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TYPE PERENNIAL RYEGRASS TURF

PATRIOT II is an advanced generation synthetic variety developed through two cycles of recurrent mass selection of its parent variety Patriot. In this new turfgrass, we were able to decrease growing height, increase disease resistance and darken foliage color.

of winter overseded entries grown on Times II PATRIOT II maintains the fine texture exhibited by its parent. Its turf forms an attractive, clean mowing dense sward.

. · Patriot II

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PATRIOT II is adapted to the cool moderate climate areas of the U.S. But, most importantly, this new variety posseses characteristics means for tur quality of a cane through Nav 1991 a cane that adapt so perfectly to the unique problems of overseeding dormant Bermuda greens in the south.

Table & Bireany and seasonal means In fact, PATRIOT II was the top named variety at trials at Gainesville, Florida, and ranked third at Mississippi State!

PATRIOT II is a product of:



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As long as thatch has been kept under control a superintendent simply distributes the seed over the putting surface uniformly. This seed will germinate and mature into an impressive winter overseeding. One of the most significant factors that superintendents have learned is that after the initial fall application of poa trivialis it is easy to add additional seed to increase plant density. This factor alone allows a superintendent a second or third chance to reseed heavy wear areas or turfs that have developed insufficient stand density.

One common winter overseeding program is to apply 100% poa trivialis at the rate of 10-13 pounds/1,000 square feet to putting greens in the mid-fall and supplement with with an additional 2 pounds/ 1,000 square feet on a weekly basis in late December through the month of January. This program has been successfully used by Dwight Kummer and Jim Ellison at the Bay Hill Club in Orlando. The Bay Hill Lodge is very active in keeping the course full of golfers during the winter months with 250 or more golfers per day on weekdays and up to 350 on weekends. Additionally, Bay Hill hosts the Nestle Invitational PGA Tour stop in mid-March. In all, this adds to the challenge of providing an excellent putting surface for the pros.

Dwight and Jimmy have found that applying "supplemental light applications of Laser poa trivialis at 2 pounds/1,000 square feet weekly during January provides excellent density on the greens" for tournament preparation. Light frequent grooming of a poa trivialis overseeding in January, February, and March has been found to provide the most desirable, smoothest and truest putting surface for winter overseeding.

Throughout the southern states some superintendents are mixing bentgrass with poa trivialis for winter overseeding and reporting excellent results. Actually this combination will normally produce an 80% poa trivialis overseeding due to a slow establishment period for bentgrass. It is often said that greens are overseeded with bent when in reality poa trivialis is the grass providing the excellent performance.

Table 1

1. For a quality poa trivialis, buy only Oregon certified blue tag seed.

For 1992 the only varieties eligible for Oregon seed certification are Laser, Sabre, and Colt. There have been reports that inferior European produced varities (i.e. *Dasas, Ino,* or *Polis*) have been used as an unathuorized substitute in mixtures with subsequent mislabeling of seed tags.

2. Poa trivialis can be used for winter overseeding in the following ways:

Recommended Seeding Rates in pounds/1,000 square feet			
Grass Varieties	Greens	Tees	Fairways*
100% Poa trivialis	10-13**	10-15	125-175
OR			
85% perennial ryegrass	25-30	10-15	200-300
15% Poa trivialis			
OR			
60% perennial ryegrass	25-30	10-15	200-300
25% Chewings Fescue			
15% Poa trivialis			
OR			
60% Poa trivialis	5-7N/R***	N/R	40% bentgrass
All percentages are by seed weight.			
*Fairway rates are in pounds per acre.			
** Additional mid-winter touch-up seeding	(2-3 times) at 2 pounds/1,0	00 square feet	may be desirable.
***Not Recommended			

3. Don't consider purchasing the European varities *Dasas*, *Ino*, or *Polis* at any cost. Possible *poa annua* contamination and poor performance will result.

