



Sowing Your Seed

INSTRUCTIONS

SEEDING WITH NATIVE SPECIES

WHAT ARE SEEDS?

Seeds are the embryos of a plant that will grow into a new plant. They are usually wrapped in a tough exterior layer for protection (seed coat) and contain some stored food (endosperm).

TIMING

Different species vary on when best to be sown from seed. Some species are adapted to germinate with the first rains at the end of summer and grow throughout the warm, moist fall season. These seeds should be planted at the end of summer or early in the fall to maximize the growing season. Others are adapted to germinate after winter has passed and require a period of cold, moist stratification. These seeds should be planted in the early fall so that they can stratify naturally. Stratification length varies between species.

SEEDING STRATEGY

Seeding can be a cost-effective way to cover larger areas and result in a natural assemblage of native plants. Seeding done well can function to minimize soil erosion and prevent invasion by weedy species. Sometimes a phased seeding plan is effective to introduce a few species

first that can quickly establish, and then in following years or seasons, other species can be interseeded to increase native plant diversity. In some cases, a “nurse plant” can be introduced first to facilitate the establishment of other species that are planted later (e.g. seeding of sun-loving species while shade is created). As part of a phased seeding approach, less vigorous species can be planted ahead of vigorous species to ensure their establishment. In future years, the more vigorous species can be added.

SITE PREPARATION

Good preparation is critical to the establishment and survival of plants sown by seed. In general, seeds require good seed to soil contact, steady moisture, and to remain undisturbed during their establishment. Surface roughening prior to seeding can improve germination success by allowing for seed to soil contact...



WHEN TO SOW YOUR SEED?

Most native wildflowers are adapted to be sown in the fall, to mimic when the seed naturally drops after the dry summer. Despite this, some species can also be sown in the early spring. The species listed below will still germinate if sown in the early spring (Feb/March), but the most successful germination of native seed is done by fall sowing.

PERENNIALS

Entire-leaved Gumweed
Yarrow
Pearly Everlasting
Woolly Sunflower (below)
Field Chickweed
Spring Gold
Coastal Sage



ANNUALS

Sea Blush
Small-flowered Blue-eyed Mary
Farewell-to-Spring (left)
Small-flowered Forget-me-not
Miner's lettuce



SEED STORAGE

Seeds should be stored cool and dry if they're not planted right away. Paper envelopes prevent moisture build-up. Seeds in paper envelopes can be stored in a dry place away from sun like a cupboard if they're sown relatively soon after purchase.

On compacted soils, the ground can be roughened, raked, or tilled **before seeding** to break up the surface and allow seeds to fall into crevices, which help retain moisture for germination. There are a diverse array native plants that will thrive in any soil type, including nutrient poor, gravelly, or clay soils. Site preparation also includes dealing with undesirable plants and weedy seed banks ahead of seeding. Approaches will vary depending on the site but may include methods such as hand weeding, solarization, mulching, tilling, smothering, and herbicides. Sometimes minimizing soil disturbance can help reduce problems associated with weedy seed banks.

SEEDING DEPTH

It is essential that seed is sown at an appropriate soil depth to ensure germination and successful growth. Different seeds have different light, moisture, and temperature requirements. **Seeding onto the surface of the soil is best** for the majority of species we carry (see site prep above). As a general rule of thumb, **seeds should only be buried as deep as they are long**. Sowing on the surface and raking lightly can be effective.



For longer shelf life, place the paper envelope in a sealed plastic bag and keep in the refrigerator. In general, we recommend sowing within the first year after purchase, though some seeds can be stored much longer.

Dilute that seed! We recommend **1/2 cup carrier** for every **1 m² of area** to cover



BROADCASTING SEED

Broadcasting places seed on the soil surface instead of underground, whether by hand or with a seed spreader. Using an inert "carrier" such as vermiculite, perlite, sand, or sawdust with the seed can allow it to be spread easier, distribute more evenly, and help you visually track where the seed has already fallen. A general ratio to follow is **1/2 cup of carrier for every 1m² of area to cover**. Seed spreaders are commonly used to distribute lawn seed or agricultural seed, but they can be effective tools for broadcasting larger amounts of seed over your site. If using a spreader, ensure the unit has settings to accommodate small-sized seed. Other techniques like drill seeding and hydroseeding may become available in our area over time for native seed blends.

COLD STRATIFICATION

Some perennial seeds need a period of moist and cold conditions before they will germinate, which is called cold stratification. Some perennial seeds need a period of moist and cold conditions before they will germinate, which is called cold stratification. This is how native plants have adapted to the local climate. Germinating in cool/moist conditions prevents seedlings from drying out in the hot summer or freezing in the winter. **Great Camas, Common Camas, California Oatgrass, Nodding Onion, Red Columbine, and Broad-leaved Shootingstar** are just some examples of species that require cold stratification and should be sown in the fall.



