

A mule deer with large, dark antlers stands in a field of tall, dry grass. The deer is facing forward, looking directly at the camera. The background is a blurred landscape of trees and a hazy sky. The overall tone is muted and naturalistic.

Bates Hole / Hat Six Mule Deer

Herd History and Current Status

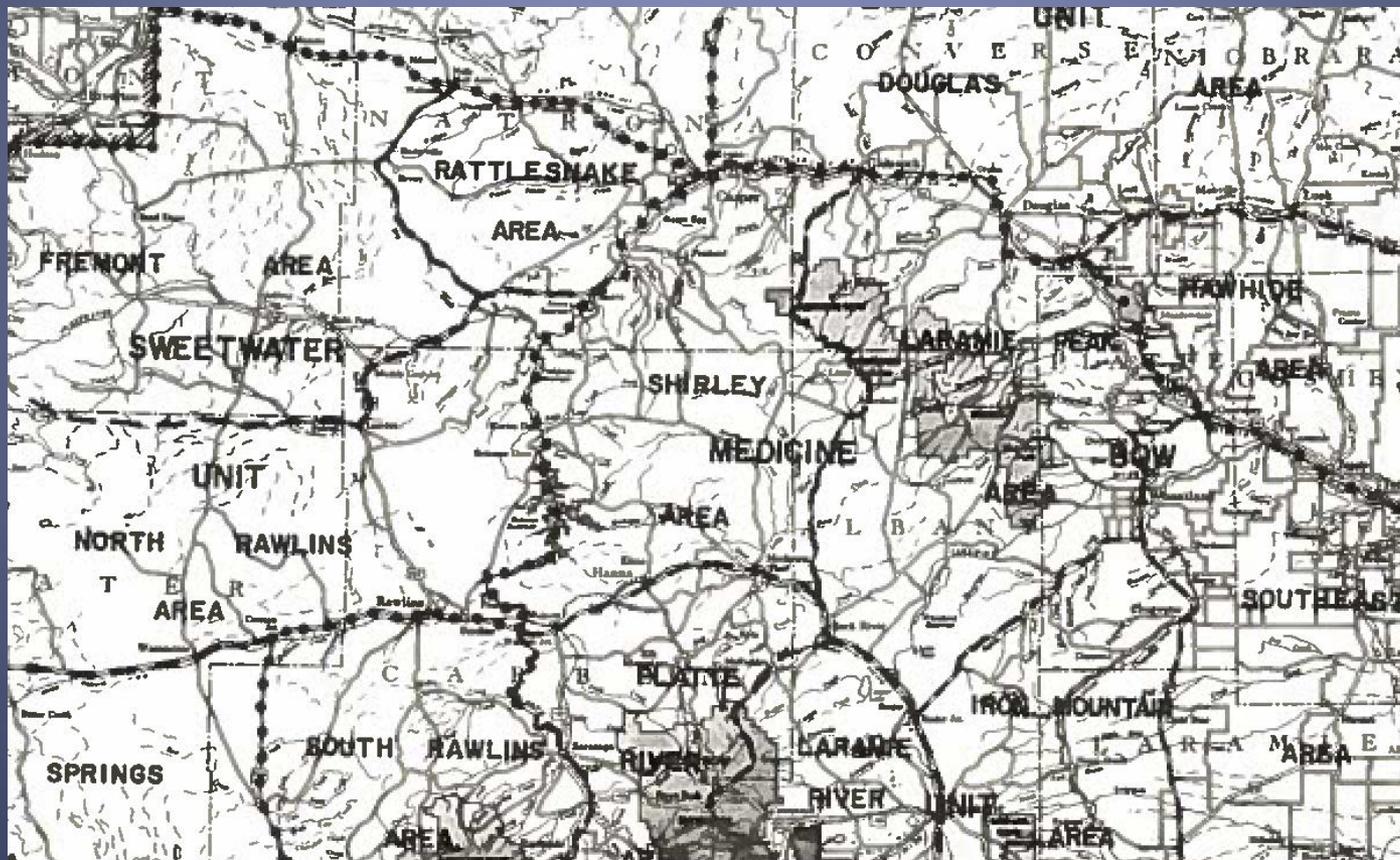
Bates Hole / Hat Six Mule Deer

- Historic Hunt Areas
- Hunting Seasons Over Time
- Hunter Statistics Over Time
- Changes in Population
- Historic Buck and Fawn Ratios
- Current Herd Status & Issues



