

THE EASTERN REDCEDAR

StandingNation-Human Alliance Bulletin

The Woodpile

For ancestors on our family trees in days gone by, as well as for members of global communities where this is still how things are done today:

- 🌳 **TREES provide sustainable wood for cooking meals.**
- 🌳 **TREES provide sustainable wood for boiling water for purification.**

Diplomatic Relationships

- ✠ The small blue cone—resembling a berry—on the female trees are consumed by a wide variety of wildlife, including the Cedar Waxwing songbird (named for this tree), grouse, pheasants, bobwhites, whitetail deer and moose.
- ✠ In numerous Native American tribes, the redcedar tree symbolizes the tree of life, because of their heavy reliance on the species, and it is burned in sweat lodges and in purification rites. (Notice that it was the northern white-cedar that symbolized the “tree of life” for European explorers to North America suffering from scurvy, not the Eastern redcedar or juniper).
- ✠ “The Eastern redcedar has a variety of ethnobotanic uses and is regarded with special spiritual significance in many Native American tribes. It is regarded as the

“Tree of Life,” or “Holy Tree,” for many tribes including the Comanche of the Southern Plains and the Kiowa of the Western and Southern Plains.”¹

✠ At least since the time of the ancient Greeks, where it was mentioned in the *Iliad*, the scent (phenols) of cedar, which in ancient Greece would have come from Lebanon cedar, and “old-world cedar” (*Cedrus libani*), has long been used to repel pests.

You or someone from an older generation in your family may have used cedar blocks, balls, hangars, and chests used for repelling moths from wool sweaters in storage. Eastern redcedar, a “new-world” cedar, is the source of those wood products. Cedar oil, generally recognized as safe (GRAS), is ranked as a pesticide in Canada. Cedar oil or mulch has been known to repel insects including moths, fleas, termites, some ant species (including fire and crazy), mosquitoes, cockroaches, venomous snakes, mice and rats.

✠ The first European mention of Eastern redcedar/juniper-based health-related tonics appeared in 1269 in a Dutch publication. This is the earliest mention of made from the berry-like cones of juniper being used for “medicinal purposes.” The Royal Navy mixed gin with lime cordial to prevent scurvy or with angostura bitters to settle the stomach at sea. Tonic water, made with quinine, is anti-malarial, which provided a great excuse to drink more gin and tonics.²

¹ “Eastern Red Cedar: Native Cultural Significance,” *UVM Tree Profiles*, UVM Digital Exhibits, University of Vermont <http://ctl.w3.uvm.edu/omeka/exhibits/show/uvmtrees/eastern-red-cedar/eastern-red-cedar-native-signi> (accessed 6/28/20).

² Simon Ford, “10 things You Didn’t Know About Gin,” *Food Republic*, <https://www.foodrepublic.com/2012/08/23/10-things-you-didnt-know-about-gin/> (accessed 12/17/20).

- ✠ The cones—blue berries--of the common juniper and, according to some sources, of the Eastern redcedar, are used to flavor gin.
- ✠ Junipers were planted in windbreaks to offset the Dust Bowl of the U.S. and Canadian prairies during the 1930s.
- ✠ The preferred wood for U.S. and many European-made pencils dating from the mid-1800s until about 1920 was eastern redcedar³.

“ . . . pencils made from cedar – *Juniperus virginiana* and *Calocedrus decurrens* [California incense cedar] in particular – tend to be among the most preferred. These woods are soft, attractive, rot resistant, sharpen easily without splintering, and take well to wood stain or lacquer, not to mention they smell great.”⁴

- ✠ Railroad companies, in the 19th and 20th centuries, planted redcedar trees because the wood makes for the best railroad ties. But, even earlier, virgin Eastern red-cedar trees were used for this purpose. In the mid-1830s, William McCormick, who leased Pelee Island from Alexander McKee (who, as an agent in the British Indian Department, in 1788 had been granted a lease for Pelee Island for 999 years by the Ojibwa and Ottawa), entered into an agreement in 1836 with a contractor from Ohio to build a sawmill. Subsequently, virgin Eastern redcedar trees on Pelee Island were “harvested,” milled into railroad ties, and shipped off from Mill Point, at the southeastern corner of the island, bound for Ohio, where they were used for a railway under construction in that state. McCormick also obtained a contract to supply cedar posts for Fort Malden, built

³ “Incense-Cedar,” *Pencils.com*, <https://blog.pencils.com/incense-cedar/> (accessed 6/29/20).

⁴ Daniel Murphy, “The Cedars of Pencils,” February 19, 2020, *awkward botany: amateur botany for the phytocurious*, <https://awkwardbotany.com/2020/02/19/the-cedars-of-pencils/> (accessed 7/01/20).

in 1795 by Britain in Amherstburg, Ontario, to protect British North America from their American neighbors.

Today on Pelee Island, one can visit both the Ivey-Red Cedar Savanna (located on East-West Road), property of the Nature Conservancy of Canada, on which grow stands of centuries-old Eastern redcedars and Mill Point (off Cooper's Road), where, while the sawmill is long gone, the much older—from the Quaternary period—glacial grooves are still in evidence.

