It takes big trencher know-how to make a small trencher productive.

Many trenching jobs only require a trench from 4 to 16 inches wide. Or at depths from 6 inches to 5 feet. They don't require a big trencher.

Ditch Witch presents the sensible and economical alternative: four small to medium sized trencher models. These trenchers are ideal for many underground installation jobs including electrical and communications cable, water and gas lines, irrigation and sprinkler systems. The Ditch Witch models C, M and 1500 are all compact handlebar units. They are easy to maneuver in small, confined work areas. Controls are conveniently arranged.

The Model 2200, an 18-HP class trencher, comes with many features found on larger models. Like hydraulic control and backfill blade. Plus 4-wheel drive that allows optimum maneuverability.

Don't waste time with

DITCH WITCH IS THE ANSWER!

equipment that digs slower and takes longer. Don't waste money using a large piece of equipment to do a small equipment job.

Use one of the sensible alternatives from Ditch Witch. Contact your Ditch Witch dealer today for more information or a free demonstration.

Or write us: Charles Machine Works, Inc., P.O. Box 66, Perry, Oklahoma 73077, TWX: 910-830-6580.



Model 1500



Model C

Model 2200



Model M

registered trade

equipment.

"I'd never ran into anything like that before, but it is really super because you can say, OK, down the road—six months or a year from now, this is what I'm going to have to do. This is what I'm going to have to watch for. Now, it would have to be an ideal salesman who knew how to fix the equipment, knew everything about it, but there has to be some supportive role by someone else to fill you in on all the real details of the equipment. What's along the way down?"



Jud Debra: "We have a few fellows on our sales staff who are very mechanically oriented and can give the customer some added help. However, in general it is im-

practical, in many cases undesirable for him to be a mechanic. That's why we have trained people at our places of business who are experts in the parts business.



It's REVEILLE Limestone Pellets... a new patented product that provides a virtually dust-free way to apply limestone. In Normess. Spreads evenly with any type spreader. If Fast action... quickly breaks down when moistened. If Stretches your fertilizer dollars by releasing locked-up nutrients. In Neutralizes soil acidity. If Conditions your soil by providing essential calcium and restoring proper pH levels. Also available, **REVEILLE Gypsum Pellets**, excellent for loosening up hard, clay soil and for improving moisture retention. Ideal for sulfur and calcium-deficient soils. Both products available in bag or bulk.



Circle 120 on free information card

"I think service schools held in the field could be a way to go. You have the experts tell the people that this fairway mower has such and such strong points, but if you don't keep the collars on the roller tight, you'll be wearing the bearings out and trying to replace them. Recommendations are check it every six months. Please check it at least once a year. Lay it right on the line and even say, well, we thought that this particular item was going to last 2000 hours. Practical experience finds, here in Florida with sand and moisture and conditions of fertilizer and etc., it's really going to last only so long.

"Unfortunately, I would estimate that in customer representation, and through no fault to the customer but through the demands of the Southern Turf market, our representation at service schools is probably only ten percent."



Ed Combest, Lake City Community College, Lake City, Florida: "As I travel, I see a definite need for more education. I'm talking about the majority of the golf course

Tom Mas-

con-

caro: "As far as

cerned, I don't

think the su-

should be-

come a me-

chanic. He's

got enough

problems and

perintendent

I'm

superintendents doing a fine job, but when they go into the maintenance complex, they're lost. And at the prices we're paying, all we're getting is automobile mechanics who are not really trained in the equipment we've got. They need the communication and the education also.

"I think about five days out of the year is real cheap education to find out how to run this business. I think it would be well worth his time and dollars to get, let's say five days worth. You can cover many subjects in five days."



to learn how to fix every piece of equipment he's got, then he is no longer a superintendent, he is something else. I really think that the emphasis should be placed on good mechanics and send them to the schools and train them so that they can report back to the superintendent on what is going on."

Ed Combest: "I agree with you 100 percent. If this is the case, it still goes back to the man in charge, the superintendent. Who he sends to the school is up to him."



John McKenzie: "I'm a firm believer in education and everything.

