

It is odd that the last three immediate past presidents of the Florida GCSA have all lost their jobs in the past 15 months.

superintendent, and club manager, and the chef to tighten their budgets than it is to try to get to the root of the problem.

Merely telling the public that golf is an environmental "good guy" isn't going to cut it. Validated research is needed to refute the claims that we are harming the environment.

In the environmental arena, the American system of justice is put aside — the accused are judged guilty until they prove their innocence. Very little evidence (validated research) exists upon which to substantiate our innocence or our guilt.

What little research is available is extremely encouraging and supports our "good guy" position, such as the Cape Cod study about pesticides and groundwater contamination. Many such studies are needed, and needed soon. This research isn't going to get done unless we — as an industry — support it both politically and financially.

To give an example of the political ramifications of research, just last week I was told that the chances of the DER completing the groundwater contamination studies at my course and at Boca Lago, as scheduled, are slim. Since the first rounds of tests indicated no

problems, the DER isn't motivated to finish the project - they would rather pursue testing where negative results are indicated.

The golf industry, meanwhile, is losing an excellent chance to gain one more piece of validated research proving that properly applied chemicals used on golf courses don't contaminate groundwater. If the DER doesn't complete the study and publish its findings, we have nothing to prove this contention.

If Mark Jarrell, superintendent, calls the DER at (904) 488-3601 and asks Bruce Moore or someone else at the agency to finish the study, the response is "we'll get back to you;" if a representative of a \$5.5 billion, politically-active golf industry calls, the answer may be a bit different.

As for the financial support of research, it is very simple: golfers are a minority in this country and tax dollars aren't going to pay for research aimed at helping golf courses.

Most research today is a cooperative effort between industry and the university system. If you are wondering why there is such a lack of pertinent research, look no further than your mirror.

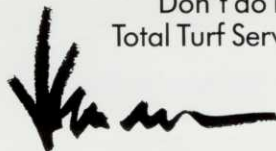
How much have you contributed to turf research over the past few years? If every golfer had been contributing an amount equal to the value a sleeve of golf balls every year for the past several years, we might have had the necessary research in hand to keep greens fees from going up an amount equal to the cost of a new golf bag each year.

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The Green Pages

A compendium of news and opinions about government, golf and the environment

State, federal pesticide officials discuss new regs

The American Association of Pesticide Officials held its annual spring meeting March 11-13 in Crystal City, Va. U.S. Environmental Protection Agency officials spoke on important upcoming pesticide regulations concerning containers, pesticide mixing and loading containment and worker protection, and also discussed the re-registration process. Implementation of the regulations will take effect over the next three years.

CONTAINER REGULATIONS

An updated implementation schedule of EPA's FIFRA pesticide container regulations was released at the AAPCO meeting. The soon-to-be-written regulations will address pesticide management (including mixing and loading containment) and disposal.

Phase 1 regulations, which mostly pertain to manufacturers and distributors of pesticide products, deal with acceptance; voluntary and mandatory recall plans; storage and disposal plans; and indemnification. Phase 1 regulations will be implemented in spring 1992.

Phase 2 regulations concern containers, residue removal and bulk storage and are scheduled for implementation in spring 1993.

Phase 3 involves pesticide management regulations that are concerned with storage, management of excess product, containment at mixing/loading sites, and transportation. Spring 1994 is the targeted implementation date for Phase 3.

WORKER PROTECTION AND TRAINING

State pesticide control officials attending the conference suggested that the training requirements for the new worker protection regulations be compatible with those for restricted use pesticide applications.

The worker protection rules will be released this summer, but the restricted-use application requirements are not scheduled for release until sometime next year, as part of the final applicator certification regulations.

The final version of the worker protection regulations, which are scheduled for release in late August, will contain specific rules concerning post-application re-entry and training for pesticide applicators. These worker protection regulations will affect only those golf courses that are involved in

producing turf and plants for commercial uses outside of their normal golf course operations.

The revised applicator certification regulations that are scheduled for release in 1992 will, however, affect all courses that apply restricted-use pesticides.

GCSAA will urge the agency to consider coordinating these two separate training requirements when writing the final regulations.

GCSAA recently sent comments on the proposed levels of supervision for restricted-use pesticide application to EPA. The Office of Government Relations had surveyed affiliated-chapter government relations liaisons for their comments on the proposed rules. The majority of respondents said they believed that only certified applicators should be able to apply restricted-use pesticides. GCSAA comments, along with comments from other interested parties, will be considered when the final regulations are drafted.

REREGISTRATION

The reregistration process is still lagging behind previous projections, said Allan Abramson, acting director of the special review and reregistration division of EPA's Office of Pesticide Programs.

Because of delays in processing the registration of A and B list pesticides (mostly those used on food products), the C and D list pesticides — which include most of the turf and ornamental products — will not be up for reregistration until 1992 or 1993.

