expensive for the average golf club to cover travel expenses and all other requirements. In conjunction with our turf programs at various schools, a mechanical program might be set up for students. Manufacturers could share the expenses by donating machinery and trained teachers. Better trained groundsmen could save clubs many manhours, machinery breakdowns, extensive repairs, replacement parts and time could all be saved.

Let us try to develop a course maintenance man. A man with a trade, not just a day-to-day means of making a living. We could start in the high schools of our areas and work with youngsters who want to use their hands and imagination. After all, it doesn't take a college degree to become a successful golf course employee. High school boys who do not wish to continue on to college are our best prospects.

If our courses are to make progress in the future and meet player demands, then our grounds maintenance personnel must be better trained, better paid. Only then will we be able to complete the cycle of performance for a quality golf course at a minimal cost. Each course, like each player, has a personality of it's own. Golf, after all, is a very humbling and

selfish game. It inflates and deflates your ego; golf courses are no different.

From observation I have developed a saying: "Show me a maintenance area in disarray and confusion and I will show you a poorly conditioned golf course."

Your maintenance area is the starting point or hub of your operation. An orderly, well-stocked repair parts area saves time, money, and equipment. Machinery under cover is a sign of resourceful management. Lockers, (lunch) eating facilities, rest rooms in sanitary condition; these are the morale builders for employees.

At a recent Baltimore Turf Conference, I was enlightened and impressed by several young superintendents. They presented a panel discussion and slides depicting improved maintenance areas. It shows they are on the ball as far as good management is concerned. No doubt more clubs should become involved in maintenance area improvement.

There are many other suggestions I might make, but to summarize simply, may I say, "Yesterday the strawboss, today the superintendent, tomorrow the resourceful course manager."

## Ideas and Gadgets

By Alexander M. Radko, Eastern Director and National Research Director, USGA Green Section

repare your golfers for winter greens well in advance of the time they are put into play by cutting out the winter green and dying it a vivid green," so says Paul Couture, Superintendent at

the Plandome Country Club, Plandome, N.Y. "Golfers get used to the plan and accept it more readily when they see the area and the preparation that goes into the winter green."

Artificial coloring makes the "alternate" or "winter" green area stand out and may prepare golfers to better accept the alternate green.



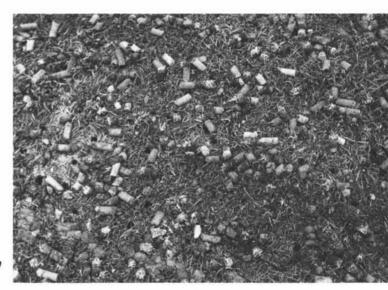
Is it possible and practical to topdress fairways?

"It is if you use putting green aerators three abreast on fairways," says Richie Valentine,

Superintendent of Merion Golf Club, Ardmore, Pa. Valentine aerated all fairways in the fall of 1970, and the three pictures following show the effect.



Fairway completely covered with cores.



A close up of cores and aeration holes.



Cores were pulverized and dragged with an excellent smoothing and topdressing effect.

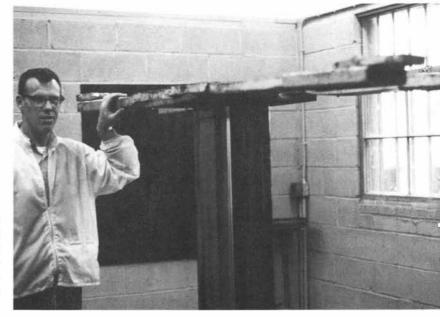
"If you have occasion to drill a well and it doesn't produce to requirement for irrigation purposes, don't cap it and forget it," advises Roy Mackintosh, Superintendent of Twin Hills Country Club, Longmeadow, Mass. "It may make an excellent source of water for filling your spray tank quickly." Mackintosh installed permanent overhead pipe, a pump, and electric controls, and in a matter of minutes the spray rig is filled and ready to go.

