

# Plant identification

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## What is the first step on identifying a plant

#### Herbaceous plants.

- Generally these types of plants are smaller.
- The stems of these plants are more flexible.
- They are also usually green.

#### Woody plants.

- Woody plants are usually bigger than herbaceous plants.
- The stem of these plants are not so flexible and are made out of wood.
- The stem on these plants can be, grey, tan, brown and even sometimes red.
- The woody plants also have rigid stems that give the plant support

When woody plants are young they can also have green stems. A way to tll if this plant is a woody plant though is by feeling the stem of the plant and feeling for little ridges. When doing this remember to always be gentle because they can be very delicate. You can also look closer to the bottom of the plant and check for some wood that might be forming.



## What type of plant is grass.

Grass is herbaceous as you can tell from the green stems. Grass is annual. This means that the plant will live through summer and de during the winter. The roots stay alive throughout the winter wich makes the plant come back in the spring.



#### **Forbs**

Forbs are herbaceous plants.

Forbs are,

Annual. They live in the summer. They die in the winter but the roots survive. They then com back in the spring.

Perennial. The plant grows for one year then dies in the winter and then keeps its roots the the winter. It then comes back in the spring. On its second year growing the plant will spread its seeds and then die.

You can tell that this plant is herbaceous because of the green stem. This plant is not too big. This plant is also a flexible plant.



#### Vines

These plants can be woody or herbaceous. These plants will grow and climb up anything that it comes across. These plants are fast growing. Vines have pretty thin stems along with branches.



Herbaceous vine. You can see the green flexible stem on this one



Woody vine. On this vine you can see the woody stem and branches.

#### Shrubs

Shrubs are typically woody plants. They are perennial which means they will live through winter. After growing for two years they will produce seeds. These plants have a lot of branches. These woody plants are generally shorter.



#### Trees.

These plants are clearly woody plants. Trees are perennial. Trees are also one of the taller plants that grow. Trees are also single stemmed which means that it has one stem unlike grass.

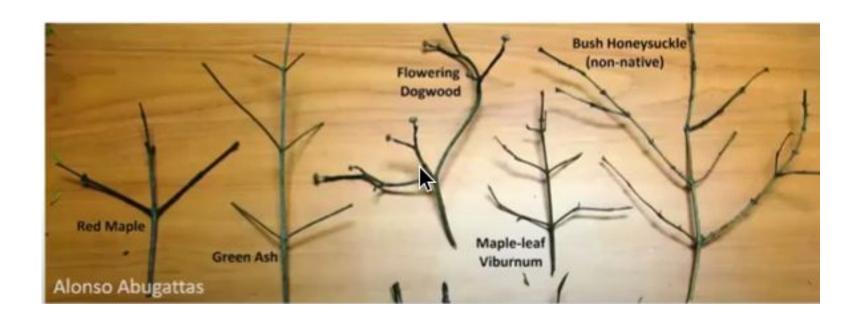


# When trying to figure out plant species you can look at the branching patterns

When a plant has alternate leaves each leave will have its own stemming spot. When a plant has opposite swimming patterns there will likely be more than one stem coming off of one area. You can look at the diagram as an example.



## Opposite stemming patterns.



### There is also whirled and basal stemming patterns.

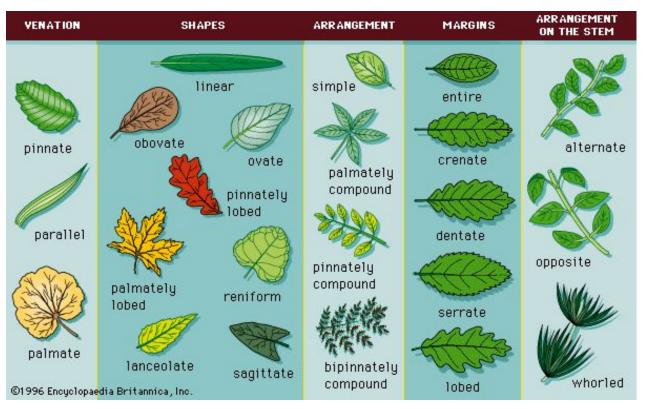
The whirled stemming pattern has branches arranged in a circle along the stem.

Like this... the stem.

You can see the branches arranged in circle forms along

There is also the basal arrangement. This has the branches arranged st the stem of the plant. Like this...

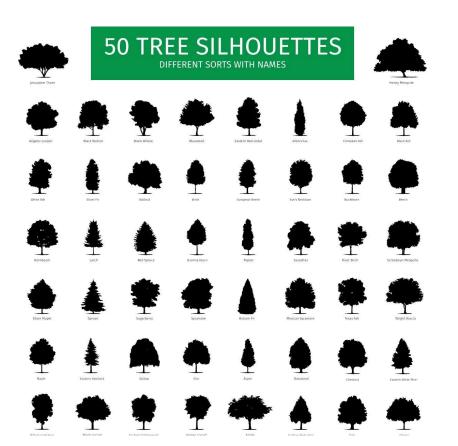
## Here are some leaving patterns.



