

# Raptor Road Survey 2023 report

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*\*Note this report was created in the middle of the season for this project. Data in this report are from the beginning of the season up to the date this report was created. Data will be analyzed by season (Oct-April) and not by calendar year. This report also contains final data for the previous season\**

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To assist with the Winter Raptor Research project you will be conducting surveys of raptors along specific driving routes. These surveys will not only help to aid in catching raptors for banding and further research but they will also be useful in estimating population sizes similar to Christmas Bird Counts. By comparing the data from different years of surveys we will be able to look for trends in the populations.

You will be given a guide that includes raptor identification, the specific routes you can cover as well as how to enter your data into eBird.

## SKILLS NEEDED

- Legible note taking and understanding of data being collected
- Taking photos with smart phone of raptors for documentation
- Ability to identify American Kestrels, Red-Shouldered Hawks and Red Tailed Hawks

## VOLUNTEER DUTIES

- Follow the survey guidelines in the manual
- set up their own eBird account
- submit all records to eBird in accordance with the manual
- provide their own transportation and optics
- track their hours using the Calvert Stewards website

## REQUIREMENTS & EXPECTATIONS

Once qualified and after reading the manual volunteers may begin conducting surveys along the indicated routes. Surveys can begin on October 1 and happen through April 31. Surveys can start any time after sunrise and must be completed before sunset. Surveys should not be conducted on rainy or snowy days. While raptors may be out at these times they are unsafe conditions to be along roadsides. You may perform more than one route in a day. Routes may be repeated after 3 days have passed since the last survey you conducted on that route.

## TRAININGS

- Must pass raptor identification test before being qualified for this program

## PROJECT DATES

- October 1, 2023 through April 31, 2024

## SUMMARY OF OCTOBER 2022-APRIL 2023 ACTIVITIES

Species	Total number of sightings per species	Birds sighted vs Number of Surveys*
American Kestrel	15	.555556
Red Shouldered Hawk	41	1.518519
Red Tailed Hawk	19	.0703704
Merlin	3	.111111
Coopers Hawk	2	.074074
Sharp Shinned Hawk	0	0
Northern Harrier	1	.037037

\* This number will be useful in comparing data between different years. Looking at just the number of birds sighted could show a false increase in population due to more surveys being conducted.

**Total Surveys conducted: 27    Total Volunteer Hours: 49.75 hours**

- Maggie Silverman: 15
- Karen Anderson and Mike Carpenter: 4
- Joanne and Craig Simmons: 6
- Thomas Burnett: 2

## SUMMARY OF OCTOBER 2023-MARCH 2024 ACTIVITIES

Species	Total number of sightings per species	Birds sighted vs Number of Surveys*
American Kestrel	86	1.103
Red Shouldered Hawk	81	1.038
Red Tailed Hawk	41	.526
Merlin	1	.013
Coopers Hawk	5	.064
Sharp Shinned Hawk	1	.013
Northern Harrier	3	.038

\* This number will be useful in comparing data between different years. Looking at just the number of birds sighted could show a false increase in population due to more surveys being conducted.

**Total Surveys conducted: 78    Total Volunteer Hours: roughly 430 hours**

- Ruth Carmona-Murray: 9
- Joanne and Craig Simmons: 3
- Karen Anderson and Mike Carpenter: 18
- Jack Felsher: 10
- Maggie Silverman: 3

The remaining surveys were conducted by Gene with volunteers or teens while road trapping.

## VOLUNTEER RECOGNITION AND APPRECIATION

After volunteers conduct 3 road surveys, they can come out for a day of raptor road trapping and banding, usually emailing everyone at the end of the week about dates the following week since trapping is very weather dependent.

Some volunteers are not available during the week, so Gene also offer some weekend dates to take volunteers out trapping.

Gene emailed all volunteers directly to let them know about the Blackwater Trip and Conowingo Trip; Karen Anderson and Mike Carpenter came on both of these trips.

