



Planting & Establishment Maintenance Guidelines for a Native Upland Seeding

Native plantings from seed take at least 3 years to fully establish. Please be patient. Following is a simplified version of our Planting Guidelines; a complete version can be found on our website: <https://nativeconnections.net/planting-guidelines-2/>

Site Prep

Native plantings must start on a firm weed-free seed bed. If your site has weeds or competing vegetation, you should spend the season eradicating all non-desirable vegetation using one or a combination of the following practices.

Chemical treatment: use a non-selective herbicide - *always read and follow the entire label.* Make 2 to 3 applications, waiting 3 to 4 weeks between applications to confirm mortality.

Cultivating: repeated tillage throughout the *entire* growing season, wait 3 to 4 weeks between tilling for weeds to flush

Smothering: completely cover vegetation with a tarp, black landscape fabric, or a heavy mulch layer for entire growing season (best for small areas)

Seeding (Spring: March 1 – June 15, Fall/Dormant: November 1 – March 1)

Native seed mixes are usually applied at 4 to 10 lbs/acre with nurse crop adding another 15 to 40 lbs/acre.

Hand-broadcasting: Best for small areas with bare and tilled soil. The native seed mix can simply be put into a bucket and scattered by hand or fed through a hand crank seeder big enough to handle the larger and fluffier seeds. Spread the seed evenly and be sure not to run out before covering the entire area. Bulk up the seed mix using a filler such as cracked corn, sawdust, peat moss, vermiculite, or cover crop. Divide your total seed mix in two or four equal parts, scattering the first half of the seed over the entire area, then seed the second half perpendicular to the first half. The seed should immediately be rolled, culti-packed, or raked into the top surface of the soil to ensure seed to soil contact.

Tractor Seeding: Best for larger areas. The seeder can be calibrated to ensure even distribution over the site.

No-Till Seed Drills work well where herbicide treatments have killed the vegetation and tillage has not been done, leaving an undisturbed soil surface. No-till drills cause minimal soil disturbance, reducing germination of weed seeds brought up from the seed bank.

Drop Seeders and **Culti-packer Seeders** are best for bare and tilled soil. A Culti-packer seeder has two sets of culti-packer rollers where the first set firms the seed bed directly prior to the seed being dropped, and the second set packs the seed into the soil ensuring good seed-to-soil contact. If your seeder does not have a cultipacker or roller, you will have to follow up seeding with a second pass of a standalone cultipacker.

Establishment Maintenance

Controlling weeds is the biggest priority during the first three establishment years. At most, native seeds will only grow a few inches the first year; with some requiring an over wintering period to break dormancy. Without proper management weeds will grow much thicker and taller than the natives competing for resources and shading out the native seedlings.

First Year: When vegetation reaches 12" to 16", mow to 4" to 6" (2-4 times/season). Mowing keeps the weeds from going to seed and shading out the natives. Native plants will be difficult to identify; cover crop and weeds will dominate the site.

Second (and Third) Year: When vegetation reaches 16" – 20" inches, mow to 8" (2-3 times/season). Weeds may still dominate.

Third (and Fourth) Year and Beyond: Your planting should be on its way to full establishment. If there's enough vegetative fuel, you can burn in the 3rd or 4th year and every other year thereafter using a qualified burn crew. Burning keeps woody plants from establishing and invigorates the native plants. Spot treatment and hand pulling of problem weeds (dock, thistles, knapweed, etc) may be necessary.