Different operations with similar names

straight lines to minimize negative responses from players. If baskets are used, some of the material will be collected and clean up labor will be reduced. A large vacuum/sweeper can also be used to collect debris. Generally, labor costs are minimal when verticutting or vertigrooming is done. The more severe the procedure, the more costly the project in terms of time and labor.

Verticutting Tees and Fairways

It should be noted that verticutting is also necessary for the same reasons on tees and fairways and (if you have the luxury) even roughs. Thatch build-up in tees and fairways can be a problem. The plant vigor and appearance can be greatly enhanced with a regular program of verticutting in these areas. To date, vertigrooming equipment is not available for fairway mowers, but, verticutting equipment is.

The degrees of verticutting will regulate the amount of time and labor needed to complete the operation and clean up the debris generated in the process. A verticutter set to enter the soil is likely to leave large amounts of material on the surface.

This material is usually a mixture of decomposing thatch, clippings, and soil. One method of clean up is to drag the this material back into the grooves created by the verticutter, effectively re-incorporating the material and accelerating the decomposition process. Another method is to mow the area with baskets to collect the material.

Remember that the benefits can easily be offset by damage if the turf cannot recover. Turf under stress from weather, insects, and/or disease has lower carbohydrate reserves and a lower tolerance to additional stress. Hot, dry weather causes rapid dessication of the grass plant following verticutting and turf loss is a real possibility. Wet, rainy weather saturates the soil, closing pore spaces and increases susceptibility to inoculation by disease organisms.

Contracting Services

Recently, contractors have begun offering verticutting and de-thatching services to golf courses. Opinions range from very positive to extremely negative about the use of contractors. A common thread running through groups of superintendents is that a turf manager that would contract spraying, aerifying, sod work, and other services would be more likely to contract verticutting.

There are some advantages in the use of a contractor. First, this is his specialty and he must be efficient if he is to make a profit. Second, hiring a contractor will free up labor, allowing golf course maintenance to continue uninterrupted. Third, there is usually recourse for the golf course if the job is not properly done or if unreasonable damages result from poor performance or materials. These questions should be asked of contractors prior to entering into any agreement about service.
Green Section conferences give up-to-the-minute information on everything from how-to to ought-to

A gronomy is no longer enough, if the curriculum for the USGA’s annual Green Section Conferences is any indication.

About 310 golf course executives, more than half of them superintendents, attended one of the two day-long Green Section conferences scheduled in Florida this year — West Palm Beach March 10 and Orlando March 12 — covering eight topics including an up-to-the-minute briefing on the golf industry’s standing with the Florida Legislature.

Hosts for both sessions were Roger Harvie, USGA Regional Affairs director for the Southeastern U.S. and John Foy, USGA Green Section director for Florida.

“There are no drastic changes for 1992,” said Chuck Gast, USGA agronomist who devotes about half his time to Florida. “And there won’t be any special Florida modifications of our recommendations, contrary to some rumors you might have heard.”

Among the Green Section’s projects this year is a program to standardize procedures for conducting soil analyses. “All the major labs are cooperating,” Gast said.

The USGA is funding a series of studies in an attempt to quantify the benefits of turfgrass and it is conducting a thorough review of the literature pertaining to wildlife on golf courses, he said.

As of mid-March, more than two dozen golf courses in Florida (40 as The Florida Green goes to press) had signed up for the USGA’s wildlife sanctuary program conducted in cooperation with the New York Audubon Society. “The USGA started the program with a $30,000 grant last year and this year added another $100,000,” Gast said.

Fees for the USGA’s Turf Advisory Service, which has become very popular, have gone up to $900 for a half-day visit and $1,400 for a full day, although privately owned public courses subscribing to the service for the first time can get a full-day visit for the half-day price.

Red Tee Stigma

Red tee markers are preventing two classes of golfers — women and senior men — from getting full enjoyment from the game, according to Jan Beljan, senior design consultant with Fazio Golf Course Designers in Jupiter.

