

GOLF & ATHLETIC TURF

LEADERS of the PACK

PGRs on fairways and deep aerification are just two ways that today's superintendent is responding to the challenge of better maintenance for better golf courses.



■ Using plant growth regulators (PGRs)—for *Poa annua* suppression and less frequent fairway mowing—is perhaps the fastest-growing trend among golf course superintendents across the nation.

"I've done a little of it," admits **Joe Alonzi** of Westchester Country Club in Rye, N.Y. "The PGR apparently weakens the poa but doesn't affect the bentgrass. It also slows plant growth so you don't have to mow it as often.

"If you're going after the poa, there's some yellowing, but if you just want to cut down on mowing, you don't see as much (discoloration). The rates are different."

Mark Esoda at Atlanta Country Club, **Rick Boehm** at Wright Patterson Golf Course in Beavercreek, Ohio, **Tom Kintzer** at Carlisle (Pa.) Country Club, **Dave Dutton** at the Links of Stono Ferry in Hollywood, S.C. and **Gene Daniel** at River Hills Country Club in Lake Wylie, S.C. also reportedly use fairway growth regulators.

Though at least half a dozen PGRs are available to the golf course market, the

product of choice seems to be Primo, introduced in 1993 by Ciba Turf & Ornamental.

Dr. Joe DiPaola, technical representative for Ciba, says that field tests at Ohio State University show no phytotoxicity on plots where Primo is used at rates up to ¼ oz./1000 sq. ft.

Primo, DiPaola notes, allows superintendents to skip weekend mowings when courses are busy. In a bentgrass divot recovery study at Michigan State University, he further points out, "Primo was doing as well or better than check plots, and data on bermudagrass show similar results."

More aerification—Though aerification is not new, more superintendents are doing more of it. Deep aerators like the Verti-Drain and Floyd McKay Drill Aerofier give superintendents the opportunity to penetrate deeper into the soil profile.

"In the last five to seven years, the Verti-Drain and the variability you can have with it is just tremendous," says **Brad**

Settings like this one at Springvale Country Club in North Olmsted, Ohio, are becoming more popular as superintendents try to offer players and members a natural environment in which to play golf.

Kocher of Pinehurst (N.C.) Golf Club. "Everyone I know either has (a deep aerifier) or has access to one."

Aerification with the water-injection (Hydroject) process developed by Toro, Inc., is also becoming more popular. And greens rolling in combination with aeration promotes faster greens.

"I started rolling because of the PGA tournament we had here earlier this year," says Alonzi. "I found out that once you do it for the pros, you have to do it for the members, so we continued through the summer.

"I haven't found a drastic difference, but on hot windy days we might have to water a little more."

John C. Mood of Sandy Run Country

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'You'll see more courses just letting wildflowers and fescues grow.'

—Tim Smith
Hawk's Nest

Club in Oreland, Pa. also started rolling his greens this year.

Managing the wilds—More frequently, supers are letting some of their rough areas grow wild, a concession to the trend of "environmentally friendly" courses.

"We let wild (rough) grasses just grow and they look gorgeous—as long as you do it in areas that aren't in play," notes Alonzi. "I haven't gotten any complaints, either, except in marginal areas where some players have lost their golf balls."

Tim Smith, who supervises Hawk's Nest Golf Club in Creston, Ohio (see article, page 27) thinks trends like this make the course easier to maintain.

"We've got a course with more of a Scottish 'links' look," he says. "I think you'll see more courses just letting wildflowers and fescues grow. We've also planted trees in areas where it's easy to maintain around them, and we have tapered creek banks that we can run equipment down to the edge of."

C. Thomas Haudenschild of Highland Golf Club in Shelton, Conn. reports he's planted more wildflowers, and **Al Comeau** of Cummaquid Golf Club in Yarmouthport, Mass., says he's replaced some annual plantings with wildflower sod. **Wayne Brown** of Scovill Golf Course in Decatur, Ill. is using more ornamental grasses, wood chips and shrubs in place of grass.

