack Locations



 Montana Packs

Ownership Legend

- | | |
|--|--|
|  BLM |  Montana State Trust Lands |
|  National Park Service |  Other State of Montana Lands |
|  Other Federal Lands |  Local Government |
|  US Fish & Wildlife Service |  Tribal and BIA Lands |
|  US Forest Service |  Plum Creek Timber Company |
|  Fish, Wildlife & Parks |  Private Land Trusts |
|  Other private |  Water |

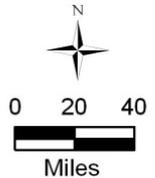
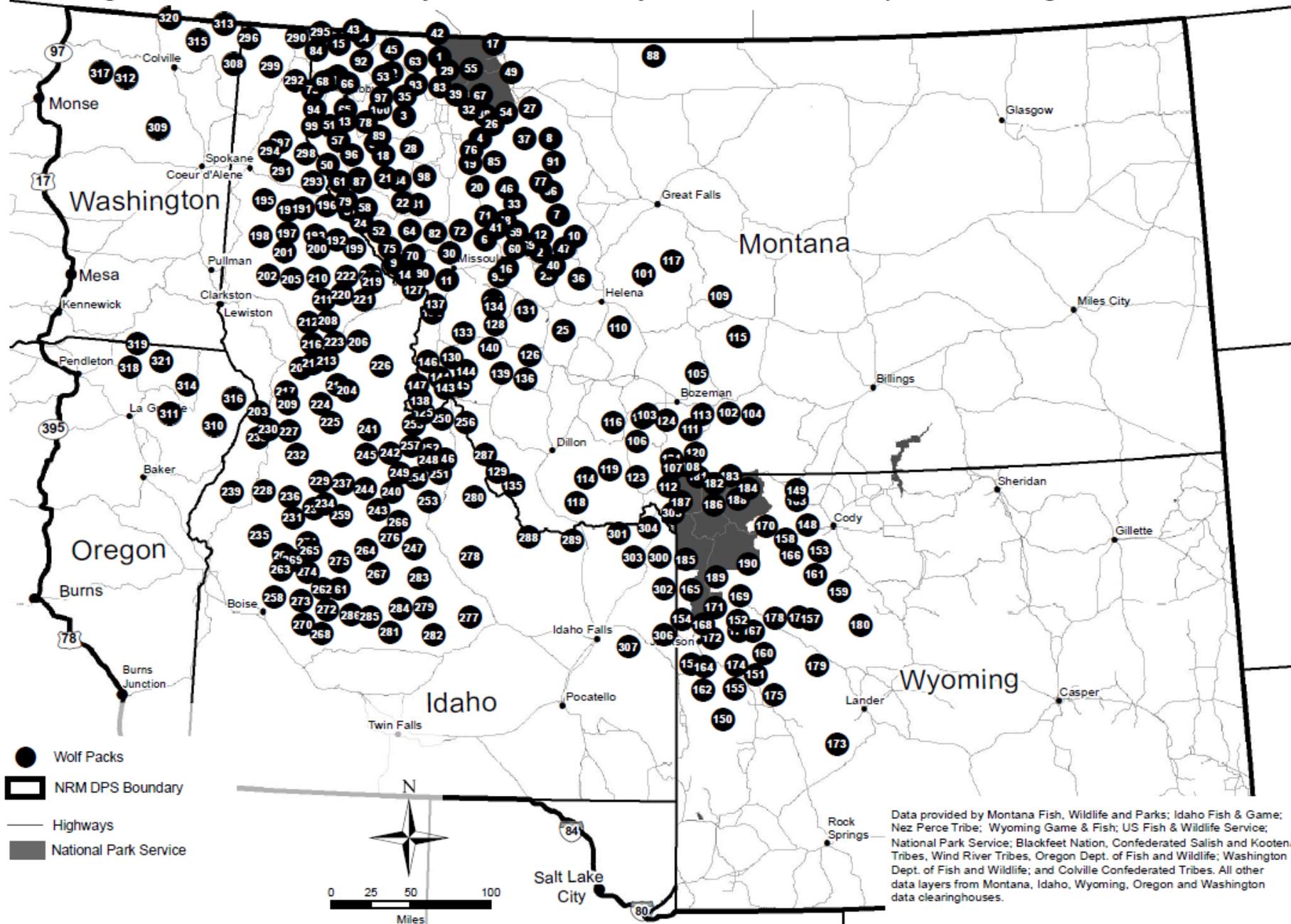


Figure 1: Northern Rocky Mountain Gray Wolf Distinct Population Segment Area



Data provided by Montana Fish, Wildlife and Parks; Idaho Fish & Game; Nez Perce Tribe; Wyoming Game & Fish; US Fish & Wildlife Service; National Park Service; Blackfoot Nation, Confederated Salish and Kootenai Tribes, Wind River Tribes, Oregon Dept. of Fish and Wildlife; Washington Dept. of Fish and Wildlife; and Colville Confederated Tribes. All other data layers from Montana, Idaho, Wyoming, Oregon and Washington data clearinghouses.

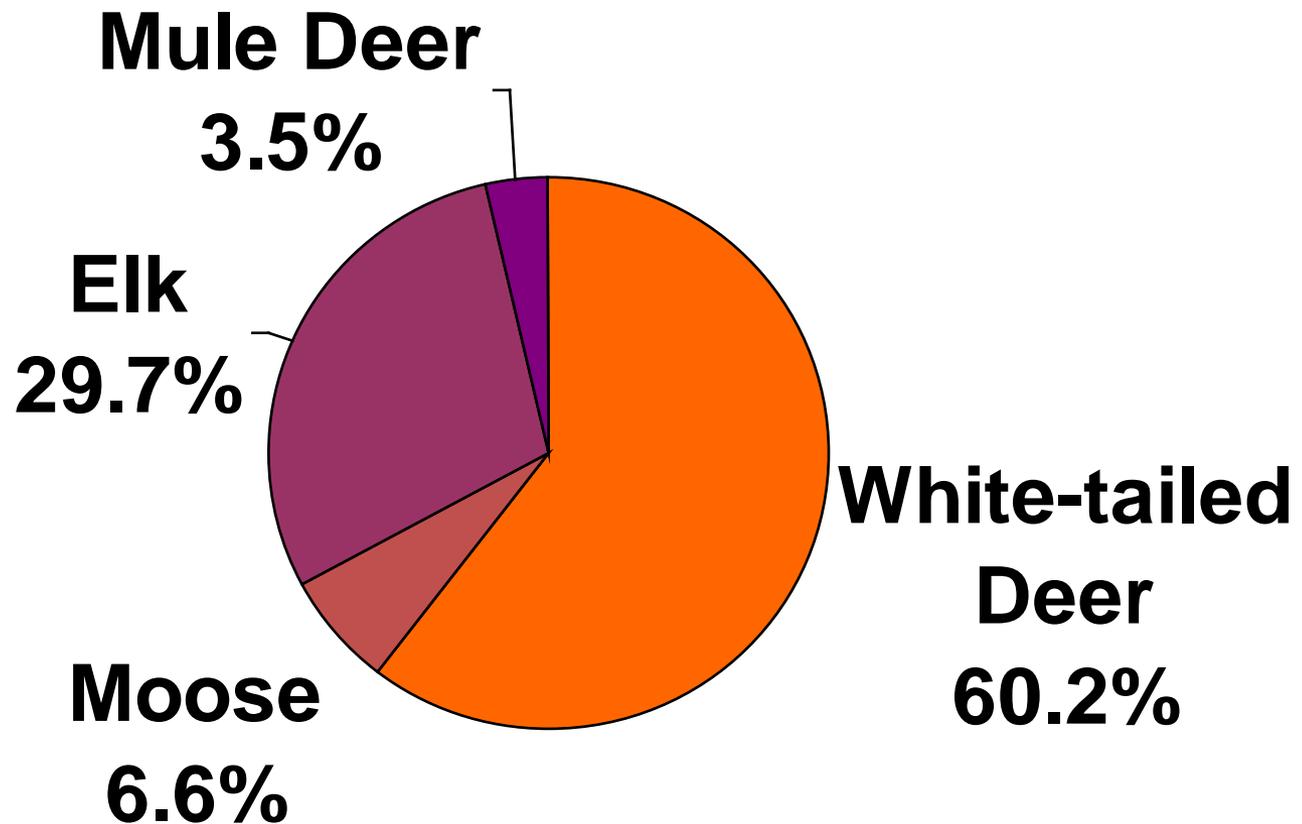
Where did it start?

