Skipper Science Presentation to House Fisheries Committee

Lindsey Bloom, SalmonState

Christopher Tran, Aleut Community of St Paul Island

March 22, 2022

What is SkipperScience?

- SS is a Partnership amongst commercial fishermen and scientific community that enables commercial fishermen to observe and log ecological data and provide it to researchers and managers in a systemized way.
- Solution to filling knowledge gaps about Alaska fisheries and the ecosystems they depend on.
- 31,000 commercial fishermen (skippers and crew) 63% Alaskan residents.
- There are 8,594 boats under 100 ft. Each boat is a potential research platform for ecosystem information!

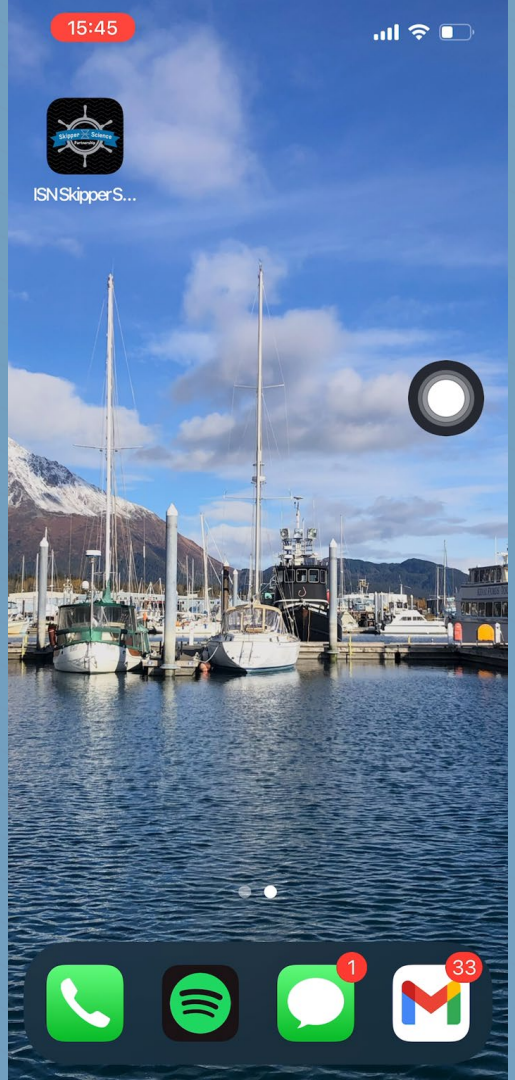
NORTHERN LATITUDES PARTNERSHIPS
RESILIENCE ACROSS BORDERS

abs

SALMON HABITAT INFORMATION PROGRAM

ALEUT COMMUNITY OF ST. PAUL
TRIBAL GOVERNMENT

AOOS
Alaska Ocean Observing System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Meet the Skipper Science (SS) Team

Salmon Habitat Information Program (SHIP)

- Lindsey Bloom
- Sommers Cole

Aleut Community of Saint Paul Island (ACSPI)

- Lauren Divine
- Chris Tran
- Bruce Robison

Aleutian Bering Sea Initiative (ABSI) and Northern Latitudes Partnerships (NLP)

- Aaron Poe
- Hannah-Marie Garcia

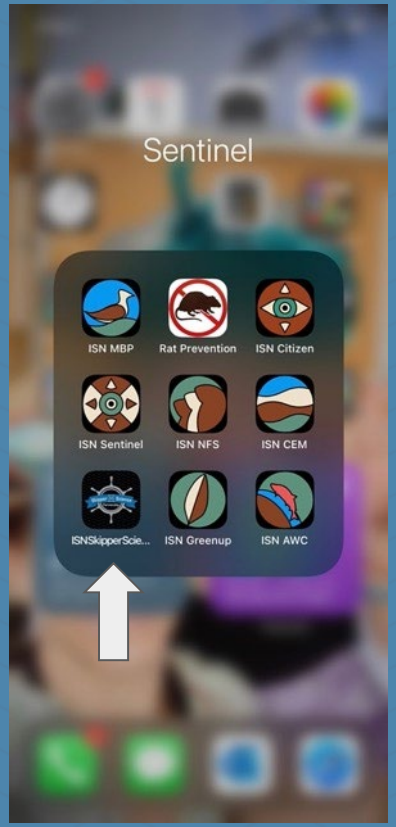
Alaska Ocean Observing Systems (AOOS)

