

# STRATEGIC SURVEYS OF SEABIRDS OFF THE WEST COAST OF LEWIS



PUFFINS



ORNITHOLOGIST AT A VP POINT ON THE ISLE OF LEWIS.

PHOTO LAUREN JACKSON

## Background

The west coast of Lewis has some of the best marine energy resources in the country and has been identified as a potential location for a number of wave and tidal energy devices. However, the area is used by a wide range of bird species, both in the breeding season and at other times of year. The aim of this project was to determine the distribution of important bird populations making use of the sea off the west coast of Lewis. Although not a key focus of the study, marine mammals were also recorded.

This research was carried out by WWT Consulting in partnership with HiDef Aerial Surveying Ltd and Natural Research Projects Ltd.

## Methodology and approach

To understand how an area to the West of Lewis was being used by marine birds and marine mammals, a series of aerial surveys and land-based counts were undertaken between April 2012 and March 2013.

The aerial surveys involved flying a plane equipped with super high definition digital video



RAZORBILL



RAVENAIR SURVEY PLANE. © wwt



KITTIWAKE



ARCTIC TERNS



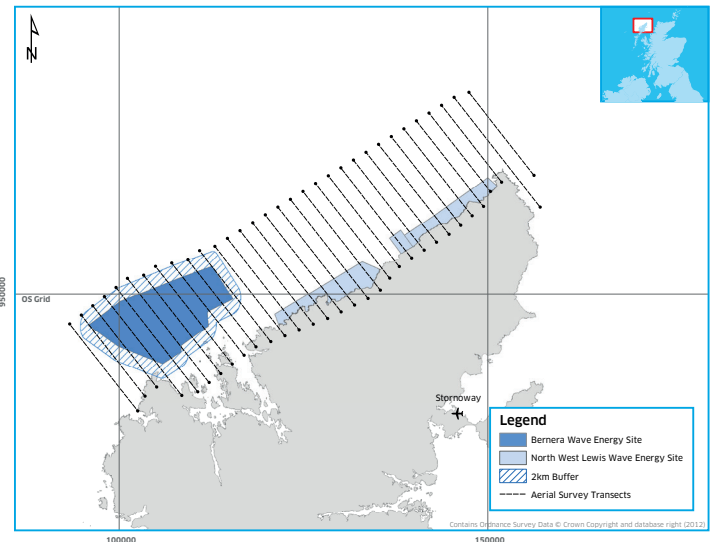
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equipment along transects 2 km apart through the survey area. Along each transect, images were taken along four 200m strips, resulting in 10% of the survey area being sampled. The images captured by the video were processed, and bird and mammal species identified by analysts post survey. The data were then analysed to estimate abundance and distribution for the study area.

Land-based counts of birds and marine mammals were carried out from 14 vantage points along the west coast of Lewis by an experienced ornithologist undertaking a bird and marine mammal survey. These counts were coordinated as much as possible with the aerial survey, and were used to gather more information on species that may be difficult to identify to species, or in areas difficult to survey, using aerial surveys. Further land-based counts covering the majority of Loch Roag were also undertaken, covering areas outside the aerial survey study area.

## RESULTS

Results of this study have now been published on the Marine Scotland website and the full report is available for download here: <http://www.scotland.gov.uk/Publications/2014/07/4663>.



## Further Information

For further information about our work:

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