You Can’t Grow Grass on Concrete

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Years ago, a turf company ran a newspaper article where they showed a picture of grass growing on concrete to prove that growing turf was easy if you followed their plan. Growing grass on concrete is possible. Growing grass on concrete and playing football on it is not. This article looks at some of the issues we face in sports turf and how to improve the concrete soil conditions that develop.

There are several criteria that turf-grasses must have in order to be suitable for athletic sports: 1) adapted to the region’s weather (i.e. “cool-season” zone); 2) tolerant of low mowing height; 3) wear resistant and good recovery; 4) tolerant of stresses and be able to compete with weeds; 5) fine textured and uniform leaf, to provide the athlete and ball with a smooth, firm and consistent playing surface; and 6) have good “quality” – color and density.

This list of criteria eliminates most grasses and leaves just a few that can be used in the northern United States and Canada. The most commonly used are perennial ryegrass (Lolium perenne), Kentucky bluegrass (Poa pratensis) and tall fescue (Festuca arundinacea). Table 1 (see page 15) highlights the pros and cons of each of these grasses.

Very rarely are these three grasses seeded alone. They are usually mixed or blended together. A “mix” refers to a seed mix that contains more than one species of grass. For example, a Kentucky bluegrass:perennial ryegrass mix. A “blend” refers to a seed blend that contains more than one cultivar or variety of the same species. For example, a 3-way blend of perennial ryegrass. The purpose of mixing and blending is to increase diversity and maximize resistance to disease and insect attack.