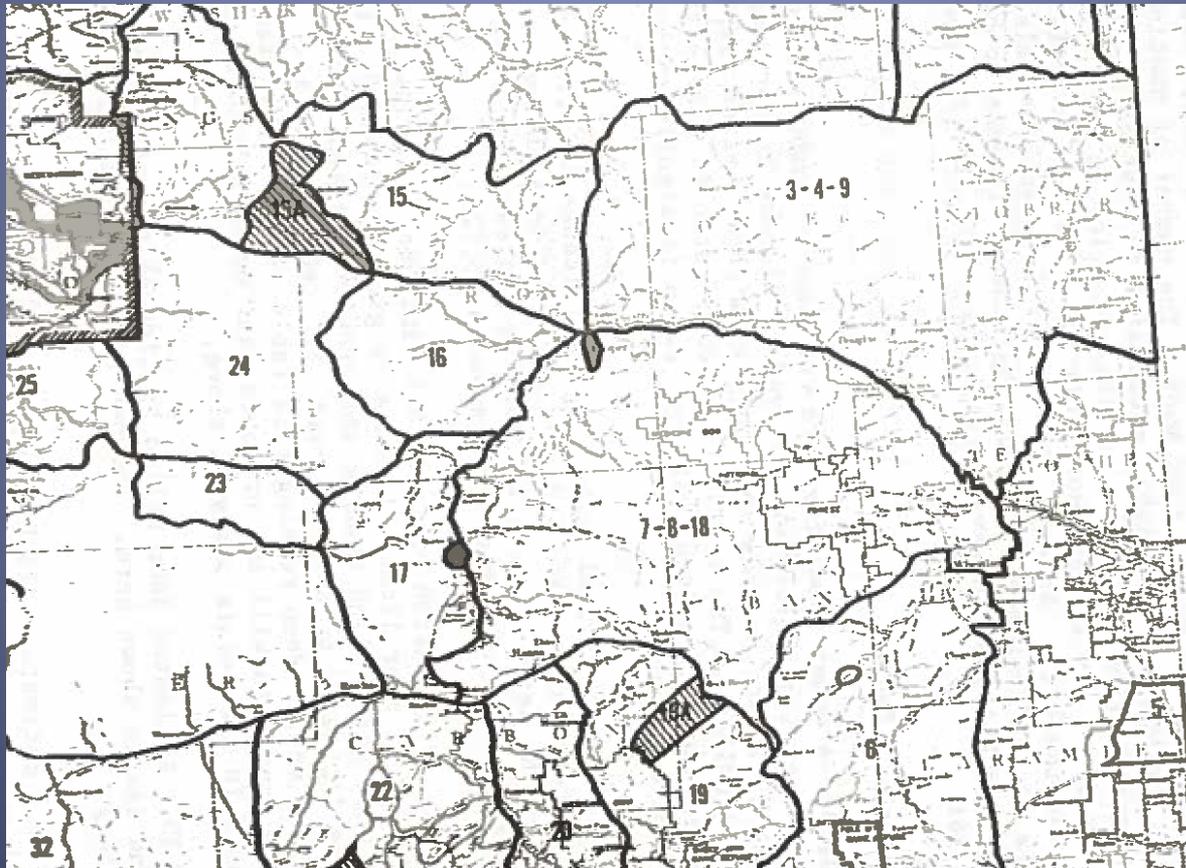
Historic Hunt Areas: 1959

Shirley Area of Medicine Bow Herd Unit



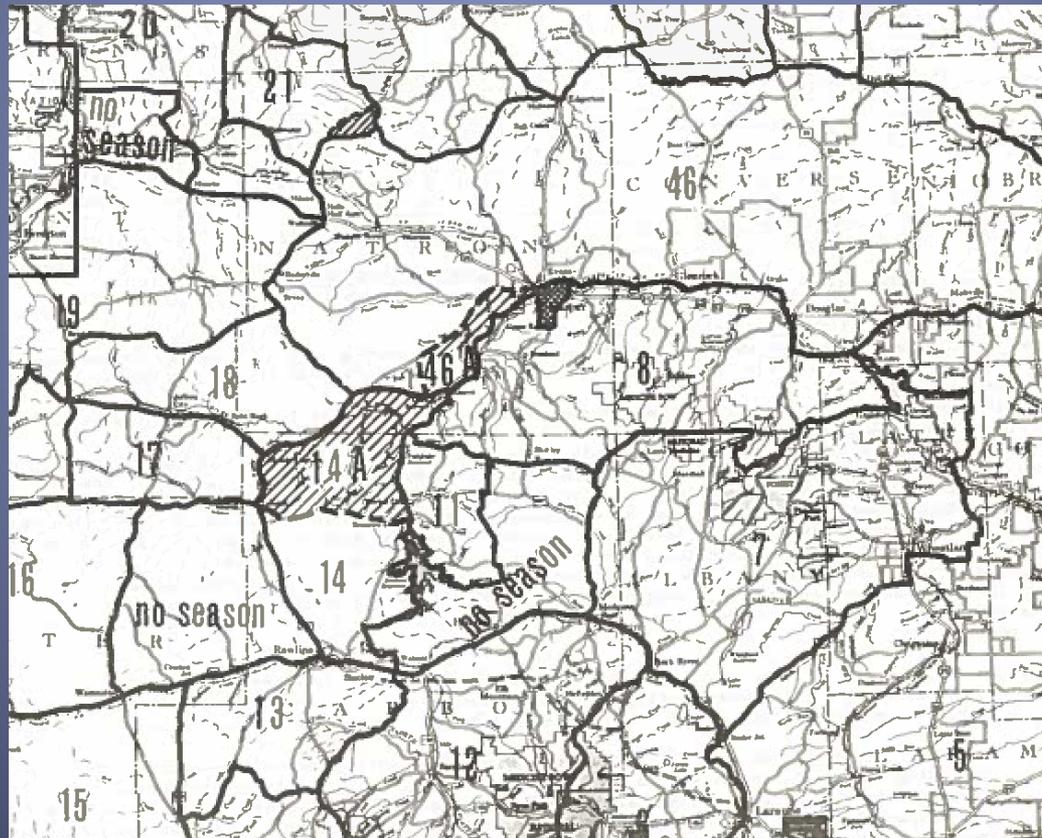
Historic Hunt Areas: 1962

Part of the Laramie Peak / Shirley Unit



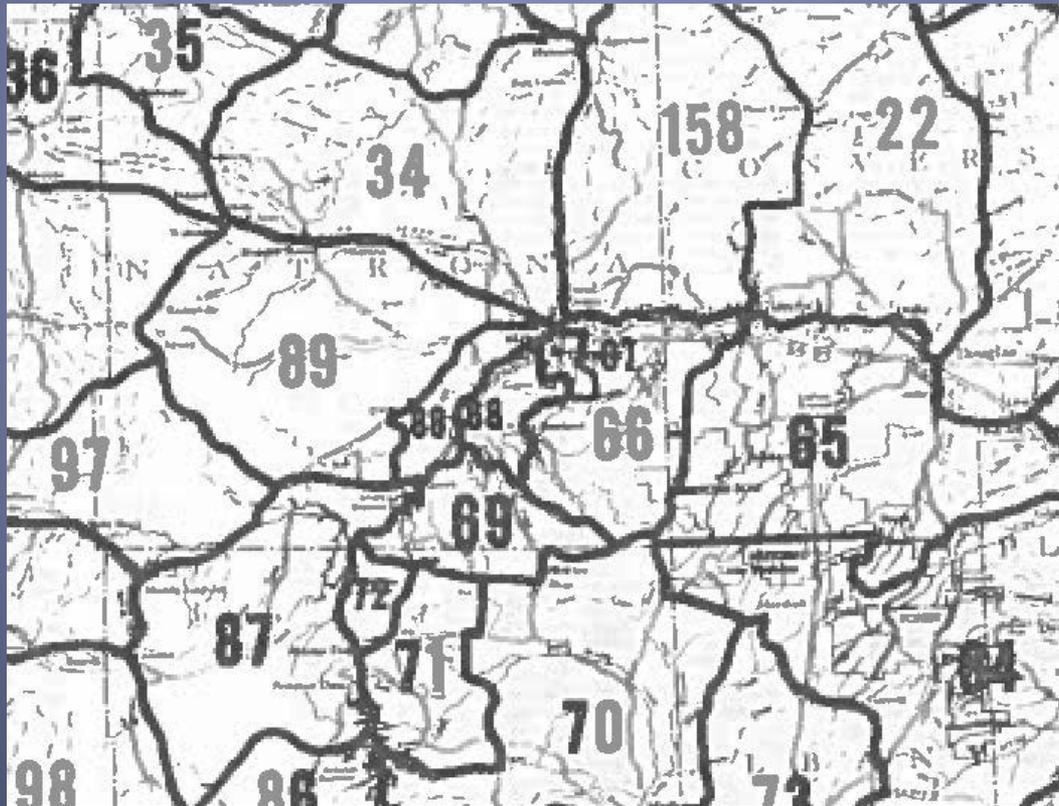
Historic Hunt Areas: 1968

Part of Bates Creek – North Laramie Herd



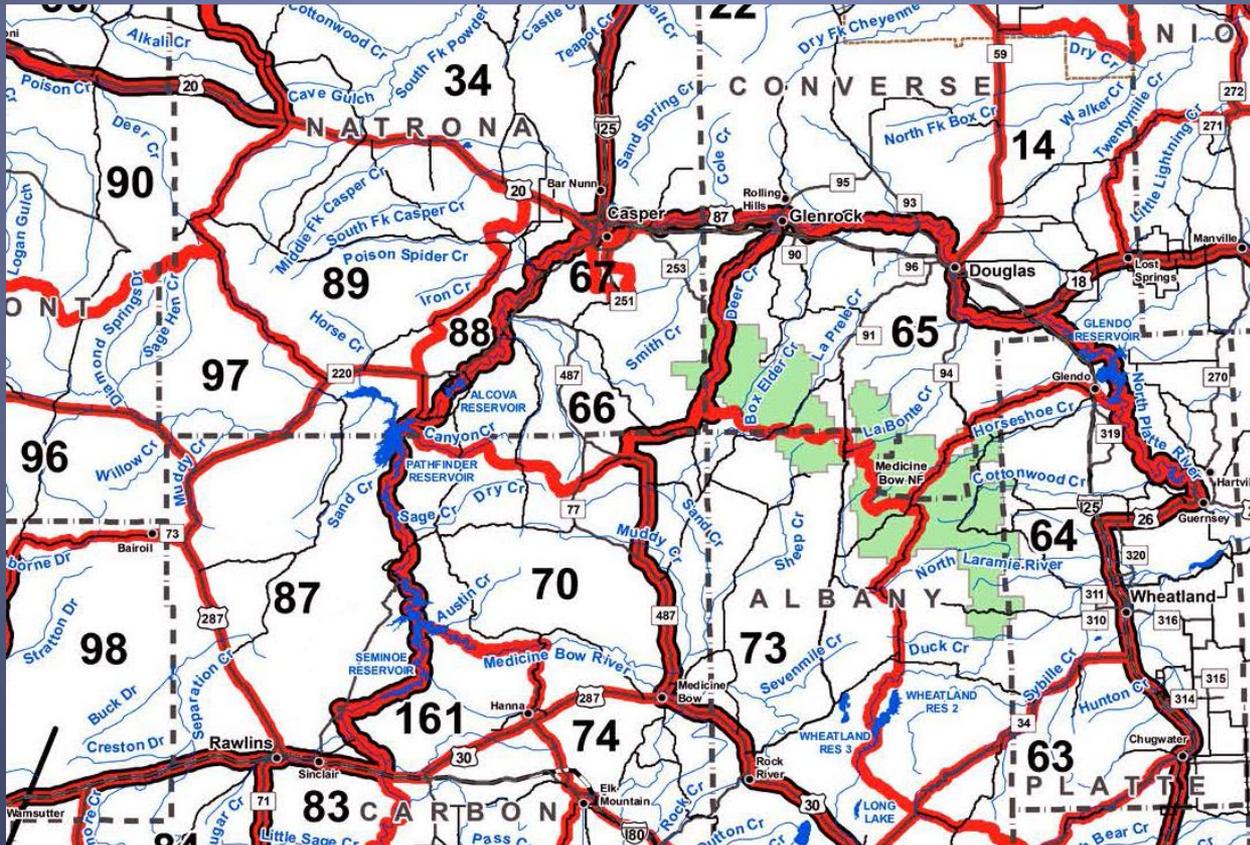
Historic Hunt Areas: 1971

