

Species at Risk Act (SARA) Consultation, Cooperation
and Accommodation Project

**Monarch (*Danaus plexippus*) Workshop Summary
Report**

March 9, 2022

Created by:

The Centre for Indigenous Environmental Resources
(CIER)



CIER

Centre for Indigenous
Environmental Resources

Acknowledgments

The Centre for Indigenous Environmental Resources (CIER) and Environment and Climate Change Canada (ECCC) would like to thank the participants that attended the virtual “Species at Risk Act (SARA) Consultation, Cooperation, and Accommodation Project” workshops.

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Introduction

This multi-year project will facilitate Indigenous communities' and organizations' participation in Environment and Climate Change Canada's (ECCC) listing and recovery planning processes for terrestrial species as part of implementing the federal Species at Risk Act (SARA). Each region will focus their resources on an area of study and development that maximizes efforts to each species.

The Centre for Indigenous Environmental Resources (CIER) role is to support and facilitate a range of activities between Indigenous communities and organizations, and ECCC on developing recovery documents, sharing knowledge and language, addressing threats to terrestrial species at risk survival and recovery, and land use planning for species at risk on reserve lands and within traditional territories. CIER also manages the provision of funds on behalf of ECCC SARA participation, capacity funding requests and Expression of Interest call for proposals. The agenda for the Monarch Butterfly information and engagement session can be seen below.

Agenda

Time (EST)	Agenda Item & Who	Notes
9:00-9:15	Welcoming and Polling Question Lynn Mallett/Alexia Goodswimmer	Introduction Activities Polling Question 1: What words come to mind when you think about Monarch? Acknowledgements: Graphic Recorder: Aaron Russell. Victoria Leck, Consultations Biologist with the Canadian Wildlife Service under ECCC – Introduction to the SARA project. Elisabeth Shapiro - Species at Risk Biologist, Monarch recovery part of the workshop presentation Indigenous presenters: <ul style="list-style-type: none"> • Theodore Flaman • Judith Jones Alexia Goodswimmer - Research Associates at CIER
9:15 – 9:45	ECCC to provide SAR intro/overview with Q&A (30 min)	PowerPoint presentation by Victoria Leck Discussion Q&A session facilitated by Victoria
9:45 – 9:50	CIER to introduce polling questions	Polling Question 2: Have you/your community been involved in participating in surveys for Monarch? (yes/no)
9:50 - 10:20	Monarch presentation by Elisabeth Shapiro with Q&A	Polling Question 3: Have you/your community been involved in participating in creating or improving Monarch Habitat? (yes/no)
10:20 – 10:30	BREAK	
10:30 – 11:10	Indigenous-led conservation.	Indigenous presentations with Q&A discussions.
11:10-11:25	Break out rooms	Discussion, 5 people in each room for networking and discussions. No facilitation I.e. ECCC/CIER not to be in rooms. Participants can notify CIER for assistance.
11:25-11:40		Victoria – wrap up and Q&A discussions
11:40 – 11:45		Overview from Graphic Recorder – Aaron Russell
11:45-12:00	Closing and Wrap-up Lynn Mallett	Closing comments -CIER

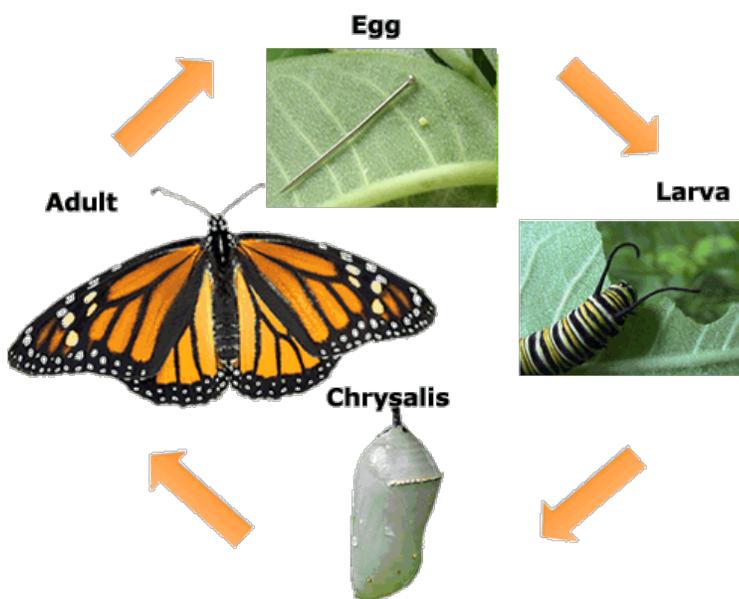
Presentation Overview

Monarch identification and habitat

Monarch is a large and very well-known butterfly. They have predominantly orange wings outlined by a black border with white spots. The caterpillar is banded white, yellow, and black, and feeds exclusively on milkweed (*Asclepias* spp.)

