

PLANET's PESP Strategy

Strategic Approach

Benefits of Turf

Lawn and landscapes impact Americans in many ways on a daily basis. Millions of acres of lawn and landscapes around our homes, commercial landscapes, roadsides, parks, athletic fields, and golf courses improve our quality of life by providing open space, recreational, enhanced property values, and the conservation of important natural resources.

Lawns with its above-ground network of leaves, shoots, and stems and an extensive fibrous root system below improve the environment since lawns:

- remove dust and dirt from the air
- reduce soil erosion
- reduce noise, dissipate heat, and reduce glare
- improve surface and groundwater by filtering rainwater
- provide a safe playing surface for children, adults, and athletes
- increase security from unwanted intruders
- decreased noxious pests, allergy related pollens and human disease exposure
- reduce fire hazard
- improves mental health via a positive therapeutic impact

Rapidly expanding urbanization profoundly affects the economic and environmental future of turf use and management. A comprehensive 1995 study estimates that the total amount of residential lawn in the United States ranges from 14 to 26 million acres, with 17.7 million acres as a conservative estimate. The U.S. lawn and landscapes industry is already a \$70 billion annual business that provides hundreds of thousands of jobs and promises even more in the future. The industry is one of the fastest growing segments of the green industry and small business. The lawn and landscapes industry is important to nearly every local economy in every region of the United States.

Environmental Challenges

The rapidly expanding uses of lawns and landscape can create challenges as our urban areas try to do more with finite natural resources. There are growing concerns about

- levels of use of water, fertilizer, and pesticides
- fossil fuels and machinery use
- safety due to intense demand and subsequent abuse of turf on athletic fields, parks and other recreational facilities

Monitoring data show that urban non point source pollution is a problem. Inappropriate application of pesticides and fertilizers is one contributing source of pollution. Nitrogen

and phosphorous (fertilizer components) concentrations in streams can exceed levels that can contribute to excessive growth of algae and other aquatic plants.

Challenges to Current Management Practices

In some locations, lawn and landscape inputs are being severely restricted, if not eliminated. For instance, severe drought conditions in many regions have resulted in government-imposed water restrictions or the use of lower-quality effluent water sources. Also, in some communities where concern about exposure to chemicals has reached heightened proportions, new pesticide use restrictions are being considered.

As inputs for lawn and landscapes establishment and maintenance are becoming less available, a growing, more prosperous population is demanding increasingly more from our current lawn and landscapes-based recreational facilities. Our nation's awareness of safety is at an all-time high. Turf is playing an important role in both reclamation and recreation and used on abandoned sites such as landfills, industrial brownfields, gravel pits, or mine spoils.

PLANET has a unique opportunity to significantly increase the public's understanding of the benefits of lawns and landscapes use by developing and promoting management systems that require proper pesticide, water and other inputs. Balancing multiple economic, aesthetic and environmental goals for lawns and landscape requires new technologies and management strategies. Finding out how to integrate the knowledge, plant varieties, and technologies needed to provide these new technologies and strategies will require a sustained and cooperative effort among federal, state, and private sectors.

Goals of the Lawn and Landscapes Benefits Strategy

Aid urban, suburban and rural homeowners across the United States by helping them understand lawn and landscape management systems and technologies that conserve and protect valuable natural resources, including water, soil, the atmosphere, and wildlife habitat, thus protecting the environment, including human health and safety. At the same time helping the public understand the environmental and economic benefits of caring for their own lawns and landscapes.

Progress 2005-2006

Activity 1

Develop communication messages through a survey leading to the proper use of pesticides, fertilizers, and water and lawn and landscape equipment.

Some of our activities were done through affiliation with Project EverGreen. We surveyed the public, industry and the suppliers on their attitudes about lawn and

landscape value and practices. The questions were divided into sections on Lifestyles, Economic and Environment. Here are some example questions:

- A well maintained lawn and landscape helps reduce soil erosion and run off.
- A well maintained lawn and landscape helps improve air quality.
- I consider myself an environmental activist.
- Most lawn and landscape fertilizers are harmful to the environment.
- Most lawn and landscape pesticides are harmful to the environment.
- I think using pesticides and fertilizers on my lawn are smart, because they keep my lawn healthy.
- Watering my lawn and landscape is wasteful.
- Lawn and landscape care products are generally safe.
- In general, I think people use more pesticides and fertilizer on their lawns and landscapes that are needed.
- Lawn and landscape care products should be more carefully regulated.
- I would use organic lawn and landscape care products even if it cost more and took longer to make my property look good.
- Pesticides for weed control, insect control and disease control are necessary for a nice lawn and landscape.

We are continuing to survey. We developed a pocket guide to the value and good practices. It mentioned

- Proper care of mowers like tuning up engine and sharpening the blade to prevent insect and disease.
- Proper use and practices of pesticides like spot treatment.
- Proper use of fertilizers for a healthy lawn to avoid weeds. Also protection of water resources.
- Proper watering.

How will you measure the risk reduction gained from this activity?

We will measure results by surveying our members to see if any changes occurred by them or customers.

We feel this that this measurement can be better done with some new procedures in the 2007 program. We expect to have participating company's give their customers a web survey site to survey changes in practices from distributed material.

Activity 2

Document and disseminate economic and environmental value of the lawn and landscape industry to local, regional and national audience.

We hope to measure the success of these activities with an increase of articles written encouraging proper care and maintenance. We will then eventually be able to see and

measure changes in attitudes and opinions. The following is an example. A website was established to disseminate materials and is listed below.

Project EverGreen Cites Reasons Why Paying Attention to Green Space Can Pay Off for Homeowners

What's better than owning your own home? According to Project EverGreen, it is knowing that investing in landscaping can make your home worth a lot more. This June, during National Homeowner's Month, Project EverGreen is reminding both buyers and sellers that a home's trees, shrubs and turf provide a lot more than just pleasant decoration.

- Studies continually show that well-planned landscaping can often add more than 10 percent to a home's value.
- Adequate shade can reduce attic temperatures by as much as 40 degrees and result in energy savings.
- Developing a thick, healthy lawn helps prevent runoff into streams and acts as a living filter to protect ground water.

To find out more about how developing and nurturing green space can benefit not only home value but homeowner lifestyle and the environment as well, access the new series of fact sheets available now at

<http://www.projectevergreen.com/whygreenmatters/index.html>

Economic impacts of the green industry in the US -
<http://www.utextension.utk.edu/hbin/frontmatter.pdf>

Activities Under 2007 Umbrella Strategy

The main idea of the 2007 strategy is giving better agronomic information on watering and mowing to the consumer to make their lawn and landscapes healthier so fewer pesticides would be necessary. One activity will encourage companies to make an inspection visit without making an application to scout the property for problems.

Our strategy is intended to:

- encourage association members to think about risk reduction in a consistent, goal-oriented way, and
 - use a survey tool that will measure their customers progress toward risk reduction by proper care for their lawns.
1. The problem is to get lawn care customers to follow lawn care service provider's instructions to care for their lawn and landscape in a way to make it healthier so less pesticides are necessary. For example, it is difficult to get lawn and landscape

customers to follow advice on proper watering and mowing and alerting the company of pest or growth difficulties in their landscape. When they can get them to follow good instructions there is a better chance of reducing pesticide application on pests.

2. The Lawns and the Environment documents are used as resources for customers to improve activities and practices resulting in improvement of local environments. By getting customers to fill out the scorecard with an online survey tool (Zoomerang) we can judge if they have read and are following the provided education material. We will model our scorecard after the one developed by the National Garden Association with Lawns in the Environment.