Women won’t play from any set of tees other than red — even though most women would benefit from a shorter course than delineated by the red tees at most courses — and senior men don’t want to play from red tees because those markers have become associated exclusively with women.

Golfers — men and women — must be educated to play from whatever set of tees gives them a fair chance of shooting par, Beljan said.

“Women must learn that they are permitted to play par golf,” she said, “and they should understand that you are not taking part of the course away from them — you are trying to give them the enjoyment of playing golf the way it was meant to be played,” Beljan said.

Replace the traditional marker colors of red, white and blue with a series of earth tones and give each set a name that is gender-neutral, she suggests.

Environmental Regulation

“There is no warm, fuzzy feeling toward golf in the Florida Legislature,” said Dr. Tom Latta, external affairs chairman of the Florida Turfgrass Association and president of AmerAquatics, Inc. in Deerfield Beach. “When it comes to golf versus the manatee, you are going to lose; golf versus bass, you are going to lose; golf versus anything and you are going to lose. Golf is a nice, fat target because golf has no natural constituency.”

Local and regional regulatory agencies have grown huge
Get Another Benefit From Poa trivialis...

DARKER COLOR

More and more professionals are using Poa trivialis for its many benefits. With Laser you can also get the darker color you've been looking for.

LASER Keeps Greens in Play

Overseeding with Laser Poa trivialis has a big advantage over ryegrass. You won't hear golfers complain about poor putting greens during the fall grow-in period like you do with ryegrass. Laser can be cut close immediately after germination, unlike perennial ryes that need to become established first. With Laser there's no waiting. That means uninterrupted play on your greens after fall overseeding.

Advantages of Winter Overseeding with LASER Poa trivialis

- Darker color
- Germinates quickly
- Can be cut close immediately after overseeding
- Improves putting surfaces compared to greens overseeded with 100% perennial ryegrass.
- Retains dark green color in winter
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- Provides a smooth spring transition
- Performs well in damp soil
- Tolerates shade

Use LASER

Use Laser alone. Or blend it with perennial rye and chewings fescue for a smooth putting turf. Either way, you'll get all the benefits of Poa trivialis...and a much darker color.

NOTE: Laser Poa trivialis is included as a component of Marvelgreen + Laser and Marvelgreen Classic winter overseeding mixtures.
Give your golfers little flags to mark fire ant mounds and have your spray tech follow up the next morning.

bureaucracies that must be supported by fines and user fees.

The public perception is that golf equates to wealth. You have a lot of money and they need to balance their budgets.

"You are going to pay user fees," Latta predicted.

He urged a three-pronged defensive strategy:

- For regulatory purposes, unite with the Florida Turfgrass Association under the turf umbrella. "Not everyone can relate to golf, but everyone can relate to turfgrass because everyone has a lawn."
- Increase research funding drastically to get accurate data. "If you can prove that golf courses are net water contributors rather than net users, you will be in a much stronger negotiating position if they try to force you to pay high rates for treated effluent."
- Organize to wield political clout. "I don't sympathize with some of the goals of the National Rifle Association, but I have to admire the way they get attention of every lawmaker in this nation."

UF's IFAS is Major League

While funding for the Envirotrohn has received a lot of publicity recently, Dr. John Cisar, IFAS turfgrass extension specialist at the Fort Lauderdale Research and Education Center, pointed out several other developments that have moved Florida into the big leagues of turfgrass research:

- Florida will host the 1993 International Turfgrass Society Research Conference — the organization's first visit to the United States in two decades.
- The Otto Schmeisser Research Green built by the FGCSA at the Fort Lauderdale REC will give the university a strong selling point in attracting grants for golf-related research.
- Of the five universities picked by the USGA to conduct pesticide fate studies, UF is the only one that can conduct all phases of the soil analysis in house.

Mole Crickets

"They're here to stay and we're just going to have to learn to live with them," said Dr. Leon Stacey, entomologist in charge of an extensive mole cricket control program on St. Simon's Island, Ga.