Most Monarchs that reach Canada are the great-grandchildren of those that left Mexico. Monarchs in southern Ontario and Quebec produce two to three generations between June and October each year. Monarchs in southern British Columbia produce at least one generation each summer. Summer adults live for two to five weeks, but overwintering adults live up to nine months. The late summer adults migrate south to Mexico or California, where they overwinter, and the yearly migration begins again.

Diagram adapted from PowerPoint presentation which was taken from Journey North



Monarch is a habitat generalist and is found wherever its host plant milkweed grows. Milkweed plants grow predominantly in open and periodically disturbed habitats such as roadsides, fields, wetlands, prairies, and open forests. Milkweeds are often planted outside their native range, and sometimes wayward Monarchs are observed at these patches. There are about 14 native milkweed species in Canada. In Ontario, Common Milkweed (*Asclepias syriaca*) and Swamp Milkweed (*Asclepias incarnata*) are the two most common species.

Threats

There are many threats impacting Monarch, and the combination of all these threats has likely resulted in population level decline. While the decision to list Monarch as Endangered under Species at Risk Act has not yet been made, it is still a species of special concern under SARA. As such, it is important to take action to support Monarch recovery. Here are some recommended Conservation Actions that can be taken to benefit Monarch. These actions were developed in 2020 through a collaborative process called the Open Standards for the Practice of Conservation (Conservation Standards), which consisted of a series of collaborative workshops with species experts, land managers, rights-holders, and stakeholders.

- Promote and participate in community science programs to improve knowledge of Monarch in Canada.

- Encourage habitat creation & restoration.
- Encourage the planting of regionally sourced native milkweed and flowering plants.
- Incorporate Monarch conservation needs into monitoring projects and multi-species conservation initiatives.
- Implement best management practices to reduce threats to Monarch associated land and vegetation management.
- Education & outreach activities to raise awareness about Monarch and the threats it faces.

There are several community sciences programs that communities and individuals can participate in to improve knowledge of Monarch and milkweed in Canada to aid in ongoing conservation efforts. [Mission Monarch](#), monitors all life stages as well as milkweed abundance. [Monarch Watch](#), tagging of migrating Monarch. Other community science projects include, [Journey North](#), [iNaturalist](#), and [eButterfly](#)

Indigenous- led conservation of Monarch presentation:

Theodore Flamand introduced the Neniizaanak Wii Nigooshkaak Species at risk program in Wiikwemikoong Unceded Territory (WUT) and their Species at Risk conservation of Monarchs. WUT's department of Lands and Natural Resources manages a land base of 54,000 ha and works on issues in their greater traditional territory. The species at risk program began in 2007 and is responsible for protection and management of WUT's 27 Species at Risk which are: 5 plants, 8 reptiles, 12 birds, 1 mammal and 1 insect also 12 Species at Risk unconfirmed or not seen lately. Below can be seen a photo depicting a Monarch Caterpillar, taken from the PowerPoint presentation.



Monarch is just one of many species they work on in WUT. Studies are completed by speaking with Elders, involving the community, especially the youth. The Neniizaanak Wii Nigooshkaak (Species at risk program). WUT has completed the following projects within the past 14 years.

- Surveyed, documented, and mapped the occurrence and habitats of 26 SAR.
- Protected two large multi-Species at Risk habitats; one is set up as a teaching site.
- Prepared written protection plans (WUT recovery strategies) for 22 SAR.
- Met with the community to see how they want SAR to be protected.
- Hosted dozens of presentations including lots in the schools.
- Run a kids day camp about SAR.
- Taken school classes on field trips into SAR habitats.
- Managed large areas of habitat including with burning and brushing.
- Conducted a 10-year demographic study of Hill's Thistle.
- Rehabilitated over 80 ha of habitat by controlling Phragmites.
- Work with Shkakamik Kwe Genwemajig, community SAR advisory group.

