Nothing costs less than Subdue. Because so little goes so far.



Pythium blight and damping-off for the least cost.

Nothing costs less to use than Subdue® to control Pythium blight and damping-off. Because it only takes 11/2 fluid ounces of Subdue to cover 1,000 square feet for 10 to 21 days. on established turf.

And nothing works as well because Subdue has two-way action against Pythium blight and damping-off. First, Subdue works systemically, to protect your turf from the inside Pythium in the soil.

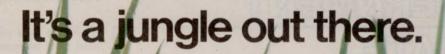
Subdue will give you control in both established turf and newly-seeded turf. And Subdue's systemic action gives you longer-lasting control than other fungicides. So you not only save on Subdue's low rate, you also save on maintenance and labor costs.

That's why Subdue is the best protection you can get. Because so little goes so far.

Ciba-Geigy, Ag. Div., Box 18300, Greensboro, NC 27419

CIBA-GEIGY







And the Ransomes Bob Cat Diesel is King. With a cunning for cutting fuel consumption. And a quiet engine that purrs through the toughest, tallest terrain. See your Ransomes Bob Cat distributor for a personal demonstration of this great grass machine or call Ransomes, Inc., One Bob Cat Lane, Johnson Creek, WI 53038, (414) 699-2000.

RANSOMES

BOB-CAT

The grass machine.

Circle No. 126 on Reader Inquiry Card

GOVERNMENT

UPDATE

PLCAA, NAA, NPCA organize to combat "environemotionalists"

Representatives of the three major urban pesticide user trade associations met in late June and took the first steps toward forming a coalition to fight what the group called "environemotionalists."

"Toxic torts are going to be the auto whiplash of the 1980's," Ian Oppenheim told representatives of the Professional Lawn Care Association of America (PLCAA), National Arborist Association (NAA) and National Pest Control Association (NPCA).

Oppenheim, a specialist in environmental law, is acting executive director of the National Environmental Law Foundation (NELF), which was incorporated in Massachusetts in early Iune to combat what was called "increasing attempts to overregulate urban pesticide use."

John Kenney, president of Turf Doctor, Inc., Framingham, MS, is president of NELF. Steve Keris, director of technical operations for Certified Pest Control, Dedham, MS, is secretary. Board members are Jerry Faulring, president of Hydro Lawn, Gaithersburg, MD, and Dr. Robert Miller, vice president of ChemLawn Corp., Columbus, OH.

In his presentation to the group, Kenney said:

"We, as urban pesticide applicators, use perhaps 5 percent of all pesticides applied in the U.S., but are seen by 95 percent of the public. The public exposure has left us open to overregulation by legislative bodies all the way from city councils to state governments.

He cited costly customer pre-notification laws that have been passed in many localities, bans on aerial application and bans on all professional pesticide applications in some communities.

Ray Russell, director of government relations for Dow Chemical U.S.A. told the group that the solution to the problems facing all urban pesticide applicators lies in the "mobilization of users."

Although actual goals of the coalition have not been finalized, it appeared from the discussion at the meeting that the main thrust would be to take both a "pro-active" and "defensive" posture at the same time.

Representatives of PLCAA, NAA and NPCA hoped to have a prospectus for the group hammered out by the beginning of this month. Working on this document are: Jim Brooks, PLCAA executive director, Bob Felix, NAA executive director and Jack

Grimes, NPCA director of government affairs.

Other meeting attendees were: Robert Russell, vice president of government relations for Orkin Exterminating Co., Atlanta; Robert Earley, group publisher of LAWN CARE INDUSTRY, WEEDS TREES & TURF and PEST CONTROL, Cleveland; Dick Williston of the NAA, Wantagh, N.Y.; Walter Money, NAA pastpresident, Rockville, MD; Ron Giffen, vice president, Lakeshore Equipment & Supply Co., Elyria, OH; Dick Foster, publisher of PEST CONTROL TECHNOLOGY and LAWN CARE PROFES-SIONAL, Cleveland; and J.F. "Skip" Skaptason, vice president of PBI/Gordon Corp., Kansas City, KS.

whenever he's not writing or on the road at a tournament, convention or speaking engagement.



Representatives of Kubota present the first Kubota M4950 tractor assembled at the company's Compton, CA, plant. The M4950 is the first in a new line of M Series agricultural tractors ranging in PTO horsepower from 47 to 76. The body and engine for the M Series arrive intact from Japan. Assembly workers at Kubota install the wheels, tires and Roll Over Protection Systems (in some models) and customerordered options. Pictured are Richard Fadness of Melroe Equipment Co., Gardena, CA (pictured in the driver's seat), Kevin Morioka, Kubota executive vice president and Gene Souza, Kubota sales representative.

