# An economy lesson in country club management.

A simple, rather ingenious idea that will save you thousands of dollars, just happens to come in one of the most prestigious golf cars money can buy. The Harley-Davidson® 3-wheel electric golf car.

A simple idea called Master Drive. Master Drive is a 2-circuit system that will give you more rounds between charges, reduce downtime

and charging costs, and increase the life of the batteries.

Simply put, it gives you a battery set-up with two circuits, instead of one.

Conventional golf car batteries are hooked up in series. Harley-Davidson

electrics utilize a series/parallel circuit.



A look at your course tells you why. Look out the clubhouse window and you'll see that two-thirds of the traveling done by golf cars is at low speeds.

But cars wired in series are drawing maximum power from the batteries all of

the time.

Which means that the two-thirds of the time when

they're going slow, power is wasted. A resistor burns off the surplus.

Master Drive wastes nothing. In the high-speed circuit, the batteries are in series, just like a conventional electric golf car. But in low speeds, the same batteries operate in parallel. So the batteries are only called upon to produce half the power.

Like we said: A simple, rather ingenious idea. That only proves

that prestige and common sense can go hand in hand.

Who to call to start your savings plan. To get all the details about Harley-Davidson electric and gas cars, call your Harley-Davidson dealer. He's knowledgeable in all facets of golf car fleet management. From fleet planning to profitability and financing. He'll be there to personally assist you with your service needs throughout the year.

Or write or call Dave Caruso, National Golf Car Sales Manager, Harley-Davidson, (414) 342-4680, 3700 W. Juneau,

Milwaukee, Wisconsin 53201.





Pesticide storage/p. 13

Wastewater conference/p. 14

Nitrogen fertilization/p. 17

## business/december

EDITORIAL:

DAVID J. SLAYBAUGH

RAYMOND L. GIBSON

KRIS FAY Graphics assistant

**RON MORRIS** 

FOUNDERS & CONSULANTS:

HERB GRAFFIS JOE GRAFFIS

BUSINESS:

HUGH CHRONISTER

RICHARD J. W. FOSTER

DAVID J. SLAYBAUGH

TERESA HUTSENPILLER

CLARENCE ARNOLD

CHRIS SIMKO

ADVISORY BOARD

GENE BURRESS, CGCS, Supervisor of Golf, City RICHARD H. EICHNER, Superintendent, Lakeside Golf Club, Hollywood, Calif.
DAVID C. HARMON, Superintendent, Golden
Horseshoe Golf Course, Williamsburg, Va.
PHIL JACKSON, Golf director, Los Angeles (Calif.) County Parks & Recreation Dept. WILLIAM E. LYONS, Owner, Lyons Den Golf, Cana Hotels, Scottsdale, Ariz.

TOM J. ROGERS, CGCS, Garden City, (Kan.)

Beach, Fla.

JOHN W. URBAN, Owner-manager, Urban Hills
Country Club, Richton Park, Ill.



FRONT COVER: Scenes from golf business and turf events of the past year presage events of 1979 listed in our annual calendar.

VOLUME 52 NUMBER 12

<u>Idea file</u>	4
News	5
Clippings	12
FEATURES	
Store pesticides properly	
Safety is the main reason for storing pesticides properly, but a clean and neat chemical storage area also enables the superintendent to find a pesticide when it's needed and to quickly tell what his inventory includes	13
Wastewater irrigation conference	
Using effluent (treated wastewater from a sewage plant) for irrigating recreational turfgrass was the subject of a recent "state-of-knowledge" conference near Chicago Editor Dave Slaybaugh reports	14
Want to boost business without increasing costs?	
The Golf Card can give golf course operators increased traffic — with the opportunity for increased sales in the bar, restaurant, and pro shop — merely by allowing cardholders to play twice a year without green fees	16
Nitrogen fertilization of bentgrass greens	
Maintaining the growth rate of bentgrass through application of the right amounts of nitrogen at the right times will provide good color and a good putting surface. Turf specialist Charles Darrah explains	17
Products	18
	Haller.
Classified	20
Viewpoint	22



GOLF BUSINESS (formerly Golfdom), published monthly and copyright® 1978 by The Harvest Publishing Co., a subsidiary of Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be transmitted or reproduced in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Address: 9800 Detroit Ave., Cleveland, Ohio 44102. Subscriptions sent free to qualified management person-

nel at golf facilities: All others, including elected club officials: \$18 per year in U.S. and Canada; foreign, \$24 per year. Single copy price: \$1.50. Send subscription requests and change of address notice to above address. Controlled circulation paid at Cleveland, Ohio. Postmaster: Send Form 3579 to GOLF BUSINESS, P.O. Box 6951, Cleveland, OH 44101.