Some manufacturers may decide to save the testing costs and reregistration fees for some minor-use products (i.e., products that are not primary rev-

enue producers) by choosing not to reregister them. The EPA's processing delays may also delay the need for golf course superintendents to search for alternatives for suspended products.

However, the federal EPA is not the only pesticide regulator; the states also are involved.

STATE REGISTRATION

Some states are raising their pesticide registration fees — in some cases by 300 percent to 500 percent. These big fee hikes are causing pesticide manufacturers, especially smaller companies, to reconsider which products they choose to register in which states. The end result may be that superintendents in some states may soon find their choice of chemicals restricted.

This meeting brought together the federal and state regulators and the manufacturers of pesticide products. One of the last points to be made came from several state pesticide regulators: The new federal regulations will put much heavier burdens on the states; however, the states may not have the resources they need to manage or enforce them.

GCSAA Briefing

Senate considers notification rule

The lawn-care industry and environmentalists squared off May 9 at a Senate hearing.

The Environment Committee's subcommittee on toxic substances is holding hearings on legislation sponsored by Democratic Sens. Joseph Lieberman of Connecticut and Harry Reid of Nevada. Their bill would require lawn-care companies to notify neighbors within 1,000 feet of a property before applying pesticides or herbicides.

Witnesses testifying for the environmentalists included a woman who said she was severely injured when she was drenched by chemicals being sprayed on a neighbor's lawn. Christina Locek of Chicago said she was nearly blinded and has had to use canes to walk since the incident, which also killed her dog and her cat.

Warren Stickle, president of the Chemical Producers and Distributors Association, said the bill's notification system was so extensive that it would be unworkable and extremely burdensome to businesses and local governments.

Ann McClure, executive vice president of the Professional Lawn Care Association of America, said her group supports a more limited notification requirement, covering people who live adjacent to a customer's property.

Reid said more than 7 million Americans used \$1.7 billion worth of lawn-care products and services in 1987. Americans use up to 10 times more chemical pesticides per acre for lawns than for agriculture, he said, citing a report by the National Academy of Sciences.

*Excerpted from
Orlando Sentinel*

EPA investigates manipulation of pesticide data

A Texas laboratory is the subject of an EPA/Justice Department criminal investigation for allegedly falsifying studies on pesticide residues. The EPA said that studies on 17 pesticides — including several golf course chemicals — produced by 11 manufacturers were “alleged to have been improperly manipulated” by Craven Laboratories,

Austin, Tex.

The golf course chemicals listed by the EPA were maneb, sethoxydim, Diquat, mancozeb, fenoxaprop-ethyl, glyphosate and PCNB.

Craven has produced residue chemistry studies for pesticides since 1975, and the EPA is reviewing regulatory options for registrations based on Craven data. Options include requiring replacement data and “other alternatives,” according to the EPA. The agency has sent letters to 262 pesticide registrants asking them to identify all Craven data filed with EPA to support registrations and tolerances, and to estimate when they could file studies to replace Craven data.

The Craven investigation will take time. And if the EPA decides to require replacement data, it will take substantial time and money for the chemical manufacturers to have new studies conducted. If this happens, it could affect the availability and price of some pesticide products that golf course superintendents use.

Linda Fisher, an assistant EPA administrator, said that although current information does not indicate a threat to the environment or to public health, the allegations are “very serious.”

The EPA will review registration data on a chemical-by-chemical and use-by-use basis as it explores regulatory options. One EPA spokesman told *The Wall Street Journal* that the agency does not currently expect new data to require the removal of any of the products from the market.

GCSAA Briefings

TV spots put supers in positive light

Superintendents may be

fielding more questions about environmentally responsible turf management as a new public education program gets under way. The joint EPA/GCSAA television public service announcement campaign, which reminds homeowners to “play it safe and think before you apply,” has already attracted a number of media inquiries at GCSAA headquarters.

GCSAA-affiliated chapter presidents, government relations liaisons and members may view such inquiries as excellent opportunities to educate the public about topics such as integrated plant management, water protection, chemical use reduction, hazard communication, and how golf courses use environmentally responsible practices. Specific questions about the “Think Before You Apply” campaign may be directed to GCSAA's communications department.

The PSAs have been distributed throughout the country, to network affiliates in the top 35 U.S. television markets and other key regions, as well as leading national cable TV networks.

The 30- and 10-second spots instruct viewers to follow directions on chemical containers and to use only the amount needed to do the job.

The commercials include a toll-free number (800-858-7378) that viewers may call to receive more information from EPA about the subject.

GCSAA Briefing

EPA chief testifies on Clean Water Reauthorization

EPA Administrator William K. Reilly testified at a House oversight committee hearing that one of the most important

issues in the reauthorization of the Clean Water Act is non-point source pollution control.

