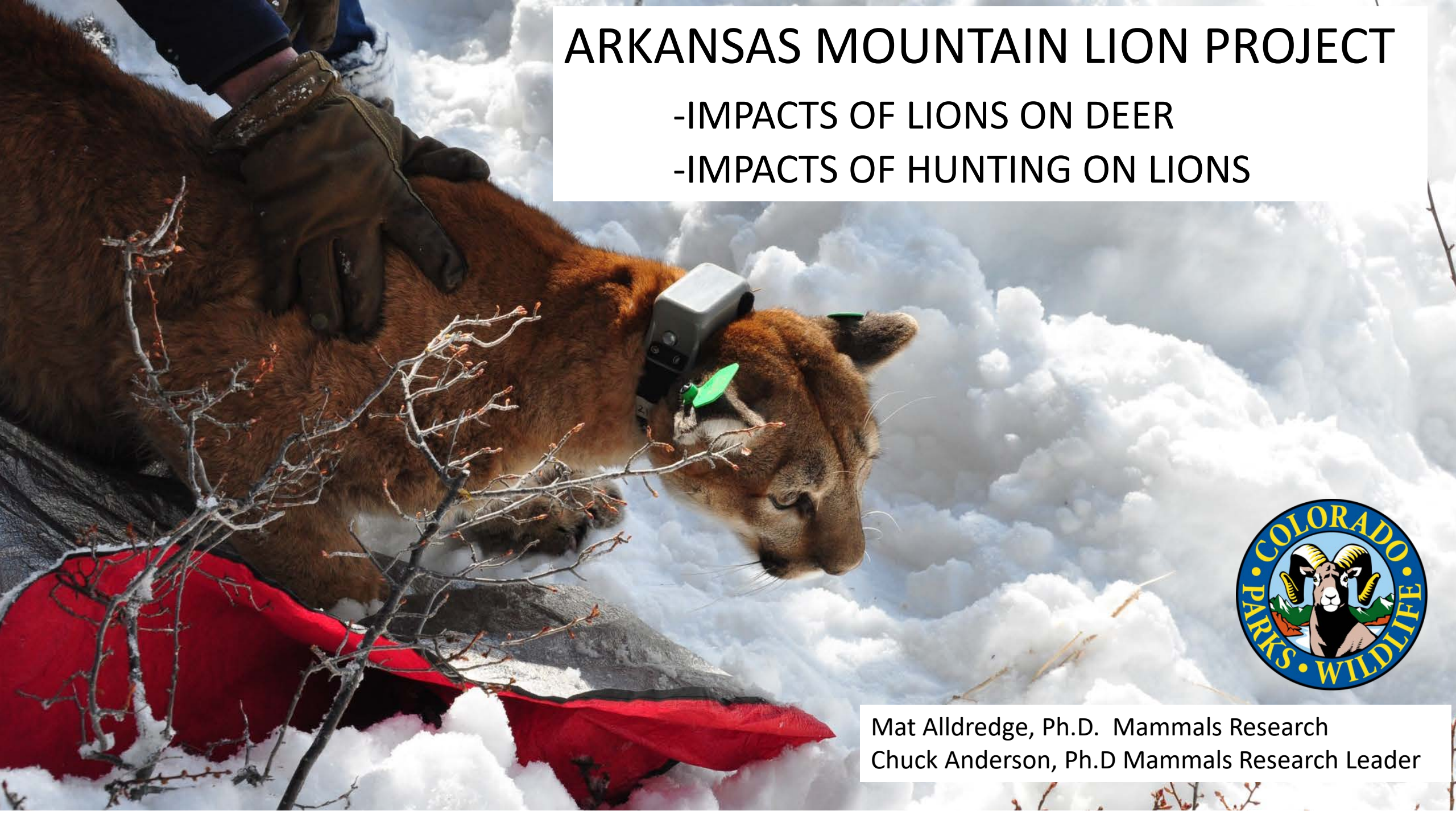


ARKANSAS MOUNTAIN LION PROJECT

-IMPACTS OF LIONS ON DEER

-IMPACTS OF HUNTING ON LIONS



Mat Alldredge, Ph.D. Mammals Research
Chuck Anderson, Ph.D Mammals Research Leader



