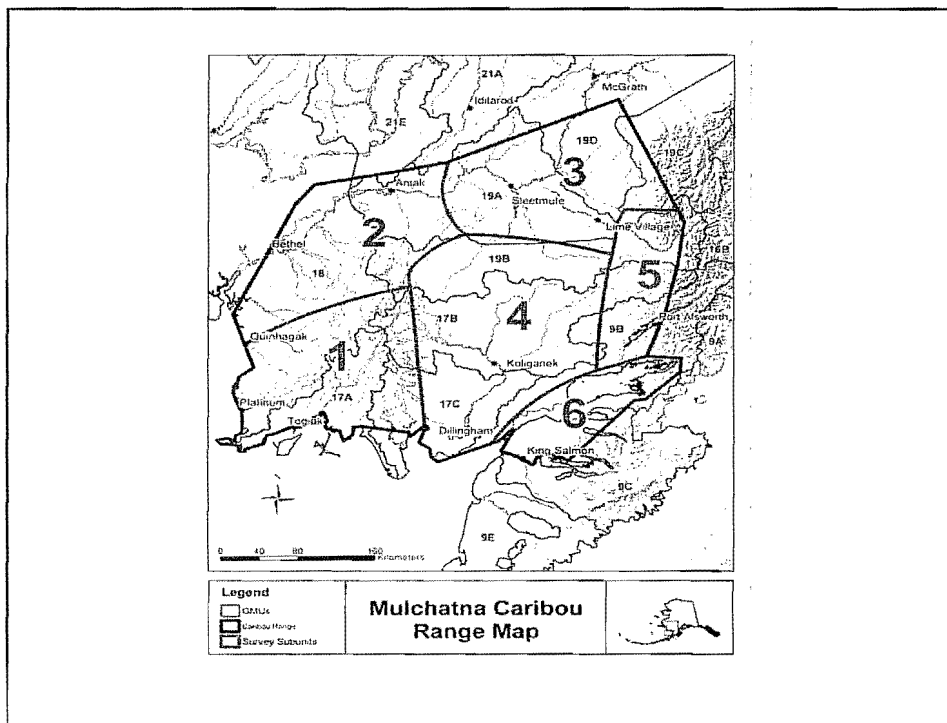


RC79

Mulchatna Caribou Herd

in southwestern Alaska

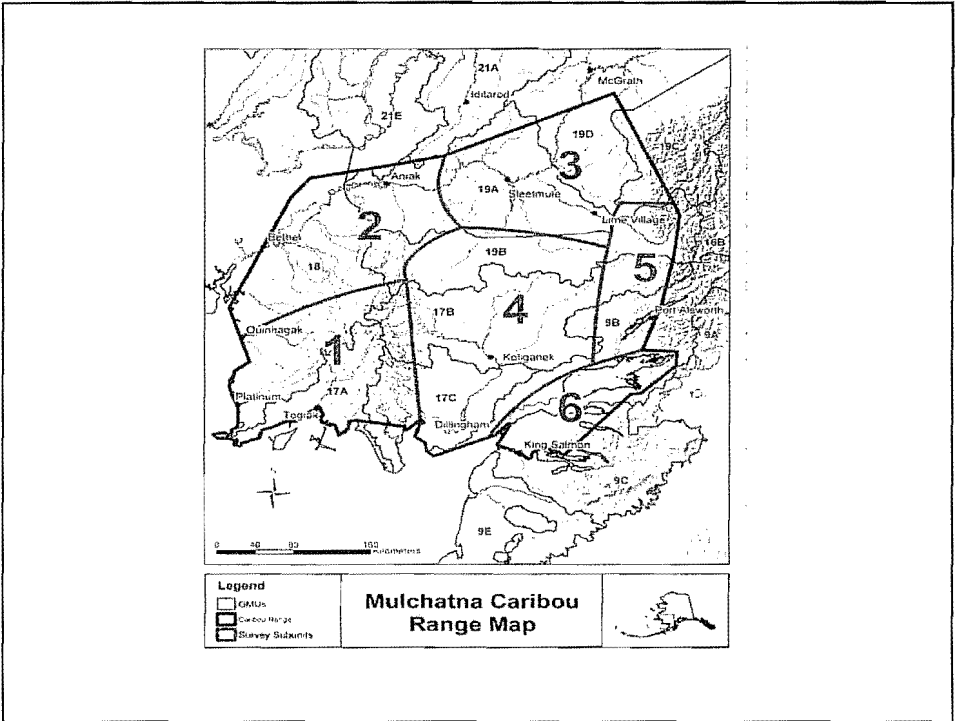


Management and Research

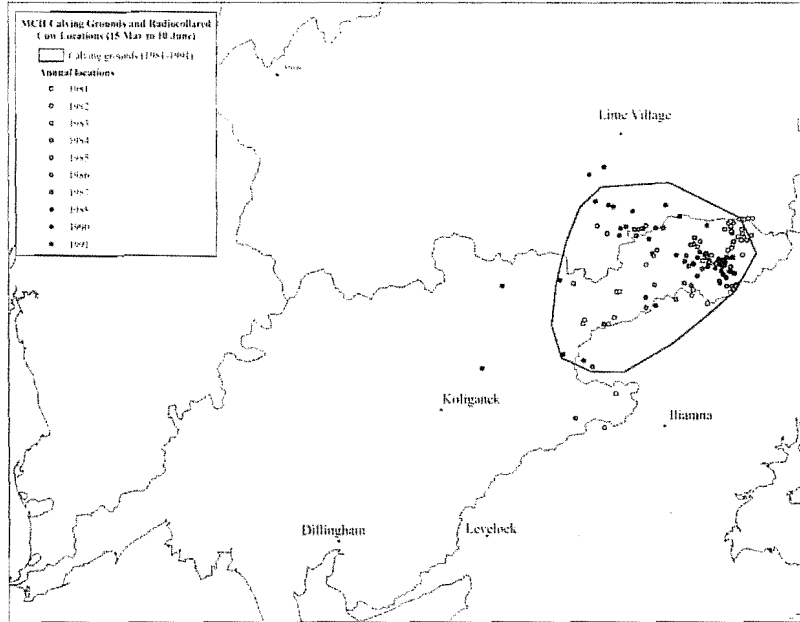
- **Radio collaring**
- **Calving survey**
- **Photo census**
- **Fall Composition survey**
- **Harvest Reporting**
- **Health Assessment**
- **Bull Distribution & Mortality**