Any pesticide labeled for mole crickets can be effective under the right conditions, he said. The trick is to get the product down to the mole crickets or get the crickets up to the product. A lot of the material gets caught up in the thatch layer.

Timing, he notes, is everything. Get a residual pesticide down before the eggs hatch.

Stacey spent a year in research before launching his all-out campaign on the mole crickets. Among his findings:

- Except during the brief mating period, males and females segregate themselves in different areas of the golf course.
- Females lay 3-11 clutches of 50 eggs each during their life cycle.
- Eggs take 6-11 days to develop in the female and 21-31 days to hatch in the soil.

From these observations, he devised three ways of using a soap flush (which drives mole crickets to the surface) to determine the "hatch-out period," which may last three or four weeks.

- Examine the females. If they are full of eggs, you have at least 21 days before hatching begins.
- If the ratio of males to females is about 50-50, that means mating has begun and you have 27-42 days before hatching begins.
- If you have nymphs in the flush, hatching has begun.

Fire Ants

Like mole crickets, fire ants will be a perpetual problem on golf courses for the foreseeable future, according to Lee Bloomcamp, former director of pest control services for the University of Florida. She now represents Mobay Chemical Co.

"Each little ant is relatively easy to kill," she says. "The problem is, there are so darn many of them — and no more than five percent are ever on the surface where you can knock them down easily.

"They are fierce predators and they all bite at once," Bloomcamp reports. "They have adapted this behavior that lets them kill quite large animals. They all crawl onto the prey but nobody bites until the first one gets disturbed. She (all workers are sterile females) releases a pheromone that alerts the others and they all dig in."

What makes the fire-ant sting so painful is that each ant inflicts a double wound: first it takes a hunk of flesh with its jaws and then it injects venom with its stinger.

Although only about six people in a thousand are allergic to fire-ant venom, about seven or eight people die every year from the shock of multiple bites.

Other useful facts about fire ants:

- If you control aphids, scale and mealy bugs in ornamentals, you will keep down fire ant populations because that deprives them of a food source and also makes them more susceptible to baits.
- They cannot swallow solids. To ingest the active ingredient in a bait, they must chew the carrier and mix it with their saliva.
- They will eat anything and can live anywhere. She once found a huge colony on a seventh-floor balcony of Shands Hospital.
- They don't always build mounds. If their mounds get knocked down by daily mowing, the ants can adapt; they'll live in the thatch layer without bothering to drag up the dirt.
- They are attracted to electrical fields, irrigation lines, water coolers and pond margins.
- More than half the colonies in Florida now have more than one queen, which makes them much harder to wipe out.
- A typical mature colony is 6 feet

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THE FLORIDA GREEN
• Drenches are effective on single-queen mounds. Give your golfers little flags to mark fire ant mounds and have your spray tech follow up the next morning.

• Baits are most effective but follow the directions carefully, since some break down quickly when they get wet or are exposed to ultraviolet light. Do not use the same spreader used for fertilizer or pesticides: the ants can detect even the slightest contamination and won’t take the bait.

Course Marking

"Keep the difficulty of your course the same each day of a tournament," said Harvie, who also is responsible for marking courses for USGA championships. "We assign levels of difficulty to various pin placements and try to keep it balanced each day."

For regular play, he offered the following tips:

- The teeing ground must be two club lengths deep.
- Out of bounds must be marked so the golfer can see from one stake to the next.
- Be careful when staking a lateral hazard that the drop area doesn’t penalize the golfer a second time. Landing in the hazard was penalty enough.
- There is nothing wrong with putting the cup in the middle of the green. Most golfers will thank you for doing so.

1001 Excuses

"Are you going to make me fire my secretary?" is a typical tactic used by golfers trying to get around the USGA’s unconditional refusal to accept late entries into its championships, according to Larry Adamson, director of championship administration.

In addition to the 6,400± U.S. Open entries that arrive on time (70% within a day or two of the deadline), another 250-300 will arrive late and almost always with an excuse.