Presentation on Species observation and pollinator projects on Manitoulin Island from Judith Jones

In 2019 and again in 2020 the question was presented to the public “How are Monarchs doing on Manitoulin Island? Help us do a one-day count” The projects were focused on getting community involvement. Instructions, tally, and information sheets were available on social media for public access. The Monarch count could be done anywhere on Manitoulin Island with data being easily submitted by participants via email or on Facebook. The focus of the Monarch project was to set up four in person orientations, which included information on Monarch and its threats. There was very little interest, and there were only two data entries. The results from these surveys were posted in the local newspaper and on the Species at Risk program Facebook Page. There was little uptake from the community, it was time to try something different.

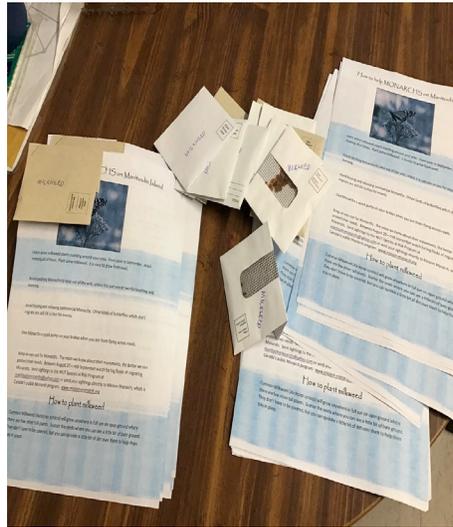
In 2021 WUT approached the Monarch survey again, they used the same set up across Manitoulin Island but later in the season with open ended dates. The focus was on migration because the large numbers of Monarchs moving receives a lot of attention. This resulted in 121 reports and counts of 100’s of Monarchs between August 13 and September 28.

The photo below is adapted from PowerPoint presentation. This photo is taken from the Monarch Survey completed on Manitoulin Island.



As directed by community Elders, youth involvement in the Monarch project is prioritized. Work has been completed with Grades 5-7, including projects such as planting milkweed plugs behind the school to begin creation of a pollinator garden. The group also planted 20 plugs in the community alvar-marsh protected area complex, which also acts as a teaching site.

Milkweed seeds were collected in 4 separate locations and given out to the community. The Species at Risk project also scatted milkweed seeds in 4 new disturbed areas and old disturbed areas (pits)



A photo of collected milkweed seeds from 4 different locations. Photo taken from presentation provided by Judith Jones.



Making capped land fill site into butterfly habitat: planted 25 common milkweed plugs



Conservation efforts being done at WUT (photos above left and right). Photos taken from presentation provided by Judith Jones.

In conclusion, Judith Jones stated that it was best to have in person conversations to gain interest but also to combine other community events to attract larger numbers of participants. Social media has been proven to be effective and people want to help. Working with the schools has been very effective and children remember working on projects from five years ago

Future plans for Monarch work in 2022 are to run another migration counting event. Host an in-person evening count session during migration and continue to work on making a butterfly garden with the school plus expand the habitat at the capped landfill site. There will be more work on collecting, handing out and scattering Common Milkweed seeds and the status of the milkweed seeds and plugs planted in 2021 will be assessed.

Figure 1: What comes to mind when you think of Monarch?

