

UNIVERSITY OF MARYLAND
Urban Wildlife Management
ENST 461, 3 credits, Section 0101
Fall Semester 2016

Instructor: Shannon Pederson, Associate Wildlife Biologist®

Class Meeting: M/W/F 12-12:50pm

Room: ANS 0422

Office Hours: By Appointment on M, W, or F 11am-12pm ANS 1457

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Required Text: Urban Wildlife Management. 2nd edition. Clark Adams and Kieran Lindsey. CRC Press.

Other Readings: Additional papers assigned in class will be available through ELMS.

Other Needs: Metro Fare \$20 (for Urban Walk in Washington, DC and visiting one Urban Park)

Course Description: This course focuses on ecology and management of wildlife in urban and urbanizing areas. It includes game species, nongame species, and primary emphasis is placed on terrestrial species. Although many of the same species found in rural habitats can inhabit the urban environment, different management approaches are needed in the complex urban environment with dense human populations and small land units with multiple ownerships. We will investigate the ecology of the urban environment and examine the unique nature of managing wildlife **biodiversity** in such urban **ecosystems**, along with human interest and its role in supporting wildlife in their neighborhoods. The course is geared toward students interested in the human-wildlife relationship in the metropolitan environment and provides a foundation for management in these unique ecosystems.

Course Objectives: 1) Ability to apply ecological and behavioral concepts and principles to the management of wildlife populations in urban and suburban areas to achieve a diversity of objectives, including control, conservation, and restoration. 2) Students will develop a general understanding of the assumptions, effectiveness, and limitations of strategies used to manage wild populations in urban areas. Students will

develop analytical problem-solving skills and will gain experience in habitat evaluation and management plan development for wildlife species in urban areas. 3) Students will develop a general appreciation for the challenges and opportunities inherent in wildlife conservation and management in urban areas. 4) Students will develop a general appreciation for the challenges and opportunities inherent in Renewable and Non-renewable natural resources. 5) Students will learn associations between sustainability and wildlife habitats.

Grading: There will be 2 exams, video, poster, presentation, and approximately weekly quizzes or homework assignments. The exams test your comprehensive knowledge of the subject matter. The projects test your ability to gather and synthesize academic material and present that material in a well-written coherent manner, and the weekly quizzes help you to identify salient points and encourage participation.

Extra Credit: There will be several opportunities for extra credit, in the form of attending a professional talk and writing a 1-page summary, participating in morning bird walks through UMD's Student Chapter of The Wildlife Society, and occasional research projects. Only talks/activities that I announce in class or on ELMS will be considered for extra credit. Summaries are due within 1 week.

Evaluation and Grades:

Exam #1: 15 points

Exam #2: 15 points

Class Homework, Activities, Quizzes: 15 points

Species flyer & bookmark: 10 points

Group Park Video: 15 points

Group Walk Poster: 10 points

City Evaluation Presentation: 10 points

Peer evaluations: 10 points

Total: 100 points

Courses will be graded with plus and minus grades under the following scale: A+ = 4.0 = 97–100 A = 4.0 = 94–96 A- = 3.7 = 90–93 B+ = 3.3 = 86–89 B = 3.0 = 83–85 B- = 2.7 = 80–82 C+ = 2.3 = 76–79 C = 2.0 = 73–75 C- = 1.7 = 70–72 D+ = 1.3 = 66–69 D = 1.0 = 63–65 D- = 0.7 = 60–62 F = 0.0 = ≤ 59

Park Options:

Greenbelt Park, Lake Anacostia, Park Rock Creek Park, Dumbarton Oaks Park, Malcolm X Park, Fort Reno Park, Gravelly Point Park, Montrose Park, Kalorama Park, Fort Bunker Hill Park, Baynard Hill Park, Wheaton Regional Park, Fort Dupont Park, Fort Stanton Park, Battery Kemble Park, Kenilworth Aquatic Gardens, National Arboretum, Sligo Creek

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Schedule:

Week	Dates	Topic	Reading	Assignment	Objective
1	8/29, 8/31, 9/2	Introductions, Definitions	Chapter 1	Submit Google Doc (homework)	Learn about fellow students, learn about urbanization, learn about UWM history
2	9/7, 9/9	Ecological Principles, Economics	ELMS reading, Chapter 3, Chapter 6	Your Ecological Footprint (homework)	Learn about ecology, sustainability, biodiversity, economical impact on wildlife; make groups of 4
3	9/12, 9/14, 9/16	Soil, Water	Chapters 4 & 5	Groups Vote on Park	Learn impact of urbanization on soil and water
4	9/19, 9/21, 9/23	Gray areas	Chapter 8	Individuals Vote on an Urban Species	Learn how ecological processes are impacted by the built environment
5	9/26, 9/28, 9/30	Green areas	Chapter 7	Exam #1	Learn how green spaces can be incorporated in urban design
6	10/3, 10/5, 10/7	BMPs	ELMS Readings	Submit list of native and invasive species (homework)	Learn management practices about addressing urban management techniques to improve wildlife habitat, Identify invasive species

7	10/11, 10/12, 10/14	Renewable Energy	ELMS Readings	Campus walk	Learn about renewable energy sources and how they impact wildlife
8	10/17, 10/19, 10/21	Human Dimensions	Chapters 9 & 10	Submit bookmark & flyer about an urban species	Learn different human perspectives, values, and behaviors
9	10/24, 10/26, 10/28	Controversial Species	Chapters 12 & 14	Debate: Feral Cat TNR (class activity)	Learn natural history of urban species that cause human-wildlife conflict
10	10/31, 11/2, 11/4	Diseases	Chapters 13	Submit Urban Walk Poster	Learn about diseases spread from wildlife to humans and pets
11	11/14, 11/16, 11/18	Legal Aspects	Chapter 11	Exam #2	Learn how urban management techniques are affected by local laws and policies
12	11/21, 11/23	Design	Readings	Video: Park Evaluation	Learn different urban designs and how they impact wildlife
13	11/28, 11/30	Adaptive Management		Submit your ideal city plan (homework)	Learn processes involved in adaptive management
14	12/5, 12/7, 12/9	City Evaluation Presentations		Course & Peer Evaluation	Obtain oral presentation experience