<u>THRU THE GREEN</u>





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. Information contained in this publication may be used freely, in whole or in part, without special permission as long as the true context is maintained. We would appreciate a credit line.



PRESIDENT JOSEPH RODRIGUEZ, CGCS Rossmoor GC 3312 Mountaire Drive Antioch, CA 94509

VICE PRESIDENT MICHAEL GARVALE, CGCS Palo Alto Hills CC 3000 Alexis Drive Palo Alto, CA 94304

SECRETARY-TREASURER RODNEY KILCOYNE Diablo Creek GC 140 Norman Avenue Clyde, CA 94520

PAST PRESIDENT GILBERT(PETE) BIBBER Del Monte GC 30 Via Contenta B Carmel Valley, CA 93924

DIRECTORS PETER J. GALEA, CGCS Crystal Springs GC 6650 Golf Course Dri ve Burlingame, CSA 94010

> STEVE GOOD Napa Golf Course 1625 Sierra Avenue Napa, CA 94558

JEAN LA DUC Coyote Creek GC 1356 Munro Ave. Campbell, CA 95008

BRIAN BAGLEY The Villages G & CC 125 Brook Lane Boulder Creek, CA 95006

OFFICE 1745 Saratoga Ave. Suite A1 San Jose, CA 95129 (408) 865-0360

PRESIDENTS

Well, it's getting close to the end of the year and we can start looking ahead. Hopefully we can look ahead to a wet, wet winter. I know for some of us water rationing, due to the extended drought, has become a way of life. In a way there were some benefits and valuable lessons learned, as many of the Superintendents I have talked to, have gained new insights into water usage. We have learned that we can get by with less water and still have a playable course. I feel overall we have become better managers of our resources, but now lets get on with the rain.

Coming up on December 7th is our annual Christmas party. This year golf and dinner will be at Rancho Canada with Tim Greenwald as our host. This annual event is a great opportunity for all of our members including Superintendents, Associates, Affiliates, etc. to get together play golf, relax and just have a good time. It is also appropriate at this event to acknowledge our affiliate members who have been so supportive in the past and continue to be. The support is appreciated and we thank you for your generosity.

I recently read an article dealing with substance abuse in the workplace and coincidentally I became aware of a couple situations that were

MESSAGE

occurring on golf courses with employees using drugs. It makes a person stop and think. Are you aware of any substance abuse, meaning alcohol or drugs, on your crew or in your shop? You might be surprised. Almost every employer will say no way, but do they really know?

Some facts are, fourteen out of everyone hundred employees abuse drugs on the job, and 60 percent of those drug abusers sell drugs to other employees. One out of every four drug abusers steals from his or her company to support their habit. This abuse costs the nations economy over \$100 billion dollars in 1988 through lost productivity, accidents, health and medical expenses and theft of property.

I don't think any of us can afford to overlook these kind of figures and the problems they represent. Just the safety aspect of it on a golf course is a cause for great concern. I don't know enough to offer a solution, b awareness and knowing what to look for would be a start. The threat of drug testing, but most of all education would also act as a deterrent.

Joseph A. Rodriguez, CGCS

CLAREMONT CC GOLF WINNERS

		Second	
<u>GROSS</u>		Gale Wilson	65
First		Third	
Ross Brownlie	68		(0
Second		Don Paul	69
Bobby Cox	73	Fourth	
	15	Wes Asmussen	69
<u>NET</u>		Fifth	
First		Mike McCraw	69
Robert Dauterman	65	Six	07
		Russ Tsuitsui	69

THRU THE GREEN

November 1990

con't from page one

requirements, and lawsuits against the ufacturers. Pesticides and the rinsate will require special handling and storage containers. Insurance akin to malpractice carried by physicians will be required by superintendents. To compensate, clubs will be forced either to increase the maintenance budget of accept a reduction in the overall appearance of the course. Realistically, most clubs will choose a combination of these two options.

The application of fewer pesticides on golf courses will result in course that are less immaculate than the average golfer has come to expect. While the perceived quality of most courses will suffer, those courses managed by a superintendent who has relied too heavily on pesticides will deteriorate the most. Without the equalizer of unlimited pesticide availability, the varying abilities of turf managers will be highly visible to all.