North Fork Flathead 1979 – Photo 1985

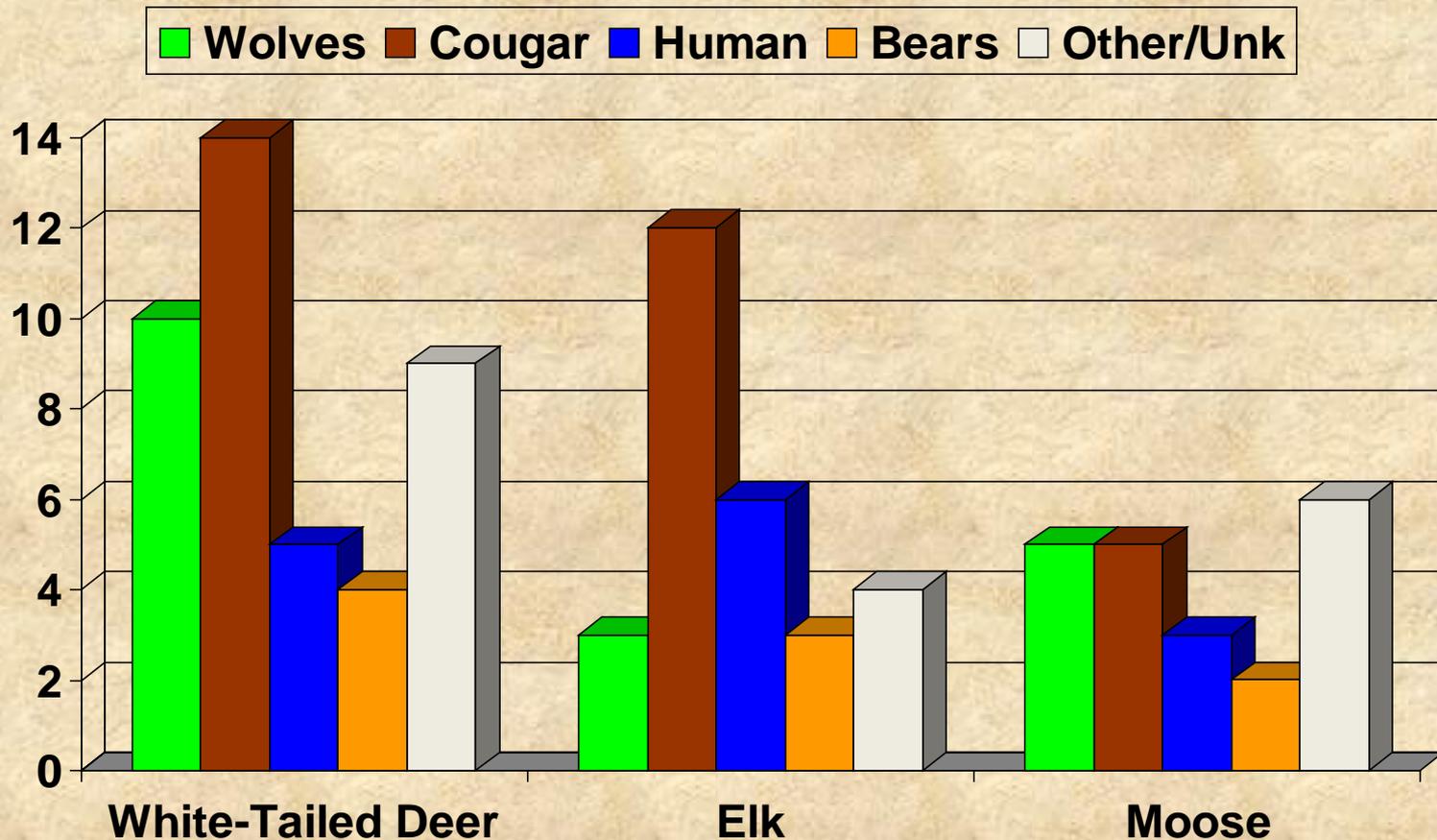


North Fork Wolf Study 1985-91

229 Ungulate Winter Kills



Radio-tagged Female Ungulate Mortalities by Predator - 1990-96



Wolf Counts: what they really are



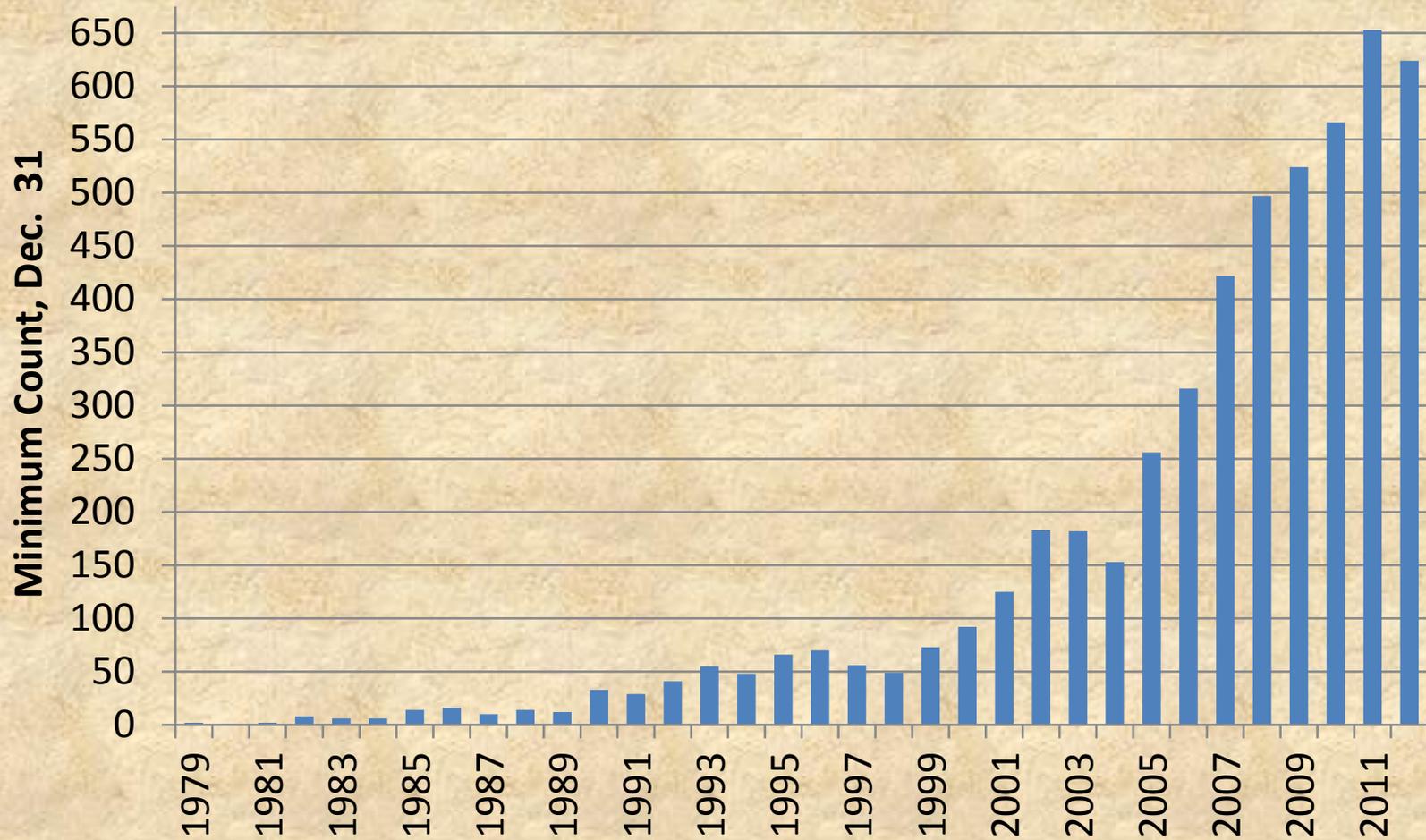
Deer/elk hunter sightings

- Statewide coverage (80,000+ hunters/ year)
- Repeated sampling of “patches”
- Phone surveys:
 - **Did you see wolves (y/n)?**
 - **Where/when did you see wolves?**
 - **How many wolves did you see?**

