

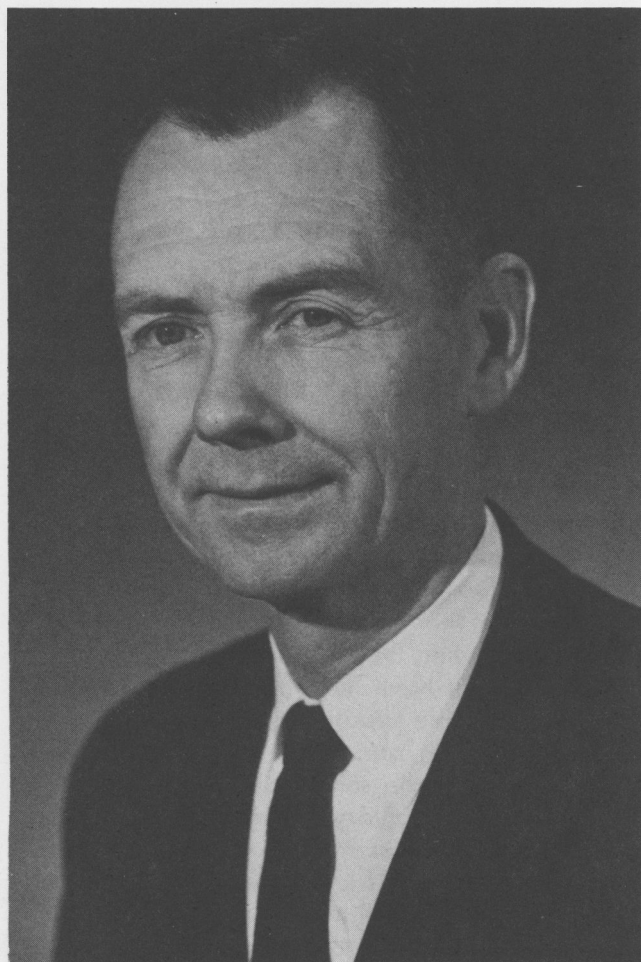
NORTHWEST TURFGRASS TOPICS

VOL. 10, No. 1

PUYALLUP, WASHINGTON

MAY, 1968

From The President's Corner



BY GEORGE HARRISON

While planning the conference for 1968, the thought often occurs, is it really worth the effort? Let's take a look at the pros and cons.

THE PROS

Where else can a professional savor the experience of 200 others in his chosen field, all eager to exchange experiences and profit from the relating of those little bits of information that they have picked up the hard way rather than from a book?

Where else can the superintendent that has a brain child of his own present his idea to a learned doctor of agronomy for approval or discard? This is the way that innovations worthwhile are born.

Where else can one hear and see the theory and then talk to those using the tools which apply this theory? This is the type of exposure that makes

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THEORY AND PRACTICES OF MOWING . . .

BY DR. J.R. WATSON, JR.*

To be suitable for the production of turf, a grass plant must be able to grow and persist under the environment to which it is subjected. Good turfgrass is judged by standards of playability and useability, as the case may be, and unless a grass is able to survive under the type of maintenance demanded by players or users, it must be replaced or maintenance practices must be modified; otherwise, use must be restricted. For those concerned with the production of turfgrass, restriction of use always should be considered a last resort. The primary objective of any turfgrass manager is to produce high quality turfgrass suitable for play, irrespective of environmental adversity.

Quite often practices which are desirable for good grass growth have to be modified extensively to meet requirements for play. Such is the case with mowing practices. The height of cut on a putting green may serve to illustrate this point. The reduction in root growth that clipping to a height of 3/16 to 1/4 inch produces is well known—but try and convince a golfer that the green should be cut at a height of 1 or 1 1/2 inches, even 1/2 inch for that matter. To compensate for the reduction in root growth all other maintenance practices, such as fertilization, watering, cultivating, and pro-

[Continued on Page 4, Col. 1]

Turfgrass Field Day

The annual Turfgrass Field Day will be held at the Western Washington Research and Extension Center on Wednesday, May 22, 1968. The Field Day will begin, as usual, at the Administrative Center on West Pioneer Avenue at 10:00 A.M. Discussions will be held regarding research on disease and weed control.

