

BY JOHN WALSH

A must have

Colorado superintendent relies on growth regulators for dollars and sense

For Mike McLaren, plant growth regulators are a tool he couldn't live without.

"I couldn't keep green speeds where they're at, and the membership wouldn't be satisfied," says the director of course and grounds at Boulder Country Club in Colorado. "I could mow greens down to a nub without PGRs, but you're risking a lot."

McLaren, who has been at Boulder eight years, works with a \$1.2-million maintenance budget and a \$250,000 annual capital budget to keep the course in the shape and in the condition the 500 golfing families expect. The 27-hole course (the nine-hole Les Fowler course and an 18-hole championship course), which was built in the early 1960s, features *Poa annua*/bentgrass greens, ryegrass/*Poa annua* fairways, bluegrass/

ryegrass tees and bluegrass/ryegrass rough.

Additionally, the club has an array of amenities including indoor/outdoor pools and tennis courts and an athletic center, which will go through a \$12-million renovation in about a year. The initiation fee for a nonequity membership is \$30,000.

"Members are paying a fair amount for dues, and they want their money's worth," McLaren says. "Those who are vocal about the condition of the golf course care a lot about the club. I'm happy here. The membership is wonderful."

As part of McLaren's \$55,000 chemical budget, which increases slowly each year because of the increasing cost of goods, \$21,000 is spent on growth regulators. He purchases mainly Primo but also uses Em-

bark and Proxy during the growing season.

Most chemicals are purchased via an early-order agreement made in the winter months through Golf Enviro Systems and the manufacturers. This ensures availability and locks in the previous years price. They're delivered by Golf Enviro Systems based on the timing of McLaren's operational needs.

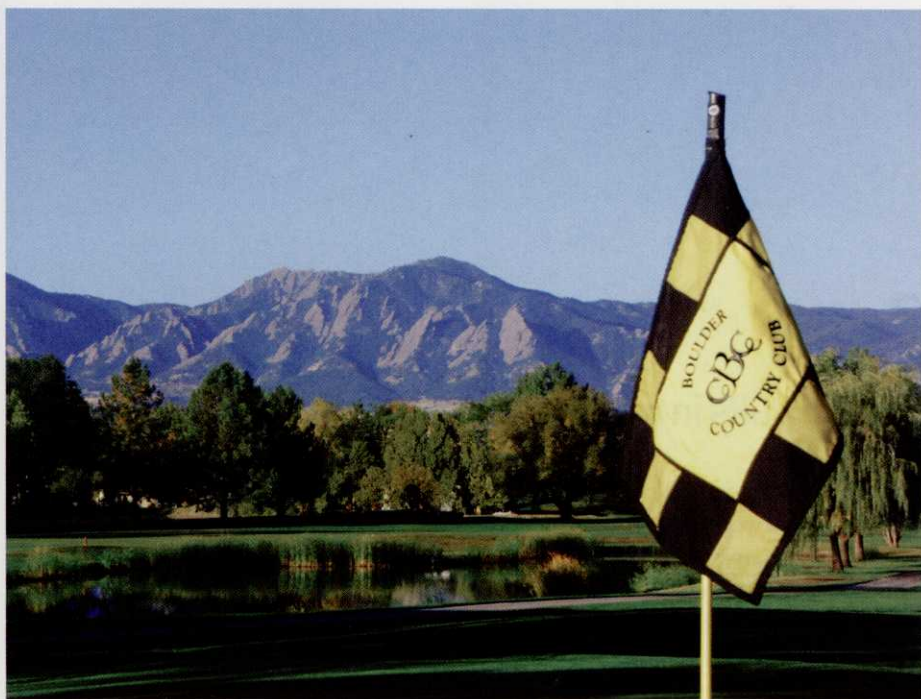
McLaren applies PGRs on greens and fairways starting in the spring and ending sometime in September.

"I spray all playing surfaces except the rough," he says. "I use a little more than 10 gallons per month or 80 gallons a year."

McLaren's first greens application of Embark is in late March or early April at 0.8 to 1 ounce per 1,000 square feet. The second application, two weeks later, is made at 0.6

At Boulder Country Club in Colorado, Mike McLaren use three different plant growth regulators – Primo, Embark and Proxy – on greens, tees and fairways during the growing season. Photo: Boulder Country Club





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ounce per 1,000 square feet. He applies a total of four applications of Embark every 10 to 14 days.

Like Embark, McLaren's first application of Primo is applied in late March or early April at 0.15 to 0.25 ounce per 1,000 square feet. Then it's applied three times a month for the rest of the growing season on greens. Fairways are treated with Primo at 1 ounce per 1,000 square feet each month.

Additionally, McLaren makes three applications of Proxy on greens – 6 or 7 ounces per 1,000 square feet each application – starting in late May or early June.

