poa annua in greens. He makes two perpendicular passes with the thatching reels, goes once over with the greens mower, then vacuums the thatch, stolons and poa seeds with a Yard-Vac, manufactured in Fresno by D & M Manufacturing. On the average a 6,000-square-foot green will yield about ¼ yard of debris with this treatment.

"If you can eliminate the seed, you can eliminate the plant," Shipman said. Of course, he hasn’t eliminated the seeds, but he believes he has cut down the percentage of poa substantially. He hopes it will continue to decline from year to year.

His normal greens application is a 4-pound-per-1,000 feet feeding of Plant Gro oxidizer, a 21-7-14 mixture by Sierra Chemical Company of Milpitas, Calif. He considers this a "touchy" application, which might cause burning if applied in direct sun. So he puts it on late in the afternoon or evening, and irrigates it in during the night. Once a year, usually late in May, the Bermuda fairways receive an application of granular 24-24-0, also by Plant Gro.

Fairways were seeded in Bermuda which still dominates, but co-exists with a mixture of native grasses. Shipman and Knott watch the weather forecasts closely when frost threatens in the late fall. "Normally I cut my fairways at 1 inch," Shipman said, "but we try to let them reach about 1½ inches before the frost. When the grass goes dormant at that length we have a nice mat all winter, and it gets a little slick so irons slip under the ball well." Even though the dormant mat takes on a light tan color after the frost, Knott says he prefers it to seeding with rye, and so do the players.

Shipman manages his spray program by using two 200-gallon spray rigs, a 10 or 12-year old John Bean and a Hardie, wood-slat orchard sprayer that could be as much as 50 years old. This antique was recently outfitted with a Hy-pro pump. Like some of his other equipment, excellent maintenance makes it seem ageless. He uses the Hardie exclusively for herbicides, and the bean for fungicides, reducing chances for cross contamination.

Because he is his own mechanic Shipman’s appreciation of good equipment and maintenance is as keen as Knott’s. He applauds the strong move to hydrostatics and hydraulics in today’s turf care equipment. "It makes it a little tougher on the mechanic, who must understand hydraulics," he said, "but performance has been improved a great deal."

Shipman particularly likes the constant reel speed of his Ransomes 7-gang fairway mower. With one man assigned to cut fairways eight hours a day, five days a week, he also appreciates its reliability. His 15-year-old, 7-gang Jacobsen is used as a back-up fairway mower.

His Jacobsen greens mower narrowly missed being cited as one of the oldest in operation when the company conducted a search last fall. A 1966 or ’67 model, it has since been retired.

Greens mowers include two three-gang Toro Greensmasters and three walking greensmasters. He uses a National Triplex for mowing aprons and tees.

Another labor saver Shipman has come to rely on heavily is the nylon-line weeder. He has two Green Machines, supplied by HMC in Torrance, Calif. With 4,000 trees at Fig Garden, and grass growing right up to the trunks of most, the weeders are in constant use. Each weighs only six pounds, and workers can keep going longer with the lighter weights than with heavier units used previously.

Two blowers for leaves and debris, and three Trucksters and one dump truck by Cushman are part of the power equipment inventory. So are a Dedoes aerifier, a fairway aerifier, an Infield Pro raker, a Lely spreader, a slicer and sod cutter.

Shipman likes the arrangement he has that takes budgeting and most record keeping off his back. "If I need a piece of equipment, Gordon and I talk about it, and if he agrees, we buy it." That’s an attitude that leads to having plenty of equipment on hand.

The minimum maintenance characteristics of the course are so inconspicuous that golfers seldom notice. They just enjoy the sporty good condition of Fig Garden.

But Knott, Shipman and the bookkeeper see the result of maintenance-saving design every month — on the bottom line of the balance sheet. And that’s where it counts.
The tough machine that's gentle on greens.

