

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE SOUTHWEST FISHERIES SCIENCE CENTER P.O. BOX 271
LA JOLLA, CA 92038-0271

June 4, 2004

F/SWC1:DAG

CRUISE ANNOUNCEMENT

VESSEL: F/V Frosti, 0403-FR.

CRUISE DATES: February 29 - March 19, 2004

PROJECT: Oregon - Washington Sardine Survey, Fisheries Resources

Division.

ITINERARY: Depart Port Angeles, Washington after loading and rigging of trawl gear on February 29, 2004. Proceed to first station of

the proposed survey track and occupy all 42 scheduled stations (see attached cruise track). The vessel will return to Port

Angeles on March 19, 2004.

OBJECTIVES: 1. Collect fishery independent adult sardines for spawning

biomass estimates.

2. Collect oceanographic data over a fixed cruise track which

covers the region 42°N to 48°N out to 127° W.

3. Collect acoustic data continuously throughout the survey using the vessel's ES-60 Simrad sounder.

PROCEDURES: 1. Forty-two primary stations have been plotted on the survey

track design with an approximate spacing of 30 nautical miles (please refer to attached diagram). At each station the

following activities will be performed:

a. Deployment of a Seabird SeaCat (SBE 19) down to 100 meters, bottom depth permitting. The self-contained CTD will collect depth, temperature, conductivity and chlorophyll data.

b. Standard meteorological data including SST, wind speed and direction, wave height and direction, cloud cover, relative

humidity, air temperature and barometric pressure.

c. During all transit between stations continuous measurements will be made of acoustic targets using the ES-60. All acoustic targets will be recorded for reoccupation during

the night portion of the survey.

d. A thirty minute surface tow using SWFSC's high speed midwater trawl. The trawl will be fitted with Polyform floats

at the trawls wings and headrope.

EQUIPMENT: 1. Supplied by scientific party:

- 37% Formalin (SWFSC)

- Sodium borate (SWFSC)

- 30 cc and 50 cc syringes (SWFSC)

Canulas (SWFSC)

Pint, 8 oz and 4 oz jars (SWFSC)

Standard CalCOFI tool boxes (SWFSC)

- Bucket thermometers and holders (SIO)

Weather observation sheets (SIO)

- SeaCat CTD (PMC)

Midwater trawls (SWFSC)

- Trawl doors (NWFSC)
- 2. Supplied by F/V Frosti:
 - Winch monitoring system
 - Simrad EK-60 color sounder
 - Port and starboard side trawl winches

MISCELLANEOUS:

- The disposal of fish caught will be in accordance with NOAA Administrative order 202-735B dated January 25, 1989.
- 2. At the completion of the cruise an inspection will be made of scientific working and berthing spaces by the Commanding Officer or his designated representative. The Scientific party is responsible for the condition and cleanliness of spaces assigned to the scientific party.
- 3. The Cruise Leader will hold a pre-cruise meeting aboard the vessel before departure.
- 4. The Cruise Leader will hold a post-cruise meeting upon termination of the cruise.
- 5. All dates and times recorded will be in Pacific Standard Time.

PERSONNEL: Dave Griffith, Cruise Leader SWFSC
Bev Macewicz SWFSC
Elaine Acuña SWFSC

NOAA personnel authorized per diem at the rate of \$2.00 per day to be paid via the Imprest Fund at the termination of the cruise.

WATCH HOURS: 0000-1159 Charge to account #8L4S0D05 1200-2359

OVERTIME: 120 hours (Authorized total per NMFS personnel)
NIGHT DIFF: 120 hours (Authorized total per NMFS personnel)

Date:_____ Prepared by:______
D.A. Griffith

Approved by:

William W. Fox, Jr. Ph.D

Science & Research Director Southwest Region