All PGRs are tank mixed. Embark is mixed with Primo and fertilizer. In late May and early June, Embark is still in the grass when McLaren applies Primo and Proxy, so all three chemicals are in the plant at one time.

On fairways, McLaren sprays Primo mainly to reduce labor. He says superintendents normally should mow fairways every day of the week in Colorado, but with Primo, he mows them about three to four times a week mainly to break up divots. The labor money saved by mowing fairways fewer times each week pays for the Primo itself, he says. It

also saves on wear and tear on the mowers, capital replacements, fuel, wear on the bedknives and the mechanic's time working on the mowers.

McLaren also uses Primo because it helps provide denser turf, reduce the number of *Poa* seed heads, provide darker color and improve the overall health of the grass plant.

"I believe that if you don't have the top growth, there's still as much photosynthesis, and that energy is going to the crown and roots of the plants," he says.

Unlike fairways, greens are mowed every day to provide a much better playing surface. The advantage of using PGRs on greens is helping maintain speeds and consistency (quality of turf). Most of the time, McLaren shoots for a 10.3-to-10.6-range on the Stimpmeter.

"I've met with some of the top superintendents at the private clubs in Denver, and they're shooting for a 10 to 10.3 range," he says.

Aside from Primo, McLaren uses Embark to control *Poa* seedheads. He says that in the past superintendents would apply Embark based on air temperature but ended up with inconsistent suppression results. So, he

started applying the product based on soil temperatures (40 to 45 degrees) because there's more of a direct tie to what the grass is doing with soil than air – especially in Colorado where one day it can snow and the next day be as warm as 70 degrees in the afternoon.

"After using Embark for years, I started to incorporate Proxy to control *Poa* seed growth," he says. "Whatever seed head isn't controlled with Embark I 'melt the seed off the stalk' with Proxy. There are usually two *Poa* blossoms, one in the spring and one in the fall, but we don't get the second blossom in the fall because we use Embark.

"Throughout the years, everyone has tried to get rid of *Poa*," he adds. "I have to manage my *Poa*, and there are only a couple products I'm comfortable with. I'm most comfortable with Primo because I've played with it a lot to extremes, and I haven't been able to damage the turf. I've played with Embark but not to the extent of Primo. I haven't had the chance to play with Embark as much partly because I don't have the desire because my program is producing great results."

Embark has a long residual in turf plant, McLaren says.

"After the first application, it's like topping off the cup so to speak," he says.

For McLaren, PGR use all comes down to dollars and sense. With the manpower he saves by using PGRs, he can use those resources elsewhere for detail work, which includes walk mowing tees, greens, and approaches, more intricate mowing patterns, trimming property lines and waterways, planting and maintaining extensive beddings, and just plain tidiness around the course.

"It's this kind of detail that separates a course with less resources from a high-end country club," he says. **GCI**

BY JOHN WALSH

The big three

Oregon superintendent benefits from PGRs in multiple ways

Darren Klein likes the results of using plant growth regulators, specifically the labor savings, consistent greens and seedhead control.

Klein, golf course superintendent at the private 18-hole Brasada Canyons, maintains the 1-year-old course that plays throughout the foot hills of Powell Butte, Ore. Klein has been growing in the course at Brasada, which has 240 members, for three years. He worked at Eagle Crest Resort outside Redmond, Ore., for 10 years before coming to Brasada. The layout features nine holes in canyons and on ridges. The fairways, rough and tees are an 80/20 mix of bluegrass and ryegrass. The greens are A-4 bentgrass.

Klein works with an annual maintenance budget of \$900,000, \$42,000 of which is allotted for chemicals and \$2,200 for plant growth regulators. He has a 22-person crew during the season and six full-timers.

Klein gets his plant growth regulator application rates right off the label.

