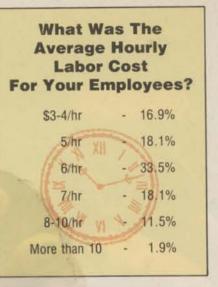
AVERAGE COMPANY GROSSES \$22,700 PER EMPLOYE

Labor and equipment charges pegged at \$21 per hour per man

A statistic of increasing importance to the industry in light of the nature of the economy is the cost of labor, including equipment, per hour per worker. The average charge for labor reported in the State of the Industry survey was \$21.07, average labor cost of employes was \$5.94 per hour. Broken down into costs and percentage of respondents, the survey showed that 16.5 percent spend three to four dollars an hour on each employe, 15.1 percent spend five dollars, 26.5 percent spend six dollars, 15.1 percent spend seven dollars, 11.0 percent spend between eight and 10 dollars an hour, and 1.9 percent spend more than 10 dollars an hour.

The seasonal nature of the lawn care industry in many parts of the country prohibits the record of a single average number of employes retained by lawn care businesses. Instead the Lawn Care Industry survey asked business







This issue is devoted to both analysis of and speculation on the current status of the lawn care industry. Hopefully, it will provide an index by which lawn care businessmen can assess their market position with respect to industry medians. OVER SEVEN MILLION ACCOUNTS SERVICED IN 1981

Industry tops \$1.5 billion

Readers of Lawn Care Industry reported a gross income of \$1.5 billion in 1981, according to the most recent survey conducted by the magazine. The results are based on a questionnaire mailed to 2,000 chemical lawn care and mowing/maintenance businesses.

Companies expand services

Of that sample, 74.6 percent indicated that they were actively involved in chemical lawn care, and reported an average gross income of \$114,562 from chemical applications. Expanded over total readership, 7600 businesses achieved gross revenues of \$870.7 million in 1981 from chemical applications.

It must be pointed out that this includes more than just "Chem-Lawn type" companies who basically apply fertilizer and pes-

QUICK STARTS

Supply distribution analysis	7
How much do you purchase?	10
State of the Industry panel	12
Company start ups	14

ticides only. As the statistics indicate, many companies are doing both chemical lawn care and

What was your pre-tax profit in 1981?										
1-4% profit	- 9.2%									
5-9% profit	-10.2%									
10-14% profit	-20.7%									
15-19% profit	-11.9%									
20-24% profit	-13.8%									
25-29% profit	- 7.4%									
30-34% profit	- 9.1%									
35-39% profit	- 1.7%									
40-44% profit	- 6.9%									
45-49% profit	- 2.3%									
More than 50%	- 6.8%									
more than our	0.0 10									

mowing/maintenance.

At the same time, 71.7 percent, or 7,300 readers responded that they were actively involved in mowing/maintenance. They reported an average gross income of \$85,999 from their mowing/ maintenance accounts. Thus, over the same universe, lawn care businesses achieved a gross income of \$627 million in 1981 from their mowing/maintenance accounts.

Lawn care businesses actively involved in chemical lawn care reported that they had an average of 881 accounts in 1981. Expanded over total readership, this indicates that 6.7 million chemical application accounts were serviced in 1981. Mowing and maintenance business reported an average of 58 accounts, or a total of 424,200 accounts serviced.

Businesses reported an average to page 17

CONSUMPTION TO GROW 24 PERCENT ANNUALLY

Lawn care industry single largest user of chemicals

Residential and commercial lawn care companies represented the single largest segment of turf and grounds management users of pesticides and fertilizers in 1981, according to a study by Charles H. Kline & Co., Inc., an independent market research firm located in Fairfield, N.J. professional users, was \$1.1 billion.

Company start-ups
How the industry advertises 15
Business identity breakdown
Lehr on labor law
Cross-section of employe benefits 25

Special State of the Inductor iccue SR 0037699 X M DH P E RIEKE PROF MICHIGAN STATE UNIV CROP & SOIL SCL E LANSING MI 48828

Total value gauged

Of the 18 end-use segments of the market isolated in the report, lawn care businesses purchased 32 percent, or \$185 million of the turf and grounds management end-use market, valued in the study at \$585 million in 1981. Total value of the market, including miscellaneous Lawn care businesses were followed in order in the study by golf courses, pest control operators, landscaping firms, horticultural companies, roadways, educational facilities, water management groups, and a variety of other professional end users.

Major products detailed include fertilizers, herbicides, insecticides, fungicides, and soil conditioners. Fertilizers were the largest category, with consumption valued at \$310 million, followed by herbicides with sales at \$120 million.

Although the study indicated that the overall consumption of the to page 25



Without a summer application of Dursban, big problems could pop up in fall.

While most insects emerge in spring, sod webworms and other varieties don't spring into action until late summer or fall. And even DURSBAN* insecticide – which gives you the longest residual action in the business – won't protect your customers' lawns from spring to fall.

That's why it's important to apply DURSBAN twice a year – on your first round for the early risers and later in the summer to get the late bloomers.

And considering the relatively low cost of DURSBAN, a two application insecticide program makes doubly good sense. After all, DURSBAN costs as little as 35¢ per 1000 sq. ft. application. A small price to pay for protection against the immeasurable costs of call-backs and shaken customer relations.

DURSBAN gets just about every bug you'll face, too: chinch bugs, sod webworms, armyworms, cutworms, you name it.

DURSBAN. Make sure *all* insects get a shot. Available in 2E and concentrated 4E formulations. See your Dow distributor. Also ask him about our new "DURSBAN delivers the goods" incentive program. Be sure to read and follow all label directions and precautions. Agricultural Products Department, Midland, Michigan 48640.

DURSBAN

Gets the jump on late emergers.



DOW Chemical U.S.A.

*Trademark of The Dow Chemical Company.

Ad No. 1906

Circle No. 105 on Reader Inquiry Card

UPFRONT

The state of our industry

I had my back turned to my office door. I heard a rustling and before I had a chance to turn around I heard a loud "thump" on my desk. I **whirled** around and saw it.

Our research director had delivered our 1982 "Profile of the Readers of Lawn Care Industry'' all 312 pages of it.

It is our **fifth report** on our readership and every year it keeps getting thicker. And it is the basis for Lawn Care Industry's "State of the Industry" report.

LAWN CARE INDUSTRY

ROBERT EARLEY, Editor/Group Publisher PAUL McCLOSKEY, Associate Editor JOAN HOLMES, Production Manager MARILYN MacDONALD, Production Supervisor DAVE JOHNSON, Graphic Design JOAN SMITH, Circulation Supervisor GAIL KESSLER, Reader Service Manager LINDA WINICK, Promotion Director

MARKETING/SALES

New York Office: **ROBERT EARLEY** (212) 888-2892 757 Third Ave., New York, NY 10017

Southern Office: JIM BROOKS, National Sales Manager RON KEMPNER (404) 233-1817

3091 Maple Dr., Atlanta, GA 30305 Northwest Office: **BOB MIEROW** (206) 363-2864 1333 N.W. Norcross, Seattle, WA 98177

Classified: DAWN ANDERSON (218) 727-8511

1 E. First St., Duluth, MN 55802

Please send advertising materials to: LAWN CARE INDUSTRY 120 W. Second St. Duluth, MN 55802 218-727-8511

HARCOURT BRACE JOVANOVICH PUBLICATIONS (HBJ)

ROBERT L. EDGELL, Chairman RICHARD MOELLER, President LARS FLADMARK, Executive Vice President ARLAND HIRMAN, Treasurer THOMAS GRENEY, Group Vice President EZRA PINCUS, Group Vice President JOE BILDERBACH, Vice President JAMES GHERNA, Vice President GEORGE GLENN, Vice President HARRY RAMALEY, Vice President Not all of the information in the report is carried in our **June issue** (which you are holding in your hands), but a good percentage of it is. Like information on average yearly expenditures and equipnent inventory, who lawn care businessmen buy from and when they buy, average gross receipts and numbers of customers and predicted growth of the lawn care industry in the 1980's.

The process started in early January, when we got together with our company's research people and lined out what we wanted to do. A questionnaire was developed, and we mailed to 2,000 of our readers in March. Associate editor Paul McCloskey spent two weeks living on **coffee and Parliaments** and pulled the whole package together.

Here it is.

PLCAA regional seminars: The Professional Lawn Care Association of America has put together an aggressive series of regional business seminars. Here are locations and dates for the ones still to be held:

• Worcester, Mass., July, call John Kenney (617-879-4510).

• Buffalo, N.Y., July 15, call Des Rice (416-279-5448).

• Detroit, Mich., mid-July, call Steve Brown, (517-351-7227).

• Cincinnati, Ohio, June 16, call Rick Steinau, (513-761-4100).

• Cleveland, Ohio, July 21, call Larry Rininger, (614-872-3859).

• Chicago, Ill., July 21, call Charles McGinty, (312-438-5161).

To register for any of these, or to receive up-to-date background information call Jane Stecker at PLCAA headquarters (312-644-0828).

ChemLawn taps Ogilvy & Mather: Ogilvy & Mather Direct Response, the Ogilvy & Mather International subsidiary with 25 offices worldwide, has just landed the account of ChemLawn Corp., Columbus, Ohio, whose \$9 million in current ad billings mades it the biggest account ever landed by the five-year-old agency.

ChemLawn's previous advertising was done by Stone & Adler. ChemLawn has 3,000 employees working out of 150 offices in 80 markets. The average contract for annual care by ChemLawn is \$150. Last year's sales of ChemLawn and ChemScape (for trees and shrubs) came to **\$142 million**.

The current advertising theme is "Service with a difference," and Golumb for background information on an investigative story she was doing about the danger of pesticides involved in lawn care.

She told us she was following up a number of **complaints** from her viewers about pesticides used in lawn care. We did all we could to set her straight, and referred her to various experts in the industry.

But this is a very **serious reminder** that each and every lawn care businessman in the country should be prepared to handle such inquiries intelligently if his local television investigative reporter decides to call with questions.

Fastest-growing cities: If you are about to launch a new lawn care company or branch, perhaps you should consider locating in a fastgrowing area so that your business can expand with the population.

According to Andy Moody, director of Metropolitan Area Forecasts for Chase Econometrics, the **10 U.S. cities** projected to grow the fastest in the 1980's are:

- Houston, Texas
- Fort Lauderdale, Fla.
- Tucson, Ariz.
- Las Vegas, Nev.
- Dallas-Fort Worth, Texas
 Austin, Texas
- Pheonix, Ariz.
- El Paso, Texas
- Tulsa, Okla.
- San Diego, Calif.

Garden centers and lawn care: Noting that many parts of the country have experienced the advent of firms specializing in lawn care, the Garden Centers of America (GCA) most recent management survey asked four questions of its members in an attempt to determine the impact of lawn care firms and how many GCA firms are offering similar services.

The survey results show that the majority of GCA's member firms **do not** offer lawn care services. Only 37 percent indicated that they offer a dry application service, an increase of three percent over 1980.

Of those firms providing a liquid or dry fertilizer application service, 52 percent use a **national brand**, 38 percent use a regional brand and nine percent use a private brand.

In comparing these figures with 1980 figures, the survey shows an **18 percent increase** in the use of regional brands and a nine percent drop in each of the remaining categories.

Overall **fertilizer sales** were up last year for 57 percent of the 90 firms responding to the survey. Of this group, 45 percent showed an increase of from 11 to 20 percent. Some 21 percent of the respondents said their sales remained the same as the previous year.

4

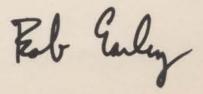
IUNE 1982

LAWN CARE INDUSTRY (USPS 397250) is published monthly by Harcourt Brace Jovanovich Publications Corporate and Editorial offices: 757 Third Avenue, New York, New York 10017. Advertising offices: 757 Third Avenue. New York, New York 10017, 111 East Wacker Drive. Chicago. Illinois 60601 and 3091 Maple Drive. Atlanta, Georgia 30305. Accounting, Advertising Production and Circulation offices: 1 East First Street. Duluth. Minnesota 55802. Subscription rates: one year, \$15 in the United States. \$18 per year in Canada. All other countries: \$40 per year. Single copies (prepaid only): \$2 in the U.S.; elsewhere \$4.50; add \$3.00 for shipping and handling per order. Second class postage paid at Duluth. Minnesota 55806 and additional mailing offices. Copyright© 1982 by Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Microfilm copies of articles are available through University Microfilms. International, 300 N. Zeeb Road. Ann Arbor, Michigan 48106.

POSTMASTER: Send address changes to LAWN CARE INDUSTRY, P.O. Box 6200, Duluth, Minnesota 55806-9900. last year's budget was just over \$6 million. Ogilvy & Mather ads will not be seen until 1983.

The new business brings the Ogilvy unit's billings to \$70 million and although **ChemLawn** is the biggest account landed, others, already in-house have grown larger. They are American Express and Trans World Airlines frequent-flier bonus program.

