

BSci 497 Insect Pests of Ornamentals and Turf (fall 2011)  
Instructor: Paula Shrewsbury, Entomology

Integration of activities related to sustainability following participation in the 2011 Chesapeake Project Workshop:

BSci 497 is an applied course that teaches students how to identify and manage pest insects in ornamental and turfgrass systems such as urban landscapes, production nurseries and greenhouses, and golf and lawn turfgrass using an Integrated Pest Management (IPM) approach.

This course historically attracts upper level undergraduate students mainly from Plant Science and Landscape Architecture (AGNR), Biology majors (CMNS), and Entomology graduate students (CMNS). Many of these students move on to be practitioners and decision makers in the professional world. In managed ecosystems pests often outbreak because various plant management practices disrupt ecosystem function. In the course I have emphasized ecologically based pest management practices, the concepts of ecosystem function and services, and the goal of creating more sustainable managed systems (at a relatively general level).

I plan to integrate more into the course on the big sustainability ideas of Environmental Stewardship, and Ecosystems and Biodiversity as they relate to managed ecosystems and pest management decisions and practices. This will be accomplished through lectures and reading papers relating to what is known already. In addition, students will be participating in "Challenge Reports" and discussions relating to these issues (~5 reports / topics during the semester). This activity will require the students read a paper on a selected topic, and then asked to answer a question(s) that requires them to assess within their groups the cost and benefits of particular management practices based on predicted impacts to environmental stewardship and ecosystem services. An example of a topic would be the use of turfgrass vs. landscape beds in managed landscapes. Which is a more sustainable practice?