Seeing Insects in a Whole New Light

Our Relationship with Insects and the Plants they Pollinate

Nimkii Brad Howie



Path of Our Learning Today

- How do we see Insects
- How do we see plants?
- How can we support pollinators?
- Telling this story from the Indigenous perspective

Indigenous People?

Indigenous people of Turtle Island (North America)







Indigenous?

One Mother

Shared Cultural and Ancestral Origin

Two separate Individuals

Two Separate Communities



Something Beautiful

 Something truly beautiful is what binds us together as
 The land we live on Indigenous people is also differentiates us

Nhat Makes us **Special and** Rinds us Unique from ogether each other?

Northwest Plateau Northeast Plains Great Basin California Southea Southwest Mesoameric

Major Classes of Indigenous People

Indigenous Past, Present, and Future

- We say that we have been living here since time immemorial. What does this mean?
- Indigenous people have always been here, and we will always be here
- We are not a people of the past, we are a **people with a past** in North America, are present here today, and will continue to fight for our Mother and our rights into the future

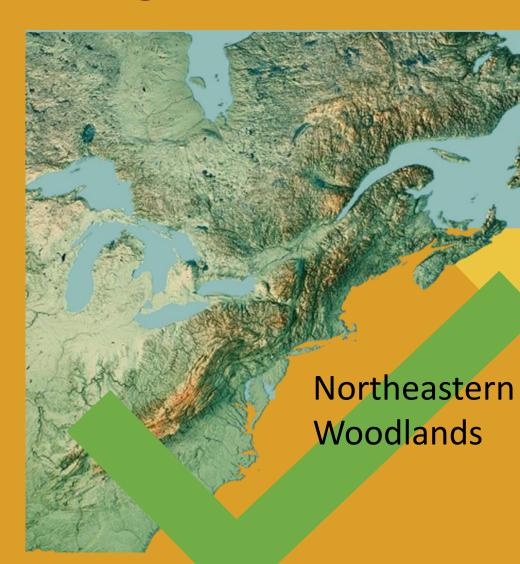
The Indigenous Perspective

- The Indigenous perspective has always been informed, influenced, and impacted by the land that we live on (and not own)
 - And the beings that we share the land with
 - The beings that are here to nurture us, support us, and teach us



The Perspectives I will be Sharing







About Me!

Aanii Kina Wiya Brad Howie nindizhinikaaz Hello Everyone I'm Brad Howie

Nbissing ndbendaagoz Nipissing First Nation is my community





Anishinaabe

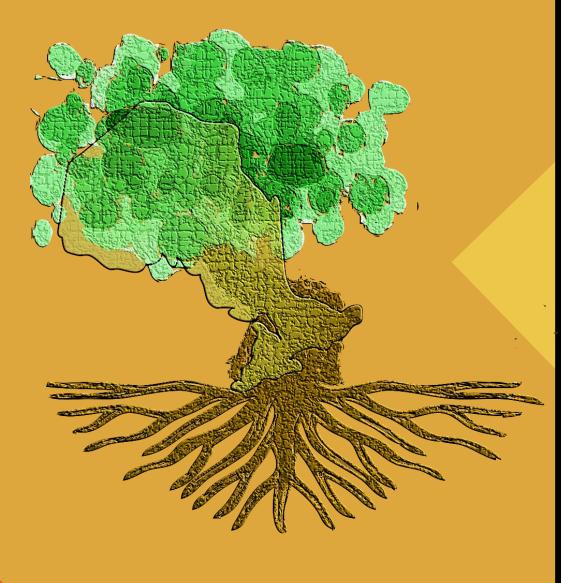
- The Anishinaabe (Ah-nish-in-ah-be) are a large group of related First Nations people living around the Great Lakes Region. They include the:
 - Ottawa
 - Potawatomi
 - Ojibway
 - Mississauga
 - Nipissing
 - Algonquin
- All of these Nations share a similar culture and language called Anishinaabemowin



The Thunderbird is a symbol of the Anishinabek Nation

The Perspectives I will be Sharing

- Lived experience
 - As an Anishinaabe
 - As a trained Western scientist
 - As an educator
 - As a person rooted in Ontario



Path of Our Learning Today

- How do we see Insects
- How do we see plants?
- How can we support pollinators?
- Telling this story from the Indigenous Anishinaabe perspective, from my perspective



Our Relationship with Insects

How do you see Insects?

