

Introducing the Suzuki Rover.

It helps you patrol, maintain, supervise, inspect, deliver, retrieve, and save money.

It's the all-pro of golf maintenance vehicles.

Because it'll do almost anything you need to maintain any kind of course—municipal or private.

And it'll probably do it faster, easier and cheaper than any other golf vehicle. The Rover has two 10" wide high-flotation tires. Instead of the usual hard pneumatic three. So it rides over ground so softly it barely leaves a mark—about the same as a footprint.

Yet those same tires make the

Rover a very tough machine. They take it through any kind of rough: over sand, through brush, over rocks, through water. Even snow (if you have some hardy types who play in winter).

It's fast when you need speed (like when you've got to deliver a message on the back nine). And it's slow when you've got to retrieve.

If you want to patrol at night, there's a big sealed beam headlight.

You can maneuver the Rover as easy as you steer a bicycle. It's

tremendously reliable and stable. It's extremely smooth and effortless to handle and ride. It's very quiet. And it gets about 35 miles on a quarter's worth of gasoline.

Best of all, the Rover will not only save you a lot on maintenance, it'll save a lot on initial price too. Because it only costs \$435*.

It's our below-par price.

You can find the Suzuki dealer nearest you in the yellow pages **Suzuki: built to take on the country.**

*Manufacturer's suggested retail. Any dealer delivery/preparation charges-if any-additional.



U. S. Suzuki Motor Corp., 13767 Freeway Dr., Dept. 8030, Santa Fe Springs, CA 90670

For more information circle number 273 on card



Cushman Motors announces Turf Care System, a single-source package of vehicles and equipment. The system includes a top dresser to apply dry or moist materials to golf course greens, a greens spiker with a 57-inch swath, more towing power from the Turf Minute-Miser and a new low-bed utility trailer. Spraying equipment, a spreader, manual or hydraulic dumping and other accessories are also available. The Minute-Miser offers fast transportation for maintenance and supervisory personnel and is able to pull a load of 250 pounds. Circle No. 109 on reader service card

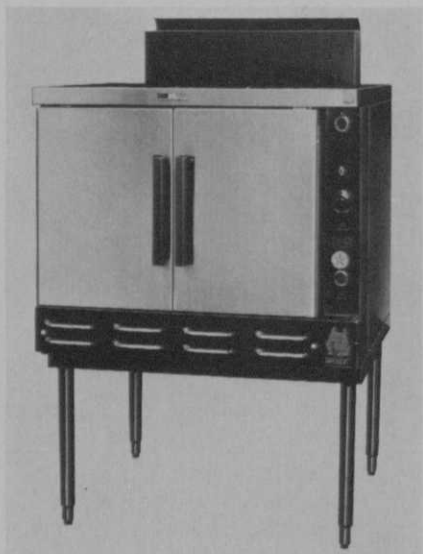


JI Case Company, Outdoor Power Equipment Div., announces two new compact tractor/loaders. The 14hp Model 644 and the 16½hp Model 646 both offer a 6.2-cubic foot bucket with a 600-pound lift capacity. The new loaders will load, scrape, grade, back-fill, clear snow, drag, dig, level and perform many other jobs suited to front end loaders. In addition, both units will accom-

modate 44- or 48-inch mowers for commercial use. Circle No. 110 on reader service card



Porolon Products, Inc., features its new 800 series of stack chairs which provides strong, portable seating. The line offers upholstered, blow-molded stack chairs in a variety of frames and colors. The frame and legs resist scratching and chipping. The foam-cushioned seats and backs are washable. An optional dolly of heavy steel with three-inch casters effortlessly rolls compactly stacked chairs. Circle No. 111 on reader service card



Wolf Range Company introduces the low-cost Crusader Convection Oven. The unit is said to run the kitchen gamut—defrosting, reheating, reconstituting and primary cooking—with ease and efficiency. The single deck model features low

working height, stainless steel double cabinet or single chef doors, manual switch for fan operation and a dynamically-balanced blower for circulating hot air evenly throughout the shelves. The oven interior is fully-porcelainized and stainless steel and continuous cleaning are also available. Circle No. 112 on reader service card



