

## **M.L. 2019 Project Abstract**

For the Period Ending June 30, 2023

**PROJECT TITLE: Nongame Wildlife Program Acceleration**

**Project Manager: Kristin Hall**

**AFFILIATION: Minnesota Department of Natural Resources Ecological and Water Resources**

**MAILING ADDRESS: 500 Lafayette Ave**

**CITY/STATE/ZIP: St Paul MN 55155**

**PHONE: 651-259-5444**

**E-MAIL: Kristin.hall@state.mn.us**

**WEBSITE: www.mndnr.gov**

**FUNDING SOURCE: Environment and Natural Resources Trust Fund**

**LEGAL CITATION: M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 08e as extended by M.L. 2022, Chp. 94, Sec. 2, Subd. 19 (c.1) [to June 30, 2023]**

**APPROPRIATION AMOUNT: \$ 513,000**

**AMOUNT SPENT: \$ 513,000**

**AMOUNT REMAINING: \$ 0**

### **Sound bite of Project Outcomes and Results**

Project outcomes for the Nongame Wildlife Program Acceleration project include: 1) improved management and delivery of foundational information on nongame species. 2) new research on declining species and increased status assessment surveys of priority nongame species. 3) increased recreational opportunities through community science, and 4) the creation of a repeatable survey to measure public support for the Nongame Wildlife Program.

### **Overall Project Outcome and Results**

These funds enabled the Nongame Wildlife Program to accelerate the implementation of Minnesota's Wildlife Action Plan. All four main activities were successfully accomplished. The first activity was to coordinate partnership efforts within identified Conservation Focus Areas. This increased coordination resulted in the development of a successful federal grant award, for nongame wildlife specific habitat enhancement and monitoring needs.

The second activity was focused on improving our data collection, integration and dissemination efforts. We successfully launched an American Kestrel research project aimed at discovering some potential reasons for their decline. We successfully integrated over 30 different (large) datasets into our centralized system and staff developed new applications and data capturing tools to make the process of data collection and management more efficient and effective.

The third action focused on citizen science and public engagement. We launched new efforts for: regal fritillary, Blanchard's cricket frog, and chimney swifts, while re-vamping the long-standing Frog and Toad survey. Community science participation was built through the development of a specific community science webpage, creating new data collection applications for volunteers, hosting training sessions and gaining feedback for improvements and growth. This work will continue in strengthening our overall Program goals of connecting people with nature where they are helping with the contribution of viable data.

The final action focused on increasing public awareness and improving programmatic messaging. We have successfully elevated our messaging and engagement efforts by creating "Let's get Wild" which features storytelling, social media outreach, nurturing our donors and volunteers, a survey and marketing campaign. We were able to investigate our supporters more in-depth and host a series of listening sessions with culturally diverse groups learning how we can better serve their interests and needs. Because the Nongame Wildlife Program depends heavily on grants and donations, continued relevancy with all Minnesotans is critical.

### **Project Results Use and Dissemination**

- Our communication efforts are an ongoing component of the Nongame Wildlife Program, funded in part by ENTRF grants which are acknowledged in print publications and web-based material such as On our [projects page](#), [“Our Work in 2022 webpage”](#), in various social media postings, and in [feature articles](#) of the Conservation Volunteer Magazine. Our staff also presented results of the kestrel research at the national Wildlife Society Conference in fall of 2022, and shared community science insights at the Pathways: Human Dimensions of Wildlife Conference in winter 2023. We rely on these multiple funding resources to get this important work done.



# Environment and Natural Resources Trust Fund (ENRTF)

## M.L. 2019 ENRTF Work Plan (Main Document)

---

**Today's Date:** August 21, 2023

**Date of Next Status Update Report:** Final

**Date of Work Plan Approval:** June 17, 2019

**Project Completion Date:** June 30, 2023

**Does this submission include an amendment request?** no

---

**PROJECT TITLE:** Nongame Wildlife Program Acceleration

**Project Manager:** Kristin Hall

**Organization:** Minnesota Department of Natural Resources Ecological and Water Resources

**College/Department/Division:** Division of Ecological and Water Resources

**Mailing Address:** 500 Lafayette Road

**City/State/Zip Code:** St Paul, MN 55155

**Telephone Number:** 651-2595444

**Email Address:** [kristin.hall@state.mn.us](mailto:kristin.hall@state.mn.us)

**Web Address:** [www.mndnr.gov](http://www.mndnr.gov)

---

**Location:** Statewide

---

**Total Project Budget:** \$513,000

**Amount Spent:** \$513,000

**Balance:** \$0

---

**Legal Citation:** M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 08e as extended by M.L. 2022, Chp. 94, Sec. 2, Subd. 19 (c.1) [to June 30, 2023]

**Appropriation Language:** \$513,000 the first year is from the trust fund to the commissioner of natural resources to accelerate the nongame wildlife program, including rare wildlife data collection, habitat management, collaborative land protection, conservation education, and a new emphasis on promoting nature tourism to benefit wildlife, visitors, and rural communities.

M.L. 2022 - Sec. 2. ENVIRONMENT AND NATURAL RESOURCES TRUST FUND; EXTENSIONS. [to June 30, 2023]

## I. PROJECT STATEMENT:

The Minnesota Department of Natural Resources' Nongame Wildlife Program is entrusted with the conservation of Minnesota's wildlife that are not traditionally hunted or harvested. This represents over 1000 species of wildlife. These species are integral parts of our landscapes, providing ecological and economic benefits, educational opportunities and recreational enjoyment for Minnesotans. The Nongame Wildlife Program is regarded as one of the most effective and successful conservation programs of its kind in the nation.

This proposal will accelerate the delivery and effectiveness of conserving and managing nongame wildlife habitats while providing the public with enhanced recreational opportunities. Minnesota's Wildlife Action Plan, which directs much of the work of the Nongame Wildlife Program, was updated in 2015. The plan identifies a statewide "Wildlife Action Network" as a strategy for maintaining and enhancing habitat for all wildlife. Within the Network, habitat management efforts will be concentrated with support from conservation partners in "Conservation Focus Areas" (CFA) where effectiveness and long-term outcomes will be tracked. The work in CFAs will support other conservation efforts, such as the MN Prairie Conservation Plan, helping to ensure that we maintain healthy and diverse wildlife populations and ecosystems into the future.

The intent of this request is to implement some of the top priorities in the Wildlife Action Plan including: 1) improving the management and delivery of foundational information on nongame species, 2) conducting surveys to assess the status of priority nongame species, 3) promoting recreational opportunities and eco-tourism through citizen science, and 4) developing a repeatable survey to measure the public's interest in and support for the conservation values and fundraising efforts of the Nongame Wildlife Program. This proposal will enable the Nongame Wildlife Program and its conservation partners to accelerate implementation of Minnesota's Wildlife Action Plan.

## II. OVERALL PROJECT STATUS UPDATES:

### **First Update March 1, 2020**

Of the four activities defined in this grant, we have made progress on the first three, with planning advancements on the fourth. The nongame species status and data distribution aspects of this work have been occurring, in part, under the Conservation Focus Area work that was partially funded in 2018 (M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08a). A status report submitted on 2/14/2020, includes details on some of the invertebrate monitoring work taking place within Conservation Focus Areas which will be used to help assess species conservation status going forward.

The outreach and engagement aspects of this work are currently in the planning phases and will be initiated this spring. To date we have finalized the position description for the Citizen Science Coordinator position and will be posting the job announcement in March 2020. Similarly we are in the process of developing an agreement with the DNR Public Affairs Unit staff in order to gain their assistance in developing the Nongame Wildlife Program public surveys.

### **Second Update September 1, 2020**

We continue to make progress on all 4 activities identified within this grant. The first Activity has just begun to be funded from this phase of the *Accelerating the Nongame Wildlife* program, previous efforts were initiated by phase 1 of these funds, awarded separately in FY 2018. Continued progress will be reported on under this award from this update forward.

Activity 2 - Data management and research- has proceeded as planned over the past 6 months. Multiple nongame wildlife data sets have been prioritized and incorporated to the Observations Database. A new pilot research project on American Kestrels was also initiated this past spring.

Activities 3 and 4 have been progressing, but were hampered by capacity restrictions in light of the hiring freeze and contracting delays. Despite these unprecedented challenges, existing staff has been able to prioritize and make substantial progress in the engagement and public participation outcomes of this work.