Weeping wives, sobbing secretaries and bulging-veined bullies every year try to talk Adamson into granting exceptions to the policy that entries must be received at the USGA office by 5 p.m. on deadline day.

The USGA won’t accept postmarks as proof of mailing because many golfers have access to meters, including one irate entrant who calmed down in a hurry once Adamson pointed out that, while his envelope may have been postmarked 10 days prior to the deadline, the accompanying check was dated three days after the deadline!

“They threaten, but nobody has sued us yet,” he said, pointing out that the association’s best defense is absolute enforcement of the policy with no exceptions — not even for a member of the USGA executive committee whose entry form really did get delayed for a few days by the U.S. Postal Service.

The new Weed/Sweep is a must for every golf course. You achieve precision control of weeds by using new dripless chemical wiping technology. The system can be easily mounted on an ATV or pulled behind a golf cart or small tractor. FREE brochure by mail or ask for a demo at your course. Don’t put it off – Call today.
Activities around the state

Successful seminars

The Everglades and South Florida Chapters have every right to be proud of their successful seminars that took place last April 9. The attendees at both seminars were treated to outstanding education and they also had the satisfaction of knowing that their registration fees went for funding the Otto Schmeisser Research Green in Fort Lauderdale and the FTGA sponsored Envirotron at the University of Florida in Gainesville.

Ridgerunners rejoice

The Ridge Chapter began its fund raising efforts on an equally successful note as a full field of superintendents and suppliers plied their skills against the new Grasslands course in Lakeland on April 27. Host superintendent Bobby Ellis had the course in superb condition. The golfers had to contend with near gale force winds as the wide-open layout proved to be a stern test — not for the faint of heart. The post-tournament barbecue and awards ceremony was highlighted by an impromptu appearance and door prize gift donation by PGA Tour player, Andy Bean, who represents the Grasslands C.C.

Building bridges and mending fences

On April 28, the president of the Central Florida GCSA, Stuart Leventhal, was assisted by three former CFC presidents, Joel Jackson, Joe Ondo and Steve Wright, at a turf management presentation for the North Florida Section of the PGA. The superintendents spoke on the roles and responsibilities of a superintendent, overseeding, renovation and pro-superintendent communications. The panel avidly solicited the aid and support of the golf professionals in helping to educate the golfing public about benefits of turfgrass and the challenges the industry is facing. The seminar took place at the Isleworth G & CC and was hosted by Bob Yount of the FTGA. Also on the program in the morning session was Ralph White, turf consultant, and Naomi Whitney of the St. John’s River Water Management District. It was refreshing to see members of the audience go up to the dais after the seminar concluded and thank the superintendents for their presentation and ask additional questions.

‘Who’s Away’ revisited

Taking a page from the Palm Beach Chapter’s fund raising notebook, members of the Central Florida Chapter with an assist from Alan Puckett of the Ridge Chapter worked the Nestle Invitational Tournament at Bay Hill for NBC during the telecast last March. The 24 volunteers worked Saturday and Sunday afternoons on the spotting and scoring lines to the production trailer. It was fun being “inside the ropes” and hearing the tournament unfold on your headset as the leaders approached your green. The Central Florida Chapter netted $1,200 for a couple of hours work each day, and each person got an NBC sports cap that was drawing $25 and $30 dollar offers from people in the gallery.

Earlier in the month, I was contacted by a Texas superintendent who had heard about the “Who’s Away” story in The Florida Green. He was looking for our NBC contact, Lou Safrin, so the Texas GCSA could participate on the PGA swing through the Longhorn State and raise a little money of their own. I hope all the chapters around the state and nation are taking advantage of this interesting way to raise scholarship and research funds and have fun. Just a tip if you do participate. They would like to have your association’s TIN number and some logo stationery handy so they can cut your check on Sunday.

— Joel Jackson
"...AND HEEEERE'S SUNNY!"

"Thank you Ed. What a summer I have in store for our audience this year. Now I don’t want you to worry about how badly I’m burning up turf..."

"HOW BADLY ARE YOU BURNING UP TURF?"

