Practice Integrated Pest Management[2,4,7]

Follow these steps and use the **Integrated Pest Management (IPM)** methods discussed in this brochure to create your own IPM program.

1. Properly identify the pest.
2. Understand the pest's life cycle, growth habits, and habitat needs.
3. Examine your lawn to determine if the problem area(s) exceed your action threshold.
4. Apply **Cultural Controls** that favor turfgrass and disrupt the pest's life cycle.
5. Identify any **Mechanical/Physical Controls** or **Biological Controls** that could further reduce the pest population.
6. As a last resort, use **Chemical Controls**. Spot treat with the least toxic products available and carefully read the label and follow directions.
7. Evaluate and record results.

Mechanical control of dandelions with a long handed weeding tool.

Take Action

Integrated Pest Management (IPM) combines several methods of control to prevent and treat lawn pests. Benefits of IPM include reduced pesticide use and improved lawn health.

Prevent: Focus on lawn care practices that improve turf health. A healthy lawn naturally resists pests.

Monitor: Inspect regularly. Define your action threshold.

Control: Use IPM control measures to limit a pest population within your determined action threshold.

Evaluate and Record: Keep track of your results to make modifications and predict future problems.

Tools for creating a pest management plan and further IPM resources can be found at

LawnToLakeMidwest.org/IPM

[1-7]For references, visit iiseagrant.org/lawn-pest-mgmt

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MANAGING LAWN PESTS

WITH FEWER CHEMICALS

for Homeowners

LAWN TO LAKE *midwest*

Pesticides control unwanted insects, weeds, and plant diseases in your yard, but they may also pose a danger to people, pets, and the environment.[1] However, you can manage pests with fewer pesticides while creating favorable growing conditions for your lawn.

Integrated Pest Management (IPM) is an approach to managing pests that focuses on pest prevention, early detection of damage, and the use of Cultural Control, Mechanical/Physical Control, and Biological Control methods to support a healthy lawn.[2] To reduce risks, the use of Chemical Control methods (pesticides) is selective and targeted.

Benefits of IPM

- Minimized need for pesticides.
- Reduced costs.[3]
- Improved lawn health.
- Decreased surface and ground water pollution.

Prevent

A preventive action plan uses Cultural Controls, such as those listed below, to achieve a dense and healthy lawn that recovers more quickly from damage and is less likely to be infested with pests.[4,5]

- Mow 3" or higher for cool-season grasses.
- Leave grass clippings.
- Water efficiently.
- Fertilize appropriately.
- Overseed.
- Plant a mix or blend of turfgrass species best suited to your yard conditions.
- Sharpen mower blades.
- Core aerate.

Monitor

Careful and frequent examination of your lawn will allow you to identify pest presence, quantity, and damage before it becomes widespread.

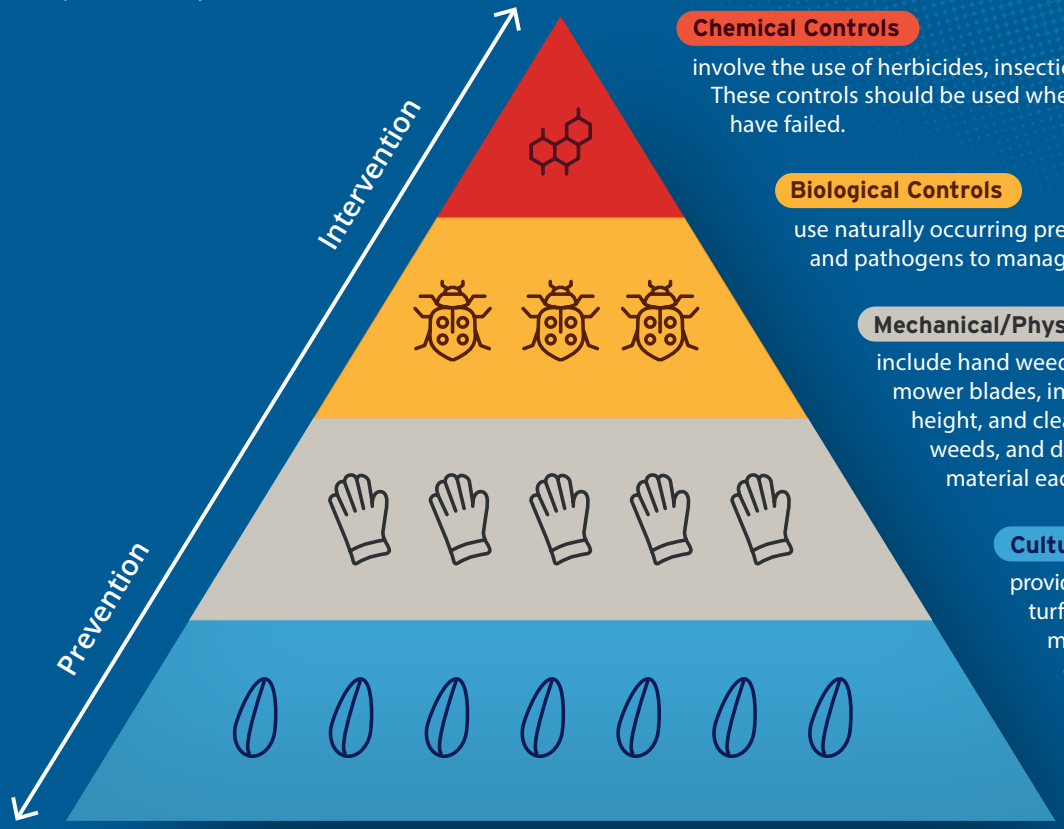
- Test your soil every 3-5 years.
- Look for problem areas once or twice a month.
- Assess when pests approach a level requiring control.
- Observe weather patterns and the time of year certain pests appear.
- Monitor rainfall and water as needed.

Control

What is your tolerance for lawn pests? Consider the purpose of your lawn and determine how much damage you are willing to allow. Before you reach that limit, known as an **action threshold**, apply the IPM model by using Cultural, Mechanical/Physical, and Biological Controls first. Proper use of these three preventative practices will ultimately reduce the need for Chemical Control (i.e., pesticide use).

IPM Pyramid

Diagram modified from Pennsylvania IPM Program[6]



Chemical Controls
involve the use of herbicides, insecticides, and fungicides. These controls should be used when other measures have failed.

Biological Controls
use naturally occurring predators, parasites, and pathogens to manage pests.

Mechanical/Physical Controls
include hand weeding, sharpening mower blades, increasing mowing height, and cleaning up leaves, weeds, and decaying plant material each spring.

Cultural Controls
provide conditions for healthy turfgrass growth. Consider maintaining healthy soils, choosing the right plant or seed for the right place, mowing high, fertilizing carefully, and watering properly.