



NATIVE PLANTS: The Forest Service conserves and restores native plants. These include wildflowers, grasses, bushes, and trees found in national forests and grasslands, and beyond.

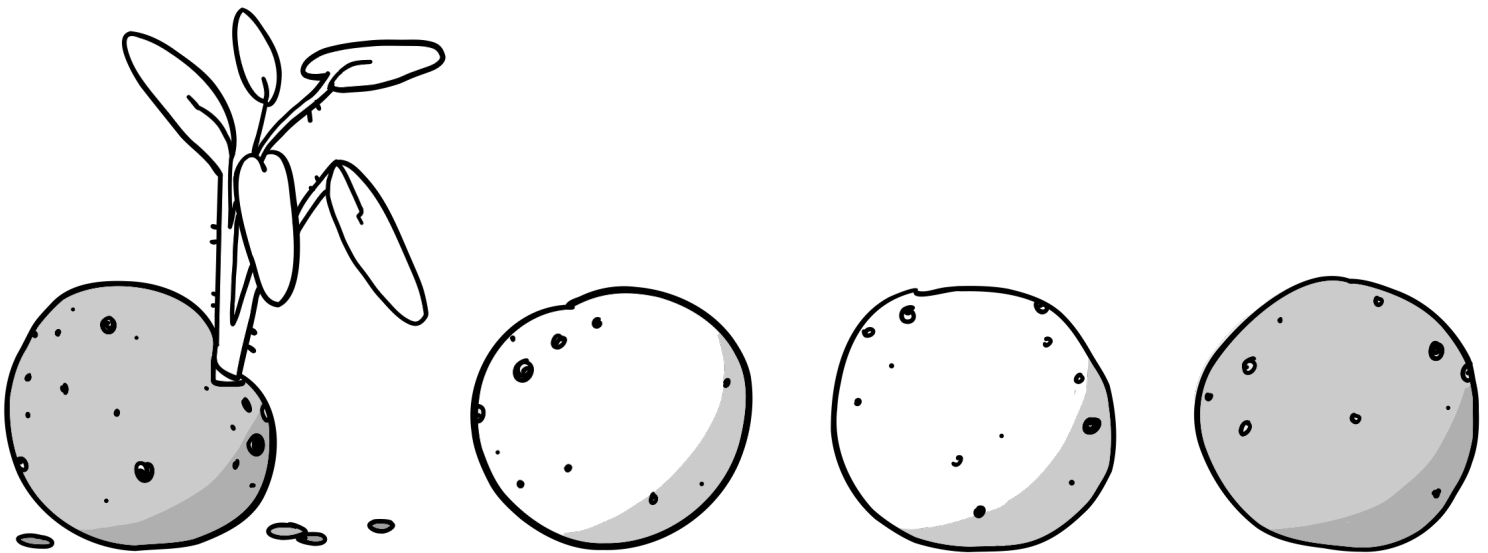
WHAT ARE THEY?

Native plants have grown naturally in a habitat for thousands of years.

WHY ARE THEY IMPORTANT?

- Native plants provide food (nectar, pollen, seeds, fruit) and shelter to local animals and insects.
- Their leaves clean the air and make oxygen.
- Their roots hold the soil in place and conserve water.

ACTIVITY: One way to spread native plants is by planting seed balls; a mixture of soil, clay, and seeds. Imagine you just planted four seed balls. What do you think the native plants would look like? Draw native plants growing from the seed balls below.



QUESTIONS

- How might animals or insects use these native plants?
- Why do you think seed balls are used to plant native seeds?