4. Touch-up reseeding or spot seeding with *poa trivialis* can be an effective tool to improve damaged surfaces or thicken weak spots. Touch-up seeding at the rate of 2 pounds/1,000 square feet can be practiced anytime throughout the winter simply by depositing seed uniformly to the surface.

5. After establishing a *poa trivialis* winter overseeding, light weekly "grooming" or brushing will help stand the plants upright and reduce grain.

6. If you are on a Rubigan *poa annua* control program, provide a 30-plus day interval between the last Rubigan application and overseeding with *poa trivialis*. On some heavy soils the interval should be extended to 40 plus days. Be sure to the read the product label prior to Rubigan applications in conjunction with *poa trivialis* winter overseedings. Contact your Dow Elanco representative for more information.



Greenward

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

The brief items on Page 44 and Page 46 are reprinted from Briefing, a government relations monthly news report of the Golf Course Superintendents Association of America

GCSAA trains local chapter government relations workers

By Don Brethhauer

GCSAA Government Relations Manager

GCSAA's government relations program is working to increase dialogue with the affiliated chapters, government relations liaison network. As part of this effort GCSAA sponsored a Chapter Government Relations Liaison Training Conference in late January, which attracted more than 30 participants representing 25 chapters.

"We really felt there was a need to pull together those individuals who are responsible for participating in government relations activities at the state and local level," said Robert Ochs, GCSAA general counsel.

"We wanted the opportunity to present a forum to share ideas and ongoing efforts, coupled with training to help these individuals become more successful in their efforts."

To accomplish this goal, the conference included several training presentations, as well as ample time for discussion and exchanging ideas. Shirley Fulton of Capital Communicators, Madison, Wis., explained how to handle and use the media to get your message across.

Kathleen Sebelius, a Kansas state legislator, gave a rundown on state governments and how they work. She emphasized the importance of educating legislative committee members about golf course management.

Jerry Johnson, a former city manager who is now with the Menninger Foundation in Topeka, spoke about how city and county governments work. He explained that the ability to recognize who has the power in a local government is crucial.

"In many cities, the mayor has the power. In most, the city council has the power, and in some, the city manager has the power," said Johnson. "In addition, more and more county governments are becoming more organized and more powerful."

Paul Mechling, CGCS, led the group discussion concerning government relations chapter efforts. Mechling, who is GR liaison for the Northern Ohio GCSA, talked about efforts in his state to secure workable pesticide regulations. Several other chapter liaisons briefed their fellow participants on recent activities within their specific states or regions.

For several years now, GCSAA headquarters has been obtaining input from local chapters, through the government relations liaisons, to develop the comments we submit to regulatory agencies on proposed rules.

As of last October, only 73 local chapters had designated a representative to serve as GR liaison, so the headquarters staff contacted all chapter presidents and asked them to designate a representative to serve as government relations liaison. Now, 90 of the 113 chapters have designated GR liaisons.

As GCSAA government relations manager, I would like to have 113 GR liaisons. If you know that your chapter has not named a GR liaison, please urge your association to do so.

GCSAA's goal is to improve upon the present network system so that GR liaisons can contact each other on government and environmental issues that affect local chapters.

GCSAA will be sending out a directory of all chapter GR representatives to the liaison network to encourage direct liaison-to-liaison contact concerning potential problems with proposed legislation and regulations. GCSAA headquarters is also serving as a clearinghouse, coordinating contacts between GR liaisons to promote more involvement in state and regional government relations efforts.

EPA unveils second phase to drinking water pesticide study

Phase II of the National Survey of Pesticides in Drinking Water Wells, recently released by EPA, concluded that there is no imminent health threat. The report confirmed the Phase I findings, but concluded that further research is needed in localized areas.

The study suggested that DCPA acid metabolites from nonfarm use of pesticides are responsible for numerous detections Because of the frequency of pesticide metabolite detection, EPA will likely adjust future studies so that pesticide metabolites are included in sample analysis.

California EPA to suspend pesticide active ingredients

The California Environmental Protection Agency will suspend 57 active ingredients now used in about 3,000 pesticide formulations in that state — if chemical companies do not perform additional health studies.

