

EASTERN EUROPEAN STEPPE & FOREST-STEPPE PLANT SURVIVAL GUIDE

Europe • USDA-EQUIVALENT ZONES 4-8 • KÖPPEN Dfa / BSk



USEFUL

EDIBLE

MEDICINAL

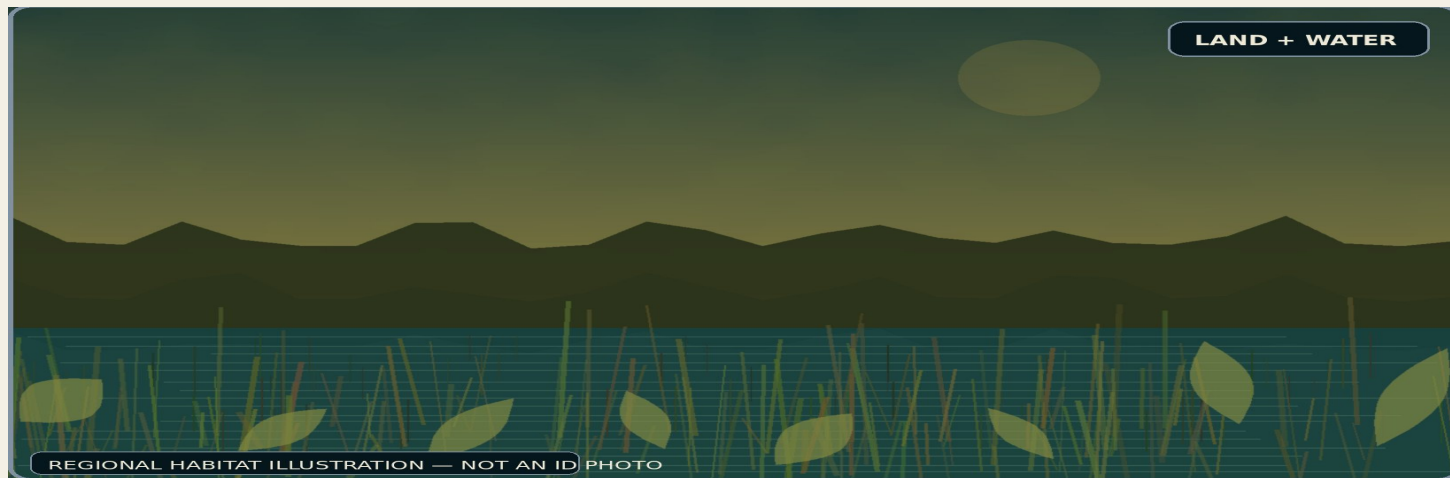
POISONOUS

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: Europe USDA-equivalent hardiness: 4-8 Köppen: Dfa / BSk

Regional habitat: Steppe grassland, oak island, river valley and saline wetland

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. PLACE**
Confirm continent, elevation, water regime, soil and disturbance.
- 2. FORM**
Tree, shrub, vine, herb, grass, sedge, palm, fern, succulent or aquatic.
- 3. LEAF**
Arrangement, veins, edge, hairs, glands, sap, odor and underside.
- 4. STEM / BARK**
Thorns, pith, nodes, buds, lenticels, fibers, latex and branching.
- 5. FLOWER / FRUIT**
Petal count, inflorescence, fruit attachment, seed and maturity.
- 6. EXCLUDE**
Name every dangerous look-alike and explain why it is different.
- 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

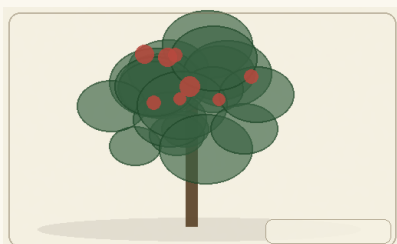
1. Deadfall and shed bark.
2. Abundant annual greens and fruit.
3. Pruned shoots and leaves.
4. Small stems from common thickets.
5. Roots, bark and whole plants only with permission and no safer substitute.

USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

OAKS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Quercus spp.