You may not accept all of these predictions. However, if you accept even one, you must also accept that our industry and the game of golf will be strongly affected. Many will sose to ignore the inevitable until it is too You assume relations, the researchers will develop grasses that don't need pesticides, and the chemical companies will develop chemicals that are so safe they will have Rachel CArson's picture on the label. You will not be up to the challenge and you will not survive.

If you are a superintendent, you might blame your demise on the USGA and the Stimpmeter. The architect can blame the golf course builder who did not follow his plans. The builder can blame the superintendent who can't properly "grow in" the course. The USGA agronomist can blame the architect who made the course too difficult to maintain. What a party we can have. Ironically, the only thing that may keep us all from cutting each other's throats will be shared dislike of the organizations we consider environmental radicals, along with their lawyers.

Or. . .

We can each take step right now to prepare ourselves. Let's become "survivalists" not by ckpiling guns and ammunition but by

ucing our exposure to the threat.

Immediate options are available to each branch of our industry.

To the Superintendent: Learn to be a better turf manager. Emphasize your skills in water management, disease identifications, soil cultivation, and fertilization. Review the principles you learned in Turfgrass 101 and simplify your programs as much as possible. A strong, healthy turf is unquestionably your best defense. You have a history of being the greatest and boldest experimenters with new products. It is time to begin to experiment more with doing less. use every skill you have to reduce your chemical needs.

To players and club officials: Realize that you will be affected by these changes in the industry. Understand that absolute perfection on the course is no longer a realistic goal. Greater emphasis should be given to playing quality and the agronomic needs of the turf. Quit judging a superintendent's worth based on the speed of the greens. Realize that nature cares very little about your tournament schedule and that maintenance practices must be given higher priority than they have in the past. consistent management is vital. Develop longrange plans and quit changing green chairmen every year.

To the architect and golf course builder: All those involved with the development of new courses must make major changes. Stop selecting grasses with total disregard of local climate. Just because a turf can be grown with enough pesticides and a big enough budget) does not mean it should be. Stop cutting corners on green construction. Stop building greens in holes where air movement is nonexistent. Pay greater attention to drainage throughout the property.

To the researcher: Give us facts. Prove that what we are presently doing is not harmful, if that is the case. However, of equal and even greater need in my eyes is the identification of what to expect and do under low or no pesticide use. and, of course, the continued development of superior turfgrasses is critical.

To the golf professional: Emphasize playing quality to the golfer. Remind players that golf is a game to be enjoyed, not an exercise in frustration or an opportunity to be critical. Emphasize the positive aspects of your course. With the help of a good pro, even the shortest nine-hole course with the smallest budget can give great enjoyment to the player.

To my colleagues in the USGA: Let us avoid

the temptation to offer quick but short-lived fixes to problems. While solid agronomic advice may not be glamorous or offer instant improvement, it is what is needed most of all. We are perhaps in the best position to gather the facts from other groups and disseminate them to the entire golf industry.

To the leadership of the USGA: I hope our organization will use its tremendous influence to educate golfers and make them more receptive to changes that are coming. Equally important will be the continued funding of turfgrass research.

To those who are not a part of golf: Realize that golf is an industry that does care for the environment. Golf courses have tremendous positive effects on both the land and the people who use it. This should not be a case of you versus us. We will stand a better chance of achieving common goals if we work together.

As I said, I am an optimist. I see the significant challenges we face as an opportunity to better our industry, our game and ourselves. Let's make the power of the lightning bolt work for us instead of against us.

Reprinted from USGA Green Section Record, March/April 1990

By James F. Moore, Director, Mid-Continent Region, USGA Green Section

By James F. Moore, Director, Mid-Continent Region, USGA Green Section



THRU THE GREEN

November 1990

VALVES IN THE IRRIGATION SYSTEM

If controllers are thought of as the brains, then valves should be considered as the heart of any irrigation system. The purpose of any valve is to control movement through the system - if a valve is open, things can pass through; if it's closed, they can't!

