

What is a weed, really, but a plant growing somewhere humans didn't ask it to?

Yarrow has lots of little flowers on a strong stem, and frilly leaves that look like tiny ferns. It can be white, yellow, or other colors. Yarrow often gets name-called as a weed. It can grow in many different places, and it spreads fast. It likes to grow in ground that's been dug up and disturbed. Unfortunately, us humans are famous for disturbing the ground when we build buildings and tear down wild areas. Luckily, plants like yarrow can still grow here. Sometimes, yarrow grows so well it can push out other plants. But bees and other pollinators are still happy to see it.

Whether it's coming up between cracks on the sidewalk, or growing in a historic national forest, it's all nature! Share with us where you managed to spot this strong and resilient flower.

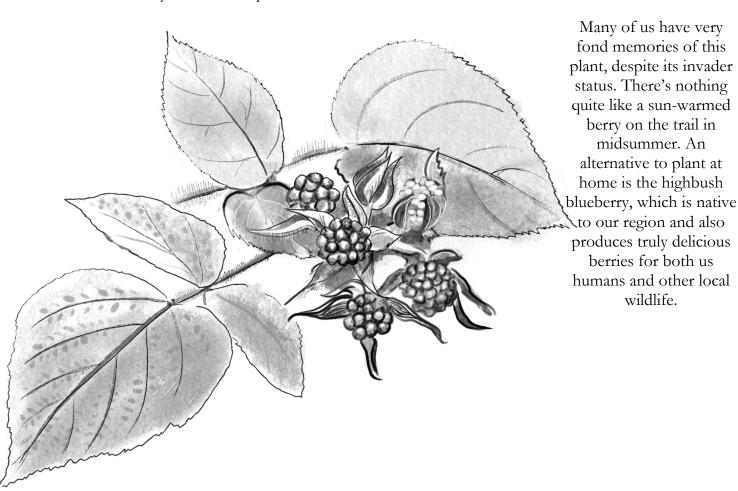




What's that delicious looking berry growing out of the bramble patch? If the stems are smooth with thorns, it's likely a blackberry or black raspberry. But if the stems are red and fuzzy, it's unmistakably a wineberry.

In bramble plants, these thorny stems are called canes. Wineberry canes have both thorns and bristly hairs, giving it a fuzzy look. The tiny green leaves (*sepals*) that cover the berries until they get ripe are also hairy.

Wineberry is a plant from the other side of the world, which humans planted in North America over a hundred years ago to help farm raspberries. Wineberry canes grow fast, and when they grow long enough to lean over and touch the ground, they grow new roots at the end of the cane, helping them cover ground at lightning speed compared to other plants. They grow so thick and fast, they can choke out other species. That makes wineberry an invasive species.



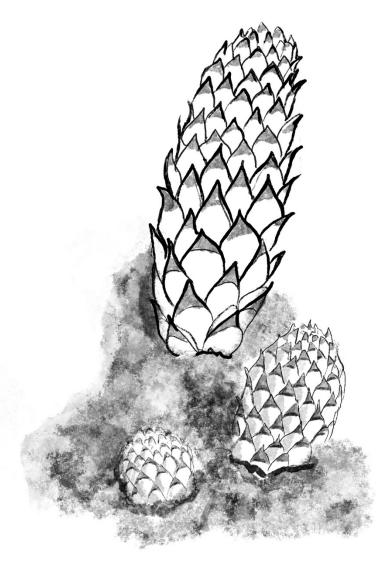




This thing can't be a flower can it? Where are its petals and leaves?

Keep your eyes peeled and looking toward the edge of the trail to spot Bear Corn, a strange looking flower with a special power.

When we think of plants, we normally imagine green leaves, which take in sunlight to create their own food in the process of photosynthesis.



This corn-on-the-cob shaped flower is yellow-ish brown, and always lives under oak trees. It doesn't have any leaves because it doesn't need them—it has special roots which tap into the roots of nearby trees, soaking up nutrients produced by the tree's leaves instead of making its own.

It's a parasite!

Look up—which tree do you think is sharing some of its food with the bear corn you find?

