As another holiday season is upon us, it seems appropriate to reflect and be thankful for this past year. Your Board of Directors continues to work diligently toward improving and making more valuable your membership in GCSANC.

Of special interest to old and new members alike is the fruition of an "Information Referral Service." As a no cost effort to fellow golf industry members, a formal program under the direction of Vice President Pete Bibber is now in place to make personal calls and offer advice on maintenance and management problems from the most qualified people in our association, Certified and Class A members. Please take advantage of this service, as it is an outreach of our association goals to foster camaraderie and extend help when needed.

Joe Rodriguez, CGCS, has successfully put together the first GCSANC scholarship program to help needy students in the horticulture industry. Through his diligent actions, Joe has initial foray of GCSANC into giving something back to the industry by means of helping potential golf course superintendents pursue their education. We are exploring other community colleges for further advancement of this program, and if you have any preferences for such extension, contact Joe.

Mike Garvale, Membership Committee Chairman, received some favorable responses to the notice in the previous newsletter regarding a short pre-test seminar, for those interested in upgrading their membership classification. This is an ideal situation for those of you who have been waiting to take the examination, as Mike will provide a brief educational session with valuable information, and then administer the test. This will be done at a convenient location for all who participate, and with the pre-test session should make taking the exam much less stressful. You will not find a better situation to upgrade your membership, so do contact Mike soon.

From my family to yours, wishing you the best of Holiday Seasons. Merry Christmas and a Happy New Year.

Paul Dias, CGCS
President
NEWSLETTER NOTES...

Larry Norman, Supt. at Pebble Beach Golf Links, is looking for experienced golf course volunteer help for the A T &T Tournament in January. If you or someone on your staff is interested, contact Larry at (408) 624-3811, Ext. 209 for information.

A Happy Belated Birthday to Myrtle Wagoner!!!!!

Regarding monthly golf prizes...at a recent Board meeting the possibility of using GCSAA catalog gift certificates in lieu of golf balls was discussed. If this sounds like a reasonable alternative for golf awards, let Rod Kilcoyne, the Golf Committee Chairman, know your feelings.

Thru the grapevine comes the report of a CDFA Inspection at a Southern California Golf Course. Seems they not only checked the storage facilities, but did an in-depth review of the Superintendents Training files regarding Hazardous Materials Training for employees.

The first edition of the California Golf Course Superintendents Association quarterly magazine will be out in February of next year. The initial copy will be a 26 page color magazine, with information from all over the State of California. This is not intended to replace any of the local newsletters, but to provide a broad spectrum of information from all around the state.

The GCSAA, through it’s Government Relations Committee, is sponsoring a "State Government Relations Forum" at the International Golf Course Conference and Show in Anaheim. The roundtable discussion is scheduled for Sunday, February 12, in the Convention Center from 1:00 to 3:00 pm. Dennis Orsborn from the Hi-Lo Chapter among others, will be speaking on proposition 65, the regulatory, and legislative input. This forum might be very timely for all those who can attend.

The Board of Directors recently approved funding for renewal of the Advertisement in the NCGA Blue Book. Many times throughout the year, job requests and other pertinent questions are passed on from the NCGA to us, since most club’s (Board of Director’s) were not able to contact GCSANC directly.

Congratulations to Rodney Butler and Carol Lozito for recently becoming members of the GCSAA.
The Golf Course Superintendent's Association of Northern California is initiating an Information Referral Service which will be available at no cost to Golf Course Superintendents in the Northern California Region. The program is designed to aid those Superintendents who request help from the Association. A committee of Certified or Class A Superintendents covering the geographical areas of Northern California will be available to make a personal call to discuss maintenance and management problems, and to advise the Superintendent of other organizations and materials that are available. This program is not intended to replace other visiting services, but to provide help in and out of the organization for the betterment of the Golf Industry. Requests preferably should be made in writing, or in case of emergency, via phone to the GCSANC office.

A LOOK AHEAD

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>January 9</td>
<td>Crow Canyon</td>
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<td>February 16</td>
<td>Almaden CC</td>
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<td>March 14</td>
<td>Ridgemark Golf and CC</td>
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<td>March ?</td>
<td>GCSANC, NCGA, USGA Conference</td>
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<td>April</td>
<td>Palo Alto GC</td>
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<td>May 2</td>
<td>Rossmoor GC</td>
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<td>May 21-22</td>
<td>GCSA Annual</td>
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Meeting Cancellation Policy:
Meeting reservations not cancelled within 24 hours of the advertised meeting time will result in a direct billing to the member making the reservation for lunch charges. Outstanding fees not paid within 60 days will result in suspension of membership privileges.

