

The REDHEAD



Fall 2018

A Special Committee of the Audubon Chapter of Minneapolis

Vol. 12 No. 4

RHWO NEWS

Field Season 2018

The 2018 red-headed woodpecker field season came fast and furious with a record setting mid-April snowfall and an early start to courtship and nesting by many of the birds at Cedar Creek. Red-headed woodpeckers paid no mind to the cold and snowy conditions and started their breeding season activities approximately 3 weeks *before* last year's breeding season. One of our most enthusiastic and skilled volunteer photographers, Siah St. Clair, was able to capture a number of red-headed woodpeckers actively foraging for insects on tiny leaves that had just emerged amidst the snow-covered trees. We suspect that the early start to breeding was a result of so many woodpeckers overwintering at Cedar Creek, allowing them ample time for courtship and cavity excavation during the spring.

Much of our research is made possible with the assistance of our citizen science volunteers who conduct surveys throughout Cedar Creek's oak savannas to identify potential red-headed woodpecker nest sites. Volunteers identify these sites by observing woodpecker behaviors, including courtship displays, movements in and out of cavities, defensive displays, and cavity excavation. From May until August, over 40 citizen scientists conducted nearly 75 surveys, totaling more than 160 hours. Many volunteers also spent additional time photographing red-headed woodpeckers and their interactions with other bird species. We have over 19,000(!) photos, which is an incredible repository of information for the project.

Much of our work early in the field season is made up of daily nest checks. Once volunteers on the project locate potentially active red-headed woodpecker nests, members of the research team confirm whether the nest is active by hoisting one of our telescoping measuring poles toward the nest cavity, inserting the attached camera, and taking a look. This year we were able to monitor 44 nest trees and we noted at least three additional trees where nesting took place but we were unable to monitor them because we could not access the cavity due to its height or entrance hole diameter. A total of 24 nests fledged at least one juvenile during first nest attempts, while 11 first nesting attempts failed. Of these 11 nests that failed, we were able to confirm that four were due to predation and one was caused by a tree blow down. We were unable to determine

Continued on page 3, Field

A Note from the Chair

Fall 2018

With the nesting season over and about 80% of the Cedar Creek ESR Red Headed Woodpeckers having left for wintering places, there will be time now to catch our collective breath, bring all the data together from this past season, and begin to plan for 2019 activities. Some data collection will continue through this coming late fall, winter, and early spring seasons, but enough time will be left to learn from all the work of this year and use those experiences to guide our upcoming activities.

I have received calls this past summer and fall from land managers who are aware that the presence of Red Headed Woodpeckers on their property is an indication of a healthy savanna ecosystem. These managers are inquiring how to attract RHWOs to their lands, and how to be more aware of their presence. I feel that this is an indication that our efforts concerning RHWOs are successfully reaching decision makers about land management.

A big thank you to all who helped make this a very successful year for the Red Headed Woodpecker Recovery Project, through volunteer efforts and/or contributing funds. Also a big thank you to our excellent academic research team, Dr. Elena West, Jesse Beck, and Megan Massa. We can all look forward with anticipation as several of the RHWOs with transmitters have "migrated" and we have a good chance to learn, next spring, where they overwintered. That has been one of our primary goals.

> Siah St. Clair Steering Committee Chair

The Redheaded Woodpecker Recovery now has a fund raiser to help us get the money we need to continue our research efforts. His name is **Jim Stengel** and he can be contacted by phone at **612 721-9083** or by email at **slheidiss@yahoo.com.** If you know of an organization or individual that will donate money for research, please give him a call.

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Note From the Editor

Dr. Elena West has provided an excellent summary of this summer's work at Cedar Creek Ecosystems Science Reserve (CCESR). Two articles dealing with citizen science are also provided. We hope it will inspire you to want to help us this winter and next summer in our citizen science projects. Please look at the article "RhWR Volunteer Opportunities" on the back page to see where you might be able to help.