Same herd unit area as today
But split into smaller hunt areas



Historic Hunt Areas: 1984

Smaller areas combined to become Areas 66 & 67



Hunting Seasons Over Time

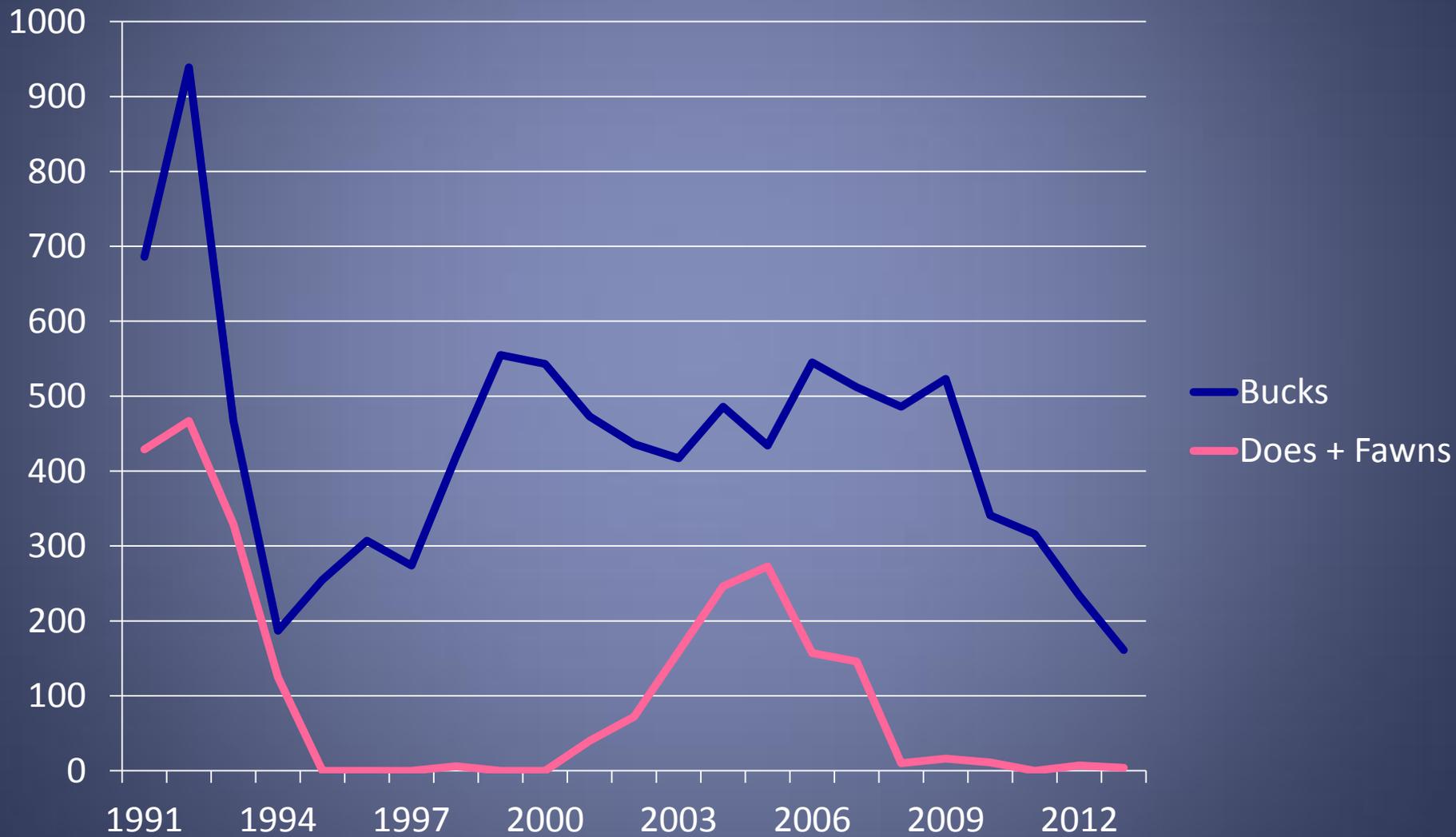
- General License Area(s)
- Additional Limited Quota tags in some years
- Antlered or Any Deer
- Length of season changed year to year
- Area 67 has always been closed to hunting



