It's almost spring, and superintendents' thoughts turn to protecting their fairways from weeds. With restrictions on chemical herbicides growing rapidly, it's important to have an effective strategy in place before making your applications.

Here are some tips on how to formulate a plan for using herbicides on your fairways:

- **Educate yourself about which weed types affect your course annually.**
  Before you decide to apply wall-to-wall herbicides, superintendents should examine the history of the weeds on their courses, says Bruce Branham, professor of plant pathology at the University of Illinois.
  Weeds often afflict the same patches annually, he says. Therefore, if you know where weeds have occurred in the past, chances are they will return to the same areas next year, Branham adds.
  "Create a map, either in your head or on paper, about what happens every year on your course as it relates to weeds," Branham says. "Armed with that information, you can spot treat only the areas that have weed infestations instead of spraying herbicides over the whole fairway."

- **Timing is everything.**
  Jimmy Thomas, certified superintendent at the Hyatt Regency Hill CC in San Antonio, says proper timing can save superintendents from having to do postemergent treatments.
  "You want to put your herbicide treatments down when the weeds are germinating," Thomas says. "If you miss that window, then you're going to be stuck doing postemergent treatments, which often interferes with play."
  Don't assume all weeds germinate at the same time of year, Branham says.
  Know when your weeds germinate and apply pre-emergent herbicides as necessary, he adds.

- **Calibrate your equipment to avoid double treatments.**
  Make sure your sprayer is calibrated properly to avoid treating some areas of the fairway with more herbicide than is recommended on the label, says Dave Kopec, associate extension specialist with the University of Arizona. In addition, mark the area you plan to treat clearly so you don't put down a double dose of herbicide as the result of operator error, Kopec says.
  "If you make a mistake and apply more herbicide than you want, I guarantee you'll notice," Kopec says.

- **Consider alternative ways to treat weed infestations.**
  You can cut your herbicide budget if you investigate what other factors may encourage weeds on your course, says Darren Davis, certified superintendent of Olde Florida GC in Naples, Fla.
  Test your soil for nutrient deficiencies, and make sure you're not putting down too much water.
  Instead of spending an enormous amount of money on herbicides, you might be able to change your fertility program to make your turf inhospitable to weeds, Davis says.
  "It may be as simple as changing your soil chemistry by adding nutrients or altering your irrigation schedule," he adds. "It's a lot more economical to look at the whole picture to determine what might be happening before spraying herbicides on your whole course."
  Thomas says what may seem obvious but is often overlooked: The most important herbicide strategy is to grow healthy turf.
  "If you have good soil and a good fertility program, you won't have to worry about weeds invading your turf," Thomas says. "Your fairways will be so strong and vital that weeds won't stand a chance of overtaking them."
  Golfers' concerns about superintendents spraying chemicals often conflict with their desire for weed-free turf, Davis says. When turf is at its healthiest, those two ideas balance. Then you can keep your herbicide applications to a minimum," he adds.