## DATA SUMMARY

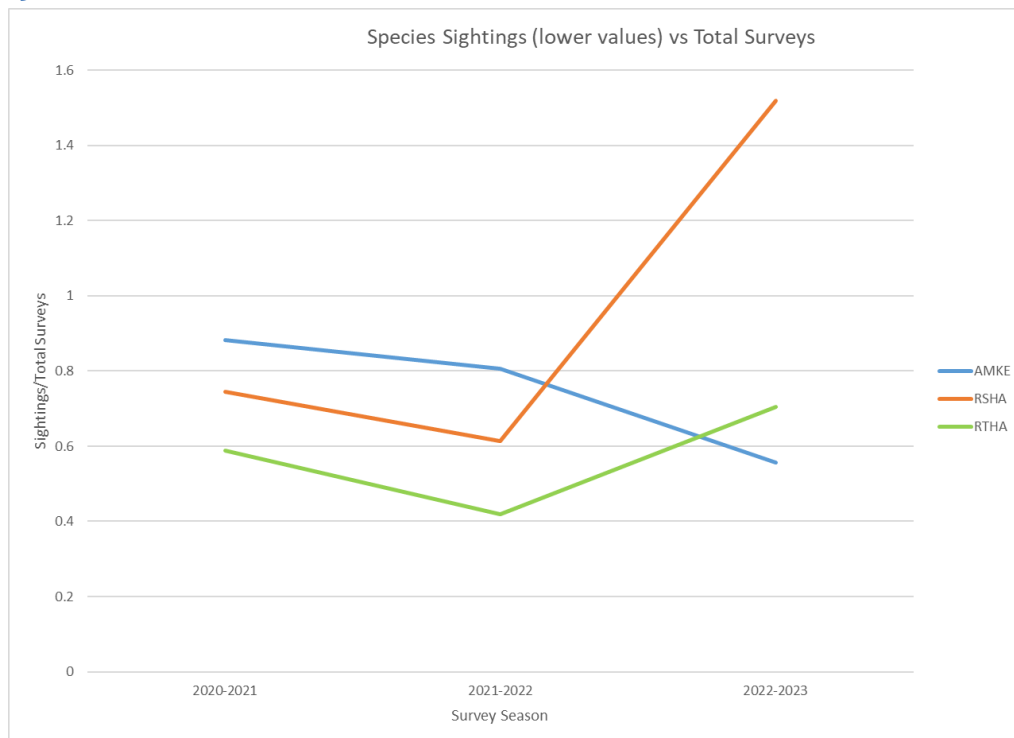
The table below shows the number of surveys completed and the number of sightings for each species divided by the number of total surveys. This allows us to more accurately compare data between years even with different total numbers of surveys conducted. Our data set is still very small with only 2 complete years. Once we reach 5-7 complete years, we will be able to see if there are any noticeable trends.

AMKE= American Kestrel, RSHA= Red-shouldered Hawk, RTHA=Red-tailed Hawk, MERL= Merlin, COHA= Coopers Hawk, SSHA= Sharp-shinned Hawk, NOHA= Northern Harrier

In the 2022-2023 season we began using Accipiter sp when it was not known if it was a COHA or SSHA.

Survey Season	# Surveys	AMKE	RSHA	RTHA	MERL	COHA	SSHA	NOHA	Accipiter sp.
2020-2021	51	0.882	0.745	0.588	0.098	0.03921	0.020	0.029	No data
2021-2022	31	0.806	0.613	0.419	0	0.06451	0	0.032	NO data
2022-2023	27	0.556	1.519	0.704	0.111	0.074	0	0.037	0.037
2023-2024	78	1.103	1.038	0.526	0.013	0.064	0.013	0.038	0