Technology has expanded on this basic principle to provide us with a variety of valves for many specialized purposes and applications. Valves today can be operated manually, or with a signal from an electrically or hydraulically operated source. You can use valves to control volume or direction of flow, working pressures, water hammer, air release, and many other important actions required for efficient irrigation system operation and management. This month we'll look at some of the more common valves installed in irrigation systems and how they can be operated a their maximum utility.

The most common use of valves in irrigation systems is for regulating the flow of water through the piping network. A typical golf course will have a complex layout of piping that takes the pressurized water from the source to the sprinklers. Since the water in the system is usually under constant (static) pressure, whenever a valve is opened the water will move through it until it is forced to stop again. Valve-in-head sprinkler systems use this principle to irrigate the turf areas of the course. Each sprinkler has an integral valve that remains closed until the controller signals it to open up and begin irrigating. Conversely, "Block" or "Battery" systems link several sprinkler heads together with a "lateral" pipeline that is non-pressurized until a control valve is signaled by the controller to open up and allow pressurized water into the lateral and, in turn, out of the sprinklers. One of the hazards of having an irrigation pipe network under constant pressure is that if the pipe cracks or a fitting breaks, water will happily run out of the break until it is fixed or until you run out of water, whichever comes first. This situation explains the importance of installing "isolation" valves at regular intervals along your pressure main line routing. Isolation valves are typically manually-operated gate valves or angle valves that allow you to shut-down (or isolate) sections of the mainline or sub-mains for maintenance without shutting down the entire golf course system. Isolation valves should be installed at logical locations along the principle mainline routing to isolate a hole or group of holes as well as larger areas of the course that have similar conditions. Isolation valves should also be installed at any sub-main connection locations off of the principle mainline, It is important that you install gate valves or angle valves that have resilient seats since they are somewhat resistant to damage from debris that is often found in golf course irrigation water sources.

One concern that you might have if you need to shut down a section of your irrigation system is how to irrigate that area until the maintenance work is completed. A possible solution to this problem is to install quick-coupling valves at regular intervals along the pressure pipe routing. Quick-coupling valves allow you to manually tap into the pressure line and hookup a hose for temporary irrigation. If you have the availability of a quick coupling valve at 250' intervals along your mainline you should be able to drag a 100' section of hose between any two valves and irrigate any area that is temporarily shut down. It is also a good idea to install quick-coupling valves on two sides of every green and at least one QCV at each tee box to allow for special or supplemental irrigation to these delicate areas of the course. The types of valves presented here are installed in practically every golf course irrigation system in operation today. As you know, every course is different in layout, structure, and temperament. Each golf course has little intricacies that may require special consideration and, often, specialized valves are the best way to exercise control over these areas.

