BIO336 - WILDLIFE BIOLOGY
Fall 2007

Instructor: Dr. Monte L. Thies
Office: LD 115D Phone: 294-3746 e-mail: woodrat@shsu.edu
Lecture: 8:00 - 9:20 TTh in LDB115
Lab: 2:00 - 3:50 TU in LDB115 and as arranged
Office hours: 10:00 - 12:00 MF, 10:00 - 12:00 TTh, and by appointment

CATALOG DESCRIPTION: The history and basic principles, philosophy and concepts of wildlife management as they relate to habitats, people, and the problems associated with their interactions. Two-hour laboratory and field work. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, and 340.

COURSE OBJECTIVES: Upon completion of this course, students should:

- Ø Understand the history of fish and wildlife management and the current professional opportunities, responsibilities, and societies in this specialization in forest resources.
- Ø Explain some of the fundamental ecological concepts that form the basis of biologically sound management of fish and wildlife, as renewable natural resources.
- Ø Explain some of the basic principles, concepts, procedures, and techniques used in managing fish and wildlife populations.
- Ø Explain the fundamentals of managing terrestrial and aquatic habitats for production of fish and wildlife resources (consumptive and nonconsumptive; game and nongame).
- Ø Understand the importance of people, public relations, and public policy in the conservation and management of fish and wildlife populations and habitats.

LECTURE TEXT: Bolen, E. G. and W. L. Robinson. 2003. Wildlife Ecology and Management. 5th ed. Prentice-Hall.

LABORATORY TEXTS: Access to a series of field guides will be strongly encouraged as references for completion of the laboratory and to support the lecture. The following are suggested but there are alternatives that you may prefer – just make sure that the books you choose are complete and suit your needs.

General: Bookhout, T. A., ed. 1994. Research and management techniques or wildlife and habitats. The Wildlife Society, Bethesda, MD.
Mammals: Burt, W. H., and R. P. Grossenheider. The Peterson field guide series No. 5: A field guide to the mammals of America north of Mexico. Houghton Mifflin Co., Boston.
Birds: Robbins, C. S., B. Bruun, and H. S. Zim. A guide to field identification: Birds of North America. Golden Press, NY.
Fish: Page, L. W., and B. M. Burr. The Peterson field guide series No. 42: Freshwater fishes. Houghton Mifflin Co., Boston.
Herps: Conant, R., and J. T. Collins. The Peterson field guide series No. 12: Reptiles and amphibians: Eastern/Central North America. Houghton Mifflin Co., Boston.

FIELD CLOTHES: As a result of the practical nature of this class, a number of labs will include field trips or other outdoor activities. Therefore, you should wear proper field clothes to each lab (i.e. no shorts, tennis shoes, etc.). You should also be prepared to go the field in inclement weather including, but not limited to, excessive heat or cold, rain, or wind. If you are not prepared to go to the field, be prepared to lose credit for that day's activities and assignments.

ATTENDANCE: It is imperative that you attend every class and lab. If you must miss scheduled class or lab time submit an acceptable excuse in writing prior to the class meeting. It is your responsibility to make up all missed material due to excused absences.

MAKE-UP POLICY: NO MAKE-UPS WILL BE GIVEN TO UNEXCUSED ABSENCES. Missed lab tests may not be made-up under any circumstances. If a lab test is missed because of an excused absence, the test will not be considered in calculating the final average. If a lecture test is missed for an excused reason, arrangements can be made to make up the exam; however, if missed for unexcused absences, a grade of 0 will be recorded, and this will be used in calculating the final average.

GRADING AND EXAMINATIONS

Grading System

Exam I	100
Exam II	100
Final Exam	150
Lab Exam I	50
Lab Exam II	50
Lab Exam III	50
Expanded Abstracts	100
Written Assignments	100
Management Plan	250
Oral Presentation	50
Total	**1000**

Grading Scale

900-1000 A
800-899 B
700-799 C
600-699 D
Below 600 F

ACADEMIC STANDARDS

- **A -** Excellent. Performance far above basic expectations for the course. Demonstrated mastery of at least 90% of course content.
- **B -** Above average. Performance exceeds basic expectations for the course. Demonstrated mastery of at least 80% of course content.
- **C -** Average. Performance meets basic expectations for the course. Demonstrated mastery of 70% of course content.
- **D -** Below average. Performance does not meet basic expectations for the course, but acceptable for credit. Demonstrated mastery of at least 60% of course content.
- **F -** Unsatisfactory. Performance unacceptable for academic credit. Demonstrated mastery of less than 60% of course content.

