



Funding the future

Professor H. B. Musser has made an investment in the future. He is the developer of Penncross Bentgrass, Pennlawn Fescue, author of the book *Turfgrass Management*, and a noted educator.

Professor H. B. Musser devoted his career to grass seed research. As a tribute to this outstanding Pennsylvania State University Turf Seed Agronomist, the Musser Foundation was formed.

The foundation's purpose is to assist graduate students in turf research through a fellowship program. This means students who have finished their undergraduate work and are going into turf research may receive financial assistance at this critical point in their careers. Only the interest earned from the H. B. Musser Fund will be used for fellowships, so the dollars you contribute keep on working in perpetuity.

If you or your company are involved in the sale or use of turfgrass or turfgrass-associated products or services, there's no better way to help yourself and the future of the turf industry than an annual contribution to the Musser Foundation.

Contributions may be made in the name of a loved one through the Memorial Fund, or to the Turfgrass Research Fellowship Fund.

"A fellowship involves an exceptional graduate student doing needed research, writing a thesis, adding to turfgrass literature and providing leadership for the future."

THE MUSSER INTERNATIONAL TURFGRASS FOUNDATION
of the H. B. Musser Turfgrass Fellowship, Inc.



Please send contributions in care of:

Dr. Fred V. Grau
P.O. Box AA
College Park, MD 20740

A nonprofit organization dedicated to fostering Turfgrass as a learned profession; to enhancing the lives of people all over the world through Turfgrass, and to supporting education and research in Turfgrass development and management.

NGF FIELD STAFF NOTES SECTION

Edited and Compiled by Harry Eckhoff
Director Information Services

CHICAGO AREA PARKS TO RESEARCH USE OF WASTEWATER ON LOCAL TURFGRASSES

By Lorraine Abbott
Great Lakes Region Director

The February Golf Market Report carried an article entitled, "Federal Funding Spurs Wastewater Irrigation for Recreational Turf." The article told of a recently escalated funding program by the Environmental Protection Agency (EPA) to assist sewage treatment plants in their disposal of wastewater utilizing land sources instead of natural waterways.

Focus was made on benefits which could be realized where municipalities and area golf courses collaborated in arranging for wastewater, or "effluent", to be properly managed and carried for use in golf course irrigation. The words, "properly managed" implied that **careful local research** should precede any attempt to implement such an arrangement for irrigation, to insure that contents of the wastewater are compatible with the nutrient needs and tolerances of local turfgrasses, and that the unpleasant odors are eliminated (all of which previous research studies have indicated can, through special treatment, be achieved).

Such local research is being carried on now in the Chicagoland area where, due to international restrictions on Lake Michigan water usage and the continual drop of well water levels, fresh or potable water sources are becoming increasingly scarce and expensive.

At a recent Greens Seminar sponsored by the Chicago District Golf Association, area superintendents' representative, Bob Williams of Bob O'Link Golf Club, declared that, "I foresee within the next two or three decades, that most of our courses will be forced to use effluent wastewater for their irrigation supply. With this kind of handwriting on the wall we should be getting involved in learning how to use effluent. We are planning just that in conjunction with the North Shore Sanitary District and their filtration plant in Highland Park."

Williams related that the plant was currently discharging from 12 to 20 million gallons of treated wastewater into the Skokie River, which ultimately feeds into the Gulf of Mexico, **every day**. "That's enough to irrigate an 18-hole golf course for an entire season," he said. "The NSSD is already working on a plan to pipe wastewater along their existing easements to reach a number of golf clubs in the Skokie Valley." At least eight courses would be able to take advantage of this supply.

Aware of the EPA funding program, the Sanitary District contacted the state and federal agencies for funds to install a line and pump station. Due to a shortage of funds and other restrictions at the time, the district was denied but told to resubmit its application at a later date.

Notwithstanding the EPA denial, the timing was obviously right for local research to determine the effects which NSSD wastewater, in its various stages of treatment, would have on turfgrasses particular to those courses that could benefit from its supply. If successful, the project could lead other sanitary districts toward considering similar water recycling operations, benefitting virtually every golf course in the Chicagoland area.