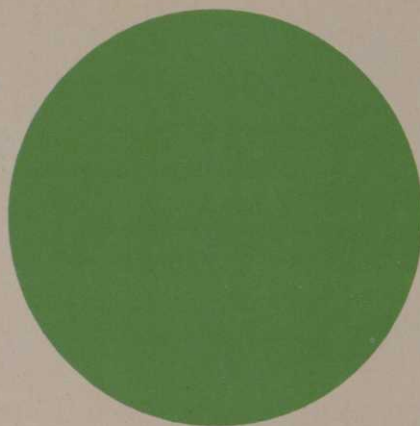
Fox Valley Marking Systems announces the new Easy Marker, a paint marker. The device is portable, non-toxic to plants and is available in yellow, silver or florescent red. The Easy Marker can be used for marking tree and shrub placement, laying out sprinkler systems, drain tiles, outlining sand traps, edging or for marking ground under repair. Circle No. 113 on reader service card



Portion-Trol Systems announces the new Count-N-Measure Liquor Pourer. The pourer is designed to serve a pre-set shot every time. A hidden counter tells how many drinks were served. Circle No. 114 on reader service card

IBDU™

(isobutylidene diurea)



It's about time!

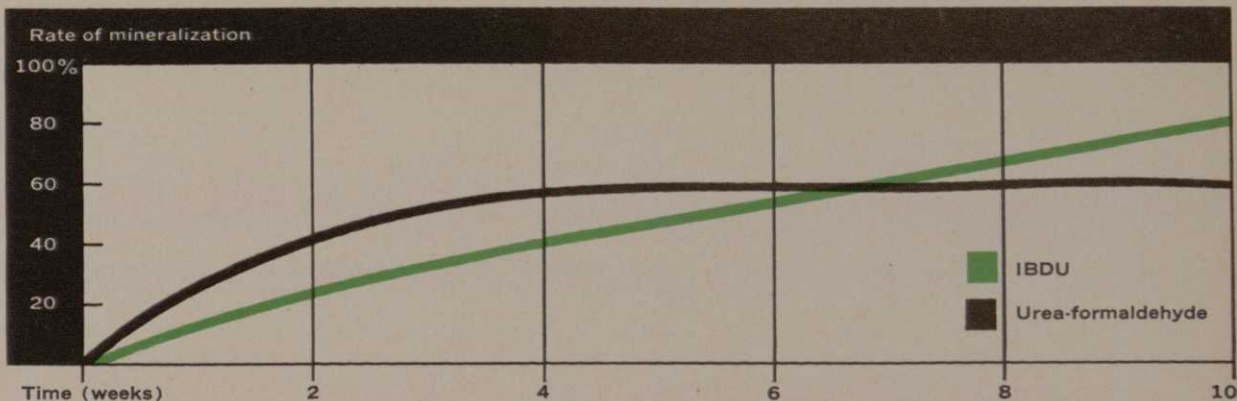
IT'S ABOUT TIME for a different concept in nitrogen—IBDU. It can be used alone, or in combination with other nitrogens, for a complete range of nitrogen release rates.

IT'S ABOUT TIME because IBDU is slow release. IBDU is activated by hydrolysis (water), so it isn't affected by sudden changes in temperature or bacterial activity. Use IBDU and avoid the sudden flush of growth that occurs when temperature or humidity rise, and cut down on the chance of disease infestation. And it won't leach out when the spring rains come.

IT'S ABOUT TIME because IBDU will keep on feeding after the other products have stopped. IBDU releases twice the slow nitrogen of urea-formaldehydes, and will keep feeding at lower temperatures. IBDU will help keep your turf green longer in the fall—and green up sooner in the spring.

IT'S ABOUT TIME because you can safely apply IBDU at higher rates than normal with more even release—and that means fewer applications. Fewer applications mean time saved and time means money.

Patterns showing rates of mineralization of IBDU and urea-formaldehyde.



IT'S ABOUT TIME we got acquainted. Send the coupon, we'll send a sample of IBDU to try on your turf. Seeing is believing.

SWIFT AGRICULTURAL CHEMICAL CORPORATION
111 West Jackson Blvd. Chicago, Illinois 60604

Please send me a sample of IBDU. Seeing is believing.

Name _____

Firm _____

Address _____

City _____ State _____

Zip Code: _____

Dept. IG.

par ex®
PROFESSIONAL PRODUCTS



Wherever golf is played...

Par Aide matched furniture makes the big difference in appearance and comfort. End frames are cast of high grade non-corrosive aluminum alloy. Back and seat slats are grade "A" treated redwood. Wide choice of end frame colors. High impact plastic covering on boards is optional.



