Regional Operations Centre, Canadian Coast Guard Western

Science Cruise Report: PAC 2022-010

Report last updated: 2022-08-04 10:52:53
https://www.waterproperties.ca/requests/cruiseplanview.php?cruiseid=2022-010

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Department/Group:	Fisheries and Oceans Canada, ESD
Other Participating Groups:	OSD; StAR
Science Cruise Number:	PAC 2022-010
Alternative Cruise Number:	
Ship's Patrol Number:	
Name of Vessel/Platform:	Franklin
Dates:	**From:** Monday 04-Jul-2022 **To:** Tuesday 02-Aug-2022
Chief Scientist:	**Jackie King**, 250-756-7176, Jackie.King@dfo-mpo.gc.ca
Master:	Tim Fry
Fishing Master:	Tim Fry
Appropriateness of Vessel:	Not Rated

Time Allocations

Originally Allocated Days **31.00**
Accounting below is given in days and should match the originally allocated days above.

Weather	+ 0.00	
SAR	+ 0.00	
CCG Refueling	+ 0.00	
CCG Ship Repair & Maintenance	+ 0.00	
CCG Crew Changes	+ 0.00	
CCG Other	+ 0.00	
Science Operations	+ 26.00	
Science Equipment Loading/Unloading	+ 0.00	
Science Other	+ 5.00	COVID isolation
Days Gained	+ 0.00	
Days Grand Total	= 31.00	

Time Allocation Comments: Positive COVID tests during survey required 5 day isolation period for remaining vessel and science crew, with daily testing.

Cruise Events

Areas of Operations

West Coast Vancouver Island, Northwest Coast Vancouver Island

Scientific Personnel

Name	Notes (Affiliation, Watches, Duties, etc)
Tyler Zubkowski	
Colin Bailey	
Julian Smith	
Francesca Loro	ANAPHYLACTIC to kiwi
Amy Tabata	
Kelsey Flynn	vegan & ANAPHYLACTIC to hazelnuts
Dylan Glaser	
Brooke Hackett	
Lenora Turcotte	
Hilari Dennis-Bohm	
Ryan Uslu	
Jennifer Boldt	

Event Log

July 4: Loading at the Pacific Biological Station. Departure by 18:00.Transit north overnight.

July 5: Positive COVID test for science crew; individual disembarked at Port Hardy while still in transit to Queen Charlotte Sound. Survey operations begin in Queen Charlotte Sound.

July 6-10: Positive COVID test for second science crew; return to Port Hardy and individual disembarked.

July 6-10: Anchored in Hardy Bay for isolation period.

July 11: Science crew returns and transit to Queen Charlotte Sound. Survey operations begin in Queen Charlotte Sound.

July 11-19: Survey operations in Queen Charlotte Sound; off Nootka Sound; off Barkley Sound

July 19: Science crew change in Ucluelet. Vessel fueling and provisions. Transit north to Queen Charlotte Sound overnight.

July 20-July 31: Survey operations in Queen Charlotte Sound and then remaining portions of WCVI.

July 27: Science crew member joins vessel in Ucluelet

July 30: Science crew member departs vessel in Ucluelet.

Aug 1: Survey operations completed and transit to Nanaimo. Return to PBS at 16:30.

Aug 2: Unload gear 08:00-10:30. Vessel repositions to IOS.

Aug 3: Oceanographic equipment and sles unloaded 07:00-08:00. Acoustic calibration completed in Pat Bay. Survey ends.

Scientific Equipment Report

None

Radioisotope Report

Not applicable

Scientific Successes and Concerns

Overall, the science team and vessel crew worked extremely well together. There were 107 midwater tows successfully completed. A total of 9,200 kg for 68 species were enumerated, measured (10,760 individuals) and weighed (9,090). Sles were collected for DNA stock composition (1,287), stomach composition (1,640), otoliths (737), energy density (498), stable isotopic analysis (893), infection and fitness status (38) and coded wire tags (70). There were 54 CTD casts, each with a 5 m water sle, and 54 bongo vertical net hauls completed. The Niksin bottle deployment off the side of the vessel worked particularly well. The block was designed by the vessel crew. Sles included nutrients, chlorophyll and zooplankton sles (size fractionated and formalin preserved).

Platform Successes and Concerns

As a working fishing vessel, the Nordic Pearl completed the primary purpose of this survey very effectively. The large wet lab with conveyor belts and work benches provided an enclosed space for Science crew to sle fish protected from wind and rain. The side work area provided to the Chief Scientist on the bridge was appreciated. The network cable from the bridge to the lab was invaluable for the electronic data acquisition program. The cabins are comfortable, and everyone is able to gather in the lounge area.

The experience and flexibility of the Skipper, Tim Fry, was invaluable. The crew consistently provided help when asked, and it was appreciated that some were able to assist in sling when science crew numbers were greatly reduced due to illness. The cook provide nutritious and delicious meals and was flexible in serving times in to facilitate the unusual hours of the survey.

Large amounts of Pacific herring and other finfish during night time tows were extremely challenging for science crew to sort and sle. The Skipper suggested the use of codend sensors, which proved to be invaluable in identifying potential catches too large for reasonable sling.

Safety Concerns

None

Hazardous Occurrences

Day 2 of survey had a positive COVID test from one of the science crew. That individual was immediately isolated, and returned to shore at Port Hardy while still on route to the survey area. Day 2 of the survey had a positive COVID test from another science crew member, again with immediate isolation. The vessel returned to Port Hardy, and the individual returned to shore. All vessel and science crew tested daily and maintained a mask and distance protocol while indoors. After a 5 day isolation period with negative COVID tests, one science crew and a new science crew joined the survey and operations resumed.; Overall, in place COVID protocols prevented widespread and ensured the survey could continue

Other Comments

The Franklin could not be used for this survey due to CG staffing shortages.; The survey was completed via charter on the commercial fishing vessel Nordic Pearl.

Images

[No Alternative Image Provided]
Image notes:

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