2018 Project Abstract For the Period Ending June 30, 2022

PROJECT TITLE: Pollinator Ambassadors Program for Gardens
PROJECT MANAGER: Elaine Evans
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FUNDING SOURCE: Environment and Natural Resources Trust Fund
LEGAL CITATION: M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 05f as extended by M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18

APPROPRIATION AMOUNT: \$250,000 AMOUNT SPENT: \$249,302 AMOUNT REMAINING: \$698

Sound bite of Project Outcomes and Results

The Pollinator Ambassadors for Gardens program broadened pollinator education access across Minnesota, particularly to traditionally underserved audiences, through training 43 youth Pollinator Ambassadors and distributing 250 Pollinator Education Toolkits. Broader adoption of pollinator conservation action-steps will help Minnesotans conserve pollinator diversity, which will support food production, water quality, and healthy ecosystems.

Overall Project Outcome and Results

Minnesotans are aware of the importance of pollinators to healthy food systems and ecosystem health but lack prepared educators and education materials to provide action steps for pollinator conservation. The Pollinator Ambassadors Program for Gardens aimed to 1) provide direct training to youth to engage their communities in pollinator education and 2) create a Pollinator Education Toolkit with expert-designed materials that educators state-wide can use to teach pollinator conservation action steps. We have successfully trained 43 Pollinator Ambassadors between the ages of 14 and 18 through in-person and virtual workshops. Pollinator Ambassadors have directly engaged approximately 3,000 Minnesotans. We distributed 250 Pollinator Education Toolkits across Minnesota to 53 nature centers, 91 classroom educators, 33 Master Gardeners and Master Naturalists, 42 non-profits, 14 federal, state, or municipal agencies, and 17 University of Minnesota Extension programs. These Pollinator Education Toolkit holders estimate reaching 100,000 people annually. Many organizations receiving Pollinator Education Toolkits prioritize service to or primarily serve low-income audiences (40%), recent immigrants (15%), Latinx communities (15%), African American communities (13%), Asian American communities (9%), and Native American communities (9%). Toolkits are also available publicly through Inter Library Loan and check out at four University of Minnesota Extension and Outreach Centers across Minnesota. Over 400 educators across the world have accessed the Digital Pollinator Education Toolkit with an estimated annual reach of 180,000. The Pollinator Ambassadors Program for Gardens has increased capacity to reach a broad geographic range of audiences in Minnesota, with youth trained in Big Stone, Hennepin, Ramsey, Wright, and Olmsted counties and toolkits with educators in 60 of Minnesota's 87 counties, as well as increasing reach to traditionally underserved audiences. Broader adoption of pollinator action steps by Minnesotans will help conserve pollinator diversity, which in turn will support food production, water quality, and healthy ecosystems.

Project Results Use and Dissemination

We have several resources that should be shared broadly. A summary of the impact of the Pollinator Ambassadors for Gardens program is available on the <u>Bee Lab YouTube channel</u>. The University of Minnesota Bee Lab website has a page dedicated to the <u>Pollinators Ambassadors program</u>. Pollinator Education Toolkits are available for checkout out through Interlibrary Loan and at the University West Central, North Central, Southwest and Rosemount Research & Outreach Centers. Digital Pollinator Education Toolkit resources are available to everyone who fills out our <u>application form</u>. We have created a "<u>Learn to</u> <u>Use Pollinator Education Toolkits</u>" video playlist to provide extra background, and a "<u>Pollinator</u> <u>Ambassadors</u>" video playlist to complement activities from the Toolkits. The <u>Habitat Assessment Guide for</u> <u>Yards and Gardens</u> is available as a pdf document.



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2018 ENRTF Work Plan Final Report (Main Document)

Today's Date: August 15, 2022 Final Report Date of Work Plan Approval: 06/05/2018 Project Completion Date: June 30, 2022

PROJECT TITLE: Pollinator Ambassadors Program for Gardens

Project Manager: Elaine Evans

Organization: Regents of the University of Minnesota

College/Department/Division: Entomology/ Extension

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Location: Statewide

Total Project Budget: \$250,000

Amount Spent: \$249,302

Balance: \$698

Legal Citation: M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 05f as extended by M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18

Appropriation Language: \$250,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota to increase knowledge of pollinators in gardens and yards and improve pollinator habitat by expanding outreach, training, and tools for Minnesota communities as part of the Pollinator Ambassadors program. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18. ENVIRONMENT AND NATURAL RESOURCES TRUST FUND; EXTENSIONS. [to June 30, 2022]

I. PROJECT STATEMENT: The Pollinator Ambassadors for Gardens project will enhance outreach capacity for pollinator education by **training educators and youth who will then be engaged in native pollinator education and monitoring**. In addition, the project will provide pollinator education and habitat improvement tools to greater Minnesota with creation of a **pollinator education toolkit** including a pollinator habitat assessment guide for yards and gardens.

Why? Native pollinators are important for crop production and ecosystem health. Declines have led to increased awareness with 87% of Minnesotans concerned about pollinator decline (MEP poll, 2017). **Public education is in higher demand than can be met by pollinator educators** like the UMN Bee Squad, Bee Atlas, and Monarch Lab, and Pollinate Minnesota with more than 500 requests each year. Many pollinator gardens have been created to support pollinator conservation but there is little documentation of pollinator use or support for endangered or rare pollinators.

Goals and actions

Enhance native pollinator outreach capacity by:

- 1) training pollinator educators in native pollinator biology and conservation
- 2) engaging youth as pollinator educators to reach new audiences in underserved communities
- 3) providing a pollinator outreach kit to greater Minnesota nature centers, 4-H groups, and others.

Increase knowledge of pollinators by:

- 1) monitoring pollinators in gardens through youth engagement in citizen science
- 2) assess value of gardens to rare and endangered by enhancements with plants on which they depend

II. OVERALL PROJECT STATUS UPDATES:

First Update March 31, 2019

The Pollinator Ambassador team has made plans for launching our education program in the summer of 2019. We have created programming by adapting existing curriculum to engage youth as pollinator educators and train them in presentation and leadership skills. We have identified youth groups serving underserved communities with which to work in the summer of 2019 and gardens and natural areas in which to conduct monitoring activities. Content and design work for the pollinator outreach kit has begun.

