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Maintenance of Bentgrass

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the grass is greener

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MAINTENANCE OF BENTGRASS

Lunsy
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Whether you have a small, private putting green, or are maintaining a golf course, or have a bentgrass lawn, there are special techniques to maintaining this velvety grass.

Variations in weather, nutrition and plant response preclude the projection of exact schedules, but there are various management practices which will help to insure good bentgrass turf.

Mowing

Mow the putting green 3-5 times a week. If in doubt, cut. More frequent cutting favors better putting surface, more uniform turf survival and better density. Keep the mower sharp and keep the bedknife adjusted.

To check, turn the reel by hand. Does it scissor-off the grass? Look at the turf after mowing. Are some long blades left chewed and bruised? Use a hand file to sharpen the front lip of bedknife every month. Have the machine lapped once a year by back-grinding. Talk to your local golf course manager, or mower maintenance firm. A cutting height of 1/4 inch (measure bedknife lip above hard surface) is standard.

For lawns, cut 3/8 to 3/4 inch high, two to three times a week. Catch clippings to improve neatness and reduce disease.

Fertilizing

Vigorous grass makes better putting greens. Fertilizer should be applied to produce growth when wanted. Monthly applications would be normal. Develop a system you trust and stay with it. Over-fertilizing is easy to do. Standard rates per application are 1 pound actual nitrogen for each 1,000 square feet in cool weather; 1/4 pound is enough in hot weather.

One easy way is to broadcast pellet fertilizer in early morning when dew is present so that your pattern of application shows; then set the sprinkler immediately to water in the material. The dew also helps dissolve the fertilizer and protects the grass from burn.

Get a soil test every two years. Phosphorus accumulates readily, but keep adding potassium. Consider a 4:1:2 ratio. Four pounds nitrogen per 1,000 square feet each year is minimal; 6 pounds ample; 8 pounds maximum. Popular fertilizer analyses include: 24-4-12, 30-3-10, 12-4-8, and 19-5-9. For lawns, 3 pounds of nitrogen for 1,000 square feet would be minimal; 4-6 pounds would be ample. Check label suggestions. Slow release forms of nitrogen are preferable.

Watering

Bentgrass loves water, so frequent application to replace moisture loss is desirable. Alternate heavy and light waterings. It is easy to over-water, so just re-wet the soil. Hand-sprinkling during the hot parts of the day through the summer may be helpful to keep the grass cooler and reduce wilting.

Several easily installed underground plastic pipe and permanent sprinkler systems are available for custom or homeowner installation. Some also utilize time-clocks for automatic watering.

Watering favors disease, so as a principle keep the leaves as dry as possible to reduce disease risk. Avoid keeping the leaves wet for extended periods as this favors disease incubation and buildup.

Disease control

Snowmold shows only in early spring. Dollarspot may show mid-May until late October. Brownpatch and leafspot may show from early June until early September, while pythium may show in July and August. Several other diseases may sometimes affect bentgrass. Extended humid, hot periods favor disease development, but, often a change in weather will stop disease activity. Poor air circulation, as often found around homes and shrubs, tends to increase the likelihood of disease attacks.

Generally, wait in the spring until dollarspot is first noticed, around mid-May, then apply fungicides every two weeks. Leave spray on foliage to dry, and use extra light applications whenever diseases are severe. Broad spectrum fungicides that act against several diseases are suggested. In northern areas, where snowmold is severe, it can be prevented by early winter spray protection. Work out a system for your sprayer. Have your materials weighed up in batches ahead of time.

For bentgrass lawns, disease is less of a problem and, with higher cut, more risk can be tolerated. Dollarspot may be the worst problem. It is easily controlled, but reoccurs; so, one application of fungicide monthly may be adequate for disease control except during adverse periods.

Insect control

Insect pests of bentgrass turf include cutworms, sod webworms and grubs. Apply an insecticide lightly over the surface (somewhat like mosquito spraying around the home), which should stop sod webworms and cutworms, and gradually build up toxicity against grubs. Watch for small areas that are bare around holes, which could indicate cutworm. Watch for small moths alighting on the turf, which can indicate sod webworms. Call your Extension Agent for specific information on insect control.

Crabgrass control

Once a year, in mid-spring, use any one of the commercially available chemicals to prevent crabgrass. Broadleaf weeds can be removed by hand-weeding from putting greens. Light uniform applications of 2,4-D, or other weed controls, can be used on bent lawns in cool growing weather.

Topdressing

Topdressing can help control thatch, smooth up the surface and improve the health of the bentgrass. Applications each spring and fall are standard. Light applications can be made any time. Calcined clay aggregates, which are free of weeds and easy to apply, may be added. Check with turf supply houses for local suggestions. Rolling in late winter or spring can improve uniformity.

For lawns, topdressing is desirable, but time-consuming and expensive. Also, topdressing with pure peat or muck is discouraged because a layer accumulates on the surface.

Vertical mowing

Early spring thinning and raking are very desirable so that the new growth has ample room to develop. Several machines are used at golf courses to loosen, punch, remove cores and improve water penetration. Twice a year (summer and fall) thinning may be desired if machines are available. Repeated use of smaller, motorized vertical thinning machines makes their ownership practical and allows more leeway in timing of operations.

Vigorous young bentgrass is usually healthy. Old, matted bent is less attractive and less dependable.

For lawns with higher cut, vertical mowing is even more important. Be sure that green growing tips are left between blade cuts, otherwise, peeled-off brown areas will result.

Reseeding and repair

Cups should be moved twice a week or, if needed, more often, so that turf is not worn out at any spot. Before September 1 is a good time to overseed and repair if damage has occurred. Cool nights and milder days favor recovery.

For putting greens, Penncross creeping bentgrass seed is preferred over Seaside, Colonial or others. Stolons, or plant pieces of well-known creeping bentgrasses, such as those used on golf courses, are also available for starting new greens. Plugs can be set into damaged areas for quick recovery.

For lawns, Penncross is also used, but Highland, Colonial, and Astoria are sometimes seeded. Seeding rates of 1-2 pounds for each 1,000 square feet are ample because the seed is very small.

Drainage

If drainage in existing soil is poor, consider making narrow, vertical trenches with a trenching machine; then fill with pea gravel covered by six inches of sand at the surface. Also, sod can be cut, soil reshaped and sod replaced if surface needs changing.

Tree root competition can be reduced by slicing vertically at edge of green, or throughout lawn, every 2-3 years.

Midwest Turf Leaflet No. 40, PURR-WICK Rootzone, introduces a new concept for building a golf green. This system includes a subgrade, a plastic barrier, slotted drain tubes, an outflow control and a sand bed rootzone. It isolates the turf from tree roots and water loss to adjacent turf or plants.