



## Annual Conference Moves To October Dates Beginning With 1993 Conference

A majority of those responding to a member survey conducted in 1991 indicated they wanted the annual NTA Northwest Turfgrass Conference moved from the September to October. Taking their direction from the member survey results, the NTA Board of Directors has changed the annual conference scheduling from the third week in September to the second week in October annually. The first conference to be held under the new schedule will be the 1993 conference scheduled for October 10-14, 1993 in Yakima, Washington.

## WWGCSA Contributes \$7,500 To R&S Fund

During the 1992 annual membership meeting held during the Northwest Turfgrass Conference in Sunriver, Ed Phelps, president of the Western Washington Golf Course Superintendents Association (WWGCSA) presented a check, from the WWGCSA, for \$7,500 for the NTA Research & Scholarship Fund to Jon Hooper, chairman of the NTA Research and Scholarship Committee. Thanks Ed and WWGCSA members.

## Farwest Equipment Overlooked And We Apologize

The editor wants to extend his sincere apologies for omitting, in the last edition of the NTA Northwest Turfgrass Topics, **Farwest Equipment Inc.** of Portland, Oregon from the list of suppliers that contributed to the success of the 1992 NTA Northwest Turfgrass Conference through their exhibit participation and golf tournament hole sponsorship. What made this particularly embarrassing for the editor was the fact that Farwest owner, David Jacobsen, had been instrumental in successfully recruiting industry supplier hole sponsors for the conference golf tournament and, as an NTA Board of Director, had been actively involved in all other elements of the conference.

## 47th Northwest Turfgrass Conference and Exhibition Planning On Track

The 1993 Northwest Turfgrass Association's 47th **Northwest Turfgrass Conference & Exhibition** is scheduled for **October 11-14, 1993**. The conference headquarters will be the **Holiday Inn** of Yakima. Conference meetings and events will be held in both the **Holiday Inn** and the **Yakima (convention) Center**.

Conference preparations have already begun. Lodging space has been blocked; meeting facilities and a golf course are reserved; potential speakers are being contacted; and, all the other numerous details pertaining to planning and preparation for such a conference are well under way.

Planning and preparations are in the able hands of the following NTA conference committee chairmen: **Don Clemans/Jim Dusin**-Education Program Committee; **Bill Griffith/Jim Dusin**-Golf Tournament Committee; **Tom Christy**-Table-top Exhibit Committee; **Jim Dusin/Bo Hepler**-Hospitality/Social Programs Committee; and, **Jim Dusin/Don Clemans**-Turfgrass Facilities Tour. These committee chairs, with technical and logistical support of the NTA staff, make-up the network responsible for this year's conference.

## Apple Tree To Host Conference Golf Tournament

In the April 1992 issue of *Western Turf Management* magazine, editor Harry Cline, in an article on the new **Apple Tree Golf Course** in Yakima says "...a group of longtime Yakima businessmen and farmers are likely to put their farming town of 65,000 in south central Washington on the golfing map with a home-built course that may well rival the best in the West."

Apple Tree, located in the West Valley area of Yakima County, will serve as the host course for the annual conference golf tournament, the **R.L. Goss Golf Tournament for Research**. Apple Tree personnel working with the NTA to make the tournament a success include: **Jim Dusin**, Greenkeeper; **John Hull**, Superintendent; and, **George Price, Jr.**, PGA Professional.

Apple Tree was originally designed by noted golf course architect **John Steidel** of the Tri-Cities although



## President's Message

### Is it Spring yet?

It has been said if people didn't talk about the weather, conversation would be cut in half. It has been such a year of contrasts, how can weather not be a topic of conversation. First the long, hot, dry summer, record snowfall, freezing rain and temperatures, record windstorms and I'm sure February must be setting records for the near 70° days.



In western Washington we are still digging – or should I say cutting – our way out from under the Inaugural Day wind storm. I hear through the grapevine one golf course in Seattle lost 160 plus trees—quite a supply of fire wood.

Weather aside, the Board has had a busy start to the year. We will be sponsoring a dinner for the International Turfgrass Society, as they tour the Pacific Northwest. We are looking at different ways to increase funding for research and scholarships and we have set up a task force, to be headed by Tom Wolff to look into the NTA's role in government relations. It is up to the task force to determine how involved the association can become with the government relations and still be in keeping with our tax status.

Planning for the 1993 NTA Conference is in full swing and is shaping up nicely. A schedule change has been proposed and is being considered. It was recommended that the conference's educational sessions be on Tuesday and Wednesday all day, dropping the Thursday morning session.

We toured Apple Tree Golf Course and found it to be scenic and challenging. The Apple Island is faintly reminiscent of the floating green at Coeur d'Alene. It will make for a great tournament.

If you have any input on what the board is working on, contact the office, a board member or myself. Thanks to all of you who have taken time to let us know how we are doing or things you would like to see us work on.

Hope you have a great Spring and a wonderful year.

Rebecca (Becky) Michels  
President

## Apple Tree Hosts *(continued from page 1)*

much of the original design was modified by the course management committee of the partnership of local businessmen who own the project and managed the construction of the course.

Apple Tree Golf Course is intended to be the centerpiece of a future residential community with extensive recreational facilities. The Par 72 course, which is nearly 7000 yards in length, is built on orchard land. Construction began in the Spring of 1990 and was completed the first week of June 1992. Thousands of manhours, over 600 truck loads of sand and native rock, 7188 railroad ties, miles of underground sprinkler pipe and computer control wiring, millions of gallons of water serve to create what will be one of the finest courses in the Pacific Northwest. The most notable of the 18 holes on the course is the par 3, 17th—The Apple Island.

## Conference Kick-off Reception And Display A Must

For the last two years, one of the highlights of the conference has been the combined conference **Kick-off Reception** and supplier **Table-top Display** the first evening of the conference. The event goes on all evening the first day of the conference and always draws (and holds) a full house. Supplier table-top displays dot the reception hall; a drawing for supplier donated door prizes is conducted throughout the event; golf tournament winners are announced and trophies awarded; a grand selection of heavy hors d'oeuvres; and, the opportunity to rekindle old acquaintances and make new ones, all contribute to an evening of fun and enjoyment.

