

THE RACE IS ON

A Knowledge exchange and trainer workshop to promote early detection and response to marine invasives through community monitoring



*Prepared by
Kachemak Bay National Estuarine Research Reserve
Coastal Training Program*

REVIEW DRAFT:
For approval by Project Team



PROJECT PURPOSE

Community monitoring programs are a vital tool in the effort to prepare for, prevent, and respond to marine invasives.

The nearshore and intertidal habitats of Alaska are some of the most biologically productive and socio-economically important habitats in North America. The invasive European green crab (EGC) was found in southeast Alaska in 2022 following years of rapid expansion and population growth in the North East Pacific, with wide economic and social impacts. This marine invader is an ecosystem engineer that can cause harmful effects to almost every coastal ecosystem service. Statewide partners need to harness collective knowledge and resources, effectively identify areas of likely EGC establishment, and mitigate the threat to nearshore habitats and species of commercial, subsistence, personal use, and cultural value.

COLLABORATIVE APPROACH

Our approach involves bringing together numerous entities to use community monitoring to address existing capacity gaps that impair Alaska partners' preparedness for marine invasive species early detection, monitoring and response. This approach is of particular need for geographically isolated and resource-limited communities that are likely to be most impacted by marine invasive species. This coordinated effort will ensure standard data collection and sharing, maintain coordination, update methods and techniques, and build skills in training techniques to keep our monitors engaged across the state. Tools and guidance delivered in the workshop available at project page: <https://nerrsciencecollaborative.org/project/Harrald23>



Content in this report was produced as part of the NERR Science Collaborative award to University of Alaska Kachemak Bay NERR NA19NOS4190058. Photo release permission was granted from participants and personally identifiable information has been removed from anonymous evaluation quotes.

ORGANIZATIONS IN ATTENDANCE

Padilla Bay NERR March 2024

- Padilla Bay NERR
- Washington Sea Grant
- Kachemak Bay NERR
- Seldovia Village Tribe
- Chugach Regional Resources Commission
- Southeast Alaska Tribal Ocean Research
- Ketchikan Indian Community
- Alaska Department of Fish and Game
- Metlakatla Indian Community
- Prince William Sound Regional Citizens Advisory Council

Kachemak Bay NERR August 2024

- Ketchikan Indian Community
- Kachemak Bay NERR
- Alaska Department of Fish and Game
- Washington Sea Grant
- Metlakatla Indian Community
- Prince William Sound Regional Citizens Advisory Council
- Alaska Pacific University
- Chugach Regional Resources Commission
- Southeast Alaska Tribal Ocean Research
- Kenai National Wildlife Refuge USFWS
- Alaska Sea Grant

ACKNOWLEDGEMENTS

A huge thank you to all of our team members and partners in this project for all of the support and collaboration. The contributions made now will help with monitoring efforts in Alaska for years to come.



WORKSHOP OBJECTIVES

In order for this network to use consistent methods and techniques, standard data collection and sharing, build skills in training techniques to engage monitors across the state, and maintain and build new partnerships, participants accomplished these objectives:

01

Practice consistent trapping protocols, animal processing and identification, and data collection in the field.

02

Review considerations for designing a program, including trapping effort, habitat selection, and accessibility

03

Understand permitting, reporting, data management, and data sovereignty topics

04

Discuss ideas for recruiting and retaining community monitors, including volunteer motivations

05

Provide input on next steps and needs for maintaining and building network and capacity



KACHEMAK BAY WORKSHOP OVERVIEW & AGENDA



“There was a lot of collaboration and the space to talk through how we can move forward together as a statewide team for future monitoring. It was great to be in the same room to listen and learn from each other.”

Thursday August 22, 2024
Setting Up for Success: Community Monitoring for Early Detection and Response
Skill Building: Crab ID, Molt Walks
Lunch and Discussion
Field Skill Building: Training Tools for Conducting Community Monitoring
Field Debrief and Communication Discussion
Friday August 23, 2024
Skill Building: Training Tools for Crab Trapping Events
Field Skill Building: Trap Retrieval at Pier 1 Beach
Lunch and Discussion
Growing Your Program: Training Tools for Engaging Community
Next Steps Discussion and Wrap Up
Open Topics Discussion

The two day training prepared participants to set up monitoring programs for the early detection of European Green Crab in their communities, and was the first of its kind in Alaska. Importantly, participants interacted with a diverse group of new and experienced practitioners and built relationships of trust through transparency, competency, open dialogue and by sharing responsibility and accountability, creating a collaborative early detection network across the widely dispersed communities.

