Steller's Eider Telemetry Update – 29 November 2001

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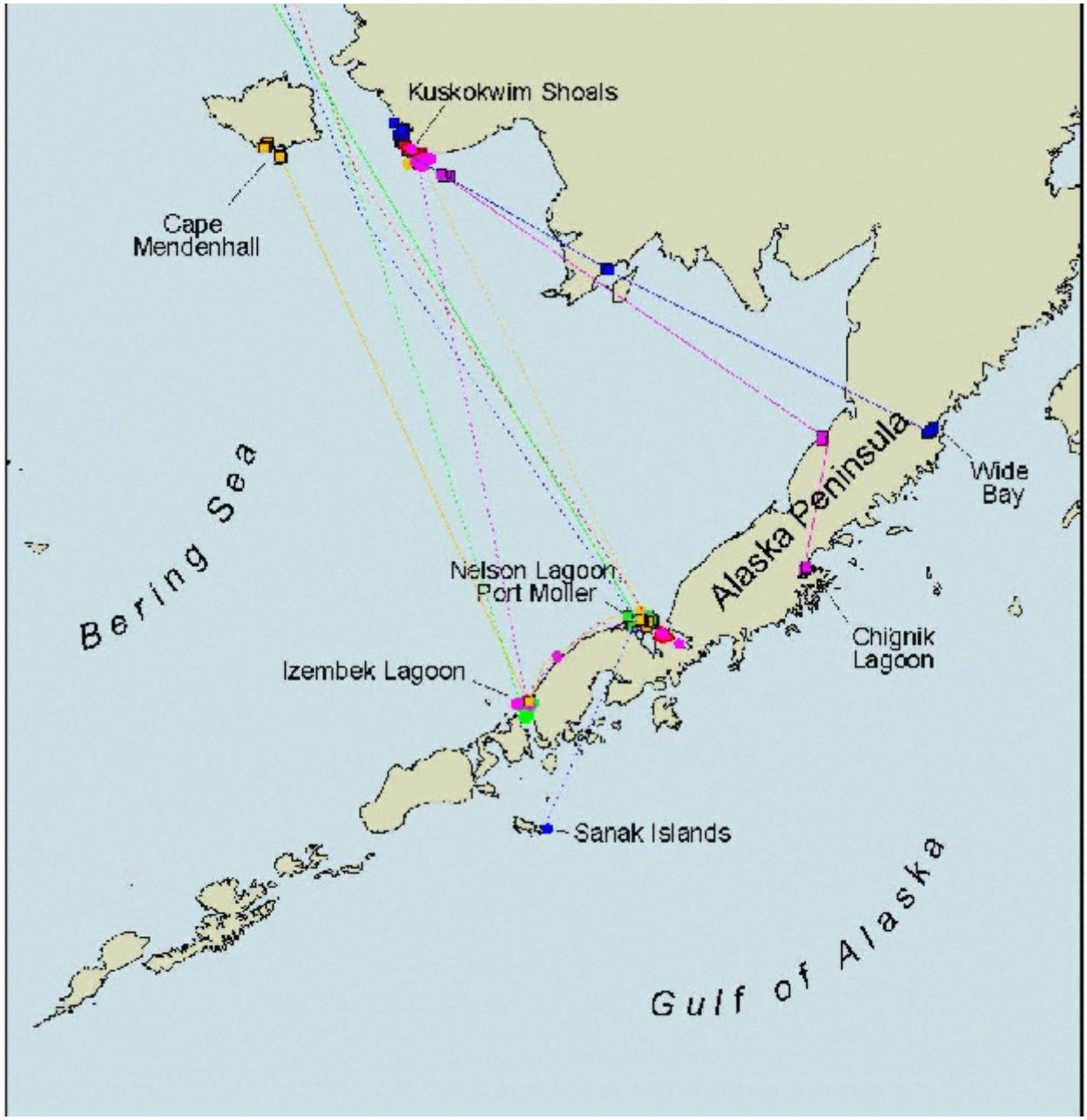
This is the second progress report for Steller's eider telemetry work conducted in the 2001 breeding season at Barrow, updating my previous communication of 6 September, 2001. This update is for your interest, and consists of fairly undigested raw data. Please consider these data preliminary, and **do not publish or cite any of these results** in correspondence or reports without confirmation from me.

Extensive use of Russian waters was noted in my last update. To summarize, 8 of the 10 birds spent at least 2 weeks in coastal waters of Chukotka. Only 1 of the 5 females used the north coast of Chukotka, but the duration of use was exceptionally long – a minimum of 52 days from late June to mid-August. Two other females spent approximately 2 weeks in the Cape Nanyagmo region of the Bering Strait in late August (the other 2 females moved directly from the North Slope of Alaska to their molting areas). All 5 males made protracted use of the north coast of Chukotka, with minimum duration of use ranging from 13-37 days (mean = 26 days). Arrival dates at these locations ranged from 2 July-28 July, and departure dates ranged from 3-11 August. A relatively discreet area at the mouth of Koliuchin Bay, and in the vicinity of the Islands of Serykh Gusey was used by 3 males (as well as 1 of 3 males in 2000), indicating that this area may be of particular importance.

By mid-August, all individuals had reached what was presumed (based on timing) to be their molting areas. A total of 5 birds used the Kuskokwim Shoals area, 1 was at Cape Mendenhall on the south side of Nunivak Island, 3 in the Port Moller/Nelson Lagoon complex, and 1 at Izembek Lagoon. Use of Nunivak Island by molting Alaska-breeding birds is previously undocumented. The presence of half the birds at Kuskokwim Shoals seems to confirm the importance of this molting site to Barrow-breeding birds, as was suggested last year, when 2 of 3 tracked birds spent the molt period at Kuskokwim Shoals. Brian McCaffery and colleagues at Yukon Delta National Wildlife Refuge flew surveys in this area on 6, 14, and 26 September. Conditions for censusing were most favorable on 6 September, when over 5600 Steller's eiders were observed, most near Kwigluk Island (see attached reports from Brian). I thank Brian, as well as pilots Paul Liedburg and George Walters, for their rapid response and well-documented surveys.

One bird apparently perished at Kuskokwim Shoals, and another transmitter went abruptly off the air earlier this month. This leaves 8 transmitters still functioning. Birds using the northern molting areas (Cape Mendenhall, Kuskokwim Shoals) departed in the last week of October or first week of November for waters of the Alaska Peninsula. Two birds that initially moved to Izembek Lagoon after departing more northerly molting areas have more recently relocated to the Nelson Lagoon/Port Moller area. As of 26 November, there was 1 bird at Kinzarof Lagoon (Cold Bay, "across from" Izembek Lagoon), 1 at Sanak Islands, 4 at the Nelson Lagoon/Port Moller complex, 1 at Chignik Lagoon, and 1 at Wide Bay. Thus, we have birds scattered over 500 km apart, along the Alaska Peninsula. The birds are evenly divided on the north and south side of the Peninsula.

The accompanying map shows the molting locations and subsequent movements. For more information, please call me at (907) 456-0325, or email Philip_Martin@fws.gov.



Locations of satellite-tracked Steller's Eiders, as of 26 November, 2001. Symbols (squares and circles) represent the "best" location per duty cycle, which occur at three-day intervals. Males are indicated by squares and solid lines, females by circles and dashed lines. Lines are conceptual, and not intended to indicate actual migratory routes.