MAPS Bird Banding Program 2021 report

Project Leader: Gene Groshon ***gene.groshon@calvertcountymd.gov*** 410-535-5327

JoAnne Lutmerding is also a project leader and guides us in running the station, providing the bands and banding equipment as well as helping on banding days.

MAPS stands for Monitoring Avian Production and Survivorship. This is a bird banding research project that focuses on studying the population of birds in their breeding habitat. The data gathered during this project helps to determine the productivity, recruitment and survival of different bird species. We follow a very specific protocol established by the Institute for Bird Populations. This is a continent wide project with more than 1,200 MAPS stations spread across nearly every state and Canadian province, having collected more than 2.5 million bird capture records since 1989.

This project involves capturing birds with mist nets in order to collect the data needed. Mist nets are made of a very fine material and are difficult for the birds to see. The nets are checked every 40 minutes and any birds captured are carefully extracted by trained staff. Once the bird is extracted it is given a small metal leg band that has a unique number stamped into it. This helps us to identify the bird if it gets recaptured. After determining the species and sex we take several measurements and then the bird is released. Photos are taken of some notable species or ones that are difficult to age. Often there is not time for photos as we need to ensure the nets are getting checked on time.

We open the nets at sunrise and run 7 net checks every 40 minutes. The 12 nets are placed along a 1 mile loop through the park so we typically hike 8 miles a day, often at a rigorous pace. The trail is narrow, sometimes wet and lined with sticker bushes and poison ivy, so pants and sturdy hiking shoes/boots are recommended.

During our time operating the station we keep track of every bird species that is seen or heard within our banding area and take note of any breeding behavior. New volunteers help with these observations.

SKILLS NEEDED

- Need their own reliable transportation
- Be able to hike 8 miles at a rigorous pace on varied terrain
- Able to identify local birds by sight and song (helpful)

VOLUNTEER DUTIES

- Assist with spotting and identifying birds seen and heard
- Recording data during banding process

REQUIREMENTS & EXPECTATIONS

- Arrive at start time (about 5:30 to 6:00am) to assist with opening the nets
- Hike 6-7 mile on uneven terrain (sometimes at a fast pace if it's a busy day)
- Work in hot and humid conditions for 6-7 hours with no time indoors

TRAININGS

- New volunteers should email gene.groshon@calvertcountymd.gov to set up a day to come out and observe. In 2021, we did not accept new volunteers due to social distancing limitations concerning COVID-19
- Once trained, volunteers receive a certificate that can be uploaded as a Qualification on their profile on https://calvertstewards.galaxydigital.com. This will allow them to respond to related opportunities.

PROJECT DATES

- Late April- Early May: Possible trail clearing days and net setup day
- Late May- Early August: There will be 8 banding days from sunrise till about 11:30am

SUMMARY OF 2021 ACTIVITIES

We banded 86 birds and recaptured 26 birds that were previously banded by us either in the same year or prior years. Some notable species that we banded in 2021 include Yellow Billed Cuckoo (recap), Prothonotary Warblers (2 recaps) and a Brown Thrasher. We also conducted a habitat survey to identify the plants that are found within our banding area.
We allowed a more volunteers in 2021 due to Covid social distancing protocols not being as severe.

Total Volunteer Hours: 129 hours
Volunteers: Karen Anderson, Mary Bell, Joanna Lutmerding, Scott Clark, Joe Clark, Eaton Ekarintaragun, David Miller, Zachary Stickney, Grace Hanners
Staff: Gene Groshon and Kim Curren

FUTURE PLANS

- We will need to decide where to move net 12 after extensive clearing for the dam repair project removed the habit from another net location.
- Will need to determine what future potential impacts will affect this project from more construction such as the overlook platform that could affect nets 1 and 2.
- Gene will discuss with Joanna whether it is worth proceeding with the project at this site with the many changes that have been done to the habitat.

