

EASTERN DECIDUOUS FOREST & APPALACHIANS PLANT SURVIVAL GUIDE

North America • USDA-EQUIVALENT ZONES 4-8 • KÖPPEN Dfa / Cfa

LAND + WATER

REGIONAL HABITAT ILLUSTRATION — NOT AN ID PHOTO

USEFUL

EDIBLE

MEDICINAL

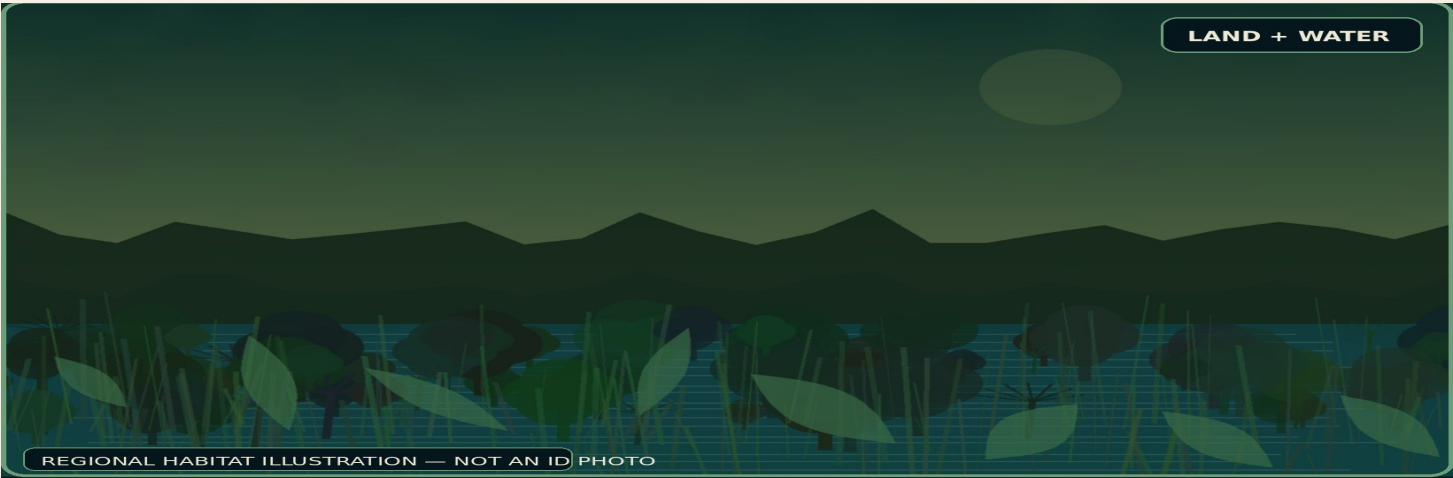
POISONOUS

IDENTIFY • EAT • BUILD • HEAL • AVOID

Illustrations show habitat and form; verify every plant with current regional photographs and expert sources.

REGION AT A GLANCE

A continental bioclimatic region, not a destination or a promise that every listed plant occurs at every site.



Continent: North America USDA-equivalent hardiness: 4-8 Köppen: Dfa / Cfa
Regional habitat: Mesic hardwood forest, ridge, cove and river valley
Zone warning: hardiness describes winter minimum temperature only; rainfall, heat, soils, fire, elevation and seasonality still control the flora.

FIELD PRIORITIES

- Use the continent, climate band and habitat as filters — never as proof of identity.
- Match at least three independent traits and rule out every dangerous look-alike before harvest.
- Treat water plants as both botanical and water-quality decisions; parasites, sewage and algal toxins can defeat correct identification.
- Take material from deadfall or abundant growth first. Roots, bark and whole plants are the most destructive harvests.
- Medicinal notes document traditional use only; the guide gives no dosing and does not replace medical care.

SURVIVAL STANDARD

A correct plant name is only the beginning. Also verify plant part, maturity, preparation, dose, contamination, legal access and local cultural protocol. When any one of those is uncertain, do not consume or medicate.

POSITIVE IDENTIFICATION AND PRACTICAL USE

The illustrations are form diagrams. The linked POWO and iNaturalist pages provide current photographs and taxonomic context.

1

1. PLACE

Confirm continent, elevation, water regime, soil and disturbance.

2

2. FORM

Tree, shrub, vine, herb, grass, sedge, palm, fern, succulent or aquatic.

