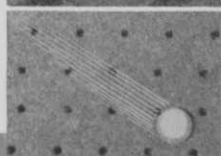


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RYAN
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aerating!**

- **more cores—36—per sq. ft.**
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- **evenly spaced cores on 2" centers**



Coring immediately relieves compaction so ball "bites" on green—and rolls true.

The self-propelled Ryan Greensaire will help you build your greens to tournament quality—and keep them that way—the first year you use it. Greensaire aerating is thorough: 36,000 evenly spaced cores per 1,000 sq. ft.—all over 3" deep! Play can resume as soon as wind-

rowed cores (optional attachment) are raked away or cores are crumbled into top dressing (use the Ryan Mataway for this). The Greensaire covers up to 100 sq. ft. per minute so the average green is ready to play again in less than 2 hours. Transport speed is 3½ mph from green to green. And the Greensaire has earned a world-wide reputation for superfine aerating—plus trouble-free maintenance!



See how Ryan units team up to do more jobs: apply top dressing, turf builder, or fertilizer with the self-propelled Ryan Spread-Rite immediately after aerating. Exclusive "live action" hopper (7 cu. ft.) handles all materials, damp or dry, spreads an even 39" swath in precise thicknesses to ½". See your Ryan distributor or write:



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AERATORS, RENOVATORS, VERTICAL MOWERS, SPREADERS, ROLLERS, AND SOD CUTTERS

normally are made when a capital building program is undertaken. But they feel that the excess should be diverted only to improving the course.

Equipment Fund Properly Handled

There should be no overlapping or intermingling of funds set aside in the machinery and course emergency reserves, the supts. declare. These should be kept separate and the golf course fund tapped to replace a piece of equipment, for example, only as a last resort. Supts., as a whole, have no argument with the way in which the machinery reserve account is handled. At most, but not all clubs, it is done in accordance with accepted accounting principles. Several greenmasters report that their equipment fund is replenished each year by a specified amount that is based on the total replacement of machinery over a period of perhaps eight or ten years.

But the course emergency fund, if one ever is established, is a different matter. If a garage for golf cars is needed, the first thing one of the front office committees seizes on is the maintenance department's course emergency reserve. "What were up against," says James E. Thomas of the Army Navy Club in Arlington, Va., "is that the idea for an emergency fund for repairing damage to the course is kind of a nebulous thing. A committee will agree that such tangible items as tractors and greenmowers wear out and have to be replaced, so it is willing to maintain a reserve for equipment. But few people will concede that a course can be hit by a tornado or cloudburst and damaged to the extent of \$25,000 or \$50,000. It can only happen to other courses. As a result, they keep putting off establishing a course emergency fund."

Fares Better Than Most

Thomas, incidentally, fares better than most supts. His executive committee can appropriate up to \$3,000 of capital improvement money at any time to apply to emergency expenditures. If this much is requested and the entire amount not spent, it reverts to the capital account. Thomas' Army Navy course was hit by a cloudburst more than a year ago and the creek banks were badly eroded. It is going to cost more than \$25,000 over the

next few years to restore them.

The Algonquin Plan

The Algonquin GC, in suburban St. Louis, has what people in the management end of the golf business consider the ideal replacement or emergency reserve. It covers all club departments, is pegged at \$25,000 and is built back to this amount when extraordinary expenditures are made from it. This is done even at the cost of a membership assessment. In 1960, the fairways at Algonquin were hard hit by disease and after it was decided to convert them to U3 Bermuda, \$5,000 was immediately appropriated so that Supt. Frank Bubany could get the job underway.

As Bubany points out, the Algonquin plan "makes living for the supt., club manager, etc. more bearable because we don't have to worry against the day disaster strikes."