✠ Known as a “pioneer” species, common juniper (more likely to be a bush) and Eastern redcedar (most likely to become a tree) are the first trees to colonize recently disturbed landscapes, such as what results after a fire, or on a piece of abandoned farm or pasture land, or along roadsides.

A Tourist's Testimonial

*The woods are not such as you find in Bohemia, Moscovia, or Hercynia, barren and fruitless, but the highest and reddest Cedars in the world, far bettering the Ceders of the Azores.*⁵

—British Captain Arthur Barlowe (1550 – 1620)

Tree-Tripping

Try this:

Next time you are walking in your neighborhood or hiking a trail and see an evergreen tree or bush, take a closer look and then reach out, gently stroke its needles:

- Are the needles soft scaly needles of the Northern white-cedar (AKA arborvitae) or are they the very prickly scaly needles of the Eastern red-cedar (aka juniper)?
- Or are they needle-looking needles in clusters of 5 of the Eastern White Pine or the four-sided needles on the drooping boughs of the Norway Spruce?
- Can you see any evidence of fruit (or flower, the beginning of fruit) or cone?

⁵ Richard Hakluyt, quoting British captain Arthur Barlowe, who was charged to find land in North America to claim for Queen Elizabeth I of England, upon arriving at Roanoke Island (now a part of NC) in 1584, in *The Principall Voyages, Traffiques, and Discourses of the English Nations* (1599-1600), reprinted in Albert Bushnell Hart, ed., *American History Told by Contemporaries* (New York, 1898), volume 1, 89-95 at <http://www.swarthmore.edu/SocSci/bdorse1/41docs/04-bar.html> (accessed 7/01/20). Note: Barlowe would have come across the “Ceders of Azores” earlier in his journey. The Azores is Portuguese-owned archipelago of lush green volcanic islands in the Atlantic Ocean. The other “ceders” mentioned in his comparison are a different species of juniper, endemic to the Azores and now known as the Azores juniper (*Juniperus brevifolia*).

- How many types of tree seed containers—naked or enclosed—can you identify out in nature?

Tree Dreams

- 🔗 Have you ever noticed a tree “volunteer” in land you share or on which you spend time?
- 🔗 Have you ever supported a tree “volunteer” by transplanting, feeding, mulching, or otherwise helping it survive?
- 🔗 Have you ever had to make a decision involving removing one or more trees to save one or more other trees?
- 🔗 Do you have anything made of Eastern redcedar in your yard? In your house?
- 🔗 What association(s) does the smell of redcedar have for you?

Trees can be gymnosperms or angiosperms. A gymnosperm—from the Greek “naked seed”—is a plant that has seeds, but no true flowers and no fruits. Because they have no fruits, a gymnosperm’s seeds are not enclosed; in the case of a tree, this is either a conifer (cone-bearing) tree; a cycad tree (a woody seed-producing plants with no flowers or fruit, often looking like, but not related to, palm trees); or a Ginkgoideae (Ginkgo trees are the only remaining genus in this order).

Consider the conifers. One would, of course, expect pinecones, like those of the Eastern white pine, and fir cones to be examples of such naked seeds, as they are. But what about the two species of juniper under discussion? Both junipers appear abloom with tiny blue flowers in the spring and bearing small blue “berries” in the fall. In fact, juniper “flowers” are modified leaves, called bracts. Bracts are what are responsible for the showy white or pink “flowers” on dogwood trees, but in the case of, say a “white-flowered” dogwood, the white bracts, surround a true flower, which is a greenish yellow and barely visible. Because dogwood trees have true flowers, albeit visually insignificant, dogwood trees are angiosperms. Junipers are gymnosperms because they have no true flower, and the flower-appearing bracts fuse together become modified cones masquerading as berries.

Angiosperms are flowering plants. Their seeds develop from the female parts of a tree’s flowers and are enclosed by an ovary. These “dry” or “fleshy” protective structures encasing one or more seeds are a tree’s fruit. Evolution has demonstrated remarkable creativity in designing the types of seed containers used by angiosperms to encase their seeds. Tree seed containers include acorns, nuts, pods, achenes, keys,

drupes, berries, pomes, and capsules. Pomes bearing multiple seeds (like apples or pears), and drupes with pits containing a single seed (like peaches or plums) are easy examples that come to mind. Legumes, like catalpa trees, are angiosperms that produce halved pods with multiple seeds inside. Nut trees, like black walnut, have leathery husks, which surround the nut inside. Surprisingly, a ginkgo is not considered an angiosperm because the fruit of the ginkgo—a fleshy seedcoat—does not require pollination in order to develop.

But there are other types of fruit, ones that humans don't consume, but other wildlife do, like the winged maple keys (AKA samaras). Common hoptrees, and linden, ash, and elm trees have similar structures with pods covering the seeds at the base of the wings.

Sweetgum spiny balls are aggregate seed capsules, and sycamore's softer balls are covered with an aggregate of achenes, composed of many nutlets with hair tufts attached. Today, out my study windows, in my front yard, on the last day of the first week of vaccination and the day before the winter solstice of this first year of the COVID pandemic, balls from both of these trees bob and sway with promise of the future.