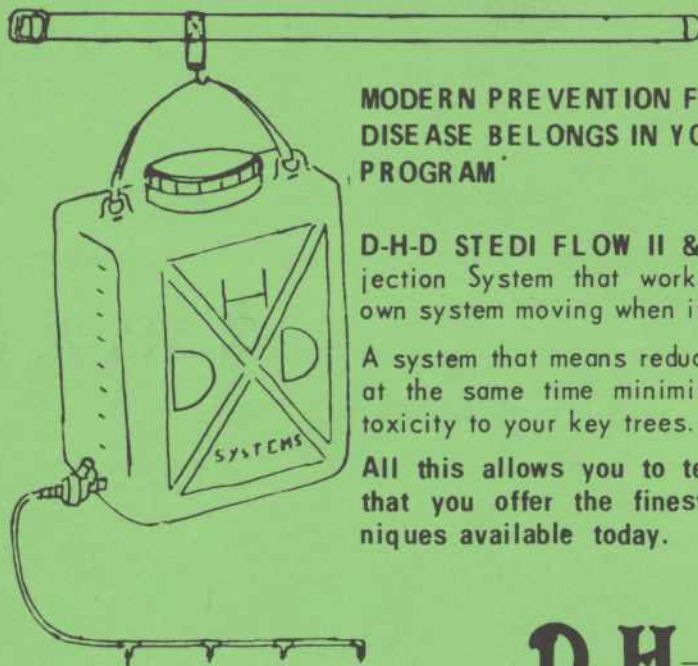


## GRUB CONTROL CONT.

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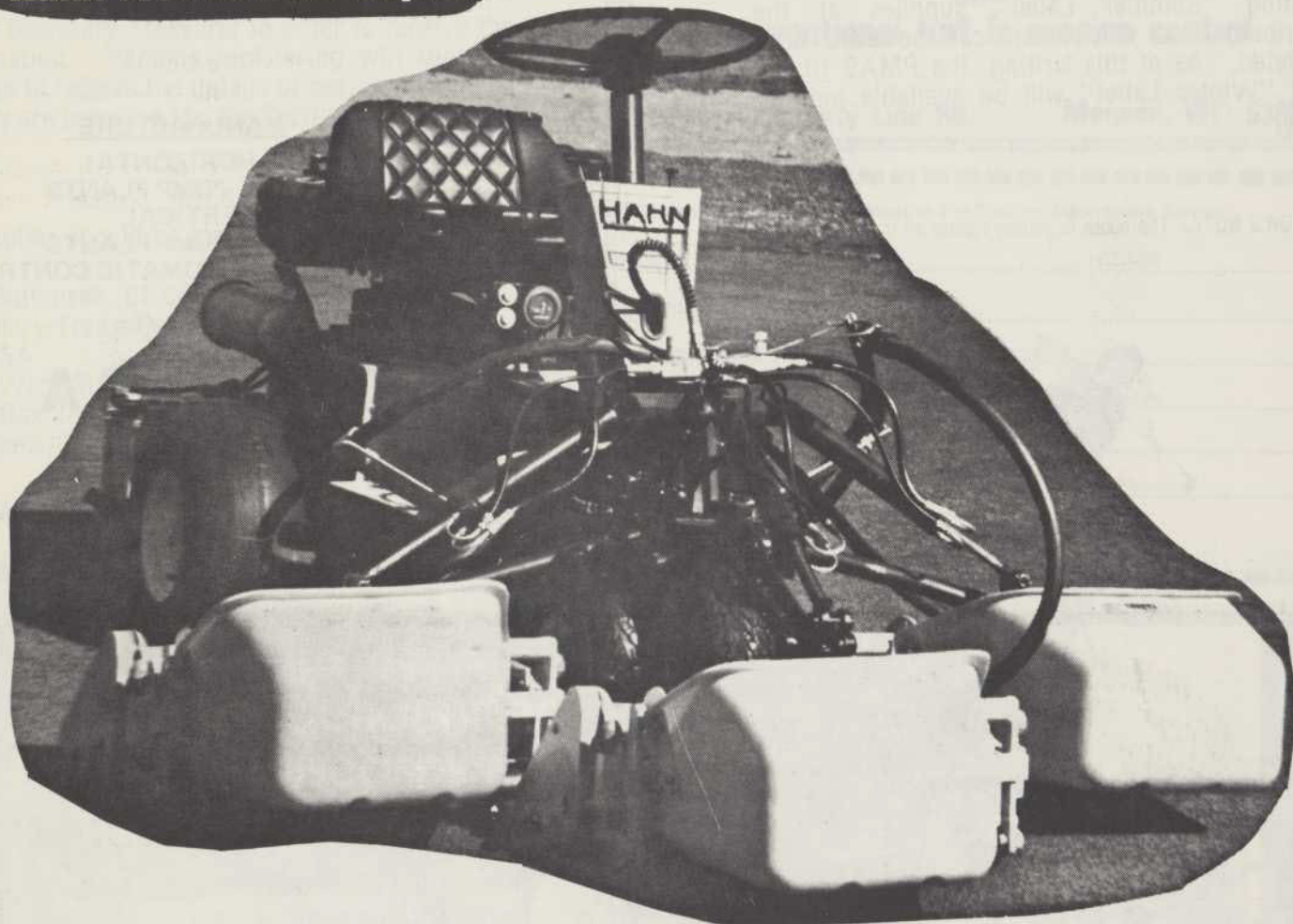
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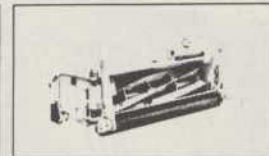
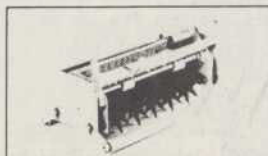
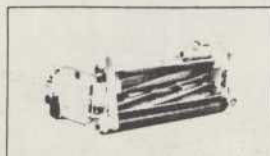
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## PMAS 10% UPDATE

