

# Large vessels change behaviour of fin whales when ship strikes are narrowly avoided

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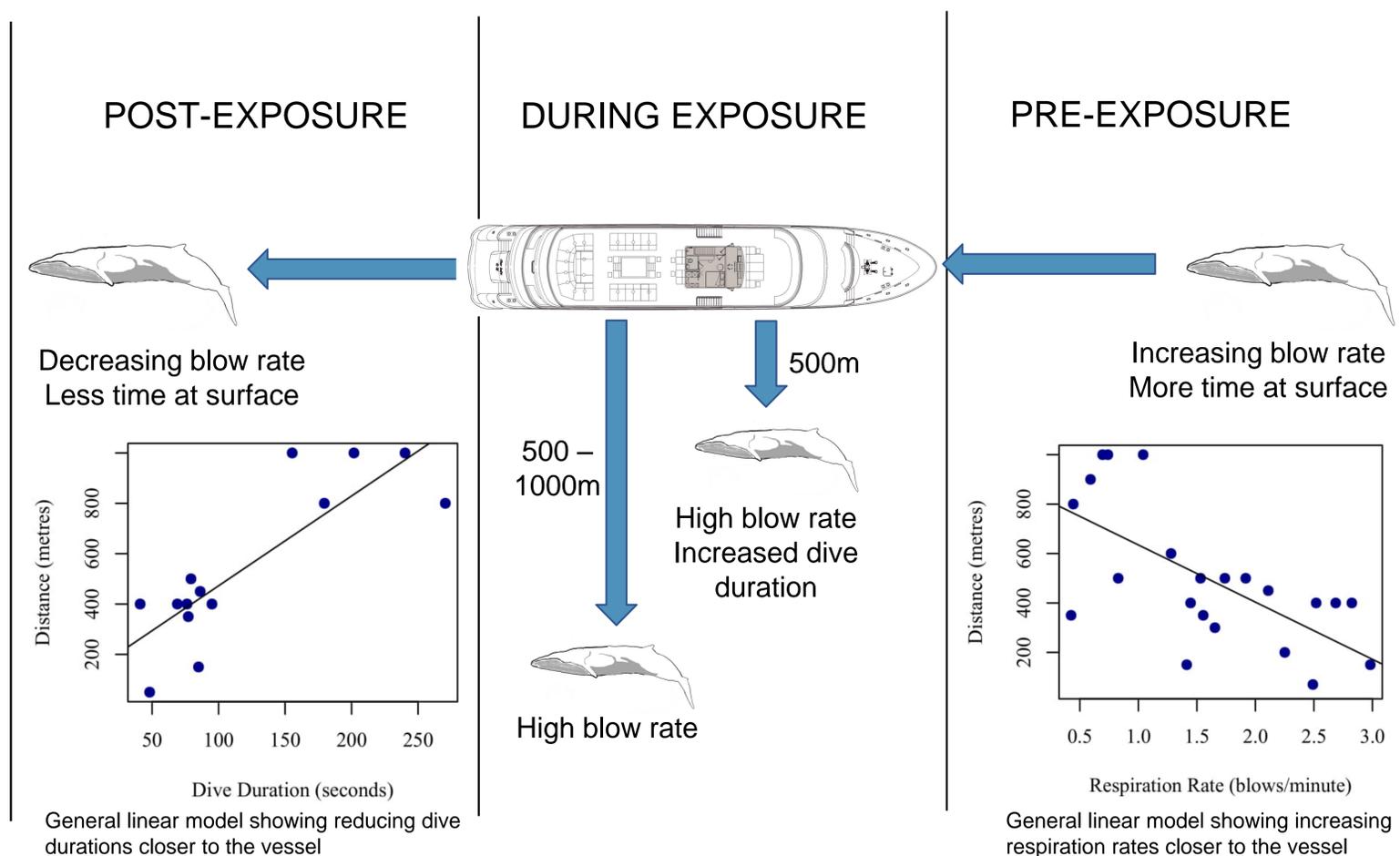
## BACKGROUND

When vessels collide with whales, impacts can be lethal<sup>1</sup>, or cause severe injury<sup>2</sup>. Close-encounters with small vessels have been documented to cause behavioural changes<sup>3</sup>; however, few studies have investigated the dynamics of such encounters with large vessels.

**Aim: test influence of vessel distance on fin whale behaviour**

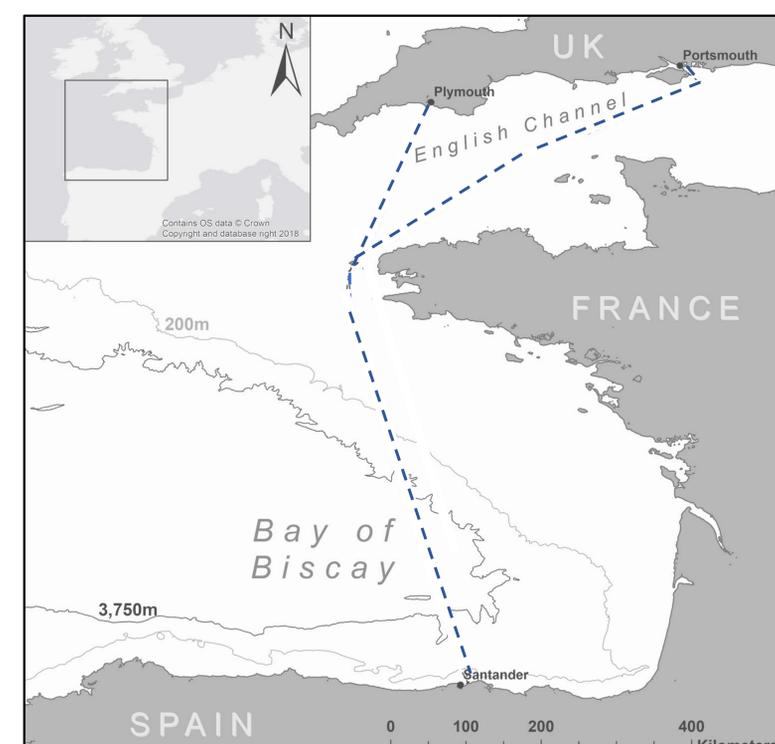
## WHAT DID WE FIND?

- Across 4,828 km effort, **88 animals** were recorded
- **34% within 500m** of ship
- Two groups **within 50m**
- The vessel took **evasive action six times**



## METHODS

- A large ferry was used as a platform of opportunity
- Fin whale responses to the oncoming vessel were recorded from the bridge
- Position, time & behaviour recorded for each surface and breath
- Generalized Linear Models & Kruskal Wallis to test influence of distance from vessel on behaviour



## PLANNED FURTHER WORK

- Advance this work during a PhD – with camera setup for finer-scale data
- Investigate overlap between vessel traffic & whales in North-East Atlantic
- Develop potential mitigation strategies

## WHAT DOES THIS MEAN?

- Behavioural changes may increase collision risk
- Response may be stress-induced
- Close encounters could alter activity budgets
- **Near-misses should be reported**, not only collisions which are unlikely to be noticed by large vessels

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