SCANS II cruise report for the vessel "Skagerak".

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The survey took place to and from Hönö, Gothenburg in Sweden from 27 June to 16 July 2005. The aim of the project was to cover Skagerrak, Kattegat, the Belt Sea, the Sound and the western Baltic. 8 cetacean observers and 1 bird observer recorded cetaceans and birds along planned transect lines. Swedish, Norwegian, Danish and German waters was visited. Almost 400 sightings of harbour porpoises and harbour seals were made.

Contents

- 1) Dairy
- 2) Area maps with transect lines and numbers
- 3) Maps of visual and acoustic observations

1) Dairy

27 June

Boxes were delayed and we had to pick them up in Gothenburg in the evening.

28 June

Setting up all the equipment.

29 June

First day at sea. Transit to Skagen in rather bad conditions.

Transect number S8 in poor conditions. Spend the night in Kungshamn.

30 June

Transect S12 and S7 in good conditions. Spend the night in Grebbestad.

1 July

Transect S1 and S2. Spend the night in Skagen.

2 July

Transect S3 and S16 in good conditions. Spend the night anchored at the eastern beginning of S6.

3 July

Transect S6, S5, I2, I3, I8 and I4. Spend the night in Korsør.

4 July

Too much wind. Stayed in Korsør. Validated the past too days.

5 July

Too much wind. Stayed in Korsør. More validation. Buying seamaps for Germany and new binoculars. Modifying big eyes with bicycle handles.

6 July

Transect I5, I9, X8, X7 (only Danish part), X5 and X1. Got permission to enter German waters but not until the 7th. Spend the night in Sønderborg.

7 July

Transect X6 and X7 (German part only). Stopped because of too much wind. Spend the night in Marstal.

8 July

Transect X2, X3, X9, part of K7 and part of K6 due to too much wind and part of K10 due to darkness. Spend the night at sea.

9 July

Transect K2, K9 and K1. K9 and K1 were modified to avoid shallow area and ship traffic separation zone. Distance estimation experiment with the woody porpoise and a bouy with a radar reflector. Experiment carried out in the Sound with 20 trails with one primary team (Steve and Ewan) and 14 with the other (Nathalie and Denise). The experiment had to be stopped when the radar could not pick up the signal from the buoy due to high waves. Spend the night in Copenhagen.

10 July

Transect S11 moved to the NW to avoid land, S10 coming from east stopped at Anholt because of too much wind. Spend the night in Grenå.

11 July

Rest of S10 from west to Anholt then southwest on S4 then northwest (modified I1) to Ebeltoft Vig where the night was spend anchored.

12 July

From Ebeltoft Vig southeast (modified I7) to the end of I7 then west to cross shipping lane (ad-hoc transect), then southeast to meet I4 (ad-hoc transect), then I4. Transit south to Skælskør off effort, start ad-hoc transect after narrow sound towards the Storstrøm bridge. Spend the nigth in Stubbekøbing.

13 July

Transect K11 modified slightly to meet K5. After K5 north over Oder Bank on an ad-hoc transect to Adler Grund (visual survey abandoned due to increasing wind) and from there acoustic survey to Falsterbo during the night.

14 July

North through the Sound and NW to the start of transect S9 with only the acoustics. Visual survey on the last part of this ad-hoc transect and on the first half of S9 (modified to avoid shallow area). Second distance experiment with 20 trails for all primary observers. Acoustic survey during the night on the rest of S9. Went into home harbour at Hönö because the weather was no good for the coming days.

15 July

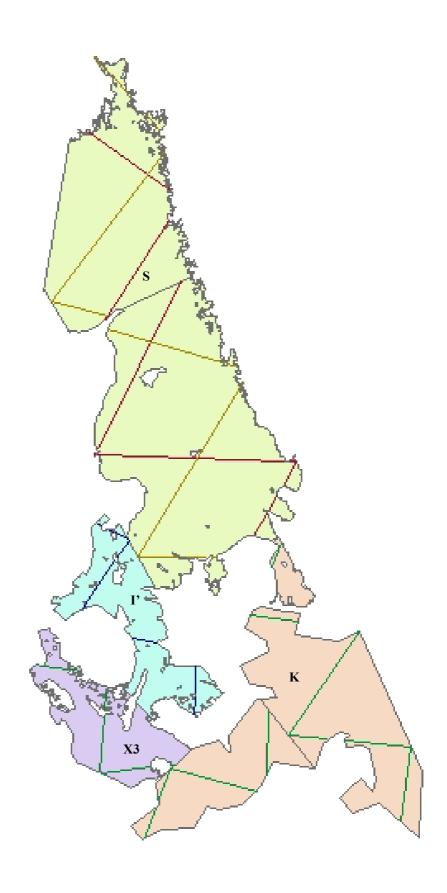
Packing and validating.

