

Final Narrative Report

Fostering Great Lake Stewardship from Forest to Fen

Background/Overview

1. Briefly summarize the project description as outlined in the original proposal.

As outlined in the original proposal, this project provided programming for people of all ages to get them outside experiencing nature, engaging in habitat management and contributing to data collection. Connecting people to the Great Lakes in a meaningful way, develops understanding and appreciation for the ecology of the Great Lakes that can lead to active stewardship and advocacy to support long-term sustainability of the Great Lakes fishery. Participation in data collection and education on biodiversity and habitat management helps people understand how stewardship decisions are made and can encourage people to advocate for data-driven decisions and stewardship planning in the future. In two programs areas, *Experiencing Nature* and *Habitat Monitoring*, this project aimed to reach 275 people of all ages and abilities through 16 events and activities. Project evaluation included surveys appropriate to the specific event/activity to indicate any changes in knowledge, attitudes or intended behavior.

- *Experiencing Nature*: facilitate experiences in nature for all ages and abilities.
 - Goal: 10 events reaching 200 people
 - 8 family-friendly and 2 adult-focused
 - Outcome: 18 events (9 in-person, 9 online lessons) reaching 359 people
 - 3 family-friendly events and 15 adult-focused (more in-person family events were slated, but could not take place due to COVID-19 restrictions)
- *Habitat Monitoring*: increase public contribution to habitat management through data collection and observation.
 - Goal: 6 habitat monitoring activities reaching 75 people
 - Outcome: 7 activities (3 virtual, 3 in-person, 1 combined virtual/in-person) reaching 92 people

2. Was the project completed as originally intended? If not, indicate how the final outcome(s) differed from what was anticipated. Does your experience suggest that original expectations were realistic? What factors hindered or helped progress?

We surpassed project goals for events and attendance. There were some adjustments made to the audiences we reached and to the way content was delivered due to the COVID-19 pandemic. When events shifted online, the hands-on training and stewardship actions we had planned became follow-up activities for participants to complete on their own. Our original intention was to host

more family-friendly events which we would have followed through on if we could have had in-person events in 2020. We made a conscious shift away from K-12 focused content when we moved to an online event model because so many other organizations were already producing and promoting youth content. As a result, our online training and lessons were created for and marketed to an older audience.

We learned a lot in year one and were able to make adjustments to make better progress toward our goals as the grant period went on. So while we had a slow start on some of our attendance and event numbers, our original expectations were realistic.

Our attendance numbers were lower than we originally projected when we started hosting *Experiencing Nature* events. To address this issue, we tested different times and formats. Though we promoted events heavily through local media and our own on and offline channels, by the end of 2019 we found our greatest success through integrated partnerships. When we involved like-minded organizations with existing supporters, we were able to increase our reach and tailor our events to the days, times and content that would be most appealing to the audiences we were targeting.

Our original expectations for *Habitat Monitoring* events changed over the course of the grant but the overall intent and goals remained. We planned to split the events across the grant period, but were unable to do that and instead pushed all of the monitoring events to 2020. We intended to host several events at our own nature preserves in 2019, but the preserves were brand new acquisitions and we needed to complete some initial assessment and management planning on each before monitoring events and training with the public were feasible.

Though we met our goals, our monitoring events were hindered by pandemic restrictions. We wanted the events to be hands-on but public health guidelines continued to discourage gathering groups of people so we shifted to online training models. Additionally, because of our focus on including partners for specific area expertise (eg. Michigan Natural Features Inventory and the vernal pool monitoring event), we were limited by other organization's policies on public interaction.

At the conclusion of the first grant year, the return rate on surveys for use in the project evaluation was a barrier to full evaluation and improvement as identified in the project proposal. Over time, we identified techniques to improve the return rate including having available in-person surveys for those willing to take the time at the conclusion of an event and sending an email reminder to the initial request for response which helped increase our evaluation numbers.

