

*Back to our roots:
Foraging 101
Appalachian Treasures for your Table*

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Rules of Foraging

- Identification
 - *Are you SURE this is the plant you want?*
 - *Are there poisonous look-a-likes of this plant?*
 - *Is this plant safe for YOU to eat; are you allergic?*
- Location
 - *Where is this plant growing?*
 - *Are you allowed to forage on this land?*
 - *Is the soil contaminated with toxins from industrial use or runoff?*
- Multiplication
 - *Is there enough growing for you to leave some behind?*
 - *The Rule of Four:*
 - Leave the first plant you see for another species
 - Leave the second plant you see for your brother who may need it
 - Leave the third plant to grow and propagate
 - Take the fourth plant for your own use



Dandelion

(Taraxacum officinale)

Leaves can be used as salad greens (great source of vitamin C) or cooked

Roots can be roasted and brewed in a tea (good diuretic)

Flowers can be fermented into wine

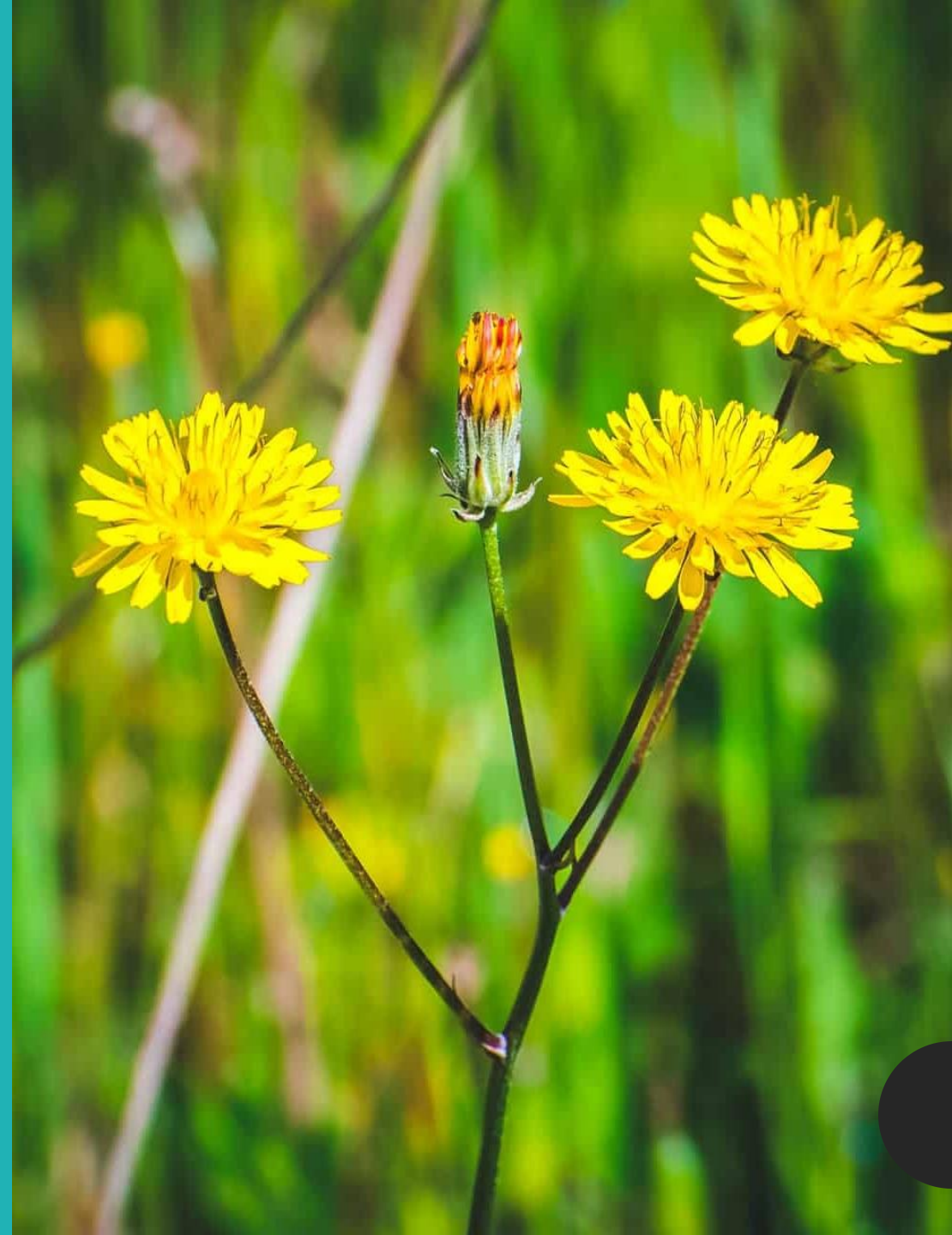
Generally recognized as safe to consume

Dandelion

Look-alikes

Cat's Ear (*Hypochaeris radicata*)

- Flower heads look very similar
- Cat's Ear do not have hollow stems
- Stems are branching
- Have hairy leaves with deep notches
- Not toxic, but not tasty





Dandelion

Look-alikes

Sow Thistle (*Sonchus spp.*)

- Multiple flowers on each stalk
- Do not have hollow stems
- Leaves are not basal
- In the thistle family, mature plant has prickly spines
- Not toxic, but pretty hard to eat

Dandelion Greens

- Best in early spring, before the plant flowers
- Choose plants growing in rich, moist soil for best flavor
- Avoid plants that grow alone, they'll be tougher and stronger flavored
- Flavor can be bitter
- High in vitamins A, C, E, K, and B vitamins
- High in calcium, iron, potassium, and manganese





