

Be A Grower, Not A Mower™

Let's face it. Nothing sets off your home and gardens like a freshly mown carpet of green. Where else can you toss a football and play with the dog? The lawn is a beautiful and integral part of the American home landscape. But it comes with a cost. Our lawns now cover over 25 million acres of America—an area the size of Pennsylvania! This carpet of green has replaced the natural habitats for our native plants, songbirds, and many kinds of small animals. The summer air is filled with the pollution and noise from mowers and string trimmers. And we spend millions of hours on lawn maintenance at a time when most Americans are struggling to find more leisure time for their families.

It wasn't always this way. Early settlers maintained a clearing around their houses with the help of an occasional "mowing" from sheep, cattle or a scythe. Their home landscape was diverse with gardens, fruit trees, natural shrubs and trees which in turn were surrounded by pastures and cropland. In 1830, the first reel mower was developed and manicured lawns quickly became the vogue at estates and parks. After

World War II, the popularity of lawns exploded when new suburban neighborhoods were developed with rolling carpets of turf that extended from one yard to the next.

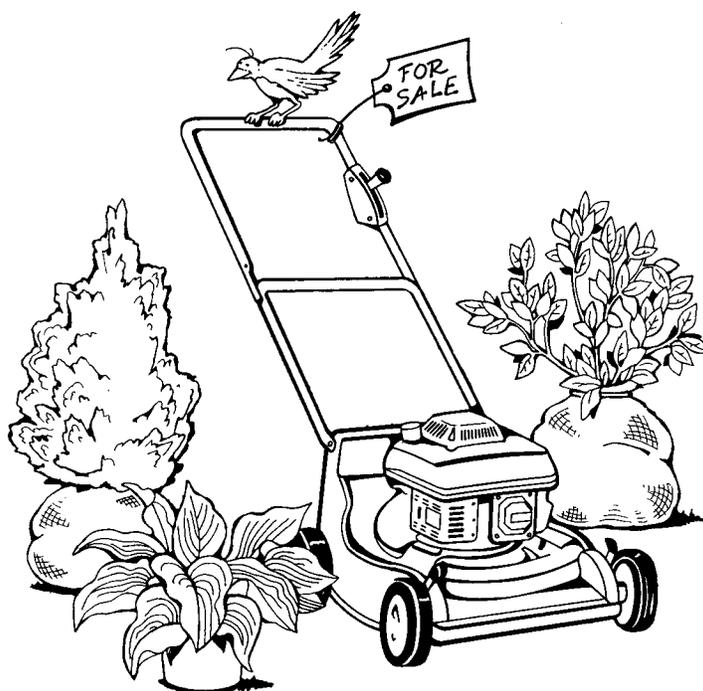
Obviously we can't (and probably don't want to), go back to the landscape of the settlers. But we can reduce our lawns and make our yards more natural and "sustainable" by incorporating a diversity of plant materials into the landscape—stately trees, native shrubs, evergreen ground covers, ornamental grasses and perennials. With thoughtful plant selection and placement, we can create a low maintenance yard and still give the appearance of neatness and care.

This bulletin will show you how two homeowners reduced the amount of lawn they maintain, (by as much as 80%), and have introduced new plantings to their yard. It will give you lots of ideas for how you can "*Be a Grower, Not a Mower*".

WHERE TO BEGIN

Start by taking a good look at your lawn. The most obvious place to begin is in areas where the grass doesn't thrive in the first place. Shaded areas under the trees, wet sections in the yard, and rocky outcroppings. And don't forget the steep bank where you risk your life mowing every weekend. These are all perfect candidates for alternative plantings.

The next question to ask yourself is how much lawn do you really need? Do you require a fairly large grassy area for recreational activities like volleyball, horseshoes, or children's games? What about the front and side yards? Are they unused spaces that simply border the house? Pay attention to the directions of the foot traffic around your house. Is there a need to provide paths rather than turf to help move people to the utility shed or back door? Once you've determined what your