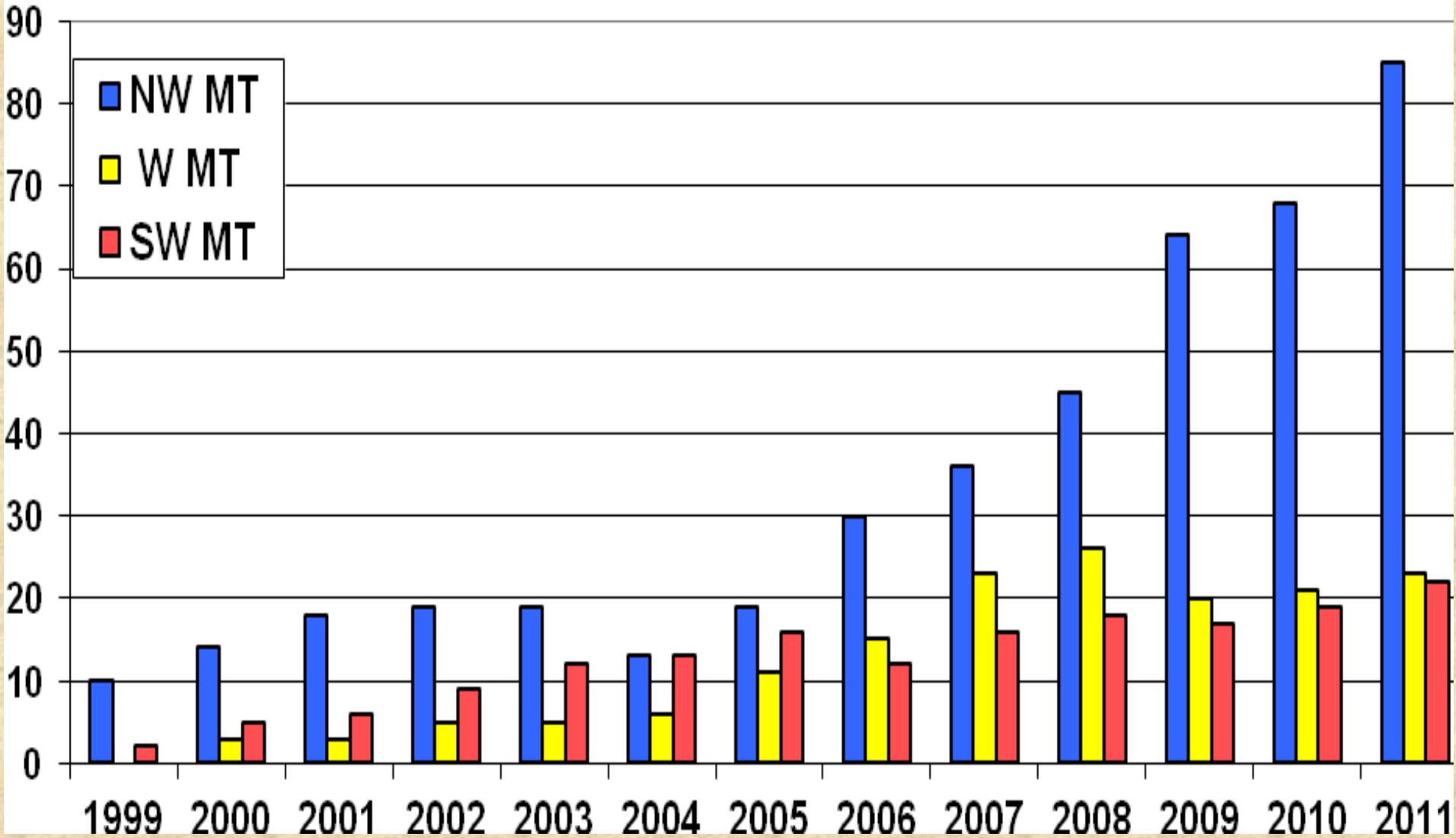




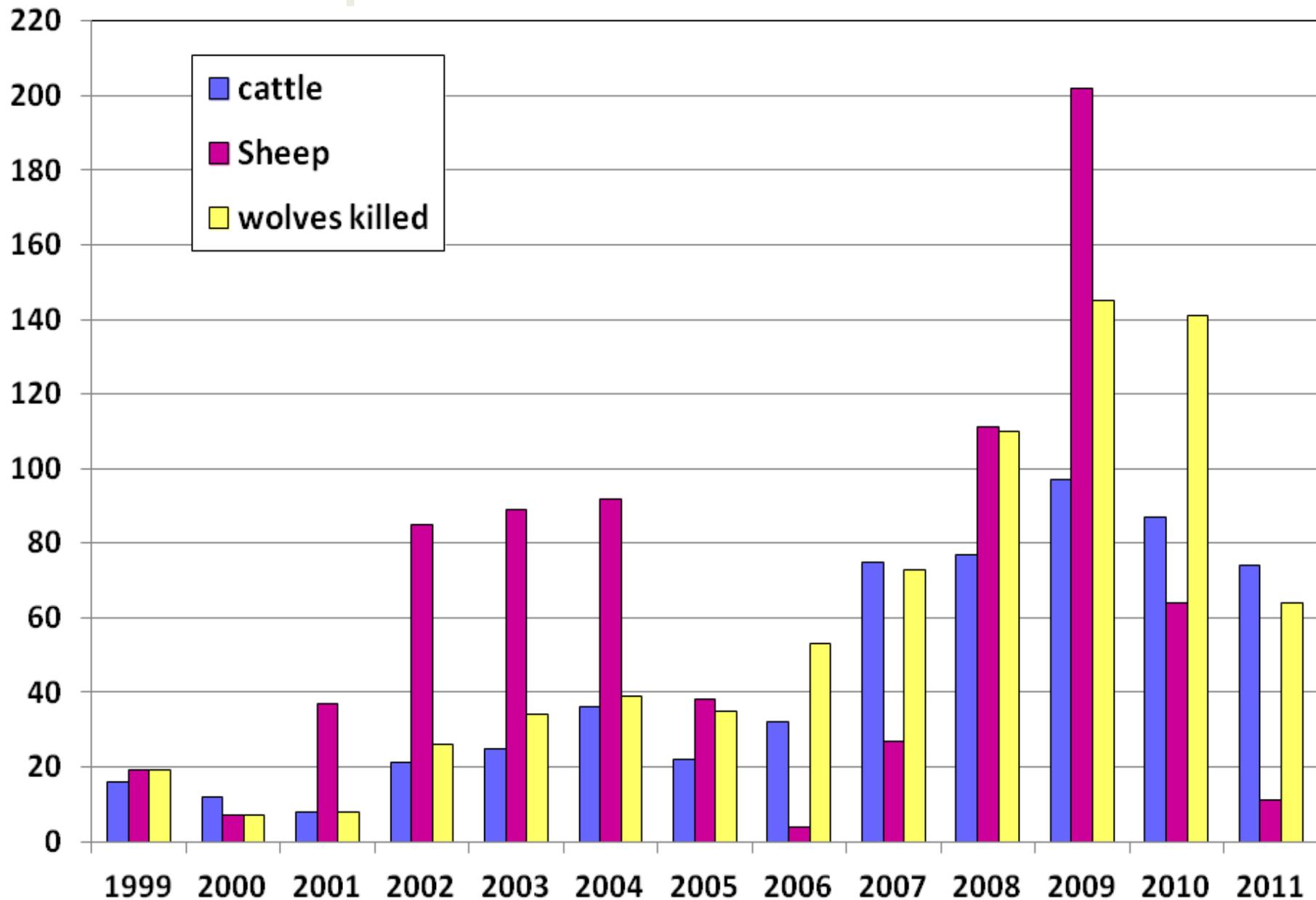
Minimum Number of Wolves in MT



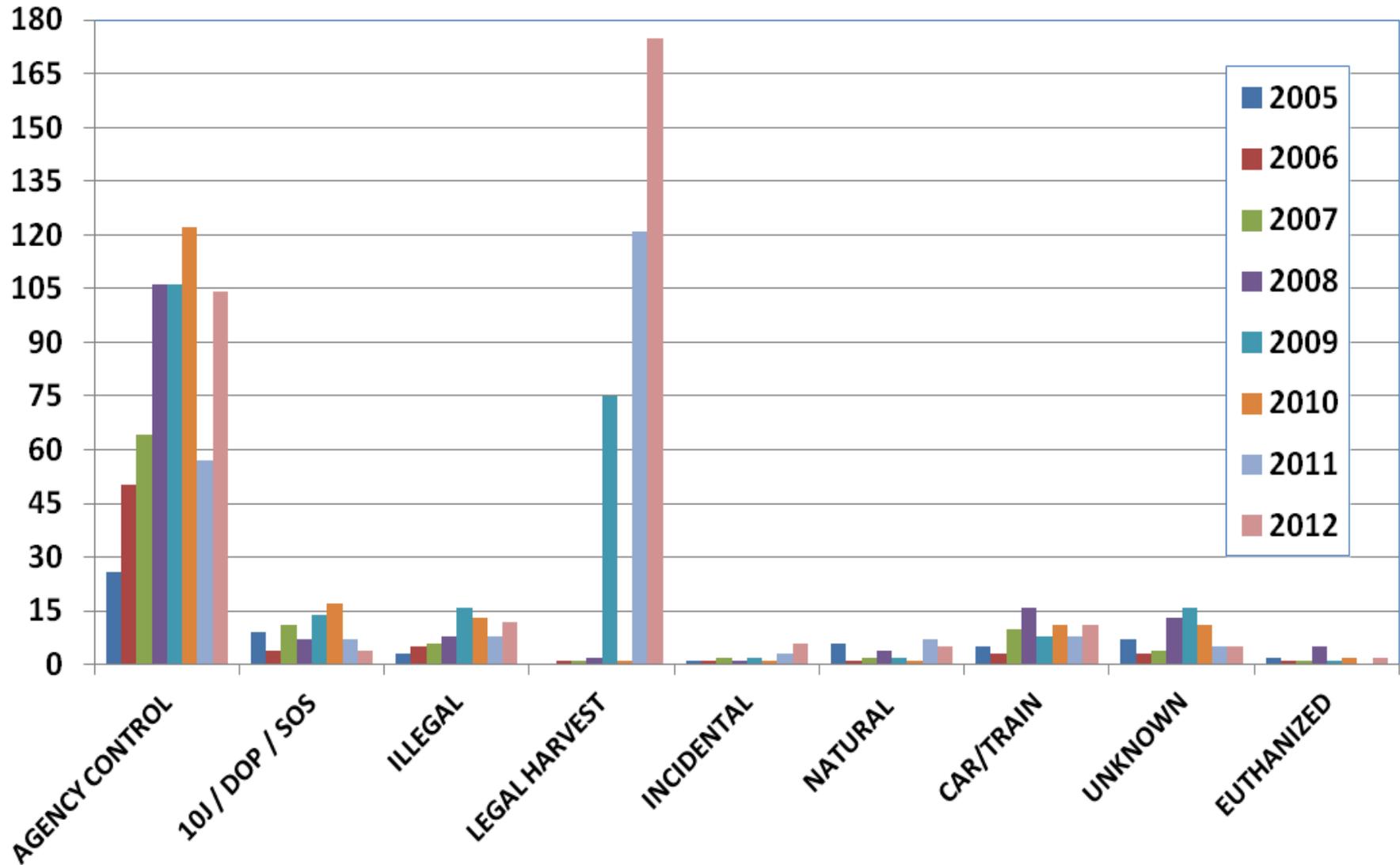
Minimum Number of Packs



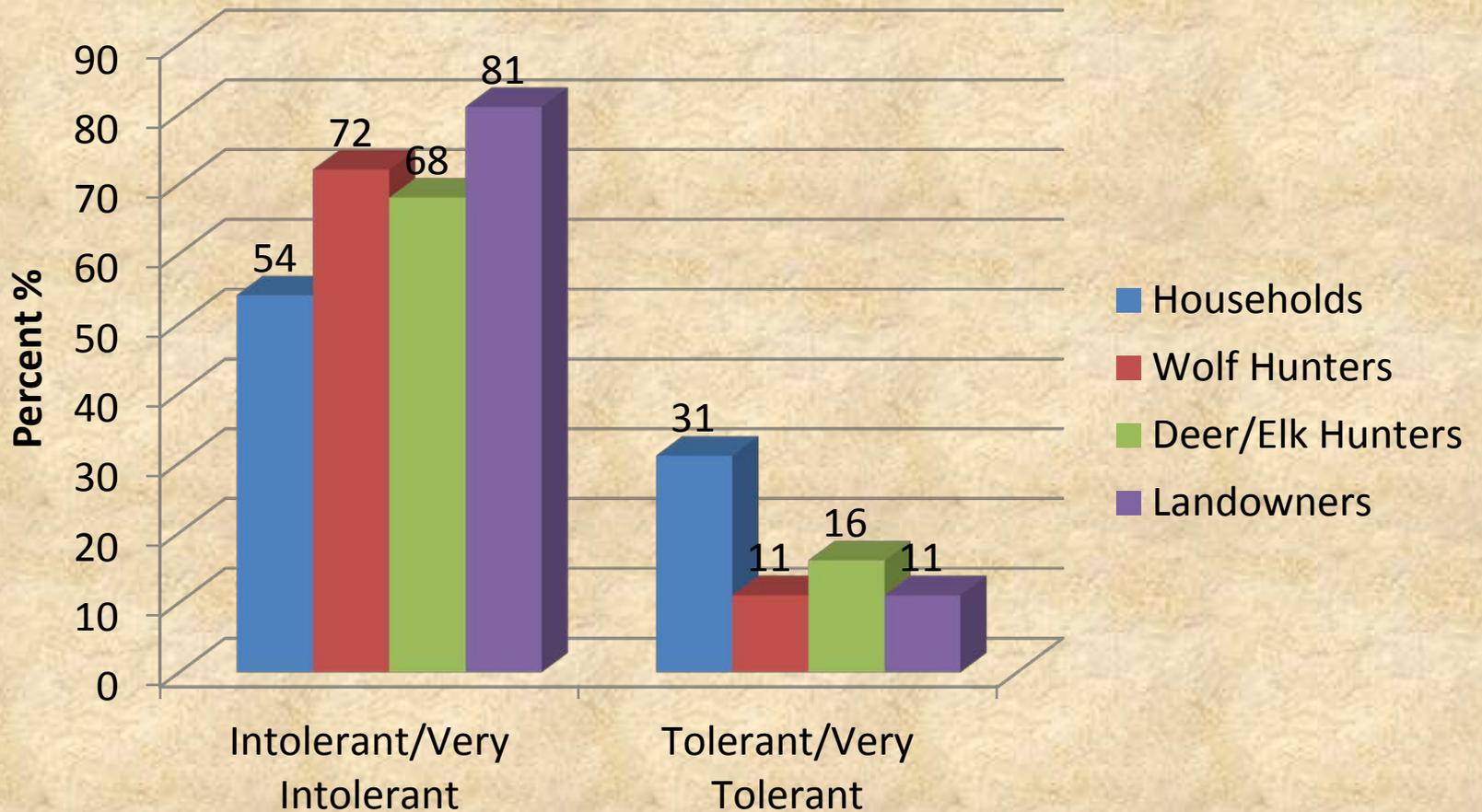
2011 Depredations and Control Actions



Sources of Wolf Mortality



Tolerance of Wolves on MT Landscape



Black Bears





**Salish Mountain Black Bear DNA
Project – July and August 2008**



Table 1. Estimates of female black bear harvest rates in 9 study areas of Montana, adjusted to the long-term average harvest.

Area	All females	Females 1+ years old
BMU 100	1.6	2.2-2.1-2.1
HD 101-102	3.8	5.4-5.2-4.9
BMU 103	2.0	2.8-2.7-2.5
BMU 104	3.7	5.3-5.0-4.8
HD 130	4.4	6.4-6.4-6.0
HD 292	1.8	2.6-2.5-2.4
HD 301	4.2	6.0-5.8-5.6
BMU 411	4.2	6.0-5.9-5.6
BMU 450	2.9	4.1-3.9-3.8
Mean rate	3.2	4.5-4.4-4.2

Grizzly Bears





Grizzly Bear Population Trend Monitoring Efforts



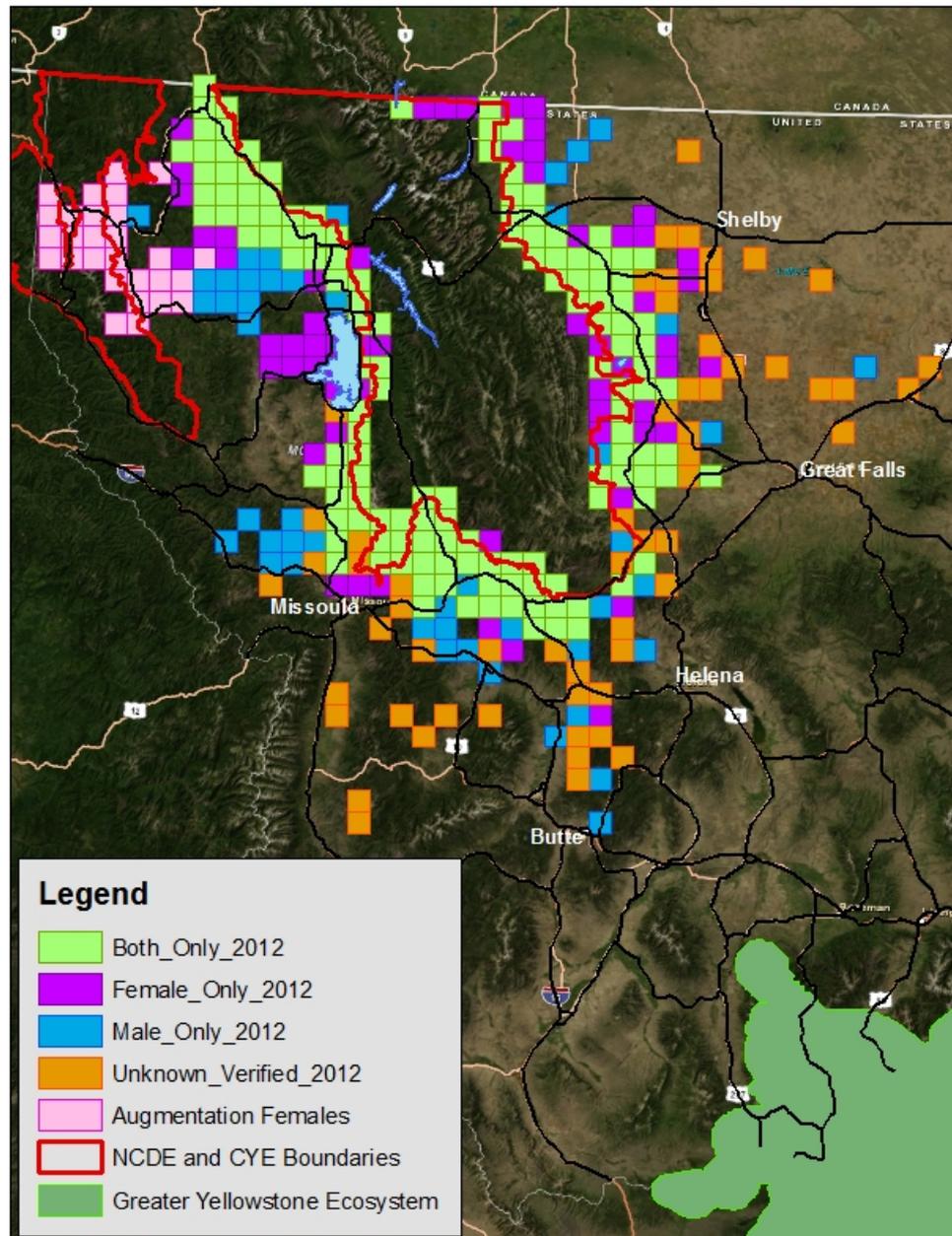
Bob Marshall Wilderness Grizzly Bear Monitoring