Following a break for lunch, the group will be reassembled at Farm No. 5, 6 miles east of the main station on East Pioneer Avenue. Discussions at Farm No. 5 will include reports of fertility investigations, new turfgrass varieties, mole control, insect control, proper application of irrigation water, and a summary of pesticide safety.

This will be your opportunity to observe the research and progress and to ask your questions regarding problems that you face in the field.

Oregon Compost Heap . . .

BY
BYRON REED



Things have been stirring here in this state of Oregon in golf course superintendents positions recently. Sam Zook, formerly of Waverly Country Club has moved to Overlake Golf & County Club at Medina, Washington. Mr. Richard Schwaubauer from Willamette Country Club has taken Sam Zook's old job at Waverly Country Club. Mr. Frank Zook, son of Sam Zook, has moved from Greenacres Golf Club at Vancouver, Washington, and has replaced Richard Schwaubauer at Willamette Country Club at Canby, Oregon. Mr. Martin Culp from Kentuck Golf Club at North Bend, Oregon, has moved to the Salem Golf Club at Salem, Oregon. The writer wishes success to all of these people in their new move.

The next Oregon Turf Management Association meeting will be at Newport, Oregon, at the Agate Beach Golf Club. Mr. and Mrs. William Martin are the owners of this fine golf club and will be the hosts. This is our fun meeting with plenty of activities to be enjoyed by the entire family. Newport, Oregon, is one of our fine coast centers and, with the Loyalty Days being held the same weekend as our meeting, May 5 and 6, this promises to be a great fun meeting. If you are planning to be with us, may I suggest that you reserve a place to stay well in advance of May 5, 1968.

Those who did not attend our meeting of last April, held at Sanitiam Golf Club at Sayton, Oregon, are real losers. We were indeed grateful to the fine group of speakers who made this meeting possible. Dr. James Bomocil, Department of Soils, Oregon State University; Victor Gibeault, Oregon State University; Dr. Roy Goss, Washington State University, Puyallup, Washington; Dr. Charles Gould, Washington State University, Puyallup, Washington; and Dr. Norman Goetze, Oregon State University, were the speakers for this workshop and meeting.

Mr. Roscoe Baptist, Superintendent of the Santiam Golf Club, was the host for this meeting. Roscoe is talented not only in his turf management

The Soil Environment BY ROY L. GOSS

Soon irrigation systems will be recharged all over the turfgrass industry to care for the watering needs in the months ahead. Proper use of water will insure the best turf vigor and quality and is an important factor in the soil environment.

SOIL-WATER RELATIONSHIPS

Soils are composed of mineral particles, organic material, air spaces, and water films. There are two types of pore spaces in soils. Capillary pore space is that area made up of very fine spaces that hold water against the forces of gravity. These are the pores that supply water for the plant needs and insures against drouthy conditions. Obviously, a soil that has a high percentage of capillary pore space are silt loams, clay loams, and water. Examples of soils having high amounts of capillary pore space are silt loams, clay loams, and very fine sandy loams. A clay soil has more total pore space than a sandy soil, but more of the pore spaces are capillary [water-holding only] than non-capillary.

Non-capillary pore space is that which is commonly referred to as the air space in the soil. The only time that non-capillary pore space will hold water is when the soils are completely saturated and do not have the ability to drain. This is a most undesirable situation and can lead to the loss of root system and to the plants in general. The pore space in the soil should be about evenly divided between capillary and non-capillary pores for turfgrasses. For example, a loamy sand soil [a soil similar to that found in athletic fields and golf putting greens] will not have more than about 35% pore space. Approximately 15% of this is capillary and about 20% is non-capillary pores. Obviously, a soil of this nature will hold more air than a silt loam. Silt loam soils may contain as much as 50% total pore space; however, the capillary pore space may make up as much as 40% of the total. In this case, little space is available for air.