According to Ed Devinger of Reinders Bros., effective August 31, 1978, PMAS 10 per cent is no longer labelled for any summer use on turf anywhere. Although already limited to Snow Mold control only in Wisconsin, it will be interesting to see the effect of this restriction nationwide. Mr. Devinger has also advised that existing "Summer Label" supplies at the distributor and field levels can be used until depleted. As of this writing, the PMAS 10 per cent "Winter Label" will be available indefinitely.

(EDITOR'S NOTE: The noose is getting tighter all the time.)



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## Position Information Service

Once again, the WISCONSIN GOLF COURSE SUPERINTENDENTS ASSOCIATION is offering Position Information Service registration to all dues paying members.

It will be necessary for all interested members to fill out the attached card and return it to the Secretary-Treasurer in order to receive the information. Persons registering will then be eligible to receive the details of position openings as they are processed by the Secretary-Treasurer's office.

All replies should be mailed directly to:

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## A NEW HANDLE ON THE ATAENIUS SPRETULUS GRUB PROBLEM . . .

by Gerald S. Wegner  
Graduate Research Associate  
Department of Entomology  
O.A.R.D.C. & the Ohio State Univ.

After two years of intensive research on the biology and control of *Ataenius spretulus*, Dr. Harry Niemczyk and myself feel very strongly that we have a handle on this serious white grub problem of golf course greens and fairways. The solution is quite simple. Since the small black beetle and its immature stages are not always

apparent or easily monitored by direct observation, it is now possible to "predict" what stage of *Ataenius* development or life history is occurring at a given time of the year by means of concurrent natural events (i.e., the blooming of certain common flowering plants, shrubs, or trees). This method is valid because both insect and plant biology is dominated by two factors in common: 1) length of daylight and 2) seasonal changes in temperature. Therefore, the activity of the various insects and plants will follow a set pattern year after year.

