

## Seed



Where you have lawns, seed or reseed with first class certified grass seed. This helps produce a healthy, vigorous, well-adapted lawn with fewer weeds. Seed should include a variety of grass types, (including clover) selected for your area. Look for seed containing Endophytic fungi, which are repellent to certain lawn pests, like chinch bugs. Seed in the fall. The cooler days provide an ideal environment for grass seed germination and deeper root growth.

## Safe Alternatives to Pesticides

The best and safest alternative for the New American Lawn is to use nothing. Go Cold Turkey! The sooner you remove harsh chemicals, the faster your soil will recover. Recognize that past use of toxic chemicals may have destroyed the microbiotic life that exist in healthy soil: it will take time, at least a season, for the soil to begin to recover. If necessary, organic fertilizers, IPM, and natural controls are safe alternatives to using pesticides. Check the information list for more details.

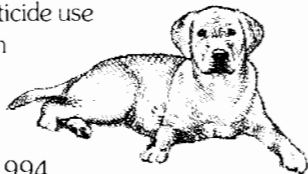


## Golf Courses and Parks

Have you ever wondered if you should play golf when the sign on the 1st tee warns of pesticides applied that day? Find out what your greens superintendent or parks manager uses and try to influence a change away from excessive use of pesticides, fertilizers, and water. Golfers and park users need to start a campaign to get their courses/parks to use the least toxic methods and explain the benefits. More weeds are a good trade-off for the safer health of golfers, park users and wildlife.

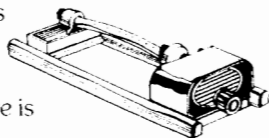
## Health Risks

The increase in pesticide use parallels the rise in cancer. The odds of getting breast cancer in 1968 were 1 in 20. In 1994, they were 1 in 8. The risk of canine malignant lymphoma doubles with four or more 2,4-D applications per year on a dog owner's lawn. Estrogenic pesticides are certain insecticides, herbicides and fungicides which interfere with the endocrine system. They can cause cancer and affect fertility. Chlorinated pesticides include fungicides, insecticides, and herbicides; they are neurotoxins that can cause cancer, liver and kidney defects, and birth defects. Know what you are putting on your lawn. Be an aggressive consumer and demand information about the health and environmental effects of the lawn care products you buy or that your lawn care services use on your property. EPA has not tested the safety of all pesticides used on lawns.



## Watering

Watering your New American Lawn is not only unnecessary, it is a waste of water resources and can harm the grass if improperly done. If a hot, dry summer turns your lawn brown, it is probably dormant and will recover when it rains. If you must water, do so early in the morning to cut down on evaporation. Water deeply to encourage deep roots, and water infrequently. Remember that the more you water, the faster the grass grows and the more mowing is needed. Summer dormancy is a natural rest period for grass in hot weather. It means less mowing, less gasoline burned, less air pollution, and more time for swimming and playing with the children. The choice of native plants for borders, ground cover and gardens will automatically mean there is less need for water.



Changing from a lawn that uses oil, gas, water and pesticides to a New American Lawn with all of its benefits demonstrates "Thinking Globally, Acting Locally." Your New American Lawn will demonstrate a commitment to a more ecologically sound world.