"Well, turf is burning so badly I saw a superintendant pumping an SPF 24 sun screen into his tank mix."

Okay, maybe Sunny isn’t ready to replace Carson, but you know the turf he ruins is no laughing matter.

This summer don’t joke around, include NoburN™ Natural Wetting Agent in your turf treatment program. Applying NoburN™ every 30 days to your heavy use areas and every 90 days to your lower use areas will protect your course from stress and burn-out all summer long; especially when water is in short supply.

NoburN™ poses no danger of burning or discoloration even when it is not watered in. Because NoburN™ is an organic product extracted from the desert Yucca plant it is completely biodegradable, thereby eliminating the danger of residue build up.

This summer if you want to avoid burn-out, without having to find a pharmacy that sells sun screen in 55 gallon drums, ask your local distributor about NoburN™ Natural Wetting Agent.

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Turf Industry Roundup

NGF conducting survey of 13,000 golf facilities, maintenance practices

The National Golf Foundation has been conducting a major national golf facility operations and maintenance survey of all 13,000 facilities in the U.S. and will publish the results in the fall. Each survey respondent will receive a free summary of the report.

This new report will provide a comprehensive overview of golf course revenues and expenses on national and regional levels.

Data will be gathered in seven areas:
- Facility characteristics: length of season, estimated rounds played, availability of practice range.
- Course Maintenance: average size of greens and fairways, source and amount of water used per year, type of irrigation system.
- Rates and Fees: 1991 weekend/weekday and other greens fees; initiation fees and dues; number of golf cars and related fees, range ball rates.
- Staff: Number of full or part-time employees by job description.
- Revenues: Gross revenues broken out in terms of dues/fees, merchandise sales, lessons, club repair, food and beverage.
- Expenses: Broken out in terms of maintenance, major facility, pro shop, cart rental, range, food and beverage and general/administrative.
- Capital Expenditures: Amount spent from 1988-1990 on golf cars, maintenance equipment, cart path construction and nine other expenditure areas.

The new report will replace the NGF’s best-selling reports on operations and operations produced separately in 1985 and 1986.

The GCSAA has developed a personnel management handbook for setting policy, writing job descriptions, developing pay scales and handling other golf course personnel management issues.

The handbook, available to both members and non-members, covers employment status, work schedules and pay, attendance, employee conduct, performance reviews, standards of conduct, employee benefits, guidelines, employment laws and job descriptions.

Sample general duties and job requirements are listed for the assistant superintendent, equipment mechanic and his assistant, foreman, equipment operator, irrigation specialist, chemical technician, gardner-triplex operator, landscape gardner and groundskeeper.

The model handbook is $10 for GCSAA members and $15 for non-members. Call 913-832-4480 for more information.

“Back to Basics” will be the theme of the Florida Foliage Association’s Annual Convention July 16-19 at the Jupiter Beach Hilton. Among the programs scheduled: Developing profitable marketing strategies, Changing world of commercial plant tissue culture, keeping the critters out, New ideas in motivation—secrets of outstanding leaders, IFAS research highlights, Financial management: a common-sense approach to business success.

Agri-Diagnostics, manufacturer of Reveal turf disease detection kit, and Ciba-Geigy, manufacturer of plant protection products including the larvacide exhibit, are co-sponsoring an advertising program to raise awareness among golfers.
about how golf course superintendents are applying sound environmental practices to golf course maintenance.

The ad, titled "Caring for the Earth," highlights the environmental stewardship and professionalism of superintendents and will be placed in publications targeted at golfers, greens committees and club members.

For each superintendent who buys at least three Reveal kits by Aug. 30, Agri-Diagnostics will make a donation toward placement of the ad. Ciba-Geigy’s contributions will be based on the sale of cases of Exhibit.

Participating superintendents will receive promotional kits containing posters, copies of the ad and a press release for use in club mailings and other promotions.

James F. Petta is ICI Professional Products’ product manager for turf and ornamentals. Richard J. Gouger, national technical manager, has retired from the firm after 18 years.