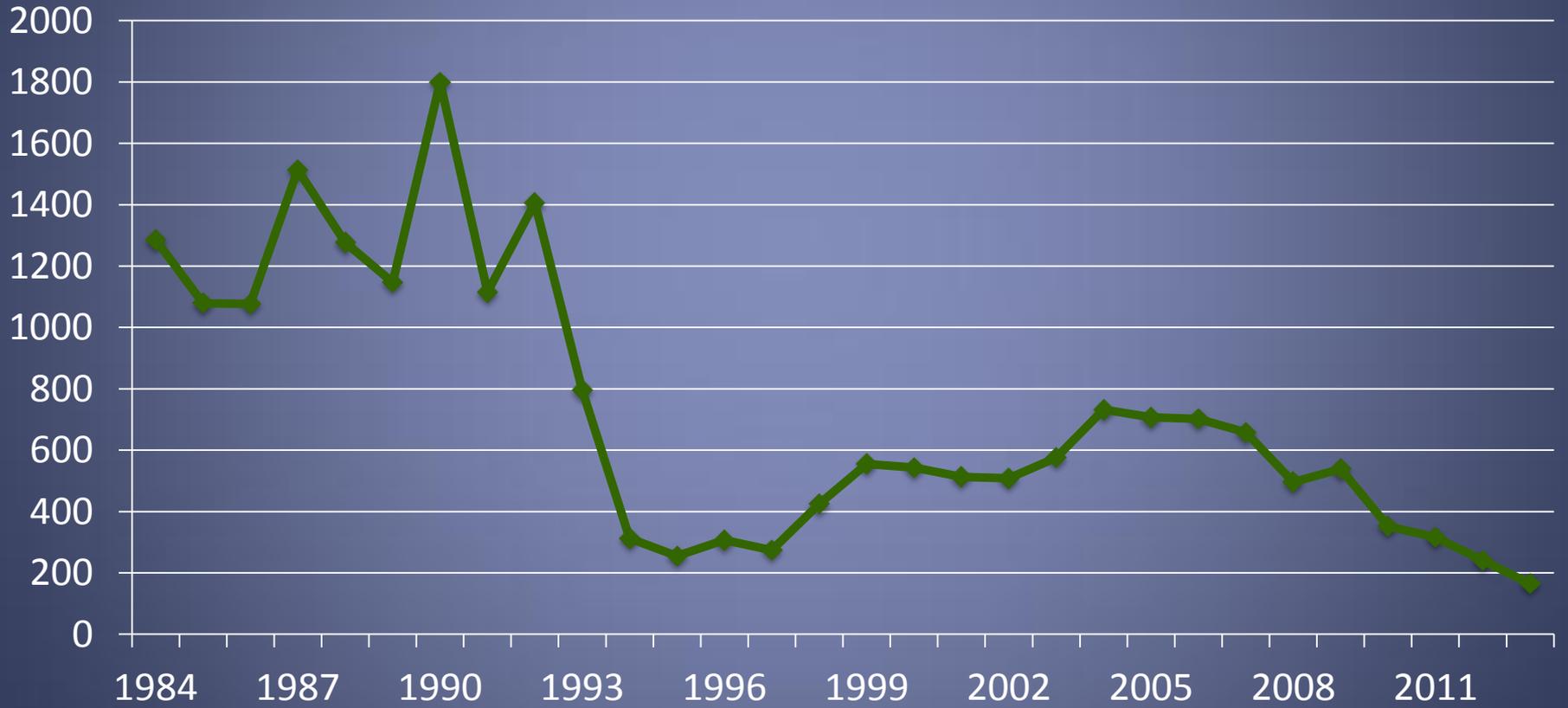
Hunting Seasons Over Time

	Season Dates		Season	License
	Open	Close	Length	Limitations
1959	Oct. 15	Oct. 31	16	Any Deer
1962	Oct. 1	Oct. 15	15	Any Deer
1968	Oct. 10	Oct. 25	16	Any Deer
1971	Oct. 10	Oct. 25	16	Any Deer
1974	Oct. 15	Oct. 25	11	Any Deer
1977	Oct. 15	Oct. 22	8	Any Deer
1980	Oct. 15	Oct. 25	11	Antlered + 400 Any Deer
1983	Oct. 15	Oct. 28	14	Antlered + 500 Any Deer
1986	Oct. 15	Oct. 26	12	Antlered + 500 Any Deer
1989	Oct. 15	Oct. 25	11	Antlered + Any Deer (3 days)
1992	Oct. 15	Oct. 25	11	Antlered + Any Deer (3 days)
1995	Oct. 15	Oct. 22	8	Antlered
1998	Oct. 15	Oct. 22	8	Antlered
2001	Oct. 15	Oct. 22	8	Antlered + 100 Doe/fawn
2004	Oct. 15	Oct. 25	11	Antlered + 400 Doe/fawn
2007	Oct. 15	Oct. 25	11	Antlered + 200 Doe/fawn
2010	Oct. 15	Oct. 22	8	Antlered + 25 Doe/fawn
2013	Oct. 15	Oct. 21	7	Antlered 3 points or more on a side