3

3. LEAF

Arrangement, veins, edge, hairs, glands, sap, odor and underside.

4

4. STEM / BARK

Thorns, pith, nodes, buds, lenticels, fibers, latex and branching.

5

5. FLOWER / FRUIT

Petal count, inflorescence, fruit attachment, seed and maturity.

6

6. EXCLUDE

Name every dangerous look-alike and explain why it is different.

7

7. VERIFY

Use current regional flora, qualified local knowledge and several photos.

AUTOMATIC STOP LIST

No tasting to identify.
No unknown roots, bulbs or white umbels.
No unknown milky sap.
No raw wetland foods.
No medicinal dose experiments.
No smoke from unknown toxic wood.

USEFUL-PLANT HIERARCHY

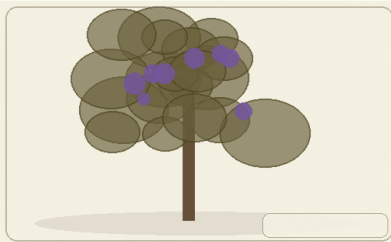
1. Deadfall and shed bark.
2. Abundant annual greens and fruit.
3. Pruned shoots and leaves.
4. Small stems from common thickets.
5. Roots, bark and whole plants only with permission and no safer substitute.

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

Wood, fiber, tinder, bow-and-arrow components, friction fire, containers and construction.

HICKORIES

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Carya spp.

IDENTIFY: Alternate compound leaves; hard husked nuts; strong ridged or shaggy bark depending on species.

HABITAT / SEASON: Eastern North American hardwood forest and river slopes. Season: Nuts fall; wood year-round.

SURVIVAL USE: Exceptional bow wood, tool handles, wedges and long-lasting coals; selected nuts are edible.

CAUTION: Some hickory nuts are bitter. Falling limbs are hazardous.

LOOK-ALIKES: Walnuts have chambered pith and different husks.

TASKS: bow wood, handles, fuel, food nut

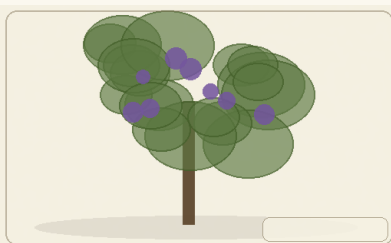
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1

ASHES

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Fraxinus spp.

IDENTIFY: Opposite branching; compound leaves; one-seeded winged keys in clusters.

HABITAT / SEASON: Temperate hardwood forest, floodplain and woodland edge. Season: Wood year-round; leaves growing season.

SURVIVAL USE: Elastic, shock-resistant wood for bows, spear shafts, wedges, handles and snowshoe frames.

CAUTION: Emerald ash borer and conservation rules may restrict cutting. Confirm opposite branching.

LOOK-ALIKES: Boxelder has opposite compound leaves but maple-type paired keys.

TASKS: bow wood, arrow shaft, handles, wedges

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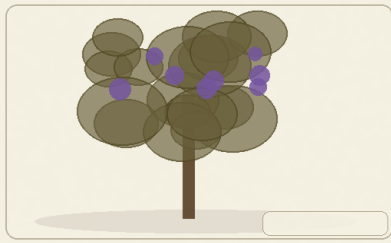
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USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

Wood, fiber, tinder, bow-and-arrow components, friction fire, containers and construction.

ELMS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Ulmus spp.

IDENTIFY: Alternate asymmetrical toothed leaves; winged samaras; fibrous interlocking wood.

HABITAT / SEASON: Temperate floodplains, hedgerows and mixed forest. Season: Wood year-round; samaras spring.

SURVIVAL USE: Tough wood for bows, handles, wedges and bent frames; inner bark has cordage history.

CAUTION: Dutch elm disease leaves brittle standing deadwood.

LOOK-ALIKES: Hackberry has three main leaf veins and small drupes.

TASKS: bow wood, cordage, handles, frames

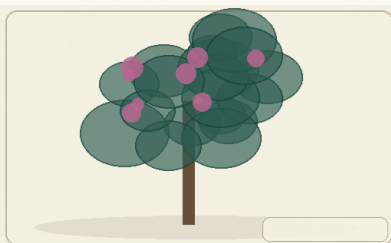
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3

BASSWOOD / LINDEN

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Tilia spp.