And I know that job you're doing after I have had several students work out on

their on - the job training. But like Tom said, superintendents are not twisting the wrench. Reality is, we still don't have the part. All the preventive maintenance in the world can be put in and he can follow all the step-bystep procedures, but when that thing is gone, it is gone.

"Getting back to the salesman, he is taking that profession because he wants to go out and sell. He's not a technician, he should have the available information to relay to the person who's buying it and say this is a technical representative for our distributor or this is a technical representative of the manufacturer. He should be able to help that person find a solution, but he should not have the knowledge to do it himself. It's just like a car salesman, once you buy a car. He points to the service department. He'll help you get it over there."



Buddy Tresca, Tresca, Inc., Jacksonville, Fla.: "Our problem is communication again. It's knowing when a problem exists. It's knowing what part we need

and if we get a call and someone says hey, it's an emergency, I'm down, we'll get the part for him. Someplace, we'll find that part.

"There are golf courses that have budgets and can stock parts on their own shelves, but we do a lot of business with clubs with only one greens mower. That's the only one they've got and when they have to

There's No Mistaking Smithco Quality

There's no mistaking a Red Rider!

SMITHCO'S work cart is the work horse on any golf course. It s tough Big Red power head gives it performance to spare. The **RED RIDER** is the easiest loading, easiest

operating, most durable work cart in America. And, the easiest to maintain. No transmission, no differential, easily serviced with standard tools. It runs long. It runs hard. And it doesn't cost a bundle to operate. That's a **SMITHCO RED RIDER!**

There's no mistaking the Easy Rider Trap Maintenance System

Nothing rakes traps quite like it! Now, with two independently operated attachments — a weed cultivator and a sand SUPER SCOOPER. Lets you cultivate OR scoop, and rake at the same time. All this, plus a lightweight, maintenance-free molded fiberglass body. Engine access couldn't be simpler, with hinged seat and rear deck section. Easy on the budget.



WITH SMITHCO YOU KNOW YOU HAVE THE FIRST TURF TEAM

WAYNE, PENNSYLVANIA 19087

spend three hundred dollars, they have to call up all the board together and it's a big decision. That's a problem."

Tom Mascaro: "But the customer doesn't know what he really wants. When I was in the manufacturing end, we supplied A, B, and C lists. The A list, we would recommend they buy right away, the customer that is. We used to recommend about \$2-3000 worth of parts on the shelves on this recycling system and it worked. Salesmen would call and they'd have the right to write an order without getting a signature. In other words, they'd look on the customer's shelves and if the belts were down to three, he'd bring in five, or whatever was needed and always kept.

"No one has touched on that yet, purchasing parts. This is a weakness within many organizations of golf courses, especially when they may have a good mechanic and a good superintendent but no one inbetween who orders those parts. The superintendent is involved in so many things that he shouldn't keep track of all those pieces. The mechanic isn't well educated enough to order those parts and somewhere along the line, the machine breaks down and nothing happens."



Jack Krug: "You know we've got a weird business. Kind of like the agricultural business in that a lot of our machines are running 20-25 years after we

sell them. And we as suppliers, whether we like it or not, have to have those parts on our shelves because there's enough of the machines out there to warrant it. That sets up another problem.

"You've got a division in your parts, current and non-current. Current will have problems with reaction times. Non-current parts, if your compnay changes over a long period of time, some of those non-current parts, you might not even know what it is, much less where it is.

"At Jacobsen, two years ago, we identified a non-current aspect as a major headache. We pulled purchasing non-current parts away from the manufacturers and put it into our central warehouse operation and parts still has their own purchasing operation. That solved the problem almost overnight because there was only one job, buying non-current parts, whereas manufacturers do it as kind of a side job. They tended to fall behind the sheets over a long period of time.

Jud Debra: "Let me say, on the other hand here, our problem is not the fast moving parts, it's not the bearings, the bedknives, the things that we know we're going to sell.

"Our problem is the things we don't sell. A guy calls up and orders one and we look on our card system and say well, we sold one of these two years ago and he raises why don't we have it on stock. Well, we said, we can't afford to stock something and move it every two or three years. Our problem is not the fast moving stuff, it's the one shot item when you wrapped some mower around a tree someplace and break something that's not supposed to be broken."



