

Photo-identification of bottlenose dolphins in the Sound of Barra to assess community size, survival and calving rates.

Brief fieldwork Report - MASTS Small Grant Award code: SG154.

In June 2013, photo-identification fieldwork was undertaken to study the small and apparently isolated bottlenose dolphin community occupying the Sound of Barra and adjacent waters. Small communities such as this are relatively common around western Europe, however it is not clear if they are normal facet of the ecology of this species or indicate a species in poor condition. Dolphins have recognisable features such as nicks in their dorsal fins and particular scar patterns and so individuals can be photographically tracked over time without the need to capture animals or the use of other intrusive methods. With financial support from MASTS and SNH, photographs of the Barra individuals were taken during the summer of 2013. These photographs were assessed to investigate the presence of individually identifiable dolphins in the area and added to an archive of pictures from previous years (1995-2012) to derive estimates of long-term survival of individuals and community calving rates.

Initial results show that the 14 individuals identified in 2012 were again present in 2013. Contrary to a calf identified in 2006, and not re-sighted in 2007, two other calves born at the end of 2010/early 2011 did survive and are still present within the small community. This indicates that calves are born into and are able to survive within the group. No new calves were identified in 2013. One adult, not photographically identified in 2012, was not sighted in 2013 either and is therefore likely to have either died or emigrated. Two carcasses were found by the public in 2011 but the pictures of these stranded animals do not match the missing animal.

The MASTS Small Grant kindly awarded was used to cover the following expenses:

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| - Boat hire: 4 days @ £300 per day | £1200 |
| - Boat fuel | £271.67 |
| - Living costs | £152.27 |
| - Boat safety knife and trailer grease | £13.99 |
| Total | £1638.23 |