Chemical companies may file for extensions to complete the required health studies. The California EPA will have the final authority to determine whether extensions are necessary.

Golf course chemicals that may be affected include 2,4-D; 2,4-D dimethylamine salt; carbaryl, chloroneb, chlorothalonil, ipordione, maneb, oryzalin, thiophanatemethyl, trifluralin and vinclozolin.

Show edition of Briefing available

A special edition of *Government Relations Briefing* printed for the annual GCSAA Conference and Show is available upon request. The conference and show edition contains the top 10 government relations stories of 1991 as well as a summary of comments submitted to EPA this past year. Call the GCSAA communications department at 913-832-4470. Quantities are limited.

If you had to defend golf, courses and your profession – could you?

Here's the case every superintendent should know well

A someone involved with the game of golf, you may already be aware that golf courses are sometimes criticized for "damaging the environment." The use of turf chemicals, the impact on water and soil quality,

and the amount of irrigation water used are cited most often as public concerns about the golf industry.

Although most authorities agree that the maintenance of golf courses has comparatively little negative impact on the environment, we at the Golf Course Superintendents Association of America (GCSAA) believe that these issues must be addressed. And, through a comprehensive effort combining research, education and communications, GCSAA is leading the golf community's effort to minimize the potential for ecological harm resulting from course maintenance.

However, the biggest problem we have is public perception—or, more accurately, public misperception—about the environmental impact of courses. These inaccuracies, if left uncorrected, could pose a serious threat to the vitality and integrity of the game.

You can help GCSAA change perceptions about our industry by reviewing the following overview and sharing this information with elected officials, decision-makers and others with whom you have contact. Please do not hesitate to pass this information to others who share our belief that golf is good for the environment.

1 Research has shown that golf courses do not contribute significantly to groundwater contamination. Several university and government studies (in Massachusetts, New York and Florida) indicate that when properly applied, pesticides and fertilizers used today on golf courses do not leach into groundwater in any significant amounts.

 $2 \begin{array}{l} {\rm Modern \ turfgrass \ management \ practices \ (such \ as \ the \ use \ of \ slow-release \ nitrogen \ formulations) \ can \ greatly \ reduce \ the \ potential \ for \ nitrogen \ leaching \ or \ runoff \ into \ water \ supplies. \ The \ organic \ (thatch) \ layer \ in \ healthy \ turfgrass \ also \ significantly \ reduces \ the \ potential \ for \ nutrient \ "movement."$

An 18-hole golf course averages 140 acres. Pesticides and fertilizers are used only on certain portions of the golf course. The majority of the property often consists of natural areas that are not maintained with chemicals. These low-maintenance areas usually provide a home for wildlife, and include a diverse variety of native plants and large stands of trees.

4 Golf course superintendents are among the best-educated and most judicious users of chemical management tools. Today, most superintendents have university degrees in agronomy, horticulture or a related field. More than 3,500 superintendents also pursued continuing professional education through GCSAA last year. Although most golf courses do not apply "restricted-use" pesticides, virtually all courses with GCSAA members have at least one staff person who is statecertified in the safe handling and use of these chemicals.

5 Because turf chemicals are often expensive, golf course superintendents have an economic incentive not to apply them. What's more, many superintendents entered the profession because of a love of nature and the outdoors and are strongly committed to conservation. In a recent survey, superintendents said they give extremely high priority to selecting maintenance practices that do not have a negative impact on the environment.

6 Golf courses typically compost grass clippings, thus reducing unnecessary contributions to America's land-fills. Grass clippings and leaves are usually composted in low-maintenance areas of the course. In some cases, the compost is recycled for use as a natural soil amendment. Composting is a growing and recommended practice for golf course operations.

The water used on golf courses can be an excellent investment in both economic and environmental terms. Irrigated golf courses generate billions of tourist and property tax dollars for state economies. (America's golf courses are also bringing an increasing number of international tourists to the United States.) When effectively irrigated, healthy turf provides numerous environmental benefits.

