

EDITOR

JEAN LADUC 1356 Munro Avenue Campbell, CA 95008

OUR OBJECTIVE: The collection, preservation, and dissemination of scientific and practical knowledge and to promote the efficient and economical maintenance of golf courses.

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PRESIDENTS MESSAGE

With our Annual meeting fast approaching, it signals the end of my tenure as President and a time to reflect back on the accomplishments of the previous year. I would be remiss if I didn'tacknowledge all of the Board of Directors for their undying efforts in assuring our Association prospered.

A special thanks too our two Affiliate Representatives, Don Naumann and Mike Ginelli, who through their efforts have managed to narrow the gap between Superintendent/ Affiliate so that we work more closely as a unit. And finally a personal thanks to our Executive Secretary Barbara Mikel and her assistant Susan McGowan who have managed to keep us on track both financially and legally so that we might recognize our true potential as an Association as well as a model for other Associations to follow.

First off, our monthly meetings have gotten stronger. We've tried to structure our meetings around current topics which we thought would prove not only beneficial to our membership but keep us abreast of a fast changing industry.

Secondly, our GCSAA Seminar continues to be a popular choice. The two day seminar offers our membership a chance to share some very extensive material taught by leading Professors in their fields. This is particularly useful since not everyone has the opportunity to attend the Annual GCSAA Conference.

Thirdly our Annual Institute has proven to be extremely beneficial to our members. The quality of our speaker, combined this year with the mini trade show proved overwhelmingly successful. This Institute has afforded us the ability to be the dominant chapter in California as well as raised our level of professionalism throughout our membership.



FRANK HICKS

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P. O. BOX 1330 SALINAS, CA 93902 Fourth, our membership has grown dramatically. With the influx of new members comes new ideas and leadership to take us through the nineties.

Finally and perhaps most importantly our Association operates like a business. I am particularly proud since we've been working towards this for three years. During this time we came up with an operating budget for the Association. Having just completed our first full year of working with that budget, I'm happy to say our Association is poised to enter what I'd describe as the "Big Leagues". Through our various programs (Seminars, Institute, Affiliates mini trade show, Beverage Cart and Job Referral Service) we've been able to generate enough capital to not only cover our yearly operating expenses but a very generous Scholarship and Research Program.

Now I know you're aware that we've always supported scholarship and Research. What you're not aware of is we never really where the money was coming from. Witness controls of checks and balances we avoid committing monies we don't have. This in turn protects our operating budget and reserves. With the final piece of the puzzle in place we are now elevated to the position of "A Business".

As you can see it's been a very busy year. Through the Boards hard work and dedication our Association could not be on more solid ground.

It's been a pleasure being President. The experience is one I will cherish always.

To each and every person involved this past year I offer a sincere thanks for a job well done.

Mike



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Dele L. Siemens President

ATTENTION PLEASE!

The June 19 meeting at Spanish Bay will be limited to 125 people for breakfast. All members of GCSAA that are gold card holders will be allowed entry into the U.S. Open with GCSANC has also been one guest. allottedtickets for only 40 non-gold card members. It is imperative you get your registration back to the GCSANC office as soon as you receive it to assure yourself a spot. Registration will be done by post mark. Any questions call Brian Bagley at (408) 274-0433 or the GCSANC office (408) 865-0360.

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Mike Rawitzer Golf Shop San Jose Municipal Golf Course 1560 Oakland Road San Jose, Ca. 95131 Attention: Gary Carls, Superintendent



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A LOOK **AHEAD**

April 27 Palo Alto Hills CC

CGCSA Annual Meeting May 4.5

Ojai Valley Inn

May 13 Sonoma National

June 19 U.S. Open-Pebble Beach

Lake Merced-Supt/Pro July 13

August 14 Marin CC

September 14 Pasitiempo CC

October 9 Sierra Nevada Chapter joint meeting

November 11,12GCSANC /UC CooperativeExtension Golf Course Institute

December 4 Christmas Party





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PRESIDENT

RODNEY KILCOYNE DIABLO CREEK GOLF COURSE



I have served on the Board of Directors for the past six years, the last two as Secretary/Treasurer. I am aware of the tremendous responsibility and dedication required of the President of our organization. It is a job I did not seek, until the career change of our current Vice President Steve Good. Those who have served on the Board of Directors as officers and directors will understand my reluctance. Those who have not, I would encourage you to become involved in the running of our organization. Once involved you begin to realize the commitment required and the satisfaction received from influencing the direction of our profession. This opportunity to serve as President, I would be honored to do. I have no particular agenda other than to carry on the good work of my predecessors. To serve as a bridge between those with new ideas and the past. Our organization has successfully survived a major transition in the last three year and continues to be in the forefront of Golf Course Superintendent Chapters nationwide. It is a tradition we have come to expect and I pledge to continue.

