

GREAT PLAINS PRAIRIE & PARKLAND PLANT SURVIVAL GUIDE

North America • USDA-EQUIVALENT ZONES 3-7 • KÖPPEN Dfa / Dfb / BSk

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: 3-7 Köppen: Dfa / Dfb / BSk
Regional habitat: Tallgrass, mixed-grass, shortgrass and riparian woodland
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

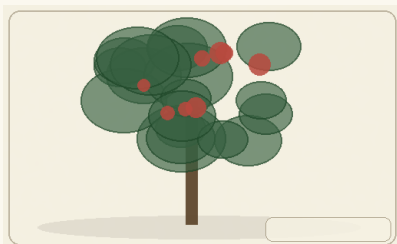
1. Deadfall and shed bark.
2. Abundant annual greens and fruit.
3. Pruned shoots and leaves.
4. Small stems from common thickets.
5. Roots, bark and whole plants only with permission and no safer substitute.

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

OSAGE ORANGE

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Maclura pomifera

IDENTIFY: Thorny twigs; glossy alternate leaves; large green wrinkled multiple fruits; orange heartwood.

HABITAT / SEASON: Prairie margins, hedgerows and disturbed central North America. Season: Wood year-round; fruit fall.

SURVIVAL USE: One of the best bow woods; durable posts, wedges and high-heat fuel.

CAUTION: Milky sap irritates skin; large fruit is not a dependable human food. Thorns puncture tires and skin.

LOOK-ALIKES: Mulberry lacks paired thorns and has edible aggregate fruit.

TASKS: bow wood, stakes, fuel, wedges

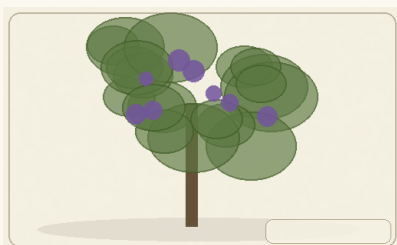
Verified images: POWO

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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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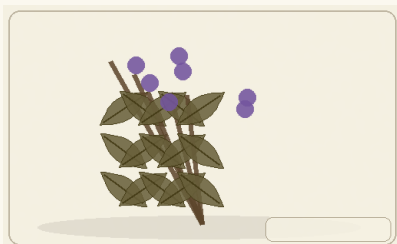
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USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

WILLOWS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

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

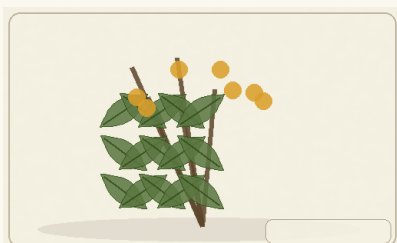
Verified images: POWO

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DOGWOODS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

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

Verified images: POWO

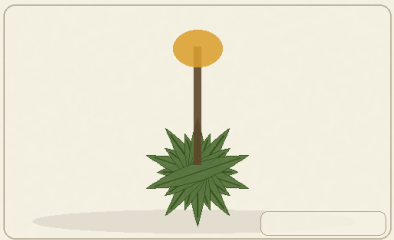
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USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

YUCCAS
USEFUL MATERIAL



Yucca spp.

IDENTIFY: Stiff sword leaves in a rosette, often with fibrous margins; tall stalk of cream bell flowers.

HABITAT / SEASON: Deserts, prairies and dry rocky slopes of the Americas. Season: Flowers and young stalks seasonal; leaves year-round.

SURVIVAL USE: Leaf fibers make strong cordage; dry flower stalks are classic bow-drill spindles and tinder; flowers or fruit of some species are documented foods.

CAUTION: Edibility varies by species and plant part. Roots called “soaproot” are not the cassava food. Sharp leaf tips injure eyes.

LOOK-ALIKES: Agaves have thicker succulent leaves and usually a single massive flowering event.

