

# NORTHWEST TURFGRASS TOPICS

VOL. 14, No. 1

PUYALLUP, WASHINGTON

APRIL, 1971

## FROM THE PRESIDENT'S CORNER



TOM KEEL

The Board of Directors of the Northwest Turfgrass Association met in Puyallup on April 5.

Principal matter of business was reviewing and formulating plans for the 25th Annual Northwest Turfgrass Association Conference to be held in Yakima.

Executive Secretary, Roy Goss, presented the proposed Conference program. It will be an interesting and informative one well suited for our 25th anniversary.

The proposed changes in the Association bylaws were accepted by the Board. Complete copies of these will be sent to all paid up members prior to the Conference.

The Committee in charge of the equipment show has made some good contacts and I feel this will be an interesting added feature to our conference.

The management of the Chinook Motel & Tower is doing an excellent job preparing to host the Conference and I urge those planning to attend to make reservations early. Would like to recommend that members stay at the Chinook in order to be near the "action" and to show appreciation to the management for helping with this Conference.

Hope to see you in Yakima,

Tom Keel, *President*

Northwest Turfgrass Association

## Turfgrass Field Day June 3, 1971

The annual Turfgrass Field Day will be held at the Western Washington Research and Extension Center on Thursday, June 3, 1971. Field Day activities will commence at 10 a.m. on the Turfgrass Research area at Farm 5, which is located six miles east of the main Experiment Station on East Pioneer Avenue. Those of you who have attended this Field Day over the years know the location, but others may pick up maps here at the main Research Station for accurate directions to the turf plots.

In addition to the nutritional studies that have been carried on for several years, persons attending the Field Day will have an opportunity to observe some new approaches for the control of *Ophiobolus* patch disease, which are mostly nutritional, *Poa annua* invasion and control studies, bluegrass longevity studies, and several other small experiments under way.

Mark this date now and plan to attend the field day on June 3.

## Silver Anniversary Conference

1971 marks the 25th year that the Northwest Turfgrass Association has been organized. The Directors of the Association have selected Yakima, Washington as a site for the 25th conference. Yakima is centrally located to all areas of the Pacific Northwest and reduces travel time for many people attending this conference. The conference headquarters will be at the Chinook Motel and Tower. This facility offers ample space for equipment and product displays and good conference-room sites. The Hotel has very pleasant rooms at reasonable costs. A reservation form for the Chinook Motel and Tower is attached to the Turfgrass Topics at this time for you to make your own reservations. The Directors of the Association urge you to patronize this particular site since there is no charge made for conference rooms and other arrangements that the management is making for this conference. If you plan to stay at the Chinook Motel and Tower you will be closer to the center of activity at all times.

The Equipment and Product display is coming along very well at this time and should be a good show for all of you attending. The Equipment and Product Displays will open Tuesday afternoon and will be open at various times, which will be posted throughout the conference.

The golf course tournament for all persons attending the conference will be held at Suntides Golf Course, whose superintendent is Mr. Joe Pottenger. The Tuesday afternoon golf tournament will eliminate frantic ef-

(Continued on P. 3, Col. 1)

## From the Oregon Compost Heap

Information has just reached us that Bob Daughterman, Superintendent at the Longview Golf and Country Club at Longview, Washington has resigned his position effective June 15, 1971.

Dave Gianoli, Superintendent at the Roseburg Municipal Golf Course, the past several years, is leaving for employment at the Lewis River Golf Club at Woodland, Washington.

On March 26, 1971, the Corvallis Golf and Country Club at Corvallis, Oregon was the site of the first Annual Professional - Superintendent - Manager - Club President Golf Tournament to be held in Oregon. John Monson, Superintendent of the Corvallis course, had it in tip top shape for a great tournament. Some teams chickened out because of the fact that Oregon was being lashed by gale force winds clocked at 78 m.p.h. in Portland. Despite the wind and rain a team from Glendoveer Golf Club, in Portland, which included Professional Bob Duden and Superintendent Clarence Sowers, walked away with top honors. The second place winners were the host club group which included Vern Martin, the club Professional and John Monson, Superintendent. Amateur Gross was won by John Zoller, Superintendent, Eugene Country Club.