### **Third Update March 1, 2021**

The global pandemic continues to limit our ability to implement some aspects of this grant based on the hiring freeze and field work restrictions. Activity 1, CFA coordination and Activity 2, research and data management, are on track for what was outlined in this work plan with partnership meetings occurring on digital platforms and data management staff focusing on prioritized data sets. We have also advanced Activity 3, what we are now calling the community science program, by assessing what is needed to restart the Frog and Toad Survey. We were able to get an exception to the hiring freeze in order to fill the Citizen Science coordinator role and filled the position this February. For Activity 4, the public awareness survey contract is in the process of being implemented and we have increased our on-line public engagement efforts through our webpage and social media.

### **Fourth Update September 1, 2021**

Project activities 1 and 2, CFA coordination and data management, continue to be on track. For this status update we have made good progress in activities 3 and 4 – Community Science & Public Awareness. The community science coordinator has been a part of the team since February 2021, and is building out our community engagement through revitalizing existing projects such as the Frog and Toad Survey as well as developing new participation science projects including a regal fritillary survey effort, Blanchard's cricket frog surveys and partnering with the UMN Bumblebee atlas.

A lot of progress has been made in public awareness (activity 4) portion of this grant. We have been able to contract with Virginia Polytechnic University and have participated in monthly meetings to work on a 3 pronged approach to better understand our current Nongame Wildlife Program supporters as well as wildlife viewers in general. We are using the information collected through this public awareness survey and research effort to develop strategies that will improve inclusion and engagement with all Minnesotans, especially the BIPOC community.

### **Fifth Update March 1, 2022**

#### **Amendment Request as of March 1, 2022**

We would like to make an amendment request which changes the amount allocated per line item but does not impact the overall amount of the original request. Kristin Hall contacted LCCMR staff in October 2021 regarding pandemic related constraints and considerations. A legislative extension is currently under review and will not be resolved prior to the submission of this update. Corrie Layfield (via e mail correspondence, 29 Oct 2021) recommended developing a multi-part amendment request based on the two potential outcomes (if extended and if not extended) which would allow for flexibility once the legislature does decide on the broader extension request.

#### **Scenario 1- If extension is granted:**

Due to pandemic related staffing, travel and field work limitations we feel we can still accomplish the activities originally proposed in this award, with the following changes under an extended timeline:

Increasing the amount of personnel funding \$28,650. This would be accomplished by:

- Transferring \$25,000 from the contracted biometrician line into a staffed biometrician line under personnel. The same work would be accomplished just with in-house staff not under contract.
- Reducing the surveyor allocation by \$50,000 as staffing constraints and lost field work opportunities cannot be recovered.
- A portion (\$22,500) of the funds from the surveyors would be reallocated towards the CFA Coordinator and Community Science Coordinator (\$25,000) as this work continues under this grant.

- We would also move \$2,500 from the CFA coordinator travel budget line as meetings have been conducted remotely during the pandemic (since March 2020). We anticipate travel and in person meetings will resume so we would like to retain some funds for such activities.
- The additional \$1,150 is from a portion of the surveyor travel funds reduction as travel was also severely restricted due to the pandemic.

Reducing the Professional/Technical/Service Contracts section of the budget by \$8,850

This change entails:

- Moving \$25,000 from the biometrician contract line as stated above
  - Retaining \$5,000 of that contract to accomplish initial analysis under contract with the University of MN.
- Increasing the MNIT contracted line by \$16,150 (from \$25,000 to \$41,150) as we have recognized benefits to continuing work with MNIT on web based updates, data collection applications and can use the funds originally allocated towards survey travel and meetings for this purpose.

The Equipment/Tools/Supplies and Printing categories will remain unchanged

Travel expenses are reallocated into personnel and contracted categories as explained above.

Direct and Necessary Costs will remain unchanged.

**Staff note 3/15/2022: Scenario 1 will be held until legislative action is taken and be revisited if extensions are granted**

**Scenario 2 – If extension IS NOT granted**

1. Increase the amount of personnel funding by \$22,750.
2. Contracts:
  - Move \$25,000 from the contract (line 20). Retain \$5,000 of that contract to accomplish initial analysis under contract with the University of MN.
  - Increase the MNIT contract (line 21) to a total of to \$46,500, as we have recognized benefits to continuing work with MNIT on web based updates, data collection applications and can use the funds originally allocated towards survey travel and meetings for this purpose.
3. Travel:
  - We would also move \$2,500 from the CFA coordinator travel budget line into the MNIT contract (line 21) line as meetings have been conducted remotely during the pandemic (since March 2020). The total of the CFA coordinator travel budget should be 2,250 as we anticipate travel and in person meetings will resume so we would like to retain some funds for such activities.
  - Please move 15,650 from Surveyor travel time (line 31) to Category “Professional/Technical/Service Contracts” for total 7,150 of Surveyor travel.
  - Travel expenses are reduced to a total of \$9,400.

Equipment: The Equipment/Tools/Supplies category will remain unchanged

4. Printing: reduce by \$1350 (allocated to contracts) for a total of 1,150 in printing costs (line 30)
5. Direct and Necessary Costs will remain unchanged.

**Scenario 1 Approved by LCCMR 4/1/2022**

Kristin Hall note: Kept Scenario level 1 funding allocations but with the extended timeframe provided in the legislative extension

**Update as of June 30, 2022:**

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

**Sixth Update as of September 1, 2022:**

**Seventh Update as of March 1, 2023:**

The extensions granted for this award have been instrumental in allowing us to complete this work as intended. The Conservation Focus Area work continues to be our primary resource for partnership engagement and implementing collaborative conservation efforts for Species in Greatest Conservation Need. We have made a lot of progress in getting many disparate nongame data sets into our overall Observations Data Base as well as rare data sets into the Natural Heritage Information System. Data management is an on-going need that received a concerted effort through this grant. And finally, our community science and environmental engagement efforts have developed into a strong component of the Nongame Wildlife Program.

**Amendment as of 3/27/2023**

This amendment request reflects line-item budget changes and not a change in overall funding or timeframe. As we are nearing the end of this grant, we recognize some of the travel and printing costs we thought we would incur have not been actualized due to two main factors: Pandemic related limitations in travel lead to conducting more meetings and planning efforts virtually, cutting our estimated travel costs to \$4,100 rather than \$9,400. We were also able to reduce predicted material outputs for the community science efforts by increasing the use of on-line materials, eliminating our printing costs (\$1,150) and reducing our overall equipment costs by \$382. In addition to these savings, our expenses in the "Direct and Necessary" line are \$1 off. To balance that line item, we would like to allocate \$1 of the direct and necessary funds line towards personnel. With the reduced expenses in travel, equipment and printing categories, we would like to request reallocating those savings of \$6,833 towards personnel as the adjustments made to the unexpected changes in our original proposal required more time and effort to accommodate. All proposed changes are outlined in the Modified Budget (attached). Thank you for your consideration of this request.

**Amendment approved by LCCMR 4/12/2023**

**Final Report as of June 30, 2023 (to be submitted before August 15, 2023):**

**Amendment Request 8/21/2023**

An e-mail requesting a slight extension on the final report was granted by Director Nash on 8/14/23. This grant has been fully executed and we have minor line items to correct in order to reflect actual expenditures. This is a retroactive amendment request as expenses are already finalized and does not change the total appropriation amount. We request an addition of \$2 to the Personnel category and a subtraction of \$2 from the travel category. I have attached an updated budget with the amendment request reflected via underlined and strikethrough text. Thank you for your consideration of this request.

**Amendment approved by LCCMR 12/30/24 (following revisions/requests)**

**Final Update Summary:** These funds enabled the Nongame Wildlife Program to accelerate the implementation of Minnesota's Wildlife Action Plan. All four main activities were successfully accomplished. The first activity was to coordinate partnership efforts within identified Conservation Focus Areas. This increased coordination resulted in the development of a successful federal grant award, for nongame wildlife specific habitat enhancement and monitoring needs.

The second activity was focused on improving our data collection, integration and dissemination efforts. We successfully launched an American Kestrel research project aimed at discovering some potential reasons for their decline. We successfully integrated over 30 different (large) datasets into our centralized system and

staff developed new applications and data capturing tools to make the process of data collection and management more efficient and effective.

The third action focused on citizen science and public engagement. We launched new efforts for: regal fritillary, Blanchard’s cricket frog, and chimney swifts, while re-vamping the long-standing Frog and Toad survey. Community science participation was built through the development specific community science webpage, creating new data collection applications for volunteers, hosting training sessions and gaining feedback for improvements and growth. This work will continue in strengthening our overall Program goals of connecting people with nature where they are helping with the contribution of viable data.