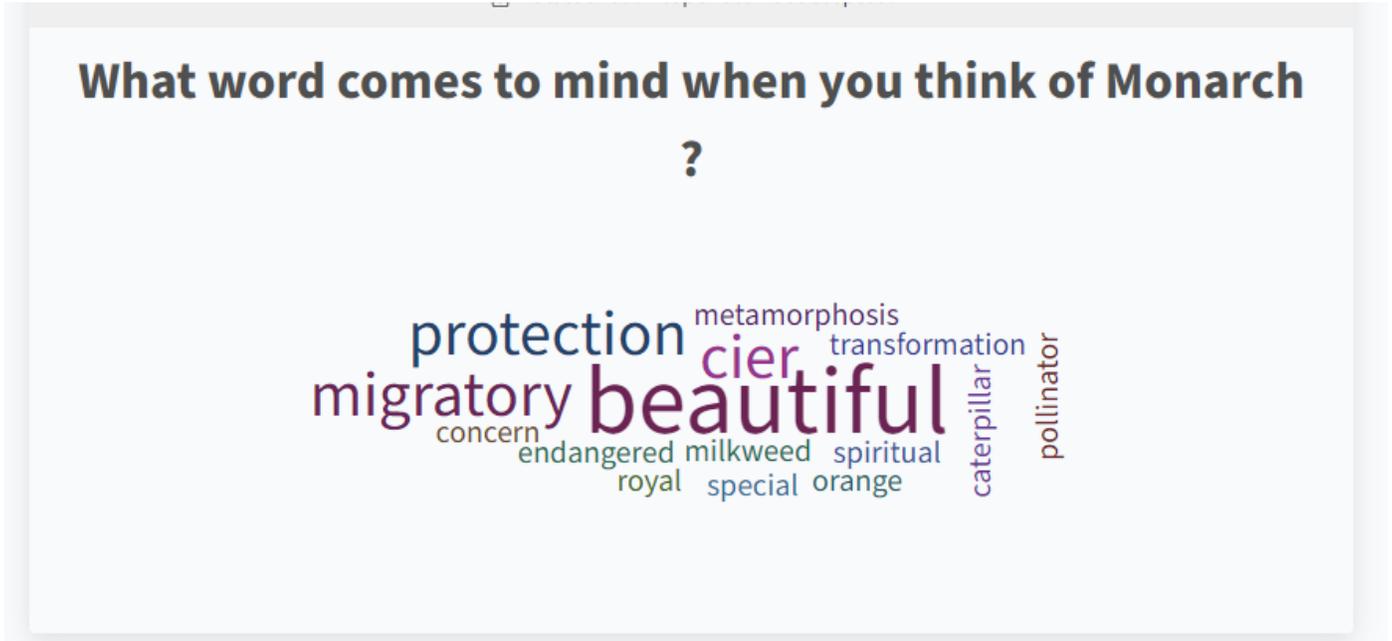


Figure 2: Have you/your community been involved in participating in Surveys for Monarch?

