

# Shellbark hickory (*Carya laciniosa*)

## Pennsylvania Plant Species of Concern

State Rank: S3 (vulnerable) Global Rank: G5 (secure)

### What it looks like:

Shellbark hickory is a tall, long-lived hardwood. Its bark, from which it gets its name, is light gray and peels away in long plates or strips, and its twigs are thick with large buds.

**Leaves** are pinnately compound, with oblong, finely toothed leaflets tapering to points.

**Flowers** vary widely from male to female, though every tree bears flowers of both sexes. Male flowers grow fuzzy-looking catkins up to 20 centimeters long, which are borne in clusters of three. Female flowers grow in clusters of two to five at the branch tips.

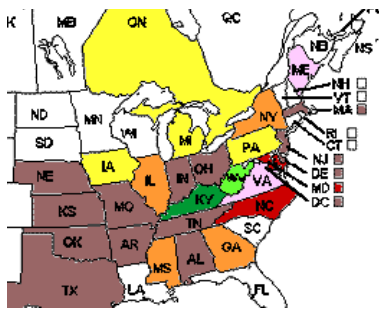
**Fruit** is in the form of oval nuts sheathed in a finely-haired husk.



Robert H. Mohlenbrock, USDA-NRCS PLANTS Database. (USDA SCS. 1989. *Midwest wetland flora: Field office illustrated guide to plant species*. Midwest National Technical Center, Lincoln, NE)

### North American State/Province Conservation Status

Map by NatureServe



#### State/Province Status Ranks

Blue	SX – presumed extirpated
Red	SH – possibly extirpated
Orange	S1 – critically imperiled
Yellow	S2 – imperiled
Green	S3 – vulnerable
Light Green	S4 – apparently secure
Dark Green	S5 – secure
Brown	Not ranked/under review
Pink	exotic

### Where it is found:

Shellbark hickory grows in wet, poorly-drained bottomland soils and flood plains; it is associated with old-growth forest stands. Its natural range is from New York and southern Ontario south to Texas and Georgia; it is considered exotic in Maine and Virginia.

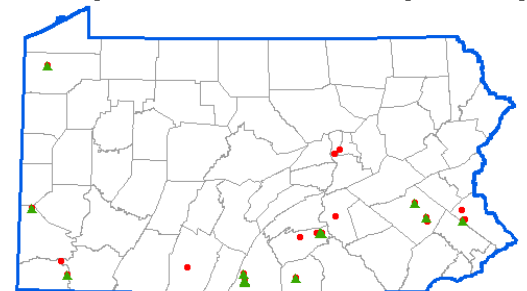
### Why it is rare:

Shellbark hickory is slow-growing (a sapling will not produce fruit until it is 40 years old) and its heavy seeds are not easily dispersed far from the parent tree. It's hard, heavy, yet flexible wood is harvested for use in tool handles and furniture. Because it grows slowly, it is rarely planted for shade.

### Conservation considerations:

Shellbark hickory is of potentially great ecological importance. Its nuts provide forage for a wide variety of species ranging from ducks and quail to deer, foxes, raccoons, and small rodents. Shellbark hickory was also one of three tree species strongly preferred for foraging by insectivorous birds in a study of the birds' habitat usage (Gabbe et al. 2002). Because this species has a potentially very slow natural dispersal rate, artificial plantings may be necessary to re-establish it in its former habitat. Seedling may be grown indoors, then transplanted to desired locations; or seeds may be planted directly if provided with shelter against browsing. Grafting and budding are also effective.

### Pennsylvania Distribution by County



▲ current data ● records > 30 years old (1975)  
Pennsylvania Natural Heritage Program data 2005

### References

- Boerner, Ralph E.J. and Do-Soon Cho. 1987. "Structure and composition of Goll Woods, an old-growth forest remnant in northwestern Ohio." *Bulletin of the Torrey Botanical Club*, 114(2): 173-9.
- Gabbe, Aaron P., Scott K. Robinson, and Jeffrey D. Brawn. 2002. "Tree-Species Preferences of Foraging Insectivorous Birds: Implications for Floodplain Forest Restoration." *Conservation Biology*, 16(2): 462-70.
- Gleason, Henry A. and Arthur Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*. Second ed. New York: The New York Botanical Garden. 78-9.
- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: September 4, 2007).
- University of Tennessee Herbarium. 2002. TENN Vascular Plant Herbarium [web application]. Department of Botany, University of Tennessee, Knoxville, Tennessee. Available at <http://tenn.bio.utk.edu>. Accessed 1 March 2005.
- USDA-NRCS. 2005. The PLANTS Database [web application], National Plant Data Center, Baton Rouge, LA 70874-4490 USA. Available at <http://plants.usda.gov>. Accessed 1 March 2005.

