

#### MASSWILDLIFE

### Wildlife Conservation







# Learning Objectives

You will be able to:

- identify key components of wildlife habitat;
- describe how wildlife and habitat interact;
- and describe how carrying capacity, biological surplus, and limiting factors affect the size of a population.

### Wildlife Conservation







### Wildlife Conservation





# <u>Wildlife Conservation</u> is the wise sustainable use of natural resources.

### Wildlife Management





## Wildlife Management





<u>Wildlife Management</u> uses science to manage wildlife **populations** and their **habitats** to achieve a goal.

### Habitat

Habitat is a species' home address.

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Food







Water



## Habitat Types







Wildlife Reproduction and Survival affected by <u>Habitat</u>

•better quality equals more resources

more resources equals more reproduction and survival

•more resources also equals less crowding, thus less spread of disease Habitat is always changing <u>Succession</u> is the natural gradual change of plant communities over time.

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Wildlife Reproduction and Survival affected by <u>Climate</u>

climate affects habitat
climate affects species ranges



# Wildlife Reproduction and Survival affected by <u>Reproductive Potential</u>



### **Carrying Capacity**

<u>Carrying Capacity</u> is the amount of animals within a population that a given habitat can support throughout the year.



### **Limiting Factors**

# <u>Limiting Factors</u> are influences that slow or stop population growth.



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- extreme weather events
- predation
- •disease
- competition



### A Year in the Life of a Wildlife Species

**Biological Surplus** is the amount of animals in a given population that are "above" the carrying capacity.

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# Hunting as a Management Tool







### •What are the four components of habitat?

### •What is the definition of carrying capacity?

•What is it called when a habitat changes through a natural gradual process?