Buck and Doe Harvest History



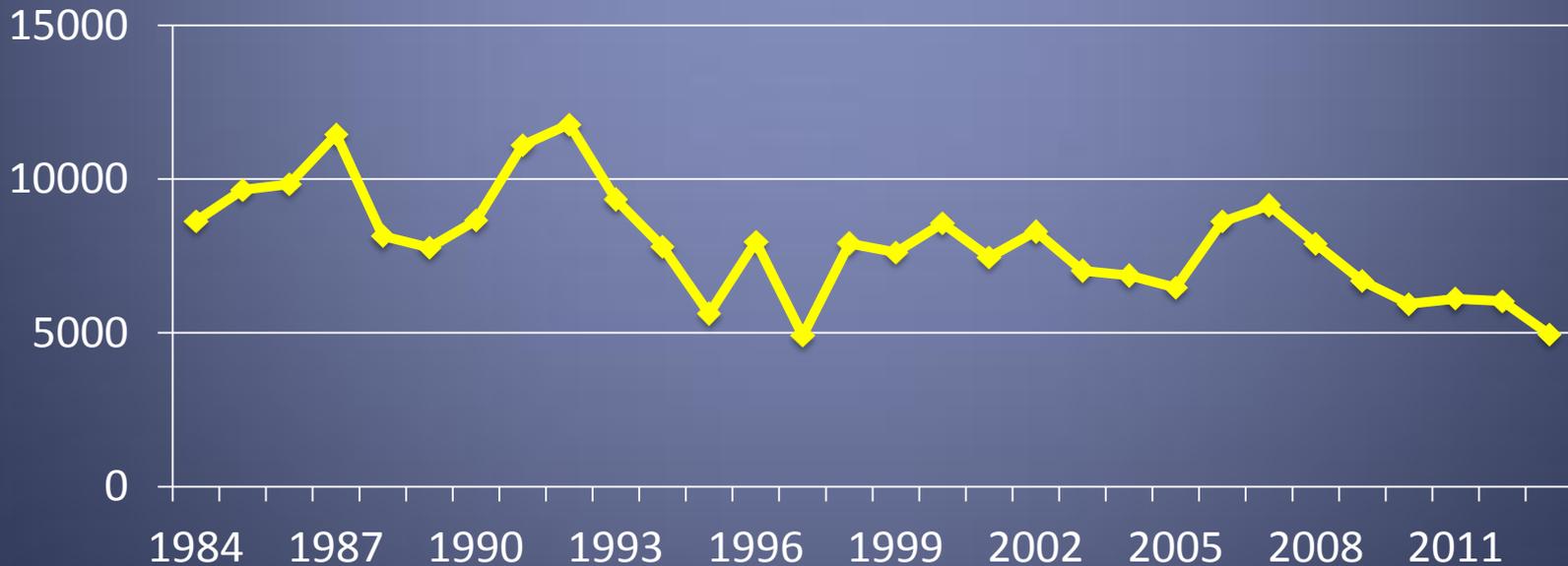
Total Harvest History



Total Harvest



Post Season Pop Estimate



Hunting Seasons Over Time

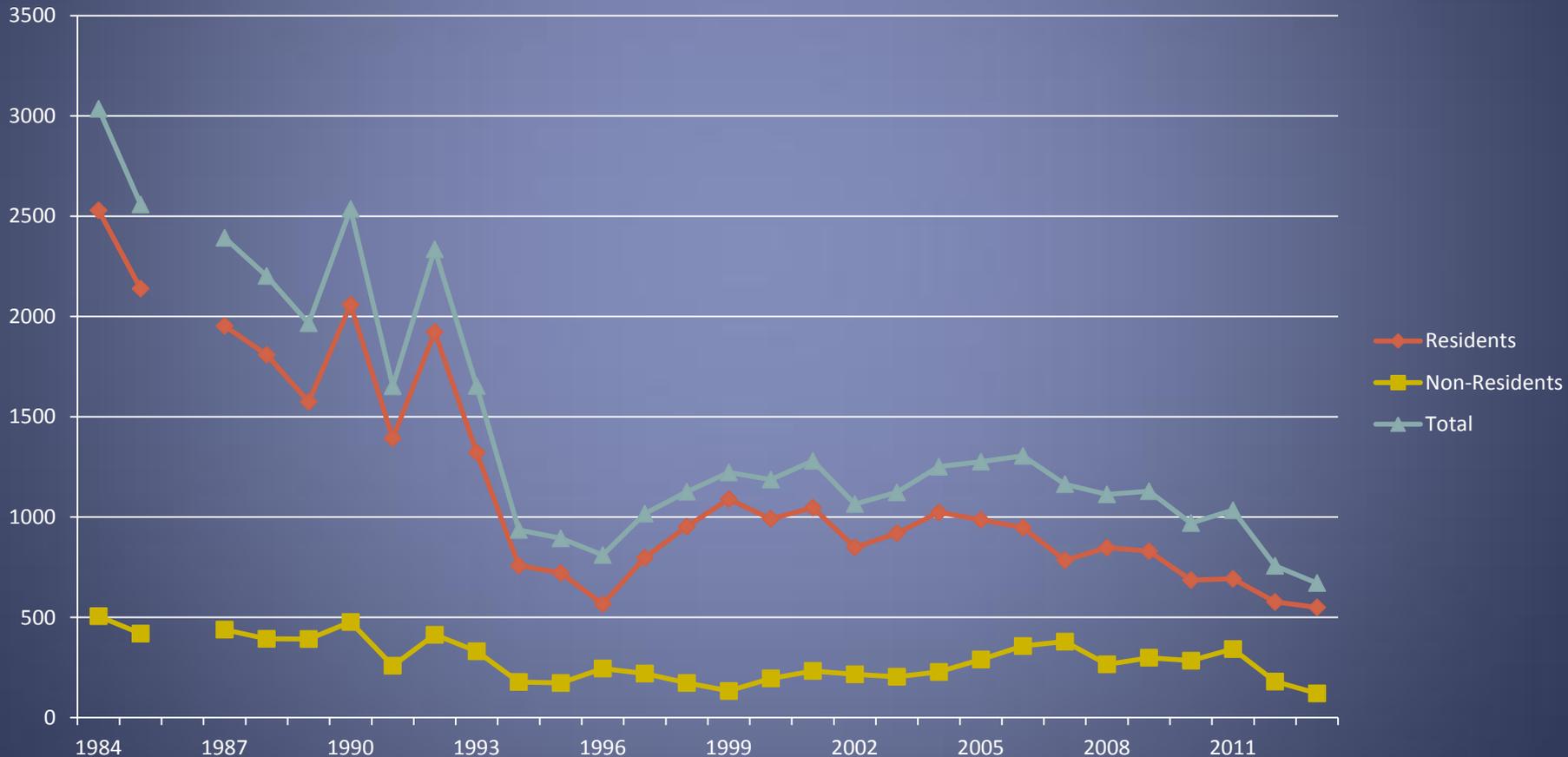
- 1988: “Concern for hunting quality and low buck:doe ratios generated discussions of changing the harvest in the herd unit to strictly limited quota license holders. However, these concerns have improved with general license harvest programs.”
- Buck ratio in 1988 was 18: 100 does; population estimate was 8,100.
- By comparison: 2013 buck ratio was 20; population estimate was 5,100.

Hunter Statistics Over Time

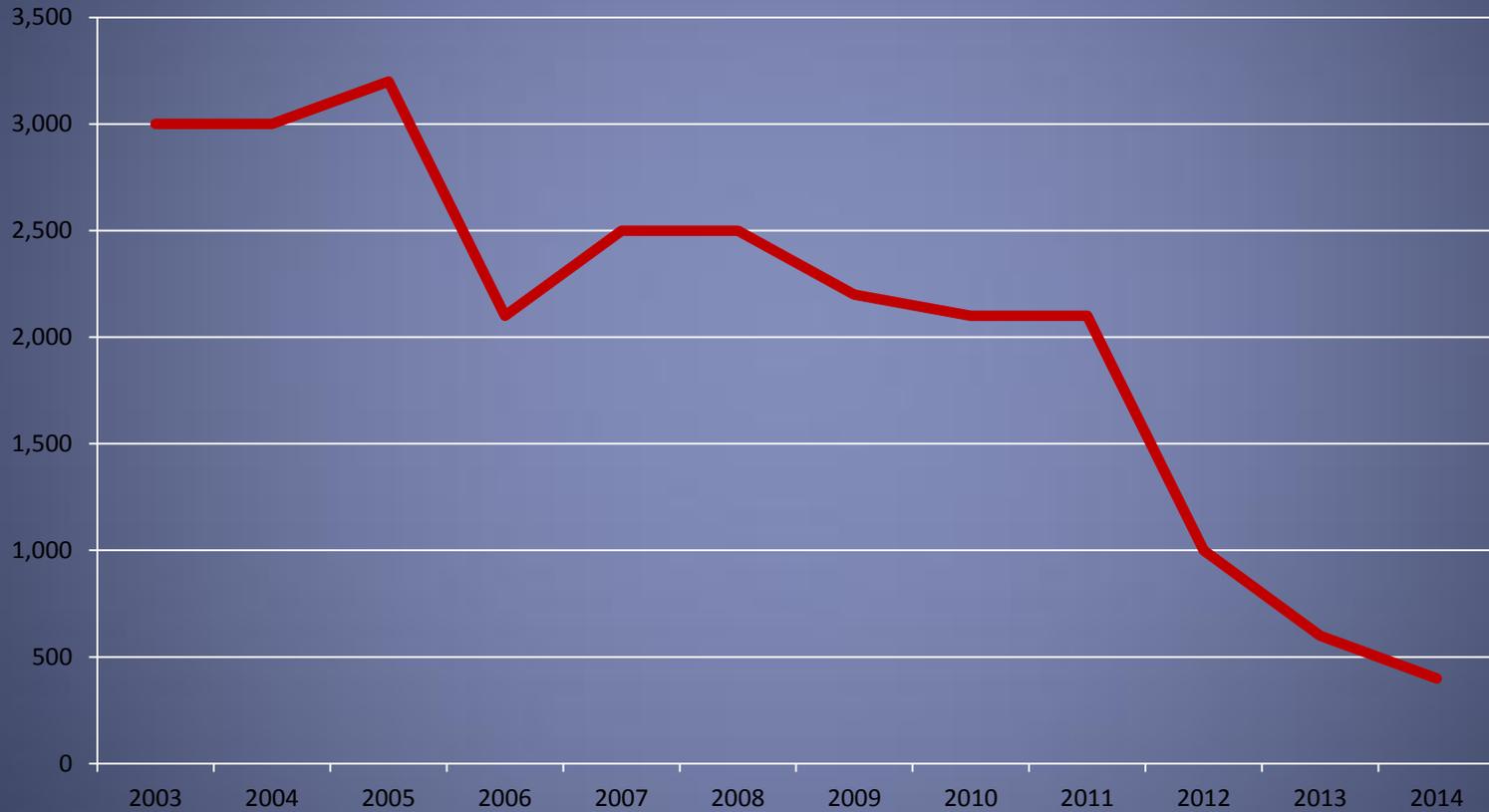
- Non-Resident Regions started in 1973
- Prior to 1973, non-residents outnumbered residents in some years and in some hunt areas



