The collection, preservation and practical knowledge and to promote the efficient and economical maintenance of Golf Courses.

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Al Schlothauer and his committee also put on a Junior Golf Better Ball Tournament at Santa Clara Golf and Tennis Club. It was well attended and had participants from as far away as Fairbanks, Alaska entered.

One of the biggest achievements this year was the Golf Course Superintendent's Institute. It was great to see this Educational endeavor started up again. Jean LaDuc and her committee did a great job putting together an excellent educational program. The response from the participants was better than we hoped for. Watch this newsletter for future dates for the next Institute.

Some great programs started by past president Paul Dias, CGCS, and continued this year are:

The Referral Service—this is a service provided to Superintendents by this Association at no charge. If you are having problems on your course, you can contact the office and a Class A Superintendent will make arrangements with you to come out and help you solve your dilemma.

Study Sessions—twice a year a study session is set up for members who wish to upgrade by testing. The Board of Director’s has also made the offer the membership to upgrade by meeting attendance. This was detailed in the March Newsletter.

GCSAA Seminar—we sponsor jointly with GCSAA for a regional seminar annually. This year the seminar is tentatively scheduled for November 28 and 29, 1990.

U.C. Job Forum—Cliff Rourke annually makes a trip to U.C. Davis in February to talk with U.C. Davis students about our Association and we are looking into participating in the U.C. Minority Job Faire next year.

Educational Advisor—Dr. Ali Harivandi had served this past year, and has agreed to serve in the future. We appreciate his expertise and the contributions he has made to us.

With all the accomplishments I have mentioned so far, now comes what you can do for your Association. There are many committees and functions, such as the Larry Lloyd Memorial Tournament (Christmas Party) or the Superintendent /Pro Tourney, you can volunteer to help on. Get involved, we can use all of you!

I would also like to take this opportunity to thank
our Class F members. It is only with your continued support that events such as the Christmas Party, GCSAA and CGCSA meetings and "Thru the Green" newsletter are financially feasible.

Lastly, a big thank you to the Board of Director members. Thank you for giving of your time-to always being there when I needed you and for making my year as President a reality and a success.

Pete

ANNUAL MEETING SLATE OF CANDIDATES

PRESIDENT

Joe Rodriguez, CGCS

VICE PRESIDENT

Mike Garvale, CGCS

SECRETARY/TREASURER

Pete Galea, CGCS

Rod Kilcoyne

DIRECTORS

Brian Bagley

James Husting

Jean La Duc

Brian Morris

Blake Swint

COME TO THE ANNUAL MEETING AND CAST YOUR VOTE!

NAUMANN'S NORCAL NEWS

Mike Leach former Supt. at Corral de Tierra CC has accepted the Supt. position at Brighton Crest GC in Friant. Replacing Mike at Corral de Tierra CC is Grant Thompson who was the Supt. at Kings CC in Hanford prior to his move . . . Dave Wilber is the new Supt. at Lake Wildwood CC in Penn Valley. Dave left cold Colorado to come to sunny California . . . Jack Archambault has left North Star at Tahoe GC and has assumed another job and career in Annapolis Md. Replacing him was the Asst. Supt. Kevin Ely. Kevin was the assistant prior to his promotion and prior to that the Supt. at Carmel Valley CC . . . Al Rafalski has accepted the Supt. position at Shoreline Golf Links replacing Dave Vaught who has now started his own corporation in the Landscape and Maintenance profession. Al was the Assistant prior to his promotion . . . Mike Nauroth is the new Supt. at Mt. Shadows GC in Rohnert Park. Mike was the Supt. at Incline Village prior to his exodus from the snow . . . Mike Hair is the new Director of Golf at Incline Village GC. He is presently looking for a Supt. to manage the golf courses . . . J.D. Chastain left Black Hawk CC to be the Construction Supt. at Silver Creek GC in San Jose . . . The golf in Orlando was fantastic and the weather was great. From Northern California we were fortunate enough to have a few winners. Included in the list of winners are Corey Eastwood (first senior division), Ed Stocke, Howard Fisher, Ross Brownlie (third gross division), Scott Lewis, James Husting and Don Naumann.

