README METADATA FILE: Grebmeier and Cooper, J 2008
Project: B57. Epibenthic Video Survey of the Bering Sea

P.I.(S):   Jackie Grebmeier/Lee Cooper
University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory
tel: +1-410-423-7334 (JG), +1-410-326-7359 (LC), fax: +1-410-326-7302
email: jgrebmei@cbl.umces.edu, cooper@cbl.umces.edu
website: http://arctic.cbl.umces.edu

1. Data Types for Epibenthic Sampling HLY0801 and HLY0802

We used a benthic camera system in 2008 to determine epibenthic community structure in the BEST-BSIERP study area (Figure 1). The benthic camera system was a stand-alone system consisting of a surface-held video camera connected by electronic cable to a camera lens, lights, and laser pointers, all enclosed in a small metal cage, that allows independent deployment and fine control for real-time benthic imaging measurements. We are analyzing the digital video imagery to determine epifaunal abundance and composition and compare these to epifaunal-size associated biomass data from previous trawling efforts to convert abundance and size from our camera survey to a rough estimate of biomass over a specific surface area.

2. Data Sets

A. DUE June 2009
   a. Meta data file for video general description file for HLY0801 & HLY0802 <B57 Meta data video.doc>, this file
   b. Video general description file <B57HLY0801&02stnvideoDescr.xls>

B. DUE October 15, 2009
   a. Epifaunal abundance: number meter^{-2} (converted from 10 cm spacing between lasers)
   b. Epifaunal biomass: grams wet weight meter^{-2}, converted from faunal size and conversion factor from available data
   c. Summary data table sediment tracers and infauna from HLY0802 cruise

3. The following captions are used as column headers for the file "HLY0801&02stnvideodescr.xls":

1. Station Number for HLY0802; given as 'HLY0801' for stations associated with that cruise

2. Station Name for HLY0801 and HLY0802

3. LAT_s=Latitude (°N) s=start of deployment

4. LONG_s=Longitude (°W) s=start of deployment

5. LAT_e= Latitude (°N) e=end of deployment

6. LONG_e=Longitutde (°W) e=end of deployment

7. Depth_m =depth in meters rounded to next deepest meter recorded on video camera (or written on sheet or in xls event log file if no depth reading on camera)

8. Date_UTC=date in universal time coordinates

9. Substrate= general description of overall substrate type in video track; multiple types are listed where sediments varied and/or were heterogeneous; presence of frequent shell fragments is also noted here

10. Functional groups(ecosystem engineers_structural modifiers)= organisms that create habitat structure through their presence and/or behavior (e.g., coral, bioturbators- size refers to burrows)

11. Functional groups (benthos)=dominant type of benthic organisms (sessile, mobile, burrowing) and common group names (e.g., crabs, sea stars); relative abundance as appropriate

12. Class_species (benthos)=taxonomic names related to groups identified in #11; listed in order of abundance

13. Functional groups (water column_lower)= dominant type of pelagic organisms; relative abundance as appropriate

14. Class/species (water column_lower)= names related to groups identified in #13; listed in order of abundance

15. Unique features of note=anything interesting not captured in other columns (e.g., feeding activities); this is a good column to check if you are interested in video clips for a presentation, etc.

16. Short_descrip_abiotic=Short description of abiotic features for simplified presentation in GIS

17. Short_descrip_dominant_epibenthic_ biotic= Includes only biological features that are overwhelmingly dominant (i.e., continual visible throughout video) for simplified presentation in GIS

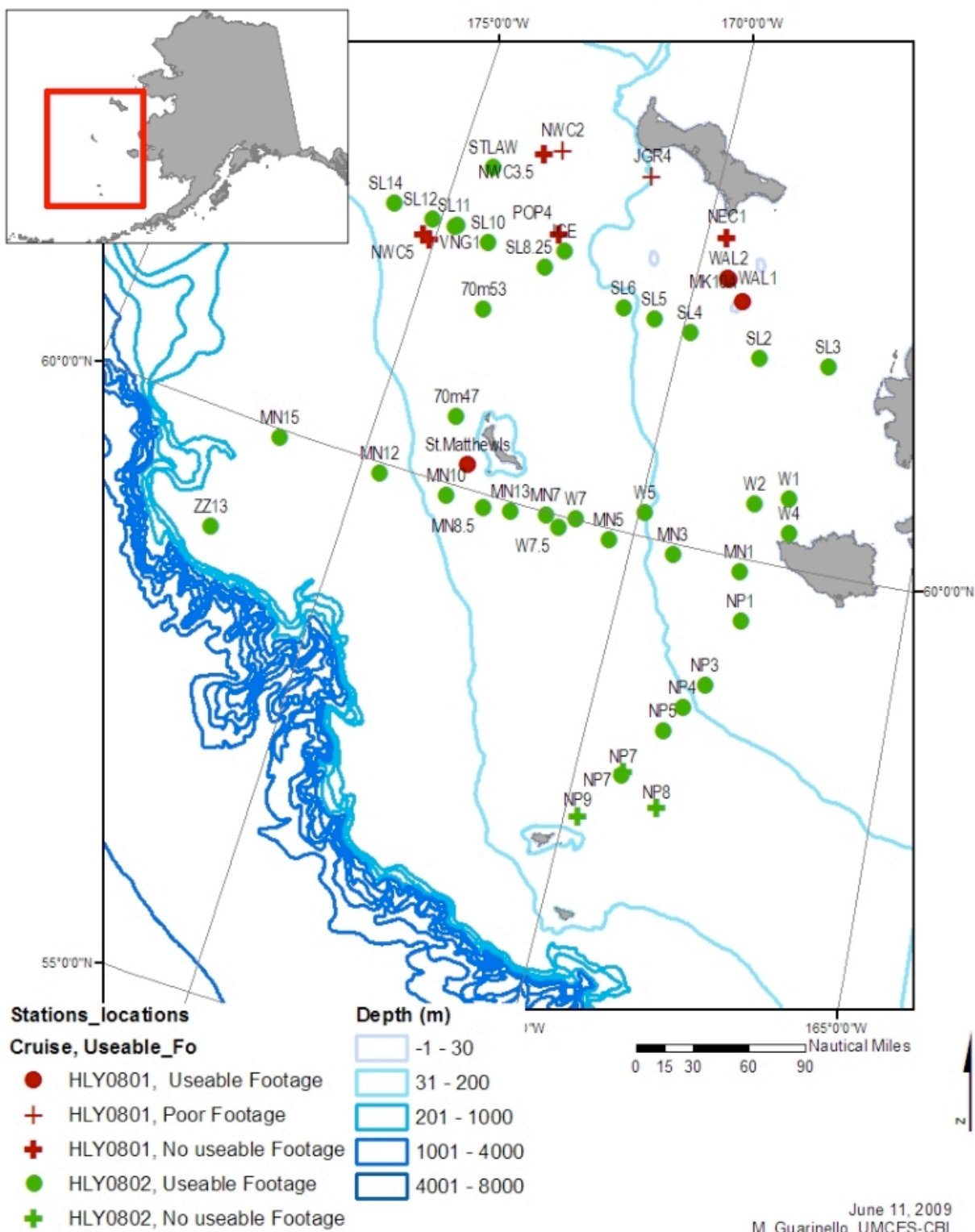18. Shipboard_Notes= notes taken during the cruise by Boris Sirenko and Ed Davis

Figure 1. Map of video stations for HLY0801 and HLY0802 in the Bering Sea, 2008..