



DEER & ELK MANAGEMENT

ELK POPULATION STATS

Year	Population Estimate
2021	3,000
2022	2,900
2023	Pending

Population Objective: 1,800

The unit will be flown at the end of the month to get an updated elk population estimate and bull:cow ratios.

ELK POPULATION STATS



- Less than 10% mortality winter 2022/23
 - Higher bull loss than cow loss
- Antler growth reduced this year
- Water = elk were more spread out this summer

DEER POPULATION STATS

Year	Population Estimate	Fawn:Doe Ratio	Buck:Doe Ratio
2022	12,000	71/100	24/100
2023	12,000	32/100	21/100
2024*	2,400*		

Population Objective is 13,500.

I found 41 deer- 26 Does, 5 bucks, and 10 fawns in December.

DEER POPULATION STATS



- Wasatch Front had 55% mortality Winter 2022/23
- Wasatch Back had 80% mortality Winter 2022/23
- Most surviving deer were 2-5 years old.
- Antler growth reduced this year.

DEER ECOLOGY

Population Management vs Buck Hunting

- Hunting fewer bucks does not increase the deer population.
- Hunting bucks is mostly a social decision
- 4-6 bucks per 100 does needed to successfully breed



DEER ECOLOGY

From Utah Data

Many factors influence deer populations:

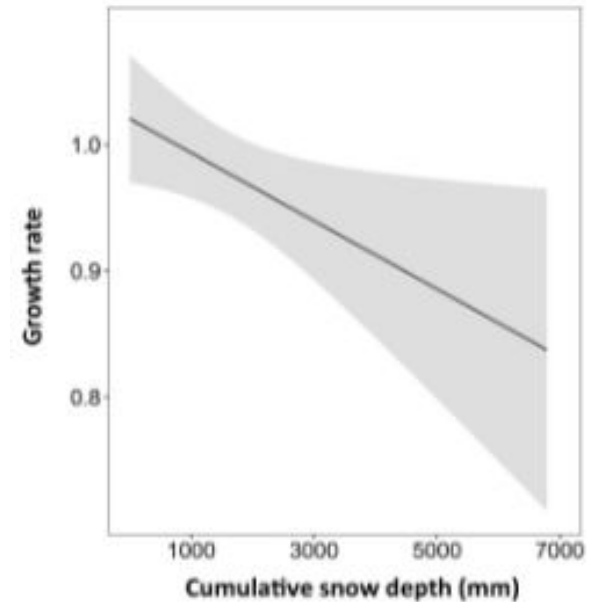
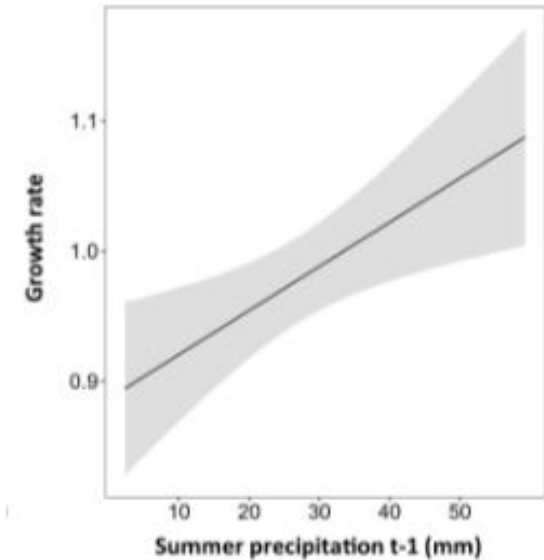
- Weather
- Habitat
- Sex Ratio
- Predation
- Disease



DEER ECOLOGY

Weather

- Moisture extremes Set Carrying Capacity
- Averages influence growth rates
 - More snow reduces growth rate
 - More summer precipit increases growth rate
- Extreme temperatures reduce growth rate



DEER ECOLOGY

Habitat

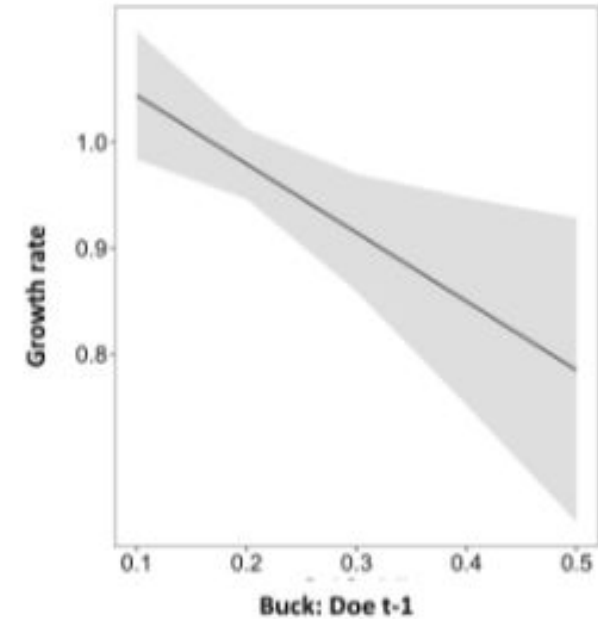
- Sets Carrying Capacity but related to weather
- Winter Range
- Summer Range



DEER ECOLOGY

Sex Ratio

- Influences growth rate
- More bucks slows growth rate
- Buck:doe ratio above 25:100 prevents growth



DEER ECOLOGY

Predation

- Influences growth rate
- Coyotes
- Cougars
- Bears



DEER ECOLOGY

Disease

- Usually impacts growth rate but can limit carrying capacity
- EHD, Blue Tongue, Pneumonia, CWD



DEER ECOLOGY

Buck Survival

- Approximately 50% loss by 2 years old
- Yearling harvest mostly compensatory



DEER ECOLOGY

Antler Growth

- Social decisions
- Mother's body condition
- Current year conditions
- Genetics



HUNT RECOMMENDATIONS

Mule Deer

- Take 40-50% of average permits last 5 years
- Require percent of those to take yearlings (small 2 points and spike).