The machinery and course emergency funds at Riverdale CC in Little Rock, Ark. are handled jointly, according to Harry R. Bryant, the supt. Members are assessed \$5 a month during the playing season so that sufficient money is fed into the reserve. At the end of the season, the unexpended portion is returned to the club's general fund. The CC of Darien (Conn.) permits its greenmaster, Vernon Burnham, to overstate his annual budget needs by approximately five per cent to take care of any untoward situations. Then, at the end of the season, unexpended portions of the maintenance budget are applied to making changes and improvements in the course.

Provide for Vandalism

Few clubs, though, have farsighted policies such as those cited above. Widespread vandalism in recent years has prompted some of them to appropriate small amounts for replacing or repairing stolen or damaged property, but that is as far as it goes.

As Paul Frank, supt. at Hole-in-the-Wall CC, Naples, Fla., points out, the course emergency fund is one more thing the supt. has to try to sell to the members. Too many times he is rebuffed because constantly changing green committees never warm up to his views. This,

(Continued on page 104)

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Keeps Greens in Top Condition...



LaQuinta's Merle Lint and Certified's Robert Maycock check Certified-treated green



"Spraying LTF on greens is a real snap for our greens boys," says Lint.

CUTS COSTS 50% ON FAMED PALM SPRINGS COURSE . . .

So says Merle Lint, general superintendent, LaQuinta Golf Course and fashionable LaQuinta Hotel in the hot California desert. For several years Certified's turf conditioning products "have worked out perfectly" on the greens of the 135-acre championship course and 40 acres of hotel grounds. Lint, veteran of 33 years in the golf business, reviewed results of these Certified products:

EVERGREEN: "We can spray all the greens in a day and a half and do a fine job. Evergreen gives deeper penetration . . . immediate results . . . blends with water-dilutable insecticides."

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BP 977: "Used as a preventative to rid turf of sod web worms . . . results are real good . . . mixes with Evergreen to do both jobs economically."

AQUA-SOL: "This fireproof, water-soluble safety solvent cleans grease off course equipment."

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SEA PINES' Changing Formula

Outdoor Photographs League photos by Eugene B. Sloan

Every year Don O'Quinn has to vary the feeding rate on this bountiful Island course so the turf won't get out of hand

By KATHLEEN L. SLOAN

The 18-hole Sea Pines course, Hilton Head Island, S.C., one of the loveliest in the United States, cost \$1 million dollars to build. It was carved from marshes bordering the Atlantic ocean and a terrain covered with palms, palmettoes, red-berried hollies, giant oaks and Southern magnolias. The course, designed by George Cobb, winds through this native flora past lagoons and creeks, right up to the Atlantic. Its borders are a natural tree line, many of whose specimens are more than 100 years old. Focal point of the course is the magnificent 15th hole, built at a cost of \$175,000, from the marshes by the sea. The blue waters of the Atlantic whirl at the base of the green set high above them, and acres of sea oats at the edge wave in the breezes.

The success story of the Hilton Head Island course is due largely to the wise



Don O'Quinn, Sea Pines maintenance vp, helped in planning of the Hilton Head course.

POWERSCREEN

CUTS FIVE DOLLARS PER YARD FROM PREPARATION COST OF TOP DRESSING



One of the first to use the new Royer POWERSCREEN, the Kennett Square Golf and Country Club (Pa.) reports that the POWERSCREEN has reduced the cost of top dressing by about \$5 per yard because it has greatly speeded its preparation. Primary reason is the POWERSCREEN's built-in elevating conveyor which discharges the finished top dressing high enough and far enough for direct stockpiling . . . and radically reduces set-up and clean-up time.

Paul Weldin, Jr., Superintendent at the



Kennett Square G & CC, also reports a marked improvement in the quality of his top dressing. The POWERSCREEN-produced top dressing is finer and more homogeneous than manually screened materials—has done away with clogged spreaders and eliminated pebbles on the greens.

Find out more about the POWERSCREEN and its 3-way payoff in economy, speed and quality. Request Bulletin PS-30. Or, better yet, contact us for a free demonstration.



