

2022

Diurnal and tidal influence on the spatial distribution and surface activity of bottlenose dolphins (*Tursiops truncatus*) in the Shannon Estuary, Ireland

Wilson, R.

Wilson, R. (2022) 'Diurnal and tidal influence on the spatial distribution and surface activity of bottlenose dolphins (*Tursiops truncatus*) in the Shannon Estuary, Ireland', *The Plymouth Student Scientist*, 15(2), pp.102-126.

<http://hdl.handle.net/10026.1/20120>

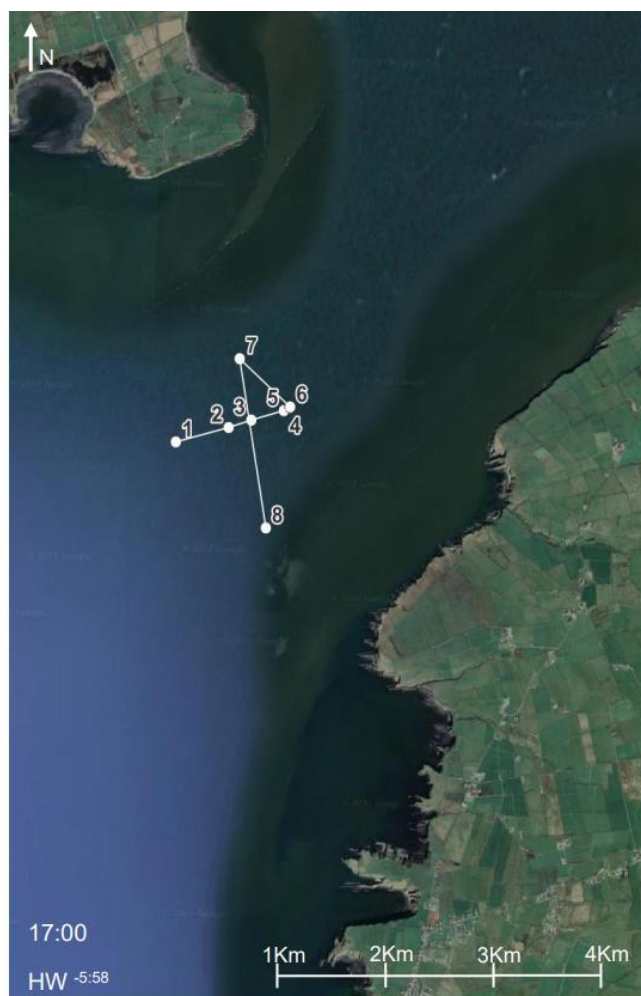
University of Plymouth

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.

Appendices

N.B. All maps in this appendix were created using the Free and Open Source QGIS.
Basemap: Googlemaps 2022.

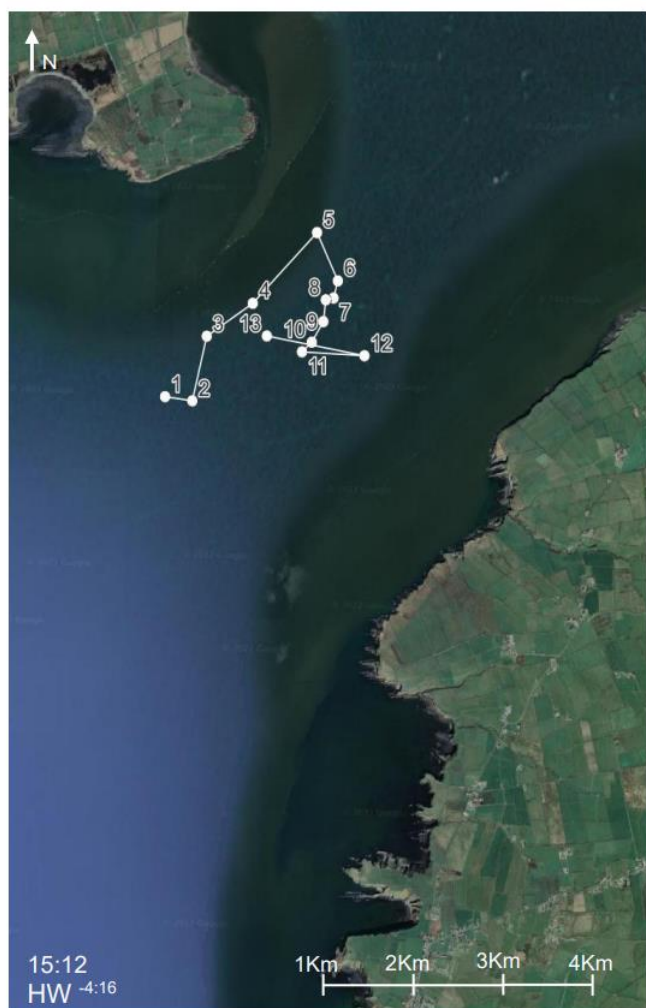
A) Tracks of all observed dolphin schools.



