

Welcome to *PolarConnect*



Jellyfish in the Bering Sea

With PolarTREC Teacher Lee Teevan
& Team Researcher Mary Beth Decker

Thursday, 3 August 2017

Getting to Know Adobe Connect

Slides will be shown here

Exit presentation

Mute your speakers

Raise your hand

List of all participants

Follow the chat

Find out more about the presentation

Chat here



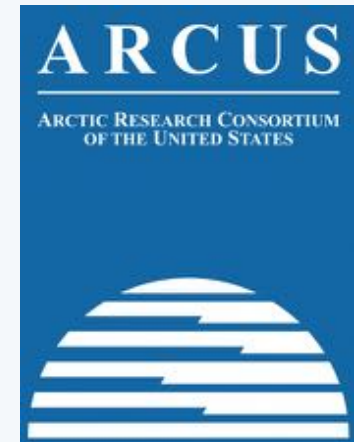
Participant Introductions

**In the Chat box, please introduce yourself
by typing in your:**

- ✓ Name
- ✓ School or Institution
- ✓ The number of students and adults participating with you in the same location

What is PolarTREC?

- Since 2004, the Arctic Research Consortium of the United States (ARCUS), a non-profit organization, has been administering the PolarTREC Program.
- PolarTREC is professional development for K-12 teachers. They are paired with researchers for 2-6 week research experiences in the polar regions.
- Over 150 teachers from around the United States have joined scientists in the Arctic and Antarctica to learn about science, the polar regions, and to share what they have learned with their students and communities.



25 Years of Connecting Arctic Research
www.arcus.org

Meet our Team!



Why is it important to study jellyfish?

- Recent major jellyfish blooms: what has caused these outbreaks?
- Some may have resulted from human activity: overfishing, species introduction and nutrient pollution.
- Some blooms may be natural occurrences

Northern Sea Nettle



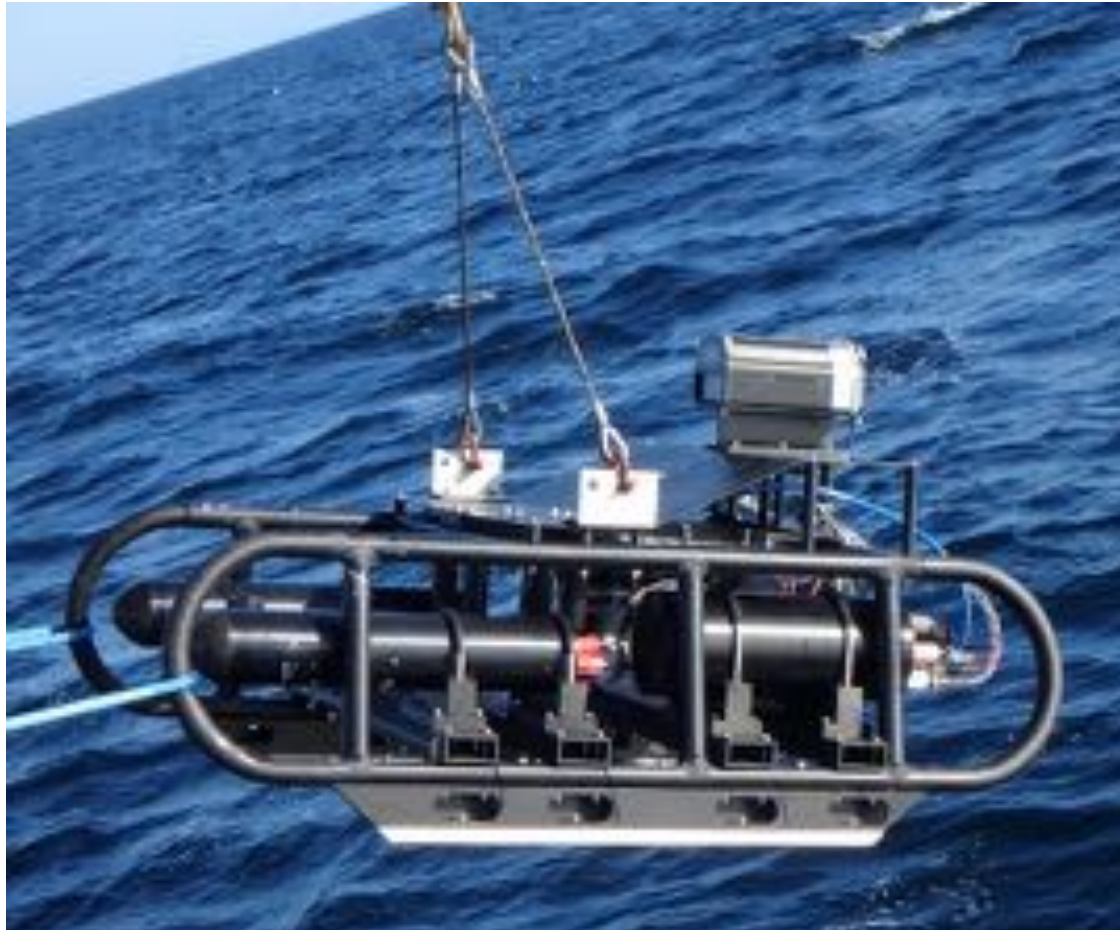
Facts:

- Bell up to 2' across
- 24 tentacles, up to 40" long
- Prey:
 - Fish eggs
 - Fish larvae
 - Zooplankton
 - Other jellies

Research Goals

- Understand population changes
- Measure rate of growth in a season
- Predict how jellyfish respond to changing ocean temperatures and fishing intensity