Second Update September 30, 2019

The Pollinator Ambassador program has successfully trained 32 youth Pollinator Ambassadors between the ages of 14 and 18. After a two day training with all students together, students met with instructors weekly from June 25 to August 13 to monitor monarchs and bees, build pollinator knowledge, and develop leadership and presentation skills. They have presented to the public at four events to date, reaching approximately 2,500 people. Content and design work for the pollinator ambassador outreach toolkits continues. The Urban Habitat Assessment Guide is in a final round of edits. Distribution of toolkits including the Habitat Assessment Guides will begin in mid-November.

Amendment Request as of September 30, 2019

We are requesting an extension of the project end date to June 30, 2021. This will allow for an additional year of programming for the Pollinator Ambassador team to work with an additional ~20 youth from the Mississippi River Green Team to train them to be youth Pollinator Ambassadors. We have funding available to cover this program primarily because we had budgeted to cover salaries for all youth participants, but the Mississippi River Green Team was able to cover salaries for their Green Team members (estimated cost savings of \$44,000 from "Pollinator Ambassador" salary when 2020 is also included). In addition, the youth salaries that we covered for

other programs were set by their programs at a lower rate than what we had budgeted for, allowing a savings of an additional \$6,720 from "Pollinator Ambassador" salary. We would like to continue with the program to train youth, providing an opportunity for returning youth to strengthen their skills and become mentors to first year Pollinator Ambassadors. We would work at a smaller scale and primarily with youth from the Mississippi River Green Team so we can best utilize our funding to support the program.

We would like to move \$50,720 in from Pollinator Ambassador youth salary to salary to support Pollinator Ambassador staff to provide an additional year of programming to Pollinator Ambassador youth. We are requesting to shift \$16,891 to Elaine Evans, Program Manager, to cover additional time to oversee and provide expert content advice to the UMN Pollinator Ambassadors Program as well as providing training to youth during the Pollinator Ambassadors program. There is an increased percentage of FTE to cover classroom time as a visiting expert during instruction. We are requesting to shift \$6,701 to Bridget Mendel, Project Lead, to cover additional time to manage the Pollinator Ambassadors Program. We are requesting to shift \$9,528 to Brooke Sommerfeldt, Program Coordinator, to cover additional time to coordinate the Pollinator Ambassadors Program as well as an increase in percent FTE from 20% to 25% to cover time as a visiting expert during instruction. We have added a new line for a Pollinator Ambassador Instructor, at 20% FTE for 1 year to provide instruction and training to Pollinator Ambassador youth during the summer of 2020. This would be covered by a shift of \$17,600.

We would like to support Pollinator Experts to provide expert content to Pollinator Ambassadors youth during trainings by shifting \$8,500 from the "Regional Coordinator" to contracted Pollinator experts. We were able to cover regional coordination with staff time from the Pollinator Ambassador Project Lead and the Program Coordinator.

In addition to training more youth and providing more in depth training for returning youth, we would like to enhance the Pollinator Ambassador Outreach Toolkit by providing more activities and increasing the durability of the materials. We would like to move \$2,000 from "Travel expenses in MN" and \$1,500 from "Regional Coordinator" to "Printing" to use for production costs for the Pollinator Ambassadors toolkits. We were able to arrange monitoring sites close to the areas we used for training and so did not need to use travel funds we had allocated for transporting Pollinator Ambassadors to monitoring sites. We also did not need many monitoring supplies. We would also like to move \$1600 from "Classroom Assistants" and \$1700 from "Materials for Citizen Science Monitoring" to Materials for Pollinator Outreach Toolkits (totaling \$3,100). With this funding we will be able to include additional materials and activities, such as a Monarch Migration Game. We would like to use these funds to enhance the educational potential of the Pollinator Ambassador Toolkits by increasing funding for the 200 kits from "\$30 per kit to "\$50 per kit.

"Amendment Approved by LCCMR 10/31/2019."

Third Update March 31, 2020

We have made plans to train an additional 18 youth in the summer of 2020. Half of these would be returning from our 2019 cohort of Pollinator Ambassadors, providing the opportunity to engage the youth in more advanced training and work on leadership skills as they share their knowledge from 2019. Due to uncertainty around the covid-19 pandemic, these plans are currently on hold. The youth organization we are partnering with (the Mississippi River Green Team) does not have an option to continue programming on-line if in-person programming is not available. The program would start in mid-June so we are currently waiting until late May to determine if we can work directly with the youth this summer. We will work with program organizers to see if remote learning options can be made available if in-person in not an option.

The Habitat Assessment Guide for Yards, Gardens, and Parks is complete. This guide provides detailed information for people to assess their gardens and improve pollinator habitat. Most pieces of the Pollinator Ambassador Outreach toolkits have been designed and produced. A set of thirty-eight partial toolkits have been

distributed. The remaining pieces are in the final stages of design and production. We have begun to promote the kits and solicit applications. We have made plans to have a kit available at each of the ten UMN Extension Research and Outreach Centers throughout Minnesota as well as several kits available to the general public through the interlibrary loan system. The remaining one hundred and fifty kits will be distributed to selected educator applicants. Distribution is currently on hold until activities can resume at the UMN Bee Lab.

Fourth Update September 30, 2020

The time period from March to September of 2020 brought many challenges. Our plans for in-person trainings with youth and for distribution of toolkits to use for education events, camps, and in-person activities changed due to Covid19. We had to pivot to work on providing resources that educators could use to provide pollinator content using remote platforms. We were able to adapt pieces of the physical toolkits into digital materials that educators could use for remote teaching. In addition to producing pdfs of posters, we created interactive slide shows to create more opportunities for active engagement. To promote the use of these materials, we produced training videos focused on background information and presentation tips to enable educators to get the most out of the digital Pollinator Ambassadors Outreach Toolkits. training.

AMENDMENT REQUEST March 23, 2021

We are requesting funds be shifted from the personnel wages line to professional contracts.

- Personnel wages would be reduced by \$31,974 to a revised budget of \$166,830
- Professional services would be increased by \$31,974 to a revised budget of \$59,394

These changes are being requested due to shifts in operations due to the COVID-19 pandemic and administrative changes. Due to hiring restrictions at the UMN, transferring funds to a professional contract would enable us to work with youth organizations to engage students as Pollinator Ambassadors. In addition, some administrative changes have occurred. One of our instructors left the U of MN but remained with the program as a contractor. In working with different youth organizations to hire pollinator ambassador youth, some organizations preferred contracting to direct hiring of youth.