Whatever your course can dish out, the Ryan Ren-O-Thin™ IV can handle it. It's engineered by Ryan to give you years of low-maintenance, high-performance service. Built with heavy-duty components, like a 7-hp engine and dual 4L-section belt drive. Designed for constant, professional use. The spring-loaded clutch control makes handling easy. A special chassis baffle minimizes recirculation, while micro-screw adjustment and four interchangeable reels let you dethatch everything from fine greens to the thickest areas.

The Ren-O-Thin IV also features a reversible handlebar for upmilling.

Talk to your local Ryan dealer today about the power rake that can conquer your course: the Ryan Ren-O-Thin IV.

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Circle 111 on free information card

Products

**18-hp engine**

A new 18 hp twin-cylinder aluminum alloy engine, with 42.33 cu in (694 cc) displacement, has been added to the Briggs & Stratton line and will be introduced at the National Hardware Show, Chicago, August 13-16. Available in both horizontal crankshaft and vertical crankshaft versions, the engine will be equipped with electric starter and dual-circuit alternator, stellite exhaust valves and seats, valve rotators and seals, ball bearing, integral fuel pump, and dual element air cleaner. A horizontal crankshaft industrial/commercial model with standard dual ball bearings and optional cast iron cylinder sleeve will also be offered.

Circle 201 on free information card

**Low-pressure filter**

A line of low pressure filters/strainers in ¾“ and 1“ sizes, designed for low pressure water and chemical handling systems is available from Zemarc Corporation, Los Angeles. Models ZF-12 (¾“ filter) and ZF-30 (1“ filter) can be used on the suction side of the pump as line strainers. They also can be used on the discharge side of the pump up to their rated pressure.

Applications include reverse osmosis and water purification systems, water sprinkler systems, fertilizer pumping systems, food and chemical processing systems, fire control and sanitation lines, fluid spray and sea water handling systems. Color coded polyester and polyester monofil weave filter elements of various micron ratings provide a high degree of filtration for Models ZF-12 and ZF-30. Effective filter area is 5 in.² for the ¾“ filter and 8 in.² for the 1“ filter.

Circle 202 on free information card

**Trash receptacle**

Display your club logo prominently on this extremely durable, 36-gallon capacity trash receptacle. Handsome styling with a baked-on enamel finish over heavy galvanized steel that promises to stand up to the most adverse weather conditions. Your special colors with a personalized design can be ordered inexpensively.

Circle 203 on free information card

**Trencher**

A new trencher has just been introduced by the Seaman Company. Called the Parsons T-8, it's the only handlebar trencher in its class with hydraulic ground drive. It is capable of trenching to a depth of up to 30” with infinitely variable trenching speeds from 0 to 15 FPM. Differential action may be manually locked out.
for positive traction. Forward, reverse and free wheel are also infinitely variable from 0 to 40 FPM.

Circle 204 on free information card

Small parts bins

A line of durable fiberboard shelf bins for storage and inventory of small parts is now available from Economu Carton Company. Called Econo-Bins, the fiberboard units come in nine different size styles to handle any small part storage need. Sizes range from 2 in. wide x 12 in. deep x 4 1/2 in. high up to 12-in. wide x 12-in. deep x 4V2-in. high. The Econo-Bins are designed to fit neatly and compactly into Econo-Bin steel storage racks. Up to 100 Econo-Bins can be stored in an Econo-Bin rack 36-in. wide x 12-in. deep x 75-in. high. Shipped flat, the one-piece Econo-Bins take minimum storage space until needed. They are easily formed with the aid of self-locking tabs.

Circle 205 on free information card

Metering pump

Jaeco's Fert-i-gator Injector/Metering Pumps now offer new features. They are equipped with a new patented safety mounting bracket that minimizes damage caused by belt failure. In addition they have a patented gear assembly that can be quickly adjusted to compensate for possible wear. Fert-i-gator Pumps provide metering of fertilizers, herbicides, insecticides and fumigants directly into the irrigation water. Their unique design eliminates base plate flexing which eliminates wear and maintenance.

