Title:

Environmentally Responsible Management Strategies for Municipal Athletic Fields and Grounds

Project Leader:

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Abstract:

Municipal athletic fields and grounds provide opportunities for recreation and physical activity. However these sites are often exposed to over use, improper plant selection and other factors predisposing them to pest problems.

In March 2009, CCE – Westchester County offered the program *Environmentally Responsible Management Strategies for Municipal Athletic Fields and Grounds.* Attendees came away with a better understanding of cultural practices fundamental to a successful IPM program aimed at preventing pest situations associated with municipal athletic fields and grounds. Specific topics of instruction included proper athletic field maintenance and the selection and use of low maintenance landscape plantings. Instruction subject matter also included IPM methods for scouting and managing pest situations.

Background and Justification:

While the municipal athletic fields and grounds found in our communities offer many important benefits, their condition and associated pests continue to be problematic and often require management. However, there is growing concern about the risks associated with the continued use of many traditional pest management practices, particularly the use of pesticides, in community settings. The passing of the Neighbor Notification Law on August 21, 2000 by the State of New York and the enactment of several pesticide reduction and phase-out laws on the part of municipalities all over New York State (including Westchester County) are examples of how state and local governments in New York are taking steps to limit and discourage the use of traditional pesticides. These policies have created an even greater need to address municipal employee training relative to the proper care of athletic fields as well as the proper selection, establishment and pest management of landscape plantings associated with municipal grounds.

By attending the program titled *Environmentally Responsible Management Strategies for Municipal Athletic Fields and Grounds* participants learned important IPM strategies relating to promoting the conditions of the athletic fields and municipal grounds that they manage. When these IPM strategies – that are predominantly cultural in nature – are eventually implemented, they will help to prevent or reduce pest problems, resulting in improved environmental health, community appearance, and economic viability. Instruction in this subject matter has also helped to ensure that when plant-related pest situations do arise, trainees will be able to develop an IPM strategy that is risk-sensitive and least-toxic in nature.

Instruction was delivered in a one-day period in March 17, 2009 by expert staff from Cornell Cooperative Extension and the NYS IPM Program at Cornell University. The

individuals that attended this program were strongly encouraged to disseminate their knowledge and program resources to colleagues, the general public, environmental groups and community members concerned about pest management practices on Municipal Athletic Fields & Grounds.

Since our municipal athletic fields and grounds – often found in community parks and open spaces – can help to improve the health of the environment, the state of the local economy and the overall quality of life for community residents, the impact of this program may be widespread and multifaceted. The basis for measuring the impact of this program would be to perform pre and post-training evaluations of the attendees to determine short-term impacts. An additional evaluation will be performed in the Fall of 2009 to determine long-term impacts as the attendees implement the information covered in the training program.

Objectives:

1) Train municipal employees about proper cultural IPM practices aimed at improving the condition of athletic fields and preventing their associated pests, as well as preventing and managing pests of landscape plantings in municipal grounds.
2) Reduce pesticide use and human and environmental health risks associated with pest management of athletic fields and municipal grounds.
3) Reduce economic risks associated with pest management of athletic fields and municipal grounds.
4) Community revitalization.
5) Project evaluation.

Procedures:

1) Educational information was conveyed and distributed to attendees of this program pertaining to proper IPM practices of municipal athletic fields and landscape plantings of municipal grounds. This took place over a 1-day training period and largely featured in-person instruction, the dissemination of resources (books, fact sheets, manuals, etc.), with limited hands-on learning activities.

2) Pre-program and post-program evaluations of attendees were conducted to determine immediate informational impacts of this educational training. A follow-up evaluation was performed to determine impacts over the longer-term, which included the adoption of innovative, non-chemical IPM strategies. This training program was completed in its entirety on March 17, 2009.

Results & Discussion:

By enabling attendees to readily identify and diagnose pest situations of municipal athletic fields and landscape plantings in municipal grounds at their earliest stage, they will now have the opportunity to consider a variety of management options including least-toxic and pesticide alternatives. This will ultimately help to reduce the need for traditional pesticide applications and associated health and environmental risks.

Having been trained to note pest and plant-health problems at their earliest stage, attendees will now be able to address the pest situation in a way that saves their communities money by preventing the costs associated with expensive practices like athletic field renovation or replacement of landscape plantings.

Having been educated about the proper care and management of athletic fields and their associated pests, and the proper site selection, plant species selection, establishment, and care of landscape plantings of municipal grounds, attendees will be able to improve the quality and health of their community parks resulting in improved environmental health, community appearance, economic viability, and the saving of taxpayer money

By providing this program opportunity the citizens and concerned community groups of Westchester County municipalities have the opportunity to learn by interacting with program attendees about information relating to promoting and protecting the quality of their public athletic fields and municipal grounds, resulting in improved environmental health, community appearance and economic viability throughout Westchester County.

Individuals that attended this training program numbered 30, representing 16 municipalities and 4 private contractors in Westchester County. Participating municipalities now have trained staff on-hand to disseminated proper IPM protocols and information to other staff members and other community members. As a result, when problems and pest situations of athletic fields and municipal grounds do arise, trainees will be able to develop a management strategy that is risk-sensitive and least-toxic in nature. Human and environmental health risks, as well as economic risks associated with the use of traditional pesticides would thereby be reduced.

9. Project Location:

Westchester County, NY

10. Samples of Resources Developed:

Please see enclosures.

1) Handouts. A complete handout packet that was distributed to each of the attendees has been included with this report.
2) Evaluations. Summaries of the pre & post program evaluations that were taken the day of the program have been included (originals are unfortunately unavailable). These summaries include quotes from attendees. In December 2009, Long-Term Survey's were mailed out to program attendees; original copies of the completed and returned evaluations have been included.
3) Photographs. Two photographs from the day of the program (March 17, 2009) have been included.

Authors: Indicate which keywords apply to your report, then submit this document with your report. It's not necessary to choose from each column.

Landscapes, Parks & Golf Courses Keywords

Pests	**Setting**	**Management Technique**
annual bluegrass weevil	athletic fields X	biological control
Asian Longhorned beetle	golf courses	cultural control X
birds	humans or pets	chemical control X
cutworms	Landscapes X	Monitoring X
deer	Parks X	Demonstration X
European crane fly	rights-of-way	research & education X
grubs (white grubs) X	Turfgrass X	trapping - exclusion - lethal techniques
Japanese beetles	water	
moles		
mosquitoes		
nematodes		
ticks		
turfgrass diseases X		
voles		
Weeds X		