Nightly news and lawn care: We at LAWN CARE INDUSTRY recently got a call from Philadelphia's WCAU-TV reporter Susan The report ended by saying: "Certainly, these statistics point up an area where garden centers might **expand** their activity."



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 6-82

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

cone	shr	nui	my n	uniber	13 Delt	, m	in ap	propri	ale ili	TOTTIa	tion an	umai	i toua	1.					
104 105	108 109 110 111 112 113 114		115 116 117 118 119 120 121	122 123 124 125 126 127 128	129 130 131 132 133 134 135	136 137 138 139 140 141 142	143 144 145 146 147 148 149	150 151 152 153 154 155 156	157 158 159 160 161 162 163	164 165 166 167 168 169 170	171 172 173 174 175 176 177	178 179 180 181 182 183 184	185 186 187 188 189 190 191	192 193 194 195 195 197 198	199 200 201 202 203 204 205	206 207 208 209 210 211 212	213 214 215 216 217 218 219	220 221 222 223 224 225 226	227 228 229 230 231 232 233
PLEAS	EC	HEC	K BEI	OW YO	UR PRI	MARY	BUSINE	SS AT	THIS I	OCATI	DN:								
				SERVIC						120		I. colleg	e. univer	sity, hos	spital, or	similar f	acility		
					business	involved	t orimari	lv		130	Condo								
					veed, and					140	Gover							, military	
					method						faciliti								
		10			11 DD			th		150	Ceme	tery or r	nemorial	garden					
20	E				maintena					190	Other	(please s	specify)_					1.000	
30					tor/lawn														
40		Nurs	sery or	garden	center/la	awn serv	ice comp	bany		C. SUP	PLIER								
50	C	Pest	t contro	ol/lawn s	service c	ompany				210	Chem	ical deal	er or dist	tributor					
60	E	Irrig	pation o	ontracto	r/lawn s	ervice co	mpany			220	Equip			stributor					
										230	Seed		lealer						
				OF FACI	NANCE	AT UNE	UF THE			240	□Sod g	rower							
110				public															
110		UPIN	vale or	public	esidie														
NAME_				12.20						т	ITLE _								
BUSINE	00	NIAI	ME									ECO							

BUSINESS NAME		ADD	RESS	
CITY	STATE	ZIP	TELEPHONE ()	and the second
			AREA CODE	
I WISH TO RECEIVE (CON	TINUE RECEIVING) LAN	WN CARE INDUS	TRY EACH MONTH I YES INO	
SIGNATURE		DA	TE	

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

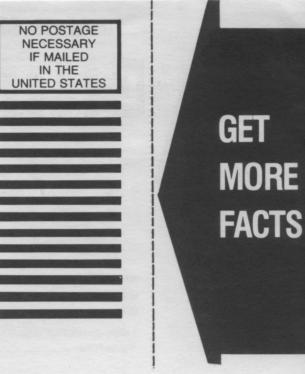


POSTAGE WILL BE PAID BY ADDRESSEE

READER SERVICE DEPARTMENT

LAWN CARE INDUSTRY

POST OFFICE BOX 6200 DULUTH, MINNESOTA 55806



MANY ASSEMBLE THEIR OWN EQUIPMENT

Most companies order from regional source

Adequate product distribution is crucial to the success of most lawn care businesses. A reliable supplier can save a company thousands in unapplied labor and overhead costs. An irresponsible supplier, on the other hand, may force the lawn care businessman to chase an ever-increasing breakeven point.

This section of the State of the Industry report concentrates on where and from whom companies buy their supplies. The results indicate the break-down between national and local distributors, and between general and industry-specific suppliers. An interesting sidelight is the number of companies who assemble their own spray rigs and equipment.

Two of five make own

Almost 50 percent (49.5) of readers polled say they purchased spray equipment and spray trucks from a regional or local manufacturer, 38.5 percent, a significant factor, assembled their own, and two out of ten (19.8 percent) purchased from a national manufacturer.

Over 60 percent of the respondents reported that they purchased pesticides from a national chemical distributor, over 20 percent said they purchased pesticides from a consumer-oriented dealer, over a quarter of the respondents (25.7 percent) said they purchased from a farm chemical distributor, 12.9 percent said they purchased from a consumeroriented dealer, 12 percent from a national sales office of a manufacturer, and 9.1 percent indicated purchasing from the regional sales office of a manufacturer.

National brand fertilizers

An overwhelming number of purchasers bought grass seed from a local farm or turf seed distributor, one out of five (21.2 percent) purchased from a consumer-oriented dealer, and 12.7 percent from the national sales office of a seed grower. Nearly six out of ten readers (59 percent) said they purchased a national brand fertilizer, 26.6 percent reported purchasing a regional brand, 16 percent bought a private brand, and 13.5 percent prepared their own mix. Of those fertilizer buyers, nearly four of 10 (39.5 percent), said they purchased a fertilizer from a turf distributor, 34.6 percent said they purchased directly from a national manufacturer, a goodly 26.3 percent said they purchased from a farm distributor, and 13.2 percent reported purchasing fertilizer from a consumer-oriented dealer.

A statistic of increasing importance detailed in the chart at right is when lawn care businessmen make purchases, take delivery, and make payments. It is interesting to note that while most make purchases in March, a good percentage (7.9), make purchases as needed, perhaps reflecting the need to closely monitor a company's break even point before any purchase committments. Also, it appears, most suppliers want their product out fast.

Du	ring Whic	h Month Do	You Mak	e Purchase	?
March.	-20,6%	November	- 9.5	June	- 3.2
February	-16.3	May	- 8.3	September	- 2.8
April	-15.9	As needed	- 7.9	July	- 1.6
January	-13,5	October	- 6.7		
Décember	-12.7	August	- 4.4		
		For Most Pu	urchases.		
		onth Do Yo			
March	-31%	December	- 6.0	September	- 2.8
April	-27.4	January	- 5.6	July	- 2.0
February	-11.9	June	- 5.2	October	- 2.0
As needed	- 9.5	August	- 4.0		
May	- 7.5	November	- 3.6		
	THE PARTY	For Most P	urchases.		
	The second secon	onth Do Yo			
May	-29.4%	July	- 5.6	October	- 2.4
April	-27.4	August	- 3.6	February	
June	-23.4	September		December	- 1.2
March	-13.1	November	-2.8	January	- 0.8

We've got killing weeds down to a formula.

If you're looking for solutions to tough weed problems, Diamond Shamrock offers you three phenoxy formulations from the Turf Care™ products line that get the job done effectively and more economically than the other leading postemergence herbicide.

MCPP-K-4. Excellent early control of those hard-to-kill weeds that 2,4-D herbicides can miss...clover, chick-weed and plaintain.

MCPP-K-4 is absorbed by weeds and translocated to the root system, so weeds are killed where they live.

What's more, MCPP-K-4 is easy on tender grass too. If necessary, you can reseed within two weeks. **Amine 4D.** This selective postemergence herbicide controls a wide variety of broadleaf weeds on established turf. Amine 4D is especially effective against dandelions. And it's gentle on most grasses.

Amine 4D is low in volatility, so it won't vaporize, even in hot weather.

MCPP+2,4-D Amine (1 Plus 1). A new phenoxy formulation of MCPP and 2,4-D that combines excellent killing action with economy and convenience.

Designed in a packaged mix, MCPP+2,4-D Amine (1 Plus 1) delivers effective control of hard-tokill and common broadleaf weeds with better economy than the other leading postemergence herbicide.

It's ideal for early season use on established turf because it provides first rate killing action with gentleness to most grasses. And areas around trees can be treated without risk of root injury.

Compare Diamond Shamrock

phenoxy formulations with other herbicides. You'll find that application for application, you can't beat our formula for beating weeds season after season.

Always follow label directions carefully when using turf chemicals.



Diamond Shamrock Agricultural Chemicals Division Diamond Shamrock Corporation

1100 Superior Avenue

Cleveland, Ohio 44114



JUNE

Circle No. 104 on Reader Inquiry Card



4. RENOVATION IN PROGRESS DAY 15



"LAWN RENOVATION WITH ROUNDUP" HERBICIDE IS ABOUT 30 TO 40% MORE PROFITABLE FOR US THAN CONVENTIONAL METHODS."



John Loyet, President Greenscape Lawn & Tree St. Louis, Mo.

"W

We put Roundup^{*} herbicide on our customer's lawn, came back 10 days later to power rake it and then seed it. About 10 days after that, the perennial ryegrass we planted came up. We were just amazed at how good it looked.

We used to have to plow or disk the lawn we were renovating or use a sod cutter to remove it. With Roundup, it only took us 6 manhours to do a job that used to take 24. And the results were just as good. Our customers like Roundup almost as much as we do because the lawn holds up really well under light traffic all during the renovation period.

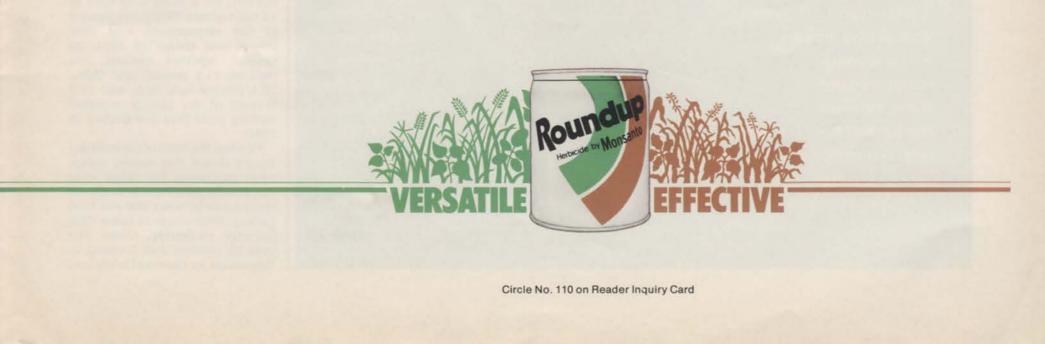
For us, it extends the season by about a month and turns a normally slow fall into a profit opportunity season.

We plan to use Roundup for lawn renovation from here on in."

IF YOU WANT TO LEARN MORE ABOUT LAWN RENOVATION WITH ROUNDUP, CALL TOLL FREE 800-621-5800 FOR YOUR FREE LAWN RENOVATION GUIDE.

ALWAYS READ AND FOLLOW LABEL DIRECTIONS FOR ROUNDUP. Roundup[®] is a registered trademark of Monsanto Company. © Monsanto Company 1982. RUP-SP2-104





INDUSTRY INVESTS MORE THAN \$21 MILLION FOR SPRAY TANKS IN 1981

How much equipment do you keep in inventory?

The high cost of capitalization has forced many lawn care businesses to scrutinize their unapplied labor and inventory costs. This section of the State of the Industry report focuses on what for many has become a perplexing business problem, namely, how many pieces of equipment to keep on hand. Responses have been broken

More than 1200 cello

down into six separate equipment categories.

□ Spray tanks.

More than 84 percent of the sample reported an average of 2.9 spray tanks in inventory. Thus, respondents indicated a total inventory of 24,900 spray tanks throughout the readership. Over 31 percent said that they had one spray tank, 25 percent reported two tanks, 21.2 percent, three tanks, 10.4 percent said they had four, and 12.3 percent of the sample reported owning five or more spray tanks, with spray tanks the single most capital intensive lawn care purchase.

	- Co I - 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1		
What Were You	ur Expendi	itures in 1	981?
	% sample purchasing	average per purchaser	Projection to LCI readership
Grass seed	76.9%	\$ 3395	\$26.6 million
Day-applied fertilizer	82.1	5645	47.3 million
Liquid-applied fertilizer	37.3	10487	39.9 million
Pre-emergence herbicides	79.8	3201	26.1 million
Post-emergence herbicides	68.3	1806	12.6 million
Turf insecticides	75.8	2420	18.7 million
Turf fungicides	57.9	1358	8.0 million
Soil amendments	28.9	1692	4.9 million
Tree insecticides	44.0	1339	6.0 million
Tree fungicides	23.0	886	2.1 million
Tractors			
Less than 10 h.p.	9.9	1359	1.4 million
10-20 h.p.	15.1	4663	7.2 million
21-30 h.p.	4.4	8772	3.9 million
31-50 h.p.	4.8	8850	4.3 million
Larger h.p.	2.0	1190	2.4 million
Spray tanks			
Less than 500 gallons	24.6	1884	4.7 million
500-1200 gallons	11.9	12431	15.1 million

Walk-behind mowers.

71 percent of the sample reported an average of 6.66 walkbehind mowers in inventory in 1981. Based on readership calculations, there are 48,000 walkbehind mowers in inventory in 1981. Nearly 43 percent of the respondents said they owned between one and four walk-behinds, 31.2 percent put the figure at between five and eight mowers, 19.2 percent said nine to 20, and 6.7 percent reported owning more than 20 walk-behinds.