[Continued on Page 6, Col.1]

ability, but in food arrangement, crowd pleasing, and a super host. Roscoe was assisted at this meeting by his fine wife and members of his family.

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information stick in one's mind. Graphs are great, slides are splendid, but when the senior superintendent says, "it works for me," this is the evidence that convinces.

Where else will be gathered the representatives of nearly every major turf supplier in the Northwest? Men who have contacted nearly every turf account are there only too glad to answer the question of the neophyte or the nearly retired professional. Literally millions of dollars are spent on research and publicity to educate these representatives that you have the privilege of meeting there. Technical knowledge in the use of tools and chemicals are found in the experiences of these people who travel the country serving your industry.

THE CONS

One hundred dollars per registrant will about cover all conference costs [registration, meals, lodging, etc.] in almost every case. Nearly every man in the turf industry has from \$5,000 to \$20,000 in equipment and land invested by him or for him in his job. Is \$100 too much to spend to learn how to use this land and equipment more efficiently?

One mistake in watering or fertilizing can cost the golf club the best use of a \$10,000-green for weeks. One mistake in proper use of a power digger can cost the cemetery many hundred dollars if the machine is not properly maintained or if the grounds look less attractive than those of

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the competitor across the way. One little tip in handling men can increase the effectiveness of a park crew's efforts by 5%. This amounts to thousands of dollars over a couple of seasons!

The time spent is sometimes hard to find. You are behind in your work, your crew is short, your substitute foreman is inexperienced. All of these are good excuses to stay home, but one new idea can save you weeks of man hours to profit your company.

The other people are sometimes inconsiderate. An all-night party next door keeps you awake so you can't concentrate at the next day's session. For every loud celebrator there are fifty who feel the way you do. Gradually this attitude of conventioning at conferences is dying out, and each year the conditions improve. The people who put on the open bottle open house have found that they, too, have a lot at stake and are restricting these parties to the last night of the conference. After all, the man who finances your trip doesn't feel too kindly toward any influence that keeps you from bringing home the most new information to your job.

THOUGHTS WHILE TRAVELING

What a year this has been for job shifts. People are feeling the urge to accept new challenges — one golf course superintendent told me that he thought a good grounds boss should change jobs every 5 years to keep his thinking fresh. — It would have been nice to have had this extra 5 inches of rain this spring spread over those 4 dry months last summer.—More California firms and allied services, like janitorial companies, are entering the turf maintenance field here in the Northwest. It must look easy!! Hope they attend the conferences to learn how. — It must build the ego of Northwest professional turf men to see how far ahead of the other parts of the world we are when it comes to mechanizing turf care—Dr. Gould's slides were a revelation. — When you find it tough to compete for labor with the industrial firms, you can be sure that upgrading of your own good help surely pays off. — See you all at the field days!

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Mowing Theory . . . from Page 1, Col. 2

grams of disease, insect, and weed control must be balanced one against the other and applied more intensively and with greater care.

Management practices, including mowing, must be keyed to the use for which the turfgrass area is being produced. For example, putting greens, home lawns, athletic fields, and other turfgrass areas require various mowing heights. These various mowing heights severely limit the number of grasses that may be used to produce satisfactory turf. Perhaps only 25 or 30 out of more than 1100 species of grass known to grow in the United States can be used for good turf. In view of the limitation that mowing places on selection of grass and intensity of management, it may be well to ask, "Why mow?"

WHY MOW?

Appearances and playability are the principal reasons for mowing turfgrass. The manner in which turfgrass is mowed will greatly influence its health, vigor, density, degree of weed invasion, and longevity. In fact, good mowing practices are perhaps the most important factor contributing to a well-groomed appearance and the longevity of any turfgrass area. The development of good mowing practices, from an agronomic standpoint, must be based on an understanding of growth habits and characteristics of grasses.

