



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
SOUTHWEST FISHERIES SCIENCE CENTER
8604 LA JOLLA SHORES DRIVE
LA JOLLA, CA 92037

January 18, 2005

F/SWC1:DAG

CRUISE ANNOUNCEMENT

VESSEL: NOAA Vessel *David Starr Jordan*, 0501-JD, DS 05-01.

CRUISE DATES: January 19 - 31, 2005

PROJECT: CalCOFI Survey, Fisheries Resources Division.

ITINERARY: Depart San Diego, California at 0900 on January 19, 2005. Proceed to first station 73.3/100.0 (position 31° 5.1'N/122° 39.7'W) and continue the proposed pattern started by the Scripps Institution of Oceanography research vessel *New Horizon* (see attached cruise track). To complete the proposed cruise track, it will be necessary to maintain maximum speed between stations whenever possible. The ship will complete the proposed pattern and arrive in San Francisco on January 31, 2005.

OBJECTIVES:

1. To conduct continuous underway sampling of surface waters. Temperature and salinity will be automatically logged by computer with the output from the GPS navigational unit.
2. To record current profiles throughout the duration of the cruise with the Acoustic Doppler Current Profiler.
3. To continue an ongoing assessment of pelagic fish stocks between La Jolla and San Francisco, California.
4. To monitor environmental conditions within the CalCOFI survey area.
5. To make continuous observations of sea birds and marine mammals.
6. To record continuous acoustic targets obtained with the EK-500 scientific sounder.
7. To conduct sea trials of a new underway CTD designed and fabricated by researchers at SIO.

PROCEDURES:

1. The *Jordan* will conduct operations in conjunction with the Scripps Institution of Oceanography research vessel *New Horizon*. During the southern occupation of the pattern (San Diego to Point Conception), the *New Horizon* will occupy the standard 66 CalCOFI stations from January 4 to January 20 and the *Jordan* will sample the northern region from Point Conception to San Francisco beginning January 18 and continuing until January 30 (see attached diagram).
2. Each standard CalCOFI station will include the following:



- a. A CTD/Rosette consisting of 12 2-liter hydrographic bottles will be lowered to 500 meters (depth permitting) to measure physical parameters and collect water at discrete depths for analysis of: salinity, nutrients and chlorophyll.
- b. A CalBOBL (CalCOFI Bongo) standard oblique plankton tow with 300 meters of wire out, depth permitting, using paired 505 μm mesh nets with 71 cm diameter openings. The technical requirements for this tow are: Descent wire rate of 50 meters per minute and an ascent wire rate of 20 meters per minute. All tows with ascending wire angles lower than 38° or higher than 51° in the final 100 meters of wire will be repeated. Additionally, a 45° wire angle should be closely maintained during the ascent and descent of the net frame.
- c. A Manta net (neuston) tow, using a 505 μm mesh net on a frame with a mouth area of 0.1333 m^2 .
- d. Weather observations.
- e. A Pairovet net will be fished from 70 meters to the surface (depth permitting) using paired 25 cm diameter 150 μm mesh nets out to and including station 70. The technical requirements for Pairovet tows are: Descent rate of 70 meters per minute, a terminal depth time of 10 seconds and an ascent rate of 70 meters per minute. All tows with wire angles exceeding 15° during the ascent will be repeated.

EQUIPMENT: 1.

Supplied by scientific party:

- -80°C Freezer (SWFSC)
- 37% Formalin (SWFSC)
- Ethanol (SWFSC)
- Tris buffer (SWFSC)
- Sodium borate (SWFSC)
- 30 cc and 50 cc syringes (SWFSC)
- Canulas (SWFSC)
- Pint, quart and gallon jars (SWFSC)
- Inside and outside labels (SWFSC)
- CalCOFI net tow data sheets (SWFSC)
- 71 cm CalCOFI Bongo frames (SWFSC)
- 71 cm CalCOFI 505 μm mesh nets (SWFSC)
- CalCOFI 150 μm Calvet nets and codends (SWFSC)
- CalCOFI Pairovet frames (SWFSC)
- 333 μm mesh codends (SWFSC)
- Inclinator for bongo tows (SWFSC)
- Digital flowmeters (SWFSC)
- 75 lb Bongo weight (SWFSC)
- 100 lb hydro weights (SWFSC)
- CalCOFI Manta net frames (SWFSC)
- 60 cm CalCOFI 505 μm mesh Manta nets (SWFSC)
- Standard CalCOFI tool boxes (SWFSC)
- Bucket thermometers and holders (SWFSC)
- Hand held inclinometer for Pairovet tows (SWFSC)
- Guideline Portasal (SWFSC)
- Underway CTD (SWFSC)
- Mounting/launching platform for underway CTD (SWFSC)
- XBT probes (2 boxes) (SWFSC)
- Salinity bottles (SWFSC)
- Standard sea water (SWFSC)
- Data sheets for scheduled hydrographic work (SIO)

- Weather observation sheets (SIO)
 - CTD and rosette (SWFSC)
 - 2 liter hydrographic bottles (SWFSC)
 - Turner fluorometer (MBARI)
 - Nutrient vials (MBARI)
2. Supplied by *David Starr Jordan*:
- Starboard hydro winch with ¼" cable for standard Bongo, Pairovet and Manta tows
 - Port winch with .322" conductive cable
 - J-frame w/block to accommodate .322" cable
 - Constant temperature room set at 22°C ±1°C (71.5°F ±2°F)
 - Winch monitoring system
 - Seabird thermosalinometer
 - EK-500 Scientific sounder
 - Knudsen 12 kHz depth recorder
 - Acoustic Doppler Current Profiler w/writeable CD drive

MISCELLANEOUS:

1. 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. NOAA Fleet Medical Policy requires that all scientific personnel embarking on NOAA vessels complete an SF-93 form, Report of Medical History.
6. All dates and times recorded will be in Pacific Standard Time.
7. At the end of line 66.7 a personnel exchange will take place in Monterey.

PERSONNEL:

Dave Griffith, Cruise Leader	SWFSC
Ron Dotson	SWFSC
Dimitry Abramenkoff	SWFSC
Noelle Bowlin	SWFSC
Valerie Andreassit	SWFSC
Melinda Kelley†	SWFSC
Jessica Redfern†	SWFSC
Jochen Klinket	SIO
Marguerite Blum	MBARI
Asila Ghoul	MBARI

†Debarking in Monterey

SWFSC personnel authorized per diem at the rate of \$3.00 per day to be paid via the Imprest Fund at the termination of the cruise.

WATCH HOURS: 0000-1159
1200-2359

Charge to account C8LAF40-P15

OVERTIME: 84 hours (Authorized total per NMFS personnel)
NIGHT DIFF: 78 hours (Authorized total per NMFS personnel)

Date: _____

Prepared by: _____
D.A. Griffith

Approved by: _____
William W. Fox Ph.D
Science & Research Director
Southwest Region