IDENTIFY: Heart-shaped toothed leaves; pale strap-like bract attached to flower and seed clusters.

HABITAT / SEASON: Moist temperate forest, coves and river terraces. Season: Bark and wood year-round; flowers early summer.

SURVIVAL USE: Inner bark yields excellent cordage; soft wood is premier for bow-drill hearth boards, carving and containers.

CAUTION: Removing living bark kills sections of the tree. Flowers may trigger allergies.

LOOK-ALIKES: Hazel leaves are rounder and lack the distinctive flower bract.

TASKS: cordage, bow drill board, carving, container

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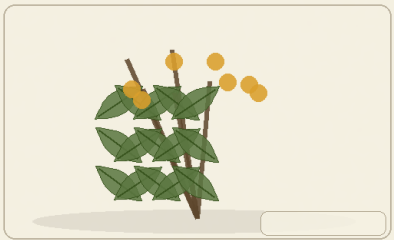
4

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

Wood, fiber, tinder, bow-and-arrow components, friction fire, containers and construction.

DOGWOOD

USEFUL MATERIAL



Cornus spp.

IDENTIFY: Usually opposite branching; arcuate leaf veins curve toward the tip; clustered flowers and drupes.

HABITAT / SEASON: Forest edge, riparian thicket and mountain slope. Season: Stems year-round; fruit varies by species.

SURVIVAL USE: Dense straight shoots make excellent arrow shafts, skewers and pegs.
 CAUTION: Fruit edibility varies greatly; some species cause stomach upset. Use as material unless species is confirmed.
 LOOK-ALIKES: Viburnums may have opposite leaves but different veins and buds.
 TASKS: arrow shaft, pegs, skewers

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MATERIAL SELECTION SCREEN

Before cutting, test straightness, grain, dryness, hidden rot, sap or smoke toxicity, and whether the species is protected. Match the material to the load: springy bow wood, straight shaft wood, soft dry hearth board, harder spindle, fibrous cordage, or resin-free cooking fuel.

LAND-BASED EDIBLE PLANTS

Documented foods on dry or seasonally dry ground. Preparation and contamination still matter.

WILD ROSES

LAND FOOD



Stylized form diagram — not an identification photograph

Rosa spp.

IDENTIFY: Prickly stems; compound toothed leaves; five-petaled flowers; red to orange hips.

HABITAT / SEASON: Open woods, thickets, prairie, dunes and mountain slopes. Season: Hips late summer through winter.

SURVIVAL USE: Fleshy hip walls are documented food after the irritating hairs and seeds are removed; good for simmering or drying.

CAUTION: Internal hairs irritate skin and mouth. Avoid sprayed or moldy fruit.

LOOK-ALIKES: Hawthorn has simple lobed leaves and woody thorns.

TASKS: food fruit, cordage

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STINGING NETTLE

LAND FOOD



Stylized form diagram — not an identification photograph

Urtica dioica

IDENTIFY: Opposite sharply toothed leaves; fibrous stems; translucent stinging hairs; green flower clusters.

HABITAT / SEASON: Rich disturbed soil, river terraces, old camps and forest openings. Season: Young tops spring; fiber later.

SURVIVAL USE: Young tops are documented food after thorough cooking or drying; mature stems yield strong bast fiber.

CAUTION: Wear gloves; do not eat raw. Internal use can affect medicines and kidney conditions.

LOOK-ALIKES: Dead-nettles do not sting and have showier mint-family flowers.

TASKS: food green, cordage, fiber

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LAND-BASED EDIBLE PLANTS

Documented foods on dry or seasonally dry ground. Preparation and contamination still matter.

LAMBSQUARTERS / GOOSEFOOT
 LAND FOOD



Chenopodium album

IDENTIFY: Mealy blue-green triangular to diamond leaves; green clustered flowers; ridged stems.

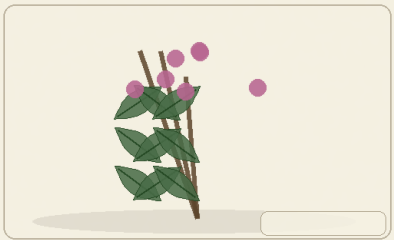
HABITAT / SEASON: Disturbed soil, river deposits, fields and camp edges. Season: Spring through fall.

