

# Plan for the Korean Sighting Survey in the Yellow Sea in 2014

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## ABSTRACT

The sighting survey for common minke whale will be conducted with closing mode using the research vessel *Tamgu 3* in the Yellow Sea of Korea in spring, 2014. The first objective of this survey is to get information on the distribution and abundance estimation of common minke whales for the stock assessment. The second one is to collect the information in general on the distribution of other cetaceans in the area. A total of 769.7 n.m. long transect lines will be searched using closing mode with binoculars. Other research activities such as biopsy sampling or photo identification will be conducted during the survey.

## BACKGROUND

The survey area, the Yellow Sea, was one of the main whaling ground in the past commercial whaling period from spring to autumn but information on the distribution and abundance is insufficient for the common minke whale assessment. Although the Cetacean Research Institute has conducted 5 systematic surveys in this area, the coverage of the surveys is still very low especially in the offshore blocks. In order to increase the survey coverage, we conducted the survey in the smaller survey blocks and shorter transect lines since 2013. 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 western North Pacific. The plan was established in accordance with the requirements and guidelines for conducting surveys and analyzing data within the Revised Management Scheme (IWC, 1997).

## SURVEY PLAN

### Survey area and period

The survey area is established in the southern part of the Yellow Sea in the Korean EEZ bounded by longitudes of 124°42'E and 127°00'E and by latitudes of 33°00'N and 37°18'N (Fig. 1). The area is divided into 2 blocks. Starting points of both blocks are set at the southernmost boundaries with random start. Total track line is 769.7 nautical miles.

The survey will be started on 23<sup>rd</sup> April and finished on 12<sup>th</sup> May 2013 and tentative itinerary will be as follows;

23-April: The vessel will leave Busan to the northernmost of the survey block YS4.

24-April: The survey will be started in the survey block YS4.

25-April: The survey block YS4 will be completed.

26-April: Move to the southernmost of the survey block YS3.

27-April: The survey block YS3 will be started.

10-May: The survey will be finished in the survey block YS3 and the vessel will leave the northernmost of the survey block YS3 heading to Busan.

12-May: The vessel will arrive at Busan.

### **Research method**

Using the research vessel *Tamgu 3* (360 GT, 1,600HP), sighting survey will be conducted with closing mode. Two scientists and four observers will be on the barrel and top bridge. The vessel will cruise with speed at 10 to 12 knots in accordance with sea states and weather conditions. Sightings with binoculars will be the main practice for searching the whales. Closing mode will be applied for identification, school size estimation, photograph or video recording. Other non-lethal research activities will be conducted such as biopsy sampling for genetic study, water temperature and salinity observations with a CTD for oceanographic study, and photography and video recording for photo identification, etc.

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

Distance and angle measurement will be trained at the start and tested at the end of the survey.

### **Oceanographic descriptions**

A CTD will be applied to profile the water temperature and salinity in the survey areas.

### **Biopsy samples**

Biopsy sampling will be tried using Larsen gun or crossbows.

### **Photo identification**

If right, gray, humpback, blue and killer whales are encountered, photographs will be taken for the photo identification studies.

**Oversight**

Yong-Rock An will act as the oversight of this survey.

**Submission to the Scientific Committee**

Details of cruise report, sighting effort and weather record and sightings results will be submitted to the 67<sup>th</sup> IWC Scientific Committee meeting.

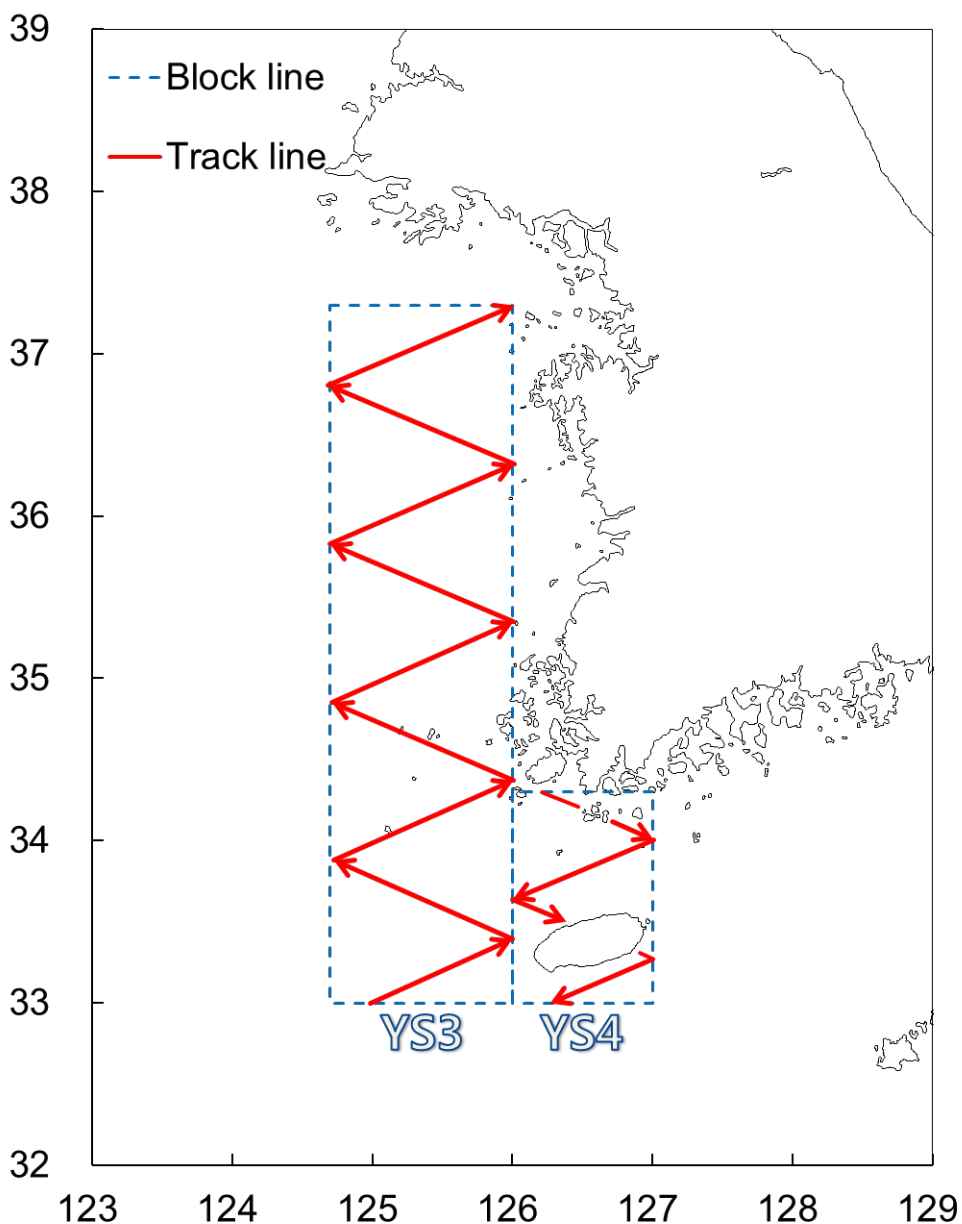


Figure 1. Survey blocks and predetermined transect lines for the Korean sighting survey in the Yellow Sea 2014 (arrows showing the direction of the research vessel).