

Integrated Pest Management

Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM can be used in agriculture, at home, in the garden or in the workplace.

How do IPM programs work?

IPM is not a single pest control method but a series of pest management evaluations, decisions and controls. In practicing IPM, growers, homeowners and businesses use these five steps to minimize pest damage.

1. Identify and Monitor Pests

Not all insects, weeds, and other living organisms require control. Know which pests are present that can cause damage.

2. Evaluate the Situation

Determine if pests are at a level to create problems and identify options to prevent or control them.

3. Prevent Pest Damage

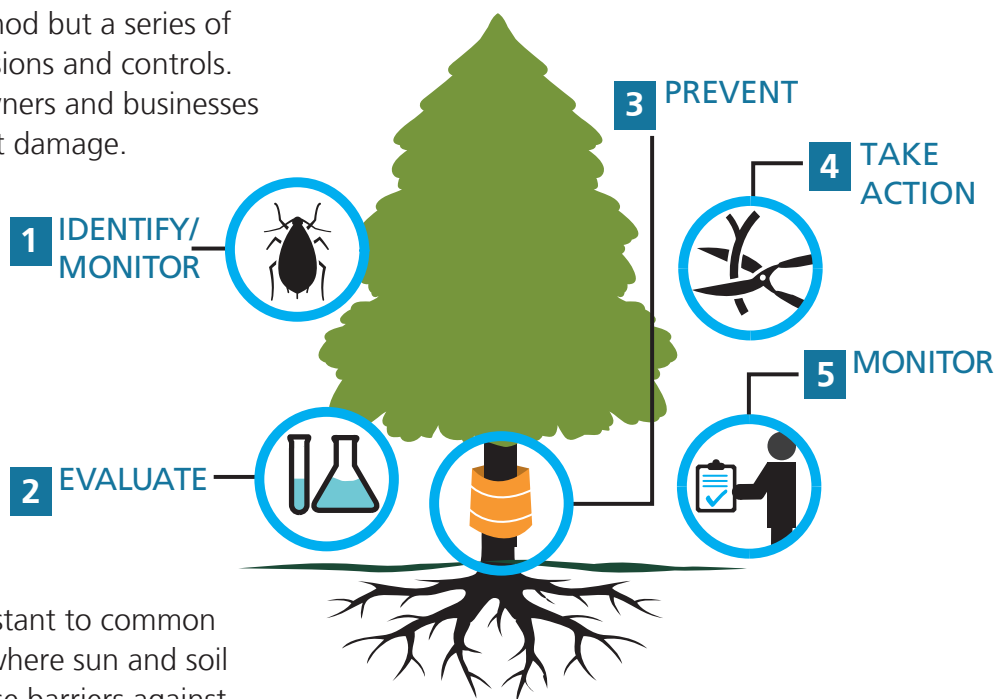
Native plants are adapted to be resistant to common pests. Be sure to plant in locations where sun and soil types are appropriate. Plant early, use barriers against climbing pests and rotate crops.

4. Use Effective and Less Risky Controls

Mechanical controls such as hoeing or weeding may minimize risk to the environment. Targeted hormones, such as pheromones disrupt pest mating, and targeted spraying of pesticides limits risks and cost.

5. Monitor for Impact

Further monitoring is needed to see if controls are working. If additional pest control methods are needed, use a targeted and least risky approach. Broadcast spraying of non-specific pesticides should be evaluated carefully for specific sites and pests.



Why use IPM?



Reduce Health Risks

Misuse of pesticides can be toxic to humans, pets and wildlife.



Minimize Pollinator Loss

Misuse of pesticides can cause die offs of beneficial insects like pollinators.



Reduce Pesticide Resistance

Overuse of pesticides can cause species to evolve via natural selection to survive.

Pesticides can contaminate the environment including air, ground and surface water.

Many natural enemies of pests are killed by pesticides, and pests can become resistant to pesticides, increasing control costs, crop losses or other pest damage.

Integrated Pest Management reduces hazards by reducing overall pesticide use.

Protect our River

Integrated Pest Management

Pesticides carried by stormwater runoff, wind and irrigation can contaminate streams and drinking water. Reduce pesticide use by practicing Integrated Pest Management.

Prevent pests:

Plant native trees and shrubs that are adapted to the local climate and are more resistant to pests and disease. Improve soil before planting to give young plants a healthy start. Plant a variety of plants to ensure blooming from spring to fall to attract beneficial insects. Mulch plants or plant spreading native groundcovers to reduce weeds. Water only as needed.



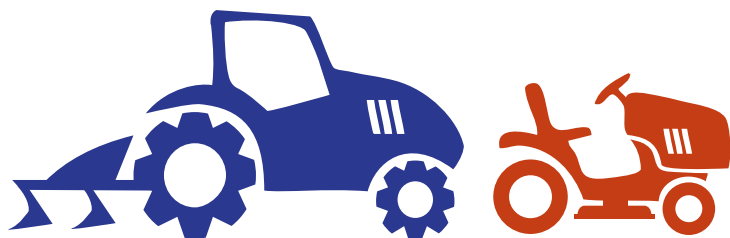
Plant natives



Attract beneficial insects



Mulch or plant groundcover



Mechanical Controls:

Some weeds and pests can be controlled by using tools for weeding, hoeing and raking. In addition, pests can be managed through mowing, or by aerating or tilling the soil. Use methods that minimize soil disturbance and erosion.

Biological Controls:

Biopesticides are naturally occurring chemicals, microbes, or plant-produced chemicals that fight pests. Many are regulated by the EPA, so be sure to follow label instructions. Predatory insects like lady bugs or preying mantises will control populations. Pheromone traps can be used to help monitor and control insect infestations.



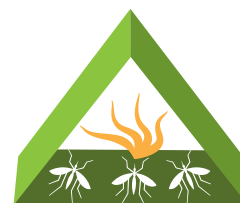
Biopesticides

Control pests using things found in nature



Predatory Insects

Feed on insect pests, eggs and larvae



Pheromones

Attract pests for identification

Resources:

Clackamas River Basin Council

www.clackamasriver.org/resident-resources/pesticide-reduction

Clackamas River Water Providers

www.clackamasproviders.org

Clackamas Soil and Water Conservation District

www.conservationsdistrict.org

Metro/Grow Smart, Grow Safe

www.growsmartgrowsafe.org

National Pesticide Information Center

www.npic.orst.edu

EPA Agriculture Management for Water Quality Module

<https://cfpub.epa.gov/watertrain/pdf/modules/Agriculture.pdf>

OSU Extension

www.extension.oregonstate.edu

US Department of Agriculture

www.nrcs.usda.gov

Oregon Department of Agriculture

www.oregon.gov/ODA/programs/Pesticides

Clackamas Basin Pesticide Stewardship Partnership

www.conservationsdistrict.org/programs

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Clackamas River Water

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