

TREES, SHRUBS
AND VINES OF
CAMP ARROWMOON

Honey mesquite (Prosopis glandulosa)



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Preface

This manual has been prepared primarily as a resource book of information on the most common woody species of Camp Arrowmoon. The book is prepared for use by all Boy Scouts and Scouters using this area. The plants are listed by common name and scientific name and include; the common and scientific name of the family; life span of the species; whether the species is native or introduced to the United States (origin); season of growth (warm, cool, or evergreen); growth characteristics; distinguishing characteristics; historic, food, and medicinal uses; forage value; and habitat where the species most commonly occurs in Texas. In addition a line drawing is provided to help in the identification of the species.

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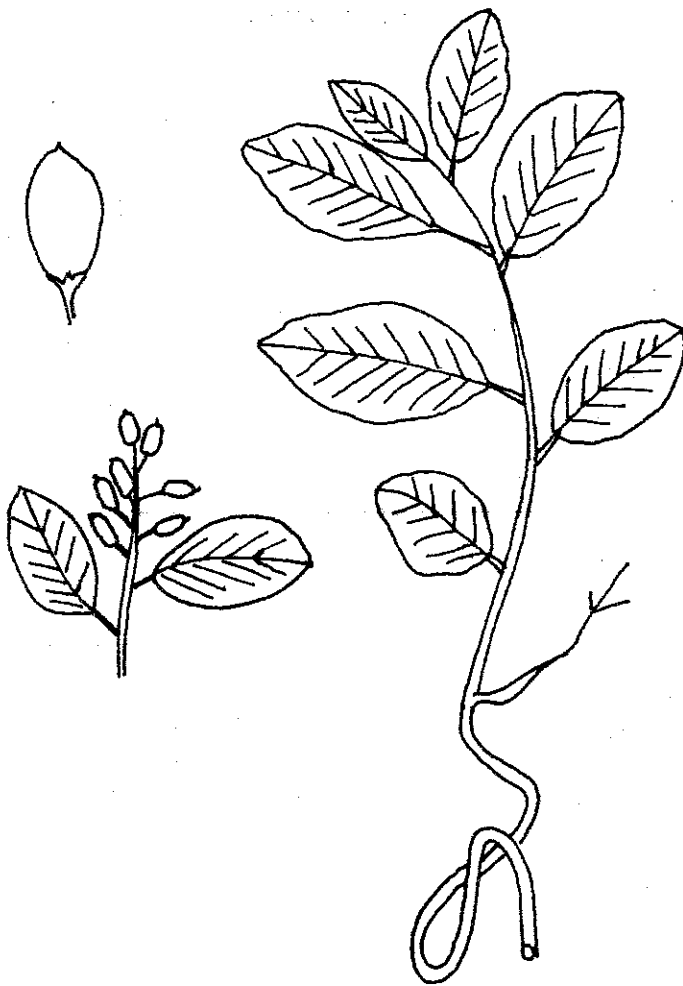
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ALABAMA SUPPLEJACK (Berchemia scandens (Hill) Tre1.)

COMMON NAME: Alabama supplejack
FAMILY: Buckthorn (Rhamnaceae)
SPECIES: Berchemia scandens (Hill) Trel.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

large, twining vine with small leaves, the secondary veins parallel; flowers March to June; fruit matures July to October

DISTINGUISHING CHARACTERISTICS:

leaves: alternate, simple (1-3 in. long, 3/4-1 1/2 in. wide), dark-green, veins indented on the upper surface; football-shaped
flowers: greenish yellow, petals five, sepals five
fruit: drupe, oblong to football-shaped, fleshy, bluish-black (1/4-1/3 in. long)
other: stems much branched, green

HISTORIC, FOOD, AND MEDICINAL USES:

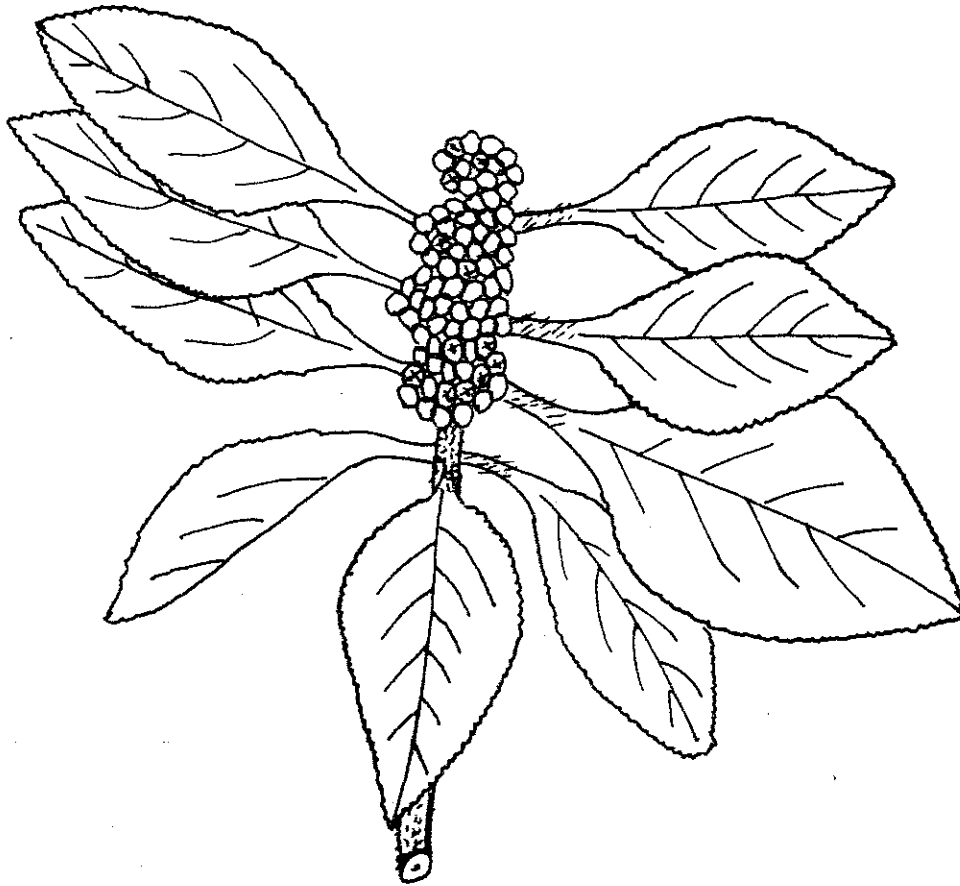
used in making wickerware; fruit used as a purple stain

FORAGE VALUE:

seventeen species of bird use the fruit including turkey, bobwhite quail and mallard ducks

HABITAT:

moist rich soils of upland forests



AMERICAN BEAUTYBERRY (Callicarpa americana L.)

COMMON NAME: American beautyberry
 FAMILY: Vervain (Verbenaceae)
 SPECIES: Callicarpa americana L.
 LIFE SPAN: Perennial
 ORIGIN: Native
 SEASON: Warm

GROWTH CHARACTERISTICS:

shrub or bush (to 9 ft. tall), much branched; covered with soft branched hairs

DISTINGUISHING CHARACTERISTICS:

leaves: opposite (3-9 in. long, 1-4 in. wide); margins with rounded teeth that angle toward the apex
 flowers: white to pinkish (3/8 in. long); in tight clusters next to the stem
 fruit: drupe (3/8 in. diameter), pink to lavender, round; in clusters next to the stem
 other: stems and leaves with short hairs; twigs round or 4-sided, gray to reddish-brown

HISTORIC, FOOD, AND MEDICINAL USES:

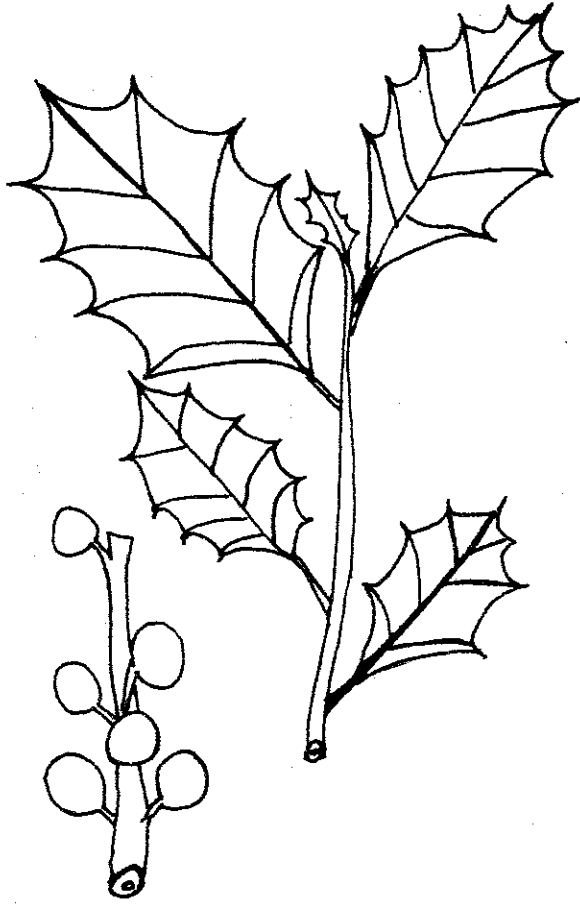
twigs are highly flammable when dry; cultivated; at least 10 species of birds use the fruit, especially the bob white quail; also eaten by raccoon, opossum and gray fox

FORAGE VALUE:

browsed by deer, fruit used by some birds; poor value for cattle

HABITAT:

dry upland and mesic creek bottoms



AMERICAN HOLLY (Ilex opaca Ait.)