HELP WANTED

Kings Country Club near the community of Hanford, located 35 miles south of Fresno, two hours from the coast and two hours from the Sierras, is seeking a golf course Superintendent. This private 18 hole country club covers 100 acres and has 425 members, is seeking a Supt. prepared to step into a busy position with ongoing course improvement, including the current five year capital equipment replacement and addition program, and significant budget increases for chemicals, etc. Applicants should be familiar with weather conditions in Central California and budget development experience is preferred. PCA, QAC, and valid California drivers license are required.

Course irrigation is provided by automatic sprinklers on the front nine and quick coupling on the back nine. Superintendent will supervise a crew of approximately ten and will report to the Greens Committee.

This is a twelve month a year position, with a benefit package available.
Valley Gardens Golf Course has an immediate opening for a full time Golf Course Superintendent. Applicants should have worked on a golf course for at least 2 years, and be familiar with all phases of running the operation, from mowing to fertilization, from equipment maintenance to irrigation. Management is running an aggressive improvement schedule which had included a new automatic irrigation system and other equipment in the last two years, and will involve a new clubhouse soon.

Valley Gardens is a nine hole course located in Scotts Valley, 15 minutes from Santa Cruz.

Benefits include major medical insurance coverage.

To apply for this position, or for further information, please contact Jerry Imel at (408) 438-3058.

WANTED

Looking to purchase used 7 gang pull behind mower. Must be in working condition-price negotiable. I will arrange pick up. Good chance to sell the old and tired and get something new! Call Carol Lozito, Snowcreek Golf Course (619) 934-6861.

WINDSOR GOLF RESULTS

LOW GROSS

- Mike Glass 76
- Fred Bliss 78
- Bill Abell 80
- Mick McBride 80

LOW NET

- Chuck Weatherton, SR 64
- Bob Dalton 70
- Bob Dauterman 71
- Dulbag Dubria 72

Closest to the pin #14

Mark Francetic

SOURCES OF PRESSURE FOR IRRIGATION SYSTEMS

Pressure (presh' er) n-Force of air, steam, water, etc. against a unit of area.-New Scholastic Dictionary of American English

If you sit down and think about it for a minute, irrigation systems put a fairly simple concept to use: Transporting water from a source to one or more locations for dispersal to plant material. One of the properties of water (as with most of us) is that it needs energy in order to move. Water can be energized by using the natural effect of gravity or by artificially injecting energy through a pump system. The real trick about irrigation systems is that the irrigation components themselves require the water to be provided at specific pressures or they don’t work properly.

Now for some relatively dry information...

Water pressure is typically expressed in pounds per square inch (PSI). Water that is not flowing through the system but is pressurized is said to have "potential energy" known as static pressure. Static pressure is expressed in terms of the force exerted on the bottom of a column of water and is directly related to the elevation or height of that column. Every vertical foot of elevation change is equivalent to .433 PSI of static pressure. Therefore, a water source that is 100 vertical feet above the sprinkler system is said to have 43.3 PSI of static pressure (potential energy in relation to the system).

Water that is flowing in the system loses some of its energy as it moves due to friction caused by contact with the pipe itself. This "friction loss" is related to the type and size of pipe, and the volume of water flowing through it. Other factors contributing to loss of pressure in a flowing
system include the effect of turbulence as the water moves through fittings, valves and other components; and the effect of elevation change as the water moves up (constituting a pressure loss) or down (constituting a pressure gain) along the pipe routing. Each of these loss (or gain) factors combine to have a "net effect" on the energy available at any point along the system when the water is in motion. This net effect is commonly termed "dynamic pressure".

In order for an irrigation system to operate properly it must be designed to account for all of these factors and provide the proper amount of dynamic pressure at each sprinkler. If the water source supplying your golf course doesn't provide adequate potential energy (static pressure) at the outset then you need to somehow overcome this pressure deficit.

**Next month: Overcoming Inadequate Pressures**

**ENVIRONMENTAL CONSIDERATIONS FOR GOLF COURSE MANAGEMENT**

At the 61st GCSAA National Conference held in Orlando, Fl. this past February, I attended "Environmental Considerations in Golf Course Management." The two day seminar was presented by Tom Thomas, a lawyer/scientist and Scott Harrison, Director of Pesticide Education at Penn State. Topics included: environmental benefits of golf courses; fate of chemicals in the environment; groundwater and wetlands protection; water law and policy related to golf courses; health effects and toxicology of golf course pesticides; legal liabilities for environmental consequences of management actions; public opinion; media relations; pesticide modes of action; environmental audits; Integrated Pest Management and a discussion of specific problems related by class participants.

