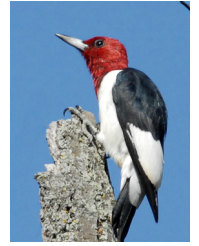


Spring 2025

The REDHEAD

Red-headed Woodpecker Recovery

Working to improve the future of Red-headed Woodpeckers



Vol. 19 No. 2

RHWO NEWS

The 2024 Cicada Irruption and Red-headed Woodpeckers

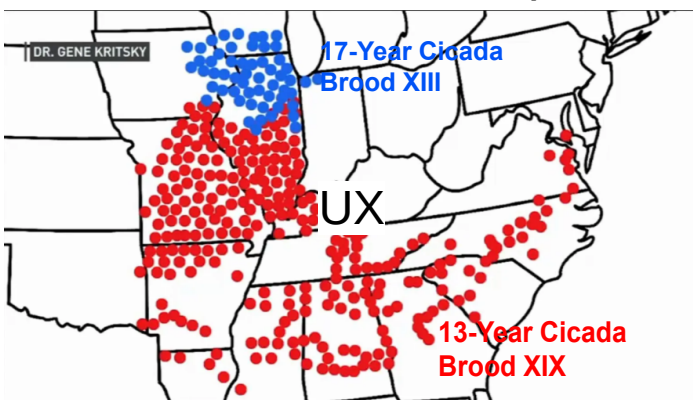
The year 2024 saw an event that had not been seen for 221 years, the simultaneous emergence of both 17-year and 13-year periodical cicada broods. We know that Red-headed Woodpeckers (RHWOs) catch cicadas and feed them to their young. RHWOs in an irruption area might fledge more broods, have larger broods, have more second broods, have less predation as predators concentrated on the cicadas, and have greater adult survival as the adults would not have to work so hard to feed their young.

I looked at the effects of the 2021 Brood X periodical cicada irruption on Red-headed Woodpeckers (*The Redhead*, Spring 2022). It appeared that certain RHWO populations increased due to the increased food availability during the cicada irruption.

Methods

I tried to find out if the 2024 cicada irruption had any effect on RHWO populations. The two cicada broods overlapped in Illinois (see Map 1). So, I looked at the number of RHWOs reported on Illinois Christmas Counts. Increased juvenile production in irruption areas could be detected on Christmas Counts within the irruption area. I compared the

2024 Periodical Cicada Irruption



Map 1

number of RHWOs reported on Illinois Christmas Counts

Continued on next column, Counts

A Note from the Chair

Spring 2025

Thanks to everyone for renewing memberships and making contributions over the past several months. Recently the Red-headed Woodpecker Recovery has sent funds to the University of Minnesota to cover wages and housing costs for research technicians for the coming field season research work on Red-headed Woodpeckers. Volunteer trainings have been scheduled within the next few weeks for Breeding Bird Survey and Nest Survey volunteers.

Site visits are also being scheduled for habitat partners and other sites as the nesting season for Red-headed Woodpeckers begins. During the last several months programs on Red-headed Woodpeckers have been presented to groups along with tabling activities at special events. Thanks to the volunteers that have done that work.

Work is also moving along well on updating and formatting of the website. Hope to have that available to everyone in a couple of months.

Enjoy spring and all the new experiences it brings.

Siah St. Clair, Steering Committee Chair

Counts, *Continued from previous column*

with the numbers expected on those Counts. To estimate the expected number of RHWOs, I used a linear regression on the numbers reported on Christmas Counts from 1999-2000 through 2023-24. RHWO numbers have been reasonably stable over this 25-year period.

The Brood XIX 13-year cicada irruption included almost all of Missouri. More RHWOs have in reported on Missouri and Illinois Christmas Counts from 1999 through 2024 than any other states. So, I also looked at RHWOs counted on all 2024-25 Christmas Counts in Missouri.

To see if the cicada irruption affected other species, I looked at Blue Jay and Common Grackle counts in Illinois and Missouri. These birds are known to prey on cicadas.