Cooperating Agencies

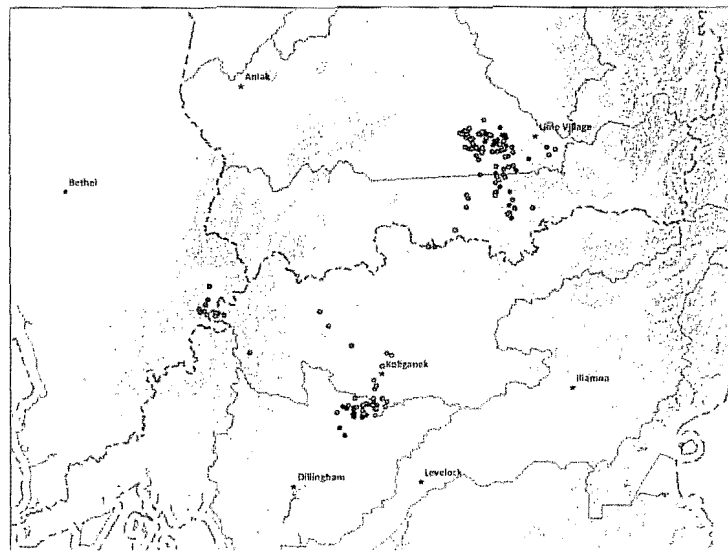
- **Alaska Dept Fish & Game**
- **US Fish & Wildlife Service**
- **National Park Service**
- **Bureau of Land Management**



MCH Calving Area 1981-1991

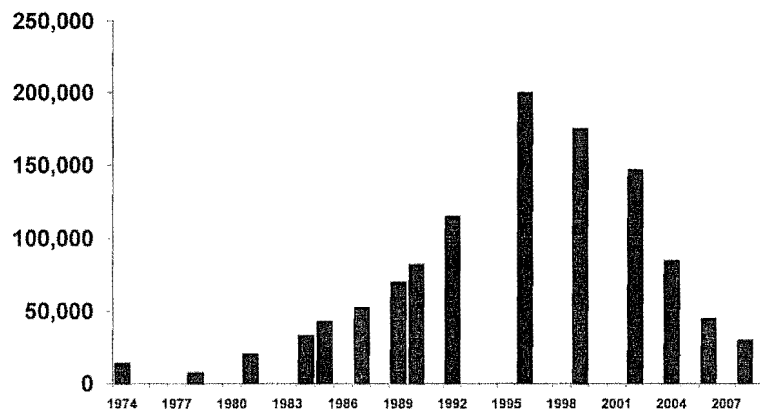


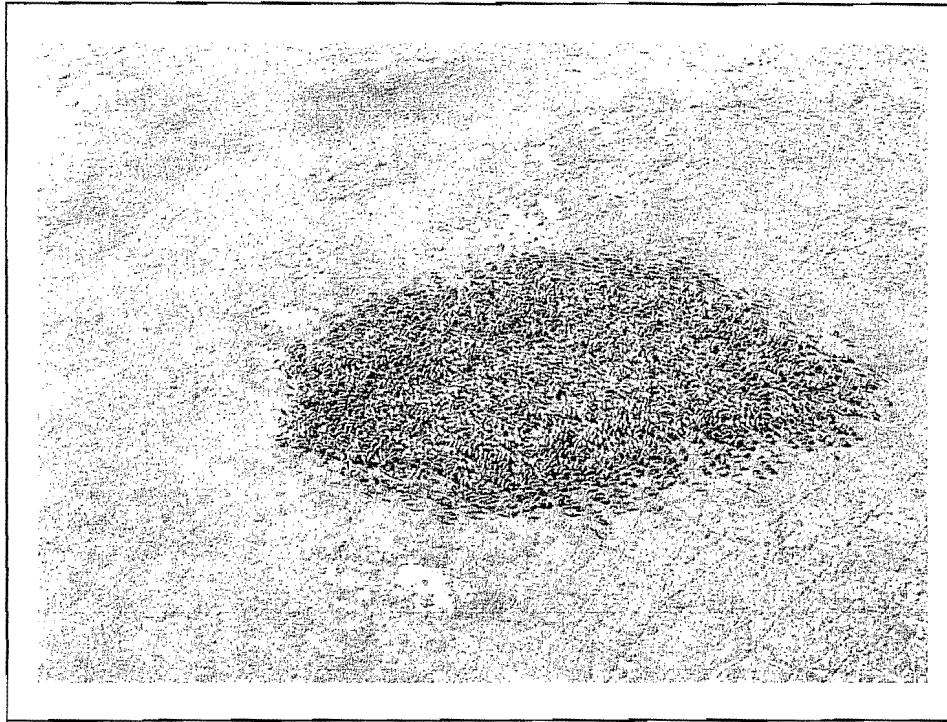
MCH Calving 2008, 2009, 2010

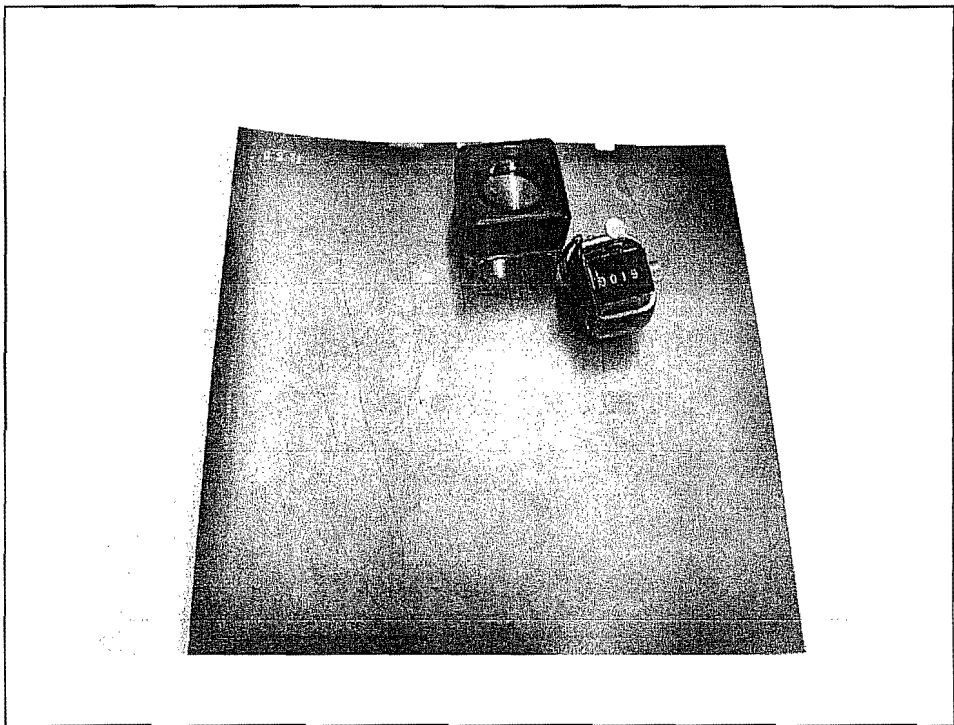
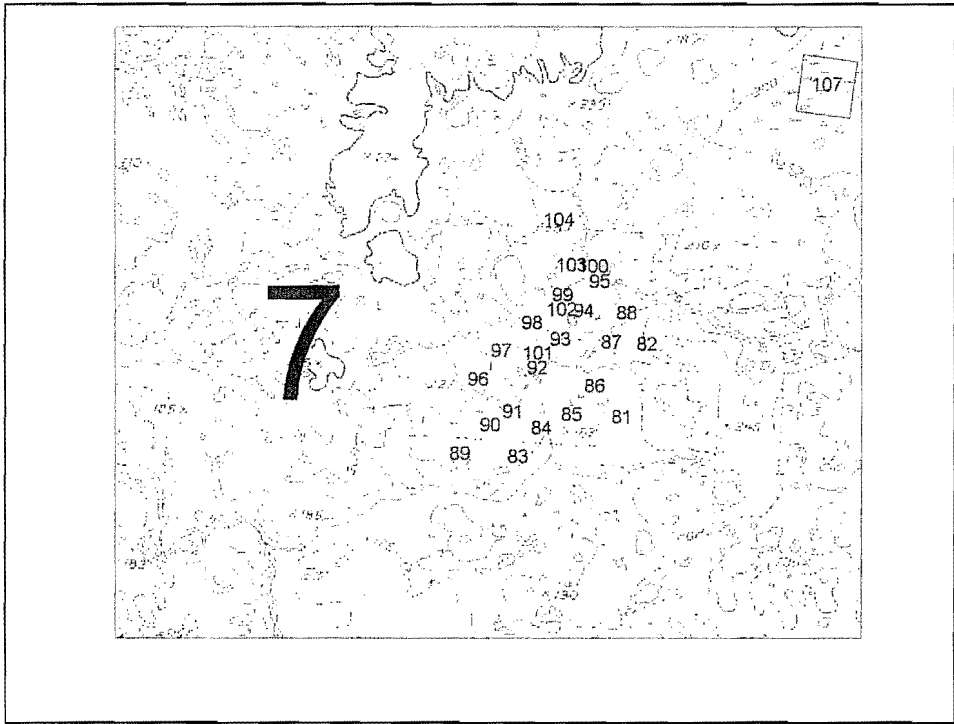