Rodale Resources Inc.

576 North St., Emmaus, PA 18049 • 1-215-965-6990 See us at the GCSAA Show in St. Louis, Feb. 19-21, in Booths 428-430 It's obvious. It's easy to check our best features. We don't cover 'em with a shiny shroud. What you see is what you get ... a completely functional and easily maintainable machine built with a minimum number of components. National's 84-inch Triplex offers the same superb performance on hillsides or level ground. Three, power driven, free-floating reels follow ground contour and cut without skip or scalp. Reels adjust down to fixed bed bars providing for more rigid and longer lasting mowing units. Bed knives have turned up lips for extra wear...a feature we introduced as early as 1925. National's noa Nationa nonsense design makes normal service faster than any mower on today's market.

Check out the economies of National's ugly beauties. We've been adding nothing but quality since 1919...it's obvious!



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Circle 104 on free information card

Program: 51st GCSAA conference

Saturday & Sunday, February 16 & 17, 1980 Pre-Conference Seminars - Two Day Landscape I Design Theory Seminar (Room 262) Mr. William R. Nelson, Jr. & Dr. Charles M. Sacamano Management II Personnel Seminar (Room 271) Mr. Ronald C. Frame Irrigation II Equipment/Operations Seminar (Room 260) Mr. David D. Davis & Mr. Bill Speelman Pesticide III Insect Seminar (Room 272) Dr. Harry D. Niemczyk & Dr. James A. Reinert Nutrition I Principles Seminar (Room 273) Dr. John H. Dunn, Dr. Ralph E. Engel & Dr. Paul E. Rieke Pre-Conference Seminars - One Day CPR (Cardiopulmonary Resuscitation) (Room 270) St. Louis Heart Association Photographic Seminar (Room 261) Jack Englert & George S. Butt (Kodak) Sunday, February 17, 1980 **Certification Examination** Monday, February 18, 1980 9:30 a.m. - 11:30 a.m. OPENING SESSION - Charles H. Tadge, CCCS (Room 120-127) 10:00 a.m. - 11:30 a.m. Keynote Speaker - "Are we Savers or Spenders" David T. McLaughlin 1:30 p.m. - 3:30 p.m. CONSERVATION OF PERSONAL RESOURCES — Gerald L. Faubel (Room 121-23 & 125-27) 1:30 p.m. - 2:00 p.m. Managing Your Family Finances - Nick Milosevich 2:00 p.m. - 2:30 p.m. Handling Stress - Dr. Carl D. Koutsky 2:30 p.m. - 3:00 p.m Insurance - Earl Whitney 3:00 p.m. - 3:30 p.m. Alcoholism & Its Problems — Frank E. Lamphier 3:30 p.m CONSERVATION IN KEY AREAS - Dr. William R. Kneebone (Room 130-131) 1:30 p.m. - 2:00 p.m. Conserving Water - Dr. James R. Watson 2:00 p.m. - 2:30 p.m. Efficient Use of Power in Irrigation Systems - Carl Kuhn 2:30 p.m. - 3:00 p.m. Fertilizer Efficiency — George R. McVey 3:00 p.m. - -3:30 p.m Energy Conservation in Turf Management - Roger J. Thomas Tuesday, February 19, 1980 9:00 a.m. - 12:00 noon EXHIBITS OPEN 4:00 p.m 1:00 p.m. LOOKING FOR THE KEY — Dr. C. Richard Skogley (Room 130-131) 1:00 p.m. - 1:30 p.m. Seasonal Root Growth/Warm & Cool Season Grasses - Dr. James B. Beard 1:30 p.m. 2:00 p.m Herbicide for Controlling Summer & Winter Weeds in Bermudagrass Turf — B.J. Johnson 2:00 p.m. - 2:30 p.m. Measuring Compaction - Dr. Paul E. Rieke 2:30 p.m. - 3:00 p.m. Fertility, Traffic & Herbicidal Influence on Winter Survival of Bermuda-grass — Dr. Richard E. Schmidt 3:00 p.m. - 3:20 p.m Granular Pesticide Products From Historical & Mode of Action Perspectives — Dr. Milton E. Kageyama 3:20 p.m. - 3:40 p.m. Advantages & Disadvantages of Granulars as Carriers — Dr. Clayton M. Switzer 3:40 p.m. - 4:00 p.m. Question & Answer Period Wednesday, February 20, 1980 9:00 a.m. - 12:00 noon USING SOME KEYS - Sherwood A. Moore, CGCS (Room 130-131) 9:00 a.m. - 9:20 a.m. Spring Dead Spot a Soil Disease - Dr. Roy V. Sturgeon, Jr. 9:20 a.m. - 9:40 a.m.

