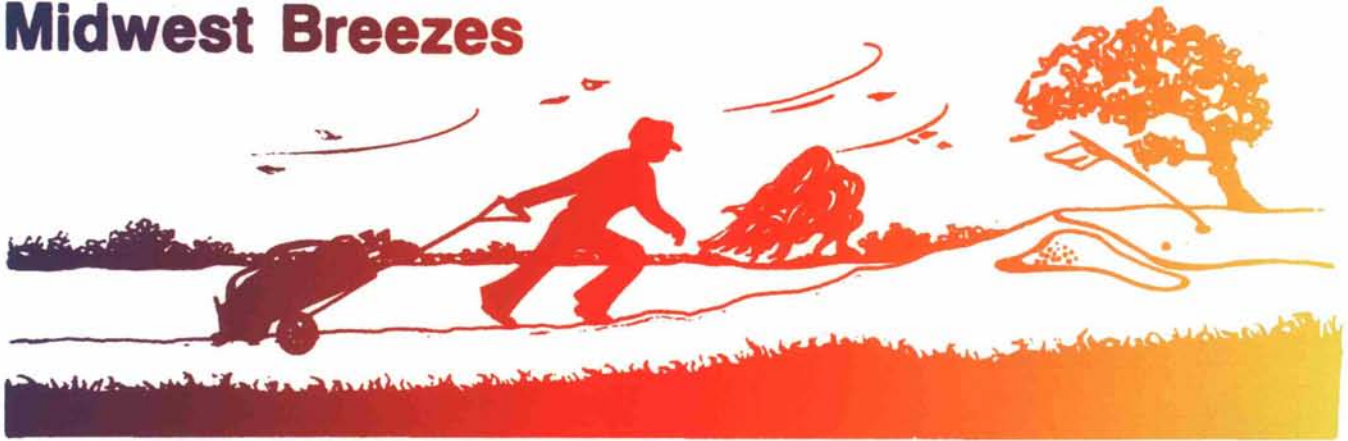


Midwest Breezes



Preventing Bunker Washouts at Indian Lakes' Blackhawk Trace

Indian Lakes Resort is a 36-hole facility consisting of the 18-hole Blackhawk Trace and the 18-hole East Trail. Blackhawk Trace was recently renovated with the first nine holes reopening in 2002 and the second nine holes in 2003. Part of the renovation included rebuilding all of the bunkers.

The new style of bunkering features a combination of both grass-facing and sand-flashing at slopes as severe as 5:2. To help reduce potential washouts on these severe slopes, Sand Trapper bunker matting was installed along all of the bunker faces during the construction. The matting is a porous material that is secured to the bunker floor before filling the bunker with sand. It works to prevent washouts by allowing rainfall to pass through the porous matting while holding the bunker sand above in place. The matting was installed on all bunker faces from the top edge of the face all the way down to the flats of the bunkers. Securing took place with 6" sod staples at 8" spacings before hauling in any sand. Results thus far have been very good.

Superintendent Chuck Ardell reports that the bunker matting has performed outstandingly over the past three years. In fact, he has yet to see a single bunker washout, even after heavy rainstorms. The worst result he has encountered has been some very minor channeling on his most severe bunker face.

Chuck emphasizes that the key to long-term successful performance of bunker matting is meticulously maintaining adequate sand depth. If the sand becomes too shallow, the matting easily can be pulled up or torn by a mechanical rake or even by hand-raking, which is how the majority of Indian Lakes' bunkers are managed. Chuck maintains the flat areas of his bunkers at 4" and the faces at 2". The 2" depth on the faces helps balls roll off of the severe slopes and down into the flat areas. He finds that those depths provide the best playability while minimizing the chances of damaging the bunker matting. While Chuck admits that the time devoted to maintaining proper sand depths can be great, it far outweighs the labor hours and headaches associated with repairing bunker washouts.

—Brian Mores
Inverness Golf Club



Sand Trapper bunker matting was installed along all bunker faces during construction.



Bunkers before renovation.



Bunkers after renovation.

(continued on page 9)

Using Bunker Linings at Cantigny Golf

With every bunker rebuild, the ability to prevent both sand contamination and sand erosion is a very important factor. It seems like the flashes are getting higher and the soil from below just won't stay put. One choice in this situation is a bunker liner, but which one? I can't make that decision for you, but I do have a personal preference in regards to installation based upon what I have seen and worked with. Recently I have worked hands-on with liners from Sand Dam, Bunker Net and Sand Trapper 2. Surprisingly, I found that these products are very different from one another.

