ALASKA FISHERIES DEVELOPMENT FOUNDATION

Technology Innovation & AFDF's Startup Accelerator

November 2022

Our Mission & Team

We work with startups and strategic partners to accelerate innovative technologies for the benefit of Alaska's marine industries, coastal communities, and ocean ecosystems.

The AFDF Startup Accelerator was founded as the Alaska Ocean Cluster by the Bering Sea Fishermen's Association.

In 2022, BSFA transferred the Alaska Ocean Cluster to the nonprofit Alaska Fisheries Development Foundation (AFDF) and rebranded the program as the AFDF Startup Accelerator.

Team
Julie Decker
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Advisors & Mentors
Karen Gillis
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Taylor Holshouser
Clyde Hutchinson
Larsen Mettler
Matt Dittrich
Kevin Payne
Dan Lesh
Keith Singleton
Mike Cusack
among others!

AFDF
Alaska Fisheries Development Foundation, Inc.

BSFA
BERING SEA FISHERMEN'S ASSOCIATION

AOC
ALASKA OCEAN CLUSTER

Our Startups

Blue Dot Kitchen

PolArctic LLC

SAILDRONE

beadedstream

NET YOUR PROBLEM

ivaldi
SEND FILES, NOT PARTS

noble ocean farms

FORAGED & FOUND

Blue Ocean Gear

SafetyNet TECHNOLOGIES

AlaSkins

Our Partners

SafetyNet Technologies

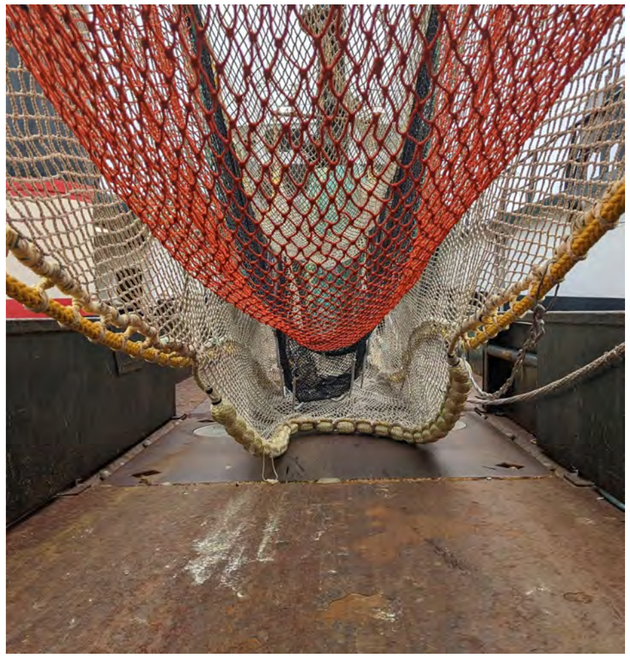
Salmon Bycatch Reduction Pilot

Goal: Pilot project to test efficacy of bycatch reduction lights

Status: The project is in its final stage of data analysis and report development.

We tested Pisces light aboard three Alaska pollock trawlers over the 2022 summer. Data was gathered during 55 trips with more than 35 million pounds of pollock landed.

Partners include Coastal Villages Region Fund, Denali Commission, and Alaska Ocean Cluster.



SafetyNet Technologies

Atlantic Scallop Bycatch Reduction Study

Study conducted by the Virginia Institute of Marine Science focused on testing Pisces

- Conducted in an area with higher abundance of Windowpane flounder
- No effect of lights was evident
- There was some indication of an effect of the positioning of the square mesh panel
- Placement at the rear appeared to reduce bycatch

Catchcam was also deployed and aided in understanding of interaction between bycatch species and Pisces lights

