

Conservation Corner

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Conservation thanks everyone who took time during this busy season to appreciate nature and attend one of our wreath classes. Who would have foreseen that our holiday preparations would include scooping, pumping, or sweeping out flooded basements? Hopefully the standing water south of our house recedes soon so we can string some lights on our cedar windbreak. It's beginning to look like a green Christmas this year.

In addition to wreaths and swags, many families hang a sprig of mistletoe in their homes during the holiday season. And while kissing under the mistletoe is a fun ritual, mistletoe is also an important forest plant with over 1,300 species found worldwide. Two species grow here in the United States, the dwarf mistletoe on the conifer forests of our western states and its kissing cousin, the American mistletoe, on a wide variety of trees along the eastern seaboard. Did you know the state floral emblem of Oklahoma is the mistletoe?

The scientific name of this semi-parasitic plant is *Phoradendron*, Greek for "thief of the tree." The common name is from the Anglo-Saxon *mistel* meaning dung and *tān* meaning twig as mistletoe often appears to arise from bird droppings. And while mistletoe is capable of photosynthesis, it also sends out roots to penetrate its host tree and rob it of nutrients, minerals, and water. The seeds contained within its white berries are covered with viscin, a sticky material that helps them hitchhike a ride on birds and mammals and also stick fast to future growing sites. Over time, mistletoe will form thick masses of stems giving it the popular name witches' brooms or its Navajo name "basket on high."

Surprisingly, mistletoe is considered a keystone species of the forest ecosystem. A wide variety of birds including silky fly-catchers, grouse, mourning doves, bluebirds, grosbeaks, and robins rely on its berries for food. Owls, hawks, and migratory birds along with red and flying squirrels utilize the dense witches' brooms as nesting sites. Not surprisingly, mistletoe parasitism leads to more tree snags, which in turn leads to more cavity-nesting birds living in forests with abundant mistletoes. And while mistletoe is toxic to people, many mammals including elk, deer, squirrels, chipmunks, and even porcupines depend on the berries and leaves for a high-protein food source.

Three hairstreak butterflies, the great purple, thicket, and Johnson's, depend on the mistletoe for survival. The butterflies court and mate (perhaps even kiss?) in the mistletoe high in the forest canopy, lay their eggs on its leaves and stems, and drink nectar from its flowers. Mistletoe provides crucial early pollen and nectar for honey and native bees as well.

Mistletoe also plays an important role in Germanic and Celtic folklore as a symbol of healing, fertility, and good luck. In Greek mythology Persephone opens the gates of Hades with mistletoe berries, while in Norse mythology the son of Odin and Frigga is killed by a mistletoe arrow.

Whether hanging in your home, the forest, or folklore, one thing is sure: Mistletoe is not just for kissing. Merry Christmas!