We will be working on raising funds to continue our work at CCESR. So if you know of any organization or individual who may be interested in funding our research, please contact Jim Stengel (contact info on first page).

Please note there are about 25 RHWOs overwintering at CCESR. So take a drive there to see them.

Jerry Bahls, Editor 🔪

Membership Dues

Red-headed Woodpecker Recovery (RhWR) receives almost all its operating revenues from membership dues.

Basic memberships are \$20.00/calendar year.
 Members who contribute more will receive other benefits along with the newsletter. Those contributing \$50.00 will also receive a handsome embroidered patch. Those contributing \$100.00 will receive the newsletter, a patch, and a personal tour of the Cedar Creek Ecosystem Science Reserve.

3) The newsletter will be published for members.

Send your membership applications and renewals to -

Audubon Chapter of Minneapolis RhWR PO Box 3801 Minneapolis, MN 55403-0801

Thank you for your continued support.

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Roosting

The 2018 breeding season is over, but we continue to discover interesting things about the Red-headed Woodpeckers at the Cedar Creek Ecosystem Reserve. We know of about 25 of the birds that are still around in late October. We expect that they will remain here all winter.

Our field work this fall and winter includes observing the birds retrieving stored food and finding where the birds are roosting. With the cooler weather, birds are spending little or no time flycatching. It appears that the birds are primarily eating acorns they have stored in late summer and early



fall. We would like to know precisely where the birds are storing food. how much food they store, and whether they use any other food sources. The birds appear to be territorial throughout the year. We have seen them chasing squirrels. Pileated Woodpeckers, Hairy Wood-

peckers, Red-bellied Woodpeckers, Blue Jays, and Whitebreasted Nuthatches away from the trees where they stored acorns. Based on limited observations, the birds do not appear to do much in fall or winter, other than occasionally eat a stored acorn.

Most of the birds roost on their breeding territories. All the birds roost in cavities. Many more males roost in their nest cavities from the previous breeding season than do females. Some birds used more than one roost cavity during the fall and winter. Some birds excavate a new cavity for roosting, though most birds used pre-existing cavities. Some roost cavities were in limbs too narrow for a nest. Mated pairs from the previous breeding season

generally had roosts within 100 meters of each other.

We would like to find out what percent of birds use more than one roost, whether mated pairs share the same territory, and how weather and date affect the time when birds go to roost. So, even though most of the Red-headed Woodpeckers have migrated elsewhere this year, there are still many questions we are trying to answer by observing the woodpeckers still here.

Jim Howitz

Field, (Continued from page 1)

the cause of failure for the remaining six nests.

We were pleasantly surprised to find that a number of pairs nested a second time this summer. We observed a total of 20 second nesting attempts, 12 of which fledged at least one juvenile and eight of which were unsuccessful. While we were



avenile and eight of which were unsuccessful. While we were able to confirm that three of these eight failures were caused by predation events we were unable to determine the cause of failure for the remaining five nests. The challenge in these cases is that nests are found empty, and without visible evidence of a predation event or carcass(s) present, it's difficult to determine the cause of failure.

In addition to nest monitoring, one of our major tasks this summer was to recapture as many of the adult woodpeckers we marked with pinpoint GPS units during the 2017 breeding season. We were able to retrieve five GPS units (out of 20) and we're hopeful that we will be able to recover additional units over the next few breeding seasons, including the 12 that we attached to birds this summer. Data from the GPS devices will provide information on whether birds migrated or overwintered at Cedar Creek. Attached to each GPS device is a geolocator, which measures light-level data, which will provide information

on cavity use and incubation.

Much of the field work this summer was also spent tracking individual adults and juveniles that had been marked with radiotransmitters. We tracked 16 adults to collect habitat use and home range data, including territory size and overlap. We marked 18 nestlings with radio-transmitters prior to fledging in order to track their daily movements, habitat use, and postfledging survival. We also collected tissue samples from each captured bird, which we will compare to prey samples using stable isotope analysis as part of our study to determine woodpecker diets. Stable isotopes are a useful tool for reconstructing consumer diets as the isotopic ratios of nitrogen ($^{15}N/^{14}N$, noted $\delta^{15}N$) and carbon ($^{13}C/^{12}C$, noted $\delta^{13}C$) in consumer tissues predictably reflect those in their diets.