The management—Supers are doing more in the way of public relations—especially public courses. For instance, Hinckley Hills Golf Course in Hinckley, Ohio sponsors a charity golf tournament. It's called the "Open Heart Open," and this year's was the 14th annual event.

"Ever since my father had open heart surgery, we've sponsored this tournament," says superintendent **Jean Esposito**. "All proceeds—usually about \$5,000—go to University Hospitals' cardiology research unit. We get the local distributor to contribute the use of Club Car golf cars, and a local restaurant donates the food service." All donations, Esposito says, are 100 percent tax deductible.

"After the tournament, we have an auction of collectibles from the Cleveland Indians and other American League



Kocher: Deep aerifiers popular with friends.



Esposito: Charity events popular for public relations.



Downing: Accepting managerial responsibilities.

New golf course maintenance trends

■ Here's what a variety of golf course superintendents reported they would do differently in 1994. The mini-survey was taken at the Golf Course Superintendents Association of America convention in Dallas earlier this year:

"ADDITIONAL PLANTERS"—**Faron Stoops**, Chambersburg Country Club, Scotland, Pa.

"ADDITIONAL FLORAL PLANTERS; ROOT FEEDING OF ALL TREES"—**Rich Pollock**, Eagle Run, Omaha, Neb.

"MORE PERENNIAL AND ANNUAL PLANTINGS"—**Kathy Eldridge**, Homewood Golf Course, Ames, Iowa

"BUNKER RENOVATION; INCREASING AERIFICATION PROGRAM; INITIATING USE OF MORE FLOWERING PERENNIALS"—**Frank Rendull**, City of Dayton, Ohio

"JUST BUILT A GREENHOUSE"—**Jack Birdwell**, Spring River Golf Course, Roswell, N.M.

"AERIFICATION OF TEES; SEEDING MORE THAN ONCE A SEASON"—**Richard Ahrens**, Decatur (Ill.) Park District

"USING 'EXHIBIT' TO CONTROL WEBWORMS; USING BIO-BACTERIA TO REDUCE BROWN PATCH PRESSURE ON BENTGRASS GREENS"—**Tom Schlick**, Marriott's Golf Club at Shiloh Falls, Pickwick Dam, Tenn.

"CONSTRUCTION OF SOIL FERTILITY MODIFICATION PROGRAM"—**Ron Mahaffey**, Oakhurst Country Club, Clayton, Calif.

"INTEGRATED PEST MANAGEMENT; NEW NEWSLETTER FORMAT"—**Paul Schippers**, The Moor's Golf Club, Portage, Mich.

"ENLARGE SOME TEES; BEAUTIFY CLUB ENTRANCE"—**John Segui**, Waynesborough Country Club, Paoli, Pa.

"AERIFY AROUND GREEN BANKS AND OVERSEED"—**Ken Smith**, Beechmont Country Club, Cleveland, Ohio.

—J.R.

teams, the Cleveland Browns and the Cleveland Cavaliers."

Finally, says **Dave Downing II**, "we've all had to be better managers." He's director of golf course operations at Wild Wing Plantation in Conway, S.C.

"We're all into more record-keeping, safety, training, public relations, budgeting, selling and communicating. But playing conditions are still very important: if the grass isn't right, you're hitting the road."

Kocher—like Downing, a multi-course superintendent—puts it this way:

"You've got to keep oiling the wheels. When people come visit our course, you want them to see that you continue to do new things and continue to maintain old things. If you're not doing that, then they're going to notice and maybe they'll go somewhere else. People vote with their feet."

—Jerry Roche

Going from dirt to golf: a whole new ballgame

Conscientious golf course superintendents like Tim Smith are involved in construction from the very beginning.

■ In 30 years working at four golf courses and country clubs, Tim Smith thought he'd seen it all. Then Mrs. Betty Hawkins hired him as superintendent of the new Hawk's Nest Golf Club she was building in a rural section of northern Ohio.

Smith found out that he hadn't really "seen it all."

"Everything that had to do with building the course was new to me," he remembers now. "I'd done little segments of it all, but I'd never gone from dirt to golf. And, believe me, it's a whole new ballgame."