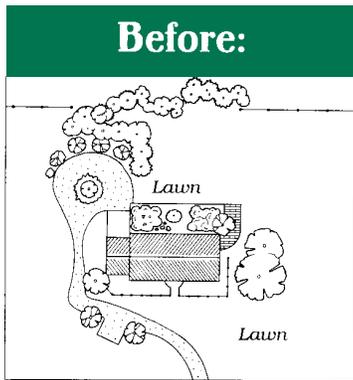


The Caldwell Residence
Knoxville, TN

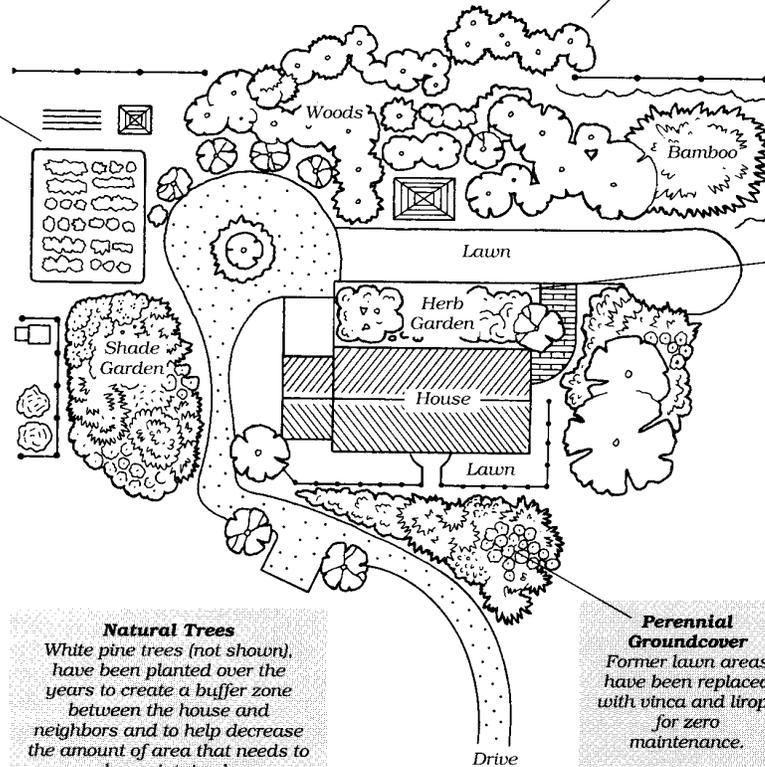
The Caldwells live in a rural area and their 7 acre property is a combination of open land and forest. They have gradually reduced their lawn area from 5 acres to 1/4 acre. The remaining lawn areas are edged with landscape timbers and are kept neatly manicured. Visitors have remarked that this makes the property look like an estate.

Vegetable Garden

Watering is important in hot Tennessee summers. This garden has an underground irrigation system that waters plants at the root zone eliminating the need for sprinklers and hand-watering.



Before: Five acres of mowing and 4 hours of labor a week.



Butterfly Shrubs

The back lawn area is being replaced with grouped plantings of coneflowers, butterfly bushes and Chaste trees that will attract a variety of swallowtail butterflies.

Brick Patio and Kitchen Herb Garden

The Caldwells use weed matting under all of the garden paths, raised beds and even the brick patio to prevent weed growth. They use this area for sitting and enjoying the scented herb garden.

Natural Trees

White pine trees (not shown), have been planted over the years to create a buffer zone between the house and neighbors and to help decrease the amount of area that needs to be maintained.

Perennial Groundcover

Former lawn areas have been replaced with vinca and lirope for zero maintenance.

Illustrations by: Suzanne LeGault

yard is used for, you may find that you can decrease your lawn by 50%!

But don't. At least not right away. Take some time to do some research and planning before you get started. Begin with the steep slope, shady or wet areas and develop a plan of what you'd like to see growing there. Start small and replant step by step. We've identified 5 key principles to help you create an attractive and low maintenance yard:

- go for a natural look (rather than a formal one)
- plant a limited number of plant varieties and bunch them in drifts
- use evergreen ground covers for year-round color
- save water—install drip irrigation

and use mulch!

- incorporate paved surfaces

The Natural Look

A formal yard has lots of open space with plants strategically placed on edges of the lawn. The natural yard incorporates more native plants—trees, shrubs, ornamental grasses and flowering perennials - grouped in free-flowing swaths around the property. The plants used in a "natural" yard are often native to your area and generally will require less fertilizer and water than some of the introduced plant species that are commonly used in home landscaping.