Properly maintained turfgrass:

- produces oxygen (carbon dioxide exchange)
- · removes pollutants from the air
- cools the atmosphere (acts as a heat-sink)
- absorbs sound and glare
- prevents erosion

filters natural and synthetic contaminants from rainfall and irrigation

- recharges critical groundwater supplies
- provides crucial "greenspace" in urban settings.

Beyond these benefits, computerized irrigation systems and improved turfgrass varieties now allow courses to use less water more efficiently to achieve the same level of conditioning.

Continuing research will provide even more "low-water" turfgrass varieties in the future.

8 GCSAA and the entire golf community are firmly committed to seeking answers through research. The United States Golf Association is funding a three-year \$3 million research that will provide a number of those answers. **9** In addition to turf-related benefits, courses provide other important ecological and community assets. Golf courses are:

• key sanctuaries for birds and other wildlife.

• disposal and treatment sites for (effluent) wastewater.

 attractive and environmentally sound "covers" for closed landfills and other ecologically damaged sites.

• places for non-golf recreational activities such as jogging, walking, birdwatching, cross-country skiing and fishing.

• businesses that provide hundreds of thousands of skilled and semi-skilled jobs.

• places for social interaction and community events.

• civic benefactors that give major contributions to charities.

• the keystone of a multi-billion-dollar industry nationwide.

• community improvements that add value to land, thus increasing local tax bases.

10 On golf's behalf, GCSAA has developed a strong and cooperative relationship with the U.S Environmental Protection Agency and other major regulatory groups. Though governmental affairs, professional education and public information, the association strives to make environmental responsibility a basic precept for its members.

Golf has the motivation, the resources and the willingness to address the issues now, before environmental questions seriously impede the growth of the game. By pursuing this enlightened path, it is hoped that golf will be increasingly perceived as a model environmental industry of the 1990s.

Endangered Species Act to be implemented

The Endangered Species Act will be implemented this fall and enforcement will follow at the end or next year," said Steve Johnson, director of field operations for EPA's office of Pesticide Programs. EPA has not explained how the potential areas of habitation and lists of specific endangered species will be communicated to end-users of pesticides. States are also having a tough time mapping areas and marking buffer zones for pesticide restrictions. Look for more information about the Endangered Species Programs in the month ahead. GCSAA is staying in close contact with EPA on this issue.

U.S. government now favors stopping local pesticide laws

The Bush Administration now favors amending FIFRA to prohibit local governments from regulating the sale and use of pesticides, according to Victor Kimm, deputy assistant administrator for EPA's office of prevention, pesticides and toxic substances. This reversal of opinion was presented as testimony to the House Subcommittee on Department Operations, Research and Foreign Agriculture, Committee on Agriculture, on March 4.

Kimm said that EPA had weighed the competing policies, and the administration now believes that a political subdivision of a state should be prohibited from regulating pesticide sale and use — unless the state has acted affirmatively to allow local regulation. Kimm added that any local regulations that went into effect before Jan. 1, 1992, should remain in effect unless the state acts affirmatively to pre-empt them.

"We wish to make it clear that such an amendment would not affect the exercise of local authority pursuant to any other federal laws. Similarly, due change would not affect current federal authority under FIFRA or statutes regarding pest control and eradication," Kimm said.

EPA wants to wipe out 'gray language' in pesticide labels

EPA is reviewing several pesticide labeling issues that topped the concerns reported on a survey or state and regional EPA offices. "Gray language" is one of the major concerns, according to the survey.

State regulators said they prefer requirements like "do not" and "shall not" over unenforceable advisory statements like "should not" or "avoid drift." Another leading concern is whether hazard statements apply to both the concentrate and the diluted product, or only to the concentrate.

Superintendents should continually look for changes in labels, especially in the language concerning safety precautions and re-entry requirements.