LECTURE EXAMS: Lecture exams will cover materials discussed in class along with any information presented during field components of the class. Information about a particular wildlife species, habitat requirements, management practice, and/or plant species that we discuss in class or on field trips also may be

asked.

The comprehensive Final Exam is scheduled for 8 – 10:00 a.m., Thursday, December 13th.

LAB EXAMS: Lab exams will cover those plants and animals either discussed in class or identified in the field. Both common and scientific names, including general taxonomy, will be required. Mounted specimens of most plants and animals will be available in the lab; however, some specimens may be represented only with pictures, tracks, and/or vocalizations. Questions about a species' wildlife value as discussed in class or in the field will be included.

EXPANDED ABSTRACTS (100 points)

You are to choose four papers dealing with wildlife management from refereed journals and write an expanded abstract for each of them. The abstract should have an introduction, method and materials, study area, results, discussion, conclusion, and your critique of the paper. The maximum length for the expanded abstract is three typed pages of 12 point font. The format for the abstracts will follow that of the **Journal of Wildlife Management**.

Abstract 1 - subject single species - **Due October 16**
Abstract 2 - subject multiple species - **Due October 30**
Abstract 3 - subject habitat management - **Due November 13**
Abstract 4 - subject your choice - **Due November 27**

MANAGEMENT PLAN (300 points)

Your management plan is a substantial part of your grade. The purpose of the plan is to give you experience as a wildlife biologist. You will be working with other members of your class in a team effort and will develop a plan for a real site. PLEASE ALLOW TIME FOR THIS PROJECT.

Items included in the plan are the following:

1. Management Plan (240 points)
2. Letter of Transmittal (10 points)
3. Oral Presentation of 25 to 30 minutes (50 points)

ACADEMIC HONESTY AND PLAGIARISM: All academic work must meet the standards contained in the University's academic honesty policy. All students are responsible for informing themselves about those standards before performing any academic work. The penalties for academic dishonesty are severe and ignorance is not an acceptable defense.

AND FINALLY: If you do not understand any of the material presented in this class, ask about it! Without feedback from you, I have no way of knowing whether you understand something - until an exam. Although this course will be demanding, let's make sure that both you and I enjoy it!

LAST DAY FOR AUTOMATIC "WP" OR "WF" ON TRANSCRIPT IS October 10, 2007.

ALL ASSIGNMENTS ARE DUE AT THE BEGINNING OF CLASS ON THE DUE DATES AND WILL ONLY BE ACCEPTED IN CLASS. A 10% PENALTY (ONE LETTER GRADE) WILL BE ASSESSED PER DAY FOR ALL LATE ASSIGNMENTS.

TENTATIVE LECTURE TOPICS

I. Course Introduction and Syllabus
II. Historical Concepts
    A. Wildlife exploitation, conservation, and legislation
III. Fish and Wildlife Professions
    A. Professional societies
    B. Fish and wildlife agencies
IV. Habitat Concepts and Management
    A. Habitat features, community diversity, and succession
    B. Aquatic habitats and ecological concepts
    C. Wildlife habitat management techniques and objectives
    D. Fisheries habitat management objectives
    E. Environmental impact assessment
V. Population Concepts
    A. Population characteristics and growth
    B. Carrying capacity and population regulation
    C. Population evaluation
VI. Managing Wildlife Populations
    A. Game management concepts
    B. Human dimensions, hunting, anti-hunting, and animal welfare/rights
    C. Nongame and endangered species
    D. Predator reintroductions
    E. Consumptive and nonconsumptive values
VII. Managing Fish Populations
    A. Human Dimensions in fisheries management
    B. Fish population management
        1. Small impoundments
        2. Large impoundments
        3. Stream and riverine populations
VIII. Nongame and endangered species
IX. Invasive species

TENTATIVE LAB COMPONENTS

Research Problem and Writing Style
Species, Sex and Age Determination in Waterfowl and Upland Game Birds
Species, Sex and Age Determination for Mammals
Statistical Analyses
Applied Trapping; Trapping Methods Demonstration
Wildlife Telemetry Demonstration
Applied GIS
Vegetation Analyses

NOTE: DEPENDING UPON CIRCUMSTANCES THE SCHEDULE ABOVE IS SUBJECT TO CHANGE.