Frank Zook, formerly the superintendent of the Willamette Valley Golf and Country Club at Canby, Oregon, has moved to Orting, Washington to become superintendent of Hi-Cedars Golf Club. His former position at the WVCC has been filled by Ed Stocke, of Northern California.

Speakers at the Educational meeting of the Northwest Section, Professional Golfers Association, held at the Thunderbird Inn on March 2 at Jantzen Beach, Portland, included golf course superintendents John Zoller, Richard Fluter, Richard Schwabauer, and Dick Malpass. They participated in a panel discussion of "The Professional and Superintendent Relationships." The panel was moderated by William Bengeyfield, Western Director, USGA Green Section.

Richard Fluter, Superintendent of Oswego Lake Golf and Country Club reports that their fully automatic, wall-to-wall irrigation system is now completely installed and ready for operation this summer. Harve Junor, Superintendent of Portland Golf Club, says that they will start installation of their automatic system soon.

Saturday, April 10, a number of superintendents, a few wives, and other invited guests were asked to play the new Delta Park Municipal Golf Course in North Portland. Despite the fact that it was a windy, cool day, most of those invited were able to get in a full 18 holes of golf. This Robert Trent Jones-designed course is destined to be officially opened May 1, 1971. Rumor

has it that virtually every starting time for the first week or so has been spoken for. The course features large greens, 80 sand traps, and several lakes which enter into play on a number of the holes.

Oregon Golf Course Superintendent's Association members Richard Fluter, Richard Schwabauer, Dick Malpass and Multnomah County Extension Agent Willard Lighty have cooperated in preparing a program of 6 2-hour lectures which they call a "Mini-Course in Golf Course Operations" which is being conducted for golf course employees.

**DOES DRAINAGE PAY?** Ask Dick Malpass of Riverside Golf Club. As part of their construction project, last fall, four miles of drainage tile was installed, along with two lakes, and a large sump pump to remove the drainage water from the golf course. Dick reports that they pump from 500,000 to 4,000,000 gallons of water *per day* off the course, over the dike into the Columbia River. The members of the club are delighted with the success of the drainage project in making the course fit for winter play. *Editors note:* Dick Malpass was kind enough to take over the chores of the Oregon Compost Heap for this issue.



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(Continued from P. 1, Col. 2)

forts for everyone to finish their round of golf before the conference opens Wednesday at 1:15 p.m. Wednesday morning will be reserved for registration and visiting the Product and Equipment booths. The tentative conference program is as follows, although no specific times have been assigned to the speakers:

Environmental Quality Control — Let's Do It Right.

Gordon L. Culp, Battelle Pacific Northwest Laboratories, Richland, Washington.

25 Years of Progress in Golf Course Maintenance —

Mr. Charles C. Wilson, Milwaukee Sewerage Commission.

Economizing in Park Operation and Maintenance —

Mr. Charles R. Schrader, Assistant Superintendent of Parks, Seattle, Washington.

Advances in Irrigation, Drainage and Irrigation Concepts —

D. A. Hogan, Karl H. Kuhn and John Pierce, Seattle, Washington

Aquatic Weed Control —

Dr. Richard Comes, Irrigated Research & Extension Center, Prosser, Washington.

Turfgrasses for the Future —

Dr. D. K. Taylor, Canada Department of Agriculture, Agassiz, British Columbia.

Weed Control in Seedling Turfgrasses —

Mr. R. M. Adamson, Canada Department of Agriculture, Saanichton, British Columbia.

Keeping Turfgrasses Clean — A Panel of Turfgrass Managers.

Biological and Mechanical Thatch Control — Roy L. Goss.

Money, Machinery and Management — Bill Bengeyfield, USGA Green Section.

25 Years of Progress With Golf Courses — Joe Much, National Golf Foundation.

All members of the Northwest Turfgrass Association will hold their annual meeting just before lunch on Thursday, September 23. One of the important considerations will be voting upon the revised by-laws.

