Here's help to maintain the beauty of your grounds!

Yes, reliable help. Economical help. Help against scores of different weeds, insects, and diseases that constantly threaten your greens, fairways, trees, shrubs and flowers. Help that comes from your supplier of all these Stauffer products.

Aspon® insecticide, the quick, long-lasting control for chinch bugs, devastating destroyers of turf. Usually just one application a season in the north. two in the south.

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Vapam® liquid soil fumigant cleans the soil of pests so you can replant grass, trees, and shrubs. Destroys weeds and their seeds, insects, nematodes and many fungous organisms. And you can replant without a long waiting period.

Dyfonate® soil insecticide, one of the newest effective controls for chinch bugs used by commercial operators in the southeast.

Captan fungicide is the reliable control at very low cost for brown patch, leaf spot, melting out and several other turf diseases.

Try these Stauffer products, liquid, granular and wettable powder forms, to protect beautiful grounds. For full information...just fill out and mail the post-paid card insert above. Stauffer Chemical Company, Agricultural Chemical Division, Dept. H.D., Westport, CT 06880.







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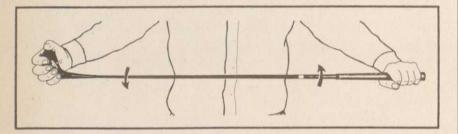
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NOW...FANSTEEL TAKES GRAPHITE ONE STEP FURTHER WITH ITS TORQUE-FREE, TIP-FIRM SHAFT

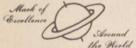
Don't let them tell you otherwise. Most carbon graphite shafts twist excessively at impact. But not Fansteel's new shaft. Static torque loading tests show its torque is at an absolute minimum. Even in the A and R shafts.

Fansteel's shaft has less vibration and greater recovery, allowing the clubface to remain square to the ball. The shaft tapering is consistent, And the tip firm. You get a solid feeling at contact. Not buggy whip squish.

Fansteel is a leading producer of space age metals, And the nation's largest maker of investment cast golf clubs. It has worked with carbon graphite for many years for various industries. Fansteel's torque-free, tip-firm graphite golf shaft has been in development for two years. Today, it's perfected and ready for your customers.

Try a simple torque test with any graphite shaft. Twist each end in opposite directions. The results will tell you a lot. A club that twists at impact will magnify swing errors. We're pleased to be appointed a Fansteel distributor.

Our salesman will be calling on you soon. For more information, write or phone



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Circle No. 196 on Reader Service Card

BEARD from page 18

does provide certain beneficial effects. Included is a cushion that is desirable on greens to provide resiliency for proper ball bounce. This limited quantity of thatch also results in increased wear tolerance and more insulation against soil temperature extremes.

This study shows the striking importance of nitrogen nutrition in affecting the rate of thatch accumulation. The primary effect of nitrogen is in the stimulation of shoot growth which in turn increases the rate at which a thatch problem develops on a given turf area.

This investigation also stresses the great nutritional value of clippings. The plots where clippings were returned were much darker green, produced a greater quantity of shoot growth, greater thatch accumulation and an increased scalping tendency. This is a direct response to nitrogen comparable to that of the two nitrogen rates. In effect, there were three levels of nitrogen utilized in this study.

In addition to excessive nitrogen nutritional levels, other factors contributing to thatch accumulation include (a) vigorous growing turfgrass cultivars, (b) infrequent or excessively high mowing, (c) acidic soil conditions, (d) poor aeration and (e) lack of beneficial thatch decomposers such as earthworms, fungi and microorganisms. Cultivar, nitrogen level, mowing practices and control of earthworms are probably the major factors affecting the thatch accumulation rate. Thus, they are the most readily manipulated in controlling the rate of thatch buildup.

The effects of fungicides on the rate of thatch accumulation are not well known. This is one of the first studies suggesting some of the types of responses that may occur. A total understanding of the effects of fungicide cannot be developed until a wide range of the commonly used fungicides can be evaluated under many different cultural conditions. Much more work of this type is needed. It should be pointed out to those readers acquainted only with bentgrass greens, that bermudagrass has a greater and more rapid thatching tendency than bentgrass. This is illustrated by the results obtained during the relatively short time that the experiment was conducted. This research was conducted under a grant from the O. J. Noer Research Foundation.



The new Trap King. A case of waiting to bring you the best.

Like the rest of us Jacobsen Distributors, Bob Mitchell wants to tell you all about the new Trap King. (Bob's with the Colonial Motor Co., Dallas, Texas.)

He'll tell you how Jacobsen took great pains to come up with the best trap rake in the business. Just to earn it the title of Trap King.

First of all, it gets you from trap to trap at 10 mph. Nobody can match that. It speeds up the whole raking job.

Instead of making you replace the whole blade just because of a worn tine, you can quickly replace each tine individually. Nobody can match that, either.

Because of its unique lateral raking motion, it gives you a better and smoother follow on turns. And nobody can match that.

Of course, one man and a Trap King can do the job of five men raking by hand. Which in itself is quite a sensational pay-off.

