

Bridging Identity With Passion Co-Producing Knowledge to Support Policy Change

How can two-eyed seeing co-create, co-produce, and co-design a story supporting both Indigenous and Western Knowledge to influence politicians for policy change?

Background

Elder Ross Schaeffer was born, raised, and resides in Kotzebue, Alaska where his way of life revolves around a subsistence lifestyle. This way of life is governed by cultural practices, climate change, and global warming. Together, we develop a story of Arctic sea ice decline through a two-eyed seeing approach introduced by Elder Mi'kmaq Albert Marshall. Two-eyed seeing recognizes Indigenous Knowledge and Western Knowledge as separate knowledge systems that, together co-create, co-produce, and co-design an understanding of systems to address issues around climate change, global warming, and its effects on cultural practices. As stewards of the land for millennia Western scientist have lessons to learn.

Data Set

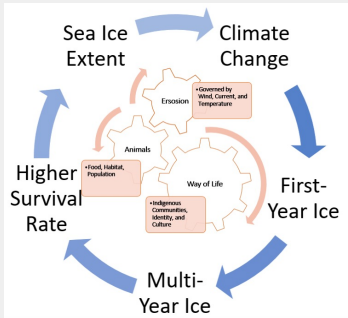


Figure 1. Ontologies Figure 2. Information came from Kotzebue, AK was analyzed from Project Jukebox in the Sea Ice in Northern Alaska project provided by Oral History 2013-25-32 Elder Ross Schaeffer interview, March 29th, 2016, Oral History 2013-25-36 Elder John Goodwin interview, May 17, 2017, Oral History 2013-25-36 Elder Pearl Goodwin interview, Date May 17, 2017, Oral History 2013-25-37 Elder Willie Goodwin Sr. interview, May 17, 2017, Oral History 2013-25-38 Elder Frank "Obbie" Greene, Elder Cyrus Harris, and Elder Joe Harris Sr. interview, May 17, 2017, Oral History 2013-25-32 Elder Cyrus Harris interview, March 31, 2016, and Oral History 2013-25-37 Elder Joe Harris Sr. interview, May 17, 2017, All available online at Northern Alaska Sea Ice Project Jukebox <https://www.alaska.gov/arc/seaice/>

Mixed Methods

1. Analyzed oral histories with Elders from project jukebox
2. Turned themes into thematic codes
3. With those thematic codes I produced a histogram for a visual
4. Built a relationship with Ross Schaeffer and, together we created a timeline of his observations
5. Compare observations to satellite sea ice data

Results



Figure 1. A map of Kotzebue, Alaska also known as Qikiqtaalukuyituk where Elder Ross Schaeffer, Elder John Goodwin, Elder Pearl Goodwin, Elder Willie Goodwin Jr., Elder Frank "Obbie" Greene, Elder Cyrus Harris, and Elder Joe Harris were born and raised.

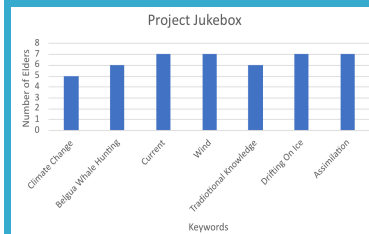


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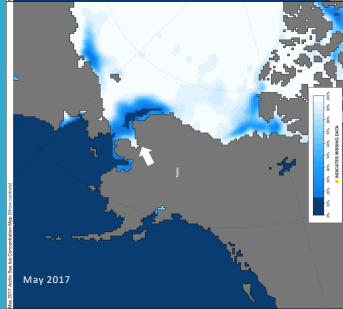
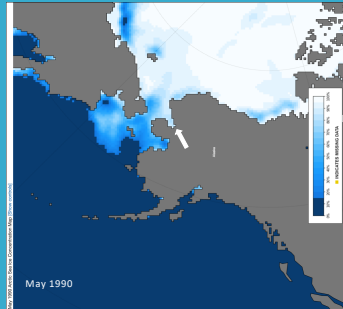


