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## Managing *Poa* annua easier

## Significant advances in managing out *Poa annua* in golf course turf have been made in recent years.

by Norman Hummel, Ph.D.

• Whether you're trying to manage or eliminate it, annual bluegrass (*Poa annua*) should be dealt with in the spring.

Poa is a prolific pest infesting golf courses, lawns and most mown turf areas. In recent years, many techniques have been developed to manage both for and against poa.

Those who prefer to live with it know its spring seed production is most objectionable. On golf courses, the abundance of seedheads detracts from the appearance, and may affect playability as well. Seedheads can be suppressed by using materials that regulate plant growth.

One of the most commonly-used products is Embark (mefluidide). On golf courses, it is recommended for fairways only. Properly timed, low rates of Embark will suppress the formation of poa seedheads.

Embark should be applied at labeled rates (for seedhead suppression) to actively growing turf, but before seedhead emergence. Examine poa sheaths on a regular basis for the presence of developing seedheads to ensure proper timing. Use a spray marker to avoid spray overlap or skips.

On greens, the wetting agent Aqua-Gro can be used for suppressing seedheads. Studies at Cornell several years ago found Aqua-Gro applied at 4 oz./1000 sq. ft. in 10 gallon of water resulted in a 65-70 percent reduction in seedheads. Apply Aqua-Gro about 10 days before seedhead emergence, repeating again two weeks later.

Some significant advances in managing out *Poa annua* in golf course turf have been made in recent years:

**1)** Using growth regulators can accelerate these conversions. Growth regulators that suppress *Poa annua* to a greater extent than a desirable grass (like bent-grass) will eventually result in the desirable grass predominating.

2) We also know that merely switching to lightweight mowers and removing clippings can effectively convert to more desirable grasses.

One growth regulator that can be applied in the spring is paclobutrazol (Scotts TGR). Applications should be made to actively-growing turf, but before seedheads emerge. Cornell studies indicate the lower label application rate may be best for spring application on greens to minimize discoloration.

If you have less than 30 percent desirable grasses in your fairways, consider a total renovation program, followed by TGR applications to keep the poa out.

A spring insect problem exclusive to *Poa annua* is the hyperodes or annual bluegrass weevil. Adult weevils overwinter in leaf debris and emerge in April and May to feed, mate and lay their eggs. Young, legless larvae feed within annual bluegrass stems through May and June.



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Hyperodes weevil is best controlled when in the adult stage; that is, late April or May. One recommendation is to apply an insecticide when the flowering dogwood is in full bloom. Materials recommended (at least in New York state) include Dursban and Oftanol.

—The author is in the Department of Floriculture and Ornamental Horticulture at Cornell University, Ithaca, N.Y. This article originally appeared in the "Cornell University Turfgrass Times"

## **BERGSTROM** from page 22G

water use and increasing the percentage of water drawn from the canal. This requires more testing to ensure that we balance maintenance procedures to compensate for the higher salt levels in the canal water."

Many of the chemicals available in California seven years ago have been taken away, and others are in jeopardy, Bergstrom says. "We've always practiced IPM, and now are doing more to adjust practices to avoid problems, and to use natural and biological controls when treatments are needed. I think chemical restrictions will tighten even more in the future."

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By law, Bergstrom holds weekly "tailgate safety meetings" that focus on a specific issue, or open up the floor to suggestions. It's also essential, Bergstrom says, to document everything.

"We keep an on-site file for each maintenance employee, including pesticide applicator training, weekly safety training sessions, and equipment training. These files verify the employee's training in specific areas, record our complaince with government regulations, and support the company's position if liability becomes an issue."

Most of Bergstrom's crew members have been on board for five or six years. He feels comfortable that "they've been 'through the hoops' before, they need less supervision, and they understand the demands of Mother Nature and special events can make on the work load.

Recent improvements:

• All supervisors, the office, pro shop and club manager all have two-way radios.

• An agronomist, VIrgil Robinson, has joined the staff.

• Full computerization of Bergstrom's department is to come in 1995.

"We're excited about the progress we're making," Bergstrom says. "As individuals and as an inudstry, we have to keep moving ahead."