



**Sit. Rep. #01 - Departure  
14 January 2008  
US AMLR Vessel Survey (*R/V Yuzhmorgeologiya*)  
South Shetlands, Antarctica**

1. The U.S. AMLR Program accepted the Russian *R/V Yuzhmorgeologiya* as ready for the 2008 charter at 0800 on 8 January 2008 in Punta Arenas, Chile. Over the next three days, provisions, equipment and personnel were embarked, laboratories were set up, and instrumentation was installed and tested. The ship departed at 0400 on 11 January 2008 for the U.S. AMLR study area in the South Shetland Islands, Antarctica.
2. In route to the U.S. AMLR study our vessel encountered uncommonly good weather across the Drake Passage. A Continuous Plankton Recorder (CPR), provided by the Australian Antarctic Division, was deployed upon crossing into the Antarctic waters. The CPR was deployed for approximately 290 nautical miles at a depth of 10 m and at a speed of 14 knots. Additionally 17 Expendable Bathythermograph (XBTs) were deployed to document the location of the Polar Front, and the southern boundary of the Antarctic Circumpolar Current (ACC). Further, nine drifters were deployed on the crossing. Five were standard drifters that measure sea surface temperature, and four were newer Iridium buoys.
3. Landfall at Admiralty Bay on King George Island was 17:00 on 13 January. The ship hove to off Copacabana Camp and immediately Zodiac operations began. Personnel (W. Trivelpiece, R. Orben, and S. Woods) and five zodiac loads of fresh provisions, fuel and mail were transferred to the Copacabana field camp. One zodiac load of provisions were distributed to our Polish colleagues at the Arctowski station. In addition the ships multi frequency echosounder was successfully calibrated while at anchor in Ezcurra Inlet.
3. After leaving Admiralty Bay in the morning (0230), of 14 January, the ship proceeded through Nelson Passage, en route to Cape Shirreff Field Camp. Wind and seas began to increase during transit and will make the Fur Seal Survey and the offload more difficult.
4. Bird and marine mammal observations. The 8th annual Drake Passage Christmas Bird count starting south of Staten Island was conducted during the Drake crossing. Approximately 216 nm of the Drake Passage were surveyed under exceptionally calm sea state conditions. Standardized seabird observations, concurrent with an opportunistic marine mammal effort, was conducted during the transit to the AMLR study area. As during prior surveys, blue petrels, prions, and diving petrels were observed in proximity to the ACC. Soft-diving petrels were new to the count this year. We also observed hourglass dolphins, minke whales, Southern bottlenose whales, and a spectacular view of a male strap-toothed beaked whale.
9. Scientific party aboard includes:

C. Reiss, SWFSC, chief scientist  
A. Cossio, SWFSC, acoustics, small boats  
V. Loeb, MLML, zooplankton  
K. Dietrich, SWFSC, zooplankton  
R. Driscoll, SWFSC, zooplankton  
D. Lombard, SWFSC, zooplankton  
K. Zaret, SWFSC, zooplankton  
D. Needham, STS, oceanography, ET support  
M. Van Den Berg, STS, oceanography, ET support, small boats  
C. Hewes, SIO, phytoplankton  
C. Montes, Chile, phytoplankton  
M. Nash, Chile, phytoplankton  
N. Sanchez, Chile, phytoplankton  
C. Biszal, SIO, phytoplankton  
H. Wang, SIO, phytoplankton  
B. Seegers, SIO, phytoplankton  
N. Spear, SWFSC, lipid extractions and scat analysis  
J. Santora, SWFSC, bird and marine mammal observations  
T. Brown, CUNY, bird and marine mammal observations  
M. Force, SWFSC bird and marine mammal observations

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Report submitted by AMLR researchers aboard the *R/V Yuzhmorgeologiya*, conducting surveys of the pelagic ecosystem in the peninsula region of the Antarctic. These reports are posted at <http://swfsc.noaa.gov/aerd-field.aspx>.  
Photos by M. Goebel (NMFS/AERD).