Turf Pest Management Project CS/ENT/PP 495T

Due Date: Beginning of final exam period on May 2, 2008.
Point value: 25% of final grade.

Directions:

1. Select one of the following turf scenarios:
   - Golf Course
   - Home Lawn Care
   - Sod Production
   - Athletic Fields

2. Select a location in North Carolina. The location can be a city, county or region.

3. Select one warm-season turf species AND one cool-season turf species that you will be managing in that scenario.

4. For each turfgrass species, list three insect pests, three diseases, and four weeds that you would expect to encounter while managing the turf in the scenario you’ve developed.

5. For each turfgrass species, develop an integrated management plan for the pests in your list. Be sure to include the following information:
   a. Overview of each pest, including methods for identification/monitoring, pest life cycle, importance in the turfgrass system, and type of damage caused.
   b. Specific cultural, chemical, biological control strategies for management of each pest. Discuss how the management practices will be implemented or applied.
   c. Discuss each practice in the plan, why it is important, and how it may influence other management practices or pests.
   d. Describe how you will decide when to implement each management practice, including environmental parameters or population/damage thresholds.
   e. Also consider and discuss any potential benefits and risks associated with the management strategies you selected, both from a turf quality perspective as well as a human health and environmental viewpoint.
   f. The report must be typed and should be at least 5 pages in length (single spaced, no larger than 12 font).

REMEMBER THE AUDIENCE!!! – A pest management plan serves two primary purposes. First, it provides you, the turf manager, with a framework from which to base management decisions. Perhaps more importantly, a pest management plan justifies the need for each management practice to people who have an interest in your finances (your bosses), the quality of your turf (your customers), or the impacts of your operation on the environment (concerned neighbors).
Presentations: During the final exam period on May 2, each student will give a 10
presentation to provide a summary of their pest management plan. The presentation
should be prepared in a format that would be given to a greens committee or similar
group that is responsible for making budgetary decisions for a turf facility. Visual aids for
the presentation should be prepared in Microsoft PowerPoint or similar software.

Suggested Resources: Books from insect, disease, and weed sections of course, Pest
Control for Professional Turfgrass Managers 2008, class handouts, and the TurfFiles
website (www.turffiles.ncsu.edu).

Criteria for Evaluation: The project will be evaluated based on the following criteria:
(1) Appropriateness of selected pest problems based on turf species and location; (2)
Effectiveness of proposed strategy for identification, monitoring, and management of the
selected pests; (3) Discussion of the integrated management plan and analysis of benefits
and risks; (4) Quality and clarity of writing; and (5) Quality and clarity of presentation.