

Ready to go

An unpredictable winter means broadleaf weeds are ready to start showing up. Is your program prepared?

inter might be toying with parts of the country with sudden changes in warm and cool weather, but eventually, spring will show up. With it will come broadleaf weeds, eager for their day in the sun as turf is coming around from a tough season.

Dealing with broadleaf is a top priority this time of year, but the best plan for doing so sounds different from course to course. Is it better to use preemergent or postemergent? What's the best way to determine the right chemical mix?

Regardless of how broadleaf is dealt with, Trey Anderson, superintendent of Hickory Ridge Golf Course in Carbondale, Ill., says it takes a sharp eye early in the season to keep ahead of the weeds.

"We'll go scout out areas in spring to see where broadleaves are going to be a problem," says Anderson. "Then we'll get a good three-way mix and go down and clean those up. Once the summer comes along, it's not really conducive to putting anything on those leaves."

Anderson's transition-zone, zoysiagrass course sees some knotweed and clover, with some broadleaf plantain showing up from year to year. Each year, he and his crew watch for the weeds to start showing up, noting where trouble spots might be and where it might pay off to give a little more attention to a section of turf.

Aside from early recognition, taking notes from year to year will also pay off, according to Patrick McCullough, extension turfgrass weed specialist at the University of Georgia.

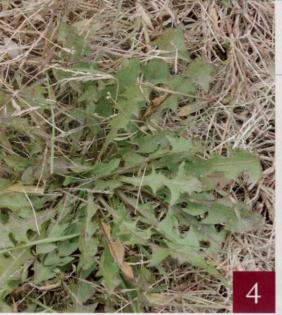




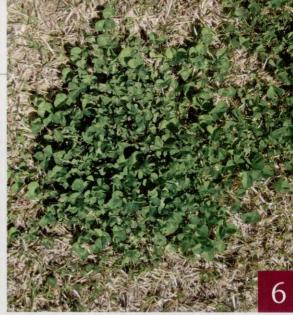
Know the enemy:

Be on the lookout this spring for these golf course invaders

- 1 Buckthorn plantain
- Common chickweed
- Corn speedwell
- 4 Dandelion
- Hairy bittercress
- White clover
- Purple deadnettle
- 8 Sticky chickweed







"Scouting turf in winter and early spring is recommended to identify broadleaf weeds that warrant control," he says. "Turf managers should also note weeds that were present in previous years and pay particular attention to new species that may have become established."

Be especially aware of sections of turf that thinned or were weakened from traffic, disease or injury during fall and winter, as well as turf grown in shade, compacted soils, or with poor drainage, since all of these scenarios are prime situations for broadleaf weeds to show up, says McCullough.

For Anderson, it's about dealing with the weeds as they show up.

"When I see what kind of catch we got through the winter, we'll start getting ready for the season," says Anderson. March means the use of preemergent for Anderson, and his crew follows up in later March and early April with postemergent as needed.

"Although we've used some preemergent, it works better for us to use post," he says. "We'll go out there with it and we know about how much we'll need because of seasons prior. We try to spray as little as we have to. If we don't have to go out and spray wall-to-wall, we won't."

Knowing where the weeds are likely to turn up and what he's likely to tangle with gives Anderson the edge to clear out problem areas with small doses of FMC Professional Solutions' Solitare without doing big, costly applications, he says.

"We're just trying to clean everything up, trying to get a nice, clean look for spring," he says. "If we can do that when we're putting down postemergent and three-way in spring, that sets us up for a really good start going into the summer golf season."

The mixed pre and post strategy feels like too much for Ken Mangum, director at the Atlanta Athletic Club in Johns Creek, Ga.

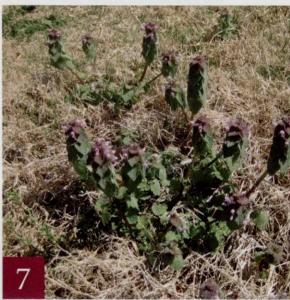
"I've always been a big proponent of just not letting it be seen," he says. "If you let even a couple weeds out there, the amount of seed it produces, it just spreads."

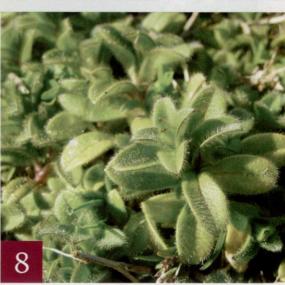
Mangum just didn't have regular trouble with broadleaf weeds until a resod of the course with Champion ultradwarf in 2006.

"When you solid sod your golf course, you bring in weeds from other areas," he says. "Once we covered the golf course with sod from who knows where, we had some hitchhikers."

Mangum started seeing knotweed and crabgrass appearing throughout the course, and that was not going to over well with members.

"Our weeds just multiplied," he says. "It had really become a notice-





A line in the grass

Methods for taking out broadleaf weeds are specific to each course, and even to the preferences of each superintendent. Beyond the battle of preemergent and postemergent herbicide is the argument of weed tolerance.

When cost is high and repeated applications get in the way of course play, it might be time to loosen the iron grip on turf, says Trey Anderson, superintendent of Hickory Ridge Golf Course.