Blue Ocean Gear

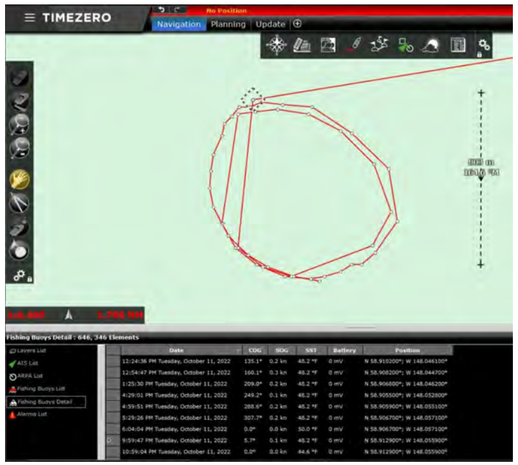
Alaskan Halibut and Black Cod

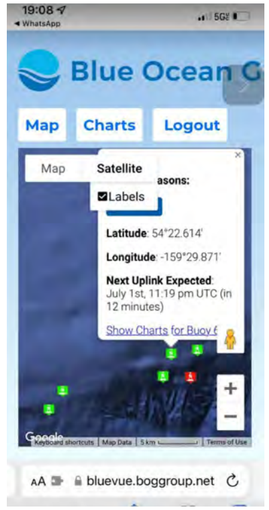
Goal: Test Smart Buoys in the Alaska longline halibut and black cod fisheries as an alternative or complement to AIS buoys

Status: Michael Offerman purchased 6 buoys which were deployed from April - November across the Gulf of Alaska. Customer was able to integrate into existing TimeZero plotter.

Results:

- Better durability than AIS
- Legal for use
- Offered ability to track gear in proprietary locations
- Invaluable in challenging weather for locating gear
- Ability to schedule hauls around submerged gear