GROWTH HABITS AND CHARACTERISTICS

On the basis of growth type, grasses may be classified into three general groups. Bunch-type grasses, such as ryegrass and chewings fescue, produce new shoots which grow inside the sheaths of the previous stem growth. Stoloniferous grasses, such as bentgrass, spread by runners or stolons which develop from shoots that push through the sheaths and run along the surface of the ground, rooting at the nodes [joints]. Kentucky bluegrass, a rhizomatous type of grass, develops shoots at the underground nodes. Some grasses, such as Bermudagrass and Zoysia, spread by both rhizomes and stolons. This is one reason why Bermudagrass is such a vigorous grower and is so difficult to control and keep out of flower beds, gravel walks, and similar areas. There are also intermediate types with decumbent stems which root at the nodes such as crabgrass and nimblewill.

The grass leaf is remarkably adapted for intercepting a maximum of sun rays which are essential for photosynthesis. The long, flattened grass blades provide a maximum of exposure with a minimum amount of protoplasm, thus making efficient use of the living tissue. A reduction in the plant-leaf area exposed to sunlight reduces the plant's capacity to carry on photosynthetic activity. This is a vital and basic consideration in determining the frequency and height of cut of turfgrasses.

The ability of grasses to withstand frequent and relatively close cutting is related to certain peculiarities of the grass family. Grasses exhibit basal growth as opposed to terminal growth found in most other plants. Basal growth means simply that growth initiates at the base rather than at the tip of the blade or stem. From a practical standpoint, this means that normal and frequent mowing does not cut off the growing areas of the grass leaf. Removal of too much leaf surface at any one cutting may, however, destroy some of the growing points.

HEIGHT OF CUT

The height at which a given perennial grass can be cut and still survive for extended periods is directly related to its ability to produce sufficient leaf surface for the photosynthetic activity required for its growth. Basically, this ability is related to the inherent type and habit of growth found in the grass. The length of internodes, the number of stolons or rhizomes, and the number of basal buds all influence the amount of leaf mass produced by a given grass; hence, affects its ability to withstand low heights of cut. Recent bluegrass selections—Prato, Windsor, Fylking, like Merion, are more tolerant of low heights of cut because of inherent growth characteristics.

[Editor's Note: Cougar bluegrass can be added to this list of new bluegrasses for the Pacific Northwest].

Creeping-type plants, such as bentgrass and Bermudagrass, when properly fertilized and watered, are able to produce adequate leaf surface at very low heights of cut [3/16 inch]. Buffalograss, although a creeper, cannot produce sufficient leaf mass at low heights because too few basal buds exist and, therefore, cannot withstand low clipping. For this reason, Kentucky bluegrass and fescue must be cut relatively high [1 to 1½ inches]. If bunch-type grasses are cut close, too much leaf area is removed and the plant can no longer carry on sufficient photosynthetic activity to sustain satisfactory growth.

FREQUENCY OF CUT

Infrequent clipping allows the grass blades to elongate to such a degree that any subsequent clipping removes an excessive amount of leaf surface. At no time should clipping amounts in excess of 1/3 of the total leaf surface be removed at any given mowing. Removal of large amounts of leaf surface will produce stubby, unsightly turf, cause excessive graying or browning of the leaf tips, and curtail the photosynthetic production of food with a resultant depletion of root reserves.

