Since 1960, those responsible for aquatic weed management have relied on Pennwalt aquatic herbicides and algicides. All of Pennwalt's aquatic herbicides are based on endothall, and offer these important advantages:

- Rapidly biodegrade into natural products
- No bioaccumulation in the food chain
- Will not bind or leave residues in the hydrosoil
- No significant movement from the treatment site
- Highly effective against algae and most problem submersed aquatic weeds, such as Hydrilla, Milfoil and Pondweeds

Pennwalt’s endothall formulations have a long history of being effective tools in weed management without causing adverse effects on man, other mammals, fish, shellfish or fish food organisms.

To manage your aquatic resources responsibly, you can rely on Pennwalt aquatic herbicides. Contact Pennwalt Corporation, Three Parkway, Philadelphia, PA 19102, (215) 587-7219, for more information.

Pennwalt aquatic herbicides are available in four formulations:

- AQUATHOL K
- AQUATHOL GRANULAR AQUATIC HERBICIDE
- HYDROTHOL 191 AQUATIC ALGICIDE AND HERBICIDE
- HYDROTHOL 191 GRANULAR AQUATIC ALGICIDE AND HERBICIDE
TRIM YOUR LABOR COSTS...

... with Atrinal®, the spray that keeps your shrubs the way you trimmed them.

Just trim once in the spring. Then spray once with Atrinal. (Where the growing season is longer, you may want to spray again in early fall.) Now hang up your pruning shears for the rest of the year.

Atrinal systemic growth regulator inhibits apical bud growth, promoting lateral branching for lusher, fuller plants that keep their shape. Atrinal can also be used to suppress flowering and fruit set of ornamental olives and certain other species. And application is safe and easy.

For more information, write for the Atrinal Landscape Maintenance brochure.

Atrinal
Maag Agrochemicals, Inc.
P.O. Box 6430
Kings Highway
Vero Beach, FL 32961-6430
305-567-7506

Atrinal can also be used for nursery and greenhouse crops.

PRODUCTS

Flexwing 215 Cutter handles large tasks
Roadside maintenance, large tracts and stalk shredding are all easily handled with the FMC Corp.’s Flexwing 215, a 15-foot cutter with hydraulic lifts to raise wings for compact trans-

port. Triple spindles on this model provide maximum cutting width with minimum skipping or streaking, and the automatic parallel lift makes hook-ups quick and easy while maintaining proper levels through all height adjustments.

Circle No. 201 on Reader Inquiry Card

Harrow lift provides easy transportation
Fuerst Brothers Inc. has introduced a new harrow lift to easy transporting of the F-i-e-x-i-b-l-e Tine Harrow. The lift attaches to a three-point hitch. In the raised position, it will suspend the entire harrow from the rear. When the harrow is operating, the lift stays clear. It fits all Fuerst Hercules and Peerless eight, ten, and twelve-foot models.

Circle No. 202 on Reader Inquiry Card

Centrifugal pump has positive drive belt
The Hypro Series 9400 belt-drive centrifugal pump from Hypro Div., Lear Siegler Inc. features a positive drive method of power transmission for no-slip uniform output. Adjustment is simple and belts can be replaced without disturbing the PTO attachment.

The cast-iron pump is epoxy-coated to resist corrosion, and the drive mechanism is protected by a polyethylene shield. Pumps may be PTO mounted or PTO shaft-driven, and deliver either 65 or 80 gpm at 40 psi. The many corrosion-resistant features make this model especially suitable for use with certain herbicides.

Circle No. 203 on Reader Inquiry Card

Two fertilizers control turf insects
Lebanon Chemical Co. has formulated two products to fertilize and provide insect control on various turf areas. Oftanol 1.5 Granular controls both surface and subsurface insects, including grubs. It is granulated for stability in hot-weather applications, has a low solubility, and resists leaching when distributed into the soil. Oftanol is EPA approved, and has little effect on earthworm populations.

Circle No. 132 on Reader Inquiry Card
Excel offers six HUSTLER models from 18 to 32 hp...the most productive lineup in the industry. HUSTLER is worth the difference!

Because real value is the basis upon which a buying decision is made, Excel would not compromise its design of the HUSTLER.

Pioneered by Excel Industries, HUSTLER dual hydrostatics and drive-wheel steering have proven to be the best drive system concept in the industry for maneuverability, traction and serviceability.

Independently driven drive-wheels counter-rotate permitting a HUSTLER to actually turn within its own radius! Now that’s maneuverability you can’t find on conventional steering wheel models. And, with that kind of maneuverability, you can easily mow around obstacles, make square corner turns or speed down straightaways and never miss a blade of grass.

Plus, you can choose from a multitude of attachments to meet year-round needs...from fine-cut mower decks, grass vacuuming systems and edgers, to grass thatching and snow removal attachments!

Yes, whether you select the 18 hp model 261, the 23 hp model 275, 21.5 hp model 275 LPG, 25 hp model 295, the 32 hp model 305 D or the 32 hp model 602 D...HUSTLER productivity is the key to your grounds maintenance...and value is your benefit! That’s what makes HUSTLER worth the difference!

Call Toll Free,
1-800-835-3260
or write for free literature:
EXCEL INDUSTRIES, INC.
P.O. Box 7000, Hesston, Kansas 67062

Circle No. 116 on Reader Inquiry Card
ROCKHOUND
TEACHES
THE ABC'S OF GROUND PREPARATION

A SERIES
ROCKHOUND

Dumping

B SERIES
ROCKHOUND

Open bottom—PTO Drive. Rocks are raked
to a convenient windrow for later pickup.

COST EFFECTIVE ROCKHOUNDS
Rake and collect rocks and surface debris.
leaving the soil in a fluffy, level, seed-bed quality condition.

It does not cost to own a Rockhound... IT PAYS!

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KEM ENTERPRISES, INC. 2309-A So. Tacoma Way, Tacoma, WA 98409

Circle No. 126 on Reader Inquiry Card

Scientific Guide To Pest Control Operations

by Dr. L.C. Truman
Dr. G.W. Bennett and
Dr. W.L. Butts

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WTT 54
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The SCIENTIFIC GUIDE TO PEST CONTROL OPERATIONS is written for owners, supervisors, servicemen, salesmen, students, persons preparing for state certification under the EPA/state programs for commercial pesticide applicators, and people interested in structural pest control.

Electronic ignition simplifies starts

The Power-Start electronic ignition module from Power Lawnmower Parts Inc. is said to eliminate the need for troublesome points and condensers on most two and four cycle engines for outdoor power equipment. Modules are designed for long

continued on page 77
MORE IN 84! Mark your calendar. It's not too early to start planning for the lawn care industry's biggest week of the year — the Professional Lawn Care Association of America's 1984 Show and Conference.

And what a week it will be! PLCAA '84 is shaping up to be the biggest, best gathering of powerhouse speakers and exhibitors in our five-year history. The seminar program has been expanded to offer over 16 hours of educational programming hosted by a new lineup of outstanding speakers, problem solvers all.

In addition, last year's popular "Workshop" series will offer even more hours of "how to" advice on business basics like purchasing, business expansion, and promotional techniques. Subjects aimed at boosting the bottom line of your operation.

IT'S SHOWTIME, FOLKS! Virtually every major vendor and supplier to the lawn care industry will be among the over 100 exhibitors at PLCAA '84. Longer show hours and more floor space in the beautiful Curtis Hickson Convention Center will give showgoers an unparalleled opportunity to see, touch, and compare all that's new in lawn care.

BRING THE FAMILY! Take advantage of Tampa, heart of Florida's funland. PLCAA '84 features, options, and vacation opportunities designed with fun in mind. Features like a special Spouse Program full of fun and surprises. Options like a week-long post-conference Caribbean cruise on the luxurious New Amsterdam, newest ship in the Holland America Line. Opportunities like a chance to visit those Florida wonderlands you've been dreaming about — Disney World, Epcot Center, and Sea World. Indicate your interest on the coupon below and details will be sent to you.

'84 is the year. Tampa is the place. Go for it!
Tough mowers... from rough cut to smooth finish.

Built for the commercial user, to assure lowest operational cost through efficient design, low fuel consumption, low maintenance, and long life. Built to take the hard usage of the commercial mower operator and the environment in which the commercial mower functions.

kut-kwick
Brunswick, Georgia 31520
Telephone 912/265-1630
End soil compaction with Verti-Drain
Redexim B.V. of the Netherlands has introduced the Verti-Drain, which features 20 tines that press into the ground to a maximum depth of over 15 inches. This system is said to allow adequate absorption of air, water, and fertilizer into the soil, thus eliminating the problem of soil compaction.

Verti-Drain can be mounted on the rear of a 65-hp tractor with broad tires and high elevating power. The tines work in pairs to penetrate the soil at an adjustable angle. When they are withdrawn, a jerking motion breaks up compacted soil and rows of holes are made, which can be varied in widths. Three models range in width from 59 in. through 98 1/2 in.

Diaphragm pumps make Smithco unit versatile
Smithco sprayers are equipped with Hypro diaphragm pumps that enable them to handle abrasive, granular materials, wettable powders, and corrosive chemicals without damage. Both sprayers in the line are built for low-cost operation and long wear.

The Lark Special delivers up to 9.5 gal/minute, with pressures up to 550 psi. The Hawk Special delivers up to 14.6 gal/minute, with pressures also to 550 psi. Any material sprayed in either pump has no contact with the critical moving parts, and any liquid-handling parts are epoxy coated for long wear. Pumps also run on lower horsepower while still meeting pressure spray requirements in normal use.

Chipper has power with less noise
Model 984 tree and brush chipper from Olathe Manufacturing Inc. has a 42-in.-diameter chipping drum that can turn at 750 rpm. This design allows continued on page 82

They do. It's their job to know things first and then pass that information on to you fast. Things like new turf management techniques, effective methods of insect and weed control, what really works... and what won't.
Powerful new medicine for turf diseases

VORLAN™ is Mallinckrodt's newest, toughest turf fungicide.

Enough experience has been gained with Vorlan by now — on golf courses and in university trials — to confirm that it establishes new standards of performance. Against Leaf Spot, Red Thread, Dollar Spot (even resistant strains!), and Pink Snow Mold, Vorlan delivers more effective control than any other fungicide available.

Vorlan's effectiveness — because it takes so little and lasts so long — also makes it economical, too.

If you haven't yet tried Vorlan, you should. Call Mallinckrodt toll-free, or contact your Mallinckrodt Turf Products distributor. No prescription is needed!

Mallinckrodt

P.O. Box 5439
St. Louis, MO 63147
(800) 325-7155

Circle No. 176 on Reader Inquiry Card
MY PRIMARY BUSINESS AT THIS LOCATION IS:
(PLEASE CHECK ONE ONLY IN EITHER A, B OR C)

A. LANDSCAPING/GROUND CARE AT ONE OF THE FOLLOWING TYPES OF FACILITIES:
0005 ☐ Golf courses
0010 ☐ Sport complexes
0015 ☐ Parks
0020 ☐ Rights-of-way maintenance for highways, railroads & utilities
0025 ☐ Schools, colleges & universities
0030 ☐ Industrial & office parks/plants
0045 ☐ Condominiums/apartments/housing developments/hotels/resorts
0050 ☐ Cemeteries/memorial gardens
0060 ☐ Military installations & prisons
0065 ☐ Airports
0070 ☐ Multiple government/municipal facilities
• Other type of facility (please specify)

B. CONTRACTORS/SERVICE COMPANIES/CONSULTANTS:
0105 ☐ Landscape contractors (installation & maintenance)
0110 ☐ Lawn care service companies
0125 ☐ Landscape architects
0135 ☐ Extension agents/consultants for horticulture
• Other contractor or service
(please specify)

C. SUPPLIERS:
0205 ☐ Sod growers
0210 ☐ Dealers, Distributors
• Other supplier (please specify)

Approximately how many acres of vegetation do you maintain or manage? ____________________________
What is your title? (please specify) _______________________________________________________
I would like to receive (continue receiving) WEEDS TREES & TURF each month: YES ☐ NO ☐

Your Signature: ____________________________ Date: ____________________________