

WFS 445- Ecology and Management of Wild Birds (3 credits)

I. **Instructor:** Dr. David A. Buehler
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Office Hours: Instructor and TAs: By appointment

II. Catalog Description:

Biological and ecological characteristics of wild birds, including game and nongame birds, endangered species, and bird pests. Current principles and practices in wild bird management. Prereq: FWF 315 or consent of instructor. 2 hours and 1 lab. One evening fieldtrip required.

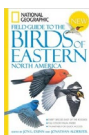
III. **Schedule:**

Lecture-	Mon-Wed	11:30 am - 12:20 pm	142 Brehm Animal Science
Lab-	Mon- Wed	7:30 - 11:00 am	142 Brehm Animal Science

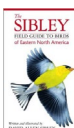
IV. Texts:



Option A: National Geographic Field Guide to the Birds of North America: Revised and Updated by Jon L. Dunn 6th Edition There are a lot of bird field guides available. This is one of the best inexpensive all-around guides.

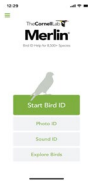


Option B: National Geographic Field Guide to the Birds of Eastern North America: Jon L. Dunn. This is a smaller, field guide version of the above for just eastern birds. Fits in your back pocket- I carry this one in the field.



Option C: The Sibley Field Guide to Birds of Eastern North America By David A. Sibley. This is a smaller, version of Sibley's N American field guide for just eastern birds. Fits in your back pocket- I carry this one in the field.

V. Smart Phone Apps Required/Encouraged for Class



Required: Merlin ID app from Cornell Lab of Ornithology. Includes photos, songs, range maps and has really cool ID function that allows you to ID birds to species from photos or song recordings. Download from your phone app store and upload the species for the SE US. FREE



Required: eBird app from Cornell Lab of Ornithology. This app allows you to keep your own checklists while you are out in the field and maintain your personal records. It also contributes your observations to a world database. Download from your phone app store. FREE



Optional: Audubon Birds: A Field Guide to North American Birds on your Android or iPhone. Includes all of the stuff in the field guide plus songs and range map. I also had this and it worked great but used pictures rather than plates for birds. \$Free

V. Course Goal:

The overall goal of the course is to help students learn how to identify birds by sight and song, learn the basics on avian ecology, and learn how to manage for a diversity of avian species across the whole range of potential habitats.

Specifically, a successful student should:

- Be able to identify ~200 birds by sight and ~125 by song.
- Be able to sex and age birds from live specimens, wings and study skins.
- Know and understand avian ecology related to reproduction, migration, foraging, over-winter
- Know and understand how to manage habitat for the whole spectrum of birds, including wetlands, grasslands, and forest environments.
- Know how to read and interpret key studies in the literature related to avian ecology and management.

Student Evaluation: Final grades will be assigned based on the following:

Final Lecture Exam	100 points	Tues May 16 10:30 am-12:45 pm
Lecture Quizzes (online) (10)	100 points	weekly
Lab Exam I	75 points	Wed Mar 1 @ 8:00 am
Lab Exam II	75 points	Wed Apr 12 @ 8:00 am
Lab Final	100 points	Fri May 12 @ 3:30 pm
Field Quizzes (5)	50 points	
Lab Mastery Exercises (5)	75 points	
Bird ID Assignment I	10 points	
Bird ID Assignment II	10 points	
Ebird Life List	5 points	

Total	600 points	

Grading:

A	552-600 points	92 -100%
A-	540-551 points	90 – 91%
B+	528-539 points	88 - 89%
B	492-527 points	82 - 87%
B-	480-491 points	80 - 81%
C+	468-479 points	78 - 79%
C	420-467 points	70 - 77%
D	360-419 points	60 - 69%
F	<360 points	<60%

