

FOR WESTERN WASHINGTON



Easy practices for healthy lawns, healthy families and a healthy environment







Overuse of lawn pesticides and fertilizers

is contaminating our streams, lakes, and Puget Sound.

Those chemicals can harm fish and wildlife. They're not healthy for children or pets either.

We use a lot of water on lawns in summer when supplies are scarce, and much of it is wasted.

The good news:

It's easy to have a healthy, beautiful lawn in the Pacific Northwest without pesticides (weed and bug killers), without fertilizer runoff, and without wasting water. Landscape professionals and scientists collaborated to develop these practices.

You can save money, time and our environment, and grow a healthy lawn that looks great year 'round.

How? It's easy...

Follow these 6 steps for a healthy, easy-care lawn:

- Mow higher, mow regularly, and leave the clippings on the lawn ("grasscycle").
- If needed, fertilize moderately in September or May with a "natural organic" or "slow-release" fertilizer.
- Water deeply, but less frequently. Or let lawns go dormant in summer.
- Improve poor lawns with aeration, overseeding, and compost topdressing.
- Avoid using "weed & feed" and other pesticides use less-toxic alternatives.
- Consider alternatives to lawns in shady areas, on slopes, and near waterways.

HEALTHY LAWNS GROW ON HEALTHY SOIL

The practices in this guide will help you build healthy soil, with lots of pore spaces for air, water and roots; beneficial organisms like earthworms; and organic matter to hold water and nutrients.

Healthy soil helps lawns grow deeper roots, resist diseases and drought damage, and grow denser turf that out-competes most weeds.

Healthy soil also reduces fertilizer runoff, filters pollutants like pet waste, and conserves water so we can leave more in our streams for wildlife.

See "Test your soil" inside to learn more.





Mow higher, mow regularly, and leave the clippings ("grasscycle")

Set mowing heights between 2 and 3 inches for most lawns (or 1-1½ inches on bentgrass lawns) to develop deeper roots, improve drought and disease resistance, and crowd out weeds.

Remove only one-third of grass length at each mowing. Try to mow weekly in spring. Cutting too much at once stresses the grass.

"Grasscycle" – leave the clippings on the lawn. Mulch-mowing provides free fertilizer (soil organisms recycle the clippings), helps lawns grow greener and denser, and doesn't cause thatch buildup. It also saves the work of disposing of clippings.

You can grasscycle with your existing mower. Keep the blade sharp, try to mow when the grass is dry,

and mow a little more often in spring. Clippings will break down quickly – just mow over any clumps to scatter them. Push mowers work fine. You can also buy "mulching" blades for many older power mowers that improve performance.

Buying a new mower? Get a "mulching" mower. Modern mulching mowers chop clippings finely and blow them down to the soil surface where they disappear and break down faster, returning free nutrients to the soil. Check Consumer Reports for current mulching mower ratings.

Keep blades sharp! Dull blades tear the grass, leaving ugly brown tips and inviting disease. Mower shops do a good job, or learn to sharpen blades yourself.



Electric and gas "mulching" mowers (center) chop clippings and blow them down to soil to decompose.

CUT ONE-THIRD OF GRASS LENGTH AT EACH MOWING.



If needed, use "natural organic" or "slow-release" fertilizer in September or May

Do I need fertilizer? How much?

If the lawn is thin or yellow, apply ½ to 1 lb. of nitrogen per 1000 sq. ft. in the fall or spring. (Read the label to figure out how much to apply for your lawn's area.) Many home lawns on good soil do fine without regular fertilizing – just with the free nutrients provided by grasscycling.

Natural Organia Forting

These fertilizers release nutrients slowly to feed the lawn, and less is wasted as runoff that pollutes our streams. Look for "water

insoluble nitrogen" and the words "natural organic" or "slow-release" on the label.

Choose no-phosphorus fertilizers to protect our waterways. Newly planted lawns need phosphorus, but established lawns rarely do – get a soil test to determine your lawn's needs.

Fertilize moderately – more is not better. Healthy lawns are a meadow green color. Dark green turf is overfertilized, which invites damage from disease and drought. Accept a lighter color, for a healthier lawn.

Fertilize in the fall, September-October with organic fertilizers, or as late as mid-November with slow-release synthetic. This feeds fall and winter root growth, as the plant stores nutrients for the next growing season. If you want to fertilize in spring too, wait until spring growth slows in May. Early spring fertilizing just makes faster growth and more mowing!

Soils west of the Cascades may be acidic and low in calcium, so
spreading lime in the fall every 3-4 years
helps some lawns. Again, a soil test will
tell you exactly what's needed.

