Post-fledging movements of rhinoceros auklets in northern Hokkaido

Akinori Takahashi^{1,2} and Toshitaka Imaki² ¹National Institute of Polar Research ²Graduate Institute for Advanced Studies, SOKENDAI

Post-fledging movements of seabirds are poorly studied due to technological challenges despite their potential importance to population ecology through the recruitment processes. Here, we describe the initial results from Argos-GPS tracking of rhinoceros auklet *Cerorhinca monocerata* fledglings from a large breeding colony at Teuri Island, northern Hokkaido, Japan. We attached a small Pinpoint Argos-GPS transmitter on five fledglings departing from the colony for their first journey to the sea in late June 2023. Three of the five birds transmitted GPS locations at sea, up to 1.3-9.5 days from fledging, over 21-221 km from the colony. All three birds moved consistently to the north just after fledging. Two birds with > 7 days of tracking data moved through the Rhishiri Channel and the Soya Strait into the Sea of Okhotsk, where post-breeding adult rhinoceros auklets are known to migrate to and stay in autumn. Movement speeds calculated from consecutive GPS locations suggest that fledglings moved mainly by swimming, but they can occasionally fly as early as four days after fledging. The ability of occasional flights appeared to help fledglings to move to the northeast at the Soya Strait, where strong southeasterly surface currents can carry surface-swimming birds to the southeast.