UF IFAS Extension UNIVERSITY of FLORIDA

ENH255

Betula papyrifera: Paper Birch[1]

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Introduction

A native to northern areas that is grown for its beautiful white bark. An additional ornamental trait is the yellow fall leaf color. The tree is best adapted to wet and moist sites—watch out for pests if grown in an unsuitable site. The tree will grow to 50 feet or more and spread about half that amount. Paper birch has excellent cold tolerance and will grow in USDA hardiness zone 2. It is rarely successful in zones warmer than USDA hardiness zone six. In landscapes it may be grown as a single-stemmed tree or in a multi-stemmed clump.

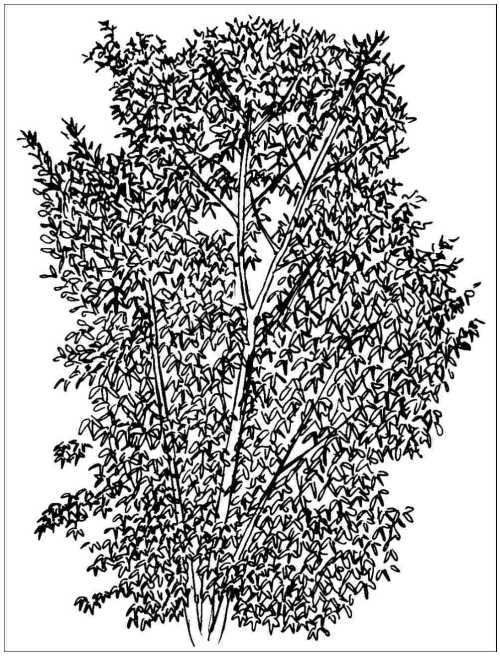


Figure 1. Young *Betula papyrifera*: Paper Birch

General Information

Scientific name: *Betula papyrifera*
Pronunciation: BET-yoo-luh pap-ih-RIFF-er-uh
Common name(s): Paper birch, canoe birch
Family: *Betulaceae*
USDA hardiness zones: 3A through 6B (Fig. 2)
Origin: native to North America
Invasive potential: weedy native
Uses: specimen
Availability: somewhat available, may have to go out of the region to find the tree

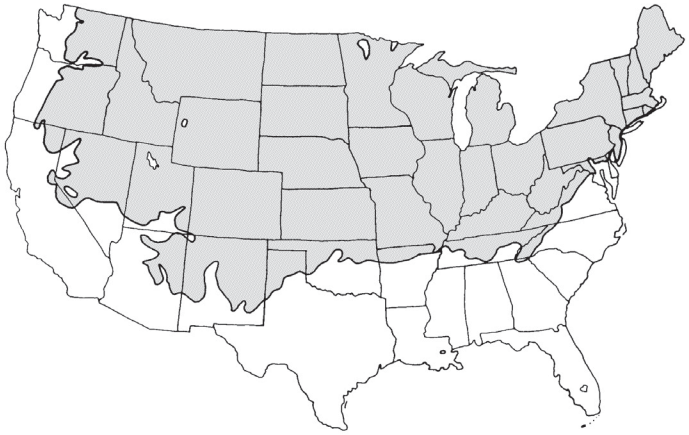


Figure 2. Range

Description

Height: 45 to 60 feet
Spread: 20 to 35 feet
Crown uniformity: irregular

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Crown shape: oval
Crown density: moderate
Growth rate: moderate
Texture: fine

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: double serrate
Leaf shape: ovate
Leaf venation: pinnate
Leaf type and persistence: deciduous
Leaf blade length: 2 to 4 inches
Leaf color: green
Fall color: yellow
Fall characteristic: showy

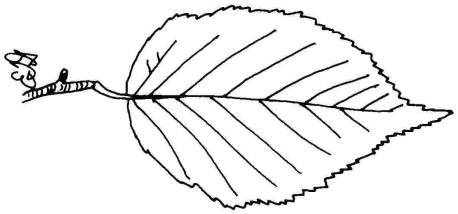


Figure 3. Foliage

Flower

Flower color: brown, green
Flower characteristics: showy

Fruit

Fruit shape: elongated
Fruit length: 1 to 3 inches
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: attracts birds; not showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches don't droop; very showy; typically one trunk; thorns
Pruning requirement: needed for strong structure
Breakage: resistant
Current year twig color: reddish, brown
Current year twig thickness: thin
Wood specific gravity: 0.55

Culture

Light requirement: full sun, partial sun or partial shade
Soil tolerances: clay; sand; loam; acidic; slightly alkaline; occasionally wet; well-drained
Drought tolerance: moderate
Aerosol salt tolerance: moderate

Other

Roots: not a problem
Winter interest: yes
Outstanding tree: no
Ozone sensitivity: unknown
Verticillium wilt susceptibility: resistant
Pest resistance: sensitive to pests/diseases

Use and Management

Pests

A light aphid infestation may not be serious, but heavy infestations cause distorted and stunted growth and produce large amounts of honeydew. The honeydew serves as a substrate for sooty mold.

Birch skeletonizer feeding causes leaf browning. The skeletonizer larva is yellowish-green and one quarter-inch-long.

Birch leaf miner is a common insect pest of birch. A small white worm eats out the middle of the leaf, which turns brown. Severe attacks of birch leaf miner predispose trees to bronze birch borer infestation. The insect shows up in mid-May but timing can vary from one year to the next and will vary according to your location in the country. The first of two generations per year is the most damaging.

The most serious pest of landscape birches is bronze birch borer. Stressed trees are most susceptible to borer attacks. The insect bores in the sapwood, beginning in the top third of the tree, causing death of the tree crown. The tunnels are slightly raised and faintly rust colored. Emergence holes in the trunk are shaped like capital Ds. Keep the trees healthy by controlling other insects, fertilizing, and watering as needed. Chemical control is applied to the trunk and main branches. Timing of the first spray will vary from year to year depending on weather conditions. A commercial sprayer may be needed to apply the spray adequately.

Diseases

Several fungi cause canker diseases on birch. These diseases infect and kill sapwood, causing sunken areas on the trunk and larger branches. There is no chemical control for canker diseases. Preventive measures include keeping the tree healthy and avoiding wounding. Regular fertilization will keep birches vigorous and more resistant to cankers. Water in dry weather to prevent water stress.

Dieback is characterized by a slow death of the branches. The tree crown accumulates dead branches. Injury caused by bronze birch borer is similar but far more prevalent. Prevent dieback by maintaining tree vigor with water and fertilizer. When the disease does occur, prune out dead branches and increase tree vigor.

Several fungi also cause leaf spots that, when severe, can cause defoliation.