



# The REDHEAD



## Red-headed Woodpecker Recovery

Fall 2011

A Special Committee of the Audubon Chapter of Minneapolis

Vol. 5 No. 4

### NESTBOX UPDATE

Since the inception of the Red-headed Woodpecker Recovery, the concept of using nestboxes to help in the recovery of the red-headed woodpecker has been a goal, much as the use of nestboxes has tremendously helped in the recovery of eastern bluebirds. Jack Hauser has spearheaded our efforts at designing nestboxes that are acceptable to red-headed woodpeckers. The initial use of boxes as specified in many publications<sup>1</sup> was tried. These boxes were placed at Cedar Creek where many red-headed woodpeckers are known to nest. These boxes were placed at a couple of different heights, 10 and 20 feet as well as at about 5 feet. Red-headed woodpeckers are known to nest high<sup>2</sup> in a tree and these heights were chosen as heights that were possible and still be able to monitor the boxes. While the boxes were readily accepted by bluebirds and tree swallows<sup>3</sup>, to date no red-headed woodpeckers have used them.

Jack has now built a box with a bark front that has proven to be successful in attracting Lewis's woodpeckers in Oregon<sup>4</sup>. It is hoped that this new box will attract red-headed woodpeckers to the box. It will be placed in an area known to be frequented by red-headed woodpeckers and about 20 feet high in a tree to give the best chance of getting them to nest in it. Additional boxes will be built as needed.

The Red-head Woodpecker Recovery continues to discourage the placing of nestboxes for red-headed woodpeckers because they need to be placed high ( $\geq 20$  feet) and the most likely occupants will be other cavity nesting birds. Two of these are very undesirable - the house sparrow and European starling. However if you are determined to place an experimental box, make sure it is well monitored and documented.

1. Carrol L. Henderson "Woodworking for Wildlife: Homes for Birds and Animals", Minnesota Department of Natural Resources (2010)
2. Data from RhWR surveys at Cedar Creek Ecosystem Science Reserve, 2008 - 2011.
3. "The REDHEAD", Fall 2009, page 2.
4. Diane Kook and James D. Moodie, "Using Nest Boxes for Lewis's Woodpecker Conservation in Central Oregon", Proceedings of the Fourth International Partners in Flight Conference: Tundra to Tropics 565-568.

### A Note from the Chair

#### A Note from the Chair October 2011

We've been blessed with a warm and beautiful fall. Hopefully the rains will follow, before the snow hits. Anyway, we are wrapping up the fifth year of our recovery project. And, as the year ends, I want to acknowledge some special contributions from folks who really make this project such a success.

Ari Waldstein, our invaluable researcher, is completing her Master's degree and will sadly be leaving us. Ari was responsible for so many new innovations. In addition to her excellent record keeping, Ari created our nest cavity camera with photos of both eggs and new nestlings. This may be a first in RHWO research. Thanks also to Ari's friend Ben for help in surveying and to Ari's sister Sasha, who helped capture and band our first RHWO - which was a female. Committee members suggested we name the bird Eve, rather than refer to her banding numbers. This embarrassed Ari's professional ornithologist sensibilities, but we can live with that.

Special thanks to Lance Nelson who (on three separate trips) helped me slog through prairie, savanna, and hazel thickets to photograph 36 different nesting trees and 36 close-ups of cavities. Bravo Lance.

If you haven't visited our updated web site, please do yourself a favor and check it out. Carol Carter greatly expanded our old web site, updated data, and added a number of creative links to RHWO related research. Thanks to Carol our new "web-master."

Thanks to Jerry Bahls, who faithfully produces our newsletter and, with great diplomacy, manages to extract articles from the likes of me and other RHWO members.

Finally kudos (that's not kudos) to the great staff at Cedar Creek for their support and enthusiasm the past three years. And we look forward to a growing relationship with the Belwin Conservancy as they work to create new savanna and RHWO habitat in the Afton area.

Chet Meyers, Chair

*Editor: While thanks are being given, the biggest must go to Chet Meyers for his hard work and dedication to the Red-headed Woodpecker Recovery. His efforts and leadership are priceless!!!*

## Note From the Editor

Below are a couple of letters edited from the Cornell BLUEBIRD-L email list

From: "Keith & Sandy Kridler" kridler"at"1starnet.com  
To: "BLUEBIRD-L" BLUEBIRD-L"at"cornell.edu  
Subject: Woodpeckers

Date: Thu, 24 Jan 2002 07:42:59 -0600

Keith Kridler Mt. Pleasant, Texas

Most of the woodpeckers will use low mounted nestboxes to roost in but seem to prefer nesting higher off of the ground. In this area they are choosing sites normally 25-60 feet off of the ground. In the last 20 years bluebird nestboxes along my trails have been used twice by red-headed woodpeckers and they are fairly rare while downies and red-bellies are very common.

