THE DIFFICULT WE DO IMMEDIATELY. THE IMPOSSIBLE TAKES 24 HOURS.

When you need to replace a broken part, you want results. Not excuses.

That's why your Toro distributor goes to great lengths to keep the vast majority of the parts you need in stock. So

you can pick up the part on the day you need it. Then there are those rare, one-of-a-kind parts. The parts that never break down. When your distributor doesn't have one of those in stock, don't worry. Because Toro does. And your distributor can get it to you as soon as you need it.

and the second

If you need it within 24 hours because an essential unit is down, simply let your distributor

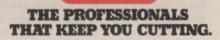
know by 2:00 PM, and he can have it shipped directly to you by air that day. It's Toro's Unit Down Program.* But if you can wait a few days, tell your distributor. He'll still have your part

shipped directly to you from the factory, but it will arrive in two to five days. It's Toro's exclusive Direct Ship Program.*

So, the next time you need a part for one of your mowers, get down to your Toro distributor.

He'll either have the part you need on his shelves that day, or he can have it on the plane that night.

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TORO

*Customer eligibility for Toro's Unit Down and Direct Ship Programs, and responsibility for additional freight and handling charges, subject to local distributor option. All 24 hour parts delivery orders must be placed with Toro by 2:00 PM, Minneapolis time.

WEED CONTROL GUIDE

Ditchbank, before and after, herbicide treatments and debris removal.



Weed Control

Akes, ponds, and streams are central features for many landscapes. Weeds in water features not only destroy their appearance, they also ruin the impact of the entire landscape.

Lagoons, holding ponds and ditches, although not landscape features, serve useful functions which are inhibited by weeds.

Control measures are limited by local regulations, desirable plants in the water, and uses, such as swimming, irrigation, fish farming, and air conditioning.

If a lake is part of a natural watershed area, there may be restrictions on the use of certain chemicals or weed-eating fish. Check with your local extension agent before treating, diverting, draining, or filling in any lake, even if it is on private property.

Preventative control

Typical conditions causing an aquatic weed problem are shallowness (less than 8 ft. deep), poor circulation of water in the lake and air above the lake, fertilizer runoff into the lake, and presence of dead organic material in the lake (such as fish, plants, or sewage). Concentrate on these faults first.

Bottom-rooted aquatic plants require light to grow. Below eight feet this light is inadequate for many aquatic plants. If a lake cannot be deepened, dyes or bottom liners can be added to shade the lake bottom.

Pond aerators add needed oxygen to water and help avoid temperature stratification of water layers. Without mixing, water tends to form layers of water based upon temperature, the warmest layer on top. Keeping surface continued on page 86

Spread our wings and get the job done faster! Five Batwing® models are

If you're responsible for maintaining a large spread or highway right-of-ways, Woods Batwing[®] rotary cutters can help you cut your big jobs down to size.

And when Batwing® goes to bat for you, it does more than mow. These heavy-duty cutters will also tackle the toughest weeds, clear light brush and shred stalks as well.

Five Batwing® models are available for cutting from a 10' to 20'

swath, and each is engineered from the ground up to take the punishment of continuous commercial mowing.

Find out more about the safe, convenient and dependable design features of Woods Batwing[®] rotary cutters. Send for your free catalog today.





Division of Hesston Corporation Oregon, Illinois 61061 Woods mowers are backed by 36 years of dependable quality

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If you're not using Daconil 2787 on your golf course, you don't have many alternatives.

Sure you've used other fungicides. Even tried one or two of the new systemics. But they didn't measure up to diseases like dollar spot and brown patch. Tees, greens and fairways had a lot of problems. And you had a lot of headaches.

Unreliable, inconsistent disease control is the biggest reason more and more superintendents are getting back to regularly scheduled applications of Daconil 2787 fungicide. Because Daconil 2787 *is* the most effective and reliable fungicide you can use on tees, greens and fairways.

