

## PlateWatch

Issue 11

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"How inappropriate to call this planet Earth when it is quite clearly Ocean."

Arthur C. Clarke

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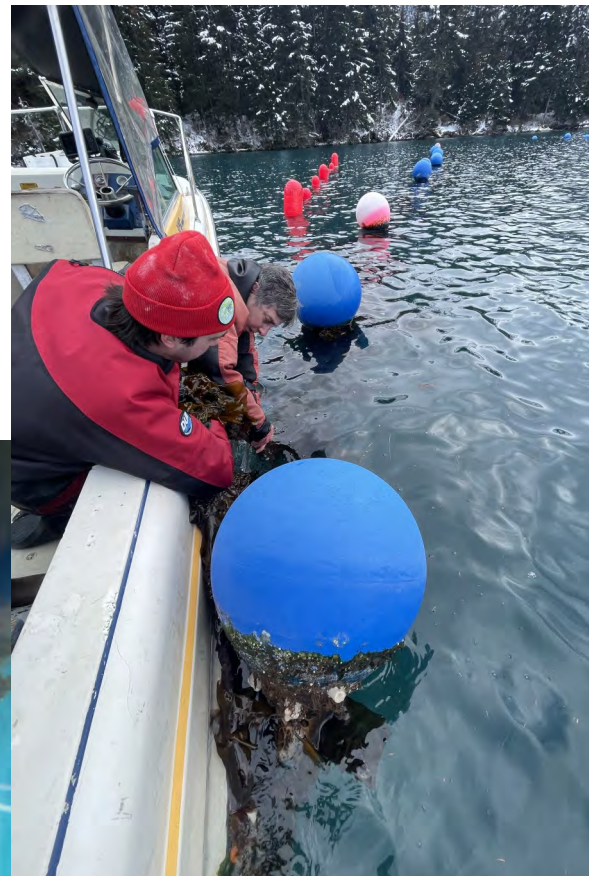
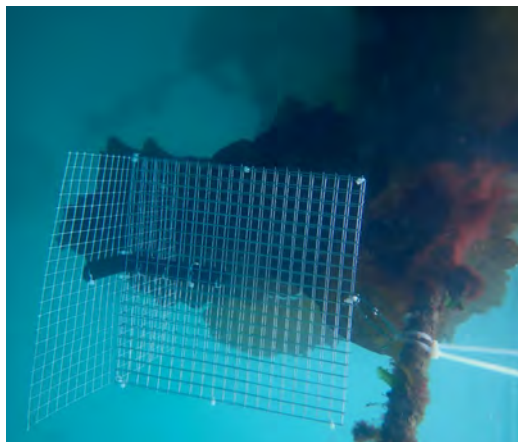


Bryozoans fouling kelp at Sea Quester kelp farm near Juneau. Photo NOAA Fisheries

## *Who's Fouling the Farm—Alaska Mariculture Invertebrate Hitchhikers*

Brenda Konar, a professor at the University of Fairbanks, and her post doc, Brian Ulaski are working on a new project in the Gulf of Alaska to look at fouling communities. The project will begin this spring and run for ~2 years. If you work in mariculture or are out on the water you may see them deploying settlement structures that mimic oyster cages at oyster farms in Cordova, Kachemak Bay and Kodiak. They want to determine which invertebrates and seaweeds are fouling the farms with the ultimate goal of a better understanding of how to minimize fouling. Preliminary

work showed a great deal of variability in the fouling communities at different farms. This could be due to different cage cleaning schedules. These mimics will help control for cleaning since they will not be cleaned. Stay tuned for updates as this project goes forward!



Oyster cage mimic and deploying the mimics at a farm. Photos Brenda Konar

## *Early Detection of Non-native Invertebrates in Prince William Sound*

This past summer SERC undertook a comprehensive survey for non-native marine invertebrates in Prince William Sound. It's a challenge in any year to sample sites over 10,000 square miles of ocean and islands that is mostly uninhabited, but this year was especially challenging. When we deployed our sampling devices we were treated to some blustery weather the first day out, forcing a total revamp of our schedule, but we managed to get 11 sites deployed for a total of 165 settlement plates!