### For More Information:

- The Encyclopedia of Organic Gardening, Rodale Press, Lawn p. 647
- Redesigning the American Lawn: a Search for Environmental Harmony, Bormann, Baltimore, Geballe
- The Chemical Free Lawn: The Newest Varieties & Techniques to Grow Lush, Hardy Grass, W. Schultz
- Building a Healthy Lawn, Stuart Franklin
- Our Stolen Future, Colborn, Myers & Dumanoski
- The Wild Lawn Handbook: Alternatives to the Traditional Front Lawn, Stevie Daniels
- Second Nature: the Education of a Gardener, Michael Pollan
- Noah's Garden: Restoring the Ecology of Our Own Backyard, Sara Stein
- The Wild Gardener in the Wild Landscape, Warren Kenfield
- The Lawn: A History of an American Obsession, Virginia Jenkins
- The Bio Integral Resource Center (BIRC), P.O. Box 7414, Berkeley, CA 94707, 510-524-2567
- New York Coalition for Alternatives to Pesticides (NYCAP), 518-426-8246
- American Pie, Environmental Information Line, 800-320-APIE, E-Mail Questions to APIE800@aol.com
- Environmental Protection Agency (EPA), for general information on pesticides 800-858-7378
- SALT (Smaller American Lawns Today), Join The SALT Movement, contact Connecticut College Arboretum, P.O. Box 5201, New London, CT 06320, 860-439-5020, also bulletins available... Native Shrubs for Landscaping #30 and Energy Conservation on the Home Grounds #21
- Alternative Pest Controls for Lawns, Rachel Carson Council, 301-652-1877, E-Mail: rccouncil@aol.com
- The Natural Lawn and Alternatives #136, Going Native, Biodiversity in our own Backyards #140, bulletins available from Brooklyn Botanical Garden, 1000 Washington Ave., Brooklyn, NY 11225, 718-941-4044
- Web Sites for more information: <http://www.epa.gov>, <http://www.nl-amer.com>

Credits: William Niering, Ph.D., Connecticut College

Garden Club of Darien, brochure design

The Toro Company

**Patience is required. It may take several seasons for all these benefits to appear!**

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# The New American Lawn



*How to have a green, healthy lawn friendly to people and the environment...*



*Read on to learn how you can turn your lawn into a "New American Lawn"...*

Since 1913, The Garden Club of America has worked to protect plants and to improve the quality of the environment. Sound lawn care is an important part of a healthy environment. The risks of pollution of water and wetlands, creation of health risks for people and wildlife, and threats to biodiversity and the environment can be reduced by intelligent lawn and plant management.

## Fertilizers

Every year, three million tons of fertilizers keep American lawns greener than normal or necessary. Incorrect or excessive fertilizer application contributes to surface and ground water pollution. Excessive fertilizer causes rapid, lush growth that makes the grass more susceptible to diseases. The New American Lawn may not require any fertilizer at all. If you feel you must apply fertilizer, an organic choice from the list below is recommended. The nitrogen in the fertilizer used should be a slow release source that is water insoluble. This provides nitrogen over a longer period and results in more uniform growth and a deeper root system. Grass clippings contain about 4% nitrogen and, left on the lawn, will provide one-third to one-half of your lawn's nutrient needs. Test the soil every three to five years. It is a simple, inexpensive way to eliminate guesswork and unneeded fertilizer.

### Sources of organic fertilizer:

**Nitrogen (N)** – Blood meal, cottonseed meal, fish emulsion, grass clippings, and compost

**Phosphorus (P)** – rock phosphate, compost, bone meal

**Potassium (K)** – green sand, fireplace wood ashes, compost, aged manure, seaweed

**Minerals (magnesium, zinc, iron, sulfur)** – kelp meal, dolomitic limestone

## Pesticides

The New American Lawn uses no pesticides. Every year, 67 million pounds of pesticides are used on American lawns. Pesticides include insecticides, herbicides, fungicides and rodenticides. There are risks to human health and the environment in the use of pesticides. Natural controls, pest resistant varieties of seed, biological products, herbicidal and insecticidal soaps lower the risks, as does the introduction of beneficial insects.



## Insect Pests

Some pests need to be kept in check in the New American Lawn. Chinch bugs are usually found on lawns stressed by drought and excessive thatch. Solutions are to aerate and dethatch the lawn and drench with an insecticidal soap solution. Before Japanese beetles hatch they are present under the grass in the soil as grubs. They feed on grass roots and encourage resultant damage from skunks, moles and raccoons. Apply milky spore in April or August; success takes several years. The New American Lawn, once established, won't create an environment conducive to insect pests.