SURVIVAL USE: Young leaves and seeds are documented food after correct identification and cooking.
 CAUTION: High oxalate and nitrate levels can accumulate; avoid large amounts and contaminated ground.
 LOOK-ALIKES: Black nightshade has star-shaped flowers and berries; goosefoot flowers stay green and clustered.
 TASKS: food green, food seed

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WILD ONIONS AND GARLIC
 LAND FOOD



Allium spp.

IDENTIFY: Narrow leaves or hollow stems; spherical flower heads; clear onion or garlic odor in leaf and bulb.

HABITAT / SEASON: Meadows, rocky slopes, open woodland and stream terraces. Season: Spring through fall.

SURVIVAL USE: Leaves, flowers and bulbs of positively identified Allium are documented food and seasoning.
 CAUTION: Every sampled part must smell of onion, but odor is not the only test. Avoid unknown bulbs.
 LOOK-ALIKES: Death camas lacks onion odor and can be fatal.
 TASKS: food green, food bulb

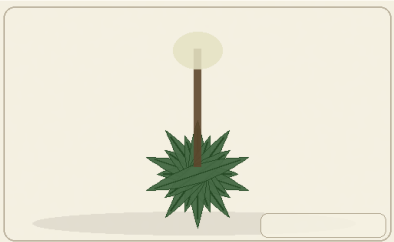
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LAND-BASED EDIBLE PLANTS

Documented foods on dry or seasonally dry ground. Preparation and contamination still matter.

DANDELION
LAND FOOD



Taraxacum officinale aggregate

IDENTIFY: Basal toothed leaves; hollow leafless stems with one yellow flower; milky sap; parachute seed head.

HABITAT / SEASON: Disturbed temperate ground, meadow and camp edge. Season: Spring through fall.

SURVIVAL USE: Young leaves, flower heads and roasted roots have documented food use where uncontaminated.
 CAUTION: Avoid sprayed lawns, roadsides and animal latrines; latex can irritate.
 LOOK-ALIKES: Catsear has hairy leaves and branched flower stalks.
 TASKS: food green, food root, tinder

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FOOD HARVEST SCREEN

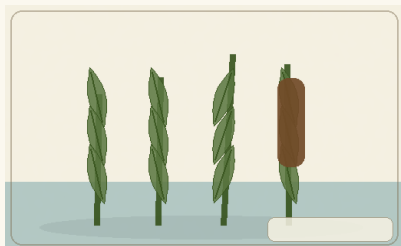
Confirm species, plant part and maturity. Check whether cooking, leaching, peeling, fermenting or repeated water changes are required. Reject mold, animal contamination, roadside plants, chemically treated ground and any food whose safe preparation cannot be completed with current water and fuel.

WATER AND WETLAND EDIBLE PLANTS

Freshwater, marsh, tidal and marine foods. Correct ID does not make dirty water safe.

CATTAILS

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Typha spp.

IDENTIFY: Tall flat strap leaves; dense brown cylindrical female flower spike below a narrower male section.

HABITAT / SEASON: Marshes, pond edges, slow channels and wet ditches. Season: Shoots spring; pollen early summer; rhizomes year-round where lawful.

SURVIVAL USE: Documented food parts include young inner shoots, pollen and processed rhizome starch. Leaves make mats, baskets and thatch; seed down can bulk tinder.

CAUTION: Water can concentrate sewage, metals and parasites. Raw rhizome requires correct processing; avoid contaminated marshes.

LOOK-ALIKES: Yellow flag iris has sword leaves and showy flowers but no brown cattail head.

TASKS: food shoot, food starch, basketry, thatch, tinder

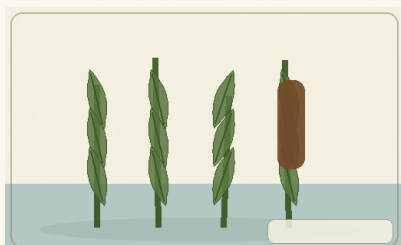
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ARROWHEAD / WAPATO

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Sagittaria spp.

IDENTIFY: Arrow-shaped or lance leaves rising from shallow water; three-petaled white flowers in whorls; underground tubers in some species.

HABITAT / SEASON: Shallow ponds, sloughs, marshes and slow streams. Season: Tubers late summer through winter.

SURVIVAL USE: Tubers of confirmed edible species are documented food after cooking; leaves and flower stalks help locate the bed.

