RESEARCH UPDATE

Keeping residential landscapes weed-free

by Evert Burt, Wayne Currey and John Burt

The most desirable features of weed control programs in landscape sites are all the practices and procedures that have a positive impact on plant growth in the landscape and a negative impact on weeds.

The encroachment of weeds into a turf is usually the result of a poor turf rather than the basic cause. Weeds commonly establish where the turf is thin and weak. Thin turf usually results from poor species selection for the specific site and improper maintenance practices.

Consider the level of maintenance that will be provided. Although bermudagrasses are considered the most attractive in Florida, they require the highest level of maintenance to look their best. If not properly maintained, bermudagrass will not provide as attractive a turf as St. Augustinegrass. In other words, a well-maintained St. Augustine lawn will provide a better and more attractive turf than will a poorly-maintained bermudagrass.

When selecting a turfgrass, consider the following factors:

• Shade. Some turfgrasses, such as St. Augustine, will grow well under moderate shade conditions, while others such as bermudagrass, will not.

• Soil Conditions. Turfgrasses vary in their ability to grow in different soils. St. Augustinegrass tolerates high salt; bahiagrass doesn't. Some turfgrasses grow little or not at all on poor, acid soils while others grow much better under the same conditions.

Other environmental factors such as soil texture, the presence of a hardpan, and the degree of slope may influence the selection of turf species.

• Climate. Temperature, degree of shade, and air drainage can greatly influence turfgrass growth. Tolerance to these various influences should be considered in the selection process.

Proper cultivar selection

Choosing cultivars not adapted to the particular site usually results in weak, thin turf that is soon followed by the appearance of weeds. Use high quality seed, sod, plugs or sprigs from the outset.

Seed or vegetative material should be planted in soil that is free of perennial weeds. If such weeds are present, consider using a total vegetation con-



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trol such as glyphosate or fumigate the site prior to planting.

Determine the level of maintenance. One cannot achieve putting green quality at a roadside maintenance level. An important consideration in turfgrass selection is the turf manager's ability and willingness to supply the appropriate maintenance

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to keep the grass in a healthy condition. A dense, healthy stand of grass can be maintained best by adhering to good horticultural practices of mowing, watering, fertilization and pest control.

Reacting to weeds by applying a herbicide usually does not solve the problem. A wiser, more practical approach is to determine why the turf is thin and weedy. Correcting the basic problems of unhealthy turf is a vital part of a sound weed control program that will help_prevent future weed problems. Healthy turf is more tolerant of herbicides than is a weak turf. At the same time, healthy weeds are easier to kill.

The common cause

Lack of proper maintenance is the most common cause of weedy turf. Mowing is the most basic and universal practice for maintaining a healthy, vigorous and attractive turf, but it is frequently done improperly.

It is important to realize that all the primary cultural practices—mowing, irrigation and fertilization—are interrelated. If one of the cultural practices is done incorrectly, it will affect the others.

For example, by mowing the turf too short, the grass develops a shallow root system, which will require more irrigation. A lawn cut too short will eventually thin out and require adjustments in fertilization practices. Before changing cultural practices, consider what effects the action will have on total maintenance. LM

Evert Burt, Wayne Currey and John Burt are ornamental horticulture consultants based in Ft. Lauderdale, Fla.