Spring Dead Spot of Bermudagrass - Dr. Leon T. Lucas

9:40 a.m. - 10:00 a.m.

Question & Answer Period 10:00 a.m. - 10:20 a.m Fusarium Blight-Fairway Grass Management & Species & Varietal Selection - Dr. Herbert Cole, Jr. 10:20 a.m. - 10:40 a.m Fusarium Blight of Kentucky Bluegrass - Dr. Richard W. Smiley 10:40 a.m. - 11:00 a.m. **Questions & Answer Period** 11:00 a.m. - 11:20 a.m Disease Forecasting: To Spray or not to Spray - Forrest W. Nutter, Jr. 11:20 a.m. - 11:40 a.m. Pythium Blight on Overseeded Grasses - Dr. T. E. Freeman 11:40 a.m. - 12:00 noon **Question & Answer Period** 9:00 a.m. - 12:00 noon UNLOCKING POTENTIAL - R. V. Mitchell, Sr., CGCS (Room 121-23 & 125-27) 10:00 a.m. 9:00 a.m **Golf Course Design Principles** — Rees Jones 10:00 a.m. - 11:00 a.m Practical Construction from Design David Canavan 11:00 a.m. - 12:00 noon Marking the Course - Joe Black Thursday, February 21, 1980 9:00 a.m. - 12:00 noon CONSERVATION OF RESOURCES - Robert Wilson (Room 122-23 & 126-27) 9:00 a.m. - 9:20 a.m. The Irrigation System Design—A Superintendents Viewpoint - Bruce Cadenelli 9:20 a.m. - 9:40 a.m. Conservation of Resources-How to Accomplish this Through Good Design -Austin Miller 9:40 a.m. - 10:00 a.m. What I Can Install in Irrigation - Roger Parks 10:00 - 10:30 a.m. Long Range Planning for Golf Course Improvements Denis J. Griffiths 10:30 a.m. - 11:00 a.m. Design for Conservation — Ronald W. Fream 11:00 a.m. - 11:20 a.m. Building & Grading Tees - Ed Hunnicutt 11:20 a.m. - 11:40 a.m. Building & Grading Greens - Robert Vincent, Jr. 11:40 a.m. - 12:00 noon How Not to Build a Golf Course and Other Ozark Activities - Herman Siler 9:00 a.m. - 12:00 noon IMPORTANT KEYS TO BUSINESS MANAGEMENT - Dan Jones, CGCS (Room 131) 9:00 a.m. - 9:30 a.m. Investigating and Protesting the Golf Club Tax Assessment - Barry Herbold 9:30 a.m. - 10:00 a.m. What to Say to the Tax Assessor -Cecil R. McKay, Jr. 10:00 a.m. - 10:30 a.m. Failures & Successes of Golf Businesses - Chuck Hegan 10:30 a.m. - 11:00 a.m. Failures & Successes of Golf Businesses - Col. Harry C. Eckhoff 11:00 a.m. - 11:30 a.m Whether to Buy or Lease Equipment - Gary F. Mueller, CPA 11:30 a.m. - 12:00 noon Food Service: "Fringes" For Your Customer/Golfer - Eldon Miller 1:00 p.m. - 4:00 p.m. THINKING SUPERINTENDENTS: USERS OF THE KEYS — George Thompson, CGCS (Room 122-23 & 126-2? 1:00 p.m. - 1:30 p.m. How to Reduce Your Maintenance Headaches on the Golf Course - David Harmon 1:30 p.m. - 2:00 p.m. Course Accessories - Merrill J. Frank, CGCS 2:00 p.m. - 2:30 p.m. Tree Transplanting - Raymond P. Knapp 2:30 p.m. - 3:00 p.m. Fertigation of Tanoan Country Club - Gary T. Grigg, CGCS 3:00 p.m. - 3:30 p.m A Superintendents Experiences with Effluent Water - Robert L. Sanders, CGCS 3:30 p.m. - 4:00 p.m.

