

From the Top of the World to Down Under— Migration of a Pomarine Jaeger

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The Pomarine Jaeger (*Stercorarius pomarinus*) is a specialized predator while on its arctic breeding



Photo by Declan Troy

Pomarine Jaeger flying over the tundra near its nest. This is the individual, photographed prior to trapping, whose migration is shown in the map.

grounds. Nesting occurs only in areas experiencing peaks in lemming (*Lemmus*) abundance, the primary prey. This leads to large fluctuations in nest densities to the extent that 3-4 years can elapse between significant breeding events at a given location. The species is thought to be nomadic, moving to new nesting locations searching for lemming peaks. Outside the breeding season Pomarine Jaegers are pelagic. Their nomadism during breeding and marine distribution movements make tracking using conventional methods challenging, thus limiting any detailed understanding of Pomarine Jaeger migration.

The nature of the wanderings of Pomarine Jaegers is of interest in itself but an added feature of note is the association between the jaegers and Stellers' Eider (*Polysticta stelleri*). The eider, listed as a Threatened Species under the Endangered Species Act, breed in Alaska intermittently. Nesting occurs primarily during years when Pomarine Jaegers also nest. Although some eider nests are lost due to jaeger predation it appears that there is a net benefit to the eiders because the aggressive behavior of the jaegers deters most other potential predators.

The summer of 2004 was a breeding year for Pomarine Jaegers in northern Alaska providing the opportunity to investigate the feasibility of tracking this species using satellite telemetry. Four birds were trapped at their nests near Barrow, Alaska (71°N). Their 18g solar PTTs were attached with strips of Teflon ribbon forming "fanny-pack" harnesses.

All the birds remained near their nest sites into September then exploded away from Barrow. The birds dispersed widely to the extent that during much of the fall there was an individual

in each quartisphere of the globe (all in the Pacific Ocean). The migration of one individual is illustrated. This bird quickly crossed into the eastern hemisphere and remained in Russian waters until reaching Japan. It loitered around eastern Japan until mid-November then proceeded rather directly south through the Solomon Islands to Australia. This individual made a U-turn around 35°S (south of Sydney) and back-tracked north off the Australian coast. In total, the fall

migration from Barrow to the southern limit of its movements was approximately 15,000 km. The reversal in direction was thought to be a local movement rather than the start of spring migration but this will remain unknown as contact with this individual was lost in February 2007.

Although our knowledge of the movements of this bird were terminated prematurely it transmitted long enough to allow us to add Pomarine Jaeger to the short list of birds known to migrate between North America and Australia.

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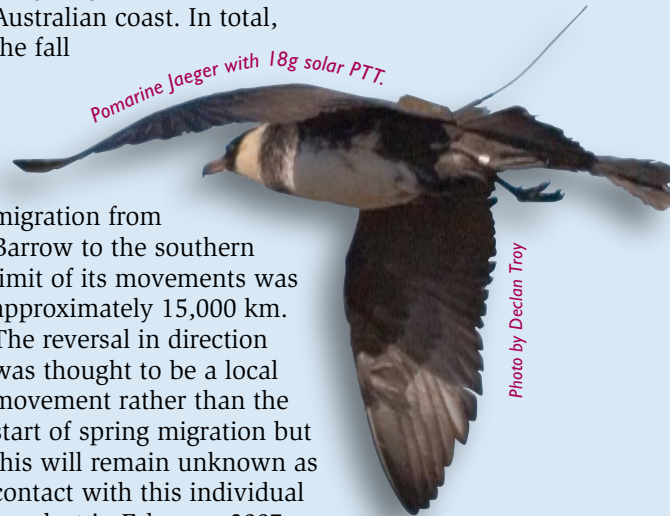
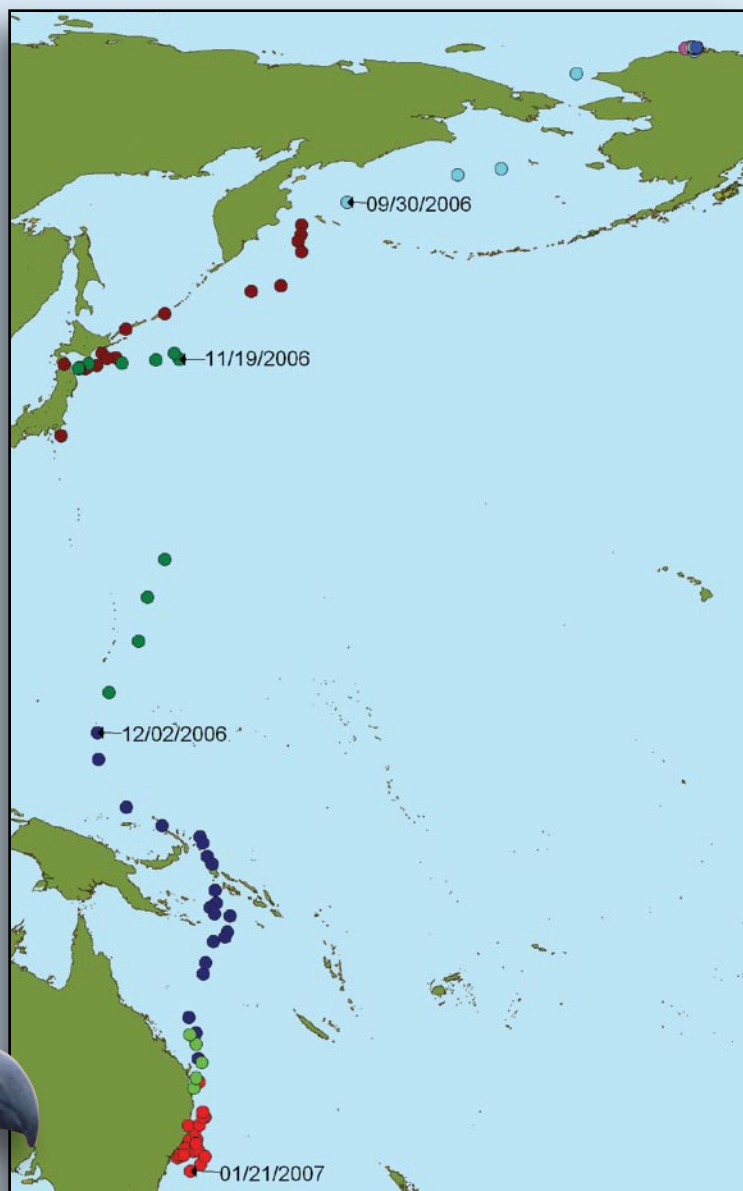


Photo by Declan Troy



Map: fall migration route of Pomarine Jaeger from Barrow to Australia. Fixes are color coded by month to give a rough idea of periods of peak movement.



Pomarine Jaeger (*Stercorarius pomarinus*)

Photo by D. Troy