

## Preserving Our Water

One of the Midwest's greatest resources is our freshwater. The Great Lakes and the waterways that feed them hold most of North America's and 20% of the world's fresh surface water. Urban lawn care practices such as over-watering, over-fertilizing, and using weed killers impact the water quality in the Midwest. The pesticides and fertilizers used on lawns and gardens frequently runoff and end up as pollution in our waterways.

Stopping water pollution from lawn and garden activities relies on people making good decisions about the products and practices they use to maintain their outdoor spaces. Natural lawn and gardening practices, as opposed to the use of fertilizers and pesticides, will make it easier to maintain and enjoy these spaces and improve the overall quality of our freshwater resources.

### Other negative impacts of conventional landscape practices and products include:

#### Endangering Wildlife

Many pesticides are extremely toxic to pollinators and aquatic life such as bees, fish and frogs. Pesticides in our waterways have been linked to development, reproductive, behavioral, and immune system problems in wildlife.

#### Threatening Children's Health

Children are most vulnerable to the health risks associated with the use of toxic chemicals like pesticides. Studies have found links between the use of lawn pesticides and non-Hodgkin's lymphoma, asthma, hormonal issues, weakened immune function, and acute leukemia.

#### Climate Change

Conventional lawn care practices produce carbon dioxide emissions that contribute to climate change. Our region is already experiencing the effects of climate change in more frequent and heavier rainstorms. The rainstorm runoff can lead to toxic algal blooms and other problems in our fresh surface waters.

For more information on the Midwest Grows Green program and cultivating a water-friendly lawn visit our website at [MidwestGrowsGreen.org](http://MidwestGrowsGreen.org)

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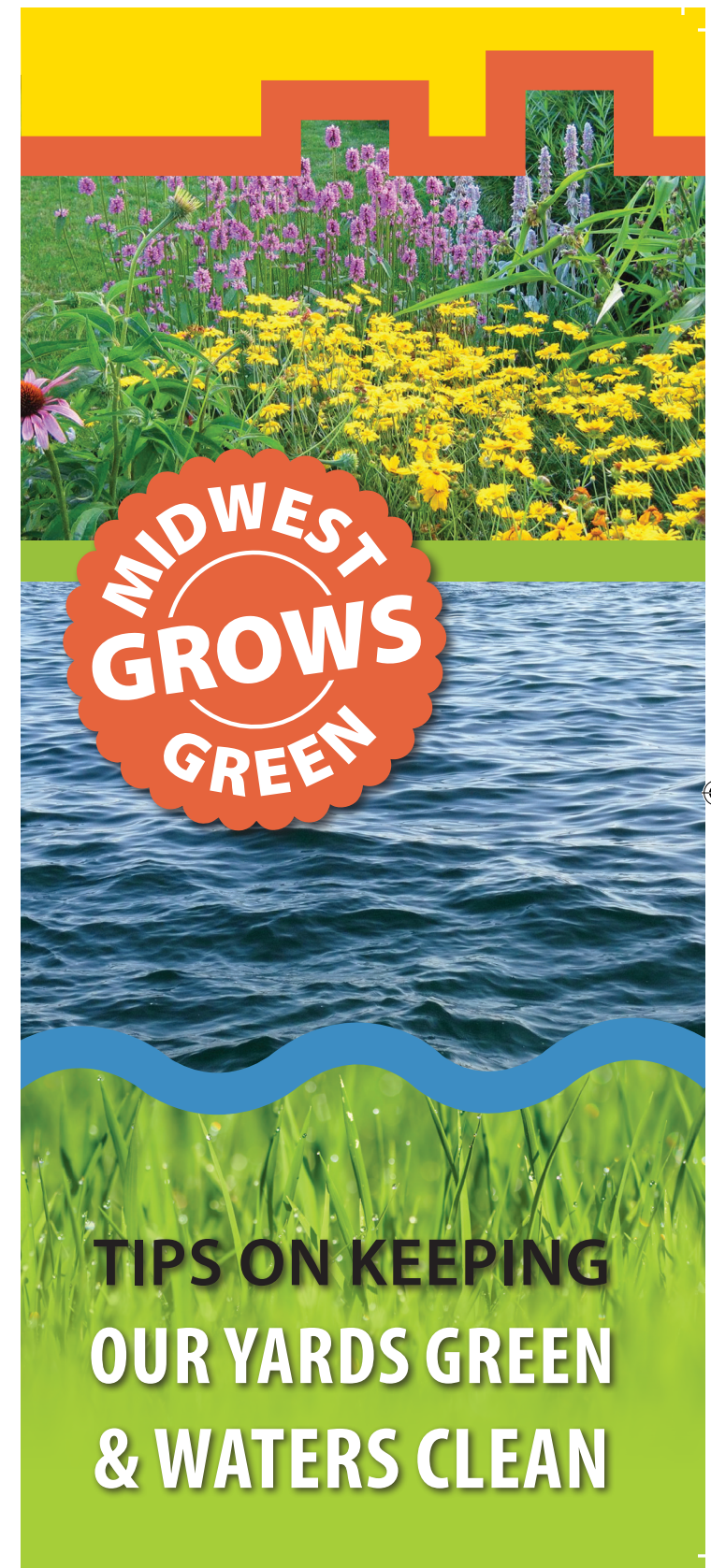