Drip Irrigation on the Golf Course - Stanley E. Metsker, CGCS

4:00 p.m. - 4:10 p.m. Invitation to Anaheim —Neil E. Beeson

Exhibitors: 51st GCSAA conference and trade show

GOLF BUSINESS has listed the exhibitors at the 51st GCSAA show, their booth numbers, the personnel who will be in the booths, and the products and equipment that the companies will be exhibiting. On the next page is a floor plan of the exhibition hall showing where the booths are. We present this for your convenience, so that you may have a better idea who and what you want to see and how to route it so you get the most out of the show.

EQUIPMENT

Aerators



West Maple Rd., Walled Lake, MI 48088 Booths 2418, 2420, 2422, 2517,

Dedoes Industries, Inc., 1060 W.

2519, 2521 Earl Crane, Arnold Dedoes, Jerry Dedoes, William Friar, David

Lesnek, and Erik Vogel will be in the booths exhibiting Dedoes line of aerators, plow attachment for the Toro Sand Pro, and Hvdraulic Dump Box for the Toro Workmaster. See advertisement, page 25.

Circle 142 on free information card

Chain saws

Homelite Div. of Textron, Inc., Box 7047, Carowinds Ind. Park, Charlotte, NC 28217

Booths 1925, 1927, 1929

Rick Osborne, Marketing Manager, Don Scoville, Territory manager, and John Cova, Territory manager, will be in the booths exhibiting Homelite chain saws, pumps, generators, cut-off saws, string trimmers, and brush cutters.

Circle 150 on free information card

Engines



Briggs & Stratton Corp., 3300 N. 124th St., Wauwatosa, WI 53222

Booths 526, 528 Lew McGregor, John Gilman, Chris Roll, and Pat Reardon will be in the booth exhibiting Briggs & Stratton's complete line of fourcycle engines.

Circle 151 on free information card

Kawasaki Motors Corp., U.S.A., 650 Valley Park Dr., Shakopee, MN 55379

Booths 630, 632

Wilbur Whitmore, Al Eisentraut, Mike Littell, Ray Tuggle and Lee Markgraf will be in the booths exhibiting Kawasaki engines.

Circle 152 on free information card

Kohler Co., Kohler, WI 53044 Booth 826

Sixteen headquarters personnel will be in the booth exhibiting Kohler's line of engines, including the new 21-hp, twin-cylinder, aircooled engine.

In addition, Kohler will feature an hour-long service seminar prior to the exhibit area opening each morning. The "Service Seminars" will be at the Sheraton St. Louis from 7:30-8:30a.m. Free coffee and danish will be served.

Circle 153 on free information card

Onan Corp., 1400 73rd Ave. NE, Minneapolis, MN 55432

Booths 1919, 1921, 1923

Ken Lorch, Jim Dunbar, Len Biggs, Jerry Mithuen, Ira Golden, Bob Taylor, Jim O'Rourke, Terry Smith, and Peter Marting will be in the booths exhibiting Onan engines and generators, including an 18 and 20 horsepower industrial gasoline engine, two 19.9 horsepower engines, a 3.0 kW generator, and a 7.2 and 12 BHP Petter Diesel engine.

Circle 154 on free information card



Teledyne Continental Motors, Industrial Products Div., 700 Terrace St., Muskegon, MI 49443 Booths 1228, 1230, 1232, 1327, 1329, 1331

Art Potter, Jack McKinley, Bill Symon, George Sculley, Fred Vollbach, James Frazier, Ray Phillips, and Mike O'Toole will be in the booths exhibiting Teledyne's engines, including the TM27 gasoline, all metric, liquid-cooled industrial engine, and the TMD27, its diesel counterpart, and the TC56, a two-cylinder industrial engine available in both 17-and 25-hp versions.

