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Movement of King Eiders from Breeding Grounds on Banks Island, NWT, to Moulting and Wintering Areas

D. Lynne Dickson

Prairie and Northern Region

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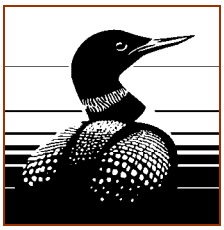

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MOVEMENT OF KING EIDERS FROM BREEDING GROUNDS ON BANKS ISLAND, NWT, TO MOULTING AND WINTERING AREAS

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ABSTRACT

This study was part of a long-term program to document spatiotemporal characteristics of migration of King Eiders (*Somateria spectabilis*) from breeding areas in the western Canadian Arctic, and to identify key areas used by the eiders during various stages of their life history. In mid-June 2008, 16 males and 13 females were captured and implanted with satellite transmitters at Banks Island, Northwest Territories, Canada. Movements were subsequently tracked by Argos satellites. With the exception of one eider shot in July during moult migration, and another that died on a wintering area in January, the remaining 27 transmitters provided locations for a period of 13 months on average.

Male King Eiders departed from the breeding grounds in late June and arrived at moulting areas to the west of the continent during the first half of August. Females departed from the breeding grounds about a month later than the males and arrived at moulting areas in the third week of August. The primary staging area for both sexes during moult migration was the west coast of Banks Island, where males and females staged an average of 25 ± 7 and 18 ± 8 days, respectively. Other areas used for staging during moult migration, but to much lesser extent, included off Cape Bathurst, NWT, and Smith Bay, Alaska, in the Beaufort Sea; off Alaska in the Chukchi Sea; and off the east side of Chukotsk Peninsula, Russia, in the Bering Sea.

All but one King Eider moulted in the Bering Sea: 8 off the coast of Alaska and 19 off the coast of Russia. The remaining eider moulted in Kolyuchin Bay on the north side of Chukotsk Peninsula. All but two eiders remained in the Bering Sea for the winter: 15 off Chukotsk Peninsula, 9 along the south shore of Bristol Bay, Alaska, and 1 off Cape Olyutor, Russia. The other two eiders wintered in the North Pacific off Kodiak Island, Alaska.

Eiders began to move northward as early as February 4. However, they did not depart from their wintering region until the fourth week of April on average. The eiders that migrated to breeding areas in North America staged at three locations during spring migration: off Alaska in the eastern Chukchi Sea; off Tuktoyaktuk Peninsula in the southeast Beaufort Sea and off Banks Island in the eastern Beaufort Sea. The most heavily used of these staging areas was the southeast Beaufort Sea, where all of the eiders that returned to breeding areas in North America (n=18) staged for an average of 30 ± 9 days. Peak numbers occurred in the southeast Beaufort Sea from May 8 to June 4.

In the second year, all females returned to within 2.2 km of the area where they had nested the previous year (mean 1.0 ± 0.6, n=10). By contrast, males (n=11) were scattered across the breeding range from the Lena River Delta, Russia, to Victoria Island, Canada. Date of arrival of females on their nesting grounds on Banks Island in 2009 ranged from June 6 to June 17.

Eiders moulted within 2 to 44 km of the site used the previous year (mean 18 ± 16 km, n=8).

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INTRODUCTION

Development of offshore oil production facilities is currently underway off the Alaskan Beaufort Sea coast and is expected to expand to the Canadian Beaufort Sea and eastern Chukchi Sea in the near future. Several hundreds of thousands of King Eiders (*Somateria spectabilis*) migrate across the Beaufort and Chukchi seas on route between wintering areas west of the continent and breeding areas in northern Alaska and Canada (Thompson and Person 1963; Barry 1986; Johnson and Herter 1989; Suydam et al. 1997, 2000; Alexander et al. 1997). Little is known about the specific migration corridors and habitats used by King Eiders during migration. Consequently, impacts of expanded oil and gas development on this sea duck species are difficult to predict. This study provides information about the location and timing of use of migration corridors by the King Eider, so that analysts can better predict and mitigate any adverse effects of offshore petroleum development on subject populations. The study also identifies affiliations between wintering, breeding and moulting grounds, thereby helping to define population units. Such information is essential to effectively manage this harvested species.

This study comprises the last year of a long-term program inititated in 1997 that uses satellite technology to track the year-around movement of King Eiders from breeding areas in Canada's Western Arctic. The program objectives were as follows: (1) to determine specific migration routes for western Canadian breeding population of King Eiders; (2) to document temporal and spatial relationships of migration corridors to pack ice, islands and other physical features in the Beaufort Sea; and (3) to identify wintering, staging and moulting areas, and their affiliation with specific breeding areas.

Prior to 2008, 46 King Eiders had been tagged on nesting grounds east of the Beaufort Sea: 41 eiders on central Victoria Island in 1997, 1998, 2003 and 2004, and 5 eiders on Banks Island in 2000. Although earlier tagging provided ample information on summer and fall movement of King Eiders westward across the Beaufort Sea, it provided only a limited amount of information about eider spring migration. Consequently, the main focus of tagging in 2008 was to obtain daily locations of King Eiders during spring migration. Siksik Lake (72°23' N; 125°05' W) on Banks Island, Northwest Territories, was chosen as the capture site because it was a known breeding area and only five eiders had previously been tagged there. Results from tagging King Eiders in 2008 are presented in this report. For results of the previous five years of deployment of satellite transmitters, see Dickson et al. (1998, 1999, 2001, 2006, 2007).

METHODS

King Eiders were captured from June 11 to June 18, 2008, on their breeding grounds near Siksik Lake (72°23' N; 125°05' W) on the west coast of Banks Island, Northwest Territories, Canada (Fig. 1). The eiders were captured using 2.6 m x 12.0 m mist nets that had a mesh size of 127 mm. Two or three nets were strung together in a V- or U-shape and placed on the upwind side of a pond with eiders present. The nets were positioned just above the water to ensure no duck would drown if it tried to dive under the net. Two or three pairs of decoys were placed within about 1 m of the downwind side of the net. Two or more observers crouched in a depression or behind a ridge downwind of the pond and waited for the eiders to return to the pond and approach the decoys. Once the ducks were settled and near the nets, the observers flushed them into the nets by shouting and running towards them. The ducks were carried back to camp in cat cages fitted with a layer of wire mesh to keep the bird off the bottom, dry and clean.

A veterinarian and assistant surgically implanted the transmitters following techniques described by Korschgen et al. (1996). Isoflurane administered with compressed air was used as the anaesthetic, and bupivicaine/lidocaine (2:1) as the local analgesic. The transmitter was implanted in the abdominal cavity of the bird with the antenna exiting dorsally near the base of the tail. The transmitter was anchored in place by stitching the eider's skin to a dacron collar fitted around the base of the antenna. Each individual was held in captivity for 2 to 3 h following surgery to ensure recovery from anaesthesia. Blood and muscle tissue samples were collected from each bird during surgery for genetics studies at the Alaska Biological Science Center in Anchorage, Alaska.

The transmitters (designed and produced by Microwave Telemetry Inc. Columbia, MD) were approximately 55 x 35 x 10 mm in size and weighed about 43 g. The transmitters were programmed to send signals to Argos satellites over a 4- to 6-h period every 3 days through until December, every 8 days during the winter, daily during spring migration, then every 3 days until the transmitters quit functioning (Table 1). These duty cycles (i.e. period of transmission followed by period of no transmission) were chosen to maximize the amount of information obtained when the birds were migrating, particularly during the target period of spring migration, while preserving battery life when the birds were stationary.

Information relayed in the transmitter signals included location of bird, body temperature and battery voltage. The latter two parameters were useful in determining why a transmitter stopped functioning. A drop in body temperature indicated the bird was dead, whereas a sudden drop in voltage indicated the battery was depleted.

Both the Standard and Auxiliary Location Processing Service available from Argos were used to obtain eider locations. Argos provided an assessment of the accuracy of each eider location (ARGOS 2007). Locations accurate to within a 1500-m radius, were rated by Argos as class 1, 2 or 3, the latter being the most accurate (to within 250 m). Locations with an accuracy of > 1500 m radius were class 0, and those with no estimate of accuracy (because < 4 messages reached the satellites) were class A, B or Z.

Usually several locations were received during each 4- to 6-h transmission period. The most accurate and plausible location of each individual eider within a transmission period was selected using a logical filter program developed by David C. Douglas (United States Geological Survey, Alaskan Science Centre, Juneau, AK). First, any implausible locations were filtered out based on where the bird was during previous and subsequent locations. Then locations were selected within each transmission period based on the highest Argos accuracy rating. If there was more than one location with the same accuracy rating (e.g. five locations with class 3 accuracy rating in a 6-h transmission period), the location with the most messages that reached the satellite was selected.

Method of Analysis

The data were divided into seasons based on migratory movement of the birds as follows: spring migration, breeding, moult migration, moulting, fall migration and wintering.

Migration began when the bird left an area and did not return (Petersen and Flint 2002). In most cases the first distance travelled was > 50 km, although this was not always the case for moult migration, which was defined as when the eider left the nesting area for the ocean and did not return (Phillips et al. 2007). Similarly, end of migration was the last of a series of directional movements, and that movement was generally > 50 km. The exception was if a bird shifted southwards after January 1, in which case it was considered part of winter movements rather than fall migration (Oppel et al. 2008). Spring migration ended when the bird moved on shore to a nesting area between early and late June. Some males remained offshore upon returning to the breeding area in the second year, so for those birds it was not possible to determine dates when spring migration ended and moult migration began.

Nest location was where the bird remained stationary at least 10 days during the nesting period (Petersen et al. 2006). Nesting period for Banks and Victoria islands was based on Cotter et al. (1997). Moult area was defined as locations < 15 km apart over a period of > 20 days following moult migration (Oppel et al. 2008). Moulting and nesting locations were mapped using all values obtained during the relatively stationary period to calculate a centroid for each bird. Centroid locations were determined using the Mean Center tool within Spatial Statistics in ArcGIS.

Date of departure on migration was the date that the bird was last seen on the nesting/moulting/wintering area (Petersen et al. 1999). Similarly, date of arrival was the date the bird was first seen in the area. Number of days of migration = date first seen at destination – date last seen at area of departure – 1 duty cycle. For example, number of days of fall migration = date first seen on wintering area – date last seen on moulting area –1 duty cycle. Duration of stay on nesting, staging, moulting or wintering area = last known date in the area – first known date in the area + 1 duty cycle. If there was a gap of > 10 days between locations at time of departure or arrival, the data were not used.

During migration, if a bird stopped and remained in an area for at least 7 days (Petersen and Flint 2002), with no directional movement > 50 km, it was considered to be at a staging area.

Results are reported as means ± standard deviation (SD).

RESULTS AND DISCUSSION

The open-water lead system in the southeast Beaufort Sea was well developed by the time we arrived on June 10 in 2008. As viewed on our flight from Inuvik to Banks Island, there was a wide expanse of open water off the landfast ice edge all along Tuktoyaktuk Peninsula that stretched all the way to Banks Island, and northward up the west coast (Fig. 1). The small ponds at Siksik Lake were ice free, although lakes were still covered in ice. There were several pairs of King Eiders in the wetlands just east of Siksik Lake, so we began trapping immediately. By the time we were finished on June 18, nest initiation had begun. The last female caught had a brood patch and laid an egg, complete with shell, while recovering from the anaesthetic. Prior to that, we captured two females, one on June 13 and the other on June 16, that both laid an egg with no shell while recovering from anaesthesia. Ideally, we should have started capturing the ducks a few days earlier in 2008.

We implanted satellite transmitters in 17 male and 13 female King Eiders (Table 2). Based on the temperature sensor in the transmitter, one male died within a day or two, likely due to complications from surgery, another male was shot at Point Barrow, Alaska, in late July during moult migration (transmitter recovered), and a female died the following January. All 27 remaining eiders survived at least until their transmitter quit functioning.

The transmitters started sending signals to Argos satellites within 24 hours of implantation. Excluding the three eiders that died, transmitters provided locations for a period of 13 months on average (range: 6–23 months, n=27) (Table 2). The best-performing transmitter (#80928) lasted until January 2010, providing 187 locations over a 19-month period. Another transmitter (#80907) lasted longer, but for an unknown reason it missed four months of transmissions during the first winter.

Appendix A contains the best-quality eider location per duty cycle throughout the life of each transmitter. Appendix B contains a series of maps that track the movement of each eider individually throughout the period its transmitter was functioning.

Nesting

Immediately following marking, one pair moved to central Banks Island and another pair to the river delta just north of Siksik Lake, but all others remained within a few kilometres of Siksik Lake during the nest initiation period (see insert in Fig. 2).

Moult Migration

Mean date of departure of males from the breeding grounds was June 27 ± 5 days (Table 3; Appendix C1). Migration to the moulting areas in the Bering and Chukchi seas took an average of 39 ± 6 days (range 28–49 days, n=15), with peak period of arrival on the moulting area in the second week of August (mean August 9 ± 6 days).

The first stop during moult migration for all but one male was the staging area off the west coast of Banks Island, where males spent an average of 25 ± 7 days (range 13–36 days, n=15). Once departed from the nearby staging area, movement across the Beaufort Sea for most males took about a week. Exceptions were three eiders that staged for 2–4 weeks off Cape Bathurst, NWT, one for a week off Jones Islands and one for a week off Smith Bay, Alaska (Fig. 3; Appendix C2a). About half of the males stopped again for 8 ± 5 days (range 3–16 days, n=10) off Alaska in the Chukchi Sea. Three other males staged in the Bering Sea off Chukotsk Peninsula, Russia, for just over a week.

All but one of the females departed the breeding area about a month later than the males (between July 15 and August 3; Table 3), which roughly follows time of hatch for King Eiders (Cotter et al. 1997; also based on egg production by three females in this study). The other female left Siksik Lake around July 8, suggesting it either failed or did not attempt to nest. Like the males, all females staged off the nearby west coast of Banks Island, but for a shorter period that averaged 18 ± 8 days (range 6–36 days, n=12). Once females departed from that staging area they moved rapidly through the Beaufort Sea in less than a week, except for one individual that staged for 10 days off Smith Bay, Alaska. No females staged in the Chukchi Sea and only two staged off Chukotsk Peninsula in the Bering Sea. Average date of arrival on the moulting area was August 23 ± 7 days (n=11), about 2 weeks later than the males.

Movement of King Eiders across the southeast Beaufort Sea from Banks Island to the Alaskan coast was on a broad front from 2 to 300 km offshore (Fig. 3; Appendix A). From Jones Islands, Alaska, westward to Point Barrow, nearly all of the eiders were within 50 km of shore (Appendix A). Likewise, eiders were seldom > 50 km from shore as they migrated through the Chukchi and the Bering seas.

The moult migration route and staging areas used in the second year of tracking were similar to those recorded in 2008 (Fig. 4). Also, King Eiders tracked from breeding areas on Victoria Island in 1997, 1998, 2004 and 2006 all followed a similar migration route (Dickson et al. 1998, 1999, 2006, 2007).

Moult

All but one King Eider moulted in the Bering Sea: 5 off the Alaskan mainland coast in Bristol Bay and Kuskokwim Bay, 3 off St Lawrence Island, and 19 off the south and east coasts of Chukotsk Peninsula, Russia (Figs. 5 and 6). The exception was a male that moulted in Kolyuchin Bay on the north side of Chukotsk Peninsula. Eiders tagged with transmitters in previous years moulted in these same areas, including one male at Kolyuchin Bay. However, several eiders in the earlier studies also moulted farther south along the Russian coast as far as Karagin Bay at the base of Kamchatka Peninsula (Dickson et al. 1998, 1999, 2000, 2001, 2006, 2007).

Fall Migration

Timing, duration and distance travelled during fall migration was highly variable in 2008. Departure from moulting areas occurred over a 7-week period from early October to mid November; duration of migration varied from 3 to 71 days; distance travelled varied from 0 to 1500 km; and arrival at wintering areas occurred over a 10-week period from Oct 8 to the beginning of January (Table 3; Appendix C1). Five of the eiders (two females and three male) that moulted off the southeast coast of Chukotsk Peninsula did not migrate; rather, they remained in their moulting area for the winter. Staging during migration occurred primarily off the east coast of Chukotsk Peninsula, off St Lawrence Island, and on the north side of Bristol Bay (Figs. 7 and 8). The average arrival date on the wintering area for males and females was November 16 ± 30 days and November 18 ± 19 days, respectively.

Winter

The majority of birds wintered in the Bering Sea either off the southeast coast of Chukotsk Peninsula (15 eiders) or along the south shore of Bristol Bay (9 eiders). An additional two eiders wintered in the North Pacific off Kodiak Island, Alaska, and another wintered off Russia in the southwest Bering Sea (Figs. 9 and 10; App. C). Likewise, results of telemetry in previous years indicated that most of the King Eiders winter either in the polynia off the southeast tip of Chukotsk Peninsula or south of the ice edge off either the Russian or Alaskan coast (Dickson et al. 2001, 2006, 2007). Unlike eiders tagged in 2008, several eiders in earlier years also wintered off the southeast tip of Kamchatka Peninsula (Dickson et al. 2001, 2006, 2007).

Spring Migration

Eiders started to move north as early as February 4 (Table 3). Although distance travelled was > 50 km during this initital move, the birds remained within the region where they had wintered, and the move was followed by a period when they were stationary which lasted on average 34 ± 23 days (range 9–81 days; n=17). With the next northward movement, the birds departed the wintering regions (as defined by Oppel et al. 2008). This occurred over a six-week period from March 29 to May 11. Average date of departure for females and males was April 26 ± 11 days and April 28 ± 6 days, respectively. All females returned to the breeding area on Banks Island (Fig. 11) and arrived during the second week of June (mean June 12 ± 3 days; range June 6-17; n=10) (Table 3; Appendix C1b). By contrast, males migrated both east and west, with three going to northern Russia and 8 to North America (Fig. 12).

Eiders migrating to breeding areas in North America staged in three areas, each defined by the presence of early open water: in the eastern Chukchi Sea off Icy Cape and Ledyard Bay, Alaska; in the southeast Beaufort Sea extending from Martin Point, Alaska, to Cape Bathurst, NWT; and in the eastern Beaufort Sea off the west coast of Banks Island (Figs. 11 and 12). About half of the eiders staged at least a week in the eastern Chukchi Sea (Table 5). Peak numbers occurred in the first week of May in 2009, and the average stay for all eiders known to stop in the area was 7 ± 4 days. All 18 eiders that crossed the southeast Beaufort Sea staged there for at least a week. The average length of stay was 30 ± 9 days, and peak numbers occurred from May 8 to June 4. Eiders staged for a shorter period off Banks Island; a mean of 10 ± 6 days (n=8). Peak numbers occurred off Banks Island from June 3 to June 12. Daily locations during spring migration confirmed that most of the eiders moved rapidly (over 450 km in < 1 day) across the western Beaufort Sea from Point Barrow eastward to at least Martin Point (Figs. 11 and 12). The exception was one male (#80930) that staged for roughly 10 days off Smith Bay (Appendix B35).

The location of the migration corridor and staging areas used by the eiders during spring migration in 2009 was very similar to previous years and was likely influenced primarily by the presence of early open water, hence a place to rest and feed.

Nest Site Fidelity

All 10 females with transmitters that were still functioning returned to the same area where they had nested the previous year (Fig. 2; Appendix C1b). The average distance between nesting locations was 1.0 ± 0.6 km (range 0.2–2.2 km), suggesting they returned to the same wetland complex, if not the same pond. By contrast, only 2 of 11 males returned to Banks Island in 2009. The other males migrated to various breeding areas elsewhere: 3 to Russia, 2 to Alaska, 2 to Cape Dalhousie and 2 to Victoria Island

(Fig. 2; Appendix B12 and B19; Appendix C1a). Males were on average 1081 ± 1168 km (range 138–3300 km, n=11) away from where they had been during nest initiation in the previous year.

King Eiders tagged on Victoria Island in previous years showed a similar pattern of nest site fidelity to those tagged on Banks Island in 2008 (Dickson et al. 1999, 2006, 2007). Excluding one bird, females returned to within 1.9 ± 0.9 km of where they had been in the previous year (n=9). The exception returned to a location nearly 50 km away. However, interestingly, this bird also departed the nesting area in late June in the first year, which is about a month earlier than is typical. This suggests that it may not have nested that year, or even completed spring migration post surgery. Like the males tagged on Banks Island, males from breeding areas on Victoria Island tended not to return (1 of 9 returned to Victoria Island). They were on average 1478 ± 1436 km from the breeding area used the previous year (n=9), and 3 of the 9 males from Victoria Island migrated to Russia in the second year.

Breeding Effort

In the second year of tracking, only 4 of the 9 males that were tracked throughout the nesting period were ever located in terrestrial habitat, and 3 of these were present on land for only 2–4 days before returning to marine waters. The rest remained in marine waters throughout the nesting period, which suggests that some of the males did not breed in the second year (Appendix C1a). Similarly, roughly half (4 of 9) of male eiders tagged in earlier years on Victoria Island remained in marine waters during nest initiation period in the second year. The rate of nonbreeding for males is unknown, but it seems unlikely it would be 50%. Thus, the satellite transmitters may have affected the ability of males to compete for a mate in the year following implantation.

Moult Site Fidelity

Both males and females returned to the same general area to moult in the second year. All were within 44 km of the site used the previous year (mean 18 ± 16 km, n=8). Indeed, three (one male and two females) returned to within 2 km of their moult location in the previous year. Although sample sizes are small, this concurs with previous results for five eiders marked on Victoria Island and one on Banks Island. On average these birds returned to within 17 ± 18 km (range 2–41 km, n=6) of the moult site used in the previous year.

Winter Site Fidelity

The one eider with a transmitter that functioned throughout two winter periods was within 8 km of where it had wintered the previous year off Chukotsk Peninsula (Appendix B31 and B32). Another bird returned to the same winter region (Bristol Bay area), but unfortunately not enough locations were obtained to pinpoint where within the region the bird wintered in the first year (Appendix B7 and B8).

Conclusions

The 30 satellite transmitters deployed in 2008 have added considerably to our database describing annual movement of the King Eiders that breed in Canada's Western Arctic. Twenty transmitters provided locations for more than a year, thus helping us identify key areas for eiders throughout their annual cycle, including dates when present in those areas. This information will assist us to predict the impact of development projects such as offshore oil and gas production, and to identify marine areas that need special protective status. In addition, information obtained about breeding and wintering area affiliations, and about site fidelity, has helped delineate the geographic extent of the King Eider population that inhabits Canada's Western Arctic. Such information is a prerequisite for successful management of this harvested species. For example, we now know that to effectly manage harvest of Canada's Western Arctic population of King Eiders, Canadian authorities will not only have to work cooperatively with wildlife managers in Alaska, but also those that manage harvest in eastern Russia as far west as the Taymyr Peninsula.

LITERATURE CITED

Alexander, S.A., D.L. Dickson, and S.E. Westover. 1997. Spring migration of eiders and other waterbirds in offshore areas of the western Arctic. *In*: D.L. Dickson (ed.) King and Common Eiders of the Western Canadian Arctic. Canadian Wildlife Service Occasional Paper No. 94. Ottawa, ON. 75 pp.

ARGOS. 2007. ARGOS User's Manual. Available from: www.argos-system.org/manual

Barry, T.W. 1986. Eiders of the western Canadian Arctic. *In:* A. Reed (ed.) Eider ducks in Canada, Canadian Wildlife Service Report Series No. 47, Ottawa, ON.

Cotter, R.C., D.L. Dickson, and C.J. Gratto. 1997. Breeding biology of the King Eider in the western Canadian Arctic. *In* D.L. Dickson (ed.) King and Common Eiders of the western Canadian Arctic. Canadian Wildlife Service Occasional Paper No. 94. Ottawa, ON. p. 51-57.

Dickson, D.L., R.S. Suydam, and J. Fadely. 1998. Tracking the movement of King Eiders from nesting grounds in western arctic Canada to their molting and wintering areas using satellite telemetry. 1997–1998 Progress report. Unpublished report, Canadian Wildlife Service, Edmonton, AB. 7 pp.

Dickson, D.L., R.S. Suydam, and G. Balogh. 1999. Tracking the movement of King Eiders from nesting grounds in western arctic Canada to their molting and wintering areas using satellite telemetry. 1998–1999 Progress report. Unpublished report, Canadian Wildlife Service, Edmonton, AB. 7 pp.

Dickson, D.L., R.S. Suydam, and G. Balogh. 2000. Tracking the movement of King Eiders from nesting grounds at Prudhoe Bay, Alaska to their molting and wintering areas using satellite telemetry. 1999–2000 Progress report. Unpublished report, Canadian Wildlife Service, Edmonton, AB. 34 pp.

Dickson, D.L., G. Balogh, and S. Hanlan. 2001. Tracking the movement of King Eiders from nesting grounds on Banks Island, NWT to their molting and wintering areas using satellite telemetry. 2000–2001 Progress report. Unpublished report, Canadian Wildlife Service, Edmonton, AB. 39 pp.

Dickson, D.L., A.K. Hoover, G. Raven, and T. Bowman. 2006. Tracking the movement of King Eiders and Long-tailed Ducks from nesting grounds on Victoria Island to their moulting and wintering areas using satellite telemetry. 2003–2004 Progress report. Unpublished report, Canadian Wildlife Service, Edmonton, AB. 119 pp.

Dickson, D.L., G. Raven, and T. Bowman. 2007. Tracking the movement of King Eiders from nesting grounds on Victoria Island to their moulting and wintering areas using satellite telemetry. 2004–2005 Progress Report. Unpublished report, Canadian Wildlife Service, Edmonton, AB. 63 pp.

Johnson, S.R. and D.R. Herter. 1989. The birds of the Beaufort Sea. BP Exploration (Alaska) Inc., Anchorage, AK. 372 pp.

Korschgen, C.E., K.P. Kenow, A. Genron-Fitzpatrick, W.L. Green, and F.J. Dein. 1996. Implanting intra-abdominal radiotransmitters with external whip antennas in ducks. J Wildl Manage 60:132-137.

Oppel, S., A.N. Powell, and D.L. Dickson. 2008. Timing and distance of King Eider migration and winter movements. Condor 110(2):296-305.

Petersen, M.R., W.W. Larned, and D.C. Douglas. 1999. At-sea distribution of spectacled eiders: a 120-year-old mystery resolved. Auk 116:1009-1020.

Petersen, M.R. and P.L. Flint. 2002. Population structure of Pacific Common Eiders breeding in Alaska. Condor 104:780-787.

Petersen, M.R., J.O. Bustnes, and G.H. Systad. 2006. Breeding and moulting locations and migration patterns of the Atlantic population of Steller's eiders *Polysticta stelleri* as determined from satellite telemetry. J Avian Biol 37:58-68.

Phillips, L.M., A.N. Powell, E.J. Taylor, and E.A. Rexstad. 2007. Use of the Beaufort Sea by King Eiders breeding on the North Slope of Alaska. J Wildl Manage 71(6):1892-1898.

Suydam, R., L. Quakenbush, M. Johnson, J.C. George, and J. Young. 1997. Migration of King and Common eiders past Point Barrow, Alaska, in spring 1987, spring 1994, and fall 1994. *In* D.L. Dickson (ed.) King and Common eiders of the western Canadian Arctic. Canadian Wildlife Service Occasional Paper No. 94. p. 21-28.

Suydam, R.S., D.L. Dickson, J.B. Fadely, and L.T. Quakenbush. 2000. Population declines of King and Common Eiders of the Beaufort Sea. Condor 102:219-222.

Thompson, D.Q. and R.A. Person. 1963. The eider pass at Point Barrow, Alaska. J Wildl Manage 27:348-356.

Table 1. Summary of duty cycles assigned to satellite transmitters implanted in King Eiders on their nesting grounds on Banks Island, Northwest Territories, in June 2008

Transmitter numbers	Hours of transmission	Hours between transmissions	Number of cycles	Period of year
80902 to 80917	4	72	60	mid June to mid December
	6	192	13	mid December to early April
	6	24	63	early April to mid June
	6	72	8	mid June to end
80918 to 80931	4	72	60	mid June to mid December
	6	192	13	mid December to early April
	4	24	68	early April to late June
	6	72	25	late June to end

Table 2a. Summary of satellite transmitter performance, and weight and status of **female** King Eiders implanted with satellite transmitters on their nesting grounds on Banks Island, Northwest Territories, in June 2008

Transmitter number	Date implanted	Date last transmission	Duration of transmission		Locations		Status	Weight (gm)
			Days	Months	Total number	% High quality[1]		
80902	11-Jun-08	25-Jul-09	409	14	97	67	Paired with 80903	1900
80904	11-Jun-08	24-Jun-09	378	13	127	95	Paired with 80905	1875
80907	12-Jun-08	23-Apr-10	680	23	134	76	Paired with 80908	2000
80910	12-Jun-08	28-Jul-09	411	14	132	95	Paired with 80909	1500
80912	12-Jun-08	27-May-09	349	11	49	47	Paired with 80911	1870
80913	13-Jun-08	18-Mar-09	278	9	72	94	Paired with 80914	1950
80916	13-Jun-08	5-Jul-09	387	13	132	97	Paired with 80915	1950
80920	15-Jun-08	10-Nov-09	513	17	170	97	Paired with 80919	1900
80924	16-Jun-08	16-Jan-09	214	7	30	67	Paired with 80925 or 80927[2]; bird died	1950
80926	16-Jun-08	14-Sep-09	455	15	104	67	Paired with 80925 or 80927[2]	1900
80928	18-Jun-08	6-Jan-10	567	19	187	83	Paired with 80930?	2075
80929	18-Jun-08	15-Oct-09	484	16	159	99	Paired; mate escaped	1625
80931	18-Jun-08	6-Oct-09	475	16	163	96	Paired; mate escaped	1450

[1] Location class L1 (500–1500 m), L2 (250–500 m), or L3 (< 250 m).
[2] Captured as two pairs.

Table 2b. Summary of satellite transmitter performance, weight and status of **male** King Eiders implanted with satellite transmitters on their nesting grounds on Banks Island, Northwest Territories, in June 2008

Transmitter number	Date implanted	Date last transmission	Duration of transmission		Locations		Status	Weight (gm)
			Days	Months	Total number	% High quality[1]		
80903	11-Jun-08	22-Jul-09	406	13	135	88	Paired with 80902	1725
80905	11-Jun-08	22-Aug-09	437	15	143	90	Paired with 80904	1900
80906	11-Jun-08	14-Jul-09	398	13	126	68	Single	1750
80908	12-Jun-08	26-Jul-08	44	1	16	94	Paired with 80907; bird shot	1650
80909	12-Jun-08	2-Dec-08	173	6	54	96	Paired with 80910	1750
80911	12-Jun-08	7-Jun-09	360	12	107	74	Paired with 80912	1550
80914	13-Jun-08	17-Jul-09	399	13	127	95	Paired with 80913	1800
80915	13-Jun-08	27-Sep-09	471	16	148	91	Paired with 80916	1675
80917	13-Jun-08	4-Jun-09	356	12	120	98	Single	1600
80918	14-Jun-08	14-Jan-09	214	7	65	95	Paired; mate unknown	1725
80919	15-Jun-08	21-Jun-08	< 6				Paired with 80920; surgery-related death	1725
80921	15-Jun-08	2-Aug-09	413	14	134	91	Single	1750
80922	15-Jun-08	17-Sep-09	459	15	157	99	Single	1650
80923	16-Jun-08	22-Mar-09	279	9	70	99	Paired; mate unknown	1650
80925	16-Jun-08	18-Jan-09	216	7	65	95	Paired with 80924 or 80926[2]	1675
80927	16-Jun-08	28-Aug-09	438	15	143	86	Paired with 80924 or 80926[2]	1750
80930	18-Jun-08	24-Aug-09	432	14	154	97	Paired 80928?	1300

[1] Location class L1 (500–1500 m), L2 (250–500 m), or L3 (< 250 m).
[2] Captured as two pairs.

Table 3. Timing of movement of King Eiders tagged with satellite transmitters on their nesting grounds on Banks Island, Northwest Territories, in June 2008

Year	Movement	Male			Female		
		Mean	Range	N[1]	Mean	Range	N[1]
2008	Breeding area: departure date	27-Jun	18-Jun to 8-Jul	16	25-Jul	8-Jul to 3-Aug	13
2008	Nearby staging area: departure date	22-Jul	10-Jul to 4-Aug	15	12-Aug	7-Aug to 20-Aug	11
2008	Moulting area: arrival date	9-Aug	27-Jul to 20-Aug	15	23-Aug	15-Aug to 8-Sept	11
2008	Moulting area: departure date	19-Oct	1-Oct to 22-Nov	12	30-Oct	14-Oct to 18-Nov	9
2008-2009	Wintering area: arrival date	16-Nov	8-Oct to 2-Jan	11	18-Nov	17-Oct to 11-Dec	8
2009	Wintering area: departure date	20-Mar	4-Feb to 25-Apr	11	5-Apr	10-Mar to 22-Apr	10
2009	Winter region: departure date	28-Apr	16-Apr to 11-May	11	26-Apr	29-Mar to 9-May	11
2009	Breeding area: arrival date	20-Jun	15-Jun to 27-Jun	3	12-Jun	6-Jun to 17-Jun	10
2009	Breeding area: departure date	6-Jul	29-Jun to 13-Jul	2	23-Jul	1-Jul to 4-Aug	6
2009	Nearby staging area: departure date		13-Jul	1	13-Aug	9-Aug to 22-Aug	5
2009	Moulting area: arrival date	10-Aug	6-Aug to 16-Aug	3	31-Aug	26-Aug to 6-Sept	4
2009	Moulting area: departure date				31-Oct	31-Oct	2
2009-2010	Wintering area: arrival date				14-Nov	8-Nov to 21-Nov	2
2010	Wintering area: departure date					24-Mar	1

[1] Data excluded if locations received were > 10 days apart.

Table 4. Timing of moult and spring migration across the Beaufort Sea by King Eiders implanted with satellite transmitters on their nesting grounds on Banks Island in 2008

		Date arrived in Beaufort Sea			Date departed from Beaufort Sea			Duration of stay (# of days)		
Migration period	Sex	N	Mean	SD	N	Mean	SD	N	Mean	SD
Moult migration in 2008	Female	13	28-Jul	± 8	12	16-Aug	± 5	12	23	± 8
	Male	16	30-Jun	± 4	16	28-Jul	± 7	16	31	± 7
Spring migration in 2009	Female	11	7-May	± 5	10	11-Jun	± 3	10	36	± 7
	Male	8	10-May	± 13	3	18-Jun	± 6	3	44	± 12

[1] Data excluded if locations received were > 10 days apart.

Table 5. Location, timing and level of use of spring staging areas by King Eiders migrating to North America to breed in 2009

Staging area	No. of migrants	% that staged	% that stopped	Arrival[1]		Departure[1]		Duration of stay[1]	
				Mean	± SD	Mean	± SD	Mean	± SD
East Chukchi Sea	19	47	84	3-May	± 11	8-May	± 10	7	± 4
Southeast Beaufort Sea	18	100	100	8-May	± 5	4-Jun	± 9	30	± 9
Off west coast of Banks Is.	14	50	71	3-Jun	± 6	12-Jun	± 2	10	± 6

[1] Includes birds known to have stopped in the staging area.