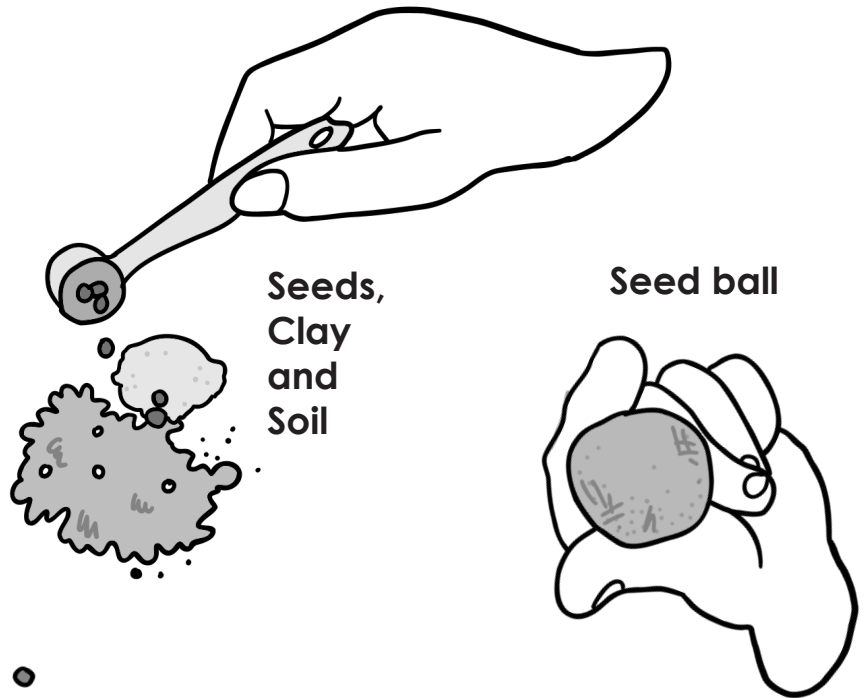
SEED BALL RECIPE: Powdered Pottery Clay

Makes 3-5 seed balls

Do you want to help spread native plants and watch them grow?
Get your hands dirty and plant seed balls!

MATERIALS

- Potting soil
- Powdered pottery clay
- Native plant seeds
- Water
- Bowl for mixing
- Measuring spoons
- Flat surface for drying



INSTRUCTIONS

1. Mix 3 tablespoons of soil and 1 tablespoon of clay in a bowl. (Ratio of soil to clay is 3 to 1.)
2. Add $\frac{1}{2}$ teaspoon of seeds and mix well.
3. Add water slowly and mix all of the ingredients together. Continue adding water until the mixture feels like cookie dough.
4. Form the seed balls by rolling them in your hands. They should be the size of a large marble or gumball (1 to 1.5 inches in diameter).
5. Set the seed balls on a flat surface and let them dry for 24 hours.
6. Now the seed balls are ready to plant. They can be planted in bare soil, in a garden bed, or in a flower pot. Gently press them into the soil, so that the bottom half is in the soil and the top half is exposed to the air.
7. Water often, or as much as needed for the specific plant. You may also plant the seed balls in areas where they will be watered naturally.
8. Over time, enjoy observing the growth of the native plant!



SEED BALL ACTIVITY: Supplemental Resources and FAQs

What are seed balls? Why are they used to plant seeds?

- A seed ball is a mixture of soil, clay, and seeds used to spread native plants.
- Seed balls protect the seeds and keep them in one place until they receive enough water to grow, typically through rainfall. The clay and soil protect the seeds from heavy winds and the heat of the sun. Plus, the hard clay casing may discourage animals from eating the seeds.

How do I make seed balls?

- Read through the activity sheets for basic instructions.
- Watch a Forest Service video demonstration, "How to Make Seed Balls"
<https://vimeo.com/721113038>

What types of seeds should be used for the seed balls?

- Use seeds that are native to your area. Native plants provide food and habitat for local animals and insects.
- Learn more about the benefits of native seeds:
 - www.audubon.org/content/why-native-plants-matter
 - www.fs.fed.us/wildflowers/Native_Plant_Materials/Native_Gardening
- Try to use local sources for the native plant seeds, like from companies that specialize in native seeds. Find your state's native plant society and their recommendations for native seed sources: www.fs.fed.us/wildflowers/links.shtml.

What types of clay can I use for the seed ball activity? Which should I choose?

- There are two ways to make seed balls, with powdered pottery clay or air-dry clay. If using air-dry clay, make sure that the clay is all-natural and non-toxic. Each option has its own instructions for how to make the seed balls.
- **Powdered pottery clay:** ideal method for larger-scale community or environmental restoration projects. Powdered pottery clay can be bought in bulk at 50 lbs., which may range from \$60 to \$90.
- **Air-Dry clay:** ideal method for smaller-scale classroom, backyard, or flower pot projects. This option is easy to find at stores and is less messy than using powdered pottery clay. Air-dry clay materials may range from \$7 to \$20 for a 5 lb. bag (to make about 50 seed balls).

Can non-hardening modeling clay be used for the seed balls?

- No, non-hardening modeling clay cannot be used for the seed balls. Modeling clay contains a wax and oil-based formula that resists water. Due to the oil and wax properties, modeling clay would not break down properly to allow the seeds to germinate.

Where and when do I plant the seed balls?

- Plant the seed balls in bare soil, in a garden bed, or in a flower pot.
- Plant the seed balls during cooler and rainier seasons.

