

Final Abstract

Final Report Approved on December 20, 2024

M.L. 2021 Project Abstract

For the Period Ending June 30, 2024

Project Title: Minnesota Master Naturalist: Nature for New Minnesotans

Project Manager: Robert Blair

Affiliation: U of MN - College of Food, Agricultural and Natural Resource Sciences

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Funding Source:

Fiscal Year:

Legal Citation: M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 05d

Appropriation Amount: \$293,000

Amount Spent: \$273,962

Amount Remaining: \$19,038

Sound bite of Project Outcomes and Results

Nature for New Minnesotans collaborated with seven English Learning Centers in the Twin Cities to help them teach their students both English and the natural history of Minnesota. To date, over 360 residents have learned more about where they live and how to talk about it.

Overall Project Outcome and Results

Nature for New Minnesotans used learning about the natural history of Minnesota to foster a sense of place in adult English Language (EL) learners while building academic their English language knowledge. The project connect the fields of English language learning and informal environmental education and directly addresses constraints of access that immigrant communities face in natural spaces.

To date, seven English Learning Centers have collaborated with Nature for New Minnesotans to teach 360 English language learners about their new home and to improve their skills in speaking English. As one participant remarked, "I have been learning English for seven years now, and no one has ever taught me about my new home."

One unique feature of the program is that the English language learners finish their natural history/English lessons by visiting a nearby natural area accompanied by a professional interpretive naturalist from one of the many environmental education sites in the metro area. To date, English language learners have visited the students have fished at Como and Thompson Lake, visited the Bell Museum, foraged for plants at Theodore Wirth Park and Crosby Farms, and hiked at the Belwin Nature Conservancy. Some even took a camping trip to Itasca State Park.

We are currently pairing with the Bell Museum of Natural History to establish this program for the long-term. We hope to expand it to more sites in the state with high concentrations of immigrants.

Project Results Use and Dissemination

The project itself is dissemination. It teaches new residents of Minnesota about the natural aspects of their new home.

We have been featured in the Sahan Journal, Minnesota Public Radio, and ATLAS, which is the official organization of English language instructors in Minnesota.

We have hosted two workshops for both English Language Instructors and professional interpretive naturalists so that the two groups could learn from one another as well as unite to better introduce immigrants to their new state and its abundant natural areas.



Environment and Natural Resources Trust Fund

M.L. 2021 Approved Final Report

General Information

Date: December 30, 2024

ID Number: 2021-175

Staff Lead: Noah Fribley

Project Title: Minnesota Master Naturalist: Nature for New Minnesotans

Project Budget: \$293,000

Project Manager Information

Name: Robert Blair

Organization: U of MN - College of Food, Agricultural and Natural Resource Sciences

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Project Reporting

Final Report Approved: December 20, 2024

Reporting Status: Project Completed

Date of Last Action: December 20, 2024

Project Completion: June 30, 2024

Legal Information

Legal Citation: M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 05d

Appropriation Language: \$293,000 the first year is from the trust fund to the Board of Regents of the University of Minnesota in partnership with English-language-learning organizations to adapt and incorporate materials developed for Minnesota Master Naturalists into English-language-learning programs to introduce immigrants and English-language learners to Minnesota's great outdoors.

Appropriation End Date: June 30, 2024

Narrative

Project Summary: Nature for New Minnesotans introduces English language learners to Minnesota's great outdoors using materials from Minnesota Master Naturalist and implemented in partnership with English learning programs that serve immigrants.

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

Immigrants and ethnic minority groups participate in outdoor recreation at lower rates than their white counterparts. This can be for many reasons including cost, distance, time, perception of safety, familiarity, and knowledge. Avoiding outdoor spaces means these communities do not get the benefits of being out in nature including physical activity, relief from stress, and connection to natural communities. Unfamiliarity with local natural areas and regulations can also result in foraging in locations that are unsafe due to herbicide application, fishing and hunting out of season, or overharvesting plants.

New immigrants often participate in English Language Learning (ELL) classes to gain and practice life skills, such as grocery shopping, but these classes do not typically include ways to safely participate in and enjoy outdoor activities. Learning a new language, city, and culture is difficult and new residents typically do not have time to attend classes that seem purely recreational. Additionally, signs in parks and published materials may not be available in students' native languages or at their literacy levels.

All of these barriers lead to less time spent outdoors, less enjoyment of natural areas, and underappreciation of Minnesota's natural resources, which leads to less support for conservation and stewardship.

What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.

