



IPM REPORT CARD FOR SCHOOL GROUNDS

Landscape Plantings



**A Self-Assessment Tool for School Administrators and Those
Making Pest Control Decisions on School Grounds**

Compiled by

George Hamilton Specialist in
Pest Management Rutgers
Cooperative Extension

Deborah Smith-Fiola
Former County Agricultural Agent
Rutgers Cooperative Extension of Ocean County

Steve Rettke
IPM Program Associate
Rutgers Cooperative Extension

This project was funded via a grant from the United States Environmental Protection Agency - Region 2
Pesticide Environmental Stewardship Program (Grant No. 98228301).

Thank you for requesting the School IPM Report Card - Landscape Plantings. Use this document to evaluate your facility and its pest management activities in your landscape plantings. This exercise should also help learn about integrated pest management on school grounds (IPM), what it involves and how it varies depending on the outdoor areas at the school being maintained. Once you have completed this report card and made the necessary changes, additional report cards covering turf, ornamental pests and athletic fields are also available for your use.

How the Report Card Works

The following material is designed to help you to make a self-assessment of your pest management practices that are used around the school. It is divided into six sections. Each section is designed to evaluate a different area of the school grounds.

As you answer the “yes” or “no” questions for each section you will be able to rate your performance as either poor, fair or good. If you answer “yes” to less than 50% of the questions in an individual section then you’re doing a “FAIR” job with your IPM program and need to implement considerable changes. If you are between 50 and 75% then you’re doing “FAIR” job and need to make a moderate number of changes. If your score is between 75 and 100% then you’re doing a “GOOD” job and need to make only minor changes.

When you have completed the self-assessment tool, rate your overall performance. If less than 50% of your section ratings are “GOOD” you need to make considerable changes. If you score is between 50 and 75% “GOOD” you’re on the right track but need to make a number of changes. If your score is greater than 75% “GOOD” you’re doing great job, need only minor changes and are well on your way to implementing a successful school IPM program.



Landscaper Plantings

1. Managing Your Trees, Shrubs, and Flowers

Are your trees, shrubs and flowers treated selectively with pesticides and not with cover sprays based upon the calendar?	Y	N
When pesticide are applied, is the decision based upon routine monitoring inspections?	Y	N

Monitoring involves the periodic inspection for pest problems for the purpose deciding where problem may occur and whether the problems found warrants any further action. Monitoring can and does include plant material inspection, use of monitoring traps and disease prediction and detection technology.

YOUR GRADE: (G/F/P)

2. Plant Selection

Are proper site locations considered with new plantings to ensure healthy plants (i.e., are plants selected for the landscape based upon their sun/shade requirements)?	Y	N
Are new landscape plants selected based upon their resistance to Key Pests?	Y	N
Are problem prone plants avoided when new plants are placed in the landscape?	Y	N

There are many varieties of plants that have natural or genetically altered/bred resistance to certain insects or diseases. Using these plants will reduce the need to apply pesticides. Plants that are planted outside of their ideal/native conditions tend to be more prone to pests. For example, azaleas (native to the edge of the forest where they do not receive direct sun all day) planted in full sun are often attacked by lacebugs, compared to those planted in shady sites. Research the shade/sun/soil needs of your plants and manipulate the site to the benefit of the plant as appropriate.

YOUR GRADE: (G/F/P)



3. Cultural Techniques

Are soil pH & moisture levels monitored periodically	Y	N
Are simple physical controls such as removing egg masses or pruning out active insects that congregate in small groups (instead of spraying) routinely practiced?	Y	N
Are sanitation practices done, such as raking up and disposing of diseased leaves or pruning out diseased or cankered stems?	Y	N
Are non-chemical methods of pruning most commonly practiced rather than mechanical methods?	Y	N

School IPM programs should always emphasize the use of cultural control strategies to limit the potential outbreak of pest problems on school landscapes. Insects, mites, disease pathogens, and weeds will more commonly become pests when certain plant species are planted in environmental conditions that favor their development. For example, spider mites will thrive on susceptible plants that are located in hot, dry and dusty sites. When azaleas and rhododendrons are planted within full sun they become highly prone to lacebug infestations. It is typically not desirable to routinely prune evergreen plants with hedge-shears. The “right plant for the right place” is a prime example of the proper use of cultural techniques to reduce future problems.

YOUR GRADE: (G/F/P)

4. Site Maps

Do you have a current map or blueprint of the site?	Y	N
Do you know the key plants and their locations?	Y	N

Generally, every landscape has key plants and key locations that are prone to pest problems. Knowing these plants and locations enables monitoring to be most efficient. Identifying these problem areas on a site map can be particularly effective when monitoring and keeping records.

YOUR GRADE: (G/F/P)

5. Knowledge About Pests

Do you know what pests attack your Key Plants?	Y	N
Are there areas with chronic problems?	Y	N
Do you know where they are located?	Y	N

A key plant is one that is prone to many pest problems. Knowing the biological life cycles of insects, diseases and weeds are critical when attempting to suppress them with IPM methods. Success when applying pesticides is often dependent upon proper timing (e.g., timing sprays to the most



vulnerable life stage of an insect). Applying pesticides to only those areas having plants with chronic problems at the right time will require fewer pesticide sprays.