Suppliers and others interested in corporate sponsorship or display information, should contact the NTA office soon at P.O. Box 1367, Olympia, WA 98507 or (206) 754-0825.

## Conference Location Offers A Variety of Amenities

There's plenty of action afoot in the Yakima Valley for those family members not attending the education sessions, too. The clear, dry climate assures bright days and there is plenty to do for all ages and interests.

Historic **North Front Street** in Yakima is home to many of the old buildings that were a part of Yakima's historic birth. Surrounding the Railroad Depot building is the unique **Track 29** (a train mall). Then there is **Yesterdays Village**, filled with over 150 speciality shops, restaurants and other family fun and entertainment, located in the historic Fruit Exchange Building.

Yakima Valley, blessed by nature with a rare combination of near-perfect wine grape growing conditions, lies just north of the 46th parallel in the same latitude as the great French wine producing regions. Their long,

*(continued on page 3)*

## Conference Location *(continued from page 2)*

warm summer days, cool nights and mineral-rich volcanic soil are ideal for classic grape growing. A stay in Yakima demands a tour of some of the more than 20 award-winning wineries throughout the Yakima Valley. You will also want to visit the recently renovated **North Yakima Brewing and Malting Company**, now operating using vintage stills and equipment from the early 1900's.

## Conference Lodging Accommodations

The conference headquarters hotel, the **Holiday Inn of Yakima**, with 170 guest rooms and executive suites, offers a combination of warm friendly service, restful accommodations and excellent dining. Amenities include the Owl's Nest dining room, the Quite Lounge, the Route '66' Lounge, room service and a spacious outdoor pool surrounded by a garden atmosphere with poolside service.

Lodging accommodation rate information and reservation cards will be included with conference registration packets which will be mailed later this year. Special rates for conference attendees will be honored by the Holiday Inn for room reservations made prior to **September 16, 1993**. After that date, reservations will be accepted on a space available basis and rates may be different.

The full range of lodging accommodations-motels, hotels, bed & breakfast and camping facilities-are available in the Yakima area. For information, contact the Yakima Valley Visitors & Convention Bureau, 10 North 8th Street, Yakima, Washington 98901 (509) 575-1300.

## Getting To The Conference

The Holiday Inn of Yakima is located in downtown Yakima just off Interstate 82 at Exit 33 and only one block east of the Yakima Convention Center. The hotel offers free limousine service to and from the Yakima Airport and free parking. Horizon Airlines and United Express offer daily flight service to the Yakima Airport.

## 1993 Research and Scholarship Fund Raising Campaign Kicks Off

Rebecca Michels, NTA president and Jon Hooper, chairperson of the NTA Research and Scholarship Fund Committee, recently announced the kick-off of the **1992/93 R&S Fund Raising Campaign**. For the last few years NTA has annually given out over \$35,000 in research grants and \$5,000 in scholarships. The success of the annual fund raising campaign plays a significant role in the level of support NTA can continue to provide to these efforts.

Intimately involved with turfgrass management, we realize more than most, that today's turfgrass quality is the result of knowledge and technological gains resulting

from research and education accompanied by hard work and effort. We owe our thanks to those who gave their time and money to make the research and education possible, for without them we would have to rely on our own slow trial and error methods.

Few of us are independently capable of, nor prepared to conduct the research or development necessary to keep the industry on the leading edge. Recognizing this, the Northwest Turfgrass Association created a research and scholarship fund to help make it possible for each of us to financially contribute to industry research and education advancements.

Donation forms will be mailed to members and industry supporters with the next month or so. Contributions are tax deductible and those contributing to the research and scholarship fund are recognized in the NTA Directory of the Northwest Turfgrass Association.

Buy a share today in better turfgrass for tomorrow.

## Annual Membership Dues Billings

The second membership renewal (dues notice) for 1993 was just recently mailed to those that had not yet responded to the first notice mailed in December. Those who have already paid their membership dues for 1992 should not receive a second notice.

*(continued on page 4)*

# Two great ways to start your turf off right

Both methylene urea-based High Density 19-26-5 Starter<sup>®</sup> Fertilizer and SREF<sup>®</sup>-based 16-24-12 Turf Starter<sup>®</sup> Fertilizer promote vigorous growth and root development of seedlings, sprigs and sod, and meet the needs of established turf.

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\*Scotts<sup>®</sup> Slow Release Encapsulated Fertilizer





## Membership Dues *(continued from page 3)*

The NTA is a nonprofit corporation founded in 1948 to help all people involved with and interested in turfgrass culture in the Northwest. The association has grown in the last few years from around 200 members to over 450 individuals involved in turf facilities development and maintenance in public schools, universities and colleges, parks, golf courses, cemeteries, sports fields, commercial facilities, home lawn care operations and others.

## Scholarship Applications Announced

The Northwest Turfgrass Association (NTA) is now accepting applications for turfgrass scholarships for 1993/94. Scholarships generally range from \$500 to \$1000.

Scholarship applicants should complete a copy of the enclosed **Scholarship Application Form**. Applications should be typed. Guidelines the NTA will use when considering applicants include the following:

1. applicants shall be enrolled in a college or university in the Pacific Northwest working toward a turfgrass science related degree;
2. applicants must: have completed the first year at a two year community college or vocational/technical institute; be a junior or senior in a four year college or university; or be a graduate student;
3. applicants shall have outstanding qualities as individuals and students including integrity, initiative and leadership; and,

4. applicants shall have a desire to make a contribution to the turfgrass industry and profession in the Pacific Northwest.

All scholarship applications for 1993/94 should be submitted to the NTA office no later than **March 30, 1993**. Questions relating to scholarships should be directed to the NTA office-(206) 754-0825.