"We're pretty clean throughout the year, but we can live with a little bit," says Anderson. "Sometimes we can be our own worst enemies. It might be good sometimes to maybe just try to decide if that's okay for your place. Everyone's program is a little different."

A municipal course, Hickory Ridge runs on a moderate budget, so when just one weed or so is spotted, he takes a moment to decide whether it's worth the money and interruption to play, and possibly bringing more attention to a dead weed stalk on the turf.

To Ken Mangum, director at the Atlanta Athletic Club, it's about cost and dealing with the weed, and all the seeds it will produce, later.

"What's your threshold for pain?" asks Mangum. "It's a question of management."

Mangum runs a tight course with a high standard on weed control, but with the Atlanta Athletic Club listed as the site for the 2011 PGA Championship, it's a standard worth upholding to him.

With a decreased budget, it might make more economic sense not to always try to play up to tournament levels, says Anderson.

"Sometimes we choose to just leave a few weeds if they're not going to have an impact on playing conditions," he says. "It's so tough to keep up to those conditions, and costly to go out with the spray repeatedly. It's a choice you have to make for your course."

Players understand and generally haven't complained to Anderson, he says. Mangum also has never heard from his players about it, but for a different reason.

"If you never see a weed, you'll never get a comment," he says.



able problem, so we wanted to get it before it even started growing."

After dealing with the weeds, he started use of Bayer Environmental Science's Specticle to get control of the knotweed, and started a regular program of Dow AgroScience's Dimension and Gallery herbicides to hold that line against the weeds. The battery of preemergents is Mangum's way of fighting off the need to do postemergent application.

"It's because of the visual, and you can typically do preemergent easier in the off-season rather than spraying during the summer when the course is busy," he said. "Not only do you have dead weeds then, your turf is off-color around where you spray sometimes. It's better if the weed is never seen at all."

Early spring is a key time of year for dealing with broadleaf, as many broadleaf weeds will start to show up alongside healthy turf. In the warming climate, growing weeds are most vulnerable to herbicide. Though it's important to get a jump on broadleaf, knowing when to attack keeps costs down.

"Broadleaf herbicides applied under cool weather in early spring often have reduced efficacy and require sequential treatments to control weeds," says McCullough. "Efficacy of broadleaf weed herbicides generally improves when temperatures are consistently in the 70s compared to cooler weather."

This is especially important with the irregular warm-ups happening as spring starts to come around this year, bringing temperatures up and giving broadleaf weeds a little bit of a jump start on superintendents.

"The timing of things is always important, especially with the crazy weather in this past year," says Mangum. "We're very warm right now. We're scrambling to get things down and get ahead of the weeds."

Anderson tries to set up his course as best he can in March and bulk out the program with aerification after.

"The best defense is a good offense," says Anderson. "The best way to deal with broadleaf is just to have a really great stand of turf. We find that if we take off that early and work in aerification, it gives the turf a chance to go into spring and summer strong."

Spring and fall applications round out a broadleaf program, but not all broadleaf decisions come down to setting up a schedule. Choosing the right product is a balancing act between finding the correct coverage for specific weeds at an application price that fits.

"In today's economy, it's trying to take your economic ability and find something that matches your weeds," says Mangum. "You always have to evaluate the cost of control per acre and the number of applications."

The mix of chemicals used in the main preemergent application is worth the cost to Mangum, since it covers his course's needs before paying for postemergent as well. For Anderson, being able to fall back on the single product makes a huge difference to his crew, since he'll only use very small amounts in postemergent applications.

"It's just simple for my guys," he says. "We're a municipal golf course. We've got an average-sized budget. It's great to have something in the shed to know that you don't have to worry about mixing, or mixing well."

More important than just finding a chemical that works is continuing to try to find a better herbicide. As technology has improved, chemicals have evolved through the years, changing the game almost every season.

"It used to be about pounds of it in every application," says Anderson. "Now it's just ounces. It's much less product than it used to be. Sometimes we get so busy you might not know what's out there. Some of the chemistry, the way it's grown in the last four to five years, now there's just so much more available. If you keep up on it, you might find you can take care of something with one spray.

"We do as much as we can education-wise," he adds. "We want to put the spray rig out the minimum number of times we can. Some chemicals have changed, and the amount of herbicides that are available now; it would be easy to just get stuck in buying the cheapest three-way without looking to see if there's something else that covers the weeds you have better."

Mangum continues to research new mixes and herbicides. "Even though you've got something that works, always be looking for something better," he says. "You have to start looking at everything. We're fortunate to have products that are actually cheaper to work with now. Look for plenty of help, staying up on all the new things. Look at trade publications and read articles."

Mangum takes the time to test new mixes before using them throughout the course.

"I tend to test things," he says. "Most everything we spray new has been tested somewhere on the golf course until we get a feel for it, see how the turf reacts to it and what kind of control it gives us."

When a superintendent finds the right application setup for their course and the right herbicides after research, dealing with broadleaf weeds is easy after all, says Anderson. "A super today is pulled in so many directions, it's helpful to just have that ready to fall back on," he says. "The less you have to worry about that the better." GCI

Kyle Brown is GCI's associate editor.

Dealing with broadleaf weeds?
Patrick McCullough, extension turfgrass weed specialist at the University of Georgia, covers winter broadleaf weed control in our Online Extras.