These were the only two that actually fledged young and does not count the hundreds of boxes (easily over 5,000 nestbox years of 5"x5"x10"deep total cavity) the woodpeckers enlarged holes so that they could enter. I believe chips would be better than shavings and they would not pack as bad. Pine bark mulch, medium grind to where the chips are not larger than 1/2" seem to work very well in duck and owl boxes without packing or getting soggy.

EXTREME care when opening nestboxes used by woodpeckers must be exercised. Side opening boxes should be avoided as eggs will roll out and the Peterson box could not safely be opened once the woodpecker began egg laying.

[Remaining text of letter has been cut.] KK

From: "Gary Springer" springer"at"alltel.net

To: "BLUEBIRD-L" BLUEBIRD-L"at"cornell.edu

Cc: "Gary Springer" springer"at"alltel.net

Subject: red-headed woodpeckers Extremely long and unfinished

Date: Fri, 25 Jan 2002 00:24:09 -0500

Hi Phil,

...I tapped on the pole a couple times and out popped an all red head with two sparkling black eyes. An instant later it flew in the same direction as previously but the sun had gone down behind the trees and the bold white patches on its black wings now looked like the flight of a white butterfly. That was only the fourth redheaded woodpecker I had ever seen and they were actually using a nest box where I could observe them at will.

...In an effort to keep the woodpeckers from further excavating the box for the purpose of creating nesting material, on two occasions during the first ten days after the eggs were laid, I added a very small amount of sawdust to the box. All total I added less than a quarter cup because

I didn't want to make any changes that might cause the birds to abandon.

...The eggs turned from light glowing pink to a mottled opaque light purple as they approached hatching age. Two of the eggs from the second clutch of three eggs hatched in about 14 days. The third egg did not hatch but was apparently removed from the box by the adults as it was gone within 5 days of when the other two eggs hatched.

Gary Springer

This month's topic "Can we get RHWO to use nestboxes?" has been researched and the answer is a definite "Maybel!" There are reports and pictures showing red-headed woodpeckers, eggs and their young in nestboxes. There are also statements from many makers of nestboxes that cavity nesters like red-headed woodpeckers use nestboxes and give dimensions etc. how they should be made. There are also statements from nature and some bird organizations that matter-of-factly say "Red-headed woodpeckers will nest in boxes."

However, a lengthy search of the internet has turned up very few reports of actual reports of red-headed woodpeckers nesting in a nestbox. Birds are occasionally reported to use the boxes for roosting. It is suggested in one anecdote that in areas where cavity sites are in short supply, they might use a nestbox, but no further evidence is given. Another suggests that more research is needed to determine what characteristics are desired by them. This the Editor strongly agrees with!

A feature article from Ari Waldstein about the use of a pole-mounted video camera to peek into a red-headed woodpecker's nest hole is very encouraging for future studies of cavity nesting birds that nest high in dead trees.

The Editor still desires submission of articles about red-headed woodpeckers or their habitat. Any size is welcome. The only condition is that it is from personal observations or from a scientific study.

Jerry Bahls, Editor

**Factoid from** D.J. Spiering, R.L. Knight / Forest Ecology and Management 214 (2005) 40-52

"All through Dakota, wherever there was timber, I saw the red-headed woodpecker, and in the Black Hills it was especially abundant. It seemed to me the most common species there and its harsh cries resounded through the forest from morning till night." (Ludlow,1875).

Another historic account of the red-headed woodpecker describes the species as, "The most abundant woodpecker in the hills" (Cary, 1901). In contrast, we saw and heard no red-headed woodpeckers at any time in managed ponderosa pine

## RhWR Contact Information

### Audubon Chapter of Minneapolis

President Jim Egge aubullet2@yahoo.com 612 827-7629  
Website www.AudubonChapterofMinneapolis.org

### Red-headed Woodpecker Recovery

Chair Chet Meyers chetmeyers@visi.com 612 374-5581  
Treasurer Jerry Bahls rhwracm@comcast.net 763 572-2333  
Recorder <open>  
Editor Jerry Bahls rhwracm@comcast.net 763 572-2333  
Website www.RedheadRecovery.org or http://rhrp.moumn.org

# A First Glimpse into Red-headed Woodpecker Nests

Ari Waldstein

As home to one of the highest densities of breeding red-headed woodpeckers in the Upper Midwest, Cedar Creek Ecosystem Science Reserve has the potential to provide some important insight into habitat preferences and nesting ecology. As a species of conservation concern, this information is pertinent for directing restoration and conservation action elsewhere in the state. Though the density of woodpecker nests at this site is high, it is important to distinguish habitat selection from habitat quality. It is incorrect to assume that all sites containing a red-headed woodpecker nest are equal in quality. One way to measure habitat quality is to quantify nest productivity. Higher productivity indicates higher habitat quality, though collecting this information can be difficult for cavity nesting birds. Traditionally, cavity nest monitoring required researchers to climb nest trees and use either a fiberscope (Purcell 1997) or mirrors to examine cavity contents. Since red-headed woodpeckers preferentially nest in snags and dead limbs (Smith et al. 2000), concerns for the preservation of the researcher (me!) and the nest tree negated this option.

