

All the elements of a good low-maintenance landscape are combined in the Sea Island, Ga landscape. Note the native live oaks, the excellent use of ground covers, and the use of durable, adaptable plants.

LOW-MAINTENANCE LANDSCAPING

Rising costs, shrinking budgets and increasing regulations have forced many landscapers to shift toward creating low-maintenance landscapes.

by Gary L. Wade, Ph.D., University of Georgia

f asked to name a practice that best describes the current and future trend in the landscape industry, I would say, "low-maintenance."

Rising costs, reduced budgets and a new environmental awareness have triggered a sort of renaissance movement in the landscape industry; a time for breaking away from some of the more labor-intensive landscape practices in favor of more low-maintenance alternatives.

Tougher regs

Still another factor forcing many to take a closer look at low maintenance options are the tough environmental issues facing the landscape industry. Issues like pesticide use, groundwater contamination, water conservation, and waste management are not going away.

Ironically, the commercial landscape industry is cashing in on the environmental movement with all sorts of new services and marketing techniques, such as xeriscaping. As a result, the entire landscape industry has benefitted because the public no longer perceives the landscape industry as a villain but a leader in water conservation.

More with less

Perhaps the greatest challenge in low-maintenance landscaping is to cut costs without sacrificing the aesthetic quality and beauty of the environment. One of the most visible examples of how this is being done is the extensive wildflower projects along our highways.

Commercial landscapers are also

using the no-mow, meadow gardening approach on highly erodible banks and as an alternative to turf areas.

Low-maintenance landscapes don't just happen. They require careful consideration of low-maintenance concepts in all three phases of the overall landscape scheme, from design to installation to follow-up and management.

The design phase

The design phase is probably the most critical time to implement low-maintenance concepts. Follow-up management needs largely depend on the initial design.

Take into account the plants' adaptability to the intended site and their maintenance requirements. Overplanting during installation is a



Native Verbena tenuisecta and Verbina rigida provide five to six months of continuous low-maintenance color.

common mistake that results in maintenance nightmares as plants mature.

Sometimes a high-maintenance landscape is inherited at the management phase. A formal garden filled with neatly sheared hedges, topiary, extensive rose plantings, large beds of annuals and espaliers on every vacant wall, can be a maintenance monstrosity. One possible solution is to use durable varieties of annuals that

don't require frequent attention, tough herbaceous perennials, pesttolerant rose cultivars and chemical plant growth regulators on formally pruned plants.

Low-maintenance examples

During the design phase, don't fight Mother Nature. Capitalize on natural surroundings by preserving native areas and nature's own low-maintenance contribution to your design.

If left totally undisturbed, native areas will require no fertilizer or pruning, and they will have a high degree of pest tolerance.

Some thinning or adding a few flowering trees and shrubs for color is acceptable, but keep the future maintenance requirements in mind when you make changes.

Turfgrass is a very functional plant

Creating low maintenance landscapes

Here are some additional considerations to keep in mind about low-maintenance landscapes:

Select plants adapted to the site and the imposed stresses of the environment. In addition to texture, form and other artistic features of a plant, consider its cold hardiness, drought tolerance, pest tolerance, water needs, and pruning requirements.

Select plants that are aggressive enough to compete with weeds and shade them out as much as possible. Trees that create a litter problem, such as sycamore, sweetgum, crabapple and female ginkgo, should be planted away from public areas.

Concentrate seasonal color in areas where it can be easily maintained. Make beds narrow enough so that all the flowers are within arm's reach and don't have to be trampled by maintenance workers. Consider flowering shrubs and herbaceous perennials as alternatives to demanding annuals.

Note the foot traffic patterns in public areas and design around them. The shortest distance between two points is a straight line, and the public is going to take a path of least resistance, even if it means trampling plants or turf.

Design plant beds with wide sweeping curves. Think about the equipment you have to maintain the landscape before designing those little islands with sharp curves.

Remove construction debris and mortar from new construction sites before planting. Removing these hazards to plant growth will prevent maintenance problems later on.

Determine soil drainage. Dig a hole the size of the typical planting hole, fill it with water and watch how it drains. If water is still standing in the hole four hours later, the soil has a drainage problem that should be corrected before planting.

Thoroughly cultivate the soil when planting. This will improve soil structure and encourage root growth establishment

Give ornamentals space. When planting solitary ornamentals, dig a large hole, twice as wide as the root ball.

Plant annuals and herbaceous perennials on elevated beds to assure good drainage and to enhance their visual impact. Direct seeding of durable annuals, like marigolds, zinnias, and cosmos will reduce labor costs of transplanting.

Use slow-release fertilizers. Slow-release fertilizers placed in the planting hole are a cost-effective way of reducing follow-up maintenance requirements. Some slow-release fertilizers release nutrients for up to 24 months after application.

Excess fertilizer results in excess growth that demands more frequent pruning and more water, and most landscapes are over-fertilized, since they can probably be maintained with 1 to 2 pounds of nitrogen per 1000 sq. ft. each season.