□ Riding mowers.

Fifty-two percent of the sample said they have an average of 2.49 riding mowers in inventory, which expands to a total readership figure of about 13,200 riding mowers. Over 44 percent reported owning just one riding mower, 21.4 percent reported owning two, 14.5 percent said they owned three riding mowers, 14.5 percent owned between four and six mowers, and 5.3 percent said they owned more than six riding mowers.

□ Hedge trimmers.

Seventy percent of the sanple said they owned an average of 3.1 hedge trimners in 1981, for a readership total of 22,000. Over 22.2 percent reported owning one hedge trimmer, 31.8 percent reported owning two hedge trimmers in 1981, 19.9 percent said they had three, 11.4 percent said four, and 14.7 percent reported an inventory of over four hedge trimmers in 1981.

□ String trimmers.

Sixty-six percent of the sample said they had an average of 3.24 string trimmers in inventory, for a total of 21,700 string trimmers. Nearly 33 percent reported owning just one string trimmer in 1981, 29.1 percent owned two, 10.9 percent, three string trimmers, 12 percent reported owning between five and 10, and 5.0 percent reported owning more than 10 string trimmers in 1981.

□ Tractors.

Sixty percent of the sample indicated that they have an average of 2.45 tractors in inventory. This means that 6100 readers own tractors, for a readership total of 14,900 tractors. Thirty-one percent of the respondents said they owned one tractor in 1981, 25 percent reported owning two tractors, 21.2 percent said three, 10.4 percent said four, and 12.3 percent of the sample reported owning more than five tractors in 1981. Further, the State of the Industry survey shows that among equipment purchases, the single most frequent expenditure is made for spray tanks between 500 and 1200 gallons. Projections to Lawn Care Industry readership shows that over 15 million was invested in these tanks for chemical lawn care.

10

More than 1200 gallons	3.2	4200	1.4 million
Walk-behind mowers	41.3	1271	5.4 million
Riding mowers	21.9	5034	11.2 million
Hedge trimmers	30.6	225	702,300
String trimmers	40.1	412	1.7 million
Mechanical tree care eqpt.	7.9	744	600,000
Irrigation equipment	8.7	4643	6.1 million
Sprayers, pumps, hoses,			
nozzles, related eqpt.	56.0	1070	6.1 million

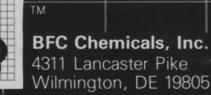
They now can be controlled by a NEW effective carbamate insecticide TURCAM[®]-

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.

TURCAM Broad Spectrum Insecticide





Circle No. 103 on Reader Inquiry Card

On March 9, 1982, these men met to talk about your job.









Burton





Baker



Fischer



Kenney



Brandt

Rice



White



1380



Zwiebel

Here's what they said about cancellation rates, undercapitalization, lowballing, and much more.

Stinson

T

he setting was Lawn Care Industry's offices on Third Avenue in New York City. These 12 chemical lawn care businessmen were asked to participate in a roundtable discussion focusing on key problems facing their industry. The discussion lasted three hours, during the course of which the talk was often spirited, the room smoky, and the tempo brisk. Those participating in the talk were: Doug Baker, president, Leisure Lawn, Inc., Dayton Oh.; Paul Bizon, manager, Pro Grass Lawn Service, Hubbard, Ore.; Larry Brandt, president, Spray-A-Lawn, Cincinnati, Oh.; Don Burton, president, Lawn Medic, Inc., Rochester, N.Y.; Marty Erbaugh, president, Lawnmark Associates,

Peninsula, Oh.; Jerry Faulring, president, Hydro Lawn Corp., Gaithersburg, Md.; Bill Fischer,

gional sales manager — posed the questions. The discussion went something like this:

have no idea why, but one thing we have seen is a down-selling by some accounts instead of cancelling. Some are dropping from four applications to two — the spring and fall applications.

12

president, Spring Green Lawn Care Corp., Naperville, Ill.; John Kenney, general manager, Turf Doctor, Framingham, Mass.; Des Rice, president, The Weed Man, Ltd., Mississauga, Ont.; Bill Stinson, manager, New Business Development, O.M. Scott & Sons, Marysville, Oh.; Rick White, president, Village Green, Ltd., West Chicago, Ill.; and Ronnie Zwiebel, president, Green Care Lawn Service, Birmingham, Al.

The staff of Lawn Care Industry — Bob Earley, group publisher/ editor, Paul McCloskey, associate editor, Jim Brooks, national sales manager, and Ron Kempner, reWhat is the economic forecast for the industry this year?

BRANDT: I feel it's going to be an excellent year. My feeling is that if you look for a bad year, it's going to happen, and so far this year, cancellations are down, sales are up, and we have not cut back at all on advertising.

FISCHER: We are experiencing a similar positive response in terms of cancellations this year. I really

BIZON: I feel that the economy is affecting people in general. People are spending more dollars around their homes in order to take care of what they've got, possibly travelling less. When we first started in this business we had to educate the people that this was a year-round business. Now that we have become established, many are seeing the value of year-round programs.

ERBAUGH: I think there had been a 'fix-up' approach toward lawn care on the part of the consumer five or six years ago. There is probably still alot of that remaining.

KENNEY: I've been doing this since 1969. There was a substantial recession at that time and a few ups and downs in the mean time. This market is characterized by 'booms' and what I would call 'boomlets'. The boomlets are all of the time and the booms are when the housing market is in trouble. By trouble I mean either that prices are going rapidly up or rapidly down.

But to go from a boomlet to a boom there has to be activity in the housing market. People have to be concerned about the value of their property. I think that all these housing machinations turn a boomlet, which is the normal state of affairs for this industry now, into a boom. But we are still a very young industry.

STINSON: I remember seeing a survey done on 100 accounts lost to a lawn care company. Fifty percent of them moved, 46 percent went to another lawn care service, and four percent went back to being do-it-yourselfers. Now, if the economy is such that people are stationary, a lawn care company won't lose that half that would have moved.

FAULRING: I think that's why we are seeing cancellations dropping. That's the key to the whole thing.

ZWIEBEL: Because many people are not able to move into a better quality home, they are improving what they have. The two best times we ever had was during the Watergate recession and right now. Our sales are up considerably over what they were last year, and quite frankly, the competition is quite a bit more aggressive this year.

But are you trading customers, or is this real growth?

ERBAUGH: I don't know if we here at this table are 100 percent representative. I think there are a lot of companies out there in a start-up mode and a lot who are reaching for that break-even point. They have a little bit different perspective on the market and may have more anxiety.

I keep asking myself what the real size of this market is and if it is tremendous value and we should raise our prices.

BAKER: You have to understand how and when your business flows. When you are looking at 50 or 60 percent of your business in the first two months, May first is a good fence post. You can sit back, take a look at everything, and adjust your capacities. At that time you can always get that extra piece of equipment. But as far as advance ordering, the cost of money puts a real squeeze on.

ERBAUGH: At the same time all this is happening, I think we are becoming far more sophisticated purchasers. We are well aware of the price of money and are getting a little bit tighter than we were last year. We are still in a very aggressive sales mode but perhaps postponing some of those sales committments until June and July in order to wait and see what the Does the public perceive the industry as professional?

FAULRING: We are now perceived as professionals and I really think we have ChemLawn to thank for much of that. When I got into this business in 1973, I would go to a neighborhood party and sometimes sheepishly admit that I had a lawn care company. Now they say, "Oh you mean like ChemLawn?" That may rile you, but at least they recognize it as a valid service that's getting better all the time.

We did a survey of our staff last year which asked on a scale of one to ten how they felt about discussing their job position and employment with friends, peers, and neighbors. The responses were in the eight range. They are all proud to be in the industry and



The Roundtable: Lawn care businessmen meet to discuss the state of the industry.

square footage actually is.

WHITE: That's a good point. I've talked to some equipnent people who are finding a lot of fence-sitters in terms of actually making that committment. Some are saying: "It depends on how many accounts I get in order for me to decide whether to get that new machine."

FAULRING: The pessimistic economic news is coming from less than 20 percent of the potential employes of this country. And even though there is a ripple effect, 80 percent of our people are employed in either service or high-tech businesses which are flourishing.

ZWIEBEL: The other point is that people who are either present or potential customers are not the people that are going to be affected by the economy anyway. The people that are not employed are the people that wouldn't be customers even under the best of conditions. if you feel good about it, you are going to be good.

KENNEY: Why is that when it wasn't true 10 years ago?

FAULRING: Because the perception of the industry was the guy with a pick-up truck. If you got out of college and said you worked for a lawn care company, you knew that's what flashed through their minds.

ERBAUGH: I agree with you about my own perception of the job we are doing, but sometimes I see a less than professional approach on the part of some of the new entrants into the industry.

We sometimes shudder when we have a customer call us and say they were former customers of certain companies. We know we have a tougher sales job on our hands and we're not sure we want them. That, coupled with price disparity, may bring a potential for real confusion in the marketplace. So, I agree that the industry is a lot better perceived than it was six or seven years ago, but we are still attracting into the business a good number of people that are not very well capitalized. even attempting to get in.

WHITE: I can't share quite the same level of enthusiasm you have. I think that within the industry a lot of people are proud of their businesses. And yet to our customers we are somewhat of a generic service. I don't think real pride will come until there is some real differentiation among lawn care services.

FISCHER: I see a lot of pride of industry among our employes. In the last month or two we have gone through our hiring cycle, and have found that the respondents are of much higher quality than they have been in a long time.

ERBAUGH: In one sense it is economy related. From the point of view of the turf graduate, we've always been the orphan of the golf course industry. Lawn care was an after-thought for him. Our experience this year is that we had a number of people come down from Ohio State whose first choice was a lawn care company. There is an awareness that lawn care is financially entrepreneurial and potentially more lucrative than the golf course is.

To what degree is lowballing hurting the industry?

BAKER: We've got a new entrant that is capitalized in the Cincinnati market and are looking for new ways to penetrate through branch expansion. But they are block selling and are at half the price of what anyone else is offering. You've heard the stories: 35,000 square foot lawns for 35 bucks.

RICE: On the other hand, I've gone into markets where companies are charging three times what I would charge. One buy is charging 55 dollars for a single weed control application — a single application on a 6,000 square foot lawn. We had a hard time cracking the market because people thought we couldn't do it at the price we offered.

BROOKS: You're saying that they have different prices for different subdivisions?

BAKER: No matter what the size of the lawn is. Every house in that subdivision is 25 dollars an application. And every house in another is 40 dollars an application. And then they don't put down any pre-emergent and things like that.

possible that we have radically underestimated its scope. I think of Cleveland, of course, which is a highly competitive market, and I've been waiting for it to slow down for years. But that may not happen for another ten years.

BAKER: I agree. I don't think we are anywhere near saturation point. The reason is that we are still growing. I've preached for years that lawn care is the best home service value a homeowner can have. Our cancellations are down about two-thirds of what we experienced last year. That's the only explanation I have for it. It's a **RICE:** We have a town in Canada dominated by White Tractor and Massey-Ferguson. Sixty percent of their employes were laid off and I think we lost only 25 or 30 customers. I think many don't realize that when General Motors lays off 500 or 1,000 people, 75 percent of those people are still getting paid. It sounds bad, but all they are losing is about five percent of their income.

FAULRING: You can't pick an industry where you don't find a bad apple and I think that kind of thing is going to be less and less of a problem in our industry. Unfortunately, it will be because of the costs of the capital required to enter the market in the first place. You will find fewer and fewer of these thinly financed operations **ERBAUGH:** Many of these people preach the gospel of undermeasuring lawns. And they don't emphasize the follow-up services. This can be a very easy business to shave on.

BAKER: There is no penalty for underformulation.

WHITE: Well, I don't see how that is going to help the consumer. I can tell my customer that my nitrogen source is urea and he's not going to know that that is any o page 14

ROUNDTABLE from page 13 14

LAWN CARE INDUSTRY

better or worse than any other fertilizer. Within the industry we know that our competitor uses this and another uses quality products. Hopefully, there will be a difference in lawn quality, but that might be fairly subtle.

I don't think we are dealing with a real sophisticated customer in many instances. A bill of lading identifying the product we put down may just puzzle him. He really doesn't know the difference.

KENNEY: So, the customer is not going to eliminate these people?

FAULRING: They will eventually because lawn and service quality will make a difference, but it may take a long time.