COMMON NAME: American holly
FAMILY: Holly (Aquifoliaceae)
SPECIES: Ilex opaca Ait.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Evergreen

GROWTH CHARACTERISTICS:

evergreen shrub or tree (10-40 ft. tall), branches short and crooked; crown rounded; flower April to June; fruits mature November to December

DISTINGUISHING CHARACTERISTICS:

leaves: simple, alternate (2-4 in. long, 1-1 1/2 in. wide), dull green, oval to oblong in outline, stiff; with sharp spines; apex with a spine; base wedge-shaped or rounded
flowers: in clusters on short stalks; 4-6 white petals; small
fruit: round or football-shaped; mostly red, rarely yellow or orange
other: twigs green to light brown or gray

HISTORIC, FOOD, AND MEDICINAL USES:

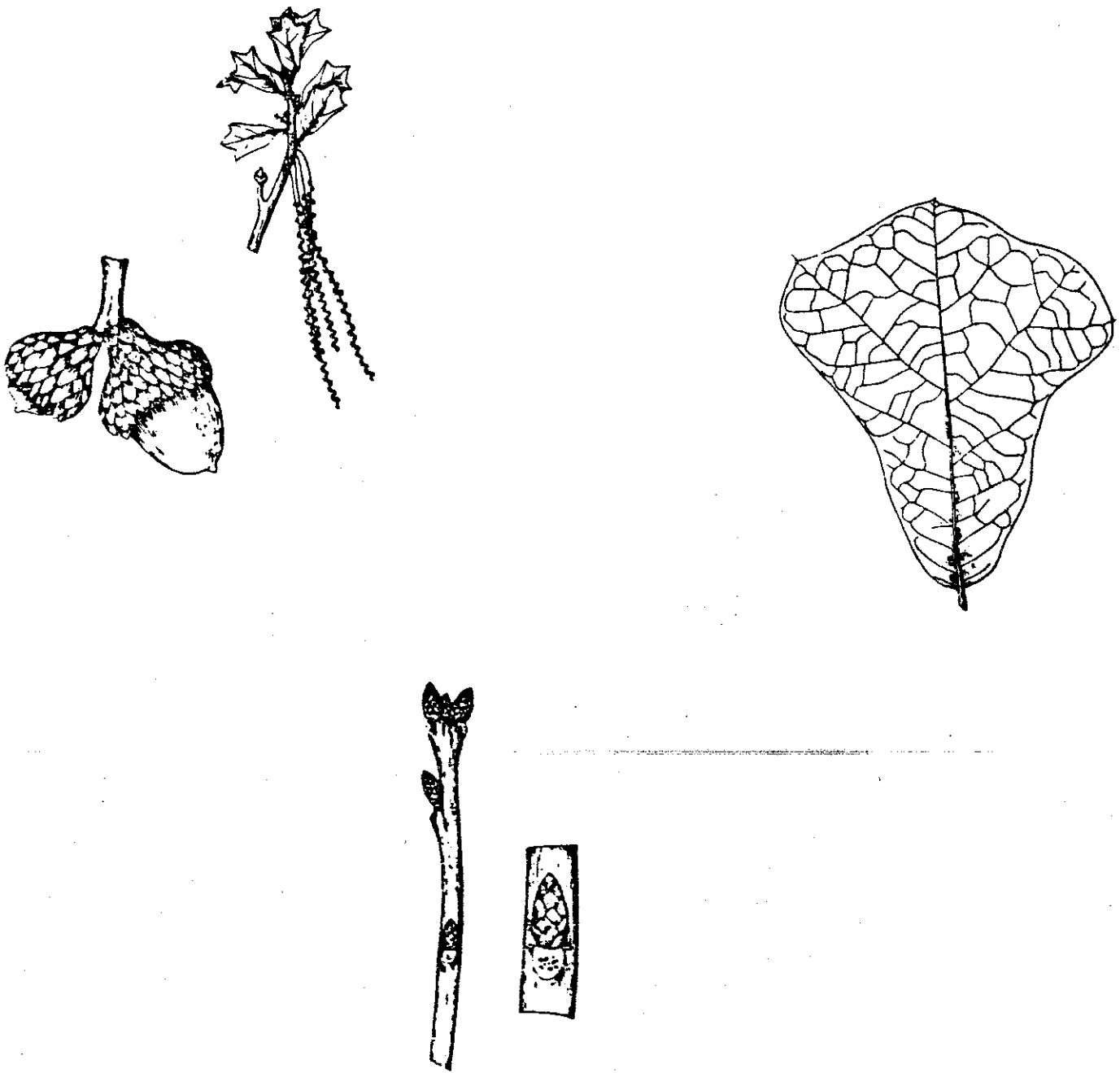
used for cabinets, interior finish, handles, fixtures and scientific instruments; planted for yard, park, or street hedges; holiday decoration

FORAGE VALUE:

18 species of birds eat the fruit

HABITAT:

moist uplands



BLACKJACK OAK (Quercus marilandica Muenchh.)

COMMON NAME: Blackjack oak
 FAMILY: Beech (Fagaceae)
 SPECIES: Quercus marilandica Muenchh.
 LIFE SPAN: Perennial
 ORIGIN: Native
 SEASON: Warm

GROWTH CHARACTERISTICS:

tree or shrub (to 30 ft. tall), deciduous, flowers and leaves appear in May; reproduces by seeds and sprouts

DISTINGUISHING CHARACTERISTICS:

leaves: simple alternate, leathery, bell-shaped (4-8 in. long), apex 3 lobed, main veins of lobes end in a bristle; upper surface dark green and glossy, lower surface lighter

flowers: unisexual, in staminate and pistillate catkins

fruit: acorns enclosed in cups for 1/2 - 2/3 the length; acorns ripen in 2 years

other: bark dark-brown or black, deeply fissured; twigs grayish brown, stiff

HISTORIC, FOOD, AND MEDICINAL USES:

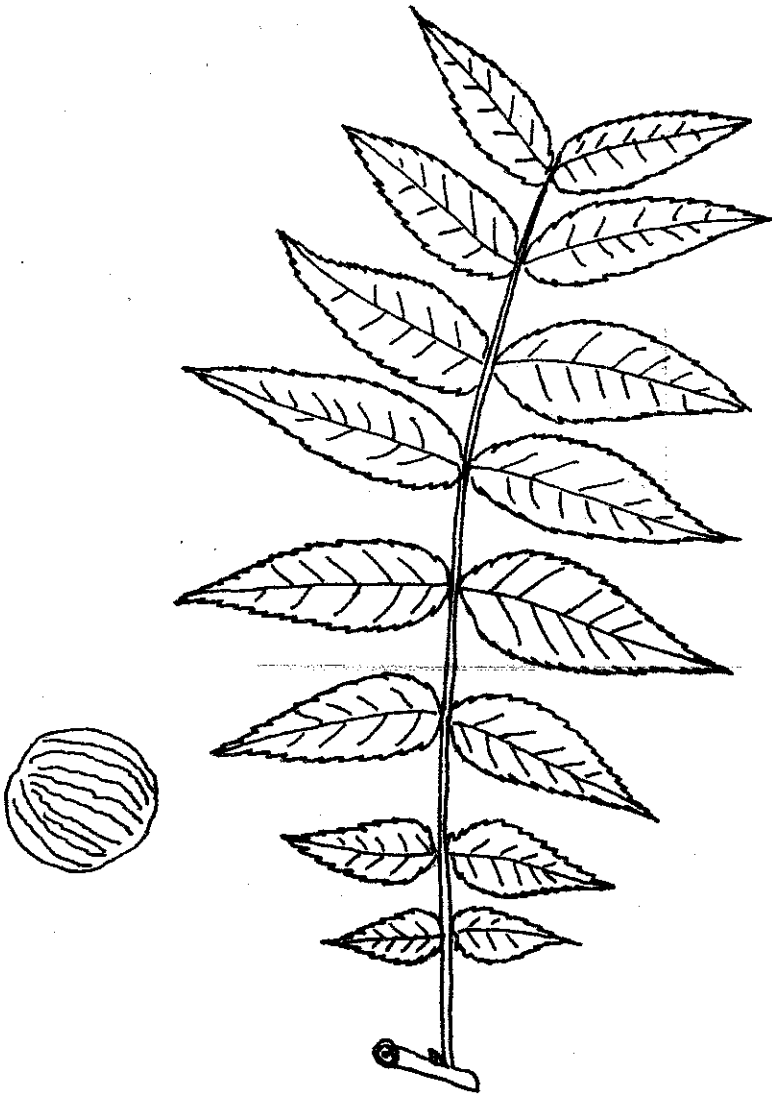
wood used for posts, fuel, charcoal, and railroad ties

FORAGE VALUE:

buds, twigs and leaves browsed by cattle and goats; acorn provide food and tree provides cover for squirrels, turkeys and deer; tannic acid may be a problem for cattle

HABITAT:

dry, sandy, and sterile soils



BLACK WALNUT (Juglans nigra L.)

COMMON NAME: Black walnut
 FAMILY: Walnut (Juglandaceae)
 SPECIES: Juglans nigra L.
 LIFE SPAN: Perennial
 ORIGIN: Native
 SEASON: Warm

GROWTH CHARACTERISTICS:

tree (to 125 ft. tall), crown rounded; fruit ripens September-October

DISTINGUISHING CHARACTERISTICS:

leaves: odd-pinnately compound (1-2 ft. long), yellow-green, deciduous; leaflets 11-23, sessile or short-petioled, apex sharp-pointed, base rounded, margins saw-toothed
 flowers: inconspicuous greenish flowers in catkins, catkins (2-5 in. long)
 fruit: solitary or clustered (1 1/2-2 1/2 in. diameter), nearly round, husk yellowish-green; nutshell hard and bony; edible
 other: bark grayish brown.