- Darcy Dugan
- Thomas Farrugia

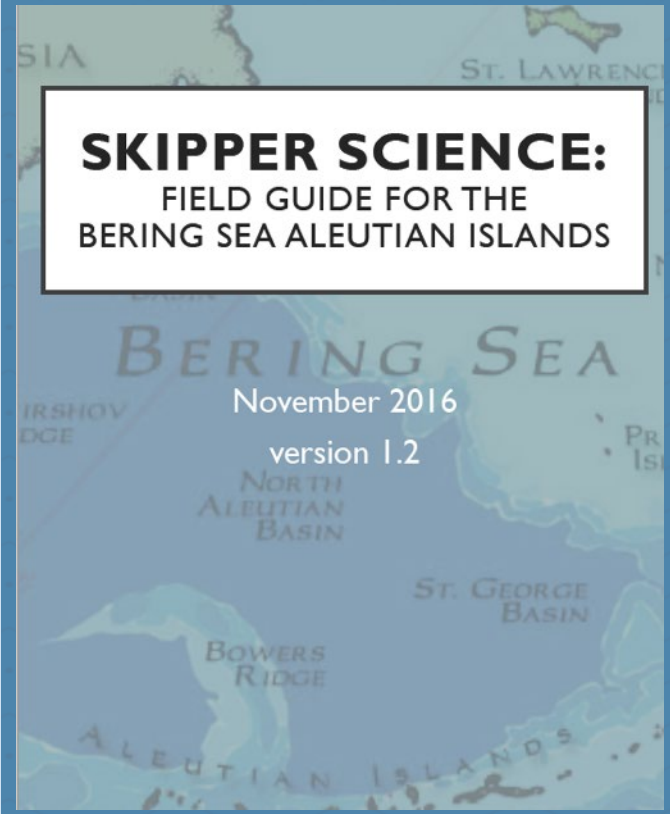
Background and History

Expansion of the **Indigenous Sentinels Network (ISN)** which has been operating for over 20 years in remote AK communities

- Online database and apps for non-scientists in remote locations to systematically record and share environmental and biological data
- Strength: Rigorous data standards and protocols; password protected; no internet or data connections needed
- Strength: Designed to be flexible and expandable to accommodate the diverse needs of users; able to be adapted based on feedback from users



Background and History



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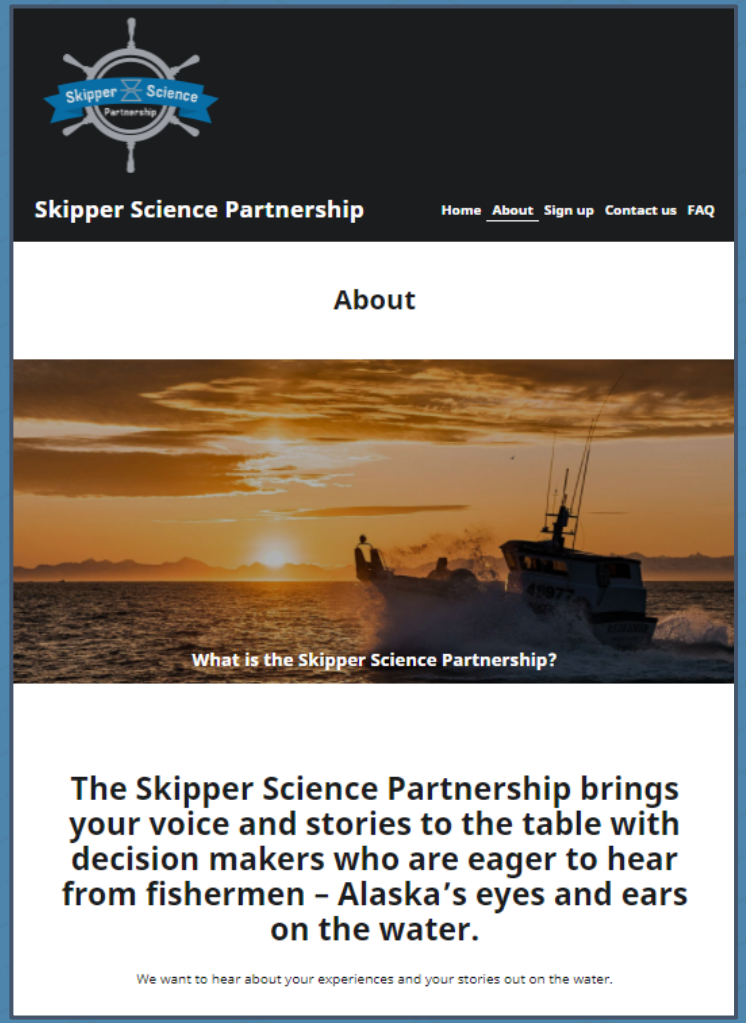
HARVESTED SPECIES

