**EFB 345: FOREST HEALTH-2009**

Instructors: S. A. Teale and J.D. Castello

Credits: 3

Time frame: June 22-July 3, 2009

COURSE SCHEDULE-2009

**June 22 (Monday)** 8:00 – 12:00pm **LECTURE**: Course introduction.

Nature, etiology, & symptomatology of various tree diseases.

Roles of fungi in the forest ecosystem.

**FIELD EX. 1**: Walkabout @ CLBS: Identification of diseases, decays, and insects of the NHF.

12:00-1:00 pm Lunch in Mess Hall

 1:00-5:00 pm What is an insect pest? Walkabout continued. Establish pheromone traps.

**June 23 (Tuesday)** 8:00-8:15 am **Quiz 1: Insects & Diseases of the NHF**

 8:15-10:00 am **LECTURE:** Assessment of forest health

 10:30-12:00 pm **FIELD EX. 2**: Assessing a high-graded stand: CLBS. Bag Lunch

 1:30-4:00 pm Assessing a managed stand: Wanakena. Establish plots & collect data for class projects.

 7:00 - 8:00 pm Continue data analysis, if needed.

 Prepare for camping trip.

**June 24 (Wednesday)**  6:30am Breakfast (make 2 lunches)

 7:00 am-5:00 pm **CANOE TRIP**: Overnight camping trip to High Falls.

**June 25 (Thursday)** morning **FIELD**: Hike to Five Ponds Wilderness to observe old growth red spruce and white pine stands, and effects of 1995 blowdown.

Assessing the health of a virgin, old-growth stand. Collect project data.

 late afternoon Canoe to Wanakena. Return to CLBS.

**June 26 (Friday)** 8:00-8:15 am **Quiz 2: Assessment of forest health**

 8:15-9:30 am **LECTURE**: Dutch Elm Disease

 9:30 am-1:30 pm **FIELD EX 3**: DED. CRARY MILLS ST. PARK

 Collect data for class projects.

 3:00-5:00 pm **LAB**: Culture DED fungus from trees. Analyze diameter/disease data.

 7:00- 8:00 pm Continue lab work, if needed.

**June 29 (Monday)** 8:00–8:15 am **Quiz 3: DED**

 8:15-9:30 am **LECTURE**: Beech bark disease

 9:30-12:30 pm **FIELD EX. 4**: BBD. Digital photography. Image J analysis of scale vs cankers. Collect project data.

 1:00-4:00 pm **FIELD AND LAB:** Continue photo and data analysis. Fungus identification

 7:00-9:00 pm Continue photo analysis, if needed.

**June 30 (Tuesday)** 8:00-8:15 am **Quiz 4: BBD.**

8:15-9:30 am **LECTURE:** Insect chemical ecology, white pine weevil, and pine sawyer.

 9:30 - 2:30 pm **FIELD EX. 5a/5b**: White pine weevil & pine sawyer at CLBS:

 Collect data for class projects.

 3:00 - 5:00 LAB: Analyze class data.

 7:00-9:00 pm Continue data analysis, if needed.

 DED culture analysis

**July 1 (Wednesday)** 6:30-9:30 am Breakfast. Travel to Jay, NY

 **QUIZ 5: INSECTS. In van.**

9:30-2:30 pm **FIELD**: Ward Lumber Co. to observe timber harvesting, scaling, and milling operations.

 3:00- 5:00 pm Whiteface Mt. to observe red spruce decline, fir wave mortality, & ice storm damage.

 eve OVERNIGHT at Meadowbrook public campground and dinner out.

**July 2 (Thursday)**  8:00-9:00 am Break camp and breakfast out.

 11:00 - 1:30 pm **FIELD**: Huntington Forest. Meet with Dr. Ralph Nyland to discuss options for managing the northern hardwood forest.

 1:30-2:00 pm At Huntington Forest:

 **QUIZ 6:** Sawmill, WFMT, HF activities.

 2:00-4:00 pm Return to CLBS.

**July 3 (Friday)** 8:00-9:00 am **LECTURE:** Dwarf mistletoe: Introduction,

morphology & life cycle.

 9:00 – 12:00 pm **FIELD EX. 6**: DM. Lost Pond Bog:

 Data collection to monitor DM infection/mortality. Observe conifer decays & damage from 1995 microburst. Bag Lunch. Data analysis.

 1:00-5:00 pm **CLASS PROJECT PRESENTATIONS AND REPORTS**

 5:00pm **FINI GO HOME!!**