They now can be _____ controlled by a NEW effective carbamate insecticide TURCAM[®]-

TURCAM Insecticide offers the professional turf and ornamental care specialists a new effective broad -spectrum insecticide for the control of a wide range of ornamental and turf pests including gypsy moth, Eastern tent caterpillar, certain scale insects and weevils, Japanese beetles, sod webworms, chinch bugs, mole crickets, white grubs and various nuisance pests such as fleas, wasps and fireants. In addition to controlling these and many other pests, TURCAM

- Will not damage your ornamentals
- Will not get tied up in your turf thatch
- Is odorless
- Is suitable for use in Liquid Systems.

For further information on TURCAM including full labeling and recommendations for use please contact your local distributor or write to the address below.





BFC Chemicals, Inc. 4311 Lancaster Pike Wilmington, DE 19805

WT&T LETTERS

Al says thanks

To say the very least, I was proud and pleased to become the recipient of Weeds Trees & Turf's first annual Man of the Year Award. It is a signal honor indeed ... one totally unexpected ... but one that I will treasure forever.

The beautiful silver trophy, inscribed to commemorate the occasion, will hold a prominent place of display in our home.

My sincere thanks to you and to all responsible for casting their votes for me.

Always the best and continued success throughout the future. If I can help you in any way, please do not hesitate to contact me. Alexander Radko National Director Emeritus Green Section United States Golf Association

Al:

The pleasure truly is ours. We sincerely saw you as the proper recipient and hope you sense the appreciation we tried to communicate by the award. On the other hand, we have no intention of letting you retire for real. You are a natural resource too valuable to retire. Edit.

Readers heed the call

I hope the readers of your magazine will take heed to your "Outlook" editorial of the April, 1982 issue. What you so accurately describe is the dilemma of leadership associated with research and extension activities throughout agriculture. I hope that you will share your comments with other editors of publications in agriculture and related areas. Hopefully, they in turn will contact their constituents. Charles Laughlin Department Head Plant Pathology and Weed Science Mississippi State University Mississippi State, Miss 39762 Dr. Laughlin:

That is a lot of hoping. I'm not exactly Jerry Lewis, but the cause is closer to us than any other at this time. If research dollars dry up, progress will slow markedly. The question is, in terms of Reaganomics, will private industry pick up the slack? Consider the cost of chemical development and retooling changes for equipment, and I think the answer is doubtful.

The only real hope is for readers to get out stationary and write their state representatives today. And then write them a month from now, and again and again until the point is made. Edit.



This magazine gives you good reading, good writing and good arithmetic.

We present the information in our articles clearly, accurately and objectively. That's good writing. Which means good reading.

We present the information in our circulation statement clearly, accurately and objectively. That's good arithmetic.

BPA (Business Publications Audit of Circulation, Inc.) helps us provide precise and reliable information to both advertisers and readers.

An independent, not-for-profit organization, BPA audits our circulation list once a year to make sure it's correct and up to date. The audit verifies your name, your company, your industry and your job title.

This information enables our advertisers to determine if they are reaching the right people in the right place with the right message.

The audit also benefits you. Because the more a publication and its advertisers know about you, the better they can provide you with articles and advertisements that meet your information needs.

BPA. For readers it stands for meaningful information. For advertisers it stands for meaningful readers. Business Publications Audit of Circulation, Inc. 360 Park Ave. So., New York, NY 10010. We make sure you get what you pay for.

PRODUCTS

Jacobsen is offering a new hydraulically-driven vertical reel mower that interchanges with standard hydraulic fairway reel units. The mower cuts turf vertically to remove and control thatch



with vertical blade rotation opposite that of standard reels. More information on the mower is available in new literature available from the Jacobsen division of Textron.

Circle No. 145 on Reader Inquiry Card

Clearman has added a wobbling turbine head to its line of lawn and garden



sprinklers made of black sun-resistant nylon with only one moving part. The 5F series offers a maximum coverage of 44-ft. in diameter and droplet size can be controlled, resulting in flow rates from 0.5 gpm to 5.0 gpm.

Circle No. 146 on Reader Inquiry Card

Deer-Away has formulated a deer repellent in powder form. BGR Powder can be applied in dew and light rain because of a hygroscopic agent that absorbs the water and sticks tightly to the vegetation. Deer Away Powder is registered with the EPA for repelling mule deer, white tailed deer, and Roosevelt elk. It comes packaged in 8 and 16-oz. shaker containers and five lb. bulk packages.

Circle No. 147 on Reader Inquiry Card

Geerpres is introducing a new line of professional sprayers made of high density polyethylene, galvanized or



Continues on page 56



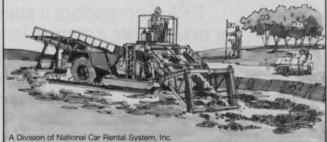
Clean Up Lakes, Ponds, River Fronts.

