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the entire area, which helps maintain consistency.

Vidosh is also a member of the Council. "We became charter members because of doing the work there," Conroy says. "It's nice to support the area you work in."

Vidosh and the NCAC also have a working relationship on hiring teenagers, usually from the innercity, to help maintain the grounds in the summer. The Council supervises the teens, while Vidosh pays them and provides benefits.

Vidosh Brothers started on the project by installing and maintaining the landscaping at GM, including the pocket parks. They also did the work for the Commons houses.

Conroy says the houses were renovated during the recession, so budgets for plant materials were tight.

Vidosh used material in keeping with the 1920s theme of the renovation, including lilacs and forsythia, two varieties of privet for the hedge, and kousa dogwood for height. Turf was a blend of Kentucky bluegrass, sodded in the front yards and seeded in the back.

Although Vidosh used the same materials at each house, design varied. Many home owners added their own landscape touches after buying the houses.

Following the housing renovation, a partnership of GM and Trizec Properties, Trizec New Center Development Associates, developed the New Center One Building in 1983. The building, an eight-story atrium office and retail complex, cost \$65 million.

Last year GM, along with Crowley's, Trizec Properties and Allied Film & Video, started a \$33 million revitalization program for the heart of the New Center business district.

The improvements continue. Construction is set to begin on a new streetscape project in July, which should be completed by the end of 1987. Funding for the project will come in part from a UDAG grant for \$5.8 million.

Four blocks along West Grand Boulevard and two along Second Avenue will receive landscape design improvements along the sidewalks and median strips.

Johnson, Johnson & Roy Inc. of Ann Arbor has worked on the landscape design development.

Vidosh has spoken informally with the architects to let them know which materials work best in the area. Windburn and sunscorch are the worst enemies of trees. Bids for installation will probably be taken in early summer.

Spreitzer says the business district improvements have become a necessity to balance the revitalized nearby neighborhoods. Also, GM management has gained confidence in its projects with the success of the neighborhoods and is more open to allocating funding.

"We all have a strong commitment," Spreitzer says. "Despite some economic down-turns, our management has maintained a commitment to the area."

Heide Aungst

Bigger may be better for landscape contractors

Large companies may be well known for putting customers through a lot of red tape, but landscape contractors seem to agree that the bigger the company, the easier it is to work for and with.

"My experience is that it's easier to work with large firms than smaller companies or residences," says Toby Langner, whose company services Amoco's Chicago headquarters.

"They set the tone of business in an organized manner, have authority to delegate down the line and understand the value of making decisions promptly."

Large companies also tend to pay their bills on time, according to Languer.

"I think the bigger company knows what it wants," adds Edmond Laflamme, whose Laflamme Services does landscape maintenance at General Electric's corporate headquarters in Fairfield, Conn.

"A smaller company is generally not as concerned or

They don't have one person to concentrate on the grounds. Any change is far slower to come about," he says.

G.E. has one staff member, Elmer Toth, who handles the grounds. Laflamme says Toth has an extensive background in horticulture and the two speak at least once a day.

Communication is the key to a good working relationship between the contractor and company. Langner says that at Amoco both management and employees are environmentally aware and immediately let Langner know if there's something they don't like. In return, if Langner has a suggestion on

future design, management listens to him.

Former Ford President R.J. Miller was so concerned about the environment that he initiated the arboretum on the property.

Like G.E., Texaco has a staff horticulturist who inspects all of NATRL's work. General superintendent Richard Settgast calls Texaco tough to work for because "they expect a top notch job."

"The biggest problem is visibility," Settgast says. "The site is constantly visible to a thousand people at a time.'

NATRL also maintains the grounds around three houses on the Texaco property, where visiting executives from throughout the world stay.

High visibility is also a problem for Rockefeller Center, home to Exxon Corp. David Murbach, manager of gardens, says the Center always strives toward excellence. "We even have people who scrape gum off the sidewalks," he says.

To keep up that positive corporate image, most corporations are also willing to finance projects. Ford is one of those companies.

"The corporation is conscious of quality landscaping and willing to back it up with finances," Ford's Dave Wood says. "The grounds are a showcase for the company. We keep them in top condition at all times.'

Laflamme says G.E. is more conservative with its budget, especially when it comes to new installations.