In addition, the accumulation of excessive clippings may smother the grass and provide excellent environmental conditions for disease organ-

[Continued on Page 7, Col. 1]

THIRTY-NINTH INTERNATIONAL TURFGRASS CONFERENCE & SHOW

The Thirty-Ninth International Turfgrass Conference and Show held at San Francisco, California, on February 18th through 23rd, 1968, was an overwhelming success. The educational conference was made up of 31 speakers with subjects varying, you might say, from "soup to nuts." The soup end was covered by the subject "The World Food Supply," and the nuts on "Small Engine Maintenance." Subjects varied widely including

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swimming pools, tennis courts, turfgrass diseases, the effect of tree roots, golf courses for the public, and a very large section on turfgrass irrigation. Golf courses for the public was very ably presented by our own Dick Haskell, Director of Golf for the City of Seattle. No one should be better qualified than Dick to determine the golf courses for the public since public players on city courses are his clientele. Don Hogan, Professional Consulting Engineer from Seattle, presented primary decisions concerning the purchase and installation of irrigation systems. Don Hogan has many years of experience in this field and keeps abreast of modern equipment and research and has designed many systems, not only in the Pacific Northwest, but in the United States as a whole.

The equipment and product display at this conference was probably the most outstanding of any year. It was like working your way through an international bazaar. There were so many exhibits that 5 days was hardly enough time, in between educational sessions, to get a good look and examination of them all. The exhibits ranged from turfgrass maintenance equipment to all sorts of products which would include chemicals, soil amendments, and even various services.

This is the grandfather of all turfgrass shows and should be foremost on the list of any turfgrass manager and, especially, golf course superintendents. The editor wishes to express his appreciation to the Northwest Turfgrass Association and the Northwest Association of Golf Course Superintendents for helping to sponsor this trip.

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THE EFFECTS OF COMPACTION

Soil compaction can drastically affect the pore space in the soil. The finer the soil texture, the greater the effect of compaction. Compaction does not effect the total amount of water a soil will hold, but it will affect the relationship between capillary and non-capillary pore space. The greater the degree of compaction, the more the shift is toward capillary [water-holding] pore space and a resulting decrease in the non-capillary [air-holding] pore space. This change in pore space is due to a fluid movement of the soil particles when the soils are too wet and, quite often, these changes are rather permanent unless they can be eliminated through mechanical treatment.

Obviously, over-irrigation will tend to saturate all pores from the soil, including the non-capillary pores. Even though water will drain from most of the non-capillary pores in a few hours, too frequent and too heavy irrigation applications will tend to keep them saturated too much of the time and exclude oxygen.

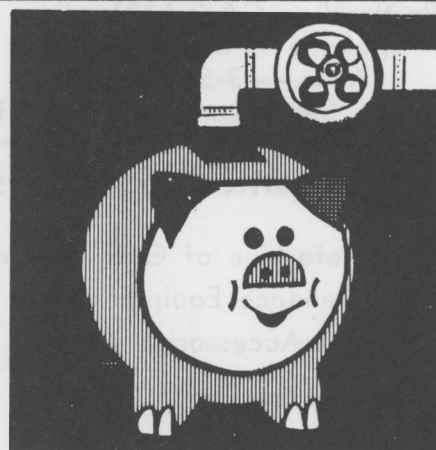
ROOT GROWTH

A number of investigators have reported the quantity and depth of roots as related to soil drainage. Non-compacted soil with a high percentage of non-capillary pore space will generally support plants with deep root systems. Conversely, compacted soils with a high percentage of capillary pores will result in shallow-rooted plants. The consequences of a soil of the latter type are not difficult to see. Shallow root systems will result in the loss of turf during periods of heat stress. Soils that have been mechanically aerified produce an abundance of roots in the aerifier holes, which is evidence that the roots are growing where the oxygen concentration is the greatest. Physiologists have pointed out, as the external temperatures increase, the rate of respiration increases, likewise. Carbon dioxide is a product of respiration of plant roots. A failure of this gas to escape back to the atmosphere aggravates a problem in soils that have little non-capillary pore space. Perhaps this is one reason why some turfgrasses develop extremely shallow roots during periods of heat stress in the summer when they should be at their depth. For this reason, light, frequent irrigations are discouraged except under conditions where no other method will work. Light, frequent irrigations under conditions of good soil depth will hasten the loss of such plants as the improved bluegrasses in their area of adaption. The writer feels that the irrigation factor alone accounts for the greatest single cause for the loss of bluegrasses and their subsequent replacement by Poa annua and bentgrasses.

