Scientists began observing low oxygen levels on the Oregon Coast starting in the early 2000s. Observations and research have led scientists to determine Oregon now has a “hypoxia season” just like it has a fire season — and in 2021, the hypoxia season came far earlier than usual.

These hypoxia events can result in “dead zones” that occur as winds pick up in the spring and summer, driving cold water from the bottom of the ocean toward the surface. That contributes to blooms of phytoplankton, which later die and sink to the ocean floor. Bacteria consume oxygen while decomposing the plankton. “Place bound” marine creatures or those who cannot relocate quickly, like crabs, can't escape the low-oxygen zone and are left to die. This is the most likely hypothesis for why Crabbins wasn't seeing crabs in his crab pots!

Here are some news stories of dead zones on the Oregon coast:
The loss of oxygen in our oceans is just one of the ways rising carbon dioxide levels in the atmosphere reveals itself. Without a serious reduction in carbon dioxide, scientists predict the ocean will eventually become a hot, sour, and breathless place.

That sounds depressing.

**So what can we do?**

1. Collect data. We can't fight something we don't understand.
2. Develop new technology.
3. Work together to reduce carbon dioxide emissions worldwide.
Activity: Taking positive climate action!

We've learned a lot about the challenges that we encounter on the Oregon Coast.

This is just ONE story and ONE of the ways climate change affects communities across the world. Choose one of the following prompts:

1. Search online for a positive climate story that shares how a community has overcome the challenges they face due to climate change.

2. Get creative and come up with an idea for a product, company, phone application, etc. with the potential to help combat global ocean deoxygenation.

3. Use the information you've gathered here and think about your own local community. Think of a climate driven challenge that faces the community you live in and try to come up with a solution / experiments / product that would help your community combat climate change.