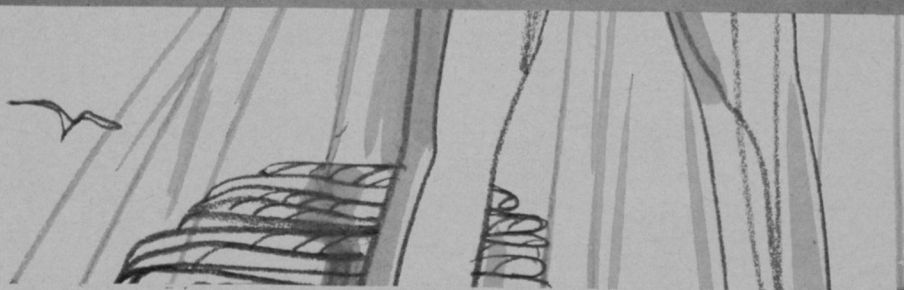
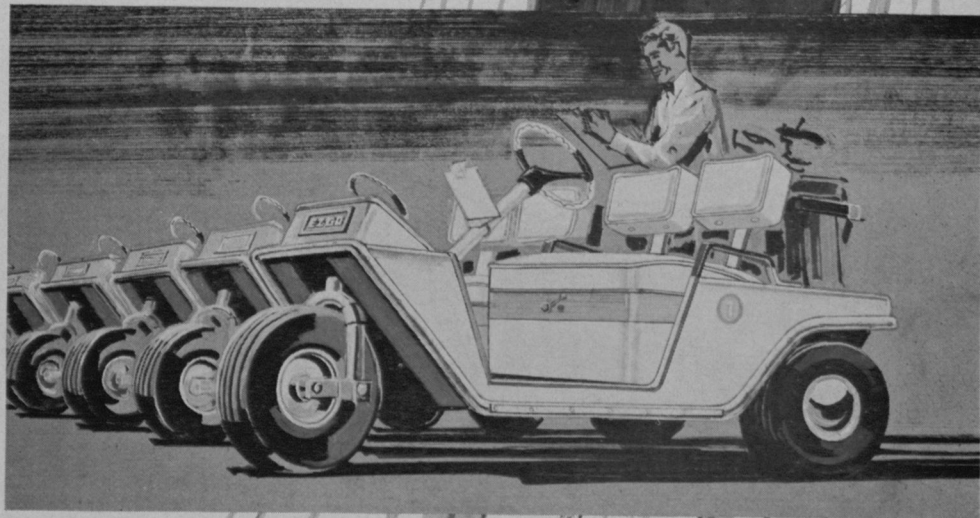


Fleet owners can look ahead

Sink a fortune in a fleet of golf cars—without assurance of the highest possible return on your investment? Unthinkable. But how can you be sure? Look at E-Z-GO's Profit Production Plan. You'll get a long-range, predictable profit picture that assures fast payback and higher returns that keep on returning.

Isn't that where we see eye to eye?

E-Z-GO CAR DIVISION, TEXTRON INC.
Augusta, Georgia 30903



For more information circle number 198 on card

How International helps take the drudgery out of spring work

Consider just a few of the jobs you could zip through in a few weeks with a new International® 2424 turf tractor:

Raking thatch, matted leaves, other debris. Early taming of rough, before it gets beyond you.

Aerating, fertilizing and reseeding, in the same operation. Rolling fairways.

Spraying for early kill of ivy and other broad leaf plants, giving your grasses a chance for quick dominance.

Building new service roads, driveways, walks and terraces. Expanding parking lots. Spreading gravel.

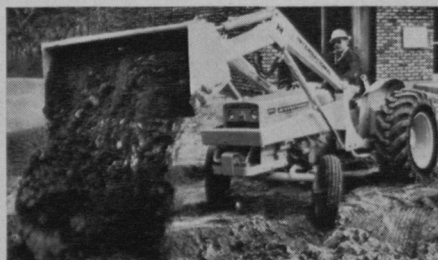
Planting or moving trees. Knocking out dead trees. Grubbing stumps.

