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# This definition from Florida: 'the working superintendent'

## Caring for the course and repairing equipment is Joe Ondo's cup o' tea.

■ If you looked up the definition of "working superintendent" in the GCSAA dictionary, you'd see a photo of Joe Ondo of Winter Pines Golf Club in Winter Park, Fla.

"Different people have different definitions of 'working superintendent,'" says the 24-year veteran. "I like the physical part of it. I'm part of the crew, so there isn't anything I haven't done. If other people on the timecard see me doing a job, they don't complain when I ask them to do it. I like that hands-on type of feeling."

While some superintendents prefer to spend their time walking the course looking for glitches, or going on equipment-buying trips, or sitting behind the desk making out work schedules, Ondo is the opposite.

"I think it has a lot to do with the type of golf course it is," Ondo admits. "It works because of the size of crews and their job responsibilities. I have no set schedule; I'm very flexible. I'm in charge, but I don't have a specific job most times. I *do* have to take a lot of stuff home."

Ondo's duties are as varied as the weather in his native Pennsylvania. One day, he and Bob Keeth (the only people on-staff with applicator licenses) will be out spraying pesticides. The next, he will be in the repair shop using knowledge gleaned from those winters back up north that

were spent tearing down equipment.

Ondo picked up at least part of his philosophy from owner Ed McMillan, who was out helping lay concrete cart paths the day LANDSCAPE MANAGEMENT visited. During the last eight years, Winter Pines workers have laid more than one mile of concrete cart paths—themselves.

"It's a nice situation here," says Ondo. "There's not a lot of pressure. You can afford to make a few mistakes and not worry about your job. Other places I've been, you're wondering if you're doing the job right or fast enough. We just expect a good day's work out of everybody."

That philosophy has resulted in little employee turnover. Five full-timers plus a 30-hour-a-week landscape specialist are under Ondo's supervision. Each of the core maintenance people has been on the course at least 10 years. "It's kind of unusual to have so many people stay on so long," says Ondo, who has worked at Winter Pines for 13 years himself.

One reason for the crew's longevity is Ondo's empathy, gained through years on work crews. "Mowing in the summer is hard because it's so hot, so guys switch off jobs. Mowing eight hours every day can be tough on a person," he says, revealing a sort of "I've-been-there" attitude.

Because Winter Pines is a public course (which also offers memberships) host to about 90,000 rounds per year, and because it's family-owned, time and money are at a premium.

"We don't get to do topdressing and things as often as we would like," Ondo



Joe Ondo: takes the good for granted.

says. "We don't aerify or rip anything up until it's absolutely necessary, usually in June. With the wetting agents and other new products on the market, we're able to get by."

"We do more spiking than aerifying. When we pull a plug, we get more weeds back. By spiking, we save money on herbicides."

New products are pre-tested so there aren't any costly mistakes.

"We'll try a product on half a practice green," Ondo says. "We've never taken a new product and put it on the golf course without trying it out first."

Because of the heat and heavy daytime traffic on the course, the crew members use lighted tractors to begin mowing at 6 a.m. Everything is done in reverse order, beginning at the last hole, so golfers only see the maintenance crew once per 18 holes.

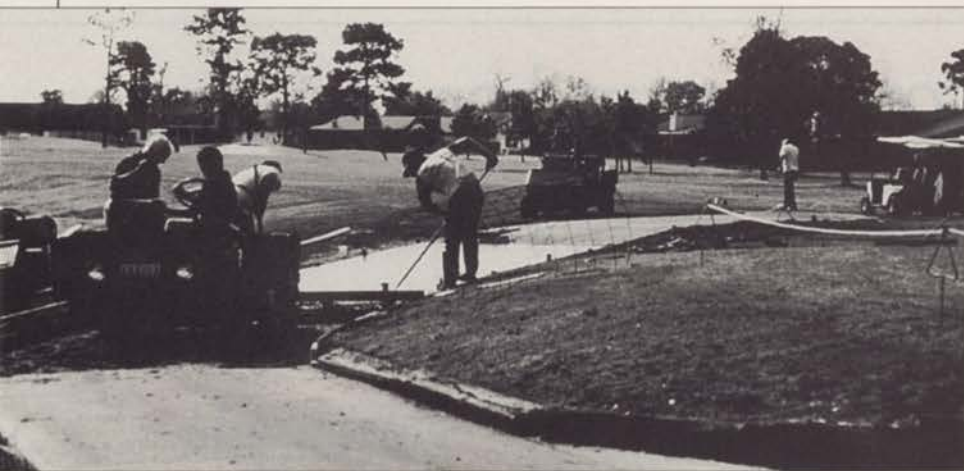
The course features Tifway 419 bermuda fairways. Its short par-3 fairways and all greens and tees are overseeded. "We try to do a little more overseeding every year," Ondo notes. The greens are modified USGA-style.