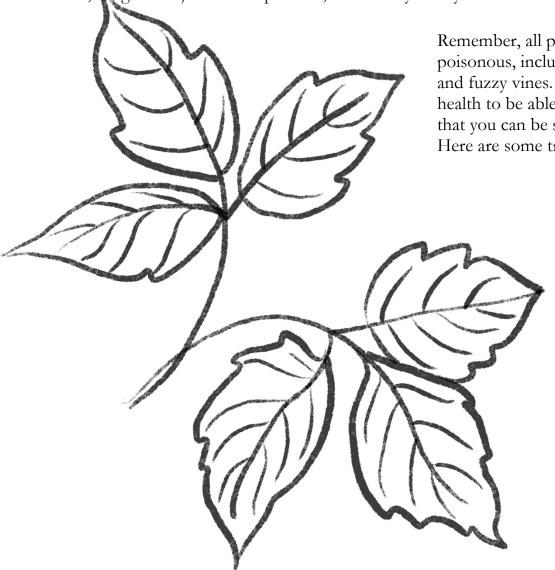
## POISON IVY Toxicodendron radicans

I bet you've heard of this plant! Do you know how to recognize it?

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Leaves of three—let it be. This plant should carry a big, flashing sign that says DON'T TOUCH.

Most people are allergic to this plant. Its sap has a substance called Urushiol, which makes your skin itch and gives you a rash. But Urushiol is no problem for other animals, and lots of birds eat poison ivy berries, and deer can eat the leaves. As long as the plant isn't in a place where it causes danger to humans, it's great to just let this plant be, like the rhyme says.



Remember, all parts of the plant are poisonous, including the berries, flowers, and fuzzy vines. It's important for your health to be able to identify poison ivy so that you can be sure to stay away from it. Here are some tricks to help you identify it.

- This plant in a vine, which can grow up the sides of trees.
   Poison ivy vines look like hairy, fuzzy ropes.
- The leaves may be light green, or dark green and glossy, depending on how old the leaves are.
- If you're looking at the 'leaves of three,' sometimes there is a little red spot where the leaves come together.





Wingstem is a native wildflower that blooms with many small yellow flowers. It can grow extremely tall, up to ten feet high!

It loves damp woodland areas and can be seen throughout our trail system.

Why is it called a Wingstem, though? Can it fly?

If you look closely at the stem of this plant, it has raised green ridges that "wing" out away from the stem. That's an important way to identify this flower.

Though the flower itself can't fly, it does receive visits from lots of winged creatures. Butterflies, bees, wasps and flies all love Wingstem.

Can you spot any of these friendly insects?

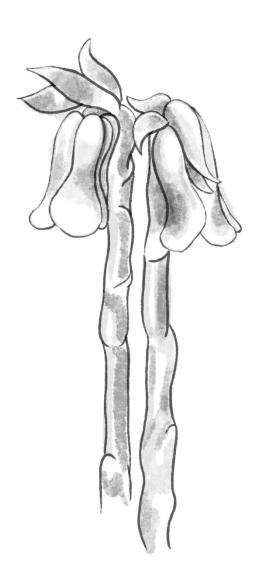


## GHOST PIPE Monotropa uniflora

Are you sure that isn't a mushroom? Or maybe an alien?

This ghostly white friend is definitely a plant, but just like Bear Corn, it's another rule breaker. No boring green leaves to be found here. Ghost Pipe doesn't need them. It sneaks what it needs from the roots of trees. But how does that work exactly? How do these plants' roots connect to the roots of trees?

The answer is fungus! Fungus lives in the roots of the plants and throughout the soil, sending out a big web of tiny threads and using them to create connections between the roots of plants.



The fungus is even better at absorbing water and nutrients from the soil than the plants roots, so it shares what it harvests with the plants in exchange for the food the plant makes from photosynthesis. Everybody works together to get what they need.

The special fungi that do this are known as mycorrhizal fungi, and the name for this web of connections is mycelium.

Ghost Pipe connects to the mycorrhizal fungi, which connect to the roots of trees, and then the food it needs is passed through the network. You might notice that fungi give the trees a fair trade, but Ghost Pipe has no food to share with the fungi. As far as we know, it gets a free ride. That's what makes it a 'parasitic' plant.

Color photos – sourced from Wikipedia.com.

Please be reminded that this is NOT a definitive source of plant identification, but rather a learning activity, and you should absolutely not use this guide in order to collect or forage plants for any purpose. Some plants are even toxic. Thank you for your attention to this warning!

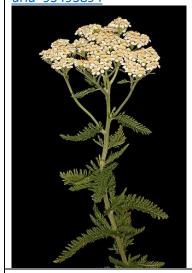
Wineberry

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