The final action focused on increasing public awareness and improving programmatic messaging. We have successfully elevated our messaging and engagement efforts by creating “Let’s get Wild” which features storytelling, social media outreach, nurturing our donors and volunteers, a survey and marketing campaign. We were able to investigate our supporters more in-depth and host a series of listening sessions with culturally diverse groups learning how we can better serve their interests and needs. Because the Nongame Wildlife Program depends heavily on grants and donations, continued relevancy with all Minnesotans is critical.

**III. PROJECT ACTIVITIES AND OUTCOMES:**

**ACTIVITY 1 Title: Conservation Focus Areas**

**Description:** Coordinate the implementation of conservation actions for at least two regionally-based Conservation Focus Areas (Figure 1). This includes the implementation of S.M.A.R.T. objectives and effectiveness measures which are uniquely defined by the partnership within each CFA. This will be done in collaboration with DNR wildlife managers and external conservation partners.

**ACTIVITY 1 ENRTF BUDGET: \$82,250**

Outcome	Completion Date
1. Continue Conservation Focus Area coordination efforts which includes bringing partners together, defining area specific conservation objectives, supporting the implementation of these objectives and tracking accomplishments	June 2022
2. Establish partnerships to identify management goals and effectiveness measures for up to two additional Conservation Focus Areas.	December 2021
3. Continue collection of baseline data to be used for effectiveness monitoring on approximately 3 sites across 1-2 Conservation Focus Areas.	December 2021

**First Update March 1, 2020**

This award includes an additional year of funding for our Conservation Focus Area efforts which were initially funded under an award in 2018. Therefore, this grant will not be applied to the Conservation Focus Area work until all funds within M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08a are expended on or before 30 June 2020. Please see the status update dated 2/14/20 for all details related to this activity.

**Second Update September 1, 2020**

As of June 30<sup>th</sup> 2020, the Conservation Focus Area efforts are now being tracked within this grant. CFA work was initially implemented with the *M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08a as extended by M.L. 2020* award and will continue to be funded and reported on here in subsequent status updates.

**Third Update March 1, 2021**

Bi-annual meetings for the 4 activated CFAs have continued virtually in 2020 and 2021. While in person meetings are preferred, the virtual platforms have allowed the partnership groups to keep in touch and continue to collaborate on shared objectives moving forward. In fall of 2020 the Prairie Coteau CFA partnership in



southwest MN identified the need for a working group focused on supporting native grasslands under both public and private ownership. This working group has convened three times over the winter and continue to develop strategies to conduct landowner engagement, with a focus on conservation grazing management and stream restoration opportunities.

Continued survey efforts were also accomplished in the fall of 2020 and reported on as part of the *M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08a as extended by M.L. 2020 status report.*

#### **Fourth Update September 1, 2021**

Virtual CFA partnership meetings are continuing but have had a break during the summer field season. The Prairie Coteau CFA (outreach subcommittee) had deliberated on hosting a landowner field day sometime this fall but have scaled back those plans in light of public health uncertainties. The CFA program, with four activated areas and two more under consideration, has generated enough partnership support that we have submitted a proposal for additional federal funds. A State Wildlife Grant, when awarded, will enable us to continue assisting partners in habitat conservation and outreach efforts on both public and private lands. The initial funding from the phase 1: Accelerating - Nongame Wildlife Program ENTRF grant made this progression possible.

#### **Fifth Update March 1, 2022**

In November of 2021, a State Wildlife Grant (federal funds) was awarded to MN Nongame Wildlife Program for our Conservation Focus Area work; which included funds for habitat projects, monitoring projects and outreach work all aimed at implementing projects to enhance protections and habitat for Species in Greatest Conservation Need. These federal funds require a 35% match which can come from partners on these projects as well as this grant. In January of 2022 we sent out a request for project ideas (RFP) to be funded with this award and received two monitoring proposals, six habitat enhancement projects and one landowner outreach event proposal. These combined state and federal funds will allow the CFA work to continue and grow, cultivating partnerships and implementing actions associated with the State Wildlife Action Plan.

#### **Update as of June 30, 2022:**

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

**Sixth Update as of September 1, 2022:** A portion of these funds continue support the CFA Coordinator position in conjunction with federal level funding. Since the last update 3 in- person meetings with CFA partners have been held to revitalize the CFA approach post-pandemic. The coordinator has been working with partners to implement habitat and monitoring projects funded under a complementary State Wildlife Grant. They have also conducted a field tours of project sites in 2 regions and secured a contract for private landowner outreach. Funding support for this work within this grant is near spent with approximately \$5,000 remaining. The next status report will include a brief update on those expenses and the final report will detail the overall success of the CFA program and how these funds were foundational to its success.

#### **Seventh Update as of March 1, 2023:**

Throughout the fall and winter of 2022, the CFA Coordinator worked to distribute federal funds awarded for habitat enhancement and response monitoring efforts taking place within active CFAs on both public and private lands. A combination of federal funds and the remaining funds in this grant were used to cover the coordinators time in completing the contracts, landowner agreements and site visits required in this work.

#### **Final Report as of June 30, 2023 (to be submitted before August 15, 2023):**

The remaining funds under this activity were predominantly travel related. The Conservation Focus Area Coordinator conducted regional visits to conduct CFA meetings as well as site visits to areas we are using federal funds to actively manage for Species in Greatest Conservation Need. The Conservation Focus Area aspect of this

work have proven to be extremely successful to the Nongame Wildlife Program. We are building off this success by supporting a second CFA coordinator position for the southern portion of the state.

Throughout the duration of this award, we activated 4 CFAs:

- Prairie Coteau CFA, with 19 partnership organizations\*
- Root River CFA and White Water CFA with 22 partnership organizations (considered together due to proximity – same partners for both CFAs)
- Brainerd Lakes CFA with 20 partnership organizations including Camp Ripley

*\* partnership organizations are from federal, state, NGO and local conservation organizations such as USFWS, The Nature Conservancy, County Soil and Water Conservation Districts, Trout Unlimited and more.*

Each partnership created a S.M.A.R.T. objectives table for their CFA and used it as an operational “report card” system to keep track of needs and actions. Actions were categorized into habitat enhancement, monitoring, and engagement (focused on workshops to reach land managers). In the Prairie Coteau baseline data for 4 prairie reconstruction efforts were collected prior to the work being implemented. Multiple taxonomic groups were monitored including plants, invertebrates (butterflies and bumblebees) and birds. For habitat enhancement activities, two native prairie inter-seeding projects were supported with these funds one in Prairie Coteau and the other in Brainerd Lakes. These funds also contributed to a floodplain forest tree planting in the Root River CFA.

**ACTIVITY 2: Nongame data collection, integration and dissemination**

**Description:** Accelerate the collection, management and delivery of data on nongame wildlife species to inform conservation efforts.

**ACTIVITY 2 ENRTF BUDGET: \$134,900**

Outcome	Completion Date
1. Conduct assessments on at least one of the Species of Greatest Conservation Need (SGCN) listed in Objectives 3.1 – 3.3 of the Wildlife Action Plan: <b>Objective 3.1-</b> By 2022, obtain additional survey information for at least 3 of the 23 selected SGCN to determine if their classification on the state list is accurate. <b>Objective 3.2 -</b> By 2022, survey at least 3 of the 15 species or groups of species for which data were insufficient in 2014 to determine if the species met the criteria for SGCN. <b>Objective 3.3 -</b> By 2022, implement research projects to identify the cause(s) of population decline for one or more of the 6 SGCN listed.	December 2021
2. Incorporate approx. 1/3 <sup>rd</sup> of the 50 identified priority nongame data sets into the Observation Database so the information is readily accessible for: providing technical guidance, conservation planning, determining survey priorities and facilitating environmental review efforts.	June 2022
3. Enhance functionality of the observation database to allow better access for data analysis and decrease staff time needed to maintain data.	June 2022

**First Update March 1, 2020**

Funding from this grant provides a 35% match to federally appropriated State Wildlife Grants (SWG) that we receive to implement our State Wildlife Action Plan. Outcome 2 – *data incorporation*, has been prioritized. We work closely with the data management staff and receive a monthly report on datasets being processed. Of the prioritized nongame datasets, we have successfully incorporated four wood turtle datasets from Region 2, three grassland bird datasets from the western regions of the state, and a lowland conifer avian monitoring dataset from the north eastern region. These databases were uploaded in January and February of 2020, funds from this

grant attributed to this work will not be included in this status update but will be accounted for in the September 2020 report.