RICE: I find that if a customer gets misrepresented or gets taken by a lawn care company, he's going to go to another one, not just stop

CLEAN **CROP**_® PROFESSIONAL TREE AND TURF PRODUCTS THE ONE SUPPLIER FOR ALL YOUR **PROFESSIONAL CHEMICAL NEEDS** FOUR POWER MCPP Excellent post emergent control for chickweed, clover, pigweed, ragweed and many other broadleaf weeds. Economically priced. FOUR POWER DP (WEEDONE DP)® Best post emergent spurge and oxalis control available. An outstanding herbicide for your hard to control weed problems. Weedone is a Reg. TM of Union Carbide Corp. FOUR POWER PLUS Four Power Plus is the most effective, efficient and economical 2, 4-D, Banvel® combination broadleaf herbicide available. Registered with E.P.A., one application controls a wide spectrum of broadleaf weeds. Banvel is a Reg. TM of Velsicol Chemical Corp. Read and follow all label instructions FAST IN SEASON SERVICE BEST IN SEASON PRICES CALL YOUR CLEAN CROP **REPRESENTATIVE TODAY** Clean Crop Special Products Group Home Office - Greeley Colorado (303) 356-4400 · Dwight Mellecker Balcom Special Products - Colorado **CARE OPERATOR'S** Greeley, Colorado **NEEDS:** (303) 352-4750 · Cary Hall Central Valley Special Products Bryon, Texas (713) 272-8479 - Joel Albrecht Growers Ag Service Special Products Kearney, Nebraska (308) 234-2124 · Dennis Faith **Growers Service Special Products** Columbus, Ohio (614) 276-5103 · Jeff Keirns Northwest Special Products Portland, Oregon (503) 238-9745 · Mike Edminster Pueblo Chemical & Supply Co. Special Products Division North Kansas City, Missouri (816) 221-2783 · Brian Lawrence Selco Supply Co. Greeley, Colorado (303) 351-7110 - Gard Schmunk

service altogether. And usually they will pay more because they have the perception that more is better.

Do vou consider the thatch problem unsolvable?

FAULRING: We are all very concerned about it, but don't have all the answers. When you start getting into these old neighborhoods that have been under professional care about seven years, they've still got a thatch problem by the hundreds of acres. You have to get everyone to cooperate with the job.

I think what's going to happen is that it will be a little bit like the energy crisis. We didn't conserve when we had a problem. No one will recognize the problem until it is at an extent at which lawns are just falling over and we can definitely attribute it to thatch.

KENNEY: We are believers in fescue which contributes to thatch very rapidly. So too do the colonial and creeping bentgrasses. And it's really a fearsome thing because an adequate thatch removal job seems to need it when the damage is so severe that you are not going to be able to recoup your losses. I really don't know what the answer is to the thatch problem. It may come about through some kind of genetic engineering.

ZWIEBEL: Again, I'm going to fall back on my main point. If we as an industry will admit to the fact that thatch is inevitable, we are going to have to emphasize proper maintenance prevention such as deep watering and educated mowing.

BRANDT: You are still prolonging the inevitable. There are still too many companies out there who are afraid to tell them they need dethatching.

ZWIEBEL: Unless we take the bull by the horns in terms of educating the consumer, we are not going to eliminate thatch and we are not

Before 1950		7.2%			
1950-1955	5.2				
1956-1960	4.8				
1961-1965		8.0			
1966-1970		7.6			
1971-1975	4.8				
1976			26	.0	
1977		8.4			
1978		9.2			
1979		9.2			
1980	6.	0			

State of the Industry survey indicates the average business was started in 1969.

going to eliminate uneducated consumers.

KENNEY: I think it's another moving target. If my average customer doesn't dethatch every year he can't overcome his thatch problems with a dethatcher, he's going to have to use a sod cutter.

FAULRING: If you've got a customer whose lawn is looking good and you go in and say that he's got a thatch problem to attend to immediately and that you're going to have to charge him 400 dollars to do it, he's going to laugh at you. It's like taking medicine when you're not sick.

KENNEY: I agree with you completely. You know who is the hardest guy to convince to dethatch his lawn? Anyone who has ever done it before. That guy is about as educated as he is going to get without sitting him down in a room like this for a few hours. And I don't believe education is the answer. I believe that if it doesn't come from genetic engineering, it won't come at all.

FAULRING: I think that there is a real plus side to this whole issue. There is a very small percentage of lawns out there that are seeded with improved varieties. What is going to happen is that all those lawns seeded with unimproved forms that you saw prior to the mid-sixties are going to lay down and die one day. Those people are going to seek professional help and you are going to sell them your improved varieties. And that's going to be a better lawn to take care of anyway.

BIZON: Maybe what you are saying is that instead of promoting the dethatching, possibly renovating would be a better alternative.

FAULRING: Yes. Providing you kill all the existing lawn and start over. Even if you could get a customer to dethatch, I don't think you could get him to do it properly. The only way to properly dethatch a lawn is to practically destroy it. And nobody wants to go that far.

WHITE: I think publicizing the thatch problem is going to happen in the Chicago area in the next couple of years. Here thatch shows up as a fusarium problem, a very controversial topic. to page 17



PUMPING SYSTEMS NC. **PUMPING SYSTEMS'** LAWN SPRAY RIGS **MEET EVERY LAWN**

Circle No. 102 on Reader Inquiry Card

.Long-life fiberglass tanks – 55 to 1200 gal. (single or multicompartments)

....Flow rates from 1 to 100 GPMHigh-volume jet agitationTop-quality components and workmanship (low maintenance) .Completely self-contained rig design provides easy mounting and easy access to equipmentat curbside or tailgateCustom design w/many options

CALL TOLL FREE— 800-638-1769

pictured: MODEL LS-500-M PUMPING SYSTEMS INC.

(Ask about our finance plans)

Columbia, Md. (301-596-3700)

Circle No. 111 on Reader Inquiry Card

AVERAGE AD EXPENDITURE: \$5,365 IN 1981

Boom time for advertising

There has been some debate over the value of advertising in the lawn care industry. Some question its effectiveness in light of the uniformity of ad messages throughout the industry. But results of the State of the Industry survey indicate that over 86 percent of the respondents used some form of advertising in 1981.

By far the most popular form of advertising in 1981 was Yellow Pages placements, with 71.1 percent of the respondents indicating use. Over 67 percent of readers said they offered some form of

LABOR from page 1

owners how many people worked for them full-time, all year around, and full-time, peak season.

The response indicated that the average number of year-round, full-time employes was 4.3 persons. Broken out in terms of numbers of employes and percentage of respondents, the results were: 27.0 percent employed one person full tine year round, 23.5 percent employed two, 30.5 percent employed three to five persons, 13.5 percent employed between six to 10, 3.5 percent enployed between 11 and 20, and only two percent employed between 20 and 49.

Double during peaks

The survey showed that an average of 8.6 persons, or exactly double the number of employes worked for conpanies full time during the peak season. Broken out in terms of number of employes and percentage of respondents, the results were: 30.8 percent employed between one and three people full time during the peak season, 27.5 percent employed four to six employes, 18.2 employed seven to 10, 8.4 percent employed 11 and 15, 6.3 percent employed 16 to 20, 5.5 percent employed between 20 and 30, 1.6 percent employed between 30 and 50, and 1.2 percent employed more than 50 persons, full time during the peak seasons.

\$22,700 per employe

Thus, LCI readers employ about

rebate, referral, or recommendation rewards in their promotion campaigns, and 40.9 percent said they employed a direct mail program.

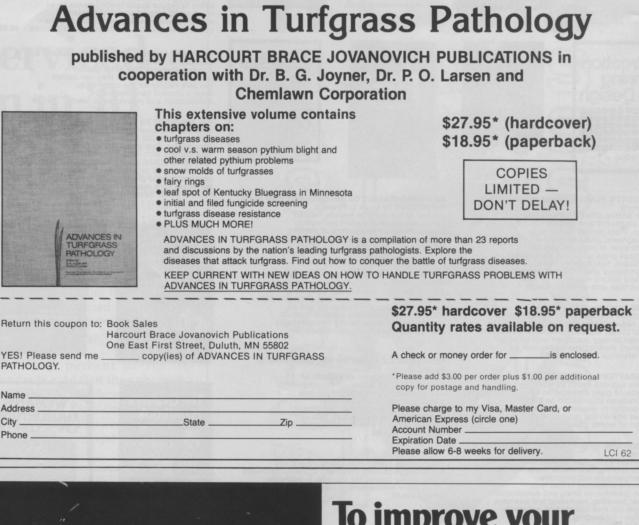
booster ads which tabulated no significant response, but which were mentioned by respondents. Readers said that they spent an average of \$5,365 on total adver-

Over two-thirds offer a form of rebate

The least used form of advertising among readers was billboard ads, followed by giveaways, truck and on-site signs, trade shows, seminars, magazines, and athletic tising expenditures during 1981. The greatest segment, 32.9 percent, spent between \$1 and \$999 last year, 26.7 percent spent between \$1,000 and \$2,499, 15.3 percent spent between \$2,500 and \$4,999, 10.6 percent spent between \$5,000 and \$9,999, 6.4 percent spent between \$10,000 and \$19,999, 4.7 percent spent between \$20,000 and \$34,899, 2.9 percent spent between \$35,000 and \$50,000, and only 0.5 percent spent more than \$50,000.

The average percent of gross receipts spent on advertising was 3.99 percent. Over 35 percent of the respondents spent one percent of gross receipts on advertising last year, 16.1 percent spent two percent, 4.1 percent spent three percent, 8.8 percent spent 10 percent, and less than 0.5 percent spent between 15 and 20 percent of gross receipts on advertising last year.

The results are based on a survey sent to 2,000 readers of Lawn Care Industry.







You've got a growing business, we've got a growing business. Why not combine them? Installing under-

44,000 full-time year-round, and about 88,000 employes full-time peak-season. An interesting statistic that is open to some question but is backed by these statistics is this — counting fulltime, year-round employes as a factor of one, and full-time, peakseason employes as a factor of one-half, the average company grosses about \$22,700 per employe annually. (Based on our readership estimate of a gross of \$1.5 billion annually).

When asked what kind of training programs are offered to employes, 76.4 percent said they offered on-the-job training.



ground automatic sprinkler systems is easy and profitable.

And with quality controllers, heads and valves from Rain Bird, rainmakers to the world since 1933, your customer is assured the best system available. His lawn stays healthier and so do you.

For more information on this moneymaking opportunity, contact your nearest Rain Bird distributor. Or write to us at the address below.

We'll show you how easy it is to make more green while you make more green.



7045 N. Grand Avenue, Glendora, CA 91740

Circle No. 112 on Reader Inquiry Card

010, 015-ADVANCES IN TURFGRASS PATHOLOGY by Dr. B.G. Joyner & Dr. P. Larsen Leading U.S. turf pathologists report on turfgrass diseases, pythium blight, snow molds, fairy rings, leaf spot of Kentucky Bluegrass in Minnesota, initial and filed fungicide screening, turfgrass disease resistance, etc. Contains new ideas on how to combat turfgrass problems. 27.95 hardcover, \$18.95 paperback

630-TURFGRASS: SCIENCE & CULTURE by

Soft bar danse Comprehensive basic text and reference source used in many leading university turf programs. Includes findings of current research compiled from more than 12,000 sources. \$23.95

375-SITE DESIGN AND CONSTRUCTION DETAILING by Theodore D. Walker An introduction to the subject of site design and construction detailing. Focus is on design implementation. Discusses the nature of construction drawings. Presents the characteristics, origin and nature of construction materials. \$24.00

355-PERSPECTIVE SKETCHES by Theodore D. Walker A reference source of ideas, media use, styles and techniques. Grouped by subject matter. Illustrated technique for vegetation, vehicles, play equipment and recreation facilities, people, animals, etc. \$19.50

Cost Data for

Landscape

1981

2nd Anouol

EE Harr Associ

Construction

TREES

WORLD





570-WESTCOTT'S PLANT DISEASE HANDBOOK by

Kenneth Horst This fourth edition offers professionals the latest diagnostic and disease control information. Plant entries designed to simplify diagnosis, plus background on the classification of plant pathogens. This handbook gives a specific description of each disease, susceptible plants, specific symptoms of the disease, reported locations and control measures for each disease and their side effects. \$34.50

565-WEEDS by Walter C. Muenscher Second edition. Premier text for identification and basic natural history for weeds found in the continental United States and Canada. Ecological data on weed biology combined with excellent keys and plant descriptions makes this an essential reference book. \$32.50

455-THE GRAFTER'S HANDBOOK by R.J. Garner Revised and updated fourth edition. <u>The</u> encyclopedia of plant propagation by grafting. Contains information on the chemical control of weeds in orchards, on diseases and on the vegetative propagation of woody plants. **\$16.95**

490-GREENHOUSE OPERATION & MANAGEMENT by

490-GREENHOUSE OPERATION & MANAGEMEN Paul Nelson Such important aspects as greenhouse heating and cooling, root media, watering, lighting, temperature and pesticide application are presented in this text. Material on greenhouse siting and construction, post-harvest handling, marketing and business management are also included as necessary considerations for keeping your operation solvent. \$19.95