Track 13 5a. A total of 8 observations over 50 minutes.



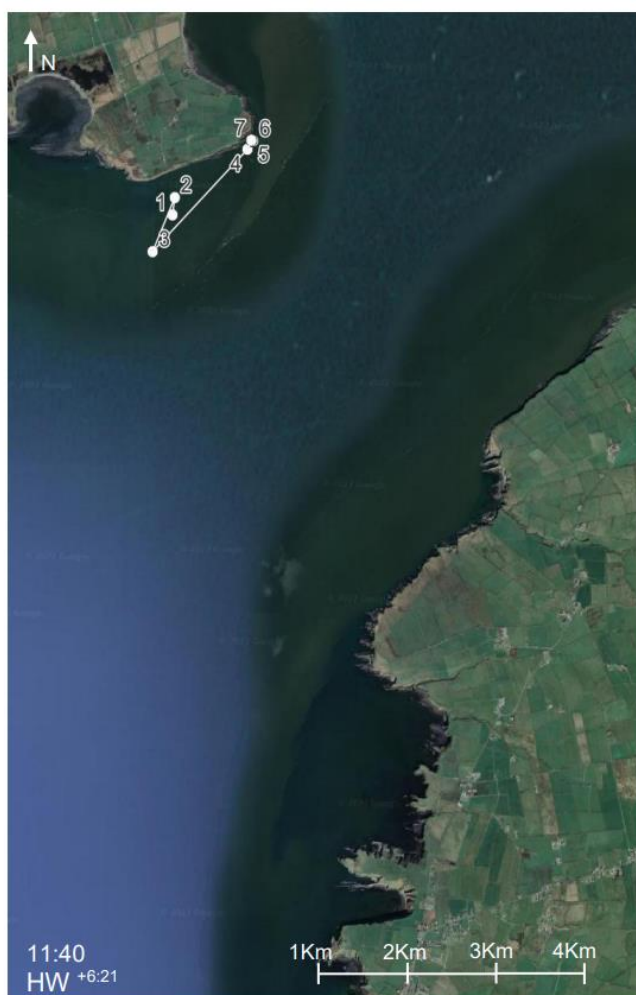
Track 22 7a. A total of 11 observations over 55 minutes.