### **Second Update September 1, 2020**

Outcome 1 – Species in Greatest Conservation Need (SGCN) assessments (Objective 3.3): We kicked off a pilot project to research the possible causes of decline in the American kestrel population in MN. Population trends for American Kestrels based on the federal Breeding Bird Survey (BBS) in Minnesota detected a significant decline of –2.68% per year from 1967 to 2015. This consistent decline and cumulative impact on the population are what lead to the MN DNR identifying the kestrel as a SGCN in the 2015 state Wildlife Action Plan. This summer we were able to develop and implement a pilot season to trap and place transmitters on kestrels in order to better understand fledgling survivability. We chose the Motus network to conduct tracking of kestrels (see status update dated 1 September 2020 for *M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08a as extended by M.L. 2020*). In this pilot season, we successfully captured 11 kestrels, deployed 9 transmitters (of 2 different types to explore which suit the needs of our research project best) and are in the process of putting up our first Motus tower. This system, once erected will assist with other Motus wildlife tracking projects within North and Central America.

Outcome 2 – data incorporation: Data entry of nine regional nongame datasets were completed during this time period, they were as follows:

- DNR Region 1- 2019 Richardson's Ground Squirrel surveys and 2013-2019 Incidental reports of listed species and SGCN
- DNR Region 2 - 2017-2018 small mammal surveys, 2018-2019 Incidental reports of listed species and SGCN, 2013-2014 Lowland conifer birds and 2010 Wood Turtle survey data
- DNR Region 3 - 2014-2017 Plains Hognose Data and 2017-2019 SE MN Wood Turtle surveys
- DNR Region 4 – 2019 Topeka shiner and plains topminnow observations.

In addition, data management staff received and began assessment of several additional datasets from Region 2.

Outcome 3 – Functionality enhancements: Data management staff began identify and prioritize functionality enhancements.

### **Third Update March 1, 2021**

On September 15<sup>th</sup> 2020 we successfully set up our first Motus tower as part of the American Kestrel research project. The Motus network is a collaborative, open source network where multiple receivers are placed throughout the nation (as well as internationally). These receivers are capable of detecting any animal equipped with a compatible transmitter. This technology has allowed researchers to track animal movement of smaller species such as bats, song birds and even insects. Support from the ENTRF enabled us to conduct the kestrel pilot study research in 2020. In light of the pilot's success we applied for and received an additional federal State Wildlife Grant in order to continue this work.

Outcome 2 – Data incorporation: Data entry of six regional nongame datasets were completed during this time period, they were as follows:

- DNR Regions 1 and 2 – 2019 Northern Goshawk territory surveys
- DNR Region 2 – 2001-2019 bird point count data from Arden Hills Army Training Site. Multiple wood turtle datasets: 1984-2020 Wood turtle road mortality observations, 2015-2016 Wood turtle hatching data, 2018-2019 Wood turtle observation records.
- DNR Region 3 – 2016-2020 records of Blanchard's cricket frog

Outcome 3 – Functionality enhancements: Capacity in the field was limited in 2020 but data management staff were able to advance some of their field data applications for enhanced data collection and expedited data

entry. There are currently at least two field applications in use; a pollinator data collector app and an avian data collector app., these are the basis for additional application development in the future. We have also created a form to streamline and standardize email submissions of wildlife observations from the public and wildlife professionals.

#### **Fourth Update September 1, 2021**

##### Outcome 1: Research update

With a combination of both state and federal funding the American kestrel project will continue into 2023. To date we have successfully deployed 34 transmitters on kestrels. While the motus network is still being built throughout the Midwest, we have successfully detected 2 of our banded kestrels in Missouri. We will spend fall of 2021 working to deploy 10 more receivers in MN, adding to the overall network throughout North America. We have also conducted multiple field surveys of SGCN (or potential SGCNs) during this reporting period, which include: Leonard's and Prairie Skipper, bumble bees, butterflies, songbirds, and bats.

##### Outcome 2: Data management update

- Data management staff have continued working to create record grouping scripts and rollup scripts to expedite Source Feature export and quality control (QC) from Observation Sampling (the database that holds repeat-visit data).
- Data management staff have continued assisting with database design for the Obs Field Data schema.
- Data from Northern Goshawk territory monitoring in 2020 have been entered into the Observation Database (Obs DB) and Biotics.
- **Camp Ripley bird point count/transect data has been processed.**
  - 1993 data has been prepped
  - 1994 data has been Quality checked and finalized
  - 2000 data has been loaded into the Obs DB and sent to the submitters for QC
  - 2005 data has been Quality checked and finalized

#### **Fifth Update March 1, 2022**

##### Outcome 1: Research Update

The American kestrel telemetry project continues but is predominantly funded under a federal funding source. In the past 6 months we were able to place 2 additional receiver towers within the motus network and plan to deploy additional transmitters on kestrels in summer 2022. Over the winter months, additional field surveying efforts were not active.

##### Outcome 2: Data management update

While we were not in the field surveying we were in the office formatting, updating and inputting newly collected and archival data. Below are the nongame (SGCN) dataset highlights over the past 6 months:

- Nemadji River wood turtle survey data entered for the years 2009, 2012, 2014, 2015, 2021
- Entered SE MN wood turtle new records from 2020-2021 and Region 2 wood turtle observations including citizen reports
- Entered Lynx observations comprising public reports from 2019-2021 into Biotics.
- Entered Nongame Region 4 bird data collected over multiple years by staff into the Observation Database (Obs DB) and records of listed species are in the queue for Biotics entry.
- Lake Sturgeon records from the Division of Fisheries "Fishes of Minnesota" database have been loaded into the Obs DB as the second set of data to be tested using the new "Minimal" approach. This approach extracts only key fields from the data set (species, observer, date, location), and stores the rest of the data in its original format in the Obs DB, so it can be delivered on request if needed.
- Entered Timber Rattlesnake Responder records from Houston County.

- Created Biotics Source Features for Robert Dana’s 2018 Butterfly surveys, which are the first batch of data to be processed using a new “Minimal” approach.
- Added or updated Biotics Element (species) records for 12 bee species.
- Finalized 2021 AHATS bird point count data.
- Observation records promoted, exported to Biotics, and Source Feature QC Complete [Jenn]
  - MBS Herp Data from SE MN 2015
  - MBS Herp data from SE MN 2010-2013
  - MN River 2015-2017
- Created biotics source features from 2004-2005 study on Red-shouldered Hawks in central Minnesota.
- Observation records promoted, exported to Biotics, and Source Feature QC Complete
- Begun design for incorporating telemetry data into the observation database.
- Developed a script to move MBS bee data from Access csv output into the new obs\_3\_tier schema so that the data can be rolled up into NHIS distributed data.
- Created Python scripts to move field app data from SDEs into the new obs\_field\_data schema.

### **Update as of June 30, 2022:**

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

### **Sixth Update as of September 1, 2022:**

Outcome 2 Data Management Update:

While we were not in the field surveying we were in the office formatting, updating and inputting newly collected and archival data. Below are the nongame (SGCN) dataset highlights over the past 6 months:

- Entered and Quality checked 2020-2021 fish observation records in the Observation database (Obs DB) and Biotics.
- Entered and Quality checked 2015-2018 wood turtle monitoring data in the Obs DB and Biotics.
- Entered and Quality checked data from Nongame Region 2 2020 Herpetological surveys and reports in the Obs DB and Biotics.
- Entered 2021 Northern Goshawk territory monitoring into the Obs DB and Biotics.
- Entered multiple years of Nongame Region 4 listed bird species records into Biotics.
- Finalized the 2021 Camp Ripley bird point count survey records. This brings this data set completely up-to-date in the Obs DB
- Entered 2011 mussel survey data from a non-DNR project into Biotics.
- Entered January 2022 to July 2022 Lynx sightings into Biotics
- Created an Access Form to streamline the data entry process for Blanding's Turtle trapping efforts at Weaver Dunes.
- Updated several Observation database scripts.

### **Seventh Update as of March 1, 2023:**

Outcome 1 Research Update:

The kestrel research and Motus project results were presented at The Wildlife Society national conference in November 2022, hosted in Spokane Washington. Results from the first phase of this research were also published in the Journal of Raptor Research (*J. Raptor Res.* 57:2 DOI: 10.3356/JRR-22-27) with acknowledgements of funding in part from the “Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR)”.

Outcome 2 Data Management Update:

- Completed the first version for the MBS Small Mammal Trapping database.