FOR COMPLETE LINE OF PAR AIDE GREENS
AND TEES EQUIPMENT—WRITE FOR CATALOG

PAR AIDE PRODUCTS COMPANY
296 NORTH PASCAL STREET • ST. PAUL, MINN. 55104

TURFGRASS MANAGEMENT

Answers to your questions about

SMALL/MEDIUM-AREA AERIFYING



Aerifiers seem to be either too big to use in restricted areas or too small to be of any practical use. Doesn't someone make a practical-size Aerifier?

Yes, someone does. The Hahn/West Point Aeri-Boy aerifies a four-foot swath—big enough to be practical, small enough to be maneuverable—then can be easily flipped over onto wheels for road towing. (Easily done by one man.) It also converts, by changing attachments on the discs, to a spiker and to a slicer.

The Hahn/West Point Aeri-Boy sounds like an ideal small-area Aerifier.® Does Hahn make a larger model for fairways?

Yes, there are two ways you can use Hahn's patented "cultivating action" on fairways. Several six-foot-wide Aerifier models are available... but many superintendents are investing in three Aeri-Boys and the Hahn triplex hitch, which connects the three units to provide 12' of aerifying. That way they can do the large areas and still have the versatility of three individual Aeri-Boys to work on greens and small areas too. It's an excellent way to stretch your turf maintenance dollar.

Is the Aeri-Boy really a true Aerifier, or just another spiker that's being called an Aerifier?

The Aeri-Boy is definitely a true Aerifier. "Aerifier" is not a generic term, but is a trademark registered by Hahn to describe a process for soil cultivation which they invented. A spiker simply punches holes in the turf. An Aerifier uses Hahn-designed "spoons" to cultivate turf by removing soil cores, thereby creating places into which surrounding soil can expand. Aerifying also gives grass roots areas into which to grow, and permits quick penetration of water, air, and nutrients.

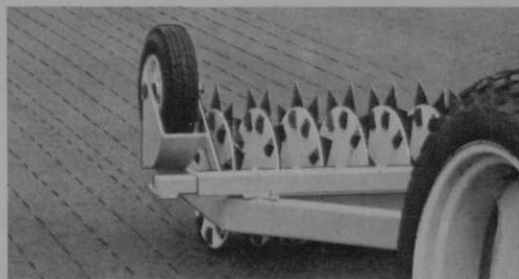
The other day I heard someone refer to the Hahn Aeri-Boy as "unique." What's "unique" about it?

The Aeri-Boy is the first, and the only, Aerifier to fill the gap between the big fairway units and the smaller residential units, which are really too small to even be practical for golf course work. It requires a small investment, pulls easily, and is ideal for cultivating hard-to-get-at places—around trees, small collars between trap and green, tees, approaches, etc.

Can the Hahn/West Point Aeri-Boy be converted to spiking and slicing blades, like the Hahn-West Point Grasslan and TM tractor-mounted models?

Yes, quite easily. And the Aeri-Boy will not only accommodate spiking and slicing blades, but will also handle all size spoons and Flexi-press springs.

We feel the Aeri-Boy with double-point diamond blades is an ideal unit for greens slicing.



This ad is one in a series offered as an information service by Hahn-West Point, Evansville, Indiana, to serve as a guide in managing golf courses with minimal interference to the golfer. Dealer and distributor inquiries are welcome, and will be promptly answered.

HAHN 
WEST POINT
DIVISION OF HAHN, INC.

Dept. G-372 • 1625 N. Garvin • Evansville, Indiana 47717

GRAU *from page 21*

lars, approaches and fairways. There is quite a bit of encroachment of bermuda into the greens. Is there a chemical that will kill the bermuda but not the bent? (North Carolina)

A—We know of no chemical that will kill bermuda and not harm the bent, unless it would be Tupersan. It has been reported to be quite damaging to bermuda. I doubt that Tupersan has been recommended by the manufacturer for this purpose, so treat it experimentally at first. The other approach is to be extra diligent

about edging and picking the runners out by hand.

Q—*We would appreciate having the answers to several questions about Penncross bent. At what height should it be cut from 1) the playing viewpoint and 2) the greenkeeping angle? Under normal conditions, how often should it be cut? What feeding program is considered to be adequate?* (Iowa)

A—Best height of cut for greens is three-sixteenth inch; for tees one-fourth inch, and for fairways one-half

inch. Turfgrasses must be managed to suit the players—management is forced to adjust.

