

More Play, Better Management

ALMOST IN THE MIDST of Baltimore's outlying industrial area lies Bethlehem Steel's Sparrows Point Country Club. In contrast to the beehive of activity in the nearby business community, the peaceful, country atmosphere of the club makes it stand out almost like an oasis in a desert.

The club provides a convenient recreational and social outlet for the corporation's employee-members and their guests. Maintaining that relaxing atmosphere provides a special challenge for golf course superintendent Alex Watson.

The Sparrows Point membership includes upwards of 700 golfers who utilize the club's nine and eighteen hole courses.

"The golfing pressure is increasing," Watson observes. "The number of members hasn't increased that much, but we are getting more and more play by the members and their guests. This means that the grounds maintenance crew has to accomplish more in a day to avoid interfering with play."

This increasing player pressure is directly related to one of Watson's current major problems, finding good labor. "We're located right in the heart of a major industrial area," he explains. "People don't care to work here when they can find higher paying jobs in a factory just down the road. College students are a big help to us during the summer months. They're inexperienced, of course, but they're good workers, and we'd be hard-pressed without them."

Increasing golfer pressure combined with a limited seasonal labor supply puts a premium on organization and management. A valuable aid, Watson has learned, is a well-planned, closely-followed work schedule. His master schedule coordinates activities all year long, as well as in the busy months of May through August when his crew usually numbers 18 or 19 men.

Of all the duties that go with his job, turfgrass management, naturally, is a top priority item. At Sparrows Point, the greens are mainly Arlington and Congressional bentgrass. Tees are mostly bermudagrass, with some bluegrass and bentgrass. Fairways are primarily bluegrass mixtures, with areas of hybrid and native bermudagrasses.

Dollarspot, leafspot, red thread, rust, brown patch, and, occasionally, snow mold are the common disease threats in Watson's area. But a four-season preventive spray program has minimized disease problems, he says.

"Each spring, as soon as weather and ground conditions permit, we treat tees and fairways with fungicides, herbicides, and insecticides," he explains. "The greens are treated with fungicides and insecticides only, and the treatment is continued regularly throughout the season."

A combination of systemic and contact fungicides is the key to Wat-

son's disease control program. "The development of systemics has been helpful," he notes. "And rotating them with a basic contact product like Acti-dione has enabled us to avoid the problems of disease strains resistant to some of the newer systemics that many turf managers have encountered."

For greens, Watson combines regularly scheduled fungicide applications with daily inspections for disease. Additional fungicide treatments are applied if needed.

Once begun, fairway and tee fungicide treatments are also continued through the end of the playing season. Herbicides and insecticides are applied routinely with the first two fungicide applications, then discontinued unless required.

Watson's crew saves time and labor by making combined herbicide and fungicide applications when the products permit. "We always check compatibility of products before mixing them together,"



A radio-equipped golf cart provides mobility while keeping Watson in touch with members of his maintenance crew.

he notes. "Compatibility charts provided by some of the manufacturers are a big help." Wetting agents are also added to fungicides when the label permits.

Off-season treatments are dictated by the weather. If possible, Watson likes to make a late November or December fungicide application to prevent snow mold on greens. "If conditions permit, we like to make one greens application prior to February," he says. "Even if the weather's bad, though, we always make a late February application."

During the golfing season, Watson's schedule calls for treating greens on Friday to prevent disease outbreaks during the busy weekends. Even though his crew works a half day on Saturdays, and a skeleton crew remains on duty on Sundays, weekend golfer traffic precludes spraying. Fairway treatments are scheduled so as to begin on Monday and finish before Friday.

Fertilizer and herbicides are also accounted for in Watson's master schedule. A 2,4-D MCPP, dicamba mixture is applied with the first two fungicide treatments to control knotweed and troublesome broadleaf weeds. Later applications are made as needed.