Hart Lake Basin

Grizzly Bear Den Surveys









12/13/2009



Pumas

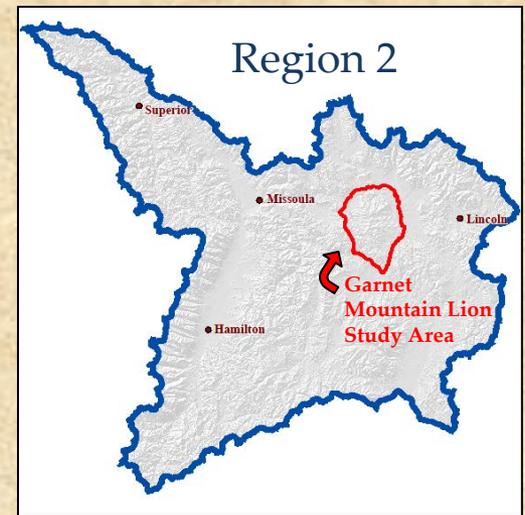




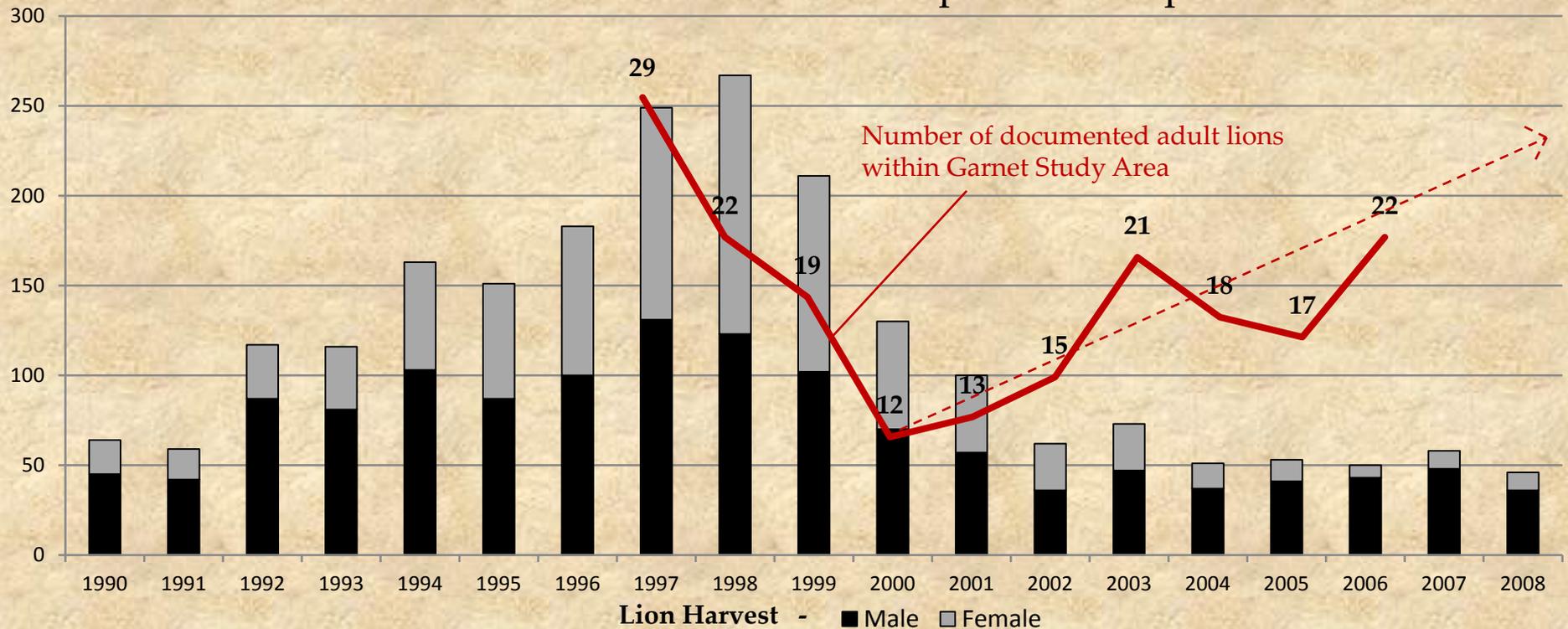
**Boone and Crockett
Puma**

North Fork of the Flathead

Garnet Range Mountain Lion Study



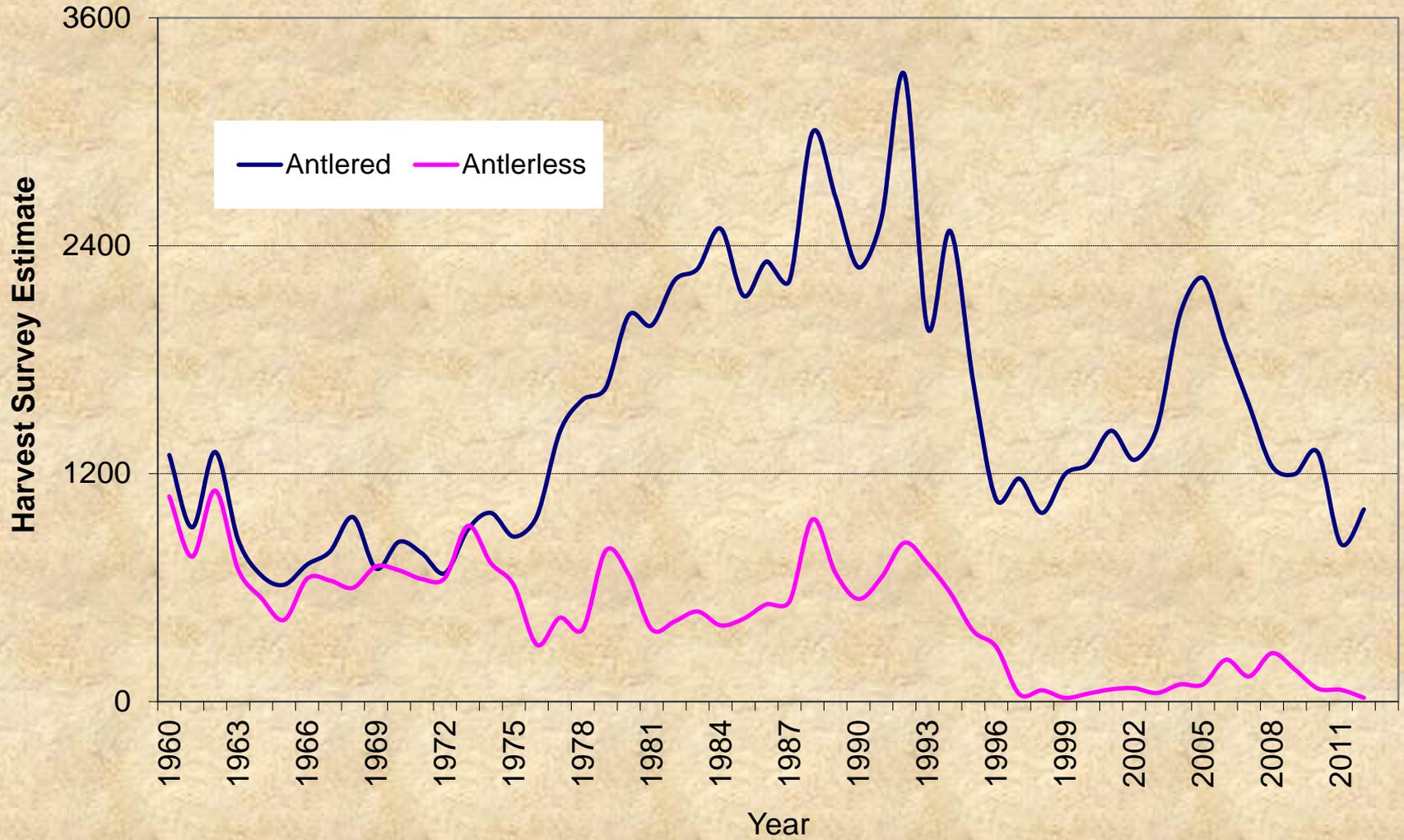
R2 Mountain Lion Harvest and Population Response