TURF

13th Annual National Institute set

The 13th Annual National Institute on Park and Grounds Management will be Nov. 7-10 at the Hyatt Hotel/ Conference Center in Birmingham,

This year's Institute will feature sessions relating to park management with concurrent sessions relating to the management of campus and school areas and a program dealing exclusively with turf and sports turf areas. A representative from the National Park Service will present a session on parkway management. The Environmental Protection Agency will also be represented.

FERTILIZER

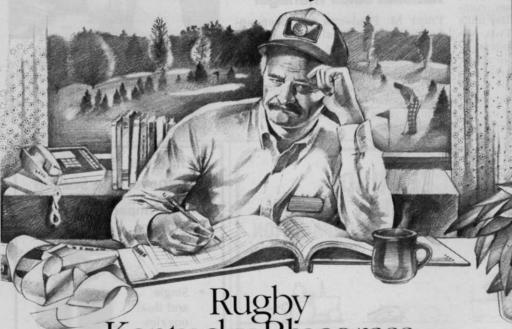
Estech reorganizes fertilizer division

Estech, Inc., a wholly-owned subsidiary of Esmark, has reorganized its Fertilizer Division and relocated it to

continued on page 16

KNOWING QUALITY TURF ISN'T ENOUGH. **TODAY'S TURF MANAGER**

TO MAN MONEY, TOO.



Rugby Kentucky Bluegrass grows rich on a lean budget.

Growing rich, green turf in today's economy is akin to being between a rock and a hard place.

Most Kentucky bluegrasses demand their fair share of nitrogen and water. But nitrogen and water, like the time needed to apply them, are money. And money is tight.

Fortunately, Rugby Kentucky Bluegrass is not like most bluegrasses. It's designed to get by on less.

In test plots grown in diverse climates from Manitoba to Oklahoma and California to Virginia, Rugby demonstrated superior tolerance to environmental stresses. Its most notable attribute. however, is its ability to thrive on little or no nitrogen and moderate moisture.

In addition to saving the costs of time and materials involved in watering and fertilizing, Rugby's

environmental tolerance means extra vigor in resisting disease.

In overall tests, Rugby scored above 29 other Kentucky bluegrasses in resistance to Fusarium blight, and was second highest in resistance to leafspot. It has also shown good ability to avoid the perils of powdery mildew, dollar spot, and stem rust. And if there's anything that can chew your budget to bits, it's the unplanned purchase of fungicide for sick grass.

So the next time you're sitting down with the books, don't get lost in all the worry of red and black ink. Instead, think of the rich, green density of Rugby Kentucky Bluegrass. And how its low-maintenance features can help you out of a tight spot.

For more information, write: Rugby, P.O. Box 923, Minneapolis, Minnesota 55440.



Circle No. 128 on Reader Inquiry Card

Fairview Heights, IL, a St. Louis suburb.

"This reorganization, which we expect to be completed by mid-August, is the result of a serious look at the fertilizer industry and the changing needs of our customers," said Edward R. Vrablik, president and chief executive officer. "Not only do we see an improvement in the general economy, but feel confident that a resurgence in the agricultural market is just around the bend."

Mark G. Boulanger has been appointed vice president, Branded Fertilizers and will head the Fertilizer Division. Prior to his new appointment, he was vice president, consumer and institutional products.

"We have three key objectives in our restructuring program," Boulanger explains. "One is to streamline the operation so that Estech's consumer, commercial and agriculture fertilizer units fall under one division. Two, we would like to make the administrative and operations personnel more accessible to one another and to market areas. Three, we want to establish a centralized marketing team that provides a blend of company and product experience with marketing expertise. From

this team you can expect some innovative programs that will better fit the needs of our fertilizer customers."

Estech entered the fertilizer business over 100 years ago. Today it markets, through a nationwide network which includes more than 250 dealer or Estech-owned outlets, the consumer line under the Vigoro® brand, the commercial line under the Par Ex® brand and the agriculture line under the Certified Harvest King® brand. The Fairview Heights headquarters will consolidate the Atlanta, St. Louis and Chicago facilities for these lines.

INDUSTRY

Champion appoints national sales manager

Frank M. Frederick has been appointed national sales manager of Champion Brass Mfg. Co. of Los Angeles. Champion produces sprinklers and accessories.

Frederick comes to Champion from Royal Tool in New York and has more than 20 years experience in sales and management.

TREES

NAA appoints Williston director of safety and education

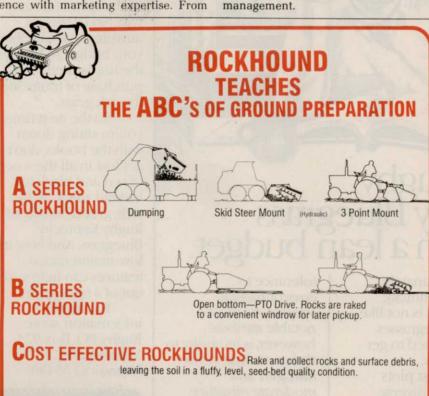
Richard M. Williston is the new Director of Safety and Education for the National Arborist Association.