From what I have experienced this past year with multiple bunker rebuilds, all products—to date—have performed very well once installed and buried with sand. The difference between them became apparent during the installation process. The Sand Dam-brand liner is engineered as a directional product, therefore it has to be laid down with a certain side up to ensure proper sand retention. Unfortunately, this means you have to roll out the entire roll, and then flip it over to position it correctly. When trying to determine how to use the roll most efficiently, try to use as big of pieces as possible to cut down on the number of liner seams. This way, you eliminate more areas that have the potential to cause problems later. When it comes to cutting the liners, it is recommended by the manufacturer of Sand Dam to use a propane torch to

burn a line of cut. This is made possible by an added fire-retardant built right into the fabric. However, liners from Bunker Net and Sand Trapper DO NOT have the fire-retardant and will flame up rapidly near any fire. These liners can be cut fairly well with a sharp utility knife. Watch out for that! I have found that rolling the liners out into place, then stapling the edges before cutting, works the best. This way you can set up your crew to have a designated "cutter" who works all the way around the bunker cutting out the edge. One thing I've noticed with securing the liners is that Bunker Net requires a lot more staples than Sand Dam. For example, a utility vehicle fully loaded with sand driving over a lined bunker will stretch Bunker Net and cause ripples and waves, while Sand Dam won't move an inch—very frustrating discrepancies if you're not aware of it.

All in all, the liners used have really made a noticeable difference in our new and redesigned bunkers throughout the course. Some have their advantages and some have their disadvantages. In my opinion, given my experience and knowledge of these liners, Sand Dam-brand bunker liner stands out above the rest. The properties that Sand Dam possesses ease installation and provide a direct fit to our application.

—Josh Murray
Cantigny Golf

L-93 Versus Penneagle: Black Sheep Golf Club's Fairway Experience

The 80 acres of fairways at Black Sheep Golf Club were seeded in 2001 to an L-93 and SR1119 blend. I have heard so many positive remarks about these fairways that I called David Beiry, golf course superintendent at Black Sheep, and asked him to compare the management of his L-93 blended fairways with Penneagle.

During the grow-in phase, the L-93 blend establishes rapidly from seed; however, care must be taken to not overgrow L-93 in the beginning or it will become puffy and thatchy. During establishment it is critical to drop the height of cut as soon as possible, and to use moderate rates of fertilizer compared to what one might use in establishing the older bents like Penneagle.

True to its reputation, L-93 is slow to begin growing in the spring, even on fairways. And in the fall the growth rate is also quite slow. But as soon as the temperatures warm up it becomes very aggressive. The divots heal much faster than for Penneagle; it is a darker green than Penneagle; David is fairly certain that it has superior heat tolerance and disease resistance compared to Pennea-

gle. The most significant difference between an L-93 blend and Penneagle is density. L-93 has at least twice the density, making it a tighter playing surface, and subsequently a much thicker and more difficult canopy for *Poa annua* to invade.

The aggressiveness and density of an L-93 blend on fairway turf requires a more intense cultural program. David core-aerifies all 80 acres of his fairways each spring. On the approaches, he removes the plugs and topdresses the holes with sand. He also vertical-mows the fairways two directions, three times per year.

When asked if he would use L-93 in fairway turf for a new fairway, David indicated that he would. He is very pleased with the playability and the durability of his L-93 blend in his fairway turf, but he hastens to add that this grass requires a more intense cultural management program than Penneagle or the older bentgrasses.

—Brad Anderson, CGCS
Midlane Country Club

One Approach to Nuisance-Bird Eviction, from Cantigny Golf

What do you do when nuisance birds insist on nesting right where you don't want them? Over the past 10 years, I have experienced some problems with birds that have nested in my maintenance facility. This is a significant problem due to the motion detectors on our security system. The most recent incident was just last month. A pair of mourning doves decided they were going to live inside my building. After several days of nest removal, the doves were still building and rebuilding. I started to get a bit frustrated. Just then, a friend stopped by and noticed I

was preoccupied with this situation. She suggested filling a small cup with ammonia and placing it right next to where the birds wanted to build. I did so immediately, and within 20 minutes the birds were gone!

—Scott A. Witte, CGCS
Cantigny Golf