YOUR GRADE: (G/F/P)

6. Identifying Pest Problems

Are plant problems initially seen before they become serious by routine monitoring inspections?	Y	N
Are they discovered only after symptoms are obvious and significant damage has occurred?	Y	N

YOUR GRADE: (G/F/P)

7. Setting Landscape Priorities

Have you identified your high priority landscape areas?	Y	N
Have you identified your low priority landscape areas?	Y	N

Within any school ground landscape there are certain areas that have high visibility and therefore require greater monitoring frequencies. These key locations would typically be near the school’s front entrance. Other key location areas having high visibility might include walkways from parking lots, flagpole areas or the landscaped areas along roadways. Plants within these areas will have lower pest threshold levels and hence, may require more frequent attention to monitoring, cultural practices and control measures to prevent pest damage. Alternatively, there will be landscaped areas that are not generally seen by the occasional school visitor. Such low visibility or priority locations can tolerate higher pest threshold levels and therefore reducing the amount of effort needed.

YOUR GRADE: (G/F/P)

8. What Methods Are Used to Manage Pests?

When pests are encountered within the landscape are aesthetic thresholds used to determine if treatments are required?	Y	N
Are life cycles of specific pests understood so that the most effective treatment timings are achieved?	Y	N
Are pesticides applied selectively to landscape plantings or are “insurance” applications routinely applied where pest problems possibly might occur?	Y	N
Are beneficial insects such as ladybird beetles, lacewings, flower flies, and parasitic wasps recognized and encouraged in the landscape?	Y	N



Are pesticide treatment decisions influenced by the presence of significant numbers of beneficial insects?	Y	N
Have two or more control methods been identified (cultural, mechanical, biological, chemical methods) that can provide control of the pest?	Y	Y
Is a plan for spot treatments in place?	Y	N
Do you employ spot treatments to avoid harming beneficial insects	Y	N

Beneficial insects such as ladybird beetle and lacewings can help control certain insect pests and reduce or eliminate the need for pesticide applications. Always choose pesticides that do not harm beneficial insects, change to spot sprays of pesticides or select plant material that encourages their presence.

YOUR GRADE: (G/F/P)

9. What products have been selected to control pests?		
Are “reduced risk” pesticides used when they can be effective?	Y	N
Are botanical pesticides used when they can be most effective against the pest?	Y	N
Are bio-rational used when they can be most effective against the pest?	Y	N
Are traditional chemical pesticides used when they can be most the most effective against the pest?	Y	N

Reduced risk pesticides, such as horticultural oils and insecticidal soaps, are materials that present little risk to human health or the environment. Botanical pesticides, such as pyrethrins and Neem, are materials derived directly from plants. Bio-rational pesticides are chemicals, either natural or synthetic, that mimic or interfere with various metabolic processes such as insect molting or plant growth.

YOUR GRADE: (G/F/P)

10. Has the property been inspected for Hazard Trees?		
Does a certified arborist periodically (i.e., once a year) examine the trees within the school grounds to identify potential concern areas?	Y	N

The ability to competently evaluate hazardous tree potentials is a specialized skill within the field of arboriculture. If the school property contains large shade trees in areas where potential targets exist (e.g., buildings, equipment, people), then these trees should be periodically evaluated for their potential to be hazardous.



YOUR GRADE: (G/F/P)

10. Are vertebrate pests a concern on school grounds? (If applicable)

When problems occur with vertebrate pests on school grounds are inspections made to discover food sources, animal feces, nests, etc.?	Y	N
If such discoveries are made, are corrective actions done to remove the conditions which favor vertebrate intrusions (e.g., shelter, food, water, dense vegetation or ground cover)?	Y	N
Are records maintained that indicate when and where vertebrate pests have been a problem over the years?	Y	N
When snap traps are necessary, are they handled only by trained personnel, and placed in areas on school grounds not readily accessible to children?	Y	N
When pesticide baits are necessary, is it done by personnel fully trained in bait selection use them and in accordance with state pesticide regulations?	Y	N
Are only child-resistant baits used?	Y	N
Is the pest manager is aware of and understands Federal, state and local laws pertaining to vertebrate pest management and protected/endangered vertebrate species?	Y	N

YOUR GRADE: (G/F/P)

11. Are nuisance or hazard pests, such as stinging insects a concern on school grounds? (If applicable)

When problems occur with nuisance pests on school grounds are inspections made to discover food sources, animal waste (goose feces), nests, etc.?	Y	N
If such discoveries are made, are corrective actions done to remove the conditions which favor nuisance pests (e.g., shelter, food, water, dense vegetation or ground cover)?	Y	N
Are records maintained that indicate when and where nuisance pests have been a problem over the years?	Y	N
When control measures are necessary, are they handled only by trained personnel, and when on children are not present on school grounds?	Y	N

YOUR GRADE: (G/F/P)

**RUTGERS COOPERATIVE EXTENSION
N.J. AGRICULTURAL EXPERIMENT STATION
RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
NEW BRUNSWICK**

Distributed in cooperation with U.S. Department of Agriculture in furtherance of the Acts of Congress on May 8 and June 30, 1914. Rutgers Cooperative Extension works in agriculture, family and consumer sciences, and 4-H. Zane R. Helsel, Director of Extension. Rutgers Cooperative Extension provides information and educational services to all people without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Rutgers Cooperative Extension is an Equal Opportunity Employer.