The Minnesota Master Naturalist program will partner with established programs that offer English Language classes in Minneapolis and St. Paul to meet these learners where they already gather. Nature for New Minnesotans will present a modified version of the Master Naturalist program's Big Woods, Big Rivers written curriculum and activities that will be selected to introduce new residents to the natural history of their new home.

Staff at the community organizations will guide the adaptation of the Big Woods, Big Rivers curriculum to ensure cultural relevance and that materials are appropriate for students' language skills. Classes will be co-led by an ELL professional and a Master Naturalist staff member. They will include a combination of in-class time discussing the readings, activities to explore and learn about nature, and visits to nearby parks. These activities will introduce students to local green spaces as well as demonstrate the ways to access these natural areas on their own either by walking or taking the city bus. This will give the students the skills, knowledge, and confidence to return to these areas with their family and friends after the class is completed.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

Nature for New Minnesotans will introduce immigrants to one of Minnesota's greatest assets – the great outdoors. It will take the well-developed Minnesota Master Naturalist program and tailor it to the needs of the immigrant community. The motto of Master Naturalist is "Explore! Teach! Conserve!" The program aims to do this by educating the public about Minnesota's natural history and building a community that explores Minnesota's natural areas and actively conserves them. Nature for New Minnesotans will adjust this approach by educating immigrants about their new home; focusing, in particular, on the natural world near where they live.

Project Location

What is the best scale for describing where your work will take place?

Region(s): Metro

What is the best scale to describe the area impacted by your work?

Region(s): Metro

When will the work impact occur?

During the Project

Activities and Milestones

Activity 1: Develop and offer professional development for ELL instructors in Nature for New Minnesotans curriculum and materials.

Activity Budget: \$1,550

Activity Description:

The final stage of Nature for New Minnesotans is to create and offer a professional development workshop for ELL instructors who want to implement the Nature for New Minnesotans program in their teaching. Specifically, we will create a day-long workshop that introduces the ELL teachers to the adapted curriculum materials and shows them how to work with them within their existing program structure. The Minnesota Master Naturalist staff specializes in teaching adults how to teach about the environment and this will be an extension of that expertise. Depending on future demand, the Master Naturalist program will be able to train instructors using this workshop model well beyond the length of this grant.

Activity Milestones:

Description	Approximate Completion Date
Offer professional development training for one cohort of 20 ELL teachers.	June 30, 2024
Develop professional development training model for ELL teachers.	June 30, 2024

Activity 2: Adapt, pilot, and revise Minnesota Master Naturalist materials and instructional texts.

Activity Budget: \$96,831

Activity Description:

The first year of Nature for New Minnesotans will center on adapting the Minnesota Master Naturalist instructional model and texts to be used in programs that teach English to adult immigrants in Minnesota. Specifically, we will work closely with staff from our partner English language programs (the English Learning Center, Pillsbury United Communities, the International Institute, and the Neighborhood House). The first six months will be spent analyzing the existing Minnesota Master Naturalist program and implementing changes that would make it work better for immigrants and ethnic minority groups in the state. This would be paired with adapting the texts used in the Master Naturalist program for a variety of reading levels. We will pilot these materials with an English Language Learners (ELL) class for immigrants (15 students) at the English Learning Center (ELC). Finally, we will revise all materials with feedback from staff members from our partner ELL programs and the ELC pilot class participants.

Activity Milestones:

Description	Approximate Completion Date
Adapt instructional texts of Minnesota Master Naturalist program in consultation with ELL staff.	December 31, 2021
Adapt Minnesota Master Naturalist program model to make it more accessible for immigrant populations.	December 31, 2021
Revise instructional model and texts based on the pilot in consultation with ELL staff.	June 30, 2022
Pilot program with adult students enrolled in ELL class and receive feedback.	June 30, 2022

Activity 3: Implement Nature for New Minnesotans in courses offered by ELL program partners.

Activity Budget: \$194,619

Activity Description:

The second and third years of Nature for New Minnesotans will be devoted to using the updated and revised materials with immigrants enrolled in ELL classes at our partner centers around the Twin Cities. Typically, these centers, such as the English Learning Center, hold 15-week-long, four-days-a-week classes in the spring, summer, and fall with ~15 participants one each class. We will offer Nature for New Minnesotans during these classes at a minimum of three different centers during each season for two years. With this effort, we will reach approximately 3 seasons x 2 years x 3 centers x ~15 students = ~270 adult learners and their families.