DATA SUMMARY

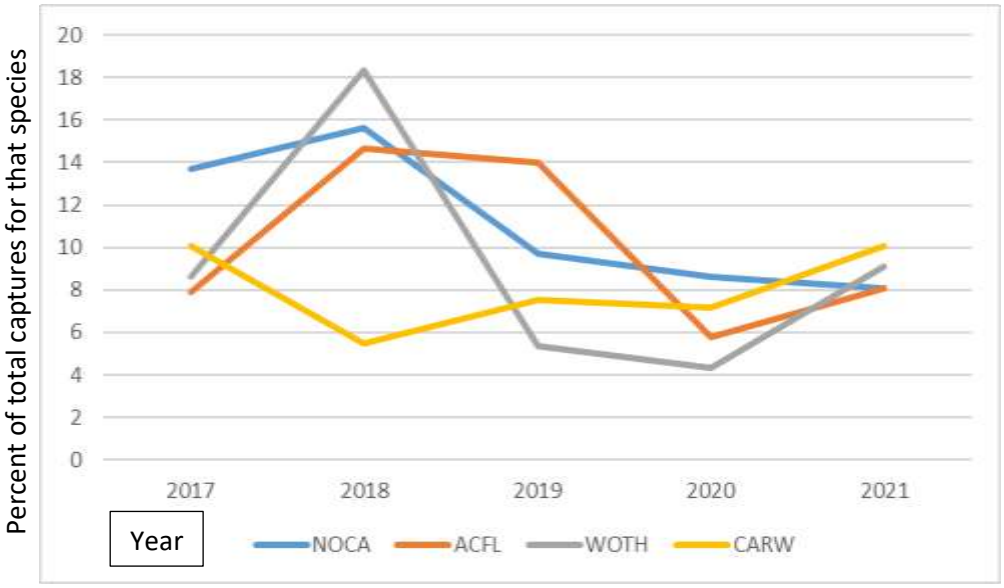
The below chart shows the most common species of capture calculated by the percentage of the year's total captures.

Northern Cardinal (NOCA), Carolina Wren (CARW), Indigo Bunting (INBU), Red-eyed Vireo (REVI), Wood Thrush (WOTH), and Acadian Flycatcher (ACFL) are consistently within the top ten species.

2017		2018		2019		2020		2021	
Species	% total	Species	% total	Species	% total	Species	% total	Species	% total
NOCA	13.67	WOTH	18.35	ACFL	13.98	COYE	16.55	CARW	10.1
CARW	10.07	NOCA	15.6	LOWA	9.68	EABL	12.95	COYE	9.09
INBU	8.63	ACFL	14.68	NOCA	9.68	NOCA	8.63	WOTH	9.09
REVI	8.63	REVI	8.26	OVEN	8.6	CARW	7.19	ACFL	8.08
WOTH	8.63	INBU	6.42	CARW	7.53	ACFL	5.76	NOCA	8.08
ACFL	7.91	CARW	5.5	INBU	7.53	INBU	5.04	RWBL	7.07
RWBL	6.47	WEVI	5.5	REVI	6.45	REVI	4.32	INBU	6.06
OVEN	5.76	OVEN	4.59	WEVI	5.38	RWBL	4.32	LOWA	6.06
LOWA	5.04	RWBL	3.67	WOTH	5.38	WOTH	4.32	REVI	6.06
COYE	4.32	GRCA	2.75	TUTI	4.3	DOWO	3.6	NOWA	4.04
DOWO	2.88	LOWA	2.75	COYE	3.23	AMGO	2.88	OVEN	4.04
EAPH	2.88	BLGR	1.83	PROW	3.23	AMRE	2.88	CACH	3.03
CACH	2.16	DOWO	1.83	RWBL	3.23	TUTI	2.88	EAPH	3.03
EAWP	1.44	EAPH	1.83	DOWO	2.15	LOWA	2.16	PROW	3.03
GRCA	1.44	EAWP	1.83	EABL	2.15	OVEN	2.16	WEVI	3.03
PROW	1.44	AMGO	0.92	RTHU	2.15	PROW	2.16	BLGR	1.01
RBWO	1.44	BLJA	0.92	BHCO	1.08	WEVI	2.16	BRTH	1.01
RTHU	1.44	COYE	0.92	EAPH	1.08	BLGR	1.44	DOWO	1.01
WEVI	1.44	PROW	0.92	GRCA	1.08	EAPH	1.44	EABL	1.01
BHCO	0.72	TUTI	0.92	ORORR	1.08	HAWO	1.44	EAWP	1.01
HOWA	0.72	AMRE	0	YBCU	1.08	BGGN	0.72	GCFL	1.01
HOFI	0.72	BGGN	0	AMGO	0	BHCO	0.72	SCTA	1.01
NOPA	0.72	BHCO	0	AMRE	0	BRTH	0.72	SUTA	1.01
SCTA	0.72	BRTH	0	BGGN	0	GRCA	0.72	TUTI	1.01
YBCU	0.72	CACH	0	BLGR	0	ORORR	0.72	YBCU	1.01
AMGO	0	EABL	0	BLJA	0	RBWO	0.72	AMGO	0
AMRE	0	GCFL	0	BRTH	0	YBCU	0.72	AMRE	0
BGGN	0	HAWO	0	CACH	0	YEWA	0.72	BGGN	0
BLGR	0	HOWA	0	EAWP	0	BLJA	0	BHCO	0
BLJA	0	HOFI	0	GCFL	0	CACH	0	BLJA	0
BRTH	0	NOWA	0	HAWO	0	EAWP	0	GRCA	0
EABL	0	NOPA	0	HOWA	0	GCFL	0	HAWO	0
GCFL	0	ORORR	0	HOFI	0	HOWA	0	HOWA	0
HAWO	0	RBWO	0	NOWA	0	HOFI	0	HOFI	0
NOWA	0	RTHU	0	NOPA	0	NOWA	0	NOPA	0
ORORR	0	SCTA	0	RBWO	0	NOPA	0	ORORR	0
SUTA	0	SUTA	0	SCTA	0	RTHU	0	RBWO	0
TUTI	0	YBCU	0	SUTA	0	SCTA	0	RTHU	0
YEWA	0	YEWA	0	YEWA	0	SUTA	0	YEWA	0