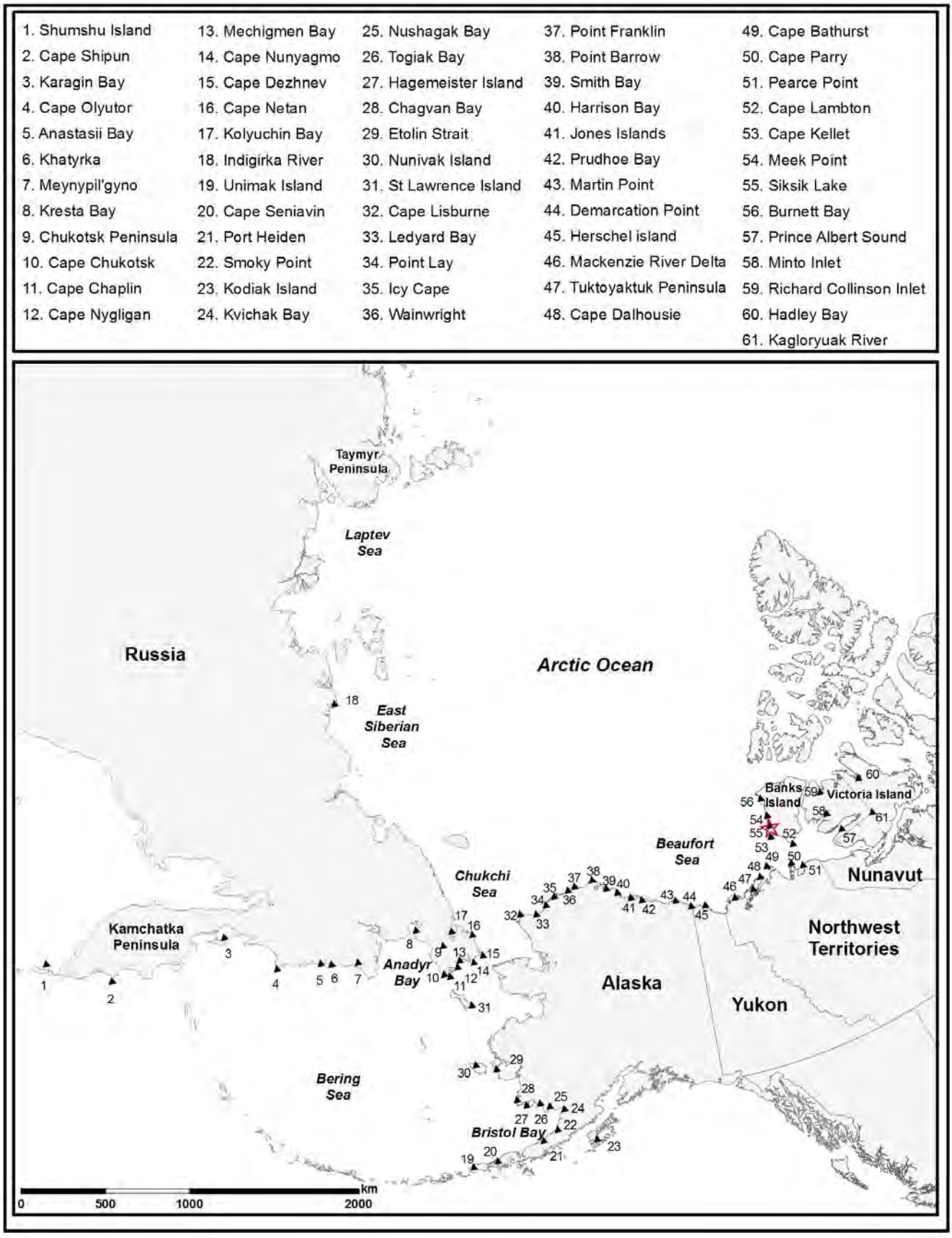

Figure 1. Location of place names mentioned in the text. Red star indicates capture location for King Eiders in 2008.

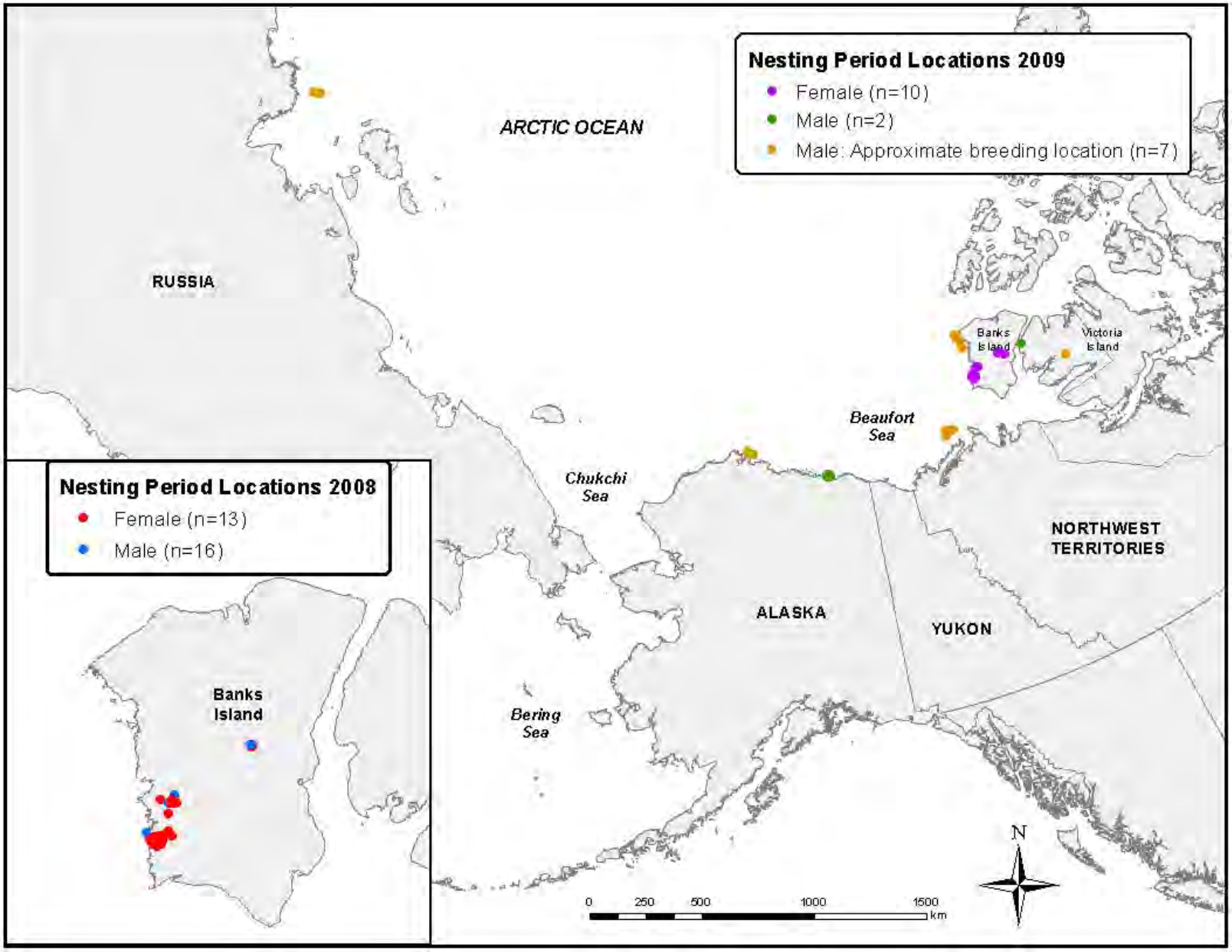

Figure 2. Locations of King Eiders during nesting period in 2008 and 2009. Circles depict locations accurate to within 1500 m.

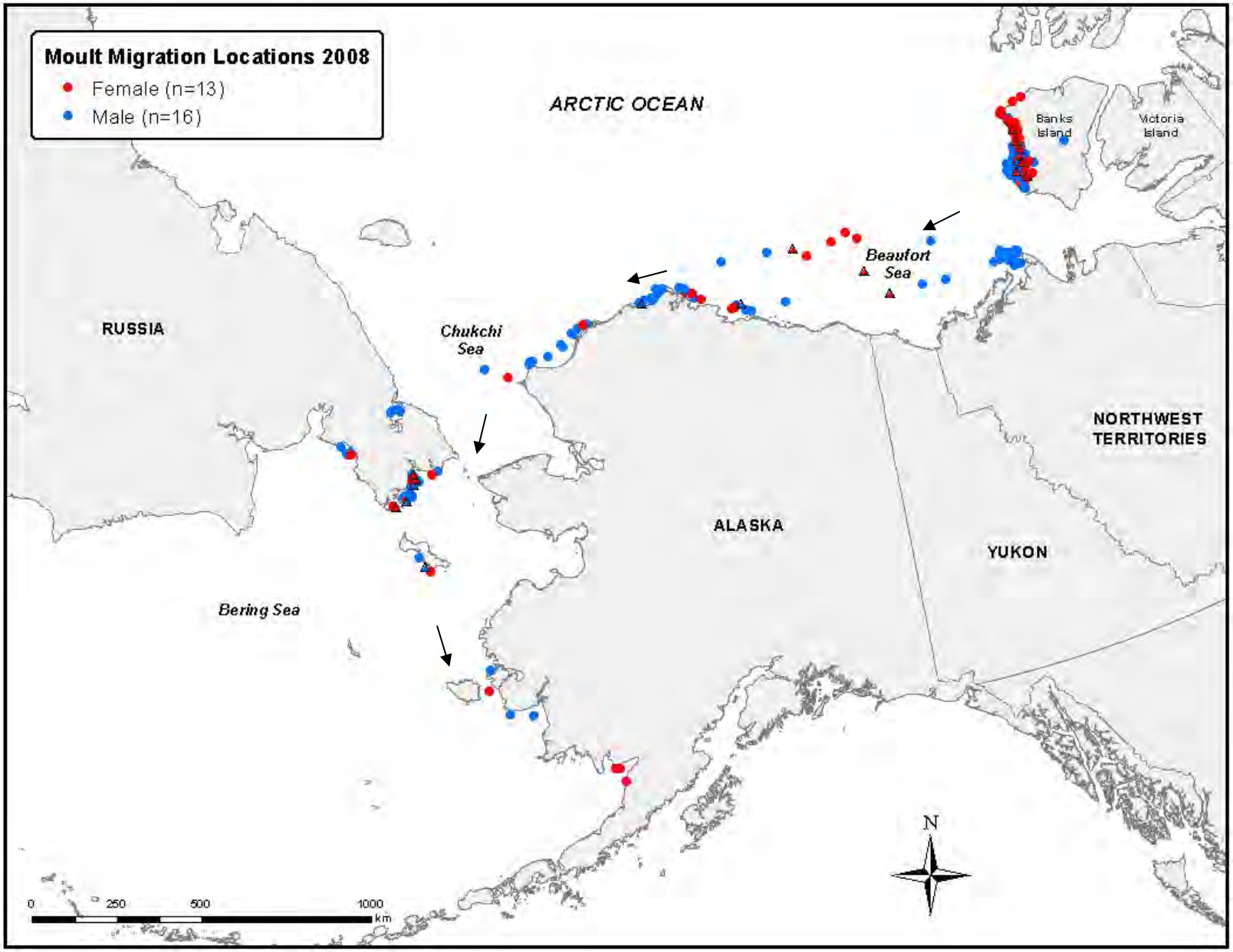

Figure 3. Locations of King Eiders during moult migration in 2008, including last day on nesting area and first day on moulting area. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations. Arrows indicate general direction of movement.

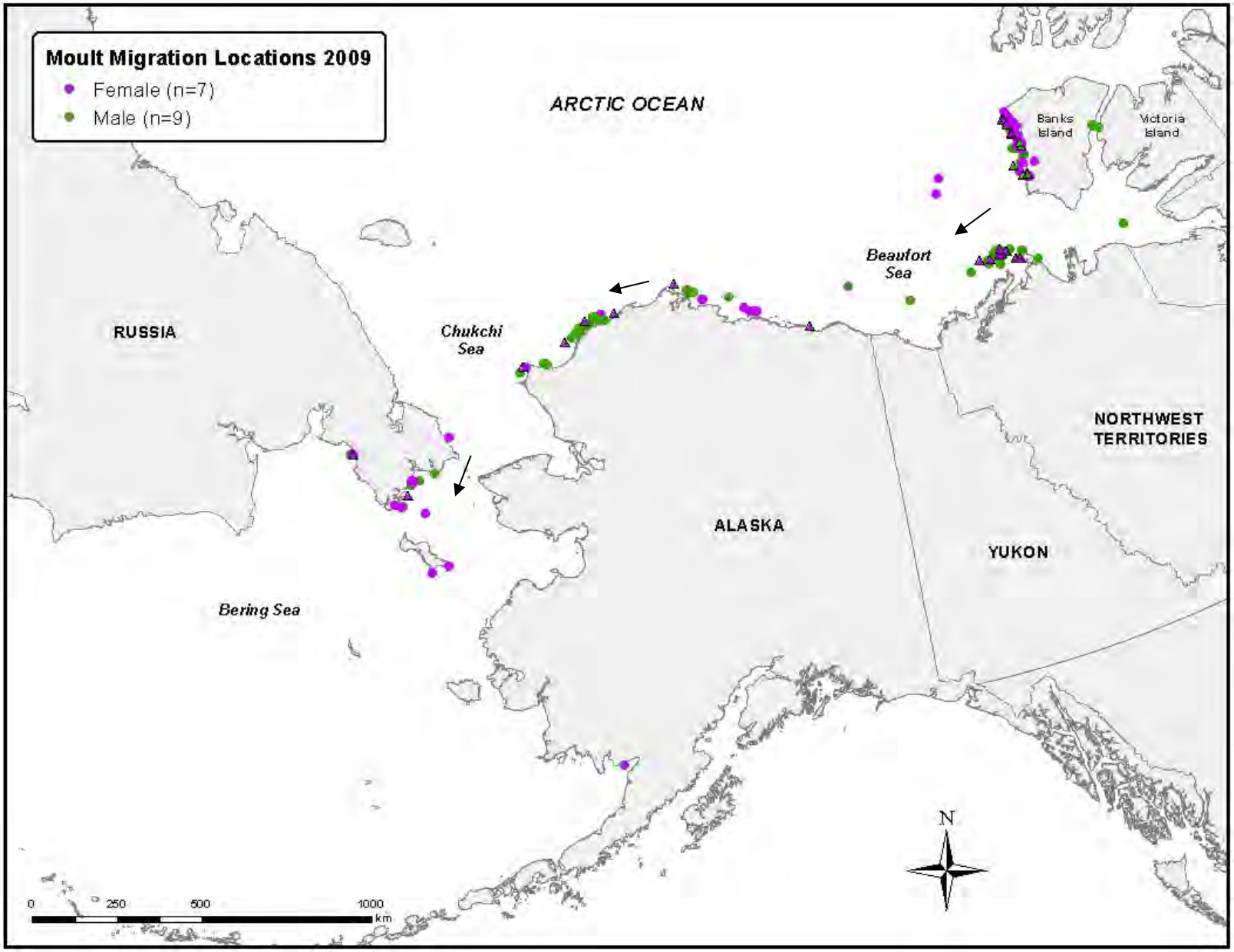

Figure 4. Locations of King Eiders during moult migration in 2009, including last day on nesting area and first day on moulting area. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations. Arrows indicate general direction of movement.

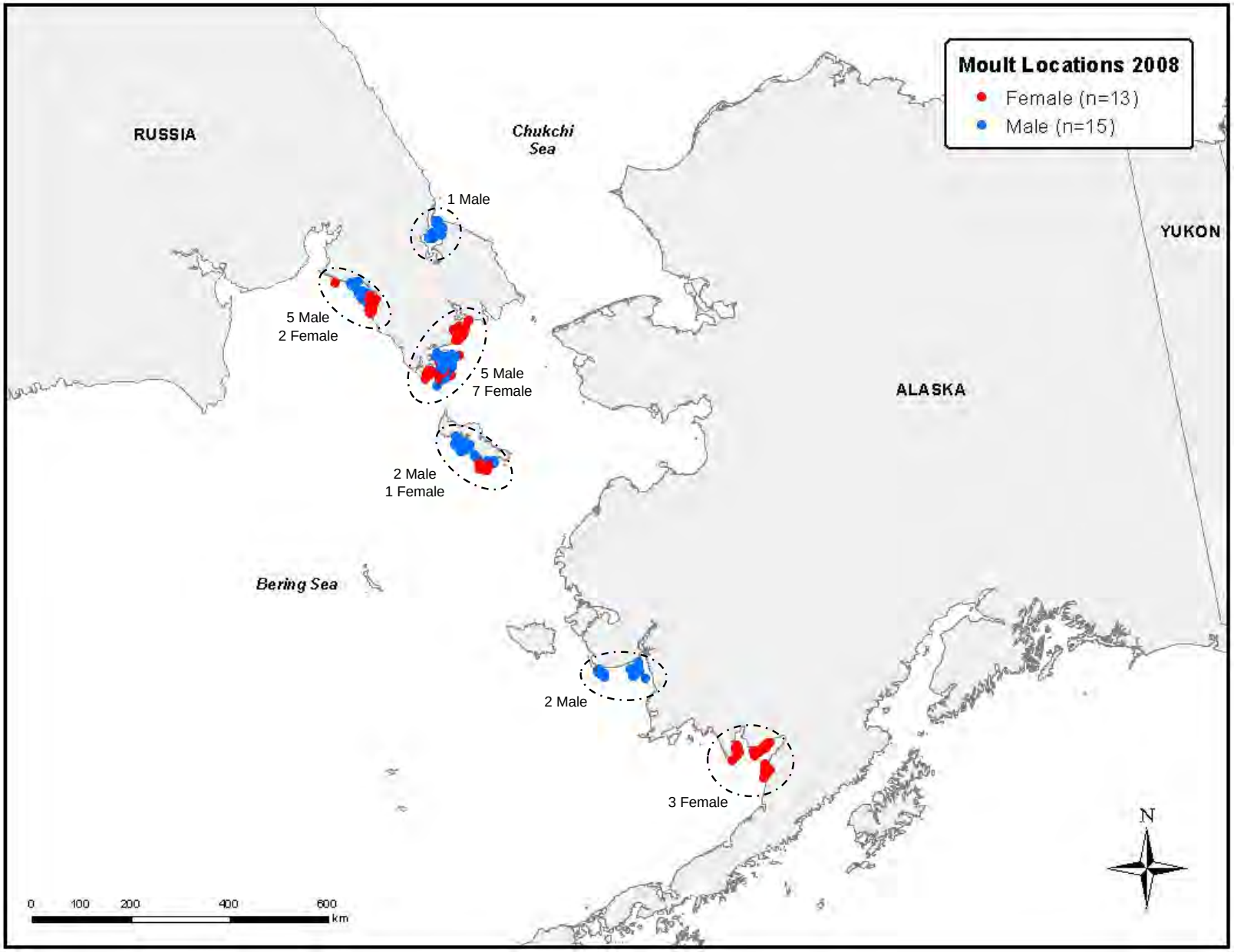

Figure 5. Locations of moulting areas for King Eiders in 2008. Circles depict locations accurate to within 1500 m.

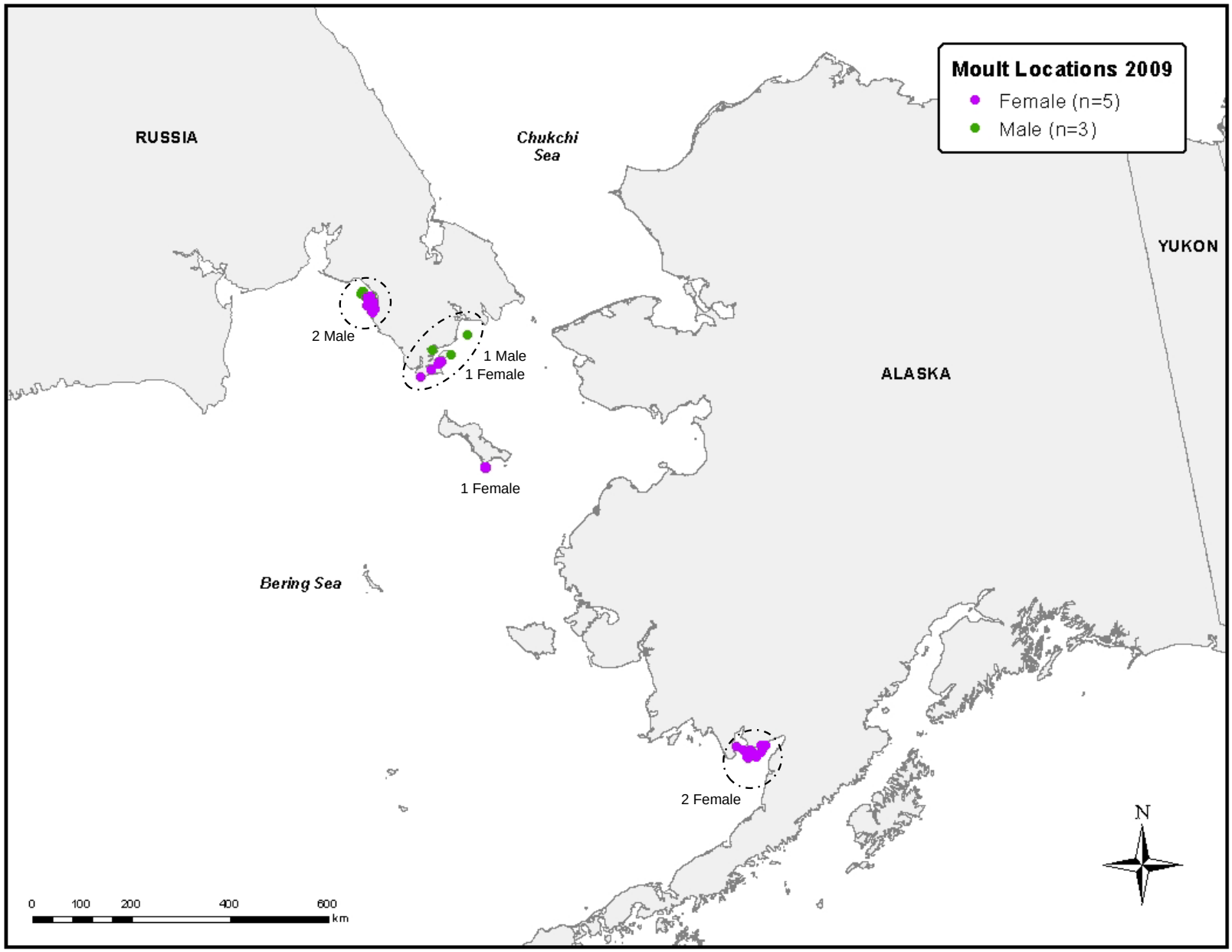

Figure 6. Locations of moulting areas for King Eiders in 2009. Circles depict locations accurate to within 1500 m.

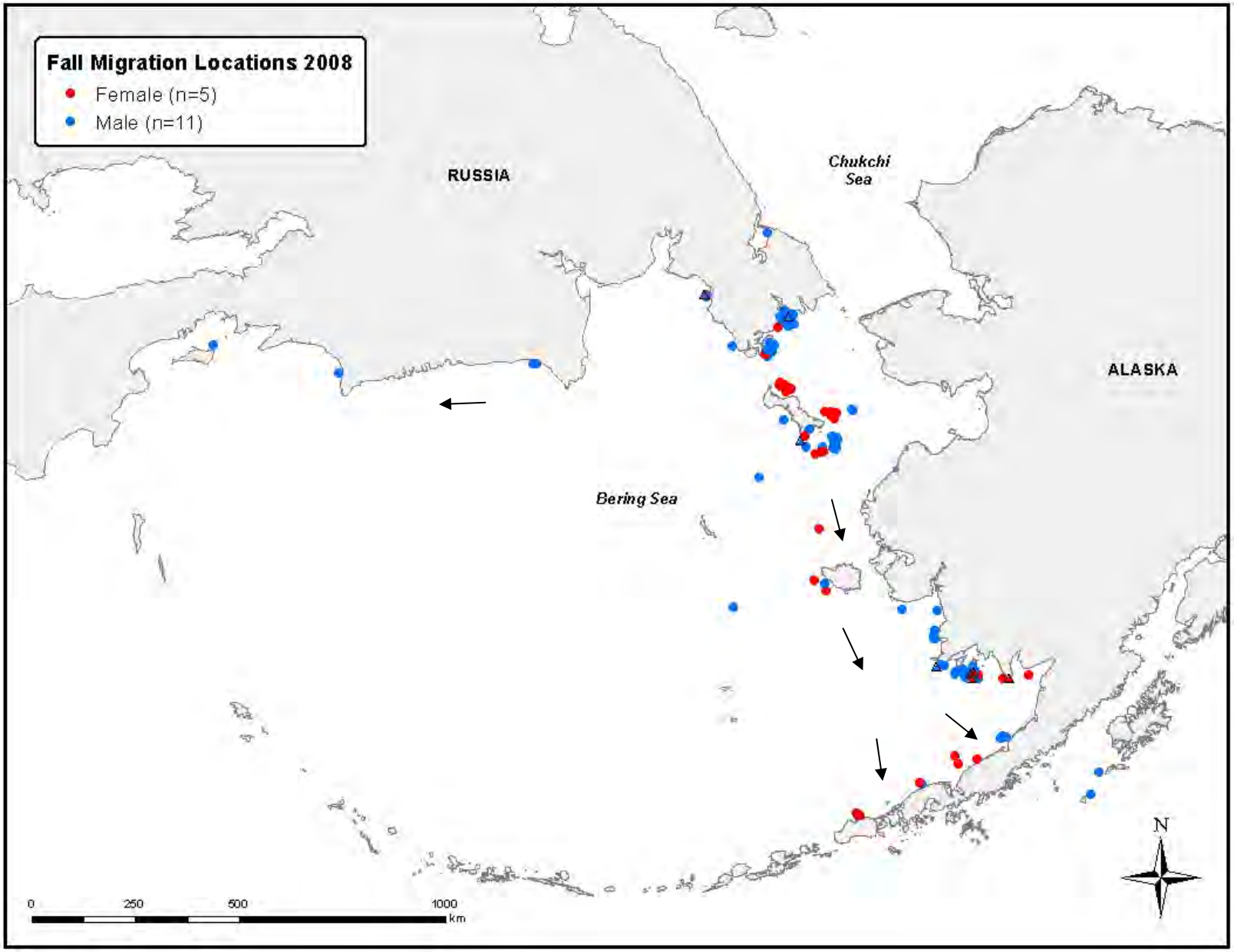

Figure 7. Locations of King Eiders during fall migration in 2008, including last day on the moulting area and first day on the wintering area. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations. Arrows indicate general direction of movement.

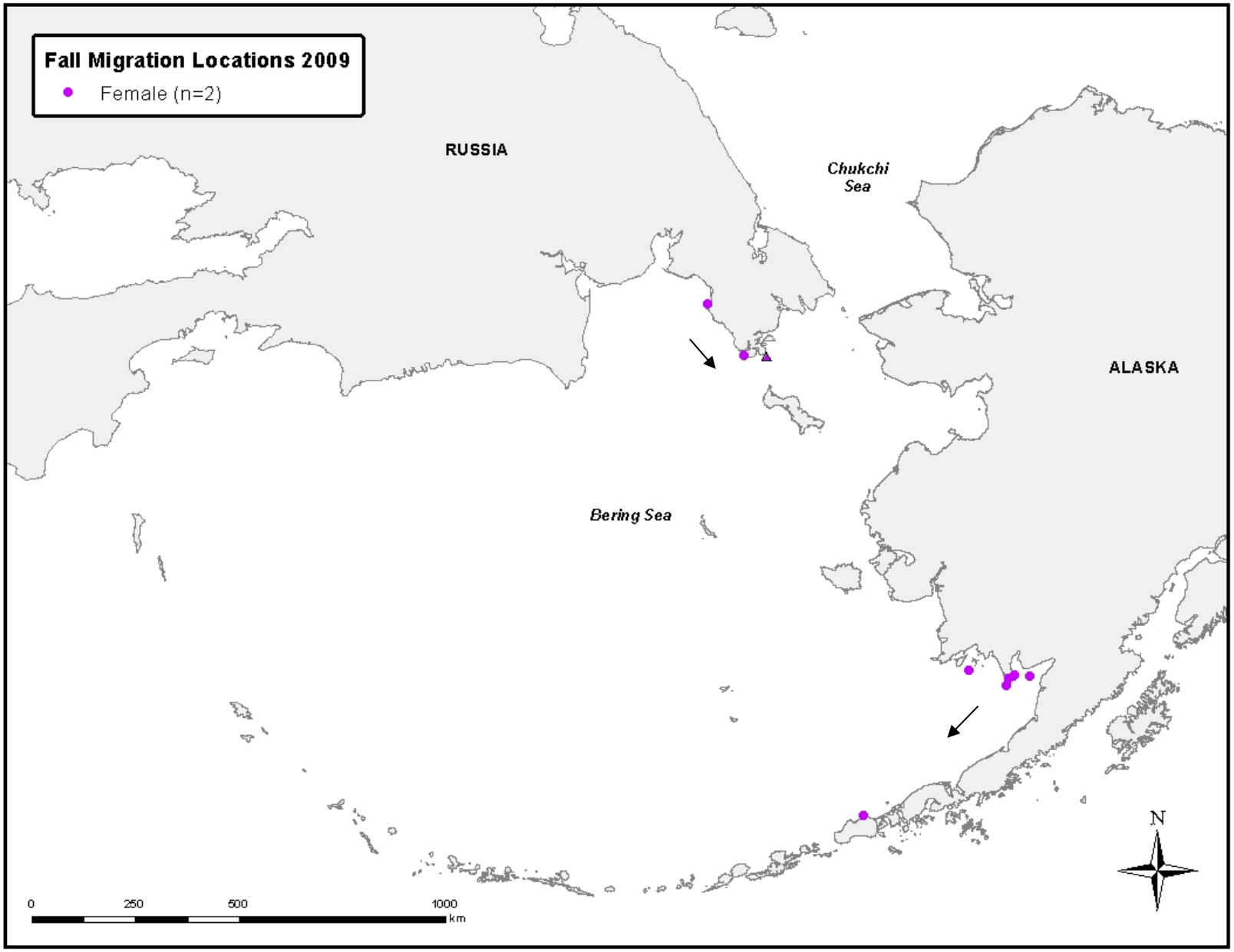

Figure 8. Locations of King Eiders during fall migration in 2009, including last day on the moulting area and first day on the wintering area. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations. Arrows indicate direction of movement.

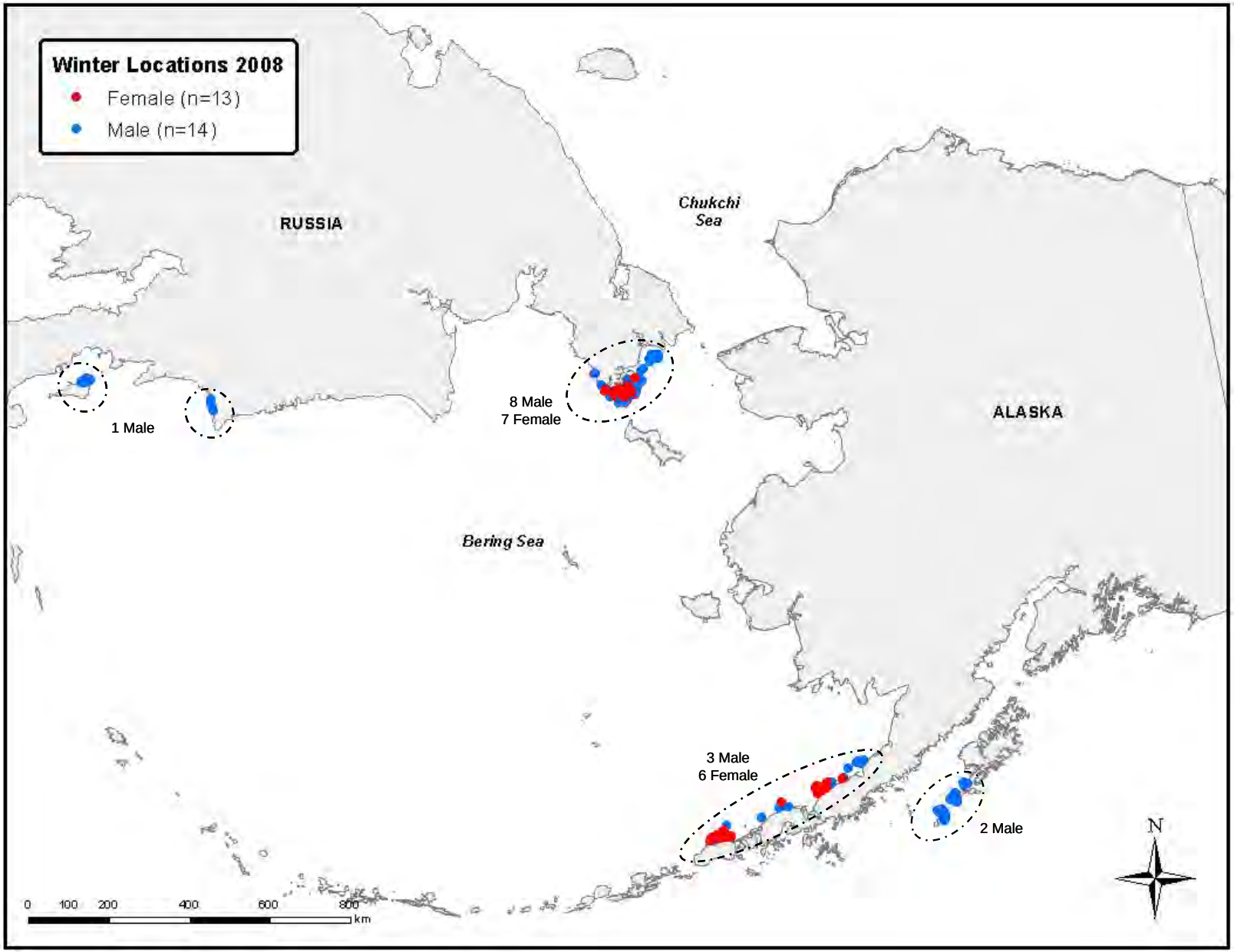

Figure 9. Locations of King Eiders on wintering area in 2008–2009. Circles depict locations accurate to within 1500 m.

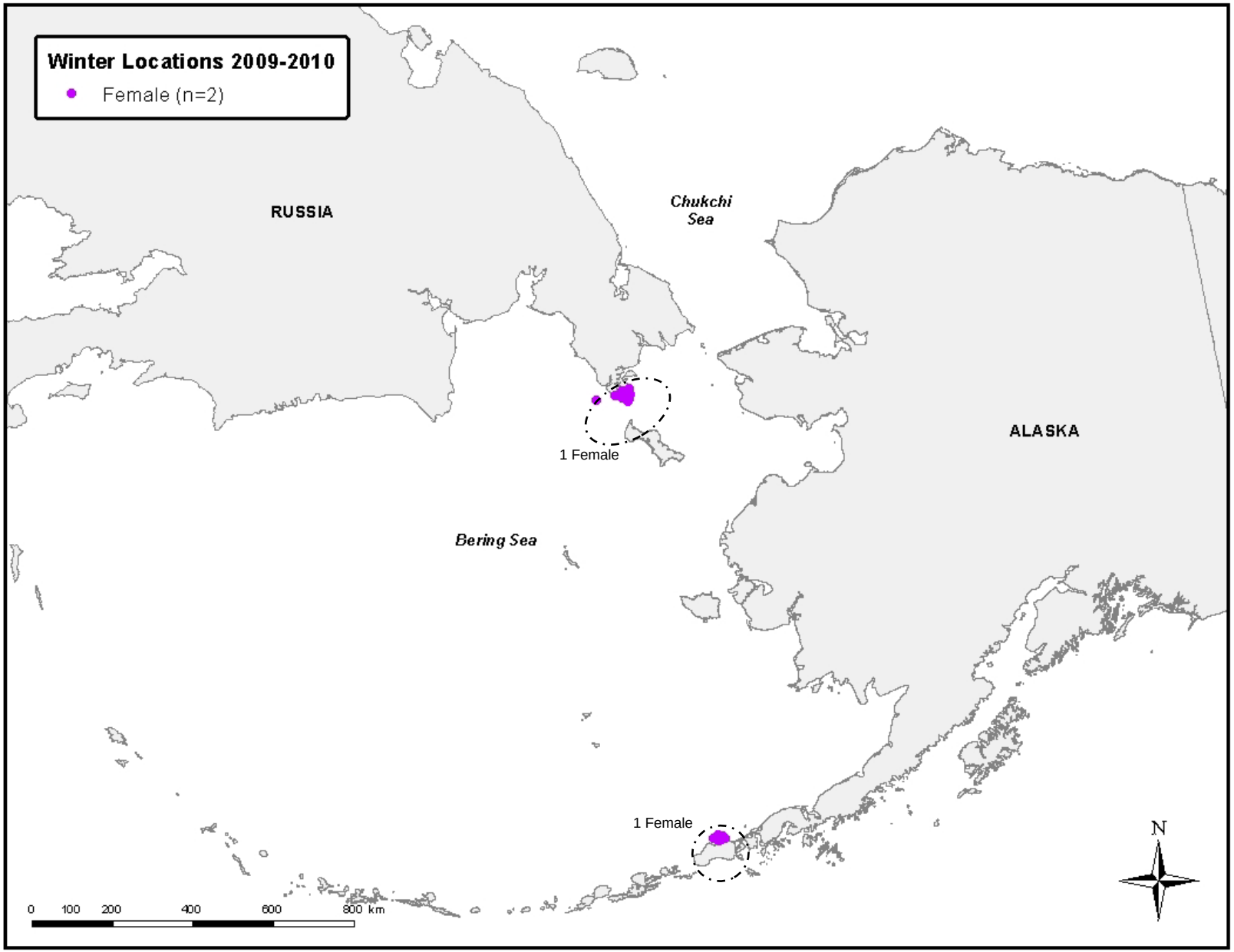

Figure 10. Locations of King Eiders on wintering area in 2009–2010. Circles depict locations accurate to within 1500 m.