The mission of the IPM Institute of North America is to improve sustainability in agriculture and communities through market mechanisms based in Integrated Pest Management.

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Midwest Grows Green is an educational program that provides the information you need to reduce water pollution and still produce beautiful outdoor spaces that are safe for people and pets to enjoy.



## Alternative Maintenance Practices

Certain tools and practices used to maintain lawns and gardens are resource intensive, resulting in water and air pollution. To lessen the negative environmental impact of your lawn and garden, try these sustainable options:

- **Choose electric.** Choose electric or, better yet, human-powered tools, such as push mowers, hand clippers, weeding tools, and rakes rather than gas powered mowers and leaf blowers.
- **Mow Less and Mow High.** Mow your lawn less frequently and raise the height setting on your mower to at least three inches. This will create healthier root systems better able to fight off weeds and drought.
- **Water Correctly.** Water deeply and infrequently to encourage deep root growth. Water in the early morning or at dusk to minimize evaporation. Ideally, you want only one inch of water delivered each week. Use a tuna can to measure when you have reached an inch.



## Natural Fertilizing

All plants, including grass, need nutrients to grow and thrive. The fertilizers we choose and their use can reduce a lawn's negative impact on water quality. Fertilizers that contain high concentrations of phosphorus and nitrogen can lead to harmful algal blooms in water bodies, creating dead zones. Dead zones compromise the beauty of the water and decrease the number of fish and other wildlife it can support. For Midwest Grows Green alternatives, consider the following:

- **Soil Sampling.** Before adding fertilizer to your lawn, make sure it needs it. Conduct a soil sample and add only the nutrients your lawn is lacking.
- **Choose Organic.** Buy organic fertilizers instead of conventional ones. Look for products that contain plant and animal byproducts (such as alfalfa meal, fish meal, and rock phosphate).
- **Compost.** Instead of throwing away your yard and food waste, consider composting your leaves, grass, woody garden clippings, dead garden plants, and food scraps. The compost you create serves as an inexpensive, nutrient-rich soil amendment that can replace or supplement fertilizer use. Pre-made compost can also be bought at any hardware or home and garden store.
- **Grass Cycling.** Grass cycling, or leaving grass clippings on the lawn, is a great, natural, and free alternative to synthetic fertilizers.

## Natural Weed Control

Herbicides are pesticides used to kill unwanted plants in our yards. Like fertilizers, these toxic chemicals are carried away as runoff into our waterways. The runoff comes into contact with other (non-target) habitats, such as fields or ponds. Ultimately, the wildlife species living in these non-target habitats will be affected.

Weeds are often a symptom of a larger problem associated with poor soil health or the use of improper maintenance practices. Use these simple tips to eliminate common weed problems:

- **Crabgrass.** To eliminate crabgrass, mow your lawn to at least three inches high and deliver one inch of water to your lawn each week (including rainfall).
- **Dandelions and Plantains.** To prevent dandelions and plantains from appearing, aerate your soil and add nutrients by top dressing with compost to improve soil health.
- **Creeping Charlie.** The presence of creeping Charlie indicates excessive moisture and compaction. Place dirt in low areas in the lawn to eliminate poorly draining spots. Reseed and top dress to outcompete this weed.

In instances where weeds are sparse, hand picking with a sturdy weeding tool is the best solution. For immediate results, look for natural products such as soaps, horticultural oils, plant-based insecticides, or vinegar.

