



Coming together to identify key questions for Dungeness crab *Takeaways of the Spring 2022 Crabber and Scientist Exchange*

In April 2022 the Crabber and Scientist Exchange (CASE) came together in La Conner for an evening to discuss and learn more about its unifying interest - Dungeness crab. CASE, represented by crabbers, scientists, managers, and other interested parties from around Puget Sound, took some time to learn more about Dungeness crab across its lifecycle and to ask its participants what they want to know, have observed, and are concerned about. Below, we have highlighted the five major avenues of inquiry that CASE participants broached over the course of the evening:

Where are Dungeness crab (in time and space)?

CASE participants want to understand what contributes to differences in crab abundance between locations and years, and what tools can be used to gauge overall population health and better predict future crab abundance.

What impacts will changing environmental conditions have on Dungeness crab?

CASE participants are interested in better understanding the impacts that changing ocean conditions (including climate change, ocean acidification and hypoxia) may have on both Dungeness crab individuals and populations through changes to water quality, habitat, and the broader ecosystem.

What impacts do fisheries have on Dungeness crab?

CASE participants want to know more about the impacts that fisheries activity and management schemes have on Dungeness crab populations (including how fishery activity may benefit or damage the crab resource) and how we can best responsibly steward the resource.

What impacts do human activities, besides fishing, have on Dungeness crab?

CASE participants want to understand how human activity (other than fishing) impacts Dungeness crab populations. This may include aquaculture, shoreline development, habitat disturbance and land use changes.

What are the ecological roles of Dungeness crab?

CASE participants are curious about the many different roles Dungeness crab have within the ecology of the Pacific Northwest and the relationships it has with other species (including invasive species) across its many life stages and areas that it inhabits.

So what comes out of these CASE conversations? Many of the topics raised by CASE participants are of interest to members of the research community and have been flagged by the Pacific Northwest Crab Research Group (PCRG, www.pnwcab.com) as areas to focus current and future collaborative research (see the [PCRG Research Guide](#) to read more). However, CASE participants also raised new questions specific to crabbers as a user group. Most of these focused on how harvesters as a community can prevent negative impacts and promote positive ones. Some of the questions that participants asked may have answers already. This provides ample opportunity for CASE and the PCRG to continue to come together to learn more about Dungeness crab, share perspectives on what is most important to harvesters, and build a more diverse community interested in Dungeness crab in the Pacific Northwest. Moving forward, we hope to organize regular and recurring CASE events where topics and presentations are selected based on these questions to ensure that the crabbing community is receiving relevant and interesting information, and is provided with opportunities to engage in the research process wherever possible. In addition to future CASE events, crabbers are always welcome to attend PCRG meetings and should feel free to contact Emily Buckner (PCRG Program Coordinator) at pnwcab@gmail.com to ask questions, connect with a researcher, or discuss questions and/or topics important to you. We hope to see you at the next CASE event!