Circle 155 on free information card

Teledyne Wisconsin Motor, 1910 S. 53rd St., Milwaukee, WI 53219

Booths 2101, 2103

Bill Hall, Homer Bliss, Wayne Danhof and Herman Klopper will be in the booths exhibiting Wisconsin's heavy-duty air-cooled engines, long-life gasoline engines, diesel engines and their new 25-hp "Z" engine.

Circle 156 on free information card

For free information please **WRITE** the number under the listing on the Reader Service Card.

Seeders

The Cyclone Seeder Co., Urbana, IN 46990

Booth 1024

Paul Speicher, Sales Manager, and Bill Gibbons, Assistant Sales Manager, will be in the booth exhibiting Cyclone's broadcast seeders.

Circle 157 on free information card

Vicon Farm Machinery, P.O. Box 6313, 3714 Cook Blvd., Chesapeake, VA 23323

Booth 2128

Nick Valkenburg will be in the booth exhibiting Vicon's fertilizer spreader/seeder.

Circle 158 on free information card

Golf cars



Club Car, Inc., P.O. Box 4658, 4152 Washington Rd., Augusta, GA 30907

Booths 2618, 2620, 2717, 2719

Sam Mays, Billy Dolan, Dick Lemmon, Mark McClure, George Inman, Frank Reese, Dick Lemnitzer, and Bill Wooten will be in the booths exhibiting their golf cars, industrial four-passenger vehicle, and industrial utility vehicle.

Circle 159 on free information card

Davis 500, Inc., P.O. Box 1847, Greenville, SC 29602

Booths 2405, 2407

Doug Berry and Mike Brunk will be in the booths exhibiting Davis' 4wheel golf car.

Circle 160 on free information card



Booth 625, 627

Steve O'Neill, R.K. Johnson, R.D. Witherspoon, Jack Thomas and Charles Emery will be in the booth exhibiting the new Legend Golf Cars.

Circle 161 on free information card

AMF/Harley Davidson Motor Co., 3700 West Juneau Ave., Milwaukee, WI 53201

Booth 1219

Harley-Davidson personnel will be in the booth exhibiting their golf cars.

See advertisement, page 55.

Circle 115 on free information card

Continues on page 22

Trade show floor plan



How Roundup[®] helped Jim Siegfried renovate this fairway in days, without closing it for one minute.



Take a good look at this goodlooking fairway.

Last fall, Jim Siegfried found a way to clean it up, without tearing it up —at the height of his club's busy season. With Roundup^{*} herbicide by Monsanto.

Jim is the Greens Superintendent at Losantiville Country Club, Cincinnati, where bermudagrass had become a serious problem on the 18th fairway. To control it, Jim applied Roundup once – while the weeds were still actively growing – right at the start of the Labor Day weekend.

"That's really 'prime time' here," Jim told us. "But after we applied Roundup, we kept the fairway in play the whole weekend, and after. The members played right over it, with no problem."

Since Roundup has <u>no</u> residual soil activity, and won't wash or leach out of treated areas to injure desirable plants, Jim simply took normal precautions against spray drift—and didn't worry about damaging desirable vegetation along the fairway.

Even better, he was able to reseed right into the dying bermudagrass only 7 days after applying Roundup without loss of playing time or inconvenience to the membership.

Reinfestation won't be a big problem for Jim, either. He knows that Roundup destroyed the rhizomes of the treated weeds, helping prevent their regrowth.

Jim thinks he'll use Roundup again this year—and apparently some club members hope so, too. "As soon as they saw how good this fairway looks, some of the members started asking when I'm going to do the same for #10, where we have some more bermuda. I'll probably tackle that with Roundup this fall."

If controlling many tough emerged weeds and grasses is a problem for you, see your local Monsanto representative or chemical dealer soon for your supply of Roundup.

Roundup. It worked for Jim Siegfried. It can work for you.



There's never been a herbicide like this before. Circle 124 on free information card