HUNT RECOMMENDATIONS

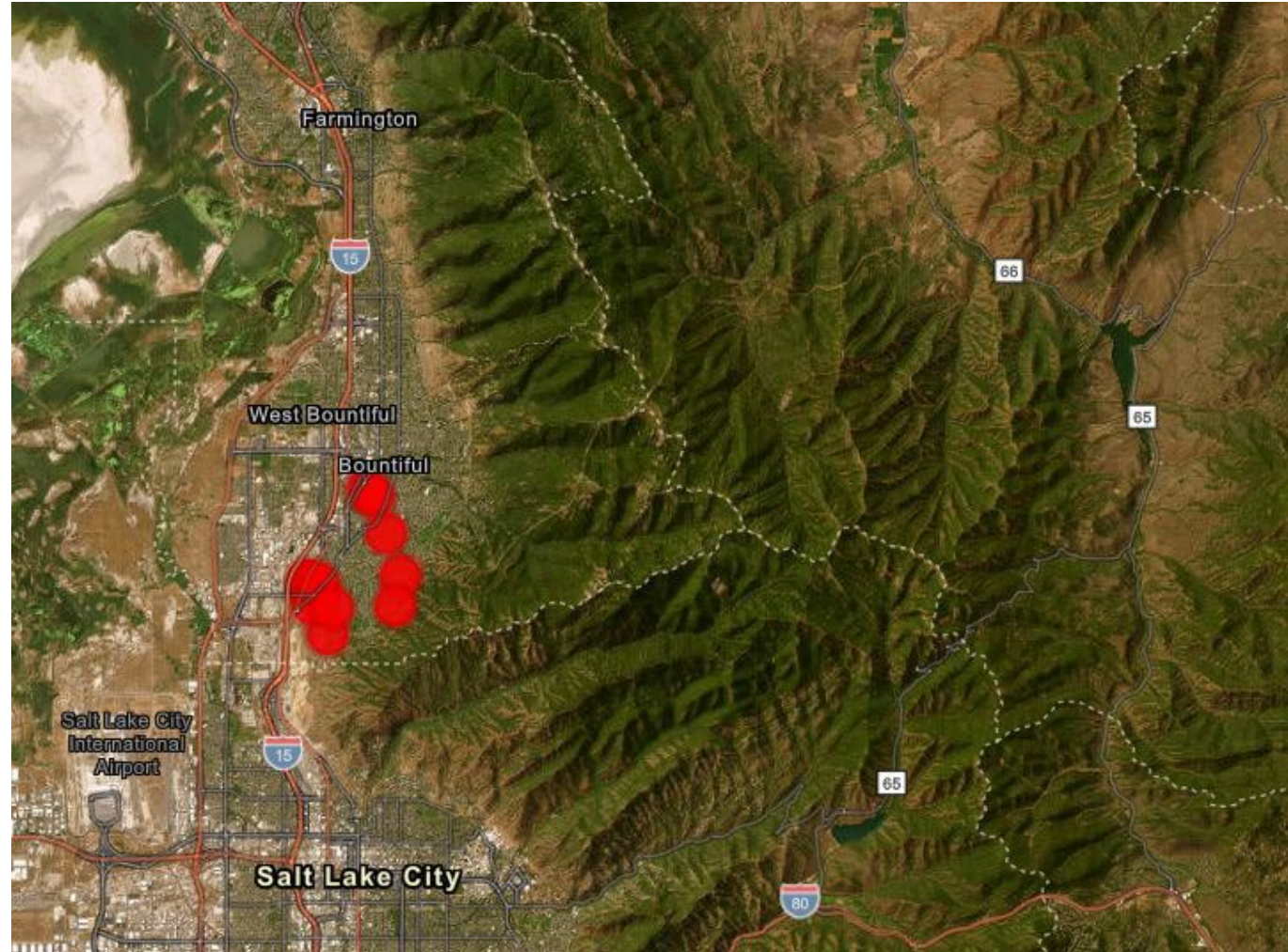
Elk

- Elk are over objective
- Not impacted much last winter
- Maintain permits similar to previous years
- Continue cow harvest



CHRONIC WASTING DISEASE

- Prion disease- spread through bodily fluids
- Always fatal
- 5% prevalence = exponential spread
- 30% prevalence = declining deer population
- Dormancy length depends on deer genetics
- Close proximity to hot spot- should test all harvested elk and deer



WINTER FEEDING

- Can save some adult deer in extreme conditions if fed correctly
- High disease risk
- Creates expectation for animals
- Causes habitat damage
- Can reduce fawn survival
- Extremely expensive and labor intensive



THANK YOU



Utah Division of
Wildlife Resources