Specifics of the project were outlined at the CDGA Greens Seminar, held March 22, by Onwensia Club superintendent, Wolfgang Mueller. Mueller first pointed out the tremendous cooperation surrounding the project, which had been conceptualized by a three-man team comprised of Dr. Al Turgeon of the University of Illinois, Aurora Country Club superintendent Carl Hophan, and Mueller himself. He remarked that its implementation **would be possible** through the Chicago District Golf Charities, the University of Illinois, the North Shore Sanitary District and the Northmoor Country Club.

CONFERENCE PROCEEDINGS AVAILABLE

In November 1978, a significant conference took place in Arlington Heights, Illinois. It was the first conference jointly sponsored by four national golf organizations. It was also the first national conference which addressed itself solely to the topic of wastewater for recreational use, a topic of vital importance to golf course management.

Because of the increasing demand on present water supply and possible future restriction in recreational use, it is important to investigate sources of supply other than potable water. Wastewater potentially has great value for irrigating turf. Speakers from throughout the nation assembled to lend their research and experience in use of wastewater on land treatment.

Proceedings covering this two-day conference are now available. It is 200 pages... cost \$10.00 per copy and should prove to be an important part of every golf course turfgrass management library. Place your order with any of the following organizations.

American Society of Golf
Course Architects Foundation
221 North LaSalle Street
Chicago, IL 60601

Golf Course Superintendents
Association of America
1617 St. Andrews Drive
Lawrence, KS 66044

National Golf Foundation
200 Castlewood Drive
North Palm Beach, FL 33408

United States Golf Association
Golf House
Far Hills, NJ 07931

(Continued on Page 33)

WASTEWATER IRRIGATION RESEARCH

(Continued from Page 32)

In addition, donations of time, funds or materials were being provided by the Chicagoland Golf Course Superintendents Association, the Midwest Association of Golf Course Superintendents, and several turfgrass-related businesses in the area. "Such combined efforts," relates Mueller, "guarantee the success of this worthy undertaking geared to the preservation of our ever dwindling fresh water supply."

Mueller continues, "We plan construction of our turf test plots and ornamental shrubs and ground cover test plots in early April, hoping for completion by early June. These plots will be located on property offered to us by the North Shore Sanitary District." Conducting the research will be Dr. Turgeon, with superintendent Jim Johns and the Northmoor Club assuming the maintenance of the plots. Progress reports will be made periodically by the Chicago District Golf Association from research data gathered. It is expected that the entire project will take two or three years, according to Mr. Johns.

"We feel," concluded Mueller, "that this cooperative effort is a significant development in bringing together the CDGA, the Clubs, the superintendents and the University of Illinois into a most ideal relationship. We appreciate and applaud them for their progressive attitude."

The National Golf Foundation adds its commendation to the entire project and its people, and encourages other communities to pursue similar undertakings of research that will reduce turf irrigation expense by utilizing water more efficiently and in a more environmentally desirable manner for everyone concerned.

★ ★ ★ ★ ★

IRRIGATION — (Continued from Page 30)

Region X (WA, OR, ID, AK)
1200 6th Avenue
Seattle, WA 98101
(206) 442-1203

Region IX (CA, NV, AZ, HI, Guam)
100 California Street
San Francisco, CA 94111
(415) 556-6266

Documents Available:

Federal Register, Wednesday, September 27, 1978, Part III, Environmental Protection Agency, **Municipal Wastewater Treatment Works Construction Grants Program**, Vol. 43, No. 188, U.S. EPA, 340 South Dearborn, Chicago, IL 60604 (or see respective regional office address).

Order Form for Construction Grants Publications, US EPA, c/o GSA-Centralized Mailing Lists Services, Bldg. 41, Denver Federal Center, Denver, CO 80225.

How to Obtain Federal Grants to Build Municipal Wastewater Treatment Works, US EPA, Office of Water Program Operations, General Services Administration (8 FFS), Centralized Mailing List Services, Bldg. 41, Denver Federal Center, Denver, CO 80225.