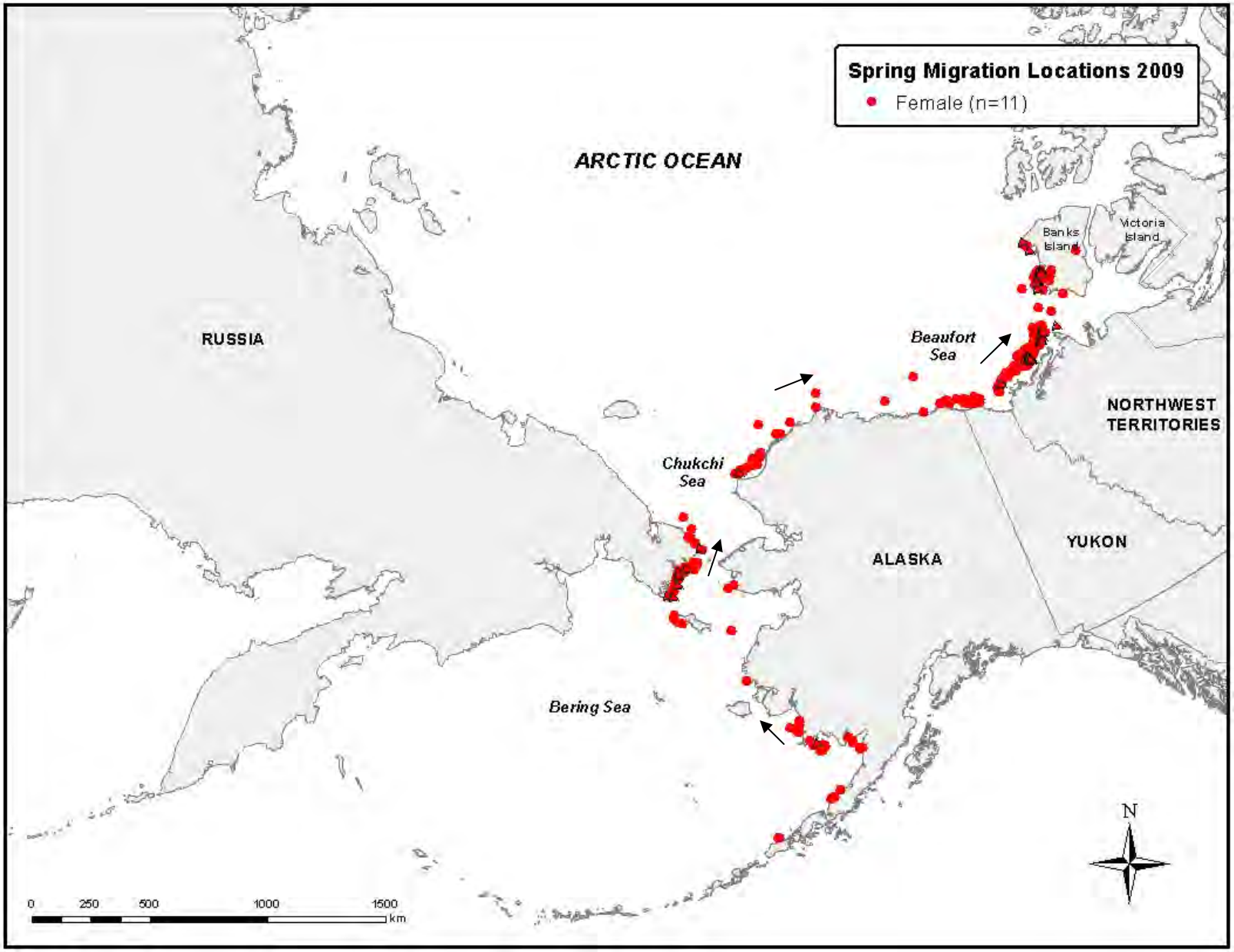

Figure 11. Locations of female King Eiders during spring migration in 2009, including last day on wintering area and first day on nesting area. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations. Arrows indicate general direction of movement.

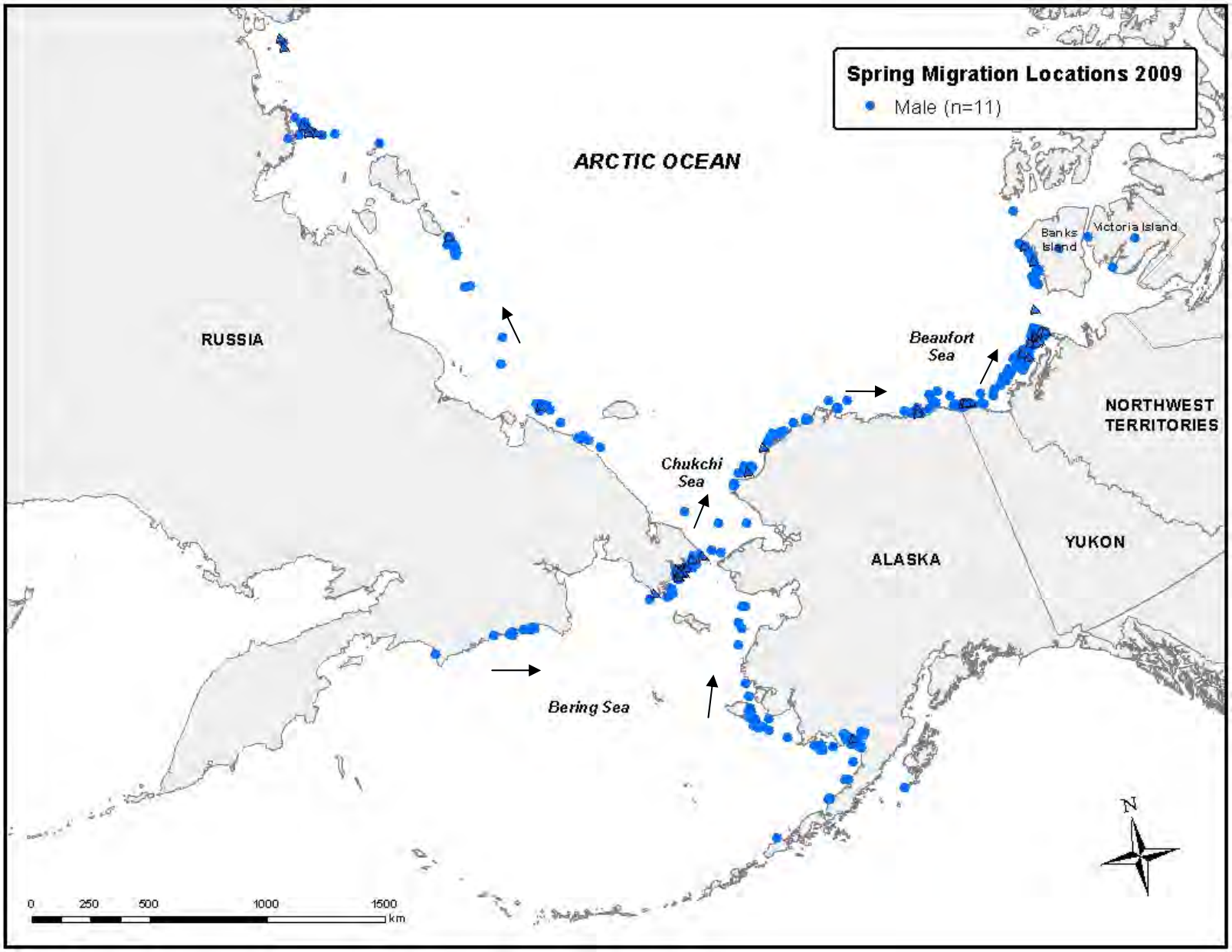

Figure 12. Locations of male King Eiders during spring migration in 2009, including last day on wintering area and first day on nesting area. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations. Arrows indicate general direction of movement.

APPENDIX A

Data obtained on location and timing of movement of King Eiders tracked using satellite transmitters deployed on Banks Island in June 2008

Appendix A. Locations of King Eiders tracked using satellite transmitters deployed on Banks Island in 2008.

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80902	**Female**							
80902	11-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80902	12-Jun-08	72.40	-125.18	6		L3	Siksik Lake	Nesting
80902	15-Jun-08	72.43	-125.30	1		LB	Siksik Lake	Nesting
80902	18-Jun-08	72.41	-125.28	2		L3	Siksik Lake	Nesting
80902	21-Jun-08	72.40	-125.21	5		L3	Siksik Lake	Nesting
80902	25-Jun-08	72.40	-125.23	4		L3	Siksik Lake	Nesting
80902	28-Jun-08	72.41	-125.22	4		L3	Siksik Lake	Nesting
80902	1-Jul-08	72.41	-125.25	3		L3	Siksik Lake	Nesting
80902	5-Jul-08	72.41	-125.20	5		L3	Siksik Lake	Nesting
80902	8-Jul-08	72.39	-125.29	4		L3	Siksik Lake	Nesting
80902	11-Jul-08	72.43	-125.26	2		L3	Siksik Lake	Nesting
80902	14-Jul-08	72.43	-125.26	2		L3	Siksik Lake	Nesting
80902	18-Jul-08	72.41	-125.18	5		L3	Siksik Lake	Nesting
80902	21-Jul-08	72.41	-125.23	4		L2	Siksik Lake	Nesting
80902	24-Jul-08	72.38	-125.29	4		L3	Siksik Lake	Nesting
80902	28-Jul-08	72.43	-125.11	6		L3	Siksik Lake	Nesting
80902	31-Jul-08	73.14	-124.75	1		LA	Meek Point	Moult migration
80902	3-Aug-08	73.06	-125.17		12	L2	Meek Point	Moult migration
80902	7-Aug-08	73.20	-125.34		22	L1	Meek Point	Moult migration
80902	13-Aug-08	70.61	-138.77		121	L0	Herschel Island	Moult migration
80902	17-Aug-08	65.28	-172.08		5	L2	Cape Nygligan	Moult
80902	23-Aug-08	65.07	-171.97		6	L2	Cape Nygligan	Moult
80902	2-Sep-08	65.16	-171.88		12	L2	Cape Nygligan	Moult
80902	6-Sep-08	65.16	-172.08		4	LB	Cape Nygligan	Moult
80902	12-Sep-08	65.14	-171.98		6	LB	Cape Nygligan	Moult
80902	19-Sep-08	65.22	-172.28	4		LB	Cape Nygligan	Moult
80902	23-Sep-08	65.17	-172.08		4	LA	Cape Nygligan	Moult
80902	29-Sep-08	65.18	-172.10		4	LA	Cape Nygligan	Moult
80902	10-Oct-08	65.19	-171.97		10	LA	Cape Nygligan	Moult
80902	16-Oct-08	65.17	-172.03		6	LA	Cape Nygligan	Moult
80902	20-Oct-08	65.17	-172.02		7	LB	Cape Nygligan	Moult
80902	27-Oct-08	65.14	-171.88		11	LB	Cape Nygligan	Moult
80902	2-Nov-08	64.57	-172.27		8	LA	Cape Chaplin	Winter
80902	6-Nov-08	64.59	-172.24		10	L0	Cape Chaplin	Winter
80902	16-Nov-08	64.52	-172.27		7	LA	Cape Chaplin	Winter
80902	23-Nov-08	64.55	-172.22		9	LA	Cape Chaplin	Winter
80902	8-Jan-09	64.36	-172.72		4	LA	Cape Chukotsk	Winter
80902	25-Jan-09	64.33	-172.57		6	L0	Cape Chukotsk	Winter
80902	3-Feb-09	64.32	-172.53		7	LB	Cape Chukotsk	Winter
80902	1-Mar-09	64.23	-172.55		17	L2	Cape Chukotsk	Winter
80902	28-Mar-09	64.31	-172.66		8	L0	Cape Chukotsk	Winter
80902	6-Apr-09	64.76	-171.75		15	LB	Cape Chaplin	Spring migration
80902	14-Apr-09	65.41	-171.08		7	L2	Cape Nunyagmo	Spring migration
80902	25-Apr-09	65.33	-171.01		16	L2	Cape Nunyagmo	Spring migration
80902	26-Apr-09	65.41	-170.74		16	L1	Cape Nunyagmo	Spring migration
80902	27-Apr-09	69.19	-165.56		41	L3	Ledyard Bay	Spring migration
80902	29-Apr-09	69.16	-165.86		35	L2	Ledyard Bay	Spring migration
80902	30-Apr-09	69.18	-165.74		39	L3	Ledyard Bay	Spring migration
80902	1-May-09	69.16	-165.75		36	L3	Ledyard Bay	Spring migration
80902	2-May-09	69.12	-165.95		31	L3	Ledyard Bay	Spring migration
80902	4-May-09	69.09	-166.00		27	LA	Ledyard Bay	Spring migration
80902	5-May-09	69.29	-165.20		51	L3	Ledyard Bay	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80902	7-May-09	71.34	-156.79		4	L1	Point Barrow	Spring migration
80902	8-May-09	70.05	-135.16		44	L3	Mackenzie Delta	Spring migration
80902	9-May-09	70.45	-132.15		66	L1	Cape Dalhousie	Spring migration
80902	11-May-09	70.54	-132.18		74	L2	Cape Dalhousie	Spring migration
80902	12-May-09	70.49	-131.55		52	L3	Cape Dalhousie	Spring migration
80902	13-May-09	70.52	-131.79		61	L3	Cape Dalhousie	Spring migration
80902	15-May-09	70.36	-132.59		70	LA	Cape Dalhousie	Spring migration
80902	16-May-09	70.53	-131.57		56	L1	Cape Dalhousie	Spring migration
80902	17-May-09	70.13	-134.71		45	L3	Mackenzie Delta	Spring migration
80902	19-May-09	69.92	-136.29		49	L1	Mackenzie Delta	Spring migration
80902	20-May-09	69.97	-136.15		50	LA	Mackenzie Delta	Spring migration
80902	21-May-09	69.96	-136.29		53	L3	Mackenzie Delta	Spring migration
80902	23-May-09	70.06	-135.99		56	L2	Mackenzie Delta	Spring migration
80902	24-May-09	70.51	-133.13		100	L3	Cape Dalhousie	Spring migration
80902	26-May-09	70.58	-133.05		103	L1	Cape Dalhousie	Spring migration
80902	27-May-09	70.44	-132.33		71	L1	Cape Dalhousie	Spring migration
80902	28-May-09	72.74	-128.50		126	L1	Cape Kellet	Spring migration
80902	30-May-09	73.81	-124.97		16	LB	Burnett Bay	Spring migration
80902	31-May-09	74.01	-124.83		13	L3	Burnett Bay	Spring migration
80902	1-Jun-09	73.97	-124.91		15	L3	Burnett Bay	Spring migration
80902	3-Jun-09	73.98	-124.91		15	L3	Burnett Bay	Spring migration
80902	4-Jun-09	74.01	-124.80		12	L3	Burnett Bay	Spring migration
80902	6-Jun-09	74.05	-124.82		9	L2	Burnett Bay	Spring migration
80902	7-Jun-09	74.10	-124.92		12	L3	Burnett Bay	Spring migration
80902	8-Jun-09	74.13	-125.11		19	L2	Burnett Bay	Spring migration
80902	11-Jun-09	74.23	-125.05		8	L0	Cape Prince Alfred	Spring migration
80902	12-Jun-09	74.07	-124.88		11	L3	Burnett Bay	Spring migration
80902	14-Jun-09	72.90	-125.13		2	LA	Meek Point	Spring migration
80902	15-Jun-09	72.39	-125.20	6		L1	Siksik Lake	Nesting
80902	17-Jun-09	72.39	-125.20	6		L1	Siksik Lake	Nesting
80902	18-Jun-09	72.36	-125.10	11		L3	Siksik Lake	Nesting
80902	19-Jun-09	72.40	-125.25	3		L3	Siksik Lake	Nesting
80902	21-Jun-09	72.40	-125.23	4		L3	Siksik Lake	Nesting
80902	22-Jun-09	72.41	-125.24	4		L3	Siksik Lake	Nesting
80902	23-Jun-09	72.41	-125.23	4		L3	Siksik Lake	Nesting
80902	25-Jun-09	72.41	-125.23	4		L3	Siksik Lake	Nesting
80902	26-Jun-09	72.41	-125.24	4		L3	Siksik Lake	Nesting
80902	28-Jun-09	72.43	-125.16	5		LB	Siksik Lake	Nesting
80902	29-Jun-09	72.41	-125.19	5		L3	Siksik Lake	Nesting
80902	2-Jul-09	72.41	-125.19	5		L1	Siksik Lake	Nesting
80902	5-Jul-09	72.42	-125.25	3		L1	Siksik Lake	Nesting
80902	7-Jul-09	72.40	-125.23	4		LA	Siksik Lake	Nesting
80902	8-Jul-09	72.43	-125.27	2		L2	Siksik Lake	Nesting
80902	16-Jul-09	72.41	-125.24	4		LZ	Siksik Lake	Nesting
80902	25-Jul-09	72.41	-125.17	6		L0	Siksik Lake	Nesting
80903	**Male**							
80903	11-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80903	12-Jun-08	72.39	-125.18	7		L3	Siksik Lake	Nesting
80903	15-Jun-08	72.41	-125.28	2		L3	Siksik Lake	Nesting
80903	18-Jun-08	72.42	-125.28	1		L3	Siksik Lake	Nesting
80903	21-Jun-08	72.42	-125.28	1		L3	Siksik Lake	Nesting
80903	24-Jun-08	72.40	-125.27	3		L3	Siksik Lake	Nesting
80903	28-Jun-08	72.41	-125.24	4		L3	Siksik Lake	Nesting
80903	1-Jul-08	72.69	-126.22		42	L3	Siksik Lake	Moult migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80903	4-Jul-08	72.98	-125.36		16	L3	Meek Point	Moult migration
80903	7-Jul-08	72.96	-125.55		20	L3	Meek Point	Moult migration
80903	11-Jul-08	73.29	-125.31		26	L2	Meek Point	Moult migration
80903	14-Jul-08	72.86	-125.12		0	L3	Meek Point	Moult migration
80903	17-Jul-08	72.89	-125.00		1	L3	Meek Point	Moult migration
80903	20-Jul-08	72.89	-124.99		1	L3	Meek Point	Moult migration
80903	24-Jul-08	72.89	-125.00		1	L3	Meek Point	Moult migration
80903	27-Jul-08	72.89	-125.00		1	L3	Meek Point	Moult migration
80903	30-Jul-08	70.69	-149.75		15	L3	Jones Island	Moult migration
80903	2-Aug-08	70.71	-150.15		19	L3	Jones Island	Moult migration
80903	6-Aug-08	71.07	-154.23		17	L3	Smith Bay	Moult migration
80903	9-Aug-08	65.09	-171.91		8	L3	Cape Nygligan	Moult migration
80903	12-Aug-08	65.44	-177.07		11	L3	Anadyr Bay	Moult
80903	15-Aug-08	65.46	-177.08		8	L3	Anadyr Bay	Moult
80903	19-Aug-08	65.44	-177.03		11	L3	Anadyr Bay	Moult
80903	22-Aug-08	65.48	-176.92		13	L3	Anadyr Bay	Moult
80903	25-Aug-08	65.49	-176.99		9	L2	Anadyr Bay	Moult
80903	28-Aug-08	65.53	-176.94		8	L3	Anadyr Bay	Moult
80903	31-Aug-08	65.47	-177.02		10	L2	Anadyr Bay	Moult
80903	4-Sep-08	65.48	-176.94		12	L3	Anadyr Bay	Moult
80903	7-Sep-08	65.42	-176.91		17	L3	Anadyr Bay	Moult
80903	10-Sep-08	65.47	-176.96		11	L3	Anadyr Bay	Moult
80903	13-Sep-08	65.49	-176.98		10	L3	Anadyr Bay	Moult
80903	16-Sep-08	65.53	-176.93		9	L3	Anadyr Bay	Moult
80903	20-Sep-08	65.44	-177.05		11	L3	Anadyr Bay	Moult
80903	23-Sep-08	65.46	-177.17		5	LB	Anadyr Bay	Moult
80903	26-Sep-08	65.46	-176.91		14	L3	Anadyr Bay	Moult
80903	29-Sep-08	65.48	-176.97		11	L3	Anadyr Bay	Moult
80903	3-Oct-08	65.48	-176.94		12	L3	Anadyr Bay	Moult
80903	6-Oct-08	65.48	-176.93		12	LA	Anadyr Bay	Moult
80903	9-Oct-08	65.53	-176.89		7	L2	Anadyr Bay	Moult
80903	13-Oct-08	64.42	-172.18		3	L3	Cape Chaplin	Winter
80903	16-Oct-08	64.45	-172.20		5	L3	Cape Chaplin	Winter
80903	19-Oct-08	64.53	-171.98		19	L2	Cape Chaplin	Winter
80903	22-Oct-08	64.51	-172.03		16	L1	Cape Chaplin	Winter
80903	26-Oct-08	64.57	-172.09		16	L3	Cape Chaplin	Winter
80903	29-Oct-08	64.60	-172.28		8	L2	Cape Chaplin	Winter
80903	1-Nov-08	64.58	-172.38		4	L2	Cape Chaplin	Winter
80903	5-Nov-08	64.56	-172.26		8	L2	Cape Chaplin	Winter
80903	8-Nov-08	64.52	-172.29		6	L3	Cape Chaplin	Winter
80903	11-Nov-08	64.52	-172.33		4	L3	Cape Chaplin	Winter
80903	15-Nov-08	64.59	-172.21		12	L2	Cape Chaplin	Winter
80903	18-Nov-08	64.54	-172.08		16	L3	Cape Chaplin	Winter
80903	21-Nov-08	64.57	-172.04		19	LB	Cape Chaplin	Winter
80903	24-Nov-08	64.06	-172.49		33	L3	Cape Chukotsk	Winter
80903	28-Nov-08	64.27	-172.48		13	L2	Cape Chukotsk	Winter
80903	1-Dec-08	64.35	-172.09		10	L3	Cape Chukotsk	Winter
80903	4-Dec-08	64.18	-172.72		14	L0	Cape Chukotsk	Winter
80903	7-Dec-08	64.59	-171.95		21	L2	Cape Chaplin	Winter
80903	11-Dec-08	64.29	-172.26		14	L1	Cape Chukotsk	Winter
80903	14-Dec-08	64.34	-172.32		7	L2	Cape Chukotsk	Winter
80903	17-Dec-08	64.63	-172.38		3	L2	Cape Chaplin	Winter
80903	21-Dec-08	64.33	-172.28		9	L3	Cape Chukotsk	Winter
80903	24-Dec-08	64.26	-172.33		16	L2	Cape Chukotsk	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80903	1-Jan-09	64.33	-172.53		5	L3	Cape Chukotsk	Winter
80903	10-Jan-09	64.34	-172.53		5	L2	Cape Chukotsk	Winter
80903	18-Jan-09	64.31	-173.57		3	L2	Cape Chukotsk	Winter
80903	27-Jan-09	64.26	-173.31		3	L3	Cape Chukotsk	Winter
80903	4-Feb-09	64.38	-172.42		3	L1	Cape Chukotsk	Winter
80903	12-Feb-09	64.30	-172.92	1		L1	Cape Chukotsk	Winter
80903	21-Feb-09	64.29	-172.34		13	L3	Cape Chukotsk	Winter
80903	1-Mar-09	64.41	-172.14		5	L1	Cape Chukotsk	Winter
80903	10-Mar-09	64.53	-172.00		18	L3	Cape Chaplin	Winter
80903	18-Mar-09	64.94	-171.79		20	L3	Cape Nygligan	Winter
80903	27-Mar-09	65.22	-171.59		28	L2	Cape Nygligan	Winter
80903	4-Apr-09	65.28	-171.56		26	L2	Cape Nygligan	Winter
80903	12-Apr-09	65.19	-171.60		26	L3	Cape Nygligan	Winter
80903	14-Apr-09	65.23	-171.52		32	L3	Cape Nygligan	Winter
80903	15-Apr-09	65.35	-171.17		15	L3	Cape Nygligan	Winter
80903	16-Apr-09	65.28	-171.20		22	L3	Cape Nygligan	Winter
80903	18-Apr-09	65.29	-171.26		22	L3	Cape Nygligan	Winter
80903	19-Apr-09	65.27	-171.15		23	L3	Cape Nygligan	Winter
80903	20-Apr-09	65.25	-171.28		28	L3	Cape Nygligan	Winter
80903	22-Apr-09	65.22	-171.54		30	L2	Cape Nygligan	Winter
80903	23-Apr-09	65.19	-171.51		30	L3	Cape Nygligan	Winter
80903	24-Apr-09	65.15	-171.51		29	L3	Cape Nygligan	Winter
80903	25-Apr-09	65.33	-171.33		20	L3	Cape Nygligan	Winter
80903	27-Apr-09	65.56	-170.37		11	L3	Cape Nunyagmo	Spring migration
80903	28-Apr-09	68.63	-166.43		9	L3	Ledyard Bay	Spring migration
80903	29-Apr-09	69.25	-165.37		47	L3	Ledyard Bay	Spring migration
80903	1-May-09	71.51	-155.09		41	L2	Point Barrow	Spring migration
80903	2-May-09	70.17	-144.35		15	L2	Martin Point	Spring migration
80903	3-May-09	69.99	-135.46		43	L3	Mackenzie Delta	Spring migration
80903	4-May-09	70.03	-133.12		44	L3	Mackenzie Delta	Spring migration
80903	6-May-09	70.04	-132.96		41	L3	Mackenzie Delta	Spring migration
80903	7-May-09	70.01	-132.93		38	L2	Mackenzie Delta	Spring migration
80903	8-May-09	70.07	-132.91		44	L3	Mackenzie Delta	Spring migration
80903	10-May-09	70.33	-132.42		63	L1	Cape Dalhousie	Spring migration
80903	11-May-09	70.37	-132.72		75	L3	Cape Dalhousie	Spring migration
80903	12-May-09	70.64	-130.39		52	L3	Cape Dalhousie	Spring migration
80903	14-May-09	70.62	-130.26		48	L3	Cape Dalhousie	Spring migration
80903	15-May-09	70.60	-130.23		46	L3	Cape Dalhousie	Spring migration
80903	16-May-09	70.36	-132.13		59	L3	Cape Dalhousie	Spring migration
80903	18-May-09	69.95	-136.04		45	L2	Mackenzie Delta	Spring migration
80903	19-May-09	69.87	-136.80		62	L3	Mackenzie Delta	Spring migration
80903	20-May-09	69.88	-136.85		64	L2	Kay Point	Spring migration
80903	22-May-09	69.80	-137.06		64	L3	Kay Point	Spring migration
80903	23-May-09	69.64	-137.30		63	L3	Kay Point	Spring migration
80903	24-May-09	69.58	-138.75		4	L3	Herschel Island	Spring migration
80903	26-May-09	69.58	-138.71		6	L3	Herschel Island	Spring migration
80903	27-May-09	69.53	-138.56		13	L3	Herschel Island	Spring migration
80903	28-May-09	69.58	-138.73		5	L3	Herschel Island	Spring migration
80903	30-May-09	69.59	-138.81		2	L3	Herschel Island	Spring migration
80903	31-May-09	69.78	-139.85		21	LB	Komakuk	Spring migration
80903	6-Jun-09	69.91	-140.57		36	LA	Demarcation Pt.	Spring migration
80903	7-Jun-09	69.85	-140.73		28	L3	Demarcation Pt.	Spring migration
80903	8-Jun-09	69.84	-140.43		30	L3	Demarcation Pt.	Spring migration
80903	10-Jun-09	69.84	-140.34		30	LB	Demarcation Pt.	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80903	11-Jun-09	69.82	-140.31		27	L3	Demarcation Pt.	Spring migration
80903	13-Jun-09	69.75	-140.58		17	L2	Demarcation Pt.	Spring migration
80903	14-Jun-09	69.82	-140.89		21	L3	Demarcation Pt.	Spring migration
80903	16-Jun-09	69.72	-140.82		11	L3	Demarcation Pt.	Spring migration
80903	17-Jun-09	70.42	-143.60		33	L3	Martin Point	Spring migration
80903	19-Jun-09	70.28	-145.55		19	L3	Martin Point	Spring migration
80903	20-Jun-09	70.36	-145.47		30	L2	Martin Point	Spring migration
80903	22-Jun-09	70.33	-145.47		26	LA	Martin Point	Spring migration
80903	24-Jun-09	70.25	-146.21		6	L1	Martin Point	Spring migration
80903	25-Jun-09	70.24	-146.34		2	L3	Martin Point	Spring migration
80903	27-Jun-09	70.15	-145.65		5	LA	Martin Point	Nesting
80903	28-Jun-09	70.11	-145.44		5	L3	Martin Point	Nesting
80903	2-Jul-09	70.07	-145.24		5	LA	Martin Point	Nesting
80903	3-Jul-09	70.16	-145.65		6	LA	Martin Point	Nesting
80903	5-Jul-09	70.08	-145.58	0		L1	Martin Point	Nesting
80903	8-Jul-09	70.18	-145.30		15	LA	Martin Point	Nesting
80903	13-Jul-09	70.11	-145.34		8	LB	Martin Point	Nesting
80903	17-Jul-09	70.55	-160.41		6	LA	Wainwright	Moult migration
80903	22-Jul-09	68.77	-166.54		15	LB	Ledyard Bay	Moult migration
80904	**Female**							
80904	11-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Spring migration
80904	12-Jun-08	72.39	-125.20	6		LZ	Siksik Lake	Spring migration
80904	15-Jun-08	72.39	-125.16	7		L3	Siksik Lake	Spring migration
80904	18-Jun-08	72.83	-120.96	74		L2	Central Banks Is.	Nesting
80904	21-Jun-08	72.83	-120.97	75		L3	Central Banks Is.	Nesting
80904	24-Jun-08	72.82	-120.98	75		L3	Central Banks Is.	Nesting
80904	27-Jun-08	72.84	-120.98	75		L3	Central Banks Is.	Nesting
80904	30-Jun-08	72.84	-120.98	75		L2	Central Banks Is.	Nesting
80904	4-Jul-08	72.84	-120.97	75		L3	Central Banks Is.	Nesting
80904	7-Jul-08	72.84	-120.97	75		L2	Central Banks Is.	Nesting
80904	10-Jul-08	72.84	-121.00	76		L3	Central Banks Is.	Nesting
80904	13-Jul-08	72.84	-120.96	75		L2	Central Banks Is.	Nesting
80904	16-Jul-08	72.84	-120.97	75		L3	Central Banks Is.	Nesting
80904	19-Jul-08	72.84	-120.99	76		L3	Central Banks Is.	Nesting
80904	22-Jul-08	72.84	-120.99	76		L3	Central Banks Is.	Nesting
80904	26-Jul-08	72.81	-121.02	74		L2	Central Banks Is.	Nesting
80904	29-Jul-08	72.83	-120.99	75		L2	Central Banks Is.	Nesting
80904	1-Aug-08	72.83	-121.00	76		L2	Central Banks Is.	Nesting
80904	4-Aug-08	73.69	-124.53	0		L3	Burnett Bay	Moult migration
80904	7-Aug-08	73.72	-124.38		6	L3	Burnett Bay	Moult migration
80904	10-Aug-08	73.81	-124.23		8	L1	Burnett Bay	Moult migration
80904	14-Aug-08	73.85	-124.25		4	L2	Burnett Bay	Moult migration
80904	17-Aug-08	73.88	-124.17	1		L3	Burnett Bay	Moult migration
80904	20-Aug-08	73.88	-124.15	1		L1	Burnett Bay	Moult migration
80904	23-Aug-08	72.27	-142.65		268	L2	Beaufort Sea	Moult migration
80904	26-Aug-08	71.19	-154.38		21	L2	Smith Bay	Moult migration
80904	29-Aug-08	64.35	-172.72		5	L2	Cape Chukotsk	Moult / winter
80904	2-Sep-08	64.31	-172.78		2	L1	Cape Chukotsk	Moult / winter
80904	5-Sep-08	64.34	-172.76		3	L3	Cape Chukotsk	Moult / winter
80904	8-Sep-08	64.34	-172.81		1	L2	Cape Chukotsk	Moult / winter
80904	11-Sep-08	64.34	-172.78		2	L2	Cape Chukotsk	Moult / winter
80904	14-Sep-08	64.34	-172.80		1	L3	Cape Chukotsk	Moult / winter
80904	18-Sep-08	64.35	-172.79		1	L2	Cape Chukotsk	Moult / winter
80904	21-Sep-08	64.34	-172.76		3	L2	Cape Chukotsk	Moult / winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80904	24-Sep-08	64.34	-172.77		3	L2	Cape Chukotsk	Moult / winter
80904	27-Sep-08	64.35	-172.78		2	L3	Cape Chukotsk	Moult / winter
80904	30-Sep-08	64.37	-172.75		3	L1	Cape Chukotsk	Moult / winter
80904	4-Oct-08	64.34	-172.79		2	L2	Cape Chukotsk	Moult / winter
80904	7-Oct-08	64.32	-172.81		1	L2	Cape Chukotsk	Moult / winter
80904	10-Oct-08	64.32	-172.77		3	LA	Cape Chukotsk	Moult / winter
80904	13-Oct-08	64.35	-172.79		1	L2	Cape Chukotsk	Moult / winter
80904	16-Oct-08	64.35	-172.83	1		L3	Cape Chukotsk	Moult / winter
80904	20-Oct-08	64.35	-172.76		3	L2	Cape Chukotsk	Moult / winter
80904	23-Oct-08	64.33	-172.79		2	L2	Cape Chukotsk	Moult / winter
80904	26-Oct-08	64.36	-172.77		2	L2	Cape Chukotsk	Moult / winter
80904	29-Oct-08	64.29	-172.83		2	L1	Cape Chukotsk	Moult / winter
80904	2-Nov-08	64.35	-172.79		1	L2	Cape Chukotsk	Moult / winter
80904	5-Nov-08	64.33	-172.74		4	L3	Cape Chukotsk	Moult / winter
80904	8-Nov-08	64.22	-172.84		7	L2	Cape Chukotsk	Moult / winter
80904	11-Nov-08	64.31	-172.86	1		L1	Cape Chukotsk	Moult / winter
80904	15-Nov-08	64.32	-172.76		4	L1	Cape Chukotsk	Moult / winter
80904	18-Nov-08	64.29	-172.77		4	L3	Cape Chukotsk	Moult / winter
80904	24-Nov-08	64.25	-172.71		9	L0	Cape Chukotsk	Moult / winter
80904	27-Nov-08	64.31	-172.32		11	L0	Cape Chukotsk	Moult / winter
80904	1-Dec-08	64.28	-172.32		14	L2	Cape Chukotsk	Moult / winter
80904	4-Dec-08	64.24	-172.62		13	L1	Cape Chukotsk	Moult / winter
80904	7-Dec-08	64.43	-171.95		14	L3	Cape Chaplin	Moult / winter
80904	13-Dec-08	64.50	-172.14		10	L2	Cape Chaplin	Moult / winter
80904	17-Dec-08	64.28	-172.26		14	L3	Cape Chukotsk	Moult / winter
80904	20-Dec-08	64.31	-172.30		11	L0	Cape Chukotsk	Moult / winter
80904	28-Dec-08	64.26	-172.50		14	L2	Cape Chukotsk	Moult / winter
80904	6-Jan-09	64.33	-172.41		8	L2	Cape Chukotsk	Moult / winter
80904	14-Jan-09	64.24	-172.36		19	L2	Cape Chukotsk	Moult / winter
80904	22-Jan-09	64.43	-171.96		14	L2	Cape Chaplin	Moult / winter
80904	30-Jan-09	64.35	-172.45		5	L1	Cape Chukotsk	Moult / winter
80904	8-Feb-09	64.38	-172.40		3	L3	Cape Chukotsk	Moult / winter
80904	16-Feb-09	64.37	-172.38		4	L1	Cape Chukotsk	Moult / winter
80904	24-Feb-09	64.31	-172.41		10	L2	Cape Chukotsk	Moult / winter
80904	5-Mar-09	64.34	-172.49		6	L1	Cape Chukotsk	Moult / winter
80904	13-Mar-09	64.38	-172.52		1	L1	Cape Chukotsk	Moult / winter
80904	21-Mar-09	64.35	-172.30		6	L3	Cape Chukotsk	Moult / winter
80904	29-Mar-09	64.28	-172.41		13	L2	Cape Chukotsk	Moult / winter
80904	7-Apr-09	64.26	-173.41		5	L1	Cape Chukotsk	Moult / winter
80904	8-Apr-09	64.27	-173.27		1	L2	Cape Chukotsk	Moult / winter
80904	9-Apr-09	64.27	-172.48		13	L2	Cape Chukotsk	Moult / winter
80904	10-Apr-09	64.18	-172.14		27	L2	Cape Chukotsk	Moult / winter
80904	12-Apr-09	64.30	-172.38		11	L2	Cape Chukotsk	Moult / winter
80904	13-Apr-09	64.35	-172.27		7	L2	Cape Chukotsk	Moult / winter
80904	14-Apr-09	64.40	-172.07		8	L2	Cape Chukotsk	Moult / winter
80904	15-Apr-09	64.50	-171.84		22	L2	Cape Chaplin	Moult / winter
80904	17-Apr-09	64.27	-172.34		15	L2	Cape Chukotsk	Moult / winter
80904	19-Apr-09	64.31	-172.43		10	L3	Cape Chukotsk	Moult / winter
80904	21-Apr-09	64.99	-171.71		21	L2	Cape Nygligan	Spring migration
80904	22-Apr-09	65.41	-171.12		7	L0	Cape Nunyagmo	Spring migration
80904	23-Apr-09	65.41	-171.07		6	L3	Cape Nunyagmo	Spring migration
80904	24-Apr-09	65.46	-171.16		3	L1	Cape Nunyagmo	Spring migration
80904	26-Apr-09	65.61	-170.50		3	L2	Cape Nunyagmo	Spring migration
80904	27-Apr-09	65.54	-170.31		15	L2	Cape Nunyagmo	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80904	28-Apr-09	65.58	-170.26		15	L2	Cape Nunyagmo	Spring migration
80904	30-Apr-09	66.90	-170.74		33	L1	Cape Netan	Spring migration
80904	1-May-09	69.16	-165.76		36	L3	Ledyard Bay	Spring migration
80904	2-May-09	69.17	-165.98		37	L1	Ledyard Bay	Spring migration
80904	4-May-09	69.08	-166.04		24	L2	Ledyard Bay	Spring migration
80904	5-May-09	69.05	-166.11		20	L2	Ledyard Bay	Spring migration
80904	6-May-09	69.41	-164.01		35	L1	Ledyard Bay	Spring migration
80904	8-May-09	69.68	-163.69		24	L1	Point Lay	Spring migration
80904	9-May-09	69.66	-163.79		28	L2	Ledyard Bay	Spring migration
80904	10-May-09	69.72	-163.54		19	L3	Point Lay	Spring migration
80904	11-May-09	70.51	-161.30		24	L2	Icy Cape	Spring migration
80904	13-May-09	70.51	-161.21		22	L2	Icy Cape	Spring migration
80904	14-May-09	69.66	-139.03		3	L2	Herschel Island	Spring migration
80904	16-May-09	70.50	-131.49		51	L2	Cape Dalhousie	Spring migration
80904	17-May-09	70.32	-133.12		76	L2	Cape Dalhousie	Spring migration
80904	18-May-09	69.92	-136.31		49	L3	Mackenzie Delta	Spring migration
80904	20-May-09	70.01	-135.86		49	L2	Mackenzie Delta	Spring migration
80904	21-May-09	70.07	-135.82		55	L3	Mackenzie Delta	Spring migration
80904	22-May-09	70.17	-134.99		54	L2	Mackenzie Delta	Spring migration
80904	24-May-09	70.24	-135.14		65	L2	Mackenzie Delta	Spring migration
80904	25-May-09	70.20	-134.59		52	L3	Mackenzie Delta	Spring migration
80904	26-May-09	70.18	-133.40		62	L3	Mackenzie Delta	Spring migration
80904	28-May-09	70.29	-131.93		46	L1	Cape Dalhousie	Spring migration
80904	29-May-09	70.23	-131.99		42	L2	Cape Dalhousie	Spring migration
80904	31-May-09	70.30	-131.85		46	L2	Cape Dalhousie	Spring migration
80904	1-Jun-09	70.31	-131.52		34	L1	Cape Dalhousie	Spring migration
80904	3-Jun-09	70.37	-131.34		35	L2	Cape Dalhousie	Spring migration
80904	4-Jun-09	70.40	-131.33		37	L3	Cape Dalhousie	Spring migration
80904	6-Jun-09	70.63	-130.60		56	L1	Cape Dalhousie	Spring migration
80904	7-Jun-09	70.70	-130.60		63	L3	Cape Dalhousie	Spring migration
80904	9-Jun-09	70.71	-129.85		54	L1	Cape Dalhousie	Spring migration
80904	10-Jun-09	70.75	-129.75		59	L2	Cape Dalhousie	Spring migration
80904	12-Jun-09	70.84	-129.65		62	L2	Cape Bathurst	Spring migration
80904	15-Jun-09	72.64	-120.33	45		L2	Central Banks Is.	Nesting
80904	18-Jun-09	72.82	-120.98	74		L1	Central Banks Is.	Nesting
80904	19-Jun-09	72.84	-121.01	77		L2	Central Banks Is.	Nesting
80904	20-Jun-09	72.84	-120.93	74		L1	Central Banks Is.	Nesting
80904	22-Jun-09	72.84	-121.03	77		L2	Central Banks Is.	Nesting
80904	24-Jun-09	72.83	-120.93	73		L1	Central Banks Is.	Nesting
80905	**Male**							
80905	11-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Spring migration
80905	12-Jun-08	72.39	-125.19	6		L3	Siksik Lake	Spring migration
80905	15-Jun-08	72.39	-125.16	7		L3	Siksik Lake	Spring migration
80905	18-Jun-08	72.84	-121.00	76		LA	Central Banks Is.	Nesting
80905	21-Jun-08	72.84	-121.02	77		LA	Central Banks Is.	Nesting
80905	24-Jun-08	72.83	-120.99	75		L3	Central Banks Is.	Nesting
80905	27-Jun-08	72.83	-120.98	75		L3	Central Banks Is.	Nesting
80905	30-Jun-08	72.95	-124.50		1	L3	Burnett Bay	Moult migration
80905	3-Jul-08	72.88	-125.38		8	L3	Meek Point	Moult migration
80905	7-Jul-08	72.94	-125.56		19	L3	Meek Point	Moult migration
80905	10-Jul-08	72.76	-126.12		36	L3	Meek Point	Moult migration
80905	13-Jul-08	70.49	-128.99		26	L2	Cape Bathurst	Moult migration
80905	16-Jul-08	70.37	-128.77		23	L1	Cape Bathurst	Moult migration
80905	19-Jul-08	70.44	-129.00		28	L1	Cape Bathurst	Moult migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80905	22-Jul-08	70.32	-128.94		30	L1	Cape Bathurst	Moult migration
80905	25-Jul-08	70.32	-128.47		12	L3	Cape Bathurst	Moult migration
80905	28-Jul-08	70.50	-129.23		33	L3	Cape Bathurst	Moult migration
80905	1-Aug-08	70.71	-128.48		12	L1	Cape Bathurst	Moult migration
80905	4-Aug-08	70.59	-134.35		100	L2	Mackenzie Delta	Moult migration
80905	7-Aug-08	70.87	-150.40		40	L0	Harrison Bay	Moult migration
80905	10-Aug-08	64.76	-171.84		11	L3	Cape Chaplin	Moult
80905	16-Aug-08	64.44	-172.29		0	L1	Cape Chaplin	Moult
80905	19-Aug-08	64.42	-172.25		0	L2	Cape Chaplin	Moult
80905	22-Aug-08	64.58	-171.98		22	L3	Cape Chaplin	Moult
80905	26-Aug-08	64.39	-172.38		2	L3	Cape Chukotsk	Moult
80905	29-Aug-08	64.39	-172.38		2	L1	Cape Chukotsk	Moult
80905	1-Sep-08	64.39	-172.38		2	LB	Cape Chukotsk	Moult
80905	4-Sep-08	64.39	-172.35		1	L3	Cape Chukotsk	Moult
80905	7-Sep-08	64.40	-172.32		0	L1	Cape Chukotsk	Moult
80905	10-Sep-08	64.40	-172.46	0		L1	Cape Chukotsk	Moult
80905	13-Sep-08	64.39	-172.33		2	L2	Cape Chukotsk	Moult
80905	16-Sep-08	64.39	-172.32		2	LA	Cape Chukotsk	Moult
80905	20-Sep-08	64.40	-172.14		4	L2	Cape Chukotsk	Moult
80905	23-Sep-08	64.42	-172.22		1	L3	Cape Chaplin	Moult
80905	26-Sep-08	64.37	-172.17		5	L2	Cape Chukotsk	Moult
80905	29-Sep-08	64.45	-172.24		3	L1	Cape Chaplin	Moult
80905	2-Oct-08	64.72	-172.26		2	L1	Cape Chaplin	Moult
80905	5-Oct-08	64.67	-172.29		5	L2	Cape Chaplin	Moult
80905	9-Oct-08	65.27	-172.10		3	L1	Cape Nygligan	Fall migration
80905	12-Oct-08	65.29	-171.90		14	L3	Cape Nygligan	Fall migration
80905	15-Oct-08	65.16	-171.92		10	L2	Cape Nygligan	Fall migration
80905	18-Oct-08	65.22	-172.01		9	L2	Cape Nygligan	Fall migration
80905	21-Oct-08	65.29	-171.97		10	L1	Cape Nygligan	Fall migration
80905	24-Oct-08	65.29	-172.05		6	L2	Cape Nygligan	Fall migration
80905	28-Oct-08	65.27	-171.78		19	L3	Cape Nygligan	Fall migration
80905	31-Oct-08	64.48	-172.30		2	L2	Cape Chaplin	Winter
80905	3-Nov-08	64.34	-172.16		8	L2	Cape Chukotsk	Winter
80905	6-Nov-08	64.36	-172.49		4	L1	Cape Chukotsk	Winter
80905	9-Nov-08	64.36	-172.42		5	L1	Cape Chukotsk	Winter
80905	12-Nov-08	64.38	-172.56		0	L2	Cape Chukotsk	Winter
80905	16-Nov-08	64.26	-172.33		16	L3	Cape Chukotsk	Winter
80905	19-Nov-08	64.35	-172.22		6	L2	Cape Chukotsk	Winter
80905	25-Nov-08	64.26	-172.43		15	LA	Cape Chukotsk	Winter
80905	28-Nov-08	64.21	-172.39		21	L2	Cape Chukotsk	Winter
80905	1-Dec-08	64.38	-172.20		3	L1	Cape Chukotsk	Winter
80905	8-Dec-08	64.41	-172.34	0		L1	Cape Chukotsk	Winter
80905	11-Dec-08	64.34	-172.39		7	L1	Cape Chukotsk	Winter
80905	14-Dec-08	64.39	-172.30		1	L2	Cape Chukotsk	Winter
80905	17-Dec-08	64.55	-171.98		20	L1	Cape Chaplin	Winter
80905	25-Dec-08	64.27	-172.44		14	L3	Cape Chukotsk	Winter
80905	3-Jan-09	64.32	-172.41		8	L3	Cape Chukotsk	Winter
80905	11-Jan-09	64.34	-172.54		5	L1	Cape Chukotsk	Winter
80905	27-Jan-09	64.25	-173.27		4	L1	Cape Chukotsk	Winter
80905	4-Feb-09	64.38	-172.42		3	L3	Cape Chukotsk	Winter
80905	13-Feb-09	64.22	-173.18		4	L1	Cape Chukotsk	Winter
80905	20-Feb-09	64.33	-173.64	0		L0	Cape Chukotsk	Winter
80905	1-Mar-09	64.53	-172.24		8	L3	Cape Chaplin	Winter
80905	9-Mar-09	64.53	-174.19		6	LA	Cape Chukotsk	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80905	17-Mar-09	64.54	-174.08		1	L1	Cape Chukotsk	Winter
80905	25-Mar-09	64.14	-172.99		13	L3	Cape Chukotsk	Winter
80905	3-Apr-09	64.56	-172.14		14	L2	Cape Chaplin	Winter
80905	4-Apr-09	64.60	-172.15		14	L3	Cape Chaplin	Winter
80905	5-Apr-09	64.48	-172.18		7	L1	Cape Chaplin	Winter
80905	7-Apr-09	64.27	-173.34		2	L3	Cape Chukotsk	Winter
80905	9-Apr-09	64.34	-172.56		5	L2	Cape Chukotsk	Winter
80905	11-Apr-09	64.21	-172.17		22	L2	Cape Chukotsk	Winter
80905	13-Apr-09	64.37	-172.36		4	L2	Cape Chukotsk	Winter
80905	14-Apr-09	64.35	-172.29		7	L3	Cape Chukotsk	Winter
80905	16-Apr-09	64.96	-171.62		26	L3	Cape Nygligan	Spring migration
80905	17-Apr-09	65.31	-171.32		22	L3	Cape Nygligan	Spring migration
80905	19-Apr-09	65.30	-171.30		22	L2	Cape Nygligan	Spring migration
80905	20-Apr-09	65.92	-169.55		13	LB	Cape Dezhnev	Spring migration
80905	21-Apr-09	65.95	-169.78		7	L2	Cape Dezhnev	Spring migration
80905	23-Apr-09	65.54	-170.61		7	L2	Cape Nunyagmo	Spring migration
80905	24-Apr-09	65.52	-170.48		11	L2	Cape Nunyagmo	Spring migration
80905	26-Apr-09	65.59	-170.07		23	L2	Cape Nunyagmo	Spring migration
80905	28-Apr-09	68.69	-166.43		10	L3	Ledyard Bay	Spring migration
80905	29-Apr-09	70.50	-161.26		23	L3	Icy Cape	Spring migration
80905	30-Apr-09	70.51	-161.11		21	L2	Wainwright	Spring migration
80905	1-May-09	70.53	-161.15		23	L3	Icy Cape	Spring migration
80905	4-May-09	69.96	-138.45		47	L2	Herschel Island	Spring migration
80905	5-May-09	70.01	-133.20		44	L3	Mackenzie Delta	Spring / moult mig
80905	6-May-09	70.03	-132.98		41	L3	Mackenzie Delta	Spring / moult mig
80905	7-May-09	70.02	-132.96		39	L2	Mackenzie Delta	Spring / moult mig
80905	10-May-09	70.46	-132.12		65	L3	Cape Dalhousie	Spring / moult mig
80905	11-May-09	70.66	-132.05		81	L2	Cape Dalhousie	Spring / moult mig
80905	12-May-09	70.94	-129.58		66	L3	Cape Bathurst	Spring / moult mig
80905	14-May-09	70.98	-129.35		61	L2	Cape Bathurst	Spring / moult mig
80905	15-May-09	70.99	-129.23		58	L3	Cape Bathurst	Spring / moult mig
80905	16-May-09	70.53	-131.77		61	L3	Cape Dalhousie	Spring / moult mig
80905	18-May-09	70.17	-134.94		54	L2	Mackenzie Delta	Spring / moult mig
80905	19-May-09	70.28	-134.50		62	L2	Mackenzie Delta	Spring / moult mig
80905	20-May-09	70.52	-133.33		100	L3	Cape Dalhousie	Spring / moult mig
80905	21-May-09	70.55	-133.09		101	L2	Cape Dalhousie	Spring / moult mig
80905	23-May-09	70.55	-133.14		103	L3	Cape Dalhousie	Spring / moult mig
80905	24-May-09	70.59	-133.42		107	L2	Cape Dalhousie	Spring / moult mig
80905	25-May-09	70.57	-132.80		96	L3	Cape Dalhousie	Spring / moult mig
80905	27-May-09	70.92	-129.23		53	L2	Cape Bathurst	Spring / moult mig
80905	28-May-09	70.95	-129.16		53	L1	Cape Bathurst	Spring / moult mig
80905	29-May-09	70.84	-129.19		46	L3	Cape Bathurst	Spring / moult mig
80905	31-May-09	70.89	-129.59		62	L3	Cape Bathurst	Spring / moult mig
80905	1-Jun-09	70.94	-129.27		55	L2	Cape Bathurst	Spring / moult mig
80905	2-Jun-09	70.96	-129.53		65	L2	Cape Bathurst	Spring / moult mig
80905	3-Jun-09	70.95	-129.96		79	L3	Cape Bathurst	Spring / moult mig
80905	5-Jun-09	70.84	-130.35		75	L2	Cape Dalhousie	Spring / moult mig
80905	6-Jun-09	70.87	-130.04		76	L0	Cape Bathurst	Spring / moult mig
80905	7-Jun-09	70.87	-130.21		77	L2	Cape Dalhousie	Spring / moult mig
80905	9-Jun-09	70.88	-129.98		76	L1	Cape Bathurst	Spring / moult mig
80905	10-Jun-09	70.87	-129.93		74	LB	Cape Bathurst	Spring / moult mig
80905	11-Jun-09	70.84	-130.23		73	L2	Cape Dalhousie	Spring / moult mig
80905	13-Jun-09	70.83	-130.11		71	L3	Cape Dalhousie	Spring / moult mig
80905	14-Jun-09	70.79	-130.32		69	L3	Cape Dalhousie	Spring / moult mig