## Milton J. Bauman Passes Away

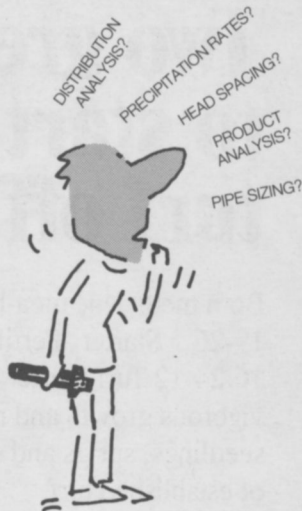
November 5, 1992, Milton J. Bauman passed away in Kirkland, Washington. Milt served terms as NTA President in 1954-55, 1955-56, 1963-63 and 1973-74. His commitment and service to the association and industry will always serve as an example for us. Thanks for everything Milt, we'll miss you.

## 93/94 Research Grant Proposals Sought

The Northwest Turfgrass Association (NTA) is now accepting proposals relating to turfgrass research for the 1993/94 academic year. Research proposals must be submitted in a prescribed format which is described in the announcement information enclosed in this newsletter.

All proposals for 1993/94 should be submitted to the NTA office no later than **March 30, 1993**. Questions relating to research funding should be directed to the NTA office (206) 754-0825.

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## Americans With Disabilities Act Benefits Both Oregon Employers and Workers

The Americans with Disabilities Act (ADA) may be confusing to a great many Oregon businesses, but the act has an enormous potential to benefit both the employer and the disabled worker.

"The publicity the ADA received is promoting awareness of the law with the general public," says David Thurber, SAIF Corporation Personnel Division director. "While Oregon has had a 'mini' ADA for some time, Oregon employers need to educate themselves on this issue to understand its benefits and its pitfalls."

Oregon law already prohibits employers from refusing to hire an otherwise qualified individual based on a disability or prior on-the-job injury. An individual is considered "qualified" if he or she can do the "essential functions" of the job.

Under the ADA regulations, an employer may have to provide special accommodations for the worker with a disability unless it causes undue hardship on the operation of the business. It is estimated that 45 million Americans have disabilities and over 60 percent of them are unemployed.

### Suggestions for Employers

The following are some suggestions to help employers comply with the new ADA regulations:

- Have written assessments of the essential functions of each job position you offer and ask each job candidate the same job-related questions in an interview.
- Use pre-employment physicals only as a condition to an offer of employment and only if all applicants in the same job classification are required to have such an examination, regardless of disability. Treat information gathered as confidential and use results only in accordance with the ADA.

The ADA allows pre-employment drug testing, but employers should note it is best to ask for just "pass-fail" results or reports on only illegal drugs to avoid any appearance of discrimination against an individual who takes prescribed medication.

- Employers may not discriminate against an individual who is not currently taking illegal drugs. An applicant who indicates he or she was a drug addict or alcoholic, but has undergone, or is currently undergoing, rehabilitation treatment, is protected under the ADA.
- Avoid labels and negative stereotypes of individuals with disabilities. Work with your employees to sensitize them on these issues.

### Employer Incentives

The ADA is an additional incentive for employers to return injured workers to the job. SAIF policyholders may see lower claim costs with an effective return-to-work program that gets the injured worker back to the workplace as quickly as possible, even if it is a temporary modified job while the worker is recovering. Under the ADA, injured workers will now have the help of the Equal Employment Opportunity Commission in determining why a job was not available to them.

The concern many employers have about the high cost of work site modifications to accommodate individuals with disabilities is being dispelled by recent studies. The Department of Labor and the General Accounting Office estimate that companies could employ most workers with disabilities with changes that cost less than \$50.

In addition, SAIF policyholders may be able to receive financial assistance from the Department of Insurance and Finance's Preferred Worker Program when making changes for injured workers with a permanent disability.

Call (503) 373-7939 or 1-800-445-3948 for additional information or contact a SAIF return-to-work consultant at your local SAIF office.

Additional incentives for hiring individuals with disabilities may be available to eligible employers who make ADA-required modifications to the workplace. An eligible small business is entitled to a 50 percent tax credit up to \$10,000 of eligible access expenditures for the year. An employer may also be eligible to deduct up to \$15,000 of expenditures incurred for removal of architectural barriers that inhibit access for an individual with a disability. Consult your tax adviser concerning the incentives.

The Oregon Disabilities Commission is the state agency that is responsible for implementing the ADA in Oregon. Contact Executive Director Eugene Organ at 378-3142 in Salem or 1-800-358-3117 toll-free from other locations in-state.

*Source: The Digger*

## Causes of Winter Turf Loss

Below are some of the major causes of winter turf loss:

- Indirect low-temperature injury to hardened plant tissue.

Ice crystals form between cells and draw enough water out of the protoplasm and membrane to destroy them.

- Low-temperature injury to plants in a reduced state of hardiness.

In late winter and early spring, temperatures can be warm enough that plant tissues rehydrate and lose hardiness. Fluctuating temperatures and sudden temperature drops can be especially damaging.

- Toxic accumulation of respiratory products under ice.

With prolonged ice cover, carbon dioxide can build to deadly levels.

- Oxygen suffocation under ice.

Ice sheets can impair oxygen diffusion to the extent that it becomes limiting.

- Heaving.

Frost heaving can cause sustained turf losses in seedling stands.

- Winter turfgrass diseases.

Snow mold fungi (*Fusarium* spp. and *Typhula* spp.) are low temperature parasitic organisms that can cause significant turf losses under the right environmental conditions.

## Winter Damage to Plants 1990-1991

by Dr. Ray Maleike

Winter weather in Washington can be unpredictable. Mild winters may be followed by winters with sudden, severe cold snaps. December 1983, November 1985, and February 1989 are notable examples. The results of the 1992-93 winter are still unknown, but when plant damage is assessed in late spring or early summer, it will probably be as bad as the winters mentioned above. Injuries will vary from damaged leaves and flower buds, to damaged stems or death of entire plant tops. Outdoor container plants may have extensive root damage.

We have suggestions for helping plants potentially damaged by cold.

1. Wait until new growth starts in the spring to assess which parts of plants have been damaged.
2. Prune dead or damaged wood back to a bud, branch, or the main trunk. Do not leave stubs.
3. Reduce stresses on the plant during the growing season. This includes giving the plant adequate water, fertilizer, protection against insects and diseases, and a good mulch.

## Bear, Gibeault Honored For Distinguished Service

The Golf Course Superintendents Association of America's board of directors has selected Dr. James B. Beard and Dr. Victor Gibeault to receive the association's 1993 Distinguished Service Awards.

