Biology 241 Field Ecology Fall 2007

Meeting Times: Monday 3:30pm – 4:20pm and Thursday 1:30pm – 4:20pm
Location: HS G128

Instructor: Dr. Cynthia Kicklighter
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Attendance: Regular attendance is expected and participation in the two scheduled field trips is mandatory.

Cell Phones: Make sure to turn off your phone before coming to class.

Web Resources: Lecture materials (powerpoint files, pdfs, etc.) will be posted to the course Blackboard web site.

Academic Honor Code: Suspected violations of the Honor Code will be referred to the Academic Honor Board. For a full description of the code and what constitutes a violation of the code, refer to the Goucher Handbook or online at www.goucher.edu/x1292.xml

Field Trips: There will be two weekend fieldtrips during the semester. Due to the distance and time required for the Wallops Island trip, we will leave late in the afternoon of Thursday, October 18 and will return on the following Sunday afternoon. Thus, you will miss Friday classes (Oct. 19).

Assigned articles: There will be several assigned articles throughout the semester, which will be discussed during our Monday class periods. I will usually post pdfs of the articles on Blackboard. When this is not possible, I will provide you with a copy.

Date	Activity	Assignment Due
30 August (TH)	Introduction to the course, plant identification	
6 September (TH)	Deer exclosure assignment, plant ID	
10 September (M)	Forest (camping) field trip information	
13 September (TH)	Prepare for forest field trip	Plant Identification Collection
17 September (M)	Ecological sampling methods	
20 September (TH)	Practice sampling methods	Forest field trip assignment
24 September (M)	Goucher Forest community project introduction	
27 September (TH)	Work independently on forest sampling	
1 October (M)	Forest sampling analysis methods	
4 October (TH)	Work independently on forest sampling	
8 October (M)	Discuss deer exclosure experiment	Deer Exclosure Proposal
11 October (TH)	Construct deer exclosures	
15 October (M)	Wallops Island field trip introduction	
18 October (TH)	Prepare and leave for Wallops Island field trip	
22 October (M)	Wallops wrap-up, deer exclosure sampling methods	
25 October (TH)	Deer exclosure sampling	
29 October (M)	Discuss deer exclosure data	
1 November (TH)	Goucher forest community presentations	Forest Community Lab Report, Population characteristics of one species
5 November (M)	Pond sampling methods	Wallops Island Marsh Transect & Intertidal Sampling
8 November (TH)	Pond sampling	
12 November (M)	Pond analysis methods	
15 November (TH)	Pond samples analysis	
19 November (M)	Discuss pond community results	
26 November (M)	Pond wrap-up, seasonality	
29 November (TH)	Forest seasonal change sampling	
3 December (M)	TBD	Pond Community Lab Report
6 December (TH)	Deer exclosure sampling #2	Seasonal Change Analysis

Grades:

Points	**Assignment**
50	Plant Identification Collection
25	Forest field trip report
50	Deer exclosure proposal
200	Goucher forest community lab report
50	Synopsis of the population characteristics of one species
25	Goucher forest community presentation
50	Wallops Island marsh transect
50	Wallops Island intertidal sampling
125	Pond community lab report
25	Seasonal change analysis
650	Total Points

Lyme Disease

Lyme disease, a bacterial infection caused by *Borrelia burgdorferi* is widely distributed in the eastern United States and is common throughout this area (including the Goucher campus). Lyme disease affects a variety of wild birds and mammals and is usually passed to humans by ticks in the genus *Ixodes*. The most common tick in this area is the American dog tick, which is not thought to be an important vector of Lyme. In this area, the white-footed mouse, *Peromyscus leucopus*, is the principle reservoir of Lyme, not the deer often associated with the disease. Fortunately, ticks are usually much more common and active in spring than in fall.

Risks can be reduced via appropriate precautions. Since *Ixodes* is the major vector, exposure to ticks should be minimized. When in field, wear closed shoes and socks. Tuck long pants into socks and wear a hat. Tick or insect repellant containing DEET may also help. Ticks show up better on light-colored clothing, and ticks seem less attracted to it.

Immediately after returning from the field, inspect your clothes and do a full-body search for ticks. These ticks are small—not much larger than the head of a pin, so look carefully. Bites from infected *Ixodes* ticks do not always result in infection, especially if they are removed promptly. Extract any attached ticks with forceps and preserve them in alcohol for preservation.

Lyme disease can be treated with antibiotics if detected early. The first clue may be a slowly expanding red rash around a bite, but this is not present in all cases. Other symptoms include fatigue, a stiff neck or jaw, slight fever, and swollen glands or joints. Be alert for symptoms, seek medical attention immediately if suspicious symptoms appear, and be sure to tell you doctor that you have been in tick habitat.