

Under the Mistletoe

Perhaps some of you have already experienced a sweet smooch or two under the holiday mistletoe, enjoying this fairly old kissing ritual for people. Although it figures prominently in ancient lore, mistletoe is important in other vital ways - it provides essential food, cover and nesting sites for an amazing number of critters. In fact, some animals couldn't even survive without mistletoe, including some birds, butterflies, and insects.

A Little History First

While the use of mistletoe dates back to ancient times, the traditions and beliefs associated with it have varied. For some, it was believed to be a holy plant. For others, it symbolized the promise of spring's return and earth's renewal. It was some time later that these traditions were adapted by the English and French, giving us the holiday custom of kissing under the mistletoe.

Perhaps the most well-known custom is for a couple who meet under the mistletoe to kiss, usually by catching an unsuspecting person who stands beneath it. The custom of kissing was very popular among servants in late 18th century England (think Downton Abbey) and the servants are credited with perpetuating the tradition

Thief of the Tree

Did you know that the white-berried plant associated with the Christmas holiday is only one of more than 1,300 species of mistletoe world-wide? The thing that all of these species have in common is that all grow as parasites on the branches of trees or shrubs. In fact, the Native American mistletoe's scientific name, *Phoradendron*, means "thief of the tree" in Greek. Mistletoe begins its life as a very sticky seed that often hitchhikes to a new host tree on a bird beak or on mammal fur. One species also has another way of dispersing seed: the seeds will explode from the ripe berries, shooting a distance as far as 50 feet. Because the seeds have a viscous sticky outer coating, they stick to any surface they hit.

Once on a host tree, the mistletoe sends out roots that penetrate the tree bark and eventually start siphoning off some of the host tree's nutrients and minerals. Since mistletoe maintains green leaves, it can still produce some photosynthesis. But it seems like a lazy life - stealing fluids and food from their benefactor tree and working just a little to grow into thick masses of branching, misshapen stems, giving rise to a popular name of witches' brooms.

But, There Are Benefits

In Arizona, the silky flycatcher bird is intimately tied to mistletoe. They build their cup-shaped nests within the mistletoe plant. The young hatch in February when mistletoe is in flower and supply a rich source of insect nutrients for the growing young. During the rest of the year, and especially during winter, many types of birds, including bluebirds and flycatchers, rely on mistletoe berries for sustenance. Some other birds, such as owls and hawks, find mistletoe a great place for nesting as do some migratory birds.

Three kinds of butterflies depend entirely on mistletoe for their survival. It is also important nectar and pollen plant for honeybees and other native bees, as well as a variety of flies, ants and beetles.

Researchers have documented that animals such as elk, deer and cattle eat mistletoe in the winter when forage is scarce.

Mistletoe is a slow grower and spreads only about two feet per year. Over time, though, it can affect the health and growth of its host tree but that may take decades.

CAUTION - Mistletoe is toxic to humans and small pets. If you are planning to use some this holiday as part of your decorations, perhaps a faux sprig such as plastic might be safer to prevent ingesting of berries or dried leaves.

Mistletoe is the state floral emblem of Oklahoma.

Resources:

University of Florida Extension Service

San Diego Natural History Museum, Biodiversity Center of the Californias

Department of the Interior, U.S. Geological Survey