"OUR GOLF COURSE HAS TWO PROS. I'M ONE OF THEM. THE OTHER IS OUR WOODS RM 90."

Mr. Tim O'Leary Member—Wilson Sporting Goods National Advisory Staff Part owner, general manager, and pro Lost Nations Golf Club Dixon, Illinois





After 15 years at the same golf complex, Mr. O'Leary has come to the conclusion that their two year old Woods RM 90 is, "far superior to any type of mower...including reels. It mows weeds and grass under wet or dry conditions, and the maintenance savings alone paid for the mower in the first year."

If you're in charge of mowing a golf course, park, school, cemetery or industrial site, it would pay you to get to know the Woods RM 90 better. It's 7-1/2 ft. cutting swath cuts the big jobs down to size by mowing up to 4-1/2 acres per hour.

For complete information on the RM 90, contact Woods, Division of Hesston, Dept. PM, Oregon, Illinois 61061.

40 years of QUALITY 1947-1987



Division of Hesston Corporation Oregon, Illinois 61061 Circle No. 258 on Reader Service Card



The landscape at Ford Motor Company stretches to the size of four golf courses.

And if there are no weed problems in the spring, we won't spray."

Brugeman tried Turflon D herbicide last year and found that it controlled a broader spectrum of weeds than the other products he was using. "It gave us greater control because of its quicker response," he says. "We'll use it exclusively after we've used up some of our remaining inventory."

Insect control

"On our ornamental shrubs and trees, we usually apply two or three cover

'I probably place more emphasis on cultural practices than most landscape managers.'

> —John Brugeman Ford Motor Co.

sprays of insecticide per year as a preventative measure. We don't feel it's necessary to do that on turf. The cost incurred wouldn't be worth it unless we have a serious problem.

Brugeman helps prevent insect problems on shrubs and trees by thin-

ning and eliminating dead wood and other environments where insects might thrive. "If you've got dense foliage in a shrub bed along with high humidity, you've got hiding places for insects. If you can eliminate them and still maintain the aesthetics, design and intent of the landscape, you're doing your job properly."

According to Brugeman, the most serious insect problem currently experienced in Michigan is the black vine weevil. "It's tough to control and attacks numerous ornamental plants. It's a root, foliage and turf feeder, and is nocturnal."

The Michigan Association of Nurserymen recommends some chemical treatments for the black vine weevil.

"We're using Dursban 50W in water-soluble packets on our ornamentals," he says. "I appreciate the obvious safety, container disposal and accurate dosage features of a watersoluble packet. Safety to my employees is an important consideration."

To protect its employees, Ford maintains a hazardous communications program, involving company control over all products used by its employees.

Safety by Ford

"All manufacturers must submit ma-

The most serious insect problem in Michigan is the black vine weevil.

terial safety data sheets to our toxicology department," Brugeman says. Those sheets are carefully reviewed. The company then publishes its own material safety data sheets that communicate hazards, safety limits, storage instructions and protective equipment requirements. "It provides us with all the information necessary to ensure proper and safe use of products. The toxicology people won't recommend unsafe products."

Brugeman holds a B.S. degree in ornamental horticulture from Ohio State University. He has been a director of the Professional Grounds Management Society, was president of the Detroit chapter of that organization and belongs to the Michigan Turfgrass and Michigan Forestry associations.

He's a knowledgeable corporate executive very much aware that a professional job of landscaping goes a long way in enhancing a corporation's image. LM

IOUGH EASY in the rough on the green

You get the best of both worlds with the New Holland LB-620. A tough, articulated loader/backhoe that's easy to operate in rough spots and tight spaces. And, a lightweight low-profile design, with a softer touch on turf.



Balanced design

The low-profile design distributes the weight over each drive wheel for full ground contact and a softer touch on turf. Positive four-wheel hydrostatic drive combines with four-way articulation to give you the flotation and traction you need in rough spots and soft spots, and adds extra stability on slopes and rough terrain.