Beard's and Gibeault's dedication and outstanding contributions to the golf industry will be recognized at the opening session of the 64th GCSAA International Golf Course Conference and Show on January 26. The conference and show will be held Jan. 23-30 in Anaheim, Calif.

GCSAA President William R. Roberts, CGCS, said, "Each of these men has made an exceptional contribution to the advancement of the golf course superintendent's profession. I can think of no other individual as deserving as Drs. Beard and Gibeault to receive GCSAA Distinguished Service Awards."

Beard was a professor of turfgrass physiology and ecology for 35 years at Texas A & M University before retiring this year. During his tenure in the Department of Soil & Crop Sciences, Beard received numerous accolades

and touched the lives of many golf course management professionals.

He has written several books that are widely used in turfgrass management instruction, including *Turfgrass: Science & Culture*, commonly referred to in the industry as "Beard's bible."

Among Beard's honors and awards have been the United States Golf Association (USGA) Green Section Award, the American Library Association's Oberly Award and the International Turfgrass Society's Distinguished Service Award. Beard is also a Fellow in the American Association for the Advancement of Science.

Beard has been an Affiliate member of GCSAA since 1984.

"Dr. Beard is considered by many to be the premier turfgrass researcher of the last several decades," said Roberts. "He has always been a contributor to the educational and professional growth of golf course superintendents throughout the world."

Gibeault has been an extension environmental horticulturist at the University of California-Riverside for 13 years. He has been a member of the USGA Turfgrass Research Committee since 1985. Gibeault has also written numerous research reports and articles for golf course technical publications, and is the editor of *California Turfgrass Culture*.

Gibeault works closely with local San Diego and California superintendents associations. He is a member of the American Society of Agronomy, the International Turfgrass Society, and the Northern and Southern Turfgrass Councils.

"Vic's dedication and service to the golf community have significantly advanced the profession," said Roberts. "There are few people in our field who are as highly respected and have touched as many individuals as Dr. Gibeault."

GCSAA members and affiliated chapters submit nominations for the GCSAA Distinguished Service Award.

## GCSAA Sponsors Pesticide Exposure Research

The government, media and public have expressed concerns about the potential for adverse health effects caused by exposure to the pesticides used on golf courses. These concerns have been heightened by the Pryor case, the Alar scare, the 2,4-D studies, the New York "Toxic Fairways" report, and negative media reports related generally to "lawn care" There is a public perception that turfgrass pesticides are only used for aesthetic purposes, and therefore pose an unacceptable health threat with little benefit to offset the risk.

Currently, the Environmental Protection Agency, the Congress and a variety of state agencies are considering actions that will limit chemical usage or require users to "warn" the public of applications. The general consensus among professional user groups, manufacturers and scientists is that golf/turf pesticides, when properly used, pose little, if any, risk to human health. However, the issue continues to be a source of public concern.

GCSAA Scholarship & Research proposes to address this problem by sponsoring a two-part study of human exposure to the pesticides that are commonly used on



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**Please Remember  
that  
NTA  
Research & Scholarship  
Fund**

**Donation  
in your  
1993 Budget**

Please allow for a \$100, \$200, \$300, \$400 or a \$500 donation. We all benefit from this type of research so please do your part and set aside funds for this worthy cause.

Thanks,  
NTA R & S Committee

# NORTHWEST TURFGRASS ASSOCIATION

1992-1993 Directory Supplement No. 2

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## New Members

Nov 1, 1992-Jan 31, 1993)

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### **KENDALL, RUD**

Editor

TURF & RECREATION MAGAZINE  
Surrey BC V4N 4G6 CANADA  
604-888-8843 Fax # 604-888-8734

### **POLLET, JOHN M.**

Owner

GRASS MASTER  
Redmond WA 98053  
206-868-3619 Fax #

### **HAUSMAN, STEVE W.**

WASHINGTON STATE UNIVERSITY  
Pullman WA 99163  
509-332-2597 Fax #

### **O'LAREY, TIM**

Asst. Golf Course Superintendent

OVERLAKE GOLF AND COUNTRY CLUB  
Medina WA 98039  
206-454-1841 Fax # 206-451-3598

**Welcome Aboard !**





# NORTHWEST TURFGRASS ASSOCIATION

*A nonprofit corporation  
supporting research for the  
improvement of Turfgrasses.*

## SCHOLARSHIP APPLICATION FORM

Applications should be typed.

Application Date \_\_\_\_\_

Student's Name: \_\_\_\_\_ Age \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Institution: \_\_\_\_\_

Faculty Advisor: \_\_\_\_\_

Name	Title	Department
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Advisor's mailing address: \_\_\_\_\_

\_\_\_\_\_

Applicant's major field of study: \_\_\_\_\_

Current class standing: \_\_\_\_\_ Jr. \_\_\_\_\_ Sr. \_\_\_\_\_ Graduate Student

Accumulative grade point: \_\_\_\_\_ Last semester/quarter grade point \_\_\_\_\_

Accumulative grade point in major field of study: \_\_\_\_\_

Number of semester/quarter hours taken to date: \_\_\_\_\_

Experience in turfgrass work: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Experience on other jobs: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(over please)

Name and relationship of any close relatives associated with the turfgrass industry: \_\_\_\_\_  
\_\_\_\_\_

Name and relationship of any close relatives who are members of the Northwest Turfgrass Association: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List all other grants or scholarships, and amounts received, for the upcoming scholastic year: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Describe (in 500 words or less) your reasons for requesting a scholarship. Include in the above a brief autobiography, a statement of your sources of financial support, your commitment to the turfgrass industry and the Pacific Northwest, and future goals. (Complete on separate page and attach.)

**Mail Application To:** Northwest Turfgrass Association, Research and Scholarship Committee  
P.O. Box 1367  
Olympia, Washington 98507

**Deadline:** Scholarship applications must be postmarked by **March 30, 1993.**

**FOR FACULTY ADVISOR** (Handwritten signature must appear)

I recommend this student for a Northwest Turfgrass Association Scholarship:

Signed \_\_\_\_\_ Date \_\_\_\_\_

Additional Comments:



Northwest Turfgrass Association  
**TURFGRASS SCHOLARSHIP  
ANNOUNCEMENT**  
(for 1993/94)

The Northwest Turfgrass Association (NTA) is now accepting applications for turfgrass scholarships for 1993/94. Scholarships generally range from \$500 to \$1000.

