PRESIDENT’S MESSAGE

The "Dog Days of Summer" are now upon us, and I hope most, if not all, of you have survived the array of problems which effect us during the warm season of the turfgrass growing year. Whether it be the diseases (anthracnose, pythium, summer patch, southern blight, or whatever) or insects, or simply the decline of poa annua, I know as September rolls in most of us are anticipating those first rain storms which inevitably lead to winter. The fall also means the workload does not drop off as we must consider fall aeration and top dressing, as well as overseeding around the busy tournament schedule.

Fall is also the time we anticipate the GCSANC Annual Institute. This year’s event promises to be a whopper. The education committee, under the guidance of Dr. Ali Harivandi and Bill Kissick, CGCS (co-chairpersons), are presenting the topic, "Managing Your Greatest Resource: Humans." The featured speaker is Dr. Elizabeth Gibson of RHR International Co. The dates are November 2, 3, and 4, 1994. The location in beautiful Santa Cruz are the Coconut Grove and the Dream Inn with a golf outing at DeLaveaga. As usual, the first afternoon will be a four hour presentation on pesticide laws and regulations. CDFA hours (4) have been applied for. Golf is considered to be a fun outing, but be advised – golf is reserved for conference attendees only. Get your reservations in early to take advantage of the Early Bird Discount.

Also, a reminder that the joint meeting with Sierra Nevada will be held at Edge-wood, Lake Tahoe. I suggest you get your reservation in ASAP if you want to attend.

See you on the tee,
Randy Gai
President

FYI

I’m back! Vacation and fishing were great!

Now, on to more mundane matters. Recently, I have been receiving a lot of renewals for GCSAA (that’s national) membership. Sometimes the checks are made out to GCSAA and sometimes, to GCSANC. You might want to make sure your accounting staff understands that there is more than one superintendents association in the world! Nice to know they think of us first! I have forwarded all those I received and called the various clubs’ accounting departments, but it could mean a delay in your GCSAA renewal.

Speaking of renewals, I will be mailing GCSANC renewal bills in October. These bills are due and payable upon receipt. They are delinquent and subject to a late fee if not paid by December 31, 1994. I know it seems like we just did this, but we try to get them out to you early so you can submit them for prompt payment. Those questionnaire forms are due back with your check. If we get the form, but not the check, you are technically not renewed until we get the form! So, when you hand your request for payment and questionnaire to your accounting department, be sure they understand to send back the questionnaire with the check.

Thru the office has been in Diamond Springs for almost a year now, but I am still getting mail forwarded from the old address. Please circle or highlight the new GCSANC address for all mail going through your accounting department.

You guys are still moving around, please forward new addresses and telephone numbers as soon as possible.

See you at Chardonnay.
FOR SALE:
One Ty-Crop model TD-400, 4 yd. top dresser with warranty. Delivery included. Contact Joe Scimas at 209/836-1236 or 209/832-1169 (home).

Joint Meeting with Sierra/Nevada
The October meeting is our annual joint meeting with Sierra/Nevada Chapter at Edgewood - South Lake Tahoe. The meeting will fill very fast, so watch the mail for your notice and get your reservations in early to guarantee a spot.

1994 GCSANC Institute
Site: Coconut Grove Conference Center, Santa Cruz
When: November 2-4, 1994
Hotel: Dream Inn
Topic: Personnel Management
Golf Course: DeLaveaga GC
Host Superintendent: Don Paul

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Golf Course Superintendent
Hayden Lake Country Club, Hayden Lake, Idaho

Requires college degree in related field, experience as a superintendent, good managerial and communications skills. Salary $40-60,000 plus benefits.

Send resumes to: James Ashburn, GM, Hayden Lake CC, 1800 East Bozanta Dr. Hayden Lake, Idaho 83835.

Tips from the USGA
Why Don't The Greens Hold?
by Pat Gross
USGA Agronomist

Is there an unwritten rule of golf that says a sculled 3-iron from the rough should hold the green? Some golfers feel this way. Many believe a putting green should be like a dart board: if you hit the target, it should stick. Maintaining soft conditions on the putting greens is contrary to producing good putting quality. But what are the factors responsible for producing greens that will hold a properly struck golf shot. The answer lies in three main areas: ball control and backspin, green construction, and maintenance.