We are also requesting funds be shifted from travel to printing, supplies, and other.

- Travel would be reduced by \$4,191 to a revised budget of \$2,722
- Printing would be increased by \$2,691 to revised budget of \$13,391
- Supplies would be increased by \$500 to revised budget of \$4,453
- Other would be increased by \$1000 to revised budget of \$3,210

Our original plan included production of 200 Pollinator Education Toolkits. We have received more than 200 requests for Pollinator Education Toolkits and would like to supply these Toolkits by reallocating some of our funds. We are not able to travel and request to move \$4,191 from travel to provide postage (\$1,000), supplies (\$500), and printing (\$2691) to produce an additional 50 Pollinator Education Toolkits to provide to educators across MN.

Fifth Update March 31, 2021

We completed design of Pollinator Education Toolkits as well as adaptation to digital formats to enable educators to use for remote teaching. In addition to producing pdfs of posters, we created interactive slide shows to create more opportunities for active engagement. To promote the use of the toolkits, we presented webinars on their use and presentation tips to the Minnesota Master Naturalists, the Minnesota Department of Education, and the Schoolyard Gardens Conference. Pending approval of a no-cost extension of our funding to June of 2022 and an amendment request, we have also created plans for engaging youth remotely in 2021, continuing our efforts to engage youth as pollinator educators.

Project extended to June 30, 2022 by LCCMR 7/1/21 as a result of M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18, legislative extension criteria being met.

Sixth Update September 30, 2021:

In the summer of 2021, we engaged an additional 11 youth in our Pollinator Ambassador training, bringing our total youth engagement to 43 youth. We engaged youth from Ramsey, Olmstead, and Big Stone counties using a weekly virtual meeting format. These trained youth then engaged the public through presentations.

We distributed additional Pollinator Education toolkits to educators throughout MN and distributed toolkits to Extension Research and Outreach Centers and interlibrary loan that can be borrowed by anyone in Minnesota. In total, 200 kits have been distributed and an additional 50 kits are set to be distributed this fall. To date, presentations with the toolkits have reached approximately 1,600 people. We promoted the use of the kits through presentations, videos, and social media. The digital toolkit materials have been accessed by 289 organizations. Presentations with the digital toolkits have reached approximately 900 people. Several of the digital toolkit pieces are available in Spanish.

Seventh Update March 31, 2022:

Our direct work with Pollinator Ambassador youth for this grant has ended, but we continue to work with youth to train them as pollinator educators. We have adapted the model we developed in this program to use for future education programs in the UMN Bee Lab. We will continue to work to enhance pollinator outreach capacity by engaging people from various communities and providing training in pollinator conservation issues and action steps. We are enhancing the usability and reach of our Pollinator Education toolkits with the production of videos to accompany the lessons of toolkit items. Videos will provide instructions for the Monarch Mishaps and Pollinator Buffet games, an overview of pollinator status with the "How are pollinators doing?" video, and a video on how to become a Pollinator Ambassador that will highlight pollinator actions of people advocating for pollinator conservation in their communities. We continue to promote the toolkits to local, regional, and national audiences.

Final Update June 30, 2022

Minnesotans are aware of the importance of pollinators to healthy food systems and ecosystem health but lack prepared educators and education materials to provide action steps for pollinator conservation. The Pollinator Ambassadors Program for Gardens aimed to 1. provide direct training to youth to engage their communities in pollinator education and 2. create a Pollinator Education Toolkit with expert-designed materials that educators state-wide can use to teach pollinator conservation action steps. We have successfully trained 43 Pollinator Ambassadors between the ages of 14 and 18 through in-person and virtual workshops. Pollinator Ambassadors have directly engaged approximately 3,000 Minnesotans. We distributed 250 Pollinator Education Toolkits across Minnesota to 53 nature centers, 91 classroom educators, 33 Master Gardeners and Master Naturalists, 42 non-profits, 14 federal, state, or municipal agencies, and 17 University of Minnesota Extension programs. These Pollinator Education Toolkit holders estimate reaching 100,000 people annually. Many organizations receiving Pollinator Education Toolkits prioritize service to or primarily serve low-income audiences (40%), recent immigrants (15%), Latinx communities (15%), African American communities (13%), Asian American communities (9%), and Native American communities (9%). Toolkits are also available publicly through Inter Library Loan and check out at four University of Minnesota Extension and Outreach Centers across Minnesota. Over 400 educators across the world have accessed the Digital Pollinator Education Toolkit with an estimated annual reach of 180,000. The Pollinator Ambassadors Program for Gardens has increased capacity to reach a broad geographic range of audiences in Minnesota, with youth trained in Big Stone, Hennepin, Ramsey, Wright, and Olmsted counties and toolkits with educators in 60 of Minnesota's 87 counties, as well as increasing reach to traditionally underserved audiences. Broader adoption of pollinator action steps by Minnesotans will help conserve pollinator diversity, which in turn will support food production, water quality, and healthy ecosystems.

III. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Train Pollinator Ambassador Instructors and youth to engage in education and pollinator monitoring

ENRTF BUDGET: \$221,128

Description: Instructors and other pollinator educators will be trained by experts in native pollinator biology. They will in turn train groups of youth (ages 15-17) in 3 urban centers in pollinator education using Driven to Discover Citizen Science curriculum (Pollinators and Monarchs). Groups will be based in Minneapolis, Saint Paul, and Rochester due to existing connections between youth groups and Extension Educators in these locations. This project expands on a program begun in 2016 by the UMN Bee Squad, training underserved youth in honey bee education. Pollinator Ambassador youth will fulfill requests for public presentations. We will track the number of people attending presentations by Pollinator Ambassador youth educators. Pollinator Ambassador youth will apply classroom instruction in pollinator biology in the field and gain experience in field biology techniques while gathering information on pollinator use of urban pollinator gardens and effects of resource enhancement for rare and endangered bees and butterflies. Data will be analyzed to determine support of pollinators by urban gardens and shared with ongoing databases of Minnesota pollinators.

