



Maine Department of Conservation
Natural Areas Program

Quercus bicolor Willd.

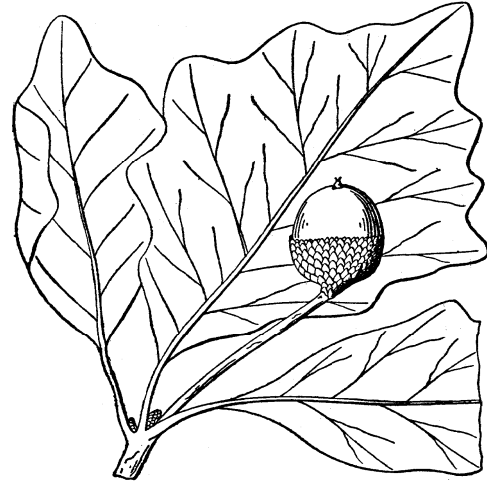
Swamp White Oak

Habitat: Bottomlands, stream margins, and swamps.
[Forested wetland]

Range: Southern Maine and southern Quebec to southern Minnesota and Nebraska, south to southern New England, Long Island, Delaware, Maryland, northern West Virginia, upland to Georgia and Kentucky, Arkansas and Oklahoma.

Phenology: Acorns mature in the first year, ripe in September - October.

Family: Fagaceae



Aids to Identification: *Quercus bicolor* is a member of the white oak subgenus, a diverse group of species that have leaves with rounded lobes (as opposed to bristle-tipped lobes in the red oak

Illustration from Britton & Brown's Illustrated Flora of the Northern United States and Canada, 2nd ed.

group) and acorns that mature in one year. Swamp white oak can be distinguished from other white oak species in Maine by the following combination of characters: ovate leaves, widest above the middle, with 6-10 pairs of low but fairly even lobes (like rounded teeth); hairless buds; and acorns on stalks that are more than 3 cm long. It can be difficult to distinguish from bur oak (*Q. macrocarpa*), which occurs in similar habitats, unless one has buds and/or acorns. *Q. macrocarpa* usually has a deep sinus near the middle of the leaf, but leaf shape and lobing are very variable, even among leaves on the same tree. The larger branches of *Q. macrocarpa* will have corky ridges along them, and are absent in *Q. bicolor*. Common white oak (*Q. alba*) is an upland species with leaves that have longer lobes than those of *Q. bicolor*. Chestnut oak (*Q. montana*) is also an upland species, found in Maine only in dryish rocky woods on and around Mt. Agamenticus, and has leaves which are much narrower in outline though similarly lobed. Hybridization between *Q. bicolor*, *Q. alba*, and *Q. macrocarpa* has been reported. Hybrids would be very difficult to identify. When in doubt, press a small branch with a few leaves and either buds or acorns and send to the University of Maine herbarium.

Ecological characteristics: Swamp white oak is a tree of hardwood floodplain forests, basin swamps, or vernal pools, and grows with ash (*Fraxinus* spp.), silver maple or red maple (*Acer saccharinum* and *A. rubrum*, respectively), and occasionally with *Q. macrocarpa*.

Synonyms:

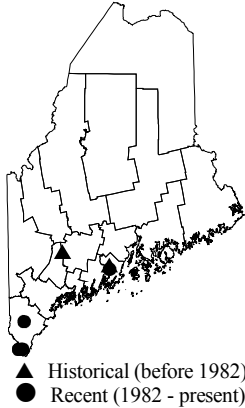
Rarity of *Quercus bicolor*

State Rank:	S1	Critically imperiled in Maine because of extreme rarity or vulnerability to extirpation.
New England Rank:	None	
Global Rank:	G5	Demonstrably widespread, abundant, and secure globally.

Status of *Quercus bicolor*

Federal Status:	None	No Federal Status.
State Status:	Threatened	Rare and, with further decline, could become endangered; or federally listed as Threatened. Listing criteria met: Few individuals, At edge of range, Vulnerable to human activity

Known Distribution in Maine:



This rare plant has been documented from a total of 6 town(s) in the following county(ies): Kennebec, Knox, York.

Dates of documented observations are: 1930, 1975, 1988 (2), 1989, 1996, 1997, 2002

Reason(s) for rarity:

At northern limit of range; not rare southward.

Conservation considerations:

Populations are small and could be eliminated by logging.

The information in this fact sheet was downloaded from the Natural Areas Program's Biological and Conservation Database on 14 MAY 2004. We are grateful to our Botanical Advisory Group for additional information on particular species, and in particular, to Arthur Haines for his assistance with identifying characteristics and taxonomic questions. Nomenclature follows Haines and Vining's *Flora of Maine* (V.F. Thomas Press, 1998); where older works refer to a plant by another name, it is given under "Synonyms". The Natural Areas Program, within the Department of Conservation, maintains the most comprehensive source of information on Maine's rare or endangered plants and rare or exemplary natural communities, and is a member of the Association for Biodiversity Information.

If you know of locations for this plant or would like more information on this species, please contact the Natural Areas Program
State House Station 93, Augusta, Maine 04333; telephone (207) 287-8044.

