

Project Title: Evaluation of overseeding sports fields with new species and cultivars. Principle Researcher: Dr. Eric Lyons  
Research Facility: University of Guelph

Project Commencement: April 1, 2022      Expected Project Completion: March 31, 2025

Update period: April 1, 2022 to January 1, 2023

#### Objective 1:

Determine the effectiveness of tetraploid perennial ryegrass, turf-type tall fescue, fast germinating Kentucky bluegrass in a sports field overseeding program in a northern continental climate.

#### Objective 2:

Determine the effectiveness of dormant Kentucky bluegrass overseeding to maintain desirable levels of Kentucky bluegrass on sports fields northern continental climates.

To achieve the objectives field plots were laid out at the Guelph Turfgrass Institute that included treatments to satisfy both objectives (attached is XLS file with the entire plot plan and details). In addition to the overseeding treatments, a weed control was added. The material for this treatment was donated. The weed control was included to increase the knowledge of how this would integrate into sports field management protocols from different municipalities. Seed was obtained free of cost from seed suppliers. The OMAFRA Alliance program has agreed to the in-kind costs of plot maintenance for this project.

Pre-treatment weed counts were taken from all plots and overseeding and wear treatments were started in July 2022. Project was managed by technical support and summer students. We are still seeking a graduate student, although technical support has been secured for the coming season to assist with the experiment.

Pre-treatment weed and species counts were conducted on the individual plots. This time-consuming endeavor allows for more scientific rigor and acceptance of the results. The dominant weed present in the stands was black medic accompanied by clover. The black medic was promptly eliminated where weed control treatments were implemented. By September the wear treatments had also eliminated the black medic in the remaining plots although enough is persisting to potentially invade bare spots. Clover while still present was reduced from visual observations. Yearly point quadrats will be completed along with regular visual ratings to track weed encroachment, turf cover, and turfgrass quality. Experience from previous years is that overseeding does not produce immediate results and we should start to see differences between the overseeding plots in the coming year.

In 2023 treatments will continue and a second experiment will be started on an alternative plot.