Condon - Swan Valley, Montana

R1 MD Harvest Trends



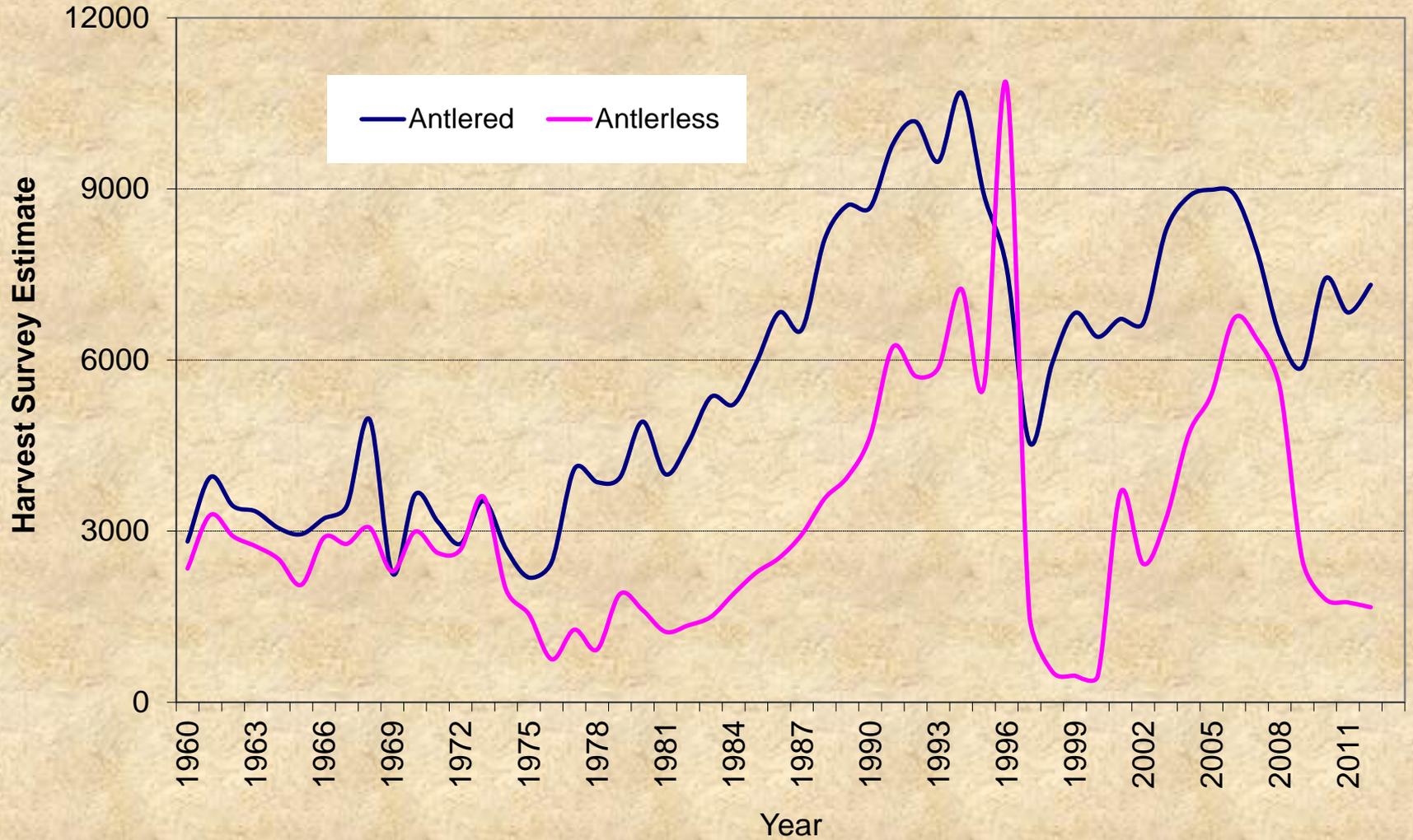


195 0/8
11 NW MT Nontypical
HD 110



232 2/8
5 NW MT Nontypical
HD 141

R1 WTD Harvest Trends



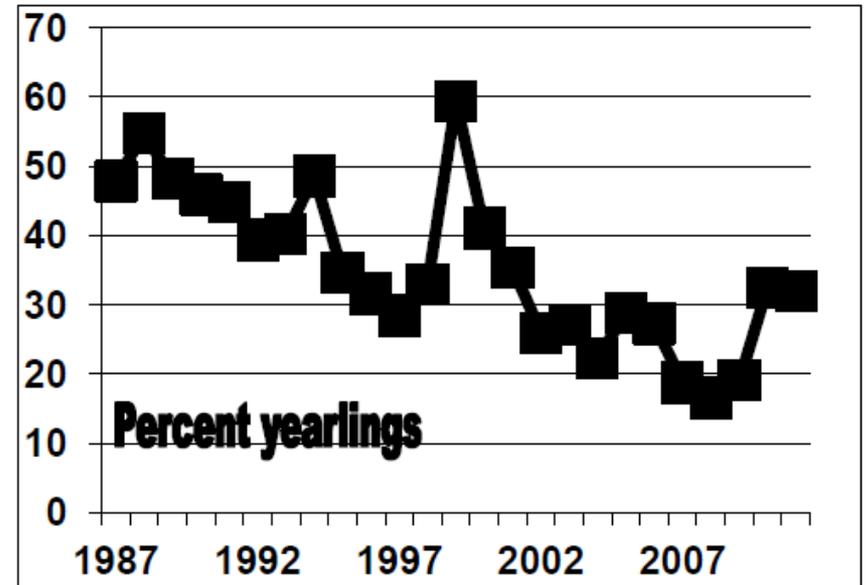
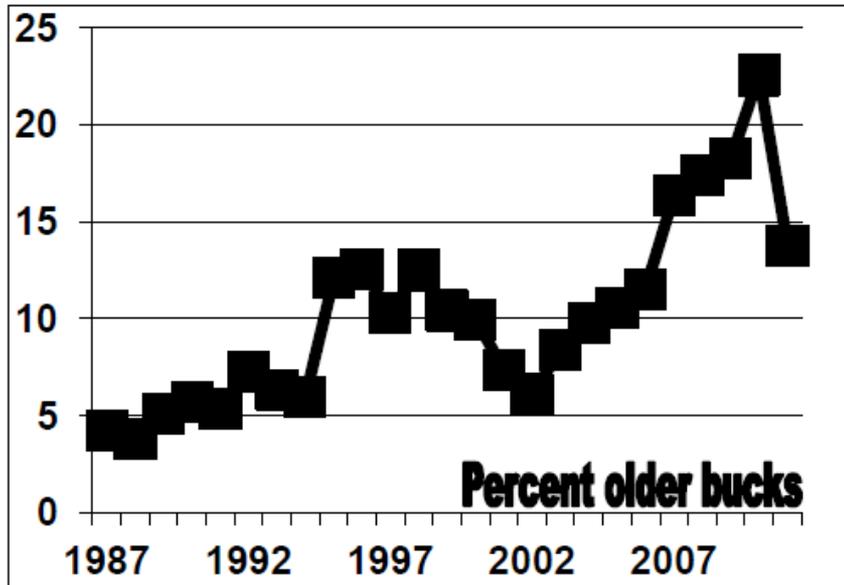
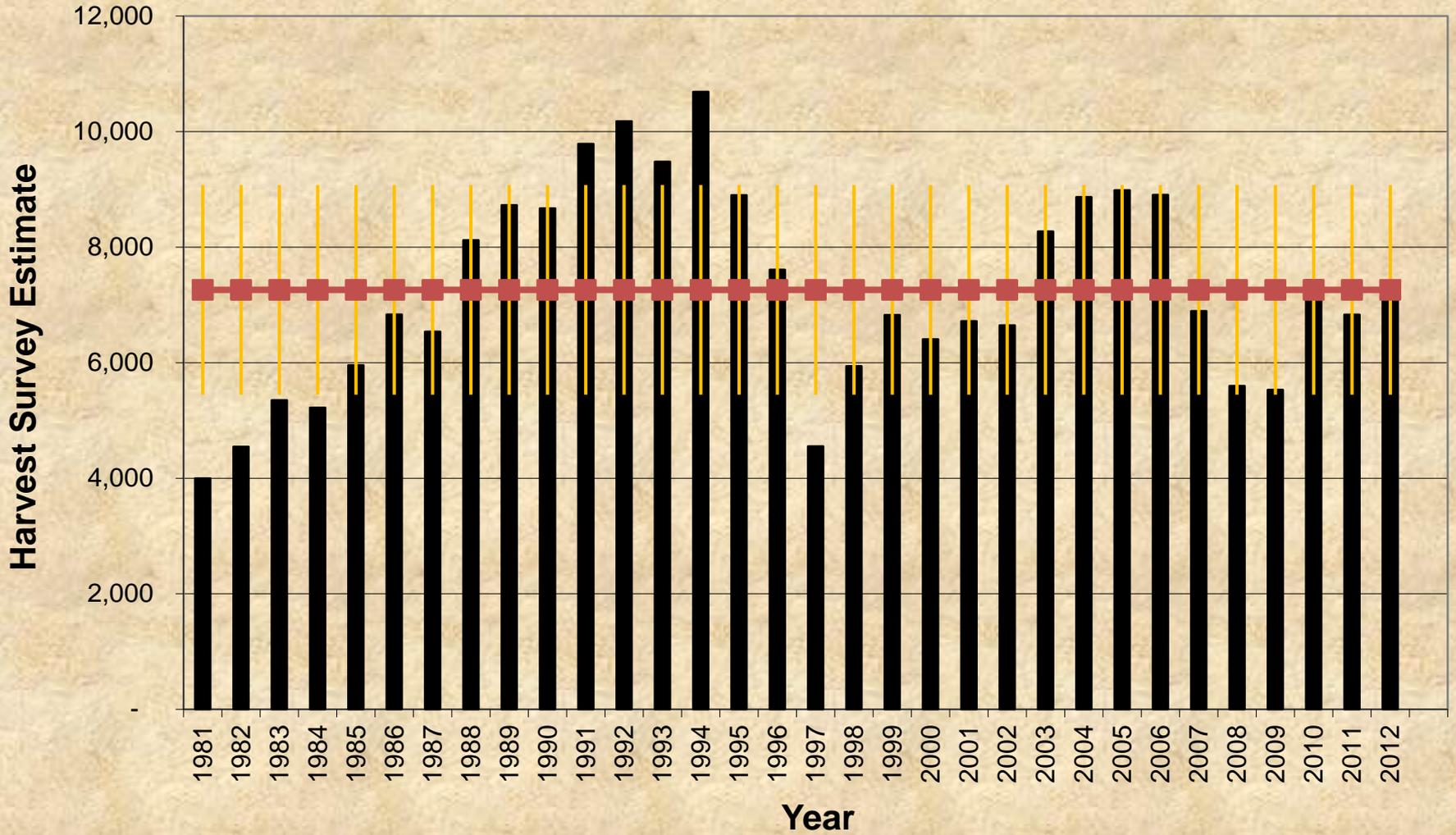


Figure 3. Percent older bucks (5.5-years-old and older, left) and percent yearlings (right) in the buck harvest checked at Region One check stations, 1987-2011.

Trends in Antlered Whitetail Harvest R1 (Mean \pm 25%)



176 1/8
10 NW MT Typical
HD 101



Elk Hunting is Easy in Northwest Montana 😊



Check Station Region One Elk

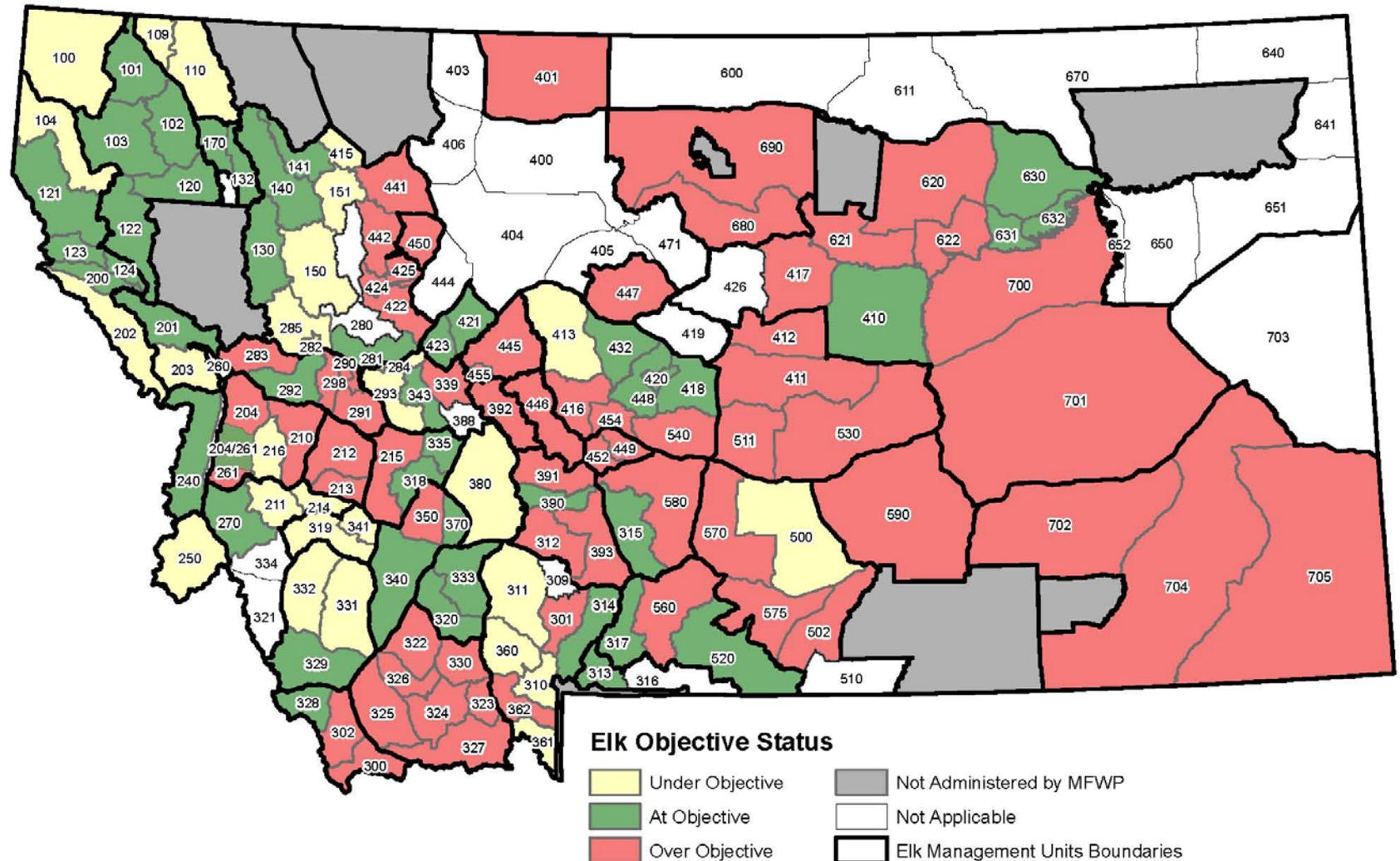






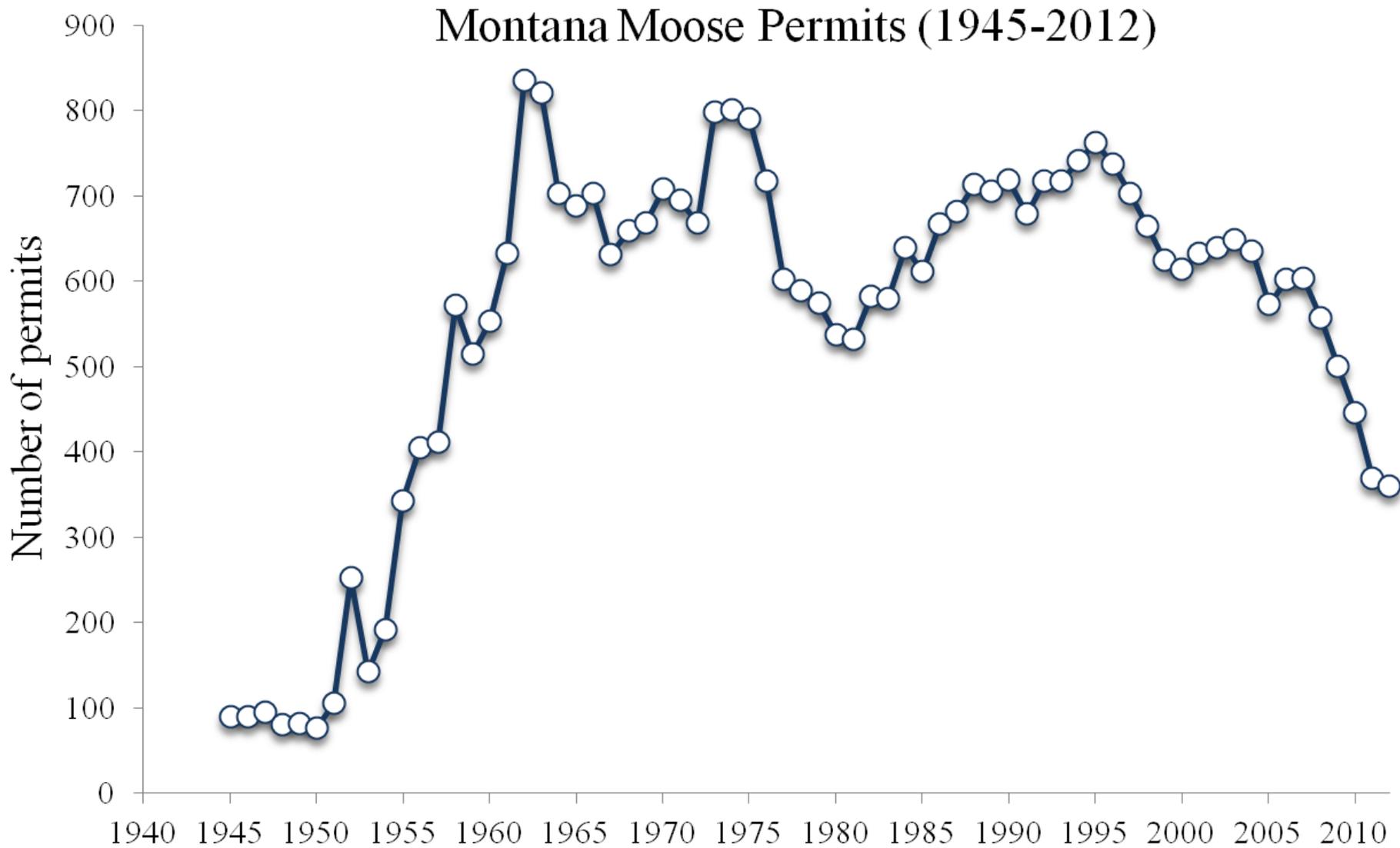
2012/11/04

Elk Population Objective Status by Hunting Districts - 2011





Moose in Montana



Moose dynamics in Montana:

