

# Gregarious behaviour of narwhals on their summering grounds

Marianne Marcoux<sup>1</sup>, Marie Auger-Méthé<sup>2</sup>, Murray Humphries<sup>1</sup>

<sup>1</sup>McGill University, <sup>2</sup>Dalhousie University, marianne.marcoux@mail.mcgill.ca

## Group Living

Narwhals are important for northern communities. Current knowledge about their behavioural biology and group formation is limited. For a social species, such as the narwhal, living in groups offers several benefits and may influence individual fitness.

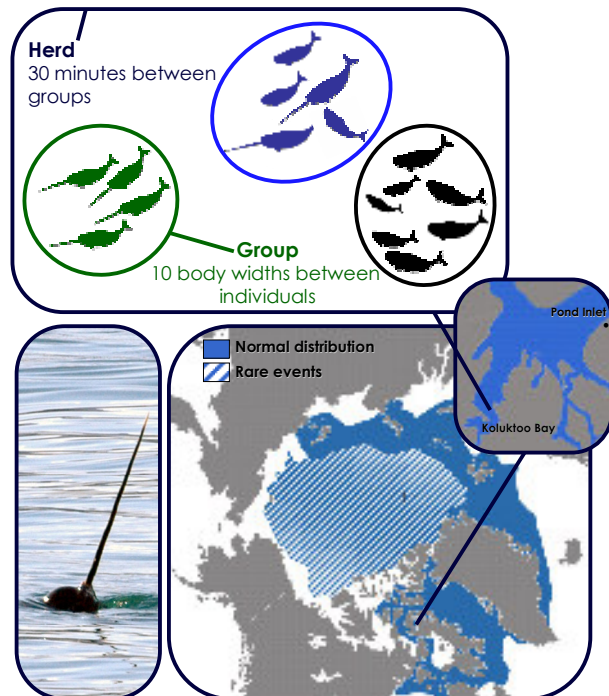
**Objective: to describe the size and composition of narwhal groups (*Monodon monoceros*)**

## Behavioural Observations

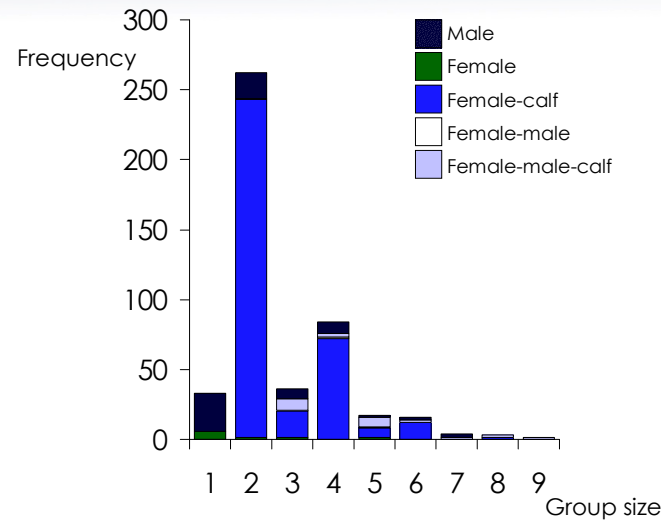
Summers 2006 and 2007

420 observation hours

11 000 narwhal sightings

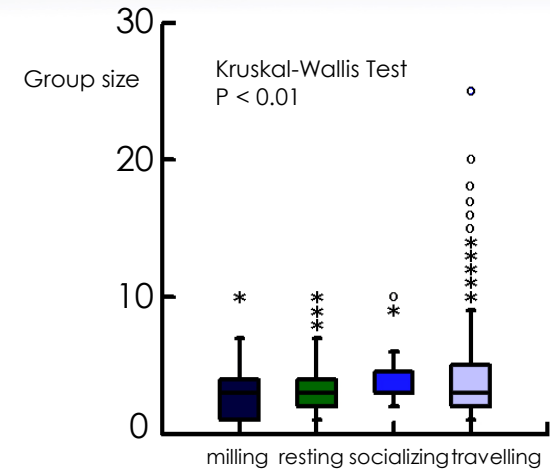


## Group size and composition



Groups are mixed and vary in size

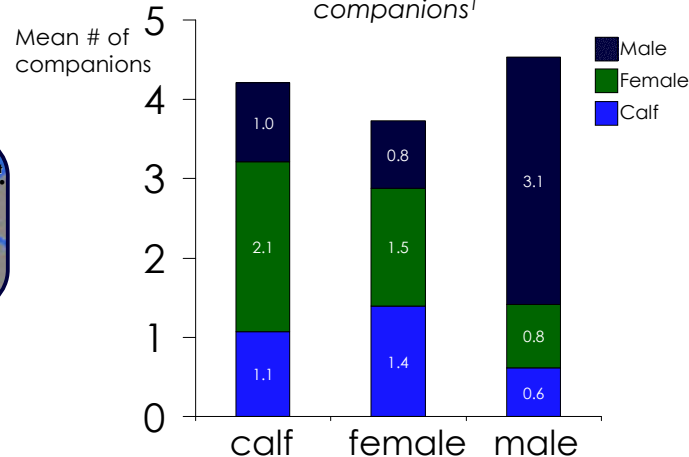
## Group size and behaviour



Group size varies with behaviour

## Gregariousness

Def: mean number of companions<sup>1</sup>



Males are more gregarious;  
>70% of their companions are males

## Grouping Patterns

Narwhals showed multi-levelled, complex grouping patterns (groups of 1-25 narwhals form herds of up to 1200 narwhals). Our results differ with the rare studies on narwhal groupings in which the sexes were more segregated<sup>2,3</sup>.

### Broader project objectives:

- Determine narwhal social organization;
- Describe and characterize their vocalization and dialect;
- Assess the impacts of shipping on narwhal behaviour.

### Acknowledgements

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