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80905	16-Jun-09	70.74	-130.52		66	L2	Cape Dalhousie	Spring / moult mig
80905	17-Jun-09	70.76	-130.90		76	LB	Cape Dalhousie	Spring / moult mig
80905	18-Jun-09	70.59	-131.05		55	L3	Cape Dalhousie	Spring / moult mig
80905	20-Jun-09	70.70	-129.94		53	L3	Cape Dalhousie	Spring / moult mig
80905	21-Jun-09	70.71	-130.02		55	L3	Cape Dalhousie	Spring / moult mig
80905	22-Jun-09	70.71	-130.45		62	L3	Cape Dalhousie	Spring / moult mig
80905	26-Jun-09	70.62	-130.82		58	L3	Cape Dalhousie	Spring / moult mig
80905	30-Jun-09	70.77	-129.68		60	L3	Cape Dalhousie	Spring / moult mig
80905	4-Jul-09	70.74	-129.85		58	L3	Cape Dalhousie	Spring / moult mig
80905	7-Jul-09	70.86	-129.58		60	L2	Cape Bathurst	Spring / moult mig
80905	11-Jul-09	70.84	-129.81		68	L3	Cape Bathurst	Spring / moult mig
80905	15-Jul-09	70.55	-132.31		79	L1	Cape Dalhousie	Spring / moult mig
80905	18-Jul-09	71.07	-151.47		44	L3	Harrison Bay	Moult migration
80905	22-Jul-09	71.46	-155.83		19	L0	Point Barrow	Moult migration
80905	26-Jul-09	70.00	-162.94		10	L3	Icy Cape	Moult migration
80905	30-Jul-09	70.07	-162.76		8	L3	Icy Cape	Moult migration
80905	2-Aug-09	70.18	-162.49		4	L2	Icy Cape	Moult migration
80905	6-Aug-09	65.20	-171.67		23	L3	Cape Nygligan	Moult
80905	10-Aug-09	64.79	-172.10		1	L3	Cape Chaplin	Moult
80905	18-Aug-09	64.78	-172.08		0	L2	Cape Chaplin	Moult
80905	22-Aug-09	64.78	-172.93	5		LB	Cape Chaplin	Moult
80906	**Male**							
80906	11-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80906	12-Jun-08	72.40	-125.18	6		L2	Siksik Lake	Nesting
80906	15-Jun-08	72.51	-125.32		1	L3	Siksik Lake	Nesting
80906	18-Jun-08	72.46	-125.31		0	L3	Siksik Lake	Nesting
80906	22-Jun-08	72.43	-126.04		24	L3	Siksik Lake	Moult migration
80906	25-Jun-08	72.73	-125.79		26	L3	Meek Point	Moult migration
80906	28-Jun-08	73.43	-124.74		12	L3	Burnett Bay	Moult migration
80906	1-Jul-08	73.59	-124.65		11	L3	Burnett Bay	Moult migration
80906	5-Jul-08	73.93	-124.61		3	L3	Burnett Bay	Moult migration
80906	8-Jul-08	73.98	-124.55		7	L3	Burnett Bay	Moult migration
80906	11-Jul-08	74.10	-124.63		2	L3	Burnett Bay	Moult migration
80906	14-Jul-08	74.07	-124.60		1	L3	Burnett Bay	Moult migration
80906	18-Jul-08	74.10	-124.58	0		L3	Burnett Bay	Moult migration
80906	21-Jul-08	74.03	-124.74		9	L1	Burnett Bay	Moult migration
80906	24-Jul-08	74.01	-124.66		9	L3	Burnett Bay	Moult migration
80906	27-Jul-08	72.22	-148.11		217	L1	Beaufort Sea	Moult migration
80906	31-Jul-08	71.16	-157.13		3	L2	Point Barrow	Moult migration
80906	3-Aug-08	71.23	-156.95		1	L3	Point Barrow	Moult migration
80906	6-Aug-08	64.69	-172.32		2	L2	Cape Chaplin	Moult migration
80906	9-Aug-08	65.31	-176.39		20	L3	Anadyr Bay	Moult
80906	13-Aug-08	65.31	-176.39		20	L1	Anadyr Bay	Moult
80906	19-Aug-08	65.38	-176.32		11	L2	Anadyr Bay	Moult
80906	23-Aug-08	65.37	-176.24		11	L2	Anadyr Bay	Moult
80906	26-Aug-08	65.30	-176.32		17	LA	Anadyr Bay	Moult
80906	29-Aug-08	65.37	-176.28		11	LA	Anadyr Bay	Moult
80906	1-Sep-08	65.34	-176.35		16	L3	Anadyr Bay	Moult
80906	5-Sep-08	65.34	-176.34		15	L3	Anadyr Bay	Moult
80906	8-Sep-08	65.36	-176.43		15	LA	Anadyr Bay	Moult
80906	11-Sep-08	65.34	-176.47		19	L2	Anadyr Bay	Moult
80906	15-Sep-08	65.32	-176.36		18	L2	Anadyr Bay	Moult
80906	18-Sep-08	65.36	-176.29		13	L3	Anadyr Bay	Moult
80906	21-Sep-08	65.34	-176.19		10	LA	Anadyr Bay	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80906	25-Sep-08	65.37	-176.28		12	L2	Anadyr Bay	Moult
80906	1-Oct-08	65.25	-176.17		14	LB	Anadyr Bay	Moult
80906	4-Oct-08	64.37	-174.00		6	L1	Cape Chukotsk	Fall migration
80906	8-Oct-08	64.37	-172.20		4	L2	Cape Chukotsk	Winter
80906	11-Oct-08	64.43	-172.11		6	LB	Cape Chaplin	Winter
80906	14-Oct-08	64.39	-172.24		2	L2	Cape Chukotsk	Winter
80906	18-Oct-08	64.38	-172.26		3	L1	Cape Chukotsk	Winter
80906	24-Oct-08	64.29	-172.75		4	LA	Cape Chukotsk	Winter
80906	28-Oct-08	64.47	-172.22		5	L2	Cape Chaplin	Winter
80906	31-Oct-08	64.46	-172.22		4	L2	Cape Chaplin	Winter
80906	3-Nov-08	64.35	-172.28		7	L2	Cape Chukotsk	Winter
80906	6-Nov-08	64.26	-172.82		4	L3	Cape Chukotsk	Winter
80906	10-Nov-08	64.25	-172.72		8	LA	Cape Chukotsk	Winter
80906	13-Nov-08	64.23	-172.74		10	LA	Cape Chukotsk	Winter
80906	16-Nov-08	64.28	-172.78		4	LA	Cape Chukotsk	Winter
80906	20-Nov-08	64.30	-172.69		7	L2	Cape Chukotsk	Winter
80906	26-Nov-08	64.26	-172.45		15	LA	Cape Chukotsk	Winter
80906	30-Nov-08	64.41	-172.42	1		LA	Cape Chukotsk	Winter
80906	6-Dec-08	64.33	-172.52		6	L2	Cape Chukotsk	Winter
80906	10-Dec-08	64.28	-172.45		13	LA	Cape Chukotsk	Winter
80906	13-Dec-08	64.41	-172.18		2	L0	Cape Chaplin	Winter
80906	16-Dec-08	64.36	-172.24		5	L1	Cape Chukotsk	Winter
80906	19-Dec-08	64.27	-172.23		16	LA	Cape Chukotsk	Winter
80906	26-Dec-08	64.23	-172.71		10	LA	Cape Chukotsk	Winter
80906	4-Jan-09	64.32	-172.53		7	L0	Cape Chukotsk	Winter
80906	12-Jan-09	64.19	-173.12		6	L1	Cape Chukotsk	Winter
80906	21-Jan-09	64.27	-173.35		2	L3	Cape Chukotsk	Winter
80906	29-Jan-09	64.33	-172.52		6	L3	Cape Chukotsk	Winter
80906	7-Feb-09	64.26	-173.21		1	LA	Cape Chukotsk	Winter
80906	15-Feb-09	64.35	-172.47		4	LA	Cape Chukotsk	Winter
80906	24-Feb-09	64.36	-172.32		5	LA	Cape Chukotsk	Winter
80906	4-Mar-09	64.29	-172.43		12	LB	Cape Chukotsk	Winter
80906	13-Mar-09	64.34	-172.53		5	L0	Cape Chukotsk	Winter
80906	21-Mar-09	64.33	-172.42		7	L0	Cape Chukotsk	Winter
80906	30-Mar-09	64.30	-172.54		9	L2	Cape Chukotsk	Winter
80906	7-Apr-09	64.39	-173.66	4		L0	Cape Chukotsk	Spring migration
80906	16-Apr-09	65.46	-171.20		4	LB	Cape Nunyagmo	Spring migration
80906	17-Apr-09	65.34	-171.45		20	L0	Cape Nygligan	Spring migration
80906	19-Apr-09	65.21	-171.13		30	LB	Cape Nygligan	Spring migration
80906	20-Apr-09	65.25	-171.20		26	L3	Cape Nygligan	Spring migration
80906	22-Apr-09	65.21	-171.76		20	L0	Cape Nygligan	Spring migration
80906	24-Apr-09	65.19	-171.59		26	L3	Cape Nygligan	Spring migration
80906	26-Apr-09	65.24	-171.40		31	L2	Cape Nygligan	Spring migration
80906	28-Apr-09	69.12	-164.99		29	LA	Ledyard Bay	Spring migration
80906	29-Apr-09	69.21	-164.92		39	L3	Ledyard Bay	Spring migration
80906	30-Apr-09	69.31	-164.61		47	L1	Ledyard Bay	Spring migration
80906	1-May-09	70.55	-161.94		28	L3	Icy Cape	Spring migration
80906	3-May-09	70.54	-161.95		27	L2	Icy Cape	Spring migration
80906	4-May-09	70.45	-162.34		24	L2	Icy Cape	Spring migration
80906	5-May-09	71.38	-152.95		58	L1	Smith Bay	Spring migration
80906	7-May-09	70.19	-134.17		51	L1	Mackenzie Delta	Spring migration
80906	9-May-09	70.27	-131.85		42	L3	Cape Dalhousie	Spring migration
80906	10-May-09	70.30	-131.85		46	LA	Cape Dalhousie	Spring migration
80906	12-May-09	70.92	-129.05		47	LB	Cape Bathurst	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80906	13-May-09	70.92	-129.13		49	L3	Cape Bathurst	Spring migration
80906	15-May-09	70.96	-129.32		58	L3	Cape Bathurst	Spring migration
80906	16-May-09	71.77	-128.38		98	L0	Cape Kellet	Spring migration
80906	17-May-09	72.80	-126.22		39	L2	Meek Point	Spring migration
80906	18-May-09	70.71	-128.88		26	L1	Cape Bathurst	Spring migration
80906	20-May-09	70.64	-130.24		50	LB	Cape Dalhousie	Spring migration
80906	21-May-09	70.65	-130.07		48	L3	Cape Dalhousie	Spring migration
80906	23-May-09	70.64	-129.89		46	L2	Cape Dalhousie	Spring migration
80906	24-May-09	70.64	-129.94		46	LA	Cape Dalhousie	Spring migration
80906	25-May-09	70.59	-130.84		55	L3	Cape Dalhousie	Spring migration
80906	27-May-09	70.67	-130.60		60	L1	Cape Dalhousie	Spring migration
80906	28-May-09	70.74	-129.87		58	L1	Cape Dalhousie	Spring migration
80906	29-May-09	70.89	-129.71		67	L3	Cape Bathurst	Spring migration
80906	30-May-09	70.95	-129.41		61	L2	Cape Bathurst	Spring migration
80906	1-Jun-09	70.81	-128.87		33	LB	Cape Bathurst	Spring migration
80906	2-Jun-09	70.77	-129.03		35	L2	Cape Bathurst	Spring migration
80906	4-Jun-09	72.53	-126.23		34	L3	Siksik Lake	Spring migration
80906	5-Jun-09	72.80	-125.98		30	L2	Meek Point	Spring migration
80906	6-Jun-09	73.77	-124.80		8	L3	Burnett Bay	Spring migration
80906	8-Jun-09	74.04	-124.82		10	L2	Burnett Bay	Spring migration
80906	9-Jun-09	74.05	-124.84		10	L3	Burnett Bay	Spring migration
80906	10-Jun-09	74.01	-124.80		12	L3	Burnett Bay	Spring migration
80906	12-Jun-09	74.07	-124.88		11	LA	Burnett Bay	Spring migration
80906	13-Jun-09	74.10	-124.91		12	L3	Burnett Bay	Spring migration
80906	15-Jun-09	74.14	-125.13		19	L3	Burnett Bay	Spring migration
80906	16-Jun-09	75.41	-123.07		67	L2	Parry Channel	Spring migration
80906	17-Jun-09	74.26	-125.18		6	L3	Cape Prince Alfred	Spring / moult mig
80906	19-Jun-09	74.10	-125.11		19	L0	Burnett Bay	Spring / moult mig
80906	20-Jun-09	74.09	-124.90		11	L3	Burnett Bay	Spring / moult mig
80906	21-Jun-09	74.05	-125.05		17	L3	Burnett Bay	Spring / moult mig
80906	23-Jun-09	74.09	-124.87		10	L3	Burnett Bay	Spring / moult mig
80906	24-Jun-09	74.11	-124.93		13	L3	Burnett Bay	Spring / moult mig
80906	26-Jun-09	74.08	-124.95		13	LA	Burnett Bay	Spring / moult mig
80906	27-Jun-09	73.72	-124.92		7	L3	Burnett Bay	Spring / moult mig
80906	30-Jun-09	73.64	-124.86		10	L2	Burnett Bay	Spring / moult mig
80906	2-Jul-09	73.64	-124.92		12	LB	Burnett Bay	Spring / moult mig
80906	3-Jul-09	73.82	-124.52		10	L1	Burnett Bay	Spring / moult mig
80906	7-Jul-09	73.93	-124.89		13	LB	Burnett Bay	Spring / moult mig
80906	10-Jul-09	73.77	-124.95		11	L3	Burnett Bay	Spring / moult mig
80906	14-Jul-09	73.29	-125.45		30	L3	Meek Point	Spring / moult mig
80907	**Female**							
80907	12-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80907	15-Jun-08	72.38	-125.16	8		L3	Siksik Lake	Nesting
80907	18-Jun-08	72.41	-125.13	7		LB	Siksik Lake	Nesting
80907	21-Jun-08	72.38	-125.18	8		LB	Siksik Lake	Nesting
80907	24-Jun-08	72.38	-125.09	10		LB	Siksik Lake	Nesting
80907	27-Jun-08	72.39	-125.15	8		L2	Siksik Lake	Nesting
80907	2-Jul-08	72.39	-125.15	8		LA	Siksik Lake	Nesting
80907	8-Jul-08	72.40	-125.14	8		L2	Siksik Lake	Nesting
80907	11-Jul-08	72.39	-125.19	6		L1	Siksik Lake	Nesting
80907	14-Jul-08	72.41	-125.05	10		LB	Siksik Lake	Nesting
80907	17-Jul-08	72.39	-125.13	8		LB	Siksik Lake	Nesting
80907	19-Jul-08	72.39	-125.16	8		LA	Siksik Lake	Nesting
80907	22-Jul-08	72.39	-125.16	7		LB	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.		km inland	km offshore	Signal quality	Location	Season
80907	25-Jul-08	72.41	-125.15		7		LB	Siksik Lake	Nesting
80907	28-Jul-08	72.39	-125.16		7		LA	Siksik Lake	Nesting
80907	31-Jul-08	72.39	-125.18		7		LB	Siksik Lake	Nesting
80907	3-Aug-08	72.39	-125.15		7		L1	Siksik Lake	Nesting
80907	6-Aug-08	73.38	-124.66			7	LB	Meek Point	Moult migration
80907	11-Aug-08	73.40	-124.73			10	LA	Burnett Bay	Moult migration
80907	14-Aug-08	71.32	-140.36			188	LB	Beaufort Sea	Moult migration
80907	17-Aug-08	71.31	-156.24	*			LB	Point Barrow	Moult migration
80907	1-Sep-08	58.54	-157.89			13	L1	Kvichak Bay	Moult
80907	6-Sep-08	58.54	-158.64			6	L2	Nushagak Bay	Moult
80907	9-Sep-08	58.57	-158.69			5	LB	Nushagak Bay	Moult
80907	24-Sep-08	58.60	-158.63			9	L1	Nushagak Bay	Moult
80907	29-Sep-08	58.59	-158.71			4	LB	Nushagak Bay	Moult
80907	2-Oct-08	58.50	-158.59			6	LB	Nushagak Bay	Moult
80907	5-Oct-08	58.55	-158.69			5	LA	Nushagak Bay	Moult
80907	8-Oct-08	58.45	-158.65			5	LB	Nushagak Bay	Moult
80907	14-Oct-08	58.54	-158.66			6	LB	Nushagak Bay	Moult
80907	17-Oct-08	58.46	-158.66			4	LA	Nushagak Bay	Moult
80907	20-Oct-08	58.63	-158.67			8	LB	Nushagak Bay	Moult
80907	23-Oct-08	58.56	-158.67			6	L2	Nushagak Bay	Moult
80907	25-Oct-08	58.36	-158.79			5	LB	Nushagak Bay	Moult
80907	28-Oct-08	58.44	-160.26			16	LB	Hagemeister Is.	Fall migration
80907	31-Oct-08	58.41	-160.40			21	LB	Hagemeister Is.	Fall migration
80907	3-Nov-08	58.29	-160.32			33	LB	Hagemeister Is.	Fall migration
80907	26-Nov-08	58.36	-160.16	*			LA	Hagemeister Is.	Fall migration
80907	10-Dec-08	56.58	-159.87			5	L2	Port Heiden	Winter
80907	7-Apr-09	59.50	-161.97			10	L3	Jacksmith Bay	Spring migration
80907	8-Apr-09	59.45	-161.95			6	L2	Jacksmith Bay	Spring migration
80907	11-Apr-09	59.37	-161.99			2	L3	Jacksmith Bay	Spring migration
80907	12-Apr-09	58.60	-160.79			5	LA	Hagemeister Is.	Spring migration
80907	14-Apr-09	58.53	-161.03			2	L3	Hagemeister Is.	Spring migration
80907	18-Apr-09	58.53	-160.97			3	L2	Hagemeister Is.	Spring migration
80907	19-Apr-09	58.51	-160.96			4	L3	Hagemeister Is.	Spring migration
80907	24-Apr-09	58.53	-160.95			2	L3	Hagemeister Is.	Spring migration
80907	27-Apr-09	58.71	-161.30			3	L3	Hagemeister Is.	Spring migration
80907	2-May-09	69.16	-165.81			36	L3	Ledyard Bay	Spring migration
80907	8-May-09	71.56	-144.96			177	L3	Martin Point	Spring migration
80907	11-May-09	70.42	-132.42			71	L1	Cape Dalhousie	Spring migration
80907	12-May-09	70.33	-132.69			71	L3	Cape Dalhousie	Spring migration
80907	18-May-09	70.55	-132.12			73	L3	Cape Dalhousie	Spring migration
80907	19-May-09	70.57	-132.31			81	L2	Cape Dalhousie	Spring migration
80907	25-May-09	70.48	-132.57			80	L2	Cape Dalhousie	Spring migration
80907	28-May-09	70.96	-129.05			51	L3	Cape Bathurst	Spring migration
80907	31-May-09	72.25	-126.46			31	L3	Cape Kellet	Spring migration
80907	3-Jun-09	72.85	-126.09			33	L3	Meek Point	Spring migration
80907	6-Jun-09	72.85	-126.47			48	L3	Meek Point	Spring migration
80907	9-Jun-09	72.93	-125.72			22	L3	Meek Point	Spring migration
80907	12-Jun-09	72.94	-125.75			24	L3	Meek Point	Spring migration
80907	15-Jun-09	72.39	-125.16		8		L3	Siksik Lake	Nesting
80907	18-Jun-09	72.37	-125.23		6		L3	Siksik Lake	Nesting
80907	21-Jun-09	72.38	-125.22		6		L3	Siksik Lake	Nesting
80907	24-Jun-09	72.37	-125.22		6		L3	Siksik Lake	Nesting
80907	27-Jun-09	72.37	-125.22		6		L3	Siksik Lake	Nesting
80907	30-Jun-09	72.39	-125.20		6		L3	Siksik Lake	Nesting

Appendix A (continued).

