



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 21, 2003

F/SWC1:DAG

CRUISE ANNOUNCEMENT

- VESSEL:** R/V *Robert Gordon Sproul* (SIO) Cruise 0302-SP.
- CRUISE DATES:** February 4 - 17, 2003.
- PROJECT:** Coastal Fisheries Resources Division, Baseline Study of Cowcod Conservation Area.
- ITINERARY:** Depart San Diego, California at 0800 on February 4, 2003. Proceed to first station 93.3/35.0 (position 32° 40.80'N/117° 52.40'W) and occupy all scheduled stations with the conservation area (see attached cruise track). The vessel will return to San Diego, California on February 17, 2003.
- OBJECTIVES:**
1. To continue with the second year of a three year baseline study within the cowcod conservation area (CCA) in partnership with CDF&G.
 2. To provide a precise index of spawning stock abundance of cowcod within the CCA.
 3. To develop a CCA cowcod larval index calibrated to CalCOFI cowcod index.
 4. To record current profiles at the end of the survey of the CCA perimeter to provide a measure of the net transport through the major survey area.
 5. To collect environmental data to characterize the oceanographic conditions under which the ichthyoplankton samples were taken.
- PROCEDURES:**
1. At each station located with the CCA, 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 will be taken. The technical requirements for this tow are: Descent rate of 50 meters per minute, ascent 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.
 2. At each station, weather observations will be taken at each station.
 3. At twelve stations (six inside the CCA and six outside the CCA), a CTD will be lowered to a depth of 500 meters (depth permitting) collecting continuous measurements of depth, temperature, conductivity, fluorescence, dissolved oxygen and transmissivity.
 4. A narrow-band RDI ADCP (Acoustic Doppler Current Profiler) will be collecting data for the duration of the survey.
- EQUIPMENT:**
1. Supplied by scientific party:
37% Formalin (SWFSC)



Sodium borate (SWFSC)
 95% Ethanol (SWFSC)
 Tris buffer (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)
 333 µm mesh codends (SWFSC)
 Inclinator for bongo tows (SWFSC)
 Digital flowmeters (SWFSC)
 75 lb Bongo weights (SWFSC)
 Standard CalCOFI tool boxes (SWFSC)
 Bucket thermometers and holders (SWFSC)
 Hand held inclinometer (SWFSC)
 Data sheets for scheduled hydrographic work (SWFSC)
 Weather observation sheets (SWFSC)
 CTD(SWFSC)

2. Supplied by R/V *Robert Gordon Sproul*:

Hydro winch with ¼" cable for standard Bongo tows
 Oceanographic winch w/.322" conductive cable
 A-frame w/blocks to accommodate .322" cable
 Davit installed on port side to allow towing of bongo nets with a
 ¼" wire
 Winch monitoring system
 12 kHz Knudsen (or comparable) precision depth recorder
 300 kHz Narrowband Acoustic Doppler Current Profiler

MISCELLANEOUS:

1. At the completion of the cruise an inspection will be made of scientific working and berthing spaces by the Master or his designated representative. The scientific party is responsible for the condition and cleanliness of spaces assigned to the scientific party.
2. The Cruise Leader will hold a pre-cruise meeting aboard the vessel before departure.
3. All dates and times recorded will be in Pacific Standard Time.

PERSONNEL:

Dave Griffith, Chief Scientist SWFSC
 Elaine Acuña SWFSC
 Dimitry Abramenkoff SWFSC
 Valerie Gowney SWFSC
 John Hyde SWFSC
 Ben Maurer SWFSC

SWFSC personnel authorized per diem at the rate of \$2.00 per day to be paid via a Travel Voucher at the termination of the cruise.

WATCH HOURS:

0000-1159 Charge to account #8L4S0D05
 1200-2359

OVERTIME:

136 hours (Authorized total for all NMFS personnel)

NIGHT DIFF:

132 hours (Authorized total for all NMFS personnel)

Date: _____

Prepared by: _____
 D.A. Griffith

Approved by: _____
Michael F. Tillman Ph.D.
Science & Research Director
Southwest Region

