



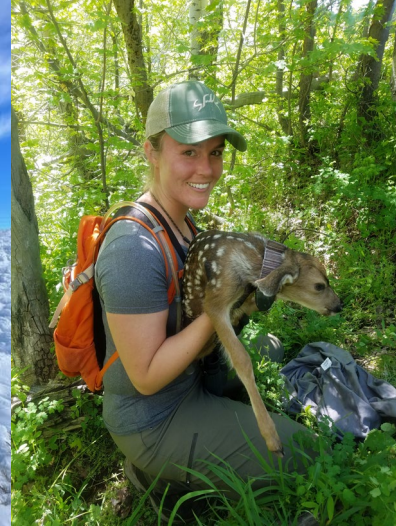
UTAH DEER MANAGEMENT

A PARTNERSHIP APPROACH



Utah Division of
Wildlife Resources

MULE DEER PARTNERSHIPS

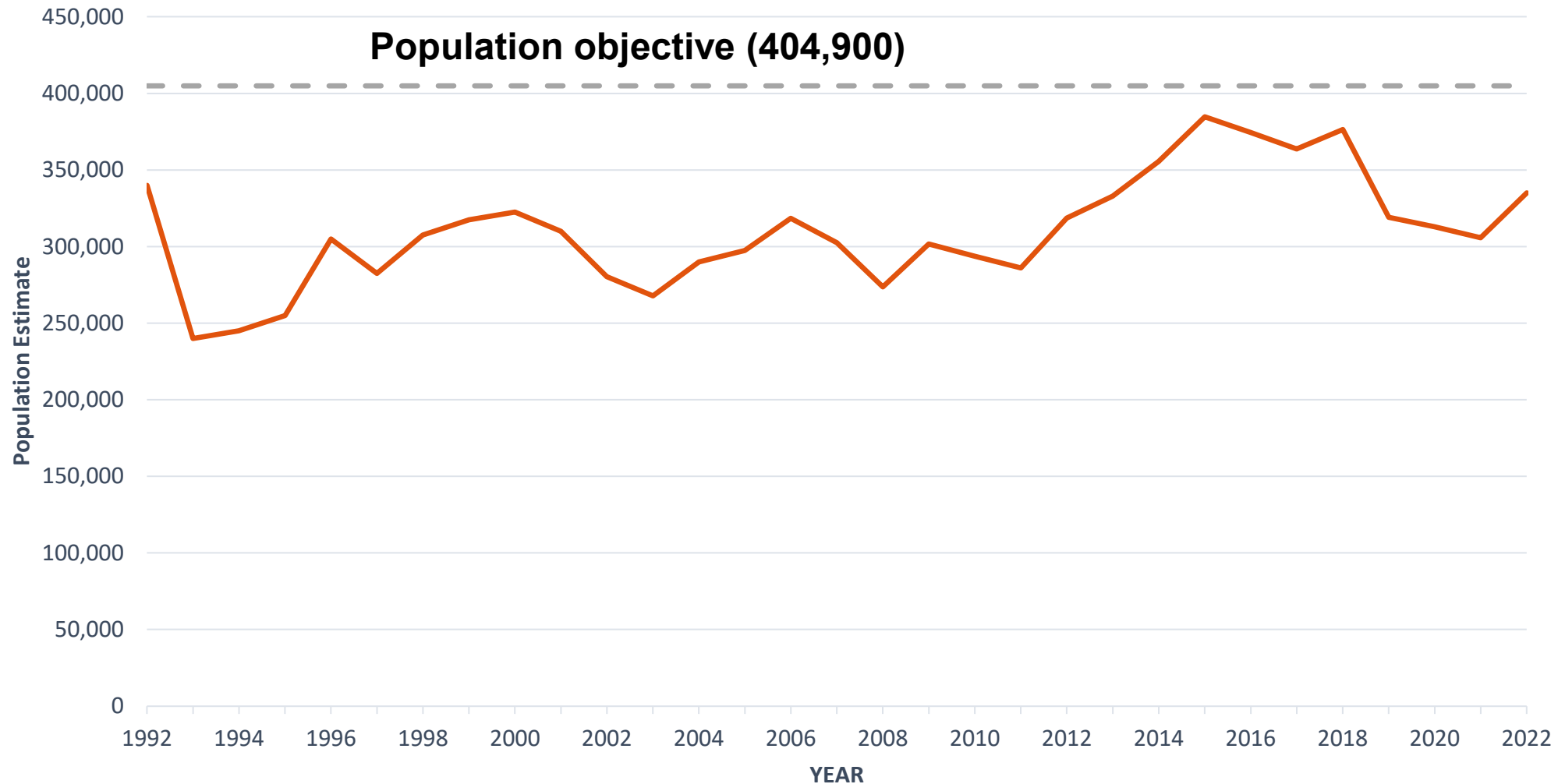


MULE DEER POPULATION ESTIMATES

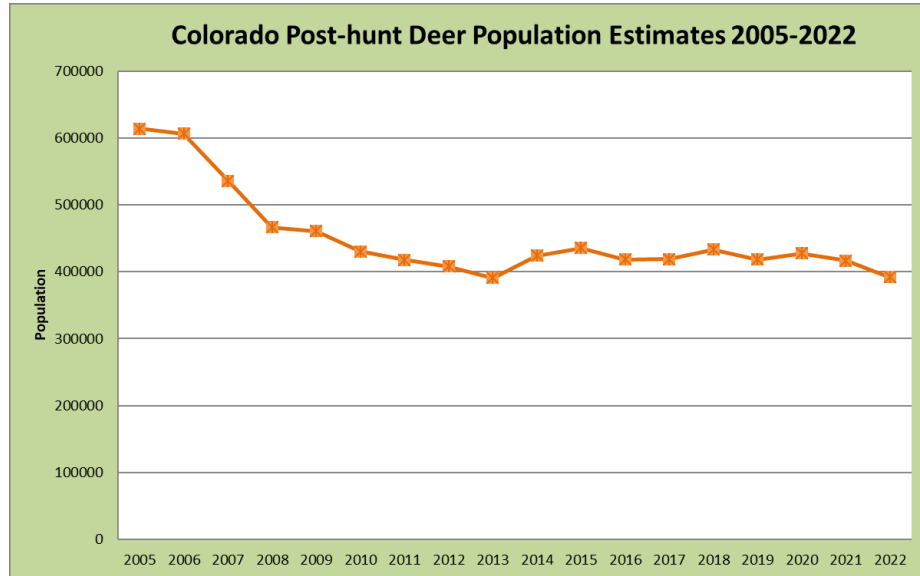
State/Province	Mule deer population	Deer hunters
California	450,000 - 500,000	177,785
Colorado	391,900	88,937
Utah	335,000	70,173
Idaho	281,988	79,516
Montana	249,758	144,740
Wyoming	242,500	40,539
Alberta	193,300	34,800
Texas	183,257	30,473
British Columbia	100,000 - 170,000	48,681
Oregon	150,000 - 160,000	38,873
Washington	90,000 - 100,000	90,783
New Mexico	80,000 - 100,000	36,748
Nebraska	60,000 - 100,000	29,210
Arizona	80,000 - 90,000	38,410
South Dakota	86,500	71,516
Saskatchewan	65,000 - 85,000	16,300
Nevada	68,000	15,500
Kansas	51,400	17,869
North Dakota	16,000	8,493



