Arborvitae and Western Red Cedar

Thuja occidentalis & Thuja plicata

The name Arborvitae has come to refer informally to two species of evergreen trees and shrubs that possess similar qualities. American Arborvitae Thuja occidentalis (Eastern Arborvitae) and Western Red Cedar Thuja plicata (Western Arborvitae) are ideal to plant alone as specimens, as hedges, as privacy screens, or even in containers. Each species has unique growth qualities, and there are many cultivars available.

When deciding on a variety - or cultivar - of Arborvitae or Western Red Cedar, look at these attributes to match one with your landscape plans and home environment: daily light needs, mature height and width, light/dark colored foliage, and rate of growth.

LIGHT

Full Sun to Light Shade Varieties

American Arborvitae Thuja occidentalis

The species is native to eastern North America. The foliage grows dense and tight. Trusted varieties include:

Emerald Green ('Smaragd') Degroot's Spire American Pillar Dark American ('Nigra') Hetz Wintergreen Golden Globe

Full sun to shade varieties

Western Red Cedar Thuja plicata

The species is native to the Pacific Northwest. The foliage grows more loose and open than its eastern cousins. Varieties include:.

Green Giant	Steeplechase
Whipcord	Forever Goldy

In whatever sunlight conditions Arborvitae may be, they need adequate, regular water. This is critically true in full sun.

PLANTING

Follow our <u>Planting Guide</u> to transplant your Arborvitae successfully. Arborvitae can be planted spring, summer, or fall provided the newly planted tree can be kept appropriately watered during the establishment period. As always, proper site selection is key to successful growth.

Soil Requirements

Check your soil's drainage before planting an Arborvitae - healthy soil should both absorb moisture and drain well. Amend heavy, poor-draining clay soils with organic matter and gypsum. The Arborvitae root system spreads out broadly and just beneath the soil surface. It is very important to encourage this root spread, and we advise digging a hole **at least twice as wide** as the root ball to encourage this root spread.

CARE

The care you provide in the first two years for any newly planted tree or shrub is critical to its long-term vitality. For Arborvitae especially, watering will be a priority. Water deeply during the summer if rainfall is less than 1 inch per week. During long dry spells, set a garden hose to trickle under the tree for 30-45 minutes of gentle, deep soaking throughout the root zone. Refer to the page on **establishment watering** in our <u>Planting Guide -Trees</u> & <u>Shrubs</u> guide for expert watering principles.

Once established Arborvitae are low maintenance. In spring, spread one inch of compost. Cover that with a 2-inch mulch layer to retain moisture and control weeds. In fall compost and mulch again.

Fertilizing

Early spring before new growth has fully emerged is the time to fertilize. Apply all-purpose slow-release fertilizer annually in spring when composting and mulching. <u>Espoma Plant-Tone</u> is an excellent

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choice for Arborvitae. And fall fertilizing helps your young trees to establish healthy, robust root systems, fertilize at half the amount in fall as you would do in spring.

Pruning

Arborvitae mature naturally into graceful pyramids, columns, or globes, consistent with each cultivar's inherent traits. Outside of removing damaged branches, pruning is typically unnecessary. However, if it is desired to shape or manage the size of an Arborvitae, shear the outermost growth in late spring after the flush of new growth. Start this method before the tree or hedge becomes too tall or mature.

Common Problems + Solutions

Hot, dry weather may induce heat stress in plants not receiving adequate water. Spider mites may infest heat-stressed plants. Reduce heat stress with regular, deep watering. This will boost the plant's vigor, aiding its natural defenses against pests. If necessary, bring spider mite infestations under control with <u>All Seasons</u> <u>Horticultural Oil or Eight Insect Control</u>.

Bagworm moths can infest Arborvitae, though northeast winter frosts typically interrupt the insect's life cycle. Although it's not a typically destructive pest, if left untreated, bagworm may cause unsightly defoliation and weakening of the tree. Hand removal adequately cleans most trees. Look to an organic pesticide like <u>Neem Oil</u> for large infestations.