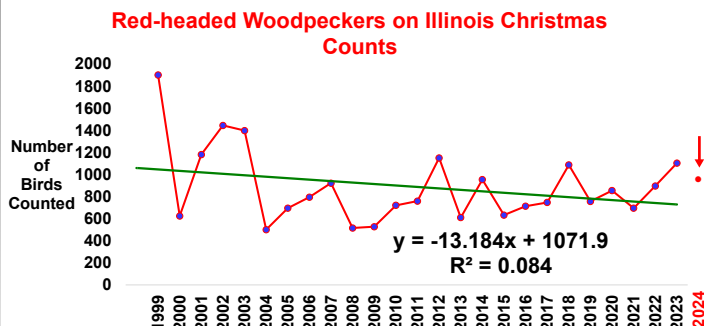
Results

Red-headed Woodpeckers reported on 2024-25 Illinois

Continued on next column, Christmas

Christmas Counts did not differ from the numbers expected from the 25-year trend ($p > 0.05$). 967 RHWOs were counted on 2024-25 Illinois Christmas Counts. 715 were expected from the 25-year trend (Chart 1). However, the 967 RHWOs reported did not lie outside the 95% confidence levels for the 25-year trend. 33 Christmas

Chart 1

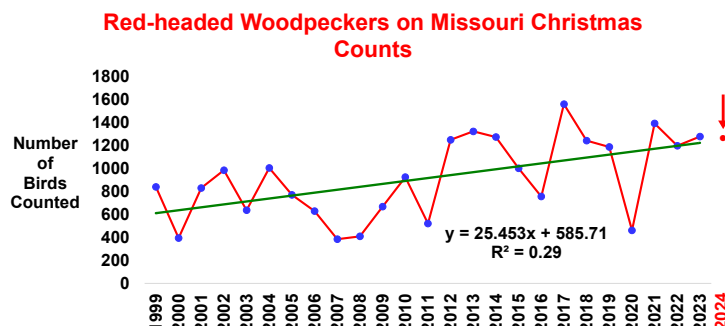


Numbers of Red-headed Woodpeckers reported on 2024-25 Illinois Christmas Counts were not statistically higher than expected from the linear regression (Green Line) based on Christmas Counts from 1999-2000 through 2023-24.

Counts reported more RHWOs than expected. 26 Counts reported fewer than expected. These differences were not statistically significant ($p > 0.05$).

Red-headed Woodpeckers reported on 2024-25 Missouri Christmas Counts did not differ from the numbers expected from the 25-year trend ($p > 0.05$). 1230 RHWOs were counted on 2024-25 Missouri Christmas Counts and 1248

Chart 2



Numbers of Red-headed Woodpeckers reported on 2024-25 Missouri Christmas Counts were not statistically higher than expected from the linear regression (Green Line) based on Christmas Counts from 1999-2000 through 2023-24.

Continued on next column, Blue Jays

Note From the Editor

You will see some subtle changes to the layout of this and future newsletters because the software I have been using will no longer be supported and I need to shift to new software to publish it. I will continue to improve it as I learn how to use this software. Please send feedback about what you like and don't like about all aspects of the newsletter. Also offer to help publish it, I can use help since time is starting to catch up to me.

Editor

Blue Jays, Continued from previous column

were expected (Chart 2). 20 Christmas Counts reported more RHWOs than expected and 10 reported fewer RHWOs than expected from the 28-year trend. These differences were not statistically significant ($p > 0.05$).

Blue Jays on Illinois Christmas Counts did not differ significantly from the numbers expected from the 25-year trend. 7601 Blue Jays were reported and 6967 were expected from the 25-year trend. 32 Illinois Christmas Counts reported more Blue Jays than expected and 21 reported fewer than expected ($p > 0.05$).

More Blue Jays were reported on 2024-25 Missouri Christmas Counts than in any previous year. 6323 Blue Jays were reported, whereas 5308 were expected from the 25-year trend. This difference is beyond the 99% confidence level ($p < 0.01$). 16 Missouri Counts reported more Blue Jays than expected. 12 Counts reported fewer than expected.

On 2024-25 Illinois Christmas Counts, 136,951 Common Grackles were reported and 185,207 were expected. However, this difference is not significant ($p > 0.05$). 15 Counts reported more Common Grackles than expected and 42 reported more than expected. This is statistically significant ($p < 0.01$).

Discussion

2024-25 Illinois Christmas Counts reported 252 more Red-headed Woodpeckers than expected from the 25-year trend. However, this result was not statistically significant. 2024-25 Missouri Christmas Counts counted 18 fewer

RHWOs than expected. So, the two states typically reporting the most RHWOs showed little, if any, support for the hypothesis that the 2024 cicada irruption increased RHWo numbers. This is in contrast with what occurred with the 2021 cicada irruption (*The Redhead*, Spring 2022). Many factors affect RHWOs population changes, such as weather, predation, food availability during the breeding season, food availability during the nonbreeding

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Continued on Page 3, Cedar Creek

Red-headed Woodpecker's Relationship with Heart-rot Fungi

Red-headed Woodpeckers excavate their nest cavities and roosts. Among the birds that are considered primary cavity excavators, Red-heads are known as weak cavity excavators. At Cedar Creek ESR, and probably other areas, Red-headed Woodpeckers nest and roost in mostly hard wood trees, like oaks, cherries, maples, birch, and elms (over 92% at Cedar Creek). To be able to excavate cavities in the very hard wood of these trees, Red-headed Woodpeckers depend on heart-rot fungi to soften the heart wood portion of these trees. See attached pictures with fruiting bodies of heart-rot fungi at nest sites.