Resident & Non-Resident Hunters



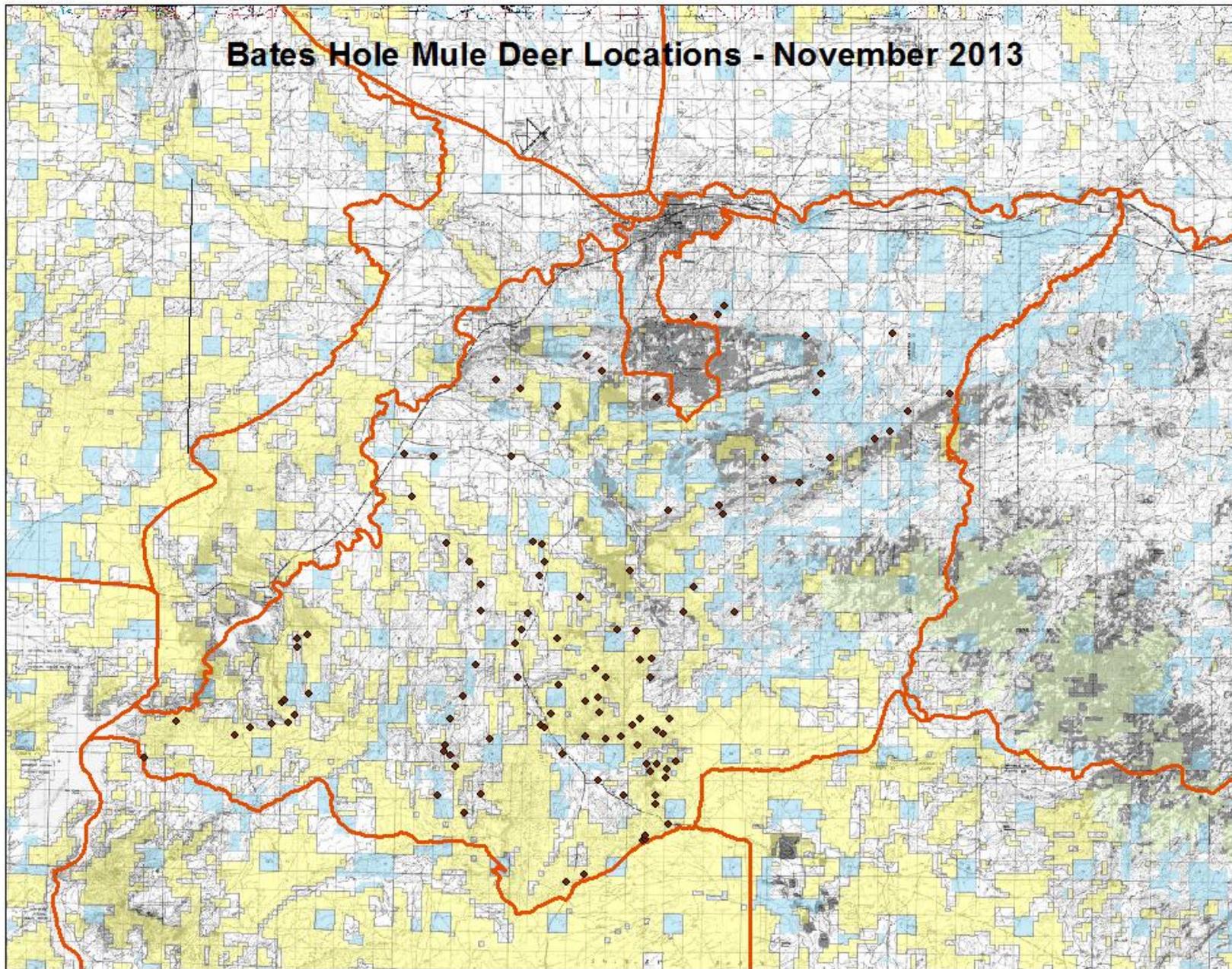
Region D Quota Recent History



Bates Hole Population Model

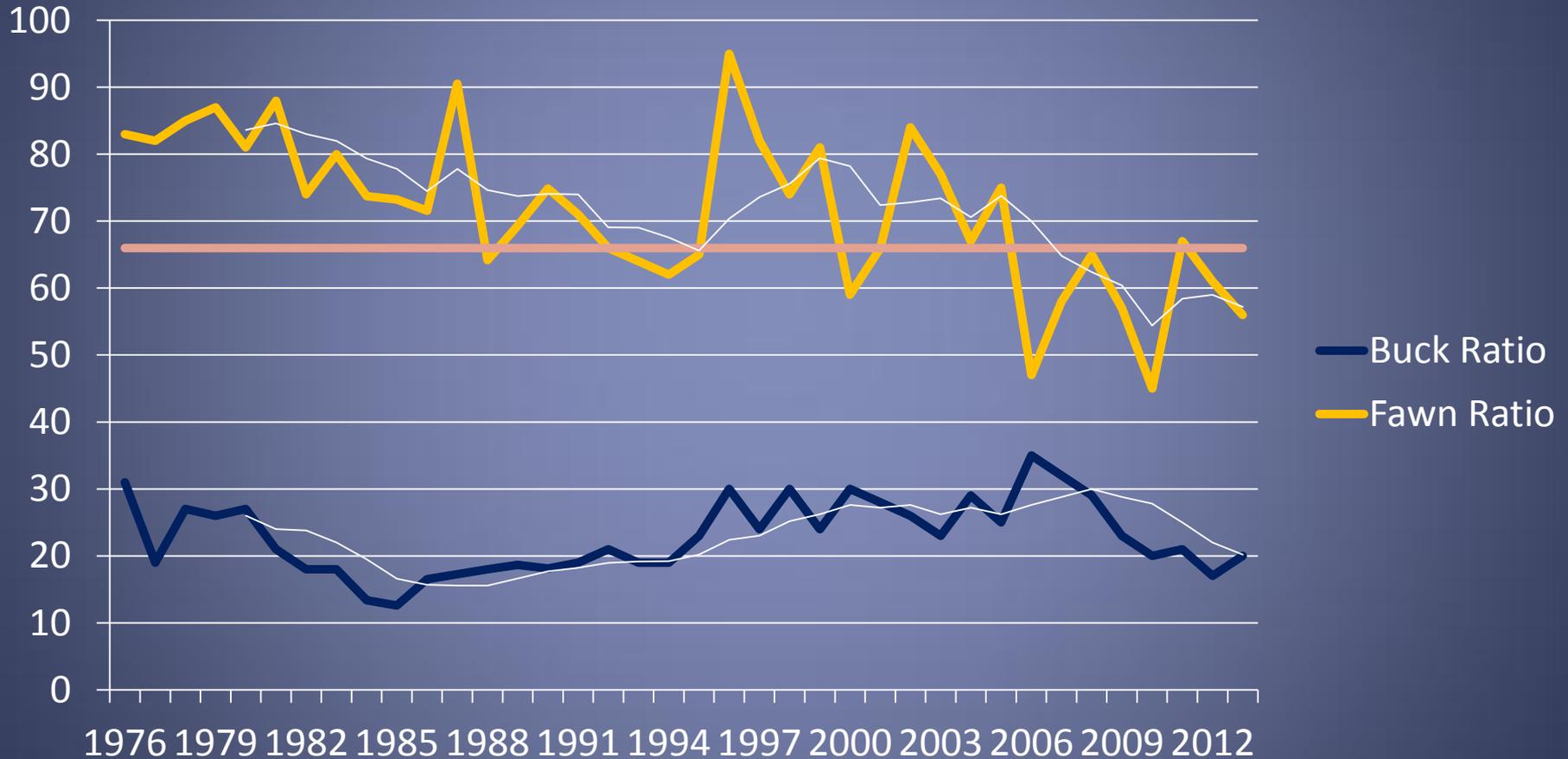
- Computer models are used to simulate herd dynamics and estimate population size & trend
- Annual classification surveys and harvest data drive the computer model
- New model design adopted in 2011 has helped refine population estimates