The Conference will terminate promptly at noon on Friday so everyone can return home.

The banquet will be held on Wednesday evening. There are some surprises in store. We think everyone will be pleasantly surprised with the plans this year.

## Fertilizer and Water Pollution

By Roy L. Goss

Much has been written about water pollution with fertilizers by ecologists. Some claim that agricultural fertilizers contribute heavily to nitrates and phosphates in rivers and lakes.

Available data do not often permit making valid estimates of nutrient transfer from fertilizers to ground and surface waters according to Standford, England and Taylor, USDA researchers at Beltsville, Maryland. A reliable basis for evaluating the effects of fertilizers on water quality requires extensive and complicated studies for these determinations.

When virgin soils in the United States were first cultivated, many were rich in organic matter and plant nutrients. These soils provided far more nitrogen than the crops could use, and losses by leaching to water bodies or by denitrification to the atmosphere were large. As a result of cultivation these natural supplies gradually diminished. Seven million tons of nitrogen fertilizer were applied to our land in 1969. This was still not enough to compensate for the large yearly drop in the capacity of the soils to supply nitrogen even with improved land use and management. Nitrogen is very soluble and some associate the rapid expansion of fertilizer uses with suspected increase in water pollution from nitrates. Besides the nitrogen added to the soil in the form of fertilizers, one must consider the organic matter in the soil and the rate at which it is mineralized, the atmospheric nitrogen that is fixed either symbiotically or non-symbiotically, the nitrogen involved in crop utilization and leaching, the nitrogen assimilated by microorganisms, and the nitrogen returned to the atmosphere as gas.

In the soil plant systems, these processes take place simultaneously. When nitrate was found in water, it is difficult to determine if fertilizers are the source. Increased dependence on fertilizer nitrogen has created opportunities for a more favorable balance between nitrogen inputs and removals than previously was obtainable.

Practical methods must be developed for assessing the nitrogen supplying capacities of soils and the changes that result from fertilizer use. These estimates coupled with greater knowledge of nitrogen requirements of crops and management practices needed for most efficient nitrogen use can provide the basis for realistically predicting fertilizer needs for specific crops and meeting these needs effectively under different soil and climatic environment.

Much has been said about phosphorus in streams and lakes. When this element is added to the soil in the form of fertilizer it is rapidly tied up to adsorption on clays or the formation of insoluble compounds with iron and aluminum. Because of this low solubility, the loss of fertilizer phosphates in water is not significant.

(Continued on P. 6, Col. 1)

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## EMPLOYEE TRAINING PROGRAM

by Dick Fluter

The following is correspondence directly from Dick Fluter, Golf Course Superintendent and member of the Oregon Golf Course Superintendents Association and the Golf Course Superintendents Association of America at the Oswego Lake Country Club at Lake Oswego, Oregon. *Editor.*

Dick Malpass, Rich Schwabauer and I have felt for some time there has been a definite need for some specific training for golf course maintenance personnel. At present, our Community Colleges have not seen this need. (We felt this might catch on if the response was good.) The three of us got together with Willard Lighty, Agricultural Extension Service from Multnomah County, Oregon, and decided to engineer and pioneer a short course for golf course personnel.

We decided on six sessions — each two hours in length, to be taught by qualified superintendents and several extension personnel.

Here is the outline and people who taught. I served as permanent chairman because I was Education Chairman of the Oregon Golf Course Superintendents Association.

Tuesday, March 30 — 7:30 - 9:30 p.m.

Grooming Requirements of the Golf Course—Dick Malpass, Riverside Golf and Country Club and Jim Smith, Professional, Riverside Golf and Country Club.

Tuesday, April 6 — 7:30 - 9:30 p.m.

Soil Drainage and Irrigation — by Richard Schwabauer, Waverly Golf and Country Club and Don Brackett, Soil Conservation Service.

Tuesday, April 13 — 7:30 - 9:30 p.m.

Landscape plant selection and care (for golf courses) Willard Lighty, Cooperative Extension Service and Dick Malpass, Riverside Golf and Country Club.

Tuesday, April 20 — 7:30 - 9:30 p.m.