Tees are mowed three times per week; fairways three times per week in the summer, greens once a day. In addition, Winter Pines tries to rebuild one green a year, just to change its look.

The crews are involved in an extensive on-going tree planting program, adding an average of 10 to 20 pines and oaks every two months. Flowers around the clubhouse which provide its family-type atmosphere are replaced every three months. Ondo is trying to select more cold-hardy materials like pansies and petunias, in deference to Florida's recent milder winters.

Of all the lessons he's learned since he began working on golf courses at the tender age of 15, Ondo says he's got one key to success: "You take the good for granted and look at the bad things."

—Jerry Roche



Winter Pines owner Ed McMillan (extreme left) sets an example by helping a crew lay a concrete cart path.

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**REEMAY**

# Managing busy athletic turf

## Basic issues must be addressed to help heavily trafficked turf recover from injury.

by Gil Landry, Ph.D.,  
University of Georgia

■ A sound, total turf management program is the best way to manage high-traffic, high-use sports turf fields.

Fertilization, mowing and irrigation must be addressed throughout the year.

Mow to maintain turf at the desired height for the level and type of activity. It may help to vary the mowing height, keeping grass longer when stresses are high. Mow frequently enough so that no more than one-third of the grass blade is removed in any one mowing.

Incorporate these specifics for intensive care of busy turf.

**Irrigation**—When irrigating, use a single, deep watering, applying one inch of water, rather than more frequent, shallow irrigation. With heavy soils, water to the point of runoff, allow the water to thoroughly infiltrate the soil, then repeat the cycle. On extremely heavy clay soils, it may be necessary to irrigate on successive nights to ensure one inch of water is applied.

Where no irrigation exists, flexible scheduling will maximize rainfall benefits. Make fertilizer applications before forecasted rains. Aerify following rain, when the soil is moist enough to allow for adequate penetration.

Maximize the time between irrigation and field use. Allow 24 to 48 hours as a minimum between watering and play. The greater the soil surface moisture during use, the greater the compaction.

**Cultivation**—Core-type aeration is the one practice that can be the most beneficial and the least disruptive, in terms of turf response.

When recovery time is adequate, use *core* aeration, dragging the cores back in. If the field use is so intense that you are concerned about surface appearance or disrupting play, use *hollow-tine* aeration followed by *solid-tine* or *slicing* blades.

On sites where naturally-occurring high bulk density runs deep into the soil profile, and/or compaction occurs below a four-

inch depth, *deep-tine* aerate.

Ideally, a combination of various cultivation will provide the best results.

Aerate prior to or during the maximum root growth period for the turf. (Normally, late winter or early spring cultivation on cool-season grasses, and later spring or early summer on warm-season grasses.) Then aerate again to relieve soil compaction after extensive use or following heavy rain or high irrigation levels. With warm-season grasses, a final aeration after the playing season will improve root growth the following spring.

### Topdressing

Topdress during the playing season, but only as needed to adjust field levels. Topdressing can temporarily reduce the turf quality of most grasses, including vigorous grasses like bermuda.

### Fertilization

It's important to properly time fertilizer applications. As a general rule, this means fall and spring applications on cool-season grasses; spring, summer and fall applications on warm-season grasses.

Provide adequate fertilization to encourage turf recovery. There is a tendency to use more nitrogen because fans are so in tune with field appearance. Too much nitrogen will sacrifice root growth for top growth.

Run soil tests once a year, at least until you have developed enough history on a specific field to know how it performs under your fertility program.