With a tighter turning radius, and a lower profile, the LB-620 works in spaces that are too tight for other loader/backhoes.

Deep digging high dumping

Powered by a 53-hp diesel engine, the backhoe has a

digging force of more than 10,000 pounds, and digs 11'-13'. The % cubic-yard capacity loader moves into the load with a breakout force of 6,442 pounds. Dump height is more than nine feet.

Easy transport

The compact LB-620 makes job-to-job transport easier, too. You tow it on a trailer behind a one-ton pickup. Yes, the LB-620 takes on the toughest jobs but works with a soft touch. Ask your New Holland dealer for a demonstration, or write to Ford New Holland, Inc., 500 Diller Ave., New Holland, PA 17557.



Circle No. 127 on Reader Inquiry Card

JOBTALK Alligatorweed a monster of a problem

Because it provides a vital link to the Albemarle Sound and Atlantic Ocean, the Scuppernong River in northeastern North Carolina has long been an important artery for commercial and recreational fishermen, duck hunters and other boaters.

Alligatorweed infestations along the Scuppernong, however, have been so intense that a large portion of the river had to be closed several years ago, forcing boaters and fishermen to search for other navigable waterways.

Heavy aquatic weed growth also restricted water flow from tributaries and drainage canals feeding into the Scuppernong, raising the likelihood of the river overflowing onto farmland and residential property during storms.

Like the Scuppernong, other major rivers, tributaries and canals in the coastal plains of North Carolina have been adversely affected by alligatorweed for many years. Only recently has a concerted effort begun to bring infestations to manageable levels, benefitting municipalities, farmers and residents.

"Alligatorweed is the most prevalent and economically most costly aquatic weed in North Carolina," says Dr. Ken Langeland, former assistant professor of crop science at North Carolina State University and current assistant professor at University of Florida. "It is a prolific warm-season perennial, with an extensive rhizome and stem system, and the ability to form thick floating vegetation mats. Those mats can impede navigation, reduce water quality and increase sedimentation rates. They also can cause major flooding in a short time, and that can really devastate crop production in the coastal plains.'

Chemical control

Alligatorweed control with herbicides is not a new idea in North Carolina. The Army Corps of Engineers, Wilmington District, initiated an alligatorweed management program in canals and drainage ditchbanks during the 1960s that relied largely on silvex applications. By 1970, the program was abandoned, due both to environmental sensitivity and a general feeling that alligatorweed was no longer a significant problem.

In the intervening years, mechanical methods, including dredging and



Alligatorweed cluttered much of the Scuppernong River (top), cutting off an important link between the Albemarle Sound and the Atlantic Ocean in North Carolina. But within a few weeks of spraying Rodeo, an aquatic herbicide, much of the vegetation was gone and the river was opened for fishing and boating (bottom).

draglines, and biological controls were occasionally used to fight alligatorweed. These efforts were costly and time-consuming. But, as the experience in the Scuppernong River demonstrates, they did little to stem the weed's proliferation.

"As a result, by the early 1980s, alligatorweed infestations increased seven-fold over 1963 levels. The weed was spreading not only in canals and rivers, but also turning up in privately-owned ponds and ditches used for irrigation," Langeland recalls. "The extension office began receiving large numbers of requests from farmers and other residents for information on how to control alligatorweed."

In response, the North Carolina Department of Natural Resources and Community Development, in conjunction with the North Carolina Agricultural Extension Service, under *continued on page 108* There's no better value for crabgrass control than Balan. And none with more experience. It's been used more years by more golf course superintendents than any other granular preemergence herbicide.

Its easy-to-spread clay carrier is one reason why. It makes application more uniform, reduces the dust common in other carriers and also increases your equipment calibration accuracy. With Balan, you get superior preemergence

crabgrass control for eight to ten weeks with

a single application. Then you can overseed or perform other turf management jobs, without worry of reduced seed germination. If you want longer control, the Balan price allows you a second application.