Observations of Interest
- Unusual looking catch
- Deeper or shallower than usual catch
- Unusual location of catch (far north, south outside of distribution range)

What to Include in your Observation:
- Date/Time
- Latitude/ Longitude
- Photo(s)
- Description of the Observation-Provide a much detail as possibl

Some Questions to answ in your Comment Box:
- Was the catch deeper shallower than expected?
- Was the catch farther north or south than th species should be?
- Did the catch occur where you have never seen the species befor
- What made this catch unusual?

2021 Pilot Program Partnerships and Support



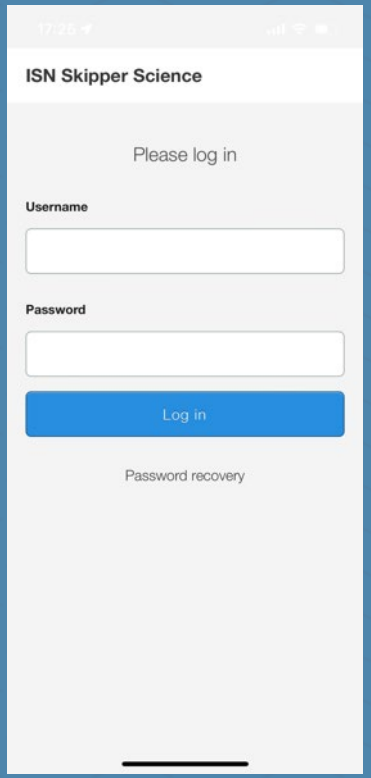
PILOT: 2021 Fishing Season

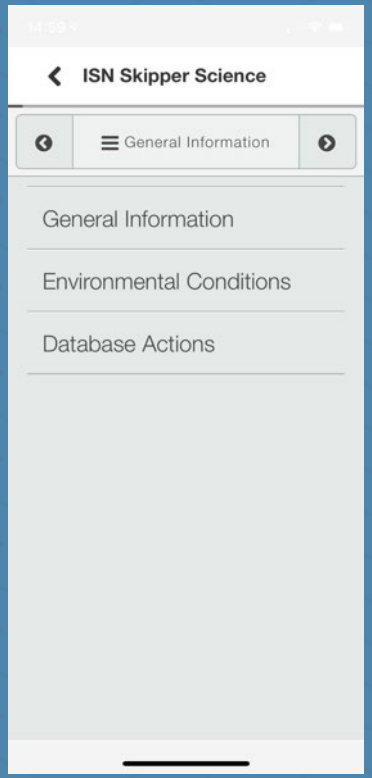
Objectives:

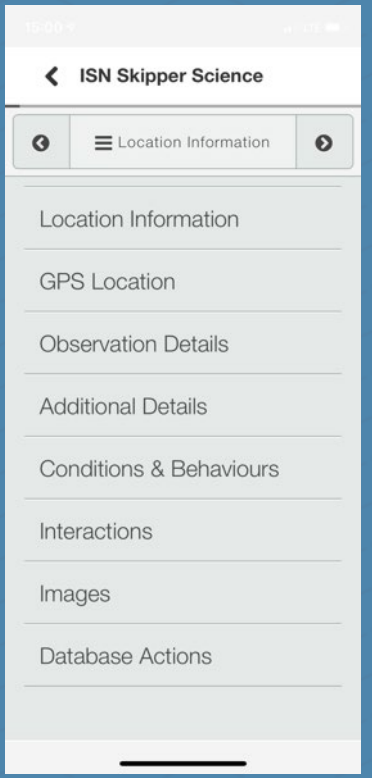
- Test the viability of a structured citizen science framework that enables data collection by fishing-specific users
- 2021 Goal: Document general observations and climatic changes affecting fisheries
- Expand to Southeast, Prince William Sound, Bristol Bay, and other Alaska communities/ regions