Species and the Percent of Total Captures throughout the project

The following species had the highest average percentage from four of the top species for each year. Northern Cardinal (NOCA), Acadian Flycatcher (ACFL), Wood Thrush (WOTH), and Carolina Wren (CARW).



Top 5 Most common species captured calculated by percent of total captures, listed largest to smallest

2017: NOCA, CARW, INBU, REVI, WOTH

2018: WOTH, NOCA, ACFL, REVI, INBU

2019: ACFL, LOWA, NOCA, OVEN, CARW

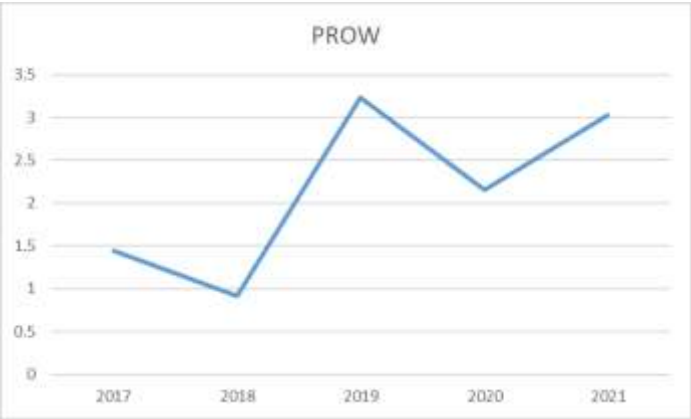
2020: COYE, EABL, NOCA, CARW, ACFL

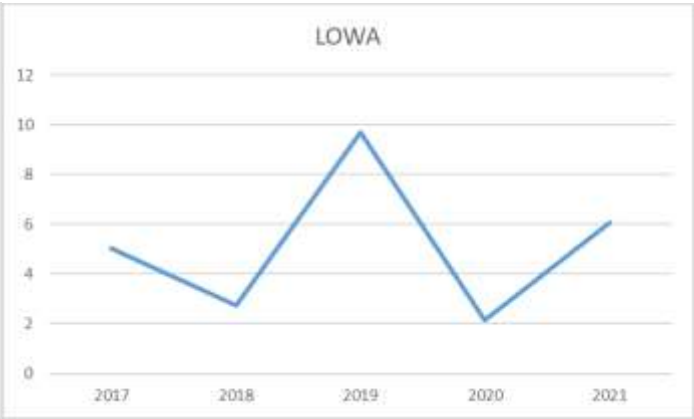
2021: CARW, COYE, WOTH, ACFL, NOCA

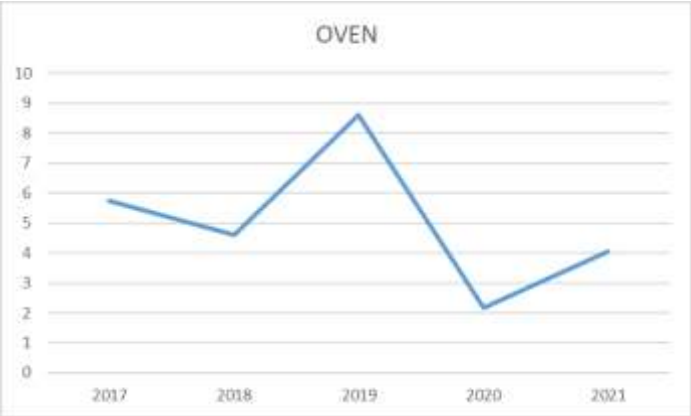
Notable Species for the area

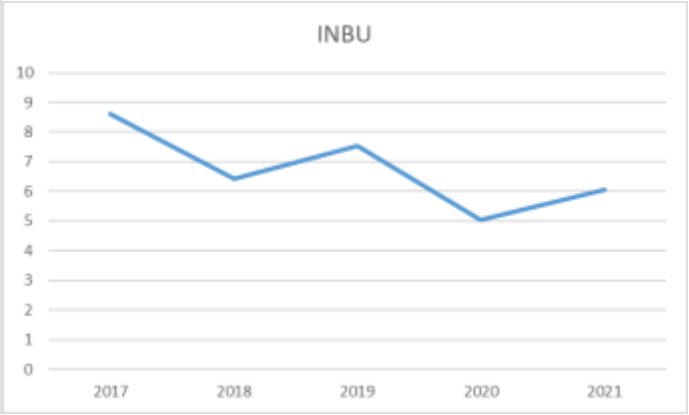