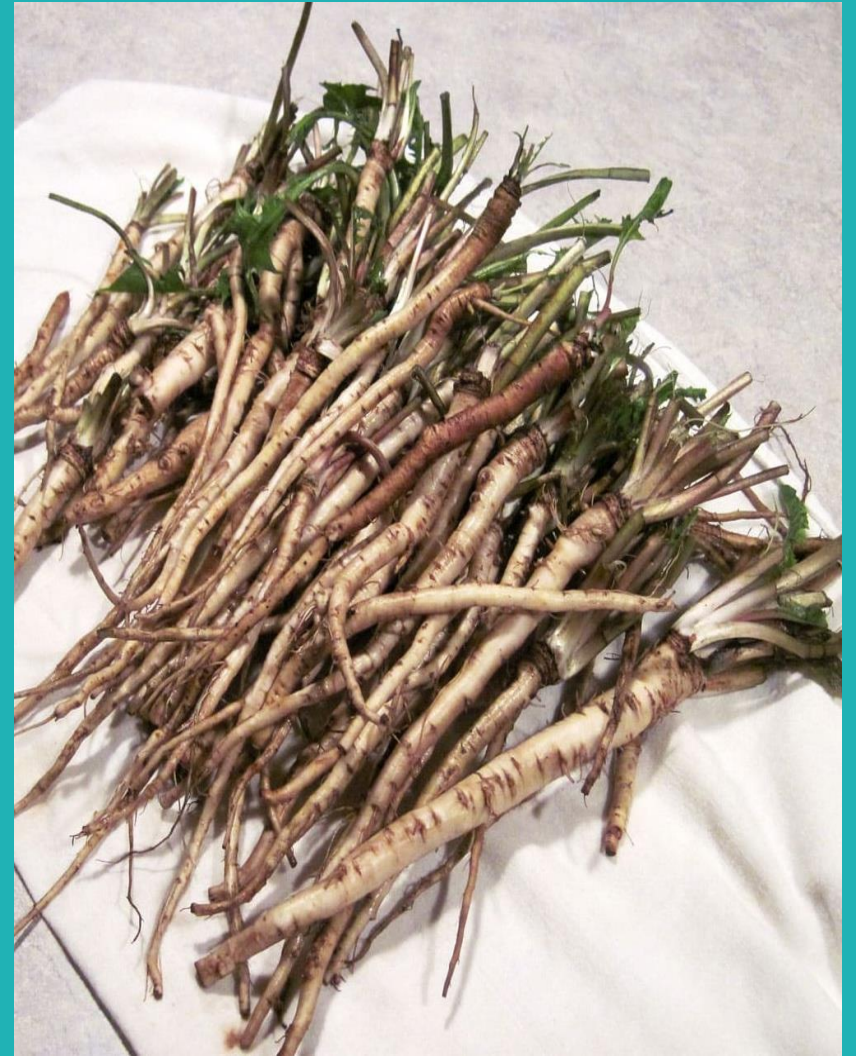
Dandelion Roots for Eating

- Dandelions growing in cultivated soil produce the best roots for eating
- Young dandelion roots that are about as thick as your pinky have the best flavor for eating
- Wash and scrub roots, then boil and serve with salt and butter
- Contain inulin, non-digestible fiber/prebiotic

Dandelion Root

“Coffee”

- Dig lots of roots (size doesn't matter) in autumn or spring
- Wash and dry the roots, then cut into smaller pieces. Dried roots will last for years
- Roast dried roots for 20 - 60 min at 325°F until brittle, or the color you prefer (darker roast, deeper flavor, just like regular coffee)
- Grind and use like regular coffee
- May have a diuretic and laxative effect for





Curly Dock

(Rumex crispus)

- Leaves can be eaten raw or boiled
- Stems taste like rhubarb
- Seeds, when brown, can be eaten whole (good source of fiber)

Curly Dock *Look-alike*

Burdock (*Arctium* spp.)

- You can eat burdock roots as a tasty vegetable or dried and ground for a chocolate-like drink
- Curly dock roots have a strong laxative effect
- Burdock leaves can be pretty tough



Curly Dock with Best Flavor

- Look for long, narrow leaves with smooth surface
- No red or purple on the leaf
- Light green petiole
- One of the most popular wild greens
- Caution: Curly dock contains oxalic acid; overconsumption can be toxic





Harvesting Curly Dock Greens

- Choose leaves from center of rosette during spring
- Young leaves are best; rolled at edge
- If the leaves feel slimy, they're at the right stage for eating
- Can be eaten raw, or steamed, boiled or fried
- Popular as creamed greens
- High in protein, iron, vitamin C and A

Broad-leaf Plantain

(Plantago major)

- Young, tender leaves can be eaten raw
- Older, stringier leaves can be boiled
- Seeds can be eaten raw or toasted.
Remove outer chaff before eating.





