

Take Steps toward a Poison-Free, Natural Lawn

September 4, 2009 by Sherri Osaka

Lawns have gotten a lot of bad press lately—and not undeservedly. They use a tremendous amount of water and gasoline, and they pollute streams and other water resources with herbicide- and pesticide-laced runoff. But it doesn't have to be that way.

These tips, ranging from “easy” to “better” to “best,” show how you can move toward a non-polluting, naturally sustainable lawn.

EASY STEPS

1. **Tune up your lawnmower at least once per season or after 25 hours of mowing.**

A well-tuned mower is more efficient, uses less gasoline, and pollutes less.

2. **During dry months keep your lawn tall—as high as three inches, depending on the grass type.**

The longer the grass, the more roots the plant can support and the less water it will need. A taller lawn also shades the ground, keeping it cooler so that weeds are less likely to germinate.

3. **Water between 5 a.m. and 10 a.m.**

Watering in the morning, when the sun is low, winds are calm, and temperatures are cool, ensures that the water doesn't evaporate before it gets to your lawn. Watering in the middle of the day isn't efficient because the weather is hotter and windier; watering in the evening means the lawn stays wet all night, inviting fungal diseases.

4. **If you have an irrigation controller and water is running off and not soaking in, set your controller to water in two shorter periods for the same total length of time.**

Some areas have clay soils, which do not allow water to soak in quickly. By breaking up your watering time, you allow the water to soak into the ground before adding any additional water, eliminating runoff.

5. **Adjust sprinkler heads to prevent water from running onto paved surfaces.**

Whenever possible keep the water where you want it—on your lawn, not the pavement.

6. **Fertilize by spreading a one-inch layer of compost over your lawn in spring and fall.**

Chemical fertilizers often kill off beneficial creatures such as earthworms, which produce castings that feed the lawn. The compost will feed the lawn and improve the soil so that it can hold more water and support more subterranean flora and fauna.

7. Add some clover to your grass.

Having some clover in your lawn will feed it and keep it green. Clover fixes nitrogen from the air, making it available to your lawn in the soil.

8. Use cornmeal gluten on your lawn.

Cornmeal gluten, which is about 10 percent nitrogen by weight, is a natural fertilizer and pre-emergent weed preventative that's usually applied in the spring and fall. According to garden writer Ann Lovejoy, 20 pounds of cornmeal gluten per 1,000 square feet will add one to two pounds of nitrogen to your lawn.

BETTER STEPS

1. Cut your grass with a mulching mower.

Mulching mowers cut the grass into tiny bits and leave them on your lawn. Grass cuttings contain lots of nitrogen, as much as one pounds per square foot per season, and feed your lawn as they decompose. A mulching mower will also save your back because you don't have to bag and dump clippings into your compost pile. You may be able to buy a mulching blade for your existing mower instead of buying a new push or reel mower.

2. Adjust your irrigation controller and check for leaks in your irrigation system once a month during the dry season.

Most people over-water. Adjusting your system every month ensures you give your lawn only the water it absolutely needs—about one inch per week. If you live in the western U.S., you should turn your irrigation system off completely once the rains come, roughly from November through March.

3. Add an automatic shut-off to your irrigation system to turn it off when it's raining, or install one of the new evapotranspiration (ET) controllers.

Turning off your irrigation system when it's raining is an obvious water saver. An ET controller (also known as a "smart" controller) will go one step further—precisely adjusting your irrigation system depending on the outside temperature and amount of precipitation. Some cities offer rebates on these when you replace an existing controller.

4. Hand pull and dig out larger weeds, instead of spraying herbicides.

Herbicides can kill the good bugs in the soil and run off from lawns during irrigation, polluting bays, streams, and other bodies of water. Hand pulling is safer and allows you to use those greens. Dandelion leaves in the early spring are tasty and a good source of vitamins. I've also fed weeds to my pet bunnies as a treat—they love them. If the weeds are not sprayed, they are safe for pets to eat.

5. If you need a new lawn, start it from seed.

The resources required to bring a bag of seed to your house are far less than having a truck drop off a load of sod. Also, most sod comes with awful green plastic netting on the back to keep the sod together. This netting rips into pieces when you dig or weed, and is tedious to remove if you ever decide to replace your lawn.

BEST STEPS

1. Replace your gasoline-powered lawnmower with a human-powered reel mower.

According to the National Wildlife Federation, a gas-powered lawnmower emits 11 times the air pollution of a new car per hour. A push-type reel mower eliminates gasoline and pollution. Plus, you'll get some exercise as well as peace and quiet. There is also some evidence that reel mowers cut the grass more cleanly than rotary mowers. Push reel mowers are best for lawns under 3,000 square feet.

2. If you live in the western U.S., don't water your lawn in the summer.

Most lawn grasses have a natural tendency to go dormant during periods of low water. In California, we see this cycle every year. In the winter the surrounding hillsides green up and in the summer they turn brown. By not watering your lawn, you are adapting to the natural cycle of your grass.

3. Replace your existing spray irrigation system with a subsurface drip system.

While spray irrigation systems are 70 percent efficient under ideal circumstances, subsurface drip systems are about 90 to 100 percent efficient because they apply the water directly to the roots. Not only do they reduce water use, they also reduce the number of weeds that germinate, reduce fungal diseases, keep the lawn dry for play, eliminate tripping on spray heads, and eliminate overspray, which can damage fences and home siding.

4. Learn to live with a few weeds.

I have dandelions in my lawn and dig them out when I have time, but I also like watching the bushtits and other small birds eat the seeds.

5. Make your new lawn only as big as you need it to be.

Lawns use lots of resources, but they are worth it if you use them. Lawns are one of the best play surfaces available. At about 1,000 square feet, my lawn is just big enough for a game of catch, croquet, or tag, while the national average is over 8,000 square feet, according to *Grounds Maintenance* magazine. I've designed gardens with lawns that are less than 200 square feet.

6. Use a native lawn substitute instead of European grasses if you want a low green area and don't need a play surface.

Many native shrubs are low-growing, very low-maintenance, and use little or no resources after they are established. Native perennials, such as sedges and yarrows, can also be used for walkable "lawns". They require much less mowing and watering than a typical grass lawn does. Native grasses and wildflowers can also be used to create a meadow instead of a lawn, attracting butterflies and other insects.