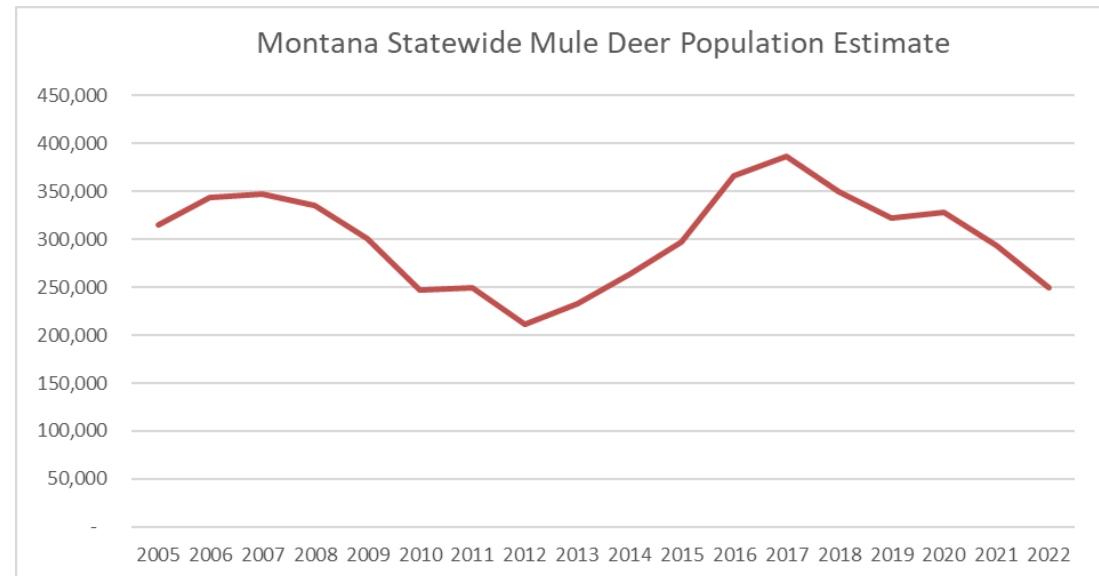
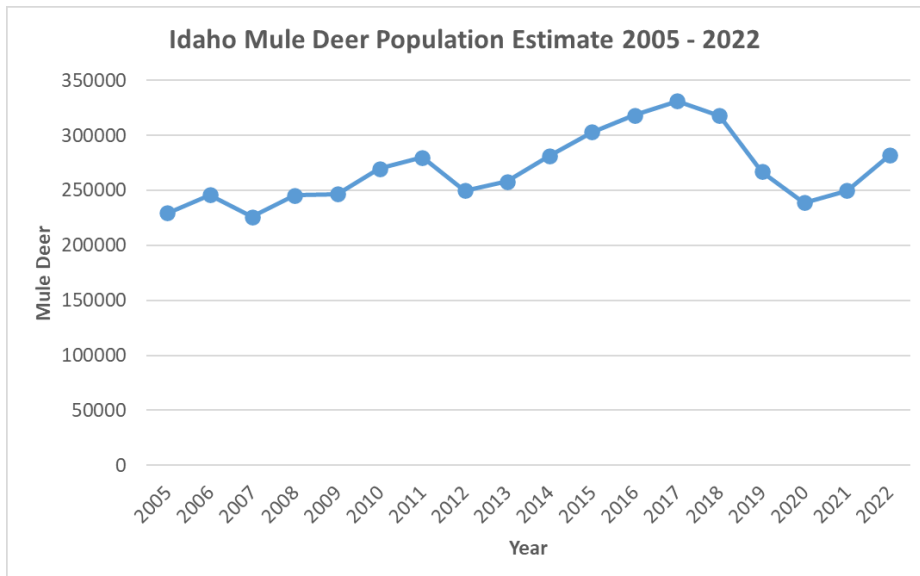
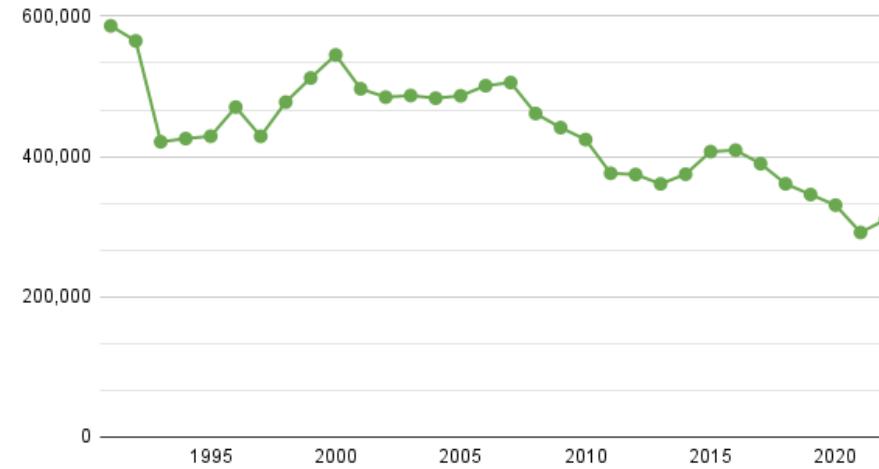
STATEWIDE DEER POPULATION TRENDS