HISTORIC, FOOD, AND MEDICINAL USES:

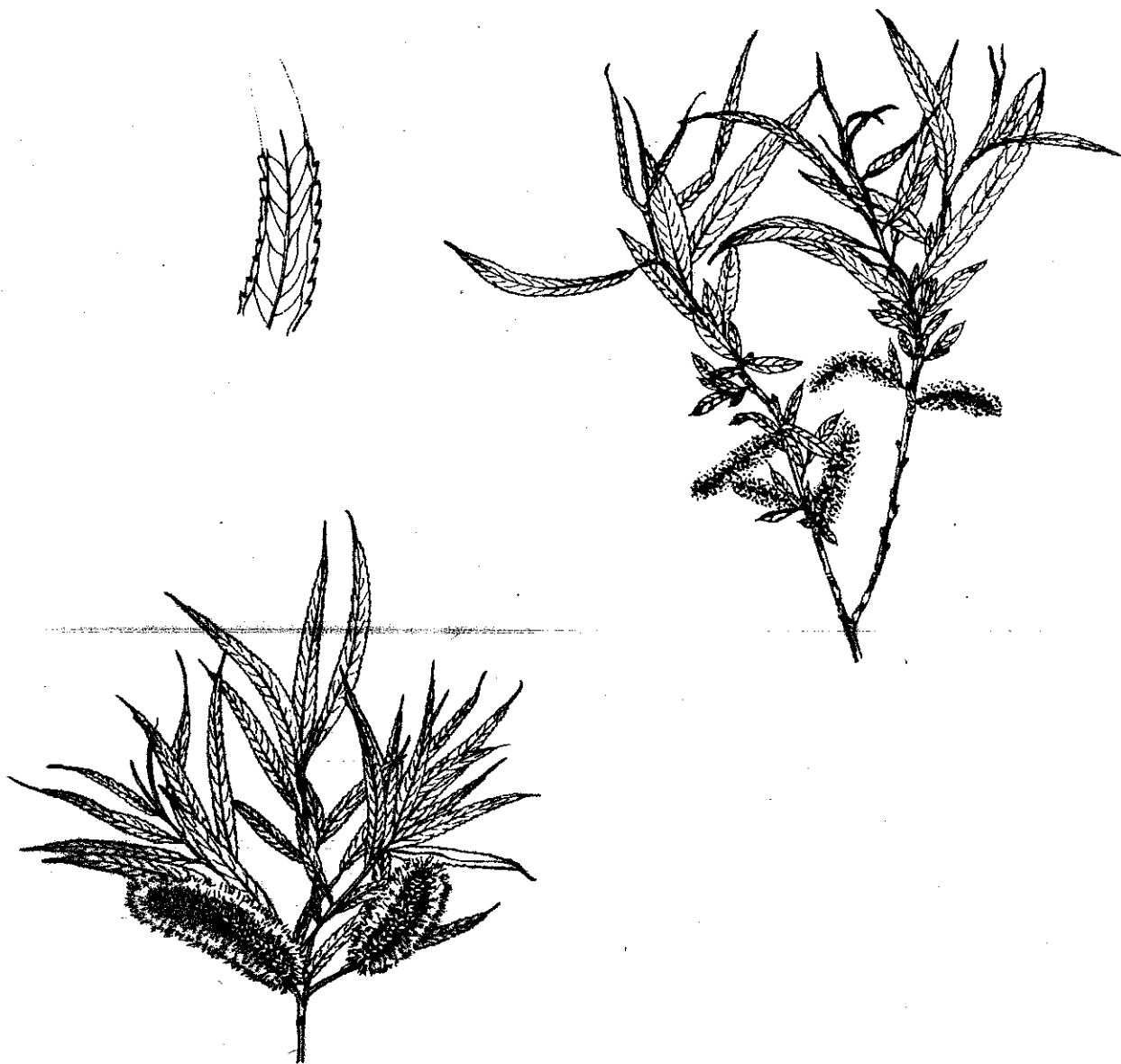
wood dark brown; used for furniture, veneers, musical instruments, caskets, gunstocks; nuts used in candies; used as an ornamental shade-tree

FORAGE VALUE:

squirrels utilize the nuts as do humans

HABITAT:

lowland or upland forests of Central and East Texas on well-drained soils



BLACK WILLOW (Salix nigra Marsh.)

COMMON NAME: Black willow
FAMILY: Willow (Salicaceae)
SPECIES: Salix nigra Marsh.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

small to large, short lived, deciduous tree (to 100 ft. tall, to 3 ft. diameter); bark gray-black, thickly ridged; seeds ripen April to July

DISTINGUISHING CHARACTERISTICS:

leaves: simple, narrow to linear (3-6 in. long), margins finely saw-toothed; lustrous upper and paler lower surfaces
flowers: inconspicuous, in catkins; staminate leafy, pistillate hairy
fruit: a capsule with minute seeds; seeds with long hairs
other: twigs slender, brittle, reddish-brown

HISTORIC, FOOD, AND MEDICINAL USES:

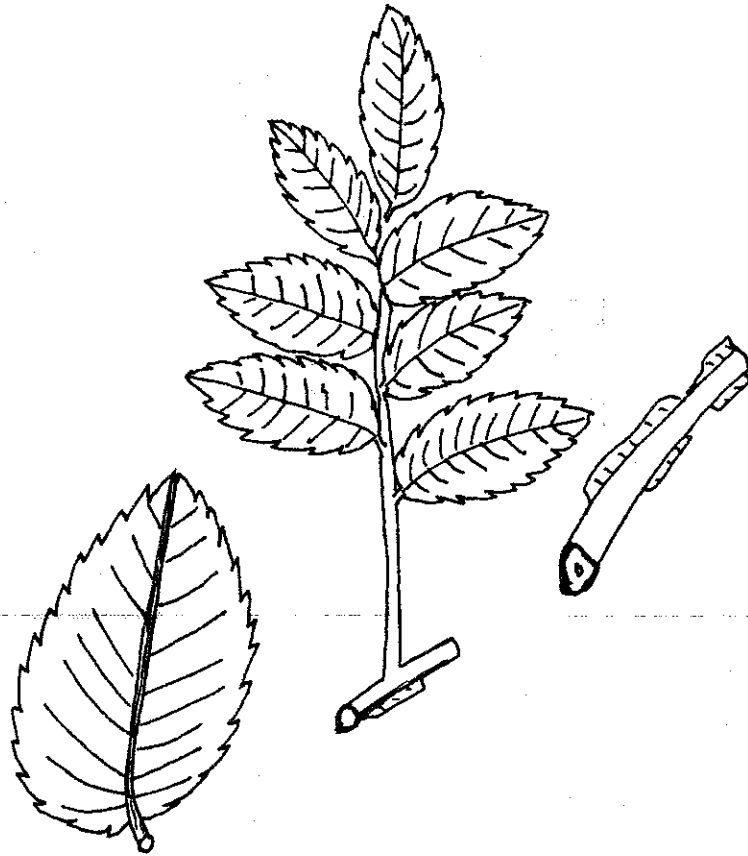
provides wildlife and watershed cover; aesthetic screening; wood products on wetland sites; charcoal, toys, and cheap furniture; home remedy for fever ailments

FORAGE VALUE:

fair for livestock and deer when foliage is within reach

HABITAT:

tolerant of many soil textures if sufficient moisture is available; tolerant of flooding and high water tables



CEDAR ELM (Ulmus crassifolia Nutt.)

COMMON NAME: Cedar elm
FAMILY: Elm (Ulmaceae)
SPECIES: Ulmus crassifolia Nutt.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Warm

GROWTH CHARACTERISTICS:

tree (to 60 ft. tall), crown narrow or rounded; branches frequently drooping; twigs and branches with a lateral corky wing

DISTINGUISHING CHARACTERISTICS:

leaves: alternate, simple (1-2 in. long, 3/4-1 in. wide); football to egg-shaped; apex pointed; margins with a double-toothed edge; lower surface like fine sandpaper
flowers: in clusters of 3-5, hairy, red to green, inconspicuous
fruit: samara (1/4-1/2 in. long), oval to football-shaped; seed surrounded by a wing with a deep notch at the apex
other: bark brown to reddish or gray; wood heavy, reddish-brown, brittle

HISTORIC, FOOD, AND MEDICINAL USES:

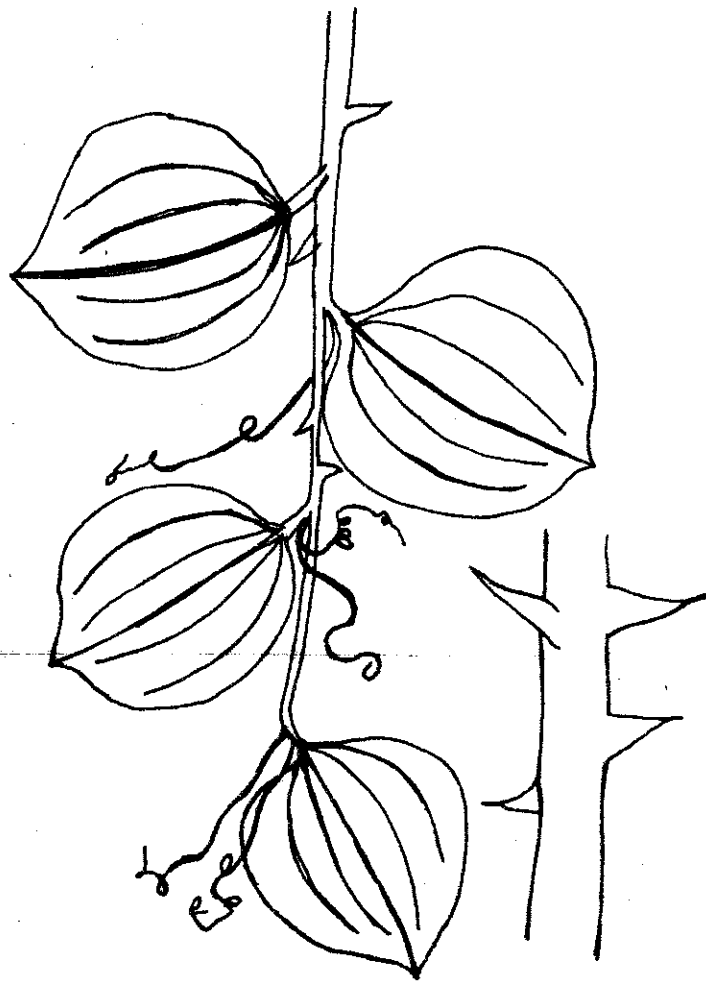
used as a shade tree; wood is too brittle for use in furniture

FORAGE VALUE:

none

HABITAT:

on clay or limestone soils of upland sites



COMMON GREENBRIER (Smilax rotundifolia L.)

COMMON NAME: Common greenbrier
FAMILY: Lily (Liliaceae)
SPECIES: Smilax rotundifolia L.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

vine climbing by tendrils; forming tangled thickets;
flowers April-June; 15-20 ft. long

DISTINGUISHING CHARACTERISTICS:

leaves: alternate, deciduous, simple (2-6 in. long, 1-6 in. wide); heart-shaped or egg-shaped, margins entire, petiole 1/4 - 3/4 in. long; upper surface dark green, lower surface slightly lighter

flowers: in clusters of all male or all female; cluster resembles an umbrella; small, greenish yellow, 6 parted, stamen 6

fruit: clusters of round fruits ripen each year; black at maturity

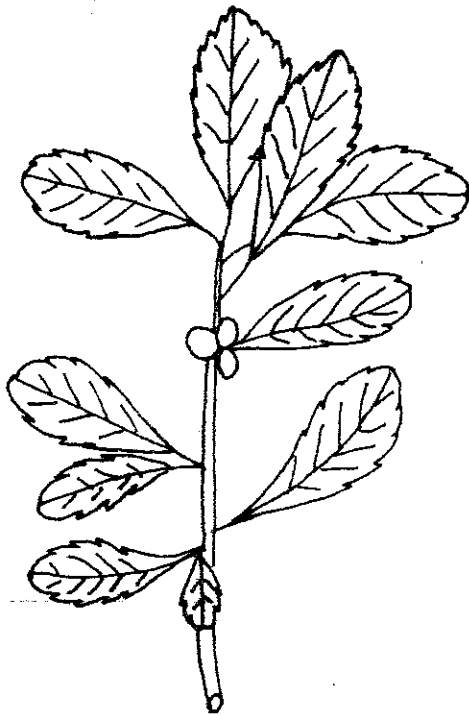
other: stem 4-angled, green; spines scattered

FORAGE VALUE:

15 species of bird eat the fruit, also rabbit, opossum, and raccoon

HABITAT:

low woods, thickets or along fences



DECIDUOUS HOLLY (Ilex decidua Walt.)