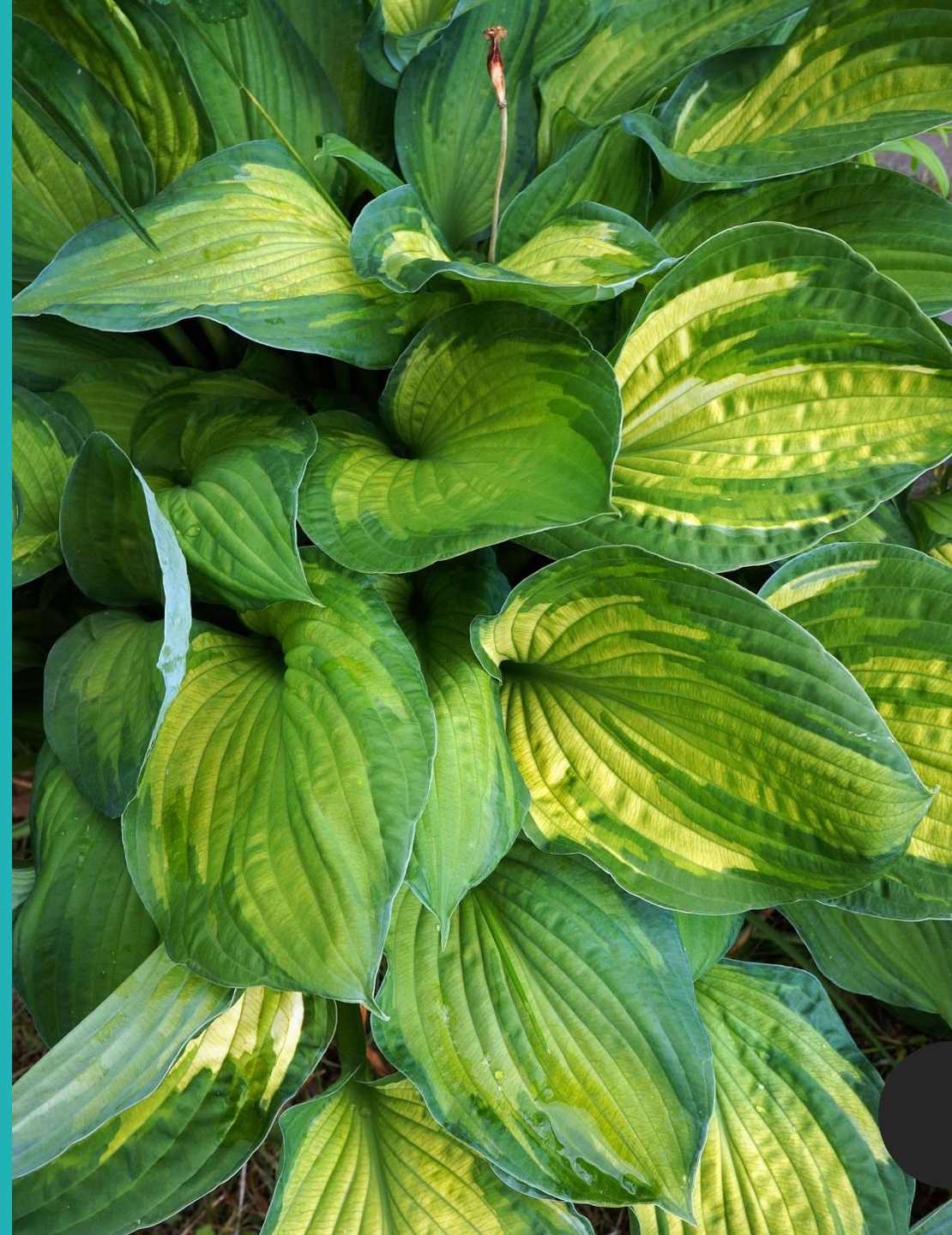
Broad-leaf Plantain *Preparation*

- May need to remove the fibrous strands from the leaves to make them more palatable
- Parboil if using in salads to tenderize
- Great for soups and stews
- Vitamins C, A, and K
- Minerals calcium, iron, zinc, and potassium

Broad-leaf Plantain

Look-alikes

- It's hard to misidentify a plant for Broad-leaf Plantain
- Some say **hostas** look like plantain, sometimes called Plantain Lilly
- Hostas are non-toxic and can be eaten



Broad-leaf Plantain Seeds

- Eat the seeds raw like peanuts or cashews
- Peel the fibrous chaff back from the seeds eating or cooking
- Flavor is nutty, slightly spicy
- Rich in protein, omega-3 fatty acids, and carbohydrates





