



## CENTER FOR EARTH LEADERSHIP FACT SHEETS

# Maintaining a Chemically Free Yard

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*Do you vacillate between the desire for a chemically free yard and an aesthetically pleasing one? No need to do that: you can have both. Your natural surroundings are important to your state of being. Yet, there are strong reasons to be concerned about pesticides. Homeowners pour nearly 70 million pounds of pesticides on urban lawns each year, according to the Environmental Protection Agency. That's three times more per acre than what's applied by US farmers. And 95 percent of these pesticides are considered probable or possible carcinogens. Even if you don't have children or pets who might be exposed, some portion of those applied chemicals will make it to a waterway and affect aquatic life.*

### LAWNS

Attractive lawns don't require chemicals, but they do require care based on an understanding of lawn ecology. One of the most important things you can do is mow often and leave the clippings on the grass. That way, you're not losing the nutrients. To keep the grass tall enough to outcompete weeds, mow to a height of two to three inches. Never cut more than one-third of the grass blade, or it will be deprived of nutrients.

Don't knock yourself out trying to keep a lawn weed free. However, you need to manage the weeds, or they can get out of control. The best technique is to dig weeds out with a tool, preferably when they are actively growing and the soil is moist enough for the roots to come out easily. If you can't get all the roots, at least remove any flowers, like dandelions, before they go to seed, and remove as much of the leaves as possible to deprive roots of nutrients.

When you water a lawn, keep in mind that the goal is to get the water deep into the root zone. Therefore infrequent, long irrigation cycles are better than frequent, short ones. Grass specialists recommend one to one and one-half inches; put out a tuna fish can and see how long it takes to fill it to that amount. If you find that water doesn't penetrate the soil well, you may want to aerate it. Hand tools are available that remove small cylindrical cores of soil four to eight inches apart. Or you can rent an aerator from a rental shop.



If your grass is thriving and you leave the clippings on it, you may not need to add any fertilizer. But if the lawn seems to need additional nutrients, select an organic fertilizer made from plant or animal sources, such as compost, well-rotted manure, or a commercial blend. Organic fertilizers are renewable resources, and they release nutrients slowly, at a rate that plants can use, thus minimizing the chance that chemicals will run off and pollute the water. Synthetic fertilizers are made from fossil fuels and tend to release nutrients quickly. Excessive use can harm beneficial soil organisms.

Avoid using weed-and-feed fertilizers. Their application amounts to indiscriminate broadcasting of pesticides over non-targeted species whether or not a pest problem exists. Philip Dickey of the Washington Toxics Coalition says it's like painting your entire car every time you wash it, just to get rid of any possible scratches. These products typically contain 2, 4-D, which is harmful to humans and wildlife.

### **SHRUB BEDS, FLOWERS, AND TREES**

Exposed soil provides a ready habitat for weed seeds that are carried by the wind or animals. Heavy mulching around your shrubs has several benefits. It covers the soil preventing some seeds from reaching it, it keeps the soil from drying out, and when it decomposes, it keeps the soil friable, making it easy to pull weeds that do grow. A more difficult challenge is pests or diseases that attack your plantings. Below are some general principles to follow. Also see [www.beyondpesticides.org](http://www.beyondpesticides.org).

- Select plants that are known to grow well in your local area without pest problems, plant them where they will get the right amount of sunlight and water, and give them plenty of organic material.
- Don't overreact. Discover what the pest is and monitor the damage. Call your county extension agent and ask about non-chemical controls.
- Entice insect eaters into your yard. Plant flowers that attract beneficial insects and trees that attract birds.
- Use mechanical methods of removing pests, such as jet streams of water to wash insects off, paper collars to keep away cutworms, handpicking caterpillars, and trimming diseased branches.
- If a pesticide is necessary, use the least harmful ones, such as insecticidal soap sprays.
- If none of this works, consider your need for that particular plant.

*Center for Earth Leadership*  
319 SW Washington, Ste 400, Portland, OR 97204  
[info@earthleaders.org](mailto:info@earthleaders.org) • (503) 227-2315