

Final Project Report to the NYS IPM Program, Community IPM 2000 – 2001

Title: SCHOOL ATHLETIC FIELD ASSESSMENT IN ORANGE COUNTY

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Cooperator(s): Jennifer Grant, NYS IPM Turfgrass IPM Coordinator; Andrew Landers, Pesticide Applicator Technical Specialist; Leslie Weston, Associate Professor of Horticulture; Joann Gruttadaurio, Senior Extension Associate Professor of Horticulture; Frank Rossi, Assistant Professor of Horticulture

Type of grant: Implementation New

Project location(s): School Athletic Fields, Orange county, NY

Abstract: A site analysis and survey will be conducted of athletic fields at 20 Orange County Schools to determine existing conditions. This information will be used to prepare site specific management plans including alternative pest management recommendations. Informational resource packets will be developed for participating managers. Potential sites for future workshops and demonstrations will be identified.

Background and justification: According to a recent survey of Orange County schools, school building and grounds personnel are responsible for maintaining the athletic fields and grounds. School athletic fields are heavily utilized during most of the year throughout Orange County. Maintaining healthy turfgrass with such heavy use can be very challenging, particularly when it comes to weed management. Two school IPM workshops were conducted by Cornell Cooperative Extension in Orange County during the past year. Participants in these workshops requested more information on IPM for school grounds and athletic fields. Chemical weed control was mentioned as being the primary pest management activity.

To target programming efforts in the area of school athletic fields, it is first necessary to assess the actual condition of the fields. Conducting on site surveys of area athletic field conditions, including weed mapping and comprehensive soil testing and analysis, would build working relationships with school personnel, and enable Extension educators to provide them with educational programming tailored to their specific needs.

Objectives: 1. Conduct site analysis of school athletic fields at 20 locations, including soil tests weed composition and condition of existing turfgrass.
2. Utilize information gathered in during site analysis to develop site specific management plans for athletic fields in Orange County.

3. Compile resource packets on athletic field construction, renovation, and maintenance for managers.
4. Select a location for a potential hands-on workshop on alternative weed management. (see grant proposal submitted by Landers, Ferrentino, et al for 2001)
5. Evaluate the program.

Procedures:

1. Contact 20 Orange County schools and arrange for on site consultations with building and grounds personnel. Visit sites and conduct a site analysis including soil testing, weed composition and density, and condition of existing turfgrass. This information will be used to develop site specific management plans and determine overall conditions of athletic fields in Orange County.
2. Site specific management plans will be developed in consultation with Cornell turfgrass team cooperators and delivered to participating schools.
3. Locate and select existing informational materials on athletic field construction, renovation, and maintenance. Assemble these materials into resource packets for participating school athletic field managers.
4. Utilizing site analysis information and the working relationships built through this project, identify potential sites for future workshops or demonstrations including the alternative weed management workshop of Landers, Ferrentino, et al.
5. Conduct follow-up interviews with athletic field managers to determine degree of adoption of recommendations.

Results and discussion: As suggested by the IPM review committee, we chose to focus on fewer schools so that we could spend more time developing the protocol and procedures for the project. We sampled soccer, football, baseball, and softball fields at 5 Orange County public schools.. We took soil samples for pH and complete nutritional analysis, soil compaction readings, and mapped weed populations for several athletic fields at each school. The measurements were taken and soil samples sent to the Cornell Nutrient Analysis Lab for testing. Soil test results were received by school personnel and our County CCE office.

Due to the funding cancellation, the Research Assistant working on this project was dropped from the project. She had just begun entering data into the computer for analysis. The analysis has not been completed, thus the participating schools have not received a Best Management Plan. Data analysis and report preparation will be required to complete this phase of the project. I have been contacted by several additional Orange County School Districts that wish to participate in this study and obtain a Best Management Plan. Without additional funding, we do not have the personnel to complete or expand the project.

Although the analysis has not been completed, we were able to observe some trends common to most of the athletic fields. The common trends seem to be lack of adequate topsoil, soil compaction, overuse and multi- purpose fields, limited funds for maintenance, limited maintenance staff and equipment. It also became apparent that we need to educate more than the building and grounds personnel. School

administrators, funding sources, athletic directors, coaches, teachers, parents, and students also need to be educated on maintenance issues.

References: (if applicable)