CAUTION: Never eat raw. Species and tuber production vary. Wetland pathogens and water hemlock are nearby hazards.

LOOK-ALIKES: Arrow arum has one large hooded flower and toxic tissues.

TASKS: food tuber

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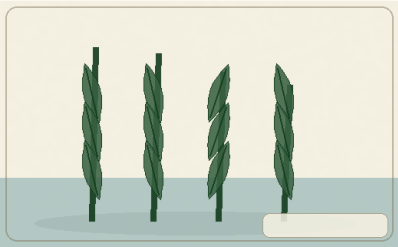
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WATER AND WETLAND EDIBLE PLANTS

Freshwater, marsh, tidal and marine foods. Correct ID does not make dirty water safe.

WATERCRESS

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Nasturtium officinale

IDENTIFY: Creeping hollow stems; pinnate leaves with a larger rounded terminal leaflet; small white four-petaled flowers.

HABITAT / SEASON: Cold flowing springs and streams, often where nutrient-rich. Season: Cool seasons.

SURVIVAL USE: Tender tops are documented food and are usually cooked in survival settings.

CAUTION: Raw watercress can carry liver flukes and sewage pathogens. Avoid downstream of livestock, roads or settlements.

LOOK-ALIKES: Water hemlock has divided leaves and umbrella flowers; never rely on habitat alone.

TASKS: food green

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AQUATIC HARVEST SCREEN

Check five separate questions: Is the species correct? Is the plant part edible? Is the water free of sewage, mining or farm runoff? Are parasites or harmful algal blooms plausible? Is entry and exit from the water safe? A “yes” to the plant and a “no” to the water still means do not eat.

MEDICINAL AND TRADITIONAL-USE PLANTS

Traditional and historical uses only — no dosing, diagnosis or treatment claims.

YARROW

TRADITIONAL-USE



Achillea millefolium

IDENTIFY: Aromatic finely divided leaves; flat clusters of small white to pink flower heads.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Dry openings, trails, grassland, shore gravel and disturbed soil. Season: Summer through fall.

SURVIVAL USE: Documented traditional external uses include washes and aromatic preparations; dry flower heads make light tinder.

CAUTION: Possible allergy, pregnancy and anticoagulant concerns. Not a substitute for wound cleaning or medical care.

LOOK-ALIKES: Poison hemlock is much taller with hollow purple-spotted stems and true umbels.

TASKS: medicine, tinder

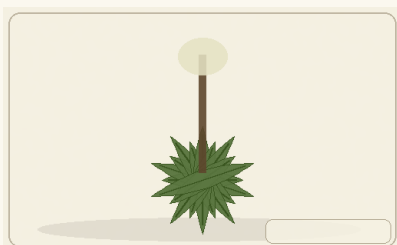
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BROADLEAF AND RIBWORT PLANTAINS

TRADITIONAL-USE



Plantago major / *P. lanceolata*

IDENTIFY: Basal rosette with strong parallel ribs; leafless spikes of tiny flowers and seeds.

Stylized form diagram — not an identification photograph

HABITAT / SEASON: Trails, camps, meadows and disturbed soil. Season: Spring through fall.

SURVIVAL USE: Young leaves and seeds are documented food; clean leaves have traditional external use on minor irritation.

CAUTION: Do not put dirty leaves on open wounds. Seeds swell with water and can obstruct if taken dry in quantity.

LOOK-ALIKES: Docks have netted veins; plantain ribs run from the base.

TASKS: food green, medicine

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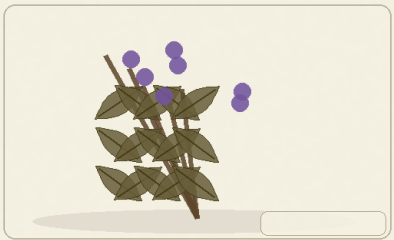
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MEDICINAL AND TRADITIONAL-USE PLANTS

Traditional and historical uses only — no dosing, diagnosis or treatment claims.

WILLOWS

TRADITIONAL-USE



Salix spp.

IDENTIFY: Alternate narrow to oval leaves; flexible twigs; catkins; many species root along wet ground.

HABITAT / SEASON: Riverbanks, lake margins, floodplains, tundra valleys and moist forest. Season: Twigs year-round; leaves and catkins in the growing season.