Best frequency of cut is daily on greens, three to four times a week for tees and fairways. By keeping tees and fairways on the dry side mowings can be reduced.

Guidelines on feeding include 1) maintain pH close to 7.0; 2) keep phosphorus low; 3) use equal quantities of nitrogen and potash (preferably slow-release nitrogen and sulphate of potash). Don't over-feed with nitrogen.

Q—*We have sent you specimens of some cup-shaped bodies that occurred in one of our putting greens. Included is a plug of turf. The cups seem to be filled with seeds. Can you help us identify the invaders and suggest a cure?* (West Virginia)

A—The specimens went to New York before coming to College Park. They arrived three weeks later in good shape because you packaged them so well.

The cup-shaped bodies are fairy-ring producing fungi belonging to the *Pezziales* family. What appears to be seeds are spore masses.

Fungi thrive on acid, low-nitrogen media. My suggestion is to shrivel them with repeated sprays of hydrated lime at one pound to 1,000 square feet. To supply nitrogen at the same time I've had excellent success with powdered ureaform at two pounds per thousand added to the hydrated lime in the spray tank. Remove all screws to avoid clogging. Spray in the evening and don't rinse it in until morning.

Q—*We have heard some discussion of contract maintenance for golf courses. No one seems to know much about it and we would like to know more. Can you enlighten us?* (Texas)

A—I am not an expert on contract maintenance, but I have encountered it in one form or another at various times. In South Africa a number of golf courses contract their weed control to a company that is staffed by experts. It relieves the superintendent of many decisions and headaches. The company guarantees the work. It looked good to me.

We have contract maintenance with us on the West Coast where it has been successful for many years. I

continued on page 98



Myers TurfLine
Sprayer TL10ETMG

The 3-minute Greens Sprayer

In 3 minutes flat, it covers a green evenly and completely — without leaving a trace. With a hand gun, the same job would require at least 12 minutes. The Myers TurfLine Sprayer's 15' boom not only saves time and labor but provides more even distribution with less pesticide waste than any other spray method now on the market. And its smooth, gentle Terra Tires make less of an impression than a single golfer with spiked shoes. Adjustable fast hitch attaches to any utility cart or lawn or turf tractor. Why don't you see for yourself what we're talking about. Call us...we'll be glad to arrange a demonstration for you.

THE F. E. MYERS & BRO. CO. **McNEIL**
400 ORANGE STREET • ASHLAND, OHIO 44805 CORPORATION

Myers. The Name That Works For You.

For more information circle number 188 on card



Get the pipe that eliminates winter rules ...in the summer.

The strength and versatility of cast iron pipe can easily become your most valuable asset.

Even if yours is a four-season course, rugged cast iron pipe can handle the hazards. Such as water hammer, higher and higher pressures, heavily laden maintenance vehicles.

And if you're planning a revamped look for your course, cast iron pipe makes it easy. Dig it up. Move it around. Reuse it. Expand the system to suit your new layout. Add sprinklers when and where you want them—cast iron pipe takes quick, clean taps with strip-proof threads...and is designed to take water hammer haz-

ards. As for long life, would you settle for a century of service? That's how long corrosion-resistant cast iron pipe has been reliably delivering water to over a hundred cities and towns nationwide.

Get set for season after season of worry-free watering. Install cast iron pipe.

Write for your free copy of Booklet A-27, "Golf Course Irrigation." It's packed with design and installation tips and helpful planning guidance.



CAST IRON PIPE

CAST IRON PIPE RESEARCH ASSOCIATION • Executive Plaza East
1211 West 22nd Street • Oak Brook, Illinois 60521



An association of quality producers dedicated to highest pipe standards through a program of continuing research
THE MARK OF PIPE THAT HAS SERVED OVER 100 YEARS IN OVER 100 CITIES

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For more information circle number 199 on card

GRAU *from page 96*

do not know the details of how the business is run but reports of performance is good.

Some older experienced superintendents look after more than one course. This in effect is a form of contract maintenance. They assume a certain responsibility for which they are paid.

Contract maintenance could be conducted by a responsible corporation which would assume full responsibility for year-around grooming. The club would meet contract payments, but would have no further requirement. Performance would be bonded. The program would be conducted by certified superintendents who have proved their ability by past performance. I can visualize an enhanced status for qualified superintendents, together with an improvement in pay scale, retirement and fringe benefits. A profit-oriented corporation would be obliged to maintain high standards in every department.

