



Merry Mistletoe

For hundreds of years, merry mistletoe has been a popular holiday plant with a sweet tradition of inviting a Christmas kiss, whether it is hung in a doorway or is found hanging naturally from the upper branches of tree. A kid with a crush might see a chance to steal a kiss when standing under the mistletoe, but a scientist might look up and see a "tree thief."



Not So Romantic After All

Mistletoe is a beautiful plant with glossy green leaves, tiny white flowers and creamy white berries, but its pretty looks and loving reputation hide the ugly truth. Mistletoe is a **hemiparasitic** plant, meaning it relies on another **host** plant to supply part of its food. The scientific name for mistletoe is *Phoradendron*, from the Greek words *phor* and *dendron*, meaning "tree thief." Mistletoe does not grow in the soil, but instead perches in the upper branches of tree. It has tough, specialized roots called **haustoria** that drill into the tree and absorb minerals from the tree's sap. As the mistletoe grows, it may cause some damage to the host tree, but seldom kills the tree.

Mistletoe native to Ohio grows on the branches of leaf-dropping trees such as oaks, elms and maples. Wild mistletoe can be found growing along the Ohio River from Marietta to Cincinnati. In fact, southern Ohio is on the northernmost edge of the mistletoe range for the United States.

Berry Bad and Berry Good

Mistletoe berries are poisonous to humans and can be fatal if swallowed. Birds love mistletoe berries, however. The berries contain seeds that are covered with a sticky, jelly-like coating. After munching the berries, birds will often wipe the sticky seeds off of their beaks onto other branches, helping to spread the plants.

Mistletoe seeds that are swallowed are also spread around by bird droppings. The word mistletoe can be traced back to similar words in Old English, Norse and German, all meaning "dung branch." Mistletoe sap was once smeared on branches to catch perching birds.

Folklore Fun

We might admire mistletoe's clever adaptations to trick other plants and animals into providing its food and spreading its seeds, but how did this ornery plant become a holiday decoration and symbol for love?

One reason for mistletoe's appeal in cold climates is that it stays green and lovely when the rest of

the plants in the forest have withered and died. The ancient Romans called mistletoe the “golden bough” that could protect the hero Aeneas on a dangerous trip into the underworld. Ancient Europeans thought mistletoe was planted by the gods, since it grew close to the heavens, and so it was harvested with golden tools for winter solstice celebrations. American pioneers looking for Christmas greenery would shoot their rifles into the treetops to knock down clusters of mistletoe hanging 20 to 40 feet in the air.

An old Norse myth may explain today’s tradition of kissing under the mistletoe. The Norse goddess, Frigga, was very protective of her son, Baldur, and she visited every plant and animal in the forest to get their promise to never harm Baldur. However, Frigga forgot about the mistletoe plant high in the trees. The trouble-making god, Loki, made a spear out of the mistletoe plant and tricked another god into killing Baldur with it. Frigga’s sadness brought endless winter to the world. To ease Frigga’s grief, the other gods brought Baldur back to life. Frigga was so grateful, that she blessed the mistletoe and declared that it should bring love, rather than sadness, into the world. From then on, anyone two people passing below the merry mistletoe would remember the story with a kiss.

Photos from left to right: American mistletoe with berries (courtesy of delawarewildflowers.org) • Mistletoe growing from a host tree branch (courtesy of duke.edu) • Mistletoe up in a tree