To eradicate patches of zoysia or bermudagrass from fairways on northern courses, Mel Lucas, Sr., Superintendent of the Piping Rock Club, Locust Valley, N.Y., recommends working the patch up in late November or December. Loosening the runners causes winterkill in warm-season grasses, so that when you establish cool-season grasses you'll experience no more warm-season grass problems. In his specific case, Lucas stripped the sod, rototilled the area, added soil and seeded to bentgrass. Several years have elapsed with no re-invasion of the warm-season grasses.

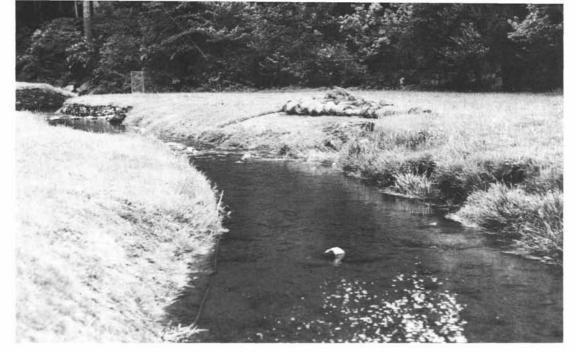
Gary Crothers, of the Apawamis Club, Rye, N.Y., says, "Don't fail to install a hydraulic lift if you're building a new maintenance facility." His cost was approximately \$1,000 to install the lift and control mechanisms, but says Gary, "It's paid for itself many times over. It's a great asset to our equipment repair operation." The lift is the same type normally installed in garages.



Supt. Roy Mackintosh, Twin Hills C.C., Longmeadow, Mass., set up this permanent installation for filling the spray rig efficiently.



Supt. Gary Crothers, Apawamis Club, Rye, N.Y., lauds the hydraulic lift as a most helpful instrument in repair operations. He had one installed when the new maintenance area was built at his club.



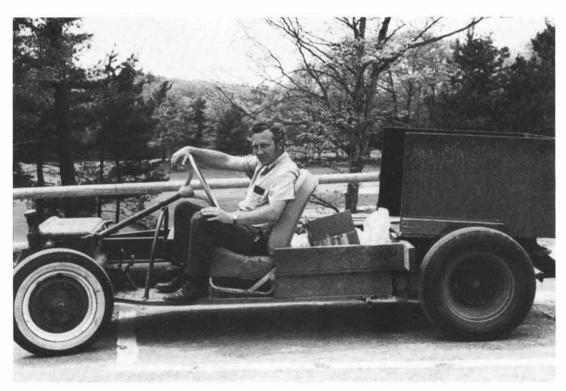
Far end, right side completed, center area being improved, foreground right side next.

Bank repair on the 11th hole at Merion taught us a new technique. Valentine's experienced labor force did a masterful job of repair by cutting a *vertical* slice from the cut (weak) area. They removed the soil and turf and placed it on the bank. Then they cut a wedge back two to three feet into the solid turf at the surface and carefully laid it on its side so that the turf and soil that was formerly on top now was

lying over on its side to create a solid wall of dense turf that extended into the water and up the bank. Then they filled the hole in back of the new bank and sodded it. Because the new fill and sod was now on top of the bank, it was in no danger of immediate erosion as is the case with new soil and new sod placed at the base of a bank.



Finished job looks natural immediately upon completion.



Supt. Wayne Ripley in his homemade truckster.

Wayne Ripley, of the Blue Hill Country Club, Canton, Mass., advises that a secondhand VW chassis can be the foundation of a homemade truckster for golf course use. The one shown above was constructed by Ripley.

In trying to spray fairways uniformly, it is difficult not to skip or overlap. To minimize this possibility, Frank Stephen, of Westwood Country Club, Williamsville, N.Y., affixed a heavy drag chain to the back of the tractor. The chain scuffs the turf and makes a line that is easily identified, one that the operator can readily pick up to gauge his direction and pattern so that he is far less likely to skip or overlap. This assures an efficient and effective job with a minimum of danger to the desirable turfgrasses.

To screen debris from the irrigation water, Saucon Valley Country Club, Bethlehem, Pa. employs a rotary filter. The water is drawn into the housing and the debris is filtered out and deposited in the concrete channel and washed downstream.

Closeup of concrete channel where debris is screened to bypass pump and wash downstream.

