

What Red-headed Woodpeckers Really Want

By Richard King and William Mueller

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Our independent research studies on the decline and management of the red-headed woodpecker (*Melanerpes erythrocephalus*) came to complementary conclusions. Mueller's research lists the following primary reasons for the decline of the red-headed woodpecker in North America and Wisconsin:

1. Habitat loss and alteration
2. Competition with the European starling
3. Vehicle-caused mortality
4. Loss of American elms to Dutch elm disease

Although the red-headed woodpecker uses other habitat types, oak savanna is one of the most important. Oak savanna once occupied approximately 5.5 million acres in Wisconsin. Only about 500 acres -- less than 1/10th of a percent of the original, pre-settlement quality savanna remain. This loss and altered habitat is directly linked with the red-headed woodpecker's population decline. Mueller studied the loss of habitat using a GIS (Geographic Information System) and data from annual Breeding Bird Surveys. He found a relationship between loss of open oak woodland and savanna and red-headed woodpecker population losses along bird survey routes in eight regions of Wisconsin.

King studied methods for improving red-headed woodpecker habitat at Necedah National Wildlife Refuge, where he is staff biologist. His work established a straightforward strategy for providing improvements including timber thinning, controlled burns and snag protection. Since these habitat improvements were carried out, more than 70 pairs of red-headed woodpeckers have established nesting territories on the Necedah refuge. The species is now the most common avian species in the restored savanna. King's research discovered that:

1. Red-headed woodpeckers will occupy restored savannas before burning but are most abundant following burns.
2. Red-headed woodpeckers prefer to nest in dead trees or dead limbs on living trees (decadent trees).
3. Red-headed woodpeckers need large trees. Average cavity height is more than 27 feet, and average diameter of cavity trees is more than 17 inches.
4. Dead trees and dead limbs will bring more cavities and more cavities lead to more successful red-headed woodpecker reproduction.
5. On the restored savannas, tree density was 28 trees/acre, and snag density was 13 snags/acre.

King's research suggests there are practical and workable solutions for managing habitat for the red-headed woodpecker, especially if landowners and land managers save snags. Readers interested in seeing red-headed woodpecker management in practice can visit Necedah National Wildlife Refuge in Juneau County, just 20 miles off of I-94 from Tomah or Mauston.

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