CHOOSING THE RIGHT SPECIES

This is one of the most important factors in developing an appropriate seed combination for a given site. Numerous factors must be taken into account such as project goals, budget, and maintenance abilities, as well as a suite of biological factors such as light, moisture, soils, and other environmental conditions. These considerations will influence species composition, grass-to-flower ratios, ratios of different species in the blend, seeding rates, and timing of inclusion for particular species. An understanding of the ecological behaviour of the various species and germination rates as well as site preparation and seeding techniques must also be considered when designing a seed blend. Consultation with an expert is often necessary when choosing and designing an appropriate seed blend.

TIMELINE

Starting a plant from seed can take time but can be very rewarding and yield a natural-functioning space. The timeline of events depends almost entirely on the type of species in the

blend and is impacted by a range of factors like site preparation methods and competition by invasive species as well as competition among the native species themselves. Weather patterns and timing of seeding dramatically affect seeding success and other outcomes as well. In general, a diverse seed blend sown in fall will show some germination in the fall of the sowing and then go through a period of relative dormancy through the winter. The following spring there will be a second flush of germination from species that require cold stratification. Some species flower in their first year, while others may quietly put on growth through several seasons before flowering. Patience is key and minimizing disturbance through the fragile periods is essential. Some seed blends can be sown in the spring if they include spring-germinating species (these same species can be sown in the fall as well). Because spring rain may be intermittent, spring sowing will be more successful if the site can be watered and if the sowing is done early (February/March).

Plants like White Fawn Lily (right) and Great Camas (left, above) can take up to seven years to bloom from seed and require patience. They are certainly well worth the wait!



MAINTENANCE

Native plants have a reputation of being little-to-no maintenance, but the truth is that almost all planted spaces require at least some maintenance to thrive continually or to meet various project objectives. Most native plants are susceptible to deer-grazing, so using deer-resistant species or otherwise protecting from deer may be required, particularly in the early-establishment phase. Rabbits, slugs, and birds can also pose a threat. All plantings, big and small, require a certain level of preventative and adaptive maintenance. For meadow spaces, periodic mowing or burning is required to reduce thatch buildup and open up space for new recruitment, particularly by annual species. Watering may also be necessary for some types of planting or to meet objectives. However, there are a variety of plantings that can be done without any supplemental watering, particularly when sown in the fall.

LOOKS CAN BE DECEIVING

Seed size varies tremendously depending on the species. From a speck of dust to the size of a pea, the volume of seed you receive may appear much less than what you were expecting. Contact us for more information on seed volume.

BENEFITS OF GROWING FROM SEED

- ✓ Learn multiple stages of plant life cycle
- ✓ Complete coverage & natural balance
- ✓ Reduced cost & labour; beneficial for larger scale projects
- ✓ Preserved genetic diversity
- ✓ Reduced waste

CHALLENGES OF GROWING FROM SEED

- ✓ Timing is critical; Many native seeds must experience a winter to germinate (cold stratification)
- ✓ Patience; some species take a long time to flower
- ✓ New seedlings are fragile and susceptible to damage by birds, slugs, trampling, frost and even our own weeding errors!

HELPFUL TERMS TO LEARN AS YOU GROW



STRATIFICATION is a process of treating seeds to simulate natural conditions that the seeds must experience before germination can occur.



GERMINATION is the stage of plant growth when the seed begins to sprout. Each seed is triggered to germinate from a combination of water, temperature, and sunlight.



INTERSEEDING means to add seed to an already vegetated area.

CONSIDER PURCHASING SEED FROM US

Saanich Native Plants offers one of the largest native plant seed selections on Southern Vancouver Island. Did you know the genetics of our seeds is local? Our seeds originate from field grown plants (not wild collected) and grown without the use of herbicides, pesticides (including neonicotinoids), or chemical fertilizers. This parent stock has been grown from wild seed sources in the Victoria area.

Field grown plants are carefully tended throughout the year and seeds are harvested by hand through the spring and summer. Once collected, seeds are sold in pre-made blends, packages, and in wholesale quantities. We specialize in custom blends to suite your specific project needs.



NEED MORE SEED?

We offer seed in custom blends as well as pre-packaged seed. Some of our seeds are readily available at the nursery during our regular business hours, but for a full selection please contact us by e-mail to check our availability and to place orders.



FOR MORE INFO...

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