"I think most Fortune 500 companies are conservative," he says. "I can't blame them. Why rock the boat?" Still, he describes G.E. as "the best company I've ever worked for."

An outstanding landscape is something both the contractor and the company can be proud of. As Ford's Wood put it, "It's a window to the world." □

—Heide Aungst

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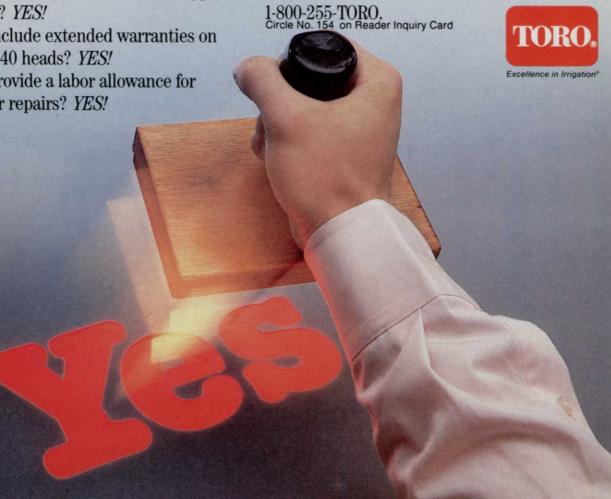
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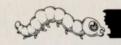
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TURF INSECT CONTROL

Despite research on alternatives and supplemental methods, insecticides remain the primary means of controlling insect damage to turf.

by Dr. Harry D. Niemczyk, OARDC; and Dr. Patricia Cobb, Auburn University

any species of insects and other closely related arthropods live in the turfgrass environment. To control the relatively few we consider pests, it is wise to think of them in relation to the specific segment of the turfgrass environment in which they live.

Some, like mites and aphids, spend some or all of their lives on the grass blades; others such as billbug adults, cutworms, chinchbugs and sod webworms live in the thatch. Grubs usually live at the thatch-soil interface where they feed on thatch and living roots.

Focusing on the specific segment of the environment inhabited by a pest and delivering the control material or management practice so that it has the desired impact on the pest is known as the "target principle." Simple, but the amount of success in achieving control is directly related to the extent to which the target was reached.

Keys to control

Knowing the seasonal occurrence and damage of all life stages of each pest common to your area is a major step toward effective control. This information, combined with the characteristics of the particular turfgrass cultivar and the known length of residual of the proposed insecticide, makes insect control scientific rather than speculative.

Still, there will be twists to confuse any control program, such as soil type, heavy thatch, weather, and poor application uniformity.

Differences between the cool- and warm-season zones and among mountains, plains, and coastal areas, also result in variations in pest species and their seasonal occurrence.



Larger sod webworm (Pedesia trisecta) adult.



Grubs at a thatch/soil feeding, and a sod webworm in the thatch.

Knowledge of each pest's life cycle in your area is often as important as the choice of insecticide.

The purpose of this guide is to point out some major pests to watch out for in cool- and warm-season turfs in 1986, when their vulnerable stages occur, and some insecticides that may be used. No endorsement of named products is intended nor is criticism implied for those not mentioned.

Late winter (Mar.)

Chinchbugs and Billbugs-In northern zones chinchbugs and billbugs both overwinter as adults

in thatch or sheltered sites near buildings. They can become active during warm days in March. Infestations of hairy chinchbug and bluegrass billbug also occur in zoysia, Kentucky bluegrass and fine fescues.

In southern Florida, the southern chinchbug is active throughout the year. Most varieties of St. Augustinegrass and some bermudagrass are damaged by southern chinchbugs. Zoysia and bermudagrass are more likely to be infested by the hunting billbug.

When summer damage from chinchbugs and/or billbugs is expected, a preventative application of liquid or granular Dursban (chlorpyrifos-1 lb. AI/acre), or Oftanol (isofenphos-2 lb. AI/acre) may be made as soon as these insects begin to move about. Treatment at this time controls adults before eggs are laid. If spring is early, these applications may be needed as early as the second week of March. During a late spring, applications may need to be delayed until the last week of March.