The Association would like to thank Jim Ross and his staff for courses around America. Some of the more popular courses are, Inverary Club in Florida, Firestone CC in Akron, OH., Pinehurst in SC, the wonderful day at Santa Teresa GC in November. We always wanted to play from the Champ Tees, especially in 220 yard plus par 3's!

OUR HOST AND HIS COURSE

Our host superintendent started in the golf business in 1956 at Castlewood CC. In 1974 he moved to Pleasanton Fairways, and in 1977 (the year of the drought), moved to Crow Canyon CC. Crow Canyon is a private club owned by Club Corporation of America which owns approximately 75 golf
and Kingwood in Dallas, TX. which was played by the GCSAA annual Tournament. Crow Canyon CC is 6,000 yards, Par 69 designed by Ted Robertson.

Northern California Professional TURF AND LANDSCAPE EXPOSITION will be held January 25 and 26 at the Santa Clara Convention Center. Watch December Newsletter for further details.

SANTA TERESA GOLF RESULTS

**Team Low Net 2 Best Ball**

*First Place Score of 128*
- Ross Brownlie
- Pete Galea
- Davis Smith
- Bob Smith

*Second Place Score of 129*
- Jim Karrick
- Jerry Zella
- Ibsen Dow
- Jim Batista

*Third Place Score of 131*
- Brian Bagley
- Leonard Walsh
- Rich Lavine
- Don Naumann

**Low Gross**
- Armando Claudio 71
- John Winskowicz 76
- Mike Garvale 78

**Low Net**
- Terry Stratton 71
- Ibsen Dow 71
- Dana Waldor 72

**SPEAKER’S AT FUTURE MEETINGS**

Larry Gilheuy from the USGA or his assistant Paul, will speak on Greens Construction and Contouring at the January meeting at Crow Canyon.

On February 16, Dr. Ali Harivandi topic will be Thatch Control on Turf.

On March 14, Dr. Art McCain will discuss Diseases in Turf.

**GOLF COURSE MECHANIC WANTED**

New 18 hole semi-private course under construction at Sonora Robert Muir Graves Architect Position available March/April Salary commensurates with experience Send resume to Al Huber 20100 Cedar Road Ste B Sonora, CA 95370
RECAP OF NOVEMBER

SPEAKER

Broadleaf P4 is a very effective water absorbing polymer that can be utilized to store water within soils and/or potting medias, under a variety of conditions for growing plants. P4 can be a very cost effective method of providing for an increase in water storage, if you are having problems supplying the needs of the growing plants, or if you have expensive water, if it is in short supply and if your media cannot hold sufficient water for plant use.

TO WHOM IT MAY CONCERN:

Golf Course Superintendent, _______ of the ______________ recently brought in, sent in plugs of turf grass to us for the determination of possible disease-causing organisms.

Examination of the affected Poa Annua revealed that they manifested typical symptoms of a vascular (=water-conducting tissues) crown and root rot. In other words, the main and lateral roots showed a discoloration which affected the central cylinder of the roots. This indicates that the water and nutrient-conducting tissues of the root (=xylem) are affected internally with what appears to be a fungal pathogen. Unfortunately, this is an unknown disease and we are only now working on the possible cause. For the first time, we were able to reproduce the disease in the greenhouse at Riverside by inoculating healthy Poa Annua plants with a pure culture of a sterile fungus that we isolated from diseased plants. The fungus is sterile since it does not produce spores. This suggests that the fungus grows as threads (= hyphae, mycelia) on the surface of the roots and spreads slowly in the soil by means of the threads by root-to-root contact. Apparently the fungus infects the epidermal cells and the cortex of the root (outside layers of the root) and moves quickly into the xylem or water and nutrient-conducting tissues of the root. The fungus multiplies in the xylem and either plugs-up the water-conducting tissues with hyphae or produces a toxin which poisons the roots and stunting, yellowing, death of the lower leaves and eventually death of the affected plants especially under conditions of stress such as high temperatures and lack of water (plugged xylem).