SOIL MICROORGANISMS

A fertile soil usually has high populations of beneficial organisms, most of which are bacteria and fungi. These beneficial organisms are concerned with the decay of organic vegetation, conversion of plant nutrients into useable form for plant use, the production of enzymes, and various other growth regulating substances. Without a proper environment, these organisms will exhibit reduced activity. Cold, saturated soils reduce bacterial activity to almost a zero level. These organisms must have ample oxygen, moisture, and temperature as well as a suitable food supply for maximum activity.

Just remember that there must be an atmosphere in the soil the same as we must have above the soil. Help preserve this atmosphere by regulating the amount of water applied, elimination of compaction, and providing all factors to make the soil a healthy environment. If dry spots occur, do not water the entire area to eliminate a few single dry spots. These can be treated with surfactants that will aid the penetration of water so that uniform infiltration and percolation can be achieved. Good soil environments can be maintained by observing good management practices, and poor environments can be improved in the same manner.



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[Continued from Page 4, Col. 2]

isms and insects. The frequency of clipping must be governed by the amount of growth which, in turn, is related to other conditions, seasons of the year, soil fertility, moisture conditions, and the natural growth rate of the grasses and, most important, the use for which the area is being grown. For this reason, putting greens should be mowed daily because only a few hours are required for the plants to grow 1/16 of an inch while fairways and roughs are mowed less frequently because of their higher cut.

OTHER CONSIDERATIONS

In addition to the mowing practices related directly to habit of growth, there are considerations that must be taken into account when developing a sound mowing program.

STAGE OF GROWTH

The stage of growth of turfgrass plays a major role in mowing practices. Mowing practices during the early stages of growth exert a material influence on density of turfgrass. Cutting at heights somewhat lower than normal during early spring will encourage lateral growth which, in turn, promotes density and helps prevent weed invasion. Tender, young grass must be cut with a sharp, well-adjusted mower to avoid mechanical damage and the early growth must be cut frequently to avoid the problems associated with high moisture.

The washboard effect often observed in turfgrass areas may be eliminated frequently by alternating the direction of mowing. This can also control runners of creeping grasses and aid in the prevention of grain and thatch. Washboard effect caused by soil problems, such as uneven ground, cannot be remedied by mowing direction.

WET CONDITIONS

Mowing wet grass should be avoided as much as possible, although available labor and time often make it impractical to do so. Dry grass cuts more easily, does not ball up and clog the mower, and gives a much finer appearing turf. Timing tests show that mowing dry grass requires less time than mowing wet grass.

UNEVEN TERRAIN

Mowers are not built for grading purposes. Turf areas containing high spots which are continually scalped should be regarded in order that

they may be cut properly and to reduce the wear and possible damage to mowing equipment. Inadequate insect control can become a serious mowing problem. Areas heavily infested with earthworms or ants may have many soil mounds caused by their activity. Such may cause soil to build up on rollers or, in severe cases, simply cause the units to bounce—both cases resulting in an uneven cut. Mounds of earth thrown up by gophers and other soil burrowing animals will have the same result.

IMPROPER OPERATIONS

Irregular or uneven cutting often occurs due to bouncing of the mowing units when they are pulled at excessive speeds. On specialized areas, such as putting greens, bowling greens, lawn tennis, etc., improper handling of the mower turns will result in turf damage through bruising and wearing of the grass.

SUMMARY

Mowing is not a simple operation to be regarded merely as a means of removing excess growth. Mowing practices are related to the species and strain of turfgrass being grown. The inherent physiological, anatomical, and morphological given grass will determine the height and frequency of mowing that will give the most satisfactory performance. Mowing is the most time-consuming of all management practices and has far-reaching effects on the appearance and longevity of any turfgrass area.



