

Sports Turf Manager

FOR BETTER, SAFER SPORTS TURF. SPRING 2010. VOL. 23. NO. 1

Establishing Turfgrass Without Herbicides: Musings on the Future

Dr. Ken Carey, Department of Plant Agriculture, University of Guelph

In a situation where most effective herbicides are banned for sports field managers, how does a manager establish or renovate successfully? As of yet, there are no easy answers, but prospects may not be entirely hopeless. In this article, I'll provide some approaches that you might keep in mind if you're in this boat. Some are cultural or management principles that you know and apply already. Others are ideas borrowed from systems such as organic crop production where these questions have been faced for years. Hopefully some may be feasible for you, at least on a trial basis, and with the assurance that many of these approaches are being pursued actively in research programs.

Weeds in Establishing Turfgrass

We've always dealt with weed pressure in newly established or renovated turf areas, so turf managers are well aware of some of the things necessary to consider:

Weed seed bank. Most areas that have had vegetation on them, whether turf or other cover, have a bank of weed seeds that has accumulated from weeds on site, or have moved in with wind and water from off-site. This is one of the main problems to deal with. In agriculture (and sometimes in turf management), we may have the luxury of time to repeatedly till the soil, allowing weed seeds to germinate and be plowed down to reduce this seed bank. Knowing what is likely to come up in your situation, either from historical records of the site or first-hand observation, will allow you to anticipate the potential size and detail of the expected problem.

Perennial weeds. In the past, these would have been targeted with non-selective herbicides (e.g. glyphosate) which are no longer available. Again, repeated tilling may reduce this problem, but is probably unrealistic in many turf installation situations.

New rootzone material. Often, installation jobs involve bringing in new rootzone material, topsoil or sand, which has the potential to aggravate a weed problem (if the material is not weed-free), or help solve the problem, by burying it.

OTS HIGHLIGHT
Continued inside on
pages 12-13.

What Are We Replacing?

There are three types of herbicides which are used to deal with three different sets of problems in establishing turf (and for which we need alternative solutions):

Nonselective herbicides (e.g. glyphosate). These allow us to kill perennial weeds (and unwanted grass) prior to establishment.



Inside Features

TURF IDENTIFICATION | 21

Dr. Eric Lyons lays out why today's turf managers need to know their turf – on the spot. From assessing overseeding programs to determining the impacts of alternative management practices, turf ID is key!

15 JUST IN TIME FOR SUMMER. How to get a sports field ready in 70 days: exploring less expensive and time-consuming strategies.

25 SCHOOL TURF. Despite being an important part of the educational system, sports fields are often at the bottom of the funding “food chain.”