IDENTIFY: Alternate leaves; acorns in cups; buds clustered at twig tips. Leaf lobes may be rounded or bristle-tipped.

HABITAT / SEASON: Temperate woodland, savanna, Mediterranean scrub and mountain forest. Season: Acorns fall; wood year-round.

SURVIVAL USE: Dense bow and handle wood, durable stakes and excellent coals. Acorns are high-energy food only after species-specific leaching to remove tannins.

CAUTION: Never eat raw bitter acorns in quantity. Moldy acorns are unsafe.

LOOK-ALIKES: Chestnuts have spiny burs and long toothed leaves.

TASKS: bow wood, handles, fuel, food nut

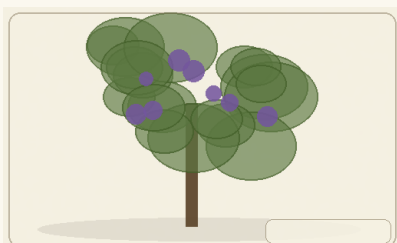
Verified images: POWO

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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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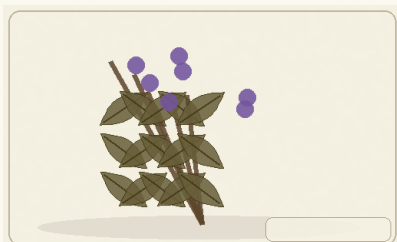
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USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

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HAZELS

USEFUL MATERIAL



Stylized form diagram — not an identification photograph

Corylus spp.

IDENTIFY: Round to oval doubly toothed leaves; male catkins; nuts enclosed by leafy husks.

HABITAT / SEASON: Temperate woodland edge, hedgerow and mountain thicket. Season: Nuts late summer-fall; rods year-round.

SURVIVAL USE: Nuts are high-energy food; straight flexible rods make arrow shafts, basket frames and light wattle.

CAUTION: Nut allergies apply. Rods split if forced when dry.

LOOK-ALIKES: Alders have woody cone-like catkins and favor wetter ground.

TASKS: food nut, arrow shaft, basketry, wattle

Verified images: POWO

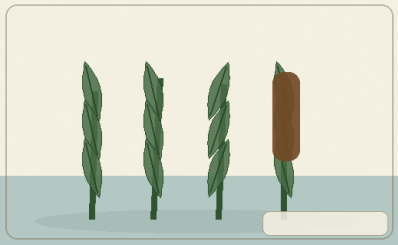
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USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

COMMON REED
USEFUL MATERIAL



Phragmites australis

IDENTIFY: Tall jointed canes; broad leaves with rough margins; large feathery purple-tan panicles.

HABITAT / SEASON: Marshes, riverbanks, lake edges and brackish wetlands worldwide. Season: Canes year-round; young shoots spring.

SURVIVAL USE: Dry canes make arrow shafts, fish spears, mats, thatch, containers and friction-fire spindles; young shoots have limited documented food use.
CAUTION: Invasive populations may be chemically treated. Cut cane edges are sharp; food use is excluded where water quality is uncertain.
LOOK-ALIKES: Giant reed is stouter; reed canary grass has a smaller seed head.
TASKS: arrow shaft, bow drill spindle, thatch, basketry, container

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MATERIAL SELECTION SCREEN

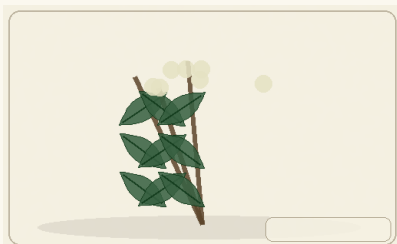
Before cutting, test straightness, grain, dryness, hidden rot, sap or smoke toxicity, and whether the species is protected. Match the material to the load: springy bow wood, straight shaft wood, soft dry hearth board, harder spindle, fibrous cordage, or resin-free cooking fuel.

LAND-BASED EDIBLE PLANTS

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

LAMBSQUARTERS / GOOSEFOOT

LAND FOOD



Chenopodium album

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

Stylized form diagram — not an identification photograph

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.