Y-axis is the percentage of the total number of birds caught that year.

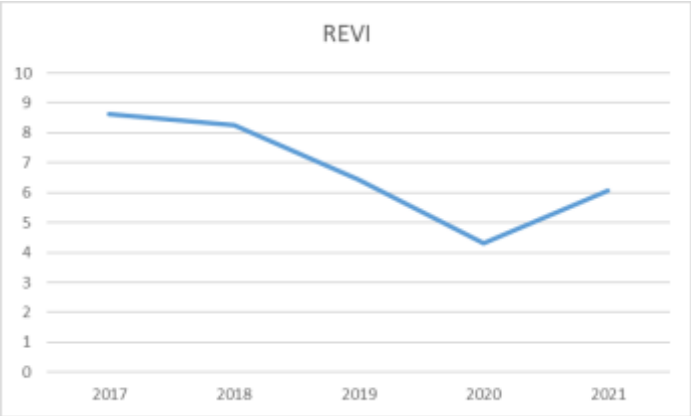
Prothonotary Warbler (PROW), Louisana Waterthroush (LOWA), Ovenbird (OVEN), Indigo Bunting (INBU), Red-eyed Vireo (REVI), White-eyed Vireo (WEVI),

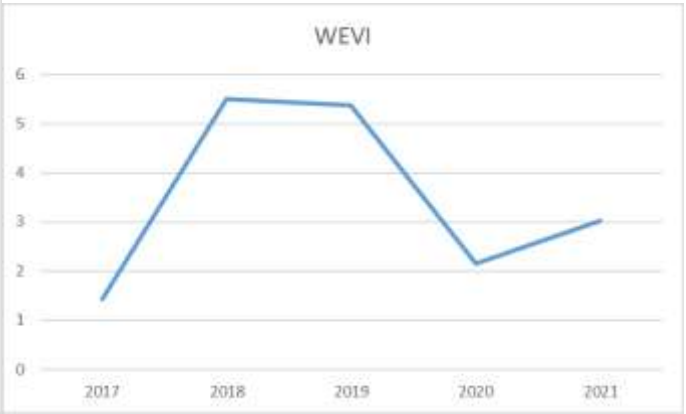












2021 PHOTOS

Male Scarlet Tanager

Male Prothonotary Warbler

Male Indigo Bunting showing molt limit

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

2021 Annual Report

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CALVERT STEWARDS VOLUNTEER PROGRAM
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Calvert Nature Society: www.calvertparks.org
Calvert County Natural Resources Division:
www.calvertcountymd.gov/NaturalResources

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