

Technical Report



Wetland Flora

No. 97-1 / January 1997

Gene Silberhorn

River Birch Red Birch

Betula nigra L.

Growth Habit and Diagnostic Characteristics

River birch is a tree of medium height (up to 50 feet), with characteristic coppery-brown, shedding parchment-like bark, that exposes yellowish-orange inner bark. Leaves are alternate, nearly triangular shaped, with double serrated margins, except at the base which has smooth margins. Petioles and principal veins are pubescent or hairy, especially when young. Fruiting catkins are distinct (illustration) in the spring, but exfoliate as the season progresses. Another characteristic of this species is brown or copper colored twigs. *Betula nigra* is an attractive small tree and is often planted as an ornamental. River birch is closely related to paper birch (*Betula papyrifera*) which is admired for its white, peeling bark. The latter birch is a northern or mountain species and grows naturally only in the higher Appalachians in the south. As the common name implies, river birch typically grows along streams and in riparian forests.

Distribution

River birch ranges throughout much of eastern United States.

Habitat

B. nigra is commonly found along streams and rivers and is often associated with other tree species such as sycamore, *Platanus occidentalis* (Wetland Flora No.94-3 / January 1994); red maple, *Acer rubrum*

(Wetland Flora No. 91-7 / July 1991); green ash, *Fraxinus pennsylvanica* (Wetland Flora No. 94-4 / May 1994); American elm, *Ulmus americana* (94-8 / September 1994) and black willow, *Salix nigra* (No. 96-3 / March 1996). River birch is considered to be a rather short-lived, pioneer species, however, very large trees are occasionally found in undisturbed riparian forests.

Ecological Value / Benefits

Holistically, as a frequent component of riparian forests, *B. nigra* accrues, in part, the general ecological values of this habitat. In addition to wildlife utilization and anadromous fish spawning and nursery areas, these wetlands function as natural filters or buffers of high nutrient loads, sediment runoff, and pesticide and herbicide residues that originate from croplands and urban development.

Specifically, seeds of river birch are food for several species of song birds, and the new bark is consumed by beavers and opossums.

Wetland Indicator Status

According to the *National List of Plant Species that Occur in Wetlands: Virginia 1988*, *Betula nigra* is classified as a **facultative wetland plant (FACW)**. FACW plants "usually occur in wetlands (estimated probability 67-99%)."

Betula nigra L.



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