

# New technology will help to protect South African penguins

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An African penguin (*Spheniscus demersus*) catches the sun on the beach at Robben Island. Image by Sara Stroman

Scientists in South Africa are introducing a cutting-edge automatic penguin recognition system which will reduce the need for potentially harmful banding of birds.

Scientists carrying out research on Robben Island are using an automatic recognition system which records patterns of spots on the chests of adult birds through digital photography. The technique is still being tested and refined, but eventually it may be possible to monitor remotely more than 90 per cent of the African penguins (*Spheniscus demersus*) on the island. This automated system will help to eliminate the need to band penguins, except for specific purposes such as measuring chick survival rates,

when flipper bands still need to be used.

Lead scientist on the Earthwatch project on Robben Island, Professor Peter Barham from the University of Bristol, referring to research carried out by French scientists who had found that king penguins had 40 per cent fewer chicks if they were banded, and lived shorter lives, said: “There have been several studies on the effect of banding on African penguins and Magellanic penguins which have been unable to find any significant differences between banded and unbanded penguins when it comes to breeding success.

“There are, however, other impacts of banding which is one reason why we want to introduce the recognition system to replace banding where possible. From time to time, for example, we find African [penguins](#) trapped by their bands.”

The Earthwatch team in South Africa are also playing an important role in drawing up the first National Biodiversity Management Plan for the African penguin. Professors Peter Barham and Les Underhill, Dr Robert Crawford and Mario Leshoro contributed to a three-day workshop in Arniston in the Western Cape in October 2010. The event was facilitated by CapeNature, a public institution with statutory responsibility for biodiversity conservation in the Western Cape, and the Department of Environmental Affairs, Oceans and Coasts. Thirty seven organisations from all spheres of penguin conservation were represented at the workshop.

**More information:** [www.earthwatch.org/europe](http://www.earthwatch.org/europe)

Provided by University of Bristol

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