Reilly told the House Public Works and Transportation Committee that controlling non-point sources of pollution (examples could include runoff of chemicals applied to agricultural field, golf courses and home lawns) would often be more cost-effective than adding additional technological controls at point sources.

Many industries already use technological controls to remove harmful pollutants from water before discharging it into surface waters. Some golf courses presently use the simple technology of a rinse pad and containment system to prevent point-source pollution during mixing and loading.

If such a system is not available, courses should never mix and load near a water source, such as a well or pond, and should rotate sites.

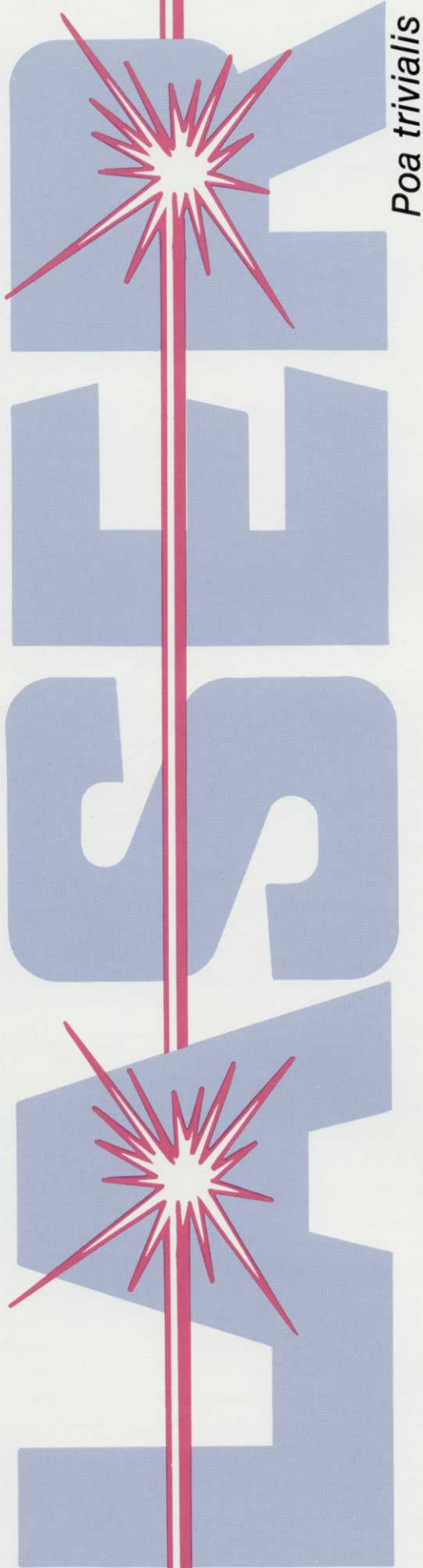
GCSAA Briefing

Fish and Wildlife Svc. joins EPA in pesticide exams

EPA is consulting with the U.S. Fish and Wildlife Service to determine whether some registered uses of 31 pesticides need to be limited in order to protect endangered species.

Among the pesticides to be examined are some golf course chemicals: acephate (Orthene), bendiocarb (Turcam), chlorpyrifos (Dursban and others), potassium nitrate, trifluralin (Treflan, Team and others), methyl bromide, aluminum phosphide (Phostoxin), azinphos methyl (Guthion), fenvalerate, naled and permethrin.

GCSAA Briefing



Get Another Benefit From Poa trivialis...

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Having spent the past two and one half years managing bentgrass greens at the Isleworth Golf and Country Club, I have a different perspective of bentgrass from most of my Florida peers. There is only a handful of courses in the state that have pure stands of bentgrass maintained year round.

While I came to respect the fine playing qualities of bentgrass, I also gained an

appreciation for the difficulties of managing a cool season grass year round through three different Florida summers. Now that I have left Isleworth, I am often asked if I'm glad to be away from the

pressure of maintaining the bentgrass.

The easy answer is yes.

The reflective answer is that it was a unique experience fraught with frustrating turf losses countered by remarkable successes.

It is not reasonable for 99.9 percent of the golf courses in Florida even to consider using bentgrass except for winter overseeding. However, if a club or two out there is contemplating pure bentgrass greens as its year-round turf, then please read the following list of requirements that I feel are necessary based on my two and one half years (and three summers!) worth of bentgrass trial and tribulation.

Following this list is no guarantee for success. Remember! Growing bentgrass in Florida is somewhat akin to growing oranges in Pennsylvania. It is out of its "natural range".

But these basics are necessary to assure a reasonable chance for success:

SITE

The greens should be located in areas with excellent air circulation and sunlight.

