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## Exploring Our Little Corner of the World with the Galiano Naturalists

by Gloria Schmidt

Name the tree that is not a member of the true fir (*Abies*) genus. Is it alpine, amabilis, balsam, Douglas, grand or noble? This was the last question asked in one heated battle on “Jeopardy.” If only a fifth-grader from Galiano Island had been there to assist the contestants. Your answer, please?

The Douglas-fir, the familiar “Christmas tree” in our area, has always been hard to classify. Indeed, its Latin name *Pseudotsuga* means “false hemlock”. In 1791, the Scottish physician and naturalist, Dr. Archibald Menzies, who accompanied Captain George Vancouver on his explorations, wrote the first description of this species he found living on the coast of Vancouver Island. Another Scottish explorer-botanist, David Douglas, found this tree in Oregon in 1825 and began shipping its seeds to his patrons in the Royal Horticultural Society to be grown as exotics in English gardens. The first botanists classified it as a pine, and it became known as “Oregon pine”. However, this stately evergreen does not have needles clustered like pines, nor are its cones similar. Naturalist John Muir called it “Douglas spruce” as its needles and cones are somewhat similar to those of that tree. In the 1800’s botanists called it either a true fir or a hemlock. In 1867, the technical name *Pseudotsuga douglasii* was proposed, in honour of David Douglas. Later this was replaced by *Pseudotsuga taxifolia* (“false hemlock with leaves like a yew”), and then in 1950 our local tree was given the name *Pseudotsuga menziesii*, taking the name full circle back to Vancouver’s naturalist.

Douglas-firs are native to the West and grow only from the Rockies to the Pacific Ocean. They are found from central B.C. southward into the high mountains of subtropical Mexico. The tree’s wide distribution can be explained by its adaptability. It grows well in a wide range of climatic conditions. It can survive through drought and fire, and it regenerates quickly after disturbances. If given enough rainfall it can grow 3-4 feet a year.

Coastal Douglas-firs are enormous trees, reaching heights of 150 to 200 feet and diameters of up to 9 feet. They are the largest tree in our area. One source said their longevity is commonly 750 years and if not burned, blown or cut down can exceed a millennium. One reached a recorded age of 1,400 years. Three ancient trees living nearby are estimated to be 750-1000 years old. The Red Creek Fir near Port Renfrew is Canada’s largest standing Douglas-fir with a height of 242 feet and a circumference of 41 feet, 2 inches. While many trees tend to stop growing higher after several decades, Douglas-fir will continue to add height and girth for centuries.

The typical Douglas-fir is characterized by a long, branch-free, cylindrical trunk and a short columnar flat-topped crown. Young trees have narrow conical crowns and branches extending to the ground – our typical Christmas tree shape. Unlike the true firs, Douglas-firs have cones on lower as well as upper branches. The cones stay attached most of the year. The narrow egg-shaped cones are about three inches long, with a 3-pronged bract between the scales. A Native American legend says that during a forest fire mice hid in fire-resistant Douglas-fir for protection and that to this day their feet and tails (the 3-pronged bract) can be seen protruding from the cones.



*Find the “mice” in this Douglas-fir cone.  
Photo by the author*

Coastal First Nations people recognized the Douglas-fir wood and bark for its excellent fuel capabilities, but their stone tools limited its full potential. When explorers and pioneers arrived with steel tools, they soon discovered its value as strong, easily cut and nailed lumber. It has become one of the best known timber-producing trees in the world market, yielding a wood of medium weight that is moderately hard and strong. One source said it would be “a strong candidate for the world’s strongest, straightest and fastest growing tree.”

People are not the only creatures that utilize the Douglas-fir. Douglas squirrels harvest great quantities of cones and strip them like an ear of corn to get to the seeds. Chipmunks, mice and shrews eat the seeds fallen from the trees. Many birds depend on the seeds as part of their diet. Deer eat the

new shoots, and black bears often strip the bark to eat the inner sap layer. The dead snags also provide ideal homes for many critters.

Douglas-firs are a sun-loving tree and are intolerant of shade. When growing close to other trees and shrubs, Douglas-firs will self-prune their shaded lower branches. This produces their familiar columnar appearance. If growing in an open area, though, the lower branches may continue to grow out and up in great outspreading arms. You can see an example of this in our renowned “Grandmother” tree, just off the parking lot at Bluffs Park. The longest-lived Douglas-firs are said to be those on harsh, arid ridges where fungus doesn’t reach and fires are rare. Galiano’s Grandmother tree is growing in just such a location. Her girth is about 14.5 feet and her 5 lower branches are all about 5.5 feet in circumference. Could it be that this Douglas-fir is the oldest on our island?

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### **Natural Mysteries**

Last month’s mystery was: Eew! Spittle bugs are disgusting. Why do they make that horrible spittle on grass stems? Spittle, did you say? You know, it’s even worse than you imagine. The nymph stages of these bugs do a headstand on a leaf, with its stylet sucking plant juice, much like an aphid, and from its anus it secretes a goo (i.e., poo) and air (i.e. flatulence) to produce a bubble. Then the bug uses its hind legs like an eggbeater to whip the bubble into the foam. To call it “spittle” is being delicate. This foam serves to conceal the bug from dumb predators that can’t figure out that spittle = bug and from smarter ones that don’t see the point in wading through that disgusting foam in search of a morsel inside; insulate the bug from extremes of sun and cold; and keep the bug nice and moist, thus

saving the bug money on Oil of Olay. The strategy must work. There are over 23,000 species of spittle bug. This insect is also known as a froghopper: “frog” for the shape of its head and “hopper” for its champion leaps. It can catapult itself two feet into the air, which is twice as high as the illustrious flea and certainly falls into the “able to leap tall buildings in a single bound” category in the bug world.

This month’s Natural Mystery: How long can a goldfish live out of water?

Have an answer? Send your thoughts to [galianonaturalists@gulfislands.com](mailto:galianonaturalists@gulfislands.com). Have a Natural Mystery of your own? Let us know, and we’ll try to answer it.

THE GALIANO NATURALISTS are a group of curious explorers who enjoy observing, marveling, and sharing information about the natural world around us. Come join us. How? Just send us an email at [galianonaturalists@gulfislands.com](mailto:galianonaturalists@gulfislands.com). Visit our website at <http://gulfnet.sd64.bc.ca/GalianoNaturalists.html>.