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Wallace Palmer is Sea Pines pro. Shop is located in four small buildings that resemble native huts. (R) Alligators, protected by law, eat lost golf balls as their dessert course.



use of money and expert management, with great emphasis on the latter, and to the efforts of one man who has nurtured it from the beginning.

Donald H. O'Quinn, formerly the supt., and just recently promoted to vice-president for maintenance and construction of Sea Pines Plantation (operators) joined the firm in 1959. This was before the Sea Pines course was designed, when Hilton Head was still a jungle-like island hardly touched by the hand of man since before the Civil War.

Understands the Climate

Among O'Quinn's attributes is the fact that he understands the Sea Islands' subtropical climate where the growth of foliage and grass overnight may be literally measured by the yardstick. Nature here has been magnanimous. The beautiful, boot-shaped island, surrounded by sounds, creeks, inlets and the sea, gets the benefit of the warm air currents from the Caribbean and the Gulf Stream, thus providing 300 growing days a year and four seasons of golfing weather. Players come from all over the U. S., and some foreign countries.

Originally the entire 18-hole course — tees, fairways and greens — was planted

in Tifton 328 in three two-acre plots in the Sea Pines' nursery. When the course was planted in 1960, the sod was stripped, run through a compost grinder and 25,000 bushels of sprigs were sown by hand over the 105 acres of the course. These were then cut in lightly with a disc harrow, rolled with a culti-packer and watered abundantly. Use of such a great amount of stolons paid off with a verdant course ready for play by September.

"We have no set formula for the fertilization of the course," says O'Quinn. "We vary the feeding program from year to year, and what we do is unique in that, it would probably not apply to any other course. Each year a soil analysis is made, then a formula for fertilization is devised for the current season. In this sandy loam, one year we might come up with 16-4-8, or the next it could be 5-10-15."

Fertilization Program

In mid-March or the first of April an adequate supply of fertilizer is applied. This is followed with a medium application in midsummer and another full application in the fall. During the 1964 season, a supplemental program of ammonium nitrate was used. This was dis-

(Continued on page 100)

I'll never forget...

The mower that climbed a tree

by Superintendent Joseph S. Tagnon, Ashbourne Country Club, Cheltenham, Penna.



"During the manpower shortage of World War II, we hired a tractor operator who was inexperienced but who did perform a magic trick. The new man was assigned to mow the fairways using a seven gang unit. Two hours after he had started this job, I was startled to see him walking across the fairway carrying an axe. When I asked him what he was

doing, he said, 'One of the mowers has climbed a tree. I'm going to have to cut the tree down to get the mower back.' I thought the heat had gotten to him until I saw the stalled tractor of the seven gang unit near a pine tree. Sure enough, on a wide turn the left side mower had hit the tree and been pulled right up it."

Don't you forget...

to prevent snow mold with Du Pont Tersan® OM turf fungicide

- "Tersan" OM effectively prevents snow mold and other major turf diseases.
- Thoroughly tested...provides long-term protection.
- Large safety factor under all conditions.
- Apply 8 ozs. per 1000 sq. ft. as late as possible prior to snowfall. Follow with 3 ozs. per 1000 sq. ft. in early spring during freezing and thawing.
- For full information about "Tersan" OM, see your golf course supplier.

On all chemicals, follow labeling instructions and directions carefully



TURF PRODUCTS

Better Things for Better Living...through Chemistry

Water, or Its Lack, Was Turf Culprit During '64 Season

**More research is needed to
determine when irrigation
is overdone or falls short**

By C. G. WILSON

Sales Manager, Milwaukee Sewerage Commission

Much already has been said about the weather and its harsh treatment of turf in recent issues of *Golfdom*. Suffice to say, the summer of 1964 will go down on record with 1955 and 1928 as one of the most disastrous years on turf, especially irrigated fairway turf in the upper Midwest. The dry open winter of '63-'64 was equally disastrous from the Rocky Mountains east through the Dakota's and western Minnesota. There, all of the snow fence and brush treatments to hold snow and stop water loss by transpiration failed miserably. *The reason — no snow.* Someone should be working on wax-like sprays for fall application on dormant turf to stop this grass loss from desiccation.

