#### 5<sup>th</sup> PSC Seminar Series on Environmental Change

July 20, 2022



# The largest pan-Pacific research expedition to study the winter ecology of salmon in the North Pacific Ocean

Scientists from Canada, Japan, the Republic of Korea, the Russian Federation, and the United States continue their research on the winter ecology of Pacific salmon in a collaborative international effort spanning the entire North Pacific Ocean





# In Memoriam Terry Williams

Long-time member of the Southern Panel passed away July 19, 2022

Recipient of Lifetime Achievement Award for Salmon Habitat and Puget Sound Preservation

"Treat your neighbors like you'd have them treat you. It's the same with the environment,..To produce all the things that we really love and enjoy, we need to take care of it. And the more we take care of the environment, the better off we're going to be."

## The 2022 Pan-Pacific Winter Expedition

- <u>Purpose</u>: Improve understanding of how environmental change in the North Pacific Ocean affects the abundance, distribution, migration, growth, fitness and survival of Pacific salmon.
- Cooperative effort by scientists from the five member countries of the North Pacific Anadromous Fish Commission (NPAFC) Canada, Japan, the Republic of Korea, the Russian Federation, and the United States.



# Richard Beamish, Emeritus Scientist Pacific Biological Station in Nanaimo

- PBS Director 1980-1993.
- Continues to push the frontiers of salmon science.
- Order of Canada, Order of British Columbia and was elected to the Royal Society of Canada.
- Heavily involved in all aspects of winter high seas salmon surveys in 2019, 2020, and 2022.



#### Brian Riddell, Science Advisor, Pacififc Salmon Foundation

- Past PSF President/CEO, where he established the Salish Sea Marine Survival Project and the research network. He has won many awards and honors for his work.
- 30 years in salmon research and management at the Department of Fisheries and Oceans where he co-authored Canada's Policy for Conservation of Wild Pacific Salmon (2005)
- Provided science advice for the Pacific Salmon Treaty, served as Co-Chair of the Chinook Technical Committee and on the PSC.
- Along with Dick Beamish, Brian has been instrumental in enabling research on the winter ecology of salmon in the Gulf of Alaska, resulting in the 2019 and 2020 expeditions and using Japanese research gillnets to compare with trawl nets during the 2022 high seas survey. He also co-authored the UN Decade of Ocean Science proposal to continue high seas surveys in the future.



#### Laurie Weitkamp, NOAA NWFSC

- Involved in the scientific basis for West Coast Coho Salmon listing and recovery under the Endangered Species Act (ESA).
- Member of the CoTC.
- Her research focuses on the ecology of salmon in estuarine and marine environments, specifically how physical conditions influence biological processes that are important for survival.
- Participated in the 2019 GOA expedition and has been a US representative on the planning team for the 2022 IYS high seas survey, and served as Chief Scientist on leg 2 on the RV Shimada.



#### Chrys Neville, Research Biologist, DFO

- Over 25 years' experience studying the marine ecology of Pacific salmon and other small pelagic fishes. She manages the Salmon Marine Interactions Program that focusses on understanding factors regulating the marine survival of Pacific salmon with specific focus on the Strait of Georgia.
- Participated in the 2019 Gulf of Alaska (GOA) expedition and helped organize the 2020 GOA expedition. In 2022 she was the Chief Scientist on the charter vessel Raw Spirit. Chrys focus is on comparing growth and condition of the salmon caught during the winter expeditions with the juveniles that her program samples in the coastal waters.