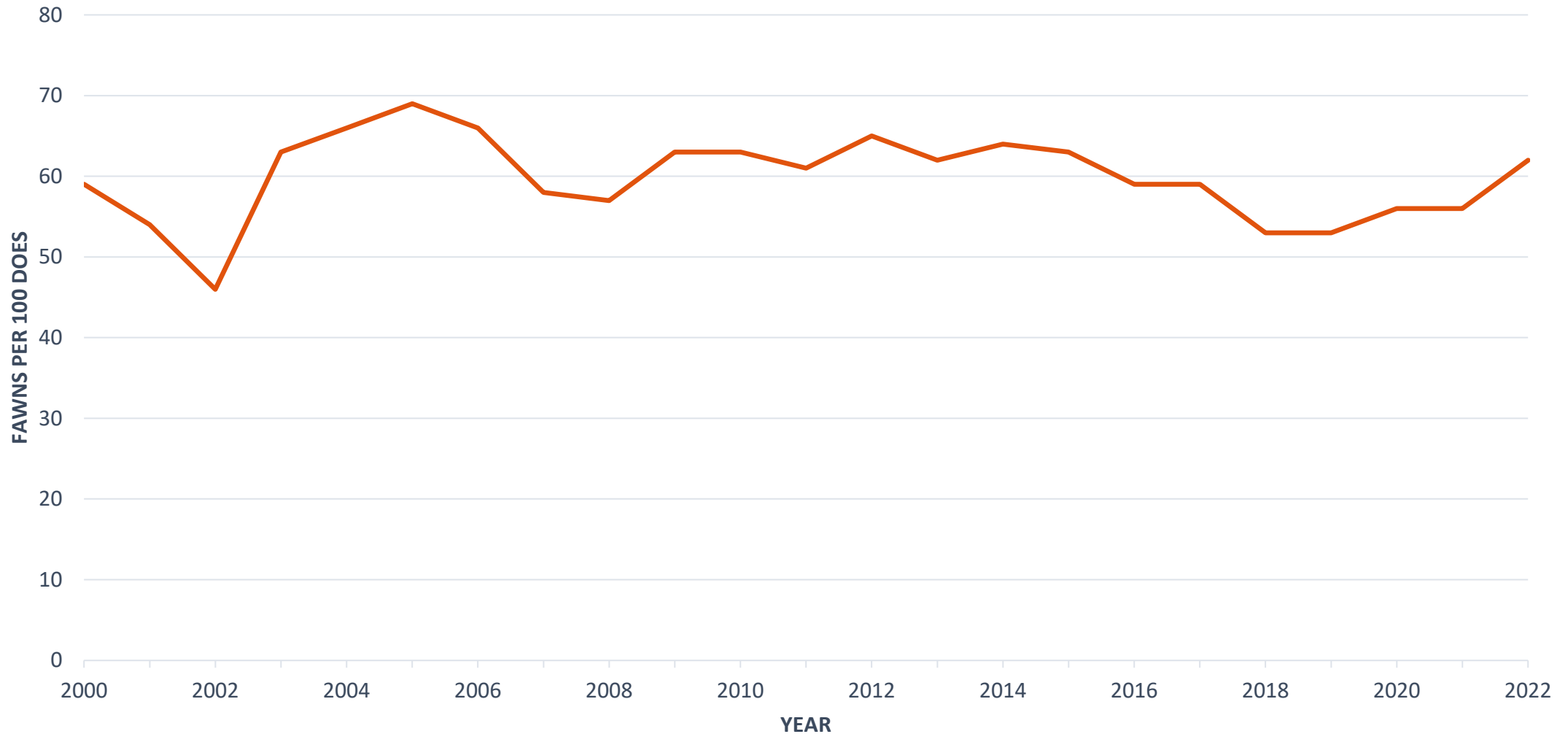
MULE DEER POPULATION TRENDS



Wyoming Mule Deer Population Estimates, 1991 - 2022

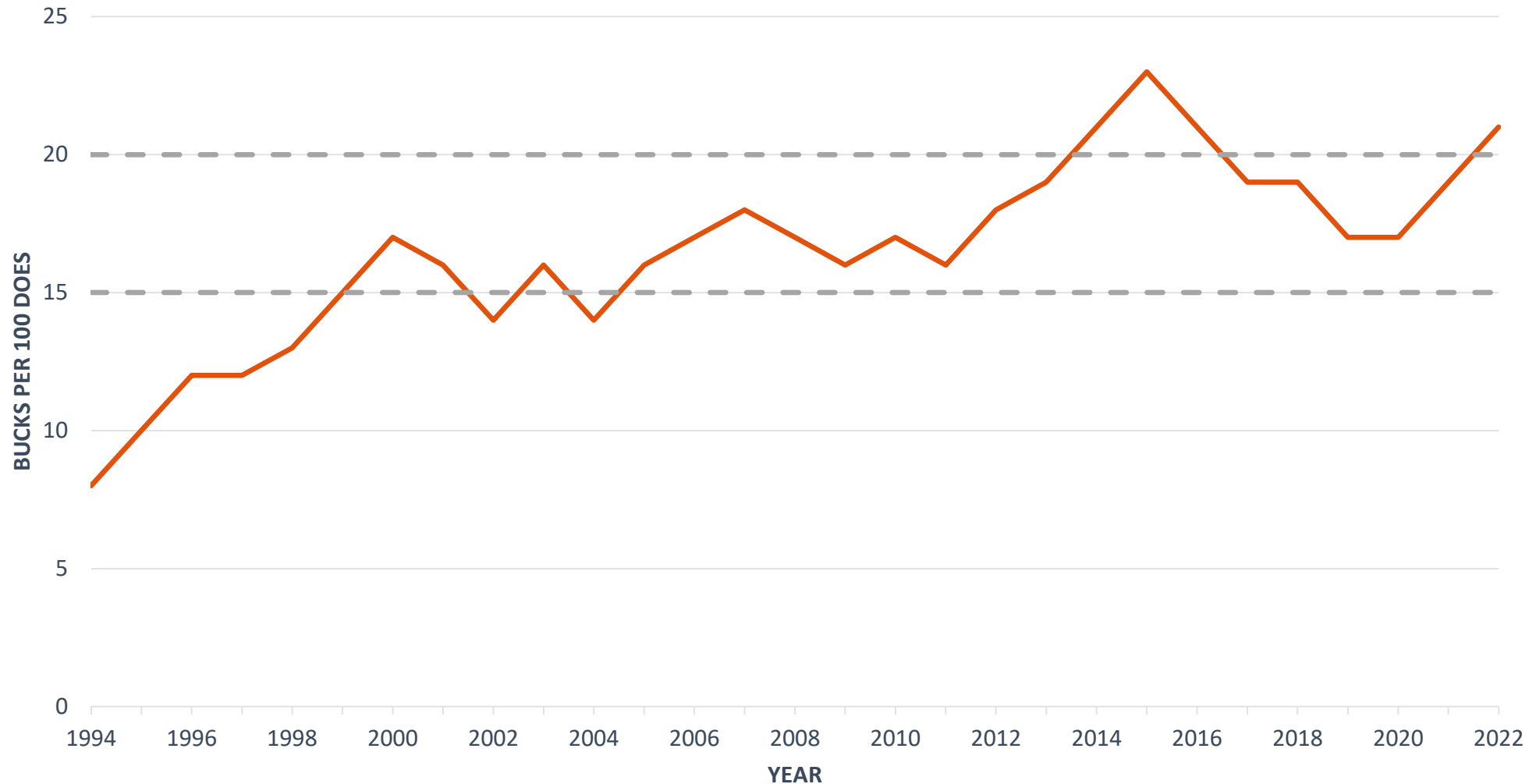


FAWN PRODUCTION TRENDS (2000-2022)



BUCK-TO-DOE RATIO TRENDS (1994-2022)

These classification surveys took place on general-season public land units.



