



Greenhouse Growing: A Simple Guide

Greenhouse growing is an effective method to germinate native plants. Greenhouses should be heated, have good air circulation, and access to a gentle watering system. By starting seedlings early inside, it gives them an early start to compete against weeds. There is also a higher survival rate of seeds (compared to direct seeding, i.e. putting seeds in the soil outdoors) because they are protected from animal consumption and hazardous environmental factors, which means less wasted seeds.

The main idea is to break the native seed's natural dormancy by first 'stratifying' them in wet sand beginning in December/January and keeping them cold to mimic winter conditions. In early March they are sown into germination flats and kept them warm and moist in the greenhouse (*or indoors using grow lights*). The seedlings may then be separated and 'upshifted' into individual pots to continue growing, and then after a couple more weeks of care, planted directly into the ground outside or distributed in pots.

Materials Needed:

Step 1 (December/January): Seeds, sterilized play sand or silica, plastic baggies, permanent markers

Step 2 (January-February): Refrigerator or unheated garage

Step 3 (Early March): Potting soil mix, germination trays, tape, permanent markers

Step 4 (April): Individual plastic pots, and bottom trays

Step 5 (May): Cordless drill auger/hand tools, garden gloves

Steps to Greenhouse Growing Native Seeds:

Step 1: Seed Stratification Activity (December/January)

Mix sand and a single species of seed (more sand than seeds, ~¼ cup sand) in a plastic baggie and add water until it resembles the consistency of cookie dough. Label. Repeat for each species.

Step 2: Cold Storage (January-February)

Immediately after mixing with sand and water, refrigerate baggies at 35-40°F for at least 30 days.

Step 3: Germination + Consistent Care (Early March)

Fill a tray with pre moistened potting soil, sprinkle seed/sand mixture evenly over the top, and dust lightly with soil to cover (if required). Label tray. Place in a heated greenhouse (or keep indoors under grow lights), and water *gently* to keep moist until germination. Do not flood the tray. If they dry out during this stage, the seeds will die. Option to add a clear plastic dome to the tray, but remove it promptly once sprouted. Continue caring for seedlings until the 'first true leaf stage', about 4 weeks.

Step 4: 'Upshifting' Seedlings + Continued Care (April)

Fill pots (with drainage holes) with pre moistened soil, poke a hole, and gently put in a singular separated plant. Tuck in. Place pots in bottom tray. Label/keep track of species. Continue care, about 3 more weeks.

Step 5: Planting Day (May)

After the danger of frost has passed, put trays of seedlings outside for a few hours at a time to 'harden them off', for a week, then full time for another week. When 'field ready', plant outside into a weed-free area or directly through cardboard mulch and wood chips into the ground using a cordless drill auger or hand tool. Plant species in groups of 3-5 so pollinators can 'see' them, at 1 ft spacing in each direction.