PTT#	Sex/Date	Lat.	Long.	Km inland	Km offshore	Signal quality	Location	Season
80907	3-Jul-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80907	6-Jul-09	72.39	-125.21	6		L3	Siksik Lake	Nesting
80907	9-Jul-09	72.39	-125.21	6		L3	Siksik Lake	Nesting
80907	12-Jul-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80907	15-Jul-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80907	18-Jul-09	72.39	-125.18	7		L3	Siksik Lake	Nesting
80907	21-Jul-09	72.43	-125.26	2		L3	Siksik Lake	Nesting
80907	24-Jul-09	72.39	-125.19	6		L2	Siksik Lake	Nesting
80907	26-Jul-09	72.42	-125.26	2		L2	Siksik Lake	Nesting
80907	29-Jul-09	72.43	-125.26	2		L3	Siksik Lake	Nesting
80907	1-Aug-09	72.39	-125.19	6		L2	Siksik Lake	Nesting
80907	4-Aug-09	72.43	-125.12	6		L2	Siksik Lake	Nesting
80907	8-Sep-09	58.61	-158.69		6	L2	Nushagak Bay	Moult
80907	13-Sep-09	58.53	-158.28		10	L3	Nushagak Bay	Moult
80907	17-Sep-09	58.58	-158.19		4	L3	Nushagak Bay	Moult
80907	20-Sep-09	58.55	-158.15		7	L3	Nushagak Bay	Moult
80907	24-Sep-09	58.47	-158.28		16	L3	Nushagak Bay	Moult
80907	27-Sep-09	58.51	-158.26		12	L3	Nushagak Bay	Moult
80907	1-Oct-09	58.52	-158.17		10	L3	Nushagak Bay	Moult
80907	4-Oct-09	58.53	-158.24		9	L3	Nushagak Bay	Moult
80907	7-Oct-09	58.49	-158.26		14	L3	Nushagak Bay	Moult
80907	11-Oct-09	58.56	-158.42		11	L3	Nushagak Bay	Moult
80907	14-Oct-09	58.54	-158.16		8	L3	Nushagak Bay	Moult
80907	18-Oct-09	58.45	-158.28		19	L3	Nushagak Bay	Moult
80907	21-Oct-09	58.51	-158.20		12	L3	Nushagak Bay	Moult
80907	25-Oct-09	58.55	-158.30		8	L3	Nushagak Bay	Moult
80907	28-Oct-09	58.49	-157.91		17	L3	Kvichak Bay	Moult
80907	31-Oct-09	58.44	-157.96		21	L3	Kvichak Bay	Moult
80907	4-Nov-09	58.47	-160.54		19	L3	Hagemeister Is.	Fall migration
80907	7-Nov-09	58.42	-158.63		7	L3	Nushagak Bay	Fall migration
80907	10-Nov-09	58.37	-158.82		4	L2	Nushagak Bay	Fall migration
80907	14-Nov-09	58.45	-158.62		6	L3	Nushagak Bay	Fall migration
80907	17-Nov-09	58.22	-158.90		19	L3	Nushagak Bay	Fall migration
80907	21-Nov-09	55.06	-163.96		5	L2	Unimak Island	Winter
80907	24-Nov-09	55.09	-164.05		11	L3	Unimak Island	Winter
80907	28-Nov-09	55.12	-163.95		9	L3	Unimak Island	Winter
80907	1-Dec-09	55.12	-164.12		16	L3	Unimak Island	Winter
80907	4-Dec-09	55.03	-164.28		11	L2	Unimak Island	Winter
80907	8-Dec-09	55.11	-164.06		12	L3	Unimak Island	Winter
80907	11-Dec-09	55.13	-163.95		10	L3	Unimak Island	Winter
80907	15-Dec-09	55.08	-164.08		11	L3	Unimak Island	Winter
80907	18-Dec-09	55.10	-163.98		9	L3	Unimak Island	Winter
80907	22-Dec-09	55.08	-164.00		8	L3	Unimak Island	Winter
80907	26-Dec-09	55.05	-163.98		5	L3	Unimak Island	Winter
80907	29-Dec-09	55.03	-163.95		2	L3	Unimak Island	Winter
80907	2-Jan-10	55.02	-164.16		6	L3	Unimak Island	Winter
80907	6-Jan-10	55.05	-163.97		4	L3	Unimak Island	Winter
80907	9-Jan-10	55.06	-163.93		3	L3	Unimak Island	Winter
80907	13-Jan-10	55.01	-164.05		4	L2	Unimak Island	Winter
80907	17-Jan-10	55.05	-164.02		6	L3	Unimak Island	Winter
80907	20-Jan-10	55.04	-164.00		5	L2	Unimak Island	Winter
80907	24-Jan-10	55.05	-164.03		7	L3	Unimak Island	Winter
80907	28-Jan-10	55.05	-163.96		4	L1	Unimak Island	Winter
80907	31-Jan-10	55.05	-163.97		4	L1	Unimak Island	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80907	4-Feb-10	55.06	-163.95		4	L3	Unimak Island	Winter
80907	8-Feb-10	55.06	-164.04		8	LA	Unimak Island	Winter
80907	12-Feb-10	55.06	-163.98		5	L2	Unimak Island	Winter
80907	15-Feb-10	55.06	-163.96		4	L3	Unimak Island	Winter
80907	19-Feb-10	55.07	-163.85		3	L2	Unimak Island	Winter
80907	23-Feb-10	55.07	-163.88		4	L3	Unimak Island	Winter
80908	**Male**							
80908	12-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80908	13-Jun-08	72.39	-125.18	7		L3	Siksik Lake	Nesting
80908	16-Jun-08	72.39	-125.16	8		L3	Siksik Lake	Nesting
80908	19-Jun-08	72.39	-125.16	7		L3	Siksik Lake	Nesting
80908	22-Jun-08	72.39	-125.16	8		L3	Siksik Lake	Nesting
80908	25-Jun-08	72.39	-125.16	8		L3	Siksik Lake	Nesting
80908	28-Jun-08	72.69	-126.22		42	L3	Meek Point	Moult migration
80908	1-Jul-08	72.75	-126.25		41	L2	Meek Point	Moult migration
80908	4-Jul-08	73.01	-125.40		20	L3	Meek Point	Moult migration
80908	7-Jul-08	72.64	-126.48		48	L3	Siksik Lake	Moult migration
80908	10-Jul-08	72.95	-126.36		46	L3	Meek Point	Moult migration
80908	13-Jul-08	72.73	-126.05		35	L3	Meek Point	Moult migration
80908	17-Jul-08	72.77	-125.94		29	L3	Meek Point	Moult migration
80908	20-Jul-08	72.81	-126.15		36	L3	Meek Point	Moult migration
80908	23-Jul-08	70.85	-150.83		44	L3	Harrison Bay	Moult migration
80908	26-Jul-08	71.30	-156.77	0		L2	Point Barrow	Moult migration
80909	**Male**							
80909	12-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Spring migration
80909	13-Jun-08	72.39	-125.19	6		L3	Siksik Lake	Spring migration
80909	16-Jun-08	72.73	-124.00	31		L3	Siksik Lake	Nesting
80909	19-Jun-08	72.69	-124.27	24		L3	Siksik Lake	Nesting
80909	23-Jun-08	72.67	-124.18	28		L3	Siksik Lake	Nesting
80909	26-Jun-08	72.77	-125.96		30	L3	Meek Point	Moult migration
80909	29-Jun-08	72.68	-126.32		45	L3	Siksik Lake	Moult migration
80909	2-Jul-08	72.83	-126.19		37	L3	Meek Point	Moult migration
80909	6-Jul-08	72.83	-126.19		37	L2	Meek Point	Moult migration
80909	9-Jul-08	73.28	-125.07		18	L3	Meek Point	Moult migration
80909	12-Jul-08	73.70	-124.40		4	L3	Burnett Bay	Moult migration
80909	16-Jul-08	73.84	-124.36		6	L2	Burnett Bay	Moult migration
80909	19-Jul-08	73.68	-124.18		5	L2	Burnett Bay	Moult migration
80909	22-Jul-08	73.81	-124.31		10	L2	Burnett Bay	Moult migration
80909	26-Jul-08	72.05	-151.98		148	L1	Smith Bay	Moult migration
80909	29-Jul-08	66.73	-174.69		1	L3	Kolyuchin Bay	Moult migration
80909	1-Aug-08	66.79	-174.58		6	L3	Kolyuchin Bay	Moult migration
80909	5-Aug-08	66.85	-174.32		15	L3	Kolyuchin Bay	Moult migration
80909	8-Aug-08	65.59	-170.68		2	L2	Cape Nunyagmo	Moult migration
80909	11-Aug-08	63.05	-169.93		6	L0	St. Lawrence Is.	Moult
80909	14-Aug-08	63.09	-170.08		7	L2	St. Lawrence Is.	Moult
80909	18-Aug-08	63.11	-170.09		6	L3	St. Lawrence Is.	Moult
80909	21-Aug-08	63.07	-170.03		8	L3	St. Lawrence Is.	Moult
80909	24-Aug-08	62.95	-169.57		3	L2	St. Lawrence Is.	Moult
80909	28-Aug-08	63.04	-169.39		7	L2	St. Lawrence Is.	Moult
80909	31-Aug-08	63.09	-169.27		8	L3	St. Lawrence Is.	Moult
80909	3-Sep-08	63.06	-169.53		1	L2	St. Lawrence Is.	Moult
80909	7-Sep-08	63.07	-169.26		10	L2	St. Lawrence Is.	Moult
80909	10-Sep-08	63.01	-169.45		5	L2	St. Lawrence Is.	Moult
80909	13-Sep-08	63.06	-169.37		6	L3	St. Lawrence Is.	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80909	17-Sep-08	63.07	-169.37		5	L3	St. Lawrence Is.	Moult
80909	20-Sep-08	63.07	-169.38		5	L3	St. Lawrence Is.	Moult
80909	23-Sep-08	63.03	-169.37		9	L3	St. Lawrence Is.	Moult
80909	27-Sep-08	63.05	-169.38		6	L2	St. Lawrence Is.	Moult
80909	30-Sep-08	63.07	-169.40		5	L3	St. Lawrence Is.	Moult
80909	3-Oct-08	62.98	-169.43		5	L2	St. Lawrence Is.	Moult
80909	7-Oct-08	63.06	-169.27		10	L2	St. Lawrence Is.	Moult
80909	10-Oct-08	62.99	-168.07		39	L2	St. Lawrence Is.	Fall migration
80909	13-Oct-08	62.98	-167.87		50	L3	St. Lawrence Is.	Fall migration
80909	16-Oct-08	62.77	-167.86		61	L3	St. Lawrence Is.	Fall migration
80909	20-Oct-08	62.93	-167.95		47	L3	St. Lawrence Is.	Fall migration
80909	23-Oct-08	62.81	-167.86		58	L2	St. Lawrence Is.	Fall migration
80909	26-Oct-08	63.02	-167.97		44	L2	St. Lawrence Is.	Fall migration
80909	30-Oct-08	63.67	-167.43		78	L3	St. Lawrence Is.	Fall migration
80909	2-Nov-08	63.70	-167.49		77	L3	St. Lawrence Is.	Fall migration
80909	6-Nov-08	63.04	-168.20		31	L3	St. Lawrence Is.	Fall migration
80909	9-Nov-08	62.79	-168.00		54	L3	St. Lawrence Is.	Fall migration
80909	12-Nov-08	62.93	-167.87		51	L3	St. Lawrence Is.	Fall migration
80909	15-Nov-08	63.02	-168.00		42	L2	St. Lawrence Is.	Fall migration
80909	19-Nov-08	62.99	-167.92		47	L3	St. Lawrence Is.	Fall migration
80909	22-Nov-08	62.99	-167.95		45	L3	St. Lawrence Is.	Fall migration
80909	25-Nov-08	62.91	-167.93		50	L1	St. Lawrence Is.	Fall migration
80909	29-Nov-08	58.95	-170.71		174	L3	Nunivak Island	Fall migration
80909	2-Dec-08	61.81	-171.04		147	L1	St. Lawrence Is.	Fall migration
80910	**Female**							
80910	12-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Spring migration
80910	13-Jun-08	72.39	-125.18	7		L3	Siksik Lake	Spring migration
80910	16-Jun-08	72.58	-124.43	17		L3	Siksik Lake	Nesting
80910	19-Jun-08	72.68	-124.16	28		L3	Siksik Lake	Nesting
80910	22-Jun-08	72.69	-124.19	27		L3	Siksik Lake	Nesting
80910	25-Jun-08	72.71	-124.11	30		L3	Siksik Lake	Nesting
80910	28-Jun-08	72.68	-124.19	27		L1	Siksik Lake	Nesting
80910	1-Jul-08	72.67	-124.14	29		L3	Siksik Lake	Nesting
80910	4-Jul-08	72.65	-124.02	34		L2	Siksik Lake	Nesting
80910	7-Jul-08	72.69	-124.16	28		L3	Siksik Lake	Nesting
80910	10-Jul-08	72.68	-124.16	28		L3	Siksik Lake	Nesting
80910	13-Jul-08	72.66	-124.07	32		L3	Siksik Lake	Nesting
80910	16-Jul-08	72.67	-124.15	29		L3	Siksik Lake	Nesting
80910	19-Jul-08	72.76	-124.46	17		L3	Siksik Lake	Nesting
80910	22-Jul-08	73.55	-124.47		5	L3	Burnett Bay	Moult migration
80910	25-Jul-08	73.87	-124.41		1	L3	Burnett Bay	Moult migration
80910	29-Jul-08	73.93	-124.53		0	L3	Burnett Bay	Moult migration
80910	1-Aug-08	74.31	-125.03		1	L3	Cape Prince Alfred	Moult migration
80910	4-Aug-08	74.30	-124.98		1	L3	Cape Prince Alfred	Moult migration
80910	7-Aug-08	74.27	-124.99		4	L3	Cape Prince Alfred	Moult migration
80910	10-Aug-08	74.33	-124.85	0		L3	Cape Prince Alfred	Moult migration
80910	13-Aug-08	72.47	-141.30		304	L3	Demarcation Pt.	Moult migration
80910	16-Aug-08	64.65	-172.04		13	L3	Cape Chaplin	Moult migration
80910	19-Aug-08	64.77	-172.01		3	L2	Cape Chaplin	Moult migration
80910	22-Aug-08	65.31	-176.48		22	L3	Anadyr Bay	Moult
80910	25-Aug-08	65.35	-176.59		20	L3	Anadyr Bay	Moult
80910	28-Aug-08	65.34	-176.43		18	L3	Anadyr Bay	Moult
80910	31-Aug-08	65.32	-176.51		21	L3	Anadyr Bay	Moult
80910	3-Sep-08	65.32	-176.55		22	L3	Anadyr Bay	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80910	7-Sep-08	65.32	-176.41		19	L3	Anadyr Bay	Moult
80910	10-Sep-08	65.30	-176.40		21	L3	Anadyr Bay	Moult
80910	13-Sep-08	65.35	-176.57		19	L3	Anadyr Bay	Moult
80910	16-Sep-08	65.33	-176.50		20	L3	Anadyr Bay	Moult
80910	19-Sep-08	65.28	-176.45		25	L3	Anadyr Bay	Moult
80910	22-Sep-08	65.34	-176.52		20	L3	Anadyr Bay	Moult
80910	25-Sep-08	65.28	-176.43		24	L2	Anadyr Bay	Moult
80910	28-Sep-08	65.31	-176.36		19	L3	Anadyr Bay	Moult
80910	1-Oct-08	65.31	-176.47		21	L3	Anadyr Bay	Moult
80910	4-Oct-08	65.24	-176.45		27	L3	Anadyr Bay	Moult
80910	7-Oct-08	65.36	-177.81		10	L3	Anadyr Bay	Moult
80910	11-Oct-08	65.31	-176.66		25	L3	Anadyr Bay	Moult
80910	14-Oct-08	65.29	-176.44		23	L3	Anadyr Bay	Moult
80910	17-Oct-08	64.30	-172.42		11	L3	Cape Chukotsk	Winter
80910	20-Oct-08	64.22	-172.51		18	L2	Cape Chukotsk	Winter
80910	26-Oct-08	64.33	-172.16		9	L3	Cape Chukotsk	Winter
80910	29-Oct-08	64.19	-172.75		13	L2	Cape Chukotsk	Winter
80910	1-Nov-08	64.38	-172.26		3	L2	Cape Chukotsk	Winter
80910	4-Nov-08	64.26	-172.41		15	L3	Cape Chukotsk	Winter
80910	8-Nov-08	64.28	-172.49		12	L2	Cape Chukotsk	Winter
80910	11-Nov-08	64.33	-172.52		6	L3	Cape Chukotsk	Winter
80910	14-Nov-08	64.29	-172.33		13	L3	Cape Chukotsk	Winter
80910	17-Nov-08	64.31	-172.63		8	LA	Cape Chukotsk	Winter
80910	20-Nov-08	64.33	-172.05		13	L3	Cape Chukotsk	Winter
80910	23-Nov-08	64.19	-172.40		23	L0	Cape Chukotsk	Winter
80910	26-Nov-08	64.29	-172.42		12	L3	Cape Chukotsk	Winter
80910	29-Nov-08	64.30	-172.46		10	L2	Cape Chukotsk	Winter
80910	3-Dec-08	64.31	-172.37		11	L3	Cape Chukotsk	Winter
80910	6-Dec-08	64.24	-173.30		5	L3	Cape Chukotsk	Winter
80910	9-Dec-08	64.34	-172.44		6	L3	Cape Chukotsk	Winter
80910	12-Dec-08	64.28	-172.65		10	L1	Cape Chukotsk	Winter
80910	15-Dec-08	64.35	-172.23		6	L1	Cape Chukotsk	Winter
80910	23-Dec-08	64.33	-172.24		9	L2	Cape Chukotsk	Winter
80910	31-Dec-08	64.35	-172.23		6	L3	Cape Chukotsk	Winter
80910	8-Jan-09	64.32	-172.59		6	L2	Cape Chukotsk	Winter
80910	16-Jan-09	64.22	-172.41		20	L3	Cape Chukotsk	Winter
80910	24-Jan-09	64.24	-172.92		3	L3	Cape Chukotsk	Winter
80910	2-Feb-09	64.36	-172.48		3	L3	Cape Chukotsk	Winter
80910	10-Feb-09	64.34	-172.40		7	L3	Cape Chukotsk	Winter
80910	18-Feb-09	64.34	-172.50		5	L3	Cape Chukotsk	Winter
80910	26-Feb-09	64.34	-172.66		5	L3	Cape Chukotsk	Winter
80910	6-Mar-09	64.34	-172.60		5	L3	Cape Chukotsk	Winter
80910	14-Mar-09	64.34	-172.39		8	L3	Cape Chukotsk	Winter
80910	22-Mar-09	64.15	-172.53		24	L3	Cape Chukotsk	Winter
80910	31-Mar-09	64.38	-172.34		3	L3	Cape Chukotsk	Winter
80910	3-Apr-09	64.58	-172.11		16	L3	Cape Chaplin	Winter
80910	4-Apr-09	64.36	-172.40		5	L3	Cape Chukotsk	Winter
80910	5-Apr-09	64.31	-172.41		9	L2	Cape Chukotsk	Winter
80910	6-Apr-09	64.27	-173.35		3	L2	Cape Chukotsk	Winter
80910	9-Apr-09	64.25	-173.20		1	L3	Cape Chukotsk	Winter
80910	11-Apr-09	64.30	-172.31		12	L3	Cape Chukotsk	Winter
80910	14-Apr-09	65.12	-171.68		20	L3	Cape Nygligan	Spring migration
80910	18-Apr-09	65.20	-171.51		30	L3	Cape Nygligan	Spring migration
80910	19-Apr-09	65.26	-171.53		28	L3	Cape Nygligan	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80910	20-Apr-09	65.19	-171.69		22	L3	Cape Nygligan	Spring migration
80910	21-Apr-09	65.18	-171.70		21	L3	Cape Nygligan	Spring migration
80910	23-Apr-09	65.16	-171.73		19	L3	Cape Nygligan	Spring migration
80910	24-Apr-09	65.15	-171.54		27	L3	Cape Nygligan	Spring migration
80910	25-Apr-09	65.21	-171.49		32	L3	Cape Nygligan	Spring migration
80910	26-Apr-09	65.49	-170.58		13	L3	Cape Nunyagmo	Spring migration
80910	28-Apr-09	65.55	-170.25		17	L3	Cape Nunyagmo	Spring migration
80910	29-Apr-09	66.15	-169.62		3	L2	Cape Dezhnev	Spring migration
80910	30-Apr-09	66.58	-170.80		10	L3	Cape Dezhnev	Spring migration
80910	1-May-09	66.57	-170.88		6	L3	Cape Dezhnev	Spring migration
80910	3-May-09	66.60	-170.98		5	L3	Cape Dezhnev	Spring migration
80910	4-May-09	67.35	-171.57		47	L3	Cape Netan	Spring migration
80910	5-May-09	69.43	-164.66		59	L3	Ledyard Bay	Spring migration
80910	7-May-09	70.97	-148.93		56	L2	Jones Island	Spring migration
80910	8-May-09	70.22	-142.55		23	L3	Martin Point	Spring migration
80910	9-May-09	70.16	-142.23		25	L3	Martin Point	Spring migration
80910	10-May-09	69.94	-139.37		38	L3	Herschel Island	Spring migration
80910	12-May-09	70.19	-132.55		53	L3	Mackenzie Delta	Spring migration
80910	13-May-09	70.24	-132.44		55	L3	Cape Dalhousie	Spring migration
80910	14-May-09	70.32	-132.45		63	L3	Cape Dalhousie	Spring migration
80910	16-May-09	70.31	-131.76		43	L3	Cape Dalhousie	Spring migration
80910	17-May-09	70.37	-132.16		59	L2	Cape Dalhousie	Spring migration
80910	18-May-09	70.59	-130.90		54	L3	Cape Dalhousie	Spring migration
80910	20-May-09	70.58	-131.10		55	L3	Cape Dalhousie	Spring migration
80910	21-May-09	70.57	-131.34		56	L2	Cape Dalhousie	Spring migration
80910	22-May-09	70.54	-131.28		52	L3	Cape Dalhousie	Spring migration
80910	23-May-09	70.65	-131.48		67	L3	Cape Dalhousie	Spring migration
80910	26-May-09	70.61	-131.64		66	L2	Cape Dalhousie	Spring migration
80910	28-May-09	70.64	-130.61		57	L1	Cape Dalhousie	Spring migration
80910	29-May-09	70.78	-129.62		58	L1	Cape Bathurst	Spring migration
80910	2-Jun-09	70.86	-129.57		60	L2	Cape Bathurst	Spring migration
80910	4-Jun-09	70.93	-130.22		84	L2	Cape Bathurst	Spring migration
80910	5-Jun-09	70.84	-130.17		73	L2	Cape Dalhousie	Spring migration
80910	7-Jun-09	70.87	-130.10		76	L1	Cape Bathurst	Spring migration
80910	8-Jun-09	70.82	-129.77		66	L1	Cape Bathurst	Spring migration
80910	10-Jun-09	71.34	-127.10		91	L2	Cape Kellet	Spring migration
80910	12-Jun-09	72.87	-125.42		9	L2	Meek Point	Spring migration
80910	14-Jun-09	72.91	-125.46		13	LA	Meek Point	Spring migration
80910	15-Jun-09	72.91	-125.53		15	L1	Meek Point	Spring migration
80910	17-Jun-09	72.67	-124.19	28		L1	Siksik Lake	Nesting
80910	18-Jun-09	72.69	-124.17	28		L1	Siksik Lake	Nesting
80910	20-Jun-09	72.67	-124.17	28		L1	Siksik Lake	Nesting
80910	21-Jun-09	72.70	-124.25	25		L0	Siksik Lake	Nesting
80910	25-Jun-09	72.68	-124.19	27		L2	Siksik Lake	Nesting
80910	28-Jun-09	72.68	-124.15	29		L1	Siksik Lake	Nesting
80910	2-Jul-09	72.67	-124.16	28		LA	Siksik Lake	Nesting
80910	10-Jul-09	72.68	-124.16	28		L1	Siksik Lake	Nesting
80910	13-Jul-09	72.69	-124.15	29		L1	Siksik Lake	Nesting
80910	28-Jul-09	73.22	-124.63		1	LB	Meek Point	Moult migration
80911	**Male**							
80911	12-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80911	13-Jun-08	72.39	-125.18	6		L3	Siksik Lake	Nesting
80911	19-Jun-08	72.39	-125.19	6		L3	Siksik Lake	Nesting
80911	22-Jun-08	72.39	-125.20	6		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80911	25-Jun-08	72.41	-125.28	2		L3	Siksik Lake	Nesting
80911	28-Jun-08	72.41	-125.28	2		L3	Siksik Lake	Nesting
80911	1-Jul-08	72.63	-125.84		26	L3	Meek Point	Moult migration
80911	5-Jul-08	72.98	-125.54		21	L3	Meek Point	Moult migration
80911	8-Jul-08	73.00	-125.71		28	L3	Meek Point	Moult migration
80911	11-Jul-08	72.95	-125.99		32	L3	Meek Point	Moult migration
80911	17-Jul-08	72.56	-125.97		26	L2	Meek Point	Moult migration
80911	20-Jul-08	72.67	-125.93		31	L3	Meek Point	Moult migration
80911	23-Jul-08	72.78	-125.41		10	L2	Meek Point	Moult migration
80911	26-Jul-08	72.87	-125.31		5	LB	Meek Point	Moult migration
80911	30-Jul-08	70.88	-158.27		8	LA	Point Barrow	Moult migration
80911	2-Aug-08	70.88	-158.51		5	L1	Point Franklin	Moult migration
80911	5-Aug-08	69.87	-163.31		14	L1	Point Lay	Moult migration
80911	11-Aug-08	65.05	-171.91		9	LA	Cape Nygligan	Moult migration
80911	14-Aug-08	64.58	-172.03		20	LB	Cape Chaplin	Moult / winter
80911	17-Aug-08	64.58	-171.92		22	LA	Cape Chaplin	Moult / winter
80911	21-Aug-08	64.57	-171.92		23	L2	Cape Chaplin	Moult / winter
80911	24-Aug-08	64.62	-171.96		17	L3	Cape Chaplin	Moult / winter
80911	27-Aug-08	64.58	-171.97		21	L3	Cape Chaplin	Moult / winter
80911	5-Sep-08	64.62	-171.96		17	L2	Cape Chaplin	Moult / winter
80911	9-Sep-08	64.62	-171.98		17	L1	Cape Chaplin	Moult / winter
80911	12-Sep-08	64.55	-171.98		21	LA	Cape Chaplin	Moult / winter
80911	15-Sep-08	64.55	-172.03		18	L3	Cape Chaplin	Moult / winter
80911	18-Sep-08	64.55	-172.04		18	L2	Cape Chaplin	Moult / winter
80911	24-Sep-08	64.64	-171.96		15	L3	Cape Chaplin	Moult / winter
80911	27-Sep-08	64.56	-172.12		15	LA	Cape Chaplin	Moult / winter
80911	30-Sep-08	64.40	-172.26		1	L1	Cape Chukotsk	Moult / winter
80911	4-Oct-08	64.39	-172.24		2	L3	Cape Chukotsk	Moult / winter
80911	7-Oct-08	64.37	-172.18		5	LA	Cape Chukotsk	Moult / winter
80911	10-Oct-08	64.40	-172.01		11	LB	Cape Chaplin	Moult / winter
80911	16-Oct-08	64.61	-171.94		19	L2	Cape Chaplin	Moult / winter
80911	23-Oct-08	64.37	-172.00		12	LA	Cape Chukotsk	Moult / winter
80911	29-Oct-08	64.57	-172.16		13	LA	Cape Chaplin	Moult / winter
80911	1-Nov-08	64.59	-172.25		10	L1	Cape Chaplin	Moult / winter
80911	4-Nov-08	64.60	-172.18		13	L1	Cape Chaplin	Moult / winter
80911	8-Nov-08	64.25	-172.27		18	LB	Cape Chukotsk	Moult / winter
80911	11-Nov-08	64.25	-172.25		18	L1	Cape Chukotsk	Moult / winter
80911	14-Nov-08	64.32	-172.12		12	LB	Cape Chukotsk	Moult / winter
80911	17-Nov-08	64.16	-172.33		27	L1	Cape Chukotsk	Moult / winter
80911	21-Nov-08	64.53	-171.83		25	L2	Cape Chaplin	Moult / winter
80911	24-Nov-08	64.37	-172.43		3	LA	Cape Chukotsk	Moult / winter
80911	27-Nov-08	64.29	-172.39		12	LA	Cape Chukotsk	Moult / winter
80911	6-Dec-08	64.22	-173.20		4	L1	Cape Chukotsk	Moult / winter
80911	9-Dec-08	64.28	-172.33		14	L0	Cape Chukotsk	Moult / winter
80911	13-Dec-08	64.37	-172.21		4	L3	Cape Chukotsk	Moult / winter
80911	16-Dec-08	64.34	-172.42		7	LB	Cape Chukotsk	Moult / winter
80911	27-Dec-08	64.26	-172.78		6	L2	Cape Chukotsk	Moult / winter
80911	5-Jan-09	64.29	-172.39		12	L1	Cape Chukotsk	Moult / winter
80911	13-Jan-09	64.34	-172.40		7	LA	Cape Chukotsk	Moult / winter
80911	21-Jan-09	64.37	-172.38		4	L2	Cape Chukotsk	Moult / winter
80911	29-Jan-09	64.36	-172.38		6	L1	Cape Chukotsk	Moult / winter
80911	6-Feb-09	64.36	-172.45		4	L3	Cape Chukotsk	Moult / winter
80911	14-Feb-09	64.37	-172.56		1	L1	Cape Chukotsk	Moult / winter
80911	23-Feb-09	64.49	-171.84		22	L3	Cape Chaplin	Moult / winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80911	3-Mar-09	64.37	-172.45		3	L3	Cape Chukotsk	Moult / winter
80911	11-Mar-09	64.29	-172.56		10	L3	Cape Chukotsk	Moult / winter
80911	19-Mar-09	65.16	-171.80		15	L2	Cape Nygligan	Spring migration
80911	28-Mar-09	65.20	-171.55		28	L1	Cape Nygligan	Spring migration
80911	5-Apr-09	65.15	-171.75		17	L2	Cape Nygligan	Spring migration
80911	6-Apr-09	65.29	-171.78		19	L1	Cape Nygligan	Spring migration
80911	7-Apr-09	65.36	-171.86		13	LB	Cape Nygligan	Spring migration
80911	8-Apr-09	65.18	-171.87		14	L2	Cape Nygligan	Spring migration
80911	9-Apr-09	65.10	-171.66		21	L0	Cape Nygligan	Spring migration
80911	11-Apr-09	65.08	-171.66		20	LA	Cape Nygligan	Spring migration
80911	12-Apr-09	65.21	-171.55		29	LA	Cape Nygligan	Spring migration
80911	13-Apr-09	65.28	-171.72		22	L3	Cape Nygligan	Spring migration
80911	15-Apr-09	65.29	-171.71		23	L3	Cape Nygligan	Spring migration
80911	16-Apr-09	65.36	-171.57		17	L3	Cape Nygligan	Spring migration
80911	17-Apr-09	65.34	-171.53		20	L3	Cape Nygligan	Spring migration
80911	18-Apr-09	65.40	-171.04		8	L3	Cape Nunyagmo	Spring migration
80911	20-Apr-09	65.28	-171.44		27	L3	Cape Nygligan	Spring migration
80911	21-Apr-09	65.29	-171.44		26	L2	Cape Nygligan	Spring migration
80911	22-Apr-09	65.29	-171.84		16	L3	Cape Nygligan	Spring migration
80911	23-Apr-09	65.33	-171.72		18	L3	Cape Nygligan	Spring migration
80911	25-Apr-09	65.35	-171.46		19	L2	Cape Nygligan	Spring migration
80911	26-Apr-09	65.34	-171.45		19	L3	Cape Nygligan	Spring migration
80911	27-Apr-09	65.22	-171.57		29	L3	Cape Nygligan	Spring migration
80911	29-Apr-09	65.42	-170.99		6	L3	Cape Nunyagmo	Spring migration
80911	30-Apr-09	65.43	-170.99		5	L2	Cape Nunyagmo	Spring migration
80911	2-May-09	69.78	176.74		12	L3	Chaunskaya Bay	Spring migration
80911	4-May-09	69.80	176.71		13	L3	Chaunskaya Bay	Spring migration
80911	5-May-09	69.81	176.71		14	L3	Chaunskaya Bay	Spring migration
80911	6-May-09	69.82	176.59		12	L3	Chaunskaya Bay	Spring migration
80911	8-May-09	69.81	176.50		8	L2	Chaunskaya Bay	Spring migration
80911	9-May-09	70.60	172.01		72	L3	Chaunskaya Bay	Spring migration
80911	10-May-09	70.68	171.53		76	L1	Chaunskaya Bay	Spring migration
80911	11-May-09	70.72	171.67		83	L3	Chaunskaya Bay	Spring migration
80911	13-May-09	70.66	171.55		75	L3	Chaunskaya Bay	Spring migration
80911	14-May-09	70.57	171.48		63	L0	Chaunskaya Bay	Spring migration
80911	15-May-09	70.59	171.24		63	L3	Chaunskaya Bay	Spring migration
80911	16-May-09	70.62	171.04		64	L3	Chaunskaya Bay	Spring migration
80911	18-May-09	70.60	171.16		63	L3	Chaunskaya Bay	Spring migration
80911	19-May-09	70.39	171.66		43	L3	Chaunskaya Bay	Spring migration
80911	20-May-09	71.60	165.59		175	L3	Medvezh'i Island	Spring migration
80911	22-May-09	74.84	130.63		185	L2	Lena River Delta	Spring migration
80911	25-May-09	74.03	128.40		71	L0	Lena River Delta	Spring migration
80911	27-May-09	74.10	127.70		75	L3	Lena River Delta	Spring migration
80911	28-May-09	74.14	127.00		75	L3	Lena River Delta	Spring migration
80911	30-May-09	74.09	127.92		74	LA	Lena River Delta	Spring migration
80911	31-May-09	73.93	125.77		30	L1	Lena River Delta	Spring migration
80911	1-Jun-09	74.87	116.77		72	LA	Taymyr Pen.	Spring migration
80911	3-Jun-09	74.94	116.11		76	L3	Taymyr Pen.	Spring migration
80911	7-Jun-09	74.91	115.36		76	L0	Taymyr Pen.	Spring migration
80912	**Female**							
80912	12-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80912	13-Jun-08	72.39	-125.18	7		L3	Siksik Lake	Nesting
80912	19-Jun-08	72.34	-125.06	13		LB	Siksik Lake	Nesting
80912	22-Jun-08	72.39	-125.19	7		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.		km inland	km offshore	Signal quality	Location	Season
