FALL NEWS NOTES

Additional Research Funding Approved

At its meeting held in conjunction with the U.S. Open Championship at Oakmont Country Club, the USGA Executive Committee approved a \$1.5-million, three-year continuation of a responsible and scientifically based investigation of the environmental impact of golf courses.

As part of these studies, the USGA will support research to 1) understand the effects of turfgrass pest management and fertilization on water quality and the environment and to 2) determine the human, biological and environmental factors that golf courses influence.

Turfgrass scientists at universities throughout the country were contacted in early June to submit project proposals pertaining to best management practices that demonstrate that pesticides and fertilizers can be applied to golf course turfs while protecting environmental quality. During the USGA's Environmental Research Committee meeting in August, new and existing pesticide and nutrient fate projects, as well as studies related to best management practices, were evaluated for possible funding for the next three-year period.

The Executive Committee also approved a USGA-sponsored meeting of wildlife specialists to plan future research concerning the effects of golf courses on wildlife. The proposed research should further document the role golf courses play in providing wildlife habitat, and will improve cooperation between wildlife enthusiasts and golfers, all of whom will gain as we learn more about how to build and maintain golf courses for the benefit of wildlife and the game.

You Think You Have Problems?

We recently received an interesting letter from Dr. D. S. McClymont at Elephant Hill Golf Course in Zimbabwe, Africa, seeking our help with their animal nuisance problems. The golf course is located in Victoria Falls National Game Park, and a feature of the course is the large number of wild animals that are in residence.

The list of animals could make for very interesting reading as part of a Resource Inventory in the Audubon Cooperative Sanctuary Program, but the problem is that the golf course serves as a sort of *animal heaven*. The course provides the only patch of green grass and trees for several hundred square miles. Although most of the animals do little damage to the turf for the majority of the year, they can provide some interesting

challenges. Chacma baboons (*Papio ursinus*) break the flags on occasion, and together with the vervet monkeys (*Cercopithecus aethiops*) they challenge the golfers by occasionally picking up golf balls during play.

The devastating problems come from the warthogs (*Phacochoerus aethiopicus*). These menacing animals leave ugly scars on any turf they decide to attack. Their extremely tough snouts dig up the turf to get at the stolons and rhizomes of the bermudagrass on the fairways, greens, and tees. The size of the holes depends on the root growth; the better the root growth, the larger the hole. Oftentimes, the holes are up to two feet deep. Their voracious eating habits leave any remaining material nonviable



Warthogs consider Elephant Hills Golf Course a gourmet treat, and they can devastate the turf in short order.

for replanting. A family of 10 to 12 can devastate a green in a matter of one or two hours. Laying sod to repair the damage has been tried, but the warthogs consider this à la carte treatment and flip over the turf to gobble the roots in short order.

It seems like all the potential solutions have been tried. Since shooting the animals is not allowed in the nature park, relocation was considered. But this is very expensive, and the commercial operators who handle this task are more interested in larger, more lucrative animals like elephants. Warthogs can travel more than 25 miles in three short days, so relocating them would involve moving them at least 65 miles away so they would not quickly return to their garden of eden.

A ground hog repellent from Germany was tried, but this seemed to act as an appetite stimulant! Even seven-strand electric fencing was used, but this proved worthless as well. The warthogs breach the fencing with ease, squealing loudly before gaining speed to hit the fence and charge through. Sparks fly, but wouldn't you do that to get to your piece of heaven?

Turf Benefits Paper Published

Drs. James B. Beard and Robert L. Green have published *The Role of Turfgrasses in Environmental Protection and Their Benefits to Humans* in the May-June 1994 issue of the *Journal of Environmental Quality*. This USGA-sponsored paper provides a detailed assessment of the research literature and serves as a valid scientific source of information documenting the benefits of turfgrasses.

More than 400 scientific references were identified, obtained, and assessed, and a total of 116 of the references were identified as the most important for developing a scientifically based paper on the benefits of turf-grasses.

The paper highlights a wide range of technical areas, including a) turfgrass evolution; b) history of turf use; c) functional benefits, such as soil erosion control, dust stabilization, groundwater recharge, surface water quality, and heat dissipation; d) recreational benefits; e) aesthetic benefits; and f) contemporary issues such as water conservation and water quality preservation as related to pesticide and fertilizer use.

A free reprint of the paper is available from the USGA Green Section, P.O. Box 708, Far Hills, NJ 07931.

The Green Section is currently working on a layman's version of the paper for distribution to the Allied Associations of Golf, the media, and the general public. The scheduled completion date is September 1994.

Turf Advisory Service Fee Changes for 1995

To keep up with increasing costs of providing quality turf advisory services to its member clubs and to the game of golf, it is necessary for the USGA to increase the fees charged for the Green Section's advisory visits. Because our agronomists can schedule much more efficiently with early notice of your request for a visit, you will find a significant break on the fee if you pay before May 15. Following is the fee schedule for 1995:

	If paid by May 15	After May 15
Half-day visit	\$ 900	\$1,200
Full-day visit	1,400	1,700

Despite the increase, the USGA will be subsidizing the Turf Advisory Service with more than \$1 million in 1995, reflecting a commitment to provide golf courses with the best services from a top-quality staff of 16 full-time agronomists. A Green Section visit is still a bargain for the many benefits that can be realized, perhaps more so now than ever. Schedule early and join us for great golfing turf in 1995!