Methods

Smartphone “app” and web technology to facilitate collection of data and observations







Methods

Phased Implementation:

Phase 1 - Outreach

- Recruitment via emails, phone calls, social media, harbor/dockside posters, and word of mouth
- Alaska Fisheries Report underwriting, traditional news stories
- *Incentive via giveaway opportunity to win $200 gift card*

Phase 2 - Sign Ups and Observations

- Skipper Science online sign up form
- Consistent individualized support and technical assistance with data collection throughout the summer

Phase 3 - Analysis and Report Write Up

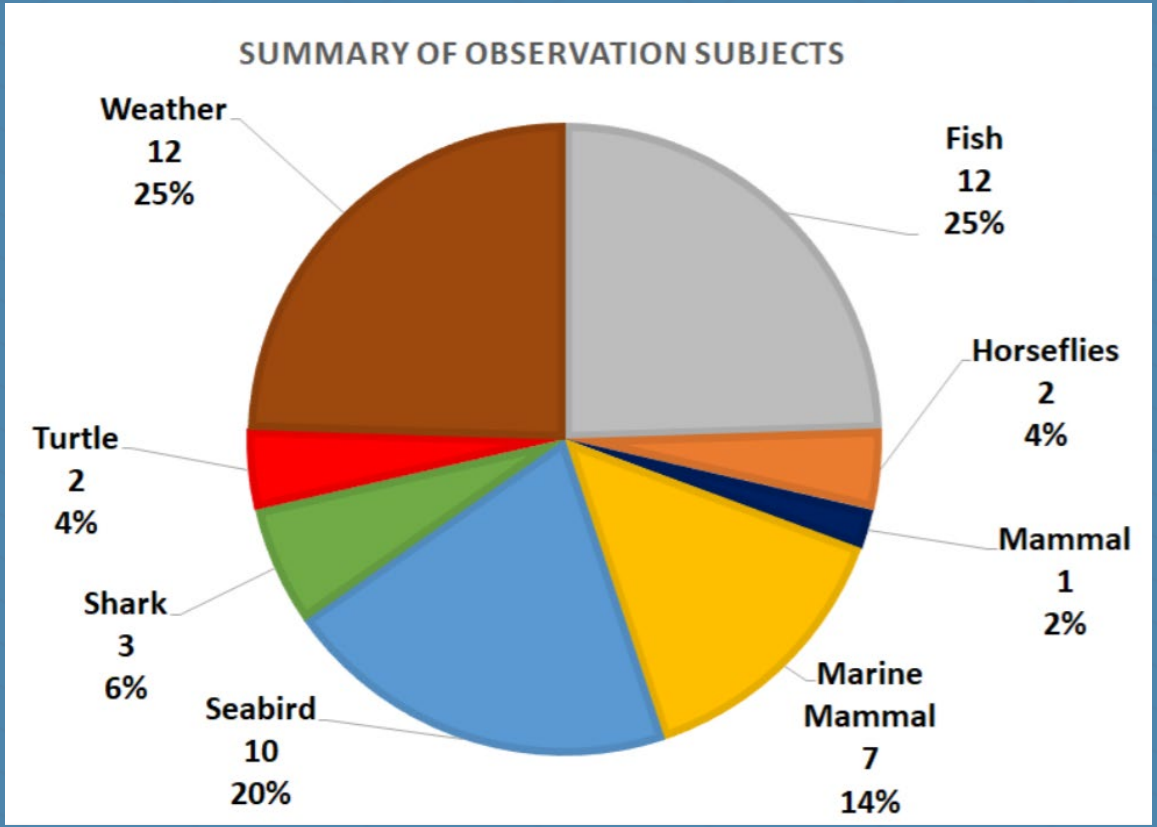
- Reminders to participants via phone calls, emails, and text messages to log observations
- Concluded official pilot season: *September 7, 2021*
- Final report published

