

# CENTRAL EUROPEAN DECIDUOUS & MIXED FOREST PLANT SURVIVAL GUIDE

Europe • USDA-EQUIVALENT ZONES 5-8 • KÖPPEN Cfb / Dfb

LAND + WATER

REGIONAL HABITAT ILLUSTRATION — NOT AN ID PHOTO

USEFUL

EDIBLE

MEDICINAL

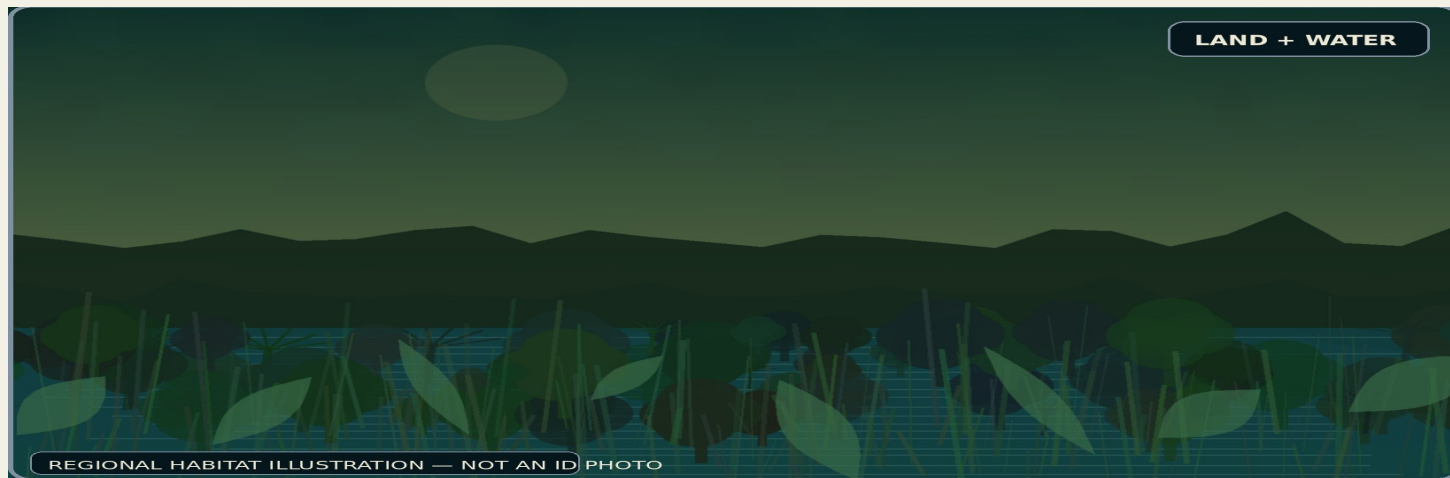
POISONOUS

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: Europe    USDA-equivalent hardiness: 5-8    Köppen: Cfb / Dfb

Regional habitat: Beech-oak forest, meadow, riverbank and managed 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. 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

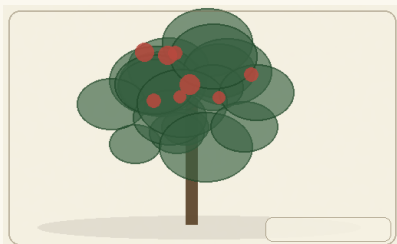
1. Deadfall and shed bark.
2. Abundant annual greens and fruit.
3. Pruned shoots and leaves.
4. Small stems from common thickets.
5. Roots, bark and whole plants only with permission and no safer substitute.