110, 120-TURF MANAGER'S HANDBOOK by Drs. William Daniel and Ray Freeborg This specially designed manual by leading turf specialists is a comprehensive, organized approach to turfgrass science and care. An easy, on-the-job reference for planning, purchasing, hiring, construction and plant selection. \$23.95 hardcover, \$18.95 paperback

795-FIRST AID MANUAL FOR CHEMICAL ACCIDENTS

795-FIRST AID MANUAL FOR CHEMICAL ACCIDEN by Marc J. Lefevre This indispensable guide helps you take quick corrective action to minimize the harmful effects of chemical accidents. Written for people (other than doctors) called on to ald fellow workers who are victims of such work-related accidents. A must reference for any work situation involving hazardous chemicals. **\$16.50 paperback**

365-PLAN GRAPHICS by Theodore D. Walker Focuses on plans, elevations, sections and lettering. Provides many different examples to be used as guidelines in personal soil experimentation. Includes graphic techniques for site analysis and design concepts. \$21.00

Bookstore





340-CONSTRUCTION DESIGN FOR LANDSCAPE ARCHITECTS by Albe E. Munson Design specifications for layout, grading, drainage, structures and irrigation. Also explains mathematics of drafting. \$24.50

335-LANDSCAPE DESIGN THAT SAVES ENERGY by Anne Simon Moffat and Marc Schlier Practical guide to landscaping a home or office to reduce space heating needs by as much as 30 percent annually. Contains specific planning strategies for the four main climatic zones of the continental United States. \$9.95 paperback

790-RECREATION PLANNING AND DESIGN by

Yeo-RECREATION PLANNING AND DESIGN by Seymour M. Gold A comprehensive look at recreation needs for parks and how they can design the park facility for the community. Book's content can help justify construction and maintenance needs. \$31.95

670, 680-GUIDE TO TREES by Simon & Schuster Beginner and experts reference to 300 trees with 350 full-color illustrations. This authoritative guide supplies you with a full description of size, color, shape, leaves, flowers, fruit and seeds; information on habitat, propagation and growth conditions PLUS hardiness zone maps, glossary and index. \$19.95 hardcover, \$8.95 paperback

Westcotts) Plant Disease

Handbook

The Grafter's

S. Carlos 127 444

Handbook



PERIT GTIVE FRETC 3 ALL

345-COST DATA FOR LANSCAPE CONSTRUCTION 1981 Kathleen W. Kerr, Editor An updated unit cost data reference for designers and cost estimators. Developed to fill the tremendous need for detailed landscape construction cost data. Laid out in easy-to-use CSI format. Annual. \$24.95

530-INTERIOR PLANTSCAPING by Richard Gaines One of the first handbooks directed at the professional interior plantscaper. Includes design and maintenance clues for foliage. \$28.50

665-THE OXFORD ENCYCLOPEDIA OF TREES OF THE WORLD Bayard Hora, Editor An authoritative reference describing the principal trees of the world. Includes biology and growth of trees, ecology of different types of forest, forest management, timber usage and pest and disease control. \$24.95

385-TREES FOR ARCHITECTURE AND THE LANDSCAPE by Robert L. Zion A book of photographic tree definitions, or portraits, intended to facilitate communication between the landscape architect, the architect and the layman. \$11.95



Mail this coupon to: Book Sales

Harcourt Brace Jovanovich Publications One East First Street, Duluth, MN 55802

Name		
Address		
City	State	Zip
Signature	D	ate
Phone Number		

ADDITIONAL TITLES

410 - DISEASES & PESTS OF ORNAMENTAL **PLANTS \$26.50**

- 660 DISEASES OF SHADE TREES \$23.50
- 610 DISEASES OF TURFGRASS \$30.00
- 450 GARDENING IN SMALL PLACES \$7.95
- 480 GREENHOUSE MANAGEMENT FOR FLOWER & PLANT PRODUCTION \$15.35
- 350 HANDBOOK OF LANDSCAPE ARCHITECTURAL

780 - PARK AND RECREATION MAINTENANCE MANAGEMENT \$18.95

390, 395 - PHOTOGRAPHIC MANUAL OF WOODY LANDSCAPE PLANTS \$22.00 harcover, \$14.60 paperback

- 700 THE PRUNING MANUAL \$14.95 730 - TREE CARE \$8.95
- 740 TREE FARM BUSINESS

-

440-FUNDAMENTALS OF ENTOMOLOGY AND PLANT PATHOLOGY by Louis L. Pyenson Limited to the study of insects, related forms, nematode and plant pathogens. Discusses nature and control of these pests in a simple and concise fashion. pests \$22.00

545-MODERN WEED CONTROL by Alden S. Crafts Deals exhaustively with the botany, chemistry, plant physiology and ecology involved in modern weed control technology. Contains lists and classifications of herbicides and an abundance of illustrative material that will help the reader visualize the varied aspects and forms of weed control. \$19.50

580-WYMAN'S GARDENING ENCYCLOPEDIA by

580-WYMAN'S GARDENING ENCYCLI Donald Wyman A classic reference on all aspects of gardening. Offers advice on planting and maintenance information on new plants, cultivation, insecticides, herbicides and fungicides. Contains 10,000 articles, 206 drawings. 170 photographs and a color hardiness zone map. **\$29.95**

510-HORTUS THIRD from Cornell University A 1,300-page concise dictionary of plants cultivated in the United States and Canada. A reference which every horticultural professional should have. \$99.50

NTERIOR PLANTSCAPING



CONSTRUCTION \$48.50 360 - HOME LANDSCAPE \$18.95 690 - INSECTS THAT FEED ON TREES & SHRUBS \$42.50 540 - INTRODUCTION TO FLORICULTURE \$29.50

370 - LANDSCAPE OPERATIONS: MANAGEMENT, METHODS & MATERIALS \$18.95 380 - MANUAL OF WOODY LANDSCAPE PLANTS \$19.00

MANAGEMENT \$20.50 750 - TREE IDENTIFICATION \$9.00 760 - TREE MAINTENANCE \$29.95 770 - TREE SURGERY \$18.95 650 - TURFGRASS MANAGEMENT \$17.95 640 - TURF IRRIGATION MANUAL \$22.95 620 - TURF MANAGEMENT HANDBOOK \$14.65 560 - WEED SCIENCE \$24.00

CLOSEOUTS

ORDER THESE TITLES AT SPECIAL REDUCED PRICES!

420 - EXOTIC PLANT MANUAL \$32.00 430 - FLOWER & PLANT PRODUCTION IN THE GREENHOUSE \$13.60 460 - GREENHOUSE ENVIRONMENT \$21,20 470 - GREENHOUSE GROWER \$12.40

- 500 HORTICULTURAL SCIENCE \$18.80
- 780 PARK AND RECREATION
 - MAINTENANCE MANAGEMENT \$16.00
- 550 PLANT PROPAGATION \$21.00
- 400 WESTERN HOME LANDSCAPING \$6.75

Phone Number

Please send me the following books. I have enclosed a check* for the total amount.

Please charge to my Visa, Master Card or American Express (circle one) Account Number Expiration Date

ORDER NUMBER	QUANTITY	PRICE	TOTAL PRICE
			manager and He
		1	4 #90931 \$22, 700 p.m.
			in an head in yi
		1 8.24 10	stimate of a give

*Please add \$3.00 per order plus \$1.00 per additional copy for postage and handling.

(postage & handling)

Please allow 6-8 weeks for delivery Prices subject to change. Quantity rates available on request Total Enclosed

LCI 62

ROUNDTABLE from page 14

'You're dealing with a monster'

The extension specialists are now saying that there has to be some kind of cultivation done in the yard to eliminate the thatch problem before it becomes a fusarium problem. Before their attitude was just to prescribe a chemical product to take care of it. Culturally, that has got to be our number one cause of turnover.

It has hurt lawn care in the Chicago area because of lack of credibility. We have not been able to take care of it and as a result, people have been going from one company to another. I think now we are going to receive a greater emphasis on dethatching because good aerators are just not available.

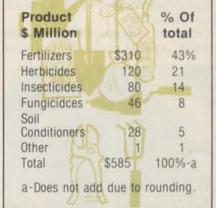
STINSON: Agronomically, what you are dealing with is a monster. I don't think you can ignore it, it's going to continue to grow and will become a time bomb. Another problem presents itself when you inform the consumer about the problem. Because the timing factor is such that you can't afford to have an eight week cycle and expect to dethatch your accounts in that length of time.

You may have to deal with an outside contractor who may be limited in the number that he can treat in any given year even with your referrals. The problem is going to get worse and worse. The two biggest things are are facing are all hinged upon thatch.

ERBAUGH: I understand the agronomics at the point. But when your business is growing 30 to 50 percent a year, or when you are at the point where you made the committment to be in the lawn care business, you are striving for the break-even point. The average lawn care company doesn't put a lot of time into the problem because they are too busy getting customers at this point.

BRANDT: I think that it is a time bomb and that eventually the customers are going to blame the lawn care industry.

U.S. Consumption Of Fertilizers And Pesticides For Turf And Grounds Managment By Product 1981



STATE OF THE INDUSTRY from page 1

Businesses serviced seven million in '81

charge per 1,000 square feet of \$4.27.

It is interesting to note that the total number of accounts serviced in both chemical lawn care and mowing/maintenance is 7.1 million. This figure represents approximately 8.5 percent of the 81.4 million residential structures in the U.S. based on U.S. Bureau of Census housing statistics.

Average up 34 percent

While this is not a precise market penetration rate, it does indicate to some extent the degree of the market as yet untapped by this industry.

Average chenical lawn care annual servicing among readers in 1981 was \$130.04, and for mowing/maintenance accounts during the same period, \$1,483.

When asked how lawn care businesses expect their 1982 receipts to compare with 1981 receipts, 78 percent of the respondents indicated that their receipts would increase an average of 33.6 percent, 14.2 percent said receipts would stay the same, and 7.7 percent reported that receipts would decline an average of 37.9 percent with regard to 1981 receipts.

Over 78 percent of the respondents said that they showed a profit in 1981 before taxes, 21.5 percent said they broke even or showed a loss. The average pre-tax profit among respondents was 22.5 percent.

ASTS AASTS AASTS AAAT TENUARY TENUARY JANUARY JANUARY DECEMBER OCTOBER OCTOBER JUNE MARCH MARCH MARCH MARCH MARCH MARCH MARCH MARCH

15

WARREN'S T-7 MULTI-PURPOSE SPREADER is designed and engineered for professionals the world over ... light-weight, durable and simple to operate! Use it for spreading seeds, pesticides and fertilizers up to 20 feet wide. Check these features against any other broadcast spreader available today and you will see for yourself that the T-7 is built to last and last. **JUNE 1982**



PEST CONTROL

OPERATIONS

places emphasis on urban and industrial pest problems. This volume also covers the laws and regulations concerning the pest control industry.

The SCIENTIFIC GUIDE TO PEST CONTROL OPERATIONS

is designed to provide a sound basis for studying the scientific aspects of pest control and promote technical competence. It

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.

Scientific Guide To Pest

Control Operations

by Dr. L.C. Truman

Dr. W.L. Butts

Domestic: \$29.50* (hardcover) Foreign: \$34.50* (hardcover)

Dr. G.W. Bennett and

The SCIENTIFIC GUIDE TO PEST CONTROL OPERATIONS - a must for anyone involved in the field of pest control!

Return this coupon to: Book Sales Harcourt Brace Jovanovich Publications Domestic: \$29.50* (hardcover) One East First Street, Duluth, MN 55802 Foreign: \$34.50* (hardcover) _copy(ies) of the SCIENTIFIC GUIDE TO PEST CONTROL YES! Please send me... OPERATIONS. A check or money order for______is enclosed. Please charge to my Visa, Master Card, or American Express (circle one) Account Number. Expiration Date. Quantity rates *Please add \$3.00 per order plus \$1.00 per additional copy for postage and handling. available upon request. Address_ State Pleast allow 6-8 City_ weeks for delivery Signature_ Date_ Phone. LCI 62

- Hi-impact Polyethylene base and canister ... virtually unbreakable.
- Interior exposed parts made of stainless steel.
- Enclosed, protected gear case and main drive shaft.
- Eye-level fingertip flow control knob.
- Safety lid to prevent fumes and dust from rising into operator's face.
- Side deflector prevents kick-back of material onto hands or clothing.

Dealerships Available



P.O. Box 459, Suisun City, California 94585 (707) 422-5100

Circle No. 115 on Reader Inquiry Card

PRODUCTS

Walk behind mower has 30% fewer parts

A sturdy deck, multiple bearing crankshaft and rugged ball bearing wheels are features of the Commercial 20 rotary mower from Jacobsen Division of Textron Inc, now available for use in the lawn care industry.

Constant engine lubrication aids slope operation and reduces



operating cost and possible downtime. The mower's two cycle engine has 30 percent fewer moving parts than standard four cycle units and permits close trimming and tight control on slopes.