COMMUNITY CONCERNS

DURING THE WORKSHOP PARTICIPANTS SHARED THESE TOPICS RELATED TO MARINE INVASIVES IN THEIR COMMUNITIES

- Fish Habitat for Subsistence Species
- Early life-stages Nurseries
- Intergenerational Learning & Practices: Memories & Experiences
- Food Sovereignty
- Traditional Harvest: Wild Species
- Commercially Important Species
- Biodiversity Preservation
- Community Ecology
- Coastal Resilience in Communities
- Community Efforts: coming together in stewardship
- Engaging Community samplers
- Sharing knowledge with community

AUDIENCES FOR COMMUNITY MONITORING STRATEGIES

FOR EACH ACTIVITY IN THE WORKSHOP, PARTICIPANTS IDENTIFIED POTENTIAL SECTORS OF THE COMMUNITY TO ENGAGE

- **Carapace Activity:**
 - Alaska Sea Life Center
 - Boys & Girls Club
 - Classrooms
 - Environmental Health Fair
 - National Park Service
 - Rotary Club
 - Culture Camp
 - Boards & Councils
 - Events & Festivals
- **Molt Walks**
 - Scouts
 - Guides
 - Ecotourism
 - Dog Walkers
 - School Groups
 - Birders
 - Boaters
 - Hunters & Anglers
 - Trail Crews

TRAPPING IDEAS FOR LATER

PARTICIPANTS IDENTIFIED ADDITIONAL UNMET NEEDS AND QUESTIONS FOR FUTURE WORK OUTSIDE THE SCOPE OF COMMUNITY MONITORING WORKSHOP

- What does it mean to “manage” EGC in Alaska?
- Disposal Methods and Plan
- Prioritization / Habitat Mapping for future
- Assessment Resources & Strategies
- Molt Search Alaska Effort
- Environmental Observations
- Words that work for different funding & activities
- Larval life stages - detection and growth
- Model Detection
- Graphics and Design for Media
- Coordinated Resources reference library
- Video of molt and dead crab difference
- Documentary, short videos, story map

EVALUATION

PADILLA BAY TRAINING PARTICIPANTS

9

KACHEMAK BAY TRAINING PARTICIPANTS

17

TRAPS SET THROUGH COMMUNITY MONITORING

200*

At Padilla Bay

PARTICIPANTS VALUED:

“The protocol review, crab ID, invasion history, and trapping field exercise were all extremely invaluable; I had a basic understanding of these topics, and we had already begun preliminary trapping, outreach, and molt survey efforts. Learning the details of WHEN to set traps, how to differentiate between very similar species (ex: graceful crab versus Dungeness crab, hairy shore crab versus purple shore crab), and helped clarify some confusion around the green crab's invasion history on the West Coast.”

“Having the opportunity to be in the same space as other Alaskans and discuss our joint approach to monitoring.”

“Talking with other participants, sharing experiences, seeing the full picture of how the volunteer monitoring is run in Padilla Bay.”





**At Kachemak Bay
PARTICIPANTS VALUED:**

“The ID activity above was cute! I think it would be great with school groups to get them thinking about green crab trapping.”

“How to conduct a molt walk and trapping event. I will share it with my colleagues, friends, family, and community where possible - aka the intertidal.”

PARTICIPANTS ARE MOTIVATED TO:

“Put more energy into collaborative outreach and education materials.”

“Motivated to finally preserve the carapaces I've collected all summer in resin and follow up on creation of new materials with partners I met at the event.”

COLLABORATION AND SUPPORT LOOKS LIKE:

“I think continuously sharing new information as it comes up, providing support up to what your agency allows and attending collaboration/ knowledge sharing meetings.”

“Building the habit of hosting or joining community monitoring events as both an individual and someone associated with a university.”

CONCLUSION

KBNERR is dedicated to supporting our communities through the early detection of marine invasive species and we look forward to finding new ways to collaborate with Reserve’s throughout the system on how to do this.