

**FORS 4340/6340. ENDANGERED SPECIES MANAGEMENT****Spring 2005****Instructor:** Michael T. Mengak, Assistant Professor – Wildlife Specialist**Office:** WSFR 3-320**Phone:** 706.583.8096**e-mail:** [mmengak@forestry.uga.edu](mailto:mmengak@forestry.uga.edu)**Office Hours:** By appointment – call first**Required Course textbooks:**

- 1 - Endangered Species: Opposing Viewpoints. Opposing Viewpoints Series, Greenhaven Press, Inc. San Diego, Calif. (1996) ISBN 0-7377-0505-1
- 2 - Endangered Species Recovery: Finding the Lessons, Improving the Process. T. W. Clark, R. P. Reading, and A. L. Clarke, eds. Island Press, Washington, D. C. (1994) ISBN 1-55963-272-0
- 3 – Fate of the Wild: The endangered species act and the future of biodiversity. B. B. Burgess, University of Georgia Press. ISBN 0-8203-2296-2
- 4 – Science and the Endangered Species Act. National Research Council. ISBN 0-309-05291-2

**Other:**

- Readings may be assigned from any of numerous articles from relevant scientific literature.
- Students should consider purchasing a subscription to *Endangered Species Update*, Univ. Michigan, (\$25.00 or less for students)

**Catalog Description:** Factors affecting extinctions and declines in biodiversity, including laws, policies, and management activities designed to protect species and critical habitats.

**Prerequisites:** FORS (ECOL) 3580-3580L or FORS 3010-3010L or BTNY 4650/6650-4650L/6650L or permission of school.

**Course Description:** This course examines historical and modern factors affecting biodiversity including species loss and recovery. The course will include a discussion of the laws, policies and procedures that identify protect and restore species that are threatened with extinction. Emphasis will be placed on the methods currently in place to manage threatened and endangered species including discussion of methods to study (research and monitor) T&E species. Procedures for recovery and preservation of species will be reviewed including Recovery Plans, Habitat Conservation Plans, preserve selection and design and conflict resolution. Case studies and guest lectures as appropriate.

**Course Objectives:** Upon completion of this course, students should understand the following:

General - Students will acquire a working knowledge of basic concepts and principles of conservation biology that will enable them to understand and take positive action to protect, preserve, and enhance wildlife values as natural resource managers or members of the general public.

Specific – At the end of the course, students will be able to:

1. Define technical terms currently used in endangered species management, conservation biology and ecosystem management,
2. Discuss the role of major governmental agencies, citizen organizations, and other public groups involved in current conservation issues,
3. Discuss the ecological principles regulating wild animal populations,
4. Understand the impact of animals, habitat and human users on each other,
5. Relate the overall concepts of conservation biology to ecosystem management and species preservation.

This course covers a variety topics related to Endangered Species Management. Specific topics are subject to change based on the interests and abilities of the students. Discussion, comments, and questions are encouraged at all times. Please read all your assignments before coming to class. Come prepared!

**INSTRUCTORS' ROLES:** The instructor will facilitate learning of introductory Endangered Species Management principles and techniques. There is dedication to helping each student achieve a high level of competence. Availability, patience, and fairness are the principal guidelines used in course instruction.

**STUDENT'S ROLE:** Each student has responsibility in this course for learning and performance; learning the course material and achieving the course objectives. Therefore, this course is a partnership between instructors and students—both have responsibility for your success.

**LATE WORK:** Late work is not acceptable. Work turned in after the deadline will be automatically lowered 1 letter grade. Grades will continue to be lowered at the rate of 1 letter grade per day (24 hours) thereafter. Work over 3 days late will not be graded. Weekends count as one day.

**COURSE PREMISES:**

1. Learning is the most important activity in this course. The requisite workload is heavy.
2. All college students are adults. They are supposed to have the maturity to make wise decisions or at least know how to get assistance. They understand what must be done to succeed. They understand that priorities must be made and that there are prices to pay for under-achievement, missing deadlines, and incomplete assignments. Be wise. Penalties are generally confined to loss of points for assignments – incomplete or late assignments can result in a total loss of points for the assignment.

**SPECIAL NOTES:**

1. Attendance is crucial and imperative; it is required in this course. The instructor should approve absences in advance. There are no make-up opportunities for missed quizzes. Late homework due to approved absences must be cleared with the instructor in advance. Make-ups tests may be arranged but only in advance and for very good reasons. Determination of the validity of your excuse rests solely with the instructor.
2. Please come prepared for class discussions. You are required to read all assignments before coming to class.
3. Much of the learning is dependent on lecture and discussions. Much of the work will occur outside of class time. Please get started as soon as possible and commit plenty of time for quality work.
4. Please note: Lack of preparation on your part does not constitute an emergency on the instructor's part.
5. Final exams are not returned to students.

**MAKE-UP:** Make-up assignments are not given for any reason. No make-up quizzes are given. Make-up tests are given ONLY if arranged in advance of your absence.

**GRADING:**

Three 1-hour exams .....	60%
Term papers (1 or more) .....	20%
Project .....	15%
Attendance, participation, field trip .....	5%

Final grades are determined as percent of possible points as follows 100-90% = A, 89-80% = B, 79-70% = C, 69-60% = D, less than 60% = F.

**CHEATING:** Cheating and plagiarism will not be tolerated. Anyone suspected of cheating or plagiarizing will forfeit that test or exercise and the case handled in accordance with the procedures in the Student Handbook. It is your responsibility to read and understand the section in the Student Handbook on cheating and plagiarism. You must also read pages 572-577 in The Little, Brown Handbook, 4th edition for a thorough discussion of plagiarism. The WSFR and UGA policy on Academic Honesty states:

"All students are responsible for maintaining the highest standards of honesty and integrity in every phase of their academic careers. The penalties for academic dishonesty are severe ([http://www.uga.edu/ovpi/academic\\_honesty/hon\\_penalties.htm](http://www.uga.edu/ovpi/academic_honesty/hon_penalties.htm)) and ignorance is not an acceptable defense."

**PAPER:** Five short (4 page) papers are required for this class. Each student will select species from a list. Details will be provided on a separate handout.

## **FIELD TRIP**

There will be a field trip if it can be arranged.

The tentative location is S. Florida. The intent is to visit habitats and meet biologists working with the Florida panther, whooping crane, Key Largo woodrat, Key Largo mouse, and several other threatened and endangered species.

The trip will occur from Wednesday to Sunday. Dates to be announced.

Cost will be approximately \$125 per student for lodging and meals. WSFR will provide transportation.

The trip is required unless other arrangements are made at least 3 weeks in advance with the instructor. Students not able to attend the field trip will receive the opportunity to complete an additional assignment, i.e., a research paper.

**TENTATIVE COURSE OUTLINE** – I reserve the right to change this outline by adding or deleting topics as the course progresses:

### Introduction and Overview

- Biodiversity
- Endangered Species Act
- Species Diversity
- Natural History (overview of breeding strategies, social dominance)

### Diversity

- Ecosystems and Ecosystem Diversity (brief overview of N. Am and other biomes)
- Genetic Diversity (chromosomes, DNA, RNA)
- Extinction and Global Change (historical context of extinction)

### Habitat and Populations

- Habitat Degradation (land use changes, human impact)
- Populations
- Small Populations – Minimum viable population size
- Metapopulation (definition and management)
- Overexploitation (hunting, poaching, over fishing)
- Exotic Species (introductions and impact)

### Management

- Ecosystem Management
- Preserve Design (SLOSS)
- Public – Private Partnerships
- International Cooperation (CITIES, international species)

Case Histories (interspersed with topics above)