Violets

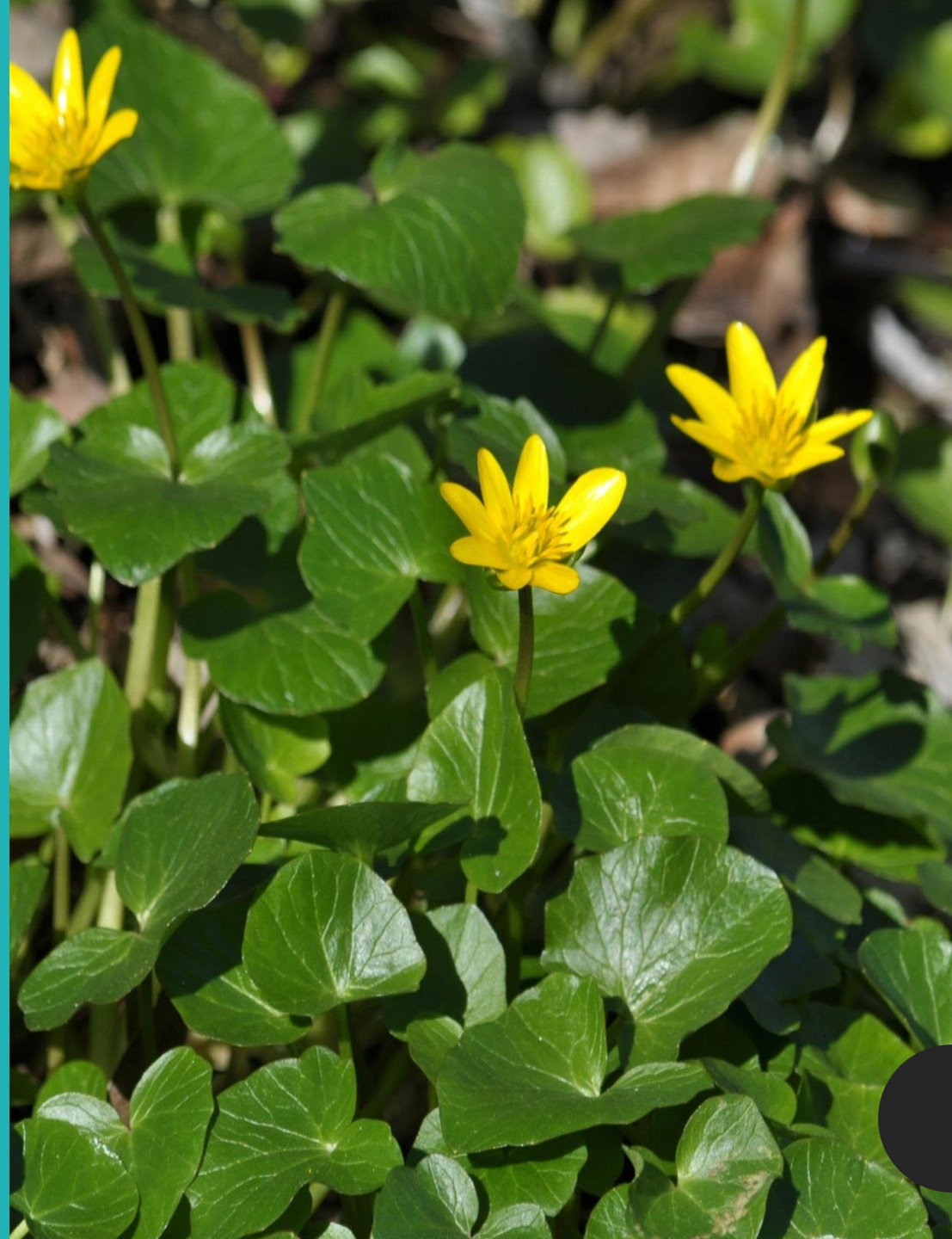
(Viola sp.)

- All violet species are edible
- Leaves and flowers are edible
- Leaves in salads
- Flowers in salads and for flavoring in syrups; also candied flowers
- Roots are toxic

Violet Look-alike

Toxic lesser celandine (*Ranunculus ficaria*)

- can be confused for yellow violets
- Certainly not when it's blooming!
- Heart-shaped leaves are very similar



Violet Flower Jelly

- Rinse and drain four cups of blossoms and place in heat resistant bowl.
- Pour 3-1/2 cups of boiling water over blossoms and let steep for two hours
- Combine liquid with ¼ cup lemon juice, 1-3/4 oz pectin (one package), and 4 cups sugar
- Bring to a boil and add 4 cups sugar, boil for one minute
- Remove from heat, skim off foam
- Ladle into hot, sterilized pint jars, leaving ¼ inch headspace
- Seal with lids and rings
- Boil jars for 5 minutes. Remove from water bath and cool