COMMON NAME: Deciduous holly
FAMILY: Holly (Aquifoliaceae)
SPECIES: Ilex decidua Walt.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

small tree or shrub (to 30 ft. tall); flowers in early spring March to May

DISTINGUISHING CHARACTERISTICS:

leaves: simple, deciduous thin, paired or whorled (2-3 in. long, 1-2 in. wide); margins with small teeth angled toward the apex; base wedge-shaped, apex rounded
flowers: whitish, small, in clusters
fruit: drupe-like, orange to red, round (1/4 in. diameter), ripens in early autumn
other: twigs elongate, slender, light to dark gray

HISTORIC, FOOD, AND MEDICINAL USES:

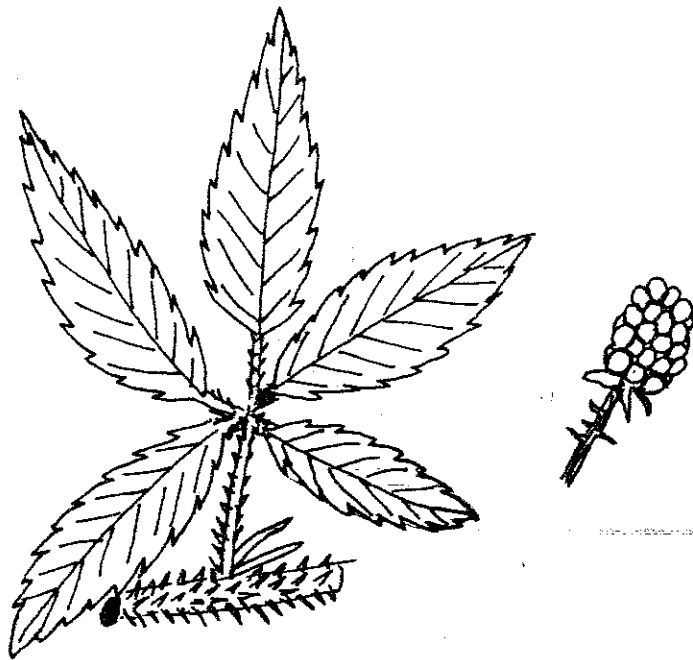
planted as an ornamental because of the orange-red berries; at least 9 species of bird feed upon the fruit, including the bobwhite quail

FORAGE VALUE:

fruit eaten by birds; poor livestock forage; deer utilize a small amount

HABITAT:

wet or moist creek and river bottoms



DEWBERRY (Rubus trivialis Michx.)

COMMON NAME: Dewberry
FAMILY: Rose (Rosaceae)
SPECIES: Rubus trivialis Michx.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

trailing or low arching, round stems with stout curved prickles

DISTINGUISHING CHARACTERISTICS:

leaves: compound; leaflets 5, glabrous, oblong to lanceolate, coarsely toothed (to 4 in. long, 1 in. wide)
flowers: 5 white petals with erect pedicels; 5 sepals, stamen numerous and pistils numerous
fruit: a compound fruit on numerous drupelets globose, black, (1/2-1 in. long)
other:

HISTORIC, FOOD, AND MEDICINAL USES:

used for jams and jellies (cultivated)

FORAGE VALUE:

birds utilize the fruit and rabbits, mice, and snakes use the plants for cover

HABITAT:

grows everywhere; a weedy species that grows in most soils



EASTERN RED-CEDAR (Juniperus virginiana L.)

COMMON NAME: Eastern red-cedar
FAMILY: Cupress (Cupressaceae)
SPECIES: Juniperus virginiana L.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Evergreen

GROWTH CHARACTERISTICS:

trees (to 40 ft. tall), evergreen, dioecious; deep taproot; shaggy bark; reproduces by seed

DISTINGUISHING CHARACTERISTICS:

leaves: small, scale-like, opposite (about 1/16 in. long); leaves overlap like shingles
flowers: inconspicuous, very small
fruit: berry-like, round, fleshy, blue; usually contains 1 or 2 seeds
other: twigs reddish-brown, round or angled

HISTORIC, FOOD, AND MEDICINAL USES:

used for posts, firewood and cedar oil; berries used to make gin; wood resistant to decay; considered a good insect repellent

FORAGE VALUE:

deer utilize twigs and leaves some during the winter and spring; provides cover and food for birds and small mammals including the opossum; fruit eaten by at least 20 species of birds

HABITAT:

dry to slightly moist uplands



FARKLEBERRY (Vaccinium arboreum Marsh.)

COMMON NAME: Farkleberry
FAMILY: Heath (Ericaceae)
SPECIES: Vaccinium arboreum Marsh.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

small tree (to 15 ft. tall), evergreen; flowers in early spring; stiff-branched

DISTINGUISHING CHARACTERISTICS:

leaves: alternate, simple, thick (3/4-3 in. long), leathery, glossy or waxy above; margins entire; football-shaped, apex pointed to rounded
flowers: whitish, urn-shaped (1/4 in. long), single
fruit: berry, round, blackish (more than 1/4 in. diameter), shiny; ripening in winter
other: flower stems flexible

HISTORIC, FOOD, AND MEDICINAL USES:

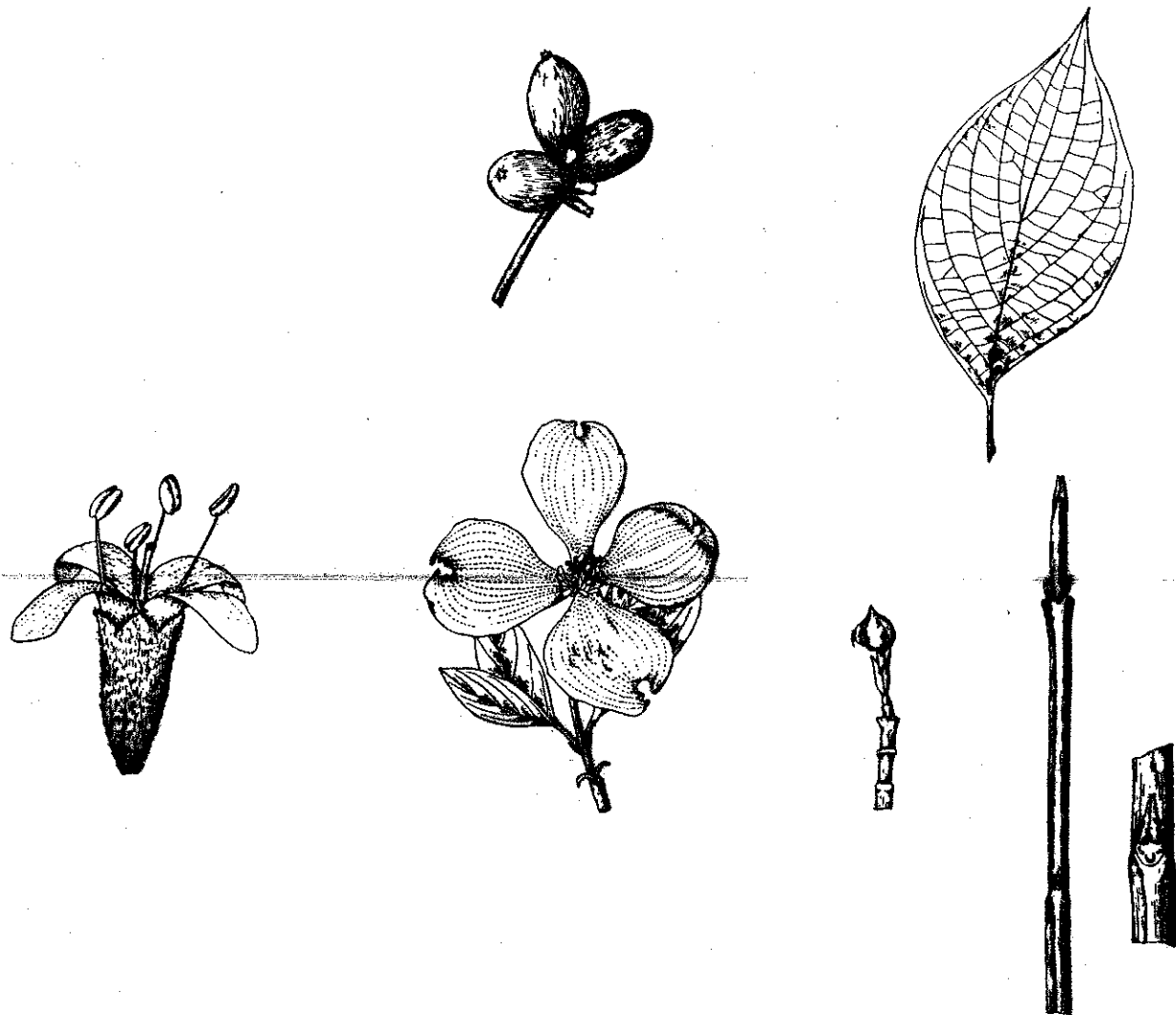
wood is used for making handles for tools; the bark for tanning leather; the bark in an extract form was used to treat diarrhea

FORAGE VALUE:

poor value for livestock; fruit eaten by a number of birds

HABITAT:

dry to medium moist uplands



FLOWERING DOGWOOD (Cornus florida L.)

