At Wintergreen Resort, Fred Biggers oversees two golf courses 13 miles apart – a total of 45 holes maintained by 37 peak-season staff. Factor in two completely different climatic zones and a separate routine at each course, and Biggers is nothing short of a mathematician.

Wintergreen is a membership-owned, four-season resort in the Blue Ridge Mountains of Virginia that features golf year-round on two courses. Devil's Knob, the highest course in Va. (a 3,850-foot elevation), is an 18-hole course on the mountain for which it's named. Stony Creek is a 27-hole course in the valley below. In addition to golf, Wintergreen features ski slopes, a tennis facility, a spa and several thousand condos at the top of the mountain, but Biggers has little time for leisure with his busy schedule.

The vast differences in climate between Devil's Knob and Stony Creek – the former is open April through November and rarely gets warmer than 80 degrees, while the latter is a product of its native surroundings – keeps Biggers on his toes when it comes to maintaining turf. Routine maintenance can be quite a production, but Biggers knew what he was getting into when he arrived at the resort nine years ago.

“I took over for a pretty sharp, certified superintendent,” he says. “So I had a pretty good idea going in. I knew Devil's Knob is more like a northern course – a lot of Poa annua, a lot of bentgrass. The climate in the valley is similar to Richmond, Va.”

Biggers has a golf course superintendent and assistants at both courses, and works closely with his mechanical staff – two separate crews.

As part of Wintergreen’s equipment fleet, the resort owns a small fleet of sprayers:
- A Toro 150-gallon greens sprayer at each golf course.
- A Toro 1150, purchased in 1999, used at Devil's Knob.
- A Toro 1250, purchased in 2005, used at Stony Creek for spraying greens and tees.
- A Toro 5500 300-gallon sprayer for spraying fairways.
- An Airtec tractor sprayer, which cost less than $20,000 when it was purchased six or seven years ago.

Fred Biggers mainly uses a tractor sprayer to apply fungicides on green surrounds and fairways. Photo: Airtec
• A 100-gallon Toro sprayer with a hand-boom for herbicides.
• A 20-year-old John Deere sprayer similar to the Toro 1150.

"We mainly use the Airtec for spraying fungicides on green surrounds and fairways," Biggers says. "It's fast and easy, and we're able to use less product. We cut our rates when we use the Airtec. I have a lot of experience with the Airtec, probably as much as anybody in the U.S., because we've used it for five or six years. We can use as much as half the rate and get the two weeks of control we want when we spray with the Airtec."

The crews don't spray the fairways as much as they used to partly because Biggers removed bentgrass from nine holes and replaced it with zoysiagrass.

Biggers is fascinated by the technology behind his Airtec sprayer, which deploys electrostatically charged particles into the air at high...
Fred Biggers has a fairly old fleet of equipment, but he credits each machine's longevity to his talented mechanic team. They keep extra pumps, parts, nozzles and fittings around to repair equipment easily.

“‘It’s unbelievable coverage,’” he says. “‘We’ve had a lot of success with the Airtec. The sprayer paid for itself in two years. I have one of the early ones, and we had to mount it on a pretty large tractor, but it does a great job with fungicide applications.’”

While Biggers is partial to his Airtec, he prefers to use the Toro 5500 on the fairways. It’s much more windproof because of shielded booms.

During the summer, the crew controls weeds monthly with hand sprayers to target areas that can’t be reached with the large boom. One application lasts three months and saves labor costs.

The John Deere sprayer also has its own unique purpose: It comes in handy for herbicide applications in tight or sloped areas.

“It stays on the slopes a little bit better because it’s lighter,” Biggers says. “We’ve kept the booms on the John Deere. We put a whole new engine on that, a whole new muffler and new controls. It’s probably on its fifth or sixth pump, but the frame doesn’t wear out, and the tank doesn’t wear out. It operates well.”

Biggers has a fairly old fleet of equipment, but he credits each machine’s longevity to his talented mechanic team.

“I’ve got wonderful mechanics,” Biggers says. “We don’t think anything of replacing an engine or rebuilding a pump. Everything here works, and works well. We keep extra pumps, parts, nozzles and fittings around so we can fix something without too much drama.”

“If we can do anything to cut costs, we’re going to do it. And if we contemplate another sprayer, we’re going to look all around.” – Fred Biggers

Biggers has been contemplating a new sprayer to replace his Toro 1150, but says that at this point, he might just rebuild the booms (all of Biggers’ sprayers have electric booms and T-jet nozzles). The golf courses have a fairly hefty maintenance budget of $1,575,000 – but considering $1,025,000 is allocated to Stony Creek and $550,000 is allocated to Devil’s Knob, it’s understandable Biggers would rather repair his working machines than shell out the cash for new ones.

“If we can do anything to cut costs, we’re going to do it,” he says. “And if we contemplate another sprayer, we’re going to look all around. We use our sprayers to spray many different things. We spray insecticides and wetting agents one day, and the next day, we spray tees with wetting agents, and the next day, fungicides.”

Even with so many operations under way, Biggers manages to keep it all straight.

“It’s kind of organizational, but I’ve been running multiple courses and clubs and resort-type operations since 1988, so it’s kind of second nature to me,” he says. “It’s what I do. I wouldn’t know what to do if I went to 18 holes. I guess I’d have to get even more detail-oriented, but you just get used to doing a bunch of different things at once.”

And when all else fails, Biggers reminds others you can’t always win.

“Sometimes you just prevent the worst loss,” he says.