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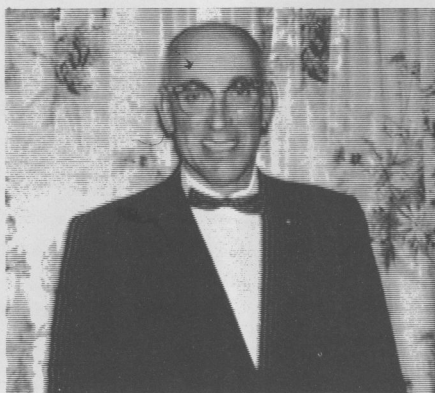
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MILT BAUMAN

Glen Proctor, the retiring superintendent of Rainier Golf & Country Club in Seattle, has been active in golf course work since 1931. His first golf course superintendent's job was at the Manito Golf & Country Club in 1935. He remained at Manito until 1949 when he took the superintendent's job at Rainier Country Club in Seattle. Glen has maintained Rainier in excellent condition throughout his almost 20 years' tenure in spite of extremely heavy traffic and golf play. Glen recalls that while he was helping build Wandermere Golf Course in Spokane in 1931 that most of his crew were paid \$1.00 per hour and, again, this was only seasonal. Most of these people were available to come back to work the following spring. With industry being so close to Rainier, this is quite a contrast today when it takes an average laborer on a golf course only about 20 minutes to make his dollar.

Glen is one of the original superintendents who helped to form the Northwest Turfgrass Association back in 1947 and went on to become the President of the Association in 1960. In addition to his duties as president, Glen has served a number of years on the Board of Directors of the Turfgrass Association and helped to make it what it is today. Glen has also served as Chairman of the Research Committee of the Northwest Turfgrass Association and has aided greatly in helping to determine research projects with Washington State University.

Glen retired from Rainier Golf & Country Club on May 1, 1968, to devote full time to the design and construction of golf courses and for turfgrass maintenance consultation under the name of B, G, & P, Inc. Through Glen's years as a golf superintendent he has spent considerable time in construction and is certainly qualified in all respects of building and maintenance consultation.

The Turfgrass Association would like to wish you the utmost success in your new venture and to say thanks for all of your contributions to the Association over the last 20 years.

Henry Land, Sr., a man who nearly everyone knows in the golf course business in the Pacific Northwest, actively retired from the superintendent's position at Tacoma Golf & Country Club on April 1, 1968. Henry has worked in one phase or another of golf course construction and management since about 1925 with only short periods of other activities. Henry took over the job as golf superintendent at Tacoma Golf and Country Club in 1950. In 1951, Henry joined the Northwest Turfgrass Association and was elected Treasurer shortly thereafter. Henry worked diligently in this capacity along with his wife, Burnette, [now deceased], for many years. Henry and Burnie worked very diligently in keeping records of the Association and, through a great deal of effort on Henry's part, the Association was finally recognized by the Bureau of Internal Revenue as a non-profit corporation.

Henry has retired at the age of 62 for reasons of health, but will continue to serve part-time as a consultant with Tacoma Country Club and will have some time to devote to his other consulting duties. In between his consulting work Henry and Millie [his present wife] will manage their private property. Henry tells the editor that he certainly expects to spend more time at some of his favorite activities of fishing, hunting and some traveling.

The Northwest Turfgrass Association will miss Henry from its active ranks since he has served as President of the Association and on the Board of Directors a number of years in addition to his Treasurer's duties. Henry became President of the Association after turning over the Treasurer's duties to Dick Haskell in about 1961. Henry has also served as Chairman of the Research Committee of the Northwest Turfgrass Association and has aided greatly in helping to determine research projects with Washington State University.

Good luck to you, Henry, in your retirement and I am sure the entire Association joins me in saying "Thanks for a job well done!"