Williston will administer the NAA's Home Study slide/cassette safety programs and seminars. He will also edit the NAA's monthly publication for



field personnel, "The Treeworker." He will formulate the development of new safety and training programs, including manuals and safety seminars.

Williston has a degree in landscape horticulture from Ohio State University.



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

1-800-426-5615



2309-A So. Tacoma Way, Tacoma, WA 98409

KEM ENTERPRISES, INC.

Circle the Reader Service numbers of those items of interest to you.

Inquiries serviced for 90 days from date of issue. For those countries outside the U.S., please apply appropriate postage before mailing.

READER SERVICE INFORMATION CARD

For more information on products or services mentioned in this issue, circle the corresponding numbers below, fill in appropriate information and mail today.

101 108 115 122 129 136 143 150 157 164 171 178 185 192 199 206 213 220 227 2

IUITIDE	שט פונ	IUW, II	II III al	וועטוענ	ate iiii	minain	UII CIII	u IIIali	loudy	*									
101 102 103 104 105 106 107	108 109 110 111 112 113 114	115 116 117 118 119 120 121 RY BU	122 123 124 125 126 127 128	129 130 131 132 133 134 135 SS AT	136 137 138 139 140 141 142 THIS I	143 144 145 146 147 148 149	150 151 152 153 154 155 156 TION	157 158 159 160 161 162 163	164 165 166 167 168 169 170	171 172 173 174 175 176 177 B. CO	178 179 180 181 182 183 184							227 228 229 230 231 232 233	234 235 236 237 238 239 240
PLEASE CHECK ONE ONLY IN EITHER A, B OR C) A. LANDSCAPING/GROUND CARE AT ONE OF THE FOLLOWING YPES OF FACILITIES: OD5							0105												
YOUR	NAM	IE_								What	is your t	title? (pl	ease sp	ecify) _			36		
BUSIN	IESS	NAME								В	USINE	SS AD	DRES	s					
WISH	ОТН	RECE			NUE R					REES			А Н МОІ	REA C	ODE	□ NO			



BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 665 DULUTH, MINNESOTA

POSTAGE WILL BE PAID BY ADDRESSEE

READER SERVICE DEPARTMENT

WEEDSTREESETURE

POST OFFICE BOX 6049 DULUTH, MINNESOTA 55806 NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES



THE PLACE: INDIANAPOLIS THE DATE: NOV. 8-10 THE EVENT: THE PROFESSIONAL LAWN CARE ASSOCIATION OF AMERICA 1983 CONFERENCE & TRADE SHOW



THE PROFESSIONAL LAWN CARE ASSOCIATION OF AMERICA CORDIALLY INVITES YOU TO THE 4TH ANNUAL CONFERENCE AND TRADE SHOW, NOVEMBER 8 TO 10, INDIANA CONVENTION • TRADE CENTER, INDIANAPOLIS, INDIANA.

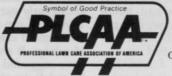
The Lawn Care industry will gather in Indianapolis this November for three exciting days of growing, learning and enjoying at the 4th Annual PLCAA Conference and Trade Show.

CONFERENCE PROGRAM: Meet with leading experts and colleagues from across the country. Talk shop, share problems and solutions, and exchange ideas. The 1983 conference program includes some of the top pros in the turf industry. You'll get practical, no-nonsense advice on the hot topics: • What's new in agrinomics • Better business practices • Government regulations that affect your business • Effective management.

TRADE SHOW: Preview supplier products, equipment and services in the spectacular Indiana Convention • Trade Center. Major industry manufacturers and suppliers will be on hand to demonstrate their product and answer your questions.

KEYNOTE SPEAKER: The 1983 PLCAA Keynote Speaker will be the dynamic Jack Van Fossen, President and Chief Executive of Chemlawn Corporation. Meet the driving force behind Chemlawn, one of the remarkable success stories in the turf industry.

EARLY BIRD REGISTRATION: Make plans to arrive early Monday, November 7th, and take advantage of the Early Bird Registration and



Reception Theme Party. Register, meet old friends, (and make some new ones), relax and be fresh and ready to go when the show opens Tuesday morning.