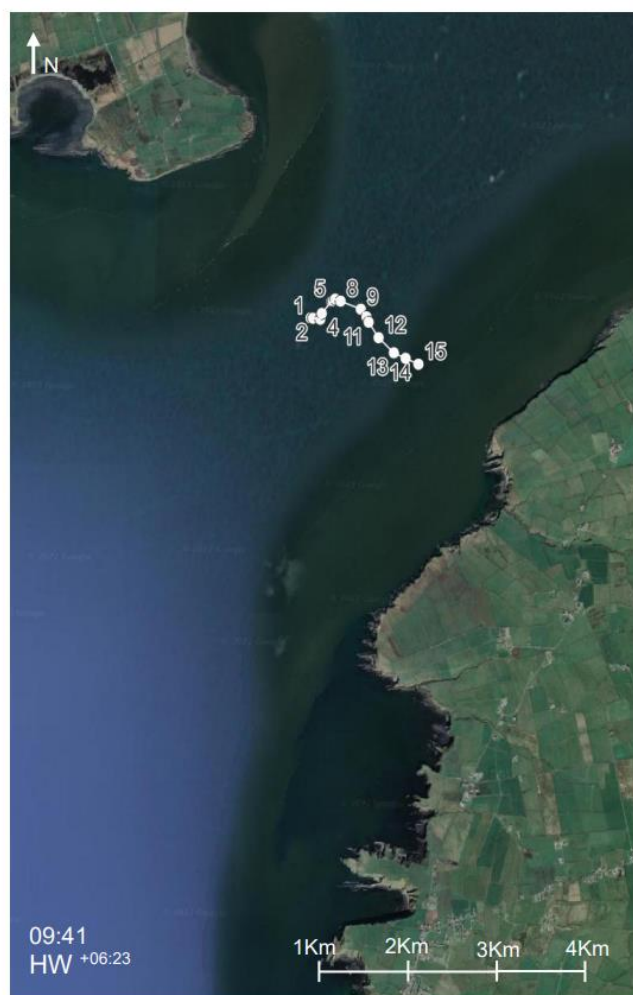
Track 25 1b. A total of 13 observations over 1 hour 3 minutes.



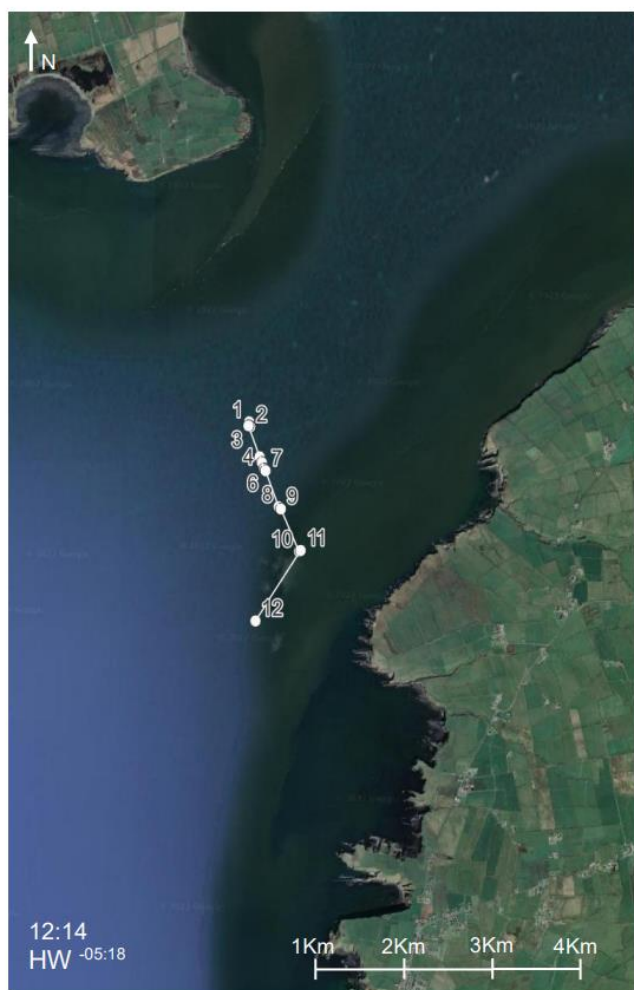
Track 44 7d. A total of 11 observations over 46 minutes.