Specifically, we will use one class period per week to focus on the Nature for New Minnesotan materials. The objectives for this class period will be to:

1. Use texts about the natural history of Minnesota to teach English.
2. Introduce the students to Minnesota’s outdoors.
3. Help the adult learners develop a sense of place in their community..
4. Show them places to visit and things to do outdoors by themselves and with their families.
5. Encourage the adult learners to participate in public conservation and citizen science projects in their communities.

Activity Milestones:

Description	Approximate Completion Date
Offer Nature for New Minnesotans ~45 students per season: fall 2022, spring and summer 2023.	June 30, 2023
Offer Nature for New Minnesotans ~45 students per season: fall 2023, spring and summer 2024.	June 30, 2024

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Kaija Bergen	Neighborhood House	Host organization that works with immigrant groups and teaches English for language learner classes.	Yes
Andrea Echelberger	Literacy Minnesota	Host organization that works with immigrant groups and teaches English for language learner classes.	Yes
Stacy Dietrich	International Institute of Minnesota	Host organization that works with immigrant groups and teaches English for language learner classes.	Yes
Jenne Nelson	English Learning Center at Our Savior's	Host organization that works with immigrant groups and teaches English for language learner classes. Will assist in adapting and piloting initial materials.	Yes
Tsega Tamene	Pillsbury United Communities	Host organization that works with immigrant groups and teaches English for language learner classes.	Yes

Dissemination

Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.

This project is focused on dissemination. It will train more than 320 new adult immigrants who are learning English about Minnesota's outdoors. We will specifically introduce activities that are youth friendly so that these new immigrants will be able to share their new knowledge with their families. All adapted reading materials from the Minnesota Master Naturalist program will be available online for free download from the University of Minnesota Extension website at the end of the grant. The new materials and activities will also be used in training approximately 35 English Language Learner educators on how to introduce Minnesota's outdoors to their students. The materials for this training will be available for free download online as well after the grant ends. The Environment and Natural Resources Trust Fund 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 ENTRF Acknowledgment Guidelines.

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?

Year 1 of Nature for New Minnesotans focuses on adapting the Master Naturalist program and its instructional texts for immigrants who are enrolled in programs that teach English as a second language. This year includes piloting the materials at the English Learning Center and revising them based on feedback from students and instructors. Years 2 – 3 involve implementing the materials in at least 18 courses at our three additional partner ELL centers. The materials and curriculum will be available to ELL teachers and, if warranted, the Master Naturalist program will continue to offer annual training to ELL teachers.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Minnesota Native Bee Atlas	M.L. 2015, Chp. 76, Sec. 2, Subd. 03g	\$790,000

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount	\$ Amount Spent	\$ Amount Remaining
Personnel										
Project Coordinator, Lucas Rapisarda		Adapts materials, works with ELL centers and staff, teaches classes			46%	1.5		\$143,780	-	-
Project Director, Lisa Curtis		Manages project and personnel, adapts material			33.5%	0.75		\$45,377	-	-
Project Assistant, Jenn Schultz		Assist with course details, supplies, planning, scheduling			33.5%	0.75		\$45,379	-	-
Evaluation, Jane Fields		Conducts formative and summative evaluation of the program to promote continuous improvement			33.5%	0.06		\$10,680	-	-
							Sub Total	\$245,216	\$242,616	\$2,600
Contracts and Services										
English Language Learner Consultant -- Phoebe Craig, formerly of English Learning Center at Our Saviors	Professional or Technical Service Contract	Phoebe assisted in adapting program and written materials; piloting course, and revising materials in the first year.				0.1		\$3,500	-	\$3,500
English Language Learning Facilities -- Literacy Minnesota/ Open Door, Neighborhood House, Our	Professional or Technical Service Contract	Over the course of the grant, these centers will host 18 classes for English Language Learners and will feature Nature for New Minnesotans curriculum. The centers will be paid \$500 for each class held.				0.3		\$9,000	\$8,000	\$1,000