Greens surrounded by trees, mounds, and houses will suffer on hot, humid days. Some courses have installed fans to try to counteract this "stagnant pocket" effect. At Isleworth the highly elevated, exposed greens always did better in times of stress than those down low by the water and shielded by homes or trees.

CONSTRUCTION

I highly recommend USGA Specification Greens.

Bentgrass does not tolerate excessive moisture so the consistency and drainage of the greens must be exact. Shortcuts and sloppiness in the construction of the greens will result in definite problems in the summer.

Improperly sized drain gravel, inconsistent thickness of the soil mix, incorrect sub-grade contouring, and on-site mixing of the soil were some of the construction problems that came back to haunt us during times of stress on the Isleworth greens.

IRRIGATION

A modern control system is mandatory. The old electro-mechanical controllers can be made to work, but they become labor intensive when you must constantly adjust for moisture requirements. The new computerized controls will make infinitesimal adjustments to allow for local environmental changes.

Each green should have *at least* two manual hose connectors for hand-watering isolated dry spots, and a separate mist system of small heads for quick cool-down syringing in addition to the heads necessary to water the putting surface and the slopes.

STAFFING

A qualified, professional, assistant superintendent is essential to manage bentgrass. The care and attention that it requires will burn out one manager. The staff should be able to lead a "normal" life to produce a quality product. I was at the golf course 358 days my first year until I hired a good assistant. Managing bentgrass became tolerable after that.

A Requiem for Bentgrass

Green Side Up



Joel D. Jackson

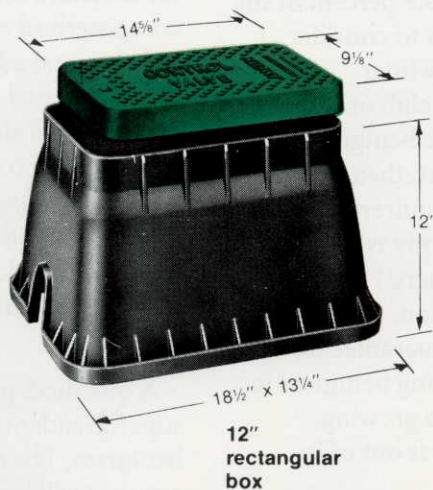
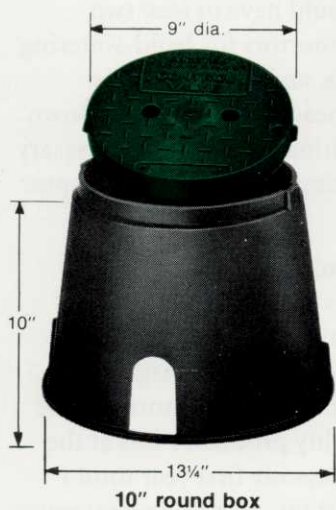
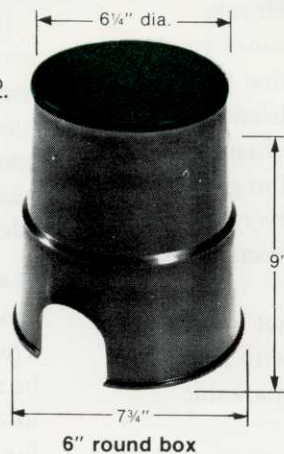
Joel D. Jackson, CGCS

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AFTERWORDS

CLUB COMMITMENT

Even with the first four items in place there will be hard times and disappointments.

Bentgrass is a cool season grass.

Hot, humid days up North tend to get balanced by cool nights. Hot humid days in Florida are followed by warm, muggy nights. Therefore, the time zone for problems with bentgrass is expanded by warm springs and falls. The club must understand that and be flexible in its demands for grooming during stressful periods. Also, the club that plans to use bentgrass should be one that has light play or no play in the summer (Augusta National, for example), and no more than 20,000 rounds per year — 15,000 is better.

The title of this piece is "A Requiem for Bentgrass." A requiem is a song, or dirge, or mass for the dead. Bentgrass has departed my life, but is still alive for others. Dan Jones, CGCS, recently tested 24 bentgrass cultivars for Dr. Milton Engleke of Texas A&M. Dan was to treat the bentgrass no differently from bermudagrass and take no unusual actions to preserve it. Dan returned eight cultivars which survived the native conditions and neglect. Dr. Engleke will continue to test and select the hardiest cultivars for possible development.

So there you have my professional opinion about bentgrass in Florida! I spoke at the 1990 Wisconsin Turfgrass Symposium about growing bentgrass in Florida, and they gave me "The Living on the Edge" award!

It is a very special grass that requires some very special conditions to be successful. If all the conditions controllable by man *are not* met, I will guarantee problems. If those conditions *are* met, I will still promise you some tough days and turf loss while trying to grow a grass variety out of its natural range.

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