If you haven't made up your mind yet about which trap rake you want to invest in, ask your Jacobsen Distributor to demonstrate the Trap King.

After you've seen it, you'll be glad you waited for Jacobsen to wait to bring you the best one.

Your Jacobsen Distributors.

Before we sell it, we buy it.

Circle No. 157 on Reader Service Card

Westinghouse golf cars topped Pikes Peak. A grueling 12.42-mile climb.

To prove the hill-climbing ability of Westinghouse electric golf cars, we ran two up the famous Pikes Peak Auto Hill Climb course.* Both cars made it to the top. 21,859 yards up to the summit, a 14,110 foot elevation. How steep is your course?

Power. Distance. Reliability. Westinghouse electrics deliver. Power to spare. For rugged grades. Over long courses. And they're priced right to help you make money whether you buy or lease.

And, of course, they're comfortable. Safe, too, with

automotive-type brakes on both rear wheels. But the important thing is they're built to operate from dawn 'til dusk, day after day. On an overnight charge.

You can be sure if it's Westinghouse.

Westinghouse Electric Vehicles, Westinghouse Bldg., Pittsburgh, Pa. 15222.

*Test sanctioned by the U.S. Auto Club with Westinghouse 3- and 4-wheel golf cars each using six 110-minute batteries. The test was conducted with the cooperation of the city of Colorado Springs, Colorado, and the U.S. Forest Service.





Circle No. 178 on Reader Service Card

WASHINGTON VIEW:

RECREATION ESSENTIALTO MORALE

Washington energy officials predict enough fuel and oil for golf courses for the coming months. Recreation is essential for morale, is their thinking

by WILLIAM LOOMIS

WASHINGTON, D.C.—Unless severe new disruptions in oil supplies coming from the rest of the world occur in the next month or two, Federal officials offer this assurance to golf course superintendents and club managers: Your needs for fuel to power tractors, trucks, lawn mowers and other equipment will be met. In addition, chances are good that there will also be fuel to keep outdoor swimming pools and clubhouses heated in cold climates.

The fact is, these officials admit privately, that the average American has been far more cooperative conserving fuel during the winter months than anticipated, and reserves have actually increased above a year ago in many parts of the country. Slower driving speeds also have greatly improved the outlook for gasoline supplies this coming summer.

But suppose this improving outlook proves false—the Arabs plunge the United States into a more serious shortage of oil and gas—what then? Here is a brief look at Federal thinking in Washington.

"Every effort will be made to keep businesses operating that rely on fuel. This is especially true of recreation facilities, because they are so important to people's morale," says a top fuel official.

This means that to the greatest extent possible, regardless of how serious the squeeze, the jobs created by golf courses will be protected. As a result, fuel will most likely be made available to clubs and public courses as long as their needs are clearly explained.

Consider this word to the wise club manager from top Federal planners, "Tell them to keep accurate records of just how much fuel they will need. We don't want to hear about it now, but if a crunch comes, the fellow with the

best-kept records will have a leg up in getting the fuel he needs."

Actually, the Government at this time says it has no specific plan for dealing with recreational facilities this summer, assuming rationing won't be necessary, and it isn't likely this will come to pass.

If there is rationing, it is likely to hit the individual golfer first, giving him less gasoline to drive back and forth to the course or his family to the club. But that doesn't mean they won't get there as often, pinching club operation. If ration tickets are given out to drivers allowing them only so much gasoline a month, they can be hoarded and spent on a big driving binge or used more judiciously.

For the golfer and his family staying home, this simply means better spacing out of the use of family cars. For resorts that rely on business from afar, it would still be possible for the family to save up its coupons and strike out on a long trip this summer, although it may pinch the use of family cars when they return home.

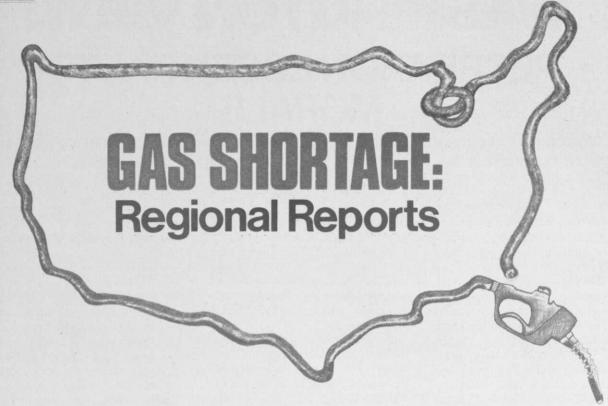
The outlook for air travel to and from vacation areas also is brighter. Business may be off at resorts, but people who fly there will not be cut off entirely. In fact, most airlines and travel agents believe air travel will be healthy during the summer tourist season, with the only problem being that people will have to plan further ahead rather than take off spontaneously. The cutbacks in air flights, into the hundreds every day, will simply make it more important to make reservations in advance, not cancel trips altogether because of a lack of fuel.

Looking further ahead, the picture gets brighter, according to Government officials. Although there will be some fuel pinch for a year or so, at most, new refinery capacity in the United States will be coming along in the next few years. However, the day when truck motors could be left running idly when they could be shut off, lawn mowers running unnecessarily or at too great a speed, showers overheated or swimming pools carelessly attended may well be over.

"I'd like to make this point to your readers," said one fuel expert. "Tell them to use caution, think a little more about conservation, keep a closer check on how employees are using fuel burning equipment, and they should be able to operate with few worries about running out of supplies."







west

by DON CURLEE

san Francisco—Golf businessmen in the West are taking the fuel shortage seriously, but in stride. Few of them have been directly or intensely affected enough yet to know if their precautionary thinking and planning are correct.

Discussions with them about it raise at least as many happy thoughts as talking about burial plots or missed putts.

One tells how a golf course construction project was held up because delivery of PVC irrigation pipe (a petroleum derivative) was long overdue. With the trenches all dug, the site resembled an antitank barrier, and practically no substitute work could be completed until the pipe was laid.

Everyone contacted here believes the most serious threat to golf operations will be indirect—the reaction of their clientele to restricted supplies of gasoline.

This translates to reduced play, particularly at more remote resort type eourses. Managers and professionals of courses close to population centers of various sizes believe play will increase when shortages intensify and

continued on page 31

central

by JOE DOAN

cHICAGO—No one connected with the operational side of the golf business has his head buried in a trap, as far as the uncertainties that lie ahead in 1974 are concerned. It is generally accepted that there are going to be some shortages, delivery delays, continued inflation and the perennial difficulty of obtaining all the maintenance and clubhouse labor that is needed.

The crux of how 1974 fares for the nation's golf clubs swings around the gasoline situation. Will there be enough fuel, everyone is asking, to assure at least routine maintenance of courses, operation of gas-powered golf cars, and what may be most important of all, transportation of players and members to and from the clubs?

The answer to each of these questions is a firm if not resounding "Yes." The gasoline situation is tight, but not as critical as it is reported to be in the opinion of at least three out of four club managers, superintendents and club professionals. It is suspected that the Government and oil interests have painted an unnecessarily gloomy picture of the fuel supply plight, causing the public and the Congress to

east

by DOUGLAS LUTZ

NEW YORK—No clear pattern emerges when assessing the impact of the gasoline shortage here on East Coast golf courses.

One course on the coast of North Carolina has curtailed mowing. In the same state, a club set in the Appalachian foothills has been unaffected.

Exclusive courses on New York's fabled North Shore (Long Island) report sporadic shortages. Yet Florida's resort trade seemingly is in no danger.

The gasoline situation here is too fluid to be predictable. Oil company officials, coping with the over-all problem amidst attacks from all quarters, including the Federal government, are short on patience and less than responsive with suggestions on how supervisory personnel can cope with maintenance problems at golf courses. They are still trying to assess the large picture, hoping to forestall drastic governmental action against their interests.

A marketing specialist, when pressured to predict what might lie ahead for the golf industry for 1974, cryptically responded, "Take up tennis." He did, however, acknowledge that,

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continued on page 31

Now, the Dawn-to-Dusk Battery comes with its own caddy.

You can stop worrying about bending posts or dropping batteries.

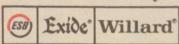
Exide-Willard announces the first golf car battery to come with its own caddy.

Our powerful, Dawn-to-Dusk EV-106 and EV-88 batteries now have sturdy polypropylene carrying straps that fit securely across the top of each battery.

Carrying, lifting and lowering

are easy, fast and safe.

And the strap can be removed with a simple "flick of the wrist" when not needed. Snap it back on again when you want to move the battery.



ESB Brands, Inc. a subsidiary of ESB Incorporated. P.O. Box 6949, Cleveland, Ohio 44101.

Battery.

Not only do we make the most convenient and safe electric vehicle batteries. we make the most powerful.

Our EV-106 runs for 106 uninterrupted minutes on an overnight charge.

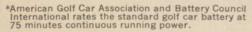
That's 41% longer than the standard battery. Even our EV-88 runs 17% longer than standard.

The new sturdy battery caddy makes ours the easyto-carry battery line.

The EV-106 and EV-88 golf car batteries. First with more power, now with added convenience and safety.

From Exide and Willard





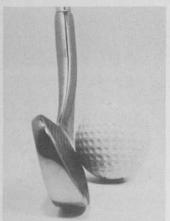




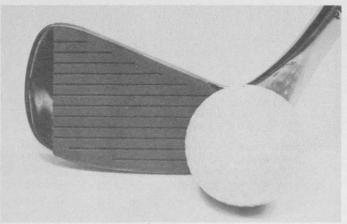
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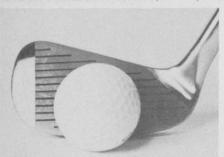
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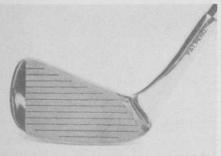


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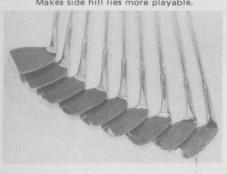
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