Bates Hole Mule Deer Locations - November 2013



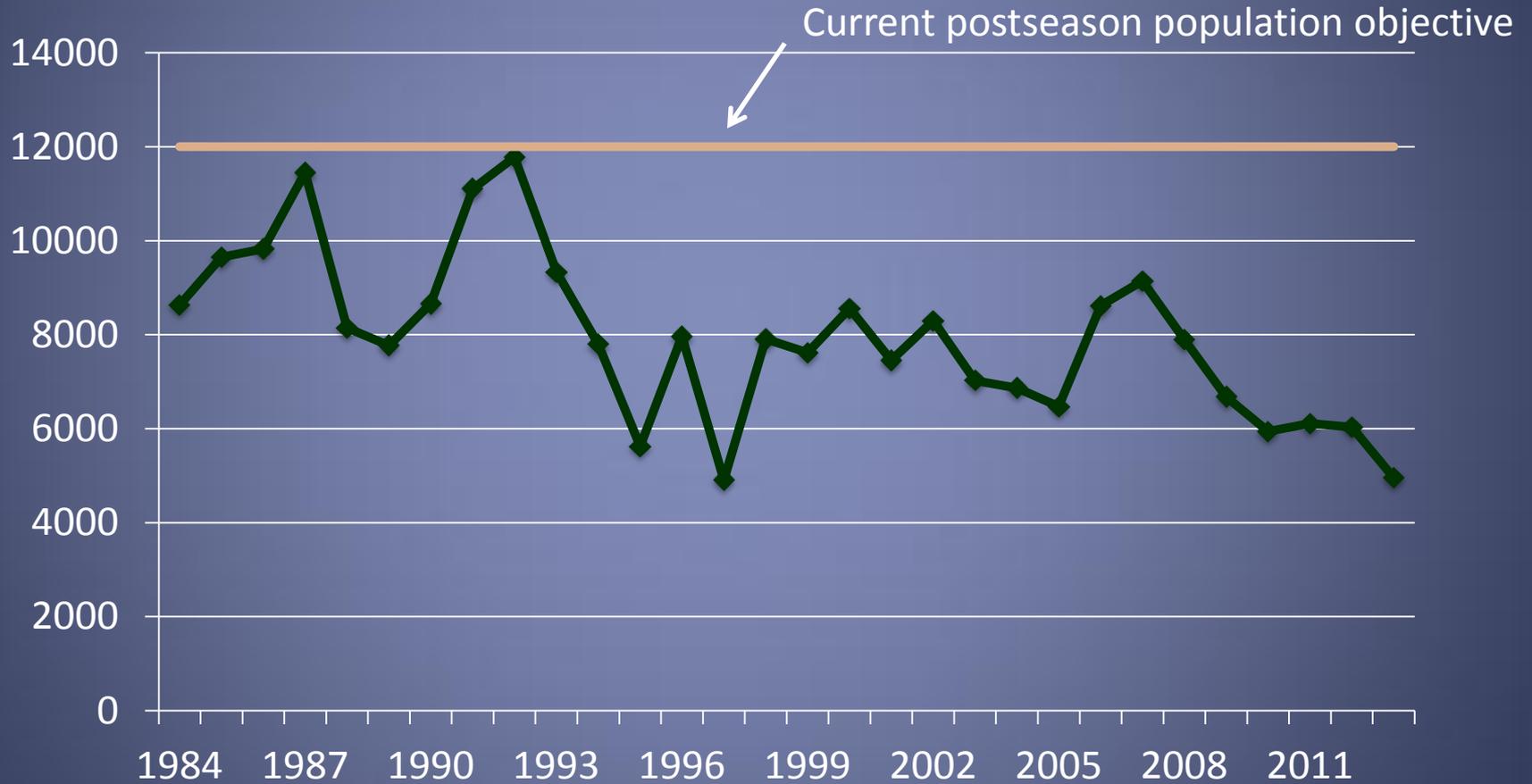
Total Deer Classified = 1,483

History of Buck and Fawn Ratios

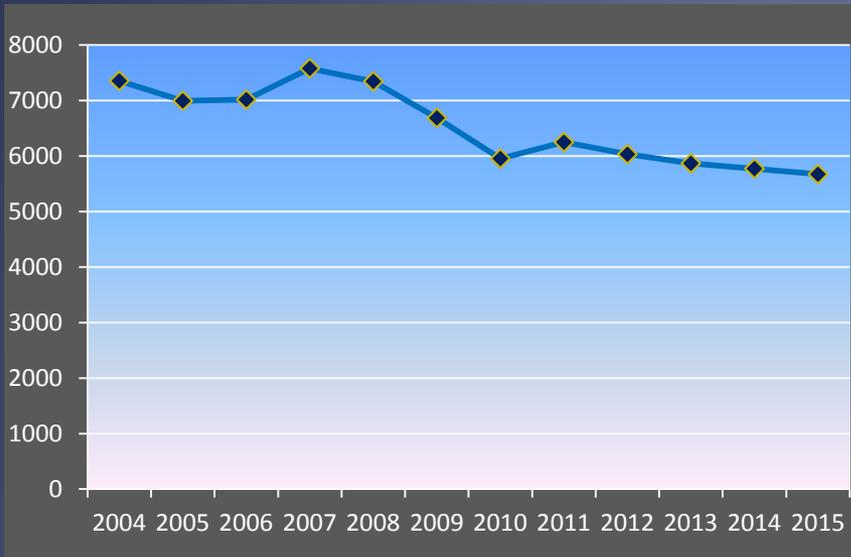


66 fawns:100 does = threshold of fawn production in a harvested herd

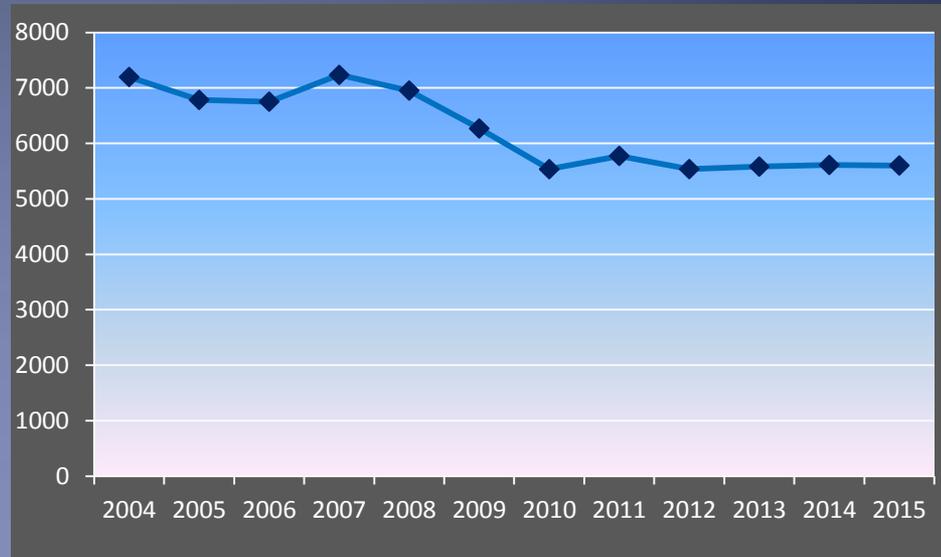
Changes in Estimated Population



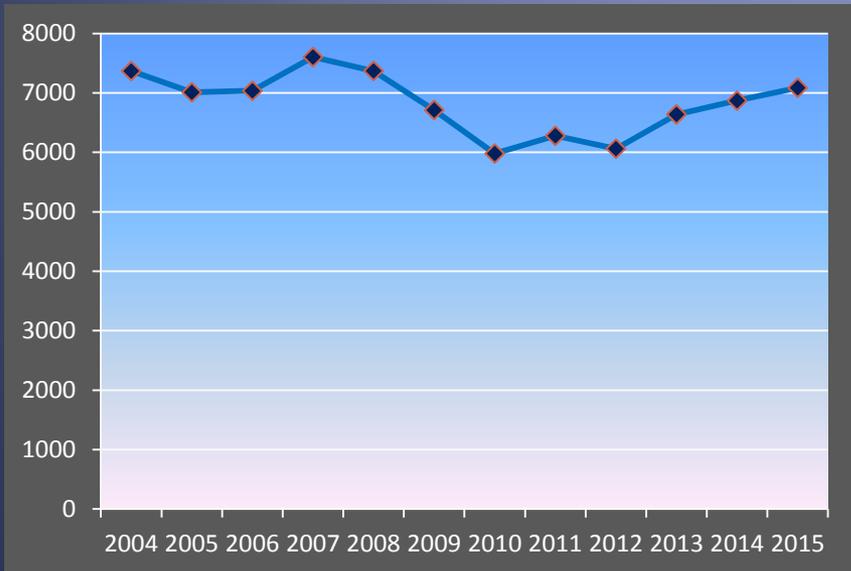
Current population trend



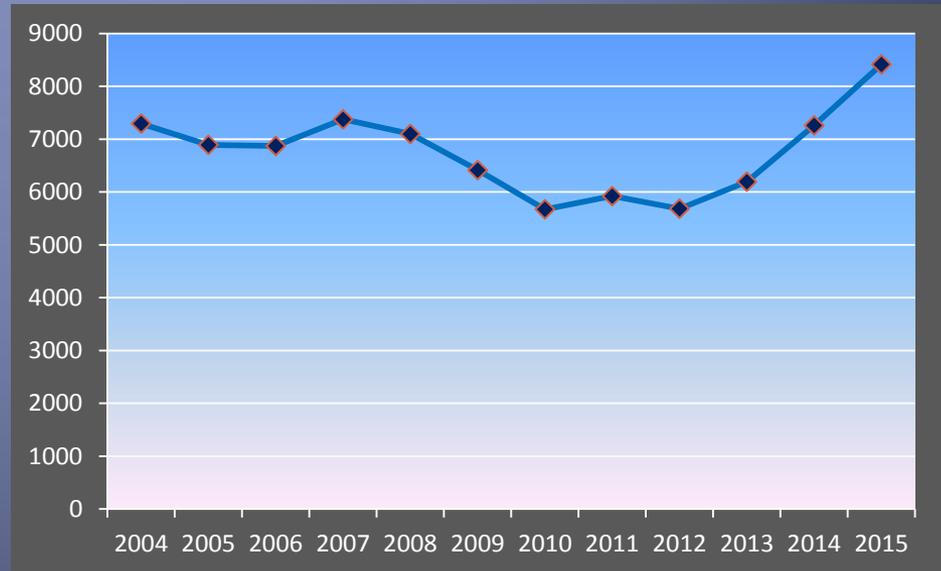
Closed season, low fawn ratio and survival



Some buck harvest, improved fawn ratio



Some buck harvest, improved fawn ratio & survival



Area 67 Deer

- Area 67 has been closed since at least 1959
- In 2011, proposed opening the hunt area based on landowner requests
- Other landowners were fervently opposed
- Deer numbers have also declined in Area 67 **despite being closed to harvest** for years and years.

Antler Class Data & Trends

Antler classification analysis for Area 66 within the Bates Hole/Hat Six Mule Deer Herd Unit, 2008 – 2013.

Bio-Year	Total Class N for HA	# Bucks Classified					Buck Ratios per 100 Females					
		Ylng	Class I	Class II	Class III	Total	Ylng	Class I	Class II	Class III	All Adult	Total
2008	1,254	75	57 (50%)	41 (36%)	16 (14%)	189	12	9	6	2	18	29