An alternative to climbing is a pole-mounted video camera, which allows nest monitoring to occur quickly, and with minimal amount of disturbance to the breeding pair. In the summer 2011, I designed my own cavity camera to monitor the red-headed woodpecker nests at Cedar Creek.

The design incorporated a small camera mounted on a 15 m telescoping pole. The camera was attached via cable to a ground-level power source and laptop. This allowed my trusty field assistant, my sister Sasha, to view the video live and direct my manipulation of the overhead camera; ensuring we obtained a good look at the entire cavity. Nest checks occurred every 5-7 days and over the duration of the breeding season we conducted 47 nest checks at 16 nests.

Use of the cavity camera resulted in several important discoveries. Up until this point, the number of chicks in each nest was uncertain. Due to small diameters at cavity height (~25.4 cm, 10 in), casual observation presumed a maximum of 2 chicks. Instead, camera footage showed that the red-headed woodpeckers at Cedar Creek have clutch sizes equivalent to elsewhere in the country with an average of 3 chicks. We saw nests with as many as 4, though they looked very crowded! The literature suggests that breeding pairs lay an average of 5 eggs (Smith et al. 2000) and this is consistent with my findings. Though we only filmed three nests in the incubation stage, two had 4 eggs and one 5. The disparity between number of eggs and the number of chicks suggests that either a percentage of eggs remain unhatched or that at least one nestling does not survive. A video displaying a dead nestling at the bottom of a cavity strengthens this hypothesis. There were also several nests with young nestlings accompanied by unhatched eggs.

Weekly monitoring and observation resulted in the discovery of two predated nests. Prior to the cavity camera, I presumed that the height of red-headed woodpecker nests protected them from the usual nest predators. Though it is unclear what predated these two nests, I found it especially interesting that in both situations the birds started a new clutch in the same cavity. Unfortunately, the fate of these nests is not known.

Like many inquiries into red-headed woodpecker ecology, the cavity camera data raised more questions than it answered. Though it appears that productivity at Cedar Creek is high, additional years of monitoring is needed to identify quality habitat characteristics and ascertain average nest success. In addition to habitat quality, a host of other factors may influence nest productivity including age of breeding pair, proximity to other red-headed woodpecker nests and date of nest initiation. The closest relatives to red-headed woodpeckers (red-cockaded, acorn and Lewis' woodpeckers) have complex social systems, and I suspect that this species does as well. If this is the case, the relationship of the breeding pair to surrounding woodpeckers might strongly impact the success or failure of a nest. The prevalence of predation and its potential relationship to habitat variables require additional study. Despite these looming questions, the use of the cavity camera this season was a great success. It gave us a first glimpse into this very important aspect of red-headed woodpecker breeding ecology. Its success proved that this cavity camera design works for this study system. And, of course, provided us with some absolutely adorable videos of red-headed woodpecker nestlings!

Purcell, K.L. 1997. Use of a fiberscope for examining cavity nests. *Journal of Field Ornithology* 68: 283-286.

Smith, K. G., J. H. Withgott, and P. G. Rodewald. 2000. Red-headed woodpecker (*Melanerpes erythrocephalus*). In *The birds of North America*, No. 518 (A. Poole and F. Gill, eds.). *The Birds of North America, Inc., Philadelphia, PA.*



Photo by Ari Waldstein

RHWO eggs in nest



Photo by Ari Waldstein



Young RHWO in nest

## Winter Issue Feature Topic

The Winter issue's topic will be "Do the young return to nest in the same area in which they were fledged?" Send your observations and references to Jerry Bahls (rhwracm@comcast.net) by January 15th. Please send observations only - no opinions! Also send any future topics to be featured in the newsletter.

## Next RhWR Meetings

The RhWR usually meets on the 3rd Wednesday each month at 7:00 pm at the Lund's Store 1 block west of 50th & France in Edina. The next meeting will be in **January 18th**. No Nov. or Dec. meeting. All are welcome and encouraged to attend. Please encourage your friends to attend also. Check our website ([www.RedheadRecovery.org](http://www.RedheadRecovery.org)) for current information.

Red-headed Woodpecker Recovery  
Audubon Chapter of Minneapolis  
PO Box 3801  
Minneapolis MN 55403-0801

# Save that Snag!

Place  
Stamp  
Here



## Red-headed Woodpecker Recovery Program Membership Application

*I'd like to join!* Please add me as a member of the Red-headed Woodpecker Recovery (RhWR) at the rate of \$10/year! Please send my membership information to the address below.

*I'd like to renew!* Renew my RhWR membership for \$5/year.

*Yes, I'd like to join Audubon Chapter of Minneapolis also!* Please add me as a member of the Red-headed Woodpecker Recovery (\$10) and the Audubon Chapter of Minneapolis (\$12) at the rate of \$22/year. Please send my membership information and *Kingfisher* to the address below.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

E-MAIL \_\_\_\_\_

**Send this application and make check payable to:**  
Audubon Chapter of Minneapolis  
RhWR  
PO Box 3801  
Minneapolis, MN 55403-0801