- All of lepidoptera data (moths and butterflies) comprising over 40,000 records, have been entered into the Observation Database (Obs DB)
- Completed quality check and mapping locations for MBS Fish Records previously not entered into the Natural Heritage Information System
- Staff created a script to move iNaturalist data on state listed (nongame wildlife) species into the obs\_minimal schema for inclusion in the distributed data (the first upload will include 3,000+ records)
- Entered Red-shouldered Hawk territory monitoring data collected in 2021 in Nongame Region 1 into the Obs DB and Biotics.
- Entered Rattlesnake den site data from Nongame Region 3 compiled 2001-2019 into the Obs DB and Biotics.
- Entered MBS butterfly data collected in 2021 and 2022 into the Obs DB
- Entered 6,000+ new MBS bee records into the Obs DB with records of listed species entered into Biotics.
- Entered data from 2021 miscellaneous herpetological (reptiles and amphibians) records into Excel templates and shapefiles for loading into the Obs DB.
- Completed data management of Northern Goshawk source features in Biotics to both remove duplicates and ensure that negative data are shown only if positive data exist previously for known territories.

**Final Report as of June 30, 2023 (to be submitted before August 15, 2023):**

The data components of this grant were instrumental in getting our Nongame Wildlife Program data prioritized, formatted and included into our Natural Heritage and Observations databases. While we use these data for communication purposes on a regular basis, getting it included onto the centralized database required our focused attention. In addition to the overall data integration of over 30 different (large) datasets into our centralized system, we also worked to develop new applications and data capturing tools to make the process of data collection and management more efficient in the future.

Research efforts to better understand the potential causes behind American Kestrel declines that were initiated by this grant have resulted in additional funding and partnerships working on kestrels at a national level. We are in the third year of this project. Through the initial tracking efforts to learn more about vulnerabilities in the full-annual life cycle, we have pinpointed the need to focus on examining fledgling dispersal and survival in their first year of life.

**ACTIVITY 3: Citizen Science and public engagement**

**Description:** Invest in statewide citizen science efforts with the primary goal of; updating and evaluating existing survey protocols and datasets (Frog and Toad Survey, Loon Survey), assessing emerging questions related to existing data sets, and identifying new survey opportunities associated with the Nongame Program’s survey needs.

Participating in citizen science encourages Minnesotans to travel and discover places otherwise missed, offering a new way to explore the state while contributing to conservation at the same time. We will also develop citizen science engagement app in collaboration with similar existing endeavors such as Explore MN. The app will feature citizen science opportunities aligned with natural areas of interest such as State Parks and Wildlife Management Areas throughout the state.

**ACTIVITY 3 ENRTF BUDGET: \$187,500**

Outcome	Completion Date
1. Hire a Citizen Science Project Coordinator to manage data, work with nongame science staff and recruit citizen participants.	December 2019

2. Evaluate existing citizen science projects, analyze data, assess newly emerging questions related to existing data sets and improve collection capabilities.	March 2021
3. Create an app with associated media to promote unique travel experiences throughout the state based on citizen science engagement opportunities.	January 2022
4. Identify future citizen science projects working with nongame staff.	June 2022

**First Update March 1, 2020**

The position description for a Citizen Science Coordinator has been completed and approved for posting with plans in place to onboard this position in this spring.

**Second Update September 1, 2020**

We prepared and drafted a Citizen Science Program framework and position description for the Citizen Science Coordinator. The position was posted for hiring and applications were accepted. Prior to hiring, a statewide hiring freeze was issued. We explored ways to advance some of the planned work (re-instating the Frog and Toad survey is top priority) by shifting responsibilities to existing staff and possibly contracting. Additionally, we collected examples of citizen science projects and apps from other states and will evaluate/consider for our Citizen Science Program once a coordinator is hired and the effort is fully underway.

**Third Update March 1, 2021**

A Citizen Science program coordinator has been hired. We are now referring to this as the Community Science program; this change reflects a national trend and greater inclusivity. The Community Science coordinator began the position in February. Prior to February, program planning was underway. A specific focus was identifying community science projects that could be kicked off in summer 2021 while promoting social distancing. The coordinator is now pursuing these projects and other steps outlined to initiate this new and exciting Community Science Program. A specific project to be re-initiated in October 2021 is the Frog & Toad Survey. The U.S. Geological Society previously supported this multi-state survey, however, the U.S. G.S. support ended in 2016. To continue, Minnesota needs an independent database and user interface. The user interface will guide volunteer surveyors through training in identification, route sign up, protocol, and data entry. It is critical to restarting the statewide survey. The Community Science program is cost shared with a federal State Wildlife Grant that requires a state match.

**Fourth Update September 1, 2021**

We made progress on developing community science that is widely accessible, with a goal of officially launching several projects in the spring of 2022, Examples include:

The regal fritillary project, which uses a map of documented prairie violet populations to predict potential regal fritillary habitat across the state and encourages enthusiasts to help us update our statewide distribution map by visiting locations that may harbor populations of this special concern species. Observers upload observations to iNaturalist, which is a well-established platform where users of all skill levels can document and share their observations.

Our cricket frog survey is similarly aimed at finding new populations of a species of interest. DNR subject matter experts identified survey areas that have the potential to contain Blanchard’s cricket frogs, a state listed species. A map of survey locations is available to participants, or they can identify potential habitat on their own. Cooperating partners at HerpMapper adapted their existing interface to create a custom data entry application for this project.

We have also made progress on re-initiating the MN Frog and Toad survey. The Community Science Coordinator is working with former administrators of the project to identify critical project components and desired

functionality, and work with MN IT Services is underway to develop a functional replacement for the former nationwide survey.

To improve collaboration and learning, we partnered with the UM Extension MN Bumble Bee Atlas to collect bumble bee data and gain experience in delivering community science opportunities. MN DNR Increasing Diversity in Environmental Careers (IDEC) interns were enthusiastic participants in the bumble bee monitoring.

Finally, we are updating our website to provide a one-stop launch page for Nongame Community Science projects and participation. The new website will include project summaries, information on how to participate, and project results as they become available.

#### **Fifth Update March 1, 2022**

Projects that were described in the September 01, 2021 update (Regal Fritillary project, Cricket Frog Survey, MN Frog and Toad survey) are progressing for launch in Spring/Summer 2022, with the following changes/updates:

1. The regal fritillary project, which uses a map of documented prairie violet populations to predict potential regal fritillary habitat across the state and encourages enthusiasts to help us update our statewide distribution map by visiting locations that may harbor populations of this special concern species.
2. Our cricket frog survey is similarly aimed at finding new populations of a species of interest. DNR subject matter experts identified survey areas that have the potential to contain Blanchard's cricket frogs, a state listed species. A map of survey locations is available to participants, or they can identify potential habitat on their own. Cooperating partners at HerpMapper adapted their existing interface to create a custom data entry application for this project.
3. Progress continues on re-initiating the MN Frog and Toad survey. The Community Science Coordinator continues to identify critical project components and desired functionality, and work with MN IT Services is to develop a functional replacement for the former nationwide survey. The 2022 field season will be dedicated to route ground truthing and adjustment. Most of the routes were originally developed in the late 1990's, when surveyors used vehicle odometers and visual landmarks to mark survey points. This phase will employ users' location-enabled cell phones and/or tablets to ensure that survey routes are accurately mapped, safe, and in appropriate habitat when the full survey relaunches in 2023. We have an online application for users to select a route (or multiple routes) to ground truth, and are in the process of developing a data collection application dedicated to this process. This route correction phase also allows us time to continue work with a biometrician to ensure the continued statewide survey is properly designed to meet long-term monitoring goals.
4. We will coordinate involvement in the Midwest BatHub's autonomous acoustic recording of bats. Volunteers living in or near a monitoring grid sign up, request an acoustic monitoring kit, receive training, and submit recorded data.

We continue to collaborate within the state (UM and non-profit organizations) and through networks with other states to learn about successful Community Science programs and use this knowledge gained to refine planning for this new Program. Human dimensions research (part of Activity 4) is helping us design a Program that best fits with our potential participants. Social media is a key component of our engagement strategies.



### **Update as of June 30, 2022:**

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

### **Sixth Update as of September 1, 2022:**

The Nongame Community Science Program has continued to progress and take shape. Our online presence has increased via our new main program webpage and pages dedicated to the frog and toad survey, Blanchard's cricket frog survey, and Chimney swift survey. We are also advertising bird-related community science opportunities via the MN eBird portal.

Volunteer recruitment is moving forward. Following the lifting of COVID-related volunteer restrictions this summer, we worked with the DNR Volunteer office to develop Community Science sign-up and correspondence options. Participants can contact the program via a dedicated email address and receive generalized or project-specific updates.

The Blanchard's Cricket Frog survey was officially launched in June, and season one will conclude at the end of August. Data will be downloaded from the HerpMapper website and incorporated into the DNR Natural Heritage database by the end of December.

The Frog and Toad monitoring project will be officially launched in the spring of 2023. Analysis of existing data continues, with the goal of revising the former protocol to specifically address statewide and regional MN population trends. The route sign up website is complete. The route ground truthing data collection application is in the final stages of testing, and will be made available to volunteers before the beginning of the 2023 monitoring season.

