



HERITAGE

seedlings, inc.

Unusual Deciduous Species

SUGGESTED BROADCAST SOWING METHODS FOR NATIVE SEED (EXCERPT FROM LARGER DOCUMENT AVAILABLE ON WEBSITE)

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Timing

Willamette Valley native seed should be sown in the fall to allow for seed stratification needs. However, many of our native grasses and forbs can be sown as late as early-March. These species should be those that need only a very short period (two weeks) of moisture in conjunction with cold. Our "Disturbed Ground / Late-Seeding" mixes are appropriate for this situation.

NOTE: For drilling suggestions, please see "Native Willamette Valley Oak Habitat and Prairie Restoration Site-Preparation and Seeding Information" on our Stewardship, *Site Preparation Page*.

Sowing Success Criteria:

- Reduce weeds.
- Ensure good soil contact.
- Time the seeding to allow the appropriate amount of cold/moist treatment for germination (2 – 12 weeks depending on species, but a few only need heat).
- Do not bury the seed too deeply.
- Mulch (straw, compost, or sawdust) is ok if applied **very lightly**.

Sowing Rates for Small Areas:

On clean site: 1 oz/250 sq. ft. (approximately 11 lb/acre). However, seed mixes vary and a mix with a lot of small seeded species can be sown at a lower rate than a mix with larger seeded species.

On site not clean of existing vegetation and/or weed seed: 1.5 – 2 oz/250 sq. ft.

Sowing Methods: – SEED MUST BE CUT WITH A CUTTING AGENT (see list below)

- 1) **Mechanical:** A fertilizer (spinner) spreader can be rented at farm stores. Mix the seed with a cutting agent such as **medium-grade vermiculite** (Note: this is my favorite but all medium-grades are not created alike; look at a sample at the vendor of choice; the bag should weigh about 20 lbs for 3.5 cu ft; if it weighs more, then it will have too many fines and you should get their "coarse"). Always err on the side of more cutting agent, and then go over the area more times. *Example:* For vermiculite in a spinner spreader; **3 bags of 3.5 cu ft mixed with seed on a setting of 2 will cover 5-6 acres covering the area twice (about 1/2 bag/acre). The amount of seed depends on your desired sowing rate.** Make sure to seed in different direction the second time to ensure good coverage. The amount of cutting agent depends on the type of mix. Mixes with bulky, large seeds do not flow as fast as mixes with small seeds. Use the spreader at a non-windy time perhaps early in the morning. Be

sure to wear a dust mask when mixing the seed with the cutting agent. While seeding, make sure the mix is flowing regularly and not bridging. Adjust the opening as necessary to make sure the seed goes the distance. Press seed into soil with a drum roller if possible (harrowing can dredge up weed seed). As noted above, if the site is really clean, establishment rates are good even without pressing the seed in with a roller.

- 2) **Hand:** I prefer using a five-gallon bucket over a hand-cranked seeder since it needs to be filled up too often and can bridge. First, you should calibrate how many square feet you can cover with a given amount of cutting agent. The seed won't factor in that much so just calibrate for the cutting agent. *Example:* I can do about 1800 ft² with a 3/4 bucket of vermiculite (around 4 lbs). I double that so you can do **2 passes** (so 8 lbs for 1800 ft²). Put all the seed you want to sow in a given area in a large bin with the calibrated amount of cutting agent. I use Therm-O-Rock™ brand and the "coarse" is more medium in size. A 3.5cu ft bag weighs 20#. This means I can seed around 0.1 acre with 1 bag of vermiculite. Again, err on the side of cutting more, and then go over the area a few times in different directions. Press seed into the soil if possible.

Note: for small areas, if you have the ability to apply the seed/cutting agent mix to top soil or mulch this works really nicely especially if applying seed later in the winter. This ensures good soil contact for germination and establishment.

Cutting Agents:

- 1) **Medium-grade vermiculite (might be a coarse-grade for some brands)** 3.5 cu ft bag \$25 or so (Growers Nursery Supply or other Nursery Supply store). *Slightly moisten before use to reduce the dust.*
- 2) **Natural Corn Cobs** Bird and Small Animal Litter/Bedding 27 lb (farm stores or the website below) Natural Corn Cob animal litter/bedding by PureLite™, <http://www.amazon.com/Natural-Small-Animal-Litter-Bedding/dp/B001VIY7J0>
- 3) **Fertilizer:** 0-45-0 (to avoid fertilizing weeds)
- 4) **Sifted sawdust:** OK to use this if hand-seeding and some seed drills. It will bridge in fertilizer spreaders
- 5) **Floor Dry:** 50 lb bag (automotive stores) <http://www.cepsorbents.com/search.asp?pg=1&stext=floor+dry+clay+based&sprice=&stype=&scat=>
- 6) **Rice Hulls:** <http://www.ricehull.com/>
- 7) **Cracked Wheat** (chicken feed): Winco bulk section – ask someone in the department for 50# bags (may want to try some first to see if it will work for your needs). Rate: One user suggests ½ bag/acre mixed with the desired amount of seed mix. However, calibration is a must since the spreader opening determines how much cutting agent is applied.
- 8) **Native grass seed with low viability:** check with local native seed vendors for old seed.

Small Garden Areas:

It is OK to cover seed with a light dusting of soil (I sift potting soil through a sieve to dust the seeded area with fine soil). Cover only until you can barely see the cutting agent. This will hasten germination and help avoid predation.

Legumes:

Legumes have a hard seed coat. If planted in the fall, most legumes will germinate by spring. However, if you're planting late-winter or early-spring they will benefit from a light scarification before sowing. Use fine sandpaper (150 grit). Tape one piece of sandpaper into a bin with sides and rub small amounts of seed on it with an additional piece of sandpaper. Thirty seconds should do it (the seed coat should look dull).