Creasy Greens

(Barbarea verna/vulgaris)

- Member of the mustard family
- Flavor similar to mustard greens or turnip greens
- Can be eaten raw or boiled





Creasy Greens *Look-alike*

Pennsylvania bittercress

(*Cardamine pensylvanica*)

- It's edible and tastes like broccoli rabe
- May taste different from creasy greens but is safe to eat

Creasy Greens Look-alikes

Butterweed (*Packera glabella*)

- Toxic
- Has yellow flowers, whereas creasy greens and Pennsylvania bittercress has white flowers





Queen Anne's Lace

(Daucus carota)

- Can be confused with poison hemlock
- Root will smell like carrots
- Blooms from midsummer to early autumn
- Leaves look like cultivated carrot leaves
- Vitamins B, C, and K
- Also contains pectin, lecithin, and carotene

Queen Anne's Lace Look-alikes

Poison Hemlock (*Conium maculatum*)

- Flower umbels are more diffuse
- Stem has purple splotches
- Leaves are more fern-like
- VERY TOXIC





Queen Anne's Lace Look-alikes

Water Hemlock (*Conium maculatum*)

- Flower umbels look more like Queen Anne's Lace
- Stem has purple splotches as well
- Leaves are lanceolate
- ALSO VERY TOXIC



Queen Anne's Lace Taproot

- Average pinky size, white and fibrous
- Harvest in fall and early spring
- Scrub well but don't peel (won't have anything left!)
- Can steam or boil
- A woody thread runs through the center of the root; cutting into small pieces makes this thread hard to detect
- Can be eaten raw, but better to use in soups and stews

Queen Anne's Lace *Shoots*

- Tender shoots of second-year growth
- Carrot-like flavor, sweeter and more tender than root, also tend to be larger than the root
- Plants six to 20 inches tall are best to harvest
- Choose thick, succulent stems
- Remove leaves and peel the skin
- Can be eaten raw, or cooked; taste like tender carrots





Maypop *Passionflower or Passionfruit* *(Passiflora incarnata)*

- Perennial vine, can grow up to 30 feet
- Alternate, deeply lobed leaves
- Beautiful flowers
- Delicious fruit

Passionflower Tea

- Dry flowers and crush
- One teaspoon of dried flowers per cup of boiling water
- Can help with relaxation and sleep
- May reduce anxiety and help with pain
- No scientific evidence for any benefits



Elderberry

(Sambucus nigra)

- Shrub can grow to six to 12 feet
- Need moist, fertile soil
- Beautiful white umbel flowers in May – July
- Flowers persist for three to four weeks, then develop into green berries that ripen to black
- Harvest berries in mid August to mid September





Elderberry Uses

- Berries must be cooked. Contain cyanide compounds that break down with heat
- Jams, Jellies, Pies
- Elderberry Syrup: anti-influenza properties
- Flowers made into tea
- Elderflowers will ferment

Spicebush

(Lindera benzoin)

- Shrub grows to 6 - 12 feet in height and diameter
- Is shade tolerant, but if planted in full sun will grow slower, but blossom and fruit abundantly
- Early yellow blossoms
- Bright green oval leaves turn golden yellow in fall
- Harvest bright red berries in September



Spicebush Uses

- Tea from twigs
- Sweet spice flavor
- Can alleviate joint pain



Spicebush Uses

- Berries for spice (tastes like allspice)
- Berries for tea
- Used to take the “wild” out of game

