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Abstracts

## FEATURE ARTICLES

### SPATIAL AND TEMPORAL VARIABILITY IN THE FORAGING AREAS OF BREEDING KING PENGUINS

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*Abstract.* King Penguins (*Aptenodytes patagonicus*) from breeding islands in the Indian Ocean (Crozet and Kerguelen Islands) and the Atlantic Ocean (South Georgia and Falkland Islands) were equipped with global location sensors to compare their foraging patterns during different times of the year. In summer, all birds investigated traveled toward the Antarctic Polar Front (APF), irrespective of whether they bred to the north (Crozet Islands, Falkland Islands), within (Kerguelen Islands) or to the south (South Georgia) of this hydrographic feature. Whereas most birds remained north of the APF and foraged in waters of the Antarctic Polar Frontal Zone, some penguins also travelled, or remained (South Georgia), south of the APF and foraged in Antarctic waters. It appeared that food resources in the vicinity of the APF were sufficiently predictable to warrant travel of several hundred km by King Penguins for foraging. Data collected on the winter distribution of King Penguins indicated at least two different foraging strategies. Birds from the oceanic Crozet Islands foraged beyond the APF in the Antarctic waters, whereas birds from the Falkland Islands relied also on the resources provided by the highly diverse and productive slope of the Patagonian Shelf. However, despite these differences, in both cases minimum distances of sometimes more than 10 000 km were covered. Further research on the foraging habitats of King Penguins over the entire breeding season and the temporal and spatial changes of oceanographic features is necessary to obtain a comprehensive picture on the variability in the foraging ranges of King Penguins.

*Key words:* *Aptenodytes patagonicus, dispersal, global location sensors, Crozet, Kerguelen, Falkland Islands, South Georgia.*