Next Month: Specialized Valves for Special Situations

A LOOK AHEAD

November 29, 30 GCSAA & GCSANC Annual Seminar, Pleasanton

December 7

Larry Lloyd Memorial Tournament and Christmas Party,Rancho Canada, Carmel

January 7, 1991 Hidden Valley CC, Middletown, CA

February GCSAA National Convention

March Joint Meeting with USGA, NCGA

April GCSANC Annual Meeting, Rossmoor

May Open

June 13 Orinda CC

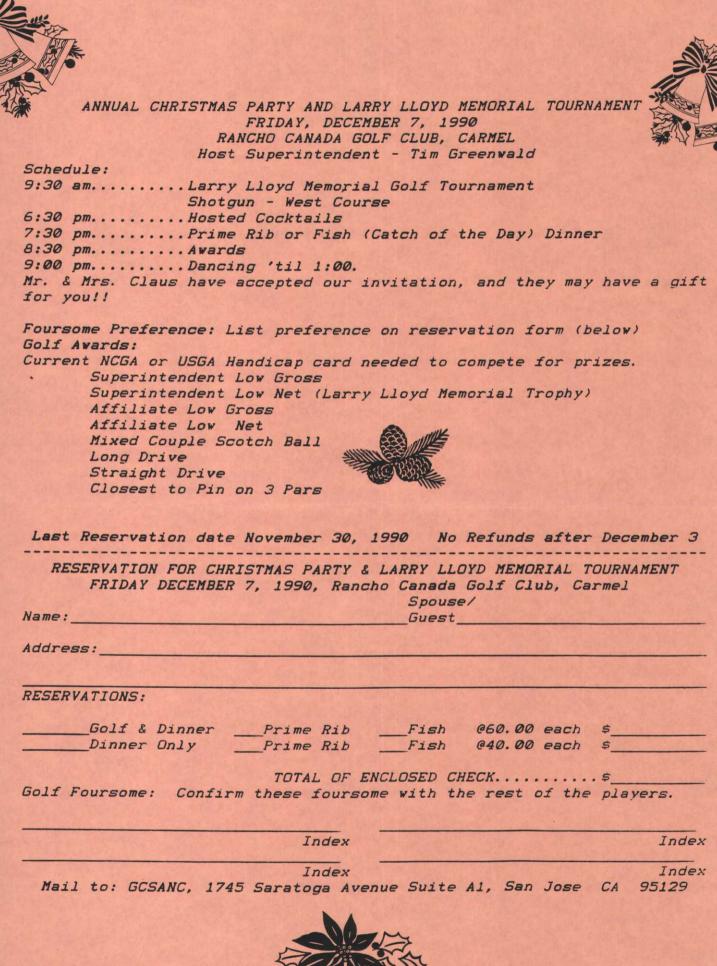
July 15 Supt./Pro Tournament, San Francisco Golf Club

August Oakland A's Baseball Game, Oakland Coliseum

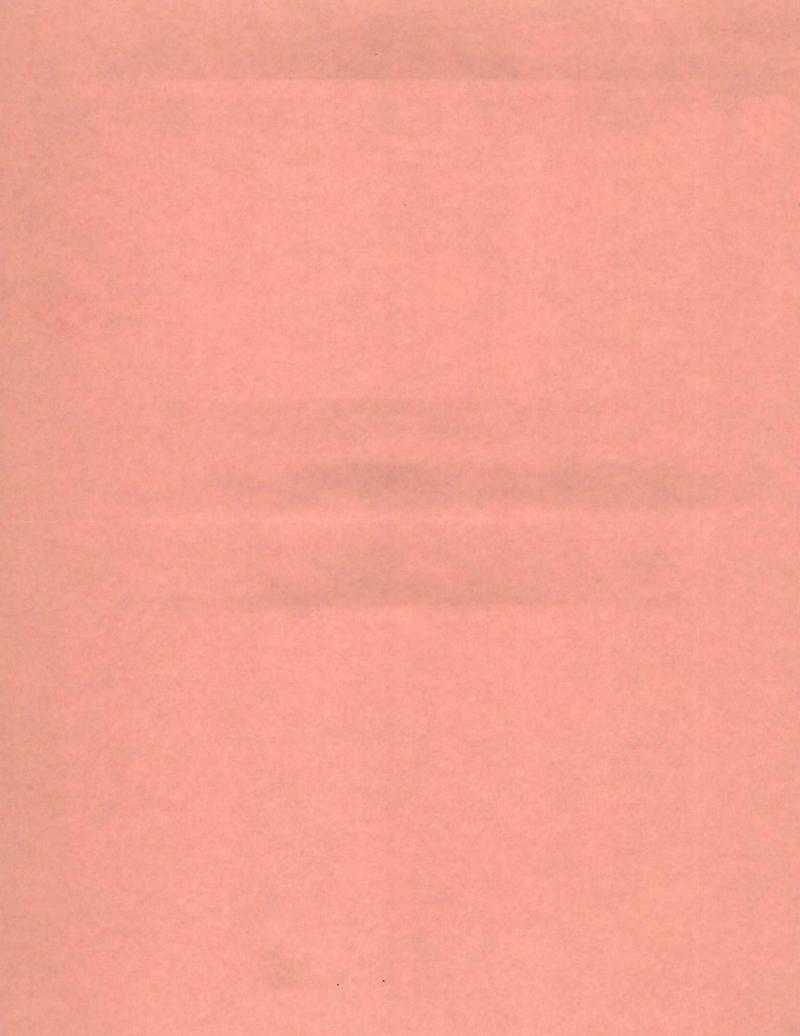
September Richmond CC



Page 4



STATION I



THRU THE GREEN

TREES AND YOU

Let's take a break from turf and examine another group of plants used on the golf course, **TREES**. Through the season, we spend most of our time looking down at our turf very carefully examining the root and leaves. Let's take a moment to look up and examine our trees.