TASKS: cordage, bow drill spindle, tinder, food flower

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MATERIAL SELECTION SCREEN

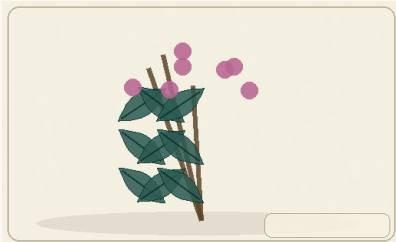
Before cutting, test straightness, grain, dryness, hidden rot, sap or smoke toxicity, and whether the species is protected. Match the material to the load: springy bow wood, straight shaft wood, soft dry hearth board, harder spindle, fibrous cordage, or resin-free cooking fuel.

LAND-BASED EDIBLE PLANTS

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

PRAIRIE TURNIP

LAND FOOD



Stylized form diagram — not an identification photograph

Pediomelum esculentum

IDENTIFY: Palmately divided leaves; blue-purple pea flowers; one enlarged starchy root below a slender crown.

HABITAT / SEASON: Native prairie and dry open plains of central North America. Season: Root late spring to early summer.

SURVIVAL USE: The cooked or dried root is a documented Indigenous food.

CAUTION: Harvest only with positive identification and permission; populations are localized and roots remove the whole plant.

LOOK-ALIKES: Locoweeds and other pea-family plants may share flowers but lack the characteristic crown and edible root tradition.

TASKS: food root

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JERUSALEM ARTICHOKE

LAND FOOD



Stylized form diagram — not an identification photograph

Helianthus tuberosus

IDENTIFY: Tall sunflower relative with rough opposite lower leaves, yellow heads and knobby underground tubers.

HABITAT / SEASON: Moist prairie, riverbanks and disturbed temperate ground. Season: Tubers fall through spring.

SURVIVAL USE: Cooked tubers are documented food; stalks dry into light kindling.

CAUTION: Tubers are rich in inulin and can cause severe gas. Confirm before flowering or dig only from known colonies.

LOOK-ALIKES: Other sunflowers lack the same tuber clusters.

TASKS: food tuber, kindling

Verified images: POWO

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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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LAMBSQUARTERS / GOOSEFOOT

LAND FOOD



Stylized form diagram — not an identification photograph

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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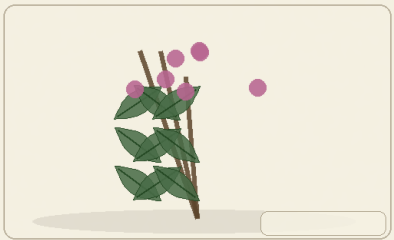
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LAND-BASED EDIBLE PLANTS

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

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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FOOD HARVEST SCREEN

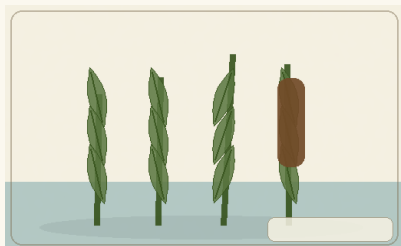
Confirm species, plant part and maturity. Check whether cooking, leaching, peeling, fermenting or repeated water changes are required. Reject mold, animal contamination, roadside plants, chemically treated ground and any food whose safe preparation cannot be completed with current water and fuel.

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

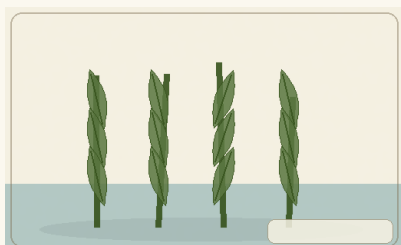
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WILD RICE

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Zizania spp.

IDENTIFY: Tall aquatic annual grass; open branching flower head with separate male and female sections; long dark grains.

HABITAT / SEASON: Shallow lakes, slow rivers and marshes in North America. Season: Late summer to early fall.

SURVIVAL USE: Mature grains are documented food and can be parched, winnowed and cooked.

CAUTION: Harvest rights and methods are culturally and legally regulated. Avoid moldy grain and polluted water.

LOOK-ALIKES: Common reed has feathery panicles but no long dark grain.