80912	25-Jun-08	72.41	-125.30		1		L2	Siksik Lake	Nesting
80912	28-Jun-08	72.41	-125.28		2		L3	Siksik Lake	Nesting
80912	2-Jul-08	72.41	-125.32		2		L2	Siksik Lake	Nesting
80912	5-Jul-08	72.39	-125.28		4		L2	Siksik Lake	Nesting
80912	8-Jul-08	72.38	-125.27		5		L2	Siksik Lake	Nesting
80912	11-Jul-08	72.42	-125.31		0		L1	Siksik Lake	Nesting
80912	14-Jul-08	72.42	-125.27		2		L3	Siksik Lake	Nesting
80912	17-Jul-08	72.43	-125.26		2		L3	Siksik Lake	Nesting
80912	21-Jul-08	72.52	-125.51			8	L1	Siksik Lake	Moult migration
80912	24-Jul-08	72.67	-125.10			0	L3	Siksik Lake	Moult migration
80912	27-Jul-08	73.65	-124.33		0		L2	Burnett Bay	Moult migration
80912	30-Jul-08	73.65	-124.32		0		L3	Burnett Bay	Moult migration
80912	12-Aug-08	72.24	-145.81			237	L0	Jones Island	Moult migration
80912	15-Aug-08	64.72	-172.02	*			LA	Cape Nygligan	Moult
80912	12-Sep-08	65.24	-172.75	*			LB	Cape Nygligan	Moult
80912	28-Sep-08	65.23	-173.68	*			LZ	Cape Nygligan	Moult
80912	14-Oct-08	65.21	-171.82			18	LA	Cape Nygligan	Moult
80912	30-Oct-08	64.62	-172.23			10	L0	Cape Chaplin	Winter
80912	2-Nov-08	64.56	-172.25			8	LZ	Cape Chaplin	Winter
80912	18-Nov-08	64.57	-172.36			4	LB	Cape Chaplin	Winter
80912	8-Dec-08	64.62	-171.73			23	L1	Cape Chaplin	Winter
80912	29-Dec-08	64.39	-172.38			2	LB	Cape Chukotsk	Winter
80912	6-Jan-09	64.29	-172.46			12	L1	Cape Chukotsk	Winter
80912	14-Jan-09	64.24	-172.46			17	LA	Cape Chukotsk	Winter
80912	23-Jan-09	64.33	-172.37			9	L1	Cape Chukotsk	Winter
80912	31-Jan-09	64.29	-172.52			11	LA	Cape Chukotsk	Winter
80912	24-Feb-09	64.35	-171.81			22	L2	Cape Chukotsk	Winter
80912	29-Mar-09	64.34	-172.52			6	L0	Cape Chukotsk	Winter
80912	9-Apr-09	64.27	-172.29			15	LB	Cape Chukotsk	Winter
80912	10-Apr-09	64.28	-172.12			16	L0	Cape Chukotsk	Winter
80912	14-Apr-09	64.26	-172.63	*			LB	Cape Chukotsk	Winter
80912	19-Apr-09	65.29	-171.69			23	L2	Cape Nygligan	Spring migration
80912	23-Apr-09	65.16	-171.67			21	L1	Cape Nygligan	Spring migration
80912	25-Apr-09	65.14	-171.80			15	L0	Cape Nygligan	Spring migration
80912	28-Apr-09	65.09	-171.81			13	LA	Cape Nygligan	Spring migration
80912	2-May-09	66.22	-169.92			4	LA	Cape Dezhnev	Spring migration
80912	4-May-09	66.37	-170.31			7	L1	Cape Dezhnev	Spring migration
80912	6-May-09	66.39	-170.33			9	L1	Cape Dezhnev	Spring migration
80912	7-May-09	71.89	-156.51			64	L2	Point Barrow	Spring migration
80912	10-May-09	70.30	-132.19			53	L0	Cape Dalhousie	Spring migration
80912	13-May-09	70.73	-129.61			56	LB	Cape Bathurst	Spring migration
80912	15-May-09	70.73	-129.61			56	LB	Cape Bathurst	Spring migration
80912	22-May-09	70.65	-129.99			48	LB	Cape Dalhousie	Spring migration
80912	23-May-09	70.62	-129.94			43	LB	Cape Dalhousie	Spring migration
80912	27-May-09	70.79	-127.58			32	LB	Cape Bathurst	Spring migration
80913	**Female**								
80913	13-Jun-08	72.39	-125.17		7		DP	Siksik Lake	Nesting
80913	14-Jun-08	72.39	-125.18		7		L3	Siksik Lake	Nesting
80913	17-Jun-08	72.39	-125.16		7		L3	Siksik Lake	Nesting
80913	20-Jun-08	72.41	-125.22		4		L3	Siksik Lake	Nesting
80913	23-Jun-08	72.41	-125.22		4		L3	Siksik Lake	Nesting
80913	26-Jun-08	72.41	-125.22		4		L3	Siksik Lake	Nesting
80913	29-Jun-08	72.41	-125.23		4		L3	Siksik Lake	Nesting
80913	2-Jul-08	72.41	-125.21		4		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80913	5-Jul-08	72.40	-125.25	4		L3	Siksik Lake	Nesting
80913	9-Jul-08	72.39	-125.17	7		L3	Siksik Lake	Nesting
80913	12-Jul-08	72.41	-125.21	5		L2	Siksik Lake	Nesting
80913	15-Jul-08	72.40	-125.27	3		L3	Siksik Lake	Nesting
80913	18-Jul-08	72.26	-125.65		0	L3	Worth Point	Moult migration
80913	22-Jul-08	72.27	-125.66		0	L3	Worth Point	Moult migration
80913	25-Jul-08	72.27	-125.65		1	L3	Worth Point	Moult migration
80913	28-Jul-08	72.27	-125.64		1	L3	Worth Point	Moult migration
80913	31-Jul-08	72.26	-125.65	0		L3	Worth Point	Moult migration
80913	4-Aug-08	72.29	-125.92		11	L3	Worth Point	Moult migration
80913	7-Aug-08	73.76	-124.33		10	L3	Burnett Bay	Moult migration
80913	10-Aug-08	73.75	-124.44		8	L3	Burnett Bay	Moult migration
80913	13-Aug-08	73.88	-124.18	0		L3	Burnett Bay	Moult migration
80913	16-Aug-08	71.22	-154.93		10	L2	Smith Bay	Moult migration
80913	20-Aug-08	71.32	-155.26		16	L2	Smith Bay	Moult migration
80913	23-Aug-08	71.24	-154.98		12	L1	Smith Bay	Moult migration
80913	26-Aug-08	65.14	-172.02		5	L1	Cape Nygligan	Moult migration
80913	29-Aug-08	65.20	-172.11		4	L2	Cape Nygligan	Moult migration
80913	1-Sep-08	65.16	-172.08		4	L3	Cape Nygligan	Moult migration
80913	5-Sep-08	60.18	-165.08		18	L2	Etolin Strait	Moult migration
80913	8-Sep-08	58.22	-157.52		1	L2	Kvichak Bay	Moult
80913	11-Sep-08	58.18	-157.56		1	L3	Kvichak Bay	Moult
80913	14-Sep-08	58.23	-157.54		3	L2	Kvichak Bay	Moult
80913	17-Sep-08	58.24	-157.54		2	L3	Kvichak Bay	Moult
80913	21-Sep-08	58.19	-157.57		2	L3	Kvichak Bay	Moult
80913	24-Sep-08	58.32	-157.64		5	L2	Kvichak Bay	Moult
80913	27-Sep-08	58.17	-157.57		1	L3	Kvichak Bay	Moult
80913	30-Sep-08	58.21	-157.55		1	L3	Kvichak Bay	Moult
80913	4-Oct-08	58.20	-157.58		3	L3	Kvichak Bay	Moult
80913	7-Oct-08	58.17	-157.58		2	L3	Kvichak Bay	Moult
80913	10-Oct-08	58.14	-157.61		2	L3	Kvichak Bay	Moult
80913	13-Oct-08	58.22	-157.52		1	L3	Kvichak Bay	Moult
80913	17-Oct-08	58.18	-157.59		3	L3	Kvichak Bay	Moult
80913	20-Oct-08	58.16	-157.59		2	L3	Kvichak Bay	Moult
80913	23-Oct-08	58.24	-157.54		2	LB	Kvichak Bay	Moult
80913	26-Oct-08	58.26	-157.64		6	L3	Kvichak Bay	Moult
80913	29-Oct-08	58.22	-157.48		1	L2	Kvichak Bay	Moult
80913	2-Nov-08	58.07	-157.68		4	L3	Kvichak Bay	Moult
80913	5-Nov-08	58.20	-157.52		0	LA	Kvichak Bay	Moult
80913	8-Nov-08	58.20	-157.64		6	L2	Kvichak Bay	Moult
80913	11-Nov-08	58.22	-157.57		4	L3	Kvichak Bay	Moult
80913	15-Nov-08	58.21	-157.58		3	L3	Kvichak Bay	Moult
80913	18-Nov-08	58.14	-157.64		4	L2	Kvichak Bay	Moult
80913	21-Nov-08	56.45	-160.38		14	L3	Port Heiden	Winter
80913	24-Nov-08	56.41	-160.23		4	L2	Port Heiden	Winter
80913	28-Nov-08	56.31	-160.41		5	L2	Port Heiden	Winter
80913	1-Dec-08	56.43	-160.31		9	L3	Port Heiden	Winter
80913	4-Dec-08	56.46	-160.26		9	L3	Port Heiden	Winter
80913	7-Dec-08	56.48	-160.08		6	L2	Port Heiden	Winter
80913	11-Dec-08	56.42	-160.23		5	L3	Port Heiden	Winter
80913	14-Dec-08	56.44	-160.30		9	L3	Port Heiden	Winter
80913	17-Dec-08	56.47	-160.35		14	L2	Port Heiden	Winter
80913	20-Dec-08	56.45	-160.09		4	L3	Port Heiden	Winter
80913	24-Dec-08	56.55	-159.94		5	L2	Port Heiden	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.		km inland	km offshore	Signal quality	Location	Season
80913	1-Jan-09	56.57	-159.88			5	L3	Port Heiden	Winter
80913	10-Jan-09	56.42	-160.24			5	L2	Port Heiden	Winter
80913	18-Jan-09	56.49	-160.05			6	L3	Port Heiden	Winter
80913	26-Jan-09	56.42	-160.23			5	L2	Port Heiden	Winter
80913	4-Feb-09	56.34	-160.39			6	L3	Port Heiden	Winter
80913	12-Feb-09	56.36	-154.92			10	L3	Kodiak Island	Winter
80913	21-Feb-09	56.45	-154.86			4	L2	Kodiak Island	Winter
80913	1-Mar-09	56.36	-154.86			7	L1	Kodiak Island	Winter
80913	10-Mar-09	56.40	-154.89			7	L3	Kodiak Island	Winter
80913	18-Mar-09	56.38	-155.07			17	LA	Kodiak Island	Winter
80914	**Male**								
80914	13-Jun-08	72.39	-125.17		7		DP	Siksik Lake	Nesting
80914	14-Jun-08	72.39	-125.18		7		L3	Siksik Lake	Nesting
80914	16-Jun-08	72.40	-125.17		7		L3	Siksik Lake	Nesting
80914	20-Jun-08	72.41	-125.23		4		L3	Siksik Lake	Nesting
80914	23-Jun-08	72.41	-125.20		5		L3	Siksik Lake	Nesting
80914	26-Jun-08	72.41	-125.22		4		L3	Siksik Lake	Nesting
80914	29-Jun-08	72.41	-125.24		3		L2	Siksik Lake	Nesting
80914	2-Jul-08	72.41	-126.06	*			L2	Meek Point	Moult migration
80914	5-Jul-08	72.88	-126.26			40	L2	Meek Point	Moult migration
80914	8-Jul-08	72.90	-126.02			32	L3	Meek Point	Moult migration
80914	11-Jul-08	72.90	-125.47			13	L2	Meek Point	Moult migration
80914	14-Jul-08	72.47	-125.74			14	L3	Meek Point	Moult migration
80914	17-Jul-08	72.37	-125.59			5	L3	Cape Kellet	Moult migration
80914	20-Jul-08	72.13	-125.84			2	L3	Cape Kellet	Moult migration
80914	24-Jul-08	72.13	-125.78			0	L3	Cape Kellet	Moult migration
80914	27-Jul-08	72.16	-125.78			2	L3	Cape Kellet	Moult migration
80914	30-Jul-08	72.16	-125.77			2	L3	Cape Kellet	Moult migration
80914	2-Aug-08	72.13	-125.77		0		L3	Cape Kellet	Moult migration
80914	5-Aug-08	70.67	-128.35			4	L3	Cape Bathurst	Moult migration
80914	8-Aug-08	70.64	-128.34			2	L2	Cape Bathurst	Moult migration
80914	11-Aug-08	70.63	-136.17			127	L3	Mackenzie Delta	Moult migration
80914	14-Aug-08	69.53	-164.12			42	L3	Ledyard Bay	Moult migration
80914	17-Aug-08	60.72	-165.24			9	L3	Etolin Strait	Moult migration
80914	20-Aug-08	59.65	-163.79			16	L3	Etolin Strait	Moult
80914	23-Aug-08	59.70	-163.91			11	L3	Etolin Strait	Moult
80914	26-Aug-08	59.68	-163.79			13	L3	Etolin Strait	Moult
80914	29-Aug-08	59.70	-163.90			11	L3	Etolin Strait	Moult
80914	2-Sep-08	59.66	-163.79			15	L3	Etolin Strait	Moult
80914	5-Sep-08	59.70	-163.78			11	L3	Etolin Strait	Moult
80914	8-Sep-08	59.68	-163.79			13	L3	Etolin Strait	Moult
80914	11-Sep-08	59.69	-163.78			11	L3	Etolin Strait	Moult
80914	14-Sep-08	59.71	-163.90			10	L3	Etolin Strait	Moult
80914	17-Sep-08	59.69	-163.80			12	L3	Etolin Strait	Moult
80914	20-Sep-08	59.72	-163.83			8	L3	Etolin Strait	Moult
80914	23-Sep-08	59.67	-163.66			14	L2	Etolin Strait	Moult
80914	26-Sep-08	59.74	-163.84			6	L3	Etolin Strait	Moult
80914	29-Sep-08	59.65	-163.65			16	L3	Etolin Strait	Moult
80914	2-Oct-08	59.66	-163.63			15	L3	Etolin Strait	Moult
80914	6-Oct-08	59.62	-163.61			20	L3	Etolin Strait	Moult
80914	9-Oct-08	59.67	-163.65			14	L3	Etolin Strait	Moult
80914	12-Oct-08	59.60	-163.64			21	L3	Etolin Strait	Moult
80914	15-Oct-08	59.60	-163.61			22	L3	Etolin Strait	Moult
80914	18-Oct-08	59.61	-163.62			20	L3	Etolin Strait	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80914	21-Oct-08	59.26	-162.14		5	L3	Chagvan Bay	Fall migration
80914	24-Oct-08	59.07	-162.12		11	L3	Chagvan Bay	Fall migration
80914	27-Oct-08	59.08	-162.10		10	L3	Chagvan Bay	Fall migration
80914	30-Oct-08	59.09	-162.08		8	L3	Chagvan Bay	Fall migration
80914	3-Nov-08	59.14	-162.13		8	L3	Chagvan Bay	Fall migration
80914	6-Nov-08	59.12	-162.15		10	L3	Chagvan Bay	Fall migration
80914	9-Nov-08	58.41	-160.64		24	L2	Hagemeister Is.	Fall migration
80914	12-Nov-08	58.40	-160.39		21	L3	Hagemeister Is.	Fall migration
80914	15-Nov-08	58.41	-160.67		22	L3	Hagemeister Is.	Fall migration
80914	18-Nov-08	58.32	-160.64		31	L3	Hagemeister Is.	Fall migration
80914	21-Nov-08	58.43	-160.53		21	L2	Hagemeister Is.	Fall migration
80914	25-Nov-08	58.44	-160.48		19	L3	Hagemeister Is.	Fall migration
80914	28-Nov-08	58.42	-160.55		23	L3	Hagemeister Is.	Fall migration
80914	1-Dec-08	58.46	-160.46		16	L3	Hagemeister Is.	Fall migration
80914	4-Dec-08	58.54	-161.73		2	L3	Hagemeister Is.	Fall migration
80914	7-Dec-08	58.41	-160.76		19	L3	Hagemeister Is.	Fall migration
80914	10-Dec-08	58.31	-160.10		32	L3	Hagemeister Is.	Fall migration
80914	13-Dec-08	58.33	-160.33		28	L3	Hagemeister Is.	Fall migration
80914	17-Dec-08	58.41	-160.65		23	L2	Hagemeister Is.	Fall migration
80914	25-Dec-08	58.41	-160.59		25	L3	Hagemeister Is.	Fall migration
80914	2-Jan-09	57.12	-158.90		18	L3	Port Heiden	Winter
80914	10-Jan-09	56.94	-159.26		20	LA	Port Heiden	Winter
80914	18-Jan-09	57.07	-158.78		9	L3	Port Heiden	Winter
80914	26-Jan-09	57.16	-158.70		10	L3	Port Heiden	Winter
80914	4-Feb-09	57.09	-158.97		20	L3	Port Heiden	Winter
80914	12-Feb-09	57.71	-158.24		31	L3	Smoky Point	Spring migration
80914	20-Feb-09	58.24	-157.52		1	L3	Kvichak Bay	Spring migration
80914	28-Feb-09	58.57	-158.01		7	L3	Kvichak Bay	Spring migration
80914	8-Mar-09	58.57	-158.47		13	L3	Nushagak Bay	Spring migration
80914	16-Mar-09	58.55	-157.74		16	L3	Kvichak Bay	Spring migration
80914	24-Mar-09	58.59	-158.27		4	L3	Nushagak Bay	Spring migration
80914	1-Apr-09	58.47	-157.63		8	L3	Kvichak Bay	Spring migration
80914	4-Apr-09	58.77	-157.27		7	L2	Kvichak Bay	Spring migration
80914	6-Apr-09	58.66	-157.46		9	L3	Kvichak Bay	Spring migration
80914	9-Apr-09	58.71	-157.24		6	L3	Kvichak Bay	Spring migration
80914	10-Apr-09	58.75	-157.08		1	L3	Kvichak Bay	Spring migration
80914	12-Apr-09	58.70	-157.21		4	L3	Kvichak Bay	Spring migration
80914	16-Apr-09	58.49	-158.18		14	L3	Nushagak Bay	Spring migration
80914	20-Apr-09	58.52	-158.15		10	L3	Nushagak Bay	Spring migration
80914	25-Apr-09	58.53	-158.24		10	L3	Nushagak Bay	Spring migration
80914	27-Apr-09	58.83	-158.62		4	L3	Nushagak Bay	Spring migration
80914	30-Apr-09	58.73	-158.55		6	L2	Nushagak Bay	Spring migration
80914	1-May-09	58.68	-158.56		12	L3	Nushagak Bay	Spring migration
80914	2-May-09	58.31	-160.50		32	L3	Hagemeister Is.	Spring migration
80914	3-May-09	59.34	-164.94		66	L3	Etolin Strait	Spring migration
80914	5-May-09	59.62	-165.27		36	L3	Etolin Strait	Spring migration
80914	6-May-09	59.61	-165.15		41	L3	Etolin Strait	Spring migration
80914	7-May-09	59.70	-165.22		31	L3	Etolin Strait	Spring migration
80914	9-May-09	63.36	-166.23		88	L3	St. Lawrence Is.	Spring migration
80914	10-May-09	63.97	-165.94		60	L3	St. Lawrence Is.	Spring migration
80914	11-May-09	64.00	-165.60		57	L3	St. Lawrence Is.	Spring migration
80914	12-May-09	66.13	-168.66		41	L3	Cape Dezhnev	Spring migration
80914	14-May-09	69.85	177.43		31	L3	Chaunskaya Bay	Spring migration
80914	15-May-09	70.21	174.24		41	L3	Chaunskaya Bay	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80914	16-May-09	70.72	172.14		88	L3	Chaunskaya Bay	Spring migration
80914	17-May-09	72.60	164.47		244	L3	Medvezh'i Island	Spring migration
80914	19-May-09	73.87	158.02		296	L3	Novaya Sibir Is.	Spring migration
80914	20-May-09	74.75	153.73		109	L3	Novaya Sibir Is.	Spring migration
80914	21-May-09	74.76	153.65		106	L3	Novaya Sibir Is.	Spring migration
80914	23-May-09	74.71	153.88		115	L3	Novaya Sibir Is.	Spring migration
80914	24-May-09	74.72	153.92		116	L3	Novaya Sibir Is.	Spring migration
80914	25-May-09	74.60	154.11		127	L3	Novaya Sibir Is.	Spring migration
80914	27-May-09	74.67	154.09		124	L3	Novaya Sibir Is.	Spring migration
80914	28-May-09	74.71	153.99		119	L2	Novaya Sibir Is.	Spring migration
80914	29-May-09	74.72	154.09		122	L3	Novaya Sibir Is.	Spring migration
80914	31-May-09	76.02	135.64		21	L3	Kotel'nyy Island	Spring migration
80914	1-Jun-09	74.38	129.77		135	L3	Lena River Delta	Spring migration
80914	2-Jun-09	74.13	128.64		86	L3	Lena River Delta	Spring migration
80914	4-Jun-09	73.98	127.54		59	L2	Lena River Delta	Spring migration
80914	5-Jun-09	73.20	127.53	26		L2	Lena River Delta	Spring migration
80914	7-Jun-09	73.65	127.99		18	L3	Lena River Delta	Spring / moult mig
80914	8-Jun-09	73.98	127.23		59	LB	Lena River Delta	Spring / moult mig
80914	10-Jun-09	74.02	126.98		63	L3	Lena River Delta	Spring / moult mig
80914	11-Jun-09	73.99	126.86		56	L3	Lena River Delta	Spring / moult mig
80914	12-Jun-09	73.95	127.59		56	L3	Lena River Delta	Spring / moult mig
80914	14-Jun-09	74.01	127.49		63	L2	Lena River Delta	Spring / moult mig
80914	16-Jun-09	74.15	128.58		88	L3	Lena River Delta	Spring / moult mig
80914	17-Jun-09	74.27	128.97		108	LA	Lena River Delta	Spring / moult mig
80914	19-Jun-09	74.38	129.02		122	L3	Lena River Delta	Spring / moult mig
80914	20-Jun-09	74.63	130.82		175	L2	Lena River Delta	Moult migration
80914	22-Jun-09	74.60	130.92		170	L1	Lena River Delta	Moult migration
80914	27-Jun-09	75.51	134.40		39	LB	Kotel'nyy Island	Moult migration
80914	5-Jul-09	75.90	142.71		6	L1	Kotel'nyy Island	Moult migration
80914	17-Jul-09	75.52	146.21		7	LA	Novaya Sibir Is.	Moult migration
80915	**Male**							
80915	13-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80915	14-Jun-08	72.39	-125.18	6		L3	Siksik Lake	Nesting
80915	17-Jun-08	72.42	-125.18	5		L3	Siksik Lake	Nesting
80915	20-Jun-08	72.36	-125.10	11		L3	Siksik Lake	Nesting
80915	23-Jun-08	72.37	-125.13	10		L3	Siksik Lake	Nesting
80915	27-Jun-08	72.39	-125.15	8		L3	Siksik Lake	Nesting
80915	30-Jun-08	72.87	-125.39		7	L3	Meek Point	Moult migration
80915	3-Jul-08	73.33	-125.28		28	L3	Meek Point	Moult migration
80915	6-Jul-08	73.16	-125.01		8	L3	Meek Point	Moult migration
80915	10-Jul-08	73.23	-124.97		11	L3	Meek Point	Moult migration
80915	13-Jul-08	70.45	-128.81		21	L2	Cape Bathurst	Moult migration
80915	16-Jul-08	70.50	-128.83		20	L3	Cape Bathurst	Moult migration
80915	19-Jul-08	70.86	-147.03		60	L3	Prudhoe Bay	Moult migration
80915	22-Jul-08	70.02	-163.07		16	L3	Icy Cape	Moult migration
80915	26-Jul-08	65.20	-171.74		20	L3	Cape Nygligan	Moult migration
80915	29-Jul-08	65.01	-172.07		5	L3	Cape Nygligan	Moult migration
80915	1-Aug-08	65.34	-176.28		14	L3	Anadyr Bay	Moult
80915	5-Aug-08	65.33	-176.55		21	L3	Anadyr Bay	Moult
80915	8-Aug-08	65.35	-176.57		20	L3	Anadyr Bay	Moult
80915	11-Aug-08	65.32	-176.48		20	L2	Anadyr Bay	Moult
80915	15-Aug-08	65.34	-176.37		16	L2	Anadyr Bay	Moult
80915	18-Aug-08	65.30	-176.49		22	L3	Anadyr Bay	Moult
80915	21-Aug-08	65.26	-176.45		26	L3	Anadyr Bay	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80915	24-Aug-08	65.31	-176.40		20	L3	Anadyr Bay	Moult
80915	28-Aug-08	65.32	-176.34		18	L3	Anadyr Bay	Moult
80915	31-Aug-08	65.35	-176.34		15	L3	Anadyr Bay	Moult
80915	3-Sep-08	65.30	-176.47		22	L3	Anadyr Bay	Moult
80915	6-Sep-08	65.34	-176.33		15	L3	Anadyr Bay	Moult
80915	10-Sep-08	65.29	-176.26		16	L3	Anadyr Bay	Moult
80915	13-Sep-08	65.27	-176.08		9	L3	Anadyr Bay	Moult
80915	16-Sep-08	65.28	-176.11		10	L3	Anadyr Bay	Moult
80915	20-Sep-08	65.21	-176.09		12	L3	Anadyr Bay	Moult
80915	23-Sep-08	65.26	-176.12		11	L3	Anadyr Bay	Moult
80915	26-Sep-08	65.25	-176.17		14	L3	Anadyr Bay	Moult
80915	29-Sep-08	65.29	-176.42		22	L3	Anadyr Bay	Moult
80915	3-Oct-08	65.29	-176.21		14	L3	Anadyr Bay	Moult
80915	6-Oct-08	65.29	-176.10		9	L3	Anadyr Bay	Moult
80915	9-Oct-08	65.27	-176.49		26	L3	Anadyr Bay	Moult
80915	13-Oct-08	65.30	-176.14		11	L3	Anadyr Bay	Moult
80915	16-Oct-08	65.30	-176.14		11	L3	Anadyr Bay	Moult
80915	19-Oct-08	65.29	-176.11		9	L3	Anadyr Bay	Moult
80915	22-Oct-08	65.27	-176.20		15	L3	Anadyr Bay	Moult
80915	26-Oct-08	65.30	-176.41		21	L3	Anadyr Bay	Moult
80915	29-Oct-08	65.29	-176.21		14	L3	Anadyr Bay	Moult
80915	1-Nov-08	65.28	-176.12		10	L3	Anadyr Bay	Moult
80915	5-Nov-08	65.23	-176.05		9	L3	Anadyr Bay	Moult
80915	8-Nov-08	62.69	-169.25		35	L3	St. Lawrence Is.	Fall migration
80915	11-Nov-08	62.76	-168.53		38	L3	St. Lawrence Is.	Fall migration
80915	14-Nov-08	62.97	-168.09		39	L3	St. Lawrence Is.	Fall migration
80915	18-Nov-08	62.92	-168.00		45	L3	St. Lawrence Is.	Fall migration
80915	21-Nov-08	62.81	-167.97		53	L3	St. Lawrence Is.	Fall migration
80915	24-Nov-08	63.03	-167.97		44	L2	St. Lawrence Is.	Fall migration
80915	28-Nov-08	62.98	-168.00		43	L1	St. Lawrence Is.	Fall migration
80915	1-Dec-08	58.48	-161.84		9	LA	Hagemeister Is.	Fall migration
80915	4-Dec-08	58.51	-161.56		8	L3	Hagemeister Is.	Fall migration
80915	8-Dec-08	58.49	-160.77		12	L3	Hagemeister Is.	Fall migration
80915	11-Dec-08	58.44	-160.90		13	L3	Hagemeister Is.	Fall migration
80915	14-Dec-08	58.37	-161.10		19	L3	Hagemeister Is.	Fall migration
80915	17-Dec-08	58.43	-161.05		13	L2	Hagemeister Is.	Fall migration
80915	21-Dec-08	58.42	-160.82		17	L3	Hagemeister Is.	Fall migration
80915	24-Dec-08	58.36	-160.44		26	L2	Hagemeister Is.	Fall migration
80915	27-Dec-08	55.91	-161.91		6	L2	Cape Seniavin	Winter
80915	5-Jan-09	55.11	-163.63		7	L3	Unimak Island	Winter
80915	13-Jan-09	55.12	-163.65		9	L3	Unimak Island	Winter
80915	22-Jan-09	55.66	-162.54		12	L3	Cape Seniavin	Winter
80915	31-Jan-09	56.43	-160.23		6	L3	Port Heiden	Winter
80915	17-Feb-09	55.97	-161.54		2	L2	Cape Seniavin	Winter
80915	25-Feb-09	56.61	-159.91		9	L3	Port Heiden	Winter
80915	6-Mar-09	56.57	-159.90		5	L2	Port Heiden	Winter
80915	14-Mar-09	56.74	-159.43		6	L2	Port Heiden	Winter
80915	23-Mar-09	56.40	-160.24		4	L2	Port Heiden	Winter
80915	31-Mar-09	57.06	-158.76		7	L3	Port Heiden	Winter
80915	9-Apr-09	58.50	-160.42		12	L3	Hagemeister Is.	Spring migration
80915	17-Apr-09	58.32	-160.32		30	L3	Hagemeister Is.	Spring migration
80915	19-Apr-09	58.43	-160.57		23	L3	Hagemeister Is.	Spring migration
80915	20-Apr-09	58.41	-160.63		23	L3	Hagemeister Is.	Spring migration
80915	21-Apr-09	58.41	-160.57		24	L3	Hagemeister Is.	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80915	23-Apr-09	58.42	-160.58		24	L3	Hagemeister Is.	Spring migration
80915	24-Apr-09	58.44	-160.47		19	L3	Hagemeister Is.	Spring migration
80915	25-Apr-09	58.50	-160.71		13	L3	Hagemeister Is.	Spring migration
80915	27-Apr-09	58.44	-160.53		20	L3	Hagemeister Is.	Spring migration
80915	28-Apr-09	58.53	-160.90		4	L3	Hagemeister Is.	Spring migration
80915	29-Apr-09	66.03	-167.75		26	L3	Point Spencer	Spring migration
80915	30-Apr-09	69.25	-165.20		46	L3	Ledyard Bay	Spring migration
80915	2-May-09	69.22	-165.11		41	L3	Ledyard Bay	Spring migration
80915	3-May-09	69.17	-165.41		38	L3	Ledyard Bay	Spring migration
80915	4-May-09	69.09	-165.95		27	L3	Ledyard Bay	Spring migration
80915	5-May-09	69.35	-165.32		59	L3	Ledyard Bay	Spring migration
80915	7-May-09	70.68	-142.78		68	L3	Martin Point	Spring migration
80915	8-May-09	70.11	-135.41		55	L3	Mackenzie Delta	Spring migration
80915	9-May-09	70.09	-134.69		40	L3	Mackenzie Delta	Spring migration
80915	11-May-09	70.22	-133.21		67	L3	Mackenzie Delta	Spring migration
80915	12-May-09	70.16	-132.71		52	L3	Mackenzie Delta	Spring migration
80915	13-May-09	70.16	-132.66		52	L3	Mackenzie Delta	Spring migration
80915	15-May-09	70.18	-132.48		50	L3	Mackenzie Delta	Spring migration
80915	16-May-09	70.18	-132.49		51	L3	Mackenzie Delta	Spring migration
80915	17-May-09	69.94	-141.38		24	L3	Demarcation Pt.	Spring migration
80915	19-May-09	69.97	-141.63		21	L3	Demarcation Pt.	Spring migration
80915	20-May-09	69.93	-141.38		23	L3	Demarcation Pt.	Spring migration
80915	21-May-09	69.96	-141.67		20	L3	Demarcation Pt.	Spring migration
80915	23-May-09	69.96	-141.70		20	L3	Demarcation Pt.	Spring migration
80915	24-May-09	70.30	-143.30		18	L3	Martin Point	Spring migration
80915	25-May-09	70.55	-133.22		104	L3	Cape Dalhousie	Spring migration
80915	27-May-09	70.69	-130.03		53	L3	Cape Dalhousie	Spring migration
80915	28-May-09	70.78	-129.54		55	L3	Cape Bathurst	Spring migration
80915	29-May-09	70.78	-129.29		46	L3	Cape Bathurst	Spring migration
80915	31-May-09	70.79	-129.35		48	L3	Cape Bathurst	Spring migration
80915	1-Jun-09	70.79	-129.02		37	L3	Cape Bathurst	Spring migration
80915	2-Jun-09	70.79	-129.39		49	L3	Cape Bathurst	Spring migration
80915	4-Jun-09	70.75	-129.55		54	L3	Cape Bathurst	Spring migration
80915	5-Jun-09	70.74	-129.20		40	L3	Cape Bathurst	Spring migration
80915	7-Jun-09	70.76	-129.26		43	L3	Cape Bathurst	Spring migration
80915	8-Jun-09	70.78	-129.28		45	L3	Cape Bathurst	Spring migration
80915	9-Jun-09	70.80	-128.81		30	L3	Cape Bathurst	Spring migration
80915	11-Jun-09	70.80	-129.08		39	L3	Cape Bathurst	Spring migration
80915	12-Jun-09	70.92	-129.38		57	L3	Cape Bathurst	Spring migration
80915	13-Jun-09	70.87	-129.55		60	L3	Cape Bathurst	Spring migration
80915	15-Jun-09	70.93	-129.84		74	L3	Cape Bathurst	Spring migration
80915	16-Jun-09	70.91	-129.96		77	L3	Cape Bathurst	Spring migration
80915	17-Jun-09	71.15	-118.22		8	L3	Minto Inlet	Spring migration
80915	19-Jun-09	71.35	-113.87	53		L3	East of Minto Inlet	Spring migration
80915	20-Jun-09	70.10	-120.13		64	L2	Amundsen Gulf	Moult migration
80915	22-Jun-09	70.26	-127.14		2	L3	Cape Bathurst	Moult migration
80915	23-Jun-09	70.62	-127.98		6	L3	Cape Bathurst	Moult migration
80915	24-Jun-09	70.62	-128.01		5	L3	Cape Bathurst	Moult migration
80915	26-Jun-09	70.64	-128.06		5	L2	Cape Bathurst	Moult migration
80915	27-Jun-09	70.78	-128.86		30	L2	Cape Bathurst	Moult migration
80915	30-Jun-09	70.74	-129.50		52	LA	Cape Bathurst	Moult migration
80915	2-Jul-09	70.79	-129.75		64	L1	Cape Bathurst	Moult migration
80915	4-Jul-09	70.73	-129.69		56	LB	Cape Bathurst	Moult migration