It would appear that more efficient large-scale buying (or leasing) would bring about savings in equipment, fertilizers, chemicals and other items.

There must be some disadvantages in the idea of contract maintenance but so far no one has pointed them out to me nor have I discovered them.

Q—*An official at our club engaged a private independent soil testing laboratory to sample and test the soils on our new course which isn't built yet. We are quite unfamiliar with their figures and their terminology. They reported the quantity of nitrogen in the soil and used that to calculate the N needed to establish the turf. We think that their recommendations are too low. We enclose a copy of the test results. Your comments?* (Virginia)

A—Nor am I familiar with their method of reporting. It seems that they are farm-oriented because their explanations revolve around manure, legumes-plowed-down and crop residue. I must agree that the nitrogen recommendations for establishment are too low. Ureaform was recommended but the quantity was too small to be significant.

My suggestion is to contact your state extension turf specialist. □

FIRST AID *from page 65*

Samaritan Law. This law gives laymen (club officials) and professionals (doctors, policemen and firemen) the right to render first aid without fear of legal prosecution," he says. "It has been discovered in some states, that physicians would pass the scene of an accident because of fear of malpractice suits," Dr. Granzen says. "The New York law protects the 'good samaritan' even if he does things totally wrong. Club officials should check with lawyer-members to see if their states have such a law. Clubs are more liable to have lawsuits brought against them if they are not prepared to handle an emergency," says Dr. Granzen. "In some cases, suits have charged clubs with negligence, because they did not anticipate strokes and have the emergency equipment available."

Both Dr. Granzen and O'Donnell agree that good first-aid procedures are really common sense. "There can be only one boss at the scene of an accident directing traffic," Granzen says, "and he must keep the crowd away from the victim, administer first aid and keep the victim from panicking." "One of the major concerns of older people," O'Donnell adds, "is the reassurance that they are going to be okay. Their primary concern, however, is generally over their spouse."

Death or serious injury on the golf course because a club was not prepared can have a detrimental effect on the attitudes of the membership. They could always wonder what would happen if they were next. Besides causing sleepless nights for the unprepared manager, professional or superintendent, it may also cost him his job.

Saving a life can take a few dollars worth of investment in equipment and a few hours investment in education. But you can't put a price tag on the results if you're caught unprepared. First aid: It's equipment and knowledge you need, but hope you will never have to use. □

Correction

Merit Associates Inc., manufacturer of the Sight-Line Putter, was erroneously listed in our PGA Merchandise Show preview (GOLFDOM, January, p. 71) as Merritt Assn., Inc. The company's address is 224 South St., Freehold, N.J. 07728.

NEWS *from page 75*

ment. "We were just out of our line with turf maintenance equipment," he says. "Warren's does not expect to continue in the turf maintenance area, but will instead increase its concentration of distribution of its line of turfgrasses."

Jack Hahn, executive vice president of Hahn, said that the agreement with Ransomes would be a milestone for both companies. "The position of Hahn West Point distributors in this country will be greatly strengthened through the addition of a wider range of specialized grass cutting equipment. Hahn's gross sales last year were \$16 million," Hahn says. "Ransomes sales were \$31 million. We expect the agreement to increase Hahn sales by between 10 to 20 per cent initially. We will complement each other very well," Hahn says. "Ransomes is involved in walk behind green mowers and has gang mowers. Hahn has riding mowers, verti-cutters and aerators."

As part of the agreement, Ransomes has made a convertible loan of a substantial amount to Hahn, thus ensuring a long-term relationship between the two companies.

Credle changes name to Midwest Toro
Credle Company, a distributor for The Toro Company, has changed its name to **Midwest Toro**.

Midwest Toro is the distributor for Toro's three major product lines—power mowers, turf equipment for golf courses, parks, schools and cemeteries, and Moist O'Matic underground lawn sprinkler equipment. Midwest Toro is also the distributor for over 50 other turf equipment product lines.

Japanese ball hits pro-only market

The first Japanese-manufactured golf ball for pro shops only has been announced by Jiro Yamamoto, president of **Rainbow Sales Company** of Gardena, Calif. The **Skyway** golf ball is manufactured by Bridgestone Tire Company, Ltd., of Japan.

The ball is coated with a new, thick chemical (polyurethane) for extra durability. The cover is abrasion and moisture proof and has a liquid center. The ball, approved and tested by the United States Golf Assn., is being offered in pro shops in 80, 90, and 100 compression.