Daconil 2787 has a proven record of performance when it comes to delivering superior control of ten major turf diseases including: dollar spot (and benomyl-resistant dollar spot), Helminthosporium (leafspot and melting-out) and large brown patch.

What's more, Daconil 2787 resists wash-off. So it's always out there working even during heavy rains or watering. There's no need to add a costly spreader/sticker for full and even plant coverage because it's already built in to the formulation.

And there's never been a documented case of resistance in over 15 years of use.

Plus you just can't beat Daconil 2787 for economy either. As we've been pointing out for the last two years, Daconil 2787 is the most cost-efficient fungicide you can use from tee to green.

So this season make your fungicide Daconil 2787. It's the one fungicide you can count on to save you from a lot of disease problems and a lot of headaches too.



Agricultural Chemicals Business SDS Biotech Corporation 7528 Auburn Road, P.O. Box 348 Painesville, Ohio 44077



0012787

Always follow label directions carefully when using turf chemicals.

Circle No. 173 on Reader Inquiry Card

WEED CONTROL GUIDE from page 82

Herbicide Directory from page 80

Herbicide	Brand Name(s)	Company	Uses
pronamide	Kerb	Rohm & Haas	Poa annua control in warm season grasses. Also weed and grass control around woody ornamen- tals and Christmas trees.
sethoxydim	Poast	BASF	Postemergence control of grassy weeds around broadleaf ornamentals.
siduron	Tupersan	du Pont	Preemergence control of annual grasses in newly seeded turf areas.
simazine	Princep	Ciba Geigy	Selective control of annual grasses and broadleaf weeds in established bermudagrass. Also, used in industrial and aquatic weed control.
sulfometuron	Oust	du Pont	Non-selective industrial and selective in bermudagrass.
tebuthiuron	Spike	Elanco	Total vegetation control in non-crop areas.
trifluralin	Treflan	Elanco	Selective preemergence weed control in established ornamentals.
trichlopyr	Garlon	Dow	Systemic control of woody plants in rights-of-way and industrial sites.
2, 4-D	2, 4-D	Dow SDS Biotech Rhone Poulenc Vertac	Selective control of weeds in turf and numerous othe areas. Usually mixed with other herbicides.
Vorlex	Vorlex	Nor-Am	Preplant fumigant. Broadleaf weed control in established turf.

Herbicide Combinations

nerbicide of			
2, 4-D plus MCPP	Chipco Turf Kleen Cleary Scotts II SDS Tee Time Lescopar	Rhone Poulenc WA Cleary OM Scott SDS Biotech Andersons LESCO	Broadleaf weed control in established turf.
2, 4-D plus dicamba	Scotts I Banvel Plus Lesco Selective Herbicide	OM Scott Velsicol Lesco	Selective postemergence control of weeds in turf.
2, 4-D plus MCPP plus dicamba	Trimec Trexan	PBI Gordon Mallinckrodt	Selective, Broad spectrum control of weeds in turf.
2, 4-D plus dichlorprop	Weedone DPC	Union Carbide	Selective postemergence control of weeds in turf.
2, 4-D plus 2,4-D plus dicamba	Trimec Ester	Bulkem	Selective, Broad spectrum control of weeds in turf.
2, 4-D plus dicamba plus dalapon	Banvel Plus	Velsicol	Broadspectrum, post- emergence turf weed control.

water temperatures down by mixing upper layers with lower, colder ones can discourage algae. Algae does not readily establish until surface water temperature reaches 60 degrees F.

Decaying organic matter removes oxygen from the water. Do not throw debris or clippings into the water. Dead plants should be removed from treated lakes if possible.

In certain states, various weed-eating fish are legal. They are restricted in certain states due to the fear they may reach major rivers and lakes.

Drawdown, or draining to expose aquatic plants to full sun or freezing temperatures, is used where fish or irrigation aren't factors. Dredging and aquatic weed harvestors are expensive and cause a disposal problem, but they may be the only way to get initial control over a serious aquatic weed problem.