Outcome	Completion Date
 Experts in native pollinator biology and conservation will train Pollinator Ambassador instructors as well as other pollinator educators lacking native pollinator expertise, such as educators at the UMN Landscape Arboretum's Pollinator Discovery Center and the Bell Museum and Planetarium. 	6/30/2019
 Pollinator Ambassador instructors will train ~45 youth (~10 in each of 3 urban centers in 2019 and an additional 15-20 youth throughout MN in2021) to prepare them for public native pollinator education 	1/01/2022
 Pollinator Ambassador youth will fulfill requests for public presentations at schools, festivals, parks, and other public events reaching ~5,000 people. 	6/30/2022
4. Pollinator Ambassador youth will survey gardens using standard bee survey protocols and protocols from the Monarch Larva Monitoring Project and monitor for rare and endangered bees and butterflies through additions of flowers on which specialists depend. Results will be summarized in a report on garden use by pollinators which will contribute to ongoing databases of pollinators.	6/30/2021

First Update March 31, 2019

Pollinator Ambassadors instructors have attended monthly meeting for organization of plans for the summer program as well as training in native pollinator biology. We have contacted youth groups in Minneapolis, St Paul, and Rochester to identify youth to engage in the program. Pollinator Ambassador Instructors will begin working with youth in June and a two day workshop, followed by weekly meetings.

Second Update September 30, 2019

The Pollinator Ambassador program has successfully trained 32 youth Pollinator Ambassadors between the ages of 14 and 18. Sixteen students were from the Mississippi River Green Team program in Minneapolis. Eleven students were from Rosa Parks Charter School in Rochester. Five students were from the Right Track program in St Paul. After a two day training with all students together, students met with instructors weekly from June 25 to August 13 to monitor monarchs and bees, build pollinator knowledge, and develop leadership and presentation skills. The Pollinator Ambassadors have presented to the public at four events to date: two public festivals, a public talk on the UMN Dirt Stage at the MN State Fair, and an educational activity with a visiting 4H group. They have reached approximately 2,500 people.

The Pollinator Ambassadors were also trained as citizen scientists collecting data for two ongoing projects, the Monarch Larva Monitoring Project (MLMP) and the Great Sunflower Project. All data collected have the Pollinator Ambassadors have been shared with these national projects, as well as with the local sites of collection. These data can be used to inform management decisions and guide decisions regarding pollinator conservation.

Two MLMP sites were monitored. One site was located at the City of Falcon Heights Community Park, a MLMP site for over 20 years. The second site was located at Quarry Hills Nature Center in Rochester MN. Youth collected data on immature monarch stages found on common milkweed plants. The data collected at both sites were very typical of monarch phenology, with peak egg laying in June, decreasing into July, and then increasing again mid-July into early August, and dropping down again. These peaks represent the 2-3 generations of monarchs we expect to see in Minnesota each summer. The stages of monarchs observed were also very typical, generally seeing more eggs and 1st instar stages than any of the others. We expect to see more eggs or early instars in one week than we do later instars the following week as most get preyed on.

Two sites were monitored for collection of data for The Great Sunflower Project: the pollinator gardens at the University of Minnesota Bee Lab in Saint Paul MN and Quarry Hills Nature Center in Rochester MN. At the U of MN Bee Lab gardens, Pollinator Ambassadors recorded 2,145 insect visitors to twenty-five different species of flowers. *Monarda fistulosa, Agastache foeniculum,* and *Eutrochium maculatum* had the most insect visitors. *Monarda fistulosa, Heliopsis helianthoides,* and *Coreopsis palmata* had the most different types of insect visitors. At Quarry Hills Nature Center, a total of 451 insect visitors were recorded on seventeen different species of flowers. *Heliopsis helianthoides, Agastache foeniculum,* and *Monarda fistulosa* had the most insect visitors. *Heliopsis helianthoides, Pycathemum virginianum,* and *Monarda fistulosa* had the most different types of insect visitors. *Despite being within the range of recent sightings, the endangered rusty-patched bumble bee was not seen at either site.* We also did not see any *Macropis* oil collecting bees despite observations at their host plant, *Lysimachia cilliata.* One rare bee sighting did occur. *Xylocopa virginica,* a bee rarely seen in Minnesota, was recorded during observations at the University of Minnesota Bee Lab gardens.

Third Update March 31, 2020

We have made plans to train an additional eighteen youth from the Mississippi River Green Team (Green Team) in the summer of 2020. Half of these youth would be returning from our 2019 cohort of Pollinator Ambassadors. One common comment from participants in 2019 was that they wanted to be exposed to more information. We have adapted our 2019 program to include opportunities for returning youth to have more direct contact with content experts to expand their knowledge. In collaboration with the Green Team program, we have made plans to connect with components of their other programming to work on leadership skills and community connections. Due to uncertainty around the covid-19 pandemic, these plans are currently on hold. The Green Team does not have an option to continue programming on-line if in-person programming is not available. The program would start in mid-June so we are currently waiting to determine if we can work directly with the youth this summer. The Green Team already has a Pollinator Outreach Toolkit so at a minimum we are hoping to find an opportunity to provide background and training so those kits can be used by the Green Team at outreach events.

Fourth Update September 30, 2020

Our goal to train an additional 18 youth for Outcome 2 of Activity 1 in the summer of 2020 was not met. In-person activities were not allowed and attempts to coordinate online learning opportunities with the youth in the Mississippi River Green Team program failed due to lack of access to technology for the youth. We have currently trained 32 youth in our Pollinator Ambassador Program, nearly reaching our goal of ~45 youth. Uncertainties about access of youth to technology continues, but we will continue to try to find a way to provide effective training remotely to reach our goal of training ~45 youth. Through connections with public and community schools, we plan to provide pollinator educator training to an additional 15 youth from across MN. We were also unable to engage youth as pollinator educators at public outreach events this summer for Outcome 3 of Activity 1. By working with youth at schools this fall and winter, we hope to create opportunities for youth Pollinator Ambassadors to use their voices as pollinator educators and advocates. For Outcome 4 of Activity 1, we have created video training and online resources to encourage pollinator counts in the classroom. While we are not collecting those data, we are encouraging that those data be shared with the Great Sunflower Project, an on-going national pollinator monitoring effort.

Fifth Update March 31, 2021

While we were unable to work with youth in 2020, we did supply resources and training to four youth training as pollinator educators with a related 4H program. For 2021, we have reformed plans to engage youth as Pollinator Ambassadors remotely, pending approval of a budget request and a no-cost extension. We have spoken with several youth groups about the possibility of connecting. While there are limitations to remote engagement, we are excited to reach students across MN.

