### ALTERNATIVES

# RESTORING A LAWN WITHOUT CHEMICALS

BY CAROLINE COX

ave you ever stood behind your lawn mower or in the lawn care aisle of your local home-improvement center in dismay? Have you ever wished that you and your neighbors could take care of your lawns in an ecologically sound way? A new report, Ecologically Sound Lawn Care for the Pacific Northwest, offers a concise guide to reducing the amount of pesticides and fertilizers used on urban lawns in the Northwest. Published by Seattle Public Utilities and written by David McDonald, the report's lawn care recommendations come from professional turf managers in four cities in Oregon and Washington. The report's suggestions are not completely nonchemical, but chemicals are mentioned as a last resort, and it is a welcome tool for reducing pesticide use. This article summarizes the reports's discussion of nonchemical techniques for a situation in which herbicide use is often recommended: renovation of an existing lawn.

## Can Your Lawn Be Successfully Renovated?

Your lawn is a good candidate for renovation, rather than complete replacement, if the following conditions are met:

- The lawn is less than 50 percent weeds.
  - The soil is not a shallow hardpan.
- You are willing to improve your lawn gradually over several years.

#### Three Steps for Lawn Renovation

First, aerate your lawn. Aeration removes plugs consisting of soil and thatch. It improves drainage and oxygen content.

Caroline Cox is JPR's editor.



Northwest lawns can be successfully managed without using pesticides.

You can rent walk-behind aerators, or (for a small lawn) use a garden fork. (Insert the fork 6 inches deep every 6 inches; lever back gently, remove the fork, and then move to the next spot.) Leave the cores on the lawn and rake them if you need to speed up their breakdown. Aeration works best when soil is wet in spring or fall.

Next, **overseed** your lawn. Overseeding crowds out weeds and allows you to establish desirable species of grass. The best dates for seeding in the Northwest are in April, the first half of May, September, and the first half of October. Sow seed at half the rate recommended for new lawns. Experts differ on which grass species do best in Northwest lawns. Some favor perennial ryegrasses and fine fescues; others favor native and naturalized species such as bentgrasses, annual bluegrass, and velvet grasses. Whatever you choose, be sure to buy certified seed that is grown and adapted for your area.

Finally, topdress your lawn with com-

post. Compost improves soil structure, encourages breakdown of thatch, improves soil fertility, and increases resistance to disease. Midspring or early fall are the best times to topdress, when grass is growing vigorously. Apply up to 1/2 inch after you've aerated your lawn to fill the core holes. Existing grass should stand up through the compost; don't bury it or bend stems over. You don't want compost to build up as a surface organic layer on top of your soil; be sure that earthworm activity or mechanical aeration incorporates it well.

### An Optional Step: Breaking Down Thatch

Thatch (the stems and above-ground roots of the grass plant which accumulate above the soil) is a brown fibrous layer in a lawn. If your thatch layer is less than 1/2 inch thick it helps prevent erosion and protects the grass plants when the lawn is used. More than 1/2 inch, however, reduces aeration and keeps water from soaking into the soil. Buildup of thatch can be caused by repeated fertilizer and pesticide use. To encourage breakdown of thatch, topdress with compost in spring and fall, apply less nitrogen fertilizer, use slow-release, natural fertilizer products, and leave clippings on the lawn after mowing. You can rent a power dethatching machine, but they should only be necessary if your lawn has over an inch of thatch. \*\*

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For more detailed recommendations, please consult Ecologically Sound Lawn Care for the Pacific Northwest. The report can be ordered from Seattle Public Utilities; Community Services Division; Resource Conservation Section; 710 Second Ave.; Seattle WA 98104. Single copies are free. It can also be downloaded from www.ci.seattle.wa.us/util/rescons.