Outcomes

3. What activities were pursued in relationship to intended outcomes, and to what extent did you achieve the following intended outcomes listed in your proposal? (Merge intended outcomes from proposal.)

Experiencing Nature Events

The intended outcome was to reach 200 people via 10 events (8 family-friendly and 2 adult-focused). Through this project area we reached 359 people via 18 events (3 family-friendly, 15 adult-focused)

Explore the Outdoors

7 youth, 4 adults; 3 volunteers supporting activities

July 2019 Hubbard Lake Nature Preserve in Alcona County

With a focus on the importance of forests for water quality, participants explored macroinvertebrate populations, built their nature observation skills and enjoyed a guided hike. Participants were encouraged to continue making nature observations as part of their daily lives and learned about the importance of cleaning recreational gear whether on land or in water.

Unwind Outside

9 adults; additional leadership provided by Munson Healthcare Grayling Hospital

August 2019 Hanson Hills Recreation Area in Crawford County

5 adults; additional leadership provided by Crawford County Commission on Aging

September 2020 Hanson Hills Recreation Area in Crawford County

These two events focused on the connections between physical, mental and natural resource health, participants were guided through stretches before and after a hike through wooded and riparian areas. They learned several different natural journaling techniques and how nature journals can be a tool for identifying any changes in resource health. While practicing these techniques, participants focused on the riparian areas making notes of the interactions between the water and land.

The Invasive Autumn Olive Workshop

18 adults

August 2019 at the Hubbard Lake Nature Preserve in Alcona County

With a focus on the impact that this invasive species can have on forest and overall Great Lakes basin health, participants practiced species identification while exploring the preserve and learned removal techniques that can be used on their own properties and riparian areas.

The Art and Science of Forestry

16 adults; additional leadership provided by the Department of Natural Resources and MSU Extension

August 2019 Pigeon River Country State Forest in Otsego County

With a focus on sustainable forestry including forest management for water quality, participants took a guided hike to learn various forestry techniques, practiced using various forestry based tools and visited a prescribed burn site.

Be a Nature Detective

21 youth and 11 adults; additional leadership provided by the volunteer group Kids Outdoor Otsego

October 2019 The Discovery Center in the Pigeon River Country State Forest in Otsego County

With a focus on nature observation and ecosystem comparisons, participants built tools for nature observation and used those tools in observing differences between a riparian ecosystem and upland ecosystem. The event wrapped up with a robust discussion around the dependence of each system on the other.

Emily Min Hunt Preserve Snowshoe

9 adults

January 2020 Emily Min Hunt in Presque Isle county

Participants were led on a guided snowshoe with commentary on how the diverse landscape of wetland, grassland and woods impacts the region's water quality and supports biodiversity.

Hubbard Lake Preserve Snowshoe

15 adults

February 2020 Hubbard Lake Nature Preserve in Alcona county

A guided hike on the preserve's trails explored the hilly terrain and its connection to the water quality of Hubbard Lake below as well as the broader connection of old growth forests to the health of the Great lakes.

Nature Observation Cross-country Ski

February 2020 Northbound Outfitters, Grayling, MI in Crawford County

12 youth; additional leadership provided by volunteer club leader

This effort was connected to an ongoing youth (up to age 12) cross country ski club. Huron Pines staff guided youth through a sensory and nature observation ski with tips on how to combine the recreation activity with nature observation skills.

Connecting to Nature Online Lesson Series

9 lessons, 244 attendees 13 and up

April and May 2020 online via Zoom

In 30-minute lessons targeted at a general, 13 and older audience in the Great Lakes basin, participants were provided content as well as resources and activities to get outside following the online portion. Topics were determined based on events that were already in the works for 2020: Plants and Stress (26 attendees), Introduction to Gardening with Native Plants (32 attendees), Unwind Outside (31 attendees), Talking Ticks (45 attendees), Introduction to Invasive Species (31 attendees), Understanding Stormwater (17 attendees), Bringing Birds to Your Backyard (20 attendees), Reading the River (16 attendees), and Protecting Wild Places (26 attendees). These participant counts do not include Huron Pines staff but does include counts of individuals who attended more than one session.