Scholarship applicants should complete a copy of the attached **Scholarship Application Form**. Applications should be typed.

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2. applicants must: have completed the first year at a two year community college or vocational/technical institute; be a junior or senior in a four year college or university; or be a graduate student;
3. applicants shall have outstanding qualities as individuals and students including integrity, initiative and leadership; and,
4. applicants shall have a desire to make a contribution to the turfgrass industry and profession in the Pacific Northwest.

The schedule for consideration of scholarship applications is as follows:

December-January	Scholarships announcement
February-March	Scholarship applications received
April-May	Scholarship applications reviewed and approved
June-July	Scholarship notifications
August-September	Scholarship disbursements

All scholarship applications for 1993/94 should be submitted to the NTA office (P.O. Box 1367/Olympia, WA 98507) no later than **March 30, 1993**. Questions relating to scholarships should be directed to the NTA office-(206) 754-0825.

Northwest Turfgrass Association  
**TURFGRASS RESEARCH  
REQUEST FOR PROPOSALS  
ANNOUNCEMENT**  
(for 1993/94)

The Northwest Turfgrass Association (NTA) is now accepting proposals relating to turfgrass research for the 1993/94 academic year.

Research proposals must be submitted in the following format:

1. a one page **cover page** to include: the date of submittal; a title for the research project being conducted or proposed; the amount of funding being requested; the name, title, address and phone number of the researcher(s) involved or to be involved in the project; the name, title, address and phone number of one individual that should receive notification of decisions regarding the proposal; the name, title, address and phone number of the individual to whom funds should be sent along with any special account or fund names or numbers funds should be ear-marked for when they are sent;
2. a one page **executive summary** to include: the date of submittal; a title for the research project being conducted or proposed; a brief overview of the research project being conducted or proposed; and,
3. a detailed explanation of the research project being conducted or proposed, including: the date of submittal; a title for the research project being conducted or proposed; information pertaining to its need, purpose, desired outcome; and anticipated activity schedule; information on the procedures to be employed; a budget for the project along with an overview of the anticipated sources of funding; and, how NTA will be kept informed on progress pertaining to the project.

Consideration of proposals will be in accordance with the following guidelines:

1. they shall be from sources within the Pacific Northwest;
2. they must be for activity that will directly benefit the turfgrass industry in the Pacific Northwest; and,
3. the activity shall be underway or initiation shall be imminent.

The schedule for consideration of applications is as follows:

December-January	Requests for Proposals announcements
February-March	Proposals received
April-May	Proposals reviewed and approved
June-July	Grant notifications
August-September	Grant disbursement

All proposals for 1993/94 should be submitted to the NTA office (P.O. Box 1367/Olympia, WA 98507) no later than **March 30, 1993**. Questions relating to research funding should be directed to the NTA office-(206) 754-0825.



golf courses. The results of this study will be extremely useful in several ways. The results will help our industry to:

1. Document worker safety or areas of concern.
2. Guide GCSAA education and research programs.
3. Alleviate public concern about pesticide exposure.

**Phase I** of this study will consist of a literature search and review that will seek to identify existing studies of human exposure to commonly used golf turf chemicals. The goals of this phase will be to:

1. Collect and organize data that will be useful to members and staff.
2. Provide background and documentation for setting future research agendas.
3. Identify areas of concern for researchers in Phase II.

**Phase II** will consist of a study of GCSAA mortality records by an independent group of qualified scientists. The goals of this second phase will be to:

1. Quantify causes of death among GCSAA members.
2. Identify deaths and illnesses that could possibly be exposure-related.
3. Fully investigate a sample from the "possible" group.
4. Compile a complete report including conclusions about exposure risks.
5. Sponsor a conference on golf-related exposure and release the report.

## Oregon Green Council Now Official

The Oregon Green Council which has been in the process of formation for some several months has adopted a set of by-laws, prepared its articles of incorporation and elected officers for the coming year.

At a meeting held at the Oregon Association of Nurserymen offices in Milwaukie, Oregon Monday night October 26, Harley Higgins, representing the Oregon Landscape Contractors Association was elected chairman. Becky Bullock of the Professional Women in Horticulture (and Barclay's Gardens) was elected vice chairman. Jim Munson of Garron Grounds Management was elected Secretary-Treasurer. Directors will be selected from the non-profit associations which compose the membership of the Green Council.

The Oregon Golf Course Superintendents has participated in the formation of this group from the beginning as has the Northwest Turfgrass Association.

Objectives of the Green Council are as follows:

1. The purpose of the Oregon Green Council shall be to monitor issues, plus develop and promote unified positions impacting ornamental horticulture.

2. The objectives of the association shall be as follows:

- A. To serve as a forum for members of the green council to exchange ideas and information regarding matters of common interest, and to strengthen the bonds within the industry with the goal of increased strength and unity.

- B. To advance the legislative and regulatory concerns of the industry by reviewing legislation, regulations, ordinances, guidelines and other actions relating to the

green council, and to recommend and take appropriate measures to protect and enhance the positions of the ornamental horticultural industry.

- C. To enhance the public image of the ornamental horticultural industry by encouraging high ethical standards, quality workmanship and products.

One of the main concerns of the Green Council, this past summer, has been the water restrictions experienced by users of the City of Portland's water supply. Landscaping, yards, athletic fields, a golf course, parks, all were severely restricted in the use of water. The Council feels that a more equitable solution to the water supply could have been accomplished without singling out the landscape industry. Unless the Portland supply system is expanded to take care of the fast-increasing population, more severe restrictions could well be the norm for coming years.

## WSNLA Cancels Convention

Icy roads and predicted "near blizzard conditions" in Blaine caused cancellation of the 1993 Washington State Nursery and Landscape Association (WSNLA) Convention last month. It was apparently the first time the convention had been cancelled in the 56-year history of the Association.