James A. Fields has been named national sales manager for DuraGreen Marketing of Mount Dora. Mark Maurais, of Apopka has been named southeastern sales manager for the Nexus Greenhouse Corp. Steve Krug of Redding, Calif., is the firm's new western sales manager.

Lawrence L. Courter is the new plant manager of TH Molding for Rain Bird Sprinkler Mfg. Corp. Jean Hughes has been appointed manager of corporate accounting for the manufacturer of irrigation systems based in Glendora, Calif.

The GCSAA has promoted David M. Bishop to director of education and Teri Harris to marketing manager and hired Ben Marshall as director of communications. Mary Nowell has been appointed marketing services manager for the LPGA.

Koala Blooms, an Australian floriculture network, will begin distributing a range of Australian flowering plants developed especially for North American gardens. Nurseries in Miami, West Palm Beach and Naples will take part in the program.

Grace-Sierra Horticultural Products Company has announced four new appointments to the company’s management team. Robert Holton was named vice president of manufacturing and will be responsible for all United States manufacturing operations and will be the company’s manufacturing representative to subsidiaries, joint ventures, and raw material suppliers. John Neal is the new vice president of research and development and will be responsible for supporting the company’s long-term business objectives. Lisle Smith was promoted to vice president and chief financial officer. Michael Thurlow is the new vice president of sales and marketing.

Century Rain Aid and the irrigation division of Banks Supply have recently merged their Florida operations, creating a network of 10 branches across the state’s west coast.

NEW PRODUCTS

Hunter Industries has introduced the ETC, a programmable electronic irrigation controller for golf courses. The ETC calculates and schedules the precise daily water needs for up to 24 stations, based on historical ET (Evapotranspiration) rates for the locality. Historical ET rates are stored in the controller memory, along with average high temperature rates. The user selects operating parameters for each station, such as soil and plant type, relative slope and precipitation rate. The controller then determines the precise amount of water required and schedules and controls its application. Software updates can be automatically downloaded into the unit with a "flashbox." The ETC can operate as a stand-alone or as part of a network.

FREE POSTER

ICI Professional Products is offering a free four-color CRUSADE turf insect poster that can help golf course employees identify major pests in turfgrass. Detailed illustrations of seven major turf insects and information and charts on the optimal time to scout and treat for each pest. To receive your free poster, phone 800-759-2500.

MAY/JUNE 1992
Instead of ryegrass -

Overseeding with *poa trivialis*

This small seed size enables a superintendent to winter overseed a green without taking it out of play in the fall or altering the height during overseeding.

**Editor's Note:** Dr. Richard Hurley, Director of Research and Agronomy for Loft Seed, Inc., is the developer of the successful *poa trivialis* variety, Laser. I ran into Dr. Hurley at the Nestle Invitational at Bay Hill last March. We were discussing the growing trend of *Poa trivialis* overseeding replacing ryegrass overseeding, and Dr. Hurley relayed his concerns over the ability of suppliers to meet the increasing demand for seed. He also wanted to alert superintendents to the possible use by some suppliers of uncertified European varieties of *Poa trivialis*. With seed ordering season just around the corner, Dr. Hurley offered to do an article on current *poa trivialis* seeding techniques and alternatives.

**BY DR. RICHARD HURLEY**

*Poa trivialis* is commonly known by its scientific name, but is also referred to as rough bluegrass or rough-stalked bluegrass. *Poa trivialis* produces moderately fine-textured, medium-dense attractive turf that has recently become a very popular choice as a winter overseeding grass. It has the ability to germinate and grow at low temperatures, displays good color retention in cool winter months, germinates rapidly with good seedling vigor, and has excellent winter hardiness.

With a small seed size that provides approximately 2,000,000 seeds per pound, *poa trivialis* has an 8-to-1 advantage in number seeds per pound compared to perennial ryegrasses. This small seed size enables a superintendent to winter overseed a green without taking it out of play in the fall or altering the height during overseeding.