Stylized form diagram — not an identification photograph

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

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

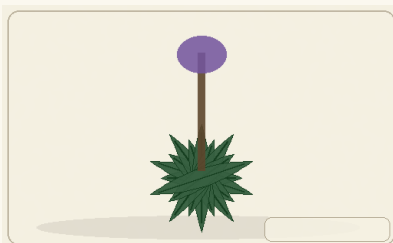
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COMMON PURSLANE

LAND FOOD



Stylized form diagram — not an identification photograph

Portulaca oleracea

IDENTIFY: Low reddish succulent stems; smooth fleshy leaves; tiny yellow flowers; clear sap.

HABITAT / SEASON: Disturbed warm ground, gardens, river deposits and camp edges worldwide. Season: Warm growing season.

SURVIVAL USE: Young leaves and stems are documented food and water-rich greens.

CAUTION: High oxalate content; avoid large amounts with kidney disease and avoid contaminated ground.

LOOK-ALIKES: Spurge often exude milky sap and are unsafe.

TASKS: food green

Verified images: POWO

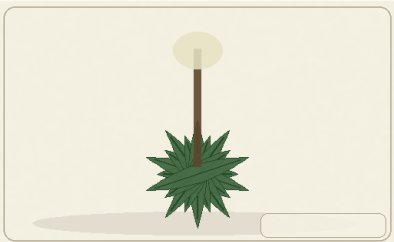
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LAND-BASED EDIBLE PLANTS

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

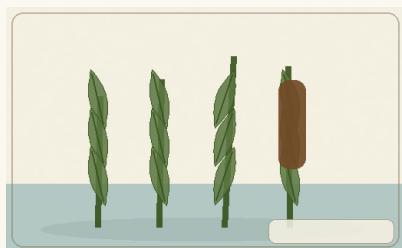
Confirm species, plant part and maturity. Check whether cooking, leaching, peeling, fermenting or repeated water changes are required. Reject mold, animal contamination, roadside plants, chemically treated ground and any food whose safe preparation cannot be completed with current water and fuel.

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

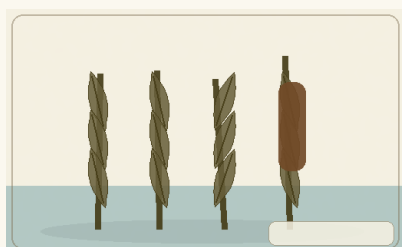
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BULRUSHES

AQUATIC FOOD



Stylized form diagram — not an identification photograph

Schoenoplectus spp.

IDENTIFY: Round or triangular mostly leafless stems; small brown flower clusters near stem tips.

HABITAT / SEASON: Freshwater and brackish marshes, pond edges and slow rivers. Season: Young shoots spring; rhizomes and stems longer.

SURVIVAL USE: Rhizomes and young shoots have documented food use after correct species identification; stems make mats, cordage and basket frames.

CAUTION: Wetland contamination is a major risk. Several sedges are difficult to separate.

LOOK-ALIKES: Cattails have broad flat leaves and a brown cylinder.

TASKS: food shoot, food starch, basketry, cordage

Verified images: POWO

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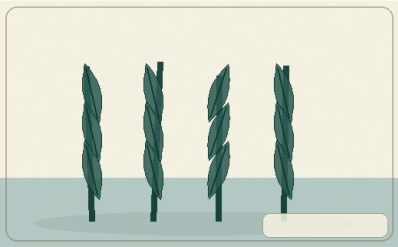
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WATER AND WETLAND EDIBLE PLANTS

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

BROAD PONDWEEDS

AQUATIC FOOD



Potamogeton spp.

IDENTIFY: Submerged or floating leaves with parallel veins; small flower spikes rise above water; flexible stems.

HABITAT / SEASON: Lakes, ponds and slow rivers across temperate and cold regions. Season: Growing season.

SURVIVAL USE: Tubers, young shoots or seeds of some species have documented food use; beds shelter fish and invertebrates.

CAUTION: Species identification and water quality are essential. Avoid stagnant, cyanobacteria-rich or polluted water.

LOOK-ALIKES: Water smartweed has jointed stems and pink flower spikes.