Hardly an afterthought, yet one of importance in parts of Kentucky, Tennessee and Georgia, was the backlash from cov-

ering greens with straw to prevent winterkill. It worked beautifully, but it was not the ideal year to do it. The mild winter encouraged disease under the straw cover. Fortunately, it wasn't serious. Still, this year, not last, would have been the success year to overseed, or so it appeared to some.

Wind Hurt, Too

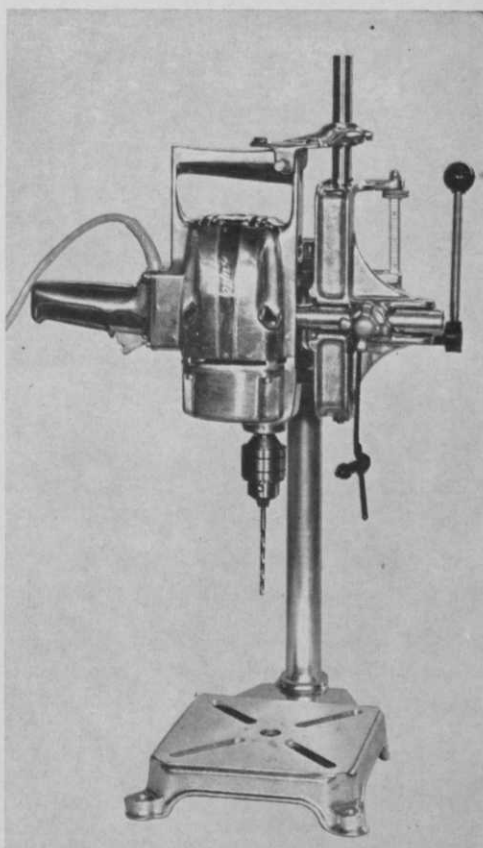
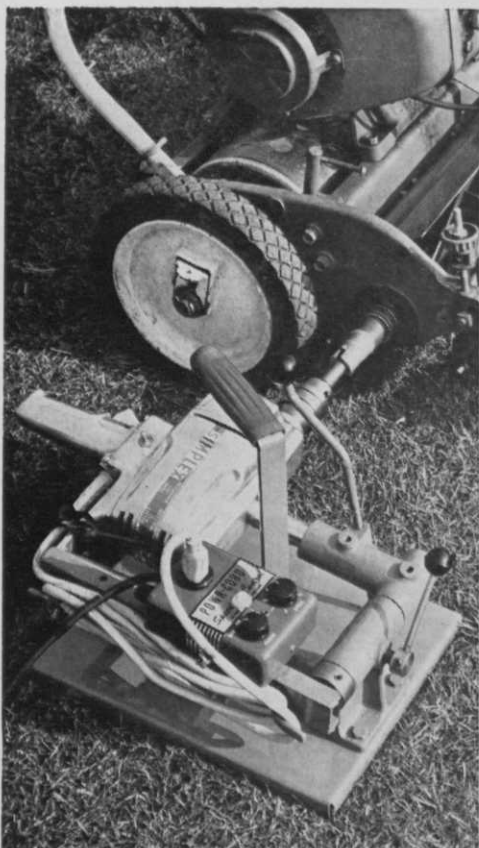
All of this is by way of saying one must learn to move with the punches no matter how low or below the belt they may fall. For instance, although much poa-bent turf was lost in the north this summer from oppressive heat, too much water and high humidity, the toll was just as bad with some when temperatures modified and the humidity dropped. The cooler, dry winds that came on sucked every last drop of water from the "no rooted" turf when the wilt guard was down in parts of the Midwest and Northeast.