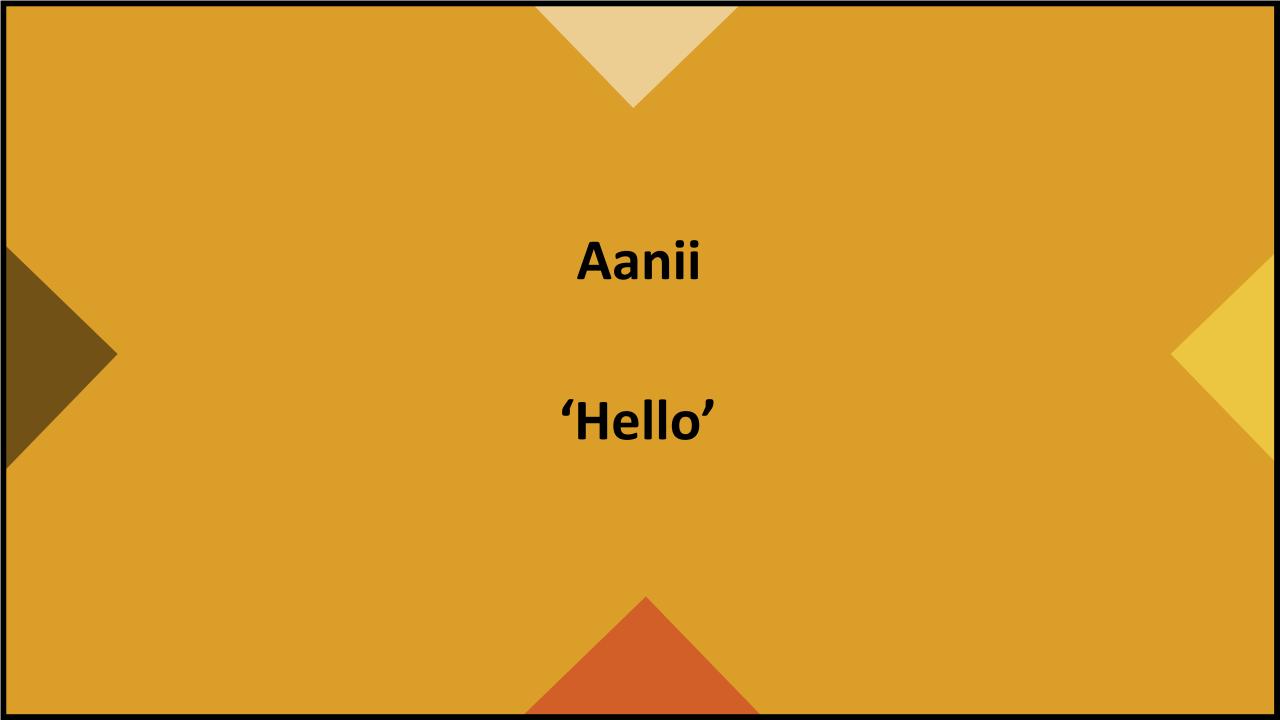


Insects

Manidoosh

'Little Spirit'





'I see your light'















Insects see our light, but do we see theirs?

How do you see Insects?

Perception of Insects

I wonder if it is more of a cultural perception of how we see insects

Our Relationship with the Plants that Insects Pollinate



If you like Insects you're going to have to learn about Plants

Milkweed Beetle

MilkWEED

Milkweed and the Monarch

Deep Relationship between Insects and Plants



Reciprocal

What does OUR Relationship have to do with it?



What does OUR Relationship have to do with it?









Perception of Weeds

I wonder if it is more of a cultural perception of how we see plants



How do you see weeds?

