PRESIDENT'S MESSAGE

The time has come to pen my farewell President's Message, bringing to a conclusion a very exciting year for me. It has been an honor to serve and help guide our Association, especially with having GCSAA "in town" for the Annual Conference and Show.

I would like to thank the entire Board of Directors for all their hard work, and more specifically direct thank you's to Rich and Leon as their efforts have been endless. I have been fortunate to have such a dedicated group to help address the various problems of our Association. Also I want to thank all committee people for their devotion to GCSANC, in helping both develop and continue progression toward professionalism.

Additionally I send a sincere thank you to Barbara Mikel for her dedication and hard work. It must be a thankless job trying to keep different people focused year after year, and headed in the right direction. Also thank you to our newsletter editor, Jo Harlow of Key Publications. Although Jo has just recently joined us, many thanks for a smooth transition.

Lastly, many heart felt thank you's to you, the members, who have enabled me to serve our Association. We have tried a few "new things", some went well, some did not. But unless you try, how do you know what is effective.

In closing, I anxiously pledge my assistance to our next President and the Board of Directors. I am willing to accept any task sent my way.

See you on the Tee,
Randy Gai
President

OFFICE NOTES

By Barbara Mikel

Since the Board of Directors elected to drop the testing requirements for upgrade to Class A or Class B, I have been getting quite a few calls requesting information about the procedure to use for your upgrade.

If you simply call the office, request an application for upgrade and leave your mailing address I will send you an application.

Once you receive your application, fill it out per the directions. You must include your work history for the last three years as a minimum to enable the Board of Directors to determine you do indeed have the proper amount of time. (See the bylaws for the time required for each Classification of membership.)

Do not send any fees but do sign the application. Attesting signatures are not required for the upgrade. These requests for upgrades are reviewed each month at the Board of Directors meetings. Once you have been approved, you will receive a confirmation letter from the office.

Many golfers make the mistake of playing with their legs stiff. This prevents a good weight shift back and through and causes a great loss of power. To get your legs moving, set up with a slight bend in the knees. Then, going back, key on moving your left knee toward your right. On the forward swing, key on moving your right knee toward your left.

Reprinted from Golf Lessons, Harris Publications, Inc.

How do you get newsletter information to the publisher?

Jo Harlow of Key Publications is now publishing Thru The Green.

She can be reached at:
Key Publications
1392 Lichen Ct.
Concord, CA 94521
Phone: 510-827-9676
Fax/Phone: 510-674-1688
SNORKELS AND SWIM FINS

By Pat Gross

The "hundred year flood" has caused considerable damage to golf courses in the west. I've heard many superintendents tell me that their golf course has been closed for weeks. They joke about having to break out the snorkels and swim fins just to get around the golf course. Aside from super saturated conditions, some less fortunate courses are having to deal with flood damage in the form of large soil deposits on the turf and vast sections of the course that are under water. This was bound to happen since many courses were constructed in flood plains during the golf course construction boom of the 70's and 80's. What can you do if your course is covered with water or a thick layer of silt?

The best thing to do is try to pump off the extra water once it stops raining and allow the turf to dry out. If this is not possible, don't panic, since many turfgrass species can survive prolonged periods of submersion without injury. According to Dr. Jim Beard, the potential for injury will depend on 1) the turfgrass species, 2) duration of submersion, 3) depth of submersion, 4) physiological condition of the plant tissue, 5) temperature, and 6) light intensity. To give you an example, creeping red fescue can be killed in as little as one day with high water temperatures of 86 degrees F. or may survive (Continued on page 4)
SNORKELS AND FINS
Continued from page 3
for more than 60 days at a low water temperature of 50 degrees F.

The following table from Dr. Beard's book lists the relative submersion tolerance of various turfgrasses:

<table>
<thead>
<tr>
<th>Category</th>
<th>Grasses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>Buffalograss, Bermudagrass, Creeping bentgrass</td>
</tr>
<tr>
<td>Good</td>
<td>Rough bluegrass (Poa trivialis)</td>
</tr>
<tr>
<td>Medium</td>
<td>Meadow fescue, Kentucky bluegrass</td>
</tr>
<tr>
<td>Fair</td>
<td>Annual Bluegrass, Perennial ryegrass</td>
</tr>
<tr>
<td>Poor</td>
<td>Red fescue</td>
</tr>
</tbody>
</table>

If you can't get the water off, the best you can do is hope that your turf can hold its breath for a good long time.

