USGA CASE STUDY

Leveling Irrigation Heads Improves Playing Conditions

Pelham Country Club Jeff Wentworth, CGCS, superintendent

Pelham Manor, N.Y. 10803

Issue

Pelham Country Club has been topdressing fairways for over 20 years in an effort to provide firm and fast conditions. The benefits of the fairway topdressing program have been fantastic, the course plays much firmer and there are fewer cart restrictions after a rain event. However, years of adding sand left many sprinkler heads 3-4 inches below the surface. Irrigation uniformity was noticeably reduced, making it challenging to irrigate without creating wet and dry areas. Low sprinkler heads were also causing issues with mowing quality around the depressed sprinklers.

Action

Like many courses in the U.S., Pelham struggles to balance daily golf course maintenance tasks with necessary improvement projects such as leveling sprinkler heads. It would have been difficult for the maintenance staff at Pelham to raise all the necessary heads and keep up with routine maintenance. Jeff Wentworth, CGCS, reached out to an experienced irrigation contractor and asked if they might be able to help. As it turned out, Pelham was able to hire the contractor at a discounted rate during the summer because that is a slower time in their business. Performing the work during summer worked out well for both Pelham and the contractor.

The sprinkler head leveling project did not require specialized equipment and could be scheduled to accommodate the golf schedule. One hundred and sixty-five sprinkler heads were raised and leveled in just two days, significantly more than the maintenance staff could have completed on their own during the busy summer months.

Results

Irrigation efficiency and mowing quality improved immediately after the project was complete. The improved irrigation efficiency helped to conserve water, improve playing conditions and enhance turf quality. Over the course of the season, labor dedicated to hand watering fairways was reduced significantly. Mowing quality around the sprinkler heads also improved.



The only challenge encountered during the project was keeping the newly sodded turf around a leveled sprinkler healthy and adequately watered. Sodded turf has an extremely shallow root system at first, so regular hand watering is needed during hot summer weather until the turf has a chance to establish deeper roots. Leveling the heads in spring or fall would reduce amount of short-term hand watering required, but you would lose the summer discount and large crew size that the irrigation contractor was able to offer during a slower time in their business. For Pelham Country Club, the benefits of performing the work in the summer were well worth the short-term challenge of managing the new sod. Pelham has many more sprinkler heads that need to be raised and leveled and will likely utilize the same process next season.



Pelham Country Club hired an irrigation contractor to raise and level low sprinkler heads. One hundred and sixty-five heads were raised and leveled in just two days.



©2017 by United States Golf Association. All rights reserved. Please see Policies for the Reuse of USGA Green Section Publications.