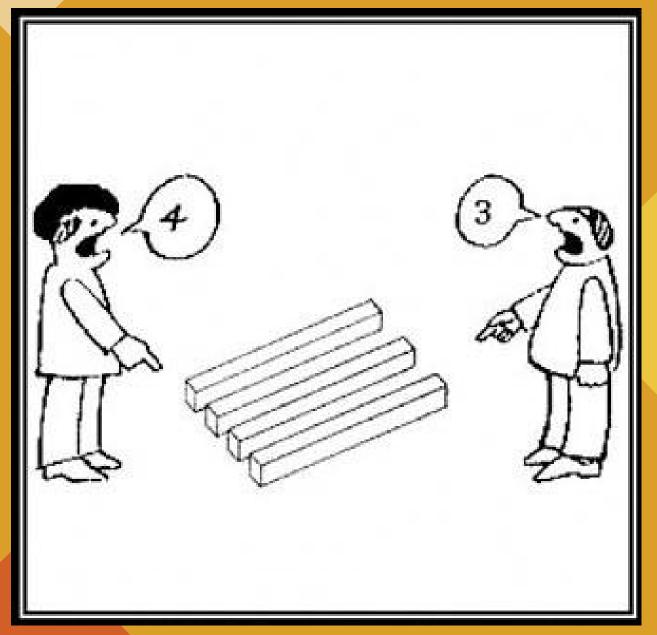
How We as Indigenous*** People See Plants?



Perception

When we reframe our perspective our relationship changes

So much of our interactions with the environment has to do with our relationships and our perspectives of beings in the environment





How you can I Help Pollinators?

• How can I/we help pollinators?



Beeing Friendly and Building CommUNITY Gardens



What is a 'Community' Garden?

- A Nursery for Diversity
 - A home for all beings
- Mimics Creators Gitigan
 - 'Hacking' into the local flora and fauna
 - Interconnected, strong community=strong relationships

Relationships!



Reciprocity

 Reciprocity is another common thread between many Indigenous Nations

- We see reciprocity everywhere in nature, this on-going gift exchange between organisms
 - This is also the thoughts behind our first treaty



Reciprocal



Introducing....

Our Community Partners!!!



Community Partner 1: Plants



Giiziso-Mashkikii Canada goldenrod (Solidago canadensis)



(Echinacea purpurea or Echinacea pallida)



Mooshkowaawis Bee balm (*Monarda didyma*)







- I'm coming more from that Ontario perspective
 - But this information can be applied to wherever you live, its all inspired and informed by the land and the beings on IT

The Benefits of Using 'Native' Plants

• What does a 'native' species really mean?



Ninwanzh Common Milkweed (Asclepias syriaca)

A Note on Native Really a Note on Science

- What do corn, beans, and squash, all have in common?
 - They are all enigmas to environmental scientists, albeit most likely without realization.
- It all has to do with how we define a 'native species', an Indigenous species, in the Northeastern Woodlands or anywhere else in North America.

A Note on Native Really a Note on Science

- In the new world they are defined as "those species that were growing prior to colonization or contact by Europeans".
- But then by definition this means that corn, beans, and squash, are all species native to the Northeastern Woodlands; yet none of these species originated here.



A Note on Native, Really a Note on Science





• What about this awesome little guy?

The Benefits of Using 'Native' Plants

- Throughout the Pollinator Partnership program you will be learning all about the benefits of native plants
- But from that perspective we are sharing today, plants (and native plants especially) are that start of CommUNITY gardens
 - They are the common thread and the base of reciprocity in our ecosystems and our community gardens



Ninwanzh Common Milkweed (Asclepias syriaca)

Brad's Favorite Herbaceous Flowers To Support Pollinators



Giiziso-Mashkikii Canada goldenrod (Solidago canadensis)



Ninwanzh Common Milkweed (Asclepias syriaca)



(Echinacea purpurea or Echinacea pallida)



Mooshkowaawis Bee balm (*Monarda didyma*)

