

A golf hole like this one encourages repeat play. It makes use of multiple tees and varied landing areas to test skill and strategy, plus bunkers, trees and a pond for a beautiful playing environment.

rough maintenance and bunker appearance and consistency to see that you are providing as high quality as the budget will allow.

The key to promoting repeat play is developing a course that provides a challenge, maintains a player's interest and remains in peak condition, adds Tom Clark, former president of the American Society of Golf Course Architects.

"The courses that are able to meet these criteria are usually quite successful in attracting new golfers, developing longterm loyalty and generating strong revenues," Clark says. "They also offer an outstanding drawing card for the community or surrounding development."

When designing a course that encourages repeat play, architects use multiple tees and design greens large enough to accommodate several pin settings.

"Using multiple tees and pin settings creates variety," says Clark. "The key is to make sure the golfer is not playing the same course every time."

A course in top condition promotes repeat play because golfers can depend on the course to be more playable more often than a course in less-than-peak condition.

"If golfers know a course is in good condition and will generally be open for play, they'll plan to return," says Clark. "For example, a course with good drainage will be open for play more often than a course that drains poorly. This is critical to the many dedicated golfers who want to tee off as soon as the rain stops.

"The architect, superintendent and golfer all share a role in keeping a course in top condition," says Clark.

Controlling moss, algae in golf course turfgrass

by Gilbert Landry Jr., Ph.D., University of Georgia

Moss and algae are found in turf areas because conditions are not good for growing dense healthy turf.

Mosses are small plants which have a mass of fine stems. *Algae* are thread-like green plants which form a thin dense green scum over the soil surface. Neither moss nor algae are thought to be parasitic to turfgrasses. The green scum formed by algae is relatively impermeable and once it

dries out, forms a tough black crust. Factors favoring the growth of algae:

• wet or humid full sun locations:

• compacted waterlogged fertile soils; and

• thin, weak turf.

Factors favoring the growth of moss:wet or humid shady conditions;

• acidic, infertile, poorly drained, waterlogged soils;

• excessive thatch; and

• thin, weak turf.

The only permanent control of moss and algae is to correct the conditions which reduce turf growth. The following cultural practices can accomplish this:

1) Maintain good soil fertility. Have the soil tested to determine proper lime and fertilizer needs.

2) Improve drainiage. Soils which stay moist because of poor drainage should be contoured so that water will drain off the area. In some cases, tile drainage may be necessary to correct wet conditions.

3) Increase light penetration and air circulation. Trimming back low branched trees may allow for better light penetration and movement. In some cases, removing some of the least desirable trees may be justified. Areas surrounded by buildings and vegetation with limbs close to the ground require considerable effort to provide adequate air circulation and light penetration. Using a shade-tolerant grass such as St. Augustinegrass, zoysiagrass or tall fescue will help. However, if direct sunlight does not reach the ground during the day, a groundcover may be more appropriate.

4) Cultivate compacted soils. Aerification with a machine the removes plugs of soil will help reduce compaction. Drainage in fine-textured soils can be improved by cultivation and adding large amounts of organic matter and sand.

5) Avoid excessive irrigation. Keeping the surface moist will only increase problems.

Moss and algae problems will recur unless growing conditions are improved, even though you might elect to use the following chemicals:

• Copper sulfate: 2 to 3 oz./1,000 sq. ft.

• Hydrated lime: 2 to 3 lbs./1,000 sq. ft.

• Ferrous sulfate (moss): 4 to 7 oz./1,000 sq. ft.

• Ferrous ammonium sulfate (moss): 10 oz./1,000 sq. ft.

• Non-selective herbicide: apply only to spots covered by moss, according to label directions, and reseed or resod the damaged areas.

Once controlled, sodding is the recommended means of establishing turf under heavily-shaded conditions.

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