

WEIBRING GOLF CLUB @ISU

Turf Care Update

Bunkers: Why now is the time for a Change!!

How long does a bunker last?

Although defined as a hazard, bunkers have become a major maintenance cost to the golf course. When broken down per square foot, bunkers often fall just behind the putting surface in total costs. Despite all the measures taken to improve the sand surface, bunkers still have a finite life. On average, industry professionals estimate a bunkers useful life to be 7-12 years.

Why do Bunkers fail?

Part of the reason a bunker fails is that it slowly changes from its original composition. When bunkers are first installed they are in fact nearly 100% sand, but over time they become contaminated with silt, clay, and organic matter. When sand becomes contaminated its percolation rate slows. This causes standing water in the bunker! When most golfers see standing water in a bunker they assume the drainage tile beneath the sand is clogged, but in fact most of the time it is just sand contaminated with silt, clay, and organic matter.

The majority of contamination comes from soil washing into the sand after a heavy rain. Without a proper liner to keep the soil and sand from mixing, rain will cause the sand to wash down the face of a bunker towards the bottom. As rain continues, not only is the sand washed to the bottom of the bunker, but once the subsoil becomes exposed, the soil will begin to erode downward into the bottom of the bunker as well (see picture above). This causes the playable sand to mix with silt and clay, creating a very poor draining and inconsistent bunkers.





What are the costs associated with repairing bunkers after a rain event?

The amount of work required to return the bunker in previous picture into a playable surface is over 3 labor hours, at a cost of approximately \$25. Multiplying by our 22 bunkers creates a total cost of \$550 to return bunkers to playability after a heavy rain. In an average year, the staff at Weibring Golf Club will rebuild bunkers after a heavy rain 15 times. More savings are created when accounting for the reduced maintenance required to edge and rake newly constructed bunkers regularly. A complete cost savings analysis shows a reduction in labor cost of 66%, saving \$15,000 annually (See Chart). That equates to 1-2 full-time seasonal workers per year. The time and labor used on returning bunkers to playability could be reallocated towards upkeep and maintenance details of the course and at the Mounier Golf and Training Center. It's the attention to detail that can have lasting impressions and create value to the customers.

Cost Savings	Current Costs	Future Costs	% Savings
Routine Maintenance (expect to reduce by .5 hr. each rake)	\$ 8,325.00	\$ 6,937.50	17%
Re-sodding (2/yr. for 10 yrs. to finish all)	\$ 1,500.00	\$ -	100%
Maintenance edging	\$ 1,500.00	\$ 500.00	67%
Rebuilding/Pumping (based on 15x/yr.)	\$ 8100.00	\$ 675.00*	92%
Additional Sand	\$ 2,575.00		100%
	Totals: \$ 23,620.00	\$ 8,112.50	66%

TURF TIPS: MOWING HEIGHT

A basic concept in turf is that root depth is proportional to shoot length. In other words the taller the grass blades the more roots. I see a common mistake every spring that ruins turf heading into summer. Lowering your mowing height. Cool season grasses actively grow roots in spring and fall. By lowering your mowing height during a time of root growth (i.e spring), you will decrease root depths. Adjusting after hot and dry conditions arrive is too late! Roots will not regrow or increase during those stressful periods. So do your lawn a favor and mow at a higher height of cut and more frequently to keep a strong healthy lawn all summer.

Value to Golfers and ISU Golf Teams

Although there is a high cost and great coordination required to complete such a large project, the results will be dramatic. Increased playability, aesthetics, and consistency will be provided for all players at WGC. We will position ourselves to be at the top of the golf market in Central Illinois in regards to playability and conditioning. Many course and clubs in Central Illinois have discussed or under taken bunker projects, but none will have the combination of a state-of-the-art aggregate liner and premier tour grade sand selection.

Weibring Golf Club will enhance its position as a valuable asset to Illinois State University showing all that experience the property the type of commitment the Department of Athletics and University invests into its programs and facilities.

The cost savings associated with the reduced labor costs of maintaining poor bunkers will be directly re-invested into the Redbird Golf Programs, the Mounier Golf and Training Center, and the golf course itself. The goals to provide high quality practice and playing conditions and the best golfing experience and value in Central Illinois will be greatly enhanced with the an investment towards bunkers.



Pictures taken after 1.25 inches of rain. Image on left is our current on-course bunkers without an aggregate liner. Images on right are the newly constructed bunkers at MGTC with liners.

-Travis Williams, Golf Course Supt.

Golf Course Problems

Augusta National Syndrome

Watching the Masters is a kick-start to the golf season here in the Midwest, but I cringe seeing the unrealistic expectations brought on by the fantastic conditions. The course is amazing and don't get me wrong I LOVE EVERYTHING ABOUT IT, but no major tournament is maintained using sustainable resources. The volunteer labor, equipment, and over attention to detail is not feasible on any golf course 365 days a year. Enjoy the majors, but remember to recreate those conditions every golf course would need 100+ staff members and a nearly unlimited operations budget.