Other features include Jaeco's unique Purge Port that provides purging access to the displacement chamber without breaking pipe connection. It can be used to observe pumping action or to bleed air. The drive on a Fert-i-gator Pump cannot fail, even if stalled. JAECOGARDS are available to protect the pump against dust and other material as well as to provide protection for personnel.

Jaeco liquid ends have double-ball check valves on both suction and discharge sides of the displacement chamber.

Circle 206 on free information card

18-hole Executive Golf Course

Public course in Monmouth County available at special price. Located in high traffic area, adjacent to 1800-unit adult condominium. Property restricted to golf course. Maintenance building, maintenance equipment, pro shop and future club house site included. Excellent opportunity for owner-operator. $495,000.

Contact:
John A. Strama, 10 Highway 35, Red Bank, NJ 07701; (201) 747-7800.

Circle 103 on free information card

“Satoh hugs the hillside like a mountain goat. And that satisfies me.”

Front tire: 9.5L10
Rear tire: 21.5L16.1

Satoh satisfaction starts with the Stallion Ground Hugger's dependable, smooth-running 38hp water-cooled Diesel engine. With nine forward speeds (three reverse) and dual-speed live PTO (540 and 1,000 rpm), the cost-efficient Stallion Ground Hugger is ideal for hilly terrain uses such as municipal park maintenance and golf course grooming. And its standard power steering gives you effortless maneuverability.

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Circle 125 on free information card

Product literature

Commercial turf equipment
An 8-page, full-color brochure features commercial lawn-turf equipment from Bunton Co. The literature contains information about rotary gang mowers, self-propelled mowers, rotary mowers, and mulching mowers, along with a comparative specifications chart.
Circle 221 on free information card

Course marking products
Fore-Par’s complete line of golf course marking products is pictured in a 12-page buyer’s guide. Included are tee markers, custom signs and plaques, personalized flags, and tee monuments.
Circle 222 on free information card

Irrigation system aid
A method of simplified pressure loss calculations for use by irrigation system designers is explained in a technical pamphlet available from Weathermatic Division, Telco Industries. The pamphlet describes how the y^X function makes it possible for irrigation designers to compute pressure losses.
Circle 223 on free information card

Impact sprinklers
A data sheet features Johns-Manville’s model 5910 Buckner Rocker Gun impact sprinkler for solid set, hand move, side roll, and pivot systems. The literature details benefits and special features of the sprinkler and presents, in table form, information about sprinkler base pressure, flow rate, sprinkler radius, maximum rectangular spacing, and precipitation per hour.
Circle 224 on free information card

Turf care equipment
Ryan professional turf care equipment is showcased in a 16-page catalog from OMC-Lincoln. The catalog contains photographs, illustrations, and specifications of the 14 products in Ryan's 1979 turf maintenance line.
Circle 225 on free information card

Hydraulic tools
Stanley’s line of hydraulic tools is featured in a 24-page, full-color shopper’s guide. Included are product descriptions of chain saws and pruners, submersible pumps, and power sources for hydraulic tools. Tool specifications, accessories, and ordering information are also provided.
Circle 226 on free information card

Derby perennial ryegrass
A full-color brochure detailing seeding rates, fertilization requirements, and other pertinent information about Derby turf-type perennial ryegrass is offered by International Seeds, Inc. The brochure also contains recent test data comparing Derby’s performance against other turf-type ryegrasses.
Circle 227 on free information card

Saws, trimmers, and pumps
A 54-page product catalog is offered by Homelite, manufacturers of pumps, chain saws, trimmers, and brushcutters. Multipurpose saws, blowers, generators, and safety accessories are also featured.
Circle 228 on free information card
GOLF COLLECTION Museum quality for sale. Ceramics, clubs, prints, music, postcards, advertising, memorabilia. Write Mr. Jim Larkin, Cold Spring Dr., Soundbeach, N.Y. 11789.

