

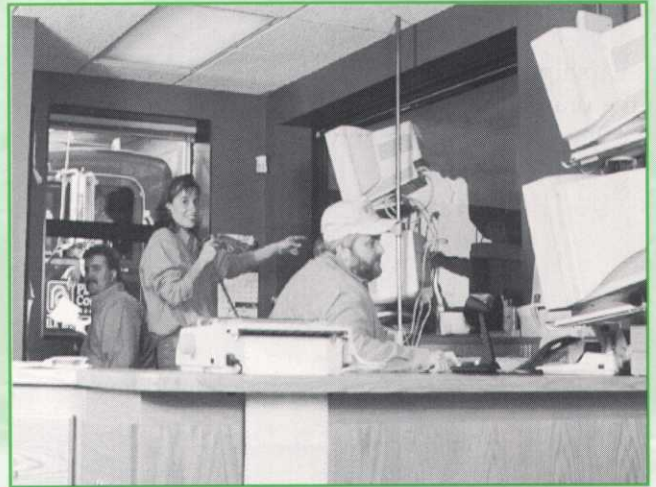


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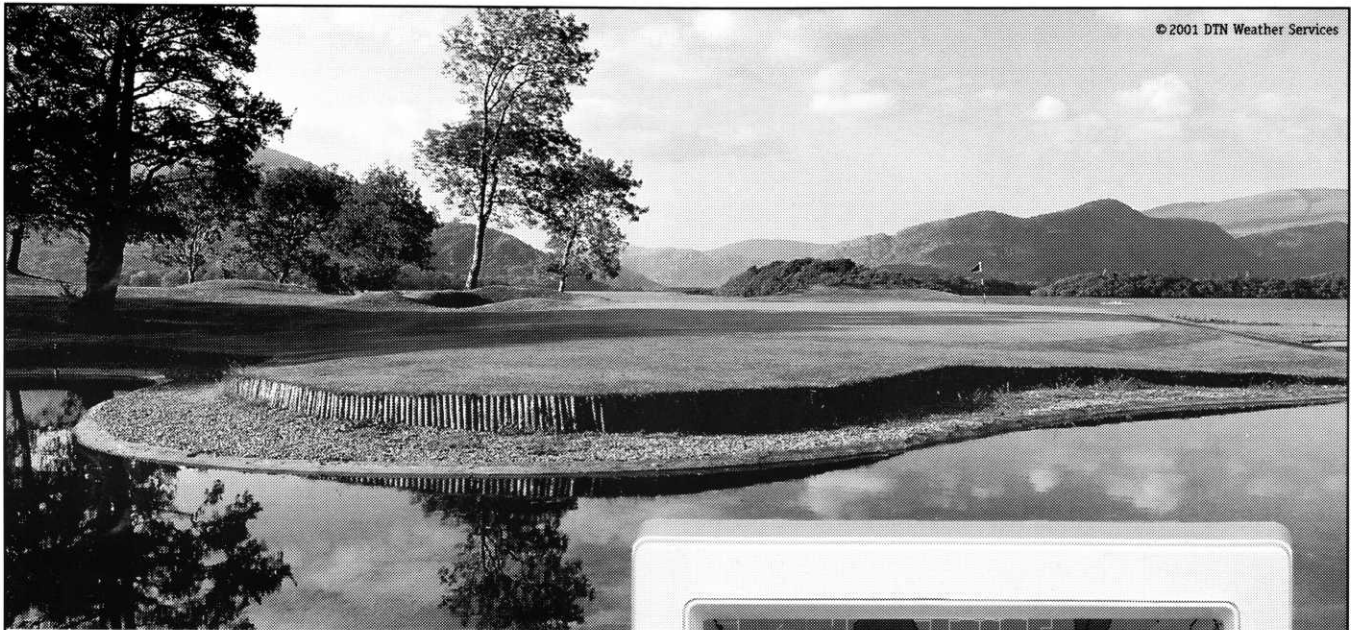
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Dacotah Ridge—

(Continued from Page 10)

Hole 10, Par 4, 394 yards

Standing on the tee provides a dramatic view of this uphill par four. Play over Wabasha Creek to the fairway on the other side. It is better to be long on your approach shot as the green is protected in front on both sides. The slope behind the green will contain shots that are hit long.

