

Metasequoia glyptostroboides: Dawn Redwood¹

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Introduction

Dawn Redwood grows in a perfect pyramid 70 to 90 feet tall and was known from fossils before living plants were discovered in China. It is similar in appearance to Bald Cypress. Although it looks like an evergreen, the needles are deciduous. The orange-red to brown trunk base is the most outstanding part of the tree. It tapers and thickens quickly with 8 to 12 large buttress-like root flares extending several feet up the tree in a manner unlike any other tree except some tropical trees. As with any other tree, butt flare (increased caliper at the base of the trunk) can be reduced somewhat by removing the lower branches at an early age. The small, upright-spreading branches are well-attached to the typically straight trunk and make for excellent climbing. The tree requires little if any pruning to maintain the pyramidal form. Lightning protection is recommended for older trees since they usually grow taller than most others.

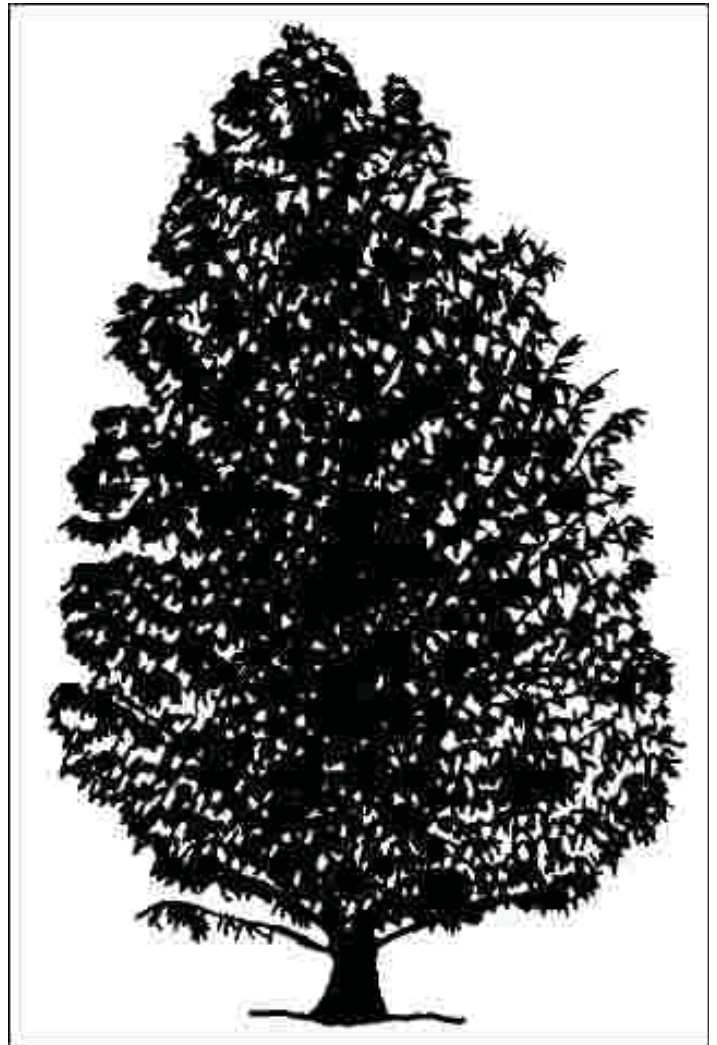


Figure 1. Middle-aged *Metasequoia glyptostroboides*: Dawn Redwood

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General Information

Scientific name: *Metasequoia glyptostroboides*

Pronunciation: met-uh-see-KWOY-uh

glip-toe-stroe-BOY-deez

Common name(s): Dawn Redwood

Family: *Taxodiaceae*

USDA hardiness zones: 5A through 8B (Fig. 2)

Origin: not native to North America

Invasive potential: little invasive potential

Uses: screen; specimen; street without sidewalk; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn 4-6 feet wide; tree lawn > 6 ft wide; highway median

Availability: somewhat available, may have to go out of the region to find the tree

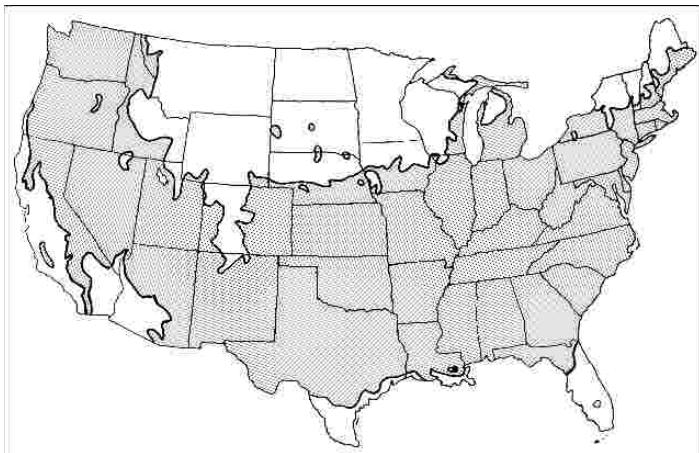


Figure 2. Range

Description

Height: 70 to 90 feet

Spread: 15 to 25 feet

Crown uniformity: symmetrical

Crown shape: pyramidal

Crown density: open

Growth rate: fast

Texture: fine

Foliage

Leaf arrangement: opposite/subopposite (Fig. 3)

Leaf type: simple

Leaf margin: entire

Leaf shape: linear

Leaf venation: none, or difficult to see

Leaf type and persistence: deciduous

Leaf blade length: less than 2 inches

Leaf color: green

Fall color: yellow, orange

Fall characteristic: showy

Flower

Flower color: unknown

Flower characteristics: not showy

Fruit

Fruit shape: round, elongated

Fruit length: .5 to 1 inch

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; not showy; fruit/leaves not a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; very showy; typically one trunk; thorns

Pruning requirement: little required

Breakage: resistant

Current year twig color: green, brown

Current year twig thickness: thin

Wood specific gravity: unknown

Culture

Light requirement: full sun

Soil tolerances: clay; sand; loam; acidic; extended flooding; well-drained

Drought tolerance: moderate

Aerosol salt tolerance: low

Other

Roots: not a problem

Winter interest: yes

Outstanding tree: yes



Figure 3. Foliage

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: resistant

Pest resistance: resistant to pests/diseases

Use and Management

The tree has been used primarily as a specimen, but there are reports of it being very tolerant of air pollution and it has done well as a street tree with lower branches removed. Lower branches should be left on the tree for most other uses to enjoy the graceful form and delightful foliage. Do not plant in soil with a high pH.

The tree grows rapidly but late season growth may be injured by early frosts. The preferred soil is moist and

moderately fertile, but *Metasequoia* does not appear to be impacted by drought, having survived in urban landscapes during recent summer droughts. It will also tolerate wet soil. It appears to be adapted to clay soil and grows best when located on continually moist sites with slightly acidic soil.

Propagation is from seeds or cuttings taken in late summer.

The cultivar 'National' grows to 85 feet tall.

Pests and Diseases

Relatively free of pests, except for a canker which has been reported recently.