I have found that the first major flights of overwintered *Ataenius* adults and their initial appearance in and on greens and fairways correspond to the first noticeable blossoming of dandelion, common blue violet, cultivated magnolia, black maple and *Poa annua* seedhead. The first eggs of *Ataenius* appear simultaneously with the blossoming of black locust, spirea, hawthorn and cottonwood seed release. First generation third instar larvae and their damage occur during the blossoming of crown vetch, chicory, milkweed, yucca and black-eyed susan. First generation adults are on the wing and second generation eggs being laid while hibiscus (rose-of-sharon, althea) and evening primrose are blooming. Second

cont. on next page

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generation larvae are feeding in greens and fairways through the blossoming of iron-wood, staghorn sumac, goldenrod and bull thistle. Finally, second generation adults are on the wing enroute to suitable overwintering sites (at the tree line of surrounding wooded areas) during new england aster bloom and bull thistle and milkweed seed release. These observations are summarized in the following table.

Based on this information, it would be wise to employ an adult control program at the onset of black locust and hawthorn blossom, and cottonwood seed release. Such a preventative measure should be used only in situations where a large population of *Ataenius* is known to be present based on damage inflicted in the previous year. In cases where no evidence of a harmful *Ataenius* population is available, periodic checks for the larvae and their damage should be made when crown vetch, chicory, milkweed, yucca and blackeyed susan come into bloom.

At this time a larval control program may be employed if needed. Generally 20 to 30 larvae per square foot will cause no apparent damage to fairways.

It is Dr. Niemczyk's and my firm belief that if the golf course superintendent is conscientious in the timing and execution of the recommended control programs, he should be able to get a handle on this turf grub problem within the next year or two.

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Approximate Time Frame	<u><i>Ataenius spretulus</i></u> Biology	Corresponding Natural Event (Phenology)
Early to Mid April	First major adult flights from over-wintering sites to greens and fairways	Blossom: Dandelion - Blue Violet Cultivated Magnolia Poa Annua seedhead
Early May	First appearance of eggs	Blossom: Black locust - Spirea Hawthorn Cottonwood seed release
Early to Mid June	Third instar larvae and their damage	Blossom: Crown vetch - Chicory Milkweed - Yucca Black-eyed Susan
Late June to Early July	First generation adults on the wing	Blossom: Hibiscus (Rose-of Sharon, Althea) Evening primrose
Mid to Late July	Second generation eggs	
August through early September	Second generation larvae and their damage	Blossom: Ironweed - Staghorn sumac Bull thistle - Goldenrod
Late September through October	Adult flights from host turfgrass to suitable overwintering sites	Blossom: New England Aster Seed Release: Bull Thistle - Milkweed

Seasonal record (*A. spretulus* biology and corresponding phenology in the Cincinnati area (Hamilton and Clermont Counties)