# 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

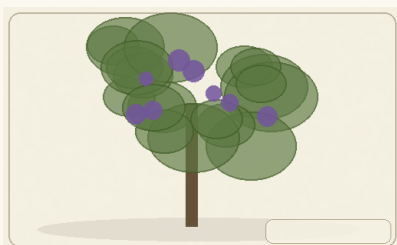
Verified images: POWO

iNaturalist

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

Verified images: POWO

iNaturalist

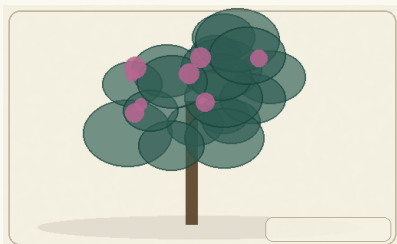
2

# USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

## 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

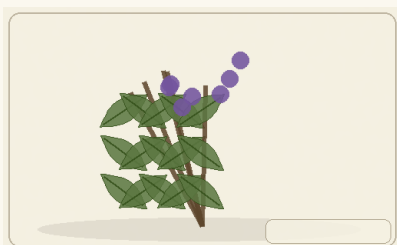
Verified images: POWO

iNaturalist

3

## 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

iNaturalist

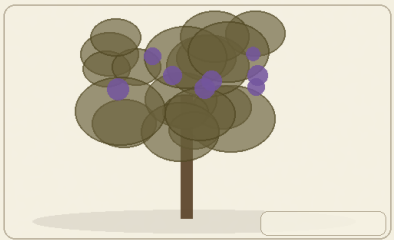
4

# USEFUL PLANTS FOR TOOLS, FIRE AND SHELTER

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

ELMS

USEFUL MATERIAL



*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

Verified images: POWO

iNaturalist

5

MATERIAL SELECTION SCREEN

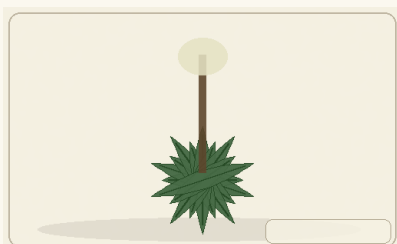
Before cutting, test straightness, grain, dryness, hidden rot, sap or smoke toxicity, and whether the species is protected. Match the material to the load: springy bow wood, straight shaft wood, soft dry hearth board, harder spindle, fibrous cordage, or resin-free cooking fuel.

# LAND-BASED EDIBLE PLANTS

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

## DANDELION

LAND FOOD



Stylized form diagram — not an identification photograph

*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

Verified images: POWO

iNaturalist

6

## 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

Verified images: POWO

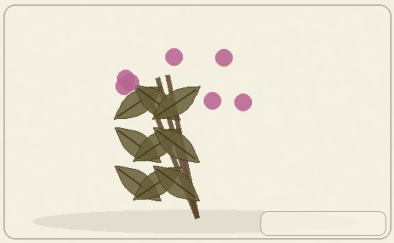
iNaturalist

7

# LAND-BASED EDIBLE PLANTS

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

COMMON CHICKWEED
LAND FOOD



*Stellaria media*

IDENTIFY: Low weak stems with a single line of hairs; opposite leaves; tiny white flowers with deeply split petals.

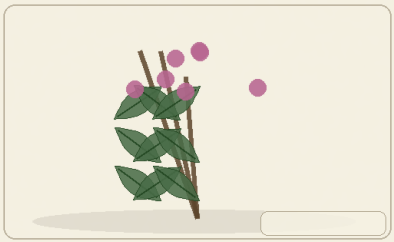
HABITAT / SEASON: Cool moist disturbed ground, gardens and forest edges. Season: Cool seasons.

SURVIVAL USE: Tender tops are documented food.  
CAUTION: Avoid polluted sites and plants with milky sap.  
LOOK-ALIKES: Scarlet pimpernel has orange or blue flowers and can be toxic.  
TASKS: food green

Verified images: POWO
iNaturalist

8

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

Verified images: POWO
iNaturalist

9

# LAND-BASED EDIBLE PLANTS

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

WILD ROSES
LAND FOOD



*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

Verified images: POWO

iNaturalist

10

FOOD HARVEST SCREEN

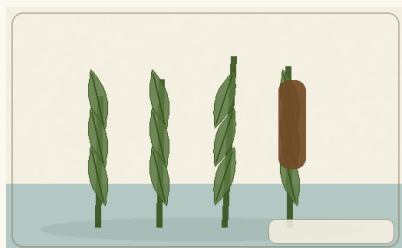
Confirm species, plant part and maturity. Check whether cooking, leaching, peeling, fermenting or repeated water changes are required. Reject mold, animal contamination, roadside plants, chemically treated ground and any food whose safe preparation cannot be completed with current water and fuel.

# 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

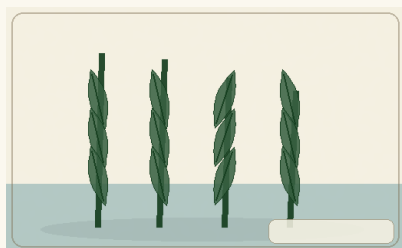
Verified images: POWO

iNaturalist

11

## 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

Verified images: POWO

iNaturalist

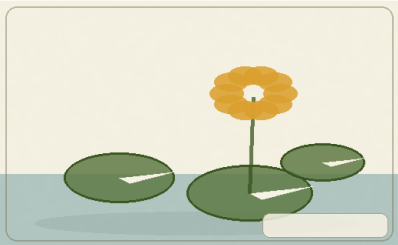
12

# WATER AND WETLAND EDIBLE PLANTS

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

TEMPERATE WATER LILIES

AQUATIC FOOD



*Nymphaea / Nuphar spp.*

IDENTIFY: Round floating leaves with a slit; solitary flowers; thick rhizomes anchored in sediment.

HABITAT / SEASON: Ponds, lakes and slow river backwaters. Season: Flowers summer; rhizomes year-round.