Balan. The better spreader. Talk to your Elanco distributor soon. Or write:

Elanco Products Company A Division of Eli Lilly and Company Lilly Corporate Center, Dept. E-455, Indianapolis, IN 46285, U.S.A. Balan®--(benefin, Elanco Products Company)

Circle No. 118 on Reader Inquiry Card



Proven Balan[®]. The better spreader for crabgrass control.



IF YOU'RE STILL USING CONVENTIONAL PESTICIDES, BE PREPARED TO HEAR OPPOSING ARGUMENTS.

Despite mounting evidence of the drawbacks of conventional, *petrochemical-based* pesticides, some companies continue to use them. Yet consider the situation that exists.

Consumer sensitivity to the problems associated with conven-tional pesticides has reached an all-time high. At the same time, the num-ber of liability suits brought by employees of companies that rely on them grows by the day.

Why run the risk? Why not use the pesticides that contain *no* petrochemicals? Why not play it Safer[™]? Scientifically derived from biodegradable ingredients, Safer pesticides are safe and effective. In other words, you can use them without worry. And if you're a crop producer, you can use them right up to harvest time.

To find out more about the advantages of Safer pesticides, phone the Safer Technical Hotline at 1-800-544-4453. Or call Safer, collect. at 617-237-9600. And judge for yourself.



The Safer Pesticide

The Bare Facts

USCO Landscapes project, Richmond, VA — SEED SHIELD was tested by a professional landscaper against straw in covering grass seed. Both areas were identically prepared, seeded and subjected to the same growing conditions including a 6 week drought. But then, after 1 week of identical watering, the SEED SHIELD covered side (left) showed dramatic germination results compared to the straw covered side (right).



Betty Staples, Owner USCO Landscapes, Richmond, VA

"SEED SHIELD cuts germination time in half."

"I was skeptical about using SEED SHIELD at first," admits Betty Staples, a professional Richmond, VA landscaper. "But after using it on several commercial and residential projects since September, I am sold on it.

DS-IED

"On the average, using SEED SHIELD along with proper soil preparation and watering, I've been getting over 90% germina-

tion in 4-5 days for fescue. With a straw covering, it generally takes twice as long to get just 60% germination and considerably longer to get full germination.

"SEED SHIELD seems to hold just the right amounts

of heat and moisture. I was able to get excellent fescue germination in October and November despite extreme weather conditions including drought and drastic temperature changes. Plus only <u>one</u> daily watering was needed instead of the usual 3 required with straw.

"It also solved a number of other landscaping problems. I got fewer bare spots. SEED SHIELD virtually eliminated debris from the new grass. It cut down on wash caused by rain. And it kept the birds from eating the seeds.

"I've recommended it to homeowners and other landscapers as being very cost-effective in the long run for producing faster, healthier sod quality growth. Plus it can let you seed earlier and later in the season than straw."

For faster, fuller grass and profit development, talk to A.C.F., Inc. about the unique, new SEED SHIELD fabric.

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Manufactured by Amoco Fabrics & Fibers Co. for Atlantic Construction Fabrics, Inc. 10201 Jefferson Davis Hwy., Richmond, VA 23237 • Toll Free 1-800-448-3636. In VA 804-271-0633

SEED SHIELD A.C.F., Inc.

RESEARCH UPDATE

Amelanchier, a native for all seasons

by Douglas Chapman, Dow Gardens Center

Amelanchier, a member of the Rosaceae family, is a unique genus with two spectacular species and an exciting hybrid.

Amelanchier fits as a shrub, small tree, specimen or in natural plantings in parks, commercial or home landscapes.

Amelanchier is native from New England to Georgia and west to Iowa. It grows along streams or rivers in rich, fertile soils.

Although it can grow in many soil types, the soil must be well drained. It must be grown in areas of high humidity. Amelanchier fluorishes in sun or shade. It is low maintenance, rarely requiring pruning; needs little or no fertilizer; is infested by few scale insects; and the only important diseases are fireblight and rust.