In Memoriam

Dr. Kenyon T. Payne, best known for his dedication and commitment to his students at Michigan State University, died in East Lansing, Michigan, on June 15, 1994.

Under Dr. Payne's direction, the MSU two-year Golf Turf Program grew in numbers and stature to the point where it is now recognized as one of the most successful in the country. One of the unique strengths of the program under Dr. Payne's leadership was the emphasis he placed on encouraging his students to remember the importance of personal values, relationships with people, and contributions to the community.

After receiving his Ph.D. degree, Dr. Payne joined the Purdue University staff as Assistant Professor with responsibilities in teaching and turfgrass breeding. He joined the MSU staff in 1952, and was named Department Head of Farm Crops in 1959. After a short tenure as Dean of Agriculture at the University of Nigeria in Ksukka, West Africa, he rejoined the MSU staff in 1966 and stayed until his retirement in 1988.

Dr. Payne received numerous awards during his career. Most recently, he was awarded the 1994 USGA Green Section Award. Dr. Payne's legacy will continue through the activities of his many students in the turfgrass industry today.

A memorial fund has been established in Dr. Payne's name for the benefit of the golf turf program at Michigan State University. Anyone wishing to make a contribution can send a check payable to Michigan State University, with a note that the contribution is for the K. T. Payne Memorial Fund.

K. T. Payne Memorial Fund Crop and Soil Sciences Department Plant and Soil Science Building East Lansing, MI 48824-1325

ALL THINGS CONSIDERED

For Heaven's Sake, Get Some Insurance!

by DAVID A. OATIS

Director, Northeast Region, USGA Green Section

AVE YOU ever noticed how common insurance is? Everywhere you Llook you see one form of insurance or another. In most states, liability insurance is required before we can even license our automobiles. We have disability insurance and health insurance and life insurance. We have homeowner's and renter's insurance. Doctors, lawyers, and many others buy malpractice insurance. Baseball pitchers may insure their arms, and professional golfers may have special policies for their golf clubs. The point is, most of us have insurance in one form or another because it helps us sleep at night and because it makes good sense.

With insurance so prevalent in our lives, I am constantly astounded that more golf courses don't have insurance policies against the loss of putting green turf. Putting green turf can be lost in the blink of an eye and totally without warning. We can lose it to disease, vandalism, sabotage, and even honest mistakes. The winter storms that bring snow and ice can cause damage, but turf can die just as quickly during hot, humid weather. We can lose putting green turf because of an oil spill or an irrigation system failure, and we can lose it from carelessness. Contaminated or improperly formulated fertilizers and pesticides can destroy perfectly healthy putting green turf in an instant. Considering the number of different ways we can lose putting green turf and considering its relative importance to the game of golf, one would think that every golf course would have insurance policies specifically for their greens. Sadly, many courses do not.

Now, before you start scrambling to call your insurance agent, talk to your golf course superintendent. He or she is responsible for this policy, and it simply amounts to having a good quality putting green nursery. "We already have one!" you say, but do you really? Read through the next few questions and then ask yourself again if you really have a putting green nursery.

- Do the turf and soil in the nursery match the turf and soil in the existing greens? If they don't, plugged or sodded portions will stand out like a sore thumb and may not perform well because of soil layering problems.
- Is the turf nursery being maintained at the same cutting height as the other greens on the golf course? If the nursery is cut ½" higher, it may take quite a while for it to adjust to a lower height.
- Are the topdressing, fertilization, aerification, and pesticide programs similar? If they are not, it may take even longer for the turf to adjust when it is used.
- Is the nursery treated just as the other greens are, or is it in an out-of-the-way location and forgotten more often than not?

• Is it usable at a moment's notice, or is it puffy, thatchy, comprised of a different turf, or mowed too high?

If you have a good nursery, you will find a hundred uses for it. Nurseries can be used to test mowers and new products, and they provide a great training ground for new personnel. They can be used to patch damaged areas or to expand shrunken greens. They are really helpful when disaster strikes. If you don't have a good nursery, probably there will come a day when you wish you did!

The message is, Don't get caught with your pants down! Have as large a putting green nursery as possible. It should be at least as large as the largest green on the course and preferably double that size. The soil and grass types should match the existing greens. If several different types of greens exist (different grasses, soils, etc.), you may need more than one nursery. Nurseries can be built inexpensively by using a few inches of the existing topdressing material and a mixture of shredded aerification plugs and various cultivars from seed.

Yes, there is some cost involved, but the advantages of having a good quality putting green nursery make the cost insignificant. This is an insurance policy you cannot afford to be without, so for heaven's sake, get some insurance!