SURVIVAL USE: Flexible rods for baskets, fish traps, wattle, arrow shafts and repair splints. Dry punky willow and softer species can serve bow-drill hearth boards; denser pieces make spindles. Bark has documented salicylate-related traditional use.

CAUTION: Species identification is difficult. Do not self-dose bark with aspirin allergy, bleeding risk, kidney disease, pregnancy, or in children with viral illness.

LOOK-ALIKES: Alders have cone-like female catkins; some dogwoods have opposite leaves.

TASKS: arrow shaft, bow drill board, basketry, cordage, medicine

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MEDICINAL RESTRAINT

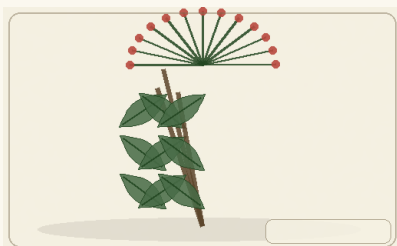
A plant can be culturally important and pharmacologically active yet still be the wrong survival choice. Unknown concentration, dehydration, pregnancy, allergies, chronic illness and medicine interactions can turn a traditional remedy into a second emergency.

POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

WATER HEMLOCKS

POISON — AVOID



Stylized form diagram — not an identification photograph

Cicuta spp.

IDENTIFY: Wetland perennial with divided leaves, white umbrella flower clusters and thick chambered rootstocks.

HABITAT / SEASON: Marshes, wet meadows, stream edges and ditches across the northern hemisphere. Season: Spring through fall.

SURVIVAL USE: No survival use. Make wetland root gathering a prohibited activity unless a qualified botanist is present.

CAUTION: Extremely poisonous; small amounts, especially roots, can cause violent seizures and death.

LOOK-ALIKES: Angelica, cow parsnip and other Apiaceae can look similar. Never taste to decide.

TASKS: poison

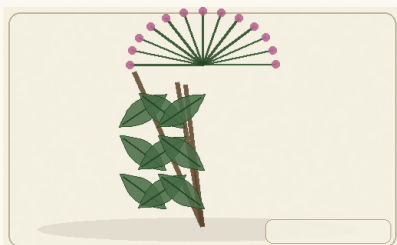
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POISON HEMLOCK

POISON — AVOID



Stylized form diagram — not an identification photograph

Conium maculatum

IDENTIFY: Tall smooth hollow stems often purple-spotted; glossy finely divided leaves; many white umbels.

HABITAT / SEASON: Roadsides, wet ditches, disturbed fields and riverbanks. Season: Spring through fall.

SURVIVAL USE: No use. Learn before collecting any wild carrot-family greens.

CAUTION: All parts are poisonous and sap can contaminate hands or tools. Do not burn in a cooking fire.

LOOK-ALIKES: Wild carrot has hairy stems and a compact nest-like fruiting umbel.

TASKS: poison

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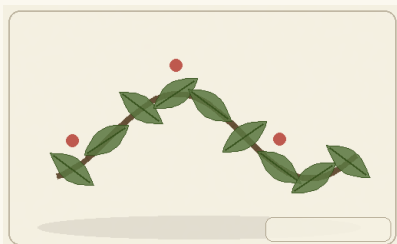
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POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

POISON IVY AND POISON OAK

POISON — AVOID



Stylized form diagram — not an identification photograph

Toxicodendron radicans / *T. diversilobum*

IDENTIFY: Leaves in three leaflets; variable lobing; white berries; climbing aerial rootlets or shrub form.

HABITAT / SEASON: Forest edges, dunes, riverbanks and disturbed North American ground. Season: Growing season; stems year-round.

SURVIVAL USE: No use.

CAUTION: Urushiol causes dermatitis; oil persists on tools and clothing and becomes dangerous smoke when burned.

LOOK-ALIKES: Boxelder seedlings have opposite leaves; Toxicodendron leaves are alternate.

TASKS: poison

Verified images: POWO

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BANEBSERIES

POISON — AVOID



Stylized form diagram — not an identification photograph

Actaea spp.

IDENTIFY: Woodland herb with divided leaves, white flower clusters and red, white or black berries on stout stalks.

HABITAT / SEASON: Moist temperate and boreal forest. Season: Fruit late summer.

SURVIVAL USE: No food use.

CAUTION: Berries and roots are poisonous and can affect the gastrointestinal and cardiovascular systems.