- During the decline of the Mulchatna herd, few cows producing calves until 4 years old
- Past several years, seeing increased production from 3-year olds
- In the nearby Nushagak Peninsula herd, some 2-year old, and most 3-year old cows have calves

Mulchatna Caribou Population Summer Estimates 1974 - 2008



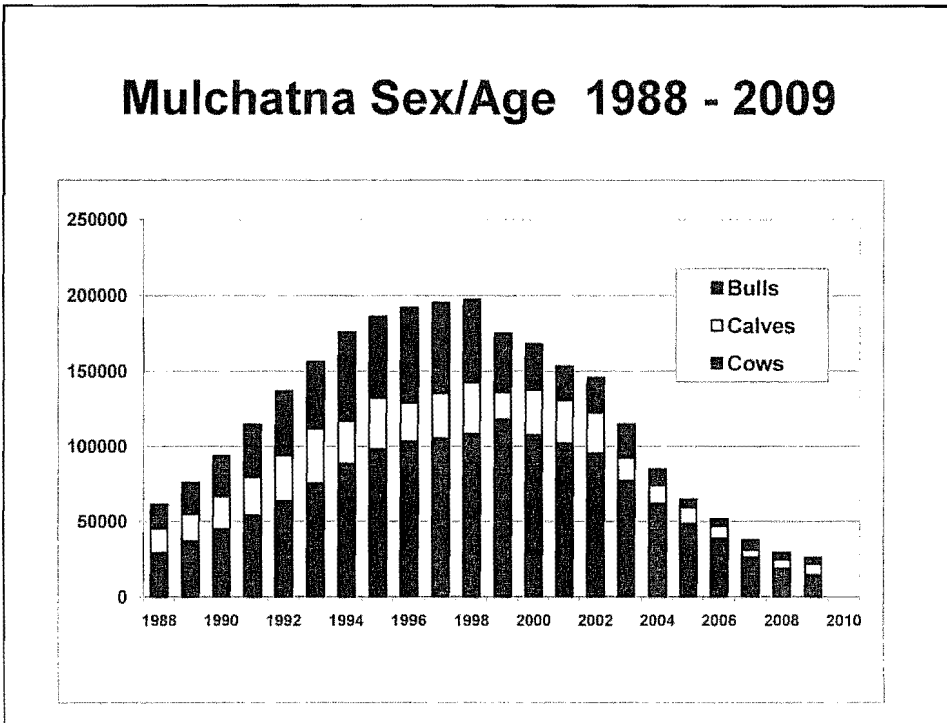
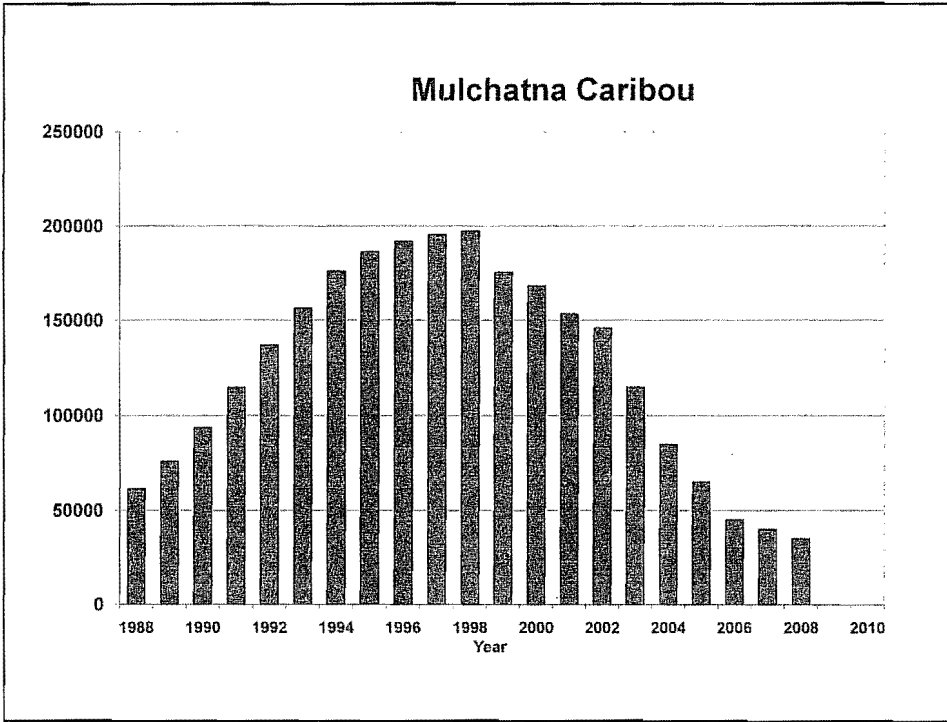




- 1970s < 25,000
 - 1980s 25,000 \Rightarrow 90,000
 - 1990s ~ 90,000
- 
- 1996 200,000
- 
- 2006 45,000
 - 2008 est. 30,000-40,000

Changes in Population ??

- Disease (foot rot, pneumonia, parasites)
- Predation
- Density dependent food limitation
- Age structure effects
- Harvest
- Climate
- All of the above,...plus ??

