

Tree Species Used and Conditions of Trees at Red-headed Woodpecker Nests



**Observations, Text, and Photography by Siah L St. Clair
Observations and Tables by James Howitz**



The Red-headed Woodpecker Recovery project (RhWR) was organized in 2007 and is a 501(c)(3) tax-exempt non-profit organization.

Investigation and research activities about Red-headed Woodpeckers (RHWOs) at Cedar Creek Ecosystem Science Reserve began in 2008 when Cedar Creek ESR gave a permit to the RhWR to initiate those activities on site. The RhWR has continued investigation and research activities since 2008 both at Cedar Creek ESR and at other locations.

Field observation efforts for included information occurred between 2012 and 2025 in all 12 months of the year, with a combined 2,563 days and 15,438 hours by Siah St. Clair and work partner Jim Howitz. All observations were made during a succession of RHWO study and research projects. Some activities required extensive experience and expertise as well as special permits and permissions.

By conducting these observation activities new natural history behaviors of RHWOs have been documented and will be used to help reduce the decline of this species and other species impacted by the presence of RHWO.

Unless otherwise noted, the information and photographs provided herein are based solely on observations by Siah L St. Clair and Jim Howitz, volunteers of the Red-headed Woodpecker Recovery project.



Observations of Tree Species Used and Conditions of Trees at Red-headed Woodpecker Nests

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Red-headed Woodpeckers (RHWO) are choosy about the condition and the location of a tree they will use for a nest as observed at Cedar Creek Ecosystem Science Reserve (Cedar Creek ESR) in East Bethel, Minnesota. As primary cavity nesters they excavate their own cavities in the trees they nest and roost in. However, Red-headed Woodpeckers are considered weak primary cavity excavators, and prefer trees that have some decay, particularly in the heartwood of the tree. Thus, these iconic woodpeckers choose trees that are within the habitat they prefer but also trees that have places on them that are in the physical condition they require to excavate cavities and roosts.

Between 2012 and 2025, we observed Red-headed Woodpeckers nesting in 10 different species of trees with a combined total of 611 nests at Cedar Creek ESR. In Table 1 below the species of trees used for nests are listed with the number and percentage of nests in each tree species during this time period.

Table 1 Tree Species Used as Nests by Red-headed Woodpeckers between 2012-2025

#	Tree Species	Number of Nests	Percent of all Nests	
1.	Northern Pin Oak	488	80.0	
2.	Quaking Aspen	25	4.0	
3.	Big-toothed Aspen	23	3.7	
4.	Bur Oak	18	3.0	
5.	Siberian Elm	14	2.3	
6.	Black Cherry	14	2.3	
7.	Red Maple	13	2.1	
8.	Paper Birch	11	1.8	
9.	White Oak	4	0.65	
10.	Green Ash	1	0.15	
	Total	611	100.0	

Based on the information in Table 1, northern pin oaks are much more frequently in the preferred condition and habitat that Red-headed Woodpeckers choose for nesting at Cedar Creek ESR compared to other tree species. Bur oaks are very common in the oak savanna habitat that these woodpeckers nest in, but they have the preferred conditions much less often than northern pin oaks and other species. Some of the tree species are much less common in oak savanna habitat, such as green ash, white oak, and red maples. It may be that the condition and location of a tree are more important than the tree species for RHWOs when making nest and roost tree selections.

Over 90% of the trees or branches used as nests were dead. Red-headed Woodpeckers used both live and dead trees for their nests in most of the tree species observed. Small sample size for a couple of tree species with nests do not show if both living and dead trees of those species were used. One green ash nest and four white oak nests were all in live trees. Table 2 below shows the overall total of live trees, dead trees, and dead branches in live trees that were observed with active Red-headed Woodpecker nests.

**Table 2 Red-headed Woodpecker Nests in Dead Trees, Dead Branches and Live parts of Live Trees
2012 to 2025**

Number or Percent	Dead Tree	Dead Branch on Live Tree	Live Part of Live Tree	Live Trees	Total Trees
Number	479	80	52	132	611
Percent	78.4	13.1	8.5	21.6	100%

