

## 南極地域におけるアデリーペンギンの採餌移動

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### **Foraging movements of Adelie penguins in Antarctica**

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How animals find foraging sites in a vast area remains an unsolved mystery of animal behaviour. Efficient foraging movement likely increases the success of growth, predator avoidance and reproduction, and might have evolved in many animals. However, less is known of foraging movement in wide-ranging animals due to the difficulty in monitoring the long-distance movements of those animals. Recently, advances in animal-borne biologging technologies allow us to monitor the long-distance movements. In this study, we report the foraging movements of Adelie penguins in fast ice area during a breeding season. The summer field study was conducted at Hukuro Cove colony, Lutzow-Holm Bay, in East Antarctica, from December 2012 to January 2013. The penguins were equipped with GPS/depth recorders, and were monitored during their foraging trips at sea. The penguins visited tidal cracks along the coast or straight-line open water in fast ice area for foraging. The average and maximum distances between the colony and the foraging site were 2.6 km and 8.5 km. On the way to their foraging sites, the penguins normally showed consecutive diving along the coast or the straight-line open water, finally found their foraging sites and spent their time within the limited areas. We discuss how the penguins find the foraging sites within fast ice area.