In building the 18-hole course, contractors moved 350,000 cubic yards of soil. That included digging three lakes with seven surface acres of water. It also meant planting 350 new trees on what had previously been leased farmland.

Smith suggests that anyone involved with building a new golf course—superintendents included (superintendents especially)—make sure a good feasibility study is done beforehand. The study should include checking with the appropriate government agencies to comply with all laws. You'd be surprised, Smith says, at the wetlands regulations that exist, the pains associated with getting sewage lines installed and getting utility clearances.

"You run into lots of things you don't expect," Smith relates. "For instance, if you're drilling a well for water that more than 25 people will be using, you'll need \$3,000 to get EPA approval."

Getting the right architect and contractors are also key. The Hawk's Nest architect was Steve Burns; Central Florida Turf was the general contractor. Other contractors laid asphalt for cart paths, did additional excavation work, and designed and built the new clubhouse.

Because her family had been in business in the community for 40 years, Mrs. Hawkins did not necessarily go with the low bidder when selecting contractors.

"She wanted to keep as much money in the area as possible," Smith notes.

Bracing for problems—Tongue in cheek, Smith also recommends making sure the weather cooperates during construction and—especially—during the grow-in.

From ground-breaking in April, 1992 until Hawk's Nest's first nine holes opened in July, 1993, 128 days of construction



Most superintendents involved in golf course construction projects run into bottlenecks they don't expect. Tim Smith found he owed the EPA \$3,000 for approval of on-site wells.

time were lost to rain. Then, just before the front nine began growing in, the weather completely reversed itself.

"Mother Nature didn't cooperate at all, and that was two-thirds of my problem," notes Smith. "When we started running short of water, I cut off seeding the last two acres. The water was gone; if we'd had to go four more days, there weren't any more rabbits in the hat."

One of his employees was assigned the task of hauling in as many trees as he could each day. Three weeks later, when the cycle was complete, he'd start over. The liberal use of mulch around trees helped their survival, Smith believes. He lost only 14 of the 350 new trees.

As luck would have it, with no more "tricks left," Smith watched as the land that would be Hawk's Nest was pelted by a "nice healing rain."

Finishing up—Because of financial considerations, the front nine had to be opened as soon as possible, midway through the 1993 season. The second nine opened April 30 of this year.

"The longer you have, the better," says Smith. "But somewhere along the line, you have to get the cash register ringing."

The finished course is a beautiful mix of bentgrass, ryegrass and Kentucky bluegrass. The grasses for the tees and USGA greens were chosen by Smith himself.

The greens are Pennlinks bentgrass cut at $\frac{3}{8}$ "—every day. The multiple (4) tees are Penncross bentgrass cut at $\frac{1}{4}$ ". Fairways are a ryegrass/Kentucky bluegrass mix.

Though business was slow at first, since Hawk's Nest opened up to its full 18 holes, it's "getting better every day. We've had nice write-ups in the *Cleveland Plain Dealer*, the *Akron Beacon-Journal* and the local paper, the *Daily Record*," Smith relates.

He and Hawk's Nest are a good pair. Smith is a third-generation golf course superintendent who previously worked at Shaker Country Club, Beechmont Country Club, Acacia Country Club and Pine Ridge Golf Course. He was also a golf car service manager for three years at Baker Vehicle Systems.

"Now the golf course work is starting," he says. "My fear was the unknown; now that it's turf, I'm much more comfortable."

—Jerry Roche

Non-monetary motivation for golf, athletic field employees

by Sam Crowe
and Craig Conner

Finding ways to motivate your maintenance staff is no easy task. The work can be tedious and monotonous, even at the best of times.

While an assistant or mechanic may be self-motivated, your general staff will often need special reward programs to provide motivation.

Salaries are certainly a major component of any reward system, but research indicates that money is only one of an employee's motivations to work. He or she also wants a sense of importance, autonomy and inclusion.

The following are several suggestions on how the supervisor can create a family atmosphere and motivate his or her staff without using salary increases.