DEER MANAGEMENT IN EXTREME WEATHER

Deer management can be challenging in the face of extreme weather, particularly:

- Severe winters
- Extended drought



SEVERE WINTERS

These are measures we've taken to protect Utah's deer populations during severe winters.



DEER FEEDING



SHED ANTLER
GATHERING CLOSURES

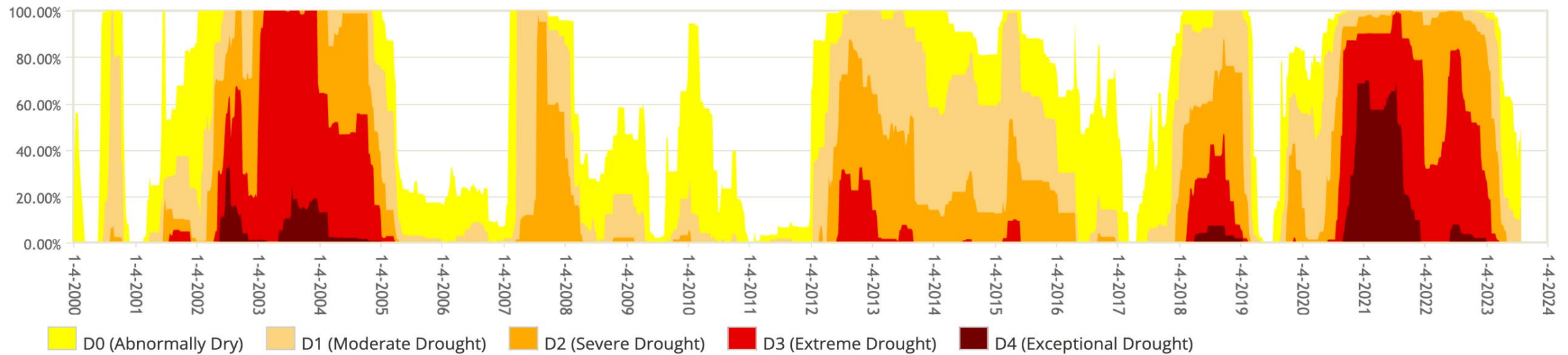


WILDLIFE MANAGEMENT
AREA CLOSURES

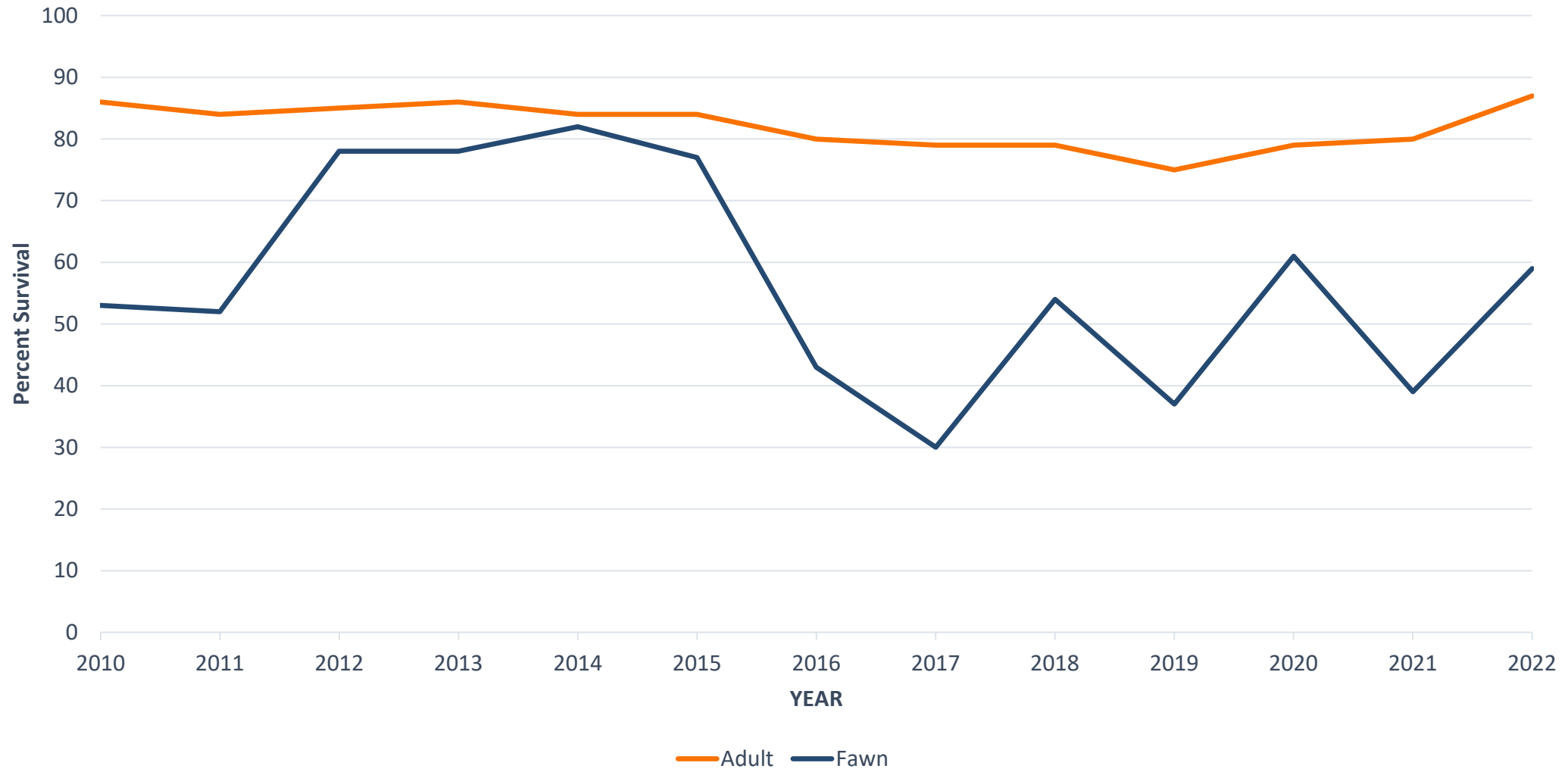
SEVERE, EXTENDED DROUGHT

- Monitor range vegetation
- Monitor and project body condition and survival
- Reduce hunting permits
- Increase predator management efforts