Hahn-Ransomes Pull-Behind Gang Units

Known worldwide as the true professional's gang reel, the Ransomes gang is now sold by Hahn-Ransomes and is backed by the nationwide Hahn service organization. Specify the Sportcutter gang for a perfect finish on fairways, or the Magna unit for semi-rough areas. Both quick-coupling units handle grass to 8" high, and can be ganged in groups of three, five, seven, or nine. Three-unit gangs cut a swath 7' wide and are mounted on a standard 3-point tractor hitch.

NEW heavy rear rolls for even faster, smoother cutting.

Impact-resistant cutting reels.

Universal framework eliminates buildup of grass cuttings.

Hardened steel gears for positive drive.

Quickly removable reel for rapid-mid-season grinding.

Width of cut from 2 ft. 6 in. to 20 ft. 6 in.

Hardened pawl and ratchet driven differential.

Easy turning without wheel skid.

Positive gear drive from both ends of the reel.

Separate clutches are fitted to each drive allowing disengagement before transportation.

For further information on what the new name Hahn-Ransomes can mean to you and your course, just write:



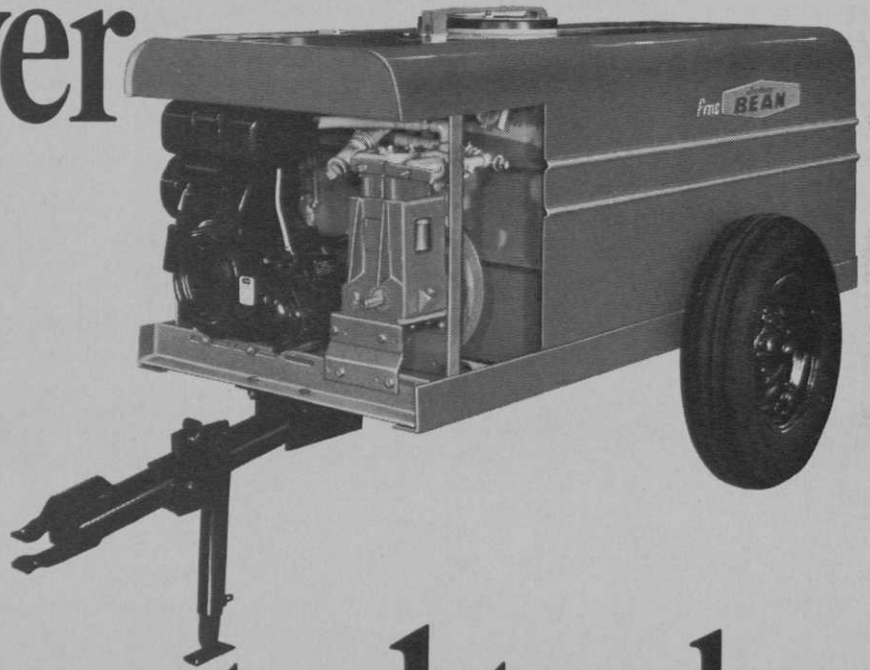
1625 N. Garvin Street, Evansville, Indiana 47717



more dependable than ever

Bean- with

stainless steel tanks



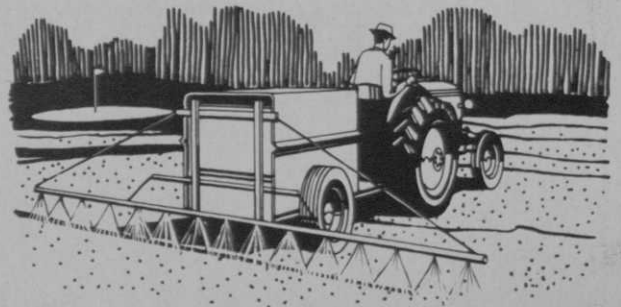
No matter what your spraying job is, John Bean all-purpose hydraulic sprayers have been proven low and high-pressure performers for many years. Now available with stainless steel tanks on all models. You can be confident of getting the most for your sprayer dollar with Bean.



POWER SPRAYING EQUIPMENT
JOHN BEAN
DIVISION

Jonesboro, Ark.—Ocoee, Fla.—San Jose, Calif.

FOR GOLF COURSES *Bean sprayers are available in models that incorporate; high-flotation axles and wheels, booms to 28', 150-500 gal. tanks, trailer or skid-mounted. Plus labor-saving air-sprayers for complete coverage.*



For more information circle number 210 on card