Saviors English Learning Center, International Institute of Minnesota, Pillsbury United										
Graphic Designer	Professional or Technical Service Contract	Graphic designer for design and layout of adapted instructional texts to be used with adult English language learners.				0.1	\$4,500	-	\$4,500	
English Language Learner Consultant -- Jessica	Professional or Technical Service Contract	Jessica will continue working with the adapted materials as they are implemented to refine their use and develop instructor implementation guides.				0.25	\$5,000	\$5,000	-	
							Sub Total	\$22,000	\$13,000	\$9,000
Equipment, Tools, and Supplies										
	Tools and Supplies	Teaching Supplies	Supplies used to teach courses (markers, post-its, demonstration materials, flip charts) (\$50 per course * 19 courses)				\$950	\$950	-	
	Tools and Supplies	Participant Materials	Supplies used by adult learners for nature-based activities (hand lenses, field guides, field notebooks) (\$10 per participant x 285 participants)				\$2,850	\$1,390	\$1,460	
	Tools and Supplies	ELL Instructor Workshop Materials	Materials for ELL Instructors including sample participant materials and instructor guides (\$50 per ELL Instructor X 20 Instructors + \$610 to round off total LCCMR request)				\$1,649	\$1,172	\$477	

							Sub Total	\$5,449	\$3,512	\$1,937
Capital Expenditures										
							Sub Total	-	-	-
Acquisitions and Stewardship										
							Sub Total	-	-	-
Travel In Minnesota										
	Miles/ Meals/ Lodging	Mileage for coordinator to work and teach with partner programs.	The coordinator will be working with and teaching with staff at organizations dispersed throughout the Twin Cities region. (2,000 miles per year at \$0.575 per mile)					\$3,650	\$3,650	-
	Other	Bus tickets and/or van rental for adult learners to participate in two field trips per course.	Each three-month course will include two field trips to nearby natural areas. (\$2.50 per ticket x 2 per participant x 285 participants)					\$7,125	\$3,759	\$3,366
							Sub Total	\$10,775	\$7,409	\$3,366
Travel Outside Minnesota										
							Sub Total	-	-	-
Printing and Publication										
	Printing	Instructional materials.	Adapted materials for adult English language learners. (\$16 per participant X 285 participants)					\$4,560	\$2,425	\$2,135
							Sub Total	\$4,560	\$2,425	\$2,135
Other Expenses										

		Stipend for English Language Learner Instructors	The final workshop to introduce 20 new instructors to the Nature for New Minnesotans materials and program will require that the instructors miss a day of work. This is to reimburse them for their forgone pay for that day. \$250 allotted to each of 20 instructors.					\$5,000	\$5,000	-
							Sub Total	\$5,000	\$5,000	-
							Grand Total	\$293,000	\$273,962	\$19,038

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	\$ Amount	\$ Amount Spent	\$ Amount Remaining
State						
			State Sub Total	-	-	-
Non-State						
			Non State Sub Total	-	-	-
			Funds Total	-	-	-

Attachments

Required Attachments

Visual Component

File: [c09d122f-bc9.pdf](#)

Alternate Text for Visual Component

The graphic outlines the three phases of the Nature for New Minnesotans project:

Step 1: Minnesota Master Naturalist and community partners adapt lessons

Step 2: Materials are piloted and then revised.

Step 3: Materials and training for additional ELL teachers...

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
Nature for New Minnesotans Background Check	c31fee08-d9a.pdf
NFNM Final report	ac0dfe25-d4d.docx

Media Links

Title	Link
Nature for New Minnesotans - Website	https://sites.google.com/umn.edu/naturefornewminnesotans/home
MPR story	https://www.mprnews.org/story/2022/09/13/new-program-connects-english-language-classes-with-minnesotas-green-spaces
Sahan Journal Story	https://sahanjournal.com/climate-environment/minnesota-nature-english-language-learner-program-outdoors-access-university-minnesota/
MN ABE connect story 1	https://atlasabe.org/news/nature-for-new-minnesotans-natural-history-in-el-classrooms/
MN ABE connect story 2	https://atlasabe.org/news/teaching-minnesotas-natural-history-in-an-el-classroom/
MN ABE connect story 3	https://atlasabe.org/news/embedded-teaching-a-socio-cultural-approach-to-language-learning-through-science
MN ABE connect story 4	https://atlasabe.org/news/embedded-teaching-application-in-a-science-lesson/
NFNM Lecture Series presentation at St. John's University Latino/Latin American Studies program	https://www.youtube.com/watch?v=xHftALBfreI

Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

To meet the new expected budget, we decreased the amount of time that project principal investigator will be devoting to the project from two months per year to one month per year. Additionally, we adjusted the materials given to students and the projected number of students from 25 students per class to a more realistic 15 students per class. This adjustment actually brought into line the original budget (which was higher) and made it consistent with the original narrative. The original narrative projected reaching a total of ~325 students. We now expect to reach ~285 students during the pilot course and the subsequent 9 regular courses. These changes brought the overall budget down from \$345,000 to \$293,000.