Photo by Siah St. Clair



Photo by Siah St. Clair

It isn't only for the excavation of the cavities that Red-heads need the cavity wood to be soft. Their nestlings scatter spray their fecal matter all over the bottom of the cavity, and the adults (mostly males) remove the soggy wood chips in the nest bottom to keep it clean. The adults then chisel new wood chips from the inside walls of the nest cavity. Over time this process may double the volume area of the inside of the nest cavity. Making new woodchips should not require a lot of time and energy, hence the trees are chosen by these woodpeckers with soft heartwood for their cavities.

There are many forms of heart rot-fungi. They are found in living and dead trees and weaken the trees to storm damage. But, at the same time, birds like Red-headed Woodpeckers depend on these fungi to create conditions that they require to be able to excavate cavities and roosts, and thus nest successfully. Red-headed Woodpecker populations will be helped if we can leave these trees standing for as long as possible.

- Siah St. Clair

Cedar Creek, *Continued from Page 2*

season, dispersal, migration, and disease. For example, we know that some of the RHWOs that breed at Cedar Creek have spent the winter in Illinois or Missouri. This past winter, all or nearly all the Cedar Creek RHWOs spent the winter at Cedar Creek. If RHWOs from a broader area likewise did not migrate to those two states, any population increase triggered by the cicada irruption may have been obscured.

More Blue Jays were reported on Illinois Christmas Counts than expected, but this was not statistically significant. On Missouri Christmas Counts, significantly more Blue Jays were reported than expected. So, Blue Jays may have increased in areas of the cicada irruption.

Fewer Common Grackles were counted on 2024-25 Illinois and Missouri Christmas Counts than expected. However, grackle numbers on Christmas Counts fluctuated wildly, making statistical analysis difficult. I found no evidence that the cicada irruption increased Common Grackle numbers.

In summary, the 2024 simultaneous 17-year and 13-year periodical cicada irruption did not appear to have a significant impact on Red-headed Woodpecker or Common Grackle numbers in the irruption areas. The cicada irruption may have contributed to increased Blue Jay numbers in the irruption areas.

- Jim Howitz

RhWR Volunteer Opportunities

The Red-headed Woodpecker Recovery (RhWR) has a need for volunteers to help run the organization. Here is a list and a very brief description of the duties -

Communications Representative on Steering Committee -

Help with website, newsletter and Facebook™ page

Assistant Newsletter Editor – Help coordinate publication of newsletter

Assistant Webmaster – Help manage the RhWR website

Citizen Science Projects (2025) – At various times the RhWR needs volunteers to help with Citizen Science Projects. Because these often require a firm commitment of time, the RhWR vets our volunteers to ensure that projects are completed in a timely manner. (Please note that if the project is at CCESR, it will require some training.)

Email rhwracm@comcast.net if you would like to commit for any of these volunteer opportunities or to ask any questions. Watch for announcements on the website or on Facebook for projects that need help. Send this info to your friends and bird lovers.

Next RhWR Steering Committee Meeting

The RhWR Steering Committee usually meets on the 3rd Wednesday of the month at 7:00 pm every two months. The next virtual meeting will be on May 21, 2025 at 7:00 pm. All are welcome and encouraged to attend. Please encourage friends to attend also.

Important Dates

Cedar Creek Training	May 3, 2025
TC Bird Festival	May 17, 2025
Steering Committee	May 21, 2025

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

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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 \$20/year (\$50 is suggested rate). Please send my membership information to the address at right.

☐ *I'd like to renew!* Renew my RhWR membership for \$20/year (\$50 is suggested rate).

☐ *I'd like to donate to the RhWR as part of my IRS Retirement Distribution.* Please contact us if unsure how to make the donation. We can help make it happen.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

E-MAIL _____

Send this application and make check payable to:

Red-headed Woodpecker Recovery
PO Box 32172
Minneapolis, MN 55432-0172