Native Plants Girl Scouts fun patch program



By Kye Johnson

A Gold Award Project

Patch requirements

Daisies: Earn at least 3 points Brownies: Earn at least 5 points Juniors: Earn at least 7 points Cadettes: Earn at least 9 points Seniors/Ambassadors: Earn at least 12 points

Go on a walk or hike to look at native plants - 1 point

Go on a native plant scavenger hunt - 1 point

Learn about at least 3 types of native plants - 1 point

Learn about 3 animals or bugs that benefit from native plants - 1 point

Draw or paint a picture of native plants - 1 point

Create a paper flower of a native flowering plant - 1 point

Take photographs of native plants - 1 point

Draw a food web that involves native plants - 1 point

Learn about 3 benefits of native plants and 3 downsides of non-native ones - 2 points

Teach a group of younger Girl Scouts about native plants - 3 points

Plant native plants or seeds - 3 points

Create a poster, social media post, or flyer to inform people about native plants - 3 points Participate in a service project to increase the use of native plants -3 points

What are native plants?

Native plants are plants that have evolved and developed in a specific ecosystem for hundreds of thousands of years! Since they have developed to live in that specific ecosystem, they tend to require less fertilizer, watering, and extra care in comparison to exotic plants.

What are non-native plants?

Non-native plants are plants that have been brought from another ecosystem. They have not developed alongside native plants and animals, and have developed in completely different ecological conditions. They tend to require more care than native plants, because it can be more challenging to get them to survive in an environment that they didn't originally develop in.



What are invasive plants?

Invasive plants are plants that are non-native and are causing harm to the ecosystem that they were introduced to. They steal the resources that native plants or animals need to survive, and can sometimes cause extinction



For example, amur honeysuckle is invasive. It grows leaves earlier in the season than native plants, effectively blocking the sunlight from them. In addition, their berries stay on the plants all winter, so the birds eat them and spread the seeds to new locations.

Go on a hike or walk to look for native plants - 1 point

Go to a park, forest preserve, garden, or other place that has lots of plants! Look for as many native plants as you can find. You could try using an app to identify plants, or bring a book along to help! In addition, you could look for areas where additional native gardens could be planted.

Two common native plants in Illinois

Purple Cone Flowers

Black-eyed Susan





Go on a native plant scavenger hunt - 1 point

You can use the scavenger hunt that is on the next page, or you can use your own! If you want, you could also make one yourself. If you're going on a native plant hike, you could even complete this scavenger hunt while hiking!



Native plant scavenger hunt

How many can you find?



Learn about 3 types of plants that are native in your area - 1 point

Learn their names, whether or not they flower, and which bugs/animals rely on them for survival. Consider using books, plant identification apps, websites, or videos for your research! You could also ask someone who already knows about native plants for help.



For example, this orange plant is butterfly weed! It flowers during the summer, and is a type of milkweed. Monarch butterflies only their eggs only on milkweed, so it's very important to their survival. In addition, it's the only food monarch caterpillars will eat.

Learn about 3 animals or bugs that benefit from native plants - 1 point

Many animals and insects rely on native plants for their survival. Learn the names of at least 3 animals or insects that need native plants to survive. In addition, learn what specific plants they use, and what they use them for.

Monarch butterflies

Ruby Throated hummingbird



Monarch butterflies lay their eggs on milkweed plants. The caterpillars are specialized to eat only milkweed, regardless of the fact that it is toxic to many other species.



Ruby Throated Hummingbirds eat the nectar from red Columbine plants.

Draw or paint a picture of native plants - 1 point

Draw or paint a picture of one or more native plants! You could start by googling a list of plants that are native in your area, until you find one that you would like to use to create art. Then, use your choice of art supplies to create art!



For example, my sister drew this purple cone flower and silver maple tree for the fun patch!

Create a paper flower of a native flowering plant - 1 point

First, do some research! Find out which plants are native in your area, and chose a flower that you would like to create! Next, gather art supplies and a tutorial. Then, create a paper flower!



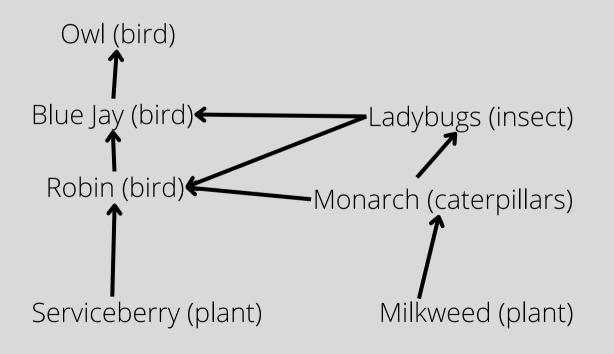
Take photographs of native plants - 1 point

Locate some native plants nearby! Then, use a camera and take photos. You can use different photography techniques, such as camera angles, lighting, and filters.



Create a food web that contains native plants - 1 point

First, choose a few plants that are native in your area. Next, create a food web! Draw lines connecting the animals that eat each type of plant, as well as the animals that eat them. Soon, you should have a diagram of an ecosystem!



Learn 3 benefits of native plants and 3 downsides of non-native ones - 2 points

Use websites, books, or interview someone! Learn some benefits of native plants, some pollinators they help, and why they should be planted! You can also learn about downsides of planting non-native plants, and which ones could be considered invasive.



Teach a group of younger Girl Scouts (or other kids) about native plants - 3 points

Teach a group of younger kids what you've learned! You could lead some of the activities in this document, so that they could earn the patch too! You could also decide to teach them anything that interests you about native plants!