Additional Acknowledgements and Conditions:

The following are acknowledgements and conditions beyond those already included in the above workplan:

Do you understand and acknowledge the ENRTF repayment requirements if the use of capital equipment changes?

N/A

Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

Yes, I understand the UMN Policy on travel applies.

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

No

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

Yes, Sponsored Projects Administration

Work Plan Amendments

Amendment ID	Request Type	Changes made on the following pages	Explanation & justification for Amendment Request (word limit 75)	Date Submitted	Approved	Date of LCCMR Action
1	Amendment Request	<ul style="list-style-type: none"> • Budget • Attachments • Budget - Personnel • Budget - Professional / Technical Contracts • Budget - Capital, Equipment, Tools, and Supplies • Budget - Travel and Conferences • Budget - Printing and Publication • Budget - Other 	<p>The budget was reorganized to reflect current costs and staffing needs. Rob Blair, who is the PI, became head of the Department of Fisheries, Wildlife, and Conservation Biology last year. This position is a twelve-month position so he no longer needs summer salary. The position is also 75% administration and 25% academic work. This means that I can still devote my efforts to the project but you don't have to pay me!</p>	June 23, 2022	Yes	July 1, 2022

Status Update Reporting

Final Status Update August 14, 2024

Date Submitted: October 24, 2024

Date Approved: November 27, 2024

Overall Update

All goals have been met or exceeded. We have developed a final report that thoroughly summarizes our progress towards achieving outcomes outlined in the original grant proposal. You can find this final report on tab 7 of this submission. We are incredibly grateful to the funding received from LCCMR, and are incredibly pleased with the outcome of the final project.

Activity 1

This activity was previously marked complete.

(This activity marked as complete as of this status update)

Activity 2

This activity was previously marked complete.

(This activity marked as complete as of this status update)

Activity 3

In the second and third years of this project, we worked with seven English learning centers (Literacy Minnesota Arlington Hills; Literacy Minnesota Minneapolis; HUBBs; Neighborhood House; International Institute of Minnesota; Metro ABE South; Metro ABE North) and served approximately 359 adult EL learners and their students. We developed four distinct curriculum modules that looked at different aspect of place-based natural history. These modules not only provided natural history content, but also scaffolded English lessons that built student confidence in accessing outdoor spaces in Minnesota. At the conclusion of each curriculum module, classrooms participated in an outdoor culminating experience; students fished at Como and Thompson Lake, visited the Bell Museum, foraged for plants at Theodore Wirth Park and Crosby Farms, and hiked at the Belwin Nature Conservancy, among other experiences.

(This activity marked as complete as of this status update)

Dissemination

The drafts of all four developed modules will be available on our website by August 30th, 2024. Modules include teacher-facing and student-facing handouts. The modules have been compiled into four distinct booklets that teachers can print as PDFs or select specific activities that they would like to use. We will continue to monitor the NFNM website and respond to inquiries regarding the use of the modules in adult English language classrooms.

NFNM program staff created a final report that will be shared on our website and with all of our existing partners. This final report can be found on tab 7.

Status Update Reporting

Status Update June 1, 2024

Date Submitted: October 24, 2024

Date Approved: November 27, 2024

Overall Update

Nature for New Minnesotans has developed four distinct natural history units that combine English language learning with place-based natural history content. They have been used in over 20 classrooms and impacted approximately 500 students. It has hosted two educator workshops that have trained over 30 adult EL teachers in the use of the curriculum modules. These modules are freely available to the public on our website.

The project has achieved all of its originally stated outcomes from the grant proposal.

Activity 1

This activity was previously marked complete.

(This activity marked as complete as of this status update)

Activity 2

This activity was previously marked complete.

(This activity marked as complete as of this status update)

Activity 3

In the second and third years of this project, we worked with seven English learning centers (Literacy Minnesota Arlington Hills; Literacy Minnesota Minneapolis; HUBBs; Neighborhood House; International Institute of Minnesota; Metro ABE South; Metro ABE North) and served approximately 359 adult EL learners and their students. We developed four distinct curriculum modules that looked at different aspect of place-based natural history. These modules not only provided natural history content, but also scaffolded English lessons that built student confidence in accessing outdoor spaces in Minnesota. At the conclusion of each curriculum module, classrooms participated in an outdoor culminating experience; students fished at Como and Thompson Lake, visited the Bell Museum, foraged for plants at Theodore Wirth Park and Crosby Farms, and hiked at the Belwin Nature Conservancy, among other experiences.