2021 Project Highlights

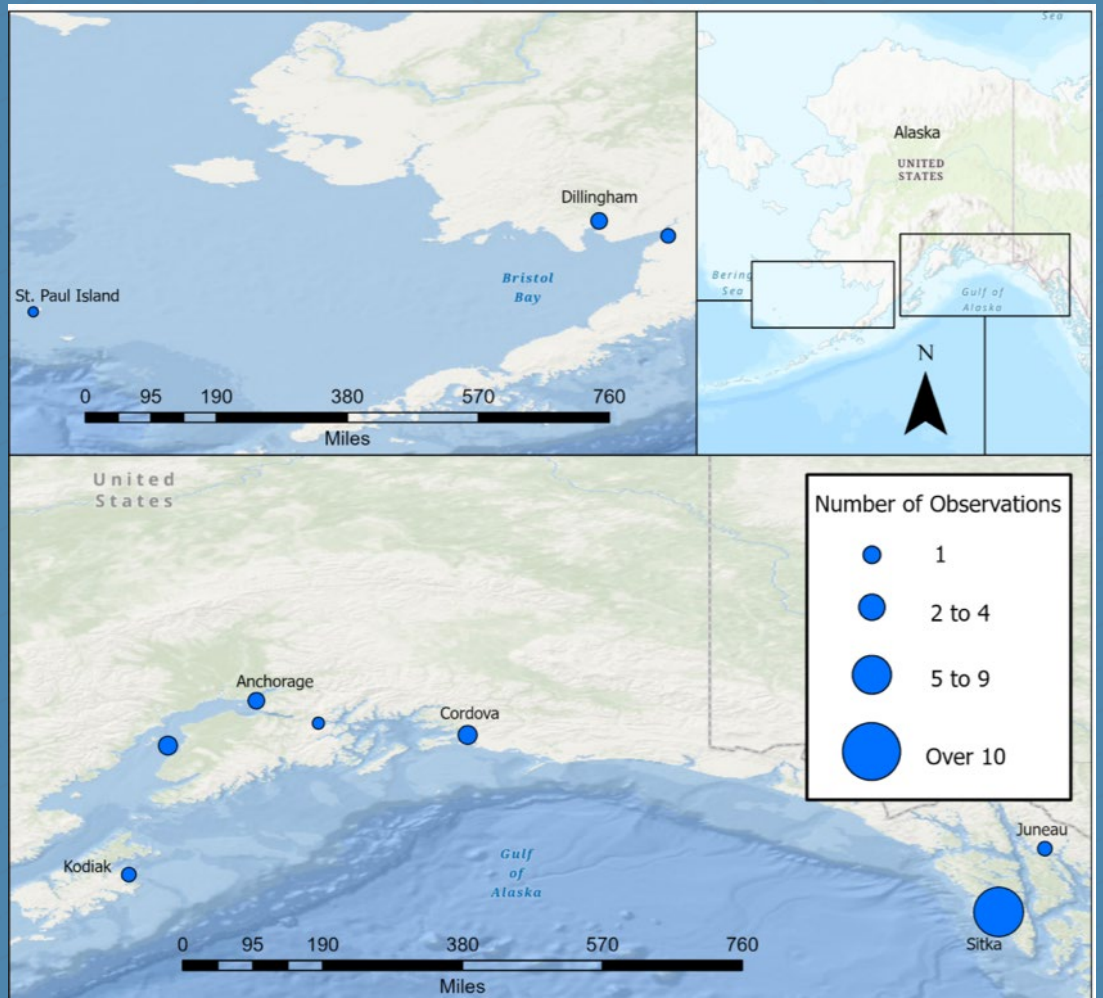
- 100 fishermen signed up for the program
- 19 Alaska-based fishing trade organizations supported/ endorsed the program
- 49 data entries completed in the SkipperScience app by participants
- 1,697 fishermen provided their opinions on climate change via phone interviews

2021 Project Highlights

Sample Observations and Results



Number and locations of observations logged during the 2021 Pilot



2021 Project Highlights
Lessons Learned and Recommendations

- Increase personal tech support for recruitment and personalized communication
- Encourage internal GPS location use or make this a required input in app
- Create more tutorial videos on logging observations, entering data

Future of Skipper Science

Next Steps:

- Expand SS program by increasing # of participants and frequency of participation
- Establish additional/long-term funding to secure for fishermen compensation
- Expand and solidify partnerships with NOAA, ADF&G, and other scientific bodies

Support from the Alaska Legislature will support continued success of SkipperScience!