<table>
<thead>
<tr>
<th>Plant</th>
<th>Exposure</th>
<th>X</th>
<th>Hardiness</th>
<th>First Frost</th>
<th>Second Frost</th>
<th>Third Frost</th>
<th>Flowering</th>
<th>Winter</th>
<th>Growth</th>
<th>Exposure</th>
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<tr>
<td>Celosia</td>
<td>XX</td>
<td></td>
<td>Tender</td>
<td>Mar. 15-July</td>
<td>Seed Set</td>
<td>Feb.-Sept.</td>
<td>Seed Set</td>
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<tr>
<td>Calliopsis</td>
<td>XX</td>
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<td>Hardy</td>
<td>Mar.-May</td>
<td>First Frost</td>
<td>Feb.-June</td>
<td>First Frost</td>
<td></td>
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<tr>
<td>Digitalis (Foxglove)</td>
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<td>X</td>
<td>Hardy</td>
<td>Sept.-Dec.</td>
<td>July</td>
<td>July</td>
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<td>Mar.-May</td>
<td>November</td>
<td>Feb. 15-May</td>
<td>November</td>
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<td>Nov.-May</td>
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<td>Hollyhock (Althaea Rosea)</td>
<td>XX</td>
<td>XX</td>
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<td>Mar. 15-June</td>
<td>First Frost</td>
<td>Feb. 15-July</td>
<td>Aug.-Sept.</td>
<td>First Frost</td>
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<td>Impatiens</td>
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<td>Mar. 15-July</td>
<td>First Frost</td>
<td>Mar. 1-July</td>
<td>First Frost</td>
<td></td>
<td></td>
<td>Sept.-June</td>
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<tr>
<td>Kalanchee</td>
<td>XX</td>
<td>X</td>
<td>Tender</td>
<td>May-July</td>
<td>First Frost</td>
<td>May-Sept.</td>
<td>First Frost</td>
<td></td>
<td></td>
<td>Sept.-Dec.</td>
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<td>Marigold</td>
<td>XX</td>
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<td>Tender</td>
<td>Mar. 15-May</td>
<td>3-4 Months</td>
<td>Mar.-Aug.</td>
<td>3-4 Months</td>
<td>After Planting</td>
<td></td>
<td>Dec.-Jan.</td>
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<td>Penta</td>
<td>XX</td>
<td>X</td>
<td>Tender</td>
<td>Mar.-May</td>
<td>When Disease Affects Leaves</td>
<td>Mar.-May</td>
<td>All Year</td>
<td></td>
<td></td>
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<tr>
<td>Portulaca (Rose Moss)</td>
<td>XX</td>
<td></td>
<td>Tender</td>
<td>Apr.-July</td>
<td>First Frost</td>
<td>Apr.-July</td>
<td>First Frost</td>
<td>Aug.-Mar.</td>
<td>April</td>
<td></td>
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<tr>
<td>Thunbergia (Alata)</td>
<td>XX</td>
<td>X</td>
<td>Tender</td>
<td>Mar.-May</td>
<td>First Frost</td>
<td>Mar.-May</td>
<td>First Frost</td>
<td>Feb.-Apr.</td>
<td></td>
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<tr>
<td>Verbena</td>
<td>XX</td>
<td></td>
<td>Hardy</td>
<td>Mar. 1-May</td>
<td>When No Longer Desired</td>
<td>Feb. 15-May</td>
<td>Sept.-Nov.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vinca (Periwinkle)</td>
<td>XX</td>
<td>X</td>
<td>Tender</td>
<td>Mar.-July</td>
<td>When No Longer Desired</td>
<td>Feb. 15-July</td>
<td>All Year</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Several plants in this table are perennials but may be grown as annuals.
2. Exposure
   - XX: Optimum Performance
   - X: Acceptable Performance
3. North Florida - Pensacola to Jacksonville and south to Ocala
   Central Florida - Leesburg south to Punta Gorda and Fort Pierce
   South Florida - Stuart to Fort Myers and south to Homestead
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Golf Course Vandalism - Manager's Nightmare

By: Bill Haycock
Manager, Dubsdread Golf Facility

It's 2:00 a.m. on a Saturday morning and you are awakened by the ring of your telephone. A voice on the other end of the line informs you that it is a local law enforcement department and that your golf course has just been vandalized by an automobile. You are asked to come to the golf course to give the police or sheriff an estimate of the cost of the damage. If the damage is over $1,000 it's classified as a felony; less than $1,000 is a misdemeanor. If you are a golf course manager or superintendent, the chances are you have experienced one or more similar types of situations as mentioned above.