Ball control and backspin
Volumes have been written on the proper way to strike a golf ball. These theories provide hours of lively debate at the 19th hole and are a great source of revenue for golf professionals. Let the truth be known, it is the ability to put backspin on the ball that makes a shot stop inclose proximity to where it lands on the green. Backspin is created when the ball is struck with a descending blow. Spin is reduced when grass or other materials get caught between the clubface and the ball. This is most evident with strokes played from the rough, producing what is known as a "flier" -- a shot with very little spin that tends to roll farther. Another factor influencing backspin is the type of golf ball. Frank Thomas, USGA Technical Director, has studied golf ball flight and measured the spin rates of different golf balls. His studies reveal the following: 2-piece balls spin at the rate of 45 revolutions per second (rps); wound surlyn covered balls spin at 55rps; and balata covered balls spin at the rate of 60rps. Furthermore, Mr. Thomas noted that a golf ball loses 50% of its spin after

Continued on page 5

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If you made the mistake of thinking federal regulations had gotten just about as bizarre as they can get, please, read on. A federal classification could require golf courses to warn employees of the dangers of bunker sand.

Crystalline silica -- the primary ingredient of sand, rocks, most of the earth's crust and dust in the air -- is classified as a carcinogen. Initially, that might not sound like such a big deal, until you consider that crystalline silica is known to cling to root vegetables and other foods, is widely used to filter most of the nation's drinking water supplies, and is played and frolicked in by millions each year on beaches and in backyard sandboxes. It also can be found in everyday products as common as pharmaceuticals, bricks, paper, jewelry, putty, paint, plastics, household cleaners, and a host of others.

That's right. One of the most predominant ingredients used to manufacture common household items could be killing us, according to several scientists, health organizations, and the Occupational Safety and Health Administration (OSHA).

In fact, crystalline silica has been categorized as a carcinogen for several years, but has been held up lately by a growing number of critics as an example of how the regulatory process sometimes gets caught up in its own web. It has been revisited as the result of a California law requiring warnings to be placed on crystalline silica containers, which has caused a mild panic in the state and beyond.

But before you build a plastic bubble for you and your family to live in for the rest of your lives, read on.

Critics are beginning to yell that the official lumping of beach sand in the same carcinogenic category as 1500s, when heavy dust exposure was determined to cause lung disease in miners. Regulations regarding dust exposure were put in place, the incidence of the disease dropped markedly, and little more thought was given to crystalline silica.

Until 1982. That was when a graduate student at the University of North Carolina made a splash by proposing that silica can cause cancer. The student cited research being conducted at the Los Alamos National Laboratory in New Mexico, where high doses of silica were repeatedly injected into the lungs of 36 rats, of which six developed tumors. This, the graduate student said, "struck me as quite powerful."

The student went on to work for the Western Consortium for Public Health in Berkeley, CA, which has formed alliances with similar organizations, such as the International Agency for Research on Cancer, an arm of the World Health Organization. Needless to say, the item snowballed until it reached its current status.

But more and more critics of the classification are becoming more vocal in their opposition to it and to the process that resulted in the classification.

The process gives no weight to studies indicating that substances do not cause cancer. The listing of silica as a probable human carcinogen was based chiefly on five rat studies. But at least five similar studies in hamsters...

Sand: Are You Listing It As A Pesticide?

Continued on page 6
### 1992-93 CHIPCO TURF PROBLEMS AND SOLUTIONS

#### Bay Area Summary

#### Most Common Insects Reported (Bay Area)

<table>
<thead>
<tr>
<th>Insects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOD WEBWORMS</td>
<td>32%</td>
</tr>
<tr>
<td>CUTWORMS</td>
<td>19%</td>
</tr>
<tr>
<td>NEMATODES</td>
<td>8%</td>
</tr>
<tr>
<td>GRUBS</td>
<td>6%</td>
</tr>
<tr>
<td>DURSBAN</td>
<td>5%</td>
</tr>
<tr>
<td>TURCAM</td>
<td>4%</td>
</tr>
<tr>
<td>SEVIN</td>
<td>1%</td>
</tr>
<tr>
<td>DYSOX</td>
<td>1%</td>
</tr>
<tr>
<td>PROXOL</td>
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</table>

#### Most Common Disease Reported (Bay Area)

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>PINK SNOW MOLD</td>
<td>26%</td>
</tr>
<tr>
<td>DOLLAR SPOT</td>
<td>25%</td>
</tr>
<tr>
<td>SUBDUE</td>
<td>24%</td>
</tr>
<tr>
<td>DACONIL</td>
<td>23%</td>
</tr>
<tr>
<td>CHIPCO 26019</td>
<td>22%</td>
</tr>
<tr>
<td>BAYleton</td>
<td>21%</td>
</tr>
<tr>
<td>TRIMEC</td>
<td>20%</td>
</tr>
<tr>
<td>BROWNSPOT</td>
<td>19%</td>
</tr>
<tr>
<td>CLEARY 3336</td>
<td>18%</td>
</tr>
<tr>
<td>ANTHRACNOSE</td>
<td>17%</td>
</tr>
<tr>
<td>PYTHIUM CONTROL</td>
<td>16%</td>
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#### Most Common Weeds Reported (Bay Area)

