



Coastal Voices

Community update



March 2018



Project Background

The *Coastal Voices* project brings together Indigenous leaders, artists, and scientists in British Columbia and Alaska to research and discuss the profound transformations triggered by the recovery of sea otters. Through the lens of traditional knowledge and western science, our goal is to share information and better equip coastal communities with strategies to navigate the ecological and socio-economic changes that come with sea otter recovery.

Project supported by:

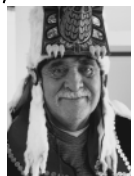


The core project team is composed of a Steering Committee of Hereditary Chiefs and traditional knowledge holders, cultural advisors, and a Simon Fraser University researcher team.

Steering Committee

Cultural Advisors

SFU Research Team



Wigvilhba Wakas
Bella Bella
Heiltsuk



Gitkinjuas
Skidegate
Haida



Hupinyuk
Port Alberni
Nuu-chah-nulth



Skil-Hillans
Old Masset
Haida



Nick Tanape Sr
Nanwalek
Supiaq Alutiiq



Wii-tsts-koom
Toquaht Bay
Nuu-chah-nulth



Geetla
Bella Bella
Heiltsuk



Kii'iljuus
Vancouver
Haida



Anne Salomon
Vancouver
SFU



Jenn Burt
Vancouver
SFU



Laurie Wood
Burnaby
SFU

Project Update: Our Story Room has Expanded!

In 2017, the *Coastal Voices* team began to process all the rich knowledge and information that was shared with us during our visits to the traditional territory of the Kyuquot/Checlesht First Nation and the Supiaq/Alutiiq communities of Port Graham and Nanwalek in south central Alaska. We finished transcribing video interviews and created a new series of short interview "video clips" to add to the **Story Room** on our website (www.coastalvoices.net). In this online Story Room, you can browse through our collection of videos that highlight how Indigenous communities in B.C. and Alaska managed their relationship with sea otters in the past, the challenges presented by sea otters today, and how these communities are planning for the future.



STORY ROOM



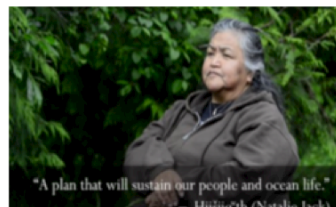
"When the schooners came around, they took our people hunting with them."
- Sasp'nti (Hilda Hanson)



"We give it some water, one last time, out of respect to the animal for having them there to feed us."
- Adrian Tanape



"What, you guys don't hunt otter down there?"
- Tim Malchoff



"A plan that will sustain our people and ocean life."
- Hisiu'ih (Natalie Jack)

LEARNING FROM THE PAST

- ▶ Ancient Use & Management of Sea Otters
- ▶ Traditional Governance, Principles & Practices

UNDERSTANDING OUR PRESENT

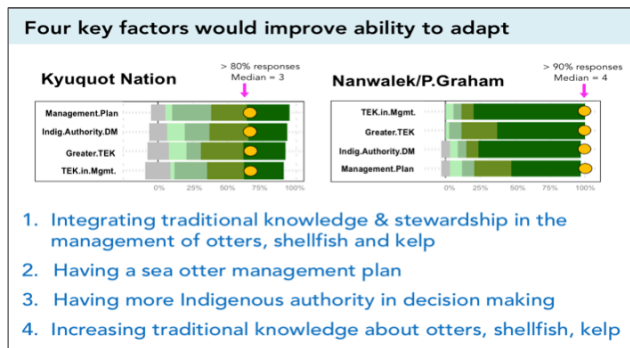
- ▶ Sea Otters Affect Food, Culture, & Ecosystems
- ▶ Conflicting Values & Lack of Power

VISIONING OUR FUTURE

- ▶ Bridge Science & Indigenous Knowledge
- ▶ Sharing Power & Authority
- ▶ Integrate Traditional Stewardship in Management

Adapting to Living with Sea Otters – What are we Learning?

In 2017, Coastal Voices researcher, Jenn Burt has been exploring the preliminary results of the survey we conducted during our community visits: *“Adapting to Sea Otters and Changing Access to Shellfish and Fish.”* In the survey, we asked 25 questions about what factors people felt improved or reduced their ability to adapt to having sea otters in their territory. The data are beginning to reveal some exciting patterns. For example, there are four key factors that people in both communities ranked as the MOST important for improving people’s ability to co-exist with sea otters (see below). We will complete the analysis of this survey in 2018 and share these findings on our web site! We hope these results will provide insight on strategies to facilitate the co-existence of humans and sea otters.