MILT BAUMAN

Milt Bauman retired from the superintendent's position at the Overlake Golf & Country Club April 1, 1968. Milt came to Overlake 15 years ago from Kellogg, Idaho, where he gained his first experiences on golf courses. After spending a tour of duty in the Marine Corps during World War II, Milt returned to Kellogg and subsequently on to Overlake Golf Club.

Milt is one of the superintendents who served two terms as President of the Northwest Turfgrass Association. His first term was in the early years of the Association and his second was in 1963. Milt is another one of the original founders of the Northwest Turfgrass Association and over the years has been a staunch supporter and hard worker for the Association. He has served on the Board of Directors for many years and has served on the Agronomy Advisory Board, Chairman of the Research Committee, and several other duties with the Association.

Milt Bauman is retiring to take over the responsibilities as General Farm Manager for Emerald Turfgrass Farms, Inc. at Sumner, Washington. Milt's many years of excellent management makes him well qualified to perform outstanding work at his new position. Good luck to you, Milt!

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TURFGRASS CONFERENCE

This is your second call to attend the annual Northwest Turfgrass Conference. In case you missed the previous announcement, the Conference will be held September 25, 26, and 27 [Wednesday through Friday] at Alderbrook Inn, Union, Washington. Alderbrook Inn is located on the southern end of Hood Canal and can be reached from the south end by taking the Olympia to Port Angeles highway, or from the north by way of Seattle, Tacoma, and Belfair.

This should provide an ideal setting for the Conference. There are no distractions, and the area is quiet, peaceful, and beautiful. A golf tournament will precede the Conference on Wednesday morning and will be played on Alderbrook's existing 9-hole golf course.

An interesting slate of speakers is being arranged for the Conference among whom will be Mr. John Escritt from the Sports Turf Research Institute of Bingley, Yorkshire, England.

Send in your reservations early for accommodations. Alderbrook Inn can probably handle all persons for the Conference; however, the rooms will be assigned on a "first-come, first-serve" basis. The entire Inn will be reserved for the Conference. Late arrivals may possibly have to obtain accommodations nearby and even as far away as Shelton, which is 14 miles. Therefore, make your reservations early. There will be more about the Conference in the September issue of Turfgrass Topics.

GEORGE HARRISON TAKES NEW POSITION

George Harrison, our current President of the Northwest Turfgrass Association, who for many years was with NuLife Fertilizer Company at Tacoma, has accepted a new position with Landscapers Northwest in Tacoma.

George is the President of this company and has many plans for expanding maintenance and construction with this firm. Among the sales group, George will be missed with respect to his interest and ability within the industry. The Association looks forward to continued association with you, George, in your new position.



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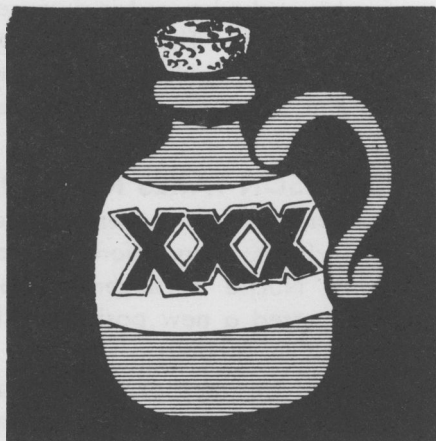
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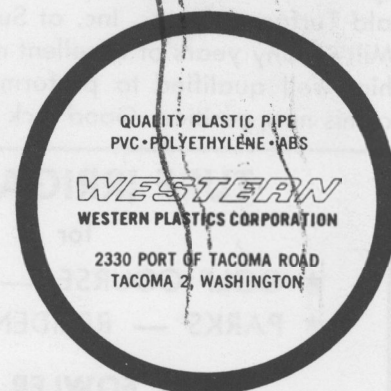
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Communications concerning **content** of this paper should be directed to Dr. Roy Goss, Editor, Western Washington Experiment Station, Puyallup, Washington.

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