

KOREA (Rep. of) PROGRESS REPORT ON CETACEAN RESEARCH, WITH STATISTICAL DATA FOR THE CALENDAR YEAR 2001

Compiled by Hawsun SOHN and Zang Geun KIM

National Fisheries Research and Development Institute

408-1, Sirang-Ri, Kijang-Up, Kijang County, Pusan City 619-900, Republic of Korea

This report summarizes information on cetacean research in Korea compiled by the National Fisheries Research and Development Institute (NFRDI) from January to December 2001. The NFRDI conducted the whale research to collect scientific data instructed by the Government and the IWC for the conservation and management of cetaceans in Korean waters.

1. Species and stocks studied

| Common name | Scientific name | Area/stock(s) | Items referred to |
|-----------------------------|-----------------------------------|----------------------------|-------------------|
| Minke whale | <i>Balaenoptera acutorostrata</i> | East, South and Yellow Sea | 2.1.1, 4.2, 6.2 |
| Baird's beaked whale | <i>Berardius bairdii</i> | East Sea | 7.1 |
| Stejneger's beaked whale | <i>Mesoplodon stejnegeri</i> | East Sea | 7.1 |
| Killer whale | <i>Orcinus orca</i> | Yellow Sea | 2.1.1 |
| Risso's dolphin | <i>Grampus griseus</i> | East Sea | 7.1 |
| Common dolphin | <i>Delphinus delphis</i> | East and South Sea | 7.1 |
| Pacific white-sided dolphin | <i>Lagenorhynchus obliquidens</i> | East Sea | 7.1 |
| Bottlenose dolphin | <i>Tursiops truncatus</i> | East Sea | 2.1.1, 7.1 |
| Rough-toothed dolphin | <i>Steno bredanensis</i> | South Sea | 7.1 |
| Dall's porpoise | <i>Phocoenoides dalli</i> | East Sea | 7.1 |
| Harbour porpoise | <i>Phocoena phocoena</i> | East Sea | 7.1 |
| Finless porpoise | <i>Neophocaena phocaenoides</i> | East, South and Yellow Sea | 2.1.1, 4.2, 7.1 |

2. Sightings data

2.1 Field work

2.1.1 SYSTEMATIC

The NFRDI carried out two systematic sighting surveys in the Yellow Sea in terms of the RMP, based on the plan endorsed in the SC. Using Tamgu 3 equipped with top barrel (stern trawler, 360 G/T), one was done from 18 April – 17 May (30 days) and the other from 6 September – 26 September (21 days) in the area within the Korean EEZ of the Yellow Sea bounded on the longitude by 123°E-126°E and on the latitude by 34°18'-37°18', which was about 16% of the whole area of the Yellow Sea. The zig-zag form of trackline was set in the survey area divided into the coastal and offshore blocks. The sighting results of spring and autumn are summarized in the table 2-1 and 2-2, respectively.

Table 2-1. Number of sightings (schools-animals) in the spring survey using the R/V Tamgu 3.

| Block | Date | Distance (n.mi.) | Number of whales and dolphins sighted | | | | | | | | |
|-------------------|--------|---------------------|---------------------------------------|-------|-----|------------------|-------|------|--------------|-----|------|
| | | | Minke whale | | | Finless porpoise | | | Killer whale | | |
| | | | pri | sec | off | pri | sec | off | pri | sec | off |
| Coastal block | 20 Apr | 8.0 | | | | 3-6 | | 2-2 | | | |
| | 23 Apr | 99.2 | | | | 27-50 | | 8-13 | 1-6 | | 3-10 |
| | 24 Apr | 43.6 | | | | | 6-8 | | | | |
| | 26 Apr | 108.0 | | 1-1 | | 1-1 | | 8-9 | | | |
| | 27 Apr | 134.4 | | 7-8 | | 54-117 | | 9-17 | | | |
| | 1 May | 55.3 | 3-3 | | 1-1 | 4-5 | | 4-6 | | | |
| | 8 May | 14.5 | | | | | | | | | |
| | 10 May | 82.0 | | 2-2 | | | 2-2 | | | | |
| | 11 May | 104.4 | | 7-7 | | | 6-8 | | | | |
| | 12 May | 31.6 | | | | 12-17 | | 5-7 | | | |
| Offshore block | 12 May | 39.5 | | 5-5 | | | | | | | |
| | 13 May | 90.0 | | 3-3 | | | | | | | |
| Total | | 810.5 | | 28-29 | | 115-214 | 36-54 | | 1-6 | | 3-10 |

Table 2-2 Number of sightings (schools-animals) in the summer survey using the R/V by Tamgu 3.

