CRUISE REPORT

Cruise Number: MF-06-07
FOCI Number: 4MF06

Ship:
NOAA Ship Miller Freeman

Area of Operations:
Gulf of Alaska

Itinerary:
Date depart / port: May 21, 2006 / Dutch Harbor, AK
Date arrive / port: June 1, 2006 / Kodiak, AK

Participating organizations:
NOAA - Alaska Fisheries Science Center (AFSC)

Chief Scientist:

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Personnel:

Steve Porter	M / AFSC
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Matt Wilson	M / AFSC

Cruise Objectives:
The objectives of this cruise were to conduct an ichthyoplankton survey in the region between Unimak Pass, the Shumagin Islands, and through Shelikof Strait to Kodiak Island to estimate the abundance, transport, and factors influencing the survival of young walleye pollock larvae. We also occupied six of the stations on Line 8 to continue our time series of environmental and biological conditions in Shelikof Strait.

Summary of Operations:

Operation	Tows
20cm bongo (20Bon)	6
60cm bongo (60Bon)	176
Seabird SeaCAT CTD (CAT)	176
CTD without bottle samples (CTD)	1
CTD with bottle samples (CTDB)	6

Samples Collected	Tows	Number
SeaBird SeaCat CTD (CAT)	176	
Extracted chlorophyll (Chlor)	6	36
SeaBird CTD (CTD)	7	

Live SL pollock larvae (S. Porter) (L-Meas)	151	2273
Larval pollock collected for otolith analysis (L-Oto)	151	4476
Microzooplankton samples preserved in formalin (MZ)	6	36
Nutrient samples collected from CTD casts (Nut)	6	65
Photosynthetically Active Radiation data collected during CTD casts (PAR)	6	
Quantitative tow preserved in formalin (QTowF)	187	215
Rough count of pollock larvae (RCountL)	170	5024

Summary of Cruise:

Narrative:

The 60-cm bongo survey with .505-mm mesh was begun in the Unimak Pass area and continued into the Gulf of Alaska towards Kodiak Island. Bongo tows went to 100 meters or 10 meters off bottom where the water depth was shallower. Due to inclement weather experienced while sampling in Unimak Pass, several non-critical grid stations were dropped from the survey. Larval walleye pollock were sorted from Net 2 of the Bongo for otolith and length studies. Fresh standard length measurements were recorded for pollock larvae and then preserved in ethanol. Net 1 samples were preserved in 5% formalin for sorting of all larval fish species at a later date. EK-60 data was continuously recorded at the request of the MACE group for analysis of the acoustic sign along the grid. Upon arrival at Line 8, the 20-cm Bongos with .153-mm mesh were added to the wire and Net 2 on the 60-cm Bongo was changed to .333-mm mesh. All of the Bongo samples from Line 8 were preserved in formalin for sorting at a later date. Each Bongo was followed by a CTD with Niskin bottles to sample the amount of chlorophyll and microzooplankton in the water column. Maximum sampling depth was 300 meters or 10 meters off bottom. Six stations were occupied and sampled on Line 8. After the completion of Line 8 operations, the grid survey was resumed with the gear returned to its original configuration. Files acquired from the SeaCat and CTD units were processed after each cast and plotted out for reference. From the 203 stations selected for the grid survey, 176 stations were successfully occupied and sampled.

Days Lost to Weather:

None

Days Lost to Equipment Failure:

None

Recommendations:

None

Acknowledgments:

The scientific party would like to acknowledge the hard work and support of the officers and crew of the Miller Freeman.

Attachments:

Table 1. Cruise Summary

Figure 1. Station Map