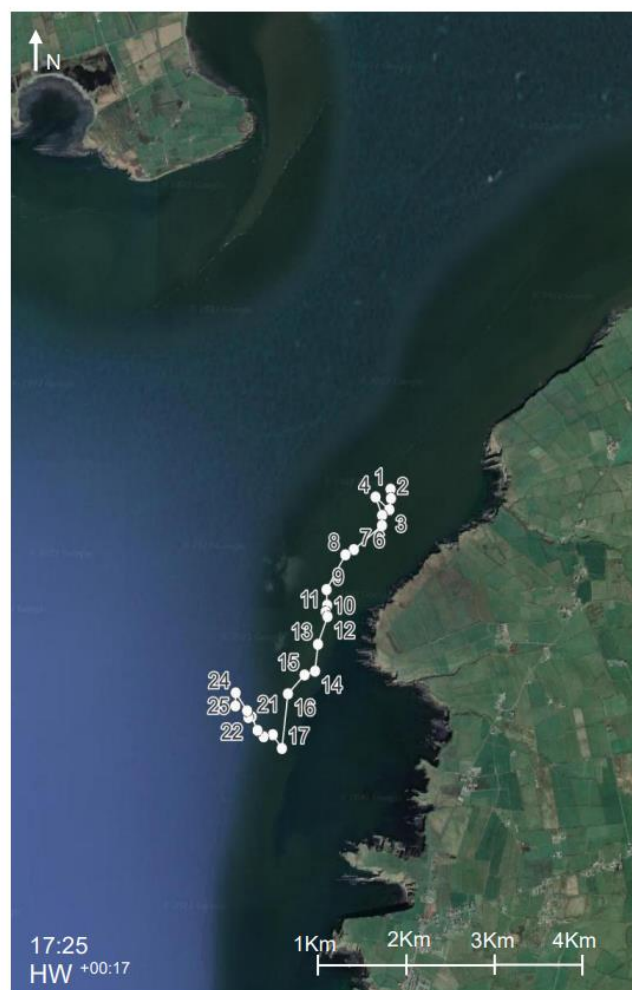
Track 52 3b. A total of 7 observation over 18 minutes.



Track 63 1a. A total of 15 observations over 13 minutes.



Track 64 3b. A total of 12 observations over 16 minutes.



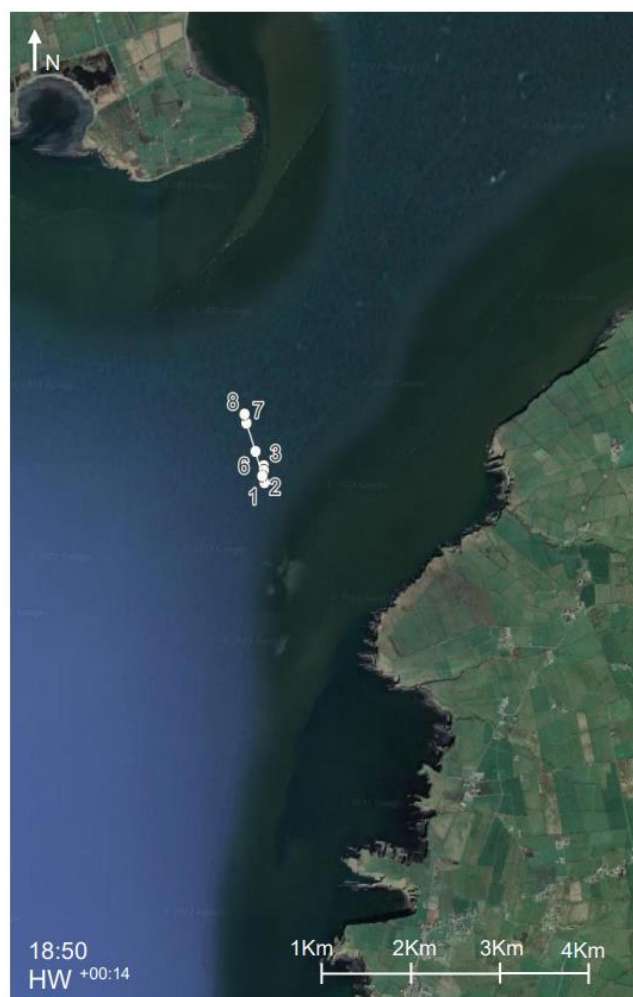
Track 70 3b. A total of 25 observations over 32 minutes.



Track 77 7a. A total of 47 observations over 37 minutes.



Track 72 11a. A total of 16 observations over 14 minutes.



Track 80 7a. A total of 9 observations over 9 minutes.

- B) Illustration of the calculation of observed school angle and speed of travel, using school 19 3A's track as an example.

θ = the angle of travel of observed dolphin schools

a = the difference in northing

b = the difference in easting

In this example, to calculate the angle of travel of observed dolphin schools relative to north it would be $90^\circ - \theta$

