

Norway spruce - great height and longest cones of any spruce



A close look at some cones. The **Norway spruce** (*Picea abies*), a large pyramid shaped tree, is one of the easiest trees to identify when mature. Branches off the main stem 'swoop' upward while branchlets growing from the main branches are long and 'droop' down. But take a close look and you can find two different types of cones on the same tree. ➡ Female cones (strobili) are 4 – 7 inches in length and are the longest cones of any spruce. They are bluntly shaped, have triangular scales and hang from the ends of twigs. ⬅ Male (pollen-producing) cones are ½ - 1 inch long, oblong-ovoid shaped and are found in the axils of needles. They produce pollen for a short time in the spring then, having fertilized female seeds, their job is done, and they die back. The Rockefeller Center holiday tree is usually Norway spruce.



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Blue spruce

Alpine Up Close *Evergreenery*

Ever walk through a grove of evergreen trees? *These are trees that retain their leaves/needles and color year round.* Besides seeing greenery, what else do you detect? You may notice a sweet, woody scent which comes from a fragrant compound called terpenes. They give plants their distinctive aroma which varies depending on the type of plant. The pictures enclosed are just a few of many species we have in our area. Take a walk and *sense* for yourself.



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- Eastern red cedar and White cedar - cedar or not? -

Don't judge a tree by its name. Trees can have similar botanical features but misleading common names which leads to confusion.

⬅ **Eastern red cedar** (*Juniperus virginiana*) is a bit of a misnomer because the tree is actually a **juniper**. **White cedar** ➡ (*Thuja occidentalis*), also known as **arborvitae**, is a true cedar.

false cedar



Both have scaly leaves. But take a closer look and you will see that junipers have spiny needle-like leaves while cedars have flattened sprays all around the twig. Pick up a [Field Guide](#) and check them out. Several of each of these trees can be found in our Church Street Green.

true cedar



Dragon lady holly - an evergreen without needles or cones



The **Dragon Lady Holly** (*Ilex x aquipernyi* 'Meschik') is the perfect tree.

- deer resistant
- attractive dark, glossy, spiky leaves year round
- seasonal berries that turn from green to red in fall
- thrives in shade, sun, and drought resistant once established

This tree is the perfect choice for a small garden or a narrow spot; it grows up to 20' high but only about 4-5' wide. Dragon lady holly is all-female and the production of red berries requires a male holly bush of any species growing nearby.

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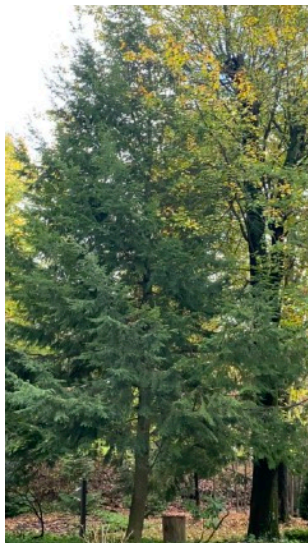
Evergreens vs conifers - What's the difference?

All evergreens retain their leaves or needles through more than one growing season. All conifers have cones, produce needles or scaly foliage, and are mostly evergreens but not always.

Evergreens fill in for deciduous trees that have dropped their leaves and leave the landscape looking bare. They protect us from cold winds, offer privacy, give color, and provide food and shelter for many birds and other animals.

By taking a close look at leaves/needles and cones, various characteristics will stand out to help in tree identification. For example, when it comes to conifers, the needles of the hemlock, pine, and spruce are sharply pointed while the needles of the arborvitae are scaly/flat sprays and those of the juniper are scaly/spiny. But trees can be deceptive. Take a look at *Alpine Up Close Deciduously* and you will find the Dawn redwood, a deciduous conifer. It has needles and cones but is not an evergreen.

House sparrows resting on Mugo pine



Underside stripes



Eastern hemlock - a conifer

Find a clue to its ID on the underside of the needles

Big tree, tiny cones - How do you know what it is? Examine some of its obvious traits: leaves vs needles (round or flat), berries vs cones (big or small, hanging up vs down) . . . as you begin examining its characteristics, sometimes a clue is on the flip side. Take a close look; a key to identifying the **Eastern hemlock** (*Tsuga canadensis*) is white or silvery stripes on the underside of each needle. On these stripes are tiny spores called stomata that enable the needles to breathe by taking in carbon dioxide and exhaling oxygen and water vapor.

The eastern hemlock can grow up to 100 feet and yet its cones are one of the smallest in the family of pines, having only a width of about 1/2" and a height of 3/4".

White pine - a conifer

Its needles are soft, flexible, and can reach 5 inches long

Put your eye on the needles. From afar, many needled evergreens can be distinguished based on their size, color, and/or shape but there is another trait; one easily overlooked unless observed by taking a very close up look. Needles emerge from bundles, called fascicles. If a twig bears needles in groups of two, three, or five, you can safely call it a pine. If the twig carries its needles singly, it's likely you are looking at a fir or a spruce.



The **White pine** (*Pinus strobus*) is the only tree east of the Rockies that has bundles of five needles. Cones can range from 3 to 8 inches in length and are cylindrical, with thick, rounded cone scales, very resinous, and maturing in late summer.