1) Provide a few generous perks such as a free lunch program. This makes employees feel that not only are you paying for them, but you are also providing for them. Meals don't have to be extravagant—sandwiches and chips are enough.

2) If you are a golf course superintendent, you can allow golfing privileges. Your staff will become better educated about the game, and will better understand how to prepare the course for fair play. This program also allows employees a chance to enjoy the fruits of their labor.

3) Another privilege might be allowing employees to use the shop facilities. Access to tools and equipment provides employees with a way to save money on their personal repairs (usually automobile). They may also be able to use the facilities to generate extra income for themselves.

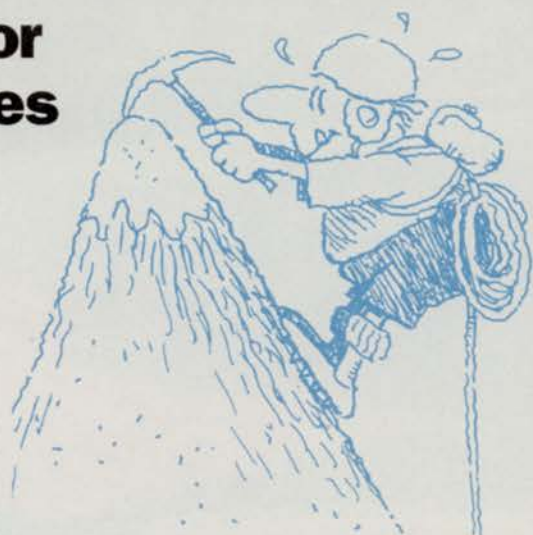
(Keep in mind, however, that this privilege can be abused. It should be carefully monitored.)

4) Parties also provide a good source of motivation and morale-boosting. (Outdoor) maintenance work seems to follow a pattern of periods of high stress followed by periods of dull monotony. A party can provide relief from either the stress or the boredom.

Timing is important to a party's success. It's just as important to break up the monotony of winter equipment repair as it is to celebrate the end of a long, hot summer.

These types of activities don't have to be limited to parties; sporting events and movies are great tension-breakers, too.

5) The suggestion box is still an effective motivational tool. Your staff may discover ways to make their work more efficient, more effective or more fun. The suggestion box provides an outlet for their own ideas—ideas that may improve your organization and also provide the staff



with a sense of autonomy.

6) Another well-tested technique is the Employee of the Month recognition program. Outstanding employees, for instance, can be rewarded with a day off, letting them know that their hard work is noticed and appreciated.

While all these ideas may not be feasible for you, most of them are easy to implement. If you don't like these ideas, try to create some of your own. The result will be a satisfied, productive employee.

—The authors are head and assistant golf course superintendents at Monroe Golf & Country Club, Snellville, Ga. This article excerpted from "Through the Green," the magazine of the Georgia Golf Course Superintendent's Association, May/June, 1993.

10 Golf design considerations to speed play

■ While there are many solutions to slow play, Don Knott, president of the American Society of Golf Course Architects, believes some design considerations should be taken into account. Here are his suggestions, some of which are applicable to superintendents as well as designers:

1) Provide efficient golfer circulation throughout the course. For example, make certain golfers always move off to the sides or behind greens rather than walk back to the front.

2) Clearly mark out of bounds areas to minimize time spent searching for balls in

unplayable areas.

3) Multiple tees equalize the hole's length, help golfers align, and may reduce severity of doglegs and hazards.

4) Greens that are substantially open in the front provide easier access and allow for the run-up shot.

5) Minimize severe undulations in greens [or place pins in areas where undulations won't cause so many three-putts].

6) Mowing patterns can provide a wider landing area for average and short hitters. Narrow landing areas should be located only where appropriate or necessary.

7) The edges of water hazards should be clearly defined and marked for shorter ball searches.

8) Use the lowest possible mower cut for both fairways and roughs. Leave just enough height on the rough to encourage definition and the desired playing characteristics. Trim trees to swing height and reduce brush in high play areas.

9) Fairways should be maintained as containment areas using mounding to retain a slightly errant shot.

