



Maine Department of Conservation
Natural Areas Program

Carya cordiformis (Wangenh.) K. Koch

Bitternut Hickory

- Habitat:** Wet to dry woods, streambanks, and swamps. [Hardwood to mixed forest (forest, upland)]
- Range:** Southern Quebec to Minnesota, south to Florida and Texas.
- Phenology:** Flowers appear in spring as leaves open.
- Family:** Juglandaceae

Aids to Identification: Large trees with scaly (but not shaggy) bark. Winter buds bright orange-yellow. Leaves alternate, pinnately compound with 5 to 11 (commonly 7 or 9) leaflets, the terminal leaflets largest. Fruit rounded, with slightly winged sutures on the husk and splitting to near the middle of the fruit.

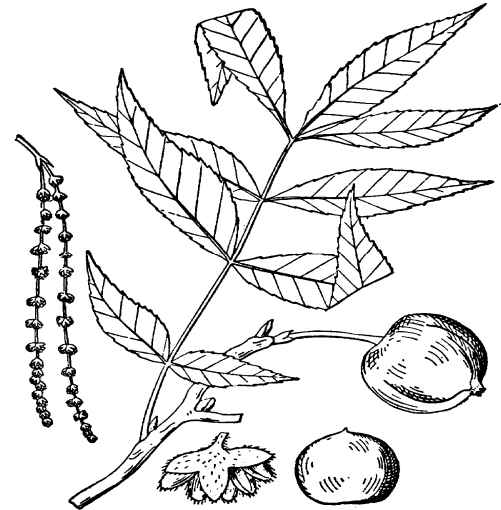


Illustration from Britton & Brown's Illustrated Flora of the Northern United States and Canada, 2nd ed.

Ecological characteristics: Bitternut hickory is a component of the White Oak/Red Oak/Hickory Forest Cover Type on well-drained upland soils, and an associate of the White Oak Forest Cover Type on upland loamy soils in the North Central Forest Region of the United States. Cutting of oak in the former type has increased the proportion of hickory.

Synonyms: Former names include *Hicoria cordiformis* (Wangenh.) Britt., *Juglans cordiformis* Wangenh.

Rarity of *Carya cordiformis*

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|--------------------------|------|--|
| 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 *Carya cordiformis*

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|------------------------|------------|---|
| Federal Status: | None | No Federal Status. |
| State Status: | Endangered | Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered. Listing criteria met: Few individuals, At edge of range, Vulnerable to human activity |



- ▲ Historical (before 1982)
● Recent (1982 - present)

Known Distribution in Maine:

This rare plant has been documented from a total of 2 town(s) in the following county(ies): York.

Dates of documented observations are: 1986, 1995 (2), 1999

Reason(s) for rarity:

Bitternut hickory is at the northern limit of its range in Maine.

Conservation considerations:

This plant is restricted statewide to southern Maine, and known populations are vulnerable to conversion of their habitat to residential or commercial use. Populations are small and could be eliminated by logging.

Plant rarity and status is based on 2008 data and the rest of the information in this fact sheet was downloaded from the Natural Areas Program's Biological and Conservation Database on 12 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.