Again, unfortunately, most of the written articles on watering, are strictly book — "deep and infrequent." Well, there are times on any and every golf course when the book must be laid aside. Notice I said laid and not cast because we are talking about fundamental truths. There is no question that grass often is overwatered, whether by natural or artificial irrigation. It is equally criminal to perpetrate this crime whether water is applied frequently or infrequently. Infrequent "book" watering may flood the low spots more than frequent watering due to excessive runoff.

Is Frequent Watering Harmful?

The other water factor as it applies to golf is uniformity of playing conditions. The more frequently water is applied, provided it is not used in excess, the more uniform the playing conditions. Often only the low handicap golfer who plays frequently notices this. The once-a-week golfer's memory is too short. A good research project for any experiment station would be to find out in reality if frequent watering, using the proper amount, is actually harmful to turf.

"Mist Culture" is becoming more commonplace in greenhouse work with no increase in disease or insect problems, and better plants. Dr. Madison in California makes a good case for frequent wa-



It's a lapping machine... It's a utility drill...

It's the new SIMPLEX 175

Now, get two, or three, valuable machines in one. The Simplex 175 is the easiest, most economical way to keep reel mowers in top cutting condition during the busy mowing season. It's also a big $\frac{1}{2}$ " portable drill for use anywhere. (Add the drill-press stand and you have a precision drill-press for your shop). The Simplex 175 has another feature you've always wanted — variable speed control for lapping-in big gang mowers or small greensmowers at the best speed for each, not too fast or too slow. Send for full information. Order now for early delivery.

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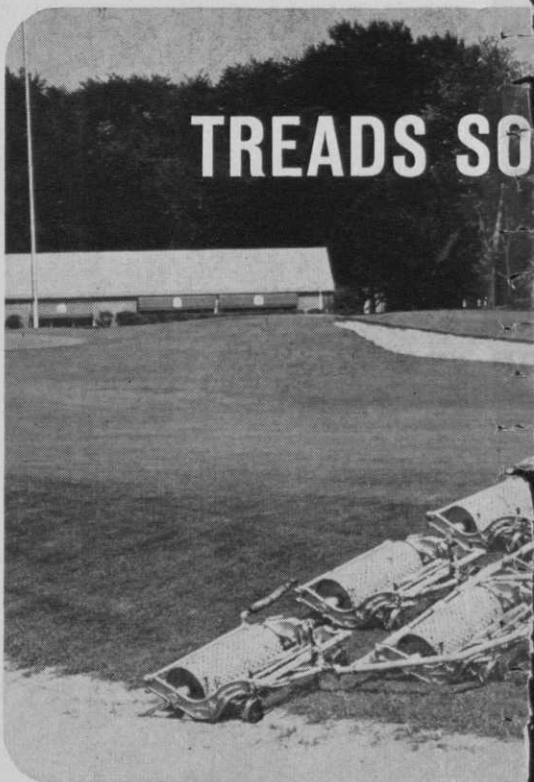
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Ford flail mower clean-mows turf grasses as close as one inch; roughs as high as five inches; cuts and pulverizes coarser growths in wooded and undeveloped areas to keep your grounds neat and trim. Tractor-mounted easily and quickly by 3-point hitch for power take-off operation. Available in 5, 6, and 7-foot mowing widths.



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Mow rainsoaked or watered fairways with greater protection to softened turf than ever before! Ford LCG tractors are now available with optional 18.4-inch low-pressure, high flotation tires. Carrying only six to 10 pounds of air pressure, these broad-base tires exert so little ground pressure that even lush or wet grass springs up behind the tires for smoother, more streakless mowing.

The broad, flat tread eliminates rutting under almost all conditions—no ridges to invite scalping. Tendency to slide sideways on steep slopes is lessened—the wider tread further adds to the stability of Ford Low Center of Gravity design.

These low-pressure "jumbos" can be specified as optional equipment on low-