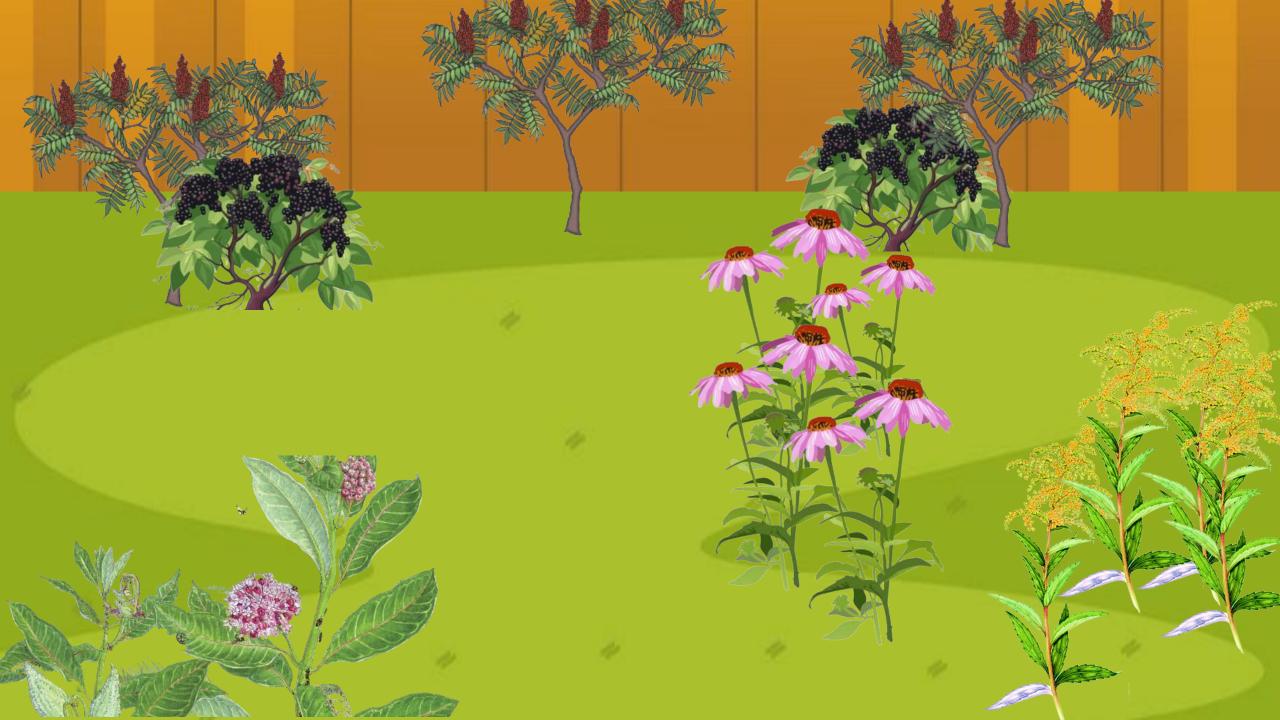


An Example of the Community in the CommUNITY Garden



Copyright Chris Helzer/The Nature Conservancy

Giiziso-Mashkikii Canada goldenrod (Solidago canadensis)



Community Partner 2: Insects



Oojii Hover fly species (Syphus sp)



Memengwaa Monarch (Danaus plexippus)

Hummingbird Clearwing (Hemaris thysbe)

How you can I Help Pollinators?

- Plant plant species that have been in your area for a very long time
 - Tap into those ancient relationships
 - Tap into those reciprocal relationships
 - Tap into that familiarity







Mishkiki

- In Anishinaabemowin our word for medicine is mishkiki.
- But when you translate this correctly it quite literally means strength of the earth
- And that's what medicine is to us, medicine is anything that comes from the Earth and is healing



How you can I Help Pollinators?

- Reconsider 'weeds'
- Add some clover to your lawn
 - No, its not native but neither is your grass...
 - Flowers provide nectar
 - Stays green in droughts
 - Tolerates foot traffic (just watch for honeybees)





White Clover (*Trifolium repens*)



Alternatives to Grass (Some other 'Weeds'

- Plants in the family
 Fabaceae have a special relationship with nitrogen fixing bacteria, fertilizing the soil!
- We even have CommUNITY with bacteria!



White Clover (Trifolium repens)



Birdsfoot Trefoil (*Lotus corniculatus*)





Ending Off for Now

 Reflect on what your relationship is with many of these non-human beings and ask yourself if this affects how you interact or treat these beings











7 Seeds of Understanding 7 Grandfather Teachings 7 Steps of Growth

Course Reflections

Along with the live or recorded online sessions for each session there will be some light course reflection work to be done at home.

You can complete this work as you go along or at the end of the course

1 Certificate



MANOOMIN LEARNING PROUDLY PRESENTS

THE FOLLOWING CERTIFICATE THAT ACKNOWLEDGES THE WORK

OF

CONGRATULATIONS ON COMPLETING THE

SEVEN SEEDS INDIGENOUS FOUND&TION COURSE

AWARDED ON_____DATE OF____20__

SIGNED

Seven Seeds Winter Cohort

Sessions are running bi-weekly from Feb 11th to May 6th

The first live session has already passed but you can catch up easily by watching the recording

I will be running this course again in the future



Questions? Discussion