## Weeds

Not all weeds are bad: weeds are merely plants growing where they are not wanted. A healthy lawn, properly mowed, crowds out many weeds such as crabgrass. The New American Lawn doesn't eliminate all weeds for years to come. It means choosing which battles to fight, how many prisoners to take, and which of the enemy to leave alone. You will have clover and dandelions and be able to walk barefoot safely with your pets and children. The presence of clover, a nitrogen fixer, will add nitrogen to your lawn. Weeds can be kept in check by hand removal, spot-killing, using a spade or applying a pre-emergent weed killer, such as corn gluten. Bare spots may be filled naturally with violets, bluets, or partridge berry, all of which can be attractive in their own right and provide nectar sources for beneficial insects and birds. Moss may fill shady spots, which will not need mowing. Remember that Mother Nature abhors a monoculture! A variety of plants, both grasses and other flowering plants, will attract beneficial insects.



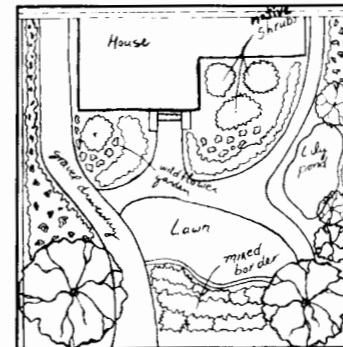
## Integrated Pest Management

Integrated Pest Management (IPM) is the use of pest identification, monitoring, and choice of the least toxic control substance. It is a technique that integrates appropriate seed choices and promotion of natural defenses to reduce or eliminate the need for toxic chemicals. Natural defenses include ladybugs, bees, spiders, bats, toads, birds, insectivorous snakes, and beneficial soil organisms. Natural defenses can take several years before they are effective as controls. Targeting the problem and identification of the pest, fungus, or weed and selective use of controls used is preferable to random use of pesticides.

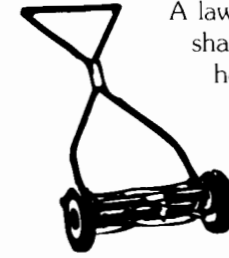


## Natives

Use native trees, shrubs and ground covers or native grasses and wildflowers that are already well-adapted to the environment in your region. They will require less fertilizer, fewer pesticides (probably none at all!), less watering and less maintenance. Birds and wildlife will benefit from the berries and seeds of native plants. Corporations as well as landowners can go the New American Lawn route – decreasing lawn size, saving money, and becoming models of sound ecology. It's good business – financially and environmentally. Landscape fragmentation and loss of biodiversity have become major biospheric issues, issues that can be addressed by moving away from monocultures like lawns of only grass.



## Mowing



A lawn should be mowed with a sharpened mower to a preferred height of 2 1/2 to 3 inches.

Mow often enough so that no more than one-third of the grass height is removed with each cutting. The lawn will cut better if it is dry. A mulching mower with recycling blades will further cut the grass into finer slivers to remain on the lawn as a source of nutrients. Since lawns are environmentally expensive, every effort should be made to reduce lawn size. By decreasing your lawn size, a human powered reel mower can be used, which saves energy and avoids noise and air pollution.

## Grass Clippings

Over 40 pounds of nitrogen are thrown away as grass clippings each summer from the average American lawn. Grass clippings account for 50% of waste sent to landfills during the growing season. The New American Lawn eliminates the need to bag and remove grass clippings, and cuts mowing time by 38%. Grass clippings left on the lawn can provide one-third to one-half of the nutrient needs of grass. Clippings contain about 4% nitrogen, .5% phosphorus and 2% potassium. Clippings decompose quickly, thanks to earthworms and soil microorganisms, and do not contribute to thatch accumulation. Thatch is composed of dead roots caused by over-fertilization and soil compaction. Grass clippings conserve water by shading the soil from the hot sun and reducing moisture loss from evaporation.