NORTH CAROLINA — 18 hole golf course, clubhouse, pool, tennis, golf carts, all related maintenance equipment. Call Ferrell Realty or Ray Whitley. 919 723-3641.

FOR SALE: Lindig topsoil shredder, 100 yds./hr. Excellent condition. Lange Topsoil Co., 8750 Lapp Rd., Clarence Center, N.Y. 14032. 716 741-2861.

DRIVING RANGE par three miniature golf, Custom and repair shop. Highway profitable. 20 acres commercially zoned. All equipment included. 216 464-0627.


GOLDFISH: Want to buy or sell a golf course? Our business is exclusively golf courses transactions. We also do golf course market value appraisals. McKay Realty.

GOLF COURSE AND COUNTRY CLUB PROPERTIES. 15553 N. East St. (U.S. 27), Lansing, Mich. 48906.

FOR SALE: 18 hole, par 3 golf course (1200 yds.), club house with snack bar and game room. Large barn, large putting green, irrigation system, 2 ponds and all equipment included. Lights for evening play, plenty of parking. Located in Reinholds, Lancaster County, Pennsylvania. Owner retiring, will consider first mortgage. Hauensee Agency, Inc., 1433 West Main Street, Ephrata, Pa. 17522. 717 733-4158 or 215 267-6251.

NINE HOLE, par three golf course, club house with snack bar, driving range, lights for evening play, three bedroom brick home. Call Eder Agency, Inc. 816 279-6348 or write Eder Agency, Inc., 621 Francis Street, St. Joseph, Missouri 64501.

FOR SALE: 1979 Aquamaster 24/115 vac drinking fountain. The replacement cooler for acres of choice property off I-94. Ideal for expansion. For appointment or additional information write: Green Acres, P.O. Box 567, Watervliet, Michigan 49096.

FOR SALE: 1997 Carlisle Road, York, Pennsylvania 17322. 717 239, Wakefield, Nebraska 68784.

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To pile up some extra profits, fast, rush the coupon for details.

I spoke with Frank Feck, Superintendent at Elyria Country Club, here in Ohio, about the problem of golf cars and golf car paths. Frank did some cost comparative studies about four years or so back, he said, and came to the conclusion that it is a matter of local and what is available. As far as keeping the cars on track, he said you could build them eight feet wide and they'd still drive on the grass.

The best idea I could come up with would be to build a device that senses when the cart has gone off the path and sets off bells, sirens, and perhaps even some loud, canned laughter. Maybe it would make a person self-conscious about driving off the edge. Otherwise, you'd have to put a fence around the entire path system. And then maintain the fence when they run into it.

So what have you done to ease the problem at your course? Send some photos and a description and when I have a good cross section, I'll run a feature on it. Make sure you get in one of the pictures.

We're going to have some excellent research in this magazine, but many times it's the Superintendents themselves that have the most innovative ideas. We will have plenty of space reserved for ideas, opinions, and also some plain old griping. Let's call attention to the problems and get some slaps on the back for solving them. We all can use that.

The GOLF BUSINESS staff is going to be traveling extensively in the weeks to come. Someone told me it would be impossible to see 11,885 golf courses in the first year on the job. I figure maybe two years. If you want to make sure we get to your course to take some pictures and do some talking, send me a card telling me you have a six pack and I'll catch the next plane.

Seriously, we want to listen to as many Superintendents as possible. It doesn't take much to make me get out of the office.

Hope to see you soon. By-the-way, there's a card in the magazine — doesn't even need a stamp.
HOW TO TELL WHEN YOUR GREENS NEED TURFACE® SOIL CONDITIONER.

Poor drainage.
TURFACE® drains many times faster than sand. So even after a heavy downpour, greens with Turface in the soil remain playable.

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TURFACE® soaks up and slowly releases water while letting air penetrate deep to grass roots. Promotes lush, dense growth, even during dry spells.

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No bite.
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