**Money and people**—Schedule downtime to perform more intensive practices. Flexibility and some adjustment of work schedules and resources can help take advantage of play rotations and optimum weather conditions.

Allocate personnel and resources to high-use, busy fields first. For example, fields with dense, healthy cover and lower levels of activity may need no in-season fertilization.

When multiple fields are involved, each with a heavy play schedule, it may be necessary to further narrow the allocation of resources. Concentrate on heavy-use areas—baseball infields, soccer goals, and between the hash marks on football fields.

To achieve the best results and keep within budget: maximize resources on high-use turf, minimize resources on low-use areas.

**Herbicides**—Use herbicides to minimize weeds. Fall is the most effective time for broadleaf weed control applications in both warm- and cool-season grasses.



The high-traffic area between the hash marks and around the bench area of this dormant bermudagrass football field have been invaded by annual bluegrass, which is wear-tolerant.

(Photo courtesy the author)

Summer annual grasses are easily controlled with pre-emergence herbicides.

Eliminating weed competition gives grass a better environment for recovery from heavy use. But be aware of the side effects of herbicide applications. Minimize the use of products with root pruning characteristics on thin turf areas.

Pre-emergence controls are beneficial, even when the turf is frequently aerated.

The best indicator of turf needs is your own eye. When reduction of growth or thin turf are revealed during mowing, take whatever action is suitable, in the earliest possible stages.

Remember to stick to the basics and do a good job with routine maintenance. Then be observant and adjust your program as needed.

—The author is an extension turfgrass specialist with the University of Georgia, and president of the National Sports Turf Managers Association.

