

# PLAN FOR THE KOREAN SIGHTING SURVEY IN THE EAST SEA IN 2010

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## ABSTRACT

Korea has a plan to conduct a sighting survey with IO passing mode using the research vessel, Tamgu no. 3 in the East Sea, April-May 2010. The first objective of the survey is to get the information on the distribution and abundance of common minke whales to be used for the in-depth assessment. The second is to collect the information in general on the distribution of other cetacean in the survey area.

## BACKGROUND

The survey area, the East Sea, was one of the major whaling grounds in the past commercial whaling period and has most of by-catches in Korea these days. Although the Cetacean Research Institute has conducted 8 systematic surveys in this area, the surveyed coverage is still very low and the IO passing mode for  $g(0)$  estimation has never been tried. Therefore this sighting survey was designed to supply these kinds of deficiency and elaborate the information on distribution and abundance for North Pacific minke whales.

The survey area, the East Sea, was one of the major whaling grounds in the past commercial whaling period and the most of by-catches of cetacean in Korea are occurring in this water, recently. Although the Cetacean Research Institute (CRI) has conducted 8 systematic surveys in this area, the coverage of the surveys is still very low in the offshore and the IO passing mode for  $g(0)$  estimation has never been tried up to 2009. The survey in 2010 will be established with IO passing mode. This sighting survey was designed to supply the deficiency of data and elaborate the information on the distribution and abundance of common minke whales in the East Sea.

## SURVEY PLAN

### Research area and period

The research area is established in the coastal and offshore waters in the East Sea bounded by longitudes of 128°09'E and 130°50'E and by latitudes of 34°18'N and 38°32'N (Fig. 1). The survey area

is divided into 4 coastal blocks and 1 offshore block. The starting points of each block are set randomly and the total transect line is 1,407.5 nautical miles but several transect lines will be cut by the EEZ between Korea and Japan.

The survey will be conducted northwardly in the offshore block and then southwardly in the coastal blocks in order to avoid double counting. It will be started on April 19 and finish May 23, 2010 and tentative itinerary will be as follows;

April 19: leave Busan and start the offshore block

May 5: finish the offshore block and enter Sokcho

May 7: leave Sokcho and start the coastal blocks

May 23: finish the survey and enter Busan

### **Research Method**

Using the research vessel, Tamgu no.3 (360 GT, 1,600HP), sighting survey will be conducted with IO passing mode using the two channeled walkie-talkies. One observer and one scientist will be on the individual top barrels of the front and the rear side, separately, two observers and one scientist will be on the top bridge. The research vessel will cruise at the speed of 10-12 knots in accordance with sea status and weather conditions. Naked eyes will be the main practice for sighting whales and binocular will also be used as a secondary tool. Although IO passing mode will be applied to minke whales, closing mode will be applied appropriately to other cetacean animals for identification and school size estimation. Other non-lethal research activities will be conducted such as biopsy sampling for genetic study, water temperature and salinity profile with CTD for oceanographic description, and photography and video recording for identification, etc.

### **Distance and angle estimation training and testing**

Training and testing of the distance and angle measurement will be conducted at the start and the end of the cruise.

### **Biopsy samples**

Biopsy samples will be tried using a Larsen gun or a crossbow.

### **Photo identification**

If we will encounter gray, humpback, right and blue whales, photographs will be taken for the identification.

### **Submission to the SC**

Details of cruise report and abundance estimate of common minke whales will be presented to the 63<sup>rd</sup> IWC Scientific Committee.

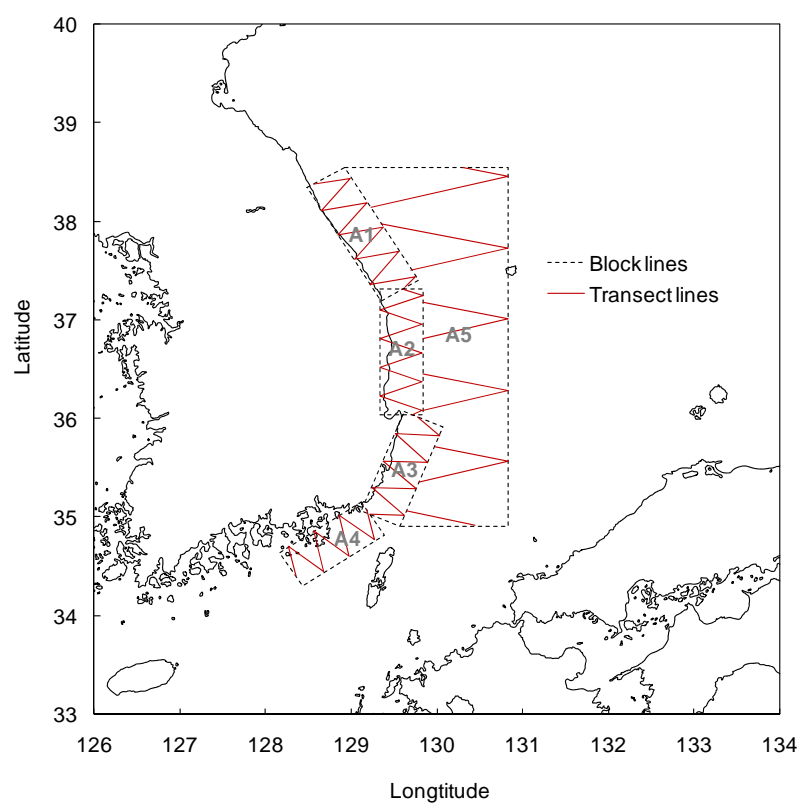


Fig. 1. Survey blocks and predetermined transect lines for Korean cetacean sighting survey in the East Sea, April-May 2010.