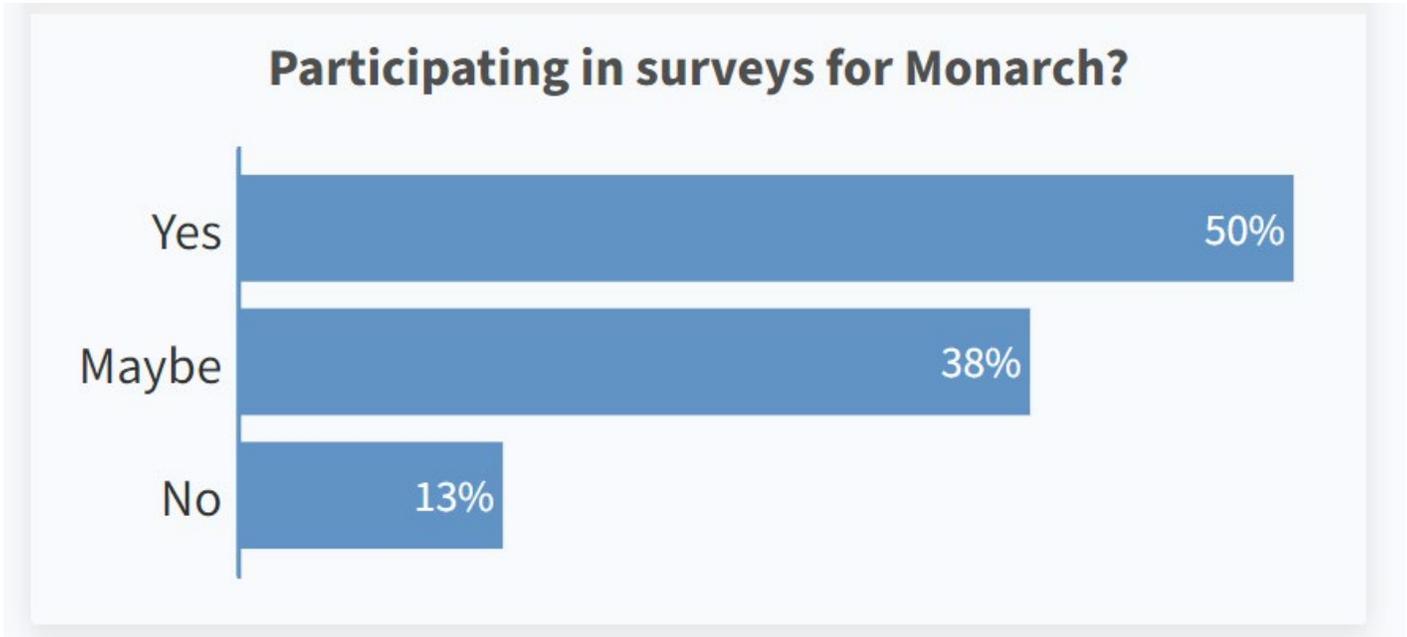
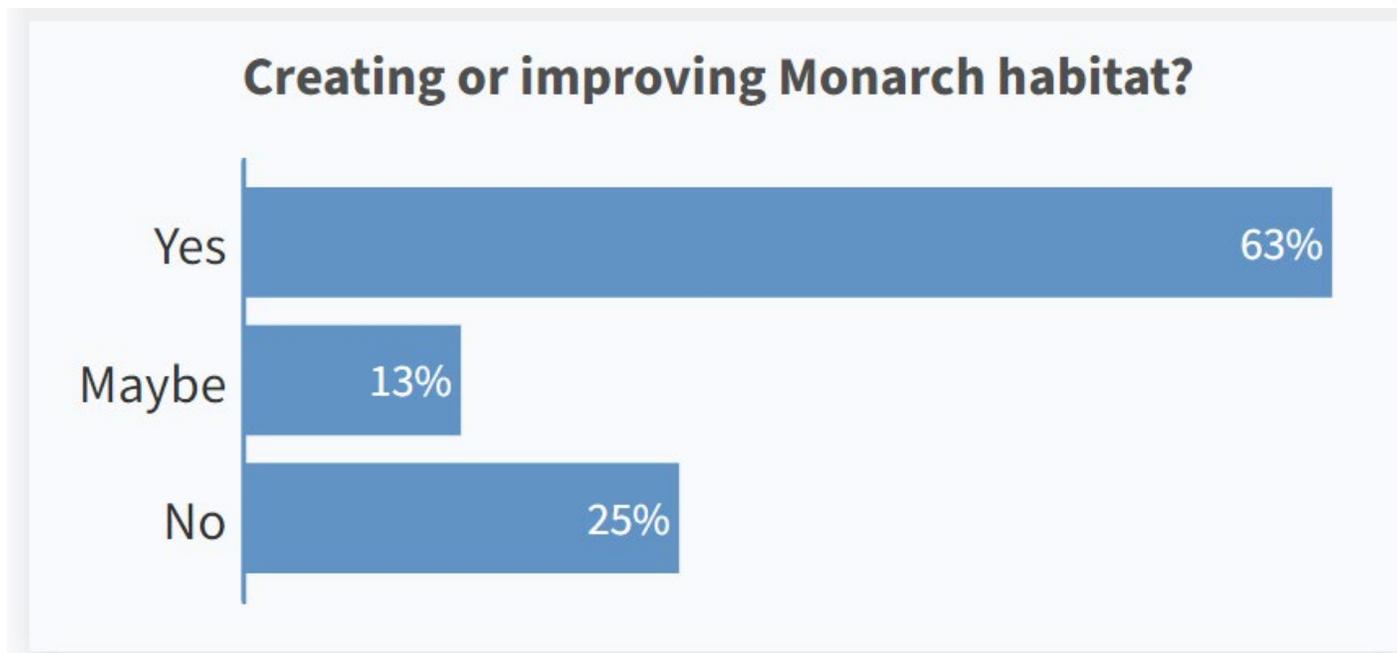


Figure 3: Have you/your community been involved in creating or improving Monarch habitat?



Following the Monarch migratory presentation and polling questions, the following is a summary of the discussions, questions and comments that were raised.

Monarch Breeding Range presentation discussion

Q: ¹⁶Do the Monarchs in Ontario really migrate all the way to Mexico and come back?

CWS: (Elisabeth) Not all the way back but the ones at the end of the summer do make it all the way to Mexico.

²Comment: I participated in a few Monarch recovery workshops last year and they informed us that we should be wary of "flower mix" packages for pollinators that may be sold at garden centres, as they may contain non-native milkweed species.