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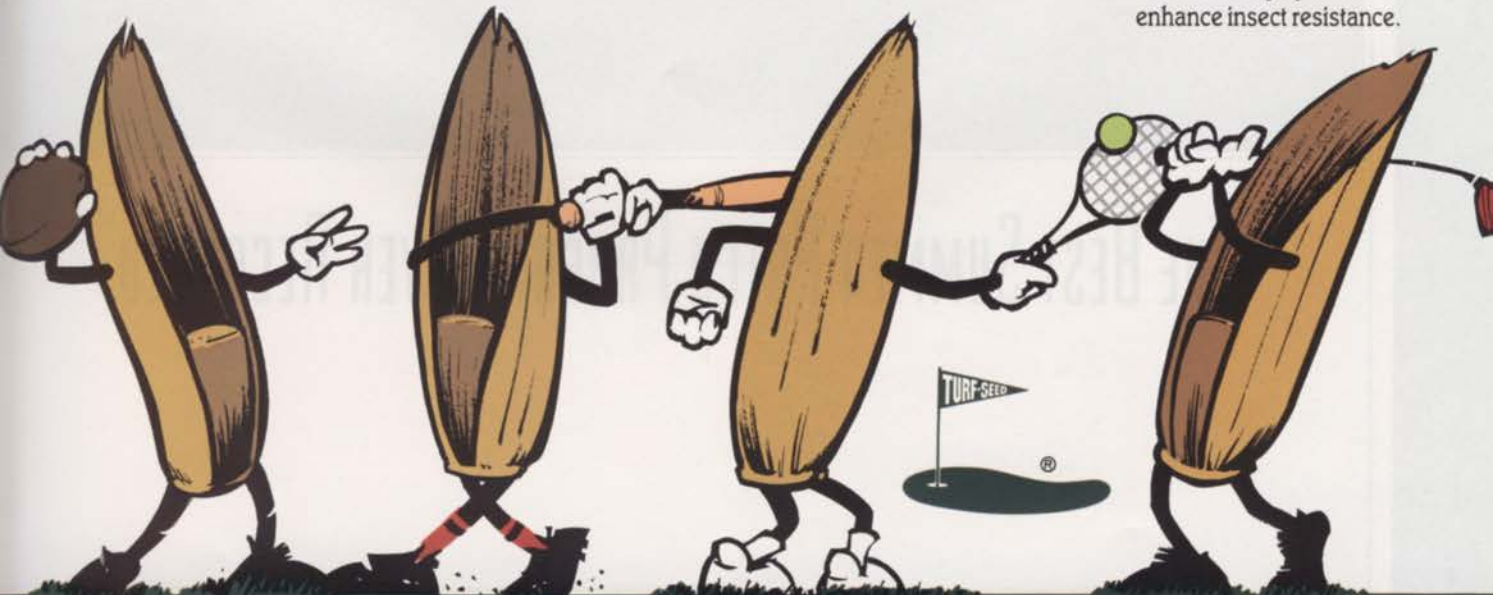
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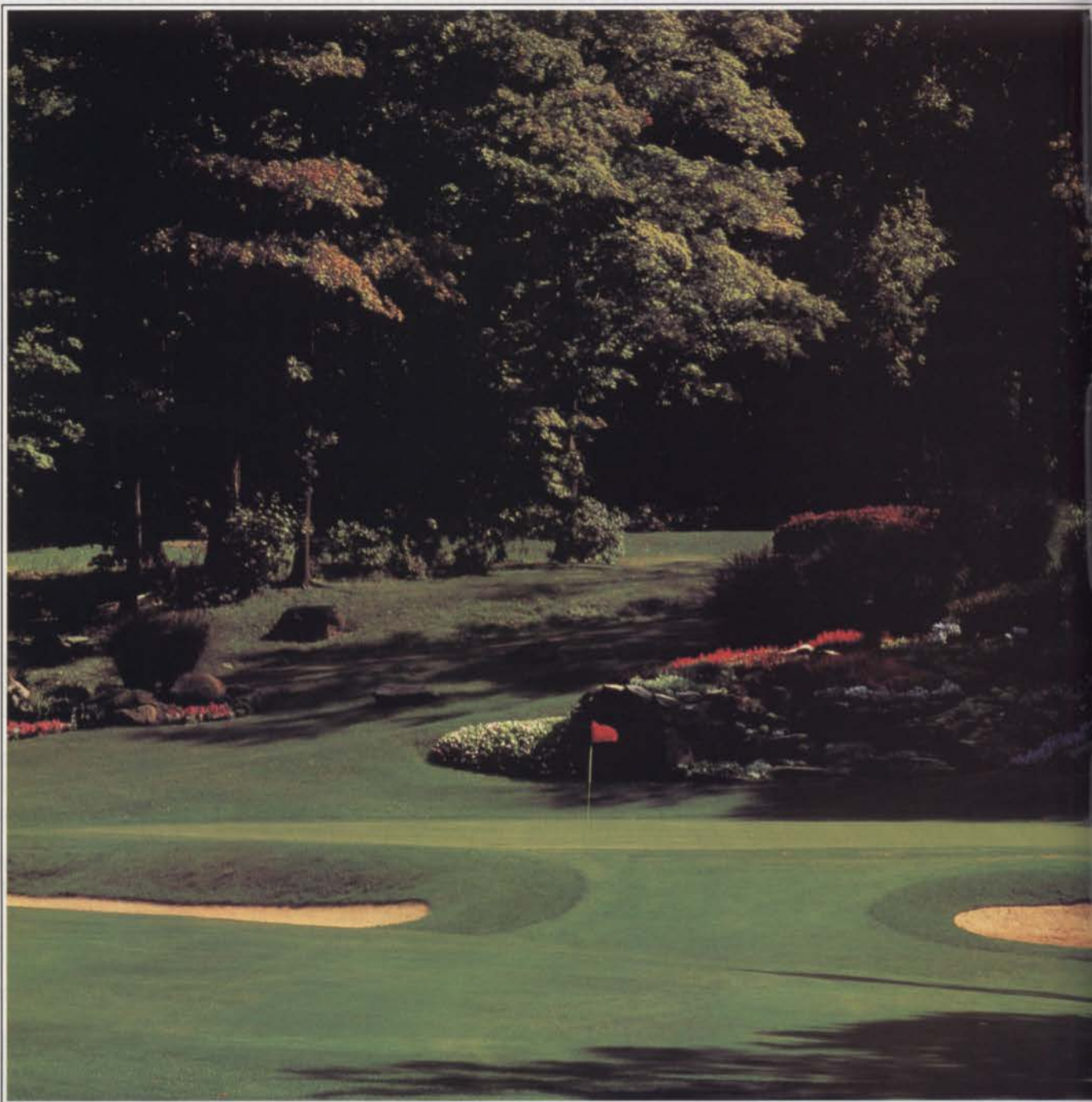
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## Healthy turf linked to iron supplements

■ Researchers have studied for years the link between iron and healthy turfgrass. Iron has been popular for several years with other members of the green industry, especially nursery growers. Only recently, however, has it become a valuable resource with golf course superintendents.