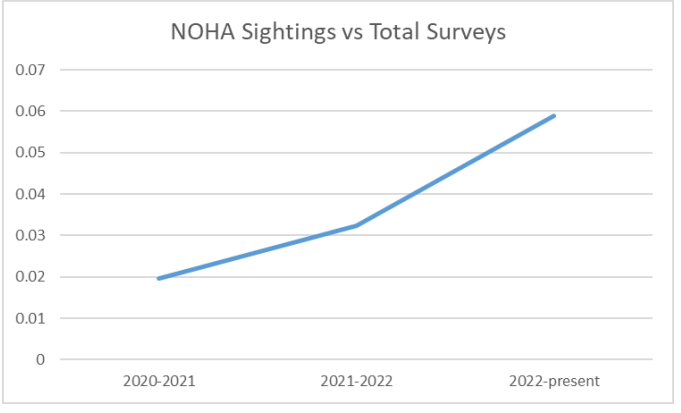
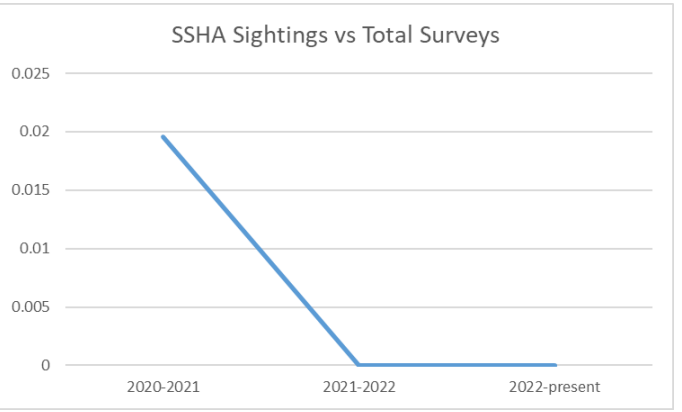
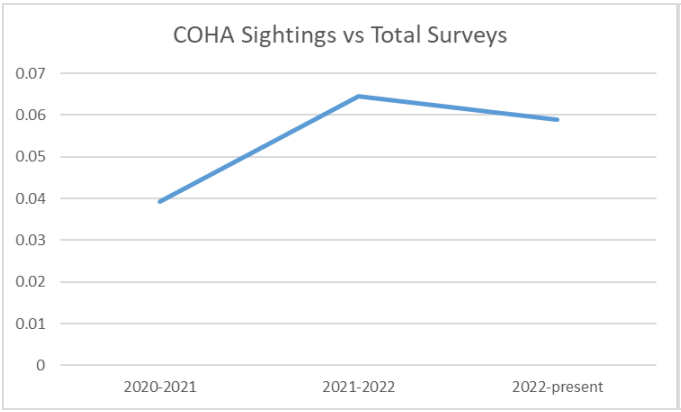
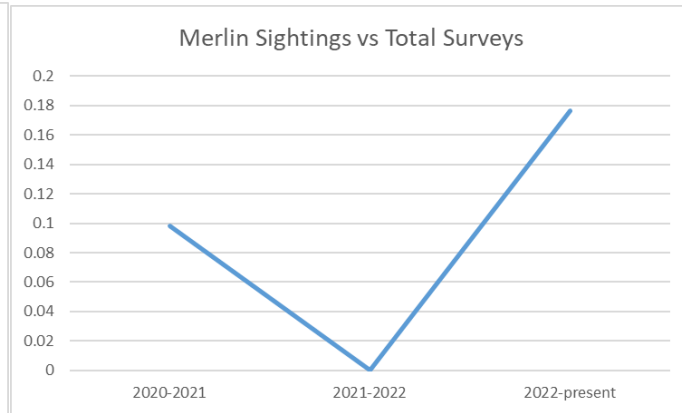
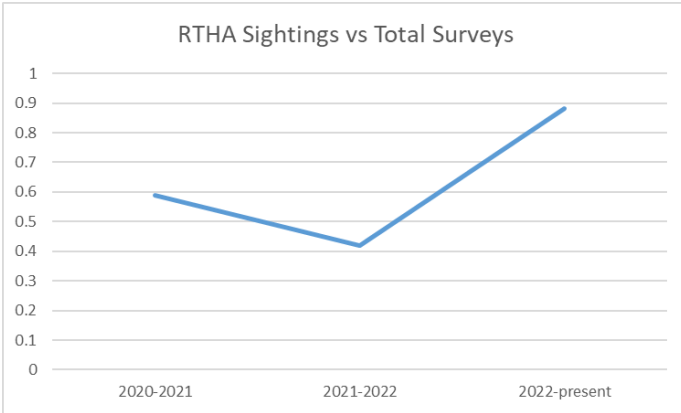
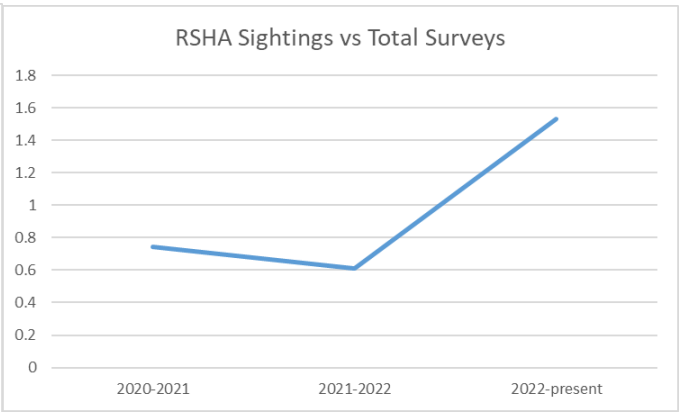
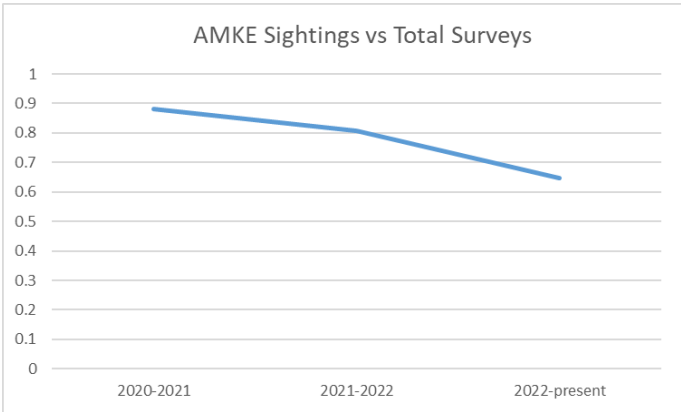
## Yearly data American Kestrels (MAKE), Red-shouldered Hawks (RSHA) and Red-tailed Hawks (RTHA)



