





Determine the type and amount of damage. Most damage looks the same. Get down on your hands and knees and look closely for insect pests or diseases.

Dig up a small section of turf to look for grubs—the most common pest in northern grasses.

Lawn insect pests and diseases vary throughout the region based on the type of grass.

Most lawns can tolerate some insect pests and diseases. Treating diseases in home lawns is not practical.

Don't apply an insecticide or fungicide if you don't have a problem.

Check with your local extension service or local lawn professional for correct identification and specific recommendations. Most insects are a harmless part of the landscape and not a problem.

Select the proper type of grass for your region to minimize pest and disease problems.

The best defense against problems is to properly water, feed, and follow maintenance practices to avoid stressing the lawn.

For more help, contact your local Cooperative Extension office (www.csrees.usda.gov/Extension)



Growing Green Lawns

Designed by Penn State's College of Agricultural Sciences in cooperation with the Northeastern Integrated Pest Management Cente





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Do you know your turf?

Early fall is the most ideal time to fertilize cool-season grasses or mixtures of:

- turf-type tall fescue
- Kentucky bluegrass
- perennial ryegrass
- fine fescues

Do not apply fertilizer to frozen ground or dormant lawns.

In the summer during active growth, fertilize warm-season grasses:

- Zoysiagrass
- Bermudagrass

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Dense lawns can outcompete weeds.

If grass is so thin that the ground is visible, weeds may move in and become established. Weeds may indicate a problem with low mowing height, poor fertility, shade, or watering practices.

If you are planning to control weeds in your lawn:

- Select a product labeled for lawn use.
- For few weeds: consider hand-pulling or a ready-to-use (RTU) product as a spot treatment.
- For many weeds: either treat the entire lawn yourself or hire a professional.
- Always follow label instructions for rates, mixing, application method, and safety precautions.
- For broadleaf weeds (dandelions, ground ivy, clover, and plantain), apply herbicides in the fall.
- For most annual grass weeds (crabgrass), apply a preemergent product in the spring.

Weed control may not be necessary every year.

Strive for a thick, competitive lawn to reduce or eliminate the need for using herbicides. Treat weeds only as necessary.

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Your lawn's many uses include:

- Part of your landscape that can increase the value of your home.
- A place for kids and pets to play.
- An area for families and friends to gather.
- A pleasing, safe, open space around your home.

Your lawn's environment benefits include:

- Erosion control.
- Noise and glare reduction.
- Rainwater and pollutant (dust, dirt, smoke, chemicals) filter.
- Habitat for beneficials.
- Energy efficiency (based on a 10,000 square-foot lawn)
- Can absorb more than 6,000 gallons of water from a rainfal event.
- Can cool about nine averae homes.

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Growing Green Lawns



Lawn care is not complicated. Making simple, easy changes in your lawn maintenace can provide you with the type of lawn desired.

Mow Right!

- Mow high. Set the mower on the highest setting.
- Leave clippings on lawn (do not use bag or catch-
- Use a sharp blade (sharpen blade at least one time per year).

Feed Right!

- Choose a fertilizer designed for lawns.
- Read and FOLLOW the directions on the bag.

• Sweep products off hard surfaces into the lawn.

- It is okay to leave lawns go dormant in the summer.
 - Cool-season lawns do not need to be watered in the
 - The best time to water is early morning.
 - Do not overwater.

Water Right!

For more help, contact your local Cooperative Extension office (www.csrees.usda.gov/Extension)



Growing Green Lawns

Regional Integrated Pest Management Centers



Connecticut
Delaware
District of Columbia
Maine
Maryland
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont
West Virginia

The Northeastern and North Central Integrated Pest Management

Centers are part of a nationwide system that provides broad access

to reliable pest management information. They focus IPM team-building

efforts, communication networks, and stakeholder participation in

each region.



Illinois
Indiana
Iowa
Kansas
Michigan
Minnesota
Missouri
Nebraska
North Dakota
Ohio
South Dakota

The Northeastern Integrated Pest Management Center was established in 2001. Members work to promote environmentally sound solutions to home and garden pest problems. Members:

University of Maryland, Penn State University, Cornell, and University of Rhode Island, the Environmental Protection Agency, Longwood Gardens, Audubon International, and Rivard's Resources IPM Environmental Management Consultants. Partners: the North Central Integrated Pest Management Center, Scotts Miracle-Gro Company, Regions I and III Water Quality.