<table>
<thead>
<tr>
<th>Weeds</th>
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<tbody>
<tr>
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<tr>
<td>POA ANNUA</td>
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<tr>
<td>BROADLEAF</td>
<td>16%</td>
</tr>
<tr>
<td>CRAB GRASS</td>
<td>15%</td>
</tr>
<tr>
<td>ENGLISH DAISY</td>
<td>13%</td>
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<tr>
<td>BOLIVA</td>
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<tr>
<td>NWDAISY</td>
<td>11%</td>
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<tr>
<td>DANDERLON</td>
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<tr>
<td>KIKUYA GRASS</td>
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<tr>
<td>CHICKWEED</td>
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<tr>
<td>CLOVER</td>
<td>6%</td>
</tr>
<tr>
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<td>5%</td>
</tr>
<tr>
<td>CRAB GRASS</td>
<td>4%</td>
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<td>ENGLISH DAISY</td>
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</tr>
<tr>
<td>BOLIVA</td>
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<tr>
<td>NWDAISY</td>
<td>2%</td>
</tr>
<tr>
<td>DANDERLON</td>
<td>1%</td>
</tr>
<tr>
<td>KIKUYA GRASS</td>
<td>1%</td>
</tr>
</tbody>
</table>

#### Chipco Insecticides and Herbicides

- **CUTWORMS**: DURSBAN 72%, SCOTTS INSECTICIDE III 8%, DYLOX 6%
- **GRUBS**: DURSBAN 48%, TURCAM 15%, SEVIN 13%
- **NEMATODES**: NEMACUR 89%
- **SOD WEBWORMS**: DURSBAN 78%, DYLOX 6%, SEVIN 6%, PROXOL 5%

- **PINK SNOW MOLD**: CHIPCO 26019 30%, SCOTTS FFII 19%, BAYleton 14%
- **DOLLAR SPOT**: DACONIL 25%, CHIPCO 26019 24%, FORE 24%
- **BROWN PATCH**: DACONIL 45%, SUBDUE 68%, BAYleton 22%
- **ENGLISH DAISY**: TRIMEC 53%, DCMBA 23%, 2,4-D 15%
- **CLOVER**: TRIMEC 50%, MCP 16%, 2,4-D 13%
- **CRAB GRASS**: PENDIMETHALIN 50%, TEAM 24%, TURFLO 20%
- **WEEDHOE**: TURFLO 32%, ROUNDUP 23%, WEEDHOE 10%
being in the air for four seconds. The bottom line -- if you want your shot to hold, use balata balls and take golf lessons, don't blame the green.

**Green construction**

Greens have been built using various methods and soil mixes which directly influence the firmness of the green. Several factors influence firmness, including: the size and shape of soil particles, bulk density, pore spaces for air and water, organic matter content, thatch accumulation, moisture retention, and several other soil physical properties. Many clubs have taken short-cuts while building new greens by selecting cheap construction materials and not having the materials tested by a laboratory. Then they wonder why the greens are like concrete. But even new greens will tend to be firmer during the first few years due to the lack of thatch and organic matter in the soil. Over a period of three to five years, new greens mature and become more resilient. In addition to the method of construction, the size and surface contours of a green influence the ability to hold a shot. Are the greens pitched toward or away from the fairway? How big are the greens? Are they tiered or relatively flat? These are all questions related to architecture. Although the superintendent cannot be held responsible for the design of the course, maintenance can have a big influence on how a shot holds the green.

**Maintenance**

The conditions necessary for good putting quality do not equate to good shot holding capacity. After all, they are putting greens, not landing greens. For optimum putting quality, greens should be firm, smooth, and closely mowed. Many superintendents have been forced by uneducated committees to overwater greens so that poorly struck golf shots will hold the green. This is unwise for many reasons. Overwatering depletes oxygen in the soil, weakens the plant, and promotes disease development. Excessive watering also promotes foot-printing, surface irregularities and "monster" ball marks that detract from surface smoothness and cause putts to jump off line.