SURVIVAL USE: Seeds and rhizomes of selected species have documented food use after intensive species-specific processing.  
 CAUTION: Raw rhizomes can be bitter or irritating; water quality and correct genus matter. Do not confuse with toxic aquatic aroids.  
 LOOK-ALIKES: Lotus leaves are peltate and rise above water; water lily leaves usually float and are not fully circular.  
 TASKS: food seed, food starch

Verified images: POWO

iNaturalist

13

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

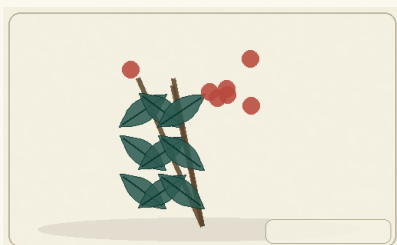
Verified images: POWO

iNaturalist

14

## CHAMOMILE GROUP

## TRADITIONAL-USE



*Matricaria chamomilla* / *Chamaemelum nobile*

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

Stylized form diagram — not an identification photograph

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

Verified images: POWO

iNaturalist

15

# MEDICINAL AND TRADITIONAL-USE PLANTS

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

MEADOWSWEET

TRADITIONAL-USE



*Filipendula ulmaria*

IDENTIFY: Tall damp-ground herb with pinnate leaves, pale undersides and frothy cream flower clusters with a sweet scent.

HABITAT / SEASON: Wet meadows, streambanks and ditches of Europe and western Asia. Season: Summer.

SURVIVAL USE: Documented flavoring and traditional use related to salicylate-containing tissues.

CAUTION: Avoid with aspirin allergy, anticoagulants, ulcers or in children with viral illness.

LOOK-ALIKES: Water dropworts have umbrella flower clusters and different leaves.

TASKS: medicine, flavoring

Verified images: POWO

iNaturalist

16

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

Verified images: POWO

iNaturalist

17

## DEADLY NIGHTSHADE

POISON — AVOID



Stylized form diagram — not an identification photograph

*Atropa belladonna*

**IDENTIFY:** Branching herb with dull oval leaves, purple-brown bell flowers and glossy black berries in a persistent green calyx.

**HABITAT / SEASON:** European and western Asian woodland edges, ruins and disturbed calcareous ground. Season: Summer through fall.

**SURVIVAL USE:** No use.

**CAUTION:** All parts are highly poisonous; berries may be attractive to children.

**LOOK-ALIKES:** Bilberries grow on low woody shrubs and have a crown at the fruit tip.

**TASKS:** poison

Verified images: POWO

iNaturalist

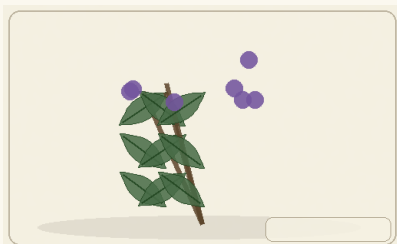
18

# POISONOUS PLANTS AND DANGEROUS LOOK-ALIKES

High-consequence species to learn before gathering starts.

## FOXGLOVE

POISON — AVOID



Stylized form diagram — not an identification photograph

*Digitalis purpurea*

**IDENTIFY:** Tall spike of purple, pink or white tubular flowers with spotted throats; soft wrinkled basal leaves.

**HABITAT / SEASON:** Roadsides, clearings, old farms and disturbed temperate ground. Season: Late spring through summer.

**SURVIVAL USE:** No field medicinal use.

**CAUTION:** All parts contain potent cardiac glycosides and can cause life-threatening rhythm disturbances.

**LOOK-ALIKES:** First-year rosettes can resemble comfrey or mullein.

**TASKS:** poison

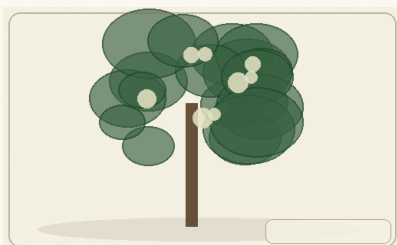
Verified images: POWO

iNaturalist

19

## YEW TOXICITY PROFILE

POISON — AVOID



Stylized form diagram — not an identification photograph

*Taxus spp.*

**IDENTIFY:** Flat evergreen needles, reddish bark and red cup-like arils around hard seeds.

**HABITAT / SEASON:** Temperate and montane forest. Season: Year-round.

**SURVIVAL USE:** Material use only by experts; no food or medicine use.

**CAUTION:** Needles, bark and seeds contain dangerous taxines. Never burn in a cooking fire.

**LOOK-ALIKES:** Hemlocks and firs have cones and pale bands beneath needles.

**TASKS:** poison

Verified images: POWO

iNaturalist

20

# 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, Elms                                                    | Use dead, shed or pruned material first.                                            |
| Arrow or dart shaft | Ashes, Hazels                                                        | Use dead, shed or pruned material first.                                            |
| Bow-drill hearth    | Basswood / linden                                                    | 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        | Oaks                                                                 | Use dead, shed or pruned material first.                                            |
| Cordage / fiber     | Basswood / linden, Elms, Stinging nettle, Wild roses                 | Use dead, shed or pruned material first.                                            |
| Basket / mat        | Hazels, Cattails                                                     | 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          | Dandelion, Stinging nettle, Common chickweed, Wild onions and garlic | Verify part, maturity and preparation.                                              |
| Seed / nut          | Temperate water lilies                                               | Verify part, maturity and preparation.                                              |
| Root / starch       | Cattails, Temperate water lilies                                     | Verify part, maturity and preparation.                                              |
| Traditional-use     | Yarrow, Chamomile group, Meadowsweet                                 | 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.