The Benefits of Evergreen Conifers

Evergreen conifer (cone bearing) trees are a common presence in northwest landscapes. They provide year-round structure and beauty in the garden but that's not all!

- Because evergreen conifers continue to photosynthesize and exchange gasses during the winter they **modify air temperature** around them, creating slightly warmer microclimates. This benefits the plants that grow around them and can keep frost off your home and vehicle.
- They provide **year-round shelter for garden wildlife**, providing nesting and roosting sites for birds and mammals in their limbs. Even when in decline tree trunks can provide homes for birds and other animals who nest in cavities in the wood.
- They also provide **food for wildlife**, harboring insects which birds feast on or bear fruit, nuts or other seed bearing structures that animals eat.
- When well cared for they provide **shelter from cold winds**, calming the environment in your garden and keeping wind away from your house.
- In the summer they provide **cooling shade**, and cool your home when their shadows are cast across the rooftop.
- During heavy rain, at any time of year, they break up rain drops as they fall and absorb water, this **minimizes erosion and overflow into storm drains**. Preventing both helps to keep our local creeks, rivers, lakes and Puget Sound healthy and free of pollutants. Though land based, trees are intricately linked to the health and wellbeing of the wildlife in the waters of Puget Sound.

"When we try to pick out anything by itself, we find it hitched to everything else in the universe." John Muir

Evergreen conifers have waxy needle or scale like leaves and produce cones that bear their seeds. Conifers can grow to hundreds of feet in height and dominate our local forests. Many of them, though not all, are native to the northwest.

Common Evergreen Conifers

-  **Deodar Cedar (*Cedrus deodara*)** is a tall tree with spicy-resinous scented wood, thickly ridged or square-cracked bark, and broad, level branches. Leaves vary from bright grass-green to dark green to strongly glaucous pale blue-green, depending on the thickness of the white wax layer on the leaves, and some variegated varieties exist as well. The needles are bundled together on the stem, making a star like arrangement on the limbs. Deodar cedars grow in well-drained yet fertile soil in sunny sites. Native to the Western Himalayan mountains, it grows to 150 feet in its native environment and at least 50 feet tall by 30 feet wide in urban settings.

-  **Douglas Fir (*Pseudotsuga menziesii*)** is a tall to very tall tree, native to the Pacific Northwest and commonly seen in our area. The dark green to blue-green needles are soft and flattened on the stem and attached singly. It has roughly furrowed brown bark which resists fire and provides caches for birds to stash seeds. The cone is distinctive, with little "rabbit ear" bracts. An important food for chickadees and finches and native Douglas squirrels. This is the dominant tree of the Cascade Mountain range, preferring dry southern slopes and is often growing in community with an undergrowth of sword fern, vine maple, filbert, salal and other common

northwest shrubs and groundcovers. The tallest known Douglas Fir is growing in Coos Bay, Oregon and tops out at 327 feet and three inches tall!

-  **Grand Fir, (*Abies grandis*),** is a large tree with foliage that wields an attractive citrus-like scent. The needles are arranged singly and flat along the stem, creating a very horizontal structure to the tree. The bark is gray-brown with white mottling, scaly when older. It is a true fir, related to Noble Fir, Alpine Fir and White Fir. A fast grower that can top out at more than 200 feet tall. Grand fir is not restricted by soil types and can even tolerate temperatures to below 40 degrees Celsius! The flat needles are also unpalatable to deer, elk and other big game animals.

-  **Incense Cedar (*Calocedrus decurrens*)** is a popular, medium-sized evergreen used for wreaths for their perfumed smell and drooping boughs. The cones are reddish- or yellowish-brown and ripen in the early autumn, remaining on the tree until spring. Bark is bright cinnamon-red. The furrowed bark provides good habitat for brown creepers and little brown bats. Incense cedar prefers moist, well-drained, fertile soil and grows best in full sun or part shade. Incense cedar can grow to over 100 feet tall.

-  **Port Orford Cedar (*Chamaecyparis lawsoniana*)** is a tall tree from Oregon and northern California with many cultivars suitable for smaller landscapes. Their feathery foliage lays in flat sprays, usually somewhat glaucous or blue-green in color. This tree thrives best in well-drained but moist soils. The Port Orford Cedar is very fragrant and can grow to 200 feet tall.

-  **Shore Pine (*Pinus contorta contorta*)**, known for its twisted needles and contorted growth habit along windy coasts, this medium- to large-sized tree can tolerate dry summer conditions and nutrient-deficient sites like sea cliffs. It has a symbiotic relationship with ectomycorrhizae attached to its roots that helps it produce nitrogen in poor soils. This fast-growing pine is very closely related to Lodgepole Pine. Shore Pine is native to the northwest and very common in dryer habitat like the San Juan Islands. Leaves are needles in bundles of three attached to the stems. Grows to heights of 50 feet with its unique contorted form.

-  **Western Red Cedar (*Thuja plicata*)** is the most well-known cedar native to the Pacific Northwest and grows to be a large shade-tolerant tree that thrives in wet garden locations. The foliage sprays are green above and marked on the undersides with whitish stomatal bands. Western red cedar is strongly aromatic—the leaves more like spiced pineapple and the bark more deeply spicy—and its soft, red bark is decay and insect resistant. Hummingbirds are attracted to the soft resinous new buds in the spring. Growing to 200 feet tall and with a ten foot trunk diameter in the wild, this is one of the most long lived trees in the Pacific Northwest, up to 1,000 years.