A new statewide research program

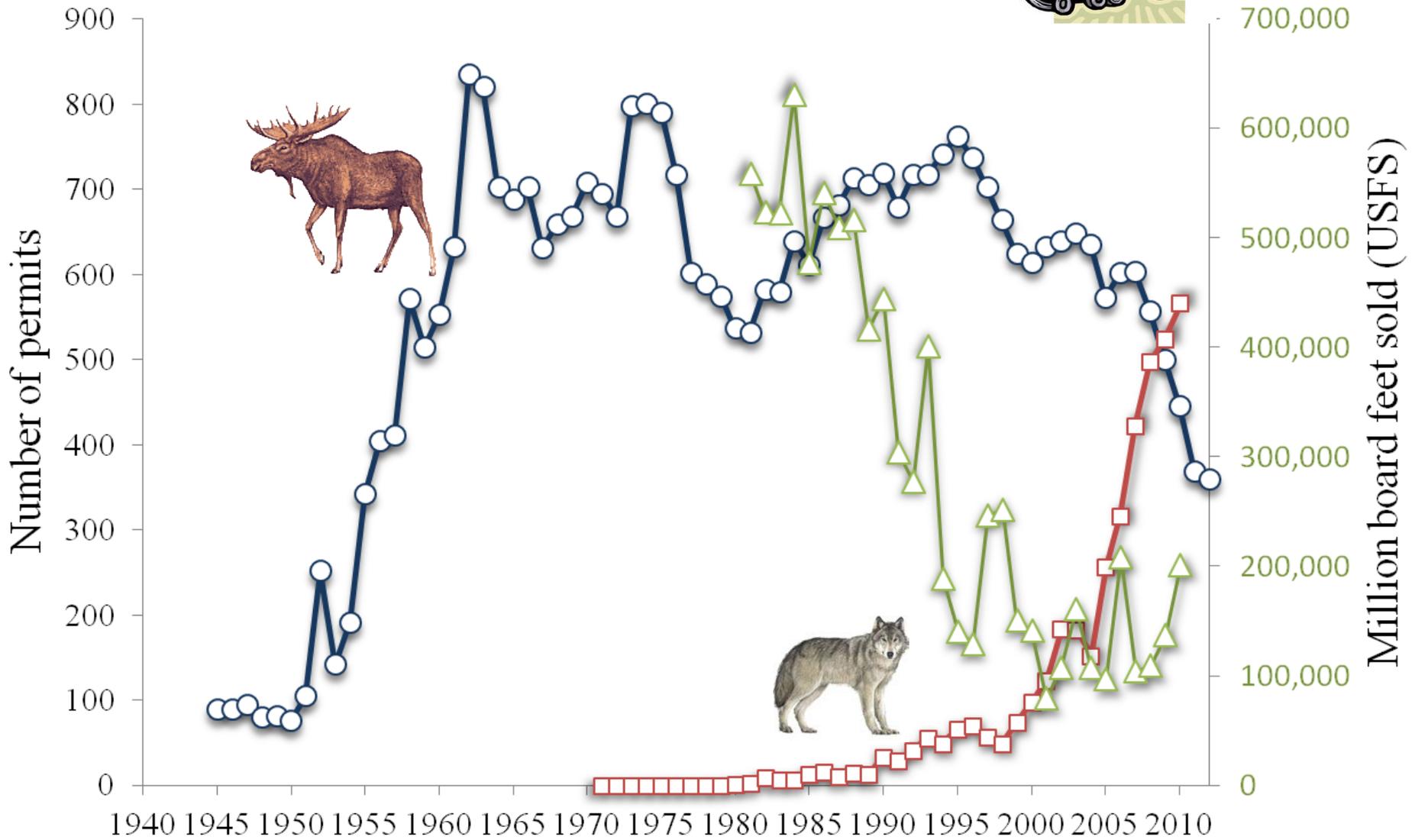
Nick DeCesare, Wildlife Research Biologist, FWP

Jesse Newby, Wildlife Research Technician, FWP

... Many other cooperating biologists, landowners ...



Potential factors



Moose Predators



*Predator-prey dynamics of moose and wolves/bears are well-studied



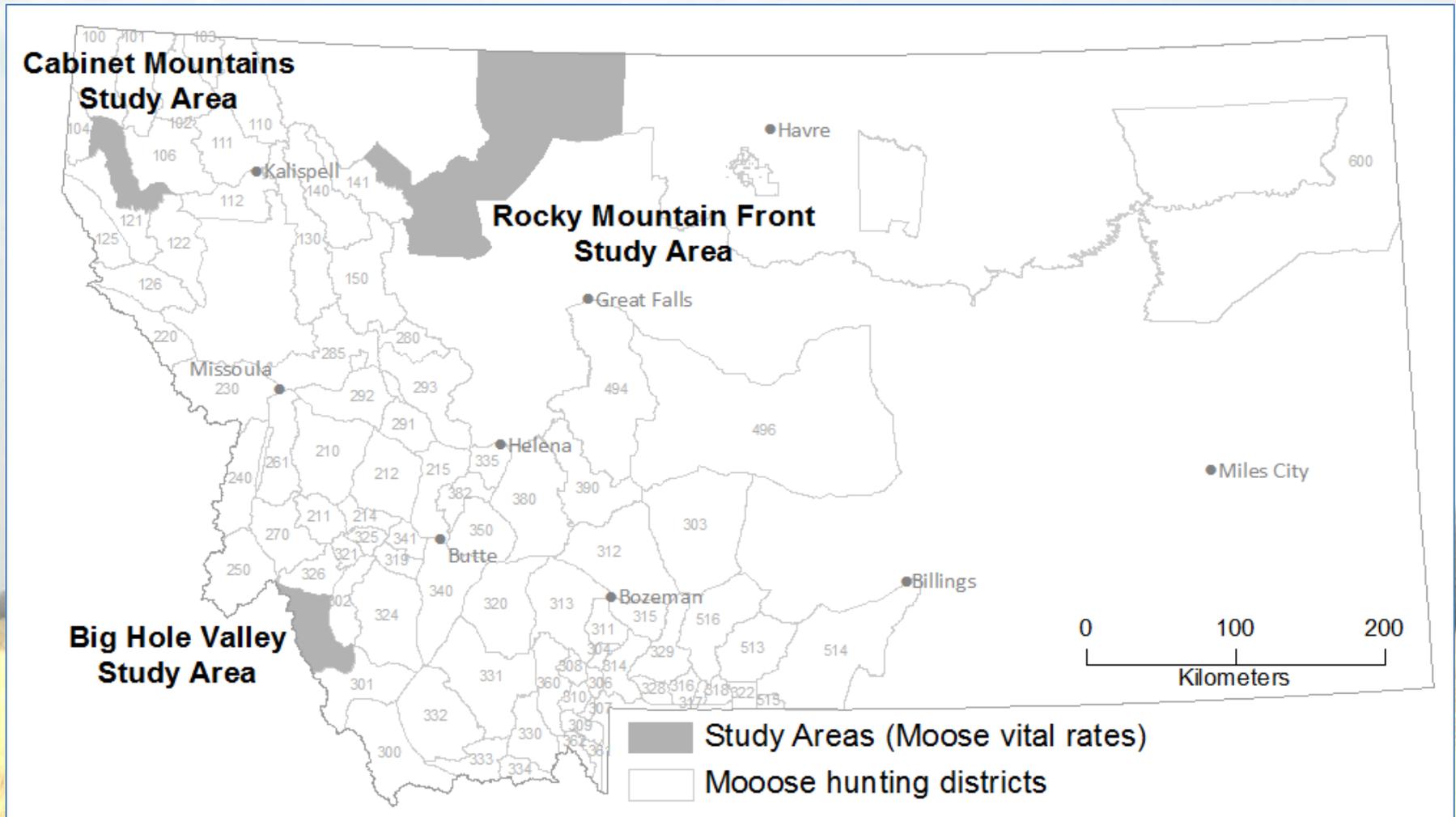
*Bears can be important predators of calves during first 30-60 days of life

*Brown bears (Alaska) can also be significant predators of adult moose.



*Wolf predation becomes a primary source of mortality on yearling/adult moose.

Study areas



Predators and Prey (Wolves vs. Elk??)



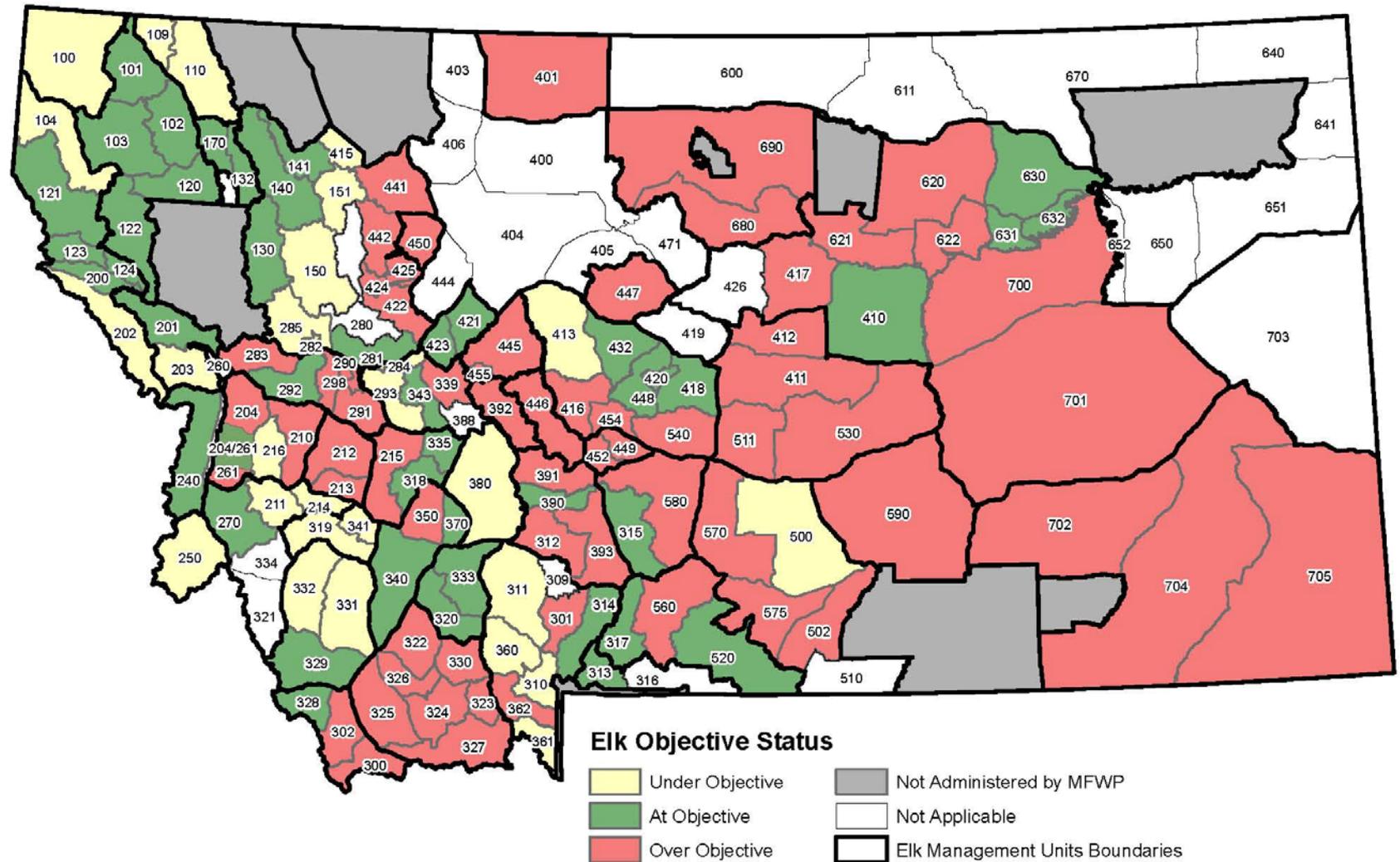


How are we doing with Elk management in Montana?

