

Lauren Frisch

The CO₂ Problem



When carbon dioxide in the atmosphere increases, carbon dioxide in the ocean increases as well.

True or False?

CO_2 in the oceans



Impact of increasing CO₂

CO₂Time Series in the North Pacific Ocean



Ocean acidification is occurring more rapidly in Alaska than other places in the US.

True or False

ocean acidification is not uniform

What happens to shells when pH drops?



pteropods

Shells - calcium carbonate

CO₂ in the oceans



All species will be impacted in the same way by ocean acidification.

True or False?

Species will be impacted differently



Implications for Fisheries



(ADFG, 2014)

Public Perceptions of Ocean Acidification

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romptions.	Section I: Fishing Profile	action II: Threats to O	ean Health					
The	Thank you for agreeing to participate in this survey. We will begin by asking you a few questions about your involvement or agreeing to participate in this survey. We will begin by asking you a few questions about your	Now we will ask you a tew ques	tions about ocea ree with.	n pollution and threa	the try Almeters		E.F.	
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19 ⁴	L No	Chemical waste	0	0	0	0	0	
ant.	If yes, how many people does this activity support	Carbon dioxide	0		0	0	0	
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Affiliations with Alaska's Fishing Industry

- 12%: family has commercial fishermen
- 39%: family has subsistence fishermen
- 28%: rely on AK seafood 12 months/year
- Reliance highest in summer months

Alaskans have a widespread basic understanding of OA



Awareness in Alaska is 3x higher than the rest of the US

Majority recognize influence of carbon dioxide and human activity



Limited understanding of how natural variations contribute to OA



Alaskans have difficulty evaluating OA as an immediate risk

Low perceptions of specific risk

- Lack of significant concern in fishing industry
- Few perceive economic implications for fisheries



Thanks!

Interest in being interviewed? Email me at Lcfrisch@alaska.edu