You can utilize native plants to

create a more natural ecosystem (like the reintroduction of cactus in an Arizona yard, or the creation of a bird or butterfly sanctuary), or allow sections of your yard to simply "go wild". There are many nurseries and garden centers that sell hardy, native plants and whatever you do, please don't remove plants from the wild, as many plants are endangered and could be irretrievably lost if they do not survive the move to your yard.

Planting in Drifts

Growing a large number of plant varieties is tempting, but it requires more work to keep them in their place. As tall varieties mature, they can block out the sun for short plants, and fast spread-

ing perennials encroach upon the slower growing plants. Keep your plantings simple. Select 2 or 3 varieties and group the plants together, giving them enough space to grow for many years without competition. You'll find that the shrubs and perennials will merge into one large planting that helps suppress weeds and creates a safe haven for toads, birds, and other small creatures.

Ground Covers

Although it takes a little work to establish ground covers, their year-round color makes it well worth the effort. They form a ground-hugging companion for taller plants, and protect the soil from erosion as they spread. And when they're mature, they keep weeds and other unwanted plants at bay.

For shaded areas, try planting *Vinca minor* or periwinkle under

your trees or incorporate ferns, lily of the valley and pachysandra in shaded corners of the yard. For spring color, plant spring bulbs, Solomon's seal, and bleeding hearts between the ground covers.

For homeowners with sunny dry areas, daylilies are one of the easiest, fast-spreading perennial ground covers you can grow. Creeping thyme, juniper, euonymus, and creeping phlox also make a nice carpet. There are so many plant varieties to choose from! See our selection of daylilies, and ornamental grasses on the back page of this bulletin, or ask your local garden center for advice on the best varieties for your area.

Save Water With Drip Irrigation and Mulching

Most homeowners will save a lot of water (and time) by simply reducing the size of their lawn and substituting more natural

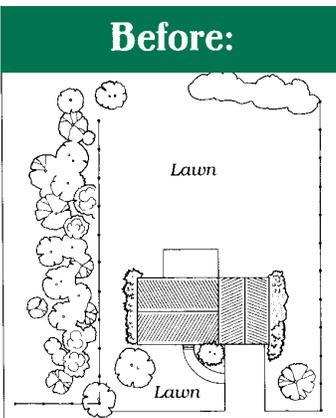
plantings. But there's more you can do. Mulch your shrub and flower beds with leaves, bark or wood chips. Mulches retain soil moisture and will improve the quality of your soil. Water your plantings with drip irrigation or soaker hoses to get water directly to the root zone and avoid wasteful run-off and loss through evaporation. And finally, utilize any free water you can for your plants. A rain barrel or tub that captures rainfall from your roof makes a great addition to your garden—and might serve as a bird bath too!