Circle No. 160 on Reader Inquiry Card

Surface pesticide for professionals only

BFC Chemicals, Inc. has announced the introduction of Turcam insecticide to its line of turf and ornamental products. Turcam provides control for a broad spectrum of ornamental and turf surface and sub-surface pests, including gypsy moth caterpillar, chinch bugs, sod webworm, white grubs, mole crickets, and fire ants, to name a few.

Turcam is an advanced carbamate insecticide which can only be sold to and used by professional applicators. Turcam offers the lawn care businessman these benefits:

- Works well on surface pests.
- Does not tie-up in thatch.
 - Odorless.

• Will not damage ornamentals on turf.

splined shaft, single ended or double-ended through shaft, belt and pulley or engine adapter.

Each pump is equipped with built-in pulsation adapter, glycerin filled dampened pressure gauge and hose fittings. Three multi-directional control valve assemblies are also offered, matched to low, medium and high pressure pump models.

The pumps have sealed oilbath crankcase with stainless steel parts that never contact the pumped fluid. Oil also supplies a balancing pressure on the diaphragm for long life operation. Parts that contact the pumped fluid are epoxycoated; valves are stainless steel.

Circle No. 162 on Reader Inquiry Card

Measuring wheels offer digital counter/reset

Three land measuring wheels from the Gandy Company measure directly in feet and meters. Use to compute acreages, chemical and fencing needs, in-town property lots, trenching and cable lengths, cross country distances, road sur-



facing requirements, and "scene of accident" measurements.

A free brochure describes wheels' features including quick reset digital counters, detachable sectional handles, and neoprene rim on metric and smaller circumference foot model.

Circle No. 163 on Reader Inquiry Card

New turf machine driven by LP gas

A new turf and grounds maintenance machine, the Hustler 275 LPG, powered by liquefied petroleum gas, is being introduced by Excel Industries, Inc., Hesston, Kansas. Powered by a 21.5 horsepower Kohler engine built especially for operating on LPG, the Hustler 275 had the advantage of reduced maintenance, more usable power and less downtime. Less maintenance is required because there are fewer components in the fuel system. A filterfuellock removes foreign matter from the liquid fuel flow. When the engine stops, the oil pressure is reduced, and fuel flow shuts off automatically, an important safety feature.

with independent control of each drive wheel. The drive wheel



allows one-hand control of speed, forward, reverse, turning and braking.

Standard features include a power take off attachment drive system, two-point "quick-hitch" attachment tool bar, variable speed control, electric start, parking brake and hydraulic attachment lift.

Circle No. 164 on Reader Inquiry Card

New truck mounted skid sprayer for '82

A new 'D' series high pressure truck-mounted skid sprayer from Friend Manufacturing Corporation features a 40 GPM — 700 PSI four diaphram pump direct connected to a 30 horsepower Wisconsin VH4D engine.

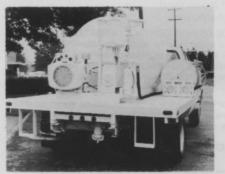
Fiberglass tanks with full length stainless steel paddle agitation are standard in 400, 500, and 600 gallon sizes. Built to industrial lawn care standards, the new sprayer design merges new technology with field-proven features resulting in more performance and durability per dollar.

Circle No. 165 on Reader Inquiry Card

Positive mixing with new tree spray unit

Tree spray unit from Torco Equipment Company is available with either a centrifugally cast fiberglass tank or a 304 stainless steel tank. Both tanks feature mechanical agitation for positive mixing, and the tank is mounted directly to truck chassis for a lower center of gravity and better stability.

Powered by a 35 GPM, three cylinder pump, the TreeSpray unit



reel with a capacity of 350 feet of 3⁄4 inch hose.

Circle No. 166 on Reader Inquiry Card

High roller mower for heavy maintenance

Rugged power mower from Kee Manufacturing Co., Inc. with the standard five horsepower or the optional five horsepower I/C Briggs and Stratton engine makes this power mower a performer in commercial use. Dual front wheels with steel rims and ball bearings and heavy-duty rear wheels with pneumatic tires give maneuverability and balance.

Cutting width is 22 inches and the cutting height adjusts from one to three inches. Other standard features include a welded tubular



steel frame construction, grease fittings at all wear points, an aluminum alloy deck and oneinch diameter steel blade shaft with precision ball bearings.

Other features include: selfpropelled heavy-duty gear reduction drive and convenient handle grip control; a unique, large capacity, easy to dump bag with no zippers to fail; eight inch dual swivel front wheels with steel rims and ball bearings adjustable for height control.

Circle No. 167 on Reader Inquiry Card

Irrigation system with test root

The "TGA" Irrometer from the Irrometer Company provides automatic control of irrigation systems in parks, golf courses, green belts, medians and industrial landscape areas for the professional lawn care businessman. Unaffected by soil type, salinity in the water, or soil and soluble salts from fertilizers, the "TGA" Irrometer operates as a "dummy root", registering how hard the root system of the turf or plant has to work to extract moisture from the soil. A gauge at the top of the instrument accurately and directly registers the soil moisture conditions. A patented, solid-state magnetic switch in a sealed housing, is externally mounted on the gauge and automatically closes when a predetermined level of soil moisture is reached. When this occurs a signal is sent to the irrigation controller, or valves, to begin irrigation when the controller permits.

Circle No. 161 on Reader Inquiry Card

Pump series offered with wide range

A new line of diaphragm pumps has been introduced by Hypro Division Lear Siegler, Inc. Ten different diaphragm pump models are offered with outputs ranging from five to 62 gallons per minute and pressures ranging from 250 to 850 PSI. Various shaft options are offered for each pump to fit the operators choice of drive: 1%-inch

The Hustler 275 has dualhydrostatic drive and twin-lever steering to provide the operator operates at up to 600 PSI allowing spray heights of as much as 80 feet. The spray pump is powered by an auxiliary engine thus offering better fuel economy and longer truck engine life. The auxiliary engine is fueled from the truck's main tank to minimize fuel contamination and refueling inconvenience. The unit offers an electric rewind hose

Circle No. 168 on Reader Inquiry Card

ROUNDTABLE from poge 17

'Too golf course oriented'

ZWIEBEL: I can't believe that. I don't believe it's a question of having to educate the customer.

STINSON: Do you think it is a service you could sell?

BAKER: We sell core aeration and it extends the life of the lawn and the life of your accounts. But if we were to dethatch all our customers' lawns we'd be three years doing it.

Are manufacturers serving your needs well?

BAKER: The equipment manufacturers are too golf course oriented.

WHITE: There is not an appropriate commercial aerifier on the market right now. Ryan and Hahn have some home sized aerifiers, but the spoons are seven inches apart and you're not getting enough holes. On the other hand, the green's aerifiers leave so many plugs on the lawn and are so small that it is not really acceptable. There needs to be a piece of equipment somewhere in between.

BAKER: Packaging, for one thing. Everybody is packaging five gallon drums at 50 trucks-full. That's a hell of an inventory. This industry is beginning to make its own equipment.

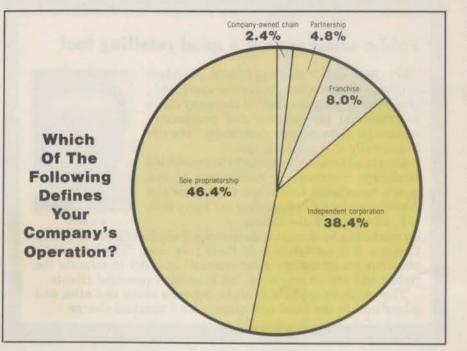
KENNEY: With the help of a manufacturer, we built our own aerators and they do quite a good job. I bet everyone in this room has at least one piece of equipment that is particularly their own that nobody else has.

RICE: But we have to create a market before we can begin to be catered to by the manufacturers. We get our hose reels from a guy that makes fire trucks. We found a tank builder that supplies the fruit growers and now they are making them for us. I think probably everyone in this room is doing that sort of thing. Everyone has their own idiosyncracies that have to be worked out for themselves.

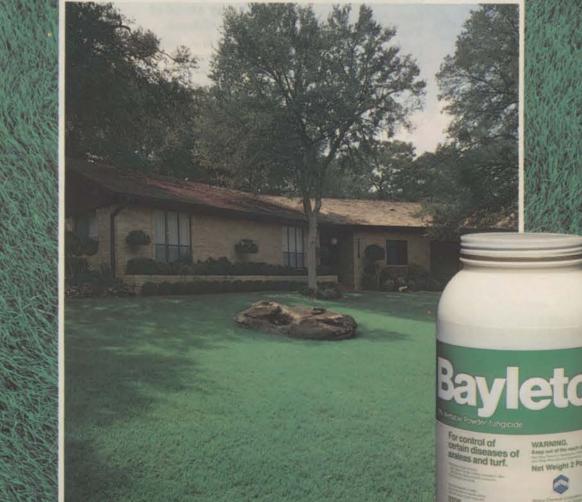
There's not one among us that can go into a show room and say I want that, that, and that. You have to borrow from other industries. We make our own spray equipment because it's not available. Finally we will get to a stage where we will have a market that's worth catering to. evaluate that? Through use and through personal experience. Anyone that reads a product quality chart in a magazine gets lost once you deal with vendors who are giving you wide variations on that product.

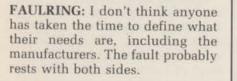
Everyone wants to improve the agronomic quality of their product, but our suppliers sometimes have a difficult time understanding the economics of the industry.

RICE: I think you'll find that the suppliers are used to running into someone and selling them the product line they have. We're



BAYLETON. For those who insist on a first class lawn.





ERBAUGH: There are so many suppliers on the market today. If I wanted a 33-0-0 analysis I would get prices that might vary \$200 on that product. Now, how do I Unique two-way action both cures and prevents most fungus diseases—gives the lawn care professional a valuable weapon to battle costly and unsightly fungus diseases.

Knocks out more diseases: BAYLETON fungicide offers the broadest spectrum of disease control of any leading turf fungicide. This includes control of tough diseases like dollar spot, brown patch, Fusarium blight, red thread, striped smut, certain rusts and pink and gray snowmold. Cost-efficient: Residual

activity of BAYLETON is as much as 14 days longer than other fungicides, so fewer applications are required. Chemical costs can be significantly reduced.

Talk to your turf chemicals supplier today for more information. When you do, chances are you'll become a "BAYLETON BELIEVER."

Circle No. 109 on Reader Inquiry Card

Don't trust your turf to anything less.



Mobay Chemical Corporation Agricultural Chemicals Division Specialty Products Group Box 4913, Kansas City, MO 64120

BAYLETON is a registered TM of the Parent Company of Farbenfabriken Bayer Gmbh, Leverkusen.

MARKETING IDEA FILE

Public seminars are a good retailing tool

"Its a cheap date," said Ray Gustin, president of Gustin Gardens, Inc., in Gaithersburg, Md., of a seminar program that his company offers to interested lay persons and prospective landscape maintenance customers. "We use it generally as a retailing tool."

Gustin addressed his remarks to assembled landscape maintenance contractors at last year's Associated Landscape Contractor's of America maintenance seminar in Cherry Hill, N.J., in a general discussion



Gustin

on marketing landscape maintenance. For a fee of \$60.00, Gustin Gardens' horticulturists hold these four week "low-key public seminars on landscape maintenance" in order to educate the public and attract wayward, but interested potential clients.

The seminars are held at night, between seven and nine, and advertised in the local newspapers for a nominal charge.

not more than 60 hours.

We have frequently discussed in this column and at PLCAA seminars the BELO plan as an approach for compensating a lawn care employe whose primary responsibility is to spray lawns. For a BELO plan to be valid, the duties of the lawn care employe must necessitate irregular hours of work; there must be an individual contract with the employe to compensate him according to a BELO plan; the contract must specify a regular rate of pay for hours up to 40 and one and one-half times that rate for hours over 40; and, the contract must provide a weekly pay guarantee for

Guidelines for imposing

BELO plan compensation

LEHR ON LABOR LAW

In the case of Donovan v. Brown Equipment and Service Tools, Inc., the United States Court of Appeals reviewed an employer's BELO plan, declared the plan invalid, and ordered the employer to compensate employes for past overtime wages. The employer had used the BELO plan to compensate its servicemen who responded to customer calls to perform their services.

When not engaged at a customer's site, the employes worked at the employer's shop where they maintained equipment, trained other employes, and provided support for employes in the field.

Consistent deviation

Prior to declaring the employer's BELO plan invalid, the court emphasized that "an employer who invokes the BELO exception has the burden of showing affirmatively that each of the essential conditions to the exception if met." The BELO plan was invalid because the emplove's hours of work were not irregular.

This same factor, lack of irregular hours, is the requirement which is likely to invalidate many lawn care employers' BELO plans.