Retreatment for chinchbugs in mid to late summer may be necessary if reinfestation from adjacent untreated

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INSECT CONTROL GUIDE



Vertical cross-section of black cutworms in their burrow.

areas occurs.

Preventative treatments may not be successful in southern Florida where the southern chinchbug has multiple generations and is resistant to most organophosphate insecticides in some areas. In southern Florida, where resistance is a problem, the insecticides Pydrin, Pounce, or Baygon have been substituted for organophosphates. Replacing susceptible turf varieties with Floratam St. Augustinegrass, a variety highly resistant to the southern chinchbug, will provide excellent natural control.

Grubs—The larvae of this group of pests normally overwinter six inches or deeper in the soil. If spring comes early, grub activity can be expected along with skunks and racoons who will tear up the turf searching for the grubs. Moles, which feed on grubs and earthworms, also become active at this time.

Application of Oftanol (2 lb. AI/acre) during March when frost is gone from the ground, provides control of overwintered grubs as they return to the surface. This treatment may not provide sufficient residual to control the late summer (July-August) infestation of grubs. Treatment at this time kills overwintering chinchbugs and billbugs and reduces infestations of these insects during the summer.

Mole crickets—Mole crickets have extended their range from Florida and eastern Georgia into southern Louisiana, eastern Texas and up the East Coast into the Carolinas. Timing of treatments is critical and varies from one area to another.

The tawny and southern mole crickets are the primary pest species. Except for southern Florida, both have one generation per year. Mole crickets become active in March from north central Florida throughout their range in the Gulf States after overwintering deep in the ground as adults or nymphs. Tunnelling damage takes place at night in moist soil and increases as mole crickets become more active. Both mole cricket species begin spring mating flights in late March. In most areas March treatment is seldom required.

In years when feeding of overwintered mole crickets resumes earlier than normal, Oftanol (2 lb/AI/acre) has been used with some success. Generally, such applications are better made later in the year.

Black turfgrass ataenius—This golf course pest overwinters as an adult in the soil under debris in roughs or other protected areas. A few may be seen flying about on warm afternoons in early March. Usually this activity begins when crocus starts blooming and intensifies as the bloom of red bud appears.

While an application of Oftanol in March may be successful in preventing summer infestations of larvae, the probability of success is increased by waiting until April.

Greenbug—The only stage of the greenbug known to overwinter in northern states is the egg. Shiny black eggs deposited the previous fall may

be found adhering to grass blades fallen tree leaves, or other debris.

Treatment for the greenbug is not appropriate during the late winter.

Sod webworms—In cool-season areas, the most common sod webworm species overwinter as larvae in the thatch or upper inch of soil. Feeding does not resume until hibernation (dipause) is broken by early spring warmth.

Treatment for sod webworm is usually not appropriate during late winter.

Spring (April-May)

Chinchbugs and Billbugs—As warm days of spring approach, movement of chinchbug and billbug adults increases rapidly. Generally, egg laying begins the first week of April on warm-season turf and the first week of May on cool-season turf. Occasionally adult billbugs can be seen wandering about sidewalks on warm afternoons.

Generally, application of insecticides to prevent infestations of chinchbugs and billbugs should be completed by the first week in May in cool-season and mid-April in the South. Such applications are made before significant numbers of eggs are laid. This time may vary as much as a week or more depending upon the spring weather.

When the preventative approach is not used and southern chinchbugs are detected in May, diazinon (4 lb. AI/acre) provides control. In areas with three to five generations, two retreatments at six-week-intervals may be needed.

Grubs—Overwintered grubs return to the surface and begin feeding on turfgrass roots in April. Increased activity and damage from birds, moles, skunks, and racoons foraging on grubs can also be expected. Feeding by birds, mammals and grubs continues through May.

In cool-season areas, a single application of Oftanol (2 lb. AI/acre) made during April has been successful in controlling overwintered grubs with one year life cycles. This treatment and similar applications of Oftanol in May or June may not provide control of late summer infestations.

Infestations of such grubs can also be controlled during April (South) or May (North) by spot or general treatment with Turcam (bendiocarb, 2 lb. AI/acre), Peoxol (trichlorfon, 8 lb. AI/acre) or diazinon (5-6 lb. AI/acre). Golf course superintendents may also use ethoprop (Mocap, Scotts