Fertilizers and Grasses — by Jerry Bacon, Royal Oaks Country Club, Vancouver, Washington and Dick Fluter, Oswego Lake Country Club.

Tuesday, April 27 — 7:30 - 9:30 p.m.

Weed and Disease Control — Tim Mannion, Columbia Edgewater Country Club, Portland, Oregon and Willard Lighty, Cooperative Extension Service.

Tuesday, May 4 — 7:30 - 9:30 p.m.

Equipment care and Maintenance — by Clarence Sowers, Glendoveer Golf Club, Portland, and John Monson, Corvallis Country Club, Corvallis, Oregon.

We sent an invitation to 40 golf courses within about 40 miles of Portland. Sessions were held in a community center in Portland.

The participants in the course receive a certificate of achievement presented by the Oregon Golf Course

(Continued on P. 5, Col. 2)

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## Dick Malpass GCSAA Director

The scene of the second largest golf course superintendent's Association of America Conference ever held was at Denver, Colorado, on February 7-12, 1971. Over 3,480 persons attended the conference. The Rocky Mountain Association of Golf Course Superintendents welcomed fellow golf course superintendents and their wives from throughout the United States and Canada.

Many Pacific Northwest Superintendents were among those attending the educational session and industry show held in conjunction with the conference. The conference was held at the spacious Denver Conference Complex, which includes the huge Currigan Exposition Hall.

Richard Fluter, Superintendent of the Oswego Lake Country Club at Lake Oswego, Oregon, was one of the program speakers.

During this convention R. W. (Dick) Malpass was elected to the Executive Committee of the GCSAA. Dick is golf course superintendent of the Riverside Golf and Country Club at Portland, Oregon. US-GCSAA President Blake has since appointed Dick as Editorial Committee Chairman for THE GOLF SUPERINTENDENT, the national publication of GCSAA. Dick is also serving as Vice-Chairman of the Educational Committee which is primarily involved with the preparation of a program for the 1972 GCSAA convention and show. Other duties involve the attendance at several executive committee meetings throughout the year.

Dick has previously served as President of the Oregon Golf Course Superintendent's Association and is currently chairman of the Board of Directors of that organization. He is also a director of The Northwest Turfgrass Association and a past President of that board. He is currently secretary-treasurer of the Evergreen Chapter of GCSAA and editor of the EVERGREEN Chapter NEWS.

Dick reports that the site of the next GCSAA conference and show will be Cincinnati, Ohio on February 13-18, 1972.

Congratulations Dick on your election. You have worked hard for the position and we know you will do the usual good job and represent the northwest well.—

*Ed.*

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(Continued from P. 4, Col. 1)

Superintendents Association, provided they attend five out of the six sessions.

The turnout has been good, in my opinion. The most we have had is 42, but I believe that shows a definite "need."

*Editor's comments.* I feel these sessions are very beneficial and should be promoted whenever possible. Not only for golf courses but all other areas of Turfgrass management. Parks, cemeteries, schools, are all in need of this type of training and refresher courses. Congratulations to you fellows and keep up the good work.

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(Continued from P. 3, Col. 2)

especially in relation to the quantities released from municipal and industrial wastes.

Erosion contributes more phosphorus to water supplies than phosphorus additions to water bodies from agricultural land. Erosion control practices which include high-levels of fertilization to provide a dense plant cover, will tend to control water pollution from phosphorus.

Obviously, additional studies must be conducted on the behavior of nitrogen and phosphorus in the soils to develop better controls for a cleaner environment.

It is the responsibility of every turfgrass manager to apply fertilizers lightly. Avoid applications that may run into streams or water bodies, know your soil types and drainage characteristic.

## Definition of Golf . . .

"Golf is the simplest looking game in the world when you decide to take it up and the toughest after you have been at it for ten or twelve years. It is probably the only known game a man can play as long as a quarter of a century and then discover that it was too deep for him in the first place.

"Golf is a physical and mental exertion made attractive by the fact that you have to dress for it in a \$200,000 club house. It is what letter-carrying, ditch-digging, and carpet-beating would be if those three tasks had to be performed on the same afternoon in colored socks, jersey, and pants by gouty-looking gentlemen who require a different implement for every mood.