| Block | Date | Distance (n.mi.) | Number of whales and dolphins sighted | | | | | | | | |
|-------|--------|---------------------|---------------------------------------|-----|-----|------------------|-----|-------|--------------------|-----|-----|
| | | | Minke whale | | | Finless porpoise | | | Bottlenose dolphin | | |
| | | | pri | sec | off | pri | sec | off | pri | sec | off |
| B2 | 8 Sep | 94.3 | 1-1 | | | | | | | | |
| B1 | 9 Sep | 50.0 | | | | | | | | | |
| B2 | 13 Sep | 81.9 | 1-1 | | | | | | | | |
| " | 14 Sep | 30.7 | | | | | | | | | |
| " | 15 Sep | 127.1 | | | | 1-1 | | | 2-17 | | |
| " | 18 Sep | | | | | | | 12-15 | | | |
| " | 19 Sep | 9.6 | | | | | | | | | |
| " | 22 Sep | | | | | | | 3-3 | | | 1-2 |
| B1 | 23 Sep | 140.4 | | | | | | | | | |
| " | 24 Sep | 87.5 | 7-8 | | | | | | | | |
| Total | | 621.6 | 9-10 | | | 1-1 | | 15-18 | 2-17 | | 1-2 |

4. Tissue/biological samples collected

The NFRDI collected biological samples of cetaceans bycaught from coastal fishing gears, or stranded, aiming at contribution to genetic study and pollutant contaminants.

4.2 Samples from directed catches or bycatches

| Species | Area/stock | Calendar year/ season | Archived (Y/N) | Tissue type(s)* | Contact person/institute |
|-------------|------------|--------------------------|-------------------|-----------------------|--------------------------|
| Minke whale | East Sea | 14 | Y | Skin, blubber, muscle | Z. G. KIM/NFRDI |
| | South Sea | 6 | Y | " " " | |

4.3 Samples from stranded animals

| Species | Area/stock | Calendar year/ season | Archived (Y/N) | Tissue type(s)* | Contact person/institute |
|------------------|------------|--------------------------|-------------------|-----------------|--------------------------|
| Finless porpoise | East Sea | 2 | Y | Skin, muscle | Z. G. KIM/NFRDI |

6. Statistics for large cetaceans

All bycatches from coastal fishing gears were obligatorily reported to marine police and fisheries authorities in accordance with the guideline of the MOMAF.

6.2 Other non-natural mortality for the calendar year 2001

| Species | Area/stock | Males | Females | Total | Cause | Methodology |
|-------------|------------|-------|---------|-------|-----------|-------------|
| Minke whale | East Sea | 7 | 25 | 132 | Entangled | Postmortem |
| | | | 1 | 4 | Drifted | |
| | | | | 1 | Stranded | |
| | South Sea | 3 | 6 | 11 | Entangled | |
| | | 1 | 1 | 2 | Drifted | |
| | Yellow Sea | | 1 | 5 | Entangled | |
| | | | 4 | 5 | Stranded | |

7. Statistics for small cetaceans

7.1 For the calendar year 2001

| Species | Area/stock | Directed catch | | Incidental mortality | | | Live-capture |
|--------------------------|------------|----------------|------------|----------------------|------------|--------------|--------------|
| | | Reported | Est. total | Reported | Est. total | Source* | Reported |
| Baird's beaked whale | East Sea | | | 1 | | Gillnet | |
| Stejneger's beaked whale | East Sea | | | 2 | | Stranded | |
| | | | | 1 | | Stranded | |
| Risso's dolphin | East Sea | | | 3 | | Drifting | |
| | | | | 4 | | Purse seiner | |
| | | | | 5 | | Gillnet | |
| | | | | 4 | | Set net | |
| | | | | 1 | | Long line | |
| | | | | 2 | | Trap net | |
| | | | | 9 | | Unidentified | |

| | | | | | | | |
|-----------------------------|-----------|--|--|----|--|--------------|--|
| Common dolphin | East Sea | | | 18 | | Purse seiner | |
| | | | | 1 | | Long line | |
| | | | | 8 | | Gillnet | |
| | | | | 32 | | Set net | |
| | | | | 3 | | Trap net | |
| | | | | 2 | | Stranded | |
| | | | | 1 | | Drifted | |
| Pacific white-sided dolphin | South Sea | | | 1 | | Drifted | |
| | East Sea | | | 21 | | Gillnet | |
| | | | | 14 | | Set net | |
| | | | | 3 | | Trap net | |
| | | | | 2 | | Stranded | |
| | | | | 3 | | Unidentified | |
| Bottlenose dolphin | East Sea | | | 1 | | Gillnet | |
| | | | | 1 | | Set net | |
| | | | | 1 | | Trawl | |
| Rough-toothed dolphin | South Sea | | | 1 | | Stranded | |
| Dall's porpoise | East sea | | | 1 | | Gillnet | |
| | | | | 1 | | Set net | |
| Harbour porpoise | East Sea | | | 1 | | Long line | |
| | | | | 57 | | Gillnet | |
| | | | | 29 | | Set net | |
| | | | | 1 | | Stranded | |
| | | | | 1 | | Drifted | |
| Finless porpoise | East Sea | | | 5 | | Gillnet | |
| | | | | 2 | | Set net | |
| | | | | 2 | | Stranded | |
| | | | | 2 | | Drifted | |
| | South Sea | | | 4 | | Stranded | |
| | | | | 2 | | Drifted | |

8. Strandings

Information of stranded cetaceans was collected in the same way as bycatch according to the guideline of the MOMAF. Data of stranded cetaceans are included in item 7.

9. Other studies and analysis

10. Literature cited

11. Publications