Shadblow or serviceberry (Amelanchier arborea) is the smallest native in cultivation. It is a round multi-stem shrub, reaching 15 to 20 feet, or up to 30 feet in a few native situations. Its silver-grey bark has subtle black stripes which are quite effective during the winter.

The leaves, as they emerge during late April, are covered with silvery tomentose which yields to a bright green leaf of summer. The fall color varies from yellow to a spectacular scarlet. The foliage is particularly vivid in the fall. The flowers are a pure white at full bloom as the leaves unfold middle to late April.

In fact, they are one of the first

native plants to bloom at about the time of rhododendron "PJM. Shadblow is native from New England to Georgia.

With such a large native range, individual provenances should be selected for each region of the country, like the Great Lakes.

Amelanchier is particularly tolerant of salt spray. Allegheny serviceberry (A. laevis) is a mediumsized tree, reaching 40 feet in heightthe largest Amelanchier. Its habit is a very upright oval.

As the leaves emerge during late April, they are covered with silvery tomentose which yields to a bright green leaf of summer.

Amelanchier laevis is frequently found native, growing as a singlestemmed tree with light silver-gray bark. The white flowers are very showy during late April.

The new leaves are reddish at the time of elongation, becoming a brilliant lime-green during summer.

Like shadblow, it is tolerant of flood conditions yet prefers welldrained, fertile soil. Apple serviceberry (A. X grandiflora) is a plant with morphological characteristics between its native parents. Apple serviceberry is a hybrid of A. arborea and A. laevis. The new leaves that unfold are purplish in color and yield to a dark green summer foliage. The fall foliar color ranges from a brilliant red to deep purple.

The white flowers which are in full bloom during late April are larger than either one of the parents. It has been reported that the flowers are held erect, but I can't say this is reliable as a key identifying characteristic.

The flower bud, just prior to opening, is pink—a good identifying characteristic. The flower at full bloom in late April is a pure white.

In general, amelanchier species are confused in the trade. Many plants available for sale are, in fact, A. X grandiflora.

The only time to definitely identify species is as the flower buds expand and the leaves unfold. Apple serviceberry is slightly larger than A. arborea. A. X grandiflora has a multistemmed habit with more spectacular flowers. All three individual types require little or no pruning, grow in sun or partial shade, and have fruit that starts out green in the early summer and changes to red and, finally, a blueberry-colored blue-black.

When looking for a native plant that will fit many landscapes as a specimen or mass border plant, in full sun or partial shade, in rich fertile soil, then either one of the three Amelanchier is a good choice. Amelanchier is an outstanding

four-season plant. LM





IN THIS ENVIRONMENT, IT'S EASY TO SEE WHY ROUNDUP" IS THE HERBICIDE OF CHOICE.



Jim Donaghy is District Manager for Philadelphia's Fairmount Park Commission, one of the largest city parks in the country. When Jim recommends a herbicide, he's not only concerned with weed control, he's also concerned with the well-being of

thousands of park visitors. For him, that herbicide is Roundup[®] Here's why:

First, Roundup works. With Roundup he gets through-the-root control of just about every kind of labeled grass and broadleaf weed he's liable to come across. Even brush is controlled by Roundup.

Second, Roundup works for pennies an application (one gallon of spray solution can treat 30 tree rings for about five cents each). With 8600 acres in the total park system, cost control is essential. Roundup really delivered on this point because it has eliminated more than 70% of hand-weeding and the expensive overtime costs that go with it.

But it's the third reason that probably weighs the most in the buying decision for Roundup: its environmental characteristics. Roundup does not wash, leach or carryover in the soil ... and it's biodegradable, odorless and practically non-toxic to fish, pets and people. In Mr. Donaghy's words: "We're using Roundup because we're getting the results they claim. And definitely because we are in such a high traffic area. That's the biggest consideration. If I had only one herbicide to use, it would be Roundup."

There are a lot of herbicides from which to choose. But, take it from Jim Donaghy, there's only one that's *choice:* Roundup.