Incorporate Paved Surfaces and Non-Planted Areas

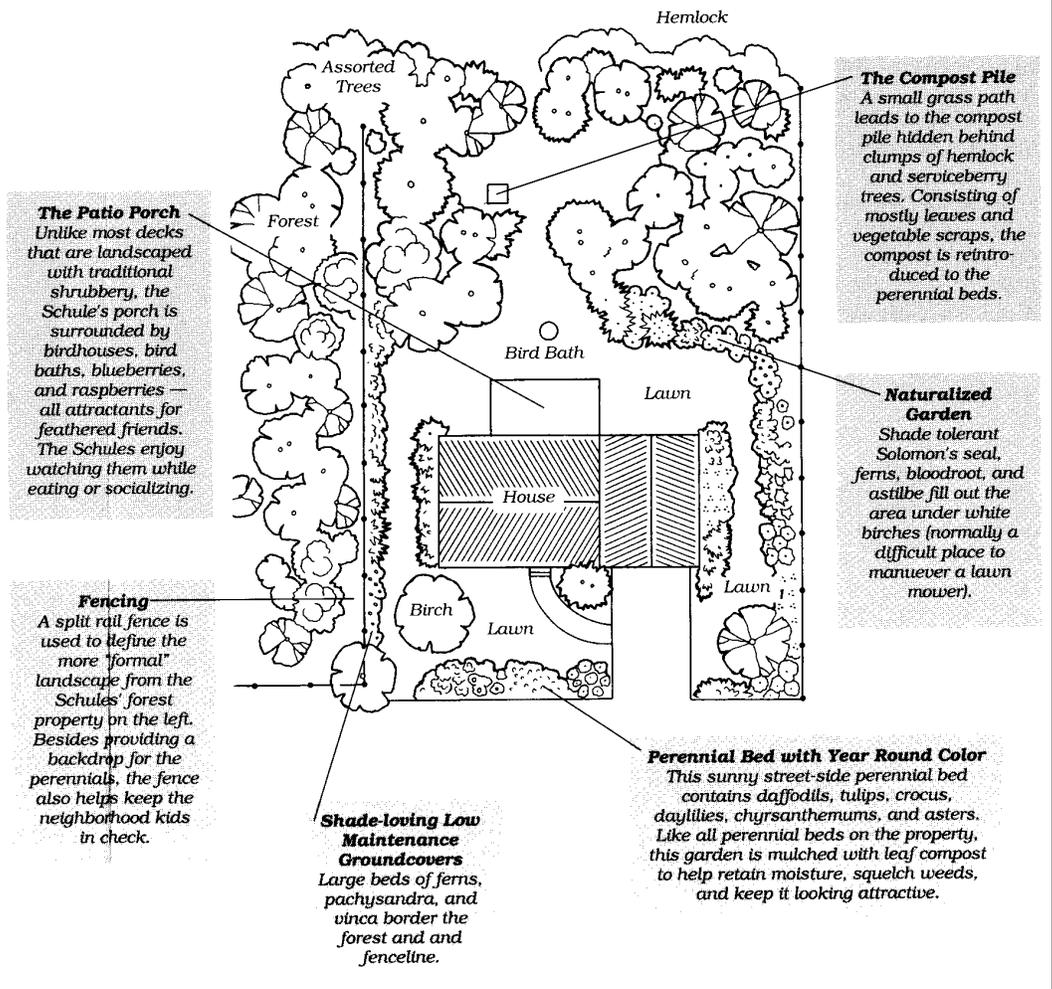
Installing low maintenance surfaces and edging makes it easy to define a neat line along walkways and borders between lawn and garden. If you have a worn footpath in the lawn between the deck and toolshed, consider

The Schule Residence So. Burlington, VT

This is a typical 1/2 acre suburban lot on a shaded street. By planting a diversity of natural trees and perennials, the Schules maintain less than 1/8 of an acre of lawn. The area is small enough that them can use a reel mower to maintain it.



Before: 1/4 acre of lawn and young birch trees.



creating a wide stone path between the two areas. Use edging or flagstone to keep turf from invading your plantings. Colorful gravel beds also can be a very attractive way to define a border or lead you to another section of the yard.

And don't forget special features like a hammock tucked in the shade, a garden pond, or a natural rock garden. The wise use of these decorative areas can create interesting "rooms" within a larger landscape.

HOW TO REPLANT YOUR YARD

You'll be rewarded with healthy growth and a low maintenance landscape if you follow some simple steps in preparing your planting beds. Again, for best success, start with a small garden bed or a manageable section of your yard.

1. Peel back the sod and remove any rocks that would compete with your new plantings, but keep any existing plants that are easy to care for and blend nicely into the landscape. You may even consider incorporating some large boulders to enhance your plantings by adding height and contrasting color.

2. Take the time to improve your soil by incorporating compost, bagged manure, or peat moss. You may need to build up the soil or create raised beds under large trees to avoid their extensive root systems. A little effort at the beginning will reward you with healthy plant growth for years to come.

3. Install drip line or soaker hoses to ensure that new-plants survive the first summer, and that your watering chores are kept to a minimum (this won't be a consideration if you're planting drought tolerant prairie grasses or heat tolerant perennials but remember that even these plants will require some pampering during their first year).

4. If you're planting shrubs or non spreading perennials, lay a fabric weed mat or plastic mulch onto

the prepared soil. The payback from this investment is immense. Weed mats allow water to penetrate into the soil but suppress weed growth, making the beds easy to maintain. Cut holes in the mat wherever plants will be positioned in the soil. Plant your perennials or shrubs with adequate spacing so they are not crowded and don't compete with one another the first year.

