

# Course- WL 703, Principles of Wildlife Management

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## 2<sup>nd</sup> Lecture

### Wildlife Management Practices

**Monitoring Wildlife Populations:** Wildlife managers continuously monitor the birth rate and death rate of various species and the condition of their habitat. This provides the data needed to set hunting regulations and determine if other wildlife management practices are needed to conserve wildlife species.

**Limiting the Animal Hunted:** Managers can teach hunters to take only a certain gender of animal, or number of animals from a population.

**Habitat Improvement:** As succession occurs, the change in habitat affects the type and number of wildlife the habitat can support. Wildlife managers may cut down or burn forested areas to promote new growth and slow down the process of succession. This practice enables them to increase the production of certain wildlife species.

**Hunting Regulations:** Hunting regulations protect habitat and preserve animal populations. Regulations include setting daily and seasonal time limits, bag limits, and legal methods for taking wildlife.

**Hunting:** Hunting is an effective wildlife management tool. Hunting practices help managers keep animal populations in balance with their habitat.

- Permit Hunts allow Alaska's wildlife managers to control hunting pressure on a population.
  - Aerial surveys give the manager an idea of how many animals are available to hunt.
  - Analyzing this information based on personal experience with the success rates of hunters, the manager determines a certain number of permits to issue. When a limited number of permits are available, a drawing will take place. The permits issued from this process are known as "drawing permits."
- Alaska also uses the "registration hunt" to keep a close count on the number of hunters and the number of animals taken.
  - The hunter gets a registration permit from a Fish and Game office.
  - In most cases, the hunter must tell the manager when they take an animal.
  - Sometimes part of the animal must be given to the manager.



Suppose each adult pair of waterfowl produces six young each year and none of the factors that limit wildlife production are active. At the end of the fifth year, the initial pair will have grown to more than 2,000 waterfowl.

**Hunting Tools and Seasons:** More efficient hunting tools limit hunting opportunity. Less efficient tools expand hunting opportunities.

- Many state agencies establish separate seasons for bowhunting and blackpowder hunters.

- Many hunters take up blackpowder firearm shooting and bowhunting so they can spend more time hunting. Still others do so because they enjoy the challenge.

**Predators:** When humans hunt, they compete with wild predators for food.

- Prey species populations can decline due to predators, disease, loss of habitat, and harsh winter.
- At times, there are not enough of the prey species to meet the needs of hunters and the wild predators.
- **Predator control** is used in rare instances to reduce wild predators to enable some wildlife populations to establish stable populations. This helps in two instances.
  - Protecting threatened or endangered species
  - Allowing ample food for humans who depend on game meat to survive winter
- Wildlife biologists believe that when prey species have adequate habitat, populations will provide more prey for wild predators and hunters to share.

**Artificial Stocking:** Restocking of game animals has been successful in many parts of the nation. Trapping animals in areas where they are abundant and releasing them in other areas of suitable habitat is an example of restocking.

**Controlling or Preventing Disease and Its Spread:** Disease can have a devastating effect on wildlife. Avian cholera, for example, poses a serious threat, especially to ducks and geese on crowded wintering grounds. Once avian cholera occurs, managers must work to prevent its spread by gathering and burning waterfowl carcasses daily.

**Management Funds/Programs:** In addition to Pittman-Robertson funds, many states have initiated programs that help finance conservation efforts.

## Glossary

### ***birth rate***

The ratio of number of young born to females of a species to total population of that species over one year

### ***death rate***

The ratio of number of deaths in a species to total population of that species spanning one year

***predator***

An animal that kills other animals for food

***succession***

Natural progression of vegetation and wildlife populations in an area; for example, as trees grow and form a canopy, shrubs and grasses will disappear along with the wildlife that use them as cover