80915	5-Jul-09	70.75	-129.08		36	LB	Cape Bathurst	Moult migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.		km inland	km offshore	Signal quality	Location	Season
80915	7-Jul-09	70.76	-129.18			40	LB	Cape Bathurst	Moult migration
80915	11-Jul-09	70.68	-129.76			51	L1	Cape Bathurst	Moult migration
80915	15-Jul-09	70.84	-129.87	*			LA	Cape Bathurst	Moult migration
80915	21-Jul-09	70.39	-162.07			11	L1	Icy Cape	Moult migration
80915	25-Jul-09	69.93	-163.14			12	L2	Icy Cape	Moult migration
80915	29-Jul-09	70.06	-162.86			11	L2	Icy Cape	Moult migration
80915	2-Aug-09	70.06	-162.84			10	L3	Icy Cape	Moult migration
80915	6-Aug-09	65.04	-172.07			2	L2	Cape Nygligan	Moult migration
80915	10-Aug-09	65.35	-176.12			7	LA	Anadyr Bay	Moult
80915	14-Aug-09	65.29	-176.15			11	L0	Anadyr Bay	Moult
80915	18-Aug-09	65.29	-176.08			8	L0	Anadyr Bay	Moult
80915	26-Aug-09	65.31	-176.07			7	L1	Anadyr Bay	Moult
80915	30-Aug-09	65.31	-176.06			6	L2	Anadyr Bay	Moult
80915	3-Sep-09	65.36	-176.12			6	L0	Anadyr Bay	Moult
80915	7-Sep-09	65.25	-176.10			11	LB	Anadyr Bay	Moult
80915	23-Sep-09	65.30	-176.18			12	LA	Anadyr Bay	Moult
80915	27-Sep-09	65.30	-176.16			11	LA	Anadyr Bay	Moult
80916	**Female**								
80916	13-Jun-08	72.39	-125.17		7		DP	Siksik Lake	Nesting
80916	14-Jun-08	72.39	-125.18		7		L3	Siksik Lake	Nesting
80916	17-Jun-08	72.42	-125.16		5		L3	Siksik Lake	Nesting
80916	20-Jun-08	72.38	-125.19		7		L3	Siksik Lake	Nesting
80916	23-Jun-08	72.37	-125.09		11		L3	Siksik Lake	Nesting
80916	26-Jun-08	72.37	-125.12		10		L3	Siksik Lake	Nesting
80916	29-Jun-08	72.35	-125.09		12		L3	Siksik Lake	Nesting
80916	2-Jul-08	72.36	-125.09		11		L3	Siksik Lake	Nesting
80916	5-Jul-08	72.33	-125.06		13		L3	Siksik Lake	Nesting
80916	8-Jul-08	72.34	-125.21		7		L3	Siksik Lake	Nesting
80916	11-Jul-08	72.33	-125.21		8		L3	Siksik Lake	Nesting
80916	14-Jul-08	72.41	-124.76		20		L3	Siksik Lake	Nesting
80916	18-Jul-08	72.42	-124.98		11		L3	Siksik Lake	Nesting
80916	21-Jul-08	72.41	-124.94		13		L3	Siksik Lake	Nesting
80916	24-Jul-08	72.42	-124.66		20		L3	Siksik Lake	Nesting
80916	27-Jul-08	72.42	-124.66		20		L3	Siksik Lake	Nesting
80916	30-Jul-08	72.37	-124.64		26		L3	Siksik Lake	Nesting
80916	2-Aug-08	72.42	-124.71		19		L3	Siksik Lake	Nesting
80916	5-Aug-08	73.45	-124.36			0	L3	Burnett Bay	Moult migration
80916	8-Aug-08	73.65	-124.32		0		L3	Burnett Bay	Moult migration
80916	11-Aug-08	73.72	-124.51			3	L3	Burnett Bay	Moult migration
80916	14-Aug-08	73.84	-124.20			4	L3	Burnett Bay	Moult migration
80916	17-Aug-08	73.84	-124.21			4	L3	Burnett Bay	Moult migration
80916	20-Aug-08	72.24	-140.50			286	L3	Komakuk	Moult migration
80916	24-Aug-08	65.12	-171.97			6	L3	Cape Nygligan	Moult
80916	27-Aug-08	65.10	-172.02			3	L3	Cape Nygligan	Moult
80916	30-Aug-08	65.21	-172.13			3	L3	Cape Nygligan	Moult
80916	2-Sep-08	65.15	-172.03			5	L3	Cape Nygligan	Moult
80916	5-Sep-08	65.19	-172.06			6	L3	Cape Nygligan	Moult
80916	8-Sep-08	65.18	-172.08			5	L3	Cape Nygligan	Moult
80916	11-Sep-08	65.15	-172.01			6	L3	Cape Nygligan	Moult
80916	14-Sep-08	65.15	-172.07			3	L3	Cape Nygligan	Moult
80916	17-Sep-08	65.16	-172.03			6	L3	Cape Nygligan	Moult
80916	20-Sep-08	65.17	-172.08			4	L3	Cape Nygligan	Moult
80916	24-Sep-08	65.15	-172.03			6	L3	Cape Nygligan	Moult
80916	27-Sep-08	65.15	-172.07			4	L3	Cape Nygligan	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80916	30-Sep-08	65.17	-172.15		1	L3	Cape Nygligan	Moult
80916	3-Oct-08	65.16	-172.11		2	L3	Cape Nygligan	Moult
80916	6-Oct-08	65.14	-172.09		2	L3	Cape Nygligan	Moult
80916	9-Oct-08	65.14	-172.08		2	L3	Cape Nygligan	Moult
80916	12-Oct-08	65.18	-172.09		4	L3	Cape Nygligan	Moult
80916	15-Oct-08	65.20	-172.13		3	L2	Cape Nygligan	Moult
80916	19-Oct-08	65.19	-172.13		3	L3	Cape Nygligan	Moult
80916	22-Oct-08	65.28	-171.78		19	L2	Cape Nygligan	Moult
80916	25-Oct-08	64.80	-171.73		17	L3	Cape Chaplin	Moult
80916	28-Oct-08	65.35	-171.86		14	L3	Cape Nygligan	Moult
80916	31-Oct-08	65.11	-171.93		8	L2	Cape Nygligan	Moult
80916	3-Nov-08	65.04	-172.05		3	L3	Cape Nygligan	Moult
80916	6-Nov-08	63.41	-168.21		28	L1	St. Lawrence Is.	Fall migration
80916	10-Nov-08	63.54	-168.30		34	L2	St. Lawrence Is.	Fall migration
80916	13-Nov-08	63.54	-168.50		29	L3	St. Lawrence Is.	Fall migration
80916	16-Nov-08	63.53	-168.75		24	L3	St. Lawrence Is.	Fall migration
80916	19-Nov-08	63.54	-168.17		39	L2	St. Lawrence Is.	Fall migration
80916	22-Nov-08	63.51	-168.53		25	L3	St. Lawrence Is.	Fall migration
80916	25-Nov-08	63.46	-168.39		24	L2	St. Lawrence Is.	Fall migration
80916	28-Nov-08	59.73	-167.00		22	L1	Nunivak Island	Fall migration
80916	2-Dec-08	55.06	-164.13		10	L3	Unimak Island	Winter
80916	5-Dec-08	55.11	-164.04		12	L3	Unimak Island	Winter
80916	8-Dec-08	55.01	-164.22		7	L2	Unimak Island	Winter
80916	11-Dec-08	55.14	-163.91		11	L2	Unimak Island	Winter
80916	14-Dec-08	55.09	-164.22		14	L2	Unimak Island	Winter
80916	17-Dec-08	55.06	-164.08		9	L2	Unimak Island	Winter
80916	26-Dec-08	55.11	-164.02		11	L2	Unimak Island	Winter
80916	3-Jan-09	55.03	-164.27		10	L3	Unimak Island	Winter
80916	11-Jan-09	55.11	-163.92		8	L3	Unimak Island	Winter
80916	20-Jan-09	55.11	-163.94		8	L2	Unimak Island	Winter
80916	28-Jan-09	55.13	-163.94		11	L3	Unimak Island	Winter
80916	5-Feb-09	55.13	-163.92		10	L3	Unimak Island	Winter
80916	13-Feb-09	55.15	-163.84		11	L3	Unimak Island	Winter
80916	21-Feb-09	55.08	-164.04		10	L3	Unimak Island	Winter
80916	2-Mar-09	55.11	-164.05		12	L2	Unimak Island	Winter
80916	10-Mar-09	55.11	-163.95		9	L3	Unimak Island	Winter
80916	18-Mar-09	56.74	-159.48		7	L3	Port Heiden	Spring migration
80916	26-Mar-09	56.49	-159.99		3	L2	Port Heiden	Spring migration
80916	3-Apr-09	56.42	-160.22		4	L2	Port Heiden	Spring migration
80916	5-Apr-09	56.41	-160.27		6	L3	Port Heiden	Spring migration
80916	6-Apr-09	56.44	-160.24		7	L3	Port Heiden	Spring migration
80916	7-Apr-09	58.15	-157.75		10	L3	Kvichak Bay	Spring migration
80916	8-Apr-09	58.22	-157.54		2	L3	Kvichak Bay	Spring migration
80916	10-Apr-09	58.15	-157.71		8	L3	Kvichak Bay	Spring migration
80916	11-Apr-09	58.21	-157.61		5	L3	Kvichak Bay	Spring migration
80916	13-Apr-09	58.48	-160.25		13	L3	Hagemeister Is.	Spring migration
80916	16-Apr-09	58.46	-160.37		15	L3	Hagemeister Is.	Spring migration
80916	17-Apr-09	58.32	-160.38		30	L3	Hagemeister Is.	Spring migration
80916	18-Apr-09	58.38	-160.38		23	L2	Hagemeister Is.	Spring migration
80916	21-Apr-09	58.42	-160.56		23	L3	Hagemeister Is.	Spring migration
80916	23-Apr-09	58.51	-160.65		16	L3	Hagemeister Is.	Spring migration
80916	24-Apr-09	58.44	-160.49		19	L2	Hagemeister Is.	Spring migration
80916	26-Apr-09	58.44	-160.51		20	L3	Hagemeister Is.	Spring migration
80916	27-Apr-09	58.51	-160.44		11	L3	Hagemeister Is.	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80916	28-Apr-09	58.49	-160.36		11	L3	Hagemeister Is.	Spring migration
80916	29-Apr-09	58.43	-160.48		20	L3	Hagemeister Is.	Spring migration
80916	1-May-09	58.43	-160.62		23	L3	Hagemeister Is.	Spring migration
80916	2-May-09	58.29	-160.61		35	L3	Hagemeister Is.	Spring migration
80916	3-May-09	58.43	-160.54		22	L3	Hagemeister Is.	Spring migration
80916	5-May-09	58.42	-160.58		24	L2	Hagemeister Is.	Spring migration
80916	6-May-09	58.42	-160.20		20	L3	Hagemeister Is.	Spring migration
80916	7-May-09	58.49	-160.29		11	L3	Hagemeister Is.	Spring migration
80916	8-May-09	64.78	-166.71		12	L2	Point Spencer	Spring migration
80916	10-May-09	70.50	-161.76		22	L3	Icy Cape	Spring migration
80916	11-May-09	70.50	-161.36		24	L3	Icy Cape	Spring migration
80916	12-May-09	70.12	-145.18		11	L3	Martin Point	Spring migration
80916	14-May-09	70.29	-133.98		65	L3	Mackenzie Delta	Spring migration
80916	15-May-09	70.37	-132.19		61	L3	Cape Dalhousie	Spring migration
80916	16-May-09	70.47	-131.89		59	L3	Cape Dalhousie	Spring migration
80916	18-May-09	69.76	-136.66		48	L3	Mackenzie Delta	Spring migration
80916	19-May-09	69.68	-136.70		44	L3	Mackenzie Delta	Spring migration
80916	20-May-09	69.68	-136.77		47	L3	Mackenzie Delta	Spring migration
80916	21-May-09	69.68	-136.74		46	L3	Mackenzie Delta	Spring migration
80916	23-May-09	69.69	-136.72		45	L3	Mackenzie Delta	Spring migration
80916	24-May-09	69.72	-136.71		47	L3	Mackenzie Delta	Spring migration
80916	26-May-09	69.77	-136.71		51	L2	Mackenzie Delta	Spring migration
80916	27-May-09	70.37	-133.10		82	L3	Cape Dalhousie	Spring migration
80916	28-May-09	70.38	-132.78		77	L3	Cape Dalhousie	Spring migration
80916	30-May-09	70.38	-132.72		76	L3	Cape Dalhousie	Spring migration
80916	31-May-09	70.38	-132.86		80	L3	Cape Dalhousie	Spring migration
80916	1-Jun-09	70.36	-132.86		78	L3	Cape Dalhousie	Spring migration
80916	3-Jun-09	70.66	-130.74		62	L3	Cape Dalhousie	Spring migration
80916	4-Jun-09	70.79	-130.56		72	L3	Cape Dalhousie	Spring migration
80916	6-Jun-09	70.77	-130.44		68	L3	Cape Dalhousie	Spring migration
80916	7-Jun-09	70.84	-130.08		72	L3	Cape Bathurst	Spring migration
80916	9-Jun-09	72.68	-125.63		20	L3	Meek Point	Spring migration
80916	10-Jun-09	72.38	-125.16	8		L3	Siksik Lake	Nesting
80916	12-Jun-09	72.36	-125.10	11		L3	Siksik Lake	Nesting
80916	13-Jun-09	72.38	-125.16	8		L3	Siksik Lake	Nesting
80916	15-Jun-09	72.39	-125.09	10		L3	Siksik Lake	Nesting
80916	16-Jun-09	72.32	-125.18	10		L3	Siksik Lake	Nesting
80916	19-Jun-09	72.32	-125.35	5		L0	Siksik Lake	Nesting
80916	22-Jun-09	72.37	-125.13	10		L1	Siksik Lake	Nesting
80916	24-Jun-09	72.35	-125.31	4		L0	Siksik Lake	Nesting
80916	1-Jul-09	72.37	-125.08	11		L1	Siksik Lake	Nesting
80916	5-Jul-09	72.46	-125.46		4	L0	Siksik Lake	Moult migration
80917	**Male**							
80917	13-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80917	14-Jun-08	72.39	-125.16	8		L3	Siksik Lake	Nesting
80917	17-Jun-08	72.39	-125.16	8		L3	Siksik Lake	Nesting
80917	20-Jun-08	72.39	-125.20	6		L3	Siksik Lake	Nesting
80917	23-Jun-08	72.36	-125.22	6		L3	Siksik Lake	Nesting
80917	26-Jun-08	72.39	-125.19	7		L3	Siksik Lake	Nesting
80917	29-Jun-08	72.55	-125.98		26	L3	Meek Point	Moult migration
80917	2-Jul-08	72.83	-126.21		38	L3	Meek Point	Moult migration
80917	6-Jul-08	72.77	-126.50		50	L3	Meek Point	Moult migration
80917	9-Jul-08	72.76	-126.59		54	L3	Meek Point	Moult migration
80917	12-Jul-08	72.69	-126.37		47	L2	Siksik Lake	Moult migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80917	15-Jul-08	71.29	-154.93		17	L2	Smith Bay	Moult migration
80917	18-Jul-08	71.32	-155.08		18	L3	Smith Bay	Moult migration
80917	21-Jul-08	71.34	-155.46		15	L3	Point Barrow	Moult migration
80917	24-Jul-08	69.18	-164.96		35	L3	Ledyard Bay	Moult migration
80917	27-Jul-08	66.84	-174.09		7	L3	Kolyuchin Bay	Moult
80917	31-Jul-08	66.82	-173.98		2	L3	Kolyuchin Bay	Moult
80917	3-Aug-08	66.99	-174.43		4	L3	Kolyuchin Bay	Moult
80917	6-Aug-08	67.02	-174.46		1	L3	Kolyuchin Bay	Moult
80917	9-Aug-08	66.97	-174.27		0	L3	Kolyuchin Bay	Moult
80917	12-Aug-08	66.98	-174.28		1	L3	Kolyuchin Bay	Moult
80917	15-Aug-08	67.03	-174.46		0	L3	Kolyuchin Bay	Moult
80917	18-Aug-08	67.03	-174.46		0	L3	Kolyuchin Bay	Moult
80917	21-Aug-08	67.00	-174.40		4	L3	Kolyuchin Bay	Moult
80917	25-Aug-08	67.02	-174.38		2	L3	Kolyuchin Bay	Moult
80917	28-Aug-08	67.04	-174.35	0		L3	Kolyuchin Bay	Moult
80917	31-Aug-08	67.03	-174.44		0	L3	Kolyuchin Bay	Moult
80917	3-Sep-08	67.03	-174.47		0	L3	Kolyuchin Bay	Moult
80917	6-Sep-08	67.02	-174.33		2	L3	Kolyuchin Bay	Moult
80917	9-Sep-08	67.03	-174.46	0		L3	Kolyuchin Bay	Moult
80917	12-Sep-08	67.00	-174.43		3	L3	Kolyuchin Bay	Moult
80917	15-Sep-08	66.81	-174.42		14	L3	Kolyuchin Bay	Moult
80917	19-Sep-08	66.71	-174.32		15	L3	Kolyuchin Bay	Moult
80917	22-Sep-08	66.71	-174.39		15	L3	Kolyuchin Bay	Moult
80917	25-Sep-08	66.76	-174.48		10	L3	Kolyuchin Bay	Moult
80917	28-Sep-08	66.71	-174.50		10	L3	Kolyuchin Bay	Moult
80917	1-Oct-08	66.70	-174.50		10	L3	Kolyuchin Bay	Moult
80917	4-Oct-08	66.73	-174.52		9	L3	Kolyuchin Bay	Moult
80917	7-Oct-08	66.70	-174.50		10	L2	Kolyuchin Bay	Moult
80917	10-Oct-08	66.95	-174.02		0	L3	Kolyuchin Bay	Moult
80917	14-Oct-08	65.34	-171.69		18	L3	Cape Nygligan	Fall migration
80917	17-Oct-08	65.22	-171.29		31	L3	Cape Nygligan	Fall migration
80917	20-Oct-08	65.19	-171.56		28	L2	Cape Nygligan	Fall migration
80917	23-Oct-08	65.26	-171.66		25	L3	Cape Nygligan	Fall migration
80917	26-Oct-08	65.39	-171.49		14	L2	Cape Nygligan	Fall migration
80917	30-Oct-08	65.30	-171.64		22	L3	Cape Nygligan	Fall migration
80917	2-Nov-08	65.38	-171.67		13	L3	Cape Nygligan	Fall migration
80917	5-Nov-08	65.34	-171.62		19	LB	Cape Nygligan	Fall migration
80917	8-Nov-08	65.41	-172.00		6	L3	Mechigmen bay	Fall migration
80917	11-Nov-08	65.38	-171.77		11	L3	Cape Nygligan	Fall migration
80917	14-Nov-08	64.65	-171.99		14	L3	Cape Chaplin	Winter
80917	18-Nov-08	64.53	-172.11		14	L3	Cape Chaplin	Winter
80917	21-Nov-08	64.53	-172.31		5	L3	Cape Chaplin	Winter
80917	24-Nov-08	64.39	-172.44		1	L1	Cape Chukotsk	Winter
80917	27-Nov-08	64.24	-172.49		16	L3	Cape Chukotsk	Winter
80917	30-Nov-08	64.29	-172.07		16	L3	Cape Chukotsk	Winter
80917	3-Dec-08	64.37	-172.31		5	L2	Cape Chukotsk	Winter
80917	7-Dec-08	64.36	-172.34		5	L3	Cape Chukotsk	Winter
80917	10-Dec-08	64.31	-172.47		9	L3	Cape Chukotsk	Winter
80917	13-Dec-08	64.48	-172.21		6	L3	Cape Chaplin	Winter
80917	16-Dec-08	64.36	-172.34		6	L3	Cape Chukotsk	Winter
80917	19-Dec-08	64.33	-172.29		9	L3	Cape Chukotsk	Winter
80917	28-Dec-08	64.32	-172.52		7	L3	Cape Chukotsk	Winter
80917	5-Jan-09	64.29	-172.32		13	L3	Cape Chukotsk	Winter
80917	13-Jan-09	64.32	-172.36		10	L3	Cape Chukotsk	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80917	21-Jan-09	64.35	-172.36		7	L3	Cape Chukotsk	Winter
80917	29-Jan-09	64.36	-172.35		6	L2	Cape Chukotsk	Winter
80917	6-Feb-09	64.33	-172.59		5	L3	Cape Chukotsk	Winter
80917	14-Feb-09	64.38	-172.45		1	L2	Cape Chukotsk	Winter
80917	22-Feb-09	64.53	-171.91		21	L3	Cape Chaplin	Winter
80917	3-Mar-09	64.38	-172.42		3	L3	Cape Chukotsk	Winter
80917	11-Mar-09	64.26	-172.42		15	L3	Cape Chukotsk	Winter
80917	19-Mar-09	64.32	-172.50		8	L3	Cape Chukotsk	Winter
80917	27-Mar-09	64.38	-172.47		1	L3	Cape Chukotsk	Winter
80917	4-Apr-09	64.33	-172.31		8	L3	Cape Chukotsk	Winter
80917	5-Apr-09	64.37	-172.31		4	L3	Cape Chukotsk	Winter
80917	6-Apr-09	64.31	-172.61		7	L2	Cape Chukotsk	Winter
80917	8-Apr-09	64.36	-172.42		5	L3	Cape Chukotsk	Winter
80917	9-Apr-09	64.35	-172.28		6	L3	Cape Chukotsk	Winter
80917	10-Apr-09	64.25	-172.27		17	L3	Cape Chukotsk	Winter
80917	12-Apr-09	64.39	-172.35		1	L3	Cape Chukotsk	Winter
80917	14-Apr-09	64.45	-172.09		9	L2	Cape Chaplin	Winter
80917	15-Apr-09	64.41	-172.00		11	L3	Cape Chaplin	Winter
80917	17-Apr-09	65.06	-171.83		13	L3	Cape Nygligan	Spring migration
80917	18-Apr-09	65.19	-171.75		19	L3	Cape Nygligan	Spring migration
80917	19-Apr-09	65.18	-171.82		16	L3	Cape Nygligan	Spring migration
80917	20-Apr-09	65.20	-171.37		35	L3	Cape Nygligan	Spring migration
80917	22-Apr-09	65.41	-171.04		6	L3	Cape Nunyagmo	Spring migration
80917	23-Apr-09	65.39	-170.84		13	L3	Cape Nunyagmo	Spring migration
80917	25-Apr-09	65.38	-170.99		11	L3	Cape Nunyagmo	Spring migration
80917	26-Apr-09	65.40	-170.84		12	L3	Cape Nunyagmo	Spring migration
80917	28-Apr-09	65.43	-170.73		15	L3	Cape Nunyagmo	Spring migration
80917	29-Apr-09	65.44	-170.39		21	L3	Cape Nunyagmo	Spring migration
80917	30-Apr-09	67.59	-171.44		76	L3	Cape Netan	Spring migration
80917	1-May-09	69.65	179.12		35	L3	Chaunskaya Bay	Spring migration
80917	3-May-09	69.82	177.74		31	L3	Chaunskaya Bay	Spring migration
80917	4-May-09	69.94	177.03		35	L3	Chaunskaya Bay	Spring migration
80917	5-May-09	70.57	172.70		75	L3	Chaunskaya Bay	Spring migration
80917	7-May-09	70.64	172.27		81	L3	Chaunskaya Bay	Spring migration
80917	8-May-09	73.72	157.43		288	L2	Novaya Sibir Is.	Spring migration
80917	9-May-09	74.75	153.68		107	L3	Novaya Sibir Is.	Spring migration
80917	11-May-09	74.86	153.43		93	L3	Novaya Sibir Is.	Spring migration
80917	12-May-09	74.87	153.31		88	L3	Novaya Sibir Is.	Spring migration
80917	13-May-09	74.90	152.90		74	L3	Novaya Sibir Is.	Spring migration
80917	14-May-09	74.92	152.95		74	L3	Novaya Sibir Is.	Spring migration
80917	16-May-09	75.00	152.39		52	L3	Novaya Sibir Is.	Spring migration
80917	17-May-09	74.95	152.49		58	L2	Novaya Sibir Is.	Spring migration
80917	18-May-09	74.95	152.48		57	L3	Novaya Sibir Is.	Spring migration
80917	20-May-09	75.02	152.26		47	L3	Novaya Sibir Is.	Spring migration
80917	21-May-09	75.02	152.23		46	L2	Novaya Sibir Is.	Spring migration
80917	22-May-09	75.05	151.98		36	L3	Novaya Sibir Is.	Spring migration
80917	24-May-09	75.05	152.02		37	L3	Novaya Sibir Is.	Spring migration
80917	25-May-09	74.97	152.37		53	L3	Novaya Sibir Is.	Spring migration
80917	27-May-09	74.92	152.48		59	L3	Novaya Sibir Is.	Spring migration
80917	28-May-09	74.81	152.52		66	L2	Novaya Sibir Is.	Spring migration
80917	30-May-09	74.84	152.53		65	L3	Novaya Sibir Is.	Spring migration
80917	31-May-09	74.93	152.46		58	L2	Novaya Sibir Is.	Spring migration
80917	1-Jun-09	74.74	152.44		65	L3	Novaya Sibir Is.	Spring migration
80917	3-Jun-09	75.05	151.94		35	L3	Novaya Sibir Is.	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80917	4-Jun-09	75.05	151.91		34	L0	Novaya Sibir Is.	Spring migration
80918	**Male**							
80918	14-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80918	15-Jun-08	72.39	-125.17	7		L2	Siksik Lake	Nesting
80918	18-Jun-08	72.41	-125.21	4		L3	Siksik Lake	Nesting
80918	21-Jun-08	72.41	-125.22	4		L3	Siksik Lake	Nesting
80918	24-Jun-08	72.40	-125.22	5		L3	Siksik Lake	Nesting
80918	27-Jun-08	72.39	-125.19	6		L3	Siksik Lake	Nesting
80918	30-Jun-08	72.41	-125.24	3		L3	Siksik Lake	Nesting
80918	3-Jul-08	72.95	-125.23		10	L3	Meek Point	Moult migration
80918	7-Jul-08	72.97	-125.58		21	L3	Meek Point	Moult migration
80918	10-Jul-08	73.06	-125.47		23	L3	Meek Point	Moult migration
80918	13-Jul-08	72.84	-125.20		0	L3	Meek Point	Moult migration
80918	16-Jul-08	73.00	-125.07		11	L3	Meek Point	Moult migration
80918	19-Jul-08	72.84	-125.20		0	L3	Meek Point	Moult migration
80918	22-Jul-08	70.98	-157.57		4	L3	Point Franklin	Moult migration
80918	25-Jul-08	68.93	-166.18		6	L3	Cape Lisburne	Moult migration
80918	29-Jul-08	68.87	-166.18	1		L3	Cape Lisburne	Moult migration
80918	1-Aug-08	68.91	-166.10		4	L3	Cape Lisburne	Moult migration
80918	4-Aug-08	68.94	-166.09		7	L3	Cape Lisburne	Moult migration
80918	7-Aug-08	64.78	-172.05		2	L2	Cape Chaplin	Moult / winter
80918	10-Aug-08	64.72	-172.27		1	L3	Cape Chaplin	Moult / winter
80918	13-Aug-08	64.73	-172.20		2	L3	Cape Chaplin	Moult / winter
80918	16-Aug-08	64.71	-172.13		5	L3	Cape Chaplin	Moult / winter
80918	19-Aug-08	64.72	-172.16		4	L2	Cape Chaplin	Moult / winter
80918	23-Aug-08	64.71	-172.16		4	L3	Cape Chaplin	Moult / winter
80918	26-Aug-08	64.73	-172.16		2	L3	Cape Chaplin	Moult / winter
80918	29-Aug-08	64.72	-172.15		3	L3	Cape Chaplin	Moult / winter
80918	1-Sep-08	64.72	-172.17		4	L2	Cape Chaplin	Moult / winter
80918	4-Sep-08	64.72	-172.18		3	L3	Cape Chaplin	Moult / winter
80918	7-Sep-08	64.73	-172.19		2	L3	Cape Chaplin	Moult / winter
80918	10-Sep-08	64.73	-172.15		3	L3	Cape Chaplin	Moult / winter
80918	13-Sep-08	64.72	-172.16		4	L3	Cape Chaplin	Moult / winter
80918	17-Sep-08	64.71	-172.23		3	L3	Cape Chaplin	Moult / winter
80918	20-Sep-08	64.72	-172.16		3	L3	Cape Chaplin	Moult / winter
80918	23-Sep-08	64.72	-172.16		3	L3	Cape Chaplin	Moult / winter
80918	26-Sep-08	64.70	-172.19		5	L3	Cape Chaplin	Moult / winter
80918	29-Sep-08	64.71	-172.21		4	L3	Cape Chaplin	Moult / winter
80918	2-Oct-08	64.71	-172.18		4	L3	Cape Chaplin	Moult / winter
80918	5-Oct-08	64.71	-172.16		4	L3	Cape Chaplin	Moult / winter
80918	8-Oct-08	64.72	-172.12		4	L3	Cape Chaplin	Moult / winter
80918	12-Oct-08	64.72	-172.10		4	L3	Cape Chaplin	Moult / winter
80918	15-Oct-08	64.55	-172.06		17	L3	Cape Chaplin	Moult / winter
80918	18-Oct-08	64.52	-172.16		11	L2	Cape Chaplin	Moult / winter
80918	21-Oct-08	64.54	-172.07		16	L3	Cape Chaplin	Moult / winter
80918	24-Oct-08	64.44	-172.25		2	L3	Cape Chaplin	Moult / winter
80918	28-Oct-08	64.42	-172.16		4	L2	Cape Chaplin	Moult / winter
80918	31-Oct-08	64.42	-172.22		1	L3	Cape Chaplin	Moult / winter
80918	3-Nov-08	64.36	-172.16		7	L3	Cape Chukotsk	Moult / winter
80918	6-Nov-08	64.40	-172.25		1	L2	Cape Chukotsk	Moult / winter
80918	9-Nov-08	64.39	-172.24		1	L2	Cape Chukotsk	Moult / winter
80918	12-Nov-08	64.53	-172.09		15	L2	Cape Chaplin	Moult / winter
80918	16-Nov-08	64.55	-172.10		15	L2	Cape Chaplin	Moult / winter
80918	19-Nov-08	64.56	-172.05		18	L3	Cape Chaplin	Moult / winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80918	22-Nov-08	64.52	-172.13		12	LB	Cape Chaplin	Moult / winter
80918	25-Nov-08	64.33	-172.35		9	L3	Cape Chukotsk	Moult / winter
80918	28-Nov-08	64.25	-172.40		16	L1	Cape Chukotsk	Moult / winter
80918	1-Dec-08	64.32	-172.33		9	L2	Cape Chukotsk	Moult / winter
80918	5-Dec-08	64.41	-172.27	0		L1	Cape Chukotsk	Moult / winter
80918	8-Dec-08	64.44	-172.08		8	L3	Cape Chaplin	Moult / winter
80918	11-Dec-08	64.33	-172.47		6	L2	Cape Chukotsk	Moult / winter
80918	14-Dec-08	64.87	-171.86		15	L3	Cape Chaplin	Moult / winter
80918	17-Dec-08	64.60	-172.30		7	L3	Cape Chaplin	Moult / winter
80918	20-Dec-08	64.38	-172.52		0	L3	Cape Chukotsk	Moult / winter
80918	29-Dec-08	64.38	-172.51		0	L2	Cape Chukotsk	Moult / winter
80918	6-Jan-09	64.40	-172.29		0	L3	Cape Chukotsk	Moult / winter
80918	14-Jan-09	64.40	-172.24		0	LB	Cape Chukotsk	Moult / winter
80920	**Female**							
80920	15-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80920	16-Jun-08	72.39	-125.18	7		L3	Siksik Lake	Nesting
80920	19-Jun-08	72.39	-125.21	5		L3	Siksik Lake	Nesting
80920	22-Jun-08	72.39	-125.21	6		L3	Siksik Lake	Nesting
80920	25-Jun-08	72.41	-125.23	4		L3	Siksik Lake	Nesting
80920	28-Jun-08	72.42	-125.18	5		L3	Siksik Lake	Nesting
80920	1-Jul-08	72.43	-125.18	4		L3	Siksik Lake	Nesting
80920	4-Jul-08	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	7-Jul-08	72.39	-125.16	8		L3	Siksik Lake	Nesting
80920	11-Jul-08	72.39	-125.21	6		L3	Siksik Lake	Nesting
80920	14-Jul-08	72.39	-125.29	4		L3	Siksik Lake	Nesting
80920	17-Jul-08	72.40	-125.23	4		L3	Siksik Lake	Nesting
80920	20-Jul-08	72.40	-125.24	4		L3	Siksik Lake	Nesting
80920	23-Jul-08	72.40	-125.23	4		L3	Siksik Lake	Nesting
80920	26-Jul-08	72.40	-125.24	4		L3	Siksik Lake	Nesting
80920	29-Jul-08	72.67	-125.14		1	L3	Meek Point	Moult migration
80920	2-Aug-08	74.02	-124.70		9	L3	Burnett Bay	Moult migration
80920	5-Aug-08	74.34	-124.84		1	L3	Cape Prince Alfred	Moult migration
80920	8-Aug-08	74.46	-122.65	0		L3	Cape Prince Alfred	Moult migration
80920	11-Aug-08	74.43	-123.50	0		L3	Cape Prince Alfred	Moult migration
80920	14-Aug-08	72.02	-144.81		231	L1	Camden Bay	Moult migration
80920	17-Aug-08	65.17	-172.09		4	L2	Cape Nygligan	Moult migration
80920	20-Aug-08	65.16	-172.07		5	L3	Cape Nygligan	Moult migration
80920	24-Aug-08	58.54	-158.09		8	L2	Kvichak Bay	Moult
80920	27-Aug-08	58.72	-157.55		4	L3	Kvichak Bay	Moult
80920	30-Aug-08	58.71	-157.57		5	L3	Kvichak Bay	Moult
80920	2-Sep-08	58.71	-157.59		4	L3	Kvichak Bay	Moult
80920	5-Sep-08	58.71	-157.58		4	L3	Kvichak Bay	Moult
80920	8-Sep-08	58.61	-157.76		9	L3	Kvichak Bay	Moult
80920	11-Sep-08	58.61	-157.75		9	L3	Kvichak Bay	Moult
80920	15-Sep-08	58.62	-157.72		10	L3	Kvichak Bay	Moult
80920	18-Sep-08	58.64	-157.72		8	L3	Kvichak Bay	Moult
80920	21-Sep-08	58.62	-157.67		11	L3	Kvichak Bay	Moult
80920	24-Sep-08	58.67	-157.68		7	L3	Kvichak Bay	Moult
80920	27-Sep-08	58.61	-157.76		9	L3	Kvichak Bay	Moult
80920	30-Sep-08	58.69	-157.61		6	L3	Kvichak Bay	Moult
80920	4-Oct-08	58.68	-157.63		6	L3	Kvichak Bay	Moult
80920	7-Oct-08	58.68	-157.63		7	L3	Kvichak Bay	Moult
80920	10-Oct-08	58.62	-157.77		8	L3	Kvichak Bay	Moult
80920	13-Oct-08	58.58	-157.83		10	L3	Kvichak Bay	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80920	16-Oct-08	58.65	-157.70		8	L3	Kvichak Bay	Moult
80920	19-Oct-08	58.57	-157.85		11	L3	Kvichak Bay	Moult
80920	23-Oct-08	58.55	-157.88		12	L2	Kvichak Bay	Moult