Figure 3. Image from the National Snow & Ice Center created with the Sea Ice Analysis Tool comparing the months of May in the years of 1990 and 2017

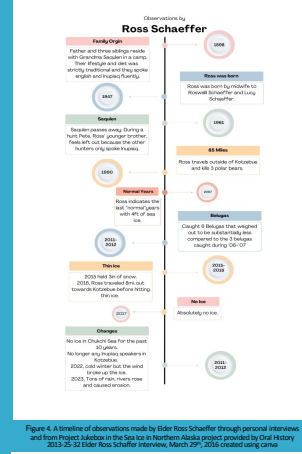


Figure 4. A timeline of observations made by Elder Ross Schaeffer through personal interviews and from Project Jukebox in the Sea Ice in Northern Alaska project provided by Oral History 2013-25-32 Elder Ross Schaeffer interview, March 29th, 2016, created using canva

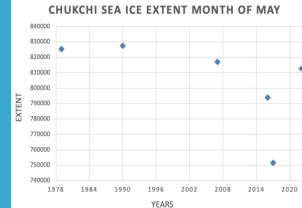


Figure 3. Chukchi Sea Ice Extent for the month of May between the years of 1990-2022 data provided by the Sea Ice Index

Discussion

The analysis of the interviews reveal Indigenous epistemologies and ontologies of Kotzebue, Alaska that create a foundation for future research to be grounded in Indigenous methodologies. In every interview, there is a deep connection with the land, animals, and environment a framework we now call, "One Health". Indigenous Knowledge is passed down, and overtime we can see daily observations of residents, and when documented creates Indigenous "qualitative" data that can be compared to Western qualitative/quantitative data. However, it is imperative that when working with Indigenous communities you are active in listening and allow Indigenous communities to lead their own research. My findings have revealed Elders in Kotzebue, Alaska hold Indigenous Knowledge that is crucial in understanding how the wind, current, and temperature have changed over time. A two-eyed seeing approach can empower Indigenous People by equitably engaging in research that pertains to their way of life and develop data that can help support policy makers too co-create policy change.

What respect means to Elder Ross Schaeffer, "Respect for all, everything. Respect means, everything the wind, animals, and nature. It is a powerful force."

Conclusions

Two-eyed seeing can identify anomalies supporting facts about climate change effects on Arctic Sea ice and Indigenous communities. Through this framework we can begin reconciliation by engaging with Indigenous communities in policy development. This means, Indigenous People are active in constructing, designing, and implementing policies that involve their way of life.

Two-eyed seeing allows Indigenous People to share their relationships with the natural world and the Indigenous Knowledge that has been passed down which can help society be better stewards of the land.

References

- <https://www.alaska.gov/arc/seaice/> Northern Alaska Sea Ice Project Jukebox
- Figure 2. Information came from Kotzebue, AK was analyzed from Project Jukebox in the Sea Ice in Northern Alaska project provided by Oral History 2013-25-32 Elder Ross Schaeffer interview, March 29th, 2016, Oral History 2013-25-36 Elder John Goodwin interview, May 17, 2017, Oral History 2013-25-36 Elder Pearl Goodwin interview, Date May 17, 2017, Oral History 2013-25-37 Elder Willie Goodwin Sr. interview, May 17, 2017, Oral History 2013-25-38 Elder Frank "Obbie" Greene interview, May 17, 2017, Oral History 2013-25-32 Elder Cyrus Harris interview, March 31, 2016, and Oral History 2013-25-37 Elder Joe Harris Sr. interview, May 17, 2017, All available online at Northern Alaska Sea Ice Project Jukebox <https://www.alaska.gov/arc/seaice/>
- Fetzner, F., K. Knowles, W. N. Meier, M. Savoie, and A. K. Windmgel. (2017). Sea Ice Index, Version 3 [Data Set]. Boulder, Colorado USA: National Snow and Ice Data Center. <https://doi.org/10.7926/H010729>. Date Accessed 11-06-2023.

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