COMMON NAME: Flowering dogwood
 FAMILY: Dogwood (Cornaceae)
 SPECIES: Cornus florida L.
 LIFE SPAN: Perennial
 ORIGIN: Native
 SEASON: Cool

GROWTH CHARACTERISTICS:

shrub or small tree (to 30 ft. tall); flowers in March or April before the leaves appear

DISTINGUISHING CHARACTERISTICS:

leaves: simple, opposite (2-5 in. long, 1-3 in. wide), football-shaped, upper surface smooth
 flowers: greenish to white (1/5 in. long), cluster of flowers subtended by four large white to cream colored bracts, the bracts with a dark notch at the apex
 fruit: a red drupe (about 1/2 in. long), found in clusters
 other: twigs slender, yellowish green to reddish

HISTORIC, FOOD, AND MEDICINAL USES:

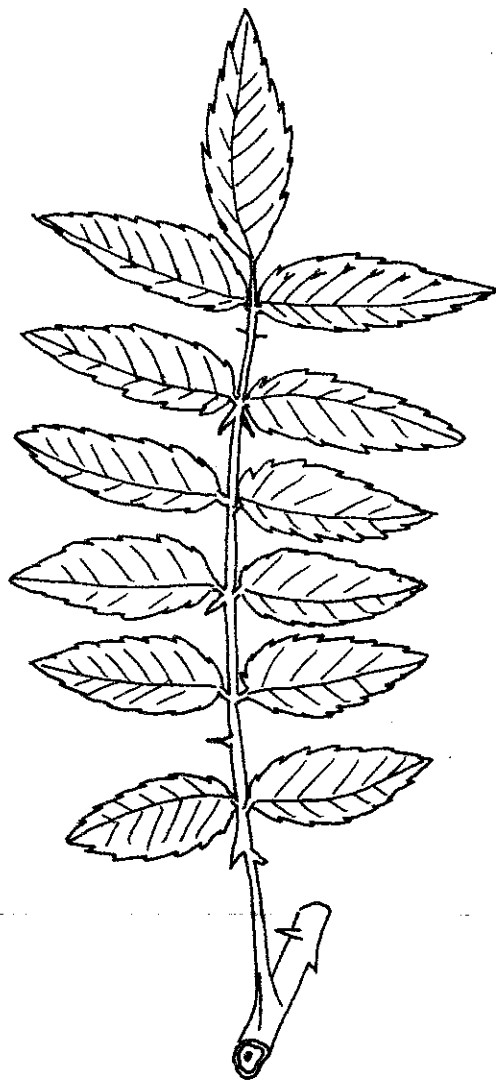
there is a legend that says that this tree was once a straight trunked tree until the wood was used for the "Saviors" cross. Following the crucifixion the tree became a small crooked tree and the petal-like floral bracts developed a red area at the apex. The red was supposedly the stain from the drops of blood; eaten by 28 species of birds including wild turkey; eaten by squirrels and white-tailed deer; indians made a dye from the fruit

FORAGE VALUE:

poor forage for cattle and fair for sheep

HABITAT:

medium moisture uplands; most frequent on sandy soils



HERCULES-CLUB PRICKLY-ASH (Zanthoxylum clava-herculis L.)

COMMON NAME: Hercules-club prickly-ash
FAMILY: Rue (Rutaceae)
SPECIES: Zanthoxylum clava-herculis L.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Warm

GROWTH CHARACTERISTICS:

small tree (to 15 ft. tall), broad rounded crown with easily recognized, cork-based prickles on the trunk and branches

DISTINGUISHING CHARACTERISTICS:

leaves: odd-pinnately compound with 5-19 leaflets; leaflets subsessile (1/2-4 1/2 in. long), lancehead-shaped; margins finely toothed
flowers: small, greenish-white in terminal cymes
fruit: follicles (1/6-1/4 in. long); seeds black, shiny
other: bark light gray; wood yellow

HISTORIC, FOOD, AND MEDICINAL USES:

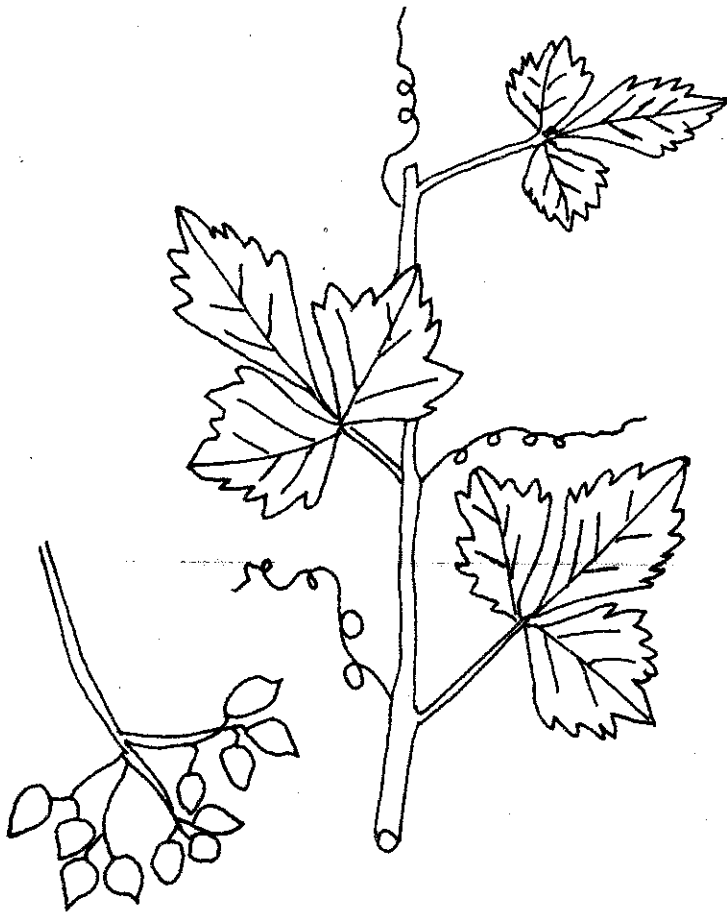
birds use the fruit; used as a treatment for rheumatism; a treatment for numbing teeth when you have a toothache

FORAGE VALUE:

none

HABITAT:

uplands of East Texas



IVY TREEBINE (Cissus incisa Desmoul.)

COMMON NAME: Ivy treebine
FAMILY: Grape (Vitaceae)
SPECIES: Cissus incisa Desmoul.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Warm

GROWTH CHARACTERISTICS:

vine that is mostly herbaceous; climbing by tendrils; identified by trifoliate or 3-lobed leaves and a bad odor that is produced when leaves are crushed

DISTINGUISHING CHARACTERISTICS:

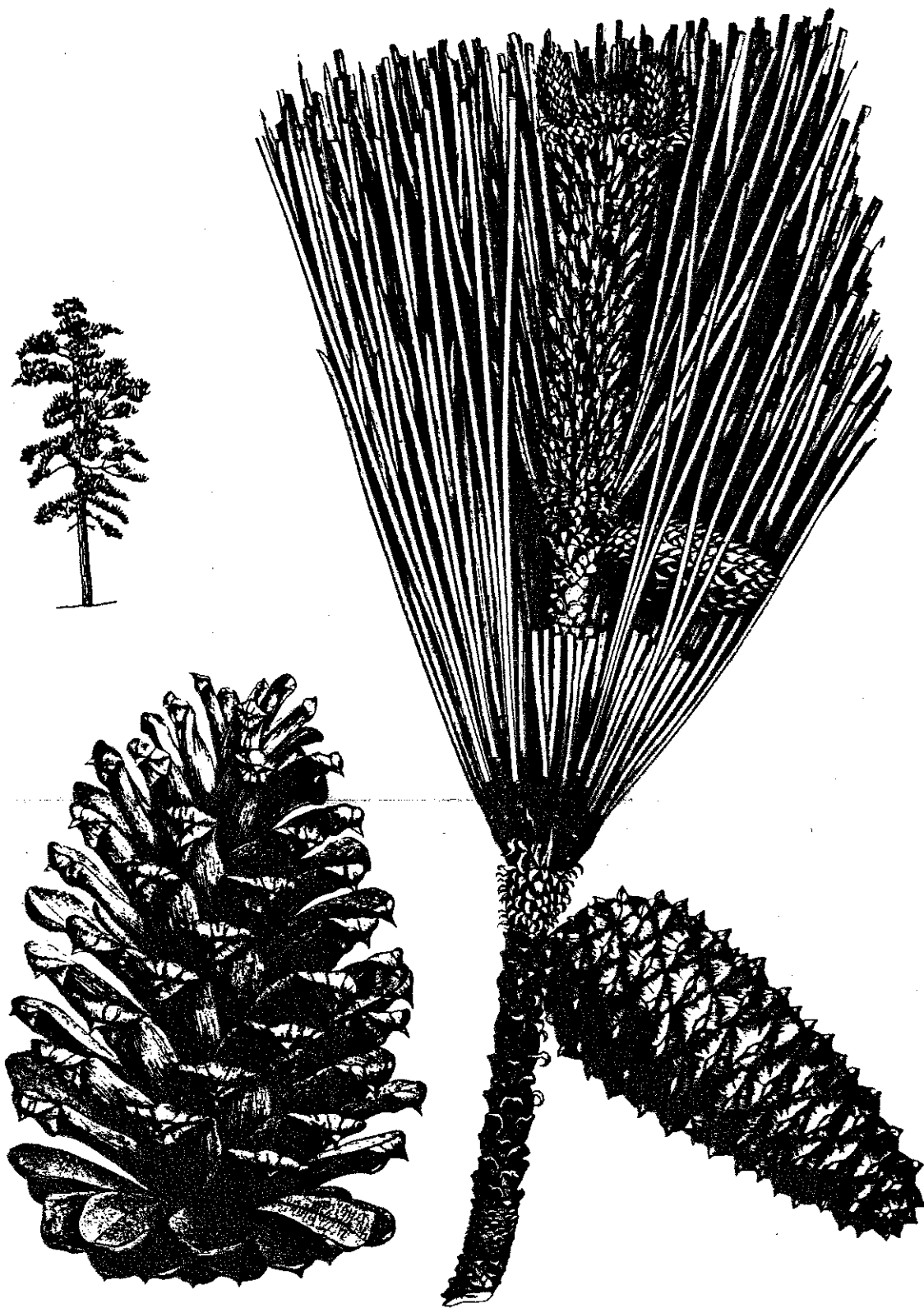
leaves: alternate or opposite; trifoliate or deeply 3-lobed (3/4-3 in. long); apex pointed or rounded; margins coarsely toothed; thick and fleshy; surface dull green
flowers: in umbrella-like clusters; greenish
fruit: berry (1/4-3/8 in. long), shiny black; seed round on one end, pointed on the other; flesh thin

FORAGE VALUE:

none

HABITAT:

grows in moist habitats and climbs on other trees and shrubs; common in central Texas



LOBLOLLY PINE (Pinus taeda L.)