For hours to be considered irregular within the meaning of the Fair Labor Standards Act, according to the court, they must fluctuate below 40 hours per week as well as above. Those fluctuations must result from the job requirements, and not from vacations, holidays, sickness, personal leave, etc

If, on the other hand, the hours are irregular but exceed 40 hours on a regular basis, such as 46 hours one week and 53 hours the next, then that does not meet the BELO exemption to the Fair Labor Standards Act. The hours were irregular, but they were irregular overtime hours only, which does not qualify for the BELO exemption. The hours must be irregular below 40 in addition to irregular overtime hours.

Wage stability

The theory behind the BELO concept is to secure employes who have varying and unpredicta-

With 27 field-proven formulas we may have more solutions than you have problems.

Because the job you do demands success, the job we do demands our best.

In the turf care industry, product integrity and quality performance are vital to the success of your operation.

That's why The Andersons now offers one of the most extensive lines of turf care fertilizer products in the industry. With 27 quality Tee Time formulations available, you have the product flexibility you need to meet the toughest turf challenges.

You get it green and keep it green. Our on-the-job testing care products. Dursban

Trademark of Dow Chemical Co.

has proven it. Our 17 years in the lawn fertilizer business confirms it. And our reputation depends on it.

Introducing Pel-TechTM: The little benefin pellets that solve big turf problems.

For liquid spray applications, The Andersons now offers Pel-Tech, the state-of-the-art in pelletized benefin for effective pre-emergence crabgrass control. Pel-Tech is economical and easy to apply, and is backed with the same high-quality assurance as all The Andersons' turf

Just like you, The Andersons knows how important it is to stay ahead of the problems.

As the professional's partner, we're proud of our record of applied turf care research and technical product innovation. Keeping you ahead of your problems is our way of keeping us ahead of the competition.

Call us toll-free or write for the name of your nearest Tee Time distributor. He'll tell you more about how The Andersons' turf care products can help your operation stay out of the weeds.

the professional's partner



Lawn Fertilizer Division P.O. Box 119 Maumee, Ohio 43537 Ohio: 800-472-3220 Outside Ohio: 800-537-3370



20

Circle No. 101 on Reader Inquiry Card

ble hours against "short" paychecks when they work a few hours in certain weeks. A BELO plan's guaranteed wage provides an employe with stability and the opportunity to plan financially.

Because some employers have used a BELO plan as a means of avoiding compensating employes for overtime, BELO plans are viewed by courts and the Department of Labor critically, and any lawn care employer who compensates his employes according to a BELO program should be sure that the hours fluctuate above and below 40 and that the other BELO elements exist. - Richard Lehr

Banvel[®]4-S Herbicide gets a powerful new tank-mix label.

So you'll get all the extras.

Banvel® 4-S Herbicide has a new label that gives you greater application flexibility. You can now tank-mix Banvel 4-S to add more weeds to your controlled list. And to get all the extras you want in a tough, dependable herbicide.

Extra options for tank-mixing.

You can now use Banvel 4-S Herbicide in a variety of combinations. Tank-mix it with 2, 4-D. Or MCPA. MCPP. Even bromoxynil. More than ever, Banvel 4-S fits your tank-mix preferences.

Extra control in a weed and feed program.

With its new label, Banvel 4-S can be applied using either sprayable liquid fertilizer or water as the carrier.

Extra broadleaf weed control.

The new Banvel 4-S label puts you in control of more weeds, including many of your worst problem broadleaves.

Extra application flexibility.

You're no longer limited to one application per year with Banvel 4-S Herbicide. Used at low rates, Banvel 4-S can be applied in retreatment programs up to two pints per acre during a growing season.

Check all the extras you get with Banvel 4-S Herbicide's

powerful new label. See your lawn or turf chemical supplier today for more information.

Extra sales opportunities.

You can now apply Banvel 4-S on non-cropland, brush areas, fencerows and roadways, as well as turf and lawns.

Banvel Herbicide is a registered trademark of Velsicol Chemical Corporation. Before using any pesticide, please read the label.

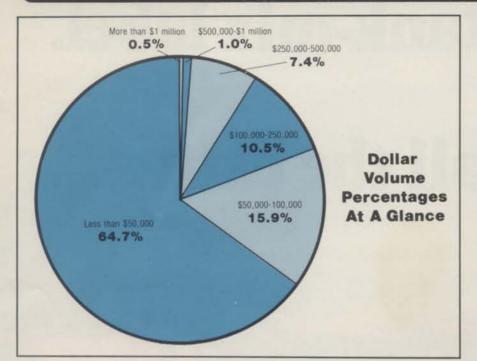
Velsicol Chemical Corporation World Headquarters 341 East Ohio St., Chicago, IL 60611

SICO EMICAL CORPORATION

adicipe

VELSICOL

Circle No. 114 on Reader Inquiry Card



ROUNDTABLE from page 19

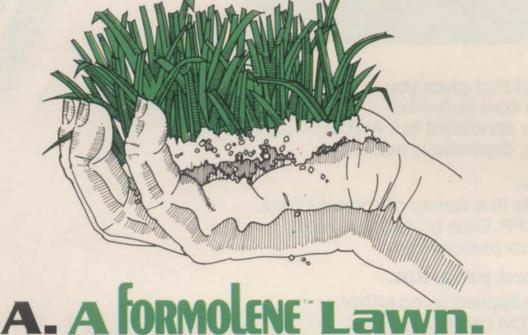
'The industry is going to change'

finding that we are getting a little more cooperation from them now. They are willing to say, well, what do you need?

What will the future of the industry bring?

KENNEY: This industry is very much like a wading bird. In Florida you can see these huge birds with seven foot wing spans. They just stand there and pound their feet in the water and wait for

Q. What's green and keeps customers happy all summer long?



30-0-2 Low-Burn Liquid Fertilizer Proven Your Safest Source of Nitrogen and Potash.

Formolene is a concentrated N&K product with a high proportion of Methylol Ureas to avoid burning. Slow 8- to 12-week release through the growing season promotes a green lawn that will keep customers happy with you as a lawn care professional. Tested at leading Turfgrass Research Institutions, it's proven the safest concentrated source of liquid N&K for low gallonage hot weather application.

Want Water-Insoluble Nitrogen?

Ask for Technical Information Sheet V, which describes a simple tank mix method for converting 25% of Formolene fertilizer's N into W.I.N. (Patent applied for.)

Call or Visit These Authorized Dealers and Keep Those Lawns Happy:

AGRICHEMICALS INC. Bishop, GA (404) 769-6475 LARRY FRICKER COMPANY INC. Tustin, CA 96280 (714) 544-2608

MOYER AND SON INCORPORATED Souderton, PA 18964 (215) 723-6001 THE OLD MILL GRAIN & FEED CO. Harrisonville, MO 64701 (816) 331-1121 little crustaceans to come out of the mud.

They've got this great wing out in mid-air which all the little critters in the mud think is a great place to go hide. So all they do is move their feet and the critters go there and the bird just grabs them because he knows just where they are going to be.

This whole industry has to criticize themselves from time to time about reacting to what it is that ChemLawn is going to charge this year. "What are they going to charge?", "Am I going to be competitive?" We really ought to price our service so that we're going to make some money. We really ought to have an identity of each individual company that distinguishes us from each other.

I think this industry is going to change. I think the prices are going to start to vary a great deal. I think as we start to look different and we start to sell the features and the benefit we provide, then the prices will start to move. And then it will become a very profitable business to be in.

FISCHER: I think we are going to see the capital intensity of this business change the industry somewhat in the coming years. I'm not quite sure how, but perhaps the 1,200 gallon sprayer is a thing of the past. The people with dry fertilizer may not be so far off the mark. There are some operations, including ourselves, who have been experimenting with blending some of their dry along with their liquid applications. I see a major change in equipment in the next ten years.

BURTON: I don't see much of a future for franchising in this industry. The federal regulations are just too encumbering for the amount of capital it takes to get a foothold. Also, it's tough to screen out the personnel. Many franchisees become very independent and challenge the authority of the company. Even the agreements.

As far as government regulation is concerned, I think the industry has become more risk sensitive. The Professional Lawn Care Association of America should becone more representative so that more watch dog organizations can be formed to find out what is going on in the various states. That's the overriding issue, more than capitalization, more than high interest rates.

22

1.10.11.100.0111

ALPINE PLANT FOODS LTD. New Hamburg, Ontario NOB2GO Canada (519) 662-2352 DOUGLASS FERTILIZER AND CHEMICAL COMPANY Sanford, FL 32771 (305) 629-0172 Lake Placid, FL 33852 (305) 322-0443 ELDON STUTSMAN, INC. Hills, IA 52235

(319) 679-2281 ELWOOD AVIATION INC Elwood, IL 60421 (815) 423-5808 FLO-LIZER INC

Kingston, OH 45644 (614) 642-3001 GREAT PLAINS ASSOCIATES LTD. Niles, MI 49120 (616) 683-7463 GROWER'S AG SERVICE Kearney, NE 68847 (308) 234-2124 HOWE INC. Shakope, MN 55379 (612) 445-6570 NICE 'N GREEN PLANT FOODS INC. Lisle, IL 60532 (312) 963-3328 OLD FOX CHEMICAL COMPANY Enfield, CT 06082 (203) 749-8339 PRESTON AGRICULTURAL SERVICE Sodus, NY 14551 (315) 483-9748 SAALE BROTHERS FARM & GRAIN CO. West Alton, MO 63386 (314) 899-0933 TURF SPECIALISTS CORP Holbrook, L.I. New York 11741 (516) 981-1118 TURFTEK Chesapeake, VA 23320 (804) 547-7111 VOGEL SEED AND FERTILIZER Jackson, WI 53037 (414) 677-2273 WESTERN FARM SERVICE INC. Alpaugh, CA 93201 (209) 949-8476 WOLFKILL FEED & FERTILIZER CO. Monroe, WA 98272 (206) 794-7065

ERBAUGH: It seems to me that the effects of increased capital costs and the effects of increasing costs of acquiring a new customer will inevitably force some consolidation in this industry. I don't say this pessimistically. Those factors are just combining and forcing some people to wonder whether or not they want to remain in the business.

HAWKEYE CHEMICAL COMPANY

Clinton, Iowa 52732 • (319) 243-5800 Circle No. 107 on Reader Inquiry Card 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 6-82 2

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

101 108 115 122 102 109 116 123 103 110 117 124 104 111 118 125 105 112 119 126	129 136 143 130 137 144 131 138 145 132 139 146 133 140 147 134 141 148	150 151 152 153 154 155	157 158 159 160 161 162	164 165 166 167 168 169	171 172 173 174 175 176	178 179 180 181 182 183	185 186 187 188 189 190	192 193 194 195 196 197	199 200 201 202 203 204	206 207 208 209 210 211	213 214 215 216 217 218	220 221 222 223 224 225	227 228 229 230 231 232	234 235 236 237 238 238
107 114 121 128 1	135 142 149	156	163	170	177	184	191	198	205	212	219	226	233	240
	: iness involved primarily f, and insect control. ethed of application: I Dry 12 Bott intenance service /lawn service company ter /lawn service company awn service company WNCE AT ONE OF THE	h any _		DCATIC 120 130 140 150 190 C. SUP 210 220 230 240	Schoo Condo Govern facilitie Ceme	minium I ment gr es etery or r (please s cal deale ment dea broker/d	housing ounds; p memoria pecify)_ er or dist ler or dist	developn barks, ar I garden ributor	nent or in ound mu	ndustrial	park	, military	-	
110 Private or public esta	ate													
NAME				TI	TLE_									
BUSINESS NAME					ADDR	ESS_		0.5	31.72	101	1000			
CITY	STATE			ZIP_			TELEF	HONE) A COD	E			
I WISH TO RECEIVE (CONT SIGNATURE	TINUE RECEIVING	G) LAV	VN CA	RE IN	DAT		CH MO	DNTH	O YES)			

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



POSTAGE WILL BE PAID BY ADDRESSEE

READER SERVICE DEPARTMENT

LAWN CARE INDUSTRY

POST OFFICE BOX 6200 DULUTH, MINNESOTA 55806



GET MORE FACTS

25 | LAWN CARE INDUSTRY

JUNE 1982

LCI STATE OF THE INDUSTRY REPORT

CLINE REPORT from page 1

Lawn care chemical usage grows 24 percent annually

turf and grounds management category will grow at a rate of 10 percent annually to 1986 as measured in current dollars, use by lawn care companies will rise at 24 percent annually through the same period, according to the report.

Cost effectiveness

In the opinion of the researchers, this growth results from the fact that lawn care firms can more cost effectively treat lawns. Additionally, the property owner no longer must set aside time for do-ityourself treatments, avoids handling toxicants, and does not have to educate himself with regard to lawn care technology.