# Reinders

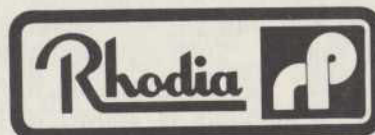
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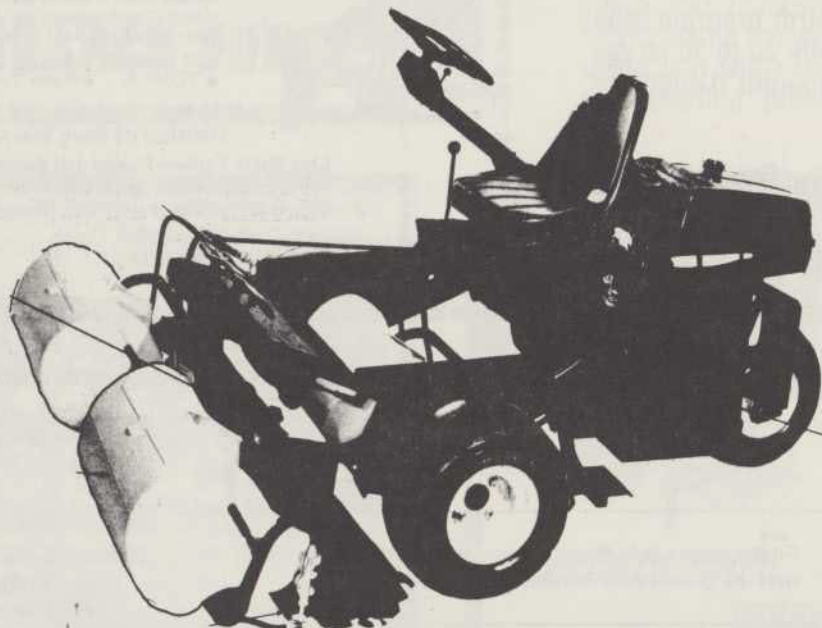
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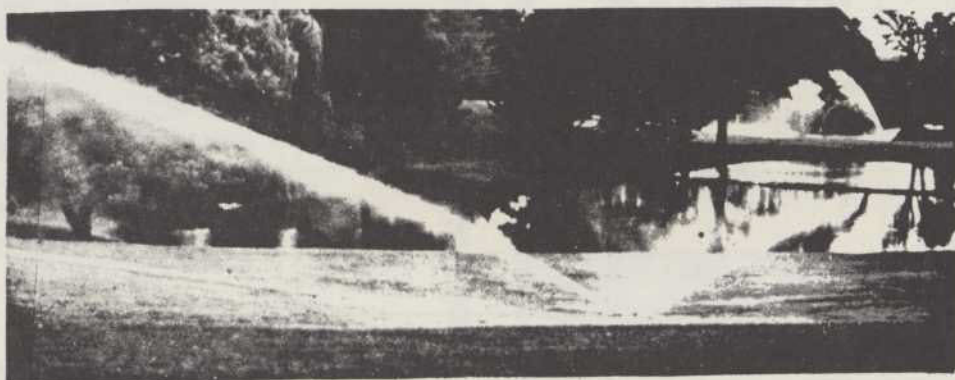
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## WAYNE OTTO: Certification Renewed

"THE GRASS ROOTS" has been informed by GCSAA headquarters that Wayne Otto, golf course superintendent at Ozaukee Country Club, Mequon; President of WGCSA recently completed the stringent certification renewal requirements of his national professional organization, the Golf Course Superintendents Association of America (GCSAA).

Otto, superintendent of Ozaukee Country Club since 1967, was honored in a presentation at the West Bend Country Club, West Bend, during a meeting of the Wisconsin Golf Course Superintendents Association. Elwood Voigt superintendent of Ozaukee County Parks, Ozaukee, made the formal presentation.

To attain certification, Otto was required to meet eligibility requirements of tenure and experience and then successfully complete a six-hour written examination. Areas covered in the test included turf management, pesticide usage, business administration, leadership, the game of golf and knowledge of GCSAA. To be renewed Otto was required to gain points toward his renewal by attending seminars and/or by taking another written examination.

A level of proven competence achieved by few golf course superintendents in the United States, the certification program was initiated by GCSAA in 1971 to provide a means of verifying an individual's capabilities and qualifications on an objective basis.

Otto and his wife, Patricia reside at 11345 N. Valley Drive, Mequon.

## National News: GCSAA to Sponsor Fall Seminars

According to Douglas H. Fender, GCSAA Director of Communications, golf course landscaping and personnel management will be the topics of two seminars sponsored by the Golf Course Superintendents Association of America in coming months. The seminars, to be offered in a number of cities, are also open to non-GCSAA members.

cont. on next page



**Management II: Leadership, Motivation and Employee Relations**, will be taught by Ron Frame, management training consultant from Oklahoma City. Management II seminars will be conducted Oct. 18-19 in Baltimore, Oct. 25-26 in Minneapolis; Nov. 8-9 in East Lansing, Mich.; Nov. 14-15 in Hyannis, Mass.; and Dec. 6-7 in Biloxi, Miss. Registration is \$80.00 for GCSAA members, \$115.00 for others.

**Landscape I: Principles of Landscape**, will offer participants insight into the unique landscaping requirements of golf courses. Dr. Charles M. Sacamano, professor and extension specialist in landscape horticulture, University of Arizona, Tucson, and William R. Nelson Jr., professor and extension landscape architect, University of Illinois, Urbana, will be the instructors for this seminar, offered Nov. 1 - 2 in Indianapolis and Nov. 9-10 in Tucson. Registration is \$90 for GCSAA members, \$125 for others.

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