Loading out old trap sand. Building

new traps. Cleaning or widening water obstacles.

Relocating tees — shaping, grading, spreading topsoil, seeding.

Just a partial list of spring chores, but the 2424 will put you on top of them



so fast you'll probably want to schedule other projects — the ones you've been putting off for years.

And this is the same tractor which will keep you ahead of your mowing later



on. Quite a combination. 47 hp (43.5 Diesel) in a low profile tractor that out-maneuvers every other tractor in the compact class.

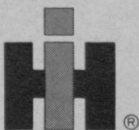
The tightest turning radius ($8\frac{1}{2}'$). The shortest wheel base (70"). Only 51 inches to the top of the hood. And the only tractor in this class with full-time hydrostatic power steering.

A differential lock that feeds power to both rear wheels regardless of traction. No spin-out. No gouging of turf even when you start up from a dead stop on an up-slope. And on side hills it holds the nose straight, prevents down-drifting.

Dual range transmission with 8 forward and 2 reverse speeds (8 and 8 optional for loader work). Live, constant running power take-off. Draft-

sensing 3-point hitch. Live hydraulics. Wide, high-flotation tires. And more. Much more.

You'll just have to get the rest of the story from your IH dealer. Maybe a demonstration? And he'll be glad to talk several different methods of financing. One, two or three years to pay. Deferred payments—up to three a year with no extra charge. Leasing. Leasing with a purchase option. Or *you* suggest something. He wants to make a deal!



INTERNATIONAL HARVESTER COMPANY

The people who bring you the machines that work
For more information circle number 201 on card

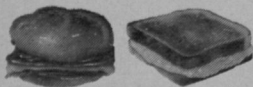


stewart commissaries

wouldn't make
thirty-five different kinds
of hot sandwiches if they
couldn't guarantee member
satisfaction

and insure

**HIGHER PROFITS
LESS FOOD WASTE
SPEEDIER SERVICE
DEPENDABLE DELIVERY
LESS LABOR**



Stewart Sandwich Service . . . the right
answer to almost any feeding problem
. . . almost anywhere. Served daily in
45,000 outlets from coast to coast.
**SCHOOLS • GOLF CLUBS • POOLS •
HOSPITALS • TAVERNS • BOWLING
LANES • FOUNTAINS • DRIVE-INS •
VENDING MACHINES. FREE OVEN LOAN.**



stewart sandwiches...
the best taste you ever tasted

stewart in-fra-red, inc.

P.O. BOX 207, FONTANA, WISCONSIN 53125

For more information circle number 118 on card

GRAFFIS' SWING

continued from page 10

Leon D. Faucett and **Max Ewing**, owners of Duck Creek GC, Garland, Tex., were hosts to 30 pro salesmen at the second annual Southwestern Professional Golf Representatives tournament . . . Max and Leon donate the championship trophy which was won by **Clayton Stubbs** of U. S. Royal . . . He got par 72, only three strokes off the course record . . . **Gil Barnett** of Hogan got net 67 . . . Faucett and Ewing have 1,000 members at Duck Creek . . . It's been open 18 months.

Protest getting higher and hotter against government financing of golf courses competing with courses built and operated by private risk capital whose investors pay stiff taxes . . . Brae-Burn CC, Houston, Tex., put on an "Appreciation Party" for its pro, **Don Collett**, who's been there two years . . . A surprise visitor was **Bill Casper**, a golfing companion of Don since they were kids in San Diego . . . Brae-Burn gave the Colletts a color TV set among other gifts . . . **Gene Sarazen**, **Fred Corcoran** and business and political notables sponsoring pro-am memorial for **Tony Lema** at Marco Island (Fla.) GC Monday Feb. 27, before the Doral tournament at Miami . . . Proceeds will go to a juvenile welfare work that was Tony's prime charity.