"The game is played on carefully selected grass with little white balls and as many clubs as a player can afford. These little balls cost from fifty cents up and it is possible to support a family of ten people (all adults) for five months on the money represented by balls lost by golfers in a single afternoon.

"A golf course is eighteen holes, seventeen of which are unnecessary and just put around the course to make the game harder. A 'hole' is a tin cup in the center of the 'green.'

"A 'green' is a small patch of grass costing \$1.98 a blade and usually located between a lake and a couple of apple trees, or a lot of 'unfinished excavations' called sand traps. The idea is to get the ball from a given point into each of the eighteen holes in the fewest strokes and the greatest number of words. A favorite expression is: 'I think you're in a trap, I hope.'

"The ball must not be thrown, pushed, or carried. It must be propelled by a bunch of curious-looking implements designed especially to provoke the owner.

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Each implement has a specific purpose and ultimately some golfers get to know that purpose. However, they are the exceptions.

"After each hole has been completed the golfer counts his strokes. Then he subtracts six and says, 'Made that in five. That's one over par. Shall we play for fifty cents on the next hole, too, Ed?' After the final or eighteenth hole the golfer adds his score and stops when he reaches eighty-seven. Then he takes a swim, sings 'Sweet Adeline' with a group of other liars and calls it the end of a perfect day."

—Unknown

## Turfgrass Fertilization Through Irrigation Systems

By Roy L. Goss

Fertilizers applied through irrigation systems is not a new concept. The concept has been applied for many years in various forms of crop management. A few turf men have worked out an adaptation for this process and their experiences have resulted in a variety of opinions and its feasibility. Labor saving is, no doubt, one of the chief advantages of "fertigation." With the present high cost of labor everyone is looking to less expensive means of doing our work.

### ADVANTAGES AND DISADVANTAGES OF FERTIGATION

1. Fertilizer applied through the irrigation system requires only slightly more labor than for irrigation alone.
2. Good surface distribution can be obtained, provided irrigation design and application times are good. High winds will distort water patterns and will influence fertilizer distribution as well.
3. Soluble nutrients may be more available to plants when applied through water solution.
4. Turfgrass burn can be reduced to a minimum.
5. Fertilizer may be applied in smaller amounts and more frequently to insure more uniform growth rate.
6. Nutrient leaching can be better controlled by injecting fertilizer solutions toward the end of the irrigation cycle.
7. Some damage may be caused by corrosive fertilizers to irrigation systems if not properly handled.

High temperature during the summer months can produce heat stresses on turfgrasses. This is the period of time when fertilizer burn or salt accumulation in soils can become highest. Overwatering can normally decrease the oxygen supplies in the soil and heavy fertilizer applications will likewise increase the salt concentrations and both are detrimental to good turfgrass growth when they occur simultaneously. This makes light and more frequent applications of fertilizer more advantageous and safe for the turfgrass managers without greatly increasing the labor budget.

Dr. G. H. Snyder, from the Everglades Experiment Station, University of Florida, reported in the Proceedings of the Florida Turfgrass Management Conference, of a practical system being operated in California. An 18-hole golf course located near Los Angeles utilized his irrigation system operated every night during the dry seasons. The greens received 1-1/2 inches of water per week and the fairways about 1-1/4 inches per week. The Superintendent of this golf course mixed 1200 lbs. of urea, 200 lbs. of Monoammonium phosphate, 300 lbs. of muriate of potash, and 40 gallons of

(Continued on P. 8, Col. 1)

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Continued from P. 7, Col. 1)

a kelp extract in 1000 gallons of water. Approximately 150 gallons of this mixture was applied to nine of the 18 holes by the irrigation system every night. This mixture approximates an 8-1-2 fertilizer. The labor requirement for mixing the fertilizer was estimated to be one man for 15 minutes each five days. The course superintendent reports good success with this method. Obviously, the amount of fertilizer applied was very low and the frequency of application promotes continual feeding for the turfgrasses.

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