16 July

Goodbye to the great ship Skagerak and its crew. Sad goodbye to the great porpoise team from all over Europe.

2) Maps of transect lines and observations

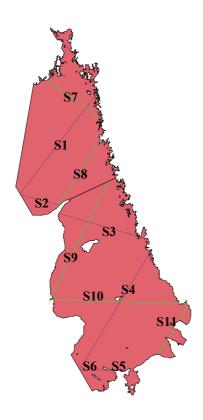
Survey area for "Skagerak":



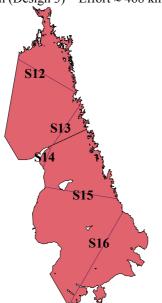
Ship S - Area S:
Allocated Effort = 1,127 km
Region to be crossed twice

Survey

Spacing of 85km (Design 1 & 2) – Effort ≈ 1,101 km Survey 1 – Blue lines Survey 2 – Green lines



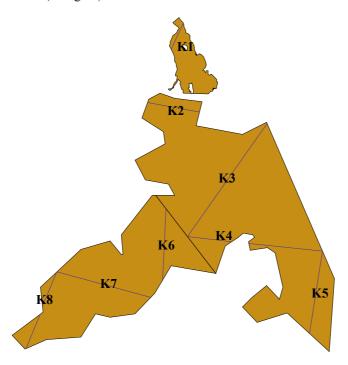
Spare SurveySpacing of 85km (Design 3) – Effort ≈ 468 km



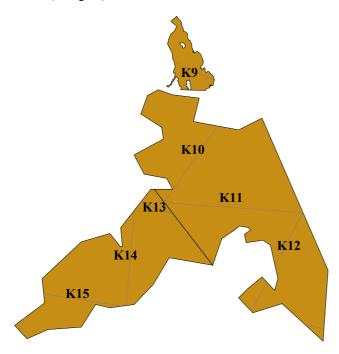
Ship S - Area K:
Allocated Effort = 551 km
Region to be crossed once

Survey

Spacing of 50km (Design 1) – Effort ≈ 481 km



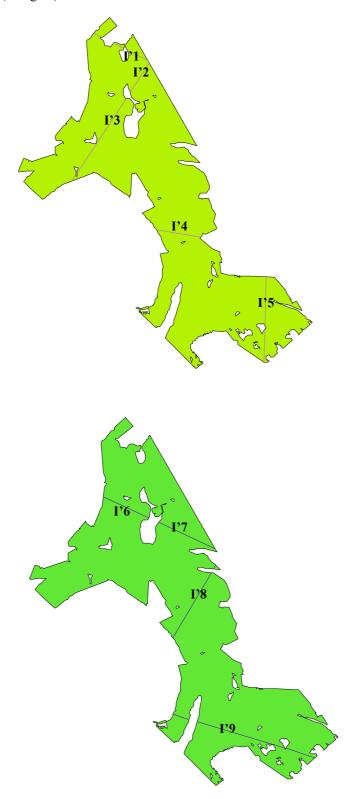
Spare Survey Spacing of 50km (Design 2) – Effort ≈ 456 km



Ship S - Area I':

Allocated Effort = 186 km
Region to be crossed once

Survey Spacing of 50km (Design 3) – Effort ≈ 143 km



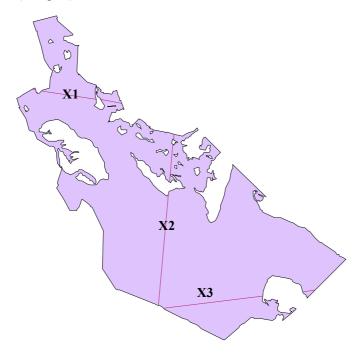
Spare Survey Spacing of 50km (Design 2) – Effort ≈ 147 km

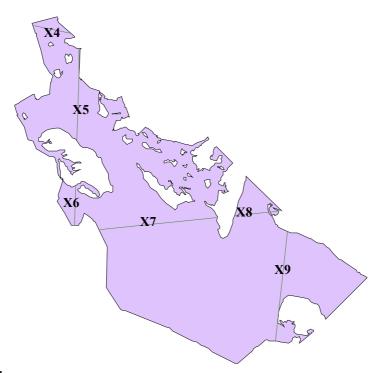
Ship S - Area X3:

Allocated Effort = 168 km Region to be crossed once

Survey

Spacing of 50km (Design 2) – Effort ≈ 137 km





Spare Survey

Spacing of 50km (Design 1) – Effort $\approx 162 \text{ km}$

SCANS II: Skagerak - All Visual Sightings (red triangles) and Acoustic Detections (blue triangles) from 29.06.2005 – 14.07.2005.