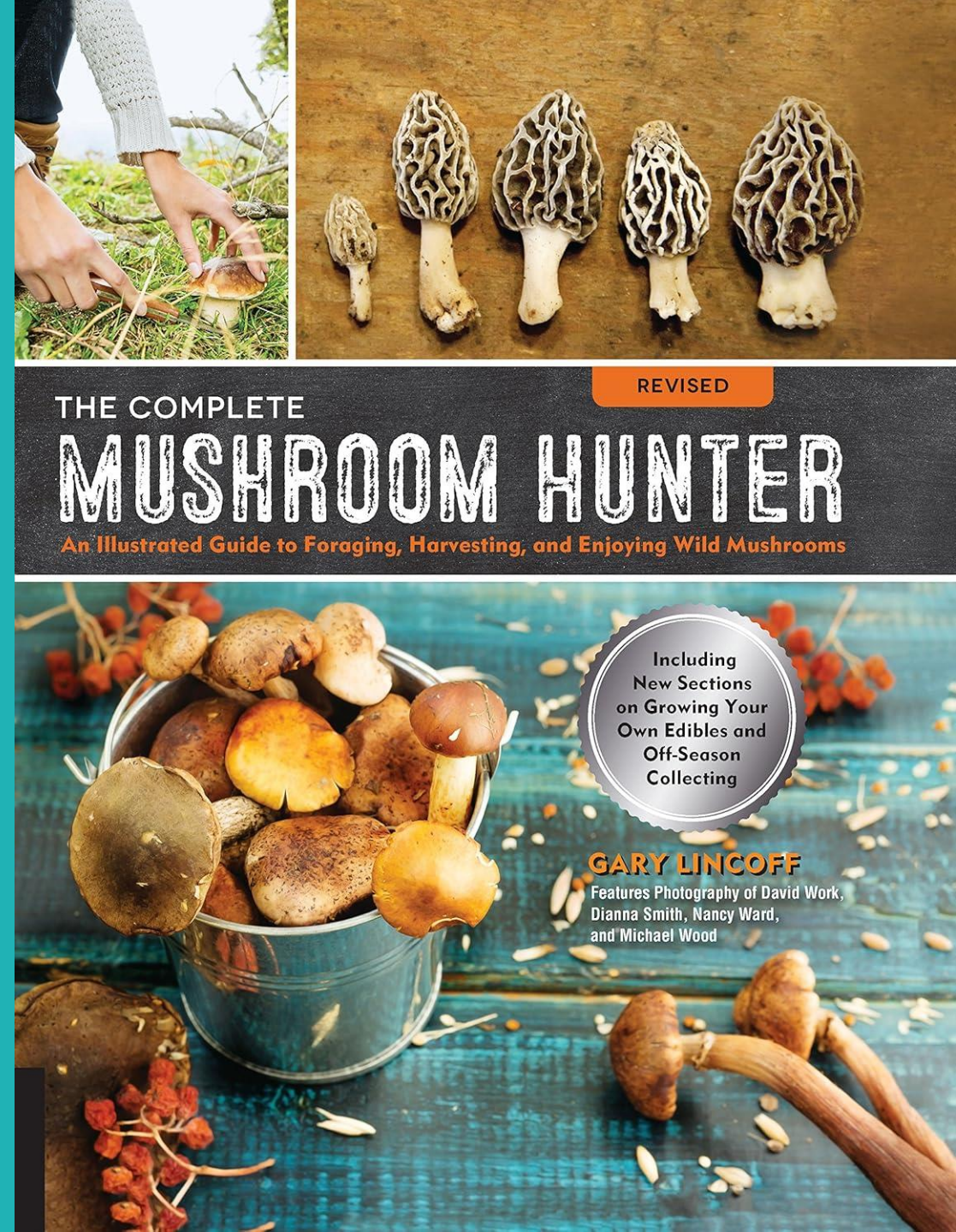


Wild Mushrooms



Wild Mushrooms

- Not all wild mushrooms are poisonous
- There are poisonous look-a-likes to many edible mushrooms
- Of all that grows in the woods, you MUST know the identity of the mushroom