Policy Statement for Land Treatment Projects contained in the **Construction Grants Program Requirements Memorandum PRM 79-3**, US EPA Office, 230 So. Dearborn St., Chicago, IL 60604 (or nearest regional office). (free of charge)

For listing of all regional EPA offices and other environmental agencies related to water pollution — **Environmental Hotline Directory**, Office of Public and Intergovernmental Affairs, c/o nearest regional agency.

Process Design Manual for Land Treatment Municipal Wastewater, compiled by the US EPA and US Army Corps of Engineers, c/o nearest regional US EPA office.

3rd ANNUAL CROWFOOT OPEN



Our congratulations to Gary Morgan and his dedicated assistants for running a truly first class golf tournament. We also want to thank Tim Heirs and his assistant Ron Andrews for having Suntree Country Club in excellent condition.

Anyone who missed this golf tournament better mark their calendar for next year.



The Sponsors Board was one of the finest ever seen at a golf tournament. Let's hope next year they run out of space and have to double its size.



Dan Meyers had Low Gross Superintendent with a 69.

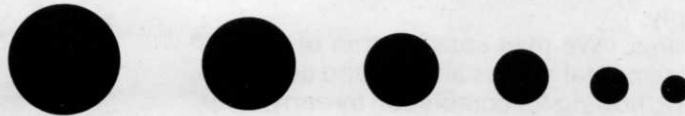


Sonny Smith had Low Gross Commercial with a 76.



George Jones wins a free golf lesson for highest score.

Editorial



Less than 3% of the earth's water is potable. Out of this 3% must come water for human consumption, industry, farming and recreational uses. The latter includes golf courses and is considered to be the last priority by many experts.

By 1990 (ten short years from now) golf course superintendents will find themselves in a critical position. No fresh water will be available for irrigation. Only two courses of action are feasible. Cease to operate (as some California courses have done), or find alternate sources of usable irrigation water.

The most readily available water source is sewage effluent. Billions of gallons a day are being dumped into our lakes, rivers and oceans. We cannot afford to let such a precious commodity be wasted. We, as an association must get the government and the EPA to recognize our needs.

A sewage plant sits in the middle of Coral Ridge Country Club (Ft. Lauderdale) and twelve million gallons a day of effluent is being pumped into the ocean. Not one drop can be used on the golf course. Another example, two regional sewage plants are being built in Dade County (Miami). One of these plant will dump sixteen million gallons of effluent into the ocean daily and the other plant will pump it into the ground. Why can't this excellent source of irrigation water be utilized on golf courses, parks and other recreational areas? A pipeline could be run to these different facilities and the effluent could be purchased the same as city water.

Pinellas County (St. Petersburg - Clearwater) is a good example of utilizing sewage effluent. The effluent from a regional plant is pumped to Innisbrook Golf Course and the entire golf complex (36 holes) is irrigated with this water with no adverse effects on plants, grasses or irrigation equipment.

Golf Course Superintendents must take a firm fast stand on this issue. Within ten to fifteen years farmers will be using effluent (as alien as it might sound now) to irrigate crops. Industry will also be using effluent for 50 to 80% of its needs. If golf courses do not secure the use of effluent within the next two to five years we will find ourselves without this precious commodity.



Kill sod webworm in minutes with low-cost LANNATE.[®]

Now labelled for use in Florida. When an infestation of sod webworm starts feeding on your valuable turf, you just can't afford a slow-kill insecticide. LANNATE[®] insecticide stops damage to turf fast, because it kills sod webworm on contact. And, after LANNATE has done its job, it quickly biodegrades into harmless materials.

LANNATE won't harm your turf, and it won't harm your budget, either. You can treat 1,000 sq. ft. for as little as 25¢.

LANNATE is simple to mix, because it comes in premeasured water-soluble bags that dissolve completely in your spray tank. Give your chemical supplier a call today—and make sure you're ready to knock out sod webworm fast with LANNATE.

As LANNATE is a highly toxic chemical and protective equipment is recommended, read and follow labeling instructions and warning carefully.

 **Turf Products**