The decision to cancel was made in a Wednesday morning conference call of WSNLA elected leaders, convention committee members, staff members and a weather forecast expert. The three-day event was scheduled to begin the next day.

## Muffett Installed As IA Director

The Irrigation Association's (IA) 1993 Officers and Board of Directors were recently installed in a formal ceremony as part of the Association's 1992 International Irrigation Exposition and Technical Conference in New Orleans, LA.

Mike Muffett, Muffett and Sons, Inc. of Zillah, Washington was installed as a board director. His term is for three years.

## United Pipe & Supply's Al Licklider Receives Hunter Trailblazer Award

Al Licklider of United Pipe & Supply of Oregon recently received the Hunter Trailblazer Award for outstanding sales and customer service, announced Chuck Huston, Hunter director of sales.

The award was presented at the national Hunter Distributor Meeting, which was held at the Pinehurst Resort in North Carolina.

## Two Washington Irrigation Suppliers Named top 20 Distributors By Hunter Industries

Two irrigation equipment suppliers, Evergreen Pacific Supply and United Pipe and Supply of Washington, were named Top 20 Distributors by Hunter Industries.

The award was presented to Evergreen's Bob Mikkelsen and Jim Winterborn, and United Pipe's Mike Rippe by Chuck Huston, Hunter director of sales, at the Hunter National Distributor Meeting, which was held at the Pinehurst Resort in North Carolina.

The awards recognized the distributors' outstanding sales and marketing efforts during 1992.

Evergreen Pacific Supply has four stores in Bellevue, Everett, Spokane and Tacoma; and United Pipe has six stores in Kennewick, Lynnwood, Spokane, Tacoma and Wenatchee.

## Better, Safer Sports Turf For Your Dollar

Many municipalities have staff who maintain turf on sports fields in the parks and a separate staff who maintain the turf at the public and high schools. There is often duplication of equipment and standards for maintenance. Safety standards may vary widely between the different jurisdictions.

In 1979, the Town of Oakville enter into a reciprocal agreement with the public school board. Under the

agreement the Parks and Recreation Department was to maintain the outside properties of all school sites in the Town of Oakville so that community groups could use the schools under the direction of the Recreation Department without cost.

It was agreed that the maintenance should include all grass cutting, fertilizing, keeping the playgrounds safe by doing minor repairs where necessary, and keeping the sports fields safe and in playable condition. The sports field maintenance included Gilling of diamonds, lining of soccer and football fields, plus maintaining the irrigation systems.

Over the years less funds were available through the school board for major projects and the necessary upgrading of the sports fields. The result was a steady decline in the conditions of all sports fields. In previous years the Parks Operations had undertaken surveys of the condition of the sports fields and made recommendations for upgrading, but the funds were not always available.

In April of 1992 the Parks staff undertook another survey and wrote a report. This time they involved the Board of Education from the beginning in making one of the following three recommendation for each field:

- a) continue to maintain the facility under the present standards,
- b) repair or renovate the facility to bring it up to safe and acceptable standards, or
- c) recommend that the facility should be no longer used due to safety reasons until brought up to safe and playable condition.


A task force was established with the public school board to assess the report and implement the findings of the inspection and to generate a plan of action. The following are the guidelines for the task force.

1. The task force to consist of:
  - one staff member from the physical education high school facility,
  - one staff member from the physical education elementary facility or a principal,
  - one staff member from the Parks and Recreation registration staff,
  - one staff member from the Parks Operations staff,
2. The task force was to discuss the report on the conditions of the facilities and its recommendations to find a suitable solution to:
  - developing a new maintenance procedure suitable for the general use and purpose of high school and elementary school facilities,
  - how the recommended renovation and maintenance procedures should be funded,
  - set a budget for the recommended renovations a short and long term basis,
  - improve communications through regular meetings and seminars which would benefit the entire program,
  - find ways to take facilities out of play for renovation for a period of one year, or alternative methods allowing enough time to do maintenance, and
  - find an alternative process or method to maintain or to establish school open space areas to keep them safe, useable and playable.
3. Develop budgets and specifications for the development of drainage and irrigation systems for the high school football fields.

(continued on page 9)

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## Better Sports Turf (continued from page 8)

4. Develop budgets and specifications for drainage systems for high school soccer fields.

This task force would develop a detailed weekly maintenance program and budget for each facility, i.e., a high school irrigated football field. The maintenance budget would detail the cutting schedule, herbicide applications, aeration/topdressing operations, overseeding and fertilizer programs for a year. It would also address materials, equipment and manpower requirements. The average estimated cost for one irrigated, high school football field was \$3,600.00, whereas the cost of an elementary school field was estimated at \$1,375.00. Any renovation procedures required to improve the safety or useability of a specific field would be an additional cost.

The Parks and Recreation staff believe this approach will vastly improve the overall condition of the turf on Oakville sports facilities without an increase in total budget by eliminating the duplication of effort. Similar discussions are now underway with the Separate School Board.

*Source: Sports Turf Newsletter*

## Turf Fertilizer Run-off Can Be Minimized

PUYALLUP – Scientists at Washington State University, after studying this environmental issue for more than a year, now are confident that a little "extra effort" can substantially reduce the amount of fertilization materials that drain away from turfgrass plots, including home lawns, parks and golf courses.

Small sand putting greens, constructed by using methods similar to those used on Washington golf courses, have been monitored for nitrate-nitrogen leaching since 1991 at WSU's facilities in Puyallup by two turf scientists, a plant pathologist and a soils scientist.

With a little extra effort, they conclude, losses of nitrate from golf putting greens can be reduced to insignificant levels. By applying smaller amounts of nitrogen but doing it more often and modifying the green with peat moss, the nitrate concentration in the drainage water was minimal but the grass quality was maintained. Slow release nitrogen sources also were part of the research application.

Their results clearly pointed out that total nitrogen leached from pure sand greens was far greater than when these same sand greens were blended with peat.

Since 1965, the U.S. Golf Association has highly recommended the use of organic amendments, such as peat moss, to provide a better rootzone mix for putting greens.

S. E. Brauen, G. K. Stahnke, G. A. Chastagner and C. Cogger, members of the research team, have and will continue to look into construction and management strategies that can provide alternatives in reducing threats to environmental quality.

