

# When Poa is healthy...

*Some supers let annual bluegrass thrive as a putting surface. And some turf researchers, such as Drs. Joe Vargas and Tom Cook, think that's just fine.*

Terry McIver / Editor-in-Chief

**D**r. Tom Cook, Oregon State University, is never bothered by *poa annua* (annual bluegrass) on golf greens, as long as it's healthy.

Superintendents in other parts of the country will usually try to eradicate annual bluegrass from greens, but as any golf course superintendent from the Pacific Northwest will tell you, it's about all they can grow.

"Regardless of what [turf variety] we start with, this is what we end up with," says Cook.

## **Cool, moist climates ideal**

*Poa annua* thrives in cool, moist climates. According to Cook, the *Poa* that thrives in the U.S. is actually a perennial biotype of annual bluegrass.

"In 1972, on the coast, very few fairways were irrigated, so we had relatively high proportions of annual biotypes and very few of the perennial types. Today, in all areas where annual bluegrass is irrigated, it's definitely the dominant species and it's perennial."

"The conversion time from bentgrass to *poa annua* ranges from three, to a maximum of 20 years," says Cook, "depending on what you planted and how you maintain your golf course."

## **Competitive turfgrass**

Dr. Joe Vargas, Michigan State University, advises superintendents on golf courses in other geographic regions to take advantage of *Poa*'s aggressive growth habit if the variety is becoming dominant.

Everybody talks about "that lousy *poa annua*," muses Vargas, and they miss realizing that *Poa* has a lot going for it, so

much that it often succeeds where creeping bentgrass fails. *Poa annua*'s competitiveness and genetic diversity," Vargas explains, "results in there being more than 50 different cultivars of annual bluegrass. That ge-

netic diversity allows annual bluegrass to adapt to compacted soils, sun or shade."

Creeping bentgrass really only does well in well-drained soils and open sun.

"Creeping bentgrass does have an advantage when it comes to cold tolerance, but what matters is *poa*'s reproductive speed," says Vargas.

*Poa annua* reproduces by seeds rather than by stolons. "Any day of the week," insists Vargas, "seeds will fill in a fairway divot or ball mark quicker than stolons."

## **Shade, stress tolerance high**

Annual bluegrass has better shade tolerance; better stress tolerance; is able to survive in poor soils and poor environmental

conditions; and it's able to make use of fertilizer quicker. *Poa annua* likes high nitrogen, creeping bentgrass does not.

"You can't grow creeping bentgrass if it does not receive morning sun," teaches Vargas. "If it gets morning sun but doesn't get afternoon sun it'll be all right."

## **Aerification schedule**

Cook recommends coring be done at three times during the year:

- in spring, before the spring rooting period—around April 1—with hollow tines,  $\frac{3}{8}$ -inch wide.

- summer, right after flowering;
- fall, right after Labor Day.

The typical procedure to obtain a good seed bed is to core aerify, remove the cores from the green, and then topdress heavily to backfill the holes. The combination of coring and topdressing is a critical component to maintaining *poa annua*.

"When surfaces are maintained this way, the *poa annua* is generally healthy, and the greens tend to be soft," says Cook. □

## **Rx for Poa annua**

### **Fertility**

**Cook:** Maintain turf vigor. Don't starve them and don't push them too hard. Do not keep a sustained, low fertility rate. One to two pounds of phosphorus per year, says Cook. **Potassium:** a 1:1 ratio with potassium and nitrogen.

**Vargas:** 3-4 lbs. nitrogen/season. Keep the sulphur levels down.

**pH:** Between 5½ and 6½—7 pH.

### **Aeration**

**Cook:** Maintain rootzone aeration, primarily from coring.

**Vargas:** Core aerify after green up and after seedhead production, says Vargas

### **Moisture**

**Cook:** Uniform rootzone moisture, irrigate consistently, avoid frequent dry-down cycles.

**Vargas:** Apply light, daily irrigation

### **Work the turf**

**Cook:** Work the surface by double-verticutting, topdressing and grooming; whatever it takes to keep the surface "in motion." Maintain turf vigor and topdress frequently, in one to three week cycles, with USGA-specification sand at very light rates per 1000 sq. ft.

**Vargas:** Deep, vertical mowing after green-up