YES!	I'm interested in attending PLCAA's 4th Annual
Conferen	ce and Trade Show. Send me more information on:

□ REGISTRATION □ E	EXHIBITING MEMBERSHIP	
NAME	the total Ages of view opinions on the b	ins delin riobus in ti
COMPANY	mer on , some most virtuur at the mi	innifera bacamanaga
ADDRESS		

Mail to: Professional Lawn Care Association of America

CITY, STATE, ZIP

1225 Johnson Ferry Road, NE • Suite B220 • Marietta, Georgia 30067

LANDSCAPE LOG

By Douglas Chapman, horticulturist, Dow Gardens, Midland, Michigan

SEPTEMBER JOB FOCUS

- 1. Lawns
 - a. renovation
 - b. insect control
 - c. fertilization
 - d. broadleaf weed control
- 2. Transplanting shrubs
- a. balled and burlapped (B. and B.)
- b. container-grown
- c. broadleaf evergreens

September is a pivotal month. Certainly, we are well into "fall landscaping." This fall activity for the lawn includes renovation, insect control, fertilization, and broad leaf weed control. Further, it includes transplanting of shrubs, specifically B. and B., container grown, and broadleaf evergreens.

LAWNS

Early September in the north and the entire month throughout central Ohio remains the prime time for either new lawn installation or renovation. The air temperature is cool and the soil is warm with photoperiod favoring new grass seed germination, but the aforementioned climatic conditions discourage new weed establishment. In general, by September the weed season is over and cool season grass growth is at its peak. Latitude will dictate how late one can consider new seeding of areas. Generally speaking, for central Michigan, seeding should be completed by the second week of September or consider late dormant seeding. Grass germination is usually rapid, depending upon the type (5-15 days) with a weed-free turf. Each part of the country should contact its land grant college for the correct seed type, but it should be stressed, for most commercial areas and home grounds, that a mixture of bluegrass, fescue, and perennial ryegrass (hardy) is probably the best to result in a high quality-minimum maintenance turf.

If your landscape is in an area where Asiatic Garden Beetle, Japanese Beetle, or any of the June beetles are a problem, then control in September is important. Although there are several compounds that are effective, Dursban, Diazinon, and Turcam are among the most highly recommended by the Cooperative Extension Service. Again, one should check with the local Cooperative Extension Service for individual state recommendations and clearance. Generally speaking, it is easier, safer, and still an effective way to apply granular herbicides, contrasted to spraying, if not an experienced applicator. It has frequently been suggested they cost a little more but the cost benefit ratio certainly favors the use of these granular materials when inexperienced and when one infrequently applies pesticides.

FERTILIZATION

Fertilizing should certainly be high on the list. With the return of rain and cool air temperatures, bluegrass and fescue again become quite active. This activity should be supported with adequate fertilization. Current research is suggesting the application of 1 pound of actual nitrogen per 1000 square feet with a 3-1-2 ratio gaining more and more acceptance. In other words, it is important to stimulate the turf with nitrogen while potassium encourages carbohydrate storage, thus winter and drought hardiness.

Broadleaf weed control is generally effective spring or fall. Most materials used to control broadleaf weeds include a combination of hormone type herbicides or a mixture of 2.4-D and MCPP or Dicamba. These combinations of materials are extremely effective in controlling most or all broadleaf types while having little or no effect on turf. Garlon is an established herbicide for industrial weed and brush control and is showing exciting potential for use in combination with 2,4-D for broadleaf weed control in turf. This potential is in the wide range of broadleaf weeds that can be controlled. Controlling broadleaf weeds in the fall in central Michigan has been extremely effective. With the cool season grasses again growing actively, they often fill in where the undesirable plant was, before the onset of another weed season in June. Further, many worthy trees and shrubs are not growing actively, thus are less sensitive to volatilization. It should be noted that the safest formulations are amine salts, L.V. esters, or granular formulations. Further note that if one is applying granular formulations, it should be applied to set turf areas and not watered in for at least 24 hours.

If there is such a thing as step-wise procedure, the turf areas should be fertilized, mowed, and the broadleaf herbicide applied with 1 to 2 days between each step.

TRANSPLANTING SHRUBS

Container grown trees and shrubs, B. and B. shrubs, and ericaceous plants can be transplanted before leaf drop, or dormancy. In fact, it is a good opportunity to get an early start on replacement or initial installation. With the warm soil and cool air temperatures, root establishment can be quite extensive prior to the onset of winter. It should be noted, at this point, that we have suggested container grown deciduous trees, not B. and B. trees as the transplant shock prior to leaf drop can be extensive. Ericaceous, or broadleaf evergreens, because of their extensive shallow vet dense fibrous root system, are effectively transplanted in September and October. One thing to consider in stimulating lateral root development on ericaceous plants and many container grown trees and shrubs is root slicing. This shallow slicing with a knife into the root system stimulates lateral root development and hastens landscape establishment. If soil amendments are used frequently, they will encourage early development. In this case, we would suggest composted animal manures, peat moss, leaf mold, or COMPOSTED BARK. The addition of organic matter speeds up establishment, conserves moisture, and provides an excellent environment for any plant establishment.

September—the transition month through fall when planting can again be considered and turf establishment and care are paramount.