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 back-fill blade. Plus 4-wheel drive that allows optimum maneuverability.

Don't waste time with 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.
equipment.

"I'd never run 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 salesperson 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 impractical, 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.

"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 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."

Tom Mascaro: "As far as I'm concerned, I don't think the superintendent should become a mechanic. He's got enough problems and 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-by-step 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. Its 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

SMITHCO WAYNE, PENNSYLVANIA 19087

Circle 123 on free information card
spend three hundred dollars, they
have to call up all the board together
and it's a big decision. That's a prob-
lem."

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 get-
ting 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 superin-
tendent 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 agri-
cultural busi-
ness in that a
lot of our ma-
chines are run-
ing 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 company
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 purchas-
ing non-current parts away from the
manufacturers and put it into our cen-
tral warehouse operation and parts
still has their own purchasing opera-
tion. 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 af-
ford 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."
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 no-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!

**Model 84 Triplex**

Deliberately designed to provide its own power source which allows unit to be pulled by almost any size tractor with or without PTO. Five, free-floating, powered reels cut an 11½ foot swath. Wings fold to 68".

**68" Triplex**

Low center of gravity and wide track provide great maneuverability. Mows a 68-inch swath at speeds up to 4 mph… that’s half an acre in 15 minutes. Wings fold to 37½".
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 IN PERSONAL RESOURCES — Gerald L. Faubel (Room 121-23 & 125-27)
1:30 a.m. - 2:00 p.m.
Managing Your Family Finances — Nick Milosevich
2:00 p.m. - 2:30 p.m.
Handling Stress — Dr. Carl D. Koutskey
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
1:30 p.m. - 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
1:00 p.m. - 4:00 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 Bermudagrass — Dr. Richard E. Schmidt
3:00 p.m. - 3:30 p.m.
Granular Pesticide Products From Historical & Mode of Action Perspectives — Dr. Milton E. Kageyama
3:30 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
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

Dedoes Industries, Inc., 1060 W. West Maple Rd., Walled Lake, MI 48086
Booths 2418, 2420, 2422, 2517, 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 Hydraulic 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 four-cycle 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 Eisenraut, 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, air-cooled 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 7:30-8:30 a.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.

Seeds

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 2616, 2620, 2717, 2719
Sam Mays, Billy Dolan, Dick Lemmon, Mark McClure, George Inman, Frank Reese, Dick Lemmitzer, 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 29601
Booths 2405, 2407
Doug Berry and Mike Brunk will be in the booths exhibiting Davis' 4-wheel golf car.
Circle 160 on free information card

Eagle Vehicles, Inc., 8181 Hoyle Ave., Dallas, TX
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 Junius 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 good-looking 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 no 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.

ALWAYS READ AND FOLLOW THE LABEL DIRECTIONS FOR ROUNDUP.
Roundup® is a registered trademark of the Monsanto Company. © Monsanto Company, 1975.
For more information, contact Monsanto Agricultural Products Company.
800 North Lindbergh Blvd., Cape St. Louis, Mo. 63166 (314) 694-1000 - RF-OID

There’s never been a herbicide like this before.