COMMON NAME: Loblolly pine
FAMILY: Pine (Pinaceae)
SPECIES: Pinus taeda L.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Evergreen

GROWTH CHARACTERISTICS:

evergreen tree (to 100 ft. tall, 3 ft. diameter); bark black in youth, or reddish-brown, plated in age; monecious; seeds mature in September or October

DISTINGUISHING CHARACTERISTICS:

leaves: needles in bundles of 3 (6-9 in. long), pale green
flowers: male flower yellow, in small clusters near the branch tips, female flowers in woody cones
fruit: woody scaled cones (2-6 in. long); scales with a reflexed spine tip
other: twigs stout, reddish-brown, scaly

HISTORIC, FOOD, AND MEDICINAL USES:

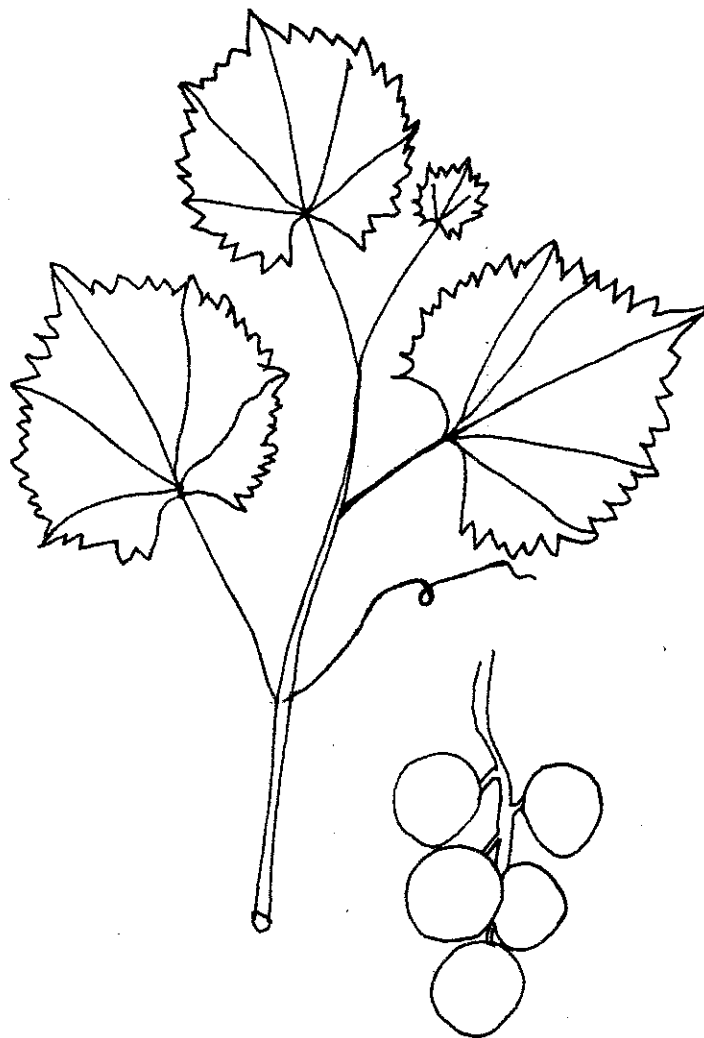
used for revegetating lignite mines; wood used for lumber, paper pulp, fuel, boxes, posts; cultivated for lumber and pulp

FORAGE VALUE:

low value to livestock; frequently used by deer on overgrazed ranges; important for food and cover for birds and small mammals

HABITAT:

adapted to many soils from piedmont to poorly drained



MUSCADINE GRAPE (Vitis rotundifolia Michx.)

COMMON NAME: Muscadine grape
FAMILY: Grape (Vitaceae)
SPECIES: Vitis rotundifolia Michx.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Warm

GROWTH CHARACTERISTICS:

high climbing vine (to 80 ft. tall), without the shreddy bark of most grapes; flowers in late spring; fruit matures between July and September

DISTINGUISHING CHARACTERISTICS:

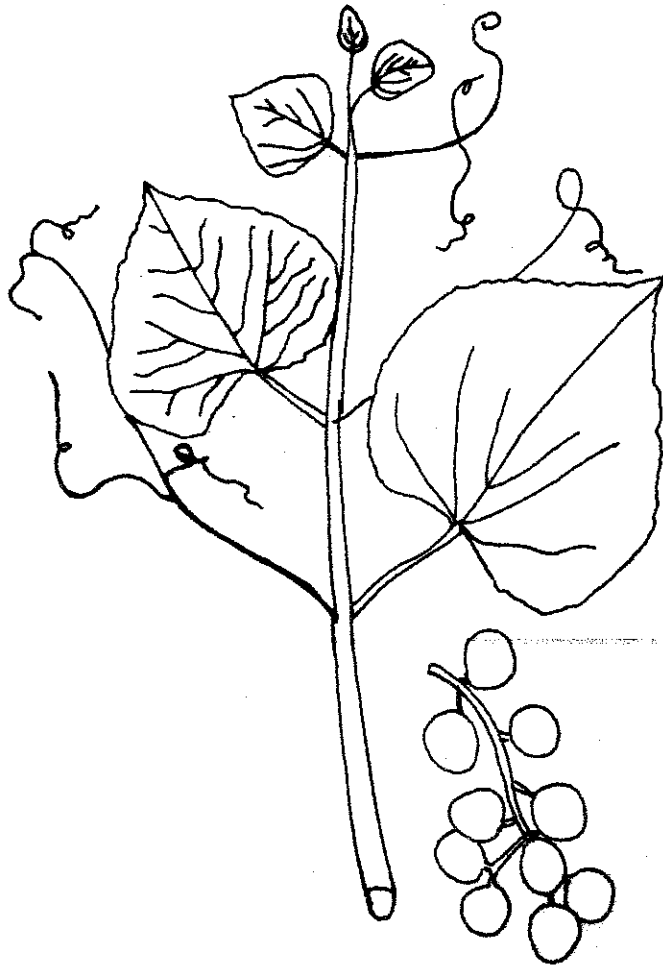
leaves: alternate, simple (2-5 in. long, 2-4 in. wide), oval to broadly heart-shaped; margins with large angled teeth; apex pointed; upper surface green and shiny; 4-6 pair of veins; stipules very small
flowers: panicles (2 in. long), some male and some female; small
fruit: round, in clusters of 2-8 or more, purplish-black (1/3-1 in. in diameter); skin tough; flesh tough

FORAGE VALUE:

utilized by some birds

HABITAT:

in most shady situations of bottomlands



MUSTANG GRAPE (*Vitis mustangensis* Buckl.)

COMMON NAME: Mustang grape
FAMILY: Grape (Vitaceae)
SPECIES: Vitis mustangensis Buckl.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Warm

GROWTH CHARACTERISTICS:

vine (to about 33 ft. long), vigorous; young growth covered with white hairs

DISTINGUISHING CHARACTERISTICS:

leaves: alternate, simple (3-5 in. long, 3-5 in. wide); apex obtuse, base slightly heart-shaped; whitish on both sides when immature, at maturity the upper surface is darker green
flowers: whitish, small, in clusters
fruit: berry, globose (1/2-3/4 in. diameter), purplish black; tough skin; seeds 1/5 in. long; in large clusters

HISTORIC, FOOD, AND MEDICINAL USES:

fruit is pungent, especially the skin, may also irritate the mouth and hands; used to make jelly and domestic wine; used to wrap meat for cooking

FORAGE VALUE:

none

HABITAT:

stream banks, thickets, edge of woods, common on disturbed sites



POISON-IVY (Rhus toxicodendron L.)

COMMON NAME: Poison-ivy
 FAMILY: Sumac (Anacardiaceae)
 SPECIES: Rhus toxicodendron L.
 LIFE SPAN: Perennial
 ORIGIN: Native
 SEASON: Cool

GROWTH CHARACTERISTICS:

poisonous shrub or vine with 3-leaflets

DISTINGUISHING CHARACTERISTICS:

leaves: compound, trifoliate (rarely 5 leaflets), long petioled, oval to lance-head shaped; margins entire or course toothed, base wedge-shaped or rounded, apex pointed; dull green above, paler beneath; terminal leaflet (1 1/3-8 in. long, 1/2-4 in. wide; leaflets shape asemi-trical)

flowers: borne in axillary panicles, small, greenish white

fruit: drupes in clusters (1/8-1/4 in. diameter), round, dull white, waxy

other: climbing by aerial roots

HISTORIC, FOOD, AND MEDICINAL USES:

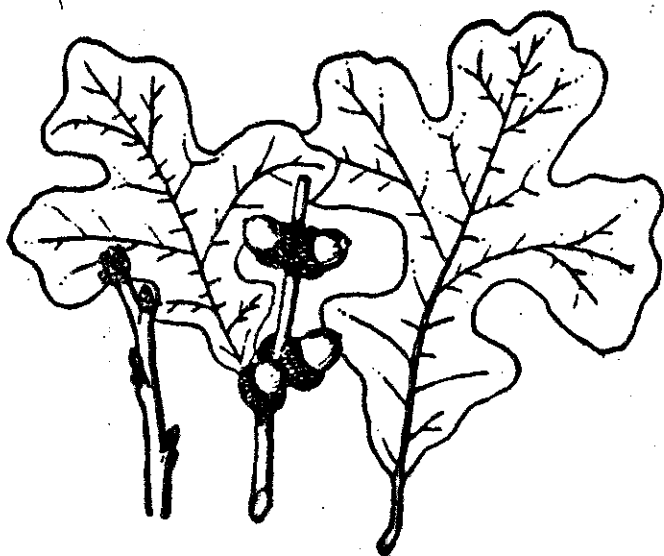
poisonous, produces blisters accompanied with burning and itching sensations; milky sap has been used in making varnish

FORAGE VALUE:

fruit eaten by at least 75 species of birds

HABITAT:

widely distributed throughout woods and plains



POST OAK (Quercus stellata Wang.)