Q: ⁷What is the blue in Florida? (Map shown)

CWS: (Elisabeth) What I am talking about today are the migratory Monarch, but there are established non-migratory (Monarch) populations around the world. They are "non migratory" that remain there year-round because there are enough flowers/milkweed (i.e., Tropical Milkweed). Tropical Milkweed can disrupt migration by providing a constant year-round supply of milkweed for the caterpillars to eat. Since the butterflies can be there year-round, it leads to an increase of parasites and pathogen's which can be detrimental to the species

Comment: ²¹I grew milkweed and other pollinator plants

CWS: (Elisabeth) Yes, we will be discussing that more.

Q: ³I've head of people captive breeding Monarchs. Is this a good or bad thing for species?

CWS: (Elisabeth) Captive breeding is a potential threat to the species. Some people do breed them for release at events, such as weddings. The Monarchs that are bred in captivity can differ from those that are bred in the wild. So, they can have non migratory traits, such as smaller wing size, and failure to orient south in the

Fall for migration. There is the potential to introduce such traits to those in the wild and this can be a concern. Some people like to take a couple eggs to raise at home, this can be useful for educational purposes.

Q: ¹⁰“There is need for commercial access” Can you elaborate on that. What do you mean by there is a need for commercial access?

CWS: (Elisabeth) There are not a lot of businesses that supply regionally specific seed sources on a scale large enough to keep up with a lot of conservation projects. It can be difficult to source seed for restoration projects. There are some organizations who get permission to access properties to collect native seeds themselves, which is a time-consuming process. So, improving the access to seed is important in the long term, that can take form in a lot of different ways. It can be access to fields where the seeds grow and/ or green houses. There is a lot of opportunity for people to play their part in this role of improving access to seeds for others.

Q: ¹⁰Specifically for our community, we have a seed sanctuary for historical plants that we are keeping. Can this be something the community can part take in? Seed collecting can be helpful.

CWS: (Elisabeth) This can be useful for working with other groups, and smaller projects to take form. Seed gathering, can certainly provide access to seeds for other communities.

Q: ²I heard that Monarchs need the sun and moon in their process and that people should not take breeding on themselves, unless properly trained. It can cause more harm than good according to the Monarch workshops from last year.

CWS: (Elisabeth) Yes, I believe I know what you are talking about. There was a study that came out a few years ago that found that Monarchs that were reared indoors, had trouble orienting when released outside. There is concern that Monarchs raised indoors, without direct exposure to the sun and moon or to being outside, may have their navigational ability affected, and they will not be able to migrate. It has been recommended that if you are raising Monarchs (with permits), to provide them with the natural light of the sun and moon.

Q: ¹⁶ We are in NE Ontario near the Timmins area, forestry practices are occurring, and they clear-cut the forests. The forestry companies do replant it later, but they only plant what they are harvesting. How feasible is it for Indigenous communities, to get access to the cut blocks to throw seed for the butterflies?

CWS: (Elisabeth) ECCC does not work directly with any foresters so cannot comment on the provincial practices. From a Monarch recovery perspective. We would say that Southern Ontario and Southern Quebec are the core breeding range for the species and are very important to Monarch. ECCC suggests contacting someone directly with the Forestry program to find out what type of opportunities there are. We are willing to provide some contacts if any participants would like.

Comment: ⁴I have raised Caterpillars, here in Thunder Bay we have a garden that gives people caterpillars to raise at home and sells the milkweed to support them and the funds go back onto the monarch garden. It's a fun activity to get the children involved.

CWS: (Elisabeth) That is creative! I think it is so important to have those education and outreach initiative programs to engage people to learn about Monarchs and other pollinators. Its important to have a holistic approach to learning about the ecosystem and the habitat they live in. Kids do love it!

Q: ¹⁰You mentioned nectar producing plants that the insects (Monarch) rely on. Can you list them again?

CWS: (Elisabeth) If you are looking to support Monarchs in the fall, which is important for migration, asters, and goldenrod species. Further resources with planting recommendations will be provided from ECCC, who want to encourage use of regionally specific native plants.

Indigenous Led conservation of Monarch Butterfly:

One Indigenous community provided presentations on the work their community is doing to help in the conservation of the Monarch. The following are some comments and discussions made following the presentations.