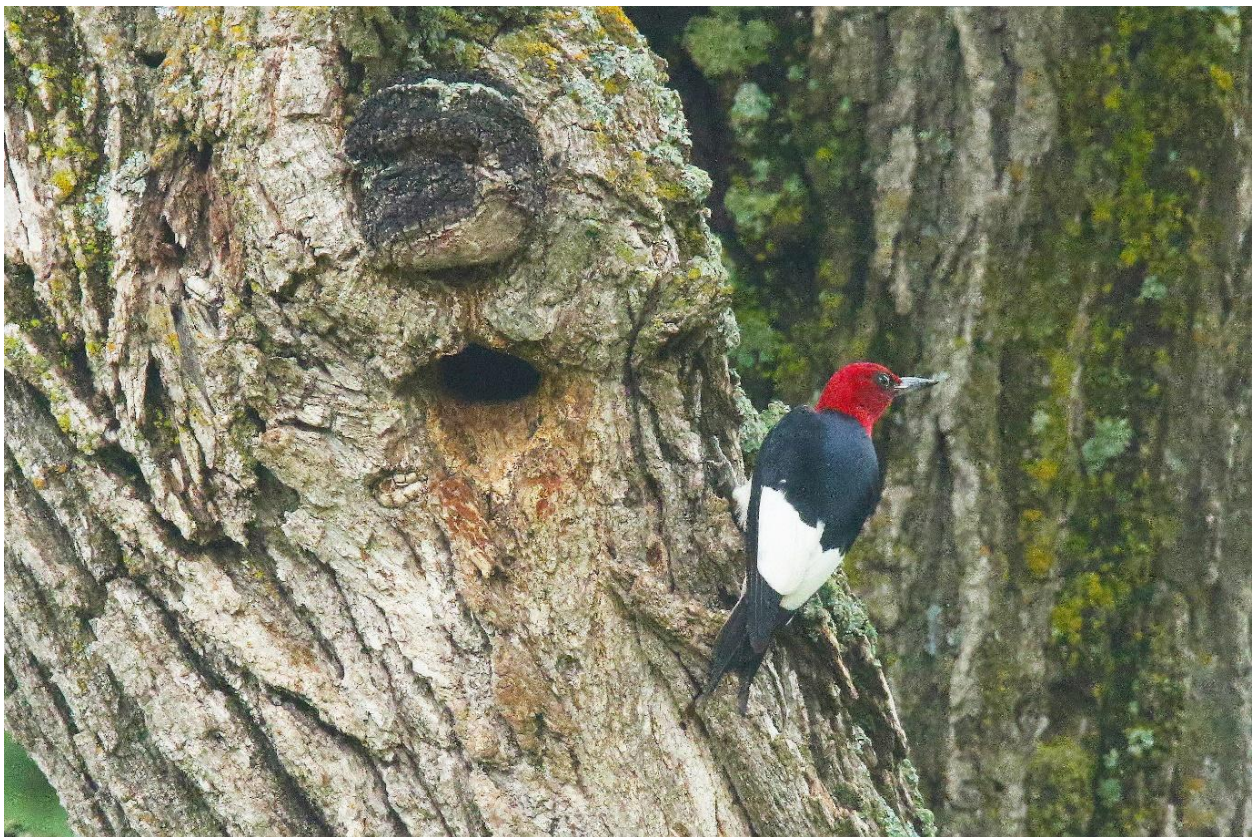
Following are pictures of Red-headed Woodpecker nests in each of the 10 tree species listed in table 1.



Active nests in a dead northern pin oak on the left and in a dead branch in a live northern pin oak on the right.



An active nest in a dead branch on a live bur oak tree.



An active nest in the main trunk of a live white oak tree.



