

# ANOTHER COVER-UP

*An inexpensive, effective way to maintain dry topdressing.*

by BOB VAVREK

**S**UPERINTENDENTS generally agree that topdressing greens at two- or three-week intervals throughout the season will result in smoother, more consistent putting surfaces. Topdressing sand-based greens at regular intervals is an absolute necessity for preventing thatch accumulation. Many older soil-based greens are topdressed with sand or a blend of sand and peat to (1) improve drainage, (2) increase resistance to compaction in the root zone, and (3) provide more consistency in playing conditions among greens.

Frequent, light topdressing is a labor-intensive, time-consuming task that often disrupts play. The use of dry materials can significantly increase the efficiency of the topdressing process. Concrete or wooden topdressing storage bins are found at many golf courses. Few, however, are provided with any overhead protection other than plastic sheeting or a tarp. Anchoring a tarp over the stockpile with old tires or cinder blocks does not allow the free exchange of air and moisture, and damp topdressing is the result.

Ed Kirchenwitz, the golf course superintendent of the Straits Course at Whistling Straits in Kohler, Wisconsin, has engineered a simple, effective, inexpensive way to cover topdressing storage bins. The design is a modification of the semicircular, plastic-covered greenhouse structures commonly used in the horticulture industry.

The framework for the cover consists of parallel metal hoops mounted in holes drilled into a railroad tie base. The holes must be drilled at a fixed angle into the ties to ensure a consistent height across the top of the structure. The hoops are placed at four-foot intervals along the ties and stabilized by three metal-pipe crossbars. Lengths of pressure-treated lumber (10' x 1" x 4") are bolted at the base of the hoops along the railroad ties to hold the plastic cover in place. Three-foot lengths of the lumber are used to secure the plastic cover along the arc of the front and back hoop.



*A plastic-covered roof can readily be installed over existing topdressing bins to provide effective protection from the elements.*

The pressure-treated wood is anchored to the metal hoops using 3" carriage bolts through a flat steel bracket. The brackets are made by cutting a length of  $\frac{1}{8}$ " x  $\frac{1}{2}$ " steel stock into 3" sections and drilling a hole at each end to accept the carriage bolt. A 6-mil-thick plastic sheet, treated to resist UV degradation, is then used to cover the hoop framework. The plastic is stretched across the hoops and secured to the boards along the base of the railroad ties by sandwiching the sheet between another length of 1" x 4" lumber. One-inch wood screws are used to fasten the two boards together once the plastic is pulled tightly between the wood. A length of rain gutter can be mounted along the railroad ties, where the plastic meets the top of the bin, to collect and move water away from the base of the topdressing shelter.

The cost of the material to cover a 17' wide x 20' deep topdressing bin was approximately \$500 and required about 20 hours of labor. Materials and hardware for the cover included: 6 hoops, 3 stabilizer pipes, 18 cross connectors (stabilizer to hoop), 6-mil UV-treated plastic sheeting, 16 10-foot lengths of 1" x 4" pressure-treated lumber, 80  $\frac{3}{8}$ " x 3" carriage bolts, 6 feet

of  $\frac{1}{8}$ " x  $\frac{1}{2}$ " metal stock, and two 20-foot lengths of rain gutter.

The plastic shelters work surprisingly well, considering the bins are open to the elements across the entire front and part of the back. In fact, keeping the front and back of the shelter open is the reason why high winds do not cause the roof to lift off the bins. According to several superintendents, rain rarely reaches the inside of the shelter. Since air freely circulates around the sand, any moisture in the topdressing can evaporate rapidly — unlike what occurs under a tarp.

The most common problem associated with this shelter is from equipment operators who damage the framework when topdressing is placed into or removed from the bins. If the height of the hoop framework is designed to accommodate the type of equipment that will be used in the bin, there will be much less risk of structural damage. In contrast to the political *cover-ups* frequently reported in the media, this type of cover-up produces positive results.

---

BOB VAVREK is an agronomist for the USGA Green Section North-Central Region, based in Elm Grove, Wisconsin.