They say, however, that when turfs are managed correctly, the alleged threats as perceived by some have not been supported by published research literature. What they are doing, the WSU scientists say, is being carried out to ward off procedures that might be detrimental to the environment.

Four major factors have come from the work: (1) Nitrogen should be used in moderation; (2) Applications should be done with greater frequency but in lower doses; (3) Modified sand rooting mediums rather than pure sand should be used; and, (4) The right slow release and soluble sources of nitrogen can provide a green putting turf during cool, wet seasons.

Support for this research comes from the U.S. Golf Association and the Northwest Turfgrass Association.

## Turfgrass Questions? Let a Computer Find the Answer For You

Basic problems and questions concerning turfgrass propagation and maintenance can be answered by tapping into a unique data base, The Turfgrass Information Center (TGIC) located at Michigan State University. This computer search service is not just for university researchers but for any green industry professional who inquires.

Over 24,500 pieces of turfgrass related data are available. It's impossible for the average person to keep track of every seminar, article or presentation they have encountered, but chances are, it's documented at TGIC. What can this information service do for you?

- Resource to materials that answer your questions.
- Summaries of general areas you are investigating.
- Clearinghouse for all published research and data relating to turfgrass.

Three examples of typical questions that TGIC answered recently: (a) What are the comparative statistics on residential water uses within a household, including watering the lawn? (b) Are there comparative studies of organic soil and mineral soil and the effect of each on turfgrass rooting? (c) What are the effects of pre-emergent herbicides on turfgrass root development?

How can you use TGIC? You can send your questions to The Turfgrass Information Center, W-212 Main Library, Michigan State University Libraries, East Lansing, MI 48824-1048, or call (517) 353-7209.

If you have access to an IBM-PC with a phone modem you can subscribe to the service to conduct your own searches. Users can be ongoing annual subscribers or on a pay-as-you-go per project basis. TGIC's response can be mailed, faxed or overnighted to you. A quarterly publication, The Turfgrass Index, is sent to all subscribers and includes new records that are added every three months to the data base.

## 'Environmental Monitors' For Golf Courses in the '90s?

In an effort to control development of the 18-hole Chateau Whistler Resort Golf Course, the nearby municipality of Whistler, British Columbia, Canada, required the builders to employ an "environmental monitor."

Acting as an environmental watchdog, Mike Nelson consulted on water-related issues throughout the courses' development, construction and maturation.

*(continued on page 10)*

## Environmental Monitors (continued from page 9)

Nelson is principal of Nelson Environmental Services in Squeamish, B.C.

According to course manager Dave Goldeon, the municipality had two major concerns about the new Robert Trent Jones Jr. golf course:

1) It needed to be more environmentally responsive than Whistler's Arnold Palmer course developed in 1982, and

2) It could not harbor the risk of polluting Lost Lake, a beautiful alpine lake bounded by the course on three sides.

In response to these concerns, resort owners hired Nelson to develop water quality guidelines. The task began prior to construction when Nelson conducted studies to determine drainage patterns.

Nelson also monitored water quality in Lost Lake for a year, on a weekly basis. Using an Alpha Sampler, he took numerous water readings.

To better organize his data, Nelson developed a model to predict the effects of golf course construction and fertilizers on Lost Lake. Using an agricultural model because no workable golf course model was available, Nelson forecast a worst-case scenario showing the lake's visibility would decrease by about two meters (25 percent) and then stabilize.

After review, the municipality agreed this level was acceptable. As it turned out, tests showed the construction and later fertilization affected the lake very minimally. However, the runoff from several storms during 1990 temporarily decreased the lake's visibility by the allowable two meters.

Part of Nelson's role as environmental monitor was to document all concerns to the municipality, and to communicate on an almost daily basis with Gordon and the project manager.

Monitor duties—Because water quality of the creeks downstream from Lost Lake had to be maintained as habitat for rainbow trout, Nelson was involved in almost every aspect of the permit process, rechanneling and construction. Working with Gordon and the contractors, Nelson's job also included:

- Making sure tree removal did not impact on the lake, streams or public traffic to lost Lake;
- Helping prepare all the major documents dealing with stream works, including forestry and cutting permits and timber stamps;
- Writing memorandums on how best to divert the creek through the irrigation pond so the contractor could work on the creek in dry conditions;

- Helping obtain clearing debris applications for both main creeks;
- Procuring Ministry of Environment, Lands and Parks work approvals;
- Placing \$360,000 worth of tile drainage used to pick up runoff and take it to the lake untouched;
- Consulting with fisheries concerning the timing of a pond diversion in order to cut a 300-meter channel through the course. (The gravel, excavation and diversion cost about \$40,000, complete restoring Fitzsimmons Creek, a spawning habitat for Dolly Varden trout.)

"We all agreed to do things like build the settling pond," says Nelson. "But it was part of my role to put our plans into a written form and submit them to the division biologist for final approval."

Last October, Nelson submitted a report to update Gordon, the municipality and the Minister of the Environment. The report included the effects of the project; conclusions; and whether the environmental monitoring program should continue.

Continuing responsibilities—Until the municipality deems otherwise, Nelson will continue to monitor water quality in Lost Lake and make fertilizer and herbicide recommendations. His job now includes taking quarterly nutrient loading budget levels up- and down-stream from the lake and submitting his findings to Gordon and the municipality.

Nelson and Gordon have worked closely to develop a fertilizer program acceptable to all parties.

"Once the course is well-established, we will reduce the amount of fertilizer used and review our program annually," says Gordon. "We never intended to dump fertilizer on this course. But now we are more aware than ever what we can do. We apply fertilizer in small amounts so there is very little leaching.

"There have been times when Mike's questions have helped us see the project more clearly and come up with better solutions. He also forces us to explain the rationale behind our fertilizing program. This is good; then we all know what's going on in a documented fashion."

Since the municipality's main concern of maintaining the water quality of Lost Lake has been realized, the environmental monitor's role has decreased somewhat. Still, for at least one year following the course opening, Nelson will continue to monitor the water quality twice a year in the spring and fall. In fact, he and Gordon anticipate water testing will eventually fall under the golf superintendent's supervision.