Collaboration, outreach, and networking are ongoing. Our engagement with the University of Minnesota, Citizen Science Association, and other relevant organizations continues to inform our program development.

### **Seventh Update as of March 1, 2023:**

The community science program is building capacity to engage participants in multiple projects in spring of 2023. This will be the first season that we are able to operate without restrictions on participation related to the covid pandemic.

We have continued to promote and develop the Blanchard's cricket frog survey in preparation for season two. We are still partnering with HerpMapper to host the survey and are planning in-person training and awareness events for spring and summer 2023. We are also in the beginning stages of partnerships to install kiosks at known or potential cricket frog breeding sites that describe the life history and conservation needs of cricket frogs and link to the program website so viewers can participate in the cricket frog community science effort. The Frog and Toad Monitoring Survey is preparing for launch in spring of 2023. Volunteer recruitment is in progress and we are planning for data collection to begin in spring 2023. Analysis of existing data will inform survey design and protocol refinements in 2024 and beyond.

The Minnesota Chimney Swift project is also preparing for a new season with increased scope in 2023. We are working with cooperating partners and a newly founded Wildlife Viewing Community of Practice group to identify project goals and plan community engagement events.

Overall, the community science program is moving forward with efforts to recruit volunteers, collect data in support of State Wildlife Action Plan goals, and build capacity for future projects.

### **Final Report as of June 30, 2023 (to be submitted before August 15, 2023):**

Most of our effort during this reporting period focused on the Statewide Frog and Toad Monitoring Survey. Chimney Swifts and Cricket Frogs also made continued progress. The community science work that has grown out of this grant and will continue in strengthening our overall Nongame Wildlife Program goals of connecting people with nature where they are helping with the contribution of viable data.

**Frog and Toad monitoring:** We solicited participation from former survey participants and signed more than 80 volunteers up for routes. Volunteers collected data from mid-April through the end of June on 83 routes in 39 counties in Minnesota. Surveys during this period resulted in at least one new record of the state endangered Blanchard’s cricket frog (near Le Crescent, MN). We also released a new Survey123 data collection app that allowed volunteers in the who have a smart phone or tablet to view route and stop information, record locations, enter data, listen to example frog calls, and record audio in the field during their survey. This was a pilot season, and we look forward to signing more people up and expanding the survey next year. We also tried a new approach and hosted one pop-up listening event toward the end of June. We had about 6 participants attend and we did hear Blanchard’s cricket Frogs.

**Chimney Swifts:** We worked with cooperating partners in USFWS, St. Paul Parks, and others to develop chimney swift monitoring protocols to be released in Fall 2023. We developed a draft data collection application for community science volunteers to use when monitoring Chimney Swift Roosts. We cooperated with a local community group to host a pilot Swift Sit Roost Monitoring event as part of the 2023 Twin Cities Urban Birding Festival.

**ACTIVITY 4: Public awareness and programmatic messaging**

**Description:** Develop and conduct a survey to measure the effectiveness of the Nongame Wildlife Program’s information messages, ascertain citizen awareness of the program and its accomplishments, and identify strategies to diversify programmatic reach to new audiences as well as increase donations to the Nongame Wildlife Program. This information will be used in part to help identify new strategies and techniques for identifying and reaching targeted audiences and initiate more effective fundraising.

**ACTIVITY 4 ENRTF BUDGET: \$81,150**

Outcome	Completion Date
1. Develop and conduct a repeatable survey to measure public awareness of the Nongame Wildlife Program and the Nongame Wildlife Checkoff to assess support of wildlife conservation for nongame and rare wildlife.	June 2021
2. Use survey results to create new and improved programmatic messaging, fundraising strategies and public engagement tools	June 2022

**First Update March 1, 2020**

Internal stakeholder meetings were held in September and October of 2019 to gain staff input on survey content and to discuss considerations for our target audience. These initial meetings resulted in bringing on a social media assistant (funded with nongame donations) to start cultivating more interactions with the public. We are also working with our Public Affairs staff to create a communications plan for the development and roll out of this survey effort.

**Second Update September 1, 2020**

We accelerated our public engagement with a new project: *Let’s Get Wild!* Key Components of this Project include: Storytelling (featuring MN wildlife enthusiasts), Social Media Outreach, Nurturing Our Donors and Volunteers, Exploration of a Friends Group, Social Science (survey) and Marketing Campaign. This comprehensive approach to public engagement is helping us to focus our messaging and resources, and build a stronger identity for the Nongame Wildlife Program.

- A “master” contact list of supporters (donors, volunteers, and advocates) is nearly complete. Volunteers will be added shortly. Such a list has not previously existed and will be used to distribute program information and collect feedback.
- A thank you letter and mini-newsletter was sent to 2020 supporters (through July 1). We will repeat this outreach quarterly. We are incorporating techniques to encourage two-way communication.

- We broadly solicited nominees for MN wildlife enthusiasts and now have a list of about 80 individuals. Our next step is to work with individuals (starting with a small number) to help them tell and distribute their stories of how wildlife connections bring physical and mental well-being, and foster relationships between people and communities. We want to build interest and intrigue by sharing wildlife stories, promoting citizen science, and highlighting events and activities.
- Facebook and website messaging has improved. Messaging is more consistent with themes of our *Let's Get Wild!* banner and has increased in volume. Engagement has increased significantly.
- Additionally, we are in the final stages of issuing a state contract for surveys, focus groups, and market testing of messages. Goals of this contract are as follows:
  - Goal 1: Better understand motivations of current and potential supporters
  - Goal 2: Develop Program messages and deliverables that are positively received by current and potential supporters.
  - Goal 3: Connect to a larger and more culturally diverse audience.
  - Goal 4: Increase the number of Program supporters. Support is shown by an increase in participation in community science and volunteer opportunities, an increase in social media engagement, and an increase in both the number of people donating money and the total amount donated.

### **Third Update March 1, 2021**

The public engagement project under the banner *Let's Get Wild!* (see above) continues. We continue to build a contact list of supporters (donors, volunteers, advocates) and are now reaching out to approximately 600 supporters quarterly (mailings and emailing was done twice during this update period). We send a “thank you” letter, a unique wildlife story and updates, and stickers (example below). Feedback is positive! We have a new Social Media Specialist on staff to assist with promotion of the Community Science program and volunteer opportunities, and to expand public engagement through platforms such as Face book and our website. We have a pending proposal for an Instagram account as well. The online response to this additional outreach is tremendous. The Social Media Specialist is continually updating and improving our webpages, and is finalizing a new “Supporter” page that clearly outlines how funds are used and projects underway (this will be up and live by the third week in March).



We have a substantial contract underway with Virginia Polytechnic University for human dimensions research. The work is taking place in three phases. Phase One focuses on wildlife viewers and results will be available in December 2021. Phase Two focuses on understanding supporters, and Phase Three surveys target audiences. All phases use a combination of phone interviews, online surveys, and focus groups. Researches will recommend strategies and messaging to strengthen and expand relationships with Minnesotans who enjoy wildlife and nature. Portions of this work (including salary for the Social Media Outreach Specialist) are covered by federal funds from a State Wildlife Grant that requires a state match.

### **Fourth Update September 1, 2021**

The public engagement project under the banner *Let's Get Wild!* continues. We continue to build a contact list of supporters (donors, volunteers, advocates) and engage Minnesotans. This spring we expanded our outreach contact list by offering popular stickers on Facebook (requestors have the option to join our “mailing” list). The Social Media Specialist is continually updating and improving our webpages, completed a new “2020 Supporter” page that clearly outlines how funds are used and highlights wildlife projects. MN DNR Regional Nongame Wildlife webpages were also updated with new photos and descriptions of wildlife field work. Social media

engagement (measured by “followers”) continues to grow, as posts are made approximately 5 days per week. During the summer of 2021, volunteer appreciation gifts were offered to all Loon Monitoring volunteers. We distributed gifts to over 200 people. Offered gifts included on-hand items (i.e. – we did not purchase anything new to give), including t-shirts, patches, and books. It was fun to connect with volunteers and they let us know they appreciate the acknowledgement.

Conservation social science research continues through a contract with Virginia Polytechnic University. The work is taking place in three Parts. Researchers will recommend strategies and messaging to strengthen and expand relationships with Minnesotans who enjoy wildlife and nature. Research project team (MN DNR Nongame Wildlife staff and University staff) members meet monthly, with work sessions occurring in between monthly meetings. Portions of this work are covered by federal funds from a State Wildlife Grant that requires a state match.