Since the fungus does not produce spores, the spread from green to green probably occurs by means (con't. on page 7)
of the threads present on the roots and crown of the dead plants that adheres to cultivation equipment and machinery. Aerification machinery is probably the most efficient way of spreading the fungus to healthy greens. Control of the disease in established plants by systemic fungicides is extremely difficult, if not impossible, because:

1) the litter and thatch tend to filter out the fungicide particles,
2) watering-in of the fungicides into the root zone is tricky because too much water may dilute the fungicide and too little watering-in of the foliage-applied fungicide will fail to get the fungicide into the effective root zone; 3) assuming that the systemic fungicide was taken-up by the roots, it must be taken-up in effective concentrations, by the plugged-up roots and 4) no systemic fungicide is truly curative; at best it will inhibit or suppress the fungal pathogen in the xylem so that when the concentration of fungicide drops once again in the xylem, the fungus will start to grow and to multiply anew. In another words, to expect that systemic fungicides (Bayleton, Benlate, 3336, and Banner [unregistered in California]) will cure the disease is asking the near impossible.

Since the xylem is diseased and plugged-up, the Poa annua plants grow poorly in summer, and the diseased plants come under great stress during hot weather. Therefore, apply low amounts of phosphorus fertilizers to promote root growth and water whenever diseased plants show signs of moisture stress. Whether or not the infected plants will die depends upon how severely the roots are infected and just where infection is located on the main root. If the crown is infected, plants will die whereas if the main root is infected a reasonable distance below the crown, the infected plant may survive until such time that infection moves up into the crown.

To aggravate the situation, there may also be a second disease affecting the roots and crown of Poa annua caused by the fungus, Magnaporthe poae (summer patch disease). This fungus attacks mainly the cortex rather than the xylem of Poa annua roots, but at soil temperatures above 65 degrees F., this fungus will also attack the water-conducting tissues (xylem). Therefore, it can also be very damaging at high soil temperatures. Unfortunately the two diseases often occur together on Poa annua and it is very difficult to determine which of the two diseases predominate in a particular diseased area.

Fortunately the same systemic (con't. on page 8)
fungicides are used against the summer patch disease as are used for the vascular crown and root rot disease. Applications are made in the same manner, that is, applied to the foliage and watered-into the soil. The systemic fungicides may do a slightly better job against the summer patch disease than against the vascular crown and root rot disease because in the former, the cortical cells rather than the all important xylem in the main site of attack.

Do not feel that you are to blame for having this disease on your greens. Nothing that you did or did not do brought on the disease. The Poa annua plants are very susceptible and once the fungus is introduced into the green, it is able to develop unimpeded.

We hope that further research will witness the development of more control measures.

Article submitted by:
Dr. R.M. Endo and
Dr. H.D. Ohr, Extension Plant Pathologist, UC Riverside

THRU THE GREEN

Official Publication of the Golf Course Superintendents Association of Northern California.

Editors:
Jean LaDuc, (415) 493-1413
THRU THE GREEN

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Northern California Professional
TURF & LANDSCAPE EXPOSITION
January 25, 1989 — 8:30 a.m. to 5:00 p.m.
January 26, 1989 — 2:50 p.m. to 3:00 p.m.
Santa Clara Convention Center
5001 Great America Parkway
Santa Clara, California

Presented by the Northern California Turfgrass Council
in conjuction with
The University of California Cooperative Extension

EDUCATIONAL SEMINARS
Chairman: Ali Harivandi, Extension Turf, Soil & Water Advisor

Wednesday, January 25, 1989
Session Moderator: Mr. Rick Hoffman, NCTC Director

9:45 a.m. Welcome and Introductions.
Mr. Ray Dawson, NCTC President

10:00 a.m. Liquid turf fertilizer and pesticide applications: accurate and flexible.
Dr. John Law, Regional Technical Manager, Chemlawn Corp.

10:40 a.m. Reaching out for profit - Putting together good ads and direct mail.
Ms. Kathy Copley, Consulting Editor, Grounds Maintenance Magazine

11:20 a.m. Maintaining small engines to eliminate downtime and costly repairs.
Mr. John Hearson, Asst. Sales Manager, Pacific Power Equipment Co.

12:00 noon — Lunch break

Thursday, January 26, 1989
Session Moderator: Mr. John Holmquist, NCTC Secretary

9:45 a.m. Welcome and Introductions.
Mr. Ray Dawson, NCTC President

10:00 a.m. Give your trees a breath of fresh air - soil aeration for healthier trees.
Dr. Larry Costello, UC Cooperative Extension, Half Moon Bay.

10:40 a.m. Are pesticides affecting your health? Implications of Proposition 65.
Dr. Art Craigmill, Toxicologist, UC Cooperative Extension, Davis.

11:20 a.m. Diagnosing tree disease problems.
Mr. Ed Perry, UC Cooperative Extension, Modesto.

Credits awarded:
* Pest Control Advisor (PCA) Continuing education: 5 hours.
* Certified Golf Course Superintendent (CGCS): 0.5 hours.

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