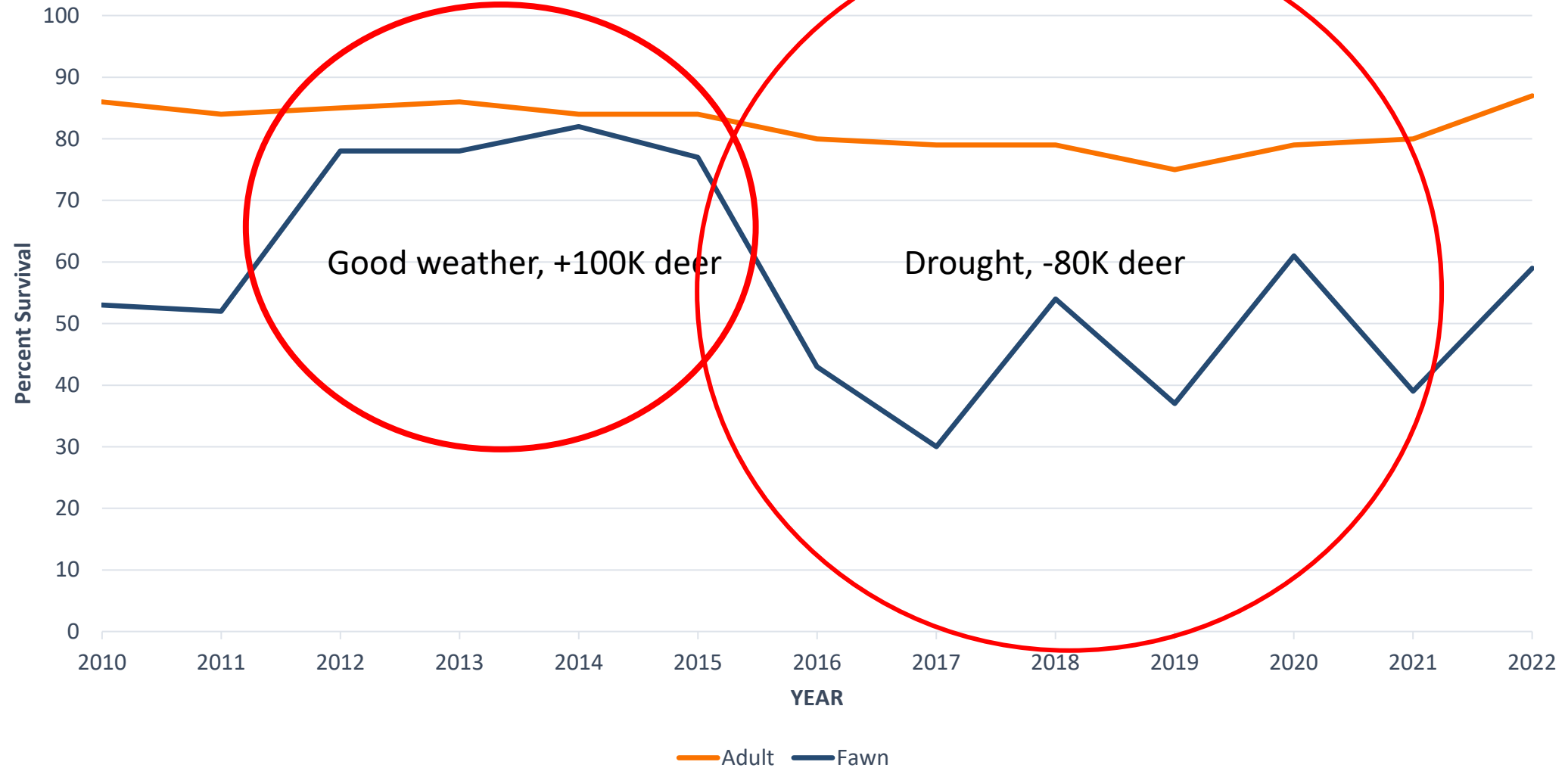
Utah Percent Area in U.S. Drought Monitor Categories



STATEWIDE DEER SURVIVAL RATES (2010-2022)



STATEWIDE DEER SURVIVAL RATES (2010-2022)



BODY FAT AND WINTER SURVIVAL

We've collected deer body fat data every December for the past nine years (2014–2022).

- Checked deer on 10-15 units per year
- Learned that more body fat means a higher chance of winter survival
- Identified areas where deer habitat needs help



FAWN SURVIVAL STUDIES

Our collaring studies on newborn fawns are:

- Used to identify the timing and cause of death (as well as where deer are surviving)
- Conducted with multiple education and conservation partners



WHAT KILLS DEER IN UTAH?

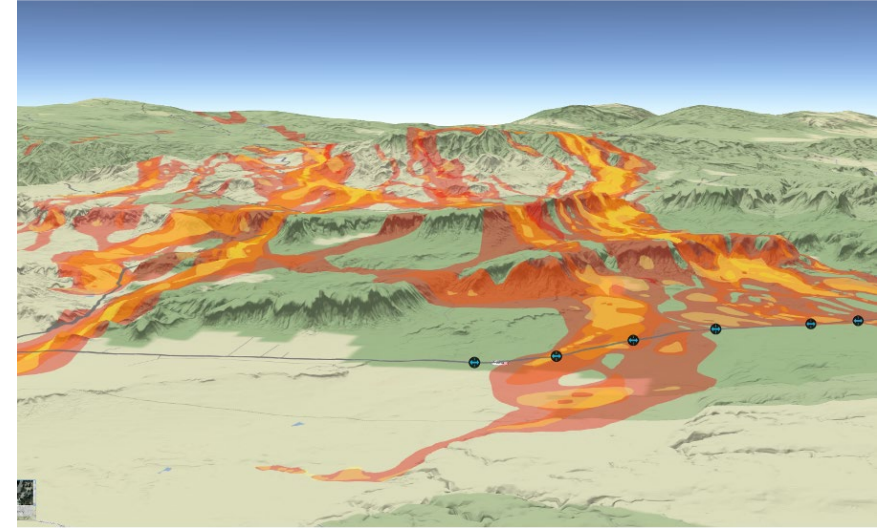
We're studying the different causes of deer mortality in Utah and identifying factors that limit the growth of each population. Then, we use targeted management strategies to address those issues.