Q: ² Our community is doing a pollinator planting in partnership with our school and Monarch survey day.

CWS: (Elisabeth) National monarch blitz, where people are encouraged to survey Monarch. If it aligns with that, there are several resources available for that. ECCC will be sending resources for that.

Comment: ¹⁷ Suggests to have an alternate date in case of inclement weather.

Comment: ² We use outreach and education utilizing social media especially in times of Covid "No Mow May" Especially since that is a great way to encourage pollination, it is a valuable way to provide protection and stewardship actions.

CWS: (Victoria) How would you like to be involved or consulted on the development of a potential future recovery strategy for Monarchs?"

CWS: (Victoria) At the beginning we talked about what stage the monarch is at in terms of the Species at Risk Act cycle. If the Monarch is up listed to endangered (that decision is not made yet), at that time ECCC will need to prepare a recovery strategy. We would like to find out if there are any communities or anyone out there interested in being involved in helping develop that recovery strategy or if there are certain ways and methods you or your community would like to be involved. If so, contact ECCC to discuss further.

Comment: ⁵ Access to information, maybe establish data sharing agreements. Better starting points for First Nations. Some communities do not know where to look for the resources, or if the Species at Risk is within traditional territories, maybe we do not want to comment on something that we do not know is in our territory. Maybe this information would encourage further involvement from Indigenous Communities.

CWS: (Elisabeth) There will be resources provided with the Species at Risk information that will be forwarded to Ontario Indigenous communities. Those resources are a great starting point with the species like Monarch, might be to explore some of the community science programs available that have completed SAR studies. Most of this information is recorded in urban areas or other areas in Canada. There are knowledge gaps in northern/remote communities.

CWS: (Victoria) In terms of starting point basis, including Monarch on Traditional lands or territories, give Victoria a call and she will pull information on sources that ECCC has access to for a species list for you to go by. There may not be full information on your lands or territories as there are data gaps, however ECCC is willing to assist with providing that information. There you can plan through those species lists to talk with Elders on what might have been sighted in your area. For anyone interested Vicki has provided email in chat.

CWS: (Victoria) Data sharing agreements. NHIC- Ontario have information on records of species at risk that would occur on your lands as well

Q: ⁵ What sources of information do you have outside of NHIC- data sharing agreement exists between community and NHIC but the data provided is not abundant. What other agencies does ECCC use for SAR, what type of available information there is?

CWS: (Victoria) NHIC is what ECCC mainly uses, there is other open-source data that can be used. Refer to list provided by ECCC which includes [iNaturalist](#) and other community source data streams such as eBird, Ontario breeding bird atlas. A lot more records showing in Southern Ontario, it is encouraged for more people to use [iNaturalist](#) to start supplying more information on recorded sightings.

Q: ⁴¹ I work at Matawa First Nations management, we assist nine First Nation communities and as of now we do not have an acting program for Monarch, but we are looking into it and our goal is to do more work around monarchs

CWS: (Elisabeth) Communities who are interested in being involved in the future recovery strategies for Monarchs should reach out to ECCC and express interest.

CWS: (Victoria) There is funding available for projects that include species surveys from \$5000- \$15,000. This funding can be used within the next year. Information available on [CIER page](#) (closing date posted).

CWS: (Elisabeth) Hopefully the resources we send around will be helpful as you plan your recovery programs. Please feel free to reach out to me if you have any questions.

Networking/ Discussion Recovery Planning & Implementation:

Participants were broken up into breakout rooms and provided with 15 minutes for discussions and networking. CIER & ECCC staff were not present, as the hope was to provide a comfortable space for Indigenous participants to network. Discussion questions were provided, and were as follows:

- Are there any specific threats to Monarchs in your community/territory?
- What conservation actions do you think are necessary in order to recover Monarchs?
- Are there any current conservation actions or any actions that could be implemented on your lands that would benefit Monarch?
- How would you like to be involved or consulted on the development of a potential future recovery strategy for Monarch?

Links provided

The following is a summarization of the resources and links provided during the presentations

Centre for Indigenous Environmental Resources <https://yourcier.org/sara/ontario/>

iNaturalist Ontario [Ontario, CA · iNaturalist](#)

Appendix A: Participant and Contact list

The contact information from participants has been left out of this public document. Participant information will be kept private internally, to help ECCC with report writing and the engagement phase of their SARA work.