

# Flora



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PLANTS TO AVOID

FIFTY TREES OF INDIANA

FIFTY TREES OF INDIANA

FIFTY TREES OF INDIANA

FIFTY TREES OF INDIANA

FIFTY TREES OF INDIANA



Trees and Shrubs

Trees and Shrubs



101 TREES INDIANA

Medicinal Plants and Herbs

Medicinal Plants and Herbs

Grasses

Grasses

Edible Wild Plants

Edible Wild Plants

Weeds

Weeds

Wildflowers

Wildflowers

forestry & natural resources

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# Station 1- Flora

## Introduction

Flora refers to all plant life occurring in an area. The term originates from the Latin goddess, Flora, who was the goddess of flowers. Plants are grouped into floras based on region, period, special environment, or climate. Floras may be subdivided by special environments:

- *Native flora*. The native and indigenous flora of an area.
- *Agricultural and garden flora*. The plants that are deliberately grown by humans.
- *Weed flora*. Originally these were the plants that were thought to be undesirable and attempts were made to control or eradicate them. Now, these plants are classified as three different types of plants:
  - weedy species
  - invasive species (that may or may not be weedy)
  - native and introduced non-weedy species that are non-undesirable. Many native plants previously considered weeds have been shown to be beneficial or even necessary to various ecosystems.

Flora is everywhere and include such living things as trees, flowers, shrubs and grasses. Animals depend on plants for survival. Because the state has a relatively uniform climate, plant species are distributed fairly generally throughout Indiana. There are 124 native tree species, including 17 varieties of oak, as well as black walnut, sycamore, and tulip tree (yellow poplar), the state tree. Fruit trees—apple, cherry, peach, and pear—are common. Local indigenous species—now reduced because of industrialization and urbanization—are the persimmon, black gum, and southern cypress along the Ohio River; tamarack and bog willow in the northern marsh; and white pine, sassafras, and pawpaw near Lake Michigan. American elderberry and bittersweet are common shrubs, while various jack-in-the-pulpits and spring beauties are among the indigenous wild flowers. The peony is the state flower. As of August 2003, Mead's milkweed and Pitcher's thistle were considered threatened and Short's goldenrod and running buffalo clover were considered endangered.

<http://www.city-data.com/states/Indiana-Flora-and-fauna.html>

## Activity suggestions before visiting the Nature Park

- Study the “Plants to Avoid” packet (includes nettles, poison oak, poison ivy and poison sumac) so students are aware of what to avoid
- Have students brainstorm what kinds of flora students think they will find.
- Practice using the shrubs, wildflowers, tree, and grasses identification guides.

## Activity suggestions during your visit to the Nature Park

- Take photographs of species that are located. Classify the species using the identification guides.

## Activity suggestions after visiting the Nature Park

- Chose one of the plants, shrubs, mosses, trees or wildflowers and list the following components. Create a poster on the findings
  - Classification
  - Description
  - Habitat
  - Scientific and common name
  - Picture
  - Two interesting facts
  - Sources where the public can find more information
  - Describe the habitat each of the plants
- Compare and contrast the flora that was located. Are some related? What living conditions do these species thrive in?
- Create an inventory (poster, PowerPoint, scrapbook) of the flora (trees, wildflowers, shrubs, grasses) within the boundaries of Sugar Creek Nature Park. Share the information on the Nature

Park website, [www.sugarcreeknaturepark.com](http://www.sugarcreeknaturepark.com). Use the field guides to assist you in your inventories.

### **Resources in the travelling trunk**

Peterson Field Guides: Trees and Shrubs

Peterson Field Guides: Wildflowers

Peterson Field Guides: Medicinal Plants and Herbs

Fifty Trees of Indiana

Grasses: An Identification Guide

101 Trees of Indiana

Identification of Common Indiana Conifers

Fifty Trees of Indiana CD

Trees of Indiana CD

DePauw Nature Park Field Guide to Trees

DePauw Nature Park Field Guide to Wildflowers

Mosses of Indiana

Peterson Field Guides: Edible Wildplants

Golden Guide- Weeds

Plants to Avoid

### **On-line References**

Field Guide to Trees (at the DePauw Nature Park),

<http://www.depauw.edu/univ/naturepark/tree%20booklet.pdf>

Field Guide to Spring Wildflowers (at the DePauw Nature Park),

<http://www.depauw.edu/univ/naturepark/wildflower%20booklet.pdf>

Wildflowers of Indiana, <http://redundancy.org/wench/wildflowers/>

USDA Plants, <http://plants.usda.gov/>.

Forests of Indiana,

<http://na.fs.fed.us/spfo/pubs/misc/in98forests/webversion/index.htm#Table%20of%20Contents>

Missouri Botanical Garden, on-line source authority for currently accepted scientific names,

<http://www.tropicos.org/>.

Missouri Plants, <http://www.missouriplants.com/>.

Connecticut Botanical Society, <http://www.ct-botanical-society.org/index.html>.

Kemper Garden Center PlantFinder Search, <http://www.mobot.org/gardeninghelp/plantfinder/alpha.asp>.

On line Tree Identification taxonomic tree

[http://forestry.about.com/od/treeidentification/tp/tree\\_key\\_id\\_start.htm](http://forestry.about.com/od/treeidentification/tp/tree_key_id_start.htm)

# Plants to Avoid

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Poison oak



Poison sumac

Poison ivy



 ADAM.



Nettles

# Poison Ivy



Poison ivy

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*Poison ivy belongs to the cashew family, Anacardiaceae. It is classified as Rhus radicans or Toxicodendron radicans.*

## **What is poison ivy?**

Poison ivy is a plant found in all parts of the United States. Most people are allergic to the oily resin or sap that is in all parts of the plant.

