



College of Agriculture and Life Sciences

School of Integrative Plant Science

# Overseeding athletic fields and lawns for ecological control of weeds

#### **Overview**

Repetitive overseeding is the repeated application of grass seed over an existing lawn, field or grassy area. A quick germinating species, such as perennial ryegrass, is recommended. In New York, the ideal time to start repetitive overseeding is early fall (September) when the weather is cool and moist. By this time, summer annual weeds, like crabgrass, will be dying or dead. Reseeding these bare areas will help prevent reestablishment of annual weeds. By spring, the ryegrass will be established and can crowd out new weeds.



Photo: Results of overseeding an athletic field in Ithaca, NY in Sept 2019; photo was taken nine days after seeds were applied to the left side of the field, the right side was untreated (photo by Carl Schimenti, Cornell University)

### **Details**

### Seed recommendations, considerations and timing

Overseeding with **perennial ryegrass** in New York State is recommended in **late August through early October**. Add 3 lbs to 6 lbs per 1000 square feet every 1 to 2 weeks. Perennial ryegrass is the recommended species because it germinates rapidly, sometimes within days if there is adequate moisture. Kentucky bluegrass and tall fescue can also be used for overseeding. However, tall fescue should be applied in mid- to late August or the first half of September because it needs warmer temperatures to germinate. Overseeding can be used to increase grass density, suppress annual weeds, and decrease bare ground in existing turfgrass. Spread the seed using a rotary or drop spreader, if available. Seeds can be raked in if specialized equipment is not available—use a lute or the back of a rake. Some evidence indicates that foot traffic can help increase seed contact with soil and help with germination with overseeding; however, this has not been adequately studied.





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## Additional practices for overseeding

When overseeding, consider both moisture and fertilizer. Seeds need adequate moisture to germinate, so if conditions are dry, irrigation may be needed. If conditions are dry, and irrigation is unavailable, increase the number of applications. Adding fertilizer supports both seedling growth and root development of existing turfgrass. We recommend 1 lb per 1000 square feet of fertilizer. Do not mow shorter than 3 inches to aid with establishment.

Advantages	Disadvantages
<ul> <li>Does not require specialized equipment</li> <li>Reduces/eliminates the need for herbicides</li> <li>Can be used in pesticide-free lawn care program</li> <li>Fields can be used for play during overseeding period</li> </ul>	<ul> <li>May not eliminate perennial weeds, such as dandelions or docks</li> <li>Cost of seed: large fields require a large amount of seed</li> <li>Drought could compromise overseeding method unless irrigation systems are used</li> </ul>

### Additional resources

Perennial ryegrass seed from SeedSuperStore (Buffalo, NY): <u>https://www.seedsuperstore.com/catalog/cat-100012/1010perennial-ryegrass</u>) Cornell Weed ID Website: <u>http://turfweeds.cals.cornell.edu/</u> Cornell Turfgrass Program Website: <u>https://turf.cals.cornell.edu/</u> New York State Integrated Pest Management Overseeding webpage: <u>https://blogs.cornell.edu/nysipm/tag/overseeding/</u>



Photo: Same image of overseeded athletic field from first page shows area covered by green turfgrass versus bare ground and thin turf using the Turf Analyzer software (measures dark green color index, DGCI). The bottom of the image shows the overseeded half of the field and the top half was untreated (image analysis by Carl Schimenti, Cornell University).