Part One focuses on wildlife viewers broadly. The online survey is underway and results will be available in December 2021. Part Two focuses on better understanding Nongame Wildlife Program supporters, and includes both focus groups and an online survey. Research questions are below. Focus groups will be in October, 2021, with an online survey to follow.

*Primary research questions*

1. *What motivates and limits current supporters in their engagement (financially and as volunteers) with the Nongame Wildlife Program?*
2. *What motivates and limits supporters of other conservation and outdoor recreation programs within the DNR in engaging with the Nongame Wildlife Program?*

*Additional research questions*

3. *What motivates and limits current and potential future supporters in their environmental stewardship and conservation behaviors?*
4. *What are the features of an effective communication effort that engages current and potential supporters of the Nongame Wildlife Program?*

Part Three objectives are to better understand BIPOC (Black, Indigenous, and People of Color) behaviors and interests, current engagement, awareness, attitudes, trust of the agency, and barriers. Primary methods are web-based interviews and/or focus groups. A pool of organizations, topic experts, and participants is being assembled. Focus group members and survey participants will then be identified. Selections are made based on established criteria.

**Fifth Update March 1, 2022**

During this time period we continue to build a contact list of supporters (donors, volunteers, advocates) and engage Minnesotans. A “Thank you” newsletter was sent to 650 households in January. The Social Media Specialist is continually updating and improving our webpages, completed a new “2021 Supporter” page that clearly outlines how funds are used and highlights wildlife projects. Social media engagement (measured by “followers”) continues to grow, as posts are made approximately 5 days per week.

Progress continues with the conservation social science research through a contract with Virginia Polytechnic University. Part One, focused on understanding wildlife viewers, is complete and preliminary results are available. Focus Groups for Part Two are complete and data analysis is underway. The next step of Part Two is an online survey to gather data on current and potential supporters of wildlife diversity and the Nongame Wildlife Program. Planning for Part Three is wrapping up, with upcoming focus groups designed to help us better understand the needs and barriers to participation by Black, Indigenous, and People of Color.

Project purpose, methods, and preliminary results were presented by MN DNR Nongame Wildlife Program Leader at a professional conference in February, 2022. Social media engagement is a key component of this research.

#### Primary research questions

1. What motivates and limits current supporters in their engagement (financially and as volunteers) with the Nongame Wildlife Program?
2. What motivates and limits supporters of other conservation and outdoor recreation programs within the DNR in engaging with the Nongame Wildlife Program?
3. What motivates and limits current and potential future supporters in their environmental stewardship and conservation behaviors?
4. What are the features of an effective communication effort that engages current and potential supporters of the Nongame Wildlife Program?

Part Three objectives are to better understand BIPOC (Black, Indigenous, and People of Color) behaviors and interests, current engagement, awareness, attitudes, trust of the agency, and barriers.

#### **Update as of June 30, 2022:**

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

#### **Sixth Update as of September 1, 2022:**

During this time period we continue to build a contact list of supporters (donors, volunteers, advocates) and engage Minnesotans. With a current contact list of about 1,400 people, we are able to reach supporters for surveys and focus groups, in addition to providing wildlife information and our gratitude for being a supporter of the Nongame Wildlife Program. Our outreach directly to individuals, on webpages (such as the annual "Supporters' Page", and social media generates multiple touch points. Social media engagement (measured by "followers") continues to grow, as posts are made approximately 5 days per week.

Progress continues with the conservation social science research through a contract with Virginia Tech University. Research results will inform development of public engagement programming for the Nongame Wildlife Program. The emphasis is on wildlife viewing, nature-based recreation, and conservation behaviors. Part One was conducted at the national, regional, and state level. Parts Two and Three apply only to Minnesota.

Part One, focused on understanding wildlife viewers, is complete and results are [available](#). As an example of findings, we learned that over half of the respondents identified distance to a wildlife viewing location, associated financial costs, and lack of free time as barriers to participating in wildlife viewing. Accessibility challenges were identified as a barrier by approximately 40% of respondents. Researchers, with input from agency staff, identified the following recommendations.

1. Respond to demand to develop programs and engage viewers through providing increased information about where, how, and what wildlife to view, and additional programs and support for wildlife viewers.
2. Broaden constituency through supporting viewing experiences of underserved groups including Black, Indigenous, and wildlife viewers of Color, and/or disabled wildlife viewers through increased representation and connection with these groups.
3. Develop opportunities for viewers to financially support their state agencies. Agencies can target new programming and opportunities for non-consumptive viewers to help increase relevancy of agencies to viewers.

Focus Groups for Part Two are complete; data have been analyzed and integrated into a larger online survey that will be kicked off in fall of 2022. As an example, from focus groups we learned that participants are motivated because they agree with the mission of the Nongame Wildlife Program and a sense of altruism, but they are limited by a lack of awareness and money. The image below shows feedback when people were asked what would encourage them to get more involved with wildlife conservation.



The upcoming survey is designed to provide information on current and potential supporters of wildlife diversity and the Nongame Wildlife Program. Results will help us build a road map to reach more people, with the objective of encouraging conservation behaviors.

Part Three Focus Groups/Facilitated Workshops are scheduled for September, 2022. Part Three objectives are to better understand BIPOC (Black, Indigenous, and People of Color) behaviors and interests, current engagement, awareness, attitudes, trust of the agency, and barriers.

#### Primary research questions

1. What motivates and limits current supporters in their engagement (financially and as volunteers) with the Nongame Wildlife Program?
2. What motivates and limits supporters of other conservation and outdoor recreation programs within the DNR in engaging with the Nongame Wildlife Program?
3. What motivates and limits current and potential future supporters in their environmental stewardship and conservation behaviors?
4. What are the features of an effective communication effort that engages current and potential supporters of the Nongame Wildlife Program?

#### **Seventh Update as of March 1, 2023:**

In fall of 2022 the MN specific results of the wildlife viewing survey effort were completed and published in a report entitled [Minnesota Results of the Wildlife Viewer Survey: Enhancing relevancy and engaging support form a broader constituency](#). We've hosted 4 workshops and webinars presenting the methods and results of the wildlife viewing research. Data collection wraps up this spring with final results of all three phases available by September 2023. The final product will include recommendations for effective public education and engagement.

#### **Final Report as of June 30, 2023 (to be submitted before August 15, 2023):**

The 3 phases of this work have been completed with no additions since the last status update. A report from phase 3 is being finalized for distribution by this fall. In general, the work we have accomplished by taking a

deeper dive into the social science applications of our program will assist us in guiding our future programmatic growth and engagement efforts.

#### **IV. DISSEMINATION:**

**Description:** The results of this project will be disseminated through DNR news releases, Nongame Wildlife Program Facebook posts, at professional society meetings of natural resources agencies and environmental educators, through collaboration with the media, and by providing regular updates to LCCMR staff and commission members.

The Minnesota Environment and Natural Resources Trust Fund (ENRTF) will be acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the [ENRTF Acknowledgement Guidelines](#).

#### **First Update March 1, 2020**

A portion of the data for this survey has been obtained. Strategies for survey contents and communication with donors are being developed. Strategies include quarterly newsletters, thank-you letters and possible small tokens of appreciation. Web page improvement and increased social media presence is underway.

#### **Second Update September 1, 2020**

First round of thank you letters and quarterly newsletter were sent to all check and on-line donations for calendar year 2020. Stickers for thank –you tokens were developed and are being printed for next round of newsletter/thank yous. Several web-page updates and improvements have been made and are still underway.

#### **Third Update March 1, 2021**

Two additional quarterly communication pieces were sent to supporters (approximately 600 per mailing). Several webpage updates and improvements have been made and are still underway. Every 2 – 3 days a new post is added to the Nongame Wildlife Program Face Book page. These webpages and posts support outreach and promotion objectives, and additionally keep readers informed of new wildlife work.

#### **Fourth Update September 1, 2021**

We continue to communicate directly with supports through mailings (one this time period) and electronically with newsletter-like updates. Spring communication typically highlights the eagle nest webcam; this project is popular and what most people want to hear about in the spring. Webpage updates and improvements continue. Nongame Wildlife Program webpages for DNR Regions were updated, featuring photos and descriptions of wildlife projects. About five times per week a new post is added to the Nongame Wildlife Program Face Book page and our number of followers continues to grow! These webpages and posts support outreach and promotion objectives, and additionally keep readers informed of new wildlife work.