The City of Orlando has only been in the municipal golf course business for a little over one year, and already we have been vandalized in excess of 30 times. Stolen flags, tee markers, golf carts, damaged greens, tees and fairways, burglaries and "doughnuts" spun by vehicles are among the most frequent types of incidents experienced. Our golf course is in the middle of a residential area with literally hundreds of vehicular access points. You must cross seven public streets to play the 18 holes. Of the 30 vandalism cases against Dubsdread, we have solved and/or prosecuted five. Total cost of damage is estimated at $20,000, of which we have been awarded $3,000 restitution by local courts of law. We still have two cases pending for vehicular vandalism which could result in an additional $3,500 in restitution.

Each golf facility manager must decide if it is worth investing time, money and energy in a program to curb vandalism on the basis of local experience. It is a hard, cold fact that damage, beyond inevitable wear and tear, has been and continues to be a very costly problem for golf courses. It is costly not only in dollars spent on maintenance, repair and replacement, but also in terms of lowered staff morale, and perhaps most important of all, in lost income because of playing conditions which are unsightly as well as inferior, for periods of time ranging from two or three hours to four or five months. When greens or tees are seriously damaged as Dubsdread's were in February of this year ($5,800 in damage by several vehicles) it adversely affects playing conditions for as long as four or five months because during the winter dormant season, damaged grass will take much longer to recover.

Even the most imaginative strategy will not eliminate the vandalism problem. However, damage can be reduced and most of us have at our disposal the means to reduce it. Being a municipal golf course, we have the advantage of calling upon various City departments for assistance. For instance, our Police Department in conjunction with the Orange County Sheriff's Department, was able to apprehend one person in the act of spinning doughnuts with his automobile on number 7 fairway and who was apparently heading towards number 7 green when the Sheriff's helicopter spotted his car with flood lights from overhead and followed him to his residence where he was arrested and charged with criminal mischief. Another person in an automobile was arrested when spotted by a police stake-out on the golf course.

The City Street Department and Engineering Department are currently assisting us in determining on which holes we can best use large drainage ditches to deter automobiles as well as assist in our drainage problems. Our Parks Department is assisting us in providing shrubs and bushes at certain locations on the golf course in order to deter automobiles from entering the golf course.

We have just completed a detailed hole-by-hole study of our golf course which is an 18-hole, 6,222 yard course with driving range, practice putting greens, etc., totaling 115 acres. The purpose of this study was to ascertain the best way to prevent or discourage vandal from damaging the course with automobiles, trucks, motorcycles, mopeds, etc. Unfortunately there is no simple solution. Each hole has its particular characteristics and must be considered individually. For instance, a chain link fence may be appropriate beside one freeway which may be adjacent to a street. However, this type of fence cannot be used on another freeway because it will interfere with play. At Dubsdread Golf Course we are convinced we will have to use a combination of chain link fence, ranch-type fence, ditches, utility poles laying on the ground, poles placed in the ground, chains attached to posts and between trees lining fairways, and curbing, to discourage vehicular vandalism. It is estimated that the cost of this work will be approximately $20,000. This seems like an excessive amount to prevent vandalism, until you stop to realize that if you lose two or three greens because of vandalism you will spend that much replacing them if the damage is severe.

In summarizing I might add that after numerous cases of unpunished vandalism against our golf facility, we decided to ask the news media to assist us in informing the public of this senseless but very costly type of crime being committed against golf courses throughout the country. We also solicited the assistance of local residents bordering the golf course to immediately report any unusual lights or sound on the golf course. The immediate citizen response was actually overwhelming. A group of our regular golfers pledged a $300.00 reward for information leading to the arrest and conviction of the vandals and we were also able to provide a reward through the Orlando Police Department Crime Watch Program. Once these rewards were publicized, we immediately received approximately ten telephone calls from informants referring not only to our most recent incident but also referring to vandalism committed against our course as far back as six months ago.
Overseeding of tees and greens in South Florida has always been looked upon as a method of improving playability during the winter months. As more and more courses are being developed for real estate purposes, overseeding is becoming a sales tool.

Most northerners have a preconceived notion that Florida is palm trees, sunshine and green grass. As Florida superintendents know, delivering a lush green golf course throughout the winter can be made impossible by the weather.