5. Incorporate a granular fertilizer into the soil around each plant to provide a slow-releasing source of nutrients. With this type of fertilizer, you'll only need to fertilize once or twice during the growing season.

6. Mulch over the weed mat or between creeping plants with straw, leaves or woodchips. Any small weeds that do germinate will be growing in the top few inches of organic mulch and can be easily pulled out and composted.

7. Native plants and groundcovers look stunning when there is a crisp clean line between them and the lawn. You can use vinyl edging, brick, or stones to achieve this definition and keep plants in their place.

8. Incorporate bird baths, feeders, benches or arches into your landscape. The yard is there for you to enjoy so let your imagination go.

LAWN CARE MADE EASY (what's left of it)

As we stated earlier, lawns are an integral part of the American landscape. A healthy turf enhances plantings and serves as an ideal space for recreational activities. When it's mowed and well maintained, it also creates a natural barrier that keeps ticks, mice, and other rodents from entering the immediate area around the house.

You'll spend less time maintaining your lawn if your grass is healthy. A thick and healthy lawn suppresses weeds, resists pests and disease, and keeps maintenance to a minimum. Here are

some things you can do to save work and grow a better looking lawn!

Mow High.

A higher cut encourages deeper, healthier roots that will be able to sustain your lawn during the hot summer months. Mowing high also helps to reduce weed problems. Most weeds need light to germinate and taller grass will help shade them out.

Mulch Your Clippings.

By leaving the grass clippings where they fall, you're adding free nutrients to the soil and stimulating biological activity. If your clippings are thick, wet and smothering the lawn, by all means rake them up and compost them. But you'll save on fertilizer if you can let the clippings do the work.

Use a Slow Release Fertilizer.

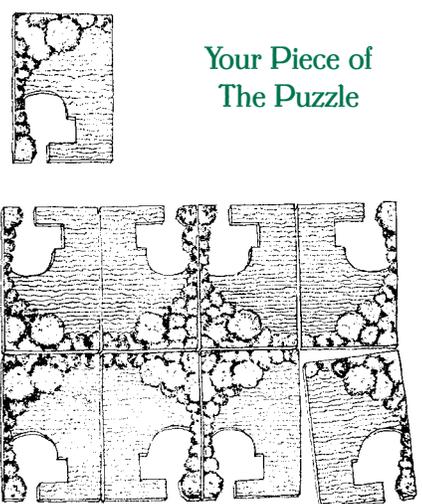
Slow release organic fertilizers will nourish your grass over a longer period of time than chemical fertilizers. They also stimulate moderate growth that doesn't require as much mowing.

Reseed Patchy Areas with the Right Grass Seed.

The simplest, yet most common problem with lawns is that the type of grass is not suited to the site. Is your lawn in the shade or sun? Most grass varieties (fescues, Kentucky Bluegrass, and perennial rye), require full sun to remain lush and green—although they'll tolerate some shade. If your yard is partially shaded all day, you should plant grass varieties that are specially suited to shade. There are also new slow growing grass varieties (fine fescues, tall fescues, bentgrass, and perennial rye) that take fewer mowings to keep them trim. Some of them are mixed with flowering clover and other low growing attractive blooms that can be mowed without harm.

By reducing your lawn even a little, say 10%, you'll be providing

a new home for a multitude of birds, salamanders, toads and butterflies, and also be creating a beautiful, low maintenance landscape for you and the people who live there.



Your Piece of The Puzzle

When one suburban yard adds a diversity of plantings, it becomes a tiny oasis. Multiply this lot by 5 and a typical suburban subdivision could look like the illustration above. These green “corridors” create an interesting diversity of plant shapes, color and texture that provide protective cover for wildlife. They also require less water and fertilizer than typical lawn areas. These corridors are a place where both people and nature can thrive.