Apply fertilizer at the beginning of the growing season, particularly if it contains a slowrelease nitrogen source, such as ureaform, ammoniacal nitrogen, or IBDU.

-Dr. Wade

in the landscape for erosion control and durability in recreational areas, but turfgrass also has the highest seasonal maintenance requirement of any plant in the landscape, aside from annual flowers.

Trends in turf

The trend today is to use small islands of high-quality turf in the highly visible public areas of the landscape, and durable low-maintenance groundcovers whenever possible to replace turf.

Mow often enough so that no more than one-third of the leaf tissue is removed at any one mowing. The closer you mow, the more frequently you'll have to mow.

The idea of letting certain warmseason turfgrasses go dormant during drought is not acceptable to most commercial clients who are paying top dollar for a green landscape.

One of the key components of xeriscaping is to group plants in the landscape according to water needs. A low water-use zone, for instance would contain plants that could survive, once established, on what nature provides, while plants in the moderate water-use zone would be watered only when necessary.



This elaegnus hedge is treated with Atrimec, which suppresses eight to ten weeks of growth with one application.

Zoning areas of a landscape in terms of maintenance requirements helps streamline follow-up maintenance practices.

Use shade to cool

A shaded landscape can be as much as 20° cooler than a similar landscape in full sun. It also requires less water than one in full sun.

Plants in the shade will generally grow slower than those in the sun, reducing maintenance needs.

Look closely at the building plan for hardscape surfaces, like concrete patios, walks, and other heat-radiat-

ing surfaces, and shade them whenever possible.

Select plants that will not overgrow their planting site and space them according to their mature size.

It's common to see plants like English laurel and rotunda holly being planted on two-foot centers when they should be spaced at least five feet apart. This is called "overselling" in the commercial landscape industry. Before long, the plants grow together and become thick and dense. Pests become a problem, and the plants begin losing their individuality as they are

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Mulches are a must in a low-maintenance landscape. They conserve water, insulate plant roots from extreme temperatures, help prevent weeds, reduce certain soil-borne diseases, and provide a buffer zone that prevents plant abuse from landscape equipment. Also, a good herbicide program and regular mulching will reduce the need for hand weeding.

Fine-textured organic mulches, like bark mini-nuggets or pine straw, are among the best for water conservation. Rock mulches absorb and radiate heat, causing unnecessary heat load and water loss in the landscape.

Install efficient irrigation systems. Drip irrigation and microsprinkler irrigation are much more efficient in water use than sprinkler irrigation.

Sprinkler systems should have matched precipitation rate nozzles for even distribution of water over the irrigated area. Low-cost rainfall sensors will prevent an irrigation system from operating during rainfall. Irrigation systems on time clocks should be adjusted weekly according to rainfall patterns, time of year and water needs.

Don't shear

Shearing is not only stressful to the plants but also results in a thick, dense outer canopy, increased pest problems, and water-demanding new growth. It is among the most costly and highest maintenance practices in a landscape. The more you shear, the more you will need to shear to maintain a desired formal shape.

Chemical growth regulators may, in certain instances, offer a cost-effective alternative to pruning. They are particularly useful on formally pruned hedges or excessively vigorous shrubs. Growth can be suppressed for 12 weeks to 24 months with one application, depending on the product used.

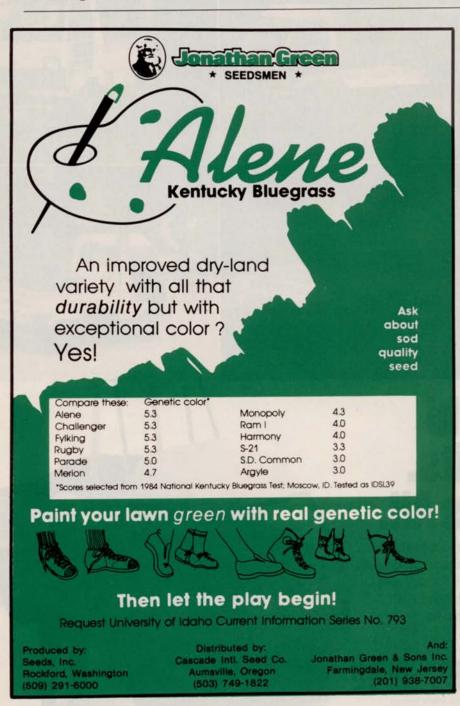
Use of PGRs

Chemical edging with PGRs by spraying a four-inch swath of turf along shrub beds will reduce the cost of mechanical edging. PGRs are also available that will suppress sucker growth on plants like crepe myrtle and crabapple. Still other PGRs cause fruit abortion from messy trees, to prevent trees from growing into power lines, or to maintain the size of street trees.

Finally, computers are revolutionizing the landscaping industry. Cost accounting, plant locator programs, cost estimating and job bidding programs are now available to the landscaper to make his job more efficient, more accurate and less costly.



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