#### **Fifth Update March 1, 2022**

We continue to communicate directly with supports through mailings (January 2022) and electronically with newsletter updates and “thank you”. Webpage updates and improvements continue. Nongame Wildlife Program webpages were updated with 2021 accomplishments, featuring photos and descriptions of wildlife projects. About five times per week a new post is added to the Nongame Wildlife Program Face Book page and our number of followers continues to grow! These webpages and posts support engagement, and additionally keep readers informed of new wildlife work. Two presentations, one focused on work under Activity 3 (Community Science) and the second on work under Activity 4 (Understanding current and potential supporters) were selected for presentation at the Association of Fish & Wildlife Agencies Wildlife Viewing and Nature Tourism Academy in February, 2022. Both presentations were very well received and generated new lines of collaboration.

#### **Update as of June 30, 2022:**

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

**Sixth Update as of September 1, 2022:**

We continue to communicate directly with supports through mailings, electronically with newsletter updates, and with “thank you” cards. Webpage updates and improvements continue. Nongame Wildlife Program webpages were updated with annual and seasonal accomplishments, featuring photos and descriptions of wildlife projects. About five times per week a new post is added to the Nongame Wildlife Program Face Book page and our number of followers continues to grow! These webpages and posts support engagement, and additionally keep readers informed of new wildlife work.

A fun note we wanted to include in this update (though falls outside of the reporting timeframe) is that the American Kestrel Project funded in part by this grant under activity 2, was featured in the Conservation Volunteer “[Field Notes](#)” section of the September – October 2022 issue.

**Seventh Update as of March 1, 2023:**

We continue to communicate directly with supports through mailings, electronically with newsletter updates, and with “thank you” cards. Nongame Wildlife Program webpages were updated with annual and seasonal accomplishments, featuring photos and descriptions of wildlife projects. New post are regularly added to the Nongame Wildlife Program Face Book page. This winter, the Eagle Cam has been a hot topic, generating many weather-related posts and a lot of buzz with our supporters. These webpages and posts support engagement, and additionally keep readers informed of new wildlife work.

**Final Report as of June 30, 2023 (to be submitted before August 15, 2023):**

Our outreach efforts are continuous and an ongoing component of the Nongame Wildlife Program, funded in part by ENTRF grants which are acknowledged appropriately in communications such as webpages, social media postings, print publications and the like. We rely on these multiple funding resources to meet match requirements and get this important work done.

**V. ADDITIONAL BUDGET INFORMATION:**

**A. Personnel and Capital Expenditures**

**Explanation of Capital Expenditures Greater Than \$5,000:** N/A

**Explanation of Use of Classified Staff:** N/A

**Total Number of Full-time Equivalent (FTE) Directly Funded with this ENTRF Appropriation:**

Enter Total Estimated Personnel Hours for entire duration of project: 7,696	Divide total personnel hours by 2,080 hours in 1 yr = TOTAL FTE: 3.7
---	--

**Total Number of Full-time Equivalent (FTE) Estimated to Be Funded through Contracts with this ENTRF Appropriation: 1.3**

Enter Total Estimated Contract Personnel Hours for entire duration of project: 2,771	Divide total contract hours by 2,080 hours in 1 yr = TOTAL FTE: 1.3
--	---

**VI. PROJECT PARTNERS:**

Project partners will include the DNR Divisions Ecological and Water Resources, Fish and Wildlife, Parks and Trails, Lands and Minerals, Forestry and external conservation organizations actively conducting habitat work in



the Conservation Focus Areas, the University of Minnesota, and communities in Minnesota associated with recreational opportunities.

**A. Partners outside of project manager’s organization receiving ENRTF funding** None

**B. Partners outside of project manager’s organization NOT receiving ENRTF funding**

External conservation organizations actively conducting habitat work in the Conservation Focus Areas such as NGOs, County Soil and Water Conservation Districts, the USFWS and the University of Minnesota.

**VII. LONG-TERM- IMPLEMENTATION AND FUNDING:**

This effort will enable the Nongame Wildlife Program to better address the conservation, education, and recreational needs of Minnesota’s nongame wildlife species and their habitats. This three-year project is part of a potential longer term matching effort and partnership that will benefit Minnesota wildlife by a collaborative conservation effort in which ENRTF supplements the voluntary Nongame Wildlife Checkoff donations by Minnesota citizens to the Nongame Wildlife Fund. This would promote conservation accomplishments of the ENRTF and increase the long term effectiveness of the Nongame Wildlife Program for wildlife conservation in Minnesota.

**VIII. REPORTING REQUIREMENTS:**

- Project status update reports will be submitted March 1 and September 1 each year of the project
- A final report and associated products will be submitted between June 30 and August 15, 2023

**IX. SEE ADDITIONAL WORK PLAN COMPONENTS:**

- A. Budget Spreadsheet**
- B. Visual Component or Map**
- C. Parcel List Spreadsheet**
- D. Acquisition, Easements, and Restoration Requirements**
- E. Research Addendum**

Attachment A:

Environment and Natural Resources Trust Fund

M.L. 2019 Budget Spreadsheet- Final

Legal Citation: M.L. 2019, First Special Session, Chp. 4, Art. 2, Subd. 08e

Project Manager: Kristin Hall

Project Title: Conservation Focus Area Coordinator

Organization: MN Department of Natural Resources

Project Budget: \$513,000

Project Length and Completion Date: 30 June 2023

Today's Date: 8/21/2023



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Budget 8/21/23	Amount spent	Balance*
<b>BUDGET ITEM</b>			
<b>Personnel (Wages and Benefits)</b>	\$ 349,585	\$ 349,585	\$ -
CFA coordinator: .5 FTE: \$45,000 (\$35,000 sal; \$10,000 benefits) 1 year- \$45,000	80,000		
Citizen Science Coordinator: .5 FTE: \$100,000 (\$40,000 sal; \$10,000 benefits) 2 years- \$100,000	135,000		
Data mgt: 1 FTE (\$57,000 sal; \$13,000.00 ben. 1 yrs.) - \$70,000	80,000		
Surveyors: two .3 FTEs (\$42,000 sal; \$10,500 benefits, per 2 staff per year) 2 years- \$105,000	22,750		
Biometrician staff--\$25,000	25,000		
<b>Professional/Technical/Service Contracts</b>			
Biometrician analysis of existing citizen science data (estimated rate of \$175/hr)	\$ 5,000	\$ 5,000	\$ -
MNIT SLA upgrades to Observation Database and data collecting apps. (estimated rate \$25/hr)	\$ 46,500	\$ 46,500	\$ -
RFP to develop/conduct messaging surveys, analyze and report on findings. (est. rate \$50/ hr)	\$ 80,000	\$ 80,000	\$ -
<b>Equipment/Tools/Supplies</b>			
meeting supplies for CFA planning and citizen science engagement / trainings.	\$ 618	\$ 618	\$ -
<b>Capital Expenditures Over \$5,000</b>			\$ -
<b>Printing</b>			
printing collateral needs for citizen science and public engagement surveys	\$ -		\$ -
<b>Travel expenses in Minnesota</b>			
CFA coordination travel from St Paul to CFAs for partnership meetings \$4,500. Estimated 8 days of travel in accordance to Commissioner's Plan (\$36/day meals = \$288, \$80/day lodging = \$640, and 6158 miles @ .58/mile = 3,572)	\$ 3,248	\$ 3,248	\$ -
Surveyor Travel, statewide: \$22,800. Estimated 80 days (40days* 2 surveyors) of travel in accordance to Commissioner's Plan (\$36/day meals = \$2880, \$80/day lodging = \$6400, and 7,770miles / yr @ 3 years @ .58/mile = 13,520)	\$ 850	\$ 850	\$ -
<b>Other:</b> Direct and Necessary Costs (HR Support ~\$5,467; Safety Support ~\$1,132; Financial Support: ~\$5,910; Communication Support: ~\$1,251; IT Support ~\$12,381; Planning Support ~\$1,059)	\$ 27,199	\$ 27,199	\$ -
<b>COLUMN TOTAL</b>	\$ 513,000	\$ 513,000	\$ -

	Status (secured or pending)	Budget	Spent	Balance
<b>OTHER FUNDS CONTRIBUTED TO THE PROJECT</b>		\$ -	\$ -	\$ -
<b>Non-State:</b> State Wildlife Grants and Nongame Wildlife Program donations	secured	\$ 145,000	\$ 145,000	\$ -
<b>State:</b>		\$ -	\$ -	\$ -
<b>In kind:</b>				

	Amount legally obligated but not yet spent	Budget	Spent	Balance
<b>PAST AND CURRENT ENRTF APPROPRIATIONS</b>		\$ -	\$ -	\$ -
<b>Current appropriation:</b> M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08a	\$ 220,000	\$ 220,000	\$ 220,000	\$ -
<b>Past appropriations:</b>				