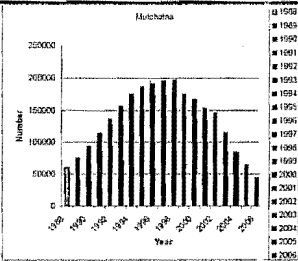
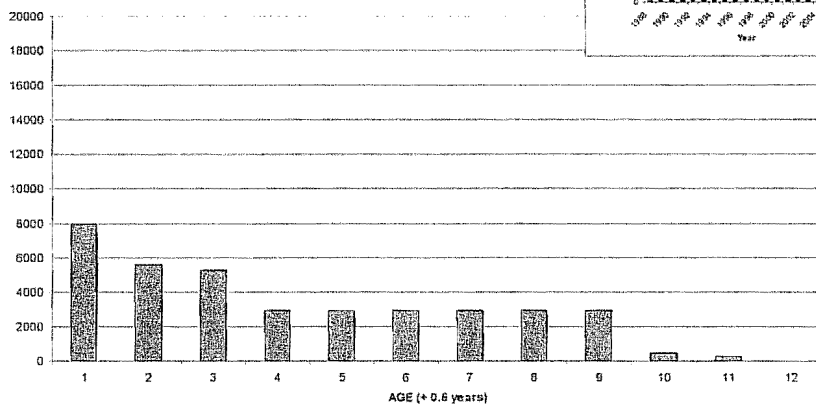


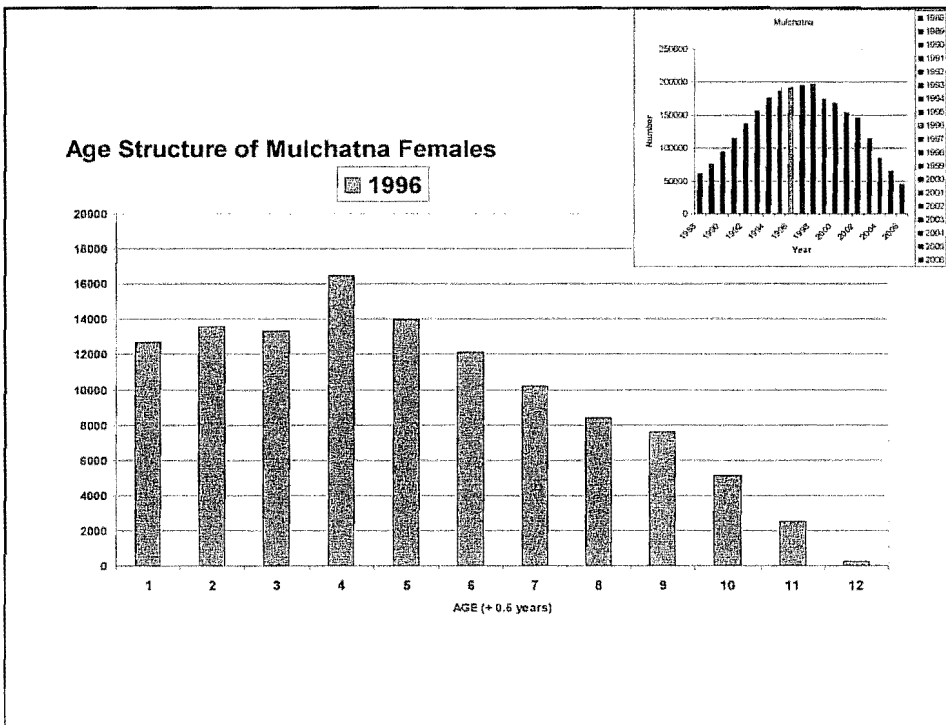
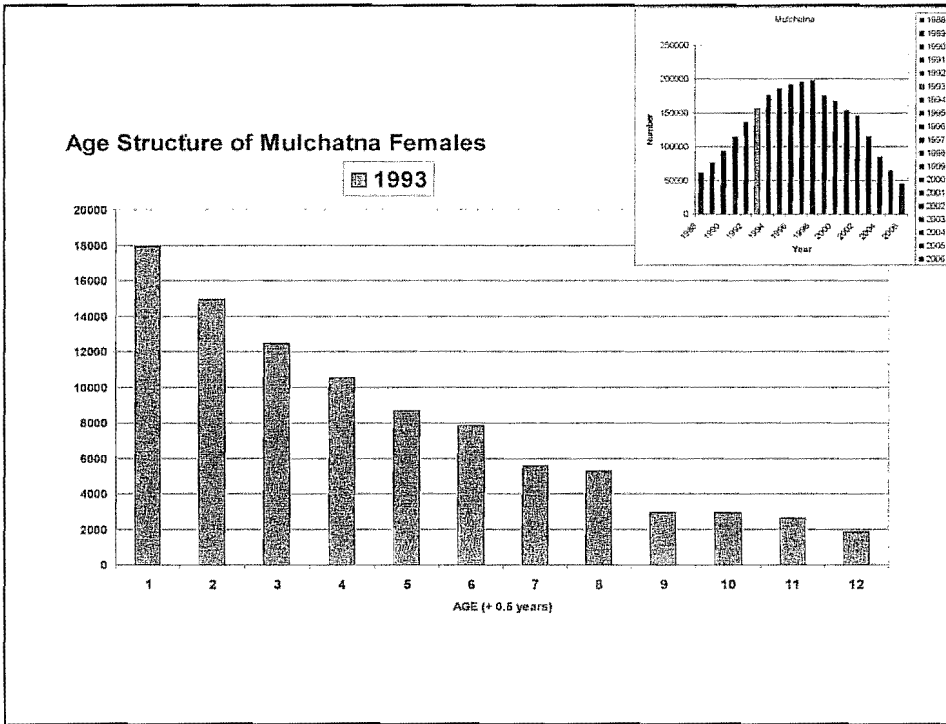
Year cows calves bulls