Habitat Monitoring

The intended outcome was to reach 75 people via 6 habitat monitoring activities. Through this project area, 92 people were reached via 7 efforts (3 virtual, 3 in-person, 1 combined virtual/in-person)

Vernal Pool Monitoring Program Training

22 adults; additional leadership provided by the Michigan Natural Features Inventory
May 2020 online via Zoom

In large group and breakout sessions, participants learned the state-wide protocol for monitoring vernal pools annually. Those that wished were provided with a monitoring kit (mailed to their homes). Due to public health considerations - participants were from several counties across the state, a follow up, in-person field day was not feasible.

Purple Loosestrife Monitoring Training

7 adults

August 2020 online via Zoom

In two live sessions, participants were taught to identify the invasive plant, report it to the Midwest Invasive Species Information Network, and provided removal tips for their own property. A resource was provided via email to those interested that outlined the primary content covered, vocabulary, and additional learning resources or activities associated with the session. All the slides and recordings were made available to participants, as well as an additional video that covered how to use the MISIN website for reporting invasives. Two participants reported instances of the plant following the workshop.

Huron Pines Preserve Monitors Training

3 adults

June-August 2020 online via Zoom, Google Classroom and in-person.

In this pilot cohort, participants received virtual orientation, a series of online, self-paced lessons, and hands-on training to support annual monitoring at the two Huron Pines Nature Preserves.

We've had 3 monitoring reports since the training, 2 at the Emily Min Hunt Nature Preserve in Presque Isle county and one at the Hubbard Lake Nature Preserve in Alcona County. All three volunteers are engaged and active with us asking great questions and helping others to enjoy the property. The monitoring reports have alerted us to new users, trail conditions that needed attention and future training opportunities.

Invasive Shrubs Monitoring Training

9 adults

August 2020 online via Zoom

Two sessions were provided: one pre-recorded session on shrub identification and one live session on how to report it to the Midwest Invasive Species Information Network with removal tips for their own property. A resource was provided via email to those interested that outlined the primary content covered, vocabulary, and additional learning resources or activities associated with the session. All the slides and recordings were made available to participants. Three participants reported instances of the plant following the workshop.

Thunder Bay River Invasive Species and Erosion Site Monitoring

3 adults

August 2020 5 stretches of the Thunder Bay River in Montmorency and Alpena counties

In this 5-day effort, volunteers were trained in data collection protocols applicable for all invasive plants and for erosion sites on rivers and lakes. This effort added capacity to Huron Pines' staff abilities and will continue in future years.

Negwegon State Park Rare Plant and Invasive Plant Species Monitoring

4 adults

August 2020 Negwegon State Park Ossineke, MI in Alpena County

A 3-day effort to conduct invasive plant species surveys, removal of spotted knapweed and survey of the rare Pitcher's Thistle. Volunteers were trained in data collection protocols applicable for all invasive plants and for the federally threatened Pitcher's thistle plant. This effort is a part of a larger partnership between Huron Pines and the Friends of Negwegon State Park to protect the rare plant species found along the shoreline of the park. It will continue beyond the grant period and include more volunteers as public health recommendations allow.

Alcona Elementary School - School Forest Monitoring

44 4th-grade students

October 2020 in Alcona County

Students actively monitored one of their school forest sites for wildlife habitat. Delayed by staff turnover and spring shutdowns, students began this effort in the Fall 2020 semester. With the support of Huron Pines, they are monitoring field cameras and forming processes to collect data about the quality of available habitat on the property directly behind their school building. This

data will inform management decisions as they design trails and classroom space the remainder of this school year.

