### Wildlife Management 101

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# Background

- Wildlife in New Mexico belongs to the citizens of New Mexico
- The Department of Game and Fish is an agency that manages wildlife for the citizens
- Hunters, anglers, and trappers fund wildlife management in New Mexico through license sales





# Definitions

- **Carrying capacity**-the amount of a particular species the land can support throughout the year. This can vary year to year.
- **Conservation**-the wise use of our natural resources.
- **Endangered**-a wildlife or plant species that is seriously at risk of extinction.
- **Extinct-**no longer in existence
- **Extirpated**-local extinction of wildlife or plant species in a geographic area, but it still exists elsewhere.
- Habitat-the natural environment of an animal, plant, or other organism.
- Limiting factors-a variable that prevents the population from growing or causes a decline. Limiting factors can be disease, weather, predation, loss of a habitat component.
- Preservation-the non-use of our natural resources.
- **Threatened-**species of wildlife or plants that are vulnerable to endangerment.

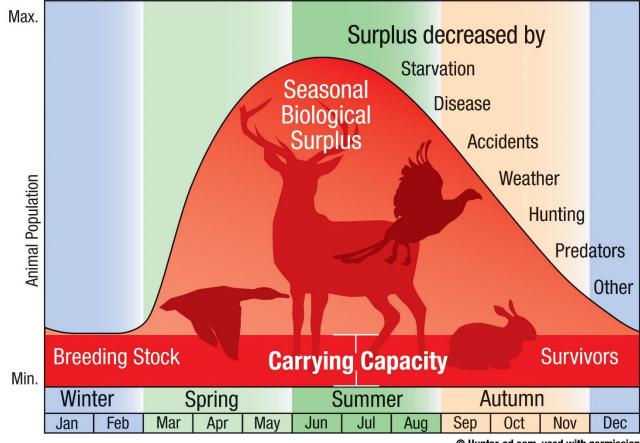
# Wildlife management

- Four main components of habitat. What are they? HINT: Think of what you need to survive.
- Best thing to do is manage the habitat
- Arrangement of components is important





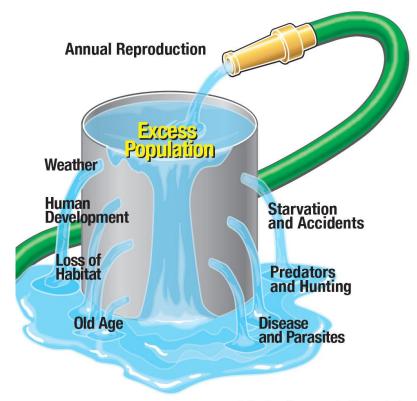
# Diagram of carrying capacity



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Carrying capacity is the number of animals the landscape can sustain over the course of the year. Breeding stock replenishes the population while limiting factors decrease numbers, only to be replenished.

# Diagram of limiting factors



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Water filling up a container is annual reproduction. Over time the population can loose members because of old age, disease, weather, predation, hunting, etc. and these are limiting factors on the population.

#### Improving habitat helps wildlife

- Developing more water for wildlife by putting in trick tanks or dirt tanks to catch monsoonal rain.
- Thinning of timber creates diversity of plant life by allowing sunlight through the tree canopy.
- Controlled burns will put nutrients back into the soil and clear the forest floor allowing for new growth.











#### Success stories across North America

- Laws, Regulations, Habitat Work, Research, Transplants....
  - Turkeys (30,000 7 million)
  - Elk (10,000-over 1 million)
  - Bald Eagles (400 nesting pairs to over 9,000 today)





North American Model of Wildlife Conservation

The North American Model has seven general tenants:

1. Wildlife Resources Are a Public Trust;

2. Markets for Game Are Eliminated;

3. Allocation of Wildlife Is by Law;

4. Wildlife Can Be Killed Only for a Legitimate Purpose;

5. Wildlife Is Considered an International Resource;

6. Science Is the Proper Tool to Discharge Wildlife Policy;

7. Democracy of Hunting Is Standard.

# Regulated hunting is positive

- Talk about the Kaibab deer population in the early 20<sup>th</sup> century
- Talk about excise taxes on hunting gear (Pittman-Robertson dollars)
- Helps allow families to put healthy organic protein on their tables
- Helps to keep wildlife populations in check
- Allows families to connect to nature and to bond in the outdoors





# Let's view some of our larger mammals here in the state....



#### Mule deer



#### White-tailed deer



#### Rocky Mountain elk



Elk track



#### Elk rub on tree



# Pronghorn antelope





### Black bear











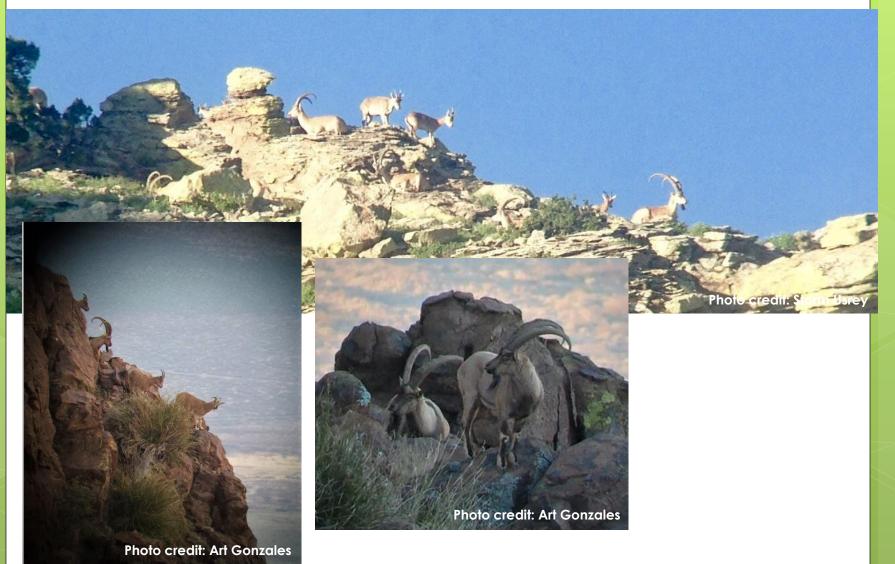








#### lbex



# Barbary sheep



#### Bighorn sheep (Desert & Rocky Mountain)



# Coyote



# Mexican Gray Wolf



# Javelina



# Bobcat



#### Thank you!!! Please enjoy nature responsibly in the future!