Hole 11, Par 3, 157 yards

Be sure to play enough club on this spectacular par three, as it is all carry to the green. The tees are elevated and the green is receptive but shots coming up short will be wet.

Hole 12, Par 4, 372 yards

When on the tee of this medium length par four you must make a choice to play safely out to the left side of the fairway away from the lake or risk skirting the water. The closer you are to the water the shorter the approach and it also provides a better angle into the green.

Hole 13, Par 5, 500 yards

The long hitter can risk going for the green in two but must accurately place the ball between the lake on the left and the greenside bunker on the right. Safely laying up short of the lake is an option but provides a more lengthy approach shot to the green.

Hole 14, Par 4, 410 yards

Be sure to hit a big drive here. The fairway is framed on

both sides to contain shots. Bunkers on both sides protect the green but it is very deep and the approach is wide, making it receptive to fairway wood shots.

Hole 15, Par 4, 410 yards

Your tee shot is slightly downhill on his dogleg right. Favor the left side to avoid the fairway bunker protecting the turn of the dogleg. Approach the green from the left side as well because the deep bunker protecting the right front green presents an intimidating recovery shot.

Hole 16, Par 3, 196 yards

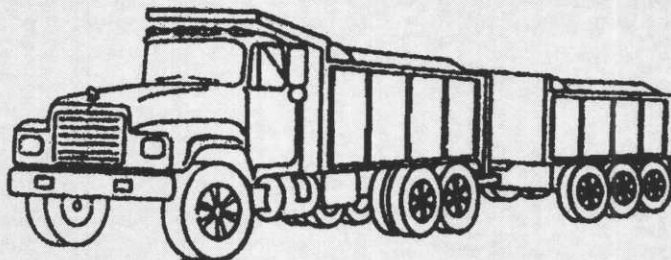
This is a long downhill par 3 that is protected on both sides by sand. The right bunker is enormous and the green is angled from left to right. There is a ridge left and short of the green, which you can use to roll the ball onto the green.

Hole 17, Par 4, 330 yards

A short dogleg left that has a dramatic fall of forty feet down to the creek the entire left side of the hole. You can play it safe out to the right or bite some off some of the corner and have a wedge to the green.

Hole 18, Par 5, 552 yards

This dramatic finishing hole has an elevated tee. A properly placed drive is essential to cutting off the corner of the sharp dogleg around Wabasha Creek. The second landing area can be reached from the first by playing over the creek and fairway bunker on the left. The creek protects the green and it also cuts in behind the green so don't go long. The right side sweeps up to provide a longer safer route.



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University of Minnesota Field Day Set July 26th

By JON POWELL
University of Minnesota

Have you ever wondered what type of research was being conducted at the University of Minnesota related that would be relevant to turfgrass management? How is that research related to the day to day operation of your profession? Here is your opportunity to experience first hand what is going on at the University.

The University of Minnesota, in conjunction with the Minnesota Turf and Grounds Foundation is pleased to announce the second annual University of Minnesota Turf and Grounds Field Day.

This event is designed to give you an opportunity hear about the research activities at the University and to examine the field plots where the research is being conducted. The other goal of the field day is to provide an additional opportunity for you to become acquainted with the University faculty and staff that are conducting turfgrass research. This year we are especially pleased to welcome Dr. Brian Horgan to the U of M turfgrass team. The speakers will present their research to small groups and time will

be allotted for questions and discussion.

The turfgrass research will cover a broad range of topics including turfgrass breeding, soils, nutrient fate, ornamental grasses, disease management, and new technologies. Attendees will also have the opportunity to take time to evaluate turfgrass varieties in the National Turf Evaluation Program (NTEP) trials on campus including Kentucky bluegrass, fairway bentgrass, and the perennial ryegrass trial.

In addition to the turfgrass track of the field day we will also be offering a concurrent session that will address arboriculture and landscape. The landscape and arboriculture track will highlight some the features of the demonstration gardens, Dutch elm disease management, and some of the more exotic species cultivated on the University of Minnesota St. Paul campus.