One way to produce green fairways and rough is to overseed the entire golf course "wall to wall." While this practice does improve playing conditions to some extent, as a general rule it doesn't justify the expense of the seed and additional mowings. Two notable exceptions to this rule would be overseeding unhealthy grassy areas that would not be suitable for play during the winter months and overseeding for aesthetic appeal to bolster real estate sales.

Heritage Ridge Golf Club has practiced "wall to wall" overseeding for the past five years. This all began the first season the club opened. The course was planted in September and in order to open the course for the winter season overseeding fairways and rough was deemed necessary. The response from the membership, sales department and management was so overwhelming that the practice has been continued every year since.

Agronomically, the overseeding of fairways and rough is not easy to justify, but as most superintendents know, sound agronomic principles must sometimes be pushed aside for economic reasons.

Overseeding has been proven to be a highly profitable tool at Heritage Ridge due to our specific circumstances. The club is privately owned and maintained and must maintain high levels of real estate and golf membership sales during the first years of operation.

The effect of overseeding on real estate sales is somewhat harder to estimate, but take for example a developer that has 300 homesites or homes to sell. What is the value of the increased aesthetic appeal of the development on each? $2,000 per unit? $5,000 per unit? Quite possibly more. This increased value multiplied by the number of units can easily justify the cost of overseeding.

Overseeding "wall to wall" is not a practice that would be profitable to most clubs. If there is little or no real estate or memberships to be sold, overseeding to this extent would not be fiscally responsible. Clubs in this position that would like to increase the aesthetic appeal might consider overseeding one or two holes near the clubhouse or other main focal points. Another option that has been used with great success has been the overseeding of roughs but not fairways. This will maintain the roughs' playability and give outstanding definition to the fairways.

Overseeding of large turf areas may not be economically feasible for many clubs, but with the majority of golf courses being constructed for development reasons, this practice may become a highly profitable tool.
Now there's a better way to control turf insects!

Now that ORTHENE® Tree & Ornamental Spray has been cleared for use against turf insects, you've got effective insect control you can count on. ORTHENE has been used for years to stop tough pests like gypsy moth larvae, aphids and bagworms, with no sign of resistance. It provides effective fast-acting control against armyworms, sod webworms, leafhoppers and greenbugs.

ORTHENE kills foliage-feeding insects two ways — on contact and by ingestion. And because ORTHENE works as a local systemic, you get broad-spectrum control that keeps right on working. ORTHENE is compatible with most commonly used insecticides and fungicides and is not phytotoxic to the turf.

ORTHENE insecticide can be used without protective equipment, so it's easy to apply. Its toxicity to fish, wildlife and pets is low, and once the spray dries you can re-enter the treated area immediately. That's another reason lawn care professionals and turfgrass managers look to ORTHENE for use around golf courses, parks, for commercial lawn care, playgrounds, picnic areas and other places where people and pets gather.

ORTHENE Tree and Ornamental Spray — for effective, broad-spectrum control of foliage-feeding insects.

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Gulf Coast
Sun Beams

By CHARLES BRASINGTON JR.
Golf Superintendent
Tiger Point Golf & Country Club

Rebuilding Equipment

Are you doing everything you can to extend the life of your equipment? If your answer is no, go out and price a new greens mower; after you find out that they are now selling for $12,000.00 I’ll bet that you will be very interested.

Here at Tiger Point we operate with 8 green and tee mowers, 2 fairway units, 3 rough units, 3 sand pros, 4 tractors, 3 trucks plus all of the other “standard” golf course operations equipment. Because we have such a large equipment inventory, it is imperative that my mechanic, Randy Wick, and myself do everything possible to extend the life of our equipment. We do so by training the operators, using the right piece of equipment for the right job, use a rigid preventative maintenance schedule and rebuild in-house as much as possible.

According to Ed Combest, shop management and mechanics teacher at Lake City Community College “When considering rebuilding equipment in-house, the organization between the superintendent and mechanic on scheduling down time is the most important factor. Once you are capable of taking the particular piece off the line you must have the capabilities which includes: knowledge (a good mechanic), proper tools and proper parts.”