Russell G. Barget, manager, Tam o' Shanter CC, Orchard Lake, Mich., elected president Michigan Club Managers' Association . . . **Norman Nocera**, Blythe-field CC, Belmont, Mich., elected vice president and **Peter Siagkris**, Point o' Woods CC, Benton Harbor, Mich., secretary-treasurer . . . Tam o' Shanter has another department head prominent in association work . . . Its pro, **Warren Orlick**, is PGA treasurer . . . The club's building program and lively membership campaign led by **Oscar Braun** figured in 1966 play, being 6,000 rounds ahead of play in 1965.

College of the Desert, Palm Desert, Calif., to conduct turf research on plots

continued on page 45

GOLFDOM

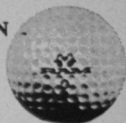
we figured out all the angles, then we made the Golden Ram

There's a bagful of stroke-saving angles built into the Golden Ram. For example, irons have "Sole-Support"—an extra-wide flange that puts head-weight at the very bottom of the blade to let you get under and through the ball smoothly (a Golden Ram 5-iron looks similar to the 9 in your bag). This flange has a contour roll front-to-back and side-to-side—less metal to meet turf for cleaner shots, smaller divots. Golden Ram woods are sole-contoured like the irons for improved fairway play; double-cyclocac face inserts eliminate exposed screws, give solid smack at impact. XPD-100 shafts

are fully flexed with 14 steps on the driver. Golden Rams are custom-made to meet your exacting specifications. But, if your customer has an average build, Golden Ram in standard shaft length is available from stock in your choice of two swingweights—all the playing features at substantially less cost.

YOUR SECRET WEAPON THIS SEASON

Ram golf balls with the Nylon XPD center. A great breed of ball in 95 and 85 compression. Test drive one.



Golf Corporation
2020 Indian Boundary Drive
Melrose Park, Illinois 60160



For more information circle number 221 on card



GRAU'S Answers to Turf Questions

By FRED V. GRAU

Today, with several excellent grasses, vegetative and seeded, plus our modern irrigation systems and mechanical equipment, plus our know-how in building synthetic soils with excellent drainage, together with highly sophisticated chemical controls for diseases, weeds, and insects, and fertilizers that release slowly, not so slowly, and rapidly, there should be little excuse for anyone to have putting greens that are anything short of perfection. This includes bent greens *and* bermuda greens.

Why can't we make the same statement about fairways? We have the irrigation systems, the soil cultivating and thatching equipment, the chemicals for weeds and insects, and the fertilizers that release at varying rates. What we *do not* have are: 1) the improved grasses we need, 2) the ability to modify the soil, and 3) the chemicals to control diseases on the grasses we now have.

Where have we fallen down? Our failure to modify fairway soils in the same manner as for greens is excusable purely on an economic basis. To do so would make golf too costly for anyone but an oil-happy sheik. This takes care of point No. 2.

Chemicals have been used for diseases on fairway turf to a limited extent with limited results. Some diseases, so far, can not be controlled in this manner (*Fusarium* on Merion Kentucky bluegrass, *Helminthosporium* leafspot on common Kentucky bluegrass). In some cases the control measures simply checked the destruction of the weak, weedy grass (annual bluegrass) that made up most of the

population and effected no permanent improvement. The economics of spraying expensive fungicides on 50 to 80 *acres* of turf should give us pause. Surely there must be a better way to do it.

The failure of one grass after another on the fairways of the nation is something to which no one can point with pride. We should examine the situation(s) in some detail.

Common bermudagrass—Occasionally one could find good fairway turf developed from seed of this grass which has been the mainstay of southern courses from Georgia to California. It was done with *adequate fertilizer, close mowing, and minimum water*. Most failures could be credited to *starvation, overwatering, diseases* which thinned turf and let weeds in, and *mowing too high*. Over the years, certain types of bermudagrass spread and dominated in large patches. Most were an improvement over the run-of-the-mill types from seed.