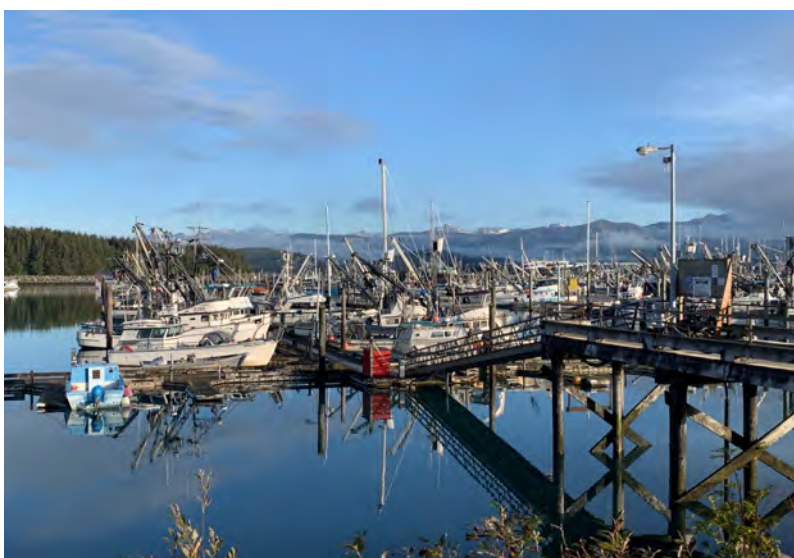
We partnered with Prince William Sound Aquaculture Corporation, the Chenega Regional Development Group and independent kelp and oyster farmers to put out the plates all over the Sound. When we returned in Sept, logistics necessitated that we retrieve 5 sites in the first 3 days by boat, by plane and by truck, which was a crazy schedule to say the least! However, we had glorious weather allowing us to retrieve all of the sites - a miraculous thing in September in Alaska!



Counter clockwise from top: Sampling on the dock at Eshamy Lodge and the dock from above. Brent Davis' boat Gizella, the boat we used to sample sites near Cordova. Eshamy photos Kim Holzer, Gizella photo Linda McCann.



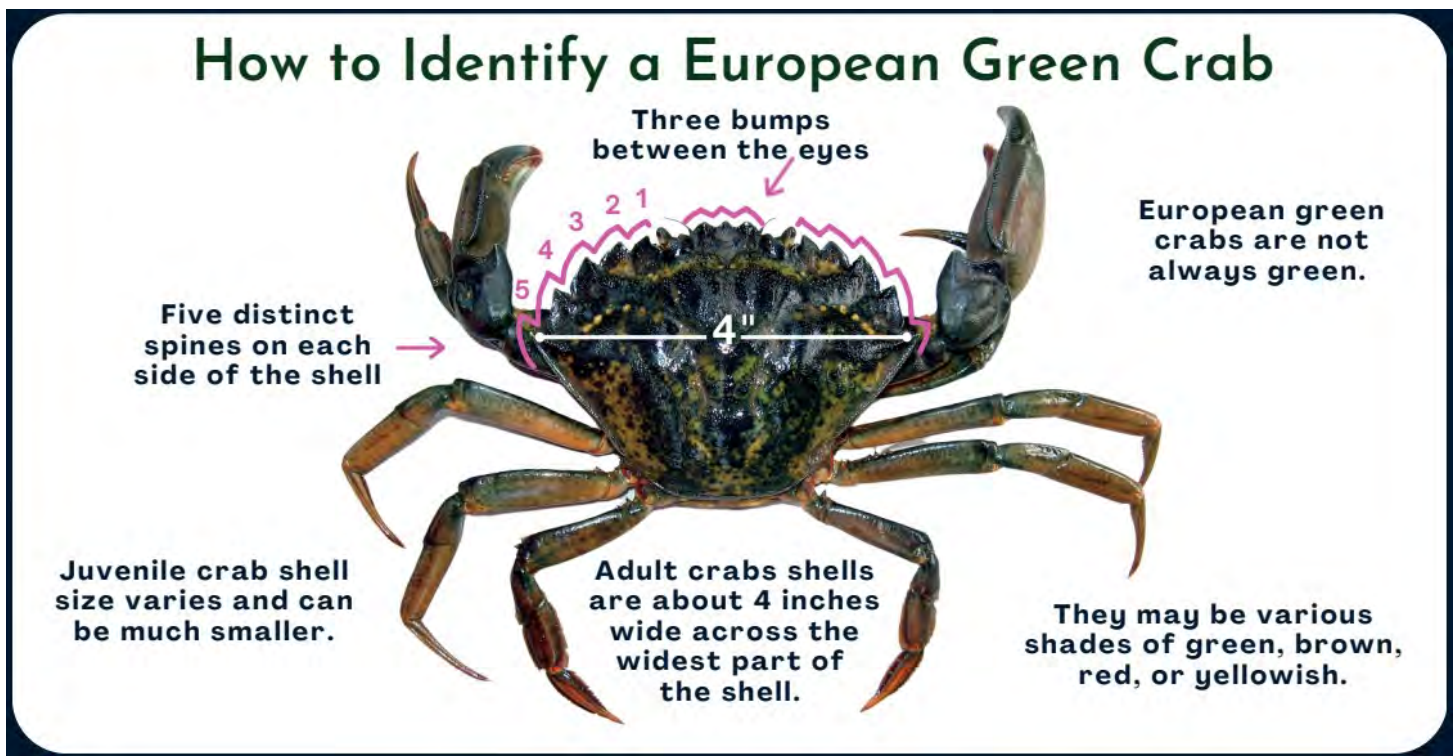
We also had fabulous help from PWSRCAC and USFWS staff Danielle Verna and Kim Holzer, an Alaska Pacific University graduate student Natalie Kiley-Bergen, and local boat captain, Brent Davis. Everyone helped the sampling run as smoothly as possible, including folks at the new Prince William Sound Science Center where we based our lab. Preliminary results indicated only one possible non-native—a tunicate from Cordova harbor that is being reviewed, but no other non-natives were found. The results will be finalized over the next year.