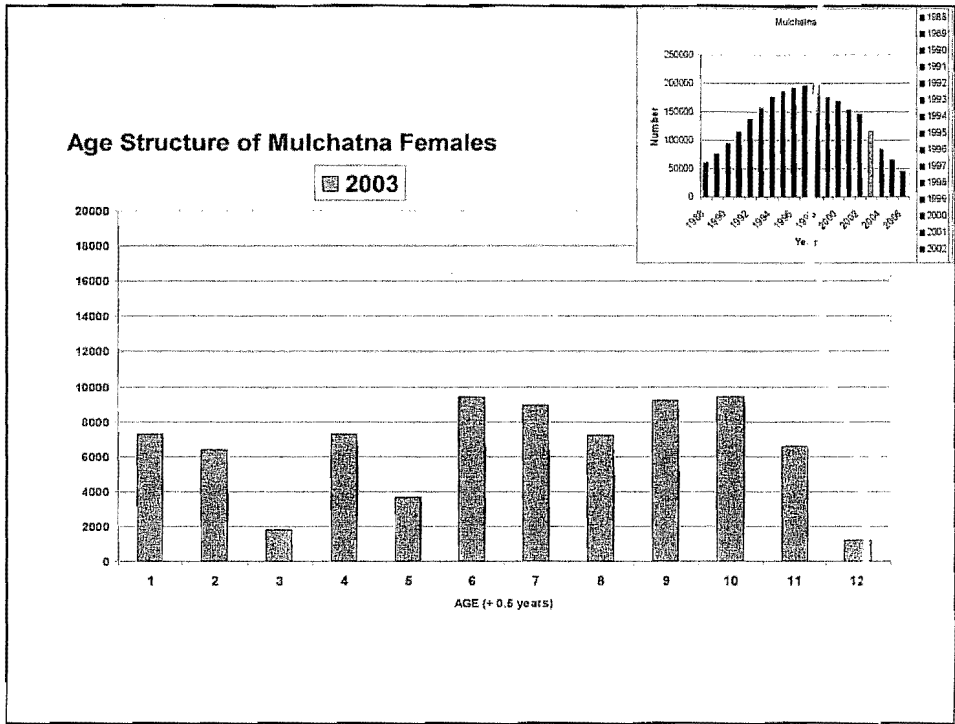
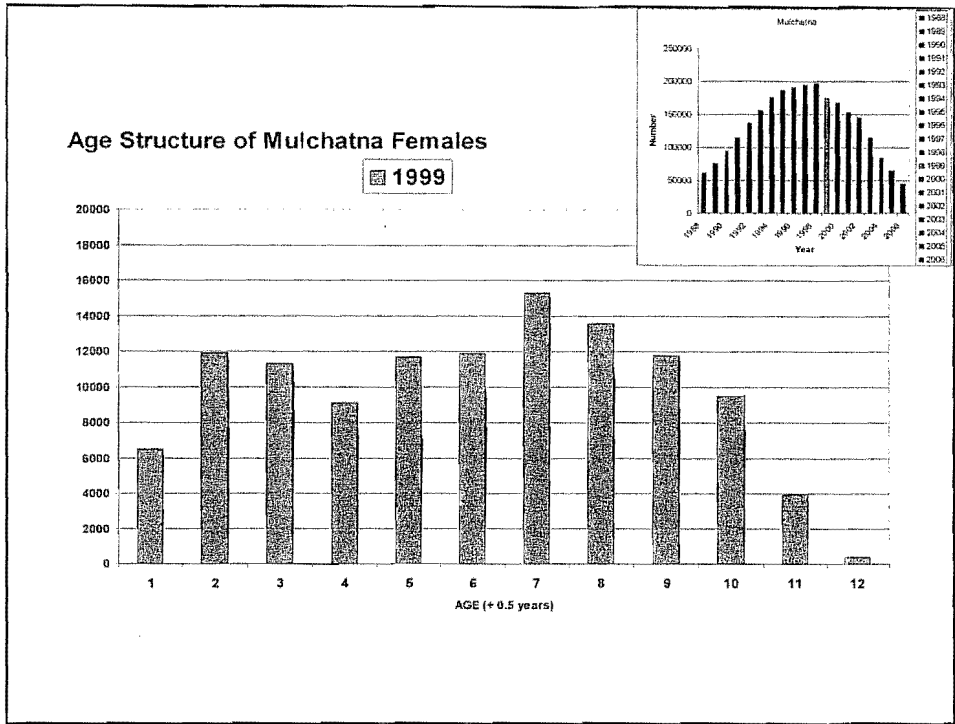
Year	cows	calves	bulls
1986	20772	7686	10353
1987	23500	14100	10931
1988	29504	15932	14048
1989	35986	19793	17770
1990	44247	24336	22793
1991	53159	29237	28465
1992	64066	35237	32621
1993	78234	34423	38703
1994	89582	35833	39528
1995	98479	34468	42350
1996	103010	35023	42885
1997	105081	35728	43583
1998	107880	34522	43001
1999	109878	13185	40209
2000	100988	22217	31782
2001	94767	17058	28457

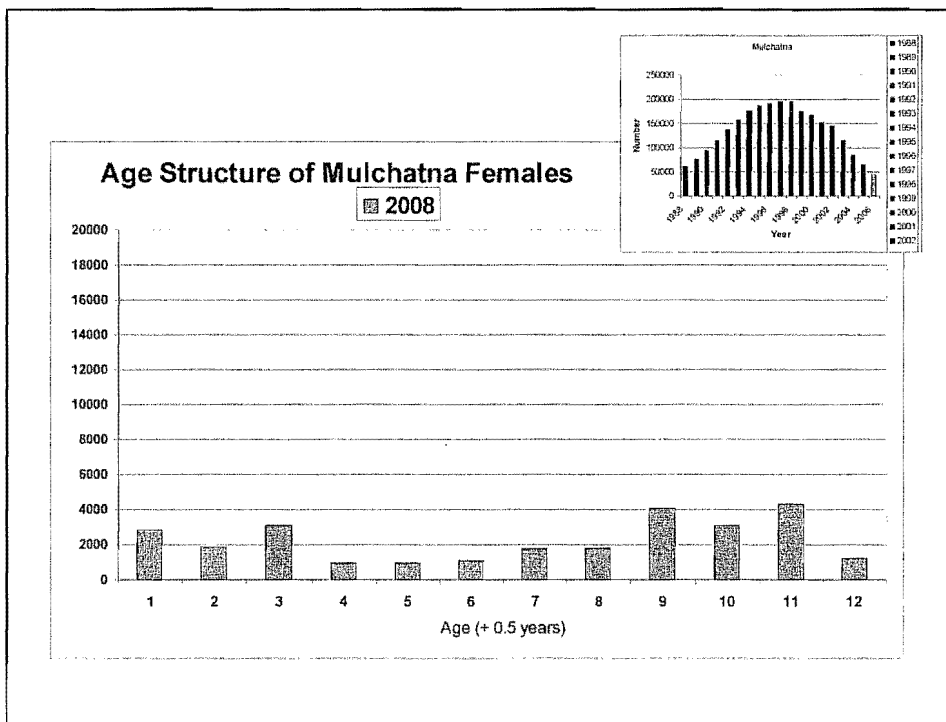
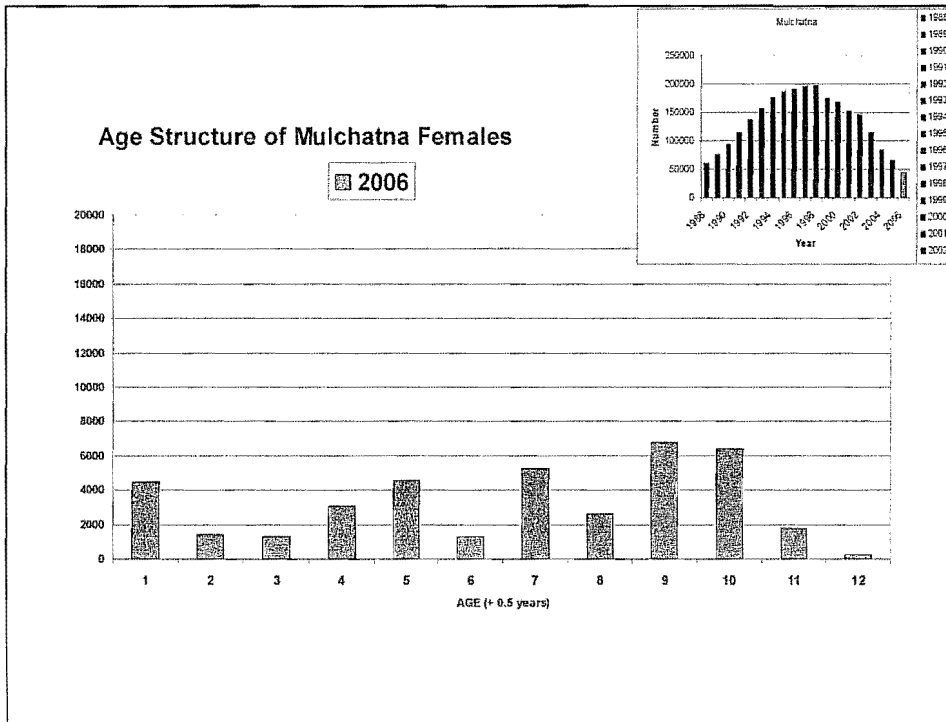
Age Structure of Mulchatna Females

