

Instructions of Matsuishi Ken Colloquium

Schedule

School year is from April to March. Schedule of the colloquium will be announced.

You can check the schedule from Google Calendar http://matuishi.main.jp/?page_id=924

Minimum number of presentations per a school year (Apr-Mar)

Grade	Paper Introduction	Research Proposal	Progress of Study	Practice of Defense
UG4	2	1	1	1
MC1	2	1		
MC2	2		1	1
DC1	2	1		
DC2	2		1	
DC3	2		1	1

Student who start the course from October or who finish the course until September make half of the obligations above.

If you want to have additional presentation e.g. practice presentations in a conference, please ask to the person in charge of colloquium (Colloquium Gakari).

Abstract

- ✓ Make an abstract when you have presentation of a paper introduction and practice for defense.
- ✓ Ask two colleague and sensei to review your abstract.
- ✓ Master and bachelor Japanese students have to make Japanese abstract, in addition to English one.
- ✓ After the review, distribute by Mailing list office-m@ml.hokudai.ac.jp with Title and doi starting from <https://doi.org/>... 3 working days before presentation. Do not attach PDF of the paper.

Presentation

- ✓ Make clear presentation file by MS Power point.
- ✓ Show the slide number.
- ✓ Print and distribute the abstract and handout for the audience on the presentation.
- ✓ Time of the presentation is not fixed, but usually within 20 min for a paper introduction.
- ✓ Leave the abstract, the paper and slides in <https://bit.ly/collo5585> after you finish presentation.

Evaluation

The quality of the presentation, attendance and active participation in discussion will be evaluated as

- ✓ UG(FS) 海洋生物科学論文購読 2 単位, 卒業研究 8 単位
- ✓ MC (FS) 資源生物学演習 I ~IV 4 単位, 資源生物学特別実験 I ~IV 16 単位
- ✓ DC (FS) 資源生物学特別演習 I ~III 6 単位, 資源生物学特別研究 10 単位
- ✓ MC(GFR) Seminar in GFR I, II 4 credits, Dissertation Research in GFR I 4 credits
- ✓ DC(GFR) Seminar in GFR III 4 credits, Dissertation Research in GFR II 8 credits

Format of the Abstract

- ✓ One page on A4 paper
- ✓ Font size is 12pt by times new roman or MS P 明朝.
- ✓ Leave 20mm margins.
- ✓ Write “Colloquium” at left top, date and your name at right top.
- ✓ Title, authors, journal name, volume, page, year and DOI

Colloquium

2019/12/05 MATSUI Natsuki(D2)

Oceanic movements, site fidelity and deep diving in harbour porpoises from Greenland show limited similarities to animals from the North Sea

Nynne H. Nielsen, Jonas Teilmann, Signe Sveegaard, Rikke G. Hansen¹,
Mikkel-Holger S. Sinding¹, Rune Dietz, Mads Peter Heide-Jorgensen.
Marine Ecology Progress Series, 597, 259-272. (2018) DOI: [10.3354/meps12588](https://doi.org/10.3354/meps12588)

Background

Harbour porpoises *Phocoena phocoena* are thought to be closely associated with continental shelf areas of North Atlantic, where most surveys of harbour porpoise abundance have been conducted. Little information is available on their occurrence outside coastal areas despite their potential for moving over large areas. West Greenland population are believed to be genetically separated from other populations in Northeast, Northwest and Central Atlantic. In this study, 30 harbour porpoises instrumented with satellite transmitters in West Greenland to gain insight into the ecology and population discreteness of harbour porpoises in West Greenland.

Material and Methods

Thirty harbour porpoises were actively live-captured on the continental shelf 50km south-west of Maniitsoq, West Greenland from 2012 to 2014. Information on sex, weight and length was collected before release. 71 porpoises which were caught incidentally in pound nets tagged in Danish waters for comparison. The satellite transmitters were designed to provide the location and depth. The ranging areas for the 2 populations were estimated by creating minimum convex polygons. The density of harbour porpoises in both populations were displayed visually by using 50% and 95% kernel densities. The bathymetry, monthly sea ice distribution and SST were included in the analysis.

Results and Discussion

The ranging areas of Greenland (4144749 km²) was 7.5 times the areas of Danish water (588165 km²). Fifteen porpoises left the West Greenland shelf areas during winter/spring and moved south or west into deeper waters of North Atlantic. This behaviour contrasts with Danish waters population which was showed a preference for areas with shallow waters year-round. It was potentially caused by existence of sea ice and food availability. Two females who left the shelf area demonstrated the deepest dive to 410 m, which was suggested to be enable to be their mesopelagic foraging. Offshore porpoises started returning to West Greenland in June and July. In August, most porpoise positions will be in either East or West Greenland. This site fidelity explained the genetic and morphometric differentiation of the West Greenland population from other harbour porpoise populations in the North Atlantic.