Jack O-Lantern



Angel's Wings

Mushroom Toxicity

- Some edible mushrooms can make you sick
 - You've not eaten them before
 - You haven't prepared them properly
- Poisonous Mushrooms
 - Amatoxin
 - Liver toxin
 - No antidote
 - Death in two to three days
 - Muscarine
 - Cholinergic effects of stomach cramping, sweating, salivation, bronchospasm, bradycardia
 - Rescue with atropine

Edible Wild Mushrooms in West Virginia

Morels

Chanterelles

Lion's Mane

Chicken of the Woods

Oysters

Boletes



Morel

(Morchella esculenta)

- Soak in salt water to remove bugs
- Slice in half to ensure identity (should be hollow)
- Saute in butter
- Never eat raw
- Contains Vitamin D, a little C, and some B vitamins
- Excellent source of iron (12.2mg/100g). Potassium, calcium and phosphorus in small amounts

Chanterelles

(Cantharellus cibarius)

- Can be eaten raw, but may cause stomach upset
- Saute until edges are crisp
- Discard any with mushy spots, should smell earthy
- High in iron (10% DV) and Vitamin D (28%DV)
- TOXIC LOOK-A-LIKE: Jack-O-Lanterns
 - *Look for ridges on Chanterelles (grow in the ground)*





Lion's Mane (*Hericium* *coralloides*)

- Can be eaten raw, but better to cook to improve flavor, texture, and digestibility
- High antioxidant activity, reduces inflammation, supports gut health
- High in potassium and iron
- Look-alikes: Bear's Head Tooth and Coral Tooth; both *Hericium*, both edible

Chicken of the Woods

(Laetiporus sulphureus)

- Named for its taste and texture similar to chicken
do not eat raw!
- High protein and fiber, antioxidants such as quercetin, and Vitamins C & D
- TOXIC LOOK-A-LIKE: Jack-O-Lanterns
 - *Chickens have small pores on underside*
 - *Jacks have visible gills*
 - *Jacks sometimes glow faintly in the dark*
 - *Chickens grow on living wood; jacks grow on dead wood*





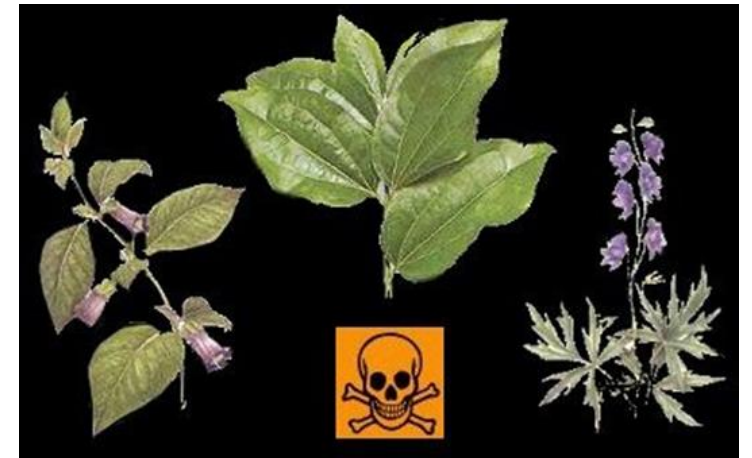
Oysters

(Pleurotus ostreatus)

- Good source of protein and fiber; high in potassium
- Grows on dead or dying trees in clusters
- Has pale brownish caps
- Gills run directly down the stem but not all the way to the bottom
- Smell slightly like licorice
- TOXIC LOOK-ALIKE: Angel's Wings: have same gill structure, but cap is more half-funnel, or tongue-shaped

Summary

- Don't forage until you're confident in your identification
- Toxic look alike abound!
- An error in judgement may be fatal
- This lecture will not give you the skills to identify edibles
- Field guides, classes on foraging, etc. essential for health and survival



Learn More About Plant Identification

(on sale today!)

A Guide
To the Toxicology of
Select Medicinal Plants and
Herbs of Eastern North America



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