

Organic Lawn Care Primer

By Reggie Ryan and Beth Ginter

Lawns are the predominant landscape feature in the United States. The history of lawns goes back to domesticating sheep and cows and their pastures. The French and English nobility included grass in their formal gardens and incorporated large sweeps of turf grass. Mowing with scythes was fine for servants but the common man needed Edwin Budding in 1830 to invent the mechanical reel mower, and lawns became a cherished part of the American suburban and rural landscape beginning in the second half of the 19th century. Around 1900, the American Garden Club weighed in with guidelines on what constituted a true lawn and generations of homeowners strived to meet the ideal lush, perfectly manicured, weed-free lawn.

What do lawns do for us today?

PROS

- + filter contaminants and prevent some run-off and erosion
- + release oxygen during photosynthesis
- + provide a cooling effect v. paved material
- + provide great seating for picnics and playspace for families

CONS

- reduce biodiversity since they are a non-native monoculture (single species of plants)
- produce more run-off than non-turf planting areas
- expose humans and pets to possible toxic synthetic herbicides and fertilizers
- excessive use of fertilizers and pesticides contributes to water and air pollution
- demand time and energy for mowing, watering and general maintenance

Many homeowners are reconsidering their passion for lawns based on concerns about the sustainability of traditional lawn care techniques. If a lawn is part of your garden design, try to keep it small. Determine what you actually use-for play, paths, access to utility areas. You may also want to go green and opt for organic lawn products and maintenance practices. Another option is a using native groundcovers or meadow grasses instead of non-native turf.

Preventing weeds and pests

The use of chemical herbicides and pesticides may harm your landscape in several ways:

- produces resistant strains of pests and weeds
- kills beneficials like microrrhiza, earthworms, butterflies, fireflies, bees, and pest-eating spiders
- persists and contaminates soil, groundwater, and streams

All of these factors may weaken the natural defenses of your soil, lawn, and the entire ecosystem.

The best weed control is prevention. Try to get rid of weeds in your lawn before they get established or change your attitude and decide that weeds may be beautiful.

Corn gluten meal can be applied as a pre-emergent weed killer to inhibit the growth of dandelions and crab grass. Full strength vinegar sprayed on young leaves is another effective weed killer.

Pests should be evaluated and identified before embarking on a course of treatment. Treat pests with botanical preparations or horticultural oils before chemical pesticides.

Fertilizers

The application of synthetic fertilizers produces a lush, green lawn by providing high doses of nutrients such as nitrogen and phosphorus. One issue with fertilization is that turf grass becomes chemically-dependent over time and excess nutrients may reduce a lawn's own self-regulatory mechanisms against disease and cyclical stresses such as drought. Another, more serious concern is the deleterious effect that excess nutrients leaving the site may have on water quality and on the earth's atmosphere. Homeowners should know that as much as 60% of nitrogen applied to turf ultimately ends up in the groundwater.

Healthy soil is the cornerstone of healthy lawns. Instead of using chemical fertilizers, try adding a thin top-dressing of rich compost or a soaking of compost tea to feed your soil. Other organic matter, such as manures may also be applied to promote a healthier lawn.

Here are some general tips for environmentally responsible lawn care:

- Get a soil test so you know what, if anything is needed
- Reduce or eliminate use of chemical pesticides, herbicides, or fertilizers
- If you fertilize, use an organic fertilizer and do so in fall when plants are storing energy for the following growing season
- Choose low nitrogen, slow-release fertilizers
- Leave grass clippings on your lawn so that decomposing nutrients return to the soil
- Water rarely and thoroughly (50-70% of all residential water is used for landscaping)
- Water in the morning to reduce evaporation and the spread of disease
- Opt for a non-motorized reel mower and mow less frequently
- Cut high; set your mower to cut no more than a 1/3 of the leaf blade to promote healthy grass
- Select an appropriate species of turf grass- tall fescues are best-suited for our climate
- Seed or re-seed cool weather grasses like fescue in the fall

Resources

University of Maryland Home and Garden Information Center - <http://www.hgic.umd.edu/>

Chesapeake Bay Foundation-Ten tips for bay friendly lawns - <http://www.hgic.umd.edu/>

Safer and Ringer Brand Organic Products - <http://www.saferbrand.com/>

American Plant Food organic turf program - <http://www.americanplantfood.com>

Montgomery County Department of Environmental Planning "Green Man" tips for environmentally-responsible lawn care - <http://www.montgomerycountymd.gov/content/dep/greenman/lawncare.pdf>

<http://www.organiclawncaretips.com/>

<http://www.organicgardening.com/>

<http://www.safelawns.org/>

Redesigning the American Lawn: A Search for Environmental Harmony, Second Edition (Paperback), Yale University Press. 2001. by F. Herbert Bormann (Author), Diana Balmori (Author), Gordon T. Geballe (Author), Lisa Vernegaard (Editor)

http://www.amazon.com/Redesigning-American-Lawn-Environmental-Harmony/dp/0300086946/ref=sr_1_3?ie=UTF8&s=books&qid=1203910902&sr=1-3

Diana Balmori - <http://www.amazon.com/exec/obidos/search-handle-url/105-8171736-2273225?%5Fencoding=UTF8&search-type=ss&index=books&field-author=Diana%20Balmori>

Gordon T. Geballe - <http://www.amazon.com/exec/obidos/search-handle-url/105-8171736-2273225?%5Fencoding=UTF8&search-type=ss&index=books&field-author=Gordon%20T.%20Geballe>

Lisa Vernegaard - <http://www.amazon.com/exec/obidos/search-handle-url/105-8171736-2273225?%5Fencoding=UTF8&search-type=ss&index=books&field-author=Lisa%20Vernegaard>

Organic Lawn Care Manual. Paul Tukey. Storey Publishing, 2007. <http://www.amazon.com/Organic-Lawn-Care-Manual/dp/1580176496>

© the honeybee group, llc 2007