The field day is scheduled to begin at 9:00 AM and end by 1:00. As with last year, special parking privileges will be available for attendees. The cost for participating in the

(Continued on Page 23)

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Audubon Program for Golf Courses Announces New Certification Handbook

Golf courses seeking to achieve certification through Audubon International's Cooperative Sanctuary Program for Golf Courses (ACSP for Golf) now have a new tool to help them. A new Certification Handbook, distributed to current program members this fall, helps golf course personnel plan environmental projects, expand conservation efforts, and document their activities to achieve designation as a Certified Audubon Cooperative Sanctuary.

"We wanted to get more golf courses involved in the program and becoming certified, but the amount of written documentation required for certification was a serious drawback for many superintendents," explained Joellen Zeh, Ecologist for Audubon International. "The new Certification Handbook significantly reduces the amount of writing required, instead relying on other types of documentation, such as an audit of environmental management practices, photographs, and "before and after" information."

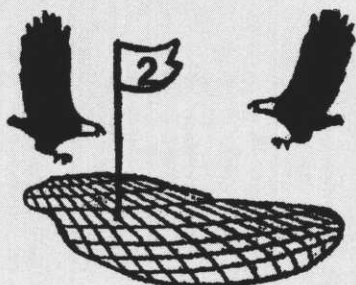
A working group that included academic advisors, USGA Green Section rep-

"We wanted to get more golf courses involved in the program and becoming certified, but the amount of written documentation required for certification was a serious drawback for many superintendents...the new Certification Handbook significantly reduces the amount of writing required."

representatives, wildlife and water quality experts, and golf course superintendents played a key role in developing the new handbook. The group field tested multiple drafts and offered critical feedback and practical information. Use of the Certification Handbook is now in effect, though ACSP Golf members who have already begun the certification process may use the old forms until December 31, 2001.

The ACSP for Golf includes 2,182 courses involved in conservation activities that benefit more than a half-million acres of land; 269 have been designated Certified Audubon Cooperative Sanctuaries. The program is administered by Audubon International, a non-profit organization specializing in environmental stewardship and sustainability, and sponsored by the United States Golf Association.

For more information about the Audubon Cooperative Sanctuary Program for Golf Courses or the Certification Handbook, please contact Joellen Zeh at Audubon International, (518) 767-9051, extension 14, or e-mail jzeh@audubon-intl.org.

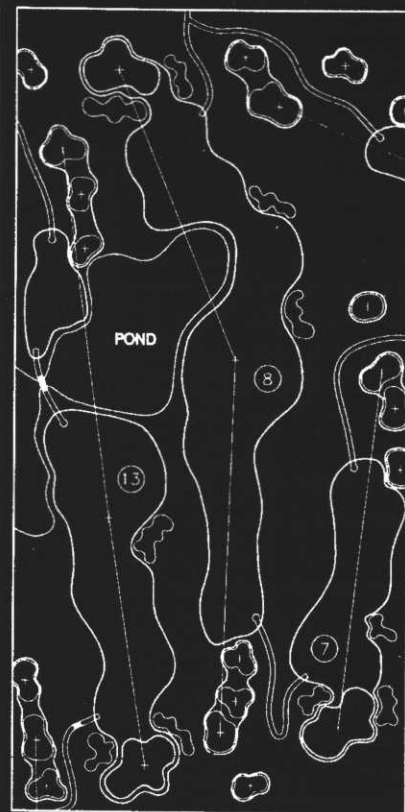


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Now is the Time To Be Conservative With Fertilization

By R.A. (Bob) BRAME,
Director, North Central Region

Dry conditions have returned to much of the lower portion of the North Central Region. Irrigation systems are being put to use at a higher intensity than normal for this time of year. The intensity has been particularly pressing for courses that did renovation work late last fall. We never know what Mother Nature is going to throw at us and the dry weather pattern over the last several weeks has certainly underlined this fact.

Keep in mind, now is the time to be conservative with fertilization. A few weeks back soil temperatures were holding back growth, and now the dry conditions are having the same impact where irrigation is not possible. Increasing fertilization will not counter dry conditions and will only set the stage for lush top growth and root decline. Spoon-feeding is certainly appropriate this time of year and through the summer, but be very conservative with granular feeding.