New Aquatic Weed Harvester removes both floating and submerged weeds to restore natural ecological balance and preserve fish habitat. Two independently controlled paddle wheels resist clogging even in heavy golf pond weed beds unsurpassed maneuverability even around marina docks. Floats in inches of water, permitting cutting close to shore. Rotating vertical side feeders direct weeds into automatic conveyor to keep

cuttings from floating away. Easily trailered from pond to pond without damaging turf. Backed by Mud Cat's international reputation for reliability and ease of operation.



P.O. BOX 16247, ST. LOUIS PARK, MINN. 55416 U.S.A. IN U.S. CALL TOLL FREE 800-328-7333 INTERNATIONALLY, OR FROM MINNESOTA PHONE 612/893-6400 TELEX 29-0767



Circle No. 126 on Reader Inquiry Card

For the 1981 NFC Playoff, the Enkaturf system made a superbowl of Candlestick Park.



ENKATURFAND ENKAMAT ARE REG. TMs OF AMER

Candlestick Park wasn't exactly in good condition before the NFC Playoff. **Football** teams seemed to tackle the San Francisco Forty-Niners' turf more than they did the Forty-Niners. And vice versa.

That was before 14,600 square feet of Enkamat[®] webbing was installed under two inch sod between the field's hash marks, thus forming one more Enkaturf system success.

After installing the Enkaturf system, Candlestick Park was subjected to heavy rainfalls until just prior to the first playoff game. The Enkaturf system performed exceptionally well in spite of the difficult conditions.

The Enkaturf system gives turfgrass the protection it needs to grow and heal itself. The webbing is structured to

keep turf anchored and resilient even in heavy traffic areas. Compaction, aeration, maintenance costs and players' injuries are reduced tremendously.

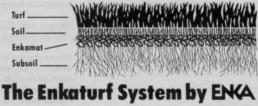
Europe has been using Enkamat on its playing fields for approximately 15 years, concentrating on **soccer fields.**

Eleven of the recently-rated top 40 **golf courses** in the country have made use of the Enkaturf system where soil erosion or excess DEAMERICAN ENKA. NC. APART OF Alzono INC. AND ARE THE SUBJECT OF A NUMBER OF U.S. PATENTS wear had been a problem. One golf club put 10,000 square feet of Enkamat on their driving range. Other golf courses have used the Enkaturf system for heavywear areas, entrance ways to cart paths, pond stabilization and for the construction of flood plains through golf course facilities where natural vegetation is far more desirable aesthetically than using concrete or riprap.

Even more and more airfield ground engineers are considering the reliability of Enkamat in **airstrips**. The Wellington Aero Club in West Palm Beach, Fla., reinforced their 4000foot grass runways with Enkamat. The stabilizing Enkaturf system provides a smooth, shock-absorbing surface. A smooth landing.

Enkamat is a three dimensional resilient webbing resistant to decay, which provides a permanent fibrous matting that gives the sod structural strength. This can *not* be achieved by any other existing medium, natural or man-made. Enkaturf reinforcement system stabilizes turf.

Roots can spread and grow in subsoil making the turf more durable. Strong root system helps prevent damage from tearing and divots.



The Enkaturf system is used in baseball fields, track fields, tennis courts, playground camping sites especially near mobile homes, you name it.

Enkamat is durable. It's safe from humic acid and soil fungi. You can't lose.

Candlestick Park didn't lose: The Enkaturf system made it a winner.

The ball is in your field now. Contact: Enkaturf Dept., at American Enka Co., Enka, NC 28728. (704) 667-7713.

OTTERBINE Spray Sculpture Floating Fountains. Now you can clean up ponds and lakes naturally.



By day or night, these floating fountains help keep your water clean and odor-free naturally, and create a sparkling spray display that enhances the beauty of any surrounding. They are available in a variety of sizes and spray pattern designs, with optional Fountain-Glo lights.

Otterbine Creates Beauty . . . By Solving Problems OTTERBINE AERATORS BAREBO, INC.

RD 1, P.O. Box 217, Emmaus, PA 18049 215-965-6018

Circle No. 103 on Reader Inquiry Card

PRODUCTS from page 54

stainless steel. Available in 1-1/2 and 3 gallon sizes, they deliver up to 60 pounds of pressure. Standard features are a pump with rod, and a 12- or 16-in. brass wand. Pressure gauge, Viton seals, 58-in. hose and nozzles are optional.

Circle No. 148 on Reader Inquiry Card

BASF's Agricultural Research Station has found that insulating glass greenhouse walls with an ethyl-vinyl-acetate coplymer incorporating a pattern of bubbles that provides air space be-



published by	· · · · · · · · · · · · · · · · · · ·	
ADVANCES IN TURFGRASS PATHOLOGY ADVANCES IN TURFGRASS PATHOLOGY ADVANCES IN TURFGRASS AT ADVANCES IN ADVANCES IN	is extensive volume contains apters on: figrass diseases of v.s. warm season pythium blight and her related pythium problems ow molds of turfgrasses iny rings af spot of Kentucky Bluegrass in Minnesota tial and filed fungicide screening figrass disease resistance .US MUCH MORE! DVANCES IN TURFGRASS PATHOLOGY is de discussions by the nation's leading turfgras seases that attack turfgrass. Find out how to EEP CURRENT WITH NEW IDEAS ON HOD DVANCES IN TURFGRASS PATHOLOGY.	\$27.95* (nardcover) \$18.95* (paperback) COPIES LIMITED — DON'T DELAY! s a compilation of more than 23 reports as pathologists. Explore the
Return this coupon to: Book Sales Harcourt Brace Jovanovich Publications One East First Street, Duluth, MN 55802 YES! Please send me copy(ies) of ADVANCES IN TURFGRASS PATHOLOGY. Name Address CityStateZip Phone		\$27.95* hardcover \$18.95* paperback Quantity rates available on request. A check or money order for is enclosed. *Please add \$3.00 per order plus \$1.00 per additional copy for postage and handling. Please charge to my Visa, Master Card, or American Express (circle one) Account Number
iser. The share of		Please allow 6-8 weeks for delivery. WTT 62

tween glass, offers about 20% more insulation than conventional film. The sculptured film is made in double and triple deck versions and can be installed with tacks or adhesive. Circle No. 149 on Reader Inquiry Card

Kubota has introduced a 29-hp tractor equipped with a hydraulic shuttle shifting tranmission. The L355 SS is powered by a four cylinder water-



cooled diesel engine with a transmission providing eight forward speeds and eight backward. Standard features include wet disc brakes, safety starting switch, hydraulic pump, swing drawbar, foot rests, fender handrail and hazard lamps.

Circle No. 150 on Reader Inquiry Card

Vandermolen has developed a heavy-duty model Diadem Brush



Chipper powered by a 18-hp twin cylinder engine. It offers a rotor design with ½-in. thick cutting knives that can handle limbs of up to 2-in. in diameter. The unit is compact enough to be moved by one man when detached from the towing vehicle.

Circle No. 151 on Reader Inquiry Card

Flora and Fauna has designed the Treetite bracing kit. According to the company, the brace fosters good root growth without wire or ropes that can cut or slip off the bark. Treetite comes with an expandable strap-tie, that expands as the tree grows, cord and stakes.

Circle No. 152 on Reader Inquiry Card

Ryerson offers steel landscape edging for long straight lines or plastic Ezy-Lok edging for free form design. The steel can be used as a retaining wall for driveways, walks, terraces and for line



Continues on page 58

You can't kill a weed by watering it!

Sometimes applying a herbicide only means watering the very thing you're trying to kill. Now Micron Corp. has solved the problem with the **HERBI** Controlled Droplet Application sprayer.

The **HERBI** is a revolutionary approach to the application of herbicides. It provides better, cheaper, easier weed control along fences, roadways, ditches, around buildings and structures. The secret is its rotary atomizer—a spinning disc which produces consistent 250 micron-sized droplets, for ultra low volume spraying, eliminating the need for high volumes of water. It gives exact and thorough coverage without run off, chemical waste, or over-kill.

The **HERBI** is lightweight—about 7 pounds. It's also extremely versatile, easy to use and, most of all, economical. It's time to stop watering weeds and start killing them . . . with the **HERBI**.



Circle No. 123 on Reader Inquiry Card

PRODUCTS from page 57

definition around building perimeters. Available in 16 to 20-ft. lengths, it comes in several widths. According to the manufacturer, Ezy-Lok plastic edging resists weathering and soil acids and contains chemical inhibitors that prevent deterioration from ultra violet rays. It comes in 25-ft. lengths that can be locked together.

Circle No. 153 on Reader Inquiry Card

Conwed has published a brochure outlining the effectiveness of Hydro Mulch as a straw tackifier to promote turf establishment along roadways, strip mines, and building sites. The brochure cites independent studies that compare the product's performance to asphalt and the leading non-asphalt tackifier. Loading and application instructions are also featured in the pamphlet.

Circle No. 154 on Reader Inquiry Card

Framar Industrial has introduced a non-selective liquid weed killer to eliminate vegetation around fence lines, parking lots, railroad sitings and industrial sites. Recommended for non-cropland areas, the herbicide



should control a wide range of perennial and annual weeds. With the purchase of 20 gallons of the product, Framar is offering a free three gallon plastic tank sprayer.

Circle No. 155 on Reader Inquiry Card

Southern Hydro Mulch Supply is marketing a new soil moisturizer, Aqua Lox, for nursery, landscape, and seeding use. The product swells to many times its weight when watered, to open air passages and maintain the moisture level. It can be used to protect plants in shipping and to aid in seed germination.

Circle No. 156 on Reader Inquiry Card

Allis-Chalmers has put out a bulletin describing its CD-5 chain drive tiller and the RT-5 rear tine tiller. Built for heavy duty work, the CD-5 has a sealed chain drive which runs in oil and is



fully protected from dirt and dust. The RT-5 has heavy tines to shred and mix stalks, mulch and green manure crops into the soil.

Circle No. 157 on Reader Inquiry Card Continues on page 61

CHIPPER BRUSH CHIPPER

DEPENDABLE

IT'S COMPLETE - READY FOR ACTION

Features found only on more expensive chippers are standard on the Chipmunk Brush Chipper. Rugged, all-welded trailer frame takes to any road or terrain. Efficient, gas-fueled, four-cylinder engine delivers all the power you need. Machined steel flywheel guarantees the maximum in chipping power Exclusive triangular operator guide makes brush loading easier. Exhaust chute has a high-volume air blower to keep chips moving. Replaceable, super-hard, chrome-alloy chipping blades. Chip deflectors for discharging chips into truck or to roadside Single, locking battery/tool box. Reflectors, running lights. Adjustable tow bar, safety chains and folding jack.

Call or write for literature. Manufactured by the pioneer of brush chipping . . . with a nationwide service organization you can rely on.

ECONOMICAL

"Depend on Chipmunk"

Chipmunk Brush Chipper

50 E. Hamilton St., P.O. Box 901 Chalfont, PA 18914 Telephone (215) 822-0542

Inquiries serviced for 90 days from date of issue. For those countries outside the U.S., please apply appropriate postage before mailing 6 - 82For more information on products or services mentioned in this issue, circle the corresponding numbers below, fill in appropriate information and mail today. 0050 0055 **CEMETERIES/MEMORIAL GARDENS** 129 130 131 132 133 134 135 136 137 138 139 140 143 144 145 146 147 148 149 150 151 152 153 154 155 157 158 159 160 161 162 163 164 165 166 167 168 169 171 172 173 174 175 176 177 178 179 180 181 182 183 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 115 116 117 118 119 120 121 122 123 124 125 126 HOSPITAL/HEALTH CARE INSTITUTIONS MILITARY INSTALLATIONS & PRISONS 102 103 104 105 106 107 Circle 0060 0065 0070 AIRPORTS MULTIPLE GOVERNMENT/MUNICIPLE FACILITIES the OTHER TYPE OF FACILITY (PLEASE SPECIFY) -108 109 110 111 **B. CONTRACTORS/SERVICE COMPANIES/CONSULTANTS:** 0105 LANDSCAPE CONTRACTORS (INSTALLATION & MAINTENANCE) Reader LAWN CARE SERVICE COMPANIES CUSTOM CHEMICAL APPLICATORS (GROUND) TREE SERVICE COMPANIES/ARBORISTS LANDSCAPE ARCHITECTS 0110 0115 0120 0125 112 Service 113 127 141 240 0130 **EROSION CONTROL COMPANIES** 0135 EXTENSION AGENTS/CONSULTANTS FOR HORTICULTURE Your primary business at this location is: (check one only in A, B or C) 0140 **IRRIGATION CONTRACTORS** numbers LANDSCAPING GROUND CARE FACILITIES: OTHER CONTRACTOR OR SERVICE (PLEASE SPECIFY) GOLF COURSES SPORT COMPLEXES of those 0015 PARKS C. SUPPLIERS: RIGHTS-OF-WAY MAINTENANCE FOR HIGHWAYS, RAILROADS, & 0205 SOD GROWERS UTILITIES 0210 EQUIPMENT DEALER/DISTRIBUTOR
OTHER SUPPLIER (PLEASE SPECIFY) items of SCHOOLS, COLLEGES & UNIVERSITIES **INDUSTRIAL & OFFICE PARKS/PLANTS** SHOPPING CENTERS, PLAZAS AND MALLS Approximately how many acres of vegetation do you maintain or manage? **PRIVATE/PUBLIC ESTATES & MUSEUMS** interest CONDOMINIUMS/APARTMENTS/HOUSING DEVELOPMENTS/ What is your title? (please specify) HOTELS/RESORTS to you. NAME BUSINESS NAME ADDRESS CITY STATE ZIP TELEPHONE (AREA CODE I WISH TO RECEIVE (CONTINUE RECEIVING) WEEDS, TREES & TURF EACH MONTH I YES I NO SIGNATURE DATE





NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES