



## Wetland Plants Identification

What are wetlands? How do you tell what is or is not a wetland?

The US Army Corps of Engineers has created a method of identifying wetlands which is used by wetland scientists, property surveyors, land managers, engineers, and many other professionals. This identification method uses three areas of study:

1. Hydrology: Is water present sometime during the growing season? Look for clues to past flooding or past pools of water.
2. Hydric soils: The presence of water over periods of time can change the color and other properties of soil.
3. Plant community: Plants that love water are called Hydrophytes. They grow in places where other plants would drown. Wetland plants have ratings such as obligate or facultative wetland, which means they must grow or prefer to grow where it's wet. Other plants are just facultative and can grow in both wetlands and uplands.

This video will introduce you to some of our hydrophytic plants around the Conservation District's wetlands.

1. First is a common wetland plant, the cattail. Cattails have long, smooth leaves and grow a round stalk which supports the seed head. This seed head looks like a corndog when it first grows, but in the fall, it dries out and becomes fluffy, allowing wind to spread its seeds.
2. Yellow flag looks similar to cattails, but its leaves are lined. Instead of a seed head, it grows bright yellow flowers which bloom in early to mid-summer.
3. Another plant with long, sword-like leaves is bur-reed. This wetland plant has unique flowers which grow on a zig-zag stalk. Later in summer, these flowers will appear rubbery and spiky.

4. There are many wetland grasses and plants which look like grasses, but they are hard to identify even for experts. This dark green reed canary grass is common around our wetlands but is an invasive species which overtakes habitats.
5. Sedges can be separated from grasses by their triangular stems. You can feel their edges. Instead of flowers, sedges have spikes. The spikes on this lurid sedge are large, growing two or three female spikes beneath a thin male spike on each stem. Lurid sedges often droop under the weight of their spikes.
6. Hop sedges look very similar to lurid sedge, but their stems are more upright. Their female spikes grow in pairs beneath the male spike.
7. Fringed sedge gets its name from its long, drooping spikes.
8. Fox sedges have many, many spikes growing close to its slender stems. You may also see bristles between the spikes which look like skinny, wiry leaves.
9. Wool-grass is related to sedges, but the edges of its stems are softer and rounded. Its spikelets look like a firework at the top of its stem and turn rusty-brown and woolly when they mature. Wool-grass has long, tapering leaves with rough edges.
10. Soft rush looks similar to wool-grass, but as a rush, it has a round stem. Its flower cluster grows part-way down the stem rather than at the top, and it has a more delicate look compared to wool-grass.
11. Spikerush may not look like our previous two wetland plants, but like wool-grass, its name is deceiving. It's related to sedges but has a softer, rounder stem. Spikerush is a tiny plant with a single, bud-like spike at the top of each stem.
12. Moving onto something less grass-like, our next wetland plant is the forget-me-not. These tiny, blue flowers with yellow centers are a favorite of small, pollinating insects.
13. The next plant we'll look at is jewelweed or touch-me-not. This broad-leafed wetland plant comes in two varieties, one with yellow flowers and the other with spotted, orange flowers. Spotted jewelweed is more commonly found in wetlands. Jewelweed is known for its juicy stems which can help soothe mosquito bites and rashes from nettles. Splitting the stem open provides access to the plant's juices.
14. Several species of smartweed can be found in Pennsylvania. They have small, bead-like flowers which come in pink, white, or green. Smartweeds are known for their jointed stems and lance-like leaves. Some species have a spot on their leaves often referred to as a "watermark."
15. Arrowhead is named after its leaves which strongly resemble deep-notched arrows on their graceful stems. The three-petal, white flowers of the arrowhead grow along a single straight stem.

16. Water plantain looks similar to arrowhead, but it has rounder or heart-shaped leaves. The central stem where its flowers bloom has multiple branches.
17. Moving away from flowering plants for a moment, we'll look at a common wetland fern. This is sensitive fern, and it is easy to identify by its leafy fronds which engulf its stems. Most other ferns have lots of little leaflets instead of the continuous leaf of sensitive fern.
18. Another leafy plant is skunk cabbage. Beware this wetland plant! If you accidentally break one of its large leaves, you'll discover exactly why people gave it the name skunk cabbage.
19. You can identify boneset by looking for its paired leaves pierced in the center by its stem. This plant was named during a time when people thought a plant's shape showed what it could be used for. Boneset was thought to help heal broken bones, but it has no real medicinal uses.
20. This plant is swamp milkweed. Notice its stem does not pierce its leaves like boneset, and it also has a smoother appearance than boneset. You can tell swamp milkweed from its upland cousin, common milkweed, by the width of its leaves.

There are many other plants which grow in Pennsylvania's wetlands, but these are some of the most common. Don't forget about the wetland trees and shrubs we covered in our tree identification video. Wetland trees can help people identify where wetlands begin and end just like the plants covered in this video.

Wetlands are an important resource to protect. They provide wildlife habitat, filter pollutants from water, lessen flood damage, and help refill groundwater sources which supply our wells. Wetlands serve wildlife, people, and the environment!