**Current research**—One study that links chelated micro-nutrients, and more specifically iron, to enhanced appearance and growth of healthy turfgrass was conducted last summer at Iowa State University by Dr. Michael Agnew, extension turf specialist.

Results indicate that areas treated with chelated micro-nutrients generally retain their dark-green color longer than non-treated areas (see Table 1). In some cases, as much as twice as long. Plus, treated turf maintains steady, but not excessive growth.

According to Agnew, an iron supplement is particularly important in areas where soil is both high in pH and calcium. The naturally occurring iron gets trapped in the soil's calcium and becomes unavailable for use by the plant. As a result, turf turns yellow and wilts.

Another factor that contributes to iron-deficient soil is frequent mowing at shorter heights. Mowing removes leaves, where

iron is stored. As superintendents try to keep up with demands for faster greens, they may keep greens at 1/8th inch or less, which means frequent mowing and potential iron deficiencies.

**Supers in favor**—Iron supplements increase root growth, which gives the plant a deeper water reserve. For superintendents, that means less watering. Greater root growth also means reduced wind and soil erosion. Plus, deeper roots enhance transpiration efficiency and "cooling" of plants.

Agnew's research also indicates that areas treated with chelated iron had green speeds equivalent to non-treated areas (Table 2), which is important to both supers and players.

Iron supplements also may reduce nitrogen requirements by as much as 30 percent. This is beneficial because, unlike iron, nitrogen actually decreases root growth and increases top growth. And increased top growth means more watering and more mowing.

"Using an iron supplement is essential to maintain top-quality turf," says Eric Lover, assistant superintendent at Dove Canyon Country Club in California. "My turf has better recuperative powers and

maintains its green color between fertilizer applications since we started using iron."

**Where to apply**—Iron is most helpful in alkaline and calcareous soils, which are prevalent in California. But the East Coast and Midwest also benefit from iron supplements in many of the same ways as California turf. In these areas, iron can even increase greenness in turf where there is no iron deficiency.

Steve Davis, turfgrass specialist for Target Specialty Products, distributes Ciba-Geigy's Sprint micro-nutrient in southern California. Since 1990, he says product sales have quadrupled in his area as superintendents begin to recognize the value of iron on golf course greens.

"Economically, the many benefits of iron supplements far outweigh the cost," says Davis.

For example, during the spring and fall, when days are warm and the nights are chilly, light frosts can destroy a turf plant's chlorophyll and slow photosynthesis. Iron negates that effect by triggering enzymes that keep grass green and prevent wilting.

Iron supplements, which are most commonly sprayed directly onto the leaves, may be applied year-round to the plant.

*continued on page 42*

Table 1

### ***Influence of micronutrients and nitrogen fertilizer on the visual quality of bentgrass greens.***

IRON SOURCE WITH NITROGEN	MAY		JUNE			AUGUST			SEPTEMBER	
	28	5	11	15	13	21	28	13	20	25
Agri-Plex For-X	8.0	8.3	8.0	8.0	8.3	8.7	8.7	8.7	8.3	8.0
Agri-Plex Fe 8%	8.0	8.3	8.0	8.3	8.3	8.3	8.3	8.3	8.3	3.7
Sprint 138 Fe	8.7	9.0	9.0	9.0	8.7	8.7	8.7	9.0	8.7	8.0
Sprint 330 Fe	9.0	9.0	9.0	8.7	9.0	8.7	8.7	8.7	8.7	8.3
FeSO	7.0	7.7	7.7	8.0	8.3	8.0	7.3	8.7	8.7	8.3
MnSO	7.0	7.7	7.3	8.3	8.0	8.0	7.7	8.7	8.7	7.7

Visual quality is based on a rating of 1 to 9; 9=dark green turf; 1=dead turf; 6.0=minimum acceptable quality.

Source: Dr. Michael Agnew, Iowa State Univ.