Sixth Update September 30, 2021:

The Pollinator Ambassador program has successfully trained 43 youth Pollinator Ambassadors between the ages of 14 and 18 meeting our goal of ~45 youth. In 2021 we worked with 11 students. Three students were from Rosa Parks Charter School in Rochester. Five students were from the Urban Roots program in St Paul. One student was from Como High School in St Paul. One student was from Big Stone 4-H. One student was from Monticello High School. Students met with instructors weekly from June 25 to August 13 to build pollinator knowledge and develop leadership and presentation skills. The Pollinator Ambassadors have presented to the public at two events to date, a public talk on the UMN Dirt Stage at the MN State Fair and Conservation Days at Bonanza State Park . They have reached approximately 280 people. Building on the 1,500 that were engaged in 2019, the total in-person audience reached by our Pollinator Ambassador youth is approximately 2,780. Our summer of 2021 youth Ambassadors are continuing their outreach efforts, but we expect that we will fall short of our goal for the youth Pollinator Ambassadors to reach 5,000 people, due to the continuing limitations on inperson activities.

Seventh Update as of March 31, 2022:

Pollinator Ambassador youth will be included in a Bee Lab video that will highlight the reach and impact of pollinator education. This video is currently in production. We expect to have this video available in June of 2022. This video will help our Pollinator Ambassadors to reach audiences despite continuing limitations on public events due to the Covid-19 pandemic.

Final Update June 30, 2022

Through in-person and virtual workshops, we trained 43 youth between the ages of 14 and 18 from Ramsey, Hennepin, Big Stone, Wright, and Olmsted counties in pollinator biology and education. These youth presented pollinator conservation action steps to approximately 3,000 Minnesotans through presentations at the Monarch Festival in Minneapolis, the Pollinator Festival in Saint Paul, the Pollinator Party in Minneapolis, the Ecology Fair at the University of Minnesota, the Dirt Stage at the Minnesota State Fair, Conservation Days at Bonanza State Park in Big Stone County., and to their classmates.

Pollinator Ambassadors monitored gardens for pollinators in 2019 and completed pollinator surveys and monarch larva monitoring at two sites. These data were shared with ongoing projects the Great Sunflower Project and the Monarch Larva Monitoring Project. We were unable to continue training and data gathering in subsequent years due to the lack of in-person training due to the COVID-19 pandemic. Pollinator Ambassadors were trained to use the biodiversity portal iNaturalist to share data on pollinators.

ACTIVITY 2: Provide tools for distance pollinator education

ENRTF BUDGET: \$28,872

Description: A pollinator habitat assessment guide focused on home, school, and community gardens will be created and made available to the public, including schools, to enhance effectiveness of gardens as pollinator habitat. The habitat assessment guide and pollinator outreach toolkit will increase the ability of Minnesotans to provide high quality to pollinators by assessing their gardens and following suggestions for improvements. A pollinator outreach toolkit including table-top poster displays, an interactive quiz, and materials for citizen science projects will be developed for use by and distributed to organizations such as 4H groups, nature centers, and schools unable to bring in pollinator experts to present information. The pollinator outreach toolkit will enable organizations located a long distance from locations with pollinator experts to provide the public with high quality, engaging, pollinator education.

Outcome	Completion Date
1. Garden pollinator habitat assessment guide, based on the successful model developed	6/30/2019
by the Xerces Society for farms and natural areas, will be developed by the Xerces Society	
in cooperation with the UMN Bee Lab.	
2. Create and promote pollinator outreach kit, as described above. Distribute ~250 kits to	6/30/2022
groups in greater Minnesota reaching ~10,000 people.	

First Update March 31, 2019

The Xerces Society has been engaged to produce a pollinator habitat assessment guide for gardens. We estimate that content and design will be completed by early June 2019. Content for the pollinator outreach toolkit is being designed with expert input from Pollinator Ambassador team members and consultation with nature centers and others who will be using the toolkits for outreach and education. It is estimated that kits will produced by June 2019.

Second Update September 30, 2019

Design and content for the Urban Habitat Assessment Guide is nearly complete with a deadline of November 1. Content and design work for the pollinator ambassador outreach toolkits continues with most pieces also set for a November 1 deadline. Distribution of toolkits including the Habitat Assessment Guides will begin in mid-November.

Third Update March 31, 2020

The Habitat Assessment Guide for Yards, Gardens, and Parks is complete. The Xerces Society produced this document with input from Dr. Evans from the UMN Bee Lab. The guide is included in the Pollinator Ambassador toolkits. It is also available to the public at the Xerces society website. The Xerces Society will promote the guide during Earth Week as part of an effort to improve habitat in managed areas. The guide provides detailed information on how to improve pollinator habitat. The target audience is home owners, community gardeners, and park managers. Here is a link to the guide:

https://www.xerces.org/publications/habitat-assessment-guides/habitat-assessment-guide-for-pollinators-inyards-gardens

Most pieces of the Pollinator Ambassador Outreach toolkits are designed and produced. In November, the first set of these partial kits were distributed to thirty-eight organizations. We distributed most kits at the Minnesota Naturalists Association annual meeting in conjunction with a training session. Kit recipients include nature centers, city, county, and state parks, the Minnesota Zoo, and BWSR. The remaining pieces of the toolkit are in the final stages of design and production. We have begun to promote the kits and solicit applications. We are prioritizing distribution to organizations working with underserved communities as well as those working in underserved areas of the state. We have made plans to have a set of kits available for check out to Master Gardeners, Master Naturalists, 4-H groups, and others at the ten UMN Extension Research and Outreach Centers throughout Minnesota. In addition, we have designed the kits to be compatible with the interlibrary

loan system so they will be available for check out to the general public. While the kits can function as standalone education pieces without additional background, we want to provide opportunities for educators to add value to the kits by offering in person workshops as well as videos for people unable to attend workshops.

