The Natural History of Spring

April 19-23, 9:00 a.m. to 5:00 p.m. Wesleyan University, Spring 2010 Geoffrey Hammerson (ghammerson@wesleyan.edu) cell phone: 360-301-2500 (use only on field trip days)

This field course entails a substantial amount of walking on sometimes rough trails over uneven terrain. Participants must be capable of moderate but prolonged physical exertion and tolerant of a lack of comfort facilities during field trips lasting several hours.

Schedule:

<u>Monday, April 19</u>: We meet in the V parking lot on Vine Street (near the tennis courts) at Wesleyan at 9:00 a.m. Come prepared to participate in an all-day field trip.

<u>Tuesday, April 20</u>: all-day field trip. Field trip locations are in part weather dependent and will be announced on the day before the trip.

Wednesday, April 21: all-day field trip.

Thursday, April 22: all-day field trip.

Friday, April 23: all-day field trip.

Field trip equipment/supplies:

Small notebook; pencil/pen; binoculars; food (lunch, snacks); water; insect repellent (optional); camera (optional). Field trips will proceed regardless of weather, so please be prepared with appropriate clothing (assume it will be colder/wetter than you think it will be) and footwear for wet/muddy conditions.

Text:

Hammerson, G. A. 2004. *Connecticut Wildlife: Biodiversity, Natural History, and Conservation*. Hanover: University Press of New England. ISBN: 1-58465-369-8

Readings (in *Connecticut Wildlife*):

Pages 9-10 (climate); 82-85, 93-94 (vernal pools); 175-178 (spring wildflowers); 250-252 (early spring butterflies); 267-271 (galls and gall makers); 273 (fairy shrimp); 288-290 (herrings and shad); 307-314 (amphibians); 367-370 (bird reproduction and migration); 408-4415 (naturalist's calendar for spring). Additionally, after each field trip, please read appropriate sections of the text that directly pertain to habitats and organisms observed during the trip (use the book's index to locate this material).

Course requirements:

<u>Field trip reports</u> (5) for class field trips (75% of final grade). Grades are based on clarity/organization, completeness, accuracy, and timely submission. Reports are due one week after the field trip. Please submit your reports as email attachments (as Word files, i.e., report.doc). Please carefully read the instructions for information on required content and organization. An example of a field trip report will be posted on the Blackboard website.

<u>Written/graphical summary of individual field project</u> (25% of grade). Project must be preapproved by the instructor; please contact the instructor by email for feedback on your potential project ideas. Due May 3. Select a habitat that is convenient for you to visit at least twice each week beginning on the vernal equinox (March 20) and continuing through April 18. Using written descriptions (and data as appropriate), plus photographs or drawings, document the changes that occur in this area during the fall semester. You may focus on one or a few species or you may choose a broader approach that encompasses all the changes you observe in your study area. Examples of suitable projects include: opening of buds and growth of leaves or appearance of flowers; singing behavior of one or more bird species in relation date and time of day; insect activity on early spring wildflowers; changes in a vernal pool basin; changing bird populations in a marsh, shore, or backyard. Evaluation of the individual research project will be based on level of effort and substance, organization, and writing quality of your submitted report.

Blackboard website:

It is your responsibility to check the course Blackboard website prior to and after each class. This is where you will find important announcements, follow-up information, maps of field trip sites, and details about upcoming field trips. Be sure to check the Course Documents section for information pertaining to each field trip.

FIELD TRIP REPORT GUIDELINES

The best way to increase both your understanding of the natural world and your powers of observation is to carefully record your field observations in written and graphic form. Your notes will be of value to you in overcoming an imperfect memory and in providing a record of biological information that often is not available in reference books. Your field notes, if carefully prepared, may be of scientific or conservation value.

Ideally all notes should be written directly into your permanent field notebook while you are in the field. However this often is not practical. I suggest that you record in a small notebook as many observations as possible while you are in the field; strive to be neat, complete (biologically relevant details are important), and organized. At the conclusion of the field trip use these notes (and other mental impressions gained during the trip) to write a final permanent record of your field observations. Do not delay in writing your field notes. Quantify whenever possible.

Please structure your notes according to the following sequence. Do not use a simple chronological format ("first we saw this, then we walked around the bend and saw that"). Prepare a separate account for each site visited.

1. Your name

2. Site name (highlight this by underlining or using bold face or italics (e.g., **Higganum Creek**, **Town of Haddam**, **Connecticut**)

3. Date and hours at the site (e.g., 11 April 2010, 0900-1630 EDT)

4. Precise locality description; description of how to get there.

5. Recent weather conditions (sun, clouds, precipitation, temperature, wind). Record tide conditions, if appropriate.

6. Methods: describe the kind of search you made and/or the sampling techniques used. Describe the route taken through the area and indicate significant study sites.

7. Brief description of habitat (topography, elevation, vegetation, soil conditions, water, etc., as appropriate).

8. List of plant species discussed by instructor. Indicate abundance, flowering, leaf growth, insect visitors, etc., as appropriate.

9. List of animal species discussed by instructor (including those detected indirectly through tracks or other evidence, including galls) and approximate numbers of each species. Notes on behavior, microhabitat, ecology, etc., should be entered after the name of the species.

The lists of plant and animal species and your written notes on these are the most important parts of the report. Lists should be organized according to major taxonomic groups (i.e., don't mix mammals with insects). You may organize the species lists by habitat if you visit distinctly different habitats, but this is not necessary if habitats are indicated in the notes for each species.

Your notes should be primarily or exclusively an account of your own field observations. However, you may include information obtained from the instructor or from other sources as long as you state the source of that information. Be sure to describe clearly what you actually observed rather than make generalized statements. For example, record that three spotted turtles basked on a single small log at the edge of a pond rather than simply generalizing that spotted turtles bask on logs. Be sure to describe any particular behaviors you observed rather than simply your interpretation of them. For example, record that a spotted turtle plunged into the water when you approached on foot to within 50 feet rather than that spotted turtles seem to be wary.