

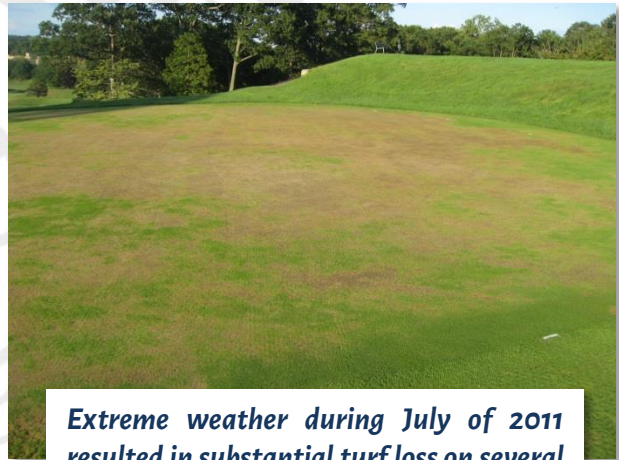
Transitioning From *Poa annua* To Creeping Bentgrass Putting Greens

Scarsdale Golf Club
Matt Severino, superintendent

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Issue

The putting greens at Scarsdale Golf Club had become increasingly unreliable and difficult to maintain during periods of extreme weather due to high populations of *Poa annua* – i.e., annual bluegrass. Playing-quality standards could not be consistently met throughout the season and significant turf loss occurred several times due to winter injury, summer stress and disease. Although the greens had been interseeded with creeping bentgrass many times over the years, little progress was made and the greens remained predominantly annual bluegrass. It became clear that a more aggressive plan was necessary. The tipping point arrived during the summer of 2011 when extreme weather resulted in substantial turf loss on several greens.



Extreme weather during July of 2011 resulted in substantial turf loss on several greens. The damage was so severe that it was necessary to close the greens and develop an aggressive recovery plan.

Action

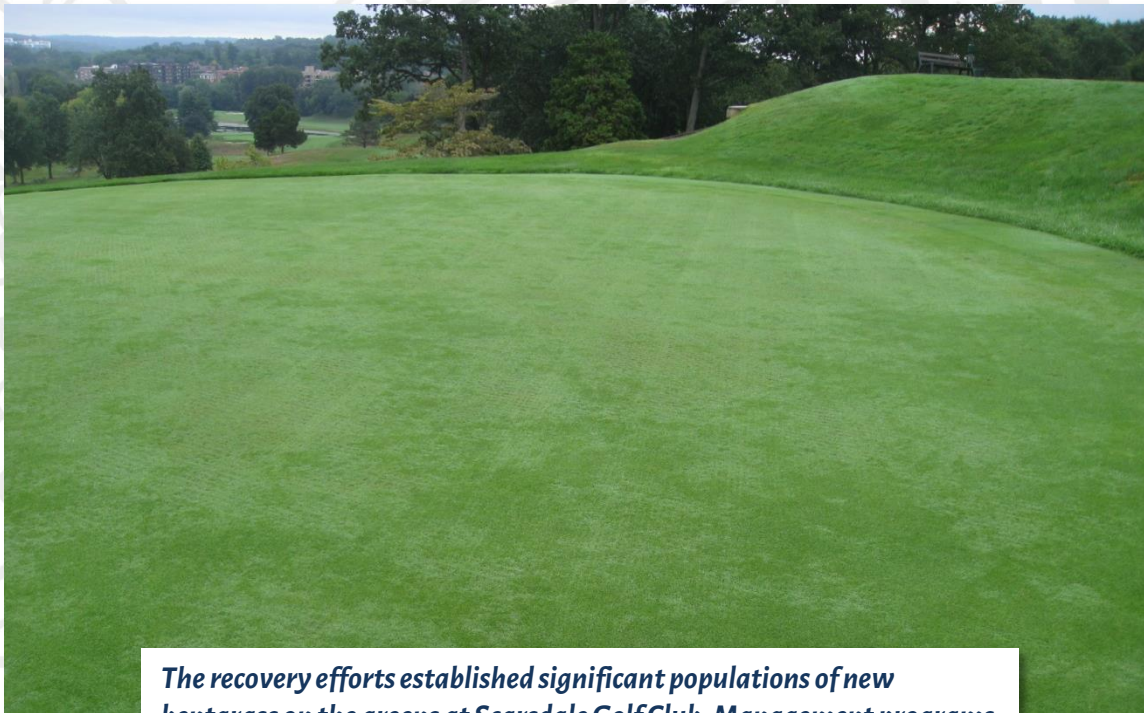
The club formed a combined Golf and Grounds Committee to evaluate several options including continuing with a gradual transition to creeping bentgrass over several years, spraying the greens with a nonselective herbicide and interseeding, and completely rebuilding the greens and sodding. After consulting with a USGA agronomist, the Board of Governors approved an aggressive plan for transitioning the greens to bentgrass.