## **What does poison ivy look like?**

“Leaves of three, let them be” is a good rule to go by. Poison ivy usually has three green leaves on each stem. They can have a reddish look, grow close to the ground, or as vines. Dark spots on the leaves are sap that has been exposed to air. Poison ivy can have different colors and appearance at different times of the year.

## **How do I get poison ivy?**

Touching any part of the plant, or anything that has come in contact with the plant that may have the oily resin on it.

## **What are the symptoms of poison ivy?**

Allergic individuals develop a skin rash (dermatitis) after coming into contact with poison ivy. The rash usually appears 24 to 48 hours after getting the oily resin on the skin, but may be delayed in some. The rash starts with itchy, red, irritated bumps. Fluid-filled blisters may develop and can burst. There is a risk of infection with open blisters.

## **What first aid and treatment is needed?**

After having contact with poison ivy remove clothing and wash skin with soap and water or alcohol to remove the oil. This is most effective if done in the first 15 minutes. Use a nailbrush to clean underneath fingernails. If a rash develops, use cool compresses with water or milk, an oatmeal bath, or medicines like Benadryl.

# Poison Oak



Poison oak

*Poison oak belongs to the cashew family, Anacardiaceae. It is classified as Rhus diversiloba or Toxicodendron diversilobum.*

## **What is poison oak?**

Poison oak is a plant that contains an irritating, oily sap called *urushiol*. It is found throughout the United States.

## **What does poison oak look like?**

Poison oak closely resembles poison ivy, although it is usually more shrub-like, and its leaves are shaped somewhat like oak leaves. The undersides of the leaves are always a much lighter green than the surface and are covered with hair.

## **How do I get poison oak?**

Touching any part of the plant, or anything that has come in contact with the plant that may have the oily resin on it.

## **What are the symptoms of poison oak?**

The reaction will appear in the form of a linear rash (sometimes resembling insect bites) within 12 to 48 hours. Blisters and severe itching will follow redness and swelling. In a few days, the blisters become crusted and begin to scale. It will usually take about ten days to heal, sometimes leaving small, pigmented spots, especially in dark skin. The rash can affect any part of the body, especially areas where the skin is thinner and more sensitive to the sap.

## **What first aid and treatment is needed?**

After having contact with poison ivy remove clothing and wash skin with soap and water or alcohol to remove the oil. This is most effective if done in the first 15 minutes. Use a nailbrush to clean underneath fingernails. If a rash develops, use cool compresses with water or milk, an oatmeal bath, or medicines like Benadryl.

# Poison Sumac



Poison sumac

*Poison sumac belongs to the cashew family, Anacardiaceae. Poison sumac is classified as Rhus vernix or Toxicodendron vernix.*

## **What is poison sumac?**

Poison sumac is a woody shrub or small tree growing to 20 feet tall.

## **What does poison sumac look like?**

Poison sumac grows as a woody shrub, with each stem containing 7 to 13 leaves arranged in pairs. Poison sumac can be distinguished from harmless sumac by its drooping clusters of green berries. (Harmless sumac has red, upright berry clusters). Poison sumac is more common in wet, swampy areas. Often the leaves have spots that resemble blotches of black enamel paint. These spots are actually *urushiol*, which when exposed to air turn brownish black.

## **How do I get poison sumac?**

Touching any part of the plant, or anything that has come in contact with the plant that may have the oily resin on it.

## **What are the symptoms of poison sumac?**

Exposure to poison sumac causes an itching rash that usually appears within 24-72 hours. The rash usually starts as small red bumps, and later develops blisters of variable size. The rash may crust or ooze. The rash may be found anywhere on the body that has contacted the oil from the plant.

## **What first aid and treatment is needed?**

After having contact with poison ivy remove clothing and wash skin with soap and water or alcohol to remove the oil. This is most effective if done in the first 15 minutes. Use a nailbrush to clean underneath fingernails. If a rash develops, use cool compresses with water or milk, an oatmeal bath, or medicines like Benadryl.

# Nettles



## **What are nettles?**

Nettles are herbs of the genus *Urtica*, which is covered with stinging, mildly poisonous hairs, causing an instant rash.

## **What do nettles look like?**

Stinging nettle plants usually reach 2 - 4 feet high, the leaves are heart-shaped, finely toothed, and tapered at the ends, and flowers are yellow or pink. The entire plant is covered with tiny stiff hairs, mostly on the underside of the leaves and stem that release stinging chemicals when touched.

## **What are the symptoms of contact with nettles?**

You will know when you come in contact with stinging nettles because you will feel a sting, which can be very painful. The sting feels very much like a bee sting and can last for hours or days.

## **What first aid and treatment is needed?**

All remedies should ease the pain and soothe the itching. Apply a paste made from baking soda and water. Use insect sting-relief pads, wipes or liquid. Look around for curled dock or jewelweed. Either of these plants may be rubbed on the exposed area to soothe the itching. If you see spines sticking out from your skin, use the sticky side of a piece of duct tape or masking tape to remove them. Wash the area with soap and water.

## **Interesting Information**

When the hairs, or spines, contact with a *painful* area of the body, they can actually *decrease* the original pain. Stinging nettle has been used for hundreds of years to treat painful muscles and joints, eczema, arthritis, gout, anemia, hay fever, or in compresses or creams for treating joint pain, sprains and strains, tendonitis, and insect bites. Nettles contain the highest plant source of iron. It is an EXCELLENT source of vitamins, minerals and protein.