Management History

Predator-Bountied
Predator-Unbountied
Predator-Unclassified
Protection

CO, NV-1965

WA, BC-1966

OR, UT-1967

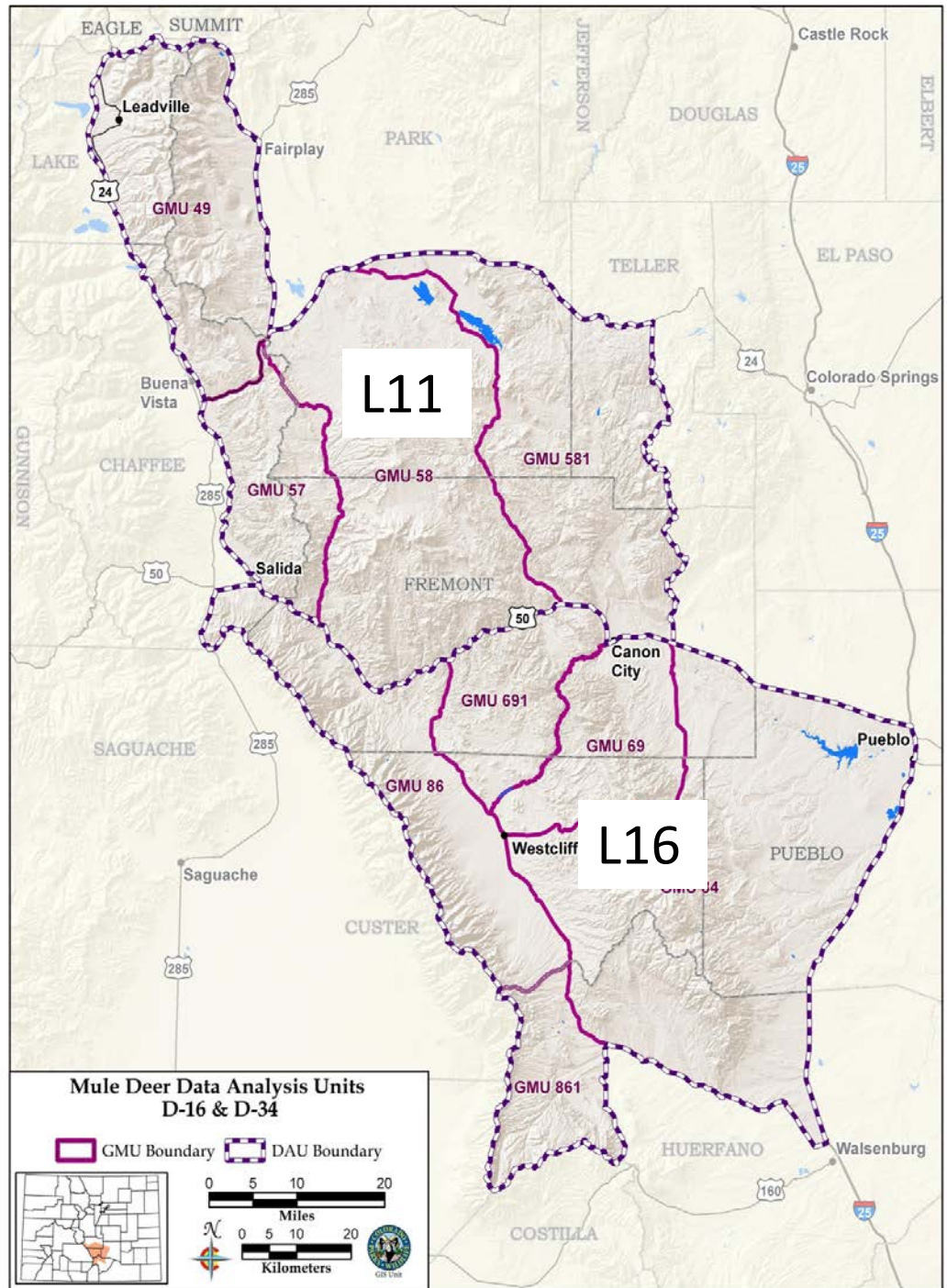
CA, ALB-1969

AZ, MT, NM-1971

ID-1972

WY-1973

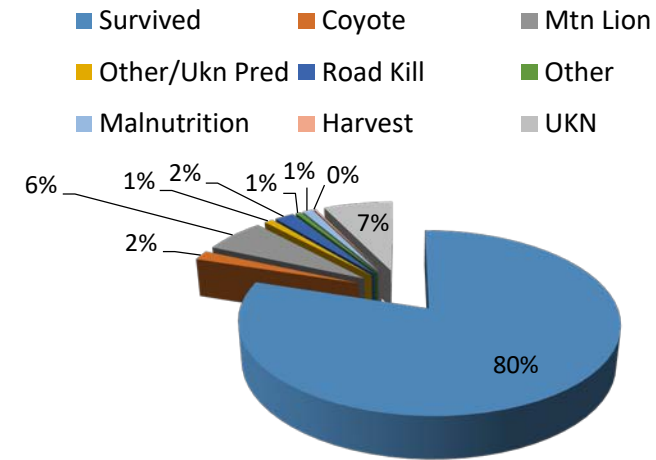




Impact of Lions on Deer Populations

- Why we started the study:
 - Adult deer survival rates 70% to 95%
 - Causes of Mortality
 - Variable from year to year
 - Known mortality from lions 6% (1-16%)
 - Potential mortality from lions could be high
- What we have found:
 - Deer survival has been high, over 80%
 - Mortality from lions low < 5% in most years

