

Elms - The Important Distinctions

	American Elm <i>Ulmus americana</i>	Slippery Elm <i>Ulmus rubra</i>
Profile	Tall and variable in outline, yet typically vase-shaped.	Medium height. Head broad and almost flat.
Bark	Ashy gray. Inner bark not containing sticky substance.	Dark brown tinged with red. Inner bark contains sticky substance.
Leaves	Somewhat rough on upper surface and smooth on the lower. Short pointed tip.	Very rough on upper surface; hairy and nearly as rough on lower. Long pointed tip.
Buds	Brown and smooth. The terminal bud is cocked at a 45° angle from the tip of the twig.	Dark reddish brown and covered with rusty hairs.

INTRODUCED ELMS

English Elm (*Ulmus procera*) a native of Europe, is more compact, stiffer, and has a less spreading form than our native species. At a distance, it resembles oak rather than elm. It has denser foliage and a longer leafing period than our native elms, and it is less susceptible to insect troubles. Leaves are similar to those of American elm but are smaller and more hairy below. The rough, coarse bark is divided by fissures into rather large plates on old trees. The almost black buds and twigs are densely hairy.

Chinese or lacebark **Elm** (*Ulmus parvifolia*) and the **Siberian Elm** (*Ulmus pumila*) have been occasionally planted along our highways. Siberian elm trees are brittle. Leaves are quite small, generally only singly serrate. Chinese elm fruits in the autumn, unlike most other species of elm.

Scotch Elm (*Ulmus glabra*) is a native of Europe occasionally planted as a street tree in central and southern Maine, often mistaken for Slippery Elm. Leaves are simple to bear-paw shaped, and sandpaperly to the touch on the upper surface.

Camperdown Elm (*Ulmus glabra* var. *camperdowni*) is a short, spreading tree with pendulous branchlets and a round-topped head, thus its name also as the umbrella elm.

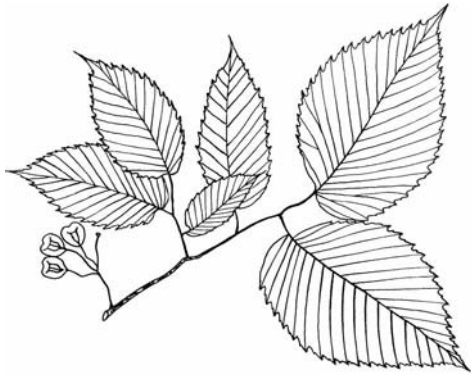
AMERICAN ELM

Ulmus americana L.

American elm is one of our largest and most graceful trees and often occurs throughout the state. Its numbers are severely decimated by the Dutch elm disease. It is found more often on rich bottom lands and moist soil along streams, but sometimes grows on higher ground.

The trunk often divides into numerous limbs which form a vase-shaped or spreading round-topped head with graceful, drooping branches. It attains a height of 60-70 feet and a diameter of 2-4 feet.

The **bark** on the trunk is separated into broad ridges by deep fissures and is an ashy-gray color on the surface. It shows alternate layers of chocolate brown and buff coloration beneath.



The **leaves** are alternate, 3-6 inches long, with coarsely doubly-toothed margins and uneven bases. The upper surface is dark green and somewhat rough.

The **flowers** appear in April before the leaves.

The **fruit** consists of a small, winged seed which ripens about the last of May before the leaves have fully developed. It has a wide, open notch at the apex, and a hairy margin.



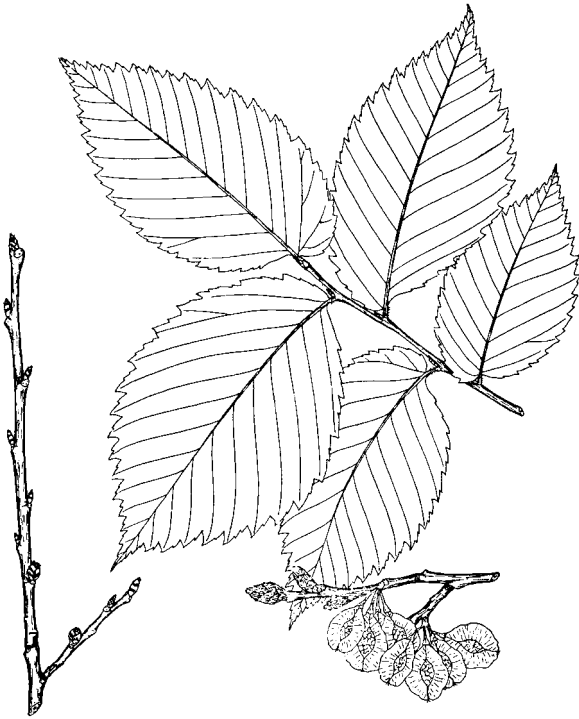
The **wood** is spiral and coarse-grained, hard, heavy, strong, tough and hard to split. It is used for flooring, railroad ties, hoops, farm lumber and pulp.

SLIPPERY ELM

Ulmus rubra Muhl.

Slippery or red elm is extremely rare in the state. The 1995 *Revised Checklist of Vascular Plants of Maine* by Campbell et al. shows this species occurring naturally in scattered locations in York and Franklin Counties. It grows best on low, rich soil though it sometimes occurs on higher ground. It grows up to 50 feet in height and 2 feet in diameter.

The **bark** is thick, dark brown tinged with red, divided by shallow fissures into flat ridges and covered with flat



scales. Inner bark is sticky when chewed.

The **leaves** are simple, alternate, 4-6 inches long, sharply toothed, dark green and very rough on the upper surface and hairy on the under surface. The **flowers** appear before the leaves in the middle of April. The **fruit** is small, flattened and winged without hairs on the margin. It ripens in late spring. The **winter buds** are obtuse, dark brown in color and covered with rusty hairs.

The **wood** is heavy, strong and durable. The inner bark is gathered for medicinal purposes.