Recent travel has revealed aeration work in progress or being planned for implementation over the next couple of weeks. This always brings a few phone calls from those golfers who think the superintendent is lying awake at night pondering ways to disrupt their game. I've had similar delusions about highway crews and orange barrels. In reality, progress does cause some short-term inconvenience. Yet, the inconvenience is minimal compared to the benefits that are achieved.

Remember that the target with topdressing is to match growth rate. That is, to integrate sand into the putting surfaces in sync with growth. This normally equates to moderate rate applications every couple of weeks over the fall and spring, yielding to lighter less frequent applications during the summer. Consistency is the key, and here again, some minor inconvenience to play may result. As aeration improves porosity in the root zone, topdressing complements this enhancement, while also offering surface smoothing and firming. Resolve now to maintain a consistent posture with topdressing this season and on into the years ahead.

News from Dr. Paul Vincelli at the University of Kentucky reveals gray leaf spot disease resistance to Heritage at three different courses in the North Central and Mid-Continent Regions. You will be reading more about this topic in the near future as it casts a shadow over gray leaf spot disease management and future use of perennial ryegrass.

We are at that point in the season when it is important to remind those that have not paid for their Turf Advisory Service visit this season to do so in the next few days. There is a \$300 per visit cost savings with payment received before May 15th. Even with early payment, visits can be scheduled whenever they best meet your course's needs. Thanks for your past support and as always we look forward to working with you this season. If your

golf course has never taken advantage of our Turf Advisory Service in the past, give us a call to discuss details/options.



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With the Grain or Against It?

By JAMES SNOW

National Director, USGA Green Section

What do you think golfers complain about most on the golf course? Green speed? Hole locations in unfair spots? Fairways too wet? Not enough water in the ball washers? Based upon the travels of the 16 USGA agronomists who consult at more than 1,600 courses annually,

the answer probably would be the sand in bunkers.

Many golfers assume bunkers are among the easiest parts of a course to maintain, requiring little more than a quick daily run-through with a raking machine. That's why they feel compelled to complain about sand color, depth and hardness or softness. Yet bunkers can cause just as many headaches for superintendents as for players.

It is far easier to keep a set of 18 greens playing to uniform speed and firmness than to ensure dozens of bunkers have the same characteristics. A green can be mowed, rolled, verticut with blades and punched with holes by an aerifier. There are few preventative maintenance practices for bunkers. That said, under the right circumstances a bunker can remain playable for up to 10 years but the wrong factors can cause problems from the start.

Three characteristics dictate how a bunker will play: the physical attributes of the grains, maintenance practices and weather. Some sands placed in a bunker at the top of a windy ridge will perform poorly, just as they would in an area with inadequate drainage.

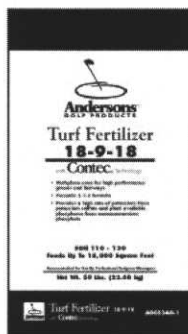
The best possible sand is like Goldilocks' favorite porridge: not too smooth or rugged, not too big or small, not too round or angular. If sand grains fit in a medium range of size, shape and texture, the overall surface benefits. Rounded, smooth sands can be too soft and unstable, like a bag full of marbles, and will produce "fried-egg" lies; grains with many sharp edges and irregular shapes can pack too tightly and produce something closer to concrete.

Weather affects sand more than most golfers realize. From the day it is put in place, bunker sand is subject to contamination. The tiniest wind gusts deposit dust and debris, and heavy rainfall or irrigation runoff causes washouts that introduce soil from bunker faces. Each time this happens the sand becomes polluted with tiny silt, clay and other particles. Over time the open spaces between the sand grains become plugged, resulting in a firmer surface. When golfers complain long enough about its hardness and dark color, the contaminated sand is removed and replaced with new sand.

Course superintendents can take steps to keep sand at its proper surface texture. Soft sand can be made to seem firmer by compacting it with a tamper or vehicle, wetting it to make it more stable, reducing its depth and using shallow-toothed rakes to avoid loosening the sand. Hard sand can be made to seem softer through frequent attention with long-toothed rakes, keeping it dry, increasing the depth of the sand or periodically adding small amounts to dilute the impact of the silt, clay and organic contaminants.

(Continued on Page 37)

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