

Mistletoe, friend or foe?

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To all those in the Christmas spirit hoping to plant a wet one on an unsuspecting passerby; to all those herbalists searching for the perfect cardio-tonic herb with little to no side effects; to all the wide variety of birds, mammals and insects that depend on it for food and shelter...mistletoe is indeed a friend.

Yet according to the article *Dwarf Mistletoe Ecology and Management* by Hoffman, mistletoe is a parasitic plant wreaking havoc on the forests, thus requiring human intervention and implementation of forest management plans. True...mistletoe does infect its host and can lead to its demise. However, it turns out that mistletoe is slow to spread with a growth rate of only about 2 feet per year. It may actually take several decades for the death of even one tree alone, and widespread infestation of an entire forest stand could take centuries!

In the meantime, this high in protein, hemi-parasitic plant, labeled as such due to its ability to photosynthesize, provides food and shelter for many of our forest friends. Wherever there is an abundance of dwarf mistletoe, whip out your binoculars, as a wide variety and high number of bird populations will surly inhabit the forest.

Examples of birds and raptors which feast and nest in mistletoe are black-capped chickadees, ruffed grouse, blue grouse, mourning doves, bluebirds, evening grosbeaks, robins, gray jays, northern beardless-tyrannulets, red crossbills, house wrens, pygmy nuthatches, Western tanagers, chipping sparrows, hermit thrushes, Cassin's finches, pine siskins, pigeons, great gray owls. "64 percent of all Cooper's hawk nests in northeastern Oregon were in

mistletoe.” “A well-disguised nest provides protection against predators such as the great horned owls.” (Puckett and Esque 2009)

A variety of insects also depend on mistletoe for their survival. There are three kinds of US butterflies - the thicklet, the Johnson and the great purple hairstreaks, the latter of which is the only butterfly to feed on Christmas mistletoe. Important pollinating insects including flies, ants, beetles and bees all rely on mistletoe. Considering the diminishing bee populations in the US, mistletoe provides one of the first spring time sources of pollen and nectar for a variety of bees, which is a great thing.

Many mammals are also depend on mistletoe, including some Texas ranchers (hey, we're mammals) who consider mistletoe an insurance forage crop because their use cattle will feed on it when other forage sources are scarce. Red squirrels, Albert squirrels and flying squirrels often use witches brooms, the bushy sections which develop after a few years, as cover and nesting sites. Chipmunks and even porcupines love this plant as food.

Mistletoe's most common therapeutic indications include arthritis, cancer, the common cold, Hepatitis, HIV and reoccurring respiratory diseases. Traditionally, mistletoe has been used to treat high blood pressure, epilepsy, exhaustion, anxiety, arthritis, vertigo, and degenerative inflammation of the joints. Apparently, “European mistletoe is believed to reduce blood pressure and act as an antispasmodic and calmativ agent, while American mistletoe is believed to simulate smooth muscles, increase blood pressure, and trigger uterine and intestinal contractions.” (Natural Standards Database 2013)

My vote on mistletoe...friend.

References:

- 1) Hoffman, J., T. (2004). Dwarf mistletoe management. Retrieved from ACHS

file:///C:/Users/Heidi's%20Computer/Downloads/dwarf%20mistletoe.pdf

- 2) Natural Standards Database (2013) Mistletoe Monograph. Retrieved from <http://naturalstandard.com/databases/herbssupplements/all/mistletoe.asp>
- 3) Puckett, C and Esque, T. (2009) Not Just for Kissing: Mistletoe and Birds, Bees, and Other Beasts. Press release retrieved from <http://www.usgs.gov/newsroom/special/mistletoe/>