

Project Completion Report  
Marshall County Central High School  
Newfolden, Minnesota

**Project Outline:**

The goal of the Marshall County Central School District's BirdWatch Project is to put the tools of bird watchers in the hands of thirty-one 7th grade students and show them how to use them. With the help of others who are passionate about birds, we will introduce our students to field "citizen science" projects to which they can contribute, and have fun doing it.

Residents of rural Northwestern Minnesota are currently under-represented in the Minnesota birding community. Currently there are only 2 members of MOU in Marshall County, 3 in Pennington County and 1 in Red Lake County. And there is a very small number of National Audubon members in the area. Of these bird enthusiasts, only a handful post their sightings on eBird, and even fewer on the MOU listserv. In fact, more non-residents than residents, report bird sightings in NW Minnesota.

Agassiz Audubon Society started working with Warren-Alvarado-Oslo (WAO) School District's 6th graders last year. Agassiz Audubon contacted us to ask if we'd consider including birdwatching as part of our new Prairie Restoration Project and Outdoor Classroom program. We welcomed the opportunity.

The major obstacle to starting a program like this is our lack of experience with birds and the cost of equipment. We can't help kids get excited about birds if we can't put binoculars and field ID books in their hands.

With the assistance of Agassiz Audubon, we believe this project will stimulate interest in birds and generate support for future bird studies and conservation efforts. We expect students will talk about what they learn about birds and encourage their families (parents and grandparents) to watch birds with them.

**Objectives:**

Students collect data (relative abundance, locations, arrival dates and departure dates and nesting dates) and post on Cornell Laboratory of Ornithology's eBird.org website. The data will increase our understanding of birds in Marshall County and NW Minnesota. It will be available for scientists and conservation professionals, for regional planners and decision-makers, and for outdoor recreation enthusiasts (and tourists) who want to see and photograph the amazing bird diversity found in Minnesota's Tallgrass Aspen Parkland throughout the year. Agassiz National Wildlife Refuge is less than 20 miles from Newfolden.

## Methods:

Early in 2015, information on the Partners for Fish and Wildlife program through the U.S. Fish and Wildlife Service was provided to High School Science Teacher Josh Tharaldson by Agassiz National Wildlife Refuge staff member Lynda Knutson. After initial conversations between USFWS program staff, local refuge staff and our school district, it was determined that a six acre restored prairie site and outdoor classroom would be established directly north of the high school in Newfolden. What was at one time an overgrown site with brush and other trees that was not being used by anyone has since been converted into a restored prairie site. In our first few years of our project we have been working to remove the overgrown brush to get it back to a prairie with the help of USFWS staff. Students have participated by seeding native seeds that have since taken off and have been managed on an ongoing basis. Our school has since put in trails for students and community members to use with more being added as our project grows. Just a few short months ago, a building was erected near the prairie site which contains two bathrooms, a large storage room for teachers to use and a large covered area that can be used for teachers when conducting classes outside. Teachers at the high school have used it primarily for science classes, but additional teachers in the high school and elementary will be using it with their classes soon. Some of the students projects that have been completed at our outdoor classroom site include: building and installing bluebird houses, putting up two bat roosts, conducting a small mammal snap trap survey, conducting a scent disk tracking survey, installing and monitoring local wildlife with trail cameras, goldenrod gall insect population study and many other small projects. As our project continues to grow, so too will the number of student projects!

Funding for the projects listed above have come from a variety of sources including the US Fish and Wildlife Partners Program, Marshall County Central School District, our local Grain Elevator, our local Education Foundation, and numerous private donors. To date, we have received over \$16,000 in donations which has been used to purchase supplies for the projects listed above, twenty-two convertible table/benches for our outdoor classroom and trails, a sign that was placed at our site, and to help cover partial costs of our newly constructed building.

To promote our restored prairie site and outdoor classroom, a Facebook page publishes all of our students projects, which can be found at the following link:  
<https://www.facebook.com/mccrestoredprairie/>

This is a scientific (inventory of seasonal relative abundance), monitoring (bluebird nest and bat roosting boxes) and educational/appreciation project.

Students gather baseline data using the Cornell Laboratory of Ornithology's eBird.org protocol. They will uplink the data to eBird.org where it will be stored and made available to everyone on-line.

Agassiz Audubon volunteers and Agassiz National Wildlife Refuge staff will conduct workshops and mentor MCC students and staff on how to use the Bird ID books, smartphone and tablet apps, the MOU website, checklists, binoculars and scopes. MCC schools will fund field trips throughout the year. Destinations may include:

- Prairie Chicken dances at Rydell National Wildlife Refuge
- Waterfowl viewing at the Agassiz National Wildlife Refuge
- Duck Banding at Agassiz National Wildlife Refuge
- Nest Box monitoring at the Restored Prairie and Outdoor Classroom
- Constructing, Installing and Monitoring American Kestrel nest boxes
- Bluebird, Kestrel and Tree Swallow nest box monitoring
- Observing Northern Saw-whet Owl Banding at Turtle River State Park

The 7<sup>th</sup> Grade students will pick a bird and write a bird biography that will be included in a booklet and/or website - Birds of Eastern Marshall County, Minnesota: Where, When and How Many.