Fourth Update September 30, 2020

Currently, 38 organizations have received a partial set of the Pollinator Education Toolkit. We have an additional 175 applicants. The production and distribution of the physical pieces of Pollinator Outreach Education toolkits was delayed until early 2021 to provide more opportunity to adapt content to a digital format for use in the summer of 2020, when most educational activities were limited to remote learning formats. A minimum of 200 complete kits will be distributed in early 2021. Applicants will be prioritized to receive kits according to the geographic area they cover and the audiences they serve, with underserved audiences prioritized. Several kits will be held back from distribution to be made available through interlibrary loan services and to make them available at the UMN Research Outreach Centers located throughout MN. The digital toolkits have been downloaded by twenty users including several county Master Gardener groups, community schools, 4-H groups, and others. These groups serve Dakota, Blue Earth, Sibley, Brown, Faribault, Hennepin, and Le Sueur counties. While the physical kits are limited to educators working with audiences in Minnesota, the digital kits are available globally. Digital toolkits are being used in California, Michigan, West Virginia, Oregon, New Jersey, Kentucky, Wisconsin, and Mexico.

Fifth Update March 31, 2021

200 Pollinator Education Toolkits have been produced. Toolkits have been distributed to 187 organizations and individuals. Distribution of the remaining kits through interlibrary loan and UMN Research and Outreach Centers is currently being arranged. We were able to adapt pieces of the physical toolkits into digital materials that educators could use for remote teaching. In addition to producing pdfs of posters, we created interactive slideshows to create more opportunities for active engagement. To promote the use of these materials, we produced training videos focused on background information and presentation tips to enable educators to get the most out of the digital Pollinator Ambassadors Outreach Toolkits.

The digital toolkit has been accessed by 89 organizations and individuals including county Master Gardener groups, community schools, 4-H groups, high schools, elementary Schools, Botanic Gardens. These groups serve Carver, Chippewa, Cottonwood, Crow Wing, Dakota, Ramsey, Hennepin, Ottertail, Kanabec, Chisago, Marshall, Polk, Mahnomen, McLeod, Nicollet, Olmstead, Washington, St Louis, Steele, Winona, Wabasha, Houston, Blue Earth, Sibley, Brown, Faribault, and Le Sueur counties. While the physical kits are limited to educators working with audiences in Minnesota, the digital kits are available globally. Outside of Minnesota, digital toolkits are being used in Illinois, California, Michigan, West Virginia, Oregon, New Jersey, Kentucky, Wisconsin, Canada, Mexico, and Peru.

Sixth Update September 30, 2021



Figure 1 Locations of organizations that have received physical Pollinator Ambassador toolkits

We have distributed UMN Pollinator Ambassador Toolkits been to 226 educators and into publicly accessible portals (interlibrary loan and UMN Research and Outreach Centers) throughout Minnesota. The last 24 toolkits will be sent this fall. Current organizations that have received toolkits are located throughout Minnesota (Figure 1) and have reached approximately 1,600 people to date. The digital UMN Pollinator Toolkit materials have been accessed by 289 educators reaching approximately 900 people across most of North America and parts of South America (Figure 2).

We are currently surveying recipients to learn more about how the kits were used. Several organizations have planted pollinator gardens and had students engage more with pollinators in their outdoor learning classrooms. Most organizations receiving the toolkits primarily serve, prioritize service to, or identify as low income, recent immigrant, Latinx, African American, Asian American, Native American, recent immigrant, and refugee communities. Several of the digital toolkit pieces are available in Spanish. We are currently gathering information from toolkit users on other languages that would benefit the communities they serve.

As a final step to reach more people and provide tools for educators to teach about pollinator conservation, we will make a series of videos to accompany the UMN Pollinator Education toolkits. These short videos can be used in classrooms or shared by organizations via social media. The videos will be available through the UMN Bee Lab Youtube channel.



Figure 2 Distribution of digital toolkits across the US, and North and South America. Red indicates states with organizations that have accessed digital UMN Pollinator Education Toolkits. Green indicates countries that have accessed digital UMN Pollinator Education Toolkits,

Seventh Update as of March 31, 2022

We have increased the distribution of the digital toolkits with an additional 53 digital toolkits. We are increasing the impact of the toolkits by producing videos that can be shown in classrooms and distributed through social media to enhance pollinator awareness and action steps. We are preparing an evaluation for toolkit users to assess the use of the toolkits in educational events and the impact on action steps. We will report these data in our final report.

Final Update June 30, 2022

The Xerces Society for Invertebrate Conservation in consultation with Dr. Elaine Evans from the University of Minnesota Bee Lab produced a Habitat Assessment Guide for Yards, Gardens, and Parks, providing detailed information on how to improve pollinator habitat. The target audience is home owners, community gardeners, and park managers. Here is a link to the guide: <u>https://www.xerces.org/publications/habitat-assessment-guide-for-pollinators-in-yards-gardens</u>

We distributed 250 Pollinator Education Toolkits across Minnesota to 53 nature centers, 91 classroom educators, 33 Master Gardeners and Master Naturalists, 42 non-profits, 14 federal, state, or municipal agencies, and 17 University of Minnesota Extension programs. These Pollinator Education Toolkit holders estimate reaching 100,000 people annually. Many organizations receiving Pollinator Education Toolkits prioritize service to or primarily serve low-income audiences (40%), recent immigrants (15%), Latinx communities (15%), African American communities (13%), Asian American communities (9%), and Native American communities (9%). Toolkits are also available publicly through Inter Library Loan and check out at four University of Minnesota Extension and Outreach Centers across Minnesota. Over 400 educators across the world have accessed the Digital Pollinator Education Toolkit with an estimated annual reach of 180,000. The Digital Pollinator Education Toolkit enables us to update and continue to add to this resource with suggestions from users from annual surveys. We currently have several of the Toolkit resources available in Spanish and hope to add translations into Hmong and Somali.

IV. DISSEMINATION:

Description: After receiving pollinator education training, Pollinator Ambassador youth will present pollinator education activities to organizations such as schools, nature centers, 4-H groups, as well as large public outreach events such as the Pollinator Party and Monarch Festival. Data collected by Pollinator Ambassador youth on use of pollinator gardens by pollinators will be shared with the Minnesota Bee Atlas database as well as incorporated into presentations by Pollinator Ambassadors, and cooperating organizations such as the U of MN Bee Squad and Monarch Lab, and Pollinator biology and conservation which will be incorporated into the educational programing of their host organizations. Pollinator Outreach Kits will be distributed to educational organizations throughout Minnesota. Priority will be given to groups that do not otherwise have access to pollinator outreach resources. Information about the kits, and ordering instructions, will be available at the website for the U of MN Bee Squad, <u>www.beelab</u>.umn.edu/bee-squad

First Update March 31, 2019

We have created a calendar of events for Pollinator Ambassador youth to present pollinator education after their training, during the late summer and fall of 2019.