If large areas are covered with soil or silt deposits, it is ideal to remove this material as soon as possible. Have patience though, because the use of heavy equipment may be doing more harm than good. The goal is to remove as much of the soil as possible and expose the leaves. Some courses have used a mechanical bunker rake fitted with a small grading blade without causing damage. For greens, remove the soil with shovels and try to wash off as much of the silt as possible using a high pressure hose. Once everything has dried out, be prepared to aerify the affected areas to break through any soil layers that may have been deposited. It may also be necessary to rope off these areas and do some extra seeding to restore turf cover.

One final note, don't forget to take photographs. This will be helpful for possible insurance purposes, and to document the extent of the damage for yourself and various golf course officials. If you have a picture of a green half covered in silt, it may be easier to explain latter in the summer why that exact same part of the green isn't doing so well.

GCSAA ELECTION RESULTS

Gary Grigg, CGCS, was elected President of the Golf Course Superintendents Association of America at its Annual Meeting. Bruce Williams, CGCS, was elected Vice President, and Paul McGinnis CGCS, was elected Secretary/Treasurer. The elected directors were Tommy Witt, CGCS; George Renault, III, CGCS, and Dave Fears, CGCS, were nominated from the floor for Director's Positions, as expected. Mike Wallace, CGCS, was appointed to fill McGinnis' one remaining year on the board.

Welcome To The Green

Welcome to the following new GCSANC members:
(Subject to 30 day wait)

CLASS B
David Saly,
Superintendent
Hiddenbrooke Golf Course

CLASS A
Terry Grasso,
Superintendent
Burlingame Country Club

Ram Pal,
Superintendent
Buchanan Fields Golf Course

TO RUSSIA WITH LOVE

An overseas goodwill program has been developed by Gale Love CGCS, retired. The intention is to help and hasten the fruition of qualified golf course maintenance personnel into the Embryo stage of developing potential golf course superintendents. This hopefully, could be approached by volunteers offering their time in allowing a Russian visitor to spend a few days shadowing the movements of superintendents and, or assistant superintendents in their day to day activities.

In developing this program it will also be necessary to establish a support base of Sponsors investing into the potential of future contacts in the new frontier. The need will be to help pay the expenses of these visitors.

Should you feel compelled to assist in any way, please call:
Gale L. Love
11596 Lower Circle Drive
Grass Valley, CA 95949-9412
916-477-8313 (Phone & Fax)

Mike Snyder has left Oakhurst Country Club to become the Superintendent at a private club in Banning, California. Mike Nunemacher has accepted the Superintendent position. He was the assistant prior to his promotion. Mike Clark, Superintendent at Oakmont C.C. in Santa Rosa has been busy this soggy winter. He is in the middle of installing a new Network 8000 irrigation system (Toro). Christianson Irrigation is the installation contractor.
THINGS TO CONSIDER WHEN PRUNING

Whenever I conduct pruning work shops, I always spend several minutes discussing the "universal responses" that plants have to pruning, you will never truly be an expert unless you understand how plants will react after being pruned.

Pruning removed leaves and buds that would develop into leaves. Two apparently opposite effects occur from pruning young plants, or those that do not produce a lot of flowers and fruit. First, invigoration is the universal response to pruning. Pruning leaves and buds allows the root system to supply each remaining leaf and bud with more water and nutrients. The result is that individual shoots are stimulated, and these grow more rapidly and later into the season. Leaves grow larger and are greener in color. Even though leaves are larger, the total leaf area will be less on more severely pruned trees since there will be fewer shoots overall. The leaf area of a pruned tree will transpire less water than that of an unpruned tree. While invigoration of individual shoots is a universal response to pruning, the overall effect on young trees is stunting or dwarfing. As I mentioned, even though individual leaves on a pruned tree may be larger, total leaf area will be smaller than if the tree has not been pruned. Shoots of pruned trees grow later in the season, using for their growth foods produced by the leaves. A pruned plant has less time after shoot growth stops to use the food produced by leaves for the rest of the plant's growth and for storage of reserves for the next season. The result is less total growth. This can be easily observed or measured by the relative size of the trunks of trees that have been pruned more severely than others.

For a young plant at the end of the growing season following pruning, the following usually is the case: the top and root systems are in balance (in terms of size) and the top and roots are (Continued on Page 6)
smaller than if the tree had not been pruned. Also, there will be less stored food in the pruned plants since they will have fewer leaves to manufacture food.