VICE PRESIDENT

In 1982, while attending U.C. Davis, I received an internship at Del Paso CC in Sacramento. In 1987, after spending three years in Los Angeles as an Assistant Superintendent, I got my first superintendents job at Saratoga CC. I then moved to The Villages G&CC in January 1990.

Our Association, like golf course superintendents in general, will face many challenges in the decades to come. From water problems both quantity and quality, to increasingly stringent environmental regulation. I feel that it is the Golf Course Superintendents Associations job to help the Superintendent with those challenges.

It has been a real privilege working with the rest of the board members these last two years. It has been a busy, yet productive and rewarding experience and I would like to continue working on the board as Vice President in the year ahead.

BRIAN BAGLEY THE VILLAGES G& CC



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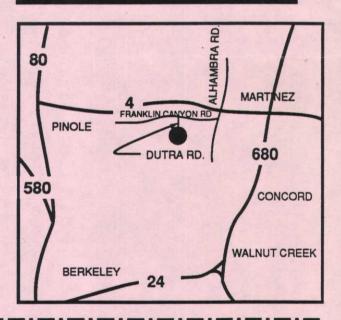
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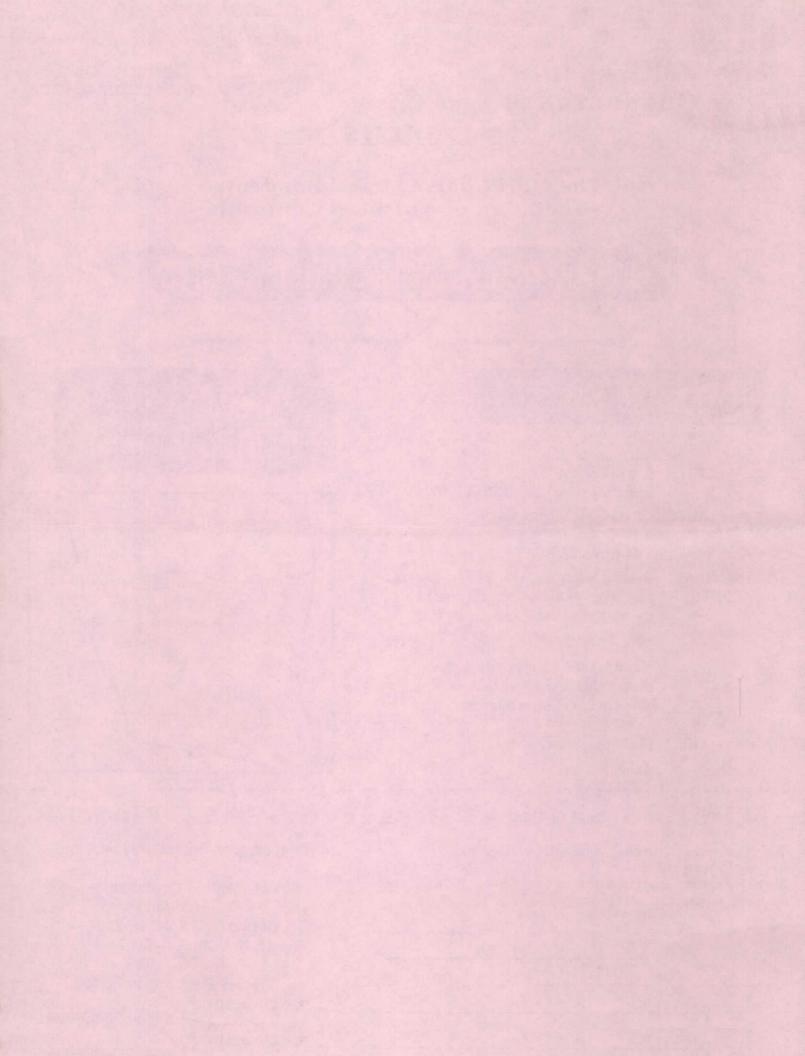
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SECRETARY/TREASURER

DAVID SEXTON CGCS THE MEADOW CLUB



M y name is David Sexton and I am the Superintendent for the Meadow Club Golf Course in Fairfax. I have been at the Meadow Club for almost eleven years and before that I was at the Ojai Valley Inn for four years.

I started in golf course maintenance at the Paso Robles Golf & Country Club while I was a student at Ca. Poly at San Luis Obispo. I received a B.S. Degree in Ornamental Horticulture from Cal Poly in 1976. I became a Certified Superintendent in 1983.

I was elected to the Board of Directors last year and have worked on Membership since that time. My experiences with the members have been very positive and rewarding and when I was asked to run for the position of Secretary/Treasurer that is being vacated by Rod Kilcoyne. I was pleased to accept the nomination and make my services available to continue serving the members of Northern California GCSA.