COMMON NAME: Post oak
FAMILY: Beech (Fagaceae)
SPECIES: Quercus stellata Wang.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Warm

GROWTH CHARACTERISTICS:

shrub or tree (30-70 ft. tall), deciduous, flowers March-May, fruits mature September-November, reproduces by seeds or sprouts

DISTINGUISHING CHARACTERISTICS:

leaves: simple alternate (4-6 in. long, 3-4 in. wide), leathery, broadest above the middle with 3-5 short deep wide lobes making it somewhat cross-shaped, lower lobes deep (more than halfway to midvein), base is tapered and apex rounded

flowers: unisexual, in staminate or pistillate catkins

fruit: acorns in clusters of 2-4, cup covers about 1/3 of the nut

other: bark dark gray, rough with scaly ridges

HISTORIC, FOOD, AND MEDICINAL USES:

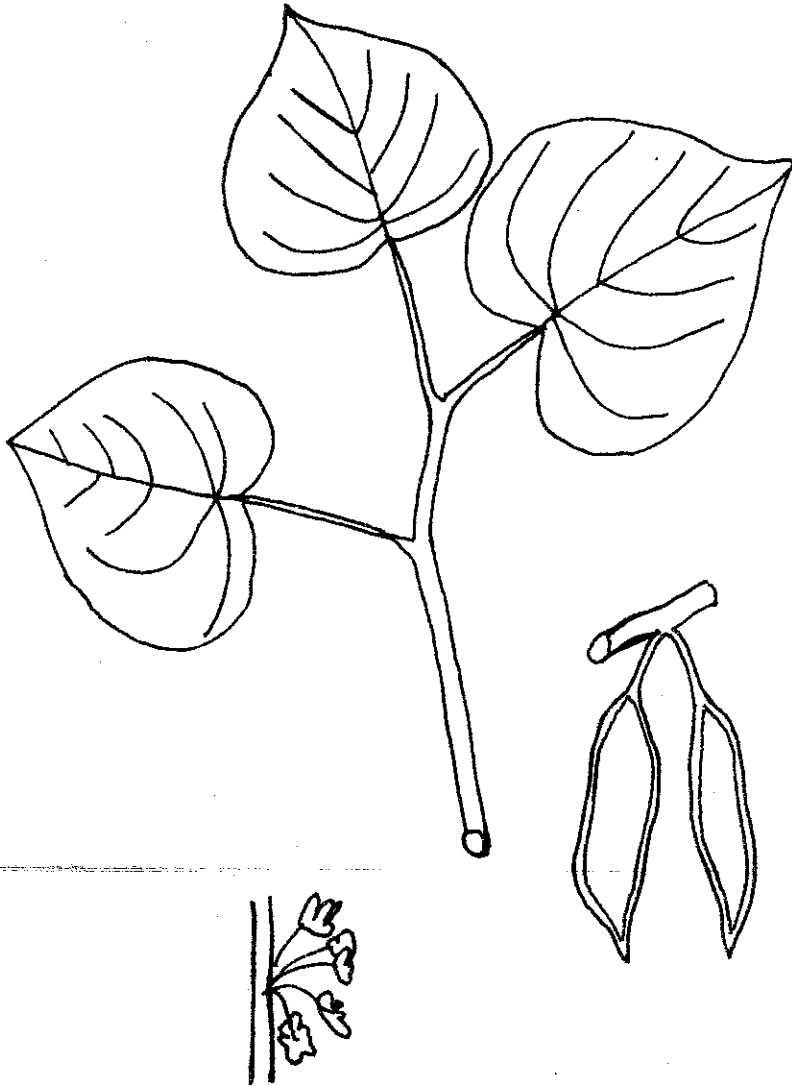
wood used for furniture, fencing, flooring, fuel, railroad ties and lumber

FORAGE VALUE:

buds, leaves, and twigs eaten by cattle (tanic acid may be poisoning problem) and goats in early spring; acorns eaten by deer, turkeys, raccoons, and squirrels

HABITAT:

rocky or sandy ridges



REDBUD (Cercis canadensis L.)

COMMON NAME: Redbud
FAMILY: Legume (Fabaceae)
SPECIES: Cercis canadensis L.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON:

GROWTH CHARACTERISTICS:

shrub or small tree (10-30 ft. tall); trunk straight, crown broadly rounded or flattened; flowers cover the branches before the leaves develop

DISTINGUISHING CHARACTERISTICS:

leaves: heart-shaped (2-6 in. long, 2-6 in. wide); simple, alternate, deciduous; palmate nerves 5-7
flowers: small, pink to lavender (1/4-2/5 in. long); in clusters of 2-8; perfect; butterfly-like
fruit: legume, linear to oblong pod (2-4 in. long, 1/2 in. wide); reddish-brown with a slight wing
other: twigs slender, brown to gray; bark thin; wood reddish-brown

HISTORIC, FOOD, AND MEDICINAL USES:

fluid extract was used to treat dysentery; used as an ornamental and has been cultivated since the 1600's

FORAGE VALUE:

browsed by white-tail deer; flowers have value for honey; seeds eaten by many birds

HABITAT:

mesic uplands, in rich soils along streams or in bottomlands; some plants occur in limestone areas



SAW GREENBRIER (Smilax bona-nox L.)

COMMON NAME: Saw greenbrier
FAMILY: Lily (Liliaceae)
SPECIES: Smilax bona-nox L.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

stout, spiny vine with 4-angled branches; climbing with tendrils; flowers April to June

DISTINGUISHING CHARACTERISTICS:

leaves: deciduous, simple (1-4 in. long), alternate; shape varied, egg-shaped to heart-shaped, triangular; margins entire or with small prickles
flowers: in umbels; sepals 3, petals 3, small; axillary umbels
fruit: berry, round (1/4 in. diameter), shining to dull black, sometimes bluish; matures in late fall
other: flower stems flexible

HISTORIC, FOOD, AND MEDICINAL USES:

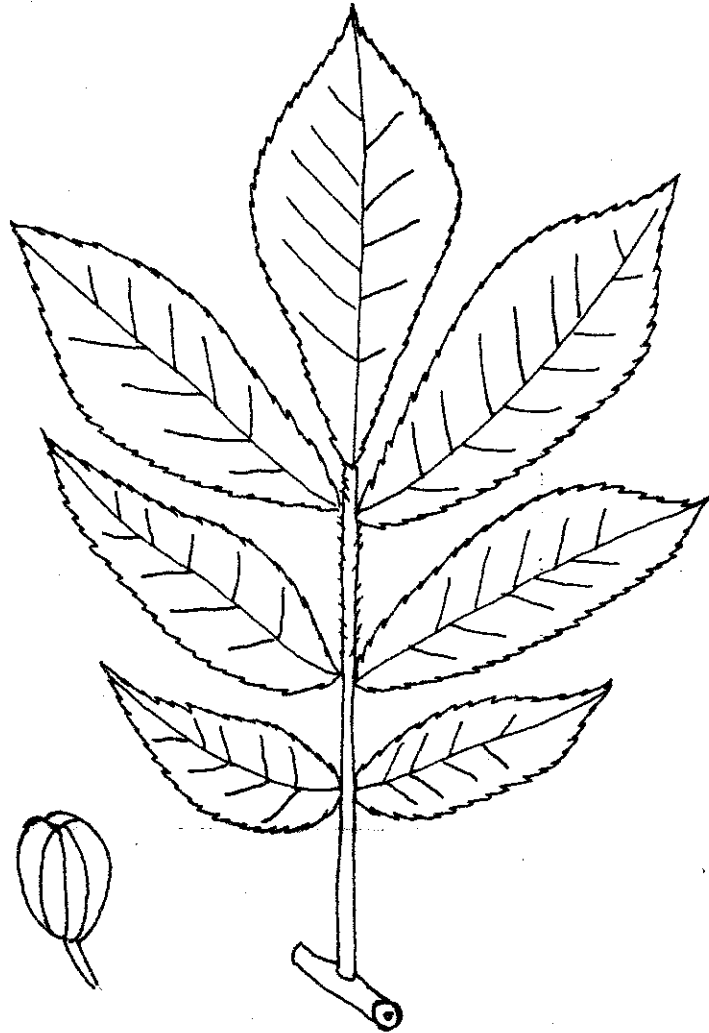
new shoots are eaten by man and prepared as a green vegetable

FORAGE VALUE:

important for 13 species of birds including ruffed grouse

HABITAT:

in thickets, roadsides, fields and woods



SHELLBARK HICKORY (*Carya laciniosa* (Michx. f.) Loud.)

COMMON NAME: Shellbark hickory
FAMILY: Walnut (Juglandaceae)
SPECIES: Carya laciniosa (Michx.f.) Loud.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

tree (to 120 ft. tall) with stout limbs and a narrow crown; deciduous; flowers April to June; largest of all hickory nuts

DISTINGUISHING CHARACTERISTICS:

leaves: deciduous (1-2 ft. long), compound with 5-9 leaflets, odd-pinnate; leaflets lance-head like in shape, apex sharp-pointed, margins saw-toothed
flowers: staminate and pistillate catkins inconspicuous, borne on the same tree
fruit: hull (1-3 in. long), light to dark orange-brown, hard, woody, with 4 ribs
other: twigs stout dark brown to reddish-orange; bark gray, in long, thin, shaggy plates

HISTORIC, FOOD, AND MEDICINAL USES:

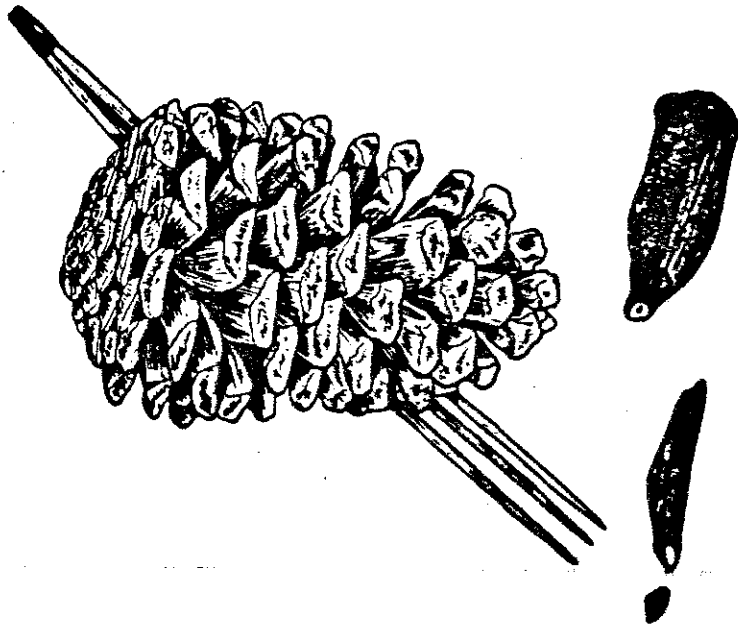
wood used for tool handles, baskets and fuel; nuts are edible and sweet

FORAGE VALUE:

none

HABITAT:

bottomland and woods of East Texas



SLASH PINE (Pinus elliottii Engelm.)

