

Slit Seeding vs. Core Cultivation/Overseeding

By Bob Vavrek, USGA Green Section Agronomist, North Central Region

Many courses across the Region experienced significant turf loss during the hot, droughty stretch of stressful weather this summer. Now that cooler temperatures and rainfall have returned questions are raised regarding the most effective techniques for returning a severely damaged site to a playable condition.

Repairs using sod or plugs of turf yield almost immediate improvement. A properly sodded site can accommodate play after approximately three weeks, under ideal growing conditions. Motorized carts, however, should still be diverted from sites repaired with sod for a considerably longer period of time using ropes and stakes if necessary.

Not all courses have the money and labor available to undertake an extensive renovation project that requires sod. A less expensive and labor intensive option is to overseed thin or bare areas after hollow tine core cultivation or overseed using a slit seeder. Which operation produces the fastest results or should a combination of both techniques be employed?

In general, slit seeders produce the best results in the most severely damaged sites – areas that are bare or areas with very little turf cover. The unit must be adjusted properly to ensure good seed-to-soil contact. It is easier to cut a clean channel and drop seed into bare turf than a site with clumpy or partial turf cover. Furthermore, when the seed germinates in a slit cut into bare areas, it will have little competition from mature plants. Cut seed into an area having a fair amount of healthy turf cover and many of the seedlings will not be able to compete with the nearby mature plants. Turf species that have a slow rate of establish-

ment, like Kentucky bluegrass, can be especially sensitive to competition from existing plants. Incidentally, always overseed in two directions (diamond pattern) to accelerate the rate of recovery, and inspect the slits frequently to determine whether or not seed is being dropped directly into the grooves.

Core cultivation followed by overseeding is the better option for improving turf cover in weak areas where a significant amount of turf cover still exists. Use large 5/8" diameter hollow tines and cut the tines or adjust the unit to produce shallow holes. Process the cores with vertical mowers and overseed just before the soil is matted or brushed back into the holes. Seedlings in the large holes have more time to mature before they have to compete with the nearby

turf compared to seedlings growing in a marrow slit. In addition, the aeration operation relieves compaction and improves the exchange of air and moisture into the root zone of existing turf and the new seedlings.

Regardless of the renovation method, be sure to apply an appropriate amount of starter fertilizer to the site and keep the seedbed moist using automatic irrigation or hand watering if necessary. A clean straw mulch can be helpful during establishment and its presence will keep golfers, well, some golfers, off the damaged sites during the recovery process.

Editor's note: Visit the USGA Green Section website for a wealth of information from Bob, like the article that appears here. ♣

Happy Thanksgiving!