FIFRA panel says re-entry label requirements apply to everyone

The State FIFRA Issues and Research and Evaluation Group's (SFIREG) working committee on enforcement and certification has decided that re-entry requirements on pesticide labels prohibit all persons from re-entering an applied area.

"If the label states, 'Do not enter treated area within 24 hours,' we interpret that as saying no one, including golfers, can enter that area within 24 hours," said John Longnecker, committee chair and chief of Pennsylvania's Division of Agronomic Services.

The statement was made as part of the SFIREG report to the American Association of Pesticide Control Officers annual meeting in Arlington, Va.

Longenecker also said his committee has asked EPA for proposed rules to clarify the label wording. Superintendents concerned about label warnings should contact their state pesticide control official.

Steve Johnson, director of field operations for EPA's Office or Pesticide Programs, has issued a plea for more information from state pesticide officials. Johnson says his office not only needs to know the number of violations and amount of fines, but also more specific information about the violations themselves — the types of violations and whether they were determined to be willful.

"We need this information to determine the direction and help fulfill the intent of our regulations," Johnson said. "The more we know, the better decisions federal regulators can make."

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Keep your owners, members, greens committee and everybody else on your side of the fence happy. Call for Harrell's Fertilizer today.





A fictitious letter to an imaginary golfer from an average superintendent

Dear Member,

The other day you were complaining to me about the condition of the golf course. You said our fairways were hard and weren't as green or as beautifully manicured as Bay Hill or the TPC that you saw on television. You're right, of course. Anyone can see it. But do you understand why?

To some, grass always seems greener elsewhere

Don't vou understand that those courses get revenue from television that they use to insure they are green and beautiful for the tournament? Our maintenance budget was cut this year to avoid raising dues to the members.

Green Side Up



Jael D. Jackson

Joel D. Jackson, CGCS Editor

As I recall the emphasis was on redecorating the clubhouse. It does look gorgeous doesn't it?

Do you know that these courses spend tens of thousands of dollars to overseed the courses so you can see those pretty stripes and checkerboard patterns from the blimp? Authorize me to spend \$40,000 to \$50,000 on overseeding and extra fertilizer and I can give you stripes too! Even so, we'd be mowing with those eight- and nine-yearold mowers that I've been trying to replace for the past two years.

Unfortunately, the committee keeps slashing my capital equipment budget. If we did overseed the entire golf course, it would also be necessary to upgrade the irrigation system to guarantee that we could water all that ryegrass during late winter warm spells. Those courses on TV have computer controller systems!

Do you also know that those tournament sites often have loaner equipment to help

manicure the course for that week? In some cases it is not unusual for the equipment distributor to supply a technician to help keep the equipment serviced and adjusted. They also have volunteers and extra temporary help for tournament week.

The point is, it takes more than the 12 people we have to produce that kind of result.

Do you know that those courses restrict play and golf cart traffic to keep from wearing out those beautiful striped mowing patterns? We allow carts on the fairways all winter to speed up play and the bermuda turf takes a beating. Bermudagrass doesn't do well in cool weather and those recent 40 degree nights have sapped its reserves and made it look a little ragged. I have tried to get carts restricted to cart paths in the winter, but I get voted down each year. I have applied liquid fertilizer, but we need warm weather for the grass to use it!

I would like to aerify the fairways to soften them up for you. But since we have the member-guest tournament the first week in April, I can't gamble that the fairways will recover in time when we have the possibility of a late season cold snap like this year.

As I write this letter the weather has warmed up and we have had some rain. The fertilizer is kicking in and the turf is greening up. With the turf actively growing we will be able to conduct some of our seasonal cultural practices that will improve the appearance and playing conditions. As usual for this time of year that means we will be verticutting, aerifying, and top dressing. Please don't bring your guests over for a round of golf for a couple of weeks until the turf has recovered.

Just remember, I'm doing the best I can with the resources at hand trying to balance the health, appearance and playability of the turf against the special events calendar and the special interests of each and every member.

Sincerely,

Your Golf Course Superintendent

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