UTAH WILDLIFE MIGRATION INITIATIVE

Modeling deer migration corridors

- Understand movement patterns
- Identify high-use areas
- Discover barriers



Wildlife-crossing structures

- Allow deer to safely cross roadways
- Remove barriers to migration
- Maintain historic migration routes between summer and winter ranges

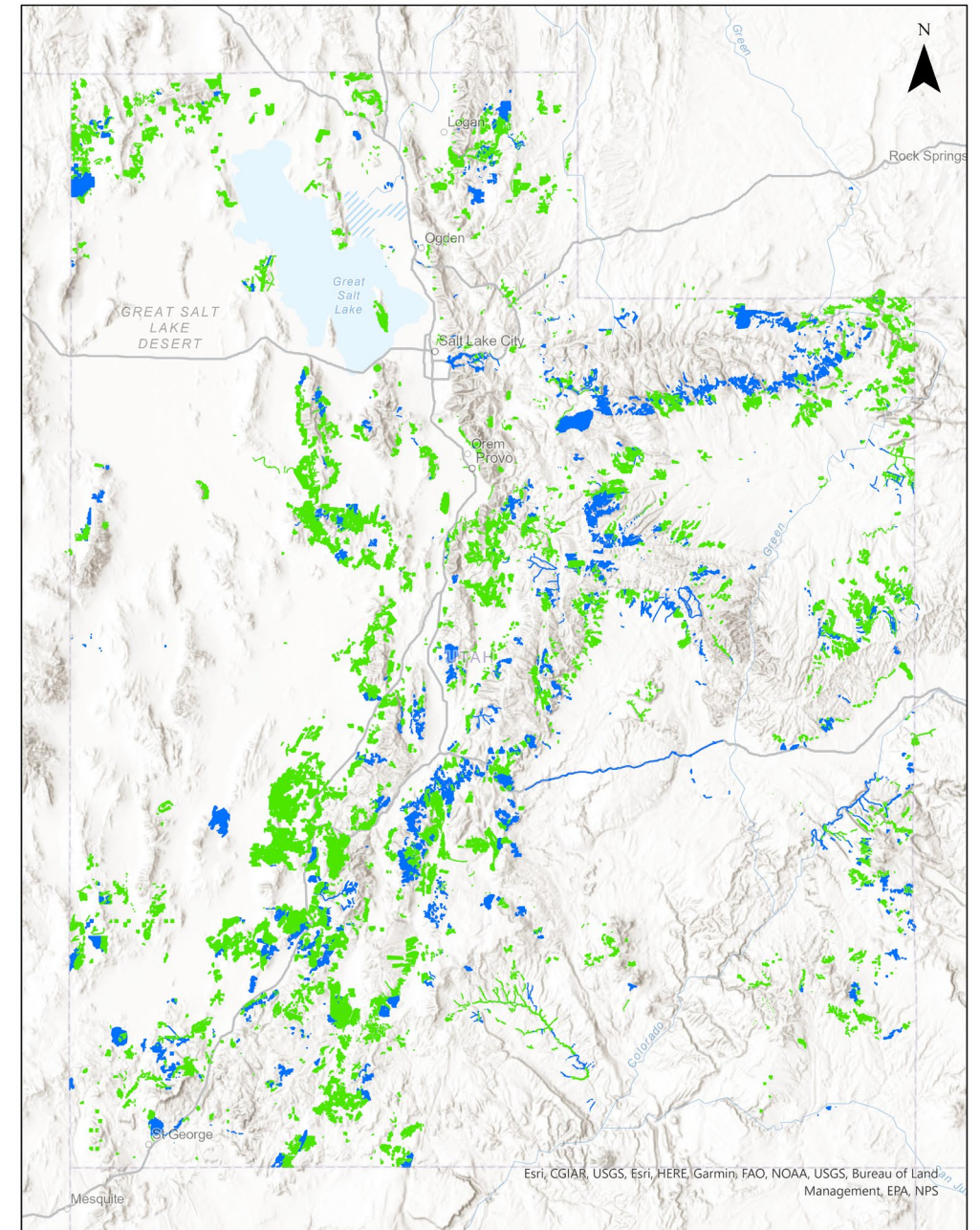


UTAH'S WATERSHED RESTORATION INITIATIVE

Since 2006, Utah's Watershed Restoration Initiative has worked to restore and conserve deer habitat across Utah.

- Total restored: **2,928,791 acres**
- Streams restored: **8,730 miles**
- Easements acquired: **50,643 acres**

On the map, areas in blue are current projects, and areas in green are completed projects.



PREDATOR-CONTROL EFFORTS

- Implemented predator management plans on 33 of 52 units in 2021.
- Increased cougar harvest 98% between 2015 and 2021.
- Moved to unlimited cougar harvest using a hunting license earlier this year.
- Increased black bear harvest 65% between 2015 and 2022.
- Used aircraft to remove 3,852 coyotes from deer-fawning areas in FY23.
- Removed 3,798 coyotes via the predator-control bounty program in FY23.



FUTURE MANAGEMENT

We're always willing to do more:

- Incorporate new ideas
- Study new issues or management options
- Implement new practices





