



## Shorewatch at Spey Bay - a Case Study

In recent years, trained volunteer observers have conducted dedicated visual dolphin surveys from the WDCS Wildlife Centre in Spey Bay. Observers watched for 10 minutes every hour, giving them an adequate chance to determine whether dolphins were present. When dolphins were sighted details about the number present, basic behaviours and location were recorded. Observers used the naked eye and binoculars (7 x 50), collected information about the environment and boat traffic, and recorded data into spreadsheets.

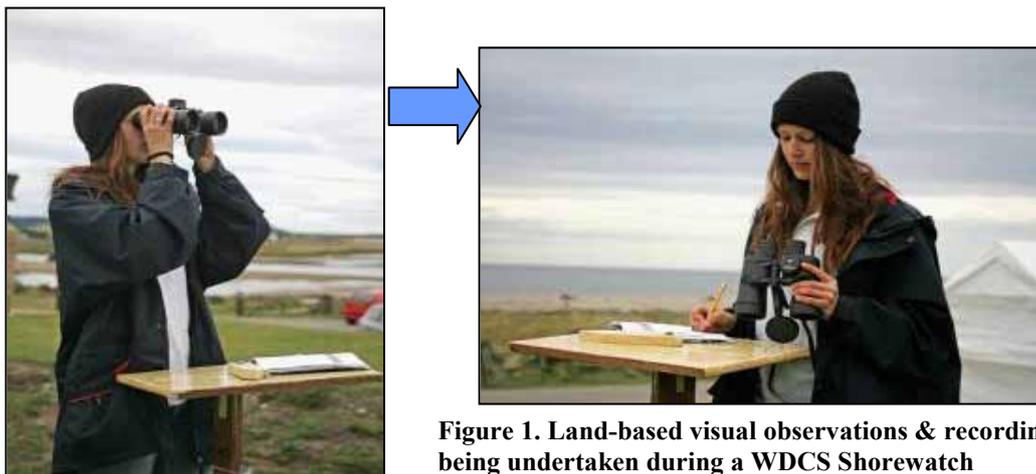


Figure 1. Land-based visual observations & recording being undertaken during a WDCS Shorewatch

The data collected from this study was analysed to determine its usefulness towards the long-term monitoring of the site and as part of large monitoring aims and determining the effectiveness of volunteer observers in collecting useful data. To this end, the data were analysed towards the following questions:

1. Is there any evidence that dolphin presence / absence differ from year to year? From month to month? If so, how so?
2. How can we quantify the probability of sighting dolphins in this area during the survey period?
3. Can these methods be successfully applied at other land-based observation platforms? What additional considerations are required?

This analysis is represented graphically on the next page and clearly demonstrates that the Shorewatch Project is capable of collection a long-term and year-round data set that can be analysed to determine annual and seasonal trends in dolphin presence in the area. In the light of increasing evidence of the dolphin population ranging into and inhabiting areas outside of the Special Area of Conservation in the inner Moray Firth (Wilson et al., 2004; Stockin et al., 2006; Culloch & Robinson, 2008; Weir et al., 2008), it is vital to understand which other areas might be key habitat for these animals. Expanding data collection to include other sites both within and outside of the SAC boundaries would make a positive addition to any broader monitoring across this area. Such data will also be valuable towards informing planning decisions in future developments. Do you want to make a difference? Become a Shorewatcher... contact WDCS at [shorewatch@wdcs.org](mailto:shorewatch@wdcs.org) or 01343 820 339.