Artwork reprinted with permission from the publisher of Noah's Garden: Restoring the Ecology of Our Own Back Yards, by Sara Stein, Houghton Mifflin Company 1993

GROUND COVERS FOR SHADED AREAS

- Pachysandra*
- Sweet Woodruff*
- Bloodroot*
- Ajuga*
- Ferns (Maidenhair, Christmas, Ostrich, and Cinnamon)*
- Vinca*
- Solomons Seal*
- Astilbe*
- Dicentra (bleeding heart)*

GROUND COVERS FOR SUNNY AREAS

- Daylilies*
- Creeping thyme*
- Creeping juniper*
- Rock cress*
- Ornamental grasses*
- Lady's mantle*
- Lirope*

PLANTS FOR IMMATURE BUTTERFLIES (CATERPILLARS)

- Birch*
- Dogwood*
- Poplar*
- Aspen & Cottonwood*
- Milkweed*
- Clover*
- Carrot tops*
- Fennel*
- Willow*

PLANTS FOR ADULT BUTTERFLIES

- Lilac*
- Butterfly Bush, (Buddleia davidii)*
- Asters*
- Mexican Orange*
- Lavender*
- Butterfly Weed, (Asclepias tuberosa)*
- Garden Sage*
- Hollyhock*
- Purple Coneflower*
- Cosmos*
- Zinnia*

BIRD-FRIENDLY PLANTS

Trees, shrubs and flowers provide food and shelter for birds and enhance the landscape. Here is a partial list of plants that are known to attract birds:

- Oak*
- Wild Cherry*
- White Pine*
- Shadblow (serviceberry)*
- Crabapple trees*
- Rhododendron*
- Azalea*
- Honeysuckle*
- Trumpet Vine*
- Viburnum*
- Chokecherry*
- Wild grape ivy*
- Barberry*
- Brambles*
- Bee balm*
- Veronica*

Not all of the plants listed above are native plants in all regions. Check for native alternatives in your area.

EPA Task Group on Environmentally and Economically Beneficial Landscaping

While the name is long, and it frequently elicits a chuckle when folks hear it—the following facts are more sobering:

- more fuel is spilt each year filling up garden equipment (e.g. lawnmowers, string trimmers, chipper/shredders, etc.) than was lost in the entire Exxon Valdez oil spill in Alaska;
- mowing an average 1/4 acre lawn produces more air pollution than driving a new (i.e. 1995) pickup truck round-trip to NY from Washington D.C.;
- in pursuit of picture-perfect lawns, homeowners apply 67 million pounds of lawn chemicals each year, more pounds per acre than are applied by farmers;
- Kentucky bluegrass requires 35-40 inches of water annually, yet is often planted in areas receiving 14 inches or less, thereby requiring watering (even in areas with water supply problems);
- homeowners apply 10,000 gallons of water each year for every 1,000 sq. ft of lawn. Fortunately drought resistant varieties of turf are being developed, and alternatives to grass lawns are gaining acceptance.

Landscaping choice plays an important role in preventing pollution and encouraging ecological diversity. While the individuals working on these and other issues are in different EPA offices, the EPA Beneficial Landscaping Task Group seeks to address this issue on a multi-media basis which promotes natural landscaping practices. The following recommendations were developed by a national interagency task force in response to the Executive Memorandum for Federal Lands which provides guidance for these practices:

To incorporate native plants whenever practicable into landscape projects. Native plants are considered all species indigenous to the region at the time of European settlement.

To minimize construction's adverse effects on the natural habitat and retain the soil resource.

To seek to prevent pollution by, among other things, reducing lawncare chemical use, reducing lawncare maintenance equipment use, recycling green waste, and reducing runoff.

To implement water-efficient practices, both in new development and in established communities; and commercial and industrial operations .

To promote awareness of the environmental and economic benefits of implementing this type of landscaping. The recent expansion of EPA's "GreenStar" program is an excellent example.

For additional information on this task group, contact (313) 668-4333.

Current EPA Task Group participants:

Office of Mobile Sources (OAR), Federal Facilities Enforcement Office (OECA), Office of Sustainable Ecosystems and Communities (OPPE), Office of Pesticide Programs (OPPTS), Office of emergency and Remedial Response (OSWER), Office of Wetlands, Oceans, and Watersheds (OW), Public Liaison Division (OCEPA), Regions 1, 2, 3, 4, 5, 6, 7, 9, and 10.

Reprinted with permission from Gardener's Supply Company, 1966.

Illustration from NOHA'S GARDEN, Copyright (c) 1993 by Sara Stein. Reprinted by permission of Houghton Mifflin Company. All rights reserved.

GARDENER'S
SUPPLY  **COMPANY**
 AMERICA'S GARDENING RESOURCE