Using new technologies to study jellyfish

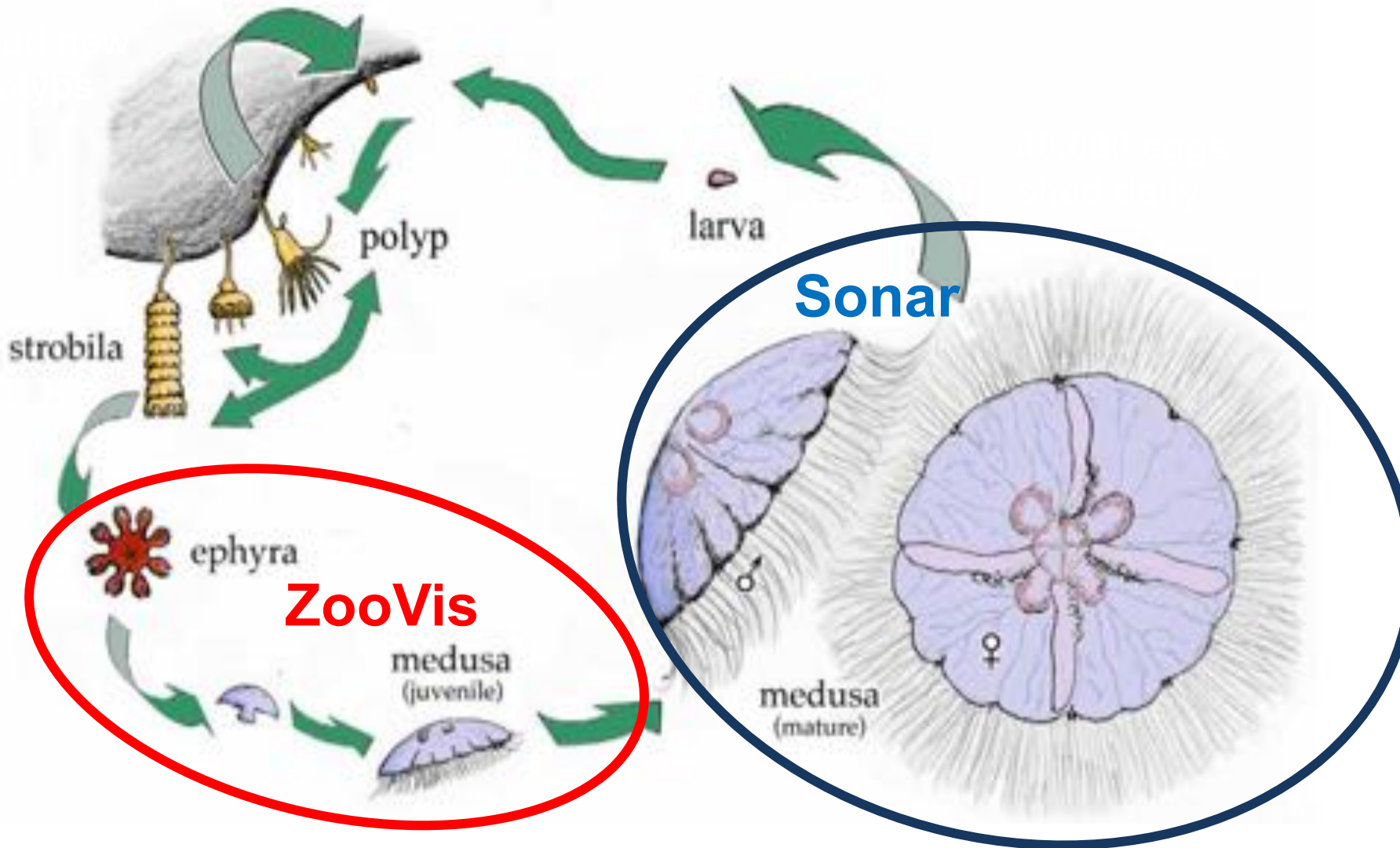


ZooVis: continuous observations of small jellyfish and plankton

Sonar: observations of large jellyfish and fish

*Plankton nets to catch jellyfish & plankton

Typical Jellyfish Life Cycle



Modified from a Mike Dawson image





Thysanoessa inermis
Hopcroft/NOAA/CoML



Hopcroft/NOAA

What's next?

- The preserved samples will be identified and counted.
- Using this information, scientists can estimate the abundance of each species at each station.
- These preserved samples will be compared to the ZooVis images to see how they match up.

Life Aboard the *Oceanus*



TV Room with never-ending zombie films playing.



Oceanus dining area



Wet Lab where sampling is done

Jellyfish in the Bering Sea

Follow us!

<https://www.polartrec.com/expeditions/jellyfish-in-the-bering-sea>



Questions

During the Presentation:

- Type your question in the text chat box

At the End of the Presentation, two options:

1. Type your question in the text chat box, or
 2. Raise your hand with the “hand button”.
- PolarTREC staff will call on you and activate your microphone.
 - Speak loud and clear, directly into the computer microphone or the phone to ask your question.

Join PolarTREC!

www.polartrec.com/about/join

Everyone can participate in different ways:

- **Follow Expeditions**
- **Participate in PolarConnect Events**
- **Join the Polar Education Email List**
- **Check out the great resources**
- **Become a PolarTREC Teacher or Researcher**
- **Become a member of ARCUS**

Thank You!

An archive of the event will be available shortly.

<http://www.polar-trec.com/polar-connect/archive>



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