Invigorating and dwarfing effects depend upon how severely you prune. Removing dead, weak and heavily shaded branches has little effect, while removing a like amount of healthy, well exposed branches has a much greater influence.

An exception to the dwarfing rule occurs when you prune mature fruit trees. Pruning off a number of flower buds leaves a fixed number of flowers to develop into fruit. The remaining leaf buds have more food available for the shoots, which will be more vigorous and have more leaves per fruit than those of unpruned trees.

Another important pruning response has to do with encouraging or discouraging branch growth. If you want to subdue a branch within a tree, prune it more severely than surrounding branches. If you want to encourage a branch, prune it lightly or not at all.

**Elm Leaf Beetle -Resistant Trees**

In a recent issue of the *Journal of Environmental Horticulture*, (12 (4): 231-235), Miller and Ware have shown that some species of elm are significantly less attractive to the elm leaf beetle. In selecting elm replacement trees, consideration should be given to using more resistant species to this very common pest.

**Feeding Preference — Elm Leaf Beetle**

<table>
<thead>
<tr>
<th>Elm Species</th>
<th>Damage Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. pumila (Siberian)</td>
<td>2.5</td>
</tr>
<tr>
<td>V. japonica (Japanese)</td>
<td>1.2</td>
</tr>
<tr>
<td>V. macrocarpa (large fruit)</td>
<td>0.7</td>
</tr>
<tr>
<td>V. wilsoniana (Wilson)</td>
<td>0.4*</td>
</tr>
<tr>
<td>V. szechvanica (Szechvan)</td>
<td>0.0*</td>
</tr>
</tbody>
</table>
*also Dutch Elm Disease resistant

**Copper Sprays Stick Tight**

Copper has a broad range of effectiveness against many different fungal and bacterial organisms. Whether you use Bordeaux of fixed coppers, the mode of action is similar.

Because of their relative insolubility in water, copper fungicides are sprayed on as suspensions, which upon drying forms a highly weather resistant coating that slowly dissolves over time. In addition to this, copper ions have a + charge and plant surfaces a - charge, which enhances the adherence of the copper. The exudate on plant parts and fungal spores is generally acidic, as is rainwater. This allows for the slow dissolving of the copper present to free copper ions. These copper ions then penetrate fungal or bacterial cells and combine with proteins and enzymes, which then deactivate the cells.
Things to Consider . .
When Moving Established Plants.

From time to time it becomes necessary to move an established plant from one place to another in a landscape. When this becomes necessary, make sure you do everything possible to help the plant survive the move.

When digging up any plant, avoid injuring as many roots as possible. Start digging from the outer edge of the branches (drip line), and carefully remove the soil while working toward the trunk until you find the main roots. Dig the soil from around the roots, but don't completely expose them. If you must cut some large roots — 1/2 inch in diameter or greater — use sharp pruning shears. Don't simply chop large roots with a shovel, as this leaves jagged wounds that close slowly. Any extra soil around the root ball will help to retain the fine "hair" roots, which absorb moisture from the soil. It's best to transplant deciduous trees and shrubs in fall, after most of the plant's leaves have dropped, or in the spring, before buds begin to grow.

Evergreen trees and shrubs usually need to have a lot of soil around their roots because they never completely go dormant and continue to lose some moisture from their leaves, even in winter. For this reason they must be dug with a root ball. The size of the root ball will vary with the size of the plant and the type of soil the plant is growing in. Normally a root ball of 1 foot in radius to each inch of trunk diameter is recommended.

Even deciduous plants need a root ball when they have a trunk diameter greater than 3 inches, or if you transplant them when they are in full leaf. Certain hard to transplant deciduous trees, like dogwoods, would always be moved with a root ball.

Whether your plant requires a root ball or whether you can move it bare-root, always keep the roots moist.

Once your plant is in its new location, you'll need to water it carefully. Too little water will allow the roots to dry out and die; too much water may rot them away. Newly transplanted trees and shrubs need regular watering during the spring, summer and fall of the first year. Because evergreens retain their leaves in winter, continue watering those plants during dry winter periods.

Deciduous plants do not need regular watering during the winter months since they are dormant and will not lose much moisture. However, you should soak them right after transplanting. In spring, the entire root zone should be well before the buds begin to grow.

*Reprinted from the Landscape HORT BULLETIN For the Northern San Joaquin Valley, Coop. Ext. University of California.