



Homeowners Guide to Lawn and Garden Maintenance:

Pollution Prevention Tips to keep
creeks, streams and rivers clean



Fertilizer

- Get a soil test to determine optimum fertilizer application rate, to avoid over fertilization.
- Use a low phosphorous fertilizer.
- Use a slow-release nitrogen. Usually about 1 lb./1,000 square ft. This prevents nutrient runoff to creeks.
- Do not apply if rainfall is forecast in the next 24 hours. All the fertilizer will wash into the creeks.
- Store fertilizer in covered locations away from rain water
- The UT Soil, Plant & Pest Center will test soil for a small fee-

[Http://soilplantandpest.utk.edu/](http://soilplantandpest.utk.edu/)

Irrigation

- Water less often, but for longer time. It will make roots grow deeper and become more drought resistant.
- Water only at night or early morning so less water evaporates into the air
- Use a rain barrel to collect water and release it on plants in a drought
- Adjust sprinkler heads so spray will not contact impervious surfaces
- Use a drip hose or a soaker hose to water, instead of a traditional sprinkler.



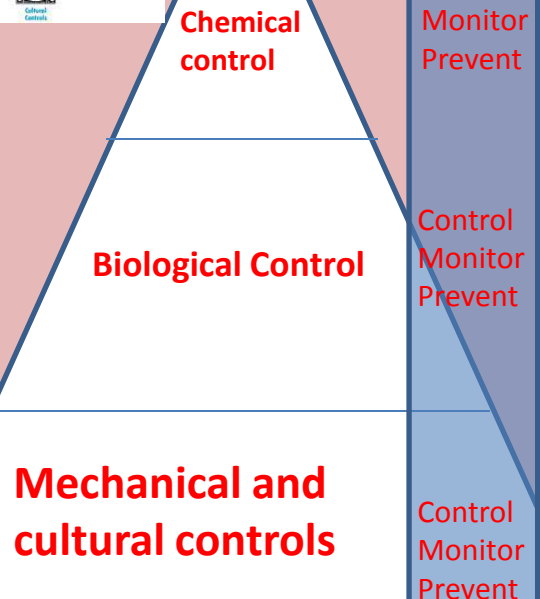
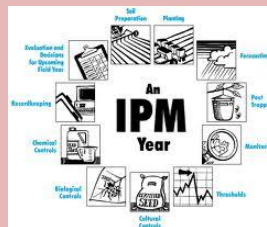
Mowing

- Never remove more than 1/3 of the leaf blade at a time.
- Do not throw yard waste into storm drains, ditches, street gutters or channels. It will eventually end up in a creek or clog a pipe.
- Leave grass clippings on the lawn. They return a small amount of fertility and contribute organic matter to the lawn.
- Recycle yard waste at the Bordeaux Mulch Facility or compost it.

<http://www.nashville.gov/Public-Works/Neighborhood-Services/Yard-Waste-Composting/Bordeaux-Mulch-Facility.aspx>



Pesticides





What is Urban Integrated Pest Management?

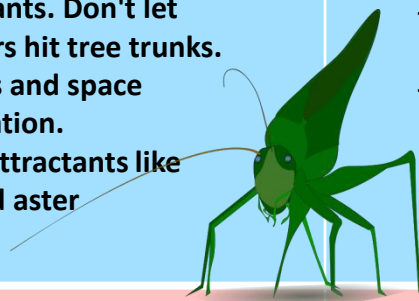


Integrated Pest Management is an effective method of weed and insect control that incorporates the least hazardous methods possible to reach the goal.

Insects & Disease

Step 1: Prevent the insects

- Pick the right plant/tree for the right spot. For example, don't plant shade trees in the sun.
- Prevent damage to plants. Don't let mowers or weed eaters hit tree trunks.
- Properly prune plants and space correctly for air circulation.
- Plant beneficial bug attractants like spearmint, thyme, and aster



Step 2: Monitor the insects

- Use insect traps to catch the bugs and accurately identify them.
- Choose the right control to specifically target your pest so it won't kill other useful bugs, such as bees.



Step 3: Control the insects

- Mechanically wash insects off plants with a garden hose. Prune out diseased/bug infested branches.
- Trap bugs with products like pheromone attractants, bug zappers, and baits.
- Use biological controls like natural predators (*Bacillus thuringiensis*, green lacewing).
- Use chemicals like horticultural oils, insecticidal soaps, insect growth regulators, botanical insecticides
- Use the least harmful chemical possible such as silicon dioxide or boric acid instead of pyrethrins



Weeds & Disease



Step 1: Prevent the weeds

- Use weed guides to correctly identify the weed and learn about the life cycle.
- Choose the right control for the specific weed you have.
- Follow the irrigation, mowing, and fertilization techniques mentioned on page 2.

Step 2: Monitor the weeds

- Use weed guides to correctly identify the weed and learn about the life cycle.
- Choose the right control for the specific weed you have.



Step 3: Control the weeds

- Mechanically pick weeds out.
- Destroy weeds with heat, boiling water, or bleach
- Apply a mild toxicity pre-emergent that contains corn gluten or dithiopyr, as soon as the first weed emerges. Definitely before March 15th & before soil temp. reaches 55°
- Apply post-emergent chemicals that target the specific weeds you have. For example, don't apply a broadleaf weed killer to kill crabgrass.
- Use the least harmful chemical possible. For example use a herbicide to kill broadleaf weeds with iron HEDTA instead of 2,4,D.



How do I find more information?



Guide to Safe Pesticides and Garden Products

<http://www.growsmartgrowsafe.org/>

Integrated Pest Management On-Line

<http://www.ipm.ucdavis.edu/>

Univ. of Tennessee IPM Information

<http://web.utk.edu/~extepp/ipmprog.htm>

Integrated Pest Management Tips

<http://www.colostate.edu/Depts/CoopExt/4DMG/PHC/integrat.htm>

Agrilife Extension

<http://ipm.tamu.edu/>

IPM Program in Connecticut

<http://www.hort.uconn.edu/ipm/>

Southern Integrated Pest Management Center

<http://www.sripmc.org/>

Tennessee Native Plant Society

<http://www.tnps.org/>

The Garden Club of Nashville

<http://www.gcnashville.org/>

Davidson County Master Gardeners

<http://www.dcmg.org/>

Insect Identification Guides

<http://www.insectidentification.org/>
<http://ento.psu.edu/extension/insect-image-gallery>

Weed Identification Guide

<http://www.tennesseeturfgrassweeds.org/PAGES/wit.aspx>

**Most supplies can be found at a local hardware store or gardening center.
Insect growth regulators and beneficial bugs can be purchased on-line.**