



Regional Operations Centre, Canadian Coast Guard Western



Science Cruise Report: PAC 2018-093

Report last updated: 2018-06-19 16:02:53

Link to Original Plan: [https://www.waterproperties.ca/requests/cruiseplanview.php?](https://www.waterproperties.ca/requests/cruiseplanview.php?cruiseid=2018-093)

cruiseid=2018-093

Department/Group:	Fisheries and Oceans Canada, ESD
Other Participating Groups:	
Science Cruise Number:	PAC 2018-093
Alternative Cruise Number:	
Ship's Patrol Number:	
Name of Vessel/Platform:	Sea Crest
Dates:	From: Saturday 09-Jun-2018 To: Saturday 16-Jun-2018
Chief Scientist:	Jackie King, 250-756-7176, Jackie.King@dfo-mpo.gc.ca
Master:	Nathan Dobie
Fishing Master:	Nathan Dobie
Appropriateness of Vessel:	Not Rated

Time Allocations

Originally Allocated Days **7.00**

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	+ 0.50	
CCG Crew Changes	+ 0.00	
CCG Other	+ 0.00	
Science Operations	+ 4.50	
Science Equipment Loading/Unloading	+ 1.50	
Science Other	+ 0.50	Net damaged and required repair
Days Gained	+ 0.00	
Days Grand Total	= 7.00	

Time Allocation Comments:

Cruise Events

Areas of Operations

Johnstone Strait, Northwest Coast Vancouver Island

Scientific Personnel

Male - Name	Notes (Affiliation, Watches, Duties, etc)
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Tyler Zubkowski	
Colin Novak	
Kevin Esseltine	

Female - Name	Notes (Affiliation, Watches, Duties, etc)
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Jackie King	
Jasmine Wietzke	
Erika Nielsen	

Event Log

June 9-began loading scientific equipment and fishing gear at 08:00. Completed loading at 12:00. Departure delayed until 17:00. Net trials off Nanoose completed by 20:00 with immediate departure for Seymour Narrows.

June 10- Fishing operations in Johnstone Strait. 5 tows completed.

June 11-Fishing operations in Queen Charlotte Sound (Cook Bank). 9 tows completed.

June 12-Fishing operations in Queen Charlotte Strait. Net damaged, and vessel returned to Port Hardy for temporary net repair. Fishing operations ceased at 13:00. Net repair work ended at 19:30. 4 tows completed.

June 13-Fishing operations resume in Queen Charlotte Strait and portion of Queen Charlotte Sound. 6 tows completed.

June 14-Fishing operations in southern Queen Charlotte Strait, and one in northern Johnstone Strait. 5 tows completed, 1 tow aborted due to logs.

June 15-Return to PBS at 10:00. Scientific unloading of gear completed by 13:00. Vessel departed 13:00 for refueling with scheduled return at 15:30 for meeting with science (pre-cruise meeting for July 5-28) and to receive 13mm twine to repair damaged net. At 14:00 received a phone call from Captain that the vessel had hit something on the way to the fuel dock and was already underway to Vancouver for repair.

Scientific Equipment Report

The new LFS 7742 mid-water trawl net received significant damage during a haul back of a surface water tow in Queen Charlotte Strait on June 12th. During haul back, the Captain misread the units of the sounder and the net hit a pinnacle causing the 42ft mesh (13mm twine) and back through the smaller meshes to become broken or for twine coating to be chaffed off the mesh. Fishing operations ceased at 13:00 on June 12th, and the vessel traveled to Port Hardy for net repairs. That afternoon and evening until 19:30, the net was stretched out along the Canadian Fishing Company wharf in Port Hardy and was temporarily repaired. Unfortunately, 13mm twine was not available and 10mm twine was used to repair the larger mesh; smaller meshes were repaired with correct twine. This temporary repair of the net meant that fishing operations could resume on schedule for June 13th. The correct 13mm twine was to be provided June 15th after return to PBS, to replace the temporary 10mm twine fix, but vessel mechanical issues meant that the vessel departed Nanaimo early on June 12th, and the more permanent fix was not completed.

Radioisotope Report

n/a

Scientific Successes and Concerns

We were able to complete the minimum number of tows per Region, and biological samples for our sockeye salmon were collected to meet the primary scientific objectives of the survey. Given a new net and door combination, particularly with the problems in achieving target head rope depths (below) it is not likely that all tows are useable for relative abundance—even within this survey year.

Platform Successes and Concerns

The vessel purchased new wingspread sensors as per the contract request, but they did not work. The vessel could provide head rope depth (when not fishing at the surface) and door spread for all tows.

It remains unclear if this vessel has suitable horsepower to deploy near surface mid-water trawls at target head rope depths, particularly 15 and 30 m; mostly applicable during the setting portion of the net. The doors are dropping and remaining at depths greater than target, and often take several minutes (i.e. >3 min) after being locked to raise up to target depth. Once a target depth is finally reached, the Captain was able to maintain within acceptable variance. Many of the locations have difficult tidal currents, which may also be a contributing factor.

The Vessel mechanical issues on June 15th meant that the vessel did not return to PBS, and was placed in dry dock in Vancouver. Expensive, and sensitive science equipment were left in the sampling area since it was not anticipated that the vessel would be in a shipyard. Additionally, 13mm twine was not delivered to the vessel, for potential repair while in Vancouver. Logistically, if we had been notified of the change in plans prior to vessel being underway to Vancouver, we could have perhaps removed the equipment and provided the twine.

The vessel had enough cabin and bunk space for 6 science staff and all accommodation and washroom facilities were clean. Healthy and abundant food were available for staff throughout the day. A large work area was available to the Chief Scientist on the bridge.

The Vessel Crew were outstanding and it was their enthusiasm and accommodating approach which compensated for any difficulties encountered. The Captain was able to provide flexible logistic planning for each day of fishing with helpful recommendations on fishing locations based on weather, running time between stations, tide or other considerations. The Captain ensured that minimal fishing time was lost due to trial trawling (June 9th) and net damage (June 12th). The Vessel Crew repaired damage to the trawl net—which ensured that we were able to continue operations. The Vessel Crew helped with deploying scientific sensors on the trawl net, and the deployment and processing of CTD, water and zooplankton samples. The Cook was flexible in meal hours, and provided outstanding meals.

Safety Concerns

None

Hazardous Occurrences

None

Other Comments

This year DFO provided a new mid-water trawl net (LFS7742) to replace the old CanTrawl 250. In addition, the Seacrest had new Thyboron Type 15 mid-water trawl doors. Loading of scientific equipment was completed by

noon on June 9, but departure to Discovery Passage was delayed until 20:00 in order to complete trawling trials with the new net and doors. As a result of required travel time and passage through Seymour Narrows, Discovery Passage locations (2) were not completed. However, the Captain was able to compensate and get us to southern Johnstone Strait two hours ahead of schedule to begin fishing operations on June 10th.

Vessel mechanical issues on June 15th meant that the vessel departed early (15:00); as a result, required net repair was not completed, and a planned pre-cruise meeting for the July 5-28 survey was not held.

Images

[No Alternative Image Provided]

Image notes:

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