Following the turf loss in 2011, the greens were cultivated with a variety of implements and seeded with creeping bentgrass. The most crucial step in the process was closing the most-damaged greens for four weeks to eliminate traffic and allow the bentgrass time to become established. When the greens were reopened in early September, full turf cover had been restored and the greens were reopened by early September with significantly more bentgrass than prior to the cultivation and seeding.

Beginning in 2012, cultural practices were adjusted to favor bentgrass. Light applications of paclobutrazol, a plant growth regulator, were made to suppress annual bluegrass. Seedhead-suppression treatments were eliminated to further weaken the annual bluegrass. The club discontinued pest control applications that normally protected annual bluegrass from summer patch, anthracnose, and annual bluegrass weevils. Nitrogen fertility was also reduced, giving bentgrass an additional competitive advantage.

These steps weakened the remaining annual bluegrass populations and noticeable thinning occurred in late June and early July. Thousands of 3-inch bentgrass plugs were planted in the thin areas and, while bentgrass populations thrived, nearly 70-80 percent of the existing annual bluegrass was under stress or dead by the end of July. Irrigation was significantly reduced before an early August aeration and seeding date, causing extreme stress and more thinning of annual bluegrass populations. The greens were then aerated, interseeded and closed for six weeks to allow for further creeping bentgrass establishment. The greens were reopened in mid-September.

The same basic cultural program was followed in 2013, except that bentgrass populations were so high that it was not necessary to close the greens after aeration and seeding in August. The remaining annual bluegrass was once again under stress during the summer, but it was barely evident because the population had become so low.



The recovery efforts established significant populations of new bentgrass on the greens at Scarsdale Golf Club. Management programs were then shifted to aggressively promote bentgrass in the future.

Results

The putting greens at Scarsdale Golf Club have performed wonderfully since the conversion program was initiated. The greens were more than 90 percent *Poa annua* in 2011, but by the end of 2014 all of the greens were more than 80 percent creeping bentgrass. Transitioning to bentgrass made the putting surfaces much easier to maintain. They require much less hand syringing, and drastic reductions have been made in fertilizer and chemical inputs. Best of all, Scarsdale Golf Club has been able to maintain consistently healthy, high-quality putting surfaces for golfers.

The biggest challenge in implementing the project was weakening annual bluegrass populations without killing them outright. The club wanted a gradual transition to creeping bentgrass without excessive turf loss at any one time, but pushing *Poa annua* to the edge without losing too much of it is challenging and unpredictable.

Effective communication was the key to success. Weekly updates were sent out to the golfers, and the superintendent and grounds chairman were always available to field questions. When asked whether he would do anything differently, Superintendent Matt Severino responded, “I wouldn’t change anything in the actual implementation of the program, but I would be careful in selling and communicating the project timeline.”

The putting surface conversion method used at Scarsdale Golf Club is inexpensive and less disruptive to play than total reconstruction. However, golfer sacrifices are still required and it is not the right approach for every course.