L11 Annual Doe Survival Dec 1999 - Dec 2015 (n = 1,086)



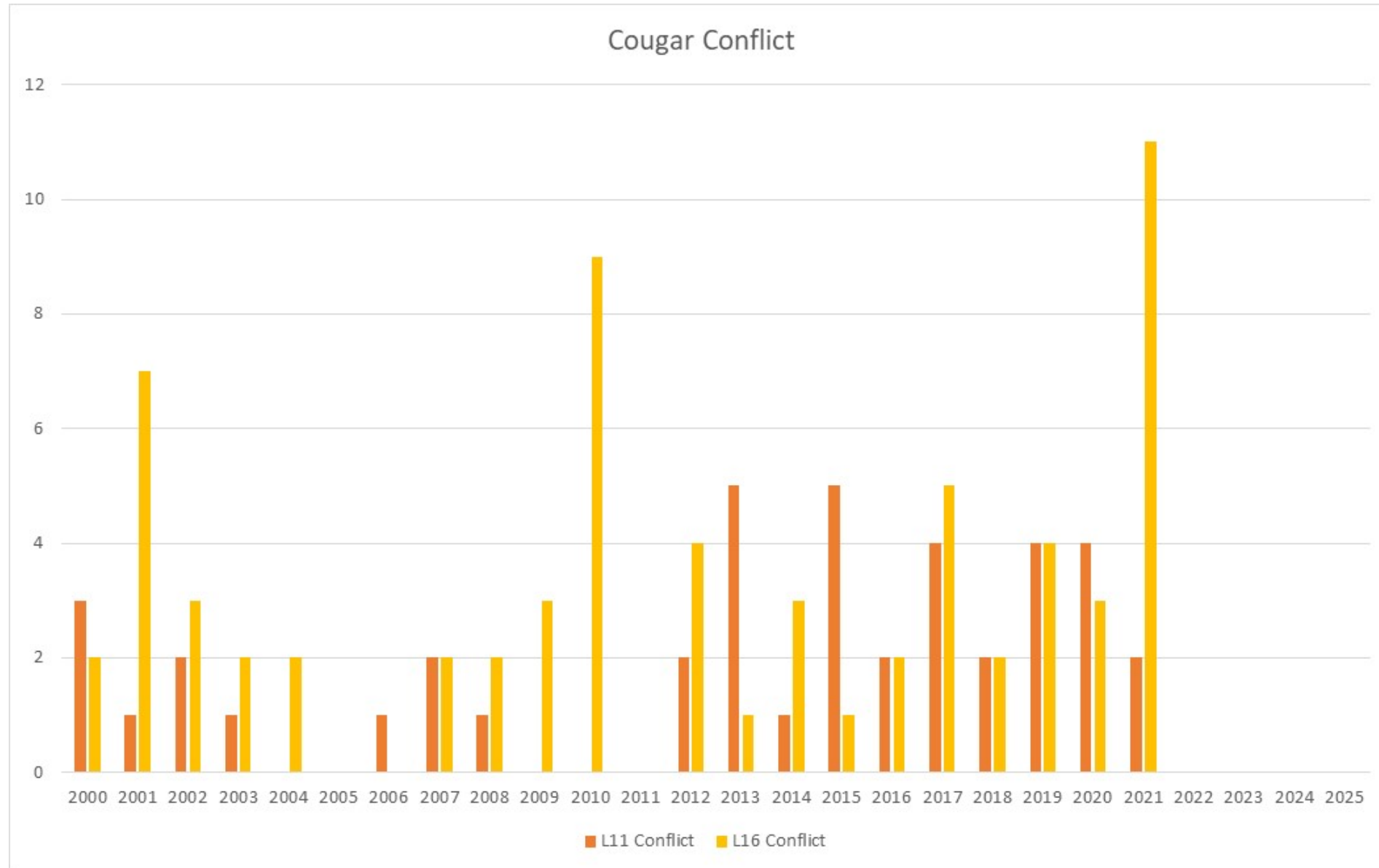
- **DEER PORTION OF THE STUDY HAS CONCLUDED**

Impact of Hunting on Mountain Lion Population

- Some theories on hunting lions
 - Intraspecific strife—increased mortality
 - Compensatory immigration
 - Increased human conflict
- Current progress
 - 5 population estimates (2.7 to 3.1 lions per 100 km²)
 - Monitored lion mortality
 - Monitored human conflict



Current Progress—Lion Conflict



Lion Study—The Next 3 Years

- Questions from other research
 - 25% lion mortality will cause
 - Compensatory immigration
 - Younger population structure
 - Increase intraspecific mortality
 - Increased human conflict
- Proposed Study Objective
 - Increase harvest in L16 to 25% (35 lions)
 - 2023-24 harvest limit recommendation increase of 20
 - Continue to monitor lion populations
 - Population size
 - Cause specific mortality
 - Human conflict