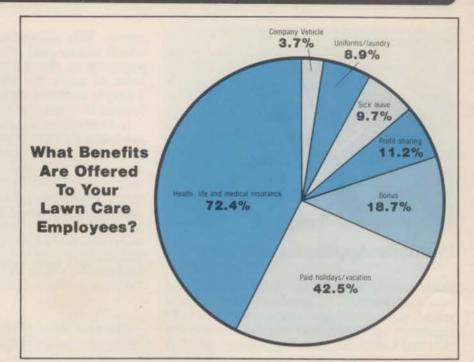
U.S. Consumption Of Fertilizers And Pesticides For Turf And Grounds Management By End Use 1981

End use Residential and Commercial	SMillion	% Of total
lawns	\$185	32%
Golf courses	175	30
Residential and commercial		
landscapes	110	19
Educational		
facilities	55	9
Parks	27	5
Industrial		
facilities	14	2
Cemeteries	5	1
Other-a	14	2
Total	\$585	100%
a-Includes airp and others.	orts, tennis	courts,

Three major categories were detailed in the report. Pesticides, comprised of herbicides, insecticides, fungicides, rodenticides, and other products were the leading category, with sales in 1981 estimated at \$664 million.

Insecticides, ranking as the second leading type of pesticide, were sold chiefly to structural pest control operators, but also to lawn care companies, landscapers, mosquito-control groups, and horticultural companies. Fungicides, aquatic pesticides, rodenticides, growth regulators, and nematicides comprise the balance of pesticide consumption, according to the survey. business holds important opportunities for alert suppliers. For example, government pressures will threaten use of various pesticides including organophosphates, and replacements must be developed.

Other opportunities center around (1) improved products, including more effective growth regulators, (2) packaging designed for reduced handling, measuring and spillage, and (3) high growth end-use segments.





One of the reasons to use GSL Sulfate of Potash

Sulfate of Potash contains 18% Sulfur in the sulfate form, which is the form preferred by lawns and gardens. Sulfate of Potash gives better disease resistance to Fusarium Patch, Ophiobolus Patch, Dollar Spot Fungus and Powdery Mildew. It is also effective in suppressing Poa Annua.

Use of Sulfate of Potash also results in better rooting, drought resistance, heat and cold tolerance and better wear resistance. And, its excellent potassium/sulfur ratio increases grass response to

The <u>safest</u> and <u>most effective</u> potash money can buy!

Avoid lawn burn.

Sulfate of Potash is nearly chloride free and has a salt index of 0.85 vs 1.94 for muriate of potash. Other sources of sulfur, such as ammonium sulfate, have salt indexes higher than 3.25. There is far less chance of burning lawns and gardens if it is mistakenly over applied, spread unevenly or unexpected weather

One-third market

Fertilizers, which account for over one-third of the total market, rank next in dollar sales after pesticides, according to the Kline report. They serve nearly all enduse segments, but are most important for lawn care companies, golf courses, and landscaping services.

According to Kline & Co., this

nitrogen, phosphate and other nutrients.

conditions favor damage.

Build your business and add to your profits by keeping your customers satisfied.

Use GSL Sulfate of Potash in any of several grades for solutions, granulated, blended or suspension products. Call or write for complete agronomic information.



Great Salt Lake Minerals & Chemicals Corp. P.O. Box 1190 • Ogden, Utah 84402 • (800) 453-4515

Western Office: P.O. Box 14761, Spokane, WA 99214 • (509) 928-2747 Northeast Office: 880 Rosedale Ave., Marion, OH 43302 • (614) 382-5304 Southeast Office: P.O. Box 1102, Smyrna, GA 30081 • (404) 977-2322 Midwest Office: 308 Hemlock Hutchinson, KA 67501 • (316) 663-6372

A subsidiary of Gulf Resources & Chemical Corporation • Houston

Circle No. 106 on Reader Inquiry Card

MEMOS

Pesticide Applicator's survey

Trade associations serving the lawn care, tree care, and structural pest control industries have joined with other associations and pesticide regulatory agencies to collect information in the National Urban Pesticide Applicators (NUPA)

survey. This pioneering survey, the results of which will be used to enforce a more scientific approach to the administration of pesticide laws, is under the direction of the Research Triangle Institute, a professional research firm located in North Carolina.

Industry firms (not just association members) randomly selected to participate in the survey, have by now received their survey form. Because the information gathered by the survey will be beneficial in protecting valuable pesticide resources, please participate by completing the form and returning it as soon as possible. The institute has emphasized that responses will be kept strictly confidential. If you need more information on the survey and its background, please call Dick Waddell, Research Triangle Institute, (800) 334-8517.

The June issue of Harper's magazine carries an article under the banner "Capitalism Observed" and headed "Lawn Order - Call in the high-tech horticulturists, or it's all over for your grass." The article was written by Timothy Bannon, a self-styled "lawn free" lawyer from Connecticut, who has described some of the history of the industry and what a typical customer might look forward to be contracting a lawn care service. Although the article is written tongue-in-cheek, for the most part it makes interesting reading. Also, it is gratifying to see the lawn care industry publicized in this reputable 'idea' magazine.

Fare She Closky



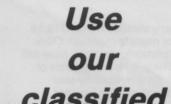
RATES: 50° per word (minimum charge, \$20). Bold face words or words in all capital letters charged at 75° per word. Boxed or display ads charged at \$50 per column inch (one inch minimum). Agency commissions will be given only when camera-ready art is provided by agency. For ads using blind box with payment to Dawn Anderson, LAWN CARE INDUSTRY, 1 East First Street, Duluth, MN 55802. BOX NUMBER REPLIES: Mail box number replies to: LAWN CARE INDUSTRY, Classified Ad Department, 120 W. 2nd St., Duluth, MN 55802 Please include box number in address

HELP WANTED

TREE SPECIALIST - Individual with detailed tree/shrub background and some lawn experience needed for growing company in Mid-Atlantic states. You will perform sales duties and help refine our tree care program. Good pay/benefits; year 'round employment. Come grow with us. Send resume in confidence to LCI Box 71. 7/82

WANTED — Aggressive, Mature individual as Branch Manager for Southern California Firm. Minimum five years experience in chemical lawn care or pest control. Preferably with large aggres-sive national company. Extensive knowledge in evaluation and comparison of operation per-centages. Call (213) 921-1001. 6/82

GENERAL MANAGER - For rapidly expanding Eastern United States lawn and tree care company. We are long established, well financed, multi-office organization with plenty of opportunity and rewards commensurate with experience and performance. You must have it all: managerial/people skills, sales ability, in-depth technical expertise. Horticulture or related degree preferred, but not required. This is the opportunity you have been looking for. Send resume to LCI Box 75. 7/82



MISCELLANEOUS

KELWAY® SOIL ACIDITY TESTER, used by PROFESSIONALS nationwide. Direct reading, lightweight, portable, fully serviceable, no powe source, Model HB-2 reads moisture too. Available through distributors. For brochure contact Kel Instruments Co., Inc., Dept. T, P.O. Box 1869, Clifton, N.J. 07015, 201-471-3954

FOR SALE

For Sale — Used spray trucks. 2 1979 GMC 6,000 in good condition, PTO operated hypro centrifugal pumps up to 170 PSI, 16 ft. wood beds with 4 ft. reinforced sides (will carry dry & liquid). One with 1,200 gallon steel tank and 2 manual hose reels. One with 500 and 300 gallon plastic tanks and 1 manual hose reel. Your choice, \$9,750 each Questions, call 219-769-8313. TE

LANDSCAPE ARCHITECTS - LANDSCAPE & SITE DEVELOPMENT CONTRACTORS "GUIDE FOR EVALUATING LANDSCAPE CONSTRUCT TION COSTS" 1982 issue now ready - send for your copy at once and have a profitable year. Send check \$12.95 (\$10.95 plus \$2.00 postage/hand.) payable to: Louis DeVirgilio, Loualco Corp., 17 Berwick Place, Norwood, Ma. 02062. 6/82

SPRAYERS - FACTORY DIRECT, professional gardeners, turf applicators, proven dependability, unconditionally guaranteed. Black River Sprayers, Dept. 1-B, P.O. Box 11, Long Beach, N.C. 28461.

For Sale - Irrigation Equipment 1977 VP-12 Ditchwitch vibratory plow, 1976 Wacer Dirt Tamper, pipe fittings and various other pipe tools and supplies. Montgomery Ward Hydroseeding & Lawn Care, P.O. Box 9695, Kansas City, MO 64134 816-765-2577 TF

1961 Used Spray Units For Sale — 1250 gallon tanks. John Bean F.M.C. 20-20 pumps. Steel beds. 16 HP Kohler engine. Ford F600's. Call 502-241-TF

Used Spray Units for Sale

1,250-gallon stainless steel tanks, Mechanical agitation. FMC 20 gallon/minute pump. Hanney electric reel. Ford F600 and Chevy C60's -'76's, '77's, '78's and '79's. Call 502-241-7341.

Heckendorn Industrial Riding Mowers. 88 inch good condition, cuts 5 acres per hour \$4000.00. 62 inch good condition newer model \$4000.00. 50 inch good condition \$1500.00 or \$8500.00 for all three 617-862-0126. 6/82

acobson Overseeder, 1 year old, worked 50 hours, 6/82 \$2,400.00. 216-357-8400.

Ft. Lauderdale lawn spray business. Est. 1948 gross \$135,000 yearly. Four — two ton spray trucks, two way radios. Principals only reply. Price \$130,000. Tom Barrows, 517 Coconut Isle, Ft. Laud, Fl. 305-764-7830 after 6:00 P.M. 7/82



BUSINESS OPPORTUNITY

Established Lawn Maintenance Business in Pinellas County on Floridas Gulf Coast. Commercial accounts only, mowing and trimming, no spraying. Nets over \$80,000, asking \$220,000 complete. Genuine reason for sale. Write LCI Box 70. 6/82



Reader Inquiry No.

Page No.

101	Andersons (Regional)	20
102	Balcom Special Products	14
103	BFC Chemicals, Inc	11
104	Diamond Shamrock	7
105	Dow Chemical U.S.A.	2-3
106	Great Salt Lake Minerals	
	& Chemicals Corp	25
107	Hawkeye Chemical Co	22
108	Jacobsen, Div. of Textron	28
109	Mobay Chemical Corp	19
110	Monsanto Co	8-9
111	Pumping Systems	14
112	Rain Bird Sales Inc	15
113	Tuco Agri Chemicals	27
114	Velsicol Chemical Corp	21
115	Warren's Turf Nursery,	
	Inc	17

NEW PRODUCTS

Use		160 Walk behind mower 30% fewer parts
our		161 Surface pesticide for professionals only
classified	Then let us know. This publication will be mailed only to your current business	162 Pump series offered with wide pressure
blind	address. Please indicate changes and return this coupon to us along with the mailing label attached to the magazine cover to avoid duplication. Thank you.	digital counter/reset
box	Send to: LAWN CARE INDUSTRY HARCOURT BRACE JOVANOVICH PUBLICATIONS	165 New truck mounted Skid sprayer for '82
service	Subscription Dept. 1 East First Street, Duluth, MN 55802	166 Positive mixing with new tree spray unit
for	Signature PLEASE PRINT Name	heavy maintenance
confidential	Business Name Business Address	
results!	City State Zip Phone Date	This index is furnished for the reader's convenience. However, the publisher can not guarantee its accuracy due to circumstances beyond our control.

26

JUNE 1982

PROXOL® KILLS GRUBS AND SURFACE FEEDERS. FAST!

There's no need to wait over a month for a grub control to work. Economical Proxol 80SP insecticide readily penetrates thatch to work fast for an effective broad spectrum kill, including grubs and surface feeding sod webworms, armyworms, and cutworms. You apply Proxol with the liquid application equipment you already have. So there's no need to haul spreaders and bulky packages on your rig, put up with package breakage and waste, or carry them in inventory. Proxol's convenient 2- and 5-lb. packages make measurement easy. Eliminates waste. You can even mix Proxol with other nonalkaline chemicals.

And you can rest easy with Proxol. Customer's children and pets are not exposed to



Division of The Upjohn Company Kalamazog, Michigan 49001 a granular residue left on the turf. Proxol is easy on the environment, too. No unpleasant odor to offend customers. No long-term residual buildup in the soil.

Proxol kills grubs and surface feeders. Fast! Over 150 U.S. distributors and 8 regional TUCO Distribution Centers assure convenient product availability. These same sources also have Acti-dione," a TUCO broad spectrum fungicide, long used by golf course superintendents, to stop turf disease problems before they start.

For more information, call toll-free: Outside Michigan – 800-253-8600 Inside Michigan (collect) – 616-385-6613



Circle No. 113 on Reader Inquiry Card

You just can't buy better gang mowers.

Gircle No. 108 on Reader Inquiry Caro

It's been proven time and again, day after day, acre after acre. You just can't buy better cutting gang mowers. For a very convincing demonstration, call your Jacobsen Distributor.

ACOBSEN

JACOBSEN Textron

Jacobsen Division of Textron Inc.

Jacobsen: You just can't buy any better.