

## Puffins to be fitted with 'sat nav' to monitor decline

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(PhysOrg.com) -- Scientists at Newcastle University are using GPS technology in an effort to understand a worrying decline in the numbers of Puffins.

In the last five years the numbers of the sea birds has plummeted around Britain.

On the Isle of May in the North Sea, the largest breeding colony in Britain, numbers fell from 70,000 in 2003 to 41,000 in 2008.

On the Farne Islands, off the Northumberland coast, numbers also dropped by around a third, from 56,000 to 36,000, during the same period.

In an effort to find out the reason, scientists from Newcastle University are working with National Trust wardens on Brownsman Island on the Farnes to tag and ring puffins.

The tags, which are glued on to the <u>birds</u> feathers and fall off after several days, will help to map their movements to find out where they are going to fish, how they are getting there and what they are doing once they are there.

The team will then collect the tags a few days later and download the data. The information should provide clues to the kind of feeding grounds the birds have been to and therefore the threats they are exposed to.



Dr Richard Bevan, of Newcastle University where the data will be processed, said scientists will be able to work out why puffins are dying from seeing where the birds go in the winter.

"Technological developments now mean that we're getting closer to finding the pieces of the jigsaw to help solve the puffin puzzle. The new data will help explain what the puffins are doing when they're on the Farne Islands and hopefully then help us to understand why numbers have declined so dramatically," he said.

"The tags are very much like the 'Tom-Tom' devices you have in the car. All it does is store the back-data and then retrieve the tag and download the data."

David Steel, National Trust Head Warden on the Farne Islands, said puffins are breeding successfully so it was essential to find out what could be causing the death of the birds out at sea.

"This has become the case of the disappearing puffins," he said. "Young puffins are successfully fledging each year and it would seem that their staple food, the sand eel is in good supply, but they're just not coming back to the islands. This research, including further counts, is designed to shed some light on what is happening."

Further work will be carried out using time-depth recorders on the Farne Island puffins. These devices provide information on diving behaviour, such as how often they dive and how deep, and sea temperatures. This information will help in understanding how puffins might be affected by climate change and possible changes in sea temperatures.

Provided by Newcastle University (<u>news</u>: <u>web</u>)



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