

Camp Fire
MINNESOTA

My nature connection

SEED SCULPTURES

GRADES: 4+
TIME: 60 min

Families will:

1. Learn how seeds pollinate and disperse.
2. Learn the difference between native and non-native seeds.
3. Create a paper and seed mixture, and mold into small sculptures that they can eventually plant.

ACTIVITY

INTRODUCTION

All living plants need a way to reproduce in order to carry on their species. This process is called pollination.

Flower Pollination: *The process of wind and rain moving pollen between plants. Most plants also need bees and other insects to pollinate.*

Self Pollination: *Instead of relying on bees or wind, some plants pollinate all on their own!*

Eventually plants will drop their seeds which will travel and a new generation of plants will start growing. This is called "seed dispersal." Seeds can disperse or travel in many ways--by gliding in the wind, floating in water, bursting, being consumed by animals (especially birds), and traveling with humans.

WHAT YOU'LL NEED

Different Types of Paper
Water
Seeds (from vegetables or packets found at a grocery store)
Blender
Plate/rack for drying
Optional: cookie cutters

SETTING

Kitchen area with access to water and a blender

Outdoor space to plant seed sculptures

Today, you will get to practice human seed dispersal by helping seeds travel to different places! Because of human seed dispersal, you can find many types of seeds that are both native and non-native in your grocery store, back yard, garden, and local park.

NATIVE VERSUS NON-NATIVE SEEDS

When a plant is native, this means that it exists in a space naturally and did not involve humans moving its seeds. Native seeds growing in Minnesota include many fern and wildflower species, Mountain Mint, American hazelnut, many Oak species, Red Maple, and Northern White Cedar.



Non-native seeds were moved by humans from the area they originated to a new spot. This is why we can grow strawberries from France, green beans from Peru or watermelon from West Africa, in our local gardens! Because of human seed dispersal, we can enjoy fruits and vegetables from around the world!

CONNECTING WITH QUESTIONS

Where is the best location to grow a seed in the area where you live? *Think of all of the things that a plant needs to be strong and healthy!*

As a family, what can you do to encourage native species growth and help the pollinators around your home?

How can you all prevent invasive species from spreading?

LET'S TALK ABOUT INVASIVE SPECIES

Invasive species are seeds that aren't native to an area and start growing and taking over plant populations. Most times when this happens, it is hard for other plants to grow. This can hurt the lives of insects and animals too. Some common invasive species in Minnesota forests include Buckthorn and Exotic Honeysuckle.

Seeds can travel on your clothing, shoes, boats, cars, etc. It's important to be mindful of this and learn about the ways to prevent it. When working with non-native species, please make sure the seeds are in a controlled and small area like a garden bed or a backyard where they won't spread to other places. Try to plant native species that benefit local wildlife/pollinators!

THE RIGHT GROWING CONDITIONS

Q: What conditions and environments will allow our seeds to thrive?

A: Plants need sunlight, water, and soil nutrients to survive.

Q: What could we do to make sure they have these things?

A: Plant seed sculptures in nutrient rich soil. Provide seeds with a sunny and warm environment to live in and water them whenever their soil feels dry. When it is chilly out, you can start your seeds indoors. Once it gets warmer out, you can transplant or move them to soil outdoors (around mid-May) when they will love the summer growing conditions.

SEED SCULPTURES

LET'S BUILD OUR VERY OWN SEED SCULPTURES!

Seed sculptures will help seeds grow big and strong!

Using wet paper and seeds, we'll be molding small sculptures to place in our yards, gardens, or indoor pots. Be sure to give the sculptures time to dry before planting them in soil.

You can create, plant, and nurture your seed sculptures throughout the growing season.

STEPS

1. Tear paper into small pieces.
2. Add in water and mix it with your hands (play around with it!).
3. Blend the paper mixture with a food processor or blender.
4. Add seeds. You can collect seeds from fruits and vegetables in your fridge, plants around you, or from store bought seed packets.
5. Create shapes with cookie cutters or creatively mold your own sculpture.
6. Dry for 24 hours on a plate or rack.
7. Plant! You can plant these in pots indoors or outside in the dirt.



Share your seed sculptures!

Post on social media using
#mynatureconnection

ADDITIONAL RESOURCES

Link to our youtube video in here

<https://www.edenproject.com/learn/for-everyone/what-is-pollination-a-diagram-for-kids>