During the last 20 years a vast improvement has taken place. Some types of bermuda grasses that were developed along with putting green research, which were not putting green quality, have become the improved fairway bermudas of today—all vegetatively propagated. There was a brief disgraceful fiasco with so-called "U-3 seed" but it soon was discredited. So, today, in the warm regions we have several good fairway bermudagrass—all vegetative—which come close to producing the quality and the results we seek. Among them are: U-3, Tifway (419) and

continued on page 20



swing to the leader

For greener, fresher, more economically cared for turf, follow the leader. Turn to a Buckner automatic irrigation system. Buckner systems are engineered to deliver the most effective water coverage. The controller, valves and sprinklers do the watering work, efficiently and inexpensively. No wonder Buckner systems are the choice of 9 out of 10 of the nation's finest golf courses. For all the facts, write for free catalog and name of nearest dealer.

Buckner. INDUSTRIES, INC.

P.O. BOX 232, FRESNO, CALIFORNIA 93708

For more information circle number 106 on card

F-10



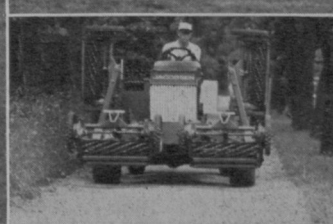
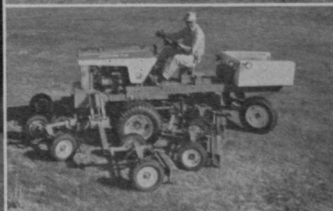
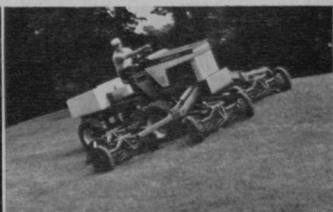
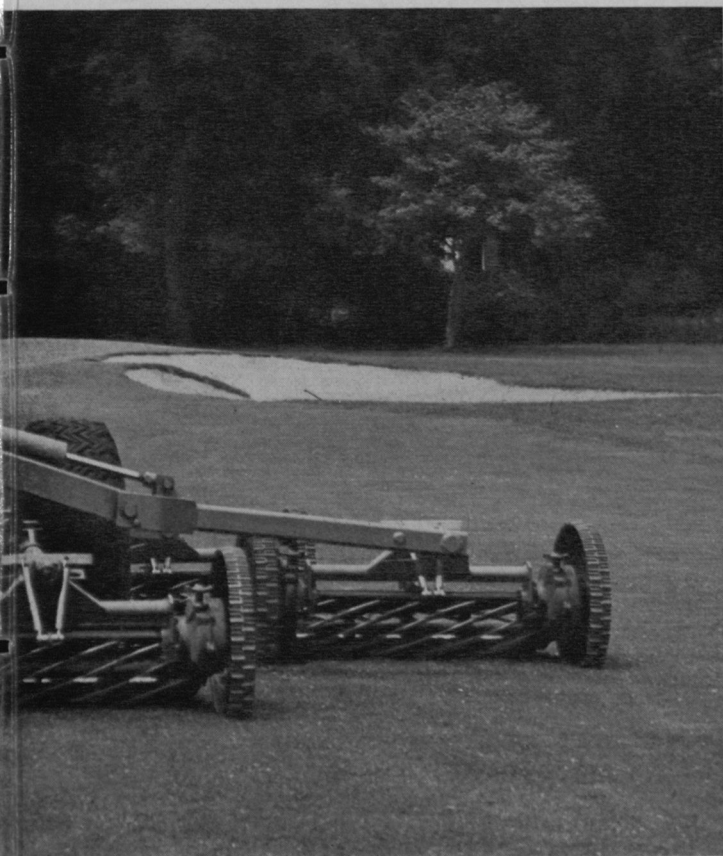
Out-front reels cut turf smoothly and evenly—with famous Jacobsen precision—before tractor wheels can mat grass down. Operator can see better, maneuver faster and reduce overlap. Reduces your mowing costs because it handles so many kinds of mowing problems.

• **Big or small jobs.** With all seven gangs in operation, the F-10 cuts a 15' swath, mows up to 62 acres a day. 30" outboard reels adapt for strip or curb mowing.

• **Gets around fast.** Mowing units lift hydraulically without stopping tractor. Cruises from job to job at up to 30 m.p.h.; travel width only 8'.