Nelson will continue to plug in new data in the Lost Lake environmental model, and Gordon's staff will continue to fertilize by hand within 10 meters of any water.


Both men agree that less fertilizer and more accountability are the landscape trends of the future.

*Source: Landscape Management*

## Chemical and Cancer: Much Ado About Nothing?

In an effort to control development of the 18-hole Chateau Whistler Resort Golf Course, the nearby municipality of Whistler, British Columbia, Canada, required the builders to employ an "environmental monitor."

*(continued on page 11)*



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## Chemical and Cancer *(continued from page 10)*

Researchers who take an objective look at the numbers should conclude that the current scare over turf chemicals amounts to "much ado about nothing."

That's the assessment of Bruce Ames, one of the foremost cancer researchers in the country. Ames, who works for the University of California at Berkeley, arrived at his conclusions after comparing the average American's exposure to known and suspected carcinogens against the actual number of cancer deaths in the United States.

"During the past 40 years, thousands of new chemicals have been introduced. If those chemicals were giving people cancer, there would be a cancer epidemic in the country. But there isn't," he says.

In fact, the only forms of cancer that have increased during the past four decades have been lung cancer and skin cancer, according to the Atlanta-based American Cancer Society. Rather than bad-mouthing turf chemicals, the Cancer Society points to an increase in smoking and sun-bathing as sources of those maladies.

Occurrences of other forms of cancer, the Society say, have remained fairly steady.

For pesticide opponents, Ames' tolerance for turf chemicals represents a deep, new fault in the foundation of their campaign against the industry.

For years, they have relied on Ames' own test for carcinogenicity to back up claims that turf specialists and corporations were poisoning America. Take away the veracity of that test, and their case against the industry suffers considerably.

Ames' own opinion on the dangers of turf and other chemicals is rooted in the realization that the natural and artificial world consists of thousands of real and potential carcinogens. It's practically impossible to eliminate human exposure to all such substances. Instead, emphasis should be placed on eliminating exposures to those that could significantly affect human health, he says.

"I found that people used our test and discovered mutagens everywhere – in cups of coffee, on the outside of bread, and from fried hamburgers," Ames says. "So I developed what I feel is a more realistic view of the whole world."

One example: compared to typical exposures for average Americans, herbal tea and peanut butter pose a much greater carcinogenic threat than do DDT or EDB.

"Or put another way, one raw mushroom gives you much more carcinogens than any polluted water you're going to drink in a day," Ames says.

Most environmentalists discredit Ames' views. Most, however, are willing to concede that the Ames test is at best only an indicator that certain substances cause cancer. They realize that the bacteria used in the test often are exposed to dosages hundreds of times more potent than any human being might reasonably incur.

But the environmentalists part company when Ames tries to translate those figures into a "cancer threshold" for the typical American.

Says Dr. Ephraim Kahn, a Berkeley-based consultant for the California Health Department: "In regard to the public health, how do you make reasonable estimates as to what is an acceptable rate of cancer. The EPA has drawn the lines at one in a million. But that's a value judgment, not a scientific judgment. He said he is not

ready to allow government to decide the number of acceptable cancers.

Kahn also objects to Ames assertion that naturally occurring carcinogens in foods such as peanut butter are much more dangerous than a DDT exposure." What Ames doesn't take into account is that we have a natural immunity to naturally occurring carcinogens that has developed as we have evolved. In contrast, within the last 30-40 years, we've been hit with a great profusion of synthetic chemicals that we haven't had time to develop defenses against."

The bottom line, says Kahn and others, is that the turf chemical industry has no right to increase a person's risk for cancer – especially if that particular risk is still known.

That argument may have prevailed in the past, but even environmental activists know they will have a tougher time making their case now that Ames has switched alliances. Other researchers, who have always believed what Ames is saying, are stepping forth, and defending Ames' view.

Dr. Vernon Houk, director of the Center for Environmental Health, based in Atlanta, says many researchers have waited not gone on record about turf chemicals because they are wary of the news media.

"One of the reasons Ames has always been quoted by the press is that he interacts well with reporters, while other researchers often do not," he says. "It's also more convenient to scream cancer at your local congressman or senator than to change your lifestyle."

Houk seems to have lost his reticence. "Ames is absolutely correct," he says.

"The kinds of quantitative risk assessment tests being done to measure carcinogenicity have no relationship to reality.

"By the time you expose an organism to an extremely high dose of a new substance, extrapolate those effects to a low dose scenario, extrapolate that against its impact on humans, and then throw in a conservative assumption factor, what you're engaging in is closer to voodoo than risk assessment."

*Source: Northern Turf Management*

## A Golfer's Glossary of Terms

**Top Dressing:** When Superintendent does not let their help go without a shirt.

**Right To Know:** The right to know the stimpmeter reading of the green every day.

**Winter Play:** The God-given right of all Golf Club members.

**Green Speed:** Too slow.

**Tee Markers:** What you use to straighten the shaft of your driver when the ball goes right or left off the tee.

**Dollar Spot:** What your playing partner spots you when you missed that last five foot putt.

**Nineteenth Hole:** Conference room in the clubhouse where long discussions take place concerning the practices and future of the Club's Superintendent.

**Cart Path:** What they put on a golf course for the maintenance equipment to get from hole to hole.

**Ball Mark:** What happens to your ball when it hits a cart path.

**Sand Pro:** A Golf Pro that's good at getting out of a sand trap.

*Source: Hole Notes*

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## Calendar of Events

- February 21-24, 1993** WCTA 30th Annual Turfgrass Conference  
Contact: WCTA (604) 467-2564
- February 28, 1993** NTA Board Fund Raising Work Session  
Contact: NTA (206) 754-0825
- March 1, 1993** NTA Board Meeting  
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- May 16-17, 1993** NTA Board Meeting  
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- August 9, 1993** NTA Board Meeting  
Contact: (206) 754-0825
- October 10, 1993** NTA Board Meeting  
Contact: (206) 754-0825
- October 11-14, 1993** NTA 47th Northwest Turfgrass Conference and Exhibition  
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