COMMON NAME: Slash pine
FAMILY: Pine (Pinaceae)
SPECIES: Pinus elliottii Engelm.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Evergreen

GROWTH CHARACTERISTICS:

tree (75-100 ft. tall), round-topped, trunk straight and symmetrical; flowers January to February

DISTINGUISHING CHARACTERISTICS:

leaves: needles, 2-3 per bundle, stout, stiff (4-12 in. long), dark green, lustrous; needles in clusters at the ends of the branches
flowers: dioecious; male cones cylindrical, clustered (1/2-1 in. long); female cones, oval, woody
fruit: woody cones, elongate to egg-shaped (3-6 in. long), dark brown; scales armed with a small recurved prickle
other: bark light orange to reddish-brown, shallowly furrowed; buds with silvery brown scales

HISTORIC, FOOD, AND MEDICINAL USES:

planted as ornamental; wood used for railroad ties, posts, flooring, veneers, fuel, paper pulp, lumber; turpentine extracted from the gum

FORAGE VALUE:

important food and cover for wild turkey, browsed by white-tailed deer

HABITAT:

low elevations along wet flatlands, stream margins or low sandy hills



SMALLS GREENBRIAR (Smilax smallii Morong)

COMMON NAME: Small's greenbrier
FAMILY: Lily (Liliaceae)
SPECIES: Smilax smallii Morong.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

vine (36-75 ft. long); stems with broad based prickles below; often evergreen

DISTINGUISHING CHARACTERISTICS:

leaves: simple, alternate (2-4 in. long, 1-2 in. wide); broadly wedge-shaped base; apex acute; margins entire; subtended by tendrils; light green color
flowers: small (about 1/5 in. long); in simple umbels
fruit: berry (1/5-1/4 in. diameter), dull red; in clusters of 7-12

HISTORIC, FOOD, AND MEDICINAL USES:

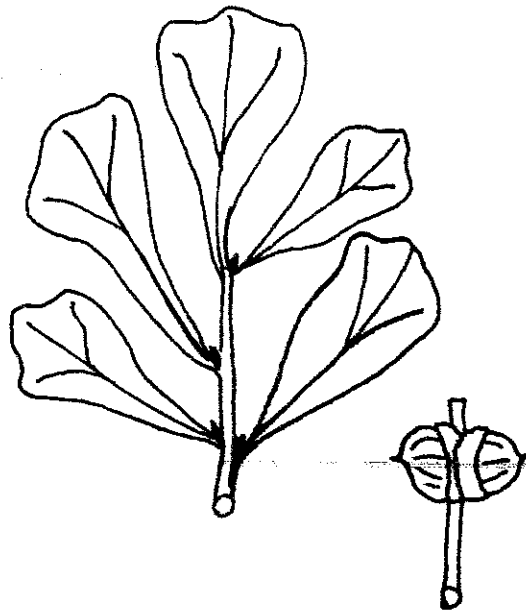
none

FORAGE VALUE:

fruit is eaten by many bird species

HABITAT:

mesic uplands, rolling woodlands of East Texas



WATER OAK (Quercus nigra L.)

COMMON NAME: Water oak
FAMILY: Beech (Fagaceae)
SPECIES: Quercus nigra L.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Warm

GROWTH CHARACTERISTICS:

tree (to 80 ft. tall), deciduous to half-evergreen

DISTINGUISHING CHARACTERISTICS:

leaves: simple (2-4 in. long and 1-2 in. wide), alternate, deciduous, spatula-shaped; margins entire or slightly toothed
flowers: small, inconspicuous, green (about 1/5 in. long)
fruit: acorn (to nearly 1 in. long), ripens in September or October
other: flower stems flexible

HISTORIC, FOOD, AND MEDICINAL USES:

used for commercial acorn production; used for cross ties, poles, fuel, and planted as a shade tree; subject to attack by mistletoe

FORAGE VALUE:

acorns used by white-tail deer

HABITAT:

moist bottom uplands, borders of streams



WAX-MYRTLE (Myrica cerifera L.)

COMMON NAME: Wax-myrtle
 FAMILY: Bayberry (Myricaceae)
 SPECIES: Myrica cerifera L.
 LIFE SPAN: Perennial
 ORIGIN: Native
 SEASON: Evergreen

GROWTH CHARACTERISTICS:

shrub or small tree, evergreen to late deciduous (to 20 ft. tall), forming a narrow rounded crown, usually forming large thickets, new growth and flowers in March-April, fruit matures September-October, reproduces by seed

DISTINGUISHING CHARACTERISTICS:

leaves: alternate, simple, sessile or short petioled (2-4 in. long), apex pointed to rounded, narrowed to the base, margins entire to toothed above the middle, surface shiny above and dull yellowish beneath; aromatic when crushed

flowers: dioecious catkins; male catkins in leaf junctions and along the branches; female catkins short along the branchlets

fruit: drupe, round, small; covered with a blue to white wax

other: dark red twigs; bark gray or gray-green, smooth

HISTORIC, FOOD, AND MEDICINAL USES:

cultivated since 1699 as an ornamental; candles can be made by boiling the waxy-blue berries; leaves were steeped for tea as a diuretic and a remedy for a sore back; root decoction was used for headache

FORAGE VALUE:

browsed by livestock and deer January-February; fruits a food source for ruffed grouse, bobwhite quail and wild turkey

HABITAT:

sandy, often acidic, or sterile soils



WILLOW BACCHARIS (Baccharis salicina Torr. & Gray)

COMMON NAME: Willow baccharis
FAMILY: Sunflower (Asteraceae)
SPECIES: Baccharis salicina Torr. & Gray
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Warm

GROWTH CHARACTERISTICS:

much branch shrub (3-8 ft. tall); reproduces by seed; dioecious; branches ascending, gummy

DISTINGUISHING CHARACTERISTICS:

leaves: simple, alternate, deciduous, nearly sessile, narrow (1-2 in. long and to 1/3 in. wide); margins without teeth or nearly so; apex blunt, base wedge-shaped; leaves dotted with resin

flowers: heads of flowers borne in late summer and fall; flowers white to cream colored (1/5-2/5 in. long)

fruit: an achene with a white pappus; the pappus of numerous fine bristles

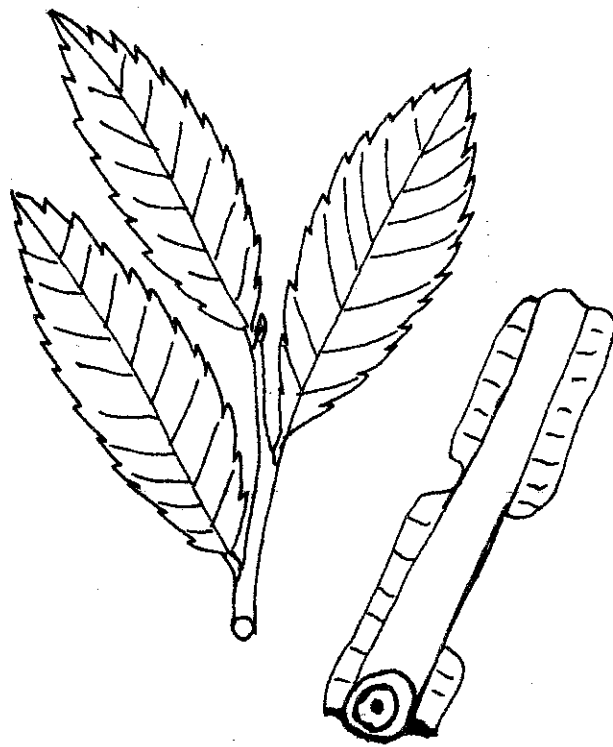
other: twigs slender, striped and angled, young ones green to tan, older ones light to dark brown

FORAGE VALUE:

poor for wildlife or cattle; poisonous

HABITAT:

an invader of disturbed open areas, usually those with abundant moisture



WINGED ELM (Ulmus alata Michx.)

COMMON NAME: Winged elm
FAMILY: Elm (Ulmaceae)
SPECIES: Ulmus alata Michx.
LIFE SPAN: Perennial
ORIGIN: Native
SEASON: Cool

GROWTH CHARACTERISTICS:

tree or shrub (to 30 ft. tall), deciduous, flowers and leaves appear in May, reproduces by seeds and sprouts

DISTINGUISHING CHARACTERISTICS:

leaves: deciduous tree (to 60 ft. tall), with slender branches and a rounded crown; flowers appear before leaves in the spring; fruit ripens March-June; reproduces by seed
flowers: inconspicuous, greenish
fruit: samara; a single seeded, winged fruit
other: branches with conspicuous corky wings; bark reddish-brown

HISTORIC, FOOD, AND MEDICINAL USES:

used for wood handles, vehicle parts; bark was used for baling twine; used as a shade tree

FORAGE VALUE:

resistant to grazing

HABITAT:

occurs along streams, woodland, and thickets of east Texas



YAUPON (Ilex vomitoria Ait.)

COMMON NAME: Yaupon
 FAMILY: Holly (Aquifoliaceae)
 SPECIES: Ilex vomitoria Ait.
 LIFE SPAN: Perennial
 ORIGIN: Native
 SEASON: Evergreen

GROWTH CHARACTERISTICS:

shrub or small tree (to 25 ft. tall), densely branched from a rounded crown, often forming dense thickets; flowers in April or May, reproduces from sprouts and seeds

DISTINGUISHING CHARACTERISTICS:

leaves: simple (1-2 in. long), alternate, petiole short, oblong to oval, broadest at middle, scalloped margins; dark green and lustrous above, paler beneath
 flowers: white to cream colored; unisexual; plants dioecious
 fruit: bright red drupe (1/4 in. long), 4 seeded; nutlets grooved
 other: stem light gray to white; bark light; twigs short, stout and rigid

HISTORIC, FOOD, AND MEDICINAL USES:

Indians made bitter tea called "black drink" from leaves, which contains caffeine; used for ceremonial reasons

FORAGE VALUE:

fair browse for livestock; red fruits provide food for wild turkey, quail, and song birds; white tailed deer browse young twigs and leaves

HABITAT:

streams and pond margins, sandy pinelands, shallow swamps, and wet woods

Selected References

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