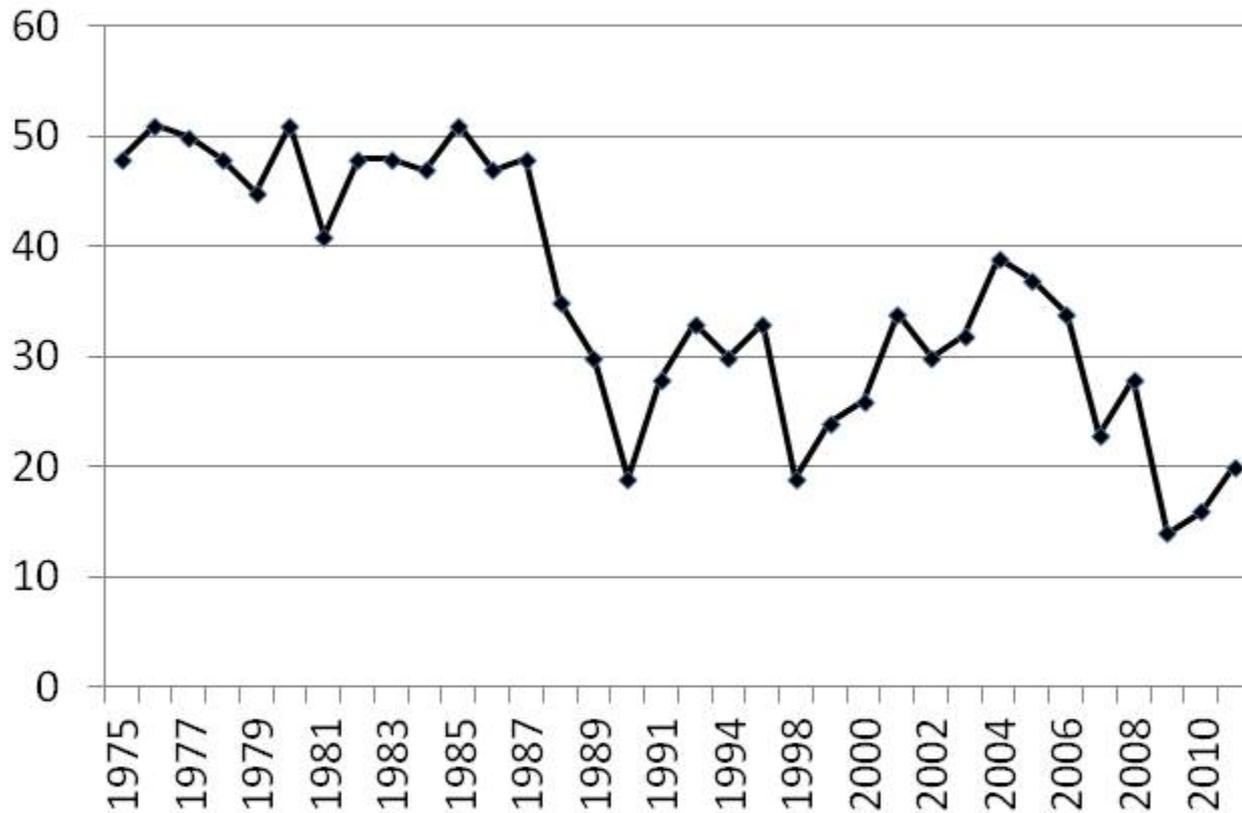
Statewide: Total for all hunting districts

Elk Plan Objective	2011 Elk Observed	Estimated Elk Numbers
90,910	112,490	140,613

Elk Population Objective Status by Hunting Districts - 2011



Elk calves per 100 cows in the Bitterroot

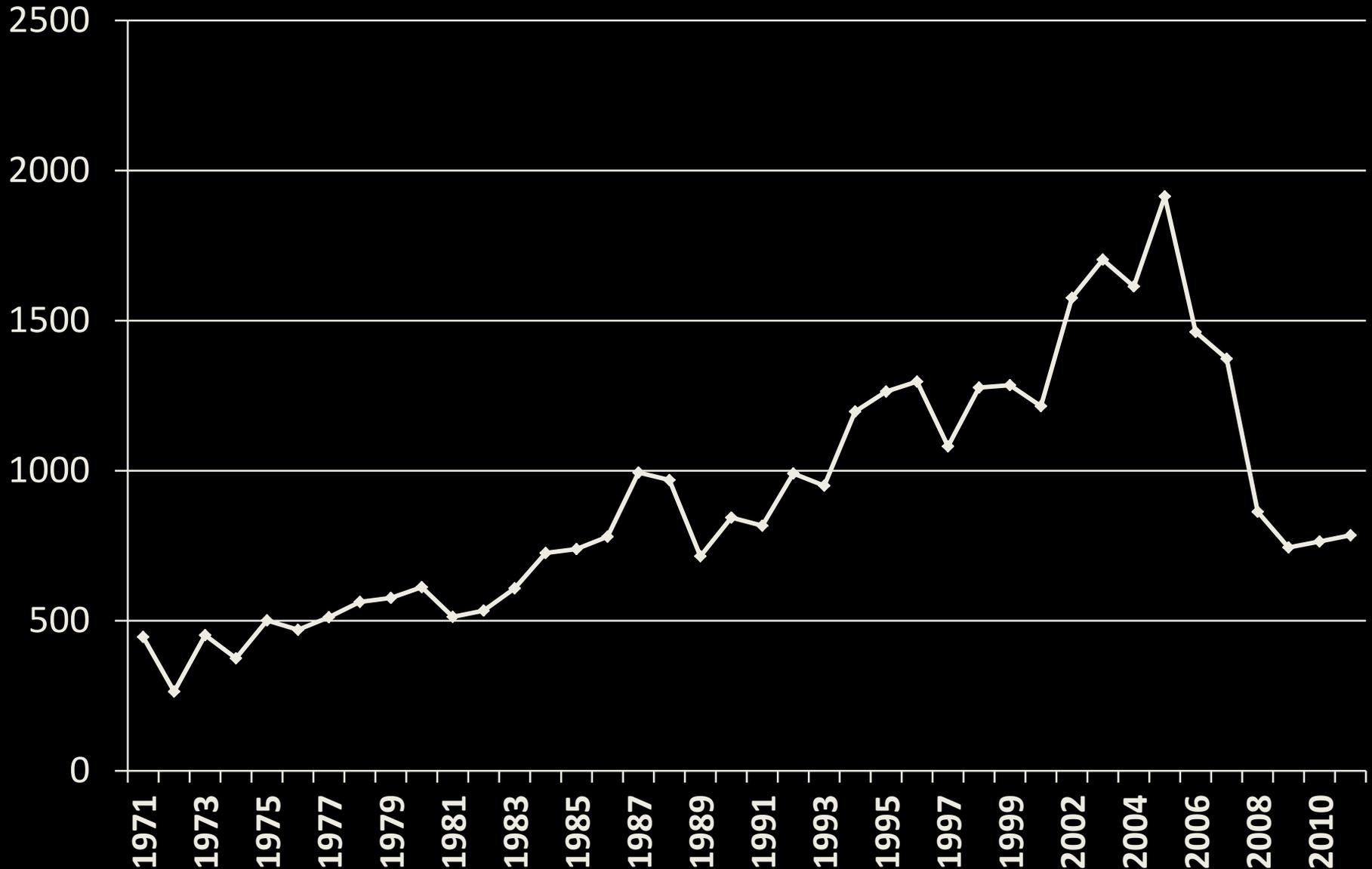


What Happened in HD250?

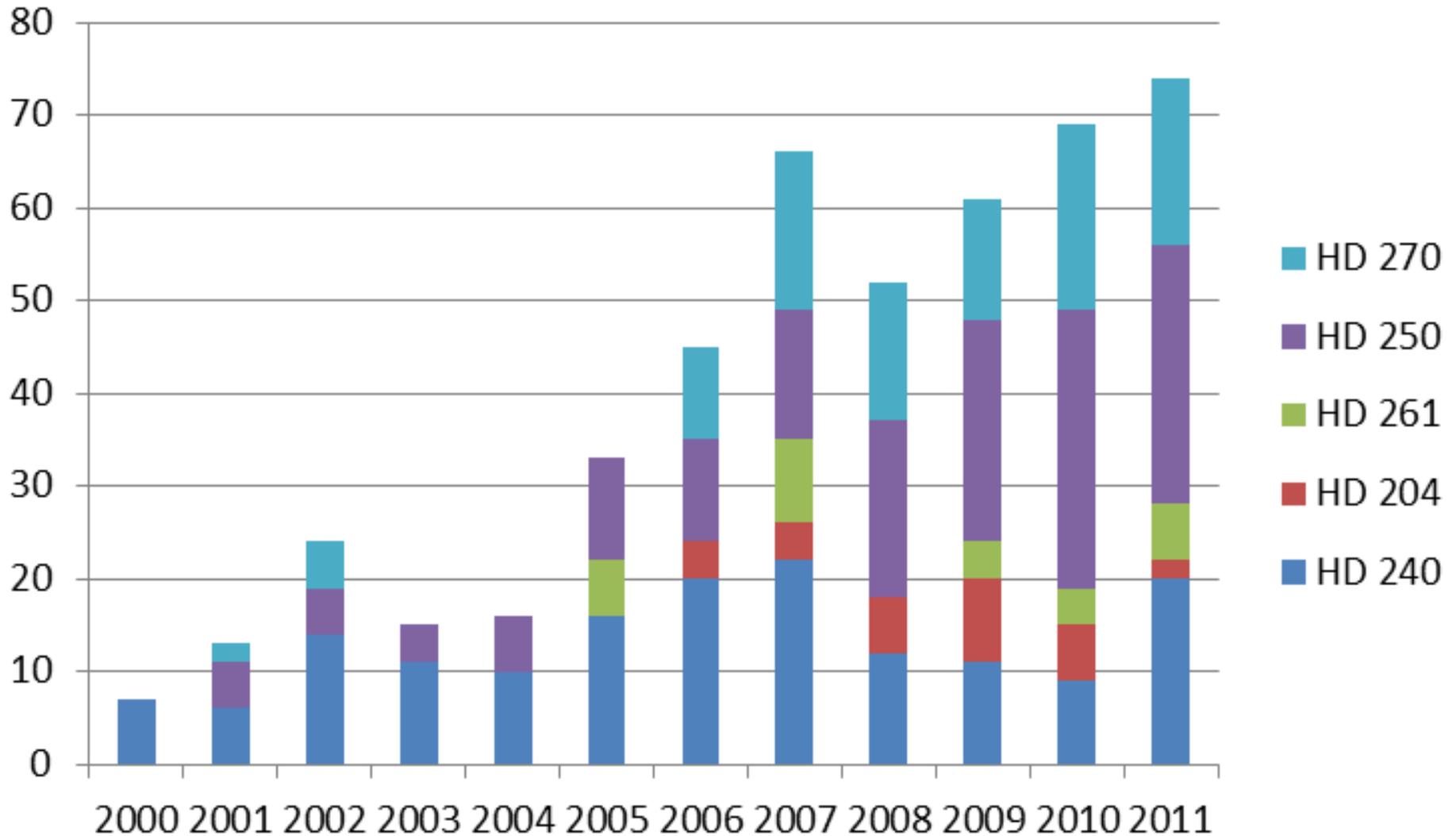
A Perfect Storm

- 2003 House Bill 42: Must manage elk at or below objective
- Wolf population started in 2001
- Lion population increasing
- Bear predation on newborn calves
- Winter severity