Welcome to the following new GCSANC members:

**AFFILIATES**

- Perry Tarstitano
  - Almaden Country Club
  - (30 day wait)
- Michael Crumley
  - Safety Storage, Inc.
  - Marketing Mgr.
- Dave Kaplow
  - Pacific Open Space, Inc.
  - President
- Glen Bell
  - Golden Bear Equip. Co
  - General Manager
- Douglas Gaynor
  - City of Modesto
  - VP of Operations
  - President Class A
- Terry Leach
  - Indian Valley Golf Course
  - VP of Operations
  - REINSTATED
- Leland Silva
  - Golden Bear Equip. Co
  - Operations Mgr.
  - Class A to retired (20 years of service)

**RECLASSIFICATIONS**

- Scott Stambaugh
  - Quail Lodge
  - Associate to Class B
- Dougles Poole
  - Alameda Golf Course
  - Associate to Class B
- Ned Soso
  - City of Sunnyvale
  - Class A to retired (20 years of service)

**ASSOCIATES**

- Everett McLain
  - Golf Centers of America
  - Greenskeeper
- EVAN BERNDT
  - (30 day wait)
- Kees Neff
  - Golf Centers of America
  - Greenskeeper
USGA
Continued from page 5
Good putting quality demands dry, firm conditions. If properly struck golf shots are not holding the green, you may also need to take a look at your fairway management programs. Mowing heights above 3/4" in the fairways will tend to produce "flier" lies and reduce the ability to impart spin on the ball. If the height of cut is less than 3/4", the problem may be that the fairways are not mowed often enough.

Golfers have to take more responsibility for their golf game and quit blaming the green or the superintendent. Although putting green maintenance has an influence, it is unreasonable to expect the superintendent to adjust the golf course to suit a particular person's style of play. The handicap system should equalize skill levels, and the superintendent should provide a well groomed course with consistent playing conditions as a test of golfing skill.

So, the next time someone asks "Why don't the greens hold?" you may need to remind them that they are putting greens, not landing areas.

Recently seen on an automobile bumper sticker on a bay area freeway:

Are you an environmentalist or do you work for a living?

SAND
Continued from page 4
and mice found no evidence of cancer.

Further, the researcher whose studies the NCU graduate student found to be "powerful" concluded as recently as 1990 that "there is a great deal of uncertainty" about the substance's link with cancer and even decried "repeated overreaction to every positive experimental observation."

And it goes on. Researchers are forming a line to take their turn pointing out holes in the classification and the process that created it, most notably, the one used by OSHA. In OSHA's defense it should be pointed out that the Labor Department requires just one study indicating a substance is carcinogenic to trigger cancer-warning rules. Because of this and the international health agency's classification of silica as a probable carcinogen, OSHA's hazard communication standard automatically was tripped. This means that companies must warn employees about workplace materials containing more than 0.1 percent of crystalline silica, which could include many golf course bunkers, sandbox-es, and our favorite beach resorts around the nation.

(From: GCSAA Government Relations Briefing, 4/93, via Agrichemical Notes, Penn State.)

Ref: Environmental Toxicology Newsletter, May 1994
**Golf Course Expo in Orlando**

_Golf Course News_ is sponsoring the first Golf Course Expo on November 11-12, 1994 in Orlando. The exposition and conference is devoted to public-access golf and is designed for the entire public-access management team -- superintendents, owners, managers, and developers of public-access golf facilities: daily fee, municipal, semi-private and resort.

The expo is free and will feature over 150 companies, highlighting displays and demonstrations spanning 66,000 sq ft of exhibit space. Arnold Palmer will keynote the conference featuring topics on Agronomy, Management and Development. Superintendents who participate in the conference will receive .6 continuing education units from GCSAA. There is a registration fee to attend the Expo conference. For more information, contact: _Golf Course News_, Conference Group, PO Box 997, 38 Lafayette St., Yarmouth, ME 04096. The Expo hotline is 207/846-0600, X248.

**Christmas Already?**

We've made a few changes to this year's Christmas Party. Namely, we have moved the dinner to Sunday night and golf to Monday morning. The item of major importance is the hotel accommodations. We will be at the Marriott Fisherman's Wharf in San Francisco. Room rates are $79.00 per night, single or double occupancy. These rates are good for Saturday, Sunday and Monday nights. The block of rooms we have contracted will only be held through November 24th. Reservations must be made before that date. Room reservations can be made by calling 1/800-325-0956. Tell them you are with GCSANC. Don't procrastinate and lose out on this special rate! Make your reservations, now!

**Schedule:**
December 4 - Dinner at the Marriott (Santa will be in attendance!)
December 5 - Golf at the Meadow Club. Host: Dave Sexton, CGCS

There will be a reception and awards ceremony following golf.

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