Second Update September 30, 2019

The Pollinator Ambassadors have presented to the public at four events to date: two public festivals, a public talk on the UMN Dirt Stage at the MN State Fair, and an educational activity with a visiting 4H group. They have reached approximately 2,500 people. Presentations at several workshops are planned for the fall and early winter of 2019-2020. Pollinator Ambassadors staff from the UMN Bee Squad, UMN Extension, Pollinate MN, and the Monarch Joint Venture have received broad training in pollinator education that they are incorporating into programming at with their host organizations. For example, Pollinate Minnesota, a non-profit pollinator education organization that has focused primarily on honey bees, now includes more information and tools for the public regarding native bee biology, identification, and conservation.

Third Update March 31, 2020

In November, Katie-Lyn Bunney from Monarch Joint Venture and Elaine Evans from the UMN Bee Lab taught a workshop to twenty-six attendees of the Minnesota Naturalists Association annual conference with detailed instructions and background to use the Pollinator Outreach Toolkits in their environmental education programs. The Pollinator Ambassadors youth presented three sessions on pollinators at the 2020 Ecology Fair on the St Paul Campus of the UMN, reaching fifty people. Unfortunately, plans to present another workshop on use of the Pollinator Outreach Toolkit at the 2020 Gathering Partners: A Conference for Friends of Minnesota's Natural Resources Conference were delayed until 2021 due to the covid-19 pandemic.

Fourth Update September 30, 2020

While in-person events were not an option, we did share information about Pollinator Ambassador toolkits via digital presentations. For national pollinator week, on June 22, we presented information on how to become a pollinator ambassador to forty youth participating in the MN 4-H Pollinator Training program. On September 17, we presented information on how to use the toolkits, both physical and digital, to over 60 attendees at the Pollinator Summit hosted by the UMN Landscape Arboretum.

Fifth Update March 31, 2021

Pollinator Ambassador youth presented in Ramsey and Big Stone counties to 500 students and 40 adults.

Katie-Lyn Bunney from Monarch Joint Venture and Elaine Evans from the UMN Bee Lab taught two workshops about the toolkits and how to use them to over 90 attendees at presentations for the Minnesota Department of Education and the Minnesota Schoolyard Garden Conference. Brooke Sommerfeldt created a short video slideshow explaining the program which is being advertised on the UMN College Readiness Consortium website used by parents and youth leaders to find youth programming. The toolkits have also been promoted at general pollinator talks presented by the UMN Bee Lab to over 600 attendees

Sixth Update September 30, 2021:

Elaine Evans presented information on the toolkits at the GreenSteps Cities Workshop to 22 attendees that are planning pollinator education in their organizations across Minnesota. Elaine Evans has also presented to MN 4-H on using the toolkits, as well as promoting the toolkits during other general pollinator talks to over 200 attendees. The Pollinator Education Toolkit playlist on the UMN Bee Lab youtube channel has had several hundred views.

Seventh Update as of March 31, 2022:

Our 2022 Pollinator Ambassador youth gave presentations about pollinators in their communities at 5 events that reached 50 adults and 230 youth in Big Stone and Ramsey counties.

Final Update June 30, 2022

The University of Minnesota Bee Lab website has a page dedicated to the <u>Pollinators Ambassadors</u> program. We have created a "Learn to Use Pollinator Education Toolkits" video playlist to provide extra background, and a "<u>Pollinator Ambassadors</u>" video playlist to complement activities from the Toolkits. The <u>Habitat Assessment Guide for Yards and Gardens</u> is available as a pdf document. . We have promoted the Toolkits and the Ambassadors program in talks with gardening groups, educators, naturalists, Master Naturalists, and Master Gardeners reaching approximately 3,000 people. The UMN Bee Lab will continue to provide training and add to video resources to enhance the Pollinator Education Toolkits. Pollinator Ambassador youth have provided pollinator education to ~3,000 people. The Pollinator Education Toolkits have been used by educators to reach an estimated 100,000 people.

V. PROJECT BUDGET SUMMARY:

A. Preliminary ENRTF Budget Overview: See attached budget sheet

Explanation of Capital Expenditures Greater Than \$5,000:

Explanation of Use of Classified Staff:

Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation:

Enter Total Estimated Personnel Hours: 6673	Divide by 2,080 = TOTAL FTE: -3.2
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Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation:

Enter Total Estimated Personnel Hours: 2375	Divide by 2,080 = TOTAL FTE: -1.1
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SOURCE OF AND USE OF OTHER FUNDS	Amount Proposed	Amount Spent	Status and Timeframe
Other Non-State \$ To Be Applied To Proj	ect During P	roject Period	: None
	\$	\$	
Other State \$ To Be Applied To Project D	ouring Project	t Period: non	e
In-kind Services To Be Applied During Project Period: Project coordination and education program development to be provided by UMN Extension employees Rebecca Masterman, Patrick Jirick, and Andrea Lorek Strauss	\$ 6,000	\$ 6,000	
Estimated salaries and transportation costs for Pollinator Ambassador Youth and Coordinators provided by the Mississippi River Green Team for 2019 and 2020	\$44,000	\$22,000	We were only able to work with the Mississippi River Green Team in 2019.
Past and Current ENRTF Appropriation:			
Minnesota	\$	\$	

VI. PROJECT PARTNERS:

A. Partners receiving ENRTF funding

Name	Title	Affiliation	Role
Elaine Evans	Associate Extension Professor	U of MN Bee Lab	Project Manager
Bridget Mendel	Project Coordinator	U of MN Bee Squad	Project Lead
Ana Heck	Project Coordinator	U of MN Bee Squad	Project Lead
Brooke Nikkila	Bee Research Technician	U of MN Bee Squad	Program Coordinator
Lisa Curtis	Program Coordinator for Citizen Science & Schoolyard Gardens	U of MN	Instructor
Katie-Lyn Bunney	Program Coordinator for Monarchs in the Classroom	U of MN	Instructor
Erin Rupp	Director	Pollinate Minnesota	Instructor
Anne Turnham	Communications	U of MN Bee Squad	Communications
Sarah Foltz Jordan	Pollinator Conservation Specialist	The Xerces Society	Create Habitat Guide
Audrey Favorito	Videographer	Wild Carrot Productions	Videographer

