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**United States Cruise Plan for BASIS on the NOAA Ship *Oscar Dyson*,
September – October 2015**

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 2015. 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 2015 within the southeastern Bering Sea to collect key ecological data on the pelagic ecosystem. The survey is conducted as part of the Bering Aleutian Salmon International Survey (BASIS) phase 2 research plan. 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 eastern Bering Sea aboard the NOAA Ship *Oscar Dyson*. The survey will begin 5 September 2015 in Dutch Harbor, Alaska and end on 6 October 2015 in Kodiak, Alaska, for a total of 31 sea days (Fig. 1; Table 1).

The cruise will be conducted aboard the NOAA ship *Oscar Dyson*. Fish samples will be collected using a midwater rope trawl. At each station, an oblique tow will be performed to 10 m depth off bottom or 200 m headrope depth (whichever is greater).

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 cruise itinerary for BASIS research cruise – NOAA Ship *Oscar Dyson*, 5 September to 6 October 2015.

Date	Location/Activity
LEG 1	
Sep 3-4	Embark scientific party/load gear, Dutch Harbor, AK
Sep 5	Depart Dutch Harbor, AK 3:00 pm, transit to Bering Sea
Sep 5 – Sep17	Complete station grid working north and south, along transects between 162W to 169W (Fig. 1)
Sep 18	Inport Dutch Harbor, AK 9:00 am, crew change
LEG 2	
Sep 19-20	Embark scientific party/load gear, Dutch Harbor, AK
Sep 21	Depart Dutch Harbor, AK 3:00 pm, transit to 169 W
Sep 21- Oct 3	Complete Station grid working north and south, along transects 169W to 173W (Fig. 1)
Oct 6	Inport Kodiak, AK 9:00 am, Disembark scientific party/off load gear

Fig. 1. Proposed survey stations for the BASIS research cruise in the eastern Bering Sea, 5 September to 6 October 2015 on board the NOAA Ship *Oscar Dyson*. Stars represent Distributed Biological Observatory (DBO) stations. Beige color delineates Steller sea lion critical habitat.

