CRUISE ANNOUNCEMENT

Eastern Bering Sea Upper Continental Slope (EBSUCS) Survey
Groundfish and Invertebrate Resources

Charter Vessel F/V *Morning Star*
Cruise 2002-02

The Alaska Fisheries Science Center's (AFSC) Resource Assessment and Conservation Engineering Division (RACE) has chartered the F/V *Morning Star* to conduct the biennial Eastern Bering Sea Upper Continental Slope (EBSUCS) survey to assess the groundfish and invertebrate resources of the slope region of the eastern Bering Sea.

AREA AND PERIOD OF OPERATION

The F/V *Morning Star* will be chartered for 70 days starting May 23 and ending July 31, 2002. Sampling gear and supplies will be shipped from Seattle to Dutch Harbor, Alaska, and scientists will load and set up the vessel beginning May 23.

The first 13 days of the survey will be conducted in the Aleutian Islands as part of the 2002 biennial bottom trawl of the Aleutian Island region. During this 13 day period the F/V *Morning Star* will proceed to Seguam Island to place a time-lapse drop camera in Atka mackerel spawning habitat. After the cameras are in place bottom trawling operations will begin near Seguam Island and proceed eastward toward Unimak Pass trawling at designated stations on the north side of the Aleutian Islands. Details of the remaining Aleutian Island survey will be covered under a separate cruise announcement.

On approximately June 5th the F/V *Morning Star* will begin the EBSUCS survey just north of Unimak Island on the slope region in the eastern Bering Sea. Station surveying and trawling will be conducted at predetermined stations between 200 and 1200 m (approximately 100-600 fm). The cruise will be divided into three legs with scientific crew changes in Dutch Harbor on June 14, and on St. Paul Island July 8th. The survey will end in Dutch Harbor on July 31st.

OBJECTIVES

The objectives of the 2002 EBSUCS survey are to:

1. describe the composition, distribution, and relative abundance of groundfish and invertebrate resources of the EBSUCS survey area;

2. collect biological samples from a variety of commercially and ecologically important species, including cods, flatfish, rockfish, grenadiers, sculpins, elasmobranchs, crabs, shrimps and other invertebrates; and

3. collect temperature profiles from surface to bottom to relate changes in fish and invertebrate distribution among years to changes in oceanographic conditions.

METHODS AND GEAR

The slope regions will divided in 6 geographical areas based on latitude and bathymetry. The EBSUCS area can be characterized by canyon areas, gentler sloping areas, and areas with very steep profiles. The survey will employ a stratified random design which will divide approximately 200 pre-determined trawl stations into the 6 area strata and 5 depth strata (200 m increments from 200-1200 m) within each area strata. The effort for distribution of trawl stations will be weighted by the area within each stratum.

A thirty-minute bottom trawl will be conducted at each station. The Poly Nor'eastern trawl equipped with 20 cm diameter rubber disc mudsweep roller gear, a version that has been used for RACE surveys for the continental slope off Washington, Oregon, and California since 1988, will be employed for this survey. The net will be fished with 1.83x2.75 m (6x9 ft) steel V-doors (weighing 1,000 kg each) rigged with four-point bridles to enhance their stability at slow towing speeds and 55 m bridles between the doors and wingtips. We will attempt to sample at all predetermined stations, but we may search for a nearby alternate station in the same target depth. Station sampling will include deployment of net mensuration instruments (attached to the trawl headrope and wing), a bathythermograph attached to the inside of the trawl headrope, and a bottom contact sensor attached to the trawl footrope.

Catches will be sorted, weighed, and counted by species. Biological information (length, sex, maturity, age structures, individual weights, stomach contents, tissues, etc.) will be collected from selected ecological biological, and

commercially important species. Temperature profiles will be collected at each trawl site with the headrope-mounted bathythermograph.

SCIENTIFIC PERSONNEL SCHEDULE
F/V MORNING STAR 2002-02

Leg 1: May 23 - June 14

NAME	PROFESSIONAL TITLE	SURVEY TITLE	AFFILIATION
Robert Lauth	Fisheries Biologist	Chief Scientist	AFSC/Seattle
James W. Orr	Zoologist	Deck Boss	AFSC/Seattle
Gerald R. Hoff	Fisheries Biologist	Biologist	AFSC/Seattle
Duane Stevenson	Zoologist	Biologist	AFSC/Seattle
Jon Short	Fisheries Biologist	Feeding Ecology	AFSC/Seattle
Dana Hanselman	Fisheries Biologist	Biologist	NMFS/ABL

Leg 2: June 14 - July 8

Gerald R. Hoff	Fisheries Biologist	Chief Scientist	AFSC/Seattle
Lyle Britt	Fisheries Biologist	Deck Boss	AFSC/Seattle
Rebecca Reuter	Fisheries Biologist	Biologist	AFSC/Seattle
Sarah Gaichas	Fisheries Biologist	Biologist	AFSC/Seattle
Mei-Sun Yang	Fisheries Biologist	Feeding Ecology	AFSC/Seattle
David Ebert	Zoologist	Biologist	MLML/California

Leg 3: July 8 - July 31

Lyle Britt	Fisheries Biologist	Chief Scientist	AFSC/Seattle
Stan Kotwicki	Fisheries Biologist	Deck Boss	AFSC/Seattle
David Somerton	Fisheries Biologist	Biologist	AFSC/Seattle
Beth Matta	Fisheries Biologist	Feeding Ecology	AFSC/Seattle
Josh Keaton	Fisheries Biologist	Biologist	AFSC/Seattle
Duane Stevenson	Zoologist	Biologist	AFSC/Seattle

For further information, contact Dr. Gary Stauffer, Director, Resource Assessment and Conservation Engineering Division, Alaska Fisheries Science Center, National Marine Fisheries Service, 7600 Sand Point Way Northeast, Seattle, Washington, 98115-0070. Telephone (206) 526-4170.