Week	Date	Lecture	Lab Schedule
1	WED 25 Jan	Introduction- Origin of Bird	Intro to Common TN Birds, Diurnal and Nocturnal Raptors 7:30-11:00 am WED indoor lab only
2	30 Jan-1 Feb	Natural Selection/Evolution	Forks of the River Field Trip 7:30am WED
3	6-8 Feb	Anatomy and Physiology	Waterfowl and other Water Birds 900 am Monday lab lecture, 800am WED indoor lab
4	13-15 Feb	Avian Communication	Waterfowl Field Trip- 730am Kyker Bottoms
5	20-22 Feb	Reproductive Biology	7 Islands Field Trip (7:30 am) (Quiz #1) WED
6	27 Feb-1 Mar	Foraging Ecology	Mon: Lab Review (730-1100am) WED: Lab Exam I (8:00-11:00 am)
7	6-8 Mar	Population Ecology	Songbirds I ID, Sex, Age 900 am Monday lab lecture, 800am WED indoor lab (Rader/Panos)
8	13-15 Mar	Spring Break	Bird on your break!
9	20-22 Mar	Migration Ecology	Songbirds II ID, Sex, Age 900 am Monday lab lecture, 800am-1100am WED indoor lab
10	27-29 Mar	Forest Songbird Ecology & Mangemt	Seven Islands Field Trip (7:30am) (Quiz #2) WED
11	3-5 Apr	Upland Gamebird Ecology and Management	Upland Gamebirds- ID, Sex, Age; Hummingbirds, Woodpeckers 900 am Monday lab lecture, 800am-1100am WED indoor lab
12	10-12 Apr	Grassland Bird Ecol & Mngt	Mon: Lab Exam II Review (730-1120 am) WED: Lab Exam II (8:00 am-1100 am)
13	17-19 Apr	Waterfowl Ecology & Mngmt	Norris Dam Field Trip (7:30 am) (Quiz #3) WED
14	24-26 Apr	Shorebird/Wader Ecology & Mgmt	Gupton Wetlands/Kingston Field Trip (7:30 am) (Quiz #4) WED
15	1-3 May	Endangered Species	North Cumberlands Field Trip (7:30am) (Quiz #5) WED
16	8 May	Final Thoughts	Sharp's Ridge Field Trip (7:30am) MONDAY
17	Fri 13 May Mon 16 May	Lab Final 3:30-6:00 pm Lecture Final 10:30 am – 12:45pm	

Lecture Quizzes:

There will be weekly lecture quizzes online that emphasize key points from recent lectures and labs. A total of 12 quizzes will be administered with the 2 lowest scores dropped. There will not be any excused absences or makeups for missed quizzes. Deadlines for quizzes will be strictly enforced.

Lab Exams:

Three lab exams (2 midterms and comprehensive final) are scheduled to test ID skills with bird specimens, individual bird songs and identification from bird soundscapes, bird internal and external anatomy, sexing and aging, identification of unknown species with a field guide, and management questions from field trips. For each lab exam, you can bring a 'cheat sheet' for the species covered on that exam to aid in identification of bird vocalizations. The 'cheat sheet' can be one side of an 8.5 x 11" sheet of paper with only the following information- your name, the 4 letter code for each species and descriptive tips you have for the species identification. For example,

AMRO: cheery cheerio cheery cheerio for the American Robin.

GHOW: whose awake, me tooooo for the Great-horned Owl

The 'cheat sheets' will be examined after each exam. Also—you will need a field guide (hard copy) for each lab exam.

Field Labs:

Field trips are designed to get the students out into the real world to observe birds in their natural habitats and to learn how to identify them and how to manage for them. The field trips are extremely important for student success in the class. Students should come prepared for field conditions with appropriate field apparel (boots, rain gear, etc.) and should always have their **binoculars**, field guide, and a field notebook for recording important observations.

Ebird:

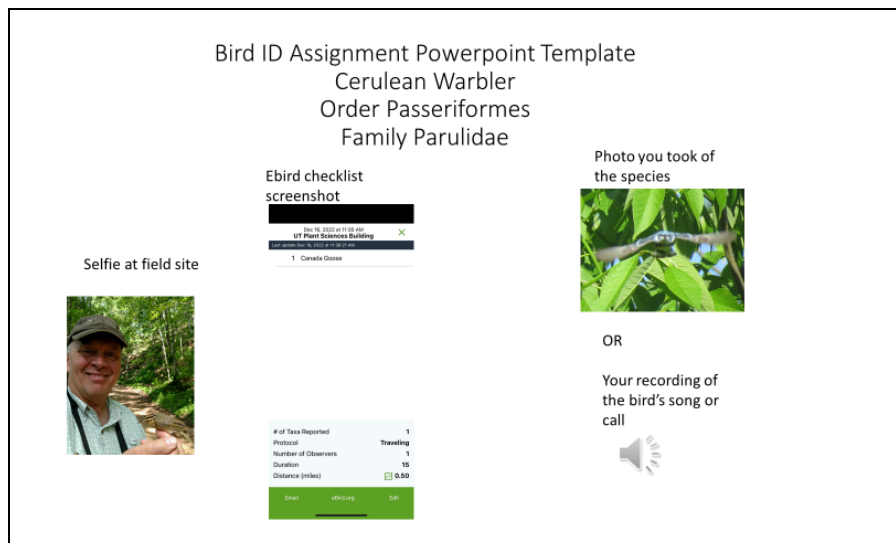
We are using Ebird (ebird.org) as a tool to keep track of individual observations during the course of the semester and to keep track of group observations during class field trips. Students are required to create a personal UserID on Ebird so that they can log their observations.

Bird ID Assignments: Two assignments @10 pts each

To encourage you to work on your bird ID outside of class, we have developed an individual bird ID assignment for each half of the semester. For each assignment, locate in the field, ID, photograph or record song of 1 species that is representative **of each order and family** we have covered for that half of the semester (up to 10 species total, no duplicate orders or families). Submit that observation with the associated photo or song on Ebird. Take a selfie of yourself at the site where the bird was located. For each assignment, turn in a powerpoint presentation with 1 slide per species. Each individual slide should have the bird ID (slide title) along with the photo or song you recorded, your selfie at the site, and a screen shot of the Ebird record you submitted for that species. For each assignment, there should be 10 individual powerpoint species slides (see template below).

Note: You can do this assignment opportunistically on campus, along 3rd Creek, across the river at Cherokee Farms or you can do a focused bird trip to one area with sufficient diversity to complete the assignment (ie. 7 Islands or Kyker Bottoms). You can make it easy (ie. Rock Pigeon on campus for Order: Columbiformes) or challenging (Family Parulidae: Cerulean Warbler) based on your level of motivation.

Also- no observations during field labs count toward this assignment.



Attendance Policy:

Attendance in lecture and lab is expected of all students. In general, field trips cannot be made up. We leave promptly at 730am on field labs. Make sure you are there early to avoid missing the vans. Because we see birds in the vans on the way to and from field sites, you are not allowed to drive your own personal vehicle for lab.

University Policies:

When you enroll at the University of Tennessee you pledge to hold yourself and your peers to the standards of academic honesty and integrity as described in the Academic Policies and Code of Conduct. You are expected to uphold your pledge to honesty and integrity in this course. Academic dishonesty in any form will not be tolerated. Visit: <http://www.lib.utk.edu/instruction/plagiarism/honor.html> to read more about the University of Tennessee Academic Policies and Standards of Conduct, behavior that constitutes academic dishonesty and sanctions.

Students with Disabilities Policy:

Every possible accommodation will be made to allow students with disabilities to complete the course successfully. Visit: see <http://ods.utk.edu/> for information on the University of Tennessee Office of Disability Services and to submit an application for disability accommodation.

Schedule Changes and Changes to Syllabus:

Given the unpredictability of the weather and other events that may unexpectedly occur during the course of the semester, there may be changes in the schedule of field trips and other activities outlined in the syllabus. Some of these changes may affect the structure of the grading in the course (e.g., we may miss a field quiz and be forced to drop it from the grading plan). Any such changes to the syllabus will be noted during class. We will attempt to keep these changes to a minimum.

Questions about Grades and Other Academic Issues: from UT Hill Topics

Issues related to grades or academic coursework should first be addressed with the course instructor, then the appropriate department head, and finally the dean of the college in which the course is offered. If an appropriate solution cannot be reached through discussions with these individuals, the Director of the Student Success Center (for undergraduate students) or the staff of the Office of Graduate Student Services (for graduate students) can offer assistance regarding the best “next steps” for problem resolution.