Elk Spring Trend Counts HD250



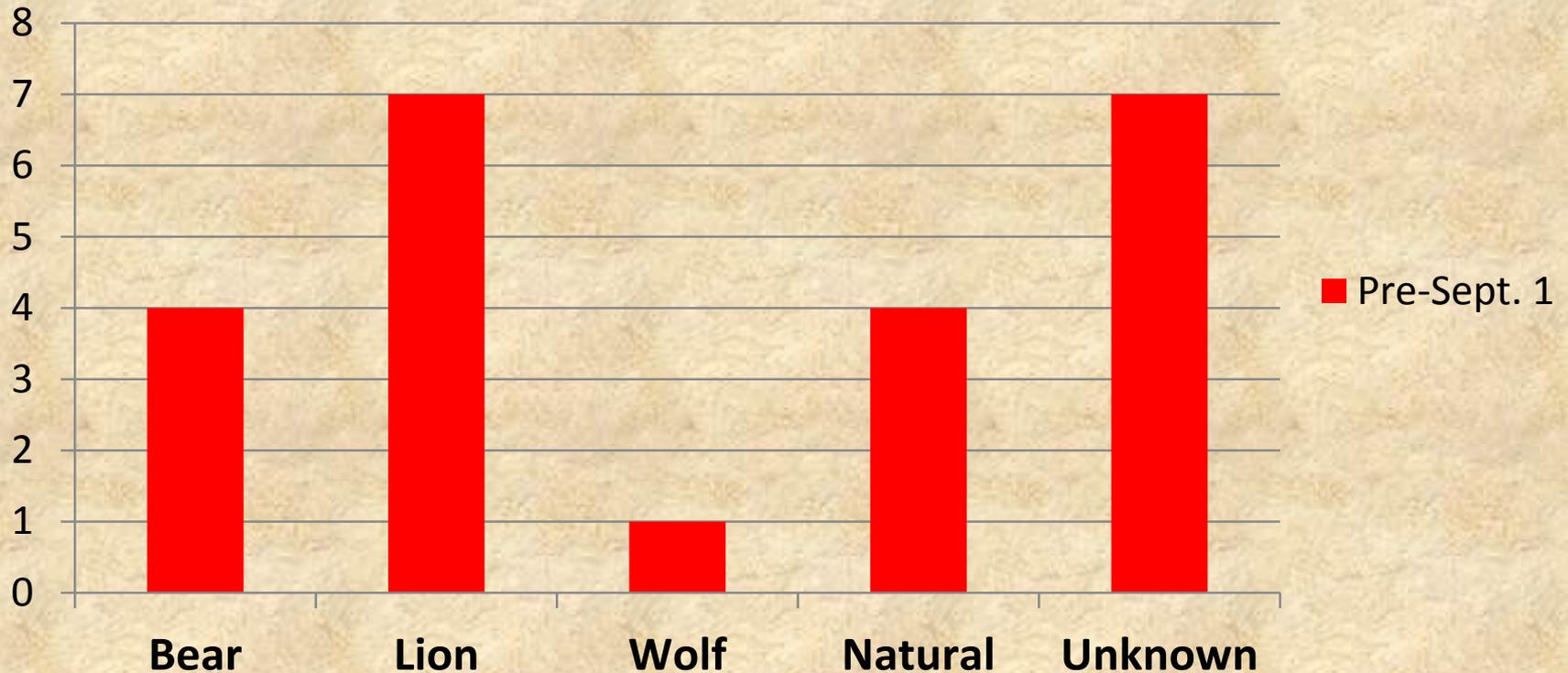
Bitterroot Valley Minimum Wolf Counts



Bitterroot Calf Mortality in Summer

Preliminary results from FWP/UM Research

66 tagged – 23 went to mortality mode



Bitterroot Elk Cow Mortality

Preliminary Results from FWP/UM Research

42 collars on from 2/14/11 to 1/9/12:

- 3 Natural mortalities
- 2 Unknown
- 1 Wolf predation
- 1 Lion Predation

Wolves kill pumas and pumas kill wolves



Grizzly Bears and Pumas and Wolves



Predators and Prey (Wolves vs. Elk?)

1. Hunters

2. Lions

3. Wolves

4. Bears

5. Winter Severity

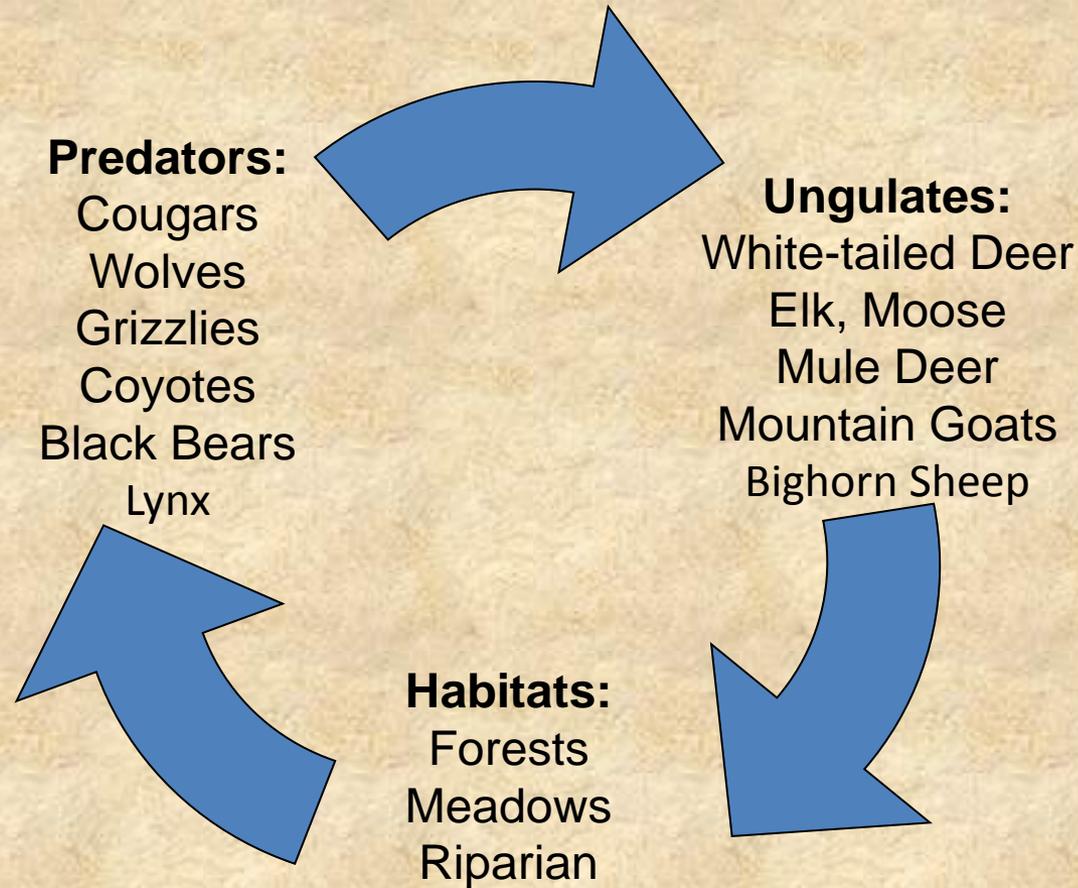


vs. Elk



Season Setting - Western Montana

Complex predator-prey ecosystems



FWP COMMISSION ACTION JULY 10, 2013

Approved the final 2013-14 wolf season.

The general hunting season will run from Sept. 15 - Mar. 15, the trapping season from Dec.15-Feb. 28. Bag limit was increased to five per person in any combination of wolves taken by trapping or hunting.

No statewide quota, two WMUs with quotas North of Yellowstone National Park and one South of Glacier. Commission will review the season at their December meeting.

Hunting Strategies?



Wolf Hunters

Deer and Elk Hunters



Deer and Elk Hunters



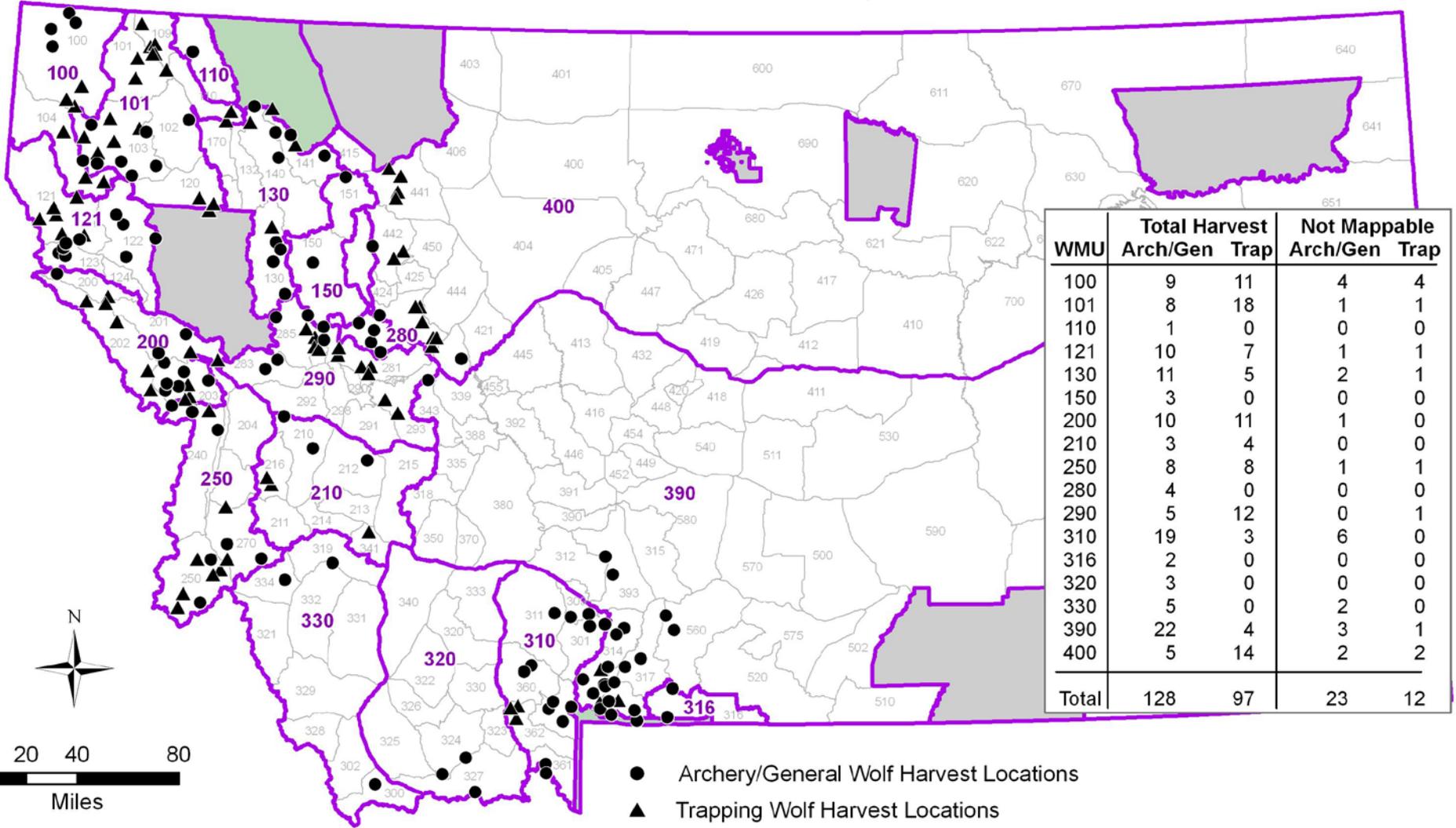
Hunt in less vulnerable habitats.... It's not easy....

Hunt in areas that have fewer hunters.... away from open roads...

Our radio collar work shows that hunters move elk more than predators...



Harvest Locations from 9/1/2012 through 2/28/2013



- Archery/General Wolf Harvest Locations
- ▲ Trapping Wolf Harvest Locations
- Gray Wolf Management Units (WMU)
- 2012 Deer/Elk Hunting Districts

NOTE:
 - Some points have been moved up to 5 miles from actual harvest location for display purposes
 - Reflects harvests reported and checked as of 3/1/2013



The Reality of Hunting with Recovered Native Carnivores in Montana

We Have an Intact Species Assemblage Again...

Be flexible and sensitive to hunter concerns over predation and winter.

Watch winter severity and summer drought closely. (Brodie et al 2013)

Monitor condition of winter range - especially conifer canopy/thermal cover.

WT Deer – Be very careful with antlerless hunting on public lands.

Mule Deer – Buck only hunting on western Montana public lands.

Elk – BTB hunting and very limited antlerless elk hunting on public lands.

Moose – Bull only hunting now – we eliminated the antlerless option.

Moose – Initiated long term scientific research and hired project staff.

Wolves on a Montana Highway!

OTHER PASSENGERS

Pumas
Grizzly Bears
Black Bears
Coyotes
Bobcats
Hunting
Snow
Cold
Heat
Drought
Habitat
Disease
Vehicles





Questions?

