

Wildlife Biology Principles Zoology 468

Instructor: Dr. Eric Schauber
Office: 269C Life Sciences II
Email: Schauber@siu.edu
Office hours: Mon., Tues., & Wed.
1:00 – 3:00 PM

Required Reading

- Bolen, E. G., and W. L. Robinson. 2002. Wildlife ecology and management, 5th edition. Prentice Hall, New Jersey
- Handouts to be provided
- Class Internet webpage

Deer attacks continue

Daily Egyptian June 14, 2005

One or more deer attacked three people Tuesday morning, according to the Director of the Department of Public Safety, bringing the total number of deer attacks on campus to six.

In one case, the deer charged the victim, but did not make contact. However, in another attack the assistant director of Media & Communication Resources and a student were both injured...

... traffic had stopped and the two people may have been trying to encourage the fawn to cross the street when the doe felt threatened and attacked....

Course Objective

- Review the ecological and social principles that form the basis of modern wildlife management.

Subject Matter

- History of Human-Wildlife Interactions
- Human Values and Perspectives of Wildlife
- Individual Ecology
- Population Ecology
- Community Ecology
- Wildlife Management

Definition of Wildlife Management

- **“The art of making land produce sustained annual crops of wild game for recreational use.”**

– Aldo Leopold, 1933

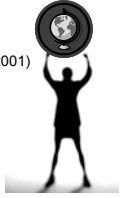
Definition of Wildlife Management

- Bolen and Robinson (the book) -
“the application of ecological knowledge to populations of vertebrate animals and their plant and animal associates in a manner that strikes a balance between the needs of those populations and the needs of people”

Why Manage?

“It's a man's, man's, man's world”
- James Brown

- The Earth is dominated by human activities
 - 33-50% of land surface modified by humans
 - >50% of freshwater runoff used
 - 10-55% of terrestrial photosynthesis products used
(Postel et al. 1996, Vitousek et al. 1997, Rojstaczer et al. 2001)
- Human activities impact wildlife through
 - habitat destruction and degradation
 - pollution
 - hunting for food or \$\$
 - transport of competitors, predators, parasites
 - extermination of other species (e.g., large predators)



Humans affect wildlife whether we think about it or not.
It makes sense to think about it.

How Management Happens

- Need to answer three questions
 - What is the desired goal?
 - What actions are most likely to achieve the management goal?
 - How do I know if management is working?

How Management Happens

- Some examples of management goals:
 - Prevent extinction of Kirtland's warbler
 - Reduce damage to tundra ecosystem by populations of lesser snow geese to
 - Balance deer hunting opportunities with agricultural damage and vehicle collisions
 - Maintain “natural” ecological processes in Yellowstone National Park

What Are Some Possible Management Actions?

- Directly manipulate # animals
 - Make it increase
 - Make it decrease
 - Keep it at a constant size
 - Leave it alone but watch/protect it
- Alter the habitat
- Regulate human activity

How Do I Know If It's Working?

- **Adaptive management:**
 - Evaluate options, choose what appears to be best
 - Establish criteria for success
 - Monitor to see if criteria are met
 - Change management actions if criteria are not met or new information dictates

Things To Remember:

- Meaning of the term “wildlife management”
- Three questions involved in a management decision
- Types of management goals
- Types of management actions
- Meaning of “adaptive management”