Deer foraging late spring through fall may feed on Arborvitae. A moderate amount of deer damage does not lead to permanent harm. However, in residential areas with large deer populations, the Northeast native *Thuja occidentalis* can quickly become a food of choice and suffer significant damage.

If deer may be a problem in your area consider planting Western Red Cedar. *Thuja plicata* cultivars are not favored by deer. Western Red Cedar is relatively deer resistant when compared to pine, fir, and most other common conifers as well.

Why is my arborvitae turning brown inside?

Answer: Inner foliage dries out and browns during seasonal needle drop. It is normal and healthy for evergreens - Pine, Spruce, Fir, Juniper, Arborvitae, etc. - to shed their oldest, innermost needles in fall. These inner needles gradually turn yellow or brown and drop to the ground. A naturally rejuvenating process, seasonal needle drop in evergreens is akin to the seasonal leaf drop of deciduous trees every fall. In spring fresh growth will fill in sparse-looking gaps that remain after winter's needle drop.

About fall watering needs

Arborvitae and all evergreens, such as Rhododendrons, Yews, Juniper, etc., need regular water during autumn months until the ground freezes. Good hydration prepares the plant for winter's often harsh conditions, especially dry, freezing winds. Ensure adequate water in the fall to reduce winter stress and damage that only becomes visible in spring. It is crucial to water landscape plants whenever there is limited rainfall from September through early December.

Varieties

Need help choosing the right tree for your space and goals? Our charts on the next page offer brief introductions to the main characteristics of some popular Arborvitae cultivars carried at Mahoney's Garden Centers. Keep in mind that many factors, including light, soil, watering, fertilization, and temperature extremes affect any individual plant's health and performance over time.

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American Arborvitae Thuja occidentalis (Eastern Arborvitae) Not deer-resistant

Best in full to mostly sun, light shade

Variety	Foliage	Shape	НхW	Growth rate
Emerald Green 'Smaragd'	Bright green, feathery	Narrow column	18' x 4'	Fast
Techny	Dark green	Broad based pyramid	15' x 8'	Fast
Dark American 'Nigra'	Deep green	Narrow pyramid	20' x 6'	Fast
Hetz Wintergreen	Deep green	Columnar pyramid	25' x 6'	Fast
American Pillar	Dark green	Narrow column	25' x 4'	Very Fast
Yellow Ribbon	Golden yellow	Narrow pyramid	25' x 5'	Fast
Degroot's Spire	Deep green, curly	Narrow column	12' x 3'	Moderate
North Pole	Dark green	Narrow column	12' x 4'	Moderate
Mr. Bowling Ball 'Bobazam'	Fine silver green	Dense globe	6' x 6'	Moderate
Woodward Globe	Flattened, wispy green sprays	Globe	4' x 5'	Slow
Golden Globe	Bright golden yellow	Dense globe	4' x 4'	Moderate
Hetz Midget	Rich green	Dense globe	3' x 3'	Slow
Little Giant	Bright forest green	Compact globe	3' x 3'	Moderate
Fire Chief 'Congabe'	Fine, bright gold; deep red in fall	Dense globe	3' x 3'	Slow

Western Red Cedar *Thuja plicata* (Western Arborvitae)

Good deer-resistance

Best in full sun through medium shade

Variety	Foliage	Shape	H x W	Growth rate
Green Giant	Glossy, sturdy dark green	Very large pyramid	35' x 10'	Very Fast
Steeplechase	Soft, dense dark green	Tall pyramid	20' x 8'	Fast
Forever Goldy	Golden yellow, feathery	Narrow pyramid	12' x 3'	Moderate
Whipcord	Dark green thread-like, pendulous	Mounding	4' x 4'	Slow

Information is representative of mature plants. Actual height, width, and growth rates will be relative to soil conditions, sunlight, and water.