TASKS: food aquatic

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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

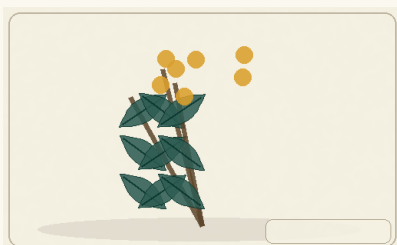
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MUGWORTS

TRADITIONAL-USE



Artemisia vulgaris complex

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

Stylized form diagram — not an identification photograph

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 AND TRADITIONAL-USE PLANTS

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

CHAMOMILE GROUP

TRADITIONAL-USE



Stylized form diagram — not an identification photograph

Matricaria chamomilla / Chamaemelum nobile

IDENTIFY: Finely divided aromatic leaves; small daisy heads with white rays and yellow centers; conical receptacle in German chamomile.

HABITAT / SEASON: Disturbed temperate ground, field edges and sandy soils. Season: Summer.

SURVIVAL USE: Documented traditional beverage and external soothing uses.

CAUTION: Daisy-family allergy is possible; concentrated use can interact with anticoagulants.

LOOK-ALIKES: Mayweeds and dog fennels resemble chamomile; smell and receptacle structure matter.

TASKS: 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.

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

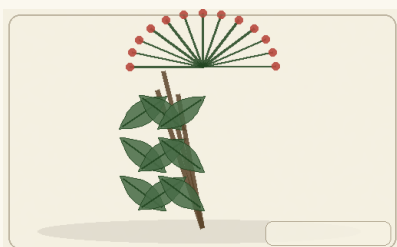
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WATER HEMLOCKS

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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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

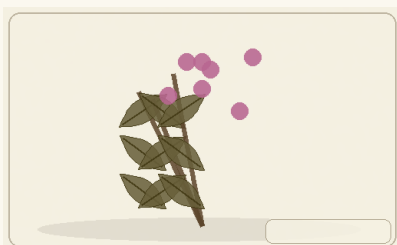
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MONKSHOODS

POISON — AVOID



Stylized form diagram — not an identification photograph

Aconitum spp.

IDENTIFY: Deeply divided palmate leaves; blue, purple, yellow or white hood-shaped flowers.

HABITAT / SEASON: Moist mountain meadows, streambanks and cool forest. Season: Summer.

SURVIVAL USE: No food or field medicinal use.

CAUTION: All parts contain potent aconitine-type alkaloids; ingestion can cause fatal heart and nerve effects.

LOOK-ALIKES: Larkspurs have a rear spur and are also toxic.

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	Oaks, Ashes	Use dead, shed or pruned material first.
Arrow or dart shaft	Ashes, Willows, Hazels, Common reed	Use dead, shed or pruned material first.
Bow-drill hearth	Willows	Use dead, shed or pruned material first.
Bow-drill spindle	Common reed	Use dead, shed or pruned material first.
Tinder	Dandelion, Cattails, Yarrow, Mugworts	Use dead, shed or pruned material first.
Fuel / coals	Oaks	Use dead, shed or pruned material first.
Cordage / fiber	Willows, Wild roses, Bulrushes	Use dead, shed or pruned material first.
Basket / mat	Willows, Hazels, Common reed, Cattails	Use dead, shed or pruned material first.
Container / wrap	Common reed	Use dead, shed or pruned material first.
Fruit food	Wild roses	Verify part, maturity and preparation.
Green food	Lambsquarters / goosefoot, Wild onions and garlic, Common purslane, Dandelion	Verify part, maturity and preparation.
Seed / nut	Lambsquarters / goosefoot	Verify part, maturity and preparation.
Root / starch	Cattails, Bulrushes	Verify part, maturity and preparation.
Traditional-use	Willows, Yarrow, Mugworts, Chamomile group	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. Euro+Med PlantBase

Botanic Garden and Botanical Museum Berlin and partners — European and Mediterranean taxonomy

<https://europlusmed.org/>

9. FloraVeg.EU and European vegetation resources

European vegetation science community — European flora and vegetation

<https://floraveg.eu/>

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.