I have worked with the five past presidents as both newsletter editor and a member of the Board irectors. This association is a dynamic, goal oriented organization. It has grown into a viable business, setting the pace and example other chapters are following. It is a pleasure to work with the membership and other Board Members. I look forward to continuing and improving the progress which has been made in the past promoting the golf course superintendent.

Jean LaDuc Coyote Creek Golf Course



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DIRECTORS

It was an honor to be selected by the Election Committee to run for a seat on the Board of Directors. I have served on two audit committees in the past. I have been a member of the Association since 1981 and I am the Superintendent at the Sharon Heights Golf and Country Club. Being a member since 1981 and only serving on the audit committee, I feel that its time to give back to the Association for which I have gotten so much out of.

ROSS BROWNLIE SHARON HEIGHTS G& CC



RANDY GAI CLAREMONT COUNTRY CLUB



I would like to be considered for the Board of Directors of GCSA of Northern California as I feel my family situation has matured to the point of finally giving me the time to put forth the effort our Association needs. I have benefited from being a member for 12 years and I would very much like to take part in helping this Association any way I can.

The majority of my education and/or knowledge about golf course maintenance has come from the efforts of many members of this association. Thus, it is important to me to offer my assistance in any capacity needed.

I have been "certified" since 1986, a charter member of the National's Golden Tee Club, and have helped to place my course in the USGA/Audubon Cooperative Sanctuary Program.

I have a strong commitment toward the environment and its issues as well as Scholarship & Research activities.

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We regret to announce Michael Higuera has withdrawn his name from the ballot.





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COMBINING THE REQUIRED DATA INTO A BASELINE IRRIGATION PROGRAM-PHASE I

Effective irrigation programming involves the evaluation of the various environmental conditions in your area, and the physical characteristics of your irrigation system to determine how much water you must apply to your turf grass to keep it healthy. A summary of the important environmental factors includes a working knowledge of the following:

- Average water requirements for your turf (average inches per day for each month of the year).
- 2. Evapotranspiration (ET) rate for your turf (average inches per day for each month of the year).
- Site rainfall (average inches per day for each month of the year).
 - 4. Depth of active root zone (inches).
- Water holding capacity of soil within root zone (inches of water held per inch of soil).

the important physical characteristics of your irrigation system that you need to know in order to calculate your system programming schedule include:

- Precipitation rates for the various irrigation zones to be irrigated (inches per hour).
- Total number of irrigation control zones on your golf course for each precipitation rate.
- 3. Total irrigation time available (water days and minutes per water day).
- Flexibility of your irrigation control system (quantity of available start times and programs).
- System hydraulic parameters (maximum flow available from pump station, maximum number o control zones that can run at once for each main line leg or zone, etc).

Since the primary reason for irrigation is to provide the proper amount of available water to the soil that will be used by the turf, the first calculation to be done involves determining the "ETapplied" (ETa). ETa represents an estimate of the amount of water to be applied by the irrigation system and is approximately equal to the soil's water storage depletion, or the evapotranspiration rate of the turf minus the effective rainfall provided to the soil by nature.

The evapotranspiration rate of turf (ETc) can be thought of as a percentage of "reference ET" after adjusting for the turf's maximum allowable stress tolerance. An excellent source for historical turf grass ETc data for the Central Coast of California is leaflet #21491 Turfgrass Evapotranspiration Map Central Coast of California published by University of California Cooperative Extension, Division of Agriculture and Natural Resources (available from ANR Publications, 510-642-2431).

Effective rainfall (ER) can be thought of as an estimate of the percentage of total rainfall that reaches the turf rootzone. For baseline scheduling purposes, monthly gross rainfall that totals less than .25 inches is considered to be 0 (zero) effective rainfall; and monthly gross rainfall levels equal to or greater than .25 inches are calculated as .67 X monthly gross rainfall. For example, if historical rainfall levels in March are found to be 2.32", Effective Rainfall should be estimated at 2.32" X .67 = 1.55". Monthly ER should then be converted into a daily ER figure by dividing by the number of days in the month. Therefore March daily ET in this example is estimated at .05"/day. (1.55" divided by 31 days = .05"/day).

If you continue with this example for March, and find from local historical research data that the daily ETc is .07"/day, you can easily calculate the daily ETa as follows: Daily ETa = ETc - ER = .07" - .05" = .02"/day

Daily ETa should be calculated for each month of the year by using this same process. Negative values for daily ETa indicate that Effective Rainfall exceeds the turf Evapotranspiration rate and irrigation should not be required during normal weather patterns.

This daily ETa data is an important step toward determining how long you need to run your sprinkler heads to provide the water required for healthy turf. The next step in the process involves combining the daily ETa with the precipitation rate of your sprinklers to determine required run times.

Next Month: Combining the Required Data into a Baseline Irrigation Program - Phase II

Doug Macdonald is an associate design consultant with Russell D. Mitchell & Associates, Inc., an irrigation system design and consultation firm in Walnut Creek, California.



Don Naumann

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