TASKS: food grain, thatch

Verified images: POWO

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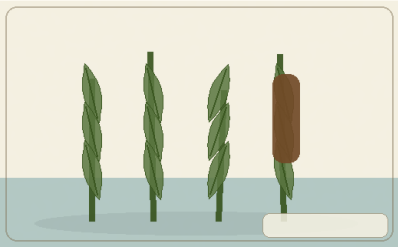
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WATER AND WETLAND EDIBLE PLANTS

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

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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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

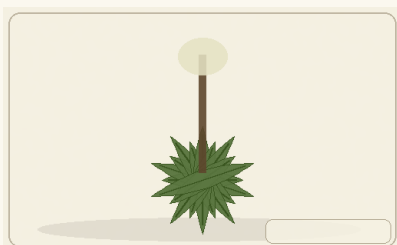
Verified images: POWO

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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

Verified images: POWO

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MEDICINAL AND TRADITIONAL-USE PLANTS

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

MUGWORTS
TRADITIONAL-USE



Artemisia vulgaris complex

IDENTIFY: Aromatic deeply lobed leaves, commonly silvery beneath; small inconspicuous flower heads.

HABITAT / SEASON: Disturbed ground, steppe, forest edges and riverbanks. Season: Summer through fall.

SURVIVAL USE: Documented traditional uses include aromatic smoke and digestive preparations; dry stalks can be tinder.

CAUTION: Avoid internal use during pregnancy or with seizure disorders. Species identification is difficult.

LOOK-ALIKES: Ragweeds lack the silvery underside and have different flowers.

TASKS: medicine, tinder

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MEDICINAL RESTRAINT

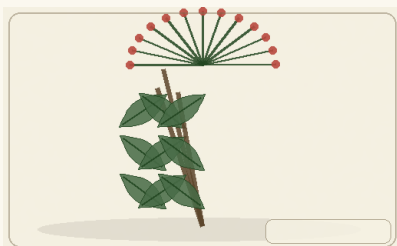
A plant can be culturally important and pharmacologically active yet still be the wrong survival choice. Unknown concentration, dehydration, pregnancy, allergies, chronic illness and medicine interactions can turn a traditional remedy into a second emergency.

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

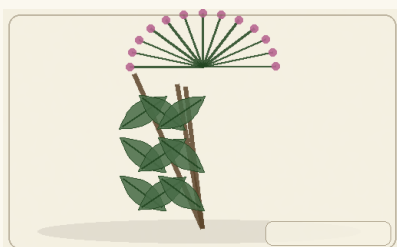
Verified images: POWO

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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

Verified images: POWO

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POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

DATURAS / THORN APPLES

POISON — AVOID



Stylized form diagram — not an identification photograph

Datura spp.

IDENTIFY: Large foul-smelling leaves; upright trumpet flowers; spiny egg-shaped capsules.

HABITAT / SEASON: Disturbed warm ground, dry riverbeds and fields worldwide. Season: Summer-fall.

SURVIVAL USE: No use.

CAUTION: All parts contain dangerous tropane alkaloids causing delirium, overheating, seizures and death.

LOOK-ALIKES: Brugmansia has hanging trumpets on woody shrubs and is also toxic.

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	Osage orange, Ashes	Use dead, shed or pruned material first.
Arrow or dart shaft	Ashes, Willows, Dogwoods	Use dead, shed or pruned material first.
Bow-drill hearth	Willows	Use dead, shed or pruned material first.
Bow-drill spindle	Yuccas	Use dead, shed or pruned material first.
Tinder	Yuccas, Cattails, Yarrow, Mugworts	Use dead, shed or pruned material first.
Fuel / coals	Osage orange	Use dead, shed or pruned material first.
Cordage / fiber	Willows, Yuccas, Wild roses	Use dead, shed or pruned material first.
Basket / mat	Willows, Cattails	Use dead, shed or pruned material first.
Container / wrap	No reliable candidate among the priority profiles.	Use a different technology or carried tool; do not force unsuitable plant material.
Fruit food	Wild roses	Verify part, maturity and preparation.
Green food	Lambsquarters / goosefoot, Wild onions and garlic, Broadleaf and ribwort plantains	Verify part, maturity and preparation.
Seed / nut	Lambsquarters / goosefoot	Verify part, maturity and preparation.
Root / starch	Cattails	Verify part, maturity and preparation.
Traditional-use	Willows, Yarrow, Broadleaf and ribwort plantains, Mugworts	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.