Golf course superintendents in Idaho are starting to get serious about annual bluegrass (Poa annua) in their Kentucky bluegrass fairways. A few superintendents, with the encouragement of Washington State agronomist Roy Goss and Oregon State University agronomist Tom Cook, are adjusting their irrigation and fertilizer programs to discourage the outcast of the bluegrass family.

Bob Lee, superintendent at Stoneridge Golf Course near Blanchard, OR, is one of those superintendents whose fairways used to be 60 percent Poa. Today those same fairways are 90 percent Kentucky bluegrass. Lee is not alone. He credits much of his early success to fellow superintendents Thomas Wolff at Monito Golf and Country Club, Spokane, WA; Roland “Bud” Ashworth at Liberty Lake Golf Course, Liberty Lake, WA; and Dick Gilfoil at Hayden Lake Golf and Country Club, Hayden Lake, ID.

“They helped give me the confidence to make the changes,” says Lee, “particularly cutting back on water. Now I’m putting on less water than anyone, and I’ve been able to practically eliminate Poa from this course.”

Even though his Idaho location provides him with an excess of available water, Lee is cutting back. “When fairways and greens are overwatered, Poa thrives,” he states. “It’s easy to run up a $5,000 yearly bill just to treat for Fusarium patch disease. The lush turf also encourages Typhula snow mold disease and, of course, winter dessication.”

Less water is only part of his Poa reduction program. Applications of endothall and judicious use of fertilizers and sulfur have enabled him to develop his bluegrass fairways and Penncross bentgrass greens. His greens are now 99 percent Penncross and all fairways are at least 90 percent Kentucky bluegrass.

“Golfers favor playability of the course over aesthetics. Most golfers are more interested in how the course plays than how it looks,” Lee claims. “I notice stress before the golfers do. Therefore, I irrigate only when the fairways show the first signs of stress. This keeps annual bluegrass from coming back to compete with the perennial grasses. We irrigate greens only at seven to ten day intervals. At times, we can go a full week before moving the cups because the greens are able to withstand more traffic.”

Lee says the overall result is reduced maintenance, including less fertilizer. “Our annual budget for fertilizer on this 18-hole course is only about $7,000, half that of some Northwest courses. We reinvest some of the savings into a higher quality slow-release fertilizer. We use isobutylidene diurea (Estech's Par Ex IBDU) which is a slow-release, 31 percent nitrogen fertilizer. We can fertilize and irrigate and the nitrogen doesn’t over-release in the turf. Since it is not temperature dependent, it works well with our great temperature extremes in Idaho.”

Greens are fertilized in the spring with one pound of 25-0-8 per 1,000 square feet (containing IBDU) along with some ammonium

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Getting Serious Goss states.

During a check of root systems on Stoneridge Golf Course's greens the day before a field day last summer, Goss discovered 12-inch root systems—attesting to the workability of Lee's system.

Goss states that Poa annua requires two to three times as many fungicide treatments as Kentucky bluegrass to control diseases. Annual bluegrass requires fungicide treatments almost year round. Susceptibility to diseases, winter kill and heat stress make management of Poa much more difficult than other turfgrasses.

By contrast, Kentucky bluegrass fairways offer superior beauty and playability; they also need less maintenance, less water and few, if any, fungicide treatments. Lee helps the Kentucky bluegrass resist disease with applications of sulfur and potassium.

With less water and fertilizer, you'd think Lee would be lucky to keep the course appearing as lush as it did before. The fact is it plays better. "The ball sits up on our bluegrass fairways, cut at one inch, almost as if it's on a tee," boasts Lee. Greens are cut as low as 3/32-inch. Balls roll true on the dense Penncross. The system, in Lee's opinion, constitutes good management."

Dr. Goss agrees and credits Lee with topdressing Poa annua to dominate golf turf. Over- and irrigation and high phosphate fertilizer are the two key causes of Poa infestations, according to Lee. "The reason we make the second application is to have the nitrogen available during the cool fall weather when the bluegrass plant continues important root growth. This helps turf withstand high temperatures the following summer when Poa is weakest. The fall-applied nitrogen is also there is the spring for early greenup."

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