# Let's get down to grass facts about golf business.

As an advertiser I'm not interested in reaching golf pros or clubhouse managers — they're not buyers of turf products.

GOLF BUSINESS reaches only those businessmen responsible for turf and course related expenditures (i.e., turf maintenance equipment, seed, sod, chemicals, golf cars, course landscaping, maintenance buildings, renovations/expansions, etc.).

These readers include: A) superintendents, greens committee chairmen and general managers of private golf courses; B) superintendents and owners of daily fee and resort courses; C) superintendents, parks directors and commissioners of municipal golf courses.

... Collectively these businessmen control the golf course turf market.

In 1979 these GOLF BUSINESS readers will purchase approximately \$95 million worth of fertilizer . . . \$30 million in fungicides . . . \$23 million in insecticides and other turf chemicals . . . \$105 million in turf equipment . . . \$75 million in irrigation systems . . . \$15 million in grass seed . . . \$26 million in sand and soil amendments . . . \$16 million in trees and ornamentals . . . and millions of dollars more for other course related products.

## GOLFDOM lost its BPA audit in 1973 because of poor circulation standards. How do I know your circulation is any better today?

The Harvest Publishing Company purchased GOLFDOM (now GOLF BUSINESS) in 1974 and rebuilt its circulation as if for a new magazine.

In August, 1977 GOLF BUSINESS received its BPA approval and remains the ONLY magazine reaching the entire golf course turf market with BPA circulation.

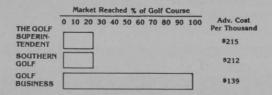
## You've made so many changes to GOLF BUSINESS. How do we know it's getting readership?

Harvest Publishing has monitored GOLFDOM's readership since its purchase in August, 1974 ... Since August, 1976 (when GOLFDOM became the new GOLF BUSINESS), we have pre-tested editorial subjects by direct mail ... conducted telephone and personal interviews ... made readership polls at GCSAA shows and sponsored numerous aided recall readership studies to evaluate how readers compare GOLF BUSINESS to THE GOLF SUPERINTENDENT and various "horizontal" golf market media. It's because of this commitment to product development that we (and a growing list of advertisers) have confidence in GOLF BUSINESS today.

### Your advertising rates are too high compared to THE GOLF SUPERINTENDENT.

There are no bargains in advertising or marketing. In the golf market you get what you pay for ... and in some cases you pay more for <a href="less!">less!</a>

For example: measure the number of golf courses delivered by THE GOLF SUPERINTENDENT or SOUTHERN GOLF for the price of a 4-color page:



I'm only interested in reaching the southern golf market . . . private golf courses markets, etc.

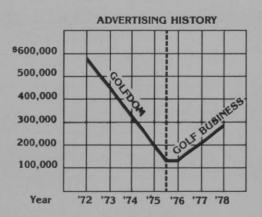
GOLF BUSINESS offers both geographic and demographic circulation buys. For example, if you're target marketing to southern resort courses in January and northeastern municipal courses in September, that's where we'll deliver your advertising message. We know of no other golf business publication offering this flexibility.

#### GOLF BUSINESS issues are too thin. It looks weak.

True, but all new trade magazines are thin — and GOLF BUSINESS is a new magazine. New name . . . new format . . . new circulation . . . new editorial direction. A new magazine, but a magazine with a history, the negative side of which being that GOLFDOM (as a business) was neglected over the years and took a terrible plunge during its last 4½ years of life . . . As a result, GOLFDOM developed a loser image and a reputation that GOLF BUSINESS has had to overcome.

It's tough to turn any business around ... It takes a good product and a lot of hard work.

#### How much more time can you afford to wait and watch?



## golf business

Serving the elite turf market.

## **Idea file**

## Old bowling pins make new tee markers

Walter Bell, superintendent at the North Kingston (Rhode Island) Golf Course, reports that he has had success in converting used bowling pins into tee markers. After painting and numbering them, he inserts a steel spike in the bottom to stand them up in the turf.

## Tips for maintaining turfgrass in shade

Virginia Agronomist K. J. Karnok recently offered members of the Old Dominion Golf Course Superintendents Association these tips on maintaining turfgrass under shady conditions:

"Following establishment of the proper turfgrass cultivars, several modified cultural practices are necessary.

"A cutting height of 2 to 2½ inches will allow the sward to absorb a greater amount of light.

"Excessive nitrogen fertilization results in succulent tissue which is more susceptible to disease and wear injury. Therefore, nitrogen should be maintained at a level just high enough to avoid nitrogen chlorosis.

"Late morning irrigation should be deep and infrequent, wetting the soil to a depth of at least 6 inches.

"Some benefits have been realized by modifying the shade environment. For example, pruning the lower limbs of isolated trees 8 to 10 feet above the ground will allow more morning and evening sunlight to reach the turf area. Dense planting of trees and shrubs should be avoided."

### Site selection spells success — or failure

Site selection will be a major factor in the success or failure of a golf course, says Rees Jones, president of the American Society of Golf Course Architects.

Jones asserts that a professional golf course architect can quickly assess whether a prospective site's characteristics — hills, trees, ravines, creeks, ponds — can be incorporated into a successful course design. "If the architect is able to make use of the natural advantages in the landscape, earthmoving operations are minimized, resulting in greatly reduced construction costs," he says.

Other characteristics to be noted are soil composition, accessibility to population centers, and availability of water and electrical power.

#### REGIONAL

### Turf managers meet in Florida

A broad and varied program of educational seminars and an exhibit area filled with 86 suppliers of seed, chemicals, and equipment drew 750 golf course superintendents and other turf managers to the 26th annual conference and show of the Florida Turf-Grass Association in Orlando recently.



Equipment exhibits in Orlando

Dr. James B. Beard, professor of turfgrass physiology at Texas A&M University, discussed the university's current turfgrass research projects in his keynote address. "We're still a very young science in turfgrass," he noted, "but we're coming."

Research programs such as the one at Texas A&M are producing much valuable information on turfgrass science, but are not cheap. Dr. Beard outlined the costs of his university's 3-year-old program and came up with a total expenditure of \$686,000. That figure includes the value of much irrigation and laboratory equipment donated by manufacturers, as well as a building, a greenhouse, test plots, stress physiology laboratory, and other equipment.

Under Dr. Beard, Texas A&M has built a rhizotron — one of seven in the world, four in the United States. Sort of a cellar with underground glass walls that enable the observation of live root systems in the soil, the rhizotron has produced what Beard termed "the most significant discovery I've been associated with." He was referring to spring root decline observed in Tifgreen and Floratam grasses. During the winter months, Beard said, the plant is dormant but the root system looks healthy. In March, however, when new leaves appear above ground, the roots

turn brown and stop growing. If effect, there is no appreciable root system underneath the grass plant for 3 to 4 weeks in the spring.

Dr. Beard also explained tests underway on heat and wear resistance and shade tolerance of various varieties of turfgrass.

Dr. Harry G. Meyers, turf extension specialist at the University of Florida, discussed "the interaction of mowing, watering, and fertilization" and how they apply to economical turf care. He pointed out that "the healthiest grass plant is unmowed" and that increased mowing height equals increased root growth, increased leaf width, decreased plant density, and lower maintenance costs.

In a session on turf equipment and its maintenance, Jerry H. Cheesman, director of the School of Golf Course Operations at Lake City (Fla.) Community College,



Cheesman: zoned maintenance

outlined how the zonal concept of organizing the maintenance center can enable the superintendent to use and maintain his equipment more efficiently. Typical zones would include administration, equipment maintenance and repair, lubrication, fertilizer storage, equipment storage, and similar functions. Specifics of equipment and golf car maintenance were covered by Ed Combest, an instructor at Lake City; Anthony Saiia, engineer for Jacobsen Turf Products; and John Bush, service training instructor for E-Z-Go.

"I see a new era on the horizon. EPA has weeded out the retired colonels and liberal arts graduates who were interpreting chemical labels they couldn't even read," said Dr. Richard L. Lipsey, pesticide chemical coordinator at the University of Florida during his talk on turf presiticides. He reported that of the 28 Rebuttable Presumptions Against Registration (RPAR's) which have been issued thus far, only DBCP has made it through the process. (see GOLF BUSINESS, November, page 6).

Other programs for golf course



Lipsey: new era for EPA

superintendents covered use of effluent water for irrigation, use of the white amur fish for aquatic weed control, budgeting, worker/supervisor relationships, and irrigation.

#### CONVENTIONS

## Tax bill highlights NCA meeting

An undercurrent of tension and excitement ran through the 3-day annual convention of the National Club Association in mid-October, but it was because of things happening a thousand miles away from the Doral Country Club, where the NCA members met in Miami. In Washington, D.C., the 95th Congress of the United States was debating in its closing hours whether to discontinue tax deductions for club dues.

As the story following explains, Congress voted to continue dues deductions, but the high point of the NCA convention was probably the moment Executive Director Gerard Hurley stepped to the microphone after dinner in the Doral ballroom and announced, "It looks like the House will leave club

## News

dues alone."

Taxes in one form or another are an omnipresent problem for private clubs these days, and a large part of the convention program was devoted to the subject. Speaking at the NCA golf club division breakfast, appraiser Warren P. Hunnicutt Jr. told club representatives, "If you are going to protest your property tax assessment, have your facts straight. Know why it's too high or unequal. If you get a reduction without having your facts straight, you're just plain lucky."

Hunnicutt commented that "most tax assessors are pretty sharp and are interested in doing a good job. They will listen to any reasonable argument, but they don't like to be threatened."

If a golf club's owners think their tax assessment is unfair, Hunnicutt said, they should hire someone qualified to make an accurate appraisal of the property's market value. In the meantime, file an appeal — don't miss the filing deadline. Then if the appraiser thinks you have a good chance for reduction, be prepared to proceed — including going to court, if need be.

In another convention session, NCA Tax Counsel William J.
Lehrfeld and Conrad Rosenberg, chief of the technical research section of the Internal Revenue Service's Exempt Organizations Divisions, briefed members on current and pending IRS regulations.

Rosenberg asked that his talk be "off the record," but most of the discussion centered around questions of what private clubs can and cannot do in obtaining



Rep. Guy Vander Jagt, outgoing president Bob Meyer, incoming president Herbert Emanuelson, and other NCA officials



## CUSHMAN. MORE THAN TRANSPORTATION,

With the Cushman 3- or 4-wheel Turf-Truckster® vehicle, you get a lot more than proven, economical turf transportation. You get the heart of a system that lets you do eight important turf jobs with one versatile power unit.

**I PIN-DISCONNECT** 

The secret of this versatility is the Cushman Pin-Disconnect system. Just put the attachment you need on the Turf-Truckster chassis, secure it with the large pull pins and you're ready to go. No special tools, no trailer to tow, no equipment to load and unload at the site.

#### 2 GREENSAVER® AERATOR

The efficient, low-cost way to quickly aerate greens, tees or other turf areas. The Greensaver drum aerator attaches easily to either Turf-Truckster equipped

with hydraulic system and dump kit. Three interchangeable drums let you use 1/2" or 3/8" coring tines, as well as slicing tines. You change drums according to varying soil conditions. The coring drums collect cores as you aerate up to 10 times faster than walk-type units.

#### **3 SPIKERS**

The Cushman Quick Spiker attaches to a Turf-Truckster with PTO, hydraulic system and dump kit. You spike a precise 57-inch swath, even over undulating ground, and raise or lower the unit hydraulically. The Trailing Spiker gives you the same width and precise results, but its built-in lifting mechanism is controlled by a pull rope.

### 4 SHORT BOX & FLATBED/BOX These hauling and dumping

attachments are mounted quickly with two pull pins. Bolt-on sides and tailgate convert the flatbed to a dump box. Both boxes can be dumped easily with either a manual or powered hydraulic dumping package. And either box is capable of hauling up to 1,000 lb. payloads.\*

#### 5 SPRAYER

Use this versatile attachment to spray greens, hard-to-reach roughs, fairways, trees, bushes. The polyethylene tank holds up to 100 gallons of chemical solution. The three-way boom provides an accurate spray for proper application and less chemical waste. The Turf-Truckster transmission and variable speed governor assure uniform ground speed. And the optional handgun lets you "fog" an area or spray up to 40' in the air.

\*Rating for vehicle equipped with 9.50-8 rear tires.



## **WE GIVE YOU A TOTAL TURF-CARE SYSTEM.**

6 SPREADER/SEEDER

The Cushman Cyclone Spreader/ Seeder mounts on either the Short Box or the Flatbed/Box with a hopper that holds up to 300 pounds. All controls can be operated from the driver's seat, to broadcast over areas up to 40 feet wide, depending on materials.

7 TOP DRESSER

The Cushman Top Dresser eliminates the need for self-powered units and time-consuming walking. The moving bed and rotating brush operate at a controlled speed to maintain an even spreading pattern over a 31-1/2 inch swath. The big hopper can hold up to 1,000 pounds of material, from rock salt to fine, powdered materials.

**8 QUICK AERATOR** The Cushman Quick Aerator is

designed to slice greens and aerate fast. It attaches to either Turf-Truckster with just three pull pins. And is hydraulically lifted from the driver's seat for easy movement from green to green. Three tine types are available for varying soil conditions: slicing, coring (two sizes) and open spoon.

#### **CUSHMAN RUNABOUT**

The economical answer to basic transportation and light hauling requirements. The new 18-hp Runabout now carries two men, plus equipment and supplies, while the 12-hp model carries one man. Both feature a big



pick-up box, exceptional maneuverability, and 3-speed transmission. The Cushman Runabout is the way to help your men do more work, and less walking.

Ask your Cushman Turf Dealer to show you all the time- and moneysaving advantages of his turf-care equipment. Unlike other companies, Cushman gives you more than transportation. We give you a total turf-care system.

Circle 130 on free information card

## Turf Care Equipment

A Division of Outboard Marine Corporation P.O. Box 82409, 3319 Cushman Lincoln, Nebraska 68501 79-CUT-1 nonmember income while retaining their exempt tax status.

Taxes and the deduction of club dues and business entertainment expenses were also on the mind and tongue of Rep. Guy Vander Jagt (R-Mich.). Speaking at the NCA general business session, he said, "Entertainment to business is like fertilizer to the farmer. You have to spread a little around to increase the yield — and a higher yield increases the taxes the IRS can collect."

Vander Jagt complimented the NCA on its lobbying effort on the dues deductions question, noting that the association had talked with 35 of the 37 members of the House Ways and Means Committee of which he is a member.

In a seminar titled "Get the Best From Your Best," the responsibilities of their constituents were discussed by George Cleaver, president of the Golf Course Superintendents Association of America, Dr. Gary Wiren, director of club relations of the Professional Golfers' Association, and Horace Duncan, executive director of the Club Managers Association of America.



Cleaver and Wiren at NCA

Cleaver pointed out that
"although the superintendent's
main job is caring for turf, he is
becoming more involved in
management of the club." Duncan,
Wiren, and Cleaver agreed on the
necessity of cooperation and
coordination between the club
manager, golf professional, and
course superintendent.

"Thousands of dollars are wasted and much dissatisfaction caused by major changes to the golf course planned without the participation and knowledge of the superintendent," Cleaver noted.

Herbert L. Emanuelson Jr. was elected to succeed Milton E. Meyer Jr. as president of NCA. Emanuelson is a New Haven, Conn., attorney and a member of the New Haven Country Club. Other officers elected, and their club affiliations, are:

Vice president — Sam Berry (Quail Hollow CC, Charlotte, N.C.)

Vice president — Harold B. Berman (past president, Columbian CC of Dallas)

Secretary — Joseph N. Noll (past president, Kenosha CC, Kenosha, Wis.)

Treasurer — E. Guenter Skole, CCM (general manager, Metropolitan Club, Washington, D.C.).

PRIVATE CLUBS

## **Dues deductions** saved in Congress

In an 11th hour decision that may save the private club industry millions of dollars, a House-Senate Conference Committee rejected the Senate's provision that would have ended tax deductions for club dues. The 95th Congress passed a tax bill that ends deductions for entertainment facilities such as yachts and hunting lodges but continues deductions for club dues.

"The odds against the Conference Committee's reversing the Senate's vote to end dues deductions were astronomical," said Herbert L. Emanuelson, Jr., the new president of the National Club Association, which led the fight against ending the deductions. "But thanks to the fantastic lobbying effort by our Washington team and the support of our members and other industry organizations, we convinced key members of the committee to defend our cause. Had it not been for this industry effort led by NCA, the club industry could well be facing financial chaos.'

Congress' action was a major blow to President Carter, who had made the disallowance of club dues deductions a highly visible part of his tax reform package. It was an important victory for the club industry and NCA, the trade association which lobbies for the interests of private golf clubs and other clubs.

When the President first announced his proposal to disallow deductions for club dues, the NCA and its executive director, Gerard Hurley, vigorously fought the proposal with the support of the Golf Course Superintendents Association of America, the

Professional Golfers' Association, the Club Managers Association of America, and other groups.

NCA had estimated that perhaps 45 percent of the nation's golf clubs could be so impaired by the loss of dues deductibility that their future would be in doubt.

TURF PESTS

## Ataenius named; new pest discovered

Dr. Harry D. Niemczyk, professor of turfgrass entomology at the Ohio Agricultural Research and Development Center in Wooster, reports that the 1978 Committee on Common Names of Insects from the Entomological Society of America has approved a common name for Ataenius spretulus. The approved common name is "black turfgrass ataenius."

Dr. Niemczyk has also discovered another beetle that damages turf at the same time Ataenius larvae do.

"This insect has been determined as *Aphodius granarius*," he said. "I found larvae of this species damaging turf in Boulder, Colo., and at two golf courses in Detroit. At first glance, adults appear identical to *Ataenius spretulus*. The larvae of *Aphodius* are slightly larger and have a somewhat darker head capsule. The most outstanding identifying feature of the larvae is the V-shaped series of spines located in the raster."

TURFGRASS SEED

## Seed industry stats subject of workshop

A major effort has been instituted by the grass seed industry in cooperation with the federal government to produce statistics that are meaningful, rather than numbers which often are inaccurate.

Duane Jacklin, chairman of the Statistics Committee of the American Seed Trade Association, headed a workshop in Portland, Ore., recently that included trade association members as well as representatives of the Economics Statistics and Cooperative Service, a branch of the U.S. Department of Agriculture.

"The purpose of the workshop



1625 N. Garvin St., Evansville, IN 47711 (812) 424-0931

Get the complete greens management system or order

**DEALERS WANTED** 

units as you require.

was not to blame anyone," Jacklin said, "but to assess where the shortcomings are in the program and to take positive action in all areas to correct them.

"One segment, and very key to the whole program, is the completion of forms sent to seed producers. If the statistics are not there, the industry has no way of gauging where it's at and where to go from there."

John Kirkbride, director of the Estimates Division of the ESCS, several members of his Washington, D.C. staff, and staff members from Washington, Oregon, and Idaho presented the morning program. They outlined the problems faced in attempting to provide a comprehensive and accurate annual report for 41 kinds of seed, including acreage and yield per acre.

"The seed industry is a small part of the ESCS statistics-gathering service throughout the U.S., but it is important to the seed growers, processors, and marketing firms as well as industries that serve these producers," Jacklin said.

Accurate information on seed production can also be valuable to golf course superintendents and other turf managers who purchase seed — particularly in regard to pricing and availability.

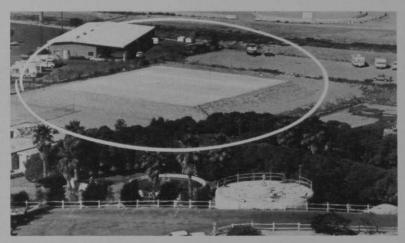
Impetus for the workshop was generated at the ASTA annual meeting earlier this year in Kansas City. Copies of the workshop discussions can be obtained by writing to Duane Jacklin, Jacklin Seed Co., Route 2, Box 402, Post Falls, ID 83854.

#### SAFETY REGULATIONS

## Nuisance standards revoked by OSHA

Assistant Secretary of Labor Eula Bingham, head of the Occupational Safety and Health Administration, on October 24 revoked 607 general industry safety standards deemed unneeded or unrelated to job safety and health.

Standards revoked ranged from those covering U-shaped toilet seats, the type of wood used for portable ladders, and the height for mounting fire extinguishers to others such as minimum age requirements for certain jobs, dikes and drainage areas around storage tanks, and the location of certain buildings in relation to public thoroughfares.



Circled area in photo stores 800,000 gallons of effluent water which eventually will be used by Rancho La Costa CC.

"Unnecessary and overly complex regulations place a tremendous burden on workers, employers, and the agency's limited inspection resources," Dr. Bingham said. "Getting rid of nitpicking and irrelevant provisions enables all of us to concentrate on reducing or eliminating the more serious and significant workplace safety and health hazards."

The revoked standards made up roughly 10 percent of the word volume of OSHA's standards and were finalized as the result of extensive public review and comment on the more than 1,100 provisions proposed for revocation last December 13.

Criteria used to determine which provisions were to be revoked, in order descending of frequency used, were:

1) encumbered by unnecessary details, 2) adequately covered by other general standards, 3) directed toward public safety or property protection, 4) obsolete or inconsequential, 5) subject to enforcement by other regulatory agencies, 6) contingent upon manufacturer's approval or recommendation, and 7) concerned with comfort or convenience.

#### **IRRIGATION**

## Rancho La Costa uses effluent from county

An agreement between Rancho La Costa Country Club and the Leucadia County (Calif.) Water District seems to be paying off for both the golf course and the county. The golf course buys effluent water for irrigation at 30 percent less than it would pay for tap water, and the county receives payment for effluent which was previously pumped into the Pacific Ocean.

There was one hangup in reaching the agreement, however. The golf course wanted the water at night, although most of it was available only during the daytime. The solution was an 800,000-gallon, embankment-supported Fabritank water storage system.

Liquid-proof, the Fabritank is made of tough Neoprene rubber-impregnated nylon by the Firestone Coated Fabrics Co. Because it weighed about 5 tons, the Fabritank was lifted into place by a crane, then unrolled and secured by engineers inside a 13-foot-high, 116-foot-square earthen bank at the Leucadia sewage treatment plant

Now the water district can store effluent water during the day, and the nearby Rancho La Costa Country Club can pump it out at night.

COMPANIES

## Distributors hear new Jacobsen plans

Nearly 300 representatives of major distributors of turf maintenance equipment attended the recent Jacobsen Turf Products' sales meeting and were introduced to top management of Textron Inc. as well as to new products and plans for the coming year.

Textron acquired Jacobsen from Allegheny Ludlum Industries earlier this year. Textron President Robert P. Straetz told the distributors that his firm had first discussed merger possibilities with Jacobsen in the mid-1960's and that Jacobsen's "established name, product quality, and leadership in turf maintenance equipment" were criteria in the acquisition decision.

Jacobsen President Frank
Depew said Jacobsen sales have
nearly doubled during the past 4
years and are running about 30
percent ahead for the current fiscal
year. As part of a 5-year Forward
Business Plan, Depew said, the
company has been reorganized
into three separate units: Turf
Products, Consumer Products, and
Central Parts Supply. Turf Products
manufacturing has been
consolidated at Racine, Wis.

According to Howard McPherson, vice president and general manager of Turf Products, improvements have been made in design, engineering, manufacturing, sales and service, and purchasing.

Substantial improvements have been made in expediting repair parts orders, said Jack Krug, vice president and general manager of Central Parts Supply. Howard Cooper, manager of product planning and development, reported that new guidelines and procedures have been developed to tailor equipment to user needs. He gave the new Turfcat as an example.

#### NATIONAL GOLF FOUNDATION BOX SCORE EXECUTIVE COURSES PAR 3 COURSES REGULATION January-October 1978 TOTAL COURSES **OPENED** 36 3 New 11 91 0 FOR PLAY Additions 33 8 STARTED 39 5 New 81 CONSTRUCTION Additions 2 2 31 76 4 **PROSPECTIVE** 8 88