• **Complete control.** Reel units have separate fingertip hydraulic controls, permitting use of gangs in varying combinations. Curb and center strip mowing is easy. Special steering arms make all mowing units turn with tractor to eliminate skipping and skidding on short-radius turns.

The mowing tractor that's out front with out-front mowing!



- **Better balance.** Weight distribution and mower placement assure stability and safety for side-hill mowing.

- **Rugged and powerful.** Plenty of economical power from 4-cylinder industrial engine and heavy-duty transmission with 4 speeds forward and 1 reverse. Jacobsen quality construction reduces maintenance. For full information or a demonstration phone your Jacobsen Turf Equipment Distributor or write today.

Jacobsen Manufacturing Company
Racine, Wisconsin 53403
"1st in Service"

JACOBSEN

For more information circle number 103 on card

**An Absolutely New
Concept In Golf Course
Maintenance Equipment**

The Amazing New

WHIRLY RAKE

**Roots Out Thatch/
Rakes Leaves/
Cleans Off Pine
Needles, Acorns,
Apples, Twigs,
Cuttings, All Sorts
Of Debris And . . .**



**Automatically Sweeps
Everything 3' To The Side Into
Compact Wind Rows—Ready
For Re-Rowing On Your Next
Pass**

Once you've used the Whirly Rake, you'll wonder how you have ever done without one. It makes raking effortless, saves you time a-plenty by raking out everything in a wide 3' swath with each pass.

Three rotating, "loom action," adjustable (and replaceable) tine arms efficiently snag-up deep rooted thatch, slippery pine needles, hard to grasp closely cropped clippings, acorns, apples, twigs, bottles and yes . . . even bottle caps. The rake arms are canted at an angle (just like the principle of the time-tested side delivery hay rake) so that all rakings are passed down the angle line and off to the side into convenient, continuous wind rows for each pick up or re-rowing on the next pass.

It's the answer to a golf course superintendent's prayer and we predict . . . WHIRLY RAKE will be the most talked about piece of ground maintenance equipment in the golf industry for '67.

WHIRLY RAKE comes in two units—a self-propelled, motorized unit or a tractor drawn, mechanically operated unit. Write today for FREE product literature and the address of your nearest WHIRLY RAKE dealer.

AIR RAKE Mfg.
Co., Inc.

41 JEFFERSON ST./WESTFIELD, MASS. 01085
(413) 568-1293

For more information circle number 101 on card

FRED GRAU

continued from page 16

Ormond bermudagrass.

In some sections there is promise in the zoysias and progress is being made. Seed has been only a partial answer. We still look toward the vegetative types which give predictable performance. These include Meyer (Z-52) and Midwest zoysia.

Common Kentucky bluegrass—In 1935 when I went to Pennsylvania to become the first extension agronomist in turf, I discovered that most golf clubs, each spring, reseeded the fairways with common Kentucky bluegrass seed. Much of it was done with a wheelbarrow seeder with no seedbed preparation and without benefit of fertilizer. The purpose was "to thicken the turf." No one ever will be able to calculate the tonnage of seed thus wasted. It would be staggering.

Why has common Kentucky bluegrass failed so dismally so generally, granting, of course, that some clubs in the far north managed to develop reasonably acceptable fairway turf? 1) *Helminthosporium* leafspot took a heavy toll two or three years out of five, opening the way for weed invasion; 2) Starvation (lack of nitrogen, principally) kept the grass from spreading to form turf; 3) Close mowing, demanded by golfers, removed the upright growing leaves and thus prevented formation of food in the leaves. When root reserves reached a low point the plant could not compete.

In 1948 I helped to launch B-27 bluegrass (Merion Kentucky bluegrass) as the first improved turfgrass from seed. At once it was both popular and unpopular. It was resistant to leafspot; it was more prostrate and could be mowed closely without injury; it was vigorous and had a deep green color. For these attributes it was popular. But—it proved to be a poor seed producer. For this it was very unpopular with seed growers who prefer strains that stand upright (for the combine) and produce large yields of seed.

Merion gradually revealed weaknesses which force us to continue to search for

continued on page 22

GOLFDOM