Clockwise from above: More of our sample sites including Cordova small boat harbor, Chenega Marina, nudibranchs and seastar from our settlement plates and Cannery Creek Hatchery. Hatchery photo Kim Holzer, Marina and invertebrate photos Linda McCann.



## *Green Crabs in Alaska*



Many of you have heard about it, the infamous European green crab. Included in the world's "worst invasive alien species" list, it was originally detected on the west coast in San Francisco Bay in 1989 and it has actively been making its way northward. The crab eats commercially important shellfish and destroys eelgrass beds that provide habitat for juvenile fish and invertebrates. And the news that we've dreaded landed in 2022—the green crab has made its way to Alaska. Discovered by the Metlakatla Indian Community on Annette Island in July of 2022, continued trapping indicates that they are established there. Alaska is taking the potential threat from this crab very seriously. With assistance from NOAA, the Metlakatla Community has stepped up trapping for the invasive crabs, the NERR in Homer, along with federal, tribal and state partners held an emer-



Scan the QR code or call 1-877-INVASIV to report observations of any invasive species or unusual plants or animals.

Top Figure: Part of a poster created by Alaska Dept of Fish and Game to get the word out about the invasive green crab.  
Bottom Figures from the Molt Walk Data Sheet



## *What Can You Do?*

cy response drill focused on the crab last fall and AKISP (the Alaska Invasive Species Partnership) green crab subcommittee has been gearing up for a massive education and outreach campaign to increase awareness and enlist help with early detection of the invasive crab in coastal Alaska. The campaign will include developing outreach tools, posting on social media, creating newspaper and radio ads and a host of other methods focused in Southeast Alaska. What can you do? Learn how to recognize the crab, do a beach walk to look for the crab's carapaces (download the datasheet for beach walks here: [https://platewatch.nisbase.org/pdfs/Moltwalkdatasheet\\_2023\\_Final.pdf](https://platewatch.nisbase.org/pdfs/Moltwalkdatasheet_2023_Final.pdf), and volunteer to set traps for the invasive crabs. If you do see this crab, please make sure to report it to Alaska Fish and Game at 1-877-INVASIV. <https://www.youtube.com/watch?v=6ddpeY7IQDY>



Hundreds of green crabs from trapping in Seadrift Lagoon, California 2014. Not a scene we want to see in Alaska! Photo Linda McCann



## *In the News*



### NOME

The Alaska State Legislature allocated 250 million for a port expansion in Nome. Situated 545 miles Northwest of Anchorage on the Bering Sea, it is the only US deep water port in the Arctic. Currently no ship with a draft over 18 feet can safely enter the harbor.. Plans call for the new harbor to be 40 feet deep. Establishing monitoring in the the Arctic would be advantageous to allow us to look at changes in invertebrate community composition that may occur with increased ship traffic to the region.

Nome Harbor, photo City of Nome website  
<https://www.nomealaska.org/port-nome>

### Alaska Aquatic Invasive Species Clearinghouse

Development continues on a database to house information about aquatic invasive species in Alaska. The database is called AK Aqua and can be accessed here:  
[https://portal.axds.co/?portal\\_id=145&ls=6JBEzpjw#search?type\\_group=all&page=1](https://portal.axds.co/?portal_id=145&ls=6JBEzpjw#search?type_group=all&page=1)

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We're on the web at

<http://platewatch.nisbase.org>