PLAN FOR THE KOREAN SIGHTING SURVEY IN THE

EAST SEA, 2012

SEOK-GWAN CHOI, YONG-ROCK AN, DAE-YEON MOON, KYUM-JOON PARK AND HYUN-WOO KIM

Cetacean Research Institute, National Fisheries Research & Development Institute

139-29, Maeam-dong, Nam-gu, Ulsan, 680-050, Republic of Korea

ABSTRACT

Korea has a plan to conduct a sighting survey with normal closing mode using the research vessel,

Tamgu 3 in the East Sea, April-May 2012. The major objective of the survey is to get the information on

distribution and abundance for western North Pacific common minke whale assessment. And also the

survey designed to collect some general information of other cetacean animals 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 the most of cetacean bycatches in Korea are occurring in this area, recently. Although the

Cetacean Research Institute (CRI) has conducted 9 systematic surveys in this area, the coverage of the

surveys is still very low in the offshore block and the IO passing mode for g(0) estimation has never been

tried up to 2010. This sighting survey is 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.

SURVEY PLAN

Research area and period

The research area is established in the coastal and offshore blocks 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 four coastal blocks and one offshore block. The starting points of each block are set

randomly and the total transect line is 1,364.3 nautical miles but several transect lines will be cut by the

EEZ between Korea and Japan.

The survey will start on April 16 and finish May 25, 2012 and tentative itinerary will be as follows;

April 16: leave Busan and start the offshore block

May 2: finish the offshore block and enter Sokcho

May 4: leave Sokcho and start the coastal blocks

May 25: finish the survey and enter Busan

Research method

Using the research vessel, Tamgu 3 (360 GT, 1,600HP), sighting survey will be conducted with normal closing passing mode. Two couples of observer and scientist will be on the individual top barrels of the front and the rear sides, rest of observers and scientists will be on the top bridge. The research vessel will cruise with speed at 10-12 knots in accordance with sea status and weather conditions. Naked eyes will be the main practice for sighting and binocular will also be used as a secondary tool. The closing mode will be applied to identify species and estimate school sizes. 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 end of the cruise.

Biopsy samples

Biopsy samplings will be tried using the Larsen gun and crossbows.

Photo identification

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

Oversight

Yong-Rock AN (CRI) will take charge of the oversight of this survey.

Submission to the Scientific Committee

Details of cruise report and abundance estimation of minke whales will be presented to the 64th IWC Scientific Committee meeting.

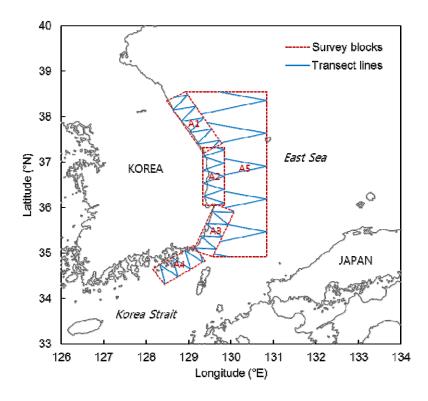


Fig. 1. Survey blocks and predetermined transect lines for the Korean sighting survey in the East Sea, 2012.