FOR A FREE, FULL-COLOR ROUNDUP GUIDE TO TRIMMING AND EDGING, CALL TOLL-FREE 1-800-332-3111

ALWAYS READ AND FOLLOW THE LABEL FOR ROUNDUP HERBICIDE. Roundup* is a registered trademark of Monsanto Company. © Monsanto Company 1987. RIP-7-103B

Monsanto

PRODUCTS

Turf 'system' has many applications

The Radiarc Turf System can be used for pre-emergence weed control, herbaceous vegetation control, brush control or many other applications.

The Radiarc will yield uniform application rates, control of spray drift, economical low volumes and absence of fine particles which produce swath displacements.

For best results, the Radiarc can be mounted at the rear of a skidder or other rough terrain vehicle. A mounting height of six to eight feet is common. A variety of nozzle sizes and placements is possible with the Radiarc.



Circle No. 191 on Reader Inquiry Card

Company formed to sell pesticide detector

A new company, Enzytec, has been formed to market a quick, easy and inexpensive pesticide detector developed at Midwest Research Institute.

The pesticide detector itself provides a simple and reliable on-thespot test to detect within minutes the presence of either organophosphates or carbamates.

Lawn care services can use the detectors to demonstrate the extent of coverage and to monitor drift. Other uses are to test spills, to monitor cleanup operations and to determine contamination of surface and groundwater.

Circle No. 192 on Reader Inquiry Card

Fairway drag system keeps courses groomed

The new Blue Mountain Fairway Drag System promotes the growth of beautiful, healthy, disease-free turf while reducing labor, wear on machinery and fuel usage.

- The system helps:
- prevent clumping and matting;
- mow any time of the day or night;
- keep fairways beautifully



groomed;

save money, time and effort; and
stop dollar spot.

An exclusive feature of this system is a free-floating swing arm that allows the system to be used on most uneven terrain, dragging the net smoothly over hills and bumps. For storage or transportation, the arms can be easily raised and the net folded and hung on retaining hooks.

Circle No. 193 on Reader Inquiry Card

Fungicide gets label for turf market use

Penncozeb fungicide from Pennwalt Corporation has received registration for use against most common turf grass diseases and major fungus diseases of certain ornamentals.

Penncozeb, the trade name for mancozeb, is a wettable powder which can be applied with ground or aerial equipment. The fungicide can provide control in as little as three hours after application. It is available in three- and 50-pound quantities.

Penncozeb is effective on fusarium blight, brown patch, pythium and petal blight, dollar spot and leaf spot.

Ornamentals it is registered for use on include azaleas, chrysanthemums, roses, tulips and rhododendrons.



Circle No. 194 on Reader Inquiry Card

'New breakthrough' in space furniture

The Plexus Collection is being called "a major breakthrough" by its manufacturers.

The new metal furniture system includes all the major elements of the public space into a single package. A metal grid pattern creates seating, tables, planters, trash receptables, ash urns, signage and banners in a linear or curvilinear design.

The heart of the system is a contoured seating unit that is ergonomically sensitive to the human form. The seat is available with or



without back. An arm option is available.

Circle No. 194 on Reader Inquiry Card

Low-growing wildflowers have uniform texture

A new very low-growing wildflower mixture, Super-Short, has been introduced by Applewood Seed Co. Designed for use in urban or suburban settings, the mixture grows only six to eight inches high.

Another appealing feature is the mixture's uniform texture. Twentytwo annual and perennial wildflowers are balanced to exhibit a wide range of colors and blooming periods.

The mixture is designed for commercial and residential applications where a uniform, somewhat manicured look is preferred. An annual fall mowing or trimming is suggested. **Circle No. 195 on Reader Inquiry Card**

Honda engine available on lawn and turf mowers

The Bunton Company is now offering the Honda GXV340 overhead valve commercial four-stroke engine as an option on its 52-, 48-, 40- and 36-inch heavy duty commercial lawn and turf mowers.

According to the company, the 11 continued on page 104