

# GROWING NATIVE PLANTS FROM SEED



## WHAT YOU'LL NEED

- Plastic trays or pots
- Large plastic bags (large enough for your pots to fit in; gallon-sized is usually sufficient)
- Commercial seed starting mix (this is finer in texture than potting soil and has no added fertilizer)
- Shallow tray without holes
- Possibly: plastic wrap, clear plastic humidity dome, and fertilizer

## 1. STORING

Store seeds in an airtight jar in the refrigerator until you are ready to sow.

## 2. SOWING

See sowing instructions by germination code on the next page.

- During the growing season, there are some seeds you'll need to stratify, or expose to the equivalent of winter conditions. You can do this in the fridge (see codes 2 and 6), or wait until winter to sow outside.

## 3. WATERING

*Always water seeds and small seedlings by this method!*

- Place entire pot in a shallow tray of water. When the soil mix surface is moist, remove pot from the tray of water and allow it to drain.
- After sowing (and after stratification, for species that need stratification) check pots on a regular basis to see if they need watering. They should not dry out or be kept soggy.
- Monitor seeds regularly; this early stage is important to survival.

## 4. TRANSPLANTING

- Transplant seedlings into separate pots when they are large enough to handle (usually after two or three pairs of true leaves emerge).
- Plant seedlings in their permanent garden locations after roots are established but before they are potbound. For very slow growing species, it may take several years before this happens.

## 5. FERTILIZING

- Fertilizing is not necessary until seedlings emerge and have at least two pairs of true leaves.
- Fertilize seedlings with routine applications of an organic, water-soluble fertilizer such as fish emulsion at 1/4 to 1/3 the recommended strength during the active growing season.

## ADDITIONAL RESOURCES

In a pinch, many seeds will germinate at a low percentage even if you ignore every rule (except the one about keeping them moist). Looking for further information? You'll find a list of our recommended books for seed germination and perennial gardening at [ncbg.unc.edu/resources](http://ncbg.unc.edu/resources).

# SOWING NATIVE SEEDS

## Code 1: No pre-treatment necessary

- Sow as early as March or April, or anytime during the growing season, in plastic pots filled with a commercial seed-starting mix. Water as described above.
- Place pot of sown seeds in a well-ventilated, warm spot with bright, indirect light. Protect pot from digging animals and direct rain.
- Germination should occur in 15 to 45 days, depending on the species.

## Code 2: Cold, moist stratification

- Between January and May: Sow seeds in a plastic pot filled with seed-starting mix, water as described above, and allow pot to drain for at least 12 hours.
- Place pot in a sealed plastic bag and store in the refrigerator for 1 to 3 months. It is not necessary to remove the pot to water it during this time. Time refrigeration period so you can remove the pots during the growing season.
- After 1 to 3 months, take pots out of refrigerator, remove plastic bag, place them in a warm, bright spot, protected from digging animals and direct rain. From this point, it may take several weeks up to a couple of months for germination to occur.
- *Alternatively, you may sow any seeds needing cold, moist stratification in a pot in late fall or winter and leave the pot outside.*

## Code 3: Soak seeds in warm water for 8 hours before sowing

- If the species doesn't need stratification (codes 2 or 6) after soaking, sow as early as March or April, or anytime during the growing season, in plastic pots filled with a commercial seed-starting mix.
- Place pot of sown seeds in a well-ventilated, warm spot with bright, indirect light. Protect pot from digging animals and direct rain.
- Germination should occur in 15 to 45 days.

## Code 4: Very fine seeds: do not cover with soil when sowing

- Instead of soil, cover seeds very lightly with sand or cover the pot with plastic wrap or a clear plastic humidity dome.
- Sow as early as March or April, or anytime during the growing season, in plastic pots filled with a commercial seed-starting mix. Water as described above.
- Place pot of sown seeds in a well-ventilated, warm spot with bright, indirect light. Protect pot from digging animals and direct rain.

## Code 5: Sow seeds directly in garden

- These species do not do well in pots or do not transplant well.
- You can sow these any time of year, but some species may take up to a year to germinate.

## Code 6: Warm and then cold stratification

- These require 1 to 3 months of warm, moist stratification followed by 1 to 3 months of cold, moist stratification.
- Sow seeds in a plastic pot filled with seed-starting mix, water as described above, and allow pot to drain for at least 12 hours.
- Place pot in a sealed plastic bag. Store in a warm, dark location (~70°F), for 1 to 3 months.
- Move the plastic bag with the pot into the refrigerator for 1 to 3 months. Time the warm / cold stratification period you can remove the pots during the growing season.
- Take pots out of refrigerator, remove plastic bag, place them in a warm, bright spot, and protect pot from digging animals and direct rain. From this point, it may take several weeks up to a couple of months for germination to occur.
- *Alternatively, you may sow any seeds needing stratification in a pot outside and wait for germination to occur naturally, keeping in mind that it may take up to a year or longer.*