TEST YOUR SOIL

Dig in and take a look. Is your soil loose, brown, and crumbly at least 8 inches down? Or hard and light colored (little organic matter)? Or gray and wet (poor drainage)?

Send a sample for tests for pH (acidity) and nutrients. The lab will recommend which amendments or fertilizer you need.
Test your soil every 3 years to plan fertilizer and lime needs.

Call WSU Master Gardeners or ask at garden stores for soil test labs and to help you interpret the results.

3

Water deeply, but less frequently. Or let lawns go dormant in summer

Grass does better when the whole root zone is wetted, and then dries.

This promotes deeper rooting. Too frequent watering can cause weak shallow roots, lawn disease, and leach nutrients from the soil. To see if you're watering as deep as the roots go, dig in with a trowel or shovel about an hour after watering.

Lawns need about 1 inch of water per week in summer, from rain or watering, to stay green. Scatter straight-sided tuna cans around your lawn, and time how long it takes your sprinkler to fill them to 1 inch. That's how long to water each rainless week in summer. Water less in early and late summer, when it's cooler.

Or let your lawn go golden brown and dormant in summer – it will bounce back in the fall. Water slowly and deeply once each rainless month to keep it healthy. Avoid heavy traffic on dormant lawns – you may want to water areas where children and pets play. When the rains return in fall, overseed any thin areas.

Save on water bills, by making every drop count:

- Water early in the morning or late in the day to reduce evaporation.
- If water puddles or runs off, water more slowly or start and stop.
- Aeration breaks down thatch layers and helps water penetrate.
- Use a timer on your sprinkler.
- Newly planted lawns need water daily; wait to plant lawns until rains come in September.
- Automatic irrigation systems often waste a lot of water. Learn how to improve efficiency at SavingWater.org



Scatter straight-sided tuna cans around your lawn, and time how long it takes your sprinkler to fill them to 1 inch. That's how long to water each rainless week in summer.



4

Improve poor lawns with aeration, overseeding, and compost topdressing

Use these practices on areas that are thin, weedy, or compacted to improve lawn appearance and health.

Aerate compacted soil in spring or fall to improve root development.

Use a rented power core aerator, or hire a professional. The soil should be moist. Make two or more passes, then rake or mow to break up the cores and leave them to break down. Aeration also helps break down excess "thatch" (old grass stems), or you can rent a power de-thatcher if you have more than a 1/2-inch thatch layer.

Overseed with a rye/fescue mix designed for Northwest conditions.

Aerate or rake first to expose the soil surface. Ask at your local nursery for a seed mix blended for the Northwest that matches your sun/shade conditions. Spread seed twice, in two directions, for

more uniform coverage, focusing on thin areas of the lawn.

Then topdress with ¼ - ½ inch of compost. Scatter compost with a shovel, then rake it out to fill aeration holes and let the grass stand up through it. Compost adds organic matter, and nutrients the young grass needs to grow quickly so it can crowd out weeds.

Really poor soil? Consider

re-planting. Strip old sod or till it in, till in 2-3 inches of compost, then re-seed the lawn. New lawns need water daily, so do this big job in September when the fall rains will help you. Call WSU Master Gardeners or ask your nursery for more tips on replanting lawns.

September or April-May are the best times to overseed and topdress with compost (with or without aeration) or amend the soil and replant.



Overseed thin areas of lawn, then topdress with ¼ to ½ inch of compost. Keep seeds moist during germination.

Compost adds organic matter, and nutrients the young grass needs to grow quickly so it can crowd out weeds.



Avoid using "weed and feed" and other pesticides – use less-toxic alternatives

These products may damage soil and lawn health and pollute our waterways. Pesticides (insecticides, herbicides etc.) are not healthy for children or pets either. They often get tracked into the house, bringing toxins indoors.

Accept a few "weeds" in your lawn. Some plants like clover actually provide nitrogen and look fine in a lawn. Target the problem weeds, leave the others.

Crowd out weeds and reduce pest damage by growing a healthy, vigorous lawn through proper fertilization, irrigation, and mowing. Improve thin areas by aerating, overseeding, and topdressing with compost.

Remove problem weeds by hand in the spring and fall. Don't cover your entire lawn with weed & feed just to kill a few dandelions. Pincer-type longhandled weed pullers are available at most garden stores. They work well in moist soil, before weeds go to seed. Pull dandelions when they're young to get as much root as possible.

Or spot-spray problem weeds with the least-toxic product. That's much safer than broadcasting herbicides all over your lawn.

Read product labels carefully and follow the instructions. Even less toxic products may have cautions. See the back page for safe product disposal.

Weed & Feed is a pesticide! It typically combines a quick-release fertilizer (bad) with a mixture of hazardous herbicides (worse). Hand pull or spot-spray instead.