(This activity marked as complete as of this status update)

Dissemination

All materials developed by this project are available on our website for free. Teachers who participated in our educators workshop received a paper copy of our newest curriculum on birds and migration in Minnesota. We have been featured in numerous media outlets over the past three years, including the Sahan Journal and MPR. In the past three years, we have worked with over 450 adult language learners in our classrooms.

Status Update Reporting

Status Update December 1, 2023

Date Submitted: December 7, 2023

Date Approved: December 20, 2023

Overall Update

Nature for New Minnesotans (NFMN) has developed and piloted three adapted curriculum modules for adult EL learners that focus on climate and seasons, native plants, and native fish. To date, we have worked with over 250 EL students across five different English learning centers; we have led over 15 courses across all sites. In October, 2023, we hosted an educators workshop for 24 EL teachers and 8 Environmental Educators on how to implement the curriculum in their instructional spaces. We have developed evaluation materials and have begun collection of summative feedback from teachers and adult EL learners.

Activity 1

On October 6th, 2023, NFMN led an educators workshop for 24 EL teachers and 8 Environmental Educators from sites across the Twin Cities Metropolitan area. In addition to our five original community English learning centers, we welcomed four additional Community learning centers in the Twin Cities Metropolitan area. In follow-up surveys on the workshop, educators expressed interest in attending additional workshops on NFMN content and intend to implement programming at their sites in Spring, 2024. Based on the success of the workshop, the NFMN team is planning to conduct an additional workshop in Spring, 2024.

(This activity marked as complete as of this status update)

Activity 2

This activity was previously marked complete.

(This activity marked as complete as of this status update)

Activity 3

NFMN continues to work with EL classrooms to facilitate place-based natural history programming that has been adapted from the Master Naturalist program. Across our partners, we average three classes per year, totaling 15 classes. We expect to maintain this level, with the hope of expanding into new classrooms in Spring, 2024.

Dissemination

Student-facing materials for three modules are now publicly available on the NFMN website. Additionally, all materials from the October, 2023 educators workshop was shared with participants. In the Spring of 2024, we hope to finalize and make public teacher facing instructional materials for each lesson, including demonstration videos and step-by-step instructions for specific activities. In May, 2023, NFMN presented at the 'Gathering Partners' conference for Minnesota Master Naturalists. In September, 2023 Nature for New Minnesotans presented its work at the Alliance of Natural Resource Outreach and Service Programs (ANROSP). This national group of Extension educators serve similar communities across the country. A journal article summarizing the first two years of the project was submitted to the Journal of Extension (JOE) and is currently under peer review to be disseminated to a larger audience. A link to our website can be found in the attachments tab.

Status Update Reporting

Status Update June 1, 2023

Date Submitted: June 26, 2023

Date Approved: June 27, 2023

Overall Update

During the 2022/2023 year, Nature for New Minnesotans (NFNM) continued to provide programming to adult English Language Learners. We finalized development on three curriculum modules, led classes at four of five partner organizations, and connected lessons to numerous outdoor experiences. Over the past year, we have gone fishing (on ice to boot!), hiked in Afton state park, learned about urban foraging, gone canoeing on Phalen Lake, and traveled to the Bell, Minnesota's natural history museum. To date, we have now served close to 200 adult English language learners and connected them to local and regional parks in the Twin Cities. Our program has made connections with Minneapolis & St. Paul parks and recreation, Three Rivers Park District, Nine Mile Creek watershed, Great River Greening, MDNR, MN valley NWR, and Ramsey County Parks. We continue to pursue additional partnerships with organizations with minority leadership, such as Huellas Latinas, Baztec, and Hmong Outdoors.

Activity 1

NFNM has set the date for our first workshop (October 6th, 2023). We will host this workshop at a regional park in the Twin Cities Metro area, likely MN Valley NWR. We have a short list of English language and environmental educators who have expressed interest in participating in the workshop and have signed up for our newsletter to receive regular updates on the progress of the workshop. Last year, we repurposed our budget to include stipends for educators to increase the likelihood of attendance and are excited to offer these as an incentive to English language educators.

Activity 2

NFNM has developed a student-facing design template for lessons and has completed three modules that are adapted for adult English language learners. NFNM has piloted each of these modules in at least two classrooms and received extensive feedback from teachers and students. A formal evaluation process has been developed and will be implemented in the final year of this grant to evaluate the project.