4. What audience(s) were you particularly hopeful of reaching? To what extent did you reach them? Did you receive any feedback?

This project was aimed at reaching youth and adults in the Northeast Lower Peninsula and that audience was reached as intended. We did reach more adults than expected and hosted fewer family-friendly events, but that was due to changes in programming caused by the pandemic. Feedback was collected and is reflected in the evaluation documents attached. Additionally, via the Connecting to Nature Series, a broader geography was reached through those online lessons and much appreciated through the initial stages of the pandemic.

5. What relationships or opportunities were developed or strengthened through the work?

Relationships with partners like Michigan Natural Features Inventory, MSU Extension, local DNR employees and Friends groups, health and wellness partners, and volunteer groups were developed and/or strengthened through this project. Leveraging Huron Pines' marketing capacity with partners' existing support bases contributed to the success of this project and will continue beyond the grant period. Opportunities in the virtual setting were developed through this work and while we hope to return to as many in-person activities as possible, much was learned about how to complement in-person offerings with virtual and online resources. We developed several program offerings that can be repeated in the future or built upon in coming years through this work.

6. Was an evaluation included as part of this project? If so, what were the key findings? (Please attach a copy of the evaluation report).

Evaluation was included as part of this project, primarily through pre and post, or just post, event/activity surveys. Several evaluation summaries are attached as part of this report. For the following events, a survey was administered but no responses were received: *Explore the Outdoors*, *Unwind Outside*, *Invasive Autumn Olive Workshop*, *Art and Science of Forestry*, and *Hubbard Lake Snowshoe Outing*. Surveys were not able to be administered for the following due to event format, school year changes or partner restrictions/willingness: *Nature Observation XC Ski*, *Thunder Bay River Invasive Species and Erosion Site Monitoring*, *Negwegon State Park Rare Plant and Invasive Plant Species Monitoring*, and *Alcona Elementary School - School Forest Monitoring*. Key findings included the following:

- In event promotion for youth and family-focused events, narrow down the age range for most appropriate with note that older/younger may attend but the event is geared towards a specific range.

- For virtual events, a variety of time lengths are amenable to different groups. Additionally, the preferred format of virtual events (podcast style, traditional lecture, etc.) is informed by age groups.
- A two-part training can yield net increase in knowledge but the best format for that was not conclusive when examining the purple loosestrife and invasive shrubs training formats.
- Generally, for habitat monitoring efforts, participants expressed a need for hands-on, in field training.

7. Whether they were intended or unintended, what do you consider the most important benefits or outcomes of this stewardship project?

One of the most important outcomes was an increased understanding of how to best recruit event and activity participants throughout the Huron Pines' service area. With different communication preferences across generations and different community communication outlets in each of our 12 service counties, the ability to learn and adjust as each event progressed was highly valuable and will continue to inform our efforts moving out of this project.

An unintended benefit was a geographical broadening of our audience through the online Connecting to Nature series. We saw audience members from several areas around the state as well as out of state; these participants are all now familiar with the area and conservation activities relevant across many ecosystems.

Additionally, the Habitat Monitoring efforts are all applicable beyond the grant period; participants can apply their skills in a variety of locations and on an on-going basis. Both contributing to state-wide data collection efforts and location specific needs, these activities increased the knowledge and skills of people interested in active participation in stewardship activities.

Related Efforts

8. Was this project a standalone effort or was there a broader effort beyond the part funded by the GLFT? Have other funders been involved either during the time of your GLFT grant or subsequently?

This project included some standalone efforts and some as part of larger, ongoing efforts. For example, much of the native and invasive plant focused work overlaps and added value to our region-wide leadership of the Cooperative Invasive Species Management Area. All of the Habitat Monitoring efforts are those that had been in discussions for a while and this funding provided the catalyst to get them going. They're also the launching point for several efforts that will continue for many years to come - specifically those with the Friends of Negwegon State Park and at the Huron Pines Nature Preserves. Many of the Experiencing Nature programs will be refined and

reused in future years based on lessons learned through this project. The support of Alcona Community Schools will continue as part of a NOAA funded effort in their Bay Watershed Education and Training program.

9. Has there been any spinoff work or follow-up work related to this project?

As mentioned above, many efforts will continue or be utilized following this project. Several volunteers were supported with knowledge and skill building that will be used beyond the grant period. Event promotion and evaluation techniques refined in this project will inform future efforts of a similar nature.

Communications/Dissemination

10. List publications, presentations, websites, and other forms of formal dissemination of the project deliverables, tools, or results, including those that are *planned* or *in process*.

The Connecting to Nature online lessons are housed and available to the public on the [Huron Pines website](#) and the [Huron Pines YouTube channel](#). The [pre-work](#) and [reporting how-to](#) from our invasive shrub training are stored on the Huron Pines YouTube channel and can be accessed with a direct link. The [reporting how-to](#), [Session One](#) and [Session Two](#) of the Purple Loosestrife training are also stored on the Huron Pines YouTube channel and can be accessed with a direct link. Event promotion and recaps were shared via the Huron Pines website, social media channels, print and email newsletters, quarterly mailings and annual reports. Lessons learned have been shared in several peer network groups.

11. Please characterize your efforts to distribute and encourage use of products, processes, programs, etc. developed through this grant.

Through sharing lessons learned and best practices across a variety of professional networks, the results and processes used through this project were highlighted. All materials were developed to be shareable and can be provided to those interested.

Reflections

12. Please describe any unanticipated benefits, challenges, surprises, and/or important lessons learned over the course of the project.

The primary lesson learned through 2019 was around how best to reach and engage the intended audience with the outcome of event attendance. With a rural project area that includes families

with children and busy schedules as well as seasonal, retired residents, reaching our target audience and translating expressed interest into actual attendance was a learning curve. We found that by partnering with organizations, like the local hospitals who add a diverse reach in their marketing avenues, our events saw additional attendance and success.

The primary lesson learned through 2020 was how best to accommodate for public health considerations and the ability to utilize online mediums in the future to complement in-person offerings. The time involved to build and deploy online offerings is the most important element of this as it can be considerably more than in-person.

Unanticipated benefits have included the planning time to discuss with partners how the events can best continue beyond the grant period. Through this effort, several events that were piloted can continue annually with less lift from all partners involved. Additionally, several new families and area residents have connected with Huron Pines and our mission when they previously might not have.

Challenges have included weather delays/cancellations, the longer planning process some events require (due to everything from partner requirements to piloting new activities), and the rural nature of the project area and how communication/promotion happens within the geography. As noted above, the impacts to educational programming associated with the pandemic were significant but pushed creativity and broadened the reach of programs. Surprises have included the feedback that activities largely geared towards youth have been of equal benefit to the adult participants.

13. What recommendations (if any) would you make to other project directors working on similar efforts or to the GLFT?

In developing any habitat monitoring efforts, reach out to partners to understand existing and established protocols or volunteer networks. Several goals of this project were made easier by tapping into partner expertise or existing resources. To increase access and equitability of offerings, we recommend adding a question to any registration about accommodations needed and being very clear of physical demands involved in any hands-on efforts. If you're establishing offerings in a geography previously not served, reach out to local groups to understand attendance expectations, marketing best practices and existing programs that may be similar. This will help ensure quality programs that connect with local residents in meaningful ways.

Attachments

- Connecting to Nature Series Evaluation Summaries (April and May 2020)
- Purple Loosestrife Monitoring Training Evaluation Summary
- Invasive Shrub Monitoring Training Evaluation Summary
- Emily Min Hunt Nature Preserve Snowshoe Outing Evaluation Summary
- Be a Nature Detective Evaluation Summary
- Vernal Pool Monitoring Evaluation Summary