

water problems? use a portable dredge

by JOSEPH P. MC BRIDE



The Chick Evans GC used a portable dredge to increase their water storage capacity, reduce chances of flooding, eradicate weeds and eliminate stagnation

A new tool for cleaning small lakes reservoirs and streams has greatly improved the appearance of one of our district's golf courses, the Chick Evans GC, Morton Grove, Ill.

Working where other equipment could not, a small, portable, shallow-draft dredge provided such benefits as increasing the course's water storage capacity, reducing the chances of flooding, eradicating weeds, and eliminating stagnation and odor.

The project, contracted with Mobile Dredging and Pumping Div. of National Power Rodding Corp., Chicago, involved cleaning and deepening a 1½-acre riverbed reservoir on the golf course. Not only did Mobile Dredging's small, trailer-transported, eight-inch dredge complete the 150 by 500-foot job quickly, but its use eliminated much of the ground destruction and all the highway spill-

age problems common to dragline excavation and truck hauling.

Pumping out 2,600 cubic yards of silt restored the reservoir to its original five-foot depth, thereby creating ample water supply to keep the golf course green even during extreme droughts. Cost for the entire job totaled just under \$23,000.

In studying the basic problem, water supply, Forest Preserve District engineers recorded an average flow of the river of six to seven cubic feet per second. In July and August, however, almost annually, the flow dropped to a seven day average of two cubic feet per second and sometimes to only 0.7 cubic feet per second. Other ways studied proved too expensive, so, dredging the lagoon or reservoir area back to its original depth behind its low sheet-piling dam was the only reasonable alternative.

The area was also an eyesore. Once a clean, free-flowing body of water it now resembled a mud flat. Ugly weeds thrived in water only 12 to 22 inches deep. Lily pads covered the water.

Although dredging won't overcome pollution, it can eliminate many of the effects of pollution:

Weeds, muck and slime are re-

moved, and water moves freely;

- Algae diminishes;
- Odors caused by decaying material are reduced;
- Mosquitos lose their breeding grounds.

Dredging the lagoon not only solved a pollution problem, it improved the appearance of the area to the golfers and the public. We also now have an assured supply of 300,000 gallons of water a day for golf course irrigation. About 150,000 gallons are used each night with no problem, and flood conditions are completely unaffected.

In the case of this golf course, dredging provided another major advantage—very little disruption to the grounds. Fairways were left untouched for the most part. No ugly mud roads were needed to move the dredge and supporting equipment in and out. The transport path was only 12 feet wide. The path, quickly reseeded and landscaped after the job was finished, was not noticeable. Moreover, material disposal was simple.

Mobile Dredging's method of pumping the material out by pipe and placing it in low areas adjacent to the river preserved the surrounding landscape. Our engineers also felt that pumping the hydraulic fill



The portable dredge lies in the 1½-acre reservoir (top left). Cutting in a semi-circle, the dredge took out 2,600 cubic yards of silt and weeds working, in as little as two feet of water (top center). Over 1,500 feet of pipe was used to carry the discharge material (top right).



material next to the river would not affect the flood retention capacity of the area. Deposits from this hydraulic dredging method, already well distributed when dumped, leveled out even further than they anticipated and filled only those low spots that normally hold water or are flooded during the initial part of a storm when the river is still within its banks, and did not really provide the flood storage or retention space. This method of filling spreads material only a few inches deep over a very large area, in this case, over 10 acres, so it is hardly noticeable.

Dredging requires specialized equipment and qualified personnel. It's both cheaper and simpler to contract the job to experts than to try to do it yourself. We put the job on public bid and awarded the contract to Mobile Dredging.

Their equipment included a hydraulic dredge of the proper size

and portability to handle this small, shallow lagoon. The particular unit used, an eight-inch dredge, is able to float in two feet of water.

The job began with the arrival of the dredge, disassembled, in four trailer loads. A 40-ton mobile crane hired locally unloaded the trailers and helped the contractor's three-man crew assemble the 25 by eight-foot hull, pontoons, ladder and cutterhead on the ground. Equipment preparation took one day. The crane then lifted the entire dredge and launched it in the water.

Crews laid seven-inch aluminum pipe on flats and land blocks from the lagoon to the spoil area where we would dump the silt. Two swing lines were attached from the ladder to the shore to control semi-circular cuts, and the dredge moved into position in the water.

Work began with the operator lowering the suction pipe-cutterhead assembly into the silt. The cutter turns slowly, breaking up the deposits and homogenizing the material with water to create a pumpable mix. Power from the rig's main diesel engine moved the silt up through the suction head pump into the discharge pipe, where it went to spoil areas. Guided by a depth rod at the end of the rig's ladder,

the operator raised the cutter to follow the natural bankside slope of the riverbed to avoid creating sharp dropoffs and prevent the sides from caving in. Production in a day ranged from 125 to 175 yards of material.

When the job was completed, the dredge was brought close to shore to be lifted out by the same crane that launched it. All gear, including pipe, was then disassembled and trailer-loaded. The job was completed by a local landscape contractor, who leveled and reseeded the small crane work area and re-installed cyclone fencing.

In 30 days the dredging crew was in and out and the entire job was done.

This project was so successful that we are considering dredging out some of our 70 other lakes and sloughs which range in size from one-half to 175 acres. Lakes scheduled for rehabilitation through dredging fall in the five to 30-acre range. Their current three-foot maximum depth will be excavated to 10 feet. □

JOSEPH P. MC BRIDE is assistant chief engineer for the Forest Preserve District of Cook County, River Forest, Ill.

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INSURE YOUR INVESTMENTS

SECOND OF A SERIES

In the first article of this insurance series (May issue, p. 72), we presented the background of inland marine insurance and pointed out where inland marine floater forms could best be adapted to broaden protection on various risk exposures found within a country club clubhouse.

This month we will move outdoors and survey other important, though frequently overlooked, properties owned by a country club, which also may be insured.

During the years in which I have been a country club insurance consultant, I have been amazed at how little clubs have fully utilized inland marine insurance forms to adequately protect their outside movable equipment and property. Some clubs buy just fire insurance on outside property only to fall victim to expensive property damage loss caused by vandals.

Other clubs purchase burglary coverage, but fail to understand the limitations of this kind of in-

Insurance covering maintenance equipment and golf cars frequently is inadequate, making vulnerable the country club, its members as well as its employees

by JOHN F. GLEASON JR.

insurance. It responds only when property is taken while inside an insured building following visible signs of forcible entry. The layman board of owners bemoan the policy "fine print" of an insurance contract, which may have been improperly purchased.

Finally, some country clubs pay a terrible price to realize after serious loss of, or damage to, outside property, that they never indemnified the club.

As stated last month, whenever an inland marine floater form is purchased to protect movable

property, the club should attempt to include on the policy all risk coverage rather than limited named perils. Although the former may cost a little more, the latter frequently falls short of the protection needed to meet all the exposures, which may cause serious loss or damage to the club's equipment.

Let's run down the list of outside items eligible for coverage under inland marine forms.

Topping the list are the golf cars owned or leased by the country club and maintenance equipment. All equipment required in the playing of the course may be insured along with other equipment under an all risk floater form. This includes benches, markers, ball washers and flag poles.

Other sporting equipment needed for tennis, the swimming pool, the children's playgrounds, boating and winter sports may be insured under inland marine forms.

Snowmobiles may be insured under a special form. Outboard and

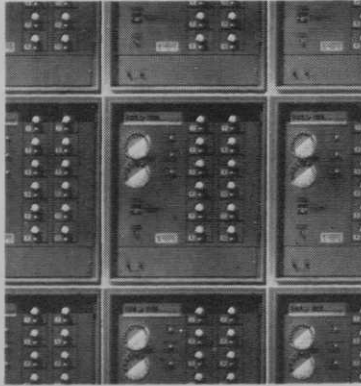
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INSURE from page 45

inboard motors take a special form, too. Vending machines on the premises may be insured as well as scoreboard, neon and electrical signs.

Some country clubs might be interested to know that bridges and tunnels on the course may be insured under an inland marine special form. Not many members consider what would be the consequences of an inaccessible key bridge or tunnel. Under the bridge and tunnel insurance form, direct physical damage, if named in the contract, can be insured. The form may also be tailored to cover revenue loss which would result if cars could not go over or through the bridge or tunnel during the time of reconstruction.

Golf cars owned or leased by a country club require very special insurance review for many important reasons.

Presumably most members are insured for personal liability arising out of sporting activities either under the standard homeowners policies or under a personal comprehensive liability policy. Although these policies protect the holder if he inadvertently injures another golfer while operating the rented golf car, the coverage does not extend to the loss or damage he causes to a golf car in his care, custody or control.

If a member rents a car for a round of golf and overturns or damages it, his personal insurance will not reimburse the golfer or the club for the damage.

Whether or not the player should be required to reimburse the country club for damage to a rented golf car is a touchy question. Clubs vary in their thinking. Some maintain that the member's dues and rental charges make possible the car rentals. To hold the player responsible for reimbursement of inadvertent property damage loss, when he has no insurance to cover such a claim, would cause unnecessary ill-feelings among members.

If the country club would provide all risk insurance on all its rented golf cars and, more important, insist when the policy is written that the insurance company delete from the policy conditions the

company's right of subrogation against members, guests, customers or authorized personnel, then, if a loss occurs, the policy will pay the club for damage.

By removing the right of subrogation against the above persons, the country club will be reimbursed for any loss to the cars, but the insurance company will not be allowed to turn to the player for reimbursement of the claim payment.

Each country club must carefully review the inland marine policy insurance for its golf cars. Then it must determine that new vehicles are added and vehicles no longer in use are removed from the policy. This review should be conducted at least annually or each time the golf car fleet is augmented by new vehicles or when older cars are discarded.

Most insurance companies provide in the insurance policy an automatic pickup endorsement, which automatically insures newly-

"It's foolish to carry more insurance on a [golf] car than the club could realize in a claim settlement."

acquired golf cars. Usually this endorsement is limited to 25 per cent of the total value of the vehicles currently insured. The endorsement requires the insured to report to the insurance company within 30 days the list and value of new vehicles.

Every country club should check and insist on this particular extension. Moreover some insurance companies will modify the endorsement so that the automatic coverage feature will be reviewed annually.

The number of companies that will grant this liberal consideration are in the minority. Every country club, therefore, must advise the insurance company whenever there is a change in the golf car fleet so that proper insurance is provided on all new vehicles.

At the same time, the club should review the value for which each golf car is insured. Golf cars depreciate. It's foolish to carry more insurance on a car than the club could

realize in a claim settlement.

If the golf cars are leased, the club has another serious insurance problem to check out. Many lease agreements require the lessor to carry physical damage insurance on the leased vehicles, but do not state if the lessor carries all risk insurance on the leased units. Many lessors carry limited insurance, yet the lease agreement goes on to state that the lessee (the country club) will be responsible for damage to the car whether the cause is insured by the lessor or not.

This situation leaves the country club vulnerable to claim payments or to reimbursement of damage losses. Moreover, the problems related to members renting these cars and personal insurance coverage on losses again arise when leased golf cars are involved.

If the lessor provides the physical damage insurance on his golf cars, then every country club should insist on being furnished with a copy of the policy so that it may determine if the lessor is carrying all risk coverage. Even more important is the need to remove the subrogation clause with respect to the country club itself and its members, guests, customers and authorized personnel.

Whenever a lessor states that he will provide the physical damage insurance, the country club must understand absolutely the insurance contract involved, because it may apply to the club which leases the golf cars. The lessor's assurance is not enough to prevent the country club from finding itself nonetheless paying a claim which it had believed would be covered by the lessor's policy, regardless of the circumstances.

Unlicensed mobile equipment required to maintain the golf course include many expensive items which should be insured under an all risk inland marine floater form. Few members realize how much money is invested in the equipment that is needed to keep a golf course in top playing condition.

Moreover, there are other movable property items used in the actual playing of a round of golf; these include the flag poles, tee benches, ball washers and markers. All of the movable equipment

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For more information circle number 180 on card

INSURE *from page 48*

needed to maintain the golf course and the property used in actual play may be listed on an inland marine floater policy.

One problem continually arises. Many country clubs may carry a policy that lists all of these outdoor properties, but fail to keep the schedule up-to-date. Unless the list is reviewed regularly, or the automatic pickup endorsement is attached to the insurance contract, new equipment frequently is not included in the schedule until it is too late. Then the club discovers that an expensive item is uninsured because it never advised the insurance company.

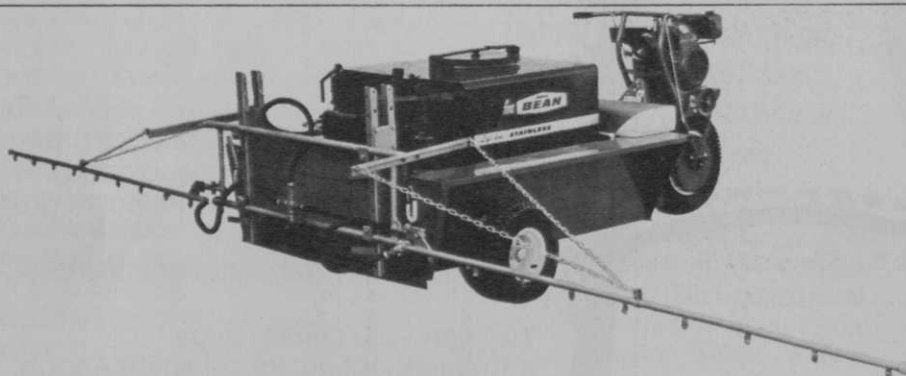
Regular or frequent review of this schedule is a recommended practice. The golf course superintendent should fully understand his responsibility in this procedure. Although he is not totally responsible, he should inform the general manager or call the insurance committee to request the addition of the new item to the existing schedule. He can also advise the proper person when a piece of machinery is retired. I once reviewed with the greens superintendent the equipment schedule of a prominent country club. The existing floater policy showed \$53,000 worth of valuable equipment on the property schedule. When our review was finished and in spite of many deletions of obsolete equipment, the revised equipment list exceeded \$100,000. It would be fair to bet that 75 per cent or more of the 10,000-plus golf courses in the United States today do not have up-to-date equipment schedules.

The most significant reason for insuring these items under the inland marine floater form is that coverage applies whether the property is inside the maintenance buildings or outdoors.

The premium required to purchase this insurance is no more, frequently less, than the premium required to purchase fire and burglary insurance on this property. Under the floater form the property is insured regardless of where it is located at the time of loss. A fire or burglary policy covers the property only in designated buildings.

Further, these limited policies

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