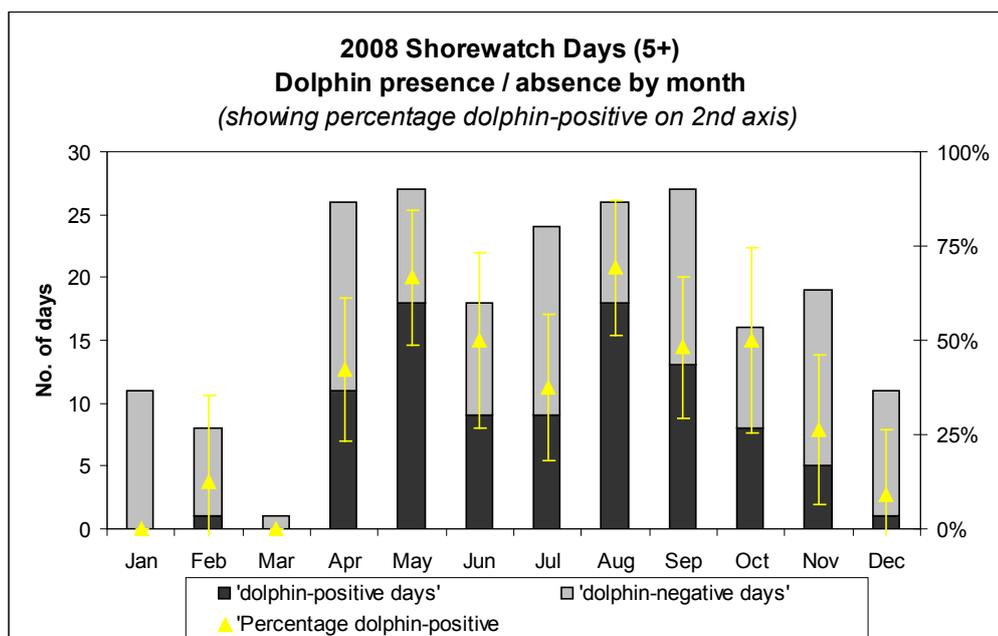


Figure 1. Dolphin presence at Spey Bay varies with each month across the year. (Stacked histogram of dolphin-positive / dolphin-negative shorewatch days by month from land-based observations at the WDCS Wildlife Centre and SPUE showing 95% confidence intervals)

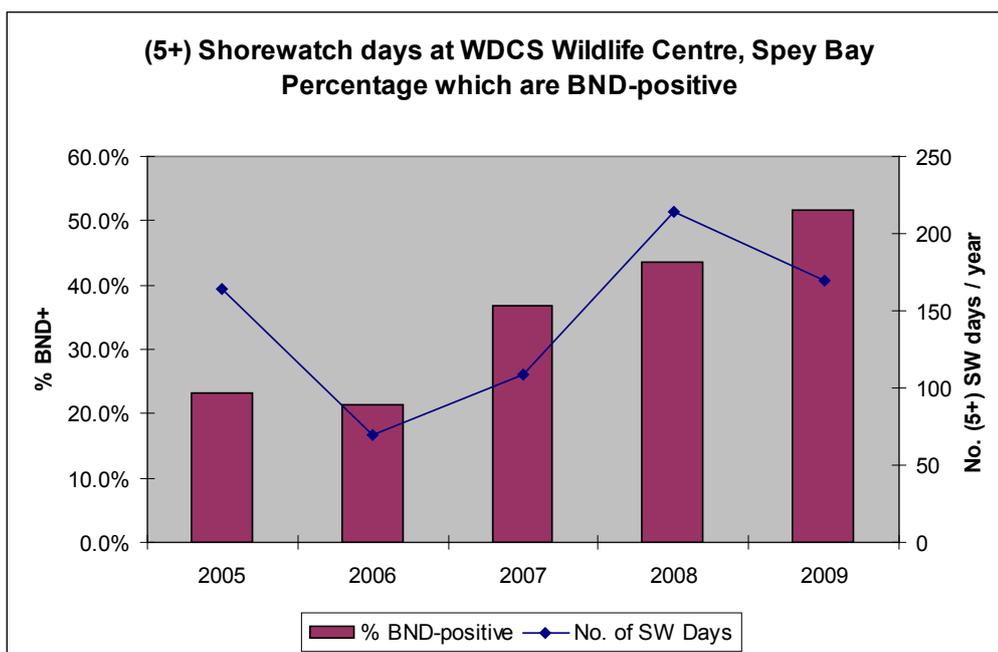


Figure 2. Dolphin presence at Spey Bay has increased from 2005/2006 to 2009. (Histogram of percentage of dolphin-positive shorewatch days (5+) (showing 95% confidence intervals) from land-based observations at WDCS Wildlife Centre (April – September, 2005 – 2009)

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