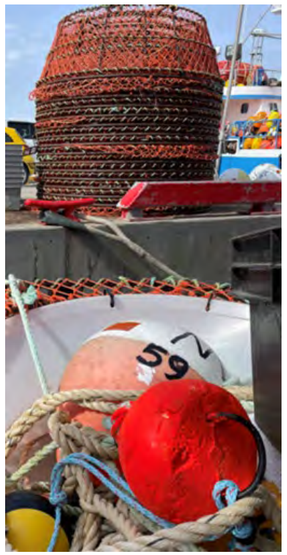
Blue Ocean Gear

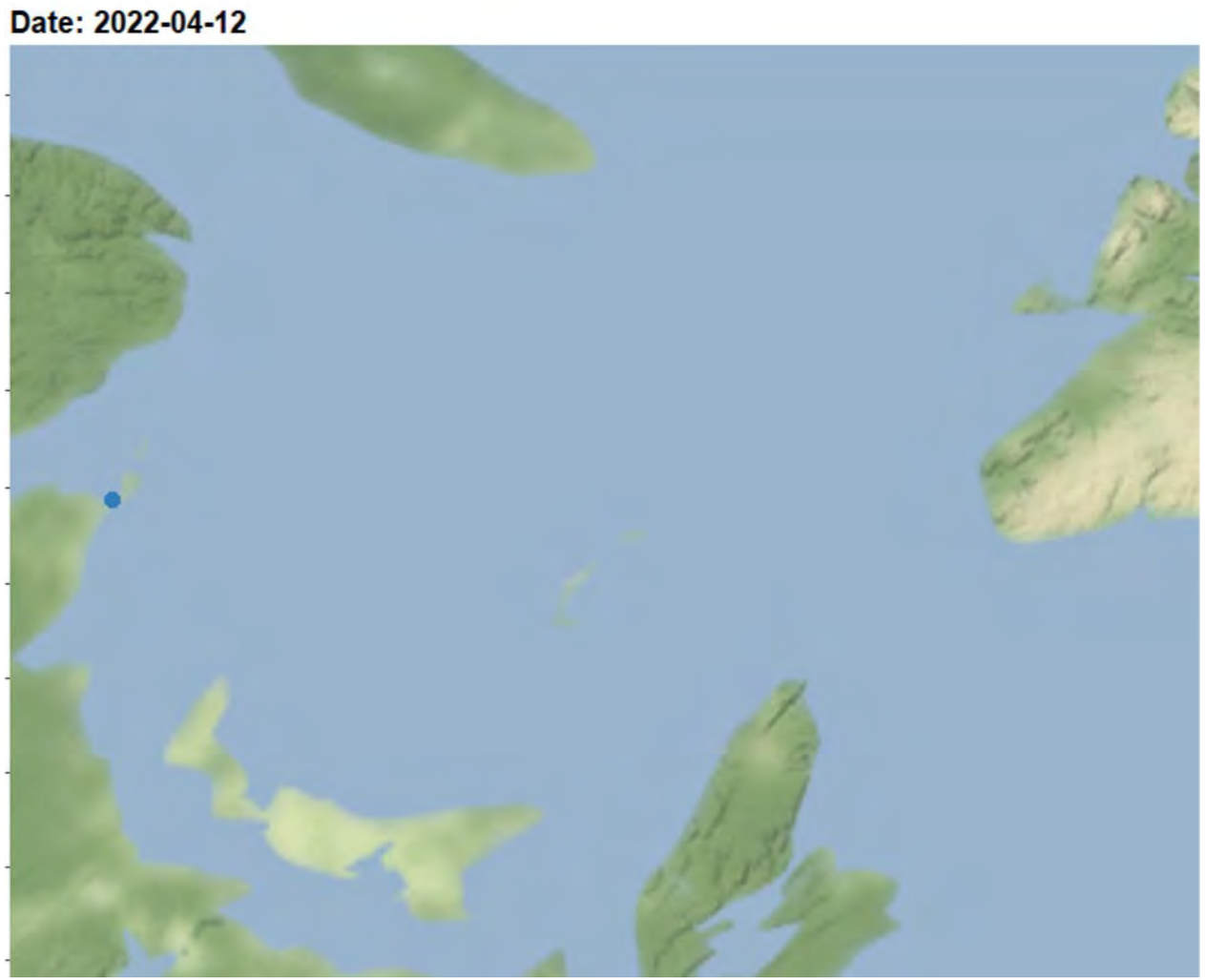
Canadian Snow Crab

Goal: Deploy Smart Buoys across customer's entire fleet of 150 snow crab pots

Status: Successful deployment during 2022 snow crab season in the Gulf of St. Lawrence. After several days of recovering gear in the fog *"like it was a sunny day"*, customer declared the purchase his "*best investment ever in the fishery*".

Partners: DFO/Atlantic Fisheries Fund, University of Southern Mississippi Marine Resource Center





PolArctic

Bering Sea Ice Forecasting

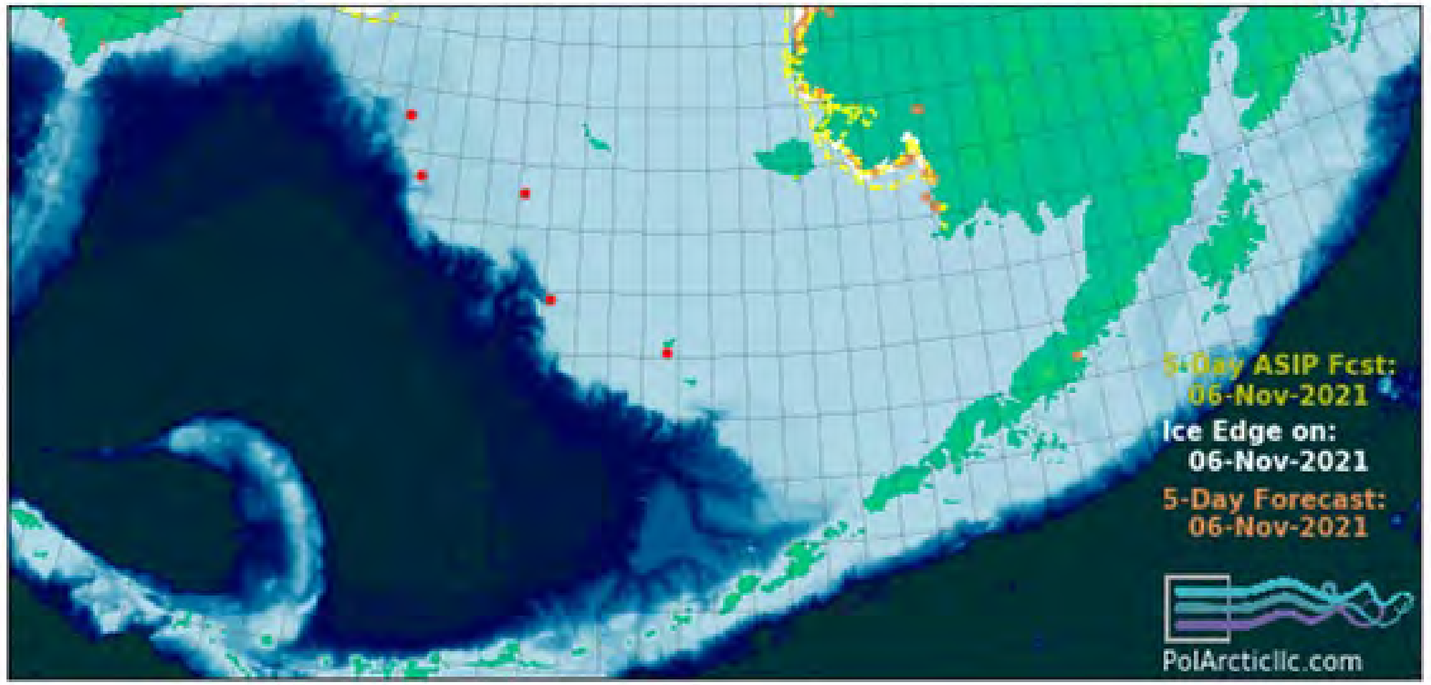
PolArctic LLC

Goal: Develop and use sea ice forecast model with Alaska commercial fishermen.