OAK	2/3	Smooth	Орр.	D	OSIER WILLOWS		Smooth Toothed	Alt.	D
BEECH HORNBEAM	0	Shiny Toothed		D	SALLOW CRAB APPLE	0	Smooth Toothed	Alt. Alt.	D
BIRCH	Ø	Smooth Toothed	AIŁ.	D	PINE		Pairs	1	E
ALDER	0	Rough Toothed	Alt.	D	CEDAR LARCH	W	Bunches	1 1	E
LIME HAZEL	Ø	Smooth Toothed Rough Toothed	Alt.	D D	SPRUCE		Brush	*	E
ELM	Ø	Rough Toothed	AIt.	D	YEW		Spiky	-	E
ASH ROWAN	MAR	Smooth Toothed	Opp. Alt:	D	HOLLY HOLMOAK	0	Shiny Leathery	Alt. Alt.	E
SYCAMORE	必	Leathery	Орр	D	ВОХ	0	Shiny	Орр.	E
Field MAPLE	X	Smooth	Орр	D	WHITE BEAM	23	Toothed White under	Alt.	E
MAPLE PLANE	X	Smooth leathery	Opp. Alt.	D D	WALNUT ELDER	S	Smooth Toothed	Орр. Орр.	L
SWEET CHESTNUT	1	Shiny Taothed	AIŁ.	D	CHERRY BLACKTHORN	0	Smooth Toothed		E
HORSE CHESTNUT	*	Toothed	Орр	D	MULBERRY	D	Shiny Toothed	Alt.	E
WHT. POPLAR	Z	White under	Ait.	D	MEDLAR	0	Downy under	Alt.	Z
BLK POPLAR ASPEN	8	Smooth Toothed		D D	HAWTHORN	W3	Shiny	Alt.	I

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### Here are some basic outlines of different types of trees



## When identifying a plant think...

Is it woody or herbaceous

What type of plant is it

What branching patterns does it have

What do the leaves look like

By looking at the tree leaving chart you can tell what type of tree you are looking at by comparing the leaves on the tree by the ones in the diagram.

## What types of plants are near us









## Eastern skunk cabbage

This cabbage is a herbaceous plant. You will mostly see this plant when traveling through a wet area.



## Northeast swamp milkweed

The swamp milkweed is a tall herbaceous plant. It grows near marshes and wetlands usually in sunny openings. This plant is perennial and lives more than two years and then spreads its seeds



#### Wild violets

Wild violets are herbaceous and perennial. These plants are mostly found in shady areas with moist soil. They can also be found in sunny drought areas.



## Blueberry plant

This is a woody plant. It is perennial. Blueberries are usually only found/planted in moist soil that can drain easily.





# Common Animals





### Eastern Gray Squirrel

- Sciurus carolinensis
- Conservation status: Least Concern
- Trophic level: Omnivorous (nuts, seeds, fruit, insects)
- Mass: 0.88 1.3 lbs (Adult)
- Field marks:
  - white/grayish ventral side
  - White tipped fur
  - Gray winter coat that becomes yellowish-brown in the summer





#### White-tailed Deer

- Odocoileus virginianus
- Conservation status: Least Concern
- Trophic level: Herbivorous (leaves, twigs, nuts, grass, berries, lichen)
- Mass: Male: 150 lbs (Adult, In Summer), Female:
  100 lbs (Adult, In Summer)
- Field Marks:
  - Tan or brown fur in the summer
  - Grayish brown in the winter
  - White on their throat and around the eyes, nose, stomach, and tail





#### Red Fox

- Vulpes vulpes
- Conservation status: Least Concern
- Trophic level: Omnivorous (feeds on small mammals, fruits)
- Mass: 4.9 31 lbs (Adult)
- Height: 14 20 in. (Adult, At Shoulder)
- Field Marks:
  - White tipped tails
  - Rusty red back and sides
  - Black ears and feet





#### American Black Bear

- Ursus americanus
- Conservation status: Least Concern
- Trophic level: omnivorous (roots, berries, fish, meat, insects)
- Mass: Male: 130 660 lbs (Adult), Female: 90 180 lbs (Adult)
- Length: 4.5 ft. (Adult)
- Field Marks:
  - Black fur
  - No distinctive shoulder hump
  - Straight face profile
  - Taller and less rounded ears
  - Claws are 1-2" long and curved for climbing





## Kahoot!