“The greater knowledge we have of traditional values and cultural roles helps us be able to adapt to change.”

Pat Norman, Chief of Port Graham

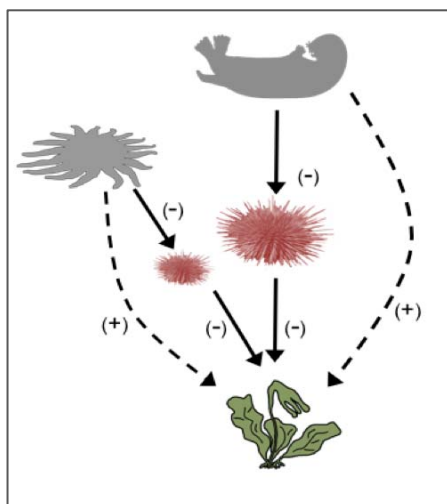


“[A management plan for sea otters] has got to be co-created, not created for us.”

Sperry Ash, Regional Language Coordinator

New Ecosystem Research Related to Sea Otters and Kelp Forests

Since 2016, several new studies have been published from members of Anne Salomon’s research lab. A study on the interactions between sea otters and abalone (lead by Lynn Lee) showed that although **sea otter recovery leads to 16 times lower abalone abundance**, a small but likely persistent number of abalone avoid otters’ paws by hiding in crevices and living at deeper depths. Another study lead by Kira Krumhansl showed that small scale harvest of giant kelp on the central coast of B.C. has minimal impacts on kelp recovery, kelp survival, and reef fish numbers, but that kelp recovery is negatively impacted by warm water temperatures. These results suggest that although the **harvest of giant kelp is incredibly sustainable**, negative effects of kelp harvest might arise with a warming climate.



Another study on the central coast of B.C. lead by Christine Stevenson found that **sea otters strongly influence urchin size** – because they eat mostly big urchins. This study also showed that urchin SIZE MATTERS when it comes to kelp forest recovery following sea otter recovery– because smaller urchins eat a lot less kelp than large urchins. Jenn Burt just completed a study that builds on these results, showing that both **sea otters AND sunflower sea stars specialize in eating different sized urchins**. The study shows that the loss of sunflower sea stars (due to disease) corresponded to a ‘boom’ in smaller-sized urchins – too small for sea otters to eat, but large enough to negatively influence kelp abundance. Both of these studies highlight how quickly sea urchin populations change following sea otter recovery. Following sea otter recovery to monitoring sites on Calvert Island in 2013, the number of large urchins declined 89-98% within 1 year.

Finally, multiple projects are currently underway that focus on traditional **First Nations clam gardens as adaptation strategies that can enhance food security amid climate change and sea otter recovery**: one study examines the environmental factors that make these areas highly productive for clams (lead by Natasha Salter), and another study is exploring how ancient clam gardens can be restored with the help of traditional knowledge to provide ecosystem benefits that enhance the supply of a diversity of traditional foods (lead by Skye Augustine). We will put links to this research on the web page, so stay tuned!

Presenting to International Audiences

In August 2017, Anne, Kii'iljuus, and Jenn travelled to Stockholm, Sweden, to present findings from the *Coastal Voices* project to an international audience at the *Resilience Frontiers Conference*. All three of us gave talks that were well attended by people from around the world who wanted to learn more about sea otter recovery, social justice, Indigenous rights, social-ecological transformations, community adaptation - all part of the *Coastal Voices* work.



Presenting to the Council of Ha'wiih

In February 2018, Anne, Kii'iljuus, and Jenn reported on our research results to the Nuu-chah-nulth Council of Ha'wiih. We are also planning similar trips to Bella Bella, Skidegate and Old Masset later on this spring, summer and fall to report back to the Heiltsuk and Haida Chiefs and communities.



Stay Tuned for Updates!

The *Coastal Voices* team has lots of work ahead of us and we look forward to sharing what we have learned! Stay in touch by checking the [Facebook page](#) or visiting the website: www.coastalvoices.net