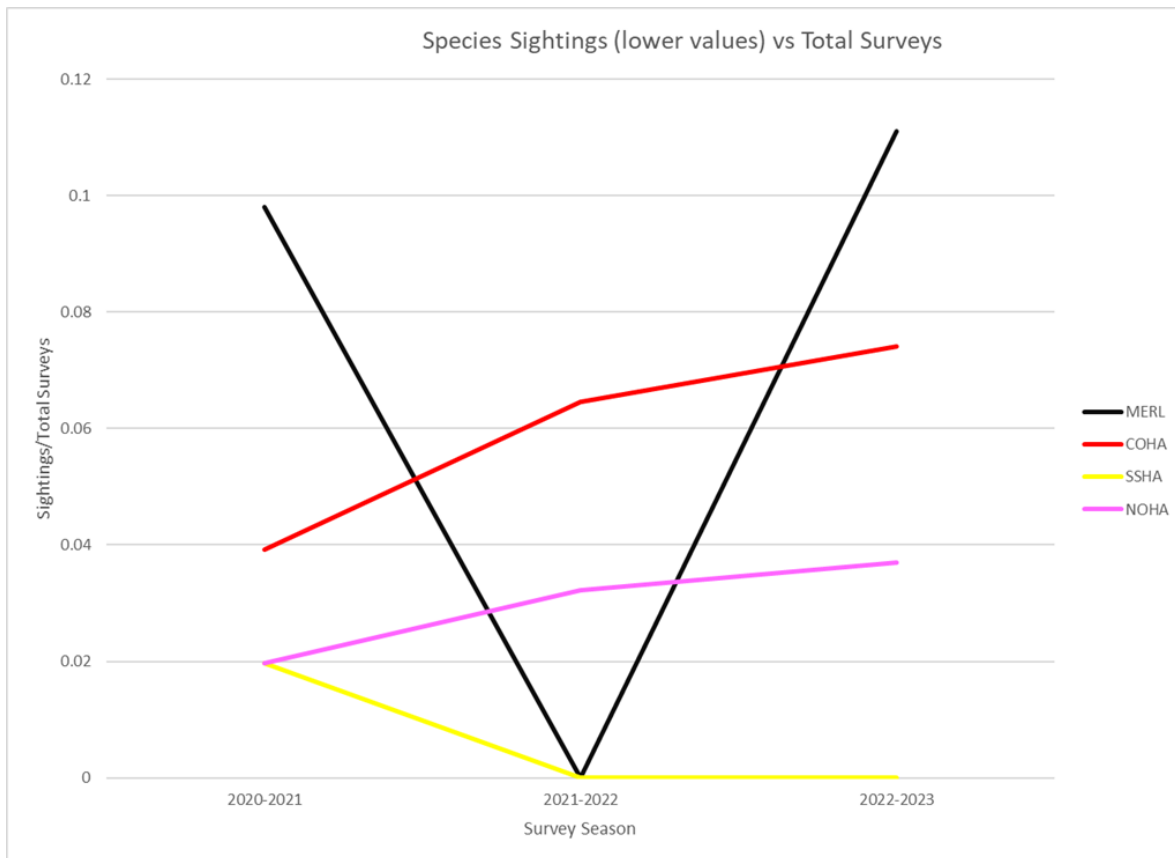
## Yearly data through Jan 25,2024

AMKE= American Kestrel, RSHA= Red-shouldered Hawk, RTHA=Red-tailed Hawk, MERL= Merlin, COHA= Coopers Hawk, SSHA= Sharp-shinned Hawk, NOHA= Northern Harrier

Graphs for final 2023-2024 will be available after May 2024.



**Sightings of MERL, COHA, SSHA, NOHA and Accipiter compared to total number of surveys.**  
 This allows more detail for the low data values for these species.



## Future Plans

- Use the data to aid in finding raptors to trap.
- Use the data to compare with sightings during trapping to estimate populations of these species in our area during the winter.
- Train survey volunteers to use the Global Raptor Impact Network app to enter data so it can be used in broader studies by other researchers across the country.

*Supporting Calvert County's nature parks and natural spaces*



# CALVERT STEWARDS

## VOLUNTEER PROGRAM

*A partnership between Calvert Nature Society and Calvert County Natural Resources Division*

# 2023 Annual Report

Date of Issue March 2024

CALVERT STEWARDS VOLUNTEER PROGRAM  
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Volunteer Portal: <https://calvertstewards.galaxydigital.com/>

Calvert Nature Society: [www.calvertparks.org](http://www.calvertparks.org)

Calvert County Natural Resources Division:  
[www.calvertcountymd.gov/NaturalResources](http://www.calvertcountymd.gov/NaturalResources)