10) Accurately mark yardage, including vertical yardage markets for quick identification.

"A well-drained course with ample playable areas, properly placed bunkers, visible water hazards and smaller greens usually plays fastest, Says Knott. "The key is to provide a challenge without overwhelming players."

Working out budget priorities

by Dale Getz

■ Coaches and athletes will always want more field time, and we'll always have more things on our "wish list" than the budget will allow, so cooperation within the University of Notre Dame's athletic department is vital.

For example, the varsity team in the midst of its playing season receives the highest priority on practice field use. In the fall, football and soccer get the prime time for practices. Secondary priority goes to other varsity teams. Club and intramural sports needs are worked into open slots in the scheduling.

Our area of Indiana has a short season for active turf growth. Turf establishment or renovation must be scheduled around field use. Most such projects begin in early spring and are completed by late fall.

I work directly with coaches on day-to-day situations like planning field use and rescheduling rained-out practices or games. Low-cost special requests such as field painting that wasn't originally planned generally can be worked into my



Notre Dame's football field to be lowered two feet by staff of Dale Getz (inset).

budget. Requests that require a large allocation of funds or labor hours are submitted to the assistant athletic director for approval and coordination.

Our coaches appreciate the level of maintenance and high standard of field quality. They notice and understand the effect of adjusting mowing height, over-

seeding, aerating and other procedures. Student athletes, alumni and spectators have also grown to understand the importance of superior sports turf.

I submit three budgets each year: for the football stadium, baseball complex and all other athletic grounds. They break planned expenditures into categories like capital improvements, repairs and maintenance, supplies, utilities, postage and phone.

As the level of play rises, so does the quality of the sports fields. The athletic program and its facilities have grown at the same rate.

We've worked to become more efficient as participation in sports at N.D. has increased at all levels. During the last few years, women's soccer and softball have become varsity sports, creating a need for their share of practice and play time.

To expand field space, we're converting a turfed parking area to practice fields. Also, an artificial turf field has been converted to natural turf.

All of this resulted in a 40 percent increase in the number of turfed sports fields, while my staff has grown by one.

The biggest upcoming project is lowering the football stadium two feet to improve spectator "sight lines," effectively adding 20,000 seats. We will install new drainage and irrigation.

Renovation starts at the end of 1995 season. The field will be ready for play by the 1996 season. Renovation will be completed in 1997.

—Dale Getz is Notre Dame University's athletic facilities manager and active member of the Sports Turf Managers Association.

From the business side...

■ Notre Dame's athletic department contains 40 sub-departments: 16 administrative departments and one for each of the 24 varsity sports. Each sub-department budget is reviewed and submitted to the budget committee for approval in October or November. The fiscal year ends June 30th.

We don't budget money to establish or renovate a field, or for other major projects. Those proposed expenditures must be presented as a formal plan.

We prioritize project requests to establish the top 10 according to the total goals of the department and the University. This list is presented along with the standard budget requests.

We show 10 special requests, but seek funding for the top four or five. This lays the groundwork for the following year's requests. For example, because women's soccer recently became a varsity sport, we may show a new soccer field as fourth on the list, and bleachers for that field as eighth. This spreads out a \$200,000 project into workable segments, rather than asking for everything at once. Budgets are approved in April or May.

Funds and endowments can be desig-

nated for athletics by contributors through the central development office, creating an area we can tap for smaller special projects. All management personnel and coaches in the athletic department are available to answer questions, show the facilities and explain needs in further detail to potential donors.

Dale Getz reports directly to me on major issues. The coaches report to the assistant athletic directors. Priorities are set by the administration. This helps us properly manage intra-department needs.

The easiest way to have good athletic fields is to have great people and rely on their judgement. Sports turf management takes the ability to coordinate the complex interaction of science and "art." Dale has the expertise to get and keep the fields in shape and the knowledge of what's best for each field and its turf. Just as the athletic trainer has the final call as to whether an athlete can play, Dale has the final call on whether or not a field can be used.

—The author, Bubba Cunningham, is athletic department business manager for the University of Notre Dame.