

## AFRICAN PENGUINS

African penguins have been marked predominantly with metal flipper bands for over 50 years and resighting data has been essential to assess the dramatic population declines that have led to the species being classified as 'Endangered'. However, as flipper bands may negatively influence the birds' survival, the use of subcutaneously implanted PIT-Tags has been introduced in South Africa since 2013.

### Project Summary

**Application description:**

Biomark 12mm sterile PIT tags, cord antennas and stick readers used to monitor colonies and nest sites.

**Species:**

African Penguin (*Spheniscus demersus*)

**Location:**

South African coastline and islands

**Products Used:**

IS1001 readers, pass by cord antennas, Rs420 stick readers, HPR+ and HPR Lite readers

**Project Partners:**

Bristol Zoological Society, SANCCOB, Earthwatch, AZA SAFE program, CapeNature, SANParks, Robben Island Museum, Department of Environmental Affairs

**Funding Organizations:**

Bristol Zoological Society, SANCCOB, Earthwatch, AZA SAFE program, CapeNature, SANParks, Robben Island Museum, Department of Environmental Affairs

Adults and fledglings at most of the major colonies in South Africa are currently being tagged using 12mm PIT-tags. Since 2013, over 1000 adults and over 600 fledglings have been tagged in the wild in addition to over 1300 fledglings raised in captivity. Additionally, since 2016, all rehabilitated penguins are being released with PIT-tags.



Biomark ground readers are now installed at 6 of the main African penguin breeding colonies in South Africa. A total of 9 ground readers are detecting PIT tagged birds when coming into the colony and when leaving to sea. Two systems are connected to weighbridges that can link PIT tag IDs to actual weights of birds, and are being used to assess the food availability around the breeding colonies. This information is used to inform fisheries management and to hopefully secure sufficient food for this endangered species. A vast amount of data is currently being collected by the Biomark ground readers and data is being used to assess juvenile and adult survival, recruitment into the breeding population, movement of birds, as well as, successful rehabilitation and hand-rearing of African penguins returned to the wild.