By the end of September we were unable to locate most of the birds we had marked with radio-transmitters. Many adults appear to have migrated (adults) or made first-year dispersal movements (juveniles). As the field season came to a close, the most dramatic moments seemed a distant memory. A huge highlight from the season include was our determination that two "trios" of birds were exhibiting polyandry, which is the first time this behavior has been described in this species (more to come on this story this fall and winter!).

Data analysis is in full swing and will be ongoing throughout the duration of our multi-year study. We look forward to sharing preliminary results in the coming months and planning for another action-packed field season. A huge thank you to all of our fantastic volunteers for their interest, support, and dedication to red-headed woodpecker research and recovery! Be sure to follow our blog for updates and photos from the field season and on our future work: <u>www.rhworesearch.org</u>

Dr. Elena West

Citizen Science Parental Effort

The photo at the right is an example of what you will see when you are doing a citizen science project at Cedar Creek Ecosystem Science Reserve (CCESR). This photo taken to monitor parental effort clearly shows the parents of the nestlings in the nest cavity. The color bands tell the observer the sex of the bird. The female (right leg [red over orange]) probably has just fed the nestlings and the male (left leg [yellow over red]) bringing something (not always clear as in this case) in its beak to the nestlings. The citizen scientist records the time, which parent feeds the young and how long it was in the cavity. They also record what the parent was feeding the young if it can be determined. While photos help with identification and makes a record of the event, the old fashioned pen and paper still works to document each parental visit to the nest. Contact us at rhwracm@comcast.net if you would like to participate in a Citizen Science Project at CCESR.



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| RhWR Volunteer Opportunities | Winter Issue Articles | | | |
| The Red-headed Woodpecker Recovery (RhWR) has a need for many volunteers now and through the fall. Here is a list of them in the order of priority and a very brief description of the duties - Communications Representative on Steering Committee - Oversee website, newsletter and Facebook page and be communications advocate on Steering Committee Newsletter Editor - Coordinate publication of newsletter Webmaster - Manage the RhWR website Lead Citizen Science Projects - Recruit and organize volunteers of RhWR citizen science projects Do Citizen Science Projects (2019) - Monitor RhWR nest sites, Monitor roost sites, Monitor food eaten, Monitor mast (Please note this requires CCESR training.) Email rhwracm@comcast.net to sign up for any of these volunteer opportunities or to ask any questions. | Send your articles, photos, observations and refer- ences to Jerry Bahls (rhwracm@comcast.net) by Jan- uary 15th. Have you monitored any RHWO nests? Or have you observed any RHWO frequently this summer? Let us know about your work! Next RhWR Steering Committee Meeting The RhWR Steering Committee usually meets on the 3rd Wednesday each month at 7:00 pm. However, the next meeting will be on Wednesday, November 14th at the Brookdale Library at 6125 Shingle Creek Pkwy in Brooklyn Center at 7:00 pm. All are welcome and en- couraged to attend. Please encourage friends to at- tend also. For current information check our website at www.RedheadRecovery.org. | | | |
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| Red-headed Woodpecker Recovery Audubon Chapter of Minneapolis PO Box 3801 Minneapolis MN 55403-0801 | Place Stamp Here | | | |
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| Red-headed Woodpecker Recovery Program Membership Application I'd like to join! Please add me as a member of the NAME | | | | |
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| also! Please add me as a member of the Red-headed | Send this application and make check payable to: | | | |
| of Minneapolis (\$12) at the rate of \$32/year. Please send my membership information and <i>Kingfisher</i> to the address at right. | Audubon Chapter of Minneapolis - RhWR PO Box 3801 Minneapolis, MN 55403-0801 | | | |
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