https://polar-ice.org/focus-areas/polar-data-stories/where-are-those-microplastics-coming-from-and-going/

Where are those microplastics coming from and going?

Where do we find microplastics around Antarctica, what influences where we find them, and what does that mean for life around Antarctica?



1) Let's explore microplastics

Microplastics are pieces of plastic that have broken off of, or down from, plastic items that we use OR that have been purposefully made to be super small. Often mircoplastics end up in our waterways and oceans.

Scientists are asking a range of questions about microplastics in their research. For example, where do they come from? Where do they go? How many do we find? What kinds do we find in different places? Where do we find them?

Let's collect some data on microplastics to see what the scientists are using to answer their questions!

Explore the Data Story as your students would while we wait to start the webinar...





Data Stories Series - Microplastics, where are you?



Icebreaker poll

What aspects of microplastics do you have questions about?

- Where they come from?
- Where we find them around the world?
- How many there are in the world?
- What eats them thinking they are food?
- I have no idea, but I'm SO excited to learn!

Thank you for joining us



Dr. Alexis Janosik
Assistant Professor
Department of Biology, University of West
Florida



Kristin Hunter-Thomson
Data Stories Series Coordinator
Program Director, Teaching Instructor
Rutgers University

Tonight's agenda

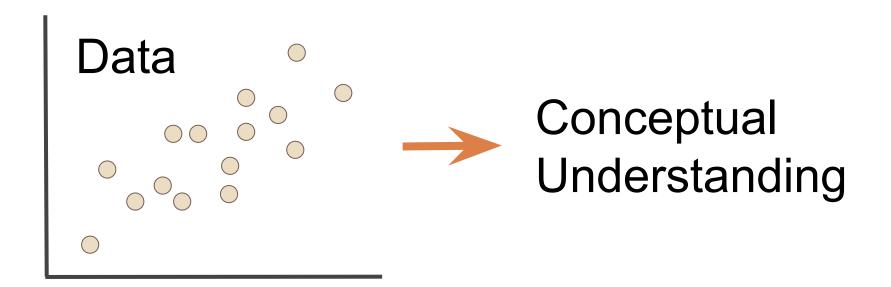
- 8:00 pm: Welcome and webinar logistics
- 8:10 pm: Getting to know Alexis & her work
- 8:45 pm: Brainstorming how to bring this into our classrooms
- 8:55 pm: Next steps and evaluation

What it is and what it isn't

Chance to explore data from the polar regions

Fully developed Lesson/Unit Plan to teach the concepts

Approach to this Data Story



Alexis & her science...

Where are those microplastics coming from and going?

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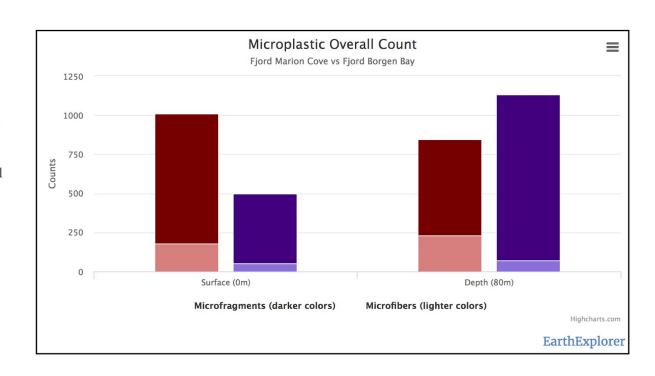


6) Pulling it all together

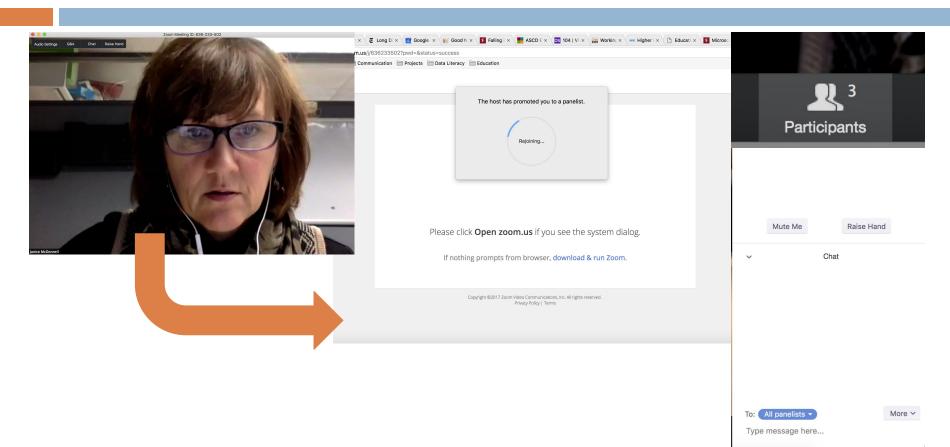
OK, let's look at both fjords together.

Where do we find microplastics overall in Fjord Borgen Bay in comparison to Fjord Marion Cove? Why do you think that pattern may occur?

What did you find surprising about where we find microplastics around the Western Antarctic Peninsula?



Promoting to Panelist



Use in classroom poll

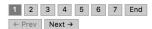
What are some ways that we can envision bringing this into our classrooms?

- Use as "Do Now"
- Build into existing lesson/unit
- Assign as extra credit
- Build their data skills
- Include in tests as application of content
- Other

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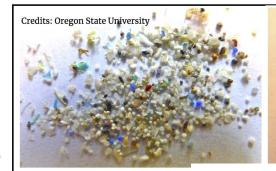


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What data skills are you using? What questions do you have? What do you like? What is frustrating?

Credits: NMFS

Polar Literacy Principles

#1 - The Arctic and Antarctic Regions are unique because of their location on Earth.

5 - The Poles are experiencing the effects of climate change at an accelerating rate.

Next steps

Open indefinitely

Recording of webinar posted by 6/8/18

"Answer recording" posted on 6/13/18

https://polar-ice.org/focus-areas/polar-data-stories/

Resources provided

Where are those microplastics coming from and going? (June 2018)

- Where are those microplastics coming from and going? Link to Data Story
- · Listen to Dr. Alexis Janosik interpret the data from this Data Story
- · Related Lessons:
 - #7: Micro-Plastic Investigation in An Educator's Guide to Marine Debris (by North American Marine Environment Protection Association (NAMEPA) and National Oceanic and Atmospheric Administration (NOAA))
 - · Mitigating Microplastics (by Marie Kowalski, Oregon Sea Grant / Oregon State University)
 - Marine Debris: Fishing for Microplastics in Your Home (by Julie Masura, University of Washington Tacoma)
- Related Data: (coming 6/8/18)
- · Related Resources:
 - Polar Literacy Principle # 1 The Arctic and Antarctic Regions are unique because of their location on Earth.
 - Polar Literacy Principle # 5 The Poles are experiencing the effects of climate change at an accelerating rate.

June 6, 2018 Teacher Webinar with Dr. Alexis Janosik – Resources (coming 6/8/18)

- · Zoom Recording
- Presentation slidedeck



Thank you for joining us!