PULL WEEDS INSTEAD OF USING PESTICIDES

Pincer-type long-handled weed pullers work well in moist soil. Pull dandelions when they're young to get as much root as possible.





MOLES - LIVING WITH A MESSY NEIGHBOR

You can't permanently prevent moles in your lawn. Moles help loosen and aerate the soil but leave ridges and mounds in the lawn. Moles eat insects and grubs, and rarely eat flower bulbs or roots, but can physically disturb small plants when they are tunneling for insects.

Rake down the mole hills in lawns. Use the soil to top-dress the lawn. It's free and delivered right to your yard! Scatter grass seed on the fresh soil.

Just stomp down any ridges moles leave in the lawn. You're likely to see the moles moving away after a few weeks.



MOSS - MANAGING IT NATURALLY

The best way to reduce moss is to provide more sunlight. For healthier grass and less moss, prune tree branches to let in more sun.

Grass prefers less acid soil and adequate nutrients, so use lime to raise the soil pH to 6.2 to 6.5, and fertilize with natural products.

Replace lawns in shady areas (such as the north side of the house) with a shade garden. Try shade-loving native plants for an easy-care substitute.

Renovate your lawn in fall or early spring. Rake out the moss in the lawn, or use a power de-thatcher. Then reseed the bare spots. Use an organic or a slow-release fertilizer when you reseed.

See **GrowSmartGrowSafe.org** to find less hazardous products and non-toxic solutions.

Or call WSU Master Gardeners to identify your problem pest or weed and learn safer solutions.



Consider alternatives to lawns in shady areas, on slopes and near waterways

Grass grows best on well-drained soil in full sun or partial shade.

Steep slopes are hard to mow and water. See the resources below for alternative ground covers and native plants that will grow well on slopes, in heavy shade and soggy or rocky soil, with much fewer maintenance needs than lawn.

Use "sheet mulching" to easily convert lawns to beds. Cover lawn areas with layers of newspaper or cardboard, then 3-6 inches of compost and/or wood chips. Wait a few months for the grass to die, and then dig holes through the mulch to plant shrubs, or till the compost and dead sod into the soil to create planting beds.

Honey, I shrunk the lawn! Level lawns are great for play and relaxation, but lawns take more work mowing, watering, edging, weeding and fertilizing than beautiful beds full of site-adapted plants. Think about where you need lawn, and where you could try other planting beds, trees, or a rain garden.

Leave a buffer of natural vegetation near streams and lakes to filter pollutants and protect fish and wildlife. Include shrubs and trees to shade the water, and native plants or low maintenance grasses that don't need mowing. Never use pesticides or soluble fertilizers near streams, ditches, wetlands, or shorelines. Fish, birds, and our children wade and swim in those waters!

Pesticide disposal and alternatives:

Extension, Gardening.WSU.edu

Pierce County Hazardous Waste Line (800) 287-6429

Lawns, gardens, pests: Washington State University

Lawn alternatives: call WSU Master Gardeners;

for plant options, visit GreatPlantPicks.org

Irrigation and water conservation:

or for native plants, KingCounty.gov/GoNative





When it comes to your lawn, act naturally.

MANARA MARKANA MARKANA

Learn more

For expert answers to all your lawn and garden questions:

- Call WSU Master Gardeners (253) 798-7170 or email pierce.mg@wsu.edu or visit ext100.wsu.edu/pierce/mg
- See videos and guides at NaturalYardCare.info

More yard care topics:

NaturalYardCare.info

Choose safer yard products and pest solutions: GrowSmartGrowSafe.org





Master Gardener Program

Washington State University extension

SavingWater.org







Developed by Seattle Public Utilities, in collaboration with turf professionals and scientists, local water utilities, and cities and counties around Puget Sound. © 1996 Seattle Public Utilities, revised 2015 Pierce County thanks City of Seattle for permission to reproduce it.

LAWN CARE CALENDAR

FOR WESTERN WASHINGTON

SPRING (April-May)

- Mow regularly at 2-3", leave the clippings for free fertilizer
- If needed, fertilize mid-May
- Improve thin areas with aeration, overseeding, and topdressing with compost
- Pull weeds before they seed

SUMMER (June-August)

- Water deeply, 1 inch per week, or let lawn go golden and dormant
- Mow less often as growth slows

FALL (September-November)

- On thin areas, overseed and topdress with compost in Sept.
- If needed, apply organic fertilizer
 September-October, or slow-release
 synthetic until November
- Pull fall weeds before they seed
- Mow lower (1") the last time in fall

WINTER (December-March)

- Get mower blades sharpened before the spring rush
- Test soil once every 3 years to plan fertilizer and lime needs