Status: Phase one is complete with phase two under development.

PolArctic built a custom model to improve understanding of sea ice in the Bering Sea

Results: Improved ability to forecast ice conditions five, ten and fifteen days out.



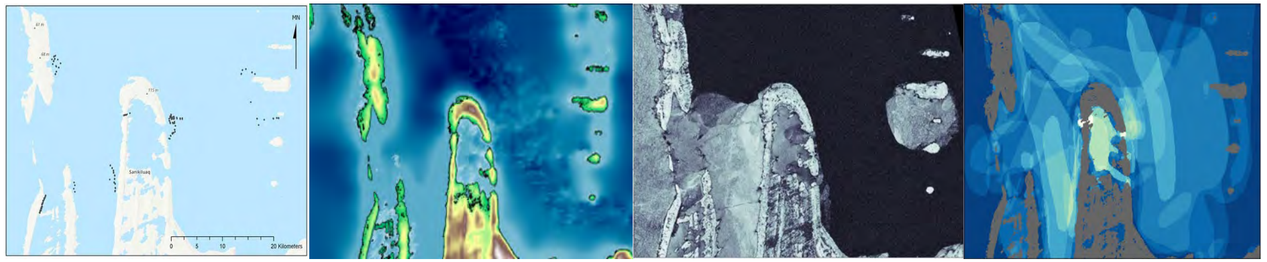
PolArctic

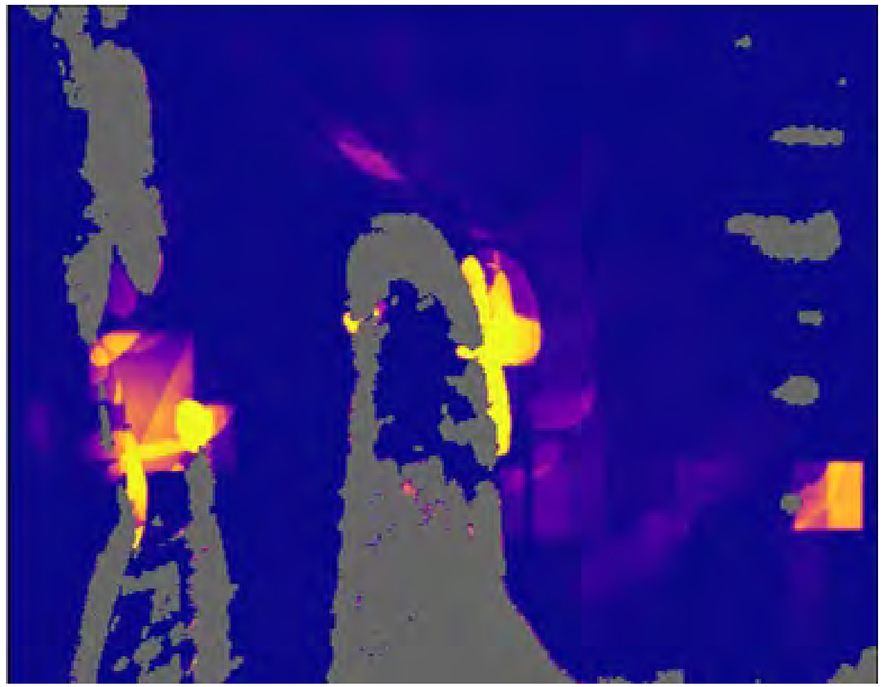
Canadian Fishery Development

Goal: Find commercially important species for identification of a new commercial inshore fishery

Status: Phase One is complete with Phase Two under negotiation.

This pilot project created an AI model to identify new inshore fishery locations for the Arctic community of Sanikiluaq, Canada. Fifty-six species locations, environmental conditions, and scientific data were aggregated to train the model with results were validated by the community.





Questions

1. Where is Alaska a clear leader in global fisheries? What areas should we focus on for improvement?

2. What's your dream project to work on? What's the main constraint preventing you from working on this project?

3. How can the audience support you? What do you need from us to make your efforts successful?

ALASKA FISHERIES DEVELOPMENT FOUNDATION

Pacific Marine Expo

November 2022

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