Lakes require some vegetation to produce needed oxygen, to provide cover for fish and wildlife, and to appear a natural part of the landscape. Portions of the lake can be kept shallow to provide for aquatic plants. Another method is removable containers of plants submersed close to the water's surface. Desirable water plants, such as water hyacinth, are available from specialized nurseries. These container plants can be removed if necessary during treatment periods.

Certain aquatic herbicides may be absorbed by roots of nearby trees or plants which extend into the water. Read labels carefully for susceptible land plant species.

Curative control

In warmer climates aquatic weed control is an ongoing struggle with nature. In the North it is a seasonal fight beginning when water temperatures get above 60 degrees F.

Algae. If preventative measures aren't enough to stop algae, then copper compounds (Cutrine) are effective. Used at correct rates, these compounds do not restrict water use.

If a lake has a history of algae problems, start using copper compounds as soon as water temperatures get above 60 degrees F. Periodic retreatment may be necessary for seasonlong control.

Copper compounds are often mixed with other aquatic herbicides for control of a variety of weeds.

Floating Weeds. Floating weeds can be either free-floating or bottomrooted plants which have leaves on the surface. They include hyacinths, duckweed, water lettuce, floating fern, water pennywort, and salvinia. The primary herbicides for floating

86 WEEDS TREES & TURF/MARCH 1985



Keep grass from chewing up your mowing budget. Spray Embark[®]PGR.

Keep the time spent mowing and trimming around trees, stones, fences, ponds, and other hardto-reach areas – plus those long stretches of open grass – from feeding on your maintenance budget.

Spray a little Embark* PGR (Plant Growth Regulator) and slow the growth of most turfgrasses for at least 6 weeks, while your grass retains a healthy green appearance. This dramatically extends the time between mowings, so you can spend valuable



manhours on other tasks.

What's more, it typically now costs less to spray Embark PGR than to mow one time. And it can be sprayed over an area in about one-sixth of the time it takes to mow. Take advantage of Embark PGR in parks and golf courses, on roadsides and airports, or wherever else you want to save the time and cost of mowing.

For more information, contact Agricultural Products/3M, 223-1N, 3M Center, St. Paul, MN 55144. Or see your local 3M Embark PGR distributor.



3M Hears You...



WEED CONTROL GUIDE

2, 4-D plus prometon	Vegemec	PBI Gordon	Selective postemergence control of weeds in turf.
2, 4-D plus triclopyr	Turflon-D	Dow Chemical	Selective postemer- gence turf herbicide for broadleaf weeds.
Balan plus Ronstar	Regalstar	Regal Chem.	Broad spectrum pre- emergence control of weeds in turf.
amitrol plus simazine	Amizine	Union Carbide	Season-long control of weeds and grasses around ornamentals.
MSMA plus cacodylic acid	Broadside	Crystal	Nonselective, broad spectrum weed control.
diuron plus sodium chlorate plus sodium metaborate	Chlorea	Rhone Poulenc	Nonselective weed and grass killer.
Amitrole plus fenac plus atrazine	Fenamine	Union Carbide	Pre- and postemer- gence control of weeds for industrial sites and rights-of-way
bromacil plus diuron	Rout Krovar	Hopkins du Pont	Wide range control of weeds in industrial sites and rights-of-way
MSMA plus dicamba	Mondak	Velsicol	Noncropland general weed control.
prometon, simazine and chlorate	Pramitol	Ciba Geigy	Full-season weed contro in industrial sites.

weeds are 2,4-D and Diquat. Sonar (Fluridone)is a broad-spectrum aquatic herbicide under experimental use.

Submersed Weeds. Weeds which are bottom-rooted and totally under water are called submersed weeds. They include hydrilla, pondweed, watermilfoil, and coontail.

The primary herbicides for submersed weeds are 2,4-D, endothall (Aquathol K), Diquat, and Sonar (experimental use only). Combinations of endothall and Diquat with copper are often used.

Emersed Weeds. These are weeds growing in shallow areas with stems and leaves above the water surface. They include cattails, duckweed, hyacinths, alligatorweed, torpedograss, and arrowhead.