80920	26-Oct-08	58.61	-157.76		9	L3	Kvichak Bay	Moult
80920	29-Oct-08	58.48	-158.05		16	L3	Nushagak Bay	Moult
80920	1-Nov-08	58.35	-159.06		7	L3	Togiak Bay	Fall migration
80920	4-Nov-08	58.40	-160.24		21	L3	Hagemeister Is.	Fall migration
80920	8-Nov-08	58.40	-160.12		23	L3	Hagemeister Is.	Fall migration
80920	11-Nov-08	58.49	-160.32		11	L3	Hagemeister Is.	Fall migration
80920	14-Nov-08	58.46	-160.29		14	L3	Hagemeister Is.	Fall migration
80920	17-Nov-08	58.42	-160.48		21	L3	Hagemeister Is.	Fall migration
80920	21-Nov-08	58.43	-160.25		18	L2	Hagemeister Is.	Fall migration
80920	24-Nov-08	58.43	-160.21		19	L3	Hagemeister Is.	Fall migration
80920	27-Nov-08	58.40	-160.57		25	L3	Hagemeister Is.	Fall migration
80920	30-Nov-08	56.43	-160.55		19	L3	Port Heiden	Winter
80920	3-Dec-08	56.43	-160.23		6	L3	Port Heiden	Winter
80920	7-Dec-08	56.43	-160.23		6	L3	Port Heiden	Winter
80920	10-Dec-08	56.40	-160.27		5	L3	Port Heiden	Winter
80920	13-Dec-08	56.41	-160.49		16	L3	Port Heiden	Winter
80920	16-Dec-08	56.50	-160.49		23	L3	Port Heiden	Winter
80920	19-Dec-08	56.41	-160.26		5	L3	Port Heiden	Winter
80920	23-Dec-08	56.44	-160.21		6	L3	Port Heiden	Winter
80920	31-Dec-08	56.43	-160.47		16	L3	Port Heiden	Winter
80920	8-Jan-09	55.11	-163.96		9	L2	Unimak Island	Winter
80920	17-Jan-09	56.47	-160.26		10	L2	Port Heiden	Winter
80920	25-Jan-09	56.43	-160.40		14	L3	Port Heiden	Winter
80920	2-Feb-09	56.42	-160.26		6	L3	Port Heiden	Winter
80920	11-Feb-09	55.11	-163.59		7	L3	Unimak Island	Winter
80920	19-Feb-09	55.11	-163.60		7	L3	Unimak Island	Winter
80920	28-Feb-09	55.13	-163.95		11	L2	Unimak Island	Winter
80920	8-Mar-09	55.18	-163.95		15	L3	Unimak Island	Winter
80920	16-Mar-09	56.71	-159.49		5	L2	Port Heiden	Winter
80920	25-Mar-09	56.39	-160.28		6	L3	Port Heiden	Winter
80920	2-Apr-09	56.46	-160.11		5	L3	Port Heiden	Winter
80920	10-Apr-09	58.44	-160.50		19	L3	Hagemeister Is.	Spring migration
80920	12-Apr-09	58.43	-160.52		21	L3	Hagemeister Is.	Spring migration
80920	13-Apr-09	58.41	-160.52		23	L3	Hagemeister Is.	Spring migration
80920	14-Apr-09	59.10	-162.10		9	L3	Chagvan Bay	Spring migration
80920	15-Apr-09	59.09	-162.03		6	L3	Chagvan Bay	Spring migration
80920	16-Apr-09	59.10	-162.08		7	L3	Chagvan Bay	Spring migration
80920	18-Apr-09	59.11	-162.07		7	L3	Chagvan Bay	Spring migration
80920	19-Apr-09	59.10	-162.09		8	L3	Chagvan Bay	Spring migration
80920	20-Apr-09	59.07	-162.07		8	L3	Chagvan Bay	Spring migration
80920	21-Apr-09	59.14	-162.07		5	L3	Chagvan Bay	Spring migration
80920	22-Apr-09	59.20	-162.16		8	L3	Chagvan Bay	Spring migration
80920	23-Apr-09	59.10	-162.09		8	L3	Chagvan Bay	Spring migration
80920	25-Apr-09	59.11	-162.08		7	L3	Chagvan Bay	Spring migration
80920	26-Apr-09	59.14	-162.11		7	L2	Chagvan Bay	Spring migration
80920	27-Apr-09	59.10	-162.08		8	L3	Chagvan Bay	Spring migration
80920	28-Apr-09	59.12	-162.15		10	L3	Chagvan Bay	Spring migration
80920	29-Apr-09	59.23	-162.18		8	L3	Chagvan Bay	Spring migration
80920	1-May-09	59.10	-162.09		8	L3	Chagvan Bay	Spring migration
80920	2-May-09	59.11	-162.12		9	L3	Chagvan Bay	Spring migration
80920	3-May-09	59.10	-162.09		8	L3	Chagvan Bay	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80920	4-May-09	59.13	-162.09		7	L3	Chagvan Bay	Spring migration
80920	5-May-09	59.19	-162.11		5	L3	Chagvan Bay	Spring migration
80920	6-May-09	59.09	-162.08		8	L3	Chagvan Bay	Spring migration
80920	8-May-09	59.09	-162.11		9	L3	Chagvan Bay	Spring migration
80920	9-May-09	59.28	-162.68		35	L3	Chagvan Bay	Spring migration
80920	10-May-09	61.15	-165.84		12	L3	Etolin Strait	Spring migration
80920	11-May-09	64.67	-167.29		41	L3	Point Spencer	Spring migration
80920	12-May-09	69.57	-163.98		36	L3	Ledyard Bay	Spring migration
80920	13-May-09	69.56	-164.01		37	L3	Ledyard Bay	Spring migration
80920	15-May-09	70.20	-143.23		6	L3	Martin Point	Spring migration
80920	16-May-09	70.22	-133.60		62	L3	Mackenzie Delta	Spring migration
80920	17-May-09	70.41	-132.06		60	L3	Cape Dalhousie	Spring migration
80920	18-May-09	69.77	-138.99		17	L3	Herschel Island	Spring migration
80920	19-May-09	69.73	-139.79		15	L3	Komakuk	Spring migration
80920	21-May-09	69.80	-140.08		23	L3	Komakuk	Spring migration
80920	22-May-09	69.82	-140.39		27	L3	Demarcation Pt.	Spring migration
80920	23-May-09	69.89	-140.74		31	L3	Demarcation Pt.	Spring migration
80920	24-May-09	70.02	-140.52		50	L3	Demarcation Pt.	Spring migration
80920	25-May-09	70.55	-133.12		102	L3	Cape Dalhousie	Spring migration
80920	27-May-09	70.58	-132.82		97	L3	Cape Dalhousie	Spring migration
80920	28-May-09	70.55	-132.79		94	L2	Cape Dalhousie	Spring migration
80920	29-May-09	70.52	-132.79		90	L3	Cape Dalhousie	Spring migration
80920	30-May-09	70.53	-132.89		94	L3	Cape Dalhousie	Spring migration
80920	1-Jun-09	70.50	-132.80		89	L3	Cape Dalhousie	Spring migration
80920	2-Jun-09	70.50	-130.96		44	L3	Cape Dalhousie	Spring migration
80920	3-Jun-09	70.74	-130.14		61	L3	Cape Dalhousie	Spring migration
80920	4-Jun-09	70.82	-130.30		72	L3	Cape Dalhousie	Spring migration
80920	5-Jun-09	70.82	-129.96		68	L3	Cape Dalhousie	Spring migration
80920	7-Jun-09	70.83	-129.99		70	L3	Cape Bathurst	Spring migration
80920	8-Jun-09	70.83	-129.88		70	L3	Cape Bathurst	Spring migration
80920	9-Jun-09	70.86	-129.32		51	L3	Cape Bathurst	Spring migration
80920	10-Jun-09	71.65	-124.71		18	L3	Cape Kellet	Spring migration
80920	11-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	13-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	14-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	15-Jun-09	72.39	-125.19	6		L3	Siksik Lake	Nesting
80920	16-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	17-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	19-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	20-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	21-Jun-09	72.39	-125.23	5		L3	Siksik Lake	Nesting
80920	22-Jun-09	72.39	-125.19	6		L3	Siksik Lake	Nesting
80920	23-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	25-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	26-Jun-09	72.39	-125.19	6		L3	Siksik Lake	Nesting
80920	27-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	28-Jun-09	72.39	-125.22	6		L3	Siksik Lake	Nesting
80920	30-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	1-Jul-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	4-Jul-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80920	8-Jul-09	72.41	-125.24	4		L3	Siksik Lake	Nesting
80920	11-Jul-09	72.38	-125.20	7		L3	Siksik Lake	Nesting
80920	15-Jul-09	72.41	-125.22	4		L3	Siksik Lake	Nesting
80920	18-Jul-09	72.42	-125.26	2		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80920	22-Jul-09	72.40	-125.23	4		L3	Siksik Lake	Nesting
80920	26-Jul-09	72.41	-125.22	4		L3	Siksik Lake	Nesting
80920	29-Jul-09	72.41	-125.21	5		L3	Siksik Lake	Nesting
80920	2-Aug-09	73.84	-124.30		7	L3	Burnett Bay	Moult migration
80920	5-Aug-09	74.18	-124.79		5	L3	Cape Prince Alfred	Moult migration
80920	9-Aug-09	74.18	-124.76		5	L2	Cape Prince Alfred	Moult migration
80920	13-Aug-09	70.78	-150.34		28	L2	Harrison Bay	Moult migration
80920	17-Aug-09	70.68	-149.90		14	L3	Jones Island	Moult migration
80920	20-Aug-09	70.48	-161.46		23	L3	Icy Cape	Moult migration
80920	24-Aug-09	65.15	-171.96		8	L2	Cape Nygligan	Moult migration
80920	28-Aug-09	65.17	-172.10		4	L2	Cape Nygligan	Moult migration
80920	1-Sep-09	64.42	-170.77		73	L2	St. Lawrence Is.	Moult migration
80920	4-Sep-09	58.63	-157.73		9	L3	Kvichak Bay	Moult
80920	8-Sep-09	58.66	-157.80		3	L1	Kvichak Bay	Moult
80920	16-Sep-09	58.65	-157.76		6	L3	Kvichak Bay	Moult
80920	20-Sep-09	58.67	-157.66		7	LA	Kvichak Bay	Moult
80920	23-Sep-09	58.63	-157.75		7	L2	Kvichak Bay	Moult
80920	27-Sep-09	58.65	-157.68		8	L1	Kvichak Bay	Moult
80920	1-Oct-09	58.59	-157.78		11	L1	Kvichak Bay	Moult
80920	17-Oct-09	58.58	-157.79		11	L0	Kvichak Bay	Moult
80920	29-Oct-09	58.54	-157.81		15	L0	Kvichak Bay	Moult
80920	10-Nov-09	58.43	-158.22		21	LB	Nushagak Bay	Moult
80921	**Male**							
80921	15-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80921	16-Jun-08	72.39	-125.18	6		L3	Siksik Lake	Nesting
80921	19-Jun-08	72.41	-125.16	6		L3	Siksik Lake	Nesting
80921	22-Jun-08	72.41	-125.17	6		L3	Siksik Lake	Nesting
80921	25-Jun-08	72.41	-125.20	5		L3	Siksik Lake	Nesting
80921	28-Jun-08	70.73	-129.14		37	L3	Cape Bathurst	Moult migration
80921	1-Jul-08	70.82	-129.65		61	L3	Cape Bathurst	Moult migration
80921	4-Jul-08	70.84	-129.58		59	L3	Cape Bathurst	Moult migration
80921	7-Jul-08	70.66	-129.79		48	L2	Cape Bathurst	Moult migration
80921	10-Jul-08	70.61	-129.88		43	L2	Cape Dalhousie	Moult migration
80921	13-Jul-08	70.63	-129.95		45	L2	Cape Dalhousie	Moult migration
80921	16-Jul-08	70.68	-129.72		50	L2	Cape Bathurst	Moult migration
80921	19-Jul-08	70.61	-130.31		48	L2	Cape Dalhousie	Moult migration
80921	22-Jul-08	70.64	-129.83		46	L2	Cape Dalhousie	Moult migration
80921	25-Jul-08	70.78	-129.66		59	L2	Cape Dalhousie	Moult migration
80921	28-Jul-08	68.50	-169.22		108	L2	Chukchi Sea	Moult migration
80921	31-Jul-08	65.32	-172.17		2	L2	Cape Nygligan	Moult migration
80921	3-Aug-08	64.78	-172.04		2	L2	Cape Chaplin	Moult migration
80921	6-Aug-08	64.73	-171.97		5	L2	Cape Chaplin	Moult migration
80921	9-Aug-08	63.25	-170.50		8	L3	St. Lawrence Is.	Moult
80921	12-Aug-08	63.26	-170.43		5	L3	St. Lawrence Is.	Moult
80921	16-Aug-08	63.29	-170.55		6	L3	St. Lawrence Is.	Moult
80921	19-Aug-08	63.28	-170.45		4	L2	St. Lawrence Is.	Moult
80921	22-Aug-08	63.26	-170.46		5	L3	St. Lawrence Is.	Moult
80921	25-Aug-08	63.25	-170.47		7	L2	St. Lawrence Is.	Moult
80921	28-Aug-08	63.26	-170.44		4	L3	St. Lawrence Is.	Moult
80921	31-Aug-08	63.27	-170.44		5	LB	St. Lawrence Is.	Moult
80921	3-Sep-08	63.21	-170.42		6	L1	St. Lawrence Is.	Moult
80921	6-Sep-08	63.25	-170.45		6	L1	St. Lawrence Is.	Moult
80921	9-Sep-08	63.20	-170.46		9	LA	St. Lawrence Is.	Moult
80921	12-Sep-08	63.19	-170.48		9	L3	St. Lawrence Is.	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80921	15-Sep-08	63.28	-170.39		1	L3	St. Lawrence Is.	Moult
80921	18-Sep-08	63.24	-170.41		5	L3	St. Lawrence Is.	Moult
80921	21-Sep-08	63.26	-170.48		6	L3	St. Lawrence Is.	Moult
80921	24-Sep-08	63.27	-170.53		8	L3	St. Lawrence Is.	Moult
80921	28-Sep-08	63.30	-170.77		10	L2	St. Lawrence Is.	Moult
80921	1-Oct-08	63.26	-170.96		18	L1	St. Lawrence Is.	Moult
80921	4-Oct-08	63.18	-170.89		25	L3	St. Lawrence Is.	Moult
80921	7-Oct-08	63.25	-170.91		18	L3	St. Lawrence Is.	Moult
80921	10-Oct-08	63.21	-170.80		20	L1	St. Lawrence Is.	Moult
80921	13-Oct-08	63.36	-171.01		8	L2	St. Lawrence Is.	Moult
80921	16-Oct-08	63.25	-170.71		15	L3	St. Lawrence Is.	Moult
80921	19-Oct-08	63.24	-170.81		17	L3	St. Lawrence Is.	Moult
80921	22-Oct-08	63.25	-170.78		16	L3	St. Lawrence Is.	Moult
80921	26-Oct-08	63.23	-170.69		16	L2	St. Lawrence Is.	Moult
80921	29-Oct-08	63.24	-170.94		20	L3	St. Lawrence Is.	Moult
80921	1-Nov-08	63.26	-170.81		15	L2	St. Lawrence Is.	Moult
80921	4-Nov-08	63.21	-170.71		18	L3	St. Lawrence Is.	Moult
80921	7-Nov-08	63.22	-170.70		18	L1	St. Lawrence Is.	Moult
80921	10-Nov-08	63.11	-170.68		22	L3	St. Lawrence Is.	Moult
80921	13-Nov-08	63.26	-170.91		18	L3	St. Lawrence Is.	Moult
80921	16-Nov-08	63.20	-170.99		23	L2	St. Lawrence Is.	Moult
80921	19-Nov-08	63.27	-170.90		16	L3	St. Lawrence Is.	Moult
80921	22-Nov-08	63.13	-170.62		18	L1	St. Lawrence Is.	Moult
80921	26-Nov-08	62.79	-169.53		18	LA	St. Lawrence Is.	Fall migration
80921	29-Nov-08	55.05	-164.16		9	L1	Unimak Island	Winter
80921	2-Dec-08	55.05	-164.29		12	L1	Unimak Island	Winter
80921	8-Dec-08	55.01	-164.19		5	LB	Unimak Island	Winter
80921	11-Dec-08	55.11	-164.10		15	L1	Unimak Island	Winter
80921	17-Dec-08	55.06	-164.13		9	L1	Unimak Island	Winter
80921	25-Dec-08	55.11	-164.03		11	L0	Unimak Island	Winter
80921	2-Jan-09	55.04	-164.21		9	L2	Unimak Island	Winter
80921	11-Jan-09	55.03	-164.27		10	L3	Unimak Island	Winter
80921	19-Jan-09	55.02	-164.37		11	L3	Unimak Island	Winter
80921	27-Jan-09	55.05	-164.31		13	L3	Unimak Island	Winter
80921	4-Feb-09	55.08	-164.09		12	LB	Unimak Island	Winter
80921	12-Feb-09	55.06	-164.24		12	LA	Unimak Island	Winter
80921	20-Feb-09	55.35	-163.85		33	L1	Unimak Island	Winter
80921	28-Feb-09	55.10	-163.95		7	L0	Unimak Island	Winter
80921	08-Mar-09	55.13	-164.00		12	L3	Unimak Island	Winter
80921	16-Mar-09	56.42	-160.22		5	L2	Port Heiden	Spring migration
80921	24-Mar-09	56.40	-160.24		4	L2	Port Heiden	Spring migration
80921	1-Apr-09	56.44	-160.23		7	L3	Port Heiden	Spring migration
80921	3-Apr-09	56.42	-160.23		5	L3	Port Heiden	Spring migration
80921	5-Apr-09	56.41	-160.35		10	L3	Port Heiden	Spring migration
80921	7-Apr-09	56.44	-160.24		7	L3	Port Heiden	Spring migration
80921	11-Apr-09	58.74	-157.25		8	L3	Kvichak Bay	Spring migration
80921	14-Apr-09	58.68	-157.23		4	L1	Kvichak Bay	Spring migration
80921	15-Apr-09	58.59	-158.01		5	L3	Kvichak Bay	Spring migration
80921	16-Apr-09	58.54	-158.28		9	L2	Nushagak Bay	Spring migration
80921	17-Apr-09	58.55	-158.10		8	L1	Kvichak Bay	Spring migration
80921	19-Apr-09	58.52	-158.18		10	L3	Nushagak Bay	Spring migration
80921	21-Apr-09	58.52	-158.17		10	L3	Nushagak Bay	Spring migration
80921	24-Apr-09	58.51	-158.28		12	L3	Nushagak Bay	Spring migration
80921	25-Apr-09	58.52	-158.25		11	L3	Nushagak Bay	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80921	30-Apr-09	58.48	-158.27		15	L2	Nushagak Bay	Spring migration
80921	1-May-09	58.54	-158.34		11	L2	Nushagak Bay	Spring migration
80921	2-May-09	58.55	-158.19		7	L2	Nushagak Bay	Spring migration
80921	5-May-09	58.90	-162.81		46	L3	Chagvan Bay	Spring migration
80921	6-May-09	59.68	-164.13		9	L3	Etolin Strait	Spring migration
80921	7-May-09	62.53	-166.28		51	L3	Etolin Strait	Spring migration
80921	9-May-09	69.10	-165.84		28	L3	Ledyard Bay	Spring migration
80921	10-May-09	69.15	-165.24		34	L3	Ledyard Bay	Spring migration
80921	12-May-09	70.55	-161.07		24	L3	Wainwright	Spring migration
80921	13-May-09	70.55	-161.06		23	L3	Wainwright	Spring migration
80921	14-May-09	70.55	-161.05		23	L2	Wainwright	Spring migration
80921	15-May-09	70.35	-141.56		61	L1	Demarcation Pt.	Spring migration
80921	16-May-09	70.49	-131.49		50	L3	Cape Dalhousie	Spring / moult mig
80921	17-May-09	70.72	-129.78		55	L3	Cape Dalhousie	Spring / moult mig
80921	19-May-09	70.74	-129.94		59	L3	Cape Dalhousie	Spring / moult mig
80921	20-May-09	70.72	-129.60		55	L2	Cape Bathurst	Spring / moult mig
80921	21-May-09	70.70	-129.21		39	L2	Cape Bathurst	Spring / moult mig
80921	22-May-09	70.75	-128.93		30	L3	Cape Bathurst	Spring / moult mig
80921	23-May-09	70.75	-129.14		39	L3	Cape Bathurst	Spring / moult mig
80921	24-May-09	70.79	-129.15		41	L3	Cape Bathurst	Spring / moult mig
80921	26-May-09	70.85	-129.10		43	L3	Cape Bathurst	Spring / moult mig
80921	27-May-09	70.94	-129.23		54	L3	Cape Bathurst	Spring / moult mig
80921	28-May-09	70.86	-129.25		49	L3	Cape Bathurst	Spring / moult mig
80921	29-May-09	70.94	-129.18		53	L3	Cape Bathurst	Spring / moult mig
80921	30-May-09	71.05	-129.59		75	L3	Cape Bathurst	Spring / moult mig
80921	1-Jun-09	71.01	-129.30		63	L3	Cape Bathurst	Spring / moult mig
80921	2-Jun-09	71.02	-129.46		68	L3	Cape Bathurst	Spring / moult mig
80921	3-Jun-09	70.96	-129.29		58	L1	Cape Bathurst	Spring / moult mig
80921	4-Jun-09	71.04	-129.73		78	L3	Cape Bathurst	Spring / moult mig
80921	5-Jun-09	71.19	-129.73		91	L3	Cape Bathurst	Spring / moult mig
80921	6-Jun-09	71.00	-130.39		94	L3	Cape Dalhousie	Spring / moult mig
80921	8-Jun-09	70.84	-130.53		78	L2	Cape Dalhousie	Spring / moult mig
80921	9-Jun-09	70.81	-130.46		73	L2	Cape Dalhousie	Spring / moult mig
80921	10-Jun-09	70.78	-130.57		71	L2	Cape Dalhousie	Spring / moult mig
80921	11-Jun-09	70.72	-130.89		71	L3	Cape Dalhousie	Spring / moult mig
80921	13-Jun-09	70.73	-130.71		70	L3	Cape Dalhousie	Spring / moult mig
80921	14-Jun-09	70.78	-130.62		73	L3	Cape Dalhousie	Spring / moult mig
80921	15-Jun-09	70.79	-130.61		73	L3	Cape Dalhousie	Spring / moult mig
80921	16-Jun-09	70.79	-130.70		75	L1	Cape Dalhousie	Spring / moult mig
80921	17-Jun-09	70.66	-130.80		64	L2	Cape Dalhousie	Spring / moult mig
80921	19-Jun-09	70.71	-130.80		69	L1	Cape Dalhousie	Spring / moult mig
80921	20-Jun-09	70.87	-129.59		62	LB	Cape Bathurst	Spring / moult mig
80921	27-Jun-09	70.90	-129.91		75	L2	Cape Bathurst	Spring / moult mig
80921	4-Jul-09	70.81	-129.66		61	L3	Cape Bathurst	Spring / moult mig
80921	8-Jul-09	70.76	-130.00		62	L1	Cape Dalhousie	Spring / moult mig
80921	11-Jul-09	70.86	-129.77		68	L3	Cape Bathurst	Spring / moult mig
80921	15-Jul-09	70.82	-130.23		71	L1	Cape Dalhousie	Spring / moult mig
80921	18-Jul-09	70.70	-130.52		61	LA	Cape Dalhousie	Spring / moult mig
80921	2-Aug-09	64.74	-172.05		3	LA	Cape Chaplin	Moult migration
80922	**Male**							
80922	15-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80922	16-Jun-08	72.39	-125.19	6		L3	Siksik Lake	Nesting
80922	19-Jun-08	72.39	-125.17	7		L3	Siksik Lake	Nesting
80922	22-Jun-08	72.42	-125.17	6		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80922	25-Jun-08	72.42	-125.16	5		L3	Siksik Lake	Nesting
80922	28-Jun-08	72.42	-125.16	6		L3	Siksik Lake	Nesting
80922	1-Jul-08	72.63	-125.68		20	L3	Meek Point	Moult migration
80922	4-Jul-08	72.93	-125.32		11	L3	Meek Point	Moult migration
80922	7-Jul-08	72.84	-125.59		14	L3	Meek Point	Moult migration
80922	11-Jul-08	72.79	-125.47		11	L2	Meek Point	Moult migration
80922	14-Jul-08	72.84	-125.21	0		L3	Meek Point	Moult migration
80922	17-Jul-08	72.84	-125.20		0	L3	Meek Point	Moult migration
80922	20-Jul-08	72.82	-125.33		5	L3	Meek Point	Moult migration
80922	23-Jul-08	72.99	-125.13		13	L3	Meek Point	Moult migration
80922	26-Jul-08	72.72	-126.35		46	L3	Siksik Lake	Moult migration
80922	29-Jul-08	69.49	-163.97		35	L2	Ledyard Bay	Moult migration
80922	1-Aug-08	68.99	-165.96		15	L3	Ledyard Bay	Moult migration
80922	4-Aug-08	65.33	-176.54		22	L3	Anadyr Bay	Moult
80922	7-Aug-08	65.34	-176.55		20	L3	Anadyr Bay	Moult
80922	11-Aug-08	65.35	-176.57		20	L3	Anadyr Bay	Moult
80922	14-Aug-08	65.33	-176.45		19	L3	Anadyr Bay	Moult
80922	17-Aug-08	65.31	-176.49		22	L3	Anadyr Bay	Moult
80922	20-Aug-08	65.33	-176.60		22	L3	Anadyr Bay	Moult
80922	23-Aug-08	65.35	-176.52		19	L3	Anadyr Bay	Moult
80922	26-Aug-08	65.34	-176.51		20	L3	Anadyr Bay	Moult
80922	29-Aug-08	65.40	-176.53		14	L3	Anadyr Bay	Moult
80922	1-Sep-08	65.31	-176.56		24	L3	Anadyr Bay	Moult
80922	4-Sep-08	65.37	-176.52		17	L2	Anadyr Bay	Moult
80922	7-Sep-08	65.36	-176.53		17	L3	Anadyr Bay	Moult
80922	10-Sep-08	65.35	-176.55		19	L2	Anadyr Bay	Moult
80922	14-Sep-08	65.34	-176.57		20	L3	Anadyr Bay	Moult
80922	17-Sep-08	65.34	-176.43		18	L3	Anadyr Bay	Moult
80922	20-Sep-08	65.29	-176.43		23	L3	Anadyr Bay	Moult
80922	23-Sep-08	65.30	-176.49		23	L3	Anadyr Bay	Moult
80922	26-Sep-08	65.28	-176.54		26	L3	Anadyr Bay	Moult
80922	29-Sep-08	65.27	-176.13		11	L2	Anadyr Bay	Moult
80922	2-Oct-08	65.23	-176.05		9	L3	Anadyr Bay	Moult
80922	6-Oct-08	65.19	-176.01		10	L2	Anadyr Bay	Moult
80922	9-Oct-08	65.21	-176.05		10	L3	Anadyr Bay	Moult
80922	12-Oct-08	65.22	-176.06		10	L3	Anadyr Bay	Moult
80922	15-Oct-08	62.48	177.40		7	L2	Meynypil'gyno	Fall migration
80922	18-Oct-08	62.46	177.23		9	L3	Meynypil'gyno	Fall migration
80922	21-Oct-08	60.30	169.63		7	L2	Cape Olyutor	Fall migration
80922	25-Oct-08	59.31	164.46		11	L2	Karagin Bay	Winter
80922	28-Oct-08	59.33	164.46		12	L1	Karagin Bay	Winter
80922	31-Oct-08	59.22	164.40		5	L3	Karagin Bay	Winter
80922	3-Nov-08	59.30	164.42		11	L2	Karagin Bay	Winter
80922	6-Nov-08	59.29	164.27		15	L1	Karagin Bay	Winter
80922	9-Nov-08	59.33	164.46		13	L3	Karagin Bay	Winter
80922	12-Nov-08	59.32	164.52		10	L2	Karagin Bay	Winter
80922	16-Nov-08	59.30	164.41		11	L3	Karagin Bay	Winter
80922	19-Nov-08	59.31	164.38		13	L3	Karagin Bay	Winter
80922	22-Nov-08	59.16	164.21		7	L2	Karagin Bay	Winter
80922	28-Nov-08	59.26	164.34		11	L3	Karagin Bay	Winter
80922	2-Dec-08	59.30	164.48		9	L2	Karagin Bay	Winter
80922	5-Dec-08	59.31	164.47		10	L3	Karagin Bay	Winter
80922	8-Dec-08	59.21	164.33		6	L2	Karagin Bay	Winter
80922	11-Dec-08	59.18	164.29		6	L0	Karagin Bay	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80922	14-Dec-08	59.21	164.35		6	L3	Karagin Bay	Winter
80922	17-Dec-08	59.28	164.43		10	L3	Karagin Bay	Winter
80922	21-Dec-08	59.20	164.35		4	L3	Karagin Bay	Winter
80922	29-Dec-08	59.19	164.31		5	L2	Karagin Bay	Winter
80922	6-Jan-09	59.18	164.29		6	L2	Karagin Bay	Winter
80922	14-Jan-09	60.24	169.80		2	L3	Cape Olyutor	Winter
80922	23-Jan-09	60.37	169.54		9	L2	Cape Olyutor	Winter
80922	31-Jan-09	60.44	169.47		4	L1	Cape Olyutor	Winter
80922	8-Feb-09	60.46	169.44		3	L2	Cape Olyutor	Winter
80922	16-Feb-09	60.31	169.69		3	L3	Cape Olyutor	Winter
80922	24-Feb-09	61.66	173.68		5	L3	Anastasii Bay	Spring migration
80922	4-Mar-09	61.96	175.09		2	L3	Khatyrka	Spring migration
80922	12-Mar-09	61.91	175.04		6	L2	Khatyrka	Spring migration
80922	21-Mar-09	61.84	174.83		5	L2	Khatyrka	Spring migration
80922	29-Mar-09	61.96	175.01		1	L3	Khatyrka	Spring migration
80922	6-Apr-09	61.90	175.01		7	L2	Khatyrka	Spring migration
80922	7-Apr-09	61.85	175.13		15	L3	Khatyrka	Spring migration
80922	8-Apr-09	61.97	175.04		0	L3	Khatyrka	Spring migration
80922	9-Apr-09	62.17	175.86		5	L3	Khatyrka	Spring migration
80922	10-Apr-09	62.24	176.47		10	L3	Khatyrka	Spring migration
80922	12-Apr-09	62.22	176.20		6	L3	Khatyrka	Spring migration
80922	13-Apr-09	62.20	176.18		8	L2	Khatyrka	Spring migration
80922	14-Apr-09	62.24	176.47		11	L3	Khatyrka	Spring migration
80922	15-Apr-09	62.33	176.45		3	L3	Khatyrka	Spring migration
80922	16-Apr-09	62.32	176.76		14	L3	Khatyrka	Spring migration
80922	18-Apr-09	62.33	176.73		12	L2	Khatyrka	Spring migration
80922	19-Apr-09	62.30	176.68		14	L3	Khatyrka	Spring migration
80922	20-Apr-09	62.34	176.64		9	L3	Khatyrka	Spring migration
80922	22-Apr-09	62.15	175.84		7	L2	Khatyrka	Spring migration
80922	23-Apr-09	62.31	176.71		14	L2	Khatyrka	Spring migration
80922	26-Apr-09	62.34	176.65		9	L3	Khatyrka	Spring migration
80922	27-Apr-09	64.13	-174.01		30	L3	Cape Chukotsk	Spring migration
80922	28-Apr-09	68.67	-166.32		4	L3	Ledyard Bay	Spring migration
80922	30-Apr-09	70.98	-157.94		15	L3	Point Barrow	Spring migration
80922	1-May-09	70.95	-157.75		7	L2	Point Barrow	Spring migration
80922	4-May-09	70.89	-159.50		7	L3	Point Franklin	Spring migration
80922	5-May-09	70.61	-160.63		17	L3	Wainwright	Spring migration
80922	6-May-09	70.51	-161.91		23	L3	Icy Cape	Spring migration
80922	9-May-09	70.56	-161.02		24	L3	Wainwright	Spring migration
80922	12-May-09	70.38	-146.93		10	L3	Prudhoe Bay	Spring migration
80922	13-May-09	70.16	-145.21		16	L3	Martin Point	Spring migration
80922	14-May-09	69.94	-135.29		33	L1	Mackenzie Delta	Spring migration
80922	15-May-09	70.53	-131.91		65	L3	Cape Dalhousie	Spring migration
80922	16-May-09	70.31	-132.04		51	L3	Cape Dalhousie	Spring migration
80922	18-May-09	69.90	-136.13		42	L3	Mackenzie Delta	Spring migration
80922	19-May-09	69.72	-139.69		15	L3	Komakuk	Spring migration
80922	20-May-09	69.73	-139.80		15	L3	Komakuk	Spring migration
80922	21-May-09	69.85	-140.41		32	L2	Demarcation Pt.	Spring migration
80922	22-May-09	69.82	-140.33		28	L3	Demarcation Pt.	Spring migration
80922	24-May-09	69.82	-140.64		24	L3	Demarcation Pt.	Spring migration
80922	25-May-09	69.82	-140.58		26	L3	Demarcation Pt.	Spring migration
80922	26-May-09	69.84	-140.54		29	L3	Demarcation Pt.	Spring migration
80922	27-May-09	69.77	-139.92		19	L2	Komakuk	Spring migration
80922	28-May-09	70.34	-133.31		81	L3	Mackenzie Delta	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80922	30-May-09	70.34	-132.85		76	L3	Cape Dalhousie	Spring migration
80922	31-May-09	70.37	-132.77		76	L2	Cape Dalhousie	Spring migration
80922	1-Jun-09	70.35	-132.75		74	L2	Cape Dalhousie	Spring migration
80922	2-Jun-09	70.38	-132.83		79	L3	Cape Dalhousie	Spring migration
80922	3-Jun-09	70.42	-133.01		86	L3	Cape Dