

## Gravel Storage Bins Made Easy

by Tony Rządski, Asst. Supt.  
Cantigny Golf Club

Every golf course has this problem. Where can I store my sand, soil, gravel, peat moss, limestone screenings, etc., etc., etc.

Every golf course deals with this problem in a different way. Some of us have timber bins, some have cinder block wall bins. Some of us just pile our wares in a readily accessible location. This is fine, but it's always hard to get that last bucketful of material when you have nothing to push it against.

We decided to build our bins out of 2' x 8' x 2' cement blocks. This is not an original idea, but it is a simple, everlasting, and fairly economical way to build material storage bins.

The 2' x 8' x 2' performed blocks actually are 'over pours' made of leftover cement from trucks that do not complete dumping their loads at a construction site. For these rather inexpensive and almost immovable blocks we paid \$35 each, delivered and installed in place.

Our four stall storage area is 72' long and 16' deep. It took 38 blocks to complete the project: \$1330 may be a lot of money, but these are immovable blocks that will never deteriorate.

I have seen beautiful material storage bins made of heavy timbers and superbly constructed. But lumber is lumber, it does rot. Wolmanized, creosote timbers, and cedar logs do have a much longer life span; but none of these timbers can stand up to some loco cowboy ramming the #5%\* out of your gravel pile with a front end loader. Timbers do crack and break. Concrete is concrete.

To beef up our storage facility a bit more I felt that the floor needed to be as strong as the walls. So we made the floor of poured concrete. If you build bins like these you can use any type of paving material for a floor, or none at all to cut down on costs. We felt that we would like to make our bins as permanent as possible and not lose our floor to the ravages of the front end loader, so we invested the extra money.

The foundation I dug to 12 inches. For the bottom layer I used 4" shot rock. I needed approximately 20 tons at a cost of \$8.80/ton to cover my 1152 square foot base. Above the base layer of shot rock I put in 4" of gravel to get me within 4" of grade. We paid \$12.60 for 16 yards of #2 gravel. The total cost of the gravel we used was \$377.60.

Before pouring the concrete I had the 2' x 8' x 2' blocks placed. The blocks sit on the gravel 4" lower than grade so that the poured concrete could form around the blocks and hold them in place. Now the crazy caballero can't nudge them either. We used approximately 12 yards of concrete for our floor. This cost us \$600.00. I also threw in some metal reinforced screening that we had laying around for a little extra insurance.

For my simple, unoriginal, everlasting, and 'fairly economical' gravel storage bins we paid a grand total of \$2,307.60. Labor costs were nothing because Cantigny pays me anyway, whether I build gravel bins or supervise the crew. Again, this may be a grand amount of money just for storage bins, but they should never move out of place.

We are very pleased with results that we have had with our storage bins. They serve our needs well and we are very happy that we spent the extra money to make them as permanent as possible.

(Photos on page 20)

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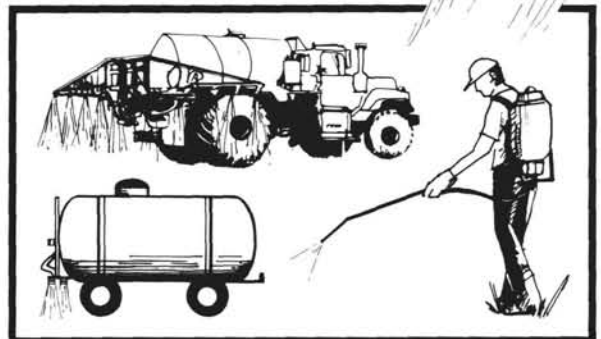
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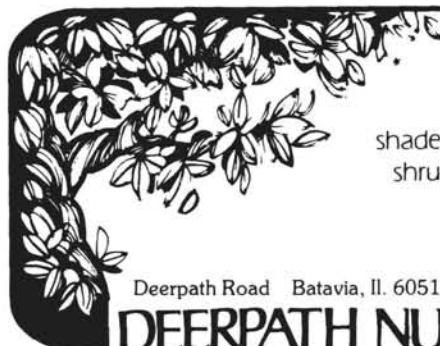
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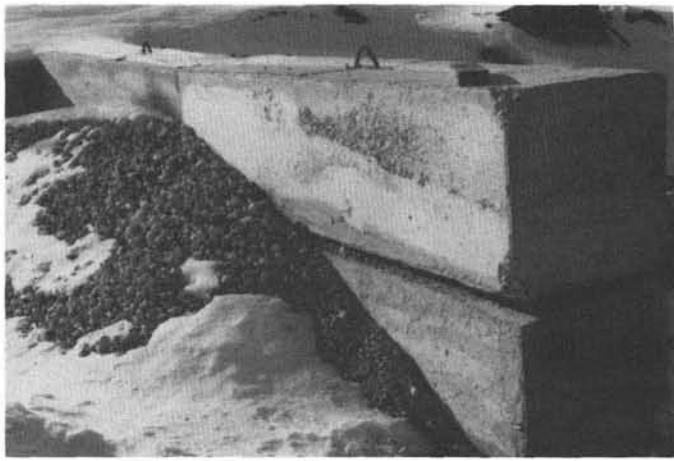
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Each year, the NGF tracks golf course development activity across the U.S. In so doing, it identifies three categories of projects: courses that have opened for play, courses that are under construction, and courses in the planning stage. At the end of 1990, the NGF was tracking a total of 1,630 projects, compared to 1,356 projects at the end of 1989.

The final 1990 tally shows that 289 courses opened for play ... one short of the 290 that opened in 1989. In 1988, the total was 211. Prior to that, the nation was averaging less than 150 course openings per year.

The possibility of high activity continuing into 1991 appears good, given the fact that at 1990 year-end a total of 560 courses were under construction. This is a significant increase over the 463 that were under construction at the end of 1989. Also, the number of courses in planning rose from 603 to 781.

In its annual count, the NGF tracks both new courses and expansions of existing courses. The 289 courses that opened for play in 1990 break down as follows:

New courses (9 or 18 holes).....	206
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