Primary herbicides for these are Banvel, 2,4-D, dalapon (Dowpon), diuron (Karmex), Rodeo (glyphosate), Sonar (experimental use only) and amitrole.

Products registered for aquatic weeds are also the best to use for ditchbank weed control, since there is always a possibility water containing herbicides in ditches will drift to other locations. Check labels for ditchbank applications.

For more <u>uptime</u> you need a National!

POI



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88 WEEDS TREES & TURF/MARCH 1985

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STOP GRUBS FROM THE FIRST BITE TO THE LAST GASP.

Grubs are a hardy breed. They're tough to prevent and even tougher to get rid of once they start chowing down on the roots of your turf.

One thing that puts them off their feed is *OFTANOL 5% Granular insecticide.

Another is new OFTANOL 2 Insecticide. It's a liquid formulation of OFTANOL, containing two pounds of active ingredient per gallon.

The nifty thing about OFTANOL, liquid or granular, is that it stops grub damage fast, even before it kills. After an application of OFTANOL, grubs stop feeding and the damage stops. Use it as a preventive, in the spring, or as a curative anytime grubs are a problem.

Grubs, one serious problem with two serious solutions. OFTANOL. Always read the label before use.



OFTANOL. WHEN YOU'RE SERIOUS ABOUT GRUBS.



Mobay Chemical Corporation Specialty Products Group Box 4913, Kansas City, Mo. 64120

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WEED CONTROL GUIDE

HERBICIDE MANUFACTURERS.

American Cyanamid Berdan Ave. Wayne, NJ 07470 (201) 831-2000.

The Andersons PO Box 119 Maumee, OH 43537 (419) 893-5050.

Applied Biochemists 5300 West County Line Rd. Mequon, WI 53092. (414) 242-5870.

BASF Wyandotte 100 Cherry Hill Rd. Parsippany, NJ 07054 (201) 263-0200.

Bulkem Corp. 400 Northtown Rd. Normal, IL 61761 (800) 447-4131.

Ciba Geigy Corp. PO Box 18300 Greensboro, NC 27419 (919) 292-7100. W.A. Cleary Chemical Corp. 1049 Somerset St. Somerset, NJ 08873 (201) 247-8000.

Crystal Chemical Co. 1525 North Post Oak Rd. Houston, TX 77055 (713) 682-1221.

Dow Chemical USA PO Box 1706 Midland, MI 48640 (517) 636-1105.

Drexel Chemical Co. 2487 Pennsylvania St. Memphis TN 38109 (901) 774-4370.

E.I. du Pont de Nemours 1007 Market St. Wilmington, DE, 19898 (302) 774-7547.

Elanco Products Co. 740 S. Alabama St. Indianapolis, IN 46285 (317) 261-3759. P.B.I. Gordon Corp. 1217 West 12th St. PO Box 4090 Kansas City, MO 64101 (816) 421-4070.

Hopkins Agric. Chem. Co. PO Box 7532 Madison, WI 53707 (608) 222-0624.

ICI Americas PO Box 751 Wilmington, DE 19897

Lebanon Chemical Corp. P.O. Box 180 Lebanon, PA 17042

LESCO Products 20005 Lake Rd. Rocky River, OH 44116 (216) 333-9250.

Mallinckrodt Inc. PO Box 5439 St. Louis, MO 63147 (314) 982-5044. MoBay Chemical Group PO Box 4913 Kansas City, MO 64120 (816) 242-2000.

Monsanto Co. 800 North Lindbergh Blvd. St. Louis, MO 63167 (314) 694-1000.

3M Agricultural Products Bldg. 223-1N-05, 3M Center St. Paul, MN 55144 (612) 736-0569.

Nor-Am Chemical Co. 3509 Silverside Rd. PO Box 7495 Wilmington, DE 19803.

Ortho Div., Chevron 575 Market St. San Francisco, CA 94105-2856.

Pennwalt Corp. Three Pkwy. Philadelphia, PA 19102 (215) 587-7000.

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