1988





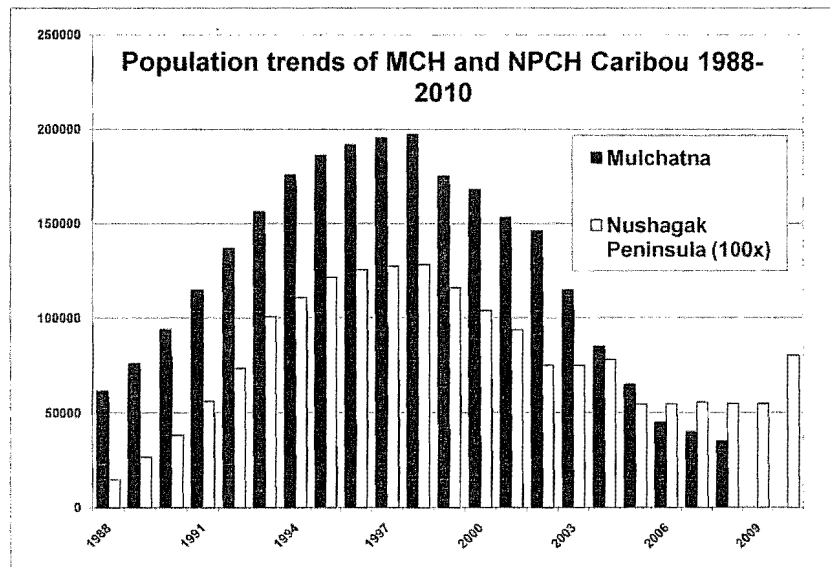




Summary

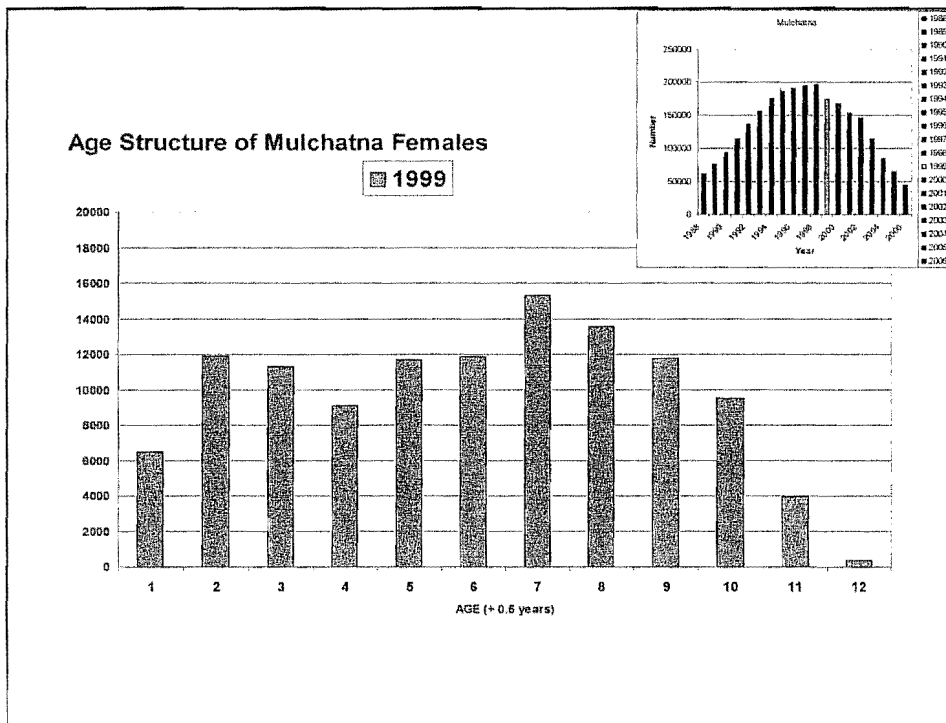
- Complex regional cause of decline
- Age structure exacerbated decline
- Bull cow ratio low but may quickly improve

Population trends of MCH and NPCH Caribou 1988-2010



Summary

- Complex regional cause of decline
- **Age structure exacerbated decline**
- Bull cow ratio low but may quickly improve



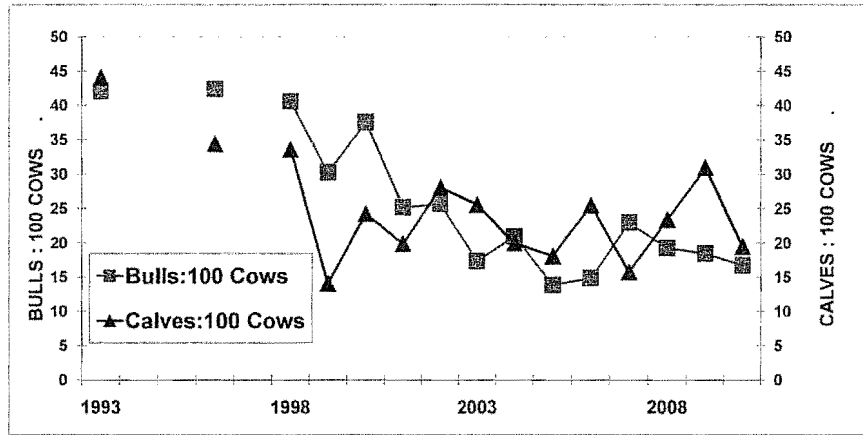
Summary

- Complex regional cause of decline
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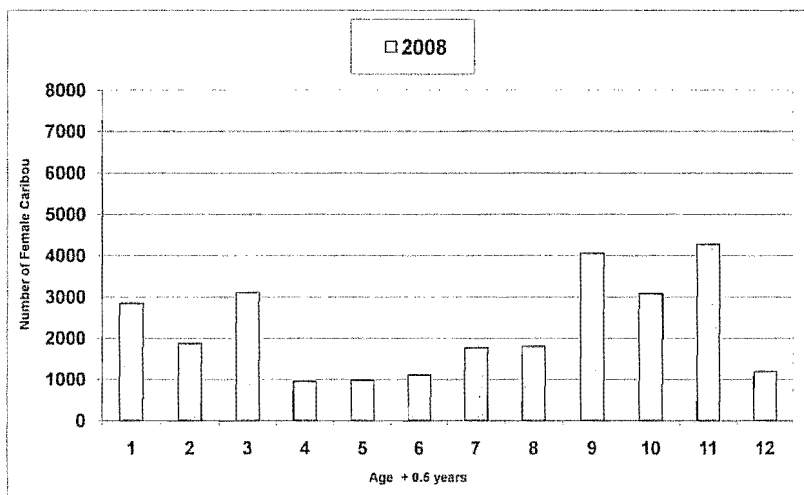
Mulchatna Caribou Fall Composition Surveys

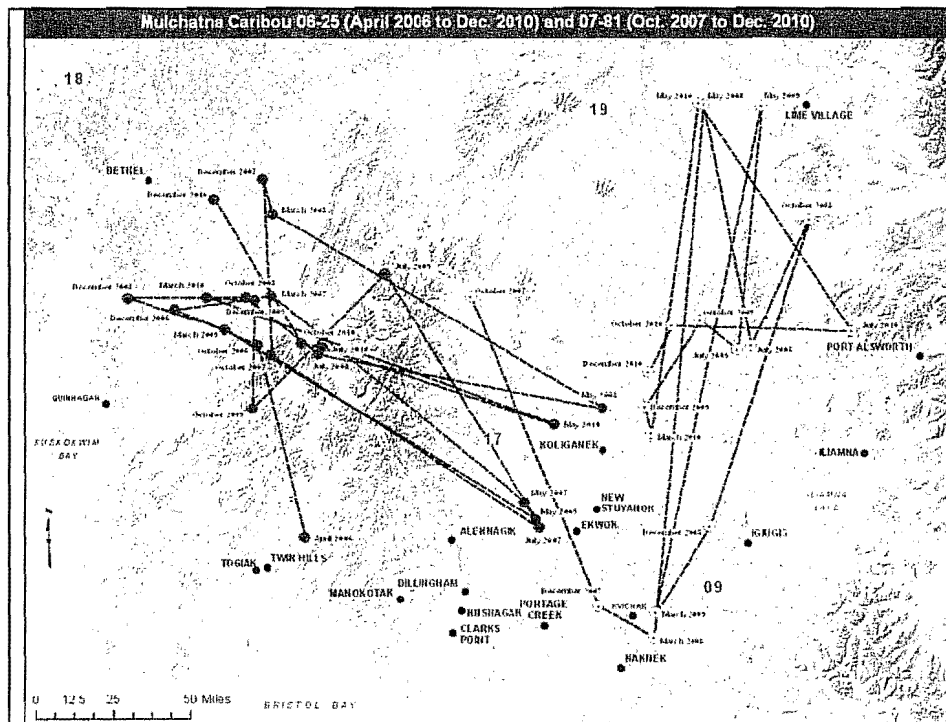
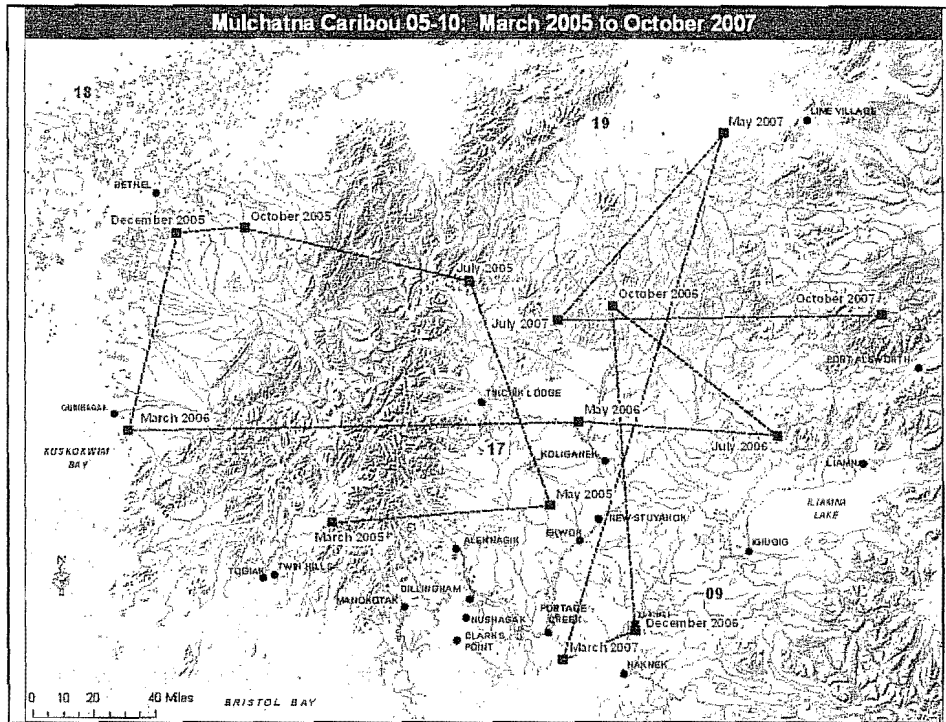


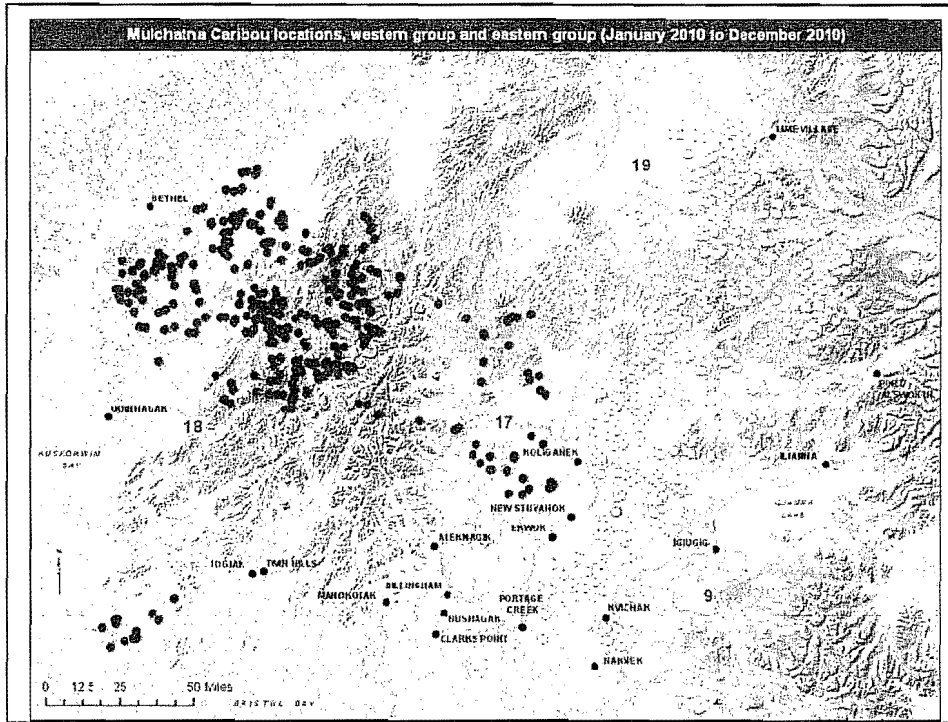
Mulchatna Caribou Fall Composition Surveys