Trees play an integral part of the golf course in design, function and aesthetics. Due to their important roles golf course superintendents should expand their awareness of trees on the golf course. This awareness may extend to the impact that trees not only have on the course, but on the environment. Trees play an important ecological role by removing carbon dioxide and cooling the environment. This has been recognized by the American Forestry Association which has recently initiated Global Releaf and has a goal of planting 200 million trees by 1992 in an effort to deal with environmental problems and global warming. Global Releaf is supported by many national hizations.

TREES AND THE GOLF COURSE

Trees provide several functions on the course. Most importantly trees provide a visual frame for the fairway and a background for the green. They also create interest as the golfer may need to stratigically play around a tree. Trees are an integral part of the game as well as the aesthetics of the landscapes and sometimes good places to sit in the shade.

These roles played by trees are also important reasons to treat trees with respect. Remember, the golf course is a system - a collection of microenvironments that are intensely managed. Trees are a part of the system and need to be included in the overall maintenance program of the course. Trees on the course become an asset to the course.

Tree care is an investment. Not all superintendent courses can afford to allocate a part of the budget to maintain trees. A good part of tree care is common sense. Understanding the basics of a tree as a system, it grows and proper maintenance procedures is important to establishing a tree care program. Many trees maintenance activities may be achieved during the off season, and time may more easily be allocated toward tree care.

Knowing some basic facts about trees may help you establish a very simple tree care program. Many times, tree maintenance comes through preventing problems in the first place. Some things to remember:

The root system is the most important part of a tree. Without healthy roots the top is sure to suffer.

Tree roots extend upward and outward far beyond the drip line. Roots may cover 2-4 times the area of the crown.

Tree roots need oxygen. Any activity interfering with oxygen diffusion into the soil is harmful to the root system.

Most of the root system is located in the upper 12 inches of the soil. Many roots grow near the soil surface where oxygen levels are highest. Never grade soil over the root system and never grade soil away from the root system.

Any injury or extensive wounding of the roots or crown may provide easy access for pathogens.

Building "wells " around the trees for the purpose of changing grades most often does not work.

Trenching under trees is harmful. Proper distances should be followed to minimize damage.

The crowns of the tree should be treated with the same respect as the root system. Minimize wounding, follow proper pruning techniques and avoiding any mechanical damage is prudent. Remove dead wood and poorly formed branches before they can lead to greater problems.

If in doubt, don't do it, call a professional for advice. Common sense is the best approach to tree management.

Credit: "The Gateway Green", Mississippi Valley GCSA newsletter, Spring 1990

MEMBERSHIP FOR NOVEMBER

Associate

Ram Pal, Buchanan Fields GC

Timothy Johnson, Pebble Beach GC

Affiliate

Lynn Quinzon, P.W. Pipe, Mokelumne Hill, CA

Robert Scafe, Corporate Signs Systems, Livermore, CA

Jack Kincaid, Thompson Irrigation, Antioch, CA

Herb Kast, Skywest GC, Hayward, CA

PASSED CLASS B TEST

Dave Davies, Dry Creek Ranch GC, Lodi, CA

An Nunez, Canyon Lakes CC, San Ramon, CA

PASSED CLASS A TEST

Jeff Livacich, Valley Gardens GC, Scotts Valley, CA

Dave Rosentrauch, Orinda CC, Orinda, CA

Dave Smith, Tilden Park GC, Berkeley, CA

Rex Thrasher, Clear Lake Riviera GC, Kelsyville, CA

PASSED CLASS UPGRADE BY MEETING ATTENDANCE

Brian Bagley, Villages CC, San Jose, CA

Al Ramoz, Santa Clara GC, Santa Clara, CA

Jorge Bartolomeu, Richmond CC, Fairfield, CA

Jerry Bodenhorn, Forest Lake GC, Acampo, CA