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United States Cruise Plan for the Southeastern Bering Sea Surface and Pelagic Trawl Survey, August–September 2018

by

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ABSTRACT

This cruise plan outlines the dates, locations, and activities of a fisheries oceanographic survey conducted in the southeastern Bering Sea during late summer and fall 2018. This survey is in part a continuation of the Bering Aleutian Salmon International Survey (BASIS). The primary objectives are to collect biological information on important fish species and describe the physical and biological oceanographic conditions in the southeastern Bering Sea.

Introduction

Scientists from the National Marine Fisheries Service (NMFS) and the Pacific Marine Environmental Laboratory (PMEL) will conduct a survey during late summer and fall 2018 within the southeastern Bering Sea to collect ecological data on the pelagic ecosystem. Primary objectives of the survey will be to: 1) collect biological information on ecologically important fish species, and to 2) describe the physical and biological oceanographic conditions of the southeastern Bering Sea waters.

Survey

A survey of epi-pelagic fish species, zooplankton, ichthyoplankton, and oceanographic measurements will be conducted at stations within the southeastern Bering Sea aboard the NOAA Ship *Oscar Dyson*. The survey will begin 20 August 2018 in Dutch Harbor, Alaska and end on 17 September 2018 in Dutch Harbor, Alaska, for a total of 27 sea days (Fig. 1; Table 1).

Fish samples will be collected using a midwater rope trawl fished at the surface and a pelagic trawl fished obliquely. At selected trawl stations, an oblique tow will be performed to 10 m depth off bottom or 200 m headrope depth (whichever is greater) and a surface tow will be performed for 30 minutes.

All fish species will be counted and standard biological measurements including length and weight will be taken from subsamples of each species. Biological and physical oceanographic data will be collected at each trawl station as well as opportunistically during the survey.

Table 1. Tentative itinerary for southeastern Bering Sea research cruise aboard the NOAA Ship *Oscar Dyson*, 20 August to 17 September 2018.

Date	Location/Activity
LEG 1	
Aug 18-19	Embark scientific party/load gear, Dutch Harbor, AK
Aug 20	Depart Dutch Harbor, AK 3:00 pm, transit to first station
Aug 20–Sep 1	Occupy station grid, working north and south along transects 160W to 175W (Fig. 1)
Sep 1	Inport Dutch Harbor, AK 9:00 am, crew change
LEG 2	
Sep 2-4	Disembark/Embark scientific party/load gear, Dutch Harbor, AK
Sep 4	Depart Dutch Harbor, AK 3:00 pm, transit to station
Sep 4-Sep 17	Occupy station grid working north and south, along transects 160W to 175W (Fig. 1)
Sep 17	Inport Dutch Harbor, AK. Disembark scientific party/off load gear

Fig. 1. Proposed survey stations for the southeastern Bering Sea research cruise aboard the NOAA Ship *Oscar Dyson*, 20 August to 17 September 2018. Steller sea lion critical habitat designated in green.