Randy and myself walked into a situation where the company had just purchased 5 new greens mowers and weren’t ready to buy any more new mowers. We had three Jacobsen Greens Kings from 5 to 8 years old that needed replacing badly. Knowing we couldn’t buy any more new equipment, our only option was to look into rebuilding. Here in the Panhandle, the distributors charge $30 per hour labor and it was estimated that the cost of rebuilding our 8 year old mower would cost $6,000. We guesstimated that it would cost us $1,500 plus our labor and decided it would be much more beneficial to try it in-house. What we did was this:

1) Completely strip down the unit, sand and painted it.
2) Bought new reels with bearings and seals.
3) Bought new bushings for the lift arms.
4) Instead of buying new lift arms, we ground the pin off of the yolk assembly and replaced with our own pin, saving $80 and kept the same quality.
5) Bored the engine; turned the crank shaft; ground the valves: new piston, rings and rod; put in new valve guides. We are increasing our blocks’ life by taking the housing up to .030”; then we bore and install a new sleeve and start the whole process over again.
6) Put in a new carburetor.
7) Put a new seat on for the operator.
8) New tires (on our equipment not used on greens, we use the treaded tires saving $10 at original cost plus lasting longer due to less wear).
9) Installed a new muffler.
10) Put on new throttle and steering cables.

In the process of rebuilding our equipment, we shop around for all replacement parts. The dealers are not the only people selling parts these days and it’s our job as managers to get the cheapest price for the same quality parts. We did all of the work I’ve listed above for $1,300 with 40 hours labor not included. Our estimated savings in-house rebuilding verses sending it out, $4,000.

If you have got the time, a good mechanic, proper parts and tools, I strongly recommend trying to rebuild when ever possible and maybe your owners or greens committee will split the savings with you and put it in your pay check!

BE HAPPY

For every minute you are angry, you lose 60 seconds of happiness.
Harbour Town Golf Links, Sea Pines Plantation, 18th hole
(458 yards — par 4)

The real star of this tournament was the turf.

It was overseeded with MARVELGREEN®!

The game was great. But the turf was sensational! Because Tom Rader, Golf Course Superintendent of Harbour Town Golf Links, Sea Pines Plantation, overseeded with a Marvelgreen blend. Marvelgreen was chosen at this Hilton Head resort for several reasons: it germinates quickly to provide an early cover of fine-leaved, dense, fairway turf. And on the greens, Marvelgreen promises a smooth, grain-free putting surface. It looks great throughout the winter season, and provides an easy spring transition. Marvelgreen blends contain just the right amount of the leading turf-type ryegrass varieties: Palmer, Prelude and Yorktown II. Marvelgreen is used at some of the most prestigious courses in the country. And it performs long after the game is over.
Bellevue Biltmore Country Club

A Jewel Along the Gulf
Take a moment to remember your first high school job—how many jobs ago was that anyway? I worked at Lamb's Pharmacy on St. Petersburg Beach over on the West Coast, recently I had occasion to drive by the place only to find that it is no longer there. It seems like another lifetime, getting off the school bus and going to work at the drug store.

This week I asked Harvey Phillips about his position as the Superintendent of Golf Course & Grounds at The Belleview Biltmore Resort in Clearwater, Florida. (featured on our cover this issue)

**My first question:** “When did you start to work for The Belleview Biltmore Golf Course?”

**Harvey's answer:** “When I was in high school, in December 1950, I went to work for one season. My first job was general golf course labor, raking sand traps and using hand rotary mowers.”

The job that was to last “for only one season,” turned into a lifetime profession which has allowed Harvey to realize his full potential in the golf course industry. He remained constant in his employment at The Belleview Biltmore Golf Course and in 1953 was promoted to Assistant Superintendent. In 1956 Harvey accepted the position of Golf Course Superintendent, which he has held up until this time.

Harvey's father, James Thomas Phillips, was a citrus grower in the 1930's, 40's and early 50's. Harvey was studying agriculture to follow in his father's footsteps as a citrus grower but recognized in the early 1950's that the groves in and around Clearwater were going out. That was when he applied for work at the Belleview Biltmore Golf Course.

One year after going to work for the golf course Harvey married Thelma Mascé in December 1951. Married thirty-four years Harvey and Thelma have one daughter, Janet who is currently attending The University of South Florida in Tampa. Janet is majoring in Education; this is her third year of study.

Some of the contributions Harvey has made to the golf industry here in Florida are: President of all local Golf Course Organizations on the West Coast of Florida, Florida Golf Course Superintendents Association President, President of The Florida Turf-Grass Association for the years 1979 and 1980, and recipient of the Wreath of Grass award in 1977.

(continued on page 41)
Construction of Biltmore Hotel in 1895-1896.

Golf at the Belleview Biltmore C.C. in the early 1900's. Henry B. Plant on the tee.