This was the first time this seminar was presented, the instructors were interesting and informative, the material was well presented and given adequate time. I feel it's critical that we understand how our management strategies effect the environment, that we are aware of public perceptions and liabilities we create. Northern California GCSA was well represented at this seminar as six local superintendents participated. I strongly urge those going to next year's GCSAA convention in Las Vegas to schedule this seminar.

Submitted by Peter J. Galea, CGCS
Crystal Springs Golf Course

**MEMBERSHIP-APRIL**

Members Today-30 day wait up

Class A
David Wilber, Lake Wildwood CC

Class D
Jeffrey Roberts, Royal & Ancient Golf Club, Scotland
Garmit Singh, Richmond CC
Leon Smithen, Saratoga CC

Class F
Charlotte Sestito, West Coast Greens
William Tavener, Pacific Sod

Current-30 day Wait

Class D
Don Ballard, Bennett Valley GC
Wilber Maeder, Petaluma G&CC

Class F
Mark Razum, Oakland Athletics
Andrew Wheeler, Water Utilities Services

Pending Exams

Carol Lozito, Snowcreek GC Class A
Darshan Dass, Canyon Lakes CC Class B
A LOOK AHEAD

APRIL 10  GCSANC Annual Meeting
        Del Monte GC

May 7    Sequoyah CC

May 20-21 CGCSA State Meeting
        The Inn and Links at Spanish Bay

June 8   De Laveaga GC

July 23   Supt/Pro Tourney
         Palo Alto Hills CC

August  Open

Sept. 7  Mira Vista CC

SCHOLARSHIP UPDATE

The Gold Course Superintendents Association of Northern California has again instituted a Scholarship Program for students in the Turf and Horticultural field. This is the second year for this program and the scholarships will provide the students, who have an interest in this field, assistance to further their education. These scholarships will also create an awareness within the community of our Association and build for the future of the industry.

Last school year the Association awarded scholarships to deserving students from Diablo Valley College, Pleasant Hill, Foothill College, Los Altos Hills and Solano Community College in Suisun. Again this year viable scholarships are available to students with Horticulture majors.

The Scholarship Fund is partially supported by a portion of the fee paid for golf at our monthly meetings and by contributions from some of our members who support this type of effort. It is this kind of generosity and willingness to be supportive of the Association that will enable us to promote the turf industry and achieve the degree of professionalism we desire.

The main criteria for the scholarship award is: enrollment in the Horticulture Program, financial need, extra curricular activities, scholastic achievement and a demonstrated interest in Turf Management.

Article by Joseph Rodriguez, CGCS
PROPOSED MEMBERSHIP FEES AND ANNUAL DUES

The Finance Committee of GCSANC, in a report to the Board of Directors, has recommended the following Membership Fees and Annual Dues. These Fees and Dues are recommended for approval by the membership at the Annual Meeting to be held April 10, 1990 at Del Monte Golf Course in Monterey.

If the proposed revised By-Laws are approved by the Membership, these new fees and dues will become effective January 1, 1991. If the By-Laws are not approved, and the Fees are approved, these new fees and dues will become an amendment to the current by-laws, and become effective January 1, 1991.

These new fees are recommended to maintain the solvency of GCSANC during a period of extensive growth and ever increasing costs. Along with membership services such as the newsletter, job announcements, and increase educational opportunities, GCSANC has embarked on a viable Scholarship program to foster future Superintendents, local and state wide participation in turfgrass research, and most significantly, the fact that we have had to hire and train a new executive secretary for business operations.

The finance committee's recommendations are based on the initiation of an operating budget for GCSANC. For the first time in our associations history, we now have an accurate basis for establishing income and expense cost centers. This information will prove to be invaluable for the continuing operations and growth of our membership services.

The Board of Director's recommends that these new fees be approved by the membership at the Annual Meeting.

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