LOOK-ALIKES: Edible Vaccinium berries grow on woody shrubs with simple leaves.

TASKS: poison

Verified images: POWO

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SURVIVAL TASK MATRIX

Choose the least destructive plant that meets the job. A material that works poorly but is abundant may beat the perfect rare species.

TASK	BEST REGIONAL CANDIDATES IN THIS GUIDE	FIELD DECISION
Bow / spring wood	Hickories, Ashes, Elms	Use dead, shed or pruned material first.
Arrow or dart shaft	Ashes, Dogwoods, Willows	Use dead, shed or pruned material first.
Bow-drill hearth	Basswood / linden, Willows	Use dead, shed or pruned material first.
Bow-drill spindle	No reliable candidate among the priority profiles.	Use a different technology or carried tool; do not force unsuitable plant material.
Tinder	Dandelion, Cattails, Yarrow	Use dead, shed or pruned material first.
Fuel / coals	Hickories	Use dead, shed or pruned material first.
Cordage / fiber	Elms, Basswood / linden, Wild roses, Stinging nettle	Use dead, shed or pruned material first.
Basket / mat	Cattails, Willows	Use dead, shed or pruned material first.
Container / wrap	Basswood / linden	Use dead, shed or pruned material first.
Fruit food	Wild roses	Verify part, maturity and preparation.
Green food	Stinging nettle, Lambsquarters / goosefoot, Wild onions and garlic, Dandelion	Verify part, maturity and preparation.
Seed / nut	Lambsquarters / goosefoot	Verify part, maturity and preparation.
Root / starch	Cattails	Verify part, maturity and preparation.
Traditional-use	Yarrow, Broadleaf and ribwort plantains, Willows	Documented use only; no field dosing.

SEASONAL OPERATING RHYTHM

PHASE	PRIMARY OPPORTUNITY	PRIMARY RISK
Early growth	Shoots, greens, flowers, sap and easy bark identification.	Toxic shoots and bulbs are hardest to separate before flowering.
Peak growth	Maximum leaf and flower information; fiber plants mature.	Heat, insects, sap and water contamination.
Fruit / seed	Highest food density; nuts, berries, pods, grains and tubers.	Mold, wildlife encounters and unripe or toxic fruit.
Dormant / dry	Wood, bark, evergreen leaves, persistent fruit and roots.	Fewer diagnostic traits; overharvest of stored underground parts.

SOURCES, IMAGE VERIFICATION AND EMERGENCY

Every profile links to current taxonomic and photograph searches. Treat community photographs as evidence to compare, not as a final authority.

1. 2023 USDA Plant Hardiness Zone Map

USDA Agricultural Research Service — hardiness-zone reference

<https://planthardiness.ars.usda.gov/>

2. Plants of the World Online

Royal Botanic Gardens, Kew — taxonomy, distribution and images

<https://powo.science.kew.org/>

3. World Flora Online

World Flora Online Consortium — global plant taxonomy

<https://www.worldfloraonline.org/>

4. Global Biodiversity Information Facility

GBIF Secretariat — occurrence records and licensed media

<https://www.gbif.org/>

5. World Checklist of Useful Plant Species

Royal Botanic Gardens, Kew — documented plant uses

<https://kew.iro.bl.uk/concern/datasets/7243d727-e28d-419d-a8f7-9ebef5b9e03e>

6. Poison Control

National Capital Poison Center — poisoning first-response guidance

<https://www.poison.org/>

7. WHO Monographs on Selected Medicinal Plants

World Health Organization — medicinal-plant safety and monographs

<https://www.who.int/publications/i/item/9241545178>

8. Flora of North America North of Mexico

Flora of North America Association — regional scientific flora

http://floranorthamerica.org/Main_Page

9. USDA PLANTS Database

USDA Natural Resources Conservation Service — North American distribution and traits

<https://plants.usda.gov/>

SUSPECTED POISONING

Stop exposure. Remove material from the mouth and rinse. Do not induce vomiting unless directed. Save a sample or clear photographs. Contact local emergency services or a poison center. Monitor airway, breathing and consciousness.

PUBLICATION LIMITS

Regional lists are representative, not exhaustive. Species ranges, names, laws and preparation practices change. Local floras, land managers, Indigenous knowledge holders, poison centers and clinicians take precedence.