(This activity marked as complete as of this status update)

Activity 3

As mentioned above, NFNM worked with four of five partner organizations this past year, with the intent of working with all five in 2023/2024. We completed 2 modules with Our Saviors, 2 modules with Literacy Minnesota, 2 modules with Neighborhood House, and 1 module with a new partner, HUBBS. We have exceeded expectations in regards to the number of students worked with, as some classrooms have been larger than previously expected. Our modules have been adapted for adult EL learners; they contain scaffolded readings and vocabulary that is grounded in the natural history of Minnesota. Each module culminates in an outdoor experience that we tailor to the needs of the specific community we are working with. Sprinkled throughout the module are reading, writing, and speaking activities that encourage students to share their own experiences in the outdoors and connect them to new experiences in Minnesota. This has led to a deeper sense of community and safety in Minnesota's outdoors.

Dissemination

NFNM has been featured in numerous media publications and has presented at statewide conferences for environmental and English language educators to share the progress of the project. We are currently working with the Metropolitan Council on their "exploring truths" project. Once our curriculum modules are properly formatted, they will be made available on our website, which was published last year. Per our grant agreement, we intend to make all materials that we develop available to the public upon completion of the grant.

Status Update Reporting

Status Update December 1, 2022

Date Submitted: February 15, 2023

Date Approved: February 16, 2023

Overall Update

Nature for New Minnesotans continues to make progress in the adaptation of Master Naturalist curriculum for adult EL learners. Curriculum has been designed to introduce students to the outdoors of Minnesota, with special attention given to how learners and their families can more easily access the outdoors. As the project has developed, many new lessons have come to bear: a need for a streamlined lesson template for EL educators; a tiered vocabulary and reading system to meet the needs of diverse EL learners; a connection of outdoor experiences with content covered in class; a need to build stronger relationships with outdoor partners. Each of these lessons has led to more engaging and exciting curriculum.

Activity 1

Discussions with EL educators and outdoor partners has begun. A workshop is being planned to take place in Fall, 2023.

Activity 2

Work has continued on curriculum development for adult EL learners. Nature for New Minnesotans is currently working with Jessica Jones, an adult EL educator and curriculum designer of over 15 years to assist in the development of this curriculum. Each curriculum module involves three core, universal activities that are grounded in scientific inquiry principles. Tiered vocabulary and readings are provided alongside these activities to enhance the learning experience. After engaging with vocabulary and readings, adult learners return to the core activities to practice and improve their environmental literacy. Each lesson is connected to a culminating outdoor experience.

At this time, the topics in this program include the biomes of Minnesota, animal adaptations to winter in Minnesota, Fishing in Minnesota, Foraging in Minnesota, and the Climate of Minnesota. Each curriculum module amounts to approximately 10-12 hours of content.

Activity 3

To date, Nature for New Minnesotans (NFM) has led programming with three of its five listed partners: Literacy Minnesota, Neighborhood House, and Our Saviors English Learning Center. Adult EL learners have traveled to Lake Itasca State Park, Afton State Park, Powderhorn Park (Minneapolis), Phalen Lake (St. Paul), the Bell Museum (St. Paul), and Minnehaha Falls (Minneapolis). Students have canoed, hiked, fished, camped, swam, and learned at each of these locations with their classmates and families.

EL learners at each of these locations have participated in at least 10 hours of Nature for New Minnesotans curriculum programming. In 2023, NFM hopes to work with its remaining two partners and engage with new learners.

Dissemination

To date, NFM has led programming with three of its five listed partners: Literacy Minnesota, Neighborhood House, and Our Saviors English Learning Center. NFM has added an additional partner, the HUBBS center in St. Paul. In total, we have worked with approximately 100 adult English Language Learners at beginner, intermediate, and advanced English levels. A website for the project has been set-up and is being updated to house curriculum as it is completed. Since our last report, we have presented at three conferences: two with a focus on English Language Learning, and one with a focus on environmental education and access to the outdoors. Through networking, we have identified a short list of EL

teachers and environmental educators to participate in a workshop in Fall, 2023. In this first workshop, we intend to open registration to 24 teachers.

Status Update Reporting

Status Update June 1, 2022

Date Submitted: June 23, 2022

Date Approved: July 1, 2022

Overall Update

Nature for New Minnesotans (NFMN) seeks to address barriers of access to the outdoors by working directly with immigrant communities attending English Language Learning (ELL) classes at community organizations across the Twin Cities Metro area.