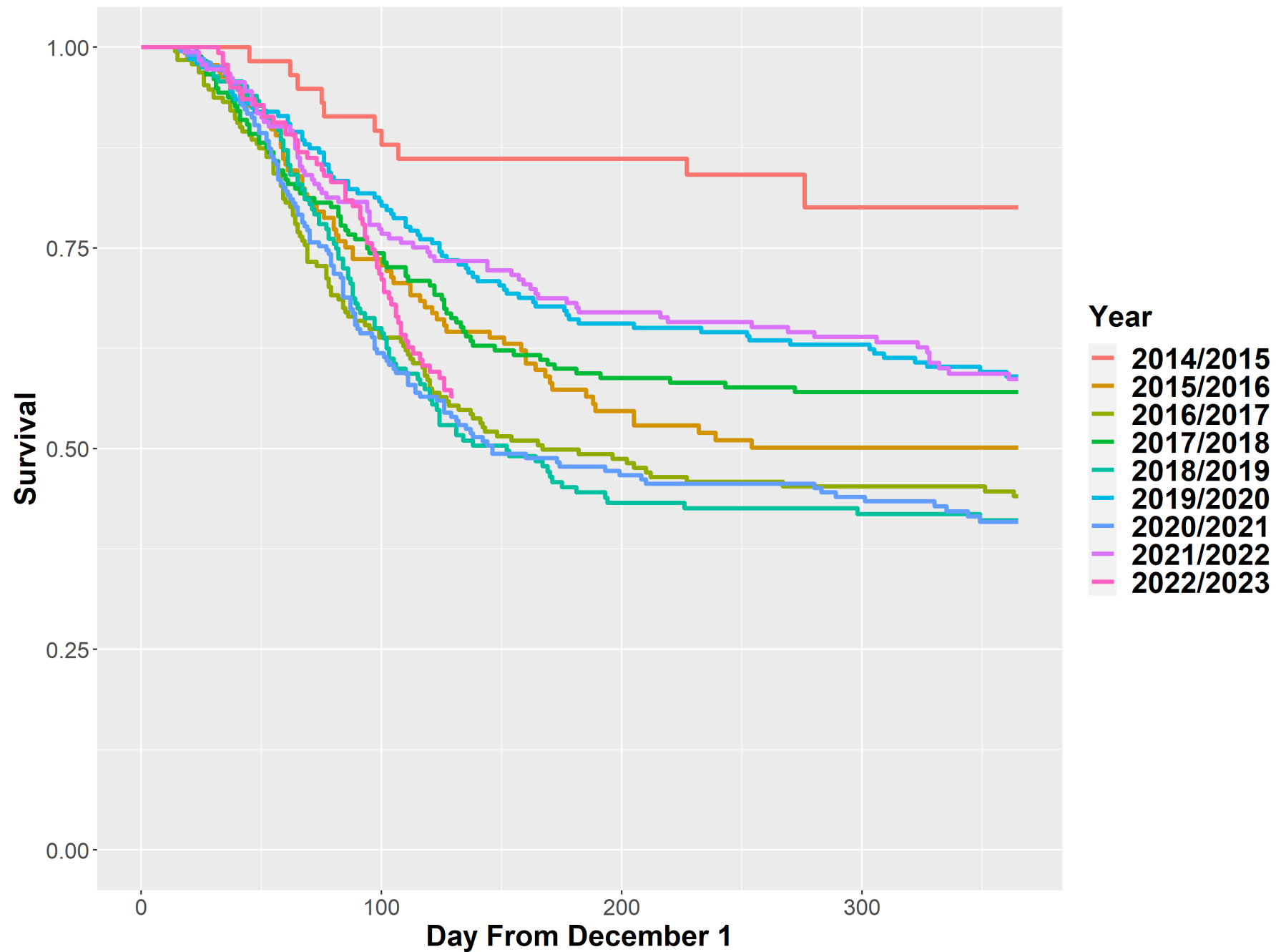
THANK YOU



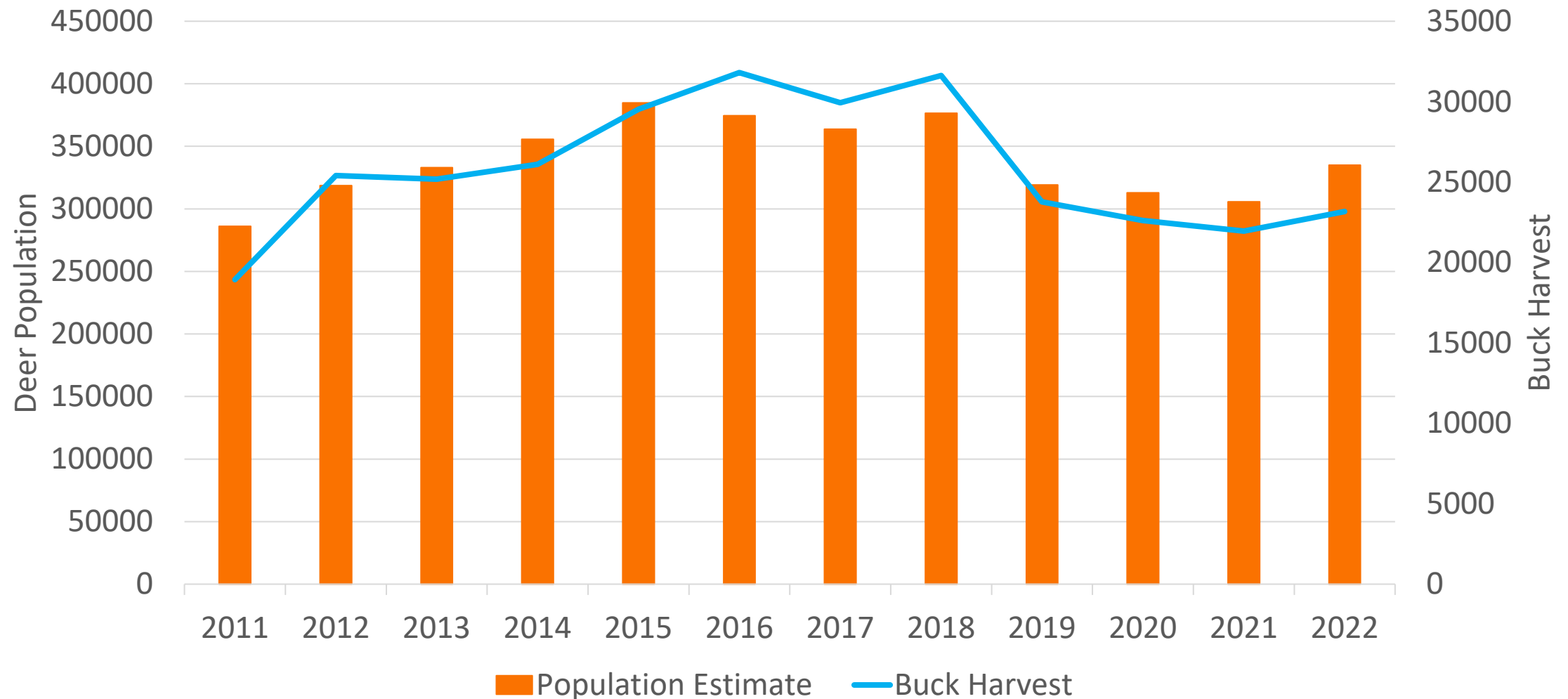
Utah Division of
Wildlife Resources



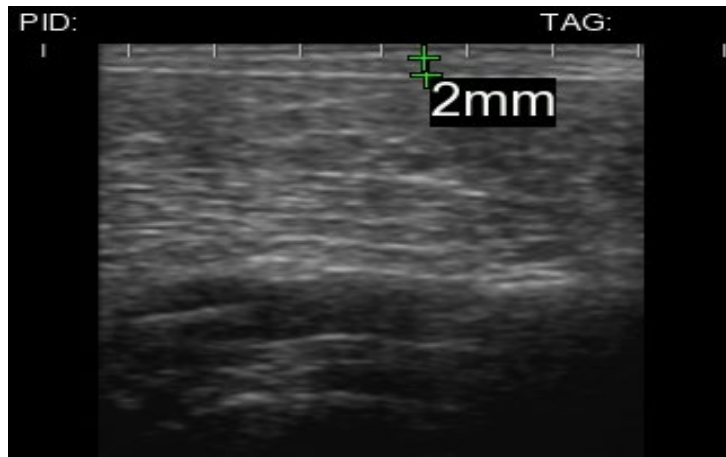
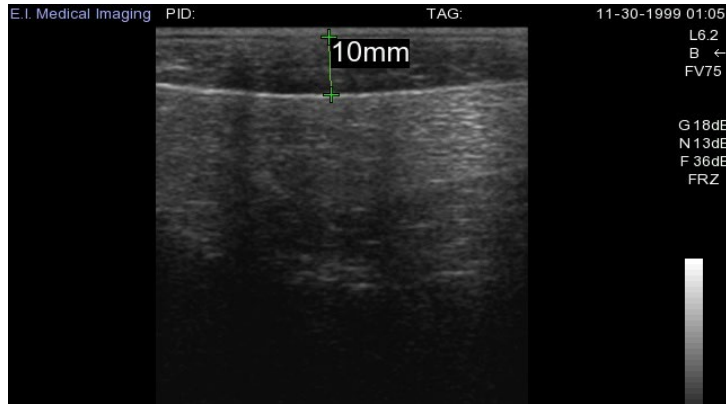
Statewide Fawn Survival