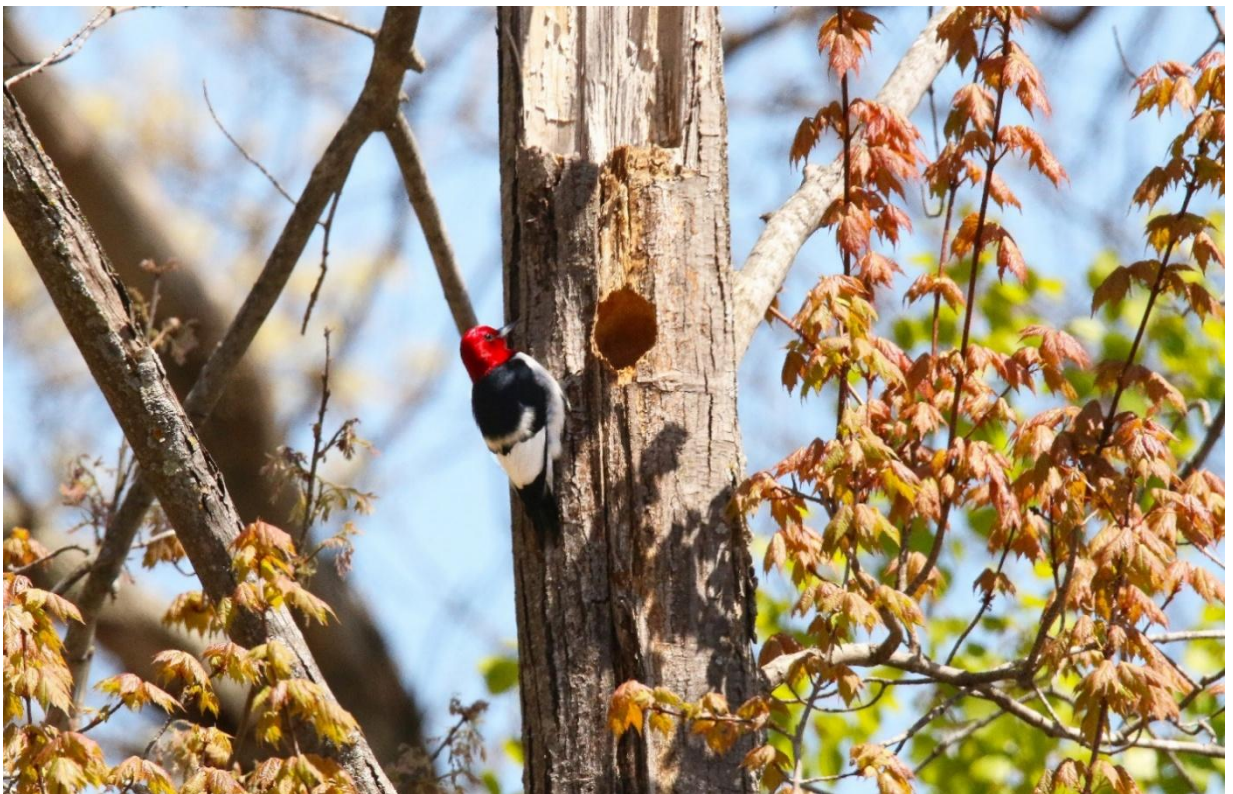
An active nest in a dead quaking aspen tree.



An active nest in a dead big-toothed aspen tree



An active nest in a live Siberian elm tree. The wooden frame holds the nest camera.



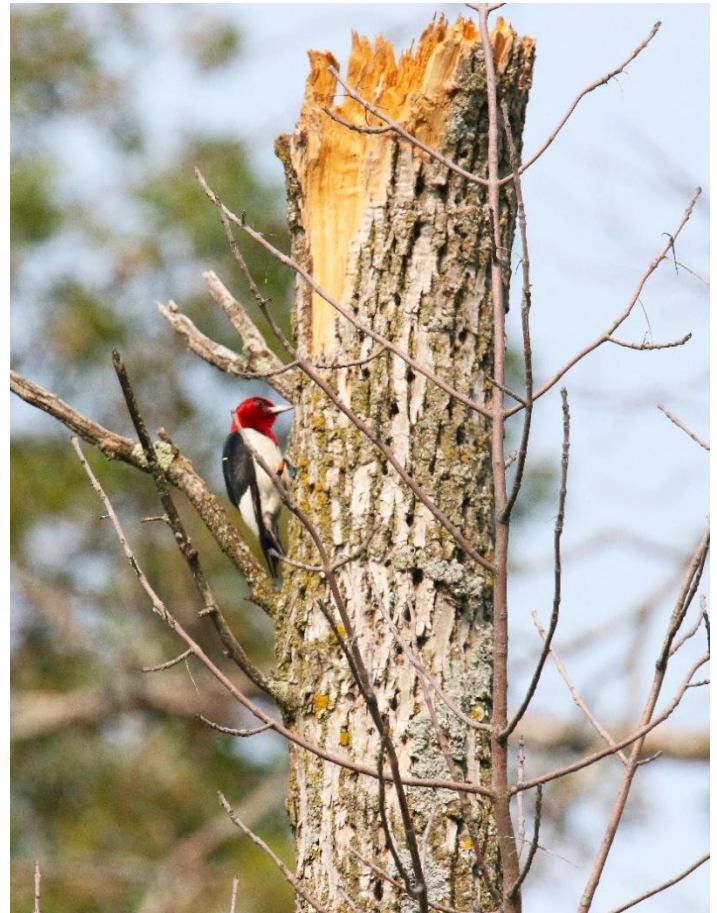
An active nest in a dead branch of a live red maple tree



An active nest in a live black cherry tree



An active nest in a dead portion of a partly live paper birch tree.



A live green ash tree with a dead branch cavity used by the above Red-headed Woodpecker the previous season, and the same woodpecker on a nearby dead green ash the following year (2024).

These pictures and observations suggest that Red-headed Woodpeckers will utilize almost any tree species available that meets their needs for both location within the correct habitat and suitability of the tree for nest cavity excavation. Other factors, like availability of potential nearby roost cavities, nearby cover for future fledglings, and close access to a variety of food needs, are all encompassed within location in the correct habitat.