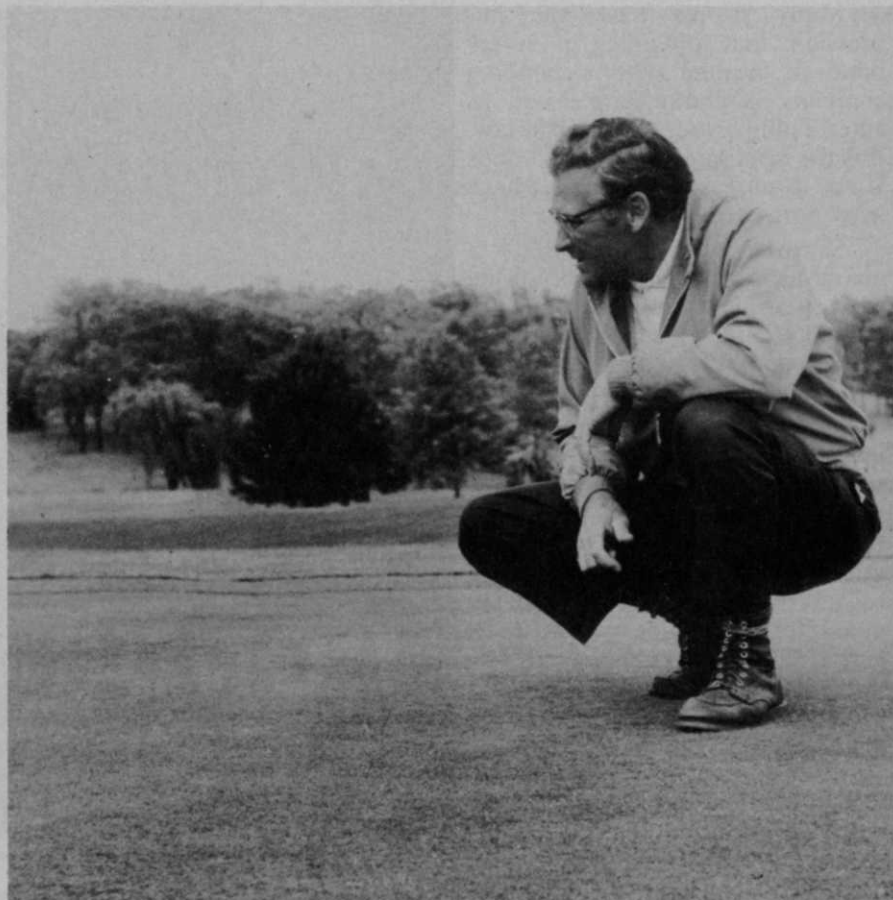
Fairways and tees are fertilized every four weeks throughout the playing season, receiving a total of seven or eight pounds of nitrogen per 1,000 square feet during the course of seven or eight applications. Bermuda tees receive from two to four pounds more nitrogen than bluegrass, a yearly average of about ten pounds per 1,000 square feet.

Greens receive the same total amount of nitrogen, but with smaller, more frequent applications — normally about 13 treatments continued through the winter season.

"We take soil tests from tees, fairways, and greens every three or four years to determine exactly how much fertilizer to apply," Watson notes. "These tests also tell us whether lime is required."

Watson has found that grass doesn't require as much phosphorous as was commonly supposed in the past. Consequently, this year's application is a mixture of nitrogen and potassium.

"Those of us who have been on a tricalcium arsenate program for Poa



Regular fungicide applications plus frequent spot checks help Watson avoid disease problems.

annua control have found that phosphorous tends to negate the effects of the weed killer," he adds, "particularly in poorly drained areas."

Watson has been testing tricalcium arsenate for several years, with good results. "The only Poa annua left is in poorly drained areas where we believe phosphorous is tying up the tricalcium arsenate in the soil.

"We have applied about 26 to 28 pounds of actual tricalcium arsenate per 1,000 square feet over the entire course," he continues. "This is considered the peak amount required for maximum Poa and crabgrass control. From now on, we'll add about three pounds per season to maintain this level."

The more flexible items on Watson's master plan — drainage and irrigation, for example — are handled as time and labor permit.

"We normally water the fairways between 5 p.m. and 10 p.m. every evening when dry weather persists. The greens are watered as necessary," he says. "The shrubbery, trees, and flower beds we take care of when we can."

Aerification of greens, tees, and

fairways is done in the fall and any other time it's needed. Watson does not believe in spring aerification as a standard practice.

"I prefer to avoid operations that set back the grass in the spring," he explains. If necessary he'll slice or spike the turf during the summer, but he prefers to have the turf fairly dense as spring approaches.

"In the fall, when the grass has been through a hot, humid semi-dormant period, is the time you can help renew and invigorate it with aerification, fertilizer, and overseeding if necessary," he believes.

Planning work in advance and utilizing new developments and information enable Watson and his crew to keep Sparrows Point attractive and functional for its membership. "We work closely with the University of Maryland, Penn State, and VPI to keep abreast of their research," he says, "and industry helps, too. Some companies have obviously put a lot of time and research into developing products and information that turf management people can benefit from."