DEER POPULATION AND GENERAL-SEASON BUCK HARVEST

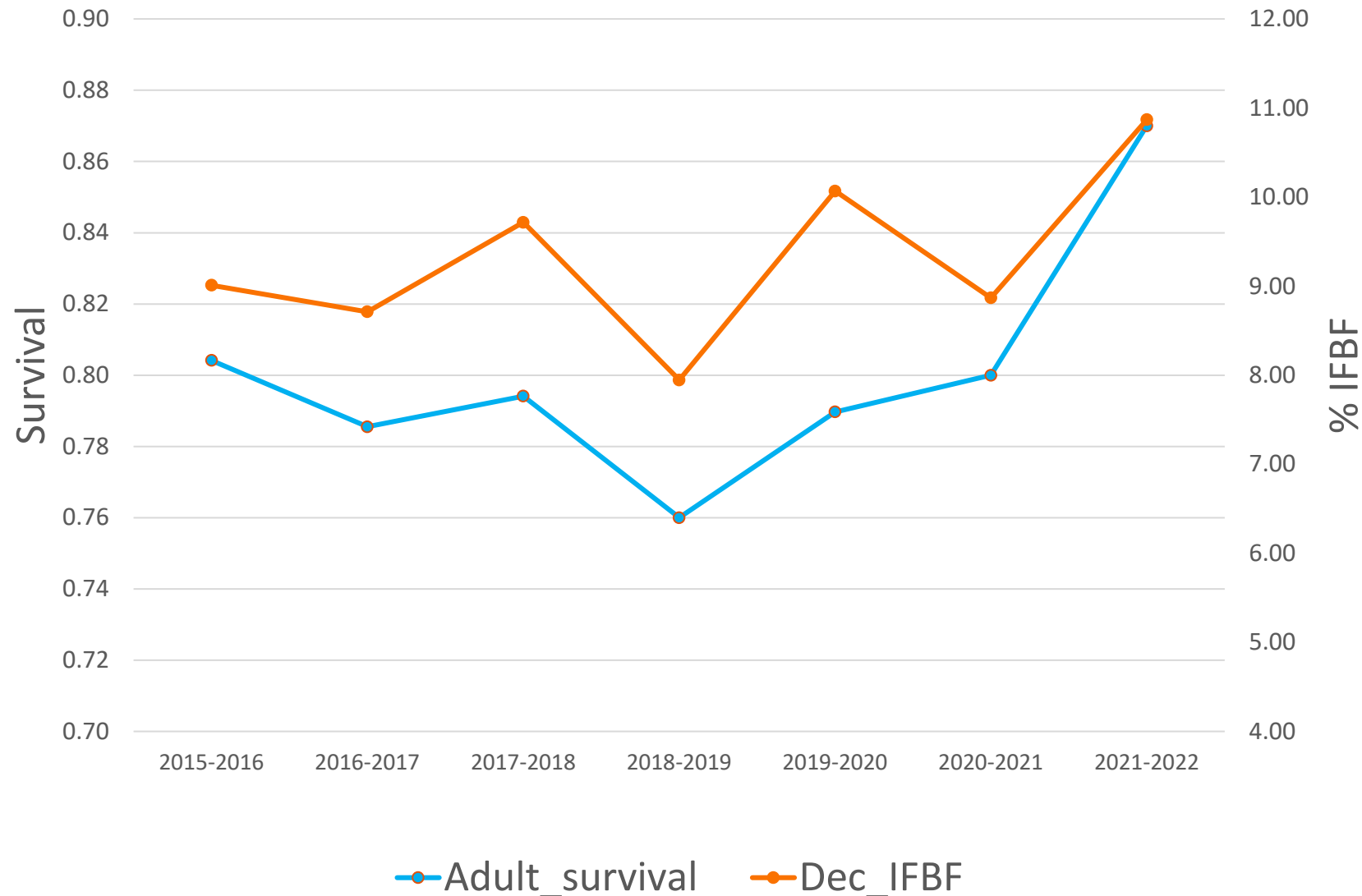


DECEMBER BODY CONDITION 2014-2022



Unit	Percent (%) Ingesta Free Body Fat (IFBF)								
	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020	Dec 2021	Dec 2022
Box Elder						8.79	9.30	12.42	
Cache		11.02	9.59	13.65	10.32	13.71	12.13	12.88	10.44
Morgan							8.84	10.84	
Antelope Island						9.99			
North Slope					8.59				
South Slope	11.31	9.46	9.00	9.56	7.24	9.90	8.52	12.18	8.65
Oquirrh-Stansbury	10.52	8.43	9.56	8.79	7.39	8.46	8.26	10.91	9.91
Chalk Creek/Kamas					7.19	11.02	10.75		
Wasatch-Manti		8.76	9.22	10.23	9.32	11.11	8.97	10.28	9.40
Wasatch East						11.51	12.26	10.78	
Southeast Manti			8.87			9.42	9.25	10.89	8.03
Southwest Manti							7.30		
Nebo-Tintic								12.67	8.88
Book Cliffs				7.56	6.35	8.80	7.13	8.88	
Nine Mile									8.48
West Desert					6.33	8.04			
Monroe	8.10	8.98	8.23	9.53	6.50	10.37	8.56	11.28	8.40
Beaver						7.75	8.44	9.67	
Boulder						8.54	5.96		
Kaiparowits							5.88		
Panguitch					8.76	8.64			
Pine Valley		7.42	6.68	6.54	6.91	6.86	6.77	7.71	7.25
Zion					8.48	9.04			
LaSal						8.63		7.61	8.91
San Juan		9.35	9.25	7.60	7.77	9.50	8.11	8.79	7.97
Statewide	9.98	9.06	8.80	9.18	7.78	9.48	8.61	10.52	8.76
Statewide_7_Units	9.98	9.01	8.71	9.72	7.95	10.07	8.87	10.87	9.01

DECEMBER CONDITION AND SURVIVAL



WHAT DRIVES DEER POPULATIONS IN UTAH?

- Survival of adults, primarily does, since bucks don't have babies
- Fawn production (fawn-to-doe ratios)
- Fawn survival
- Limiting factors
 - Weather/precipitation
 - Predators
 - Habitat

