

Science & Ecology

Eastern Red Cedar - A Most Unusual Conifer

By Edna Greig

Evergreen trees stand out after the autumn leaf fall. A native evergreen that's easy to spot in a variety of habitats in our area is the eastern red cedar (*Juniperus virginiana*). Red cedar usually grows to about 40 to 50 feet tall, and it has a dense foliage crown that is columnar or narrowly conical. The attractive reddish brown bark is thin and shaggy and peels in long, narrow strips.



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Eastern red cedar: many went to pencils.

Red cedar is a conifer, or cone-bearing, tree like pine and spruce, although it doesn't have the obvious needle-like leaves and hard brown cones of other conifers. Most of its leaves are tiny, overlapping scales that clasp slender twigs. But it also has some sharp, protruding ¼-inch to ½-inch-long needles, especially on new growth. The

needles are sometimes hard to see, but run your hand along the twigs and you should be able to feel them.

The really unique feature of red cedar is its cones, which look like small berries. Found on female trees, the plentiful ¼-inch wide berries start out light green and mature to a dark blue with a white powdery coating. The sweet, fragrant berries remain on the tree through winter. More than 50 species of birds eat the berries, including the cedar waxwing that takes its name from the tree. Mammals such as foxes, raccoons, and opossums also eat the berries. People have long enjoyed the berries as a flavoring for foods and gin.

Animals pass the seeds within the berries through their digestive systems intact. The seeds can germinate and grow in most soil types, including those that are poor and dry, as long as there is good light available. Red cedar frequently colonizes drier, open uplands alongside hardwoods such as oaks and hickories. As the hardwoods grow, they can outcompete the red cedar for light. But established red cedars sometimes persist in the shade of the hardwoods because their evergreen leaves can photosynthesize when the canopy is leafless. Red cedar also colonizes abandoned fields and farmlands and may form open groves of tidy looking spires.

The dense red cedar foliage provides valuable cover and windbreak for wildlife. Deer will browse the foliage in winter if other food is scarce. During spring and summer, red cedar foliage is the sole food for the caterpillar of an attractive green and rust colored butterfly called the olive hairstreak.

Large stands of tall red cedars were present in eastern North America when the first European settlers arrived. The settlers valued its wood because it's attractive, durable, and easy to work, and they crafted it into fence posts, furniture, and shingles. Because it sharpens easily, red cedar was the wood of choice for making pencils. Only the clearest heartwood was made into pen-



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"Berries" of *Juniperus virginiana*

cils, and the rest of the tree usually was abandoned. By the early 1900s, the best red cedar stands were depleted, and the industry began to get its pencil wood from a western cedar species. Today, the aromatic red cedar is still used to line chests, wardrobes, and closets because of its purported ability to repel moths.

The native range of red cedar is large, extending as far west as Kansas and Oklahoma. Ironically, as red cedar is recovering from overharvesting in the eastern part of its range, it also is becoming an invasive pest of the grasslands to the west. Grasslands are adapted to periodic fires and, historically, red cedar couldn't colonize this habitat because its thin bark makes it susceptible to fire. Today, fire often is suppressed in the grasslands, and the bird-dispersed seeds establish readily, threatening the native grasslands flora.

Look for red cedar when you're on the trails this winter. If you're lucky, you may spot some of the many species of birds that feast on its berries.

Trail Conference member Edna Greig is an occasional contributor to Trail Walker.