Plant native plants or seeds - 3 points

First, spend time learning about which plants would grow best in your chosen location. Take the amount of light, water, and soil type into account. In addition, you can decide if you would like to attract any specific pollinators or animals to your location! You can use the pages in the back of this guide, as well as any resources of your own, for help!



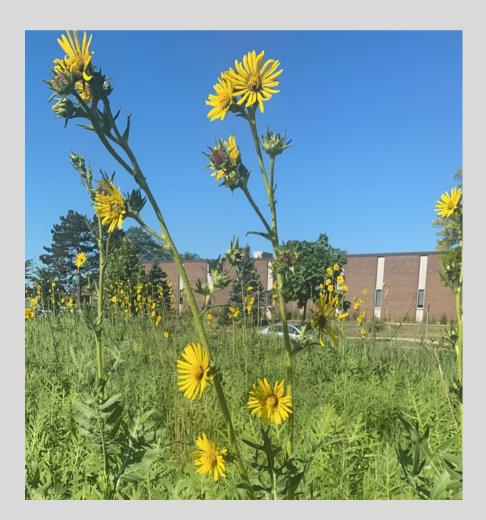
Make a poster, flyer, or social media post to teach people about native plants - 3 points

First, learn about native plants, and choose a topic that interests you! For example, you could make a poster about the benefits of native plants or a flyer about a specific native plant that interests you. Use your finished project to teach others.



Participate in a service project about native plants - 3 points

You can either design and plan your own service project, or you can participate in someone else's service project. You could plant a native plant garden, put up informative flyers at your school, or choose anything else you can think of!



Types of plants that are native in Illinois

Allegheny Serviceberry American Beach Grass



Allegheny Serviceberry is a tree that is native in Illinois. In the spring, it has white flowers. Later, in the early summer, it has purple berries. The berries are eaten by native birds.



American beach grass is a plant that grows on the edges of Lake Michigan. It helps to prevent the erosion of dunes, since its root system can stretch 20 feet. Thus, it can hold the dune in place! However, when it's grown outside of its native ecosystem, it can be invasive and extremely difficult to remove.

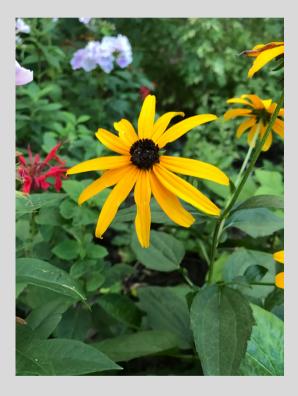
Plants that are native in Illinois

Box Elder Tree



Box elder trees are a type of maple tree. Multiple types of caterpillars eat their leaves, and they can easily reproduce using their helicopter-like seeds!

Black-eyed Susan



Black-eyed Susans are native wildflowers! They bloom during the summer, and are very beneficial to butterflies. In addition, birds will eat their seeds in the fall!

A long list of plants that are native in Illinois

American Bellflower

Anise Hyssop

Black Cohosh

Blue Gramma

Bluejoint Grass

Blue Star

Button Bush

Butterfly weed

Carolina Allspice

Carolina Mosquito Fern

Carolina Watershield Common Dogbane

Common Hackberry

Common Milkweed

Coon's Tail

Cream Wild Indigo

Cross Vine Cutleaf Toothwart Devil's Walking Stick **Downy Serviceberry** Dragon's Mouth Eastern Redbud **Ebony Spleenwort** False Aster False Boneset False Indigo Fireweed Fourleaf Milkweed Giant Marsh Marigolo Goat's Beard Gray Sedge Great Angelica

A long list of plants that are native in Illinois

Green Milkweed Hairy Grama Hardy Pecan Heath Aster Hop Sedge l eatherleaf Maidenhair Spleenwort Marsh Marigold Meadow Anemone Muskingum Sedge New England Aster Northern Catalpa Northern Sea Oats Ohio Buckeye Paper Birch Partridge Pea

Pignut Hickory Prairie Onion Prairie Milkweed Poke Milkweed Purple Milkweed Rattan Vine **Red Baneberry** Red Maple **River Birch** Running serviceberry Side-Oats Grama Silver Maple Spring Beauty Sugar Maple Swamp Milkweed Swamp Thistle

A long list of plants that are native in Illinois

Sweet Flag Thimbleweed **Tickseed Sunflower Trumpet Vine Tussock Sedge** Virginia Bluebells Water Arum Watersheild White Baneberry White Sage White Snakeroot White Turtlehead White Wild Indigo Whorled Milkweed Wild Columbine Wild Ginger



There are many more types of native plants in Illinois! To find out more, try reading websites or books.

Plants that are invasive in Illinois

Butterfly Bush



While this bush may look beautiful, looks can be deceiving! Instead of being beneficial like native plants, it can actually harm our butterfly populations. Only butterflies can eat the nectar from the bush. This leaves nothing for them to lay their eggs on, since no native caterpillars will eat butterfly bushes. They also produce rapidly, and can takeover areas where beneficial native plants could live. This leaves nothing for caterpillars to eat, and thus harms the populations overall.

Plants that are invasive in Illinois

Amur Honeysuckle



Amur Honeysuckle is an invasive plant that is commonly found on the floor of forests. Since it begins growing sooner in the spring and later in the fall than other plants, it can successfully out compete them. This can be detrimental to our native animal and insect populations who require those other plants to survive

Final Comments

I hope that you've learned more about native plants while earning this patch! I hope that you've had fun learning, creating, and teaching about native plants.