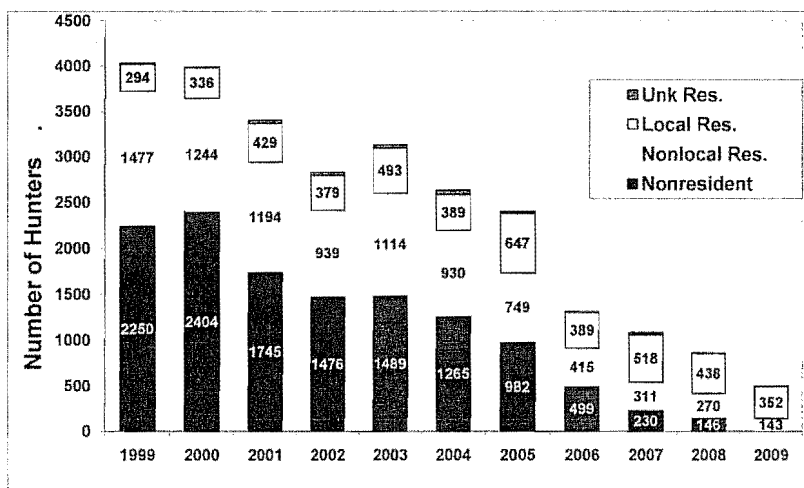
Age Structure of Mulchatna Females



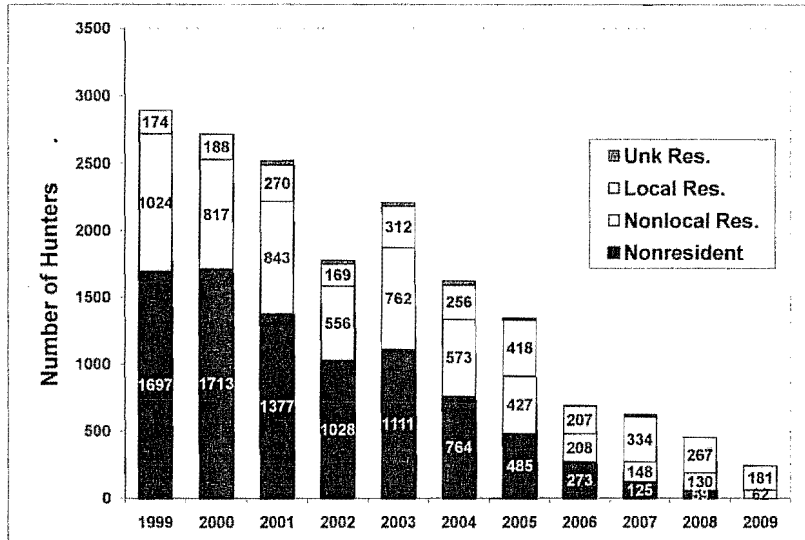




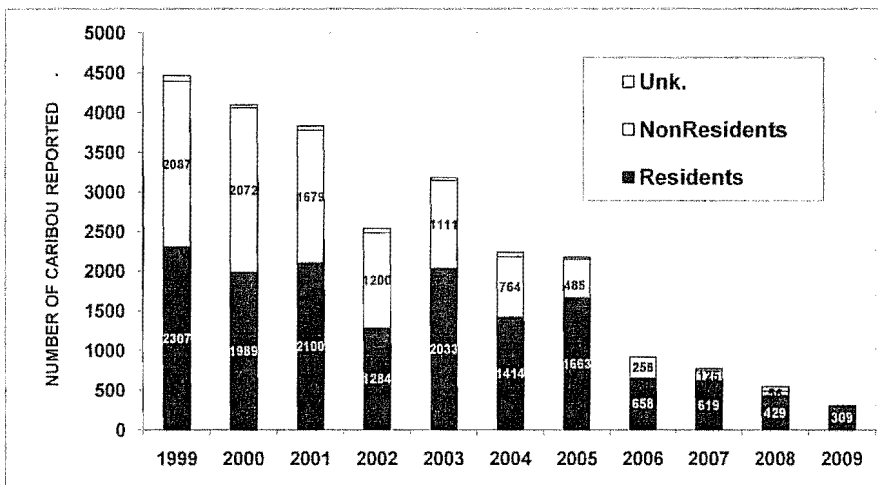
Mulchatna Caribou Hunters: 1999 - 2009



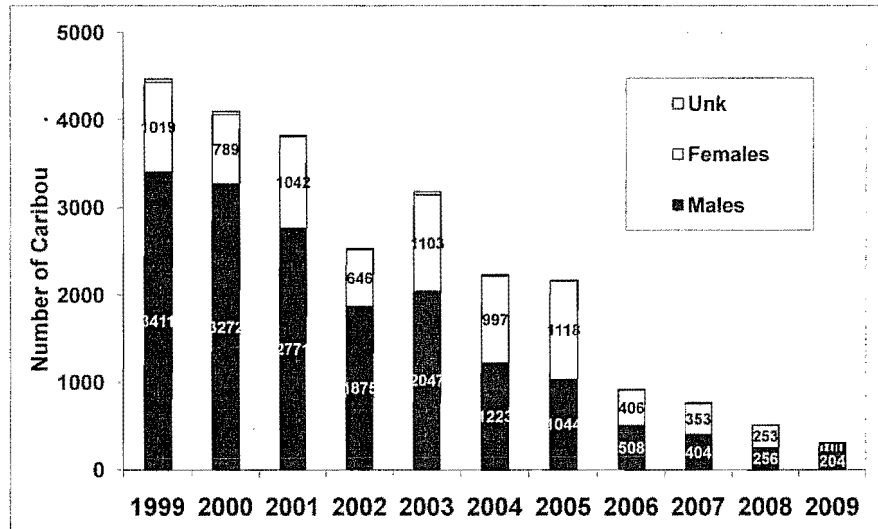
Successful Caribou Hunters 1999-2009



Reported Harvest 1999-2009



Reported Harvest 1999-2009



BOG - March, 2007

- Changed resident bag limit from 3 to 2 (of which only 1 bull) for Mulchatna Caribou Herd, and only one caribou prior to Jan 31
- Changed hunting season dates for nonresidents: September 1 – 15
- Closed Same-Day-Airborne hunting in GMUs 9-B and 17-B&C

BOG - March, 2009

- Closed caribou hunting season for nonresidents

Closing:

- **MCH- initially a very small herd, with limited distribution and utilization**
- **Rapidly grew to large herd, with great increase in distribution and use**
- **Large herd for relatively short time**
- **Rapid decrease in herd size,...but still widespread distribution and use**

Closing:

- **Number of caribou harvested has declined dramatically,...but so has hunting effort**
- **Area of most harvest has shifted to west side of range**
- **Starting to see increased productivity from younger age classes**
- **Calf mortality project scheduled for May 2011**