The Centers are supported by the USDA's Cooperative State Research, Education and Extension Service (CSREES)

www.northeastipm.org • www.ncipmc.org







Regional IPM Center Displays

The goals of the displays are to highlight poor gardening practices and help consumers make changes that will benefit them and the environment. The "Landscape Bloopers" display illustrates common landscaping mistakes. The "Growing Green Lawns" display utilizes best management practices to solve common lawn problems. Display content is the result of a national collaborative effort to build consensus among land grant universities, environmental groups, government, and private industry. Both displays utilize Integrated Pest Management (IPM) techniques. IPM helps protect water, people, pest, plants, and our planet.

The Northeastern Integrated Pest Management Center's Community IPM Working Group members collaborate to promote effective environmentally sound solutions to home and garden pest problems. Working Group Members: University of Maryland, Penn State University, Cornell, and University of Rhode Island, the Environmental Protection Agency, Longwood Gardens, Audubon International, and Rivard's Resources IPM Environmental Management Consultants. Working Group Partners: the North Central Integrated Pest Management Center, Scotts Miracle-Gro Company, Regions I and III Water Quality. The North Central Integrated Pest Management Center's recently formed Consumer Horticulture Working Group plans to collaborate with the Community IPM Working Group from the NEIPM Center to continue to provide information to consumers about good lawn care practices. The NC IPM Center working group members currently included representatives from University of Wisconsin, South Dakota State University, North Dakota State University, The Ohio State University, Michigan State University, University of Illinois and University of Minnesota.

The Northeastern Integrated Pest Management Center (http://northeastipm.org), and North Central Integrated Pest Management Center (http://www.ncipmc.org) are part of a nationwide system of four Regional Centers that provide broad access to reliable pest management information. The Centers focus on IPM team-building efforts, communication networks, and stakeholder participation in each region. The Centers are supported by the USDA's Cooperative State Research, Education and Extension Service (CSREES).

Where to get Information:

 ${\bf growing green lawns.org-provides~a~central~location~for~people~to~go~to~for~specific~information~on~lawn~care.}$

csrees.usda.gov/extension - locate your local cooperative extension office.

Contact information:

Mary Kay Malinoski, University of Maryland, Home and Garden Information Center, mkmal@umd.edu, 410-531-5568

Rick Johnson, Pennsylvania State University, Pesticide Education Program, rhj3@psu.edu, 814-865-8080 **Sue Ratcliffe**, Director, North Central IPM Center, UIUC, sratclif@uiuc.edu, 217-333-9656 **David Clement**, University of Maryland Home and Garden Information Center, University of Maryland, clement@umd.edu, 410-531-5556

Display #1 – Typical Landscape Mistakes:

Landscape Bloopers

Pesticides:

Beyond the Cabinet Door: Improper Storage of pesticides and poisons

Little Miss Application: More is not better, over use of products

Collateral Damage: Off target application Quick Fix: Choosing the wrong products

Pest Management:

A Case of Mistaken Identity: A myth that all insects are pests Guess Who's Coming to Dinner: If you plant it they will come

Landscaping:

Anatomy of a Murder: Topping Trees Shear Terror: Improper Pruning All the right cuts: Why Prune

Dude! Where's my house? Improper Plant selection and placement

In Too Deep: Improper Planting Buried Alive: Improper Mulching

Lawns:

A Mover Runs Through it Part I
Shredded and Low: Mowing too Low

Ripping-n-Tearing: Using a Dull Mower Blade

A Mover Runs Through it Part II

The Lawn Jungle: Not mowing often enough Bagging Grass Clippings: Don't bag clippings

Display #2 – Sustainable Lawn Care

Growing Green Lawns

Benefits of Lawns: many uses and environmental benefits of lawns

Growing Green Grass: mow right feed right, and water right

Mowing: correct mowing practices Watering: water conservation tips

Feeding: sustainable fertilizing practices Weeds: smart ways to manage weeds

Insects and Diseases: common sense solutions