B. Partners NOT receiving ENRTF funding

Name	Title	Affiliation	Role

Rebecca Masterman	Assistant Extension Professor and	U of MN Bee Lab	Assistance with project
	Bee Squad Program Director		management
Patrick Jirick	Youth Development Extension Educator	U of MN	Assistance with program coodination in Rochester
Andrea Lorek Straus	Extension Educator	U of MN	Assistance with educational programming

VII. LONG-TERM- IMPLEMENTATION AND FUNDING:

There is a higher demand for pollinator education than can be met by current pollinator educators. The Pollinator Ambassadors program will increase pollinator education capacity in Minnesota by training youth Pollinator Educators as pollinator outreach experts and creating Pollinator Education Toolkits that will be made available to organizations throughout Minnesota, providing interactive pollinator education from experts. The Pollinator Education Toolkits include a habitat assessment guide for gardens, enabling assessment and improvement of gardens as pollinator habitat. As part of their training, Pollinator Ambassador youth will monitor pollinators in gardens and assess supplementation of gardens with plants preferred by rare and endangered pollinators. Results from monitoring will be summarized and shared with pollinator education focused on native pollinators and increasing our understanding of pollinator usage of garden habitats will benefit Minnesotans by improving conditions for pollinators. The University of Minnesota Bee Lab will continue to update and add elements to the digital Pollinator Education Toolkits and provide trainings on their use to insure continued usage by recipients.

VIII. REPORTING REQUIREMENTS:

- The project is for 4 years, will begin on 07/01/2018, and end on 06/30/2022.
- Periodic project status update reports will be submitted March/31 and September/30 of each year.
- A final report and associated products will be submitted between June 30 and August 15, 2022.

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. 2018 Project Budget-Final

Project Title: Pollinator Ambassadors Program for Gardens Legal Citation: M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 05f Project Manager: Elaine Evans Organization: U of MN College/Department/Division: CFANS/Entomology/Extension M.L. 2018 ENRTF Appropriation: \$250,000 Project Length and Completion Date: 4 years, June 30, 2022 Date of Report: 03/31/2022



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	Revised Budget		
ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	3/25/2021	Amount Spent	Balance
BUDGET ITEM			
Personnel (Wages and Benefits) - Overall	\$166,830	\$166,830	\$0
Elaine Evans, Pollinator Ambassador Project Manager: \$37,500			
(80% salary, 20% benefits); 12.5% for 2 years, 20% FTE for 1 year			
Bridget Mendel Pollinator Ambassador Project Lead: \$24,000 (80%			
salary, 20% benefits) for 15% FTE for 3 years			
Brooke Sommerfeldt, Pollinator Ambassador Program Coordinator:			
\$22,000 (75% salary, 25% benefits) , 20% FTE for 2 years, 25% FTE			
for 1 year			
Sarah Weaver, Pollinator Ambassador Instructor: \$28,182, (75%			
salary, 25% benefits) 25% FTE for 2 years			
Katie-Lyn Bunney, Pollinator Ambassador Instructor: \$25,272 (75%			
salary, 25% benefits), - \$7,442			
Anne Turnham, Communication Specialist: \$21,289 (80% salary,			
20% benefits) 15% FTE for 2.25 years			
11 Pollinator Ambassadors: \$8,808 (93% salary, 7% benefits) 10%			
FTE for 1 years			
Pollinator Ambassador Instructor: \$17,600 (75% salary, 25%			
benefits) 20% FTE for 1 year			
Professional/Technical/Service Contracts - overall	\$59,394	\$59,394	\$0
Erin Rupp, Pollinate Minnesota, Pollinator Ambassador Instructor,			
(12 days x 8 hrs x \$120/hr) + (5 days x 8 hrs x \$60/hr) (Total			
estimated amount - \$13,920)			
Pollinator Ambassador youth salary with Right Track,- \$6031			
15 Pollinator Ambassador youth stipends, (\$400 for 26 hours of			
service) - \$5,850			
Xerces Society - produce a habitat assessment guide for 1 year			
(Total estimated amount - \$5,000)			
Katie-Lyn Bunney, Monarch Joint Venture, Pollinator Ambassador			
Instructor: \$20,093			
Pollinator experts to provide expert content during Pollinator			
Ambassador Training (Total estimated amount - \$8,500)			
Equipment/Tools/Supplies - overall	\$4,453	\$3,762	\$691
Craft and office materials (including posterboards, markers, etc.)			
for Pollinator Ambassadors to design and create outreach displays			
(Total estimated amount - \$553)			

Materials for citizen science monitoring: sweep nets, misc. insect			
curation supplies, pins and labels, insect drawers and trays, native			
plant materials for resource specialists, Monarch Larva Monitoring			
Protocol kits (Total estimated amount - \$300)			
Materials for Pollinator Outreach Toolkits (Total estimate- \$3600)			
Printing			
Printing costs for habitat assessment guides, Pollinator	\$13,391	\$13,391	\$0
Ambassador outreach materials, and Pollinator Outreach Toolkits			
(Total estimated amount \$13,391)			
Travel expenses in Minnesota - overall	\$2,722	\$2,722	\$0
Initial training seminar: lodging \$1,400, meals \$1,800 (Total			
estimated amount - \$2403)			
Travel for Instructors (Total estimated amount - \$319)			
Other - overall	\$3,210	\$3,203	\$8
Postage costs for Pollinator Ambassador outreach kits (Total			
estimated amount - \$3000)			
Background checks- 6 people x \$35 (Total estimated amount -			
\$210)			
COLUMN TOTAL	\$250,000	\$249,302	\$698

UNIVERSITY OF MINNESOTA EXTENSION

POLLINATOR AMBASSADORS PROGRAM by the numbers

POLLINATOR

YOUTH

AMBASSADOR

directly engaged **MINNESOTANS**

Asian American **African American** Low-income

Recent Immigrants Latinx

Native American

REACHING UNDERSERVED AUDIENCES



accessed the **DIGITAL POLLINATOR TOOL KIT** reaching an esitmated





Increased

pollinator conservation

action will enhance food









250

kits

across

COUNTIES

Reaching an estimated

100,000

University of Minnesota Department of Entomology, Bee Lab z.umn.edu/pollinatorambassador