We plan continue this program for 7<sup>th</sup> grade students each year.

We will publicize project activities and findings in local and regional mass media, and social media. As space permits, the Middle River Honker newspaper will publish student bird stories and images.

**Personnel:**

- Mr. Josh Tharaldson** - High School Science Teacher
- Ms. Katie Melgaard** - High School Science Teacher
- Mrs. Diane Waterworth** - 5th Grade Science Teacher
- Heidi Hughes** - Agassiz Audubon Society
- Lynda Knutsen** - Agassiz National Wildlife Refuge Visitor Services

**Location:** The project will be conducted in rural eastern Marshall County: Viking, Newfolden & Holt, MN

- Marshall County Central High School, Newfolden, Minnesota
- Marshall County Central Elementary, Newfolden, Minnesota
- Agassiz National Wildlife Refuge
- Middle River, Minnesota

**Accomplishments towards project objectives:**

Students have started to collect data (relative abundance, locations, arrival dates and departure dates and nesting dates) and have started to post on Cornell Laboratory of

Ornithology's eBird.org website. Science teacher Josh Tharaldson and Heidi Hughes have also increased birding awareness among community members and elementary aged students by hosting community education classes on bird identification etc...A Christmas Bird Count is being planned currently in cooperation with the US Fish and Wildlife for December 2018 where students in grades 6, 7, 10 and 12th grade will all participate in data collection. Having the binoculars and bird ID books have been a huge help with incorporating birding into our schools programs! Because of this grant, we have put the tools of bird watching in the hands of all of our 7th grade students and have shown them how to use them. Students have been introduced to citizen science bird watching projects and will continue to make bird watching an ongoing project with the 7th grade science program at MCC.

**Other Accomplishments:**

-With the assistance of Agassiz Audubon, we believe this project will continue to stimulate interest in birds and generate support for future bird studies and conservation efforts. In future ecology classes, students will select field research topics of interest to them and we believe that in the future more students will select topics related to birds.

-Students in 7th grade life science have monitored bluebird nest and bat roosting boxes throughout the school year.

·MCC schools have funded multiple field trips throughout the year. Students have participated in duck banding, christmas bird count projects and we hope to grow the field trip offerings related to birds in the future as more become available to us.

·The 7th Grade students will pick a bird and write a bird biography that will be included in a booklet and/or website - Birds of Eastern Marshall County, Minnesota: Where, When and How Many. We have not been able to accomplish this part of our project due to lack of time but will be working in the spring semester on this when there is more time available for these sort of projects.

·We have publicized project activities and findings in local and regional mass media, and social media. As space permits, the Middle River Honker newspaper has published stories related to our birdwatch projects.

**Numbers of Students Served: ~125**

**Budget reconciliation:**

**Project Budget:**

Expenses:

\$3,225	25 binoculars @ \$129 list price
\$500	25 copies Kaufman Field Guide to the Birds of North American plus shipping

**Support/Revenues:**

\$1,500	Binocular retailer discount
\$1,725	Grant from Minnesota Ornithologists' Union
\$ 500	MCC - 25 copies of the Kaufman Field Guide to Birds of NA (committed)
\$ 500	Bird Feeding Station - 2 wrought iron poles, raccoon baffle, stainless steel suet feeder DY sunflower tube feeder, DY thistle tube feeder, fruit feeder, nectar feeder, seed scoop/funnel, metal garbage cans for seed storage, birdbath Seed: Sunflower, Nyjer (thistle), Peanut Butter suet, millet, cracked corn, peanuts
(in-kind)	MCC School District field trip transportation (committed)
(in-kind)	NW Regional Development Commission (maps & school bus routes) committed
(in-kind)	US-FWS/Rydell NWR (Prairie Chicken viewing on the lek) committed
(in-kind)	US-FWS/Agassiz NWR (waterfowl ID program, duck banding demo) committed
(in-kind)	Agassiz Audubon (staff time) committed
(in-kind)	Tim Driscoll (raptor banding demos – kestrel, saw-whets, red-tails) committed
(in-kind)	Middle River Honker – (newspaper column) committed

**Photos:**



Life Science students monitor bird feeders at a bird feeding station at their restored prairie site and outdoor classroom in Newfolden, Minnesota.



All students in 7th grade Life Science classes at Marshall County Central High School have access to all of the tools needed to go birding!



Students in a community education class recently used the binoculars and bird ID books to identify birds in the Newfolden area.



Students in Senior High Ecology class are getting ready to participate in the Christmas Bird Count in Newfolden that is scheduled for December 18th. Students in grades 6, 7, 10, and 12th will all participate in the bird count.