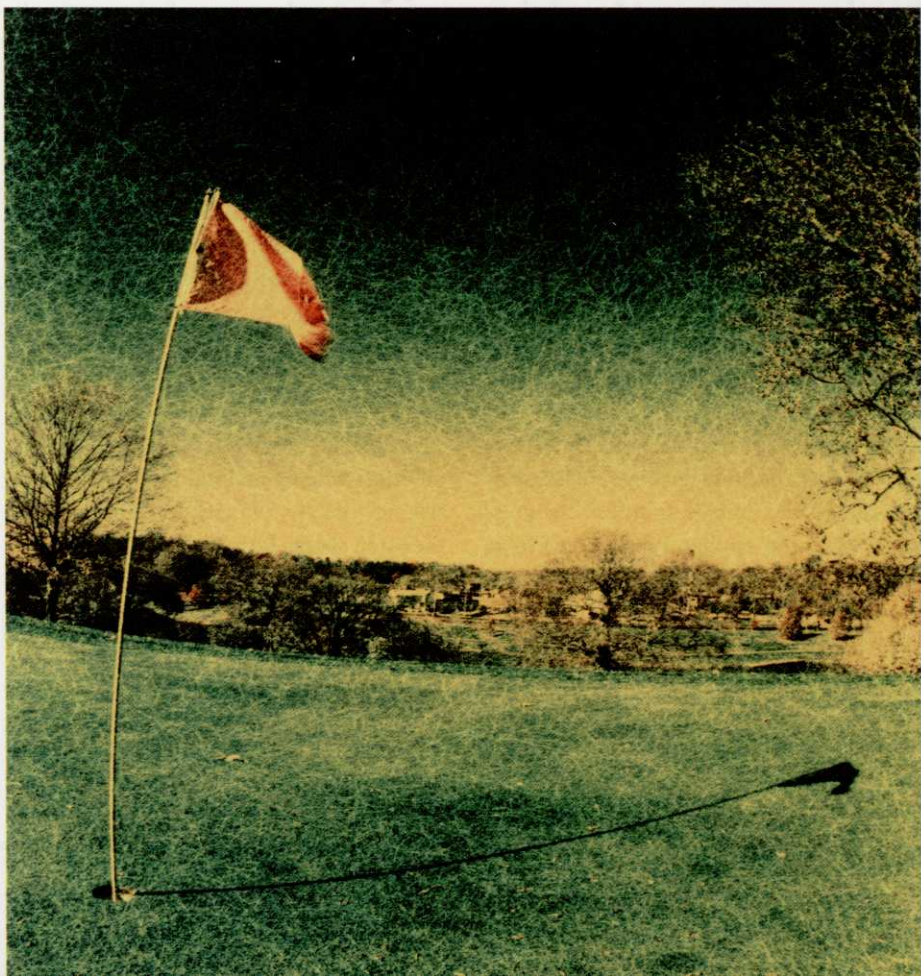
For Klein, the biggest benefits of using plant growth regulators are the control of clippings on fairways and labor-saving costs as a result of being able to eliminate one mowing day per week. He mows fairways four times a week during the height of

growing season, and that tapers off to two or three times a week during the spring and fall. He sprays fairways with Primo once a month during the growing season, which is May, June, July and sometimes August in central Oregon.

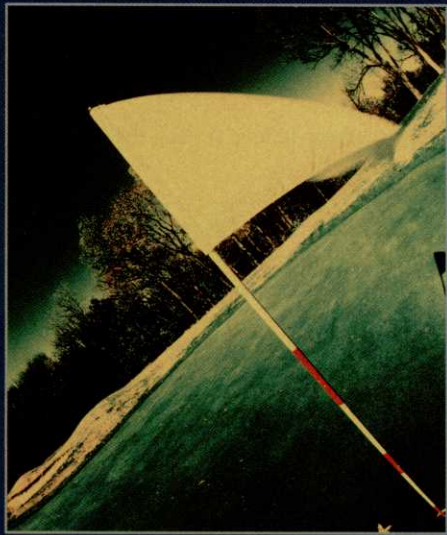
"Once the course was grown in and we were up and mowing the fairways, we

sprayed to help tillering and density," he says. "Now we use PGRs to control clippings in the fairways."

PGR use on greens helps give them consistent ball roll throughout the day. Green speeds run between 10 feet and 10.5 feet during the season and 12.5 feet during tournaments. He sprays greens,



Out of \$42,000 spent on chemicals annually, superintendent Darren Klein spends \$2,200 on plant growth regulators.



Darren Klein purchases plant growth regulators monthly because he doesn't like storing many chemicals on property.

which are mowed daily, every two weeks with Embark. The choice of Embark was influenced by a plan suggested to Klein for *Poa* control on greens from his distributor, Wilbur-Ellis. Klein says the A-4 bentgrass is dense enough to begin with, so he doesn't use PGRs to improve the density of the turf on the greens.

Klein doesn't use PGRs in the rough.

When applying PGRs, Klein uses the same TeeJet nozzles that he uses when applying fungicides. He doesn't tank mix the fungicides and PGRs when applying them, but he'll tank mix iron to mask any yellowing that might occur. He uses a granular fertilizer rather than a liquid fertilizer on the fairways, so the PGRs aren't tank mixed with fertilizer either. The PGR applications are timed between the fertilizer applications.

Klein has seen a little bit of *Poa annua* in the fairways but nothing on the greens so far.

"It's a losing battle," he says about eradicating *Poa*. It's about how slow you can let it move in."

Klein won't alter his PGR program even if *Poa* encroaches into the greens.



"We'll just have to live with it," he says.

Klein buys Primo and Embark through Wilbur-Ellis.

"I used to use Primo on everything, but the distributor recommended Embark," he says. "Embark used to be weather sensitive, but now it's been reformulated to be more user friendly."

When it comes to purchasing PGRs, Klein does it monthly, not in bulk at the beginning or end of the season.

"I don't like storing a lot of chemicals on property, plus Wilbur-Ellis is close by," he says. **GCI**