2009	1,320	59	61 (54%)	41 (37%)	10 (9%)	171	8	8	6	1	15	23
2010	1,479	82	49 (49%)	42 (42%)	9 (9%)	182	9	5	5	1	11	20
2011	1,248	47	52 (56%)	33 (36%)	7 (8%)	139	7	8	5	1	14	21
2012	1,272	28	55 (59%)	30 (32%)	9 (9%)	122	4	8	4	1	13	17
2013	1,483	86	50 (61%)	25 (30%)	7 (9%)	168	10	6	3	1	10	20

How does a population grow?

- Fawns are **KEY** to population growth
- Both fawn **production** (births) and fawn **survival** through their first year influence the rate of population growth
- A multitude of factors can influence fawn production and survival including:
 - Doe age, body condition, health, & nutrition
 - Weather & habitat conditions
 - Disease & predation

Current Management Actions for Bates Hole Mule Deer

- Eliminated significant doe harvest since 2008
- Substantial reductions of Non-Resident Quota
- Shortened hunting season length
- Added antler-point restriction in 2013-2014
- Habitat treatments to benefit mule deer
- Grants for County Predator Control Board

A close-up photograph of a sloth resting in a nest. The nest is constructed from a dense layer of dry pine needles and is surrounded by green, leafy shrubs. The sloth's brown fur is visible, and its head is tucked down. The word "Questions?" is overlaid in white text at the bottom center of the image.

Questions?