Over the past year, NFMN coordinated with ELL teachers and students to develop an adapted Master Naturalist curriculum that simultaneously addressed student interests while building their language skills. In the Spring of 2022, NFMN piloted 12 lessons at their partner organization Literacy Minnesota over the course of 1.5 months. Students learned about Minnesota's native flora and fauna, explored the state's biomes and climate, and learned about natural selection and biodiversity. Each lesson sought to provide opportunities for students to engage with new vocabulary and concepts through hands-on activities connected to outdoor learning experiences.

Through rigorous feedback and reflection, NFMN is currently revising its adapted Master Naturalist curriculum with an experienced ELL educator and curriculum designer. Additionally, NFMN has developed partnerships with numerous experiential outdoor learning opportunities that further introduce students to the outdoors in Minnesota and remove barriers to access. NFMN will implement revised programming at three partner organizations beginning in the fall of 2022.

Activity 1

NFMN has not yet developed professional development for ELL instructors due to the fact that curriculum and relevant materials are still being developed. That said, NFMN has met with the ABE Teaching and Learning Advancement System (ATLAS) at Hamline University, who oversee much of the licensure and professional development for ELL instructors in Minnesota. Upon their recommendation, NFMN requested a budget restructuring to provide small stipends to ELL educators participating in future workshops. Additionally, NFMN has begun to explore the connection between natural history adapted lessons and content in the GRE; many ELL students are interested in taking this exam. ATLAS recommended highlighting this fact to ELL educators to increase their interest in future workshops. NFMN intends to begin developing workshop materials during the 2022/2023 grant year.

Activity 2

In Fall 2021, NFMN conducted a needs assessment of its ELL community partners, speaking with teachers, students, and organization staff to identify student interests and challenges to introducing science concepts in ELL classrooms. Armed with this information, NFMN partnered with an ELL curriculum designer to develop 12 lessons adapted for ELL learning from the Big Rivers Big Woods Master Naturalist curriculum. Each lesson included objectives, vocabulary, guided readings, and hands-on activities. The program coordinator for NFMN, Lucas Rapisarda, co-lead these lessons twice a week with an experienced ELL teacher at Literacy Minnesota from February 15th to March 31st, 2022. At the conclusion of each lesson, NFMN self-reflected on the effectiveness of the lesson and debriefed with ELL teachers and students to refine the curriculum. The pilot series concluded with two local neighborhood trips that aligned with the lesson content; one to the Bell Museum at the University of Minnesota, and one to Bruce Vento Sanctuary in St. Paul.

Currently, NFMN is working on revising the pilot curriculum, as well as adding additional lesson modules for the Fall.

These revisions reflect outcomes from the pilot program, and continue to be guided by an experienced ELL curriculum designer.

Activity 3

NFNM is revising and expanding the the pilot program curriculum for the 2022/2023 year. Final edits of this curriculum will be completed by September, 2022. Each curriculum module contains 10-12 hours of vocabulary, guided reading, hands-on activities, lesson objectives, and extension activities, as well as a teacher guide, common student misconceptions, and lesson plans. Additionally, each module culminates in 1-3 options for outdoor experiences for each lesson that introduce students to Minnesota's outdoors, help adult learners develop a sense of place in their community, and show them places to visit and things to do outdoors.

NFNM has developed partnerships with the Minnesota DNR, the Minnesota Valley National Wildlife Refuge, The Bell Museum, Lower Phalen Creek Project, and the Raptor Center. These outdoor partners will provide exciting opportunities for ELL students to engage with the outdoors and participate in public conservation projects across the metro area.

In the fall of 2022, NFNM will work with three of its five ELL partner organizations to implement programming: Literacy Minnesota, Our Saviors English Learning Center, and Neighborhood House. Accounting for an average of 15 students per classroom, this results in 45 students per semester participating in NFNM.

Dissemination

NFNM reached 15 adult immigrants during its pilot program in the spring of 2022. Students in this class were trained to recognize common flora and fauna in Minnesota, as well as explain the different biomes of the state and their relation to climate. Additionally, students had the opportunity to visit the Bell Museum and receive free membership for themselves and their families. This summer, these students visited Bruce Vento Sanctuary (approximately 15 minutes from their community organization site) for the first time, will be canoeing on Phalen Lake, and camping at Itasca state park. In short, these students have become agents of dissemination through their growing knowledge of Minnesota's outdoors.

An NFNM website has been developed and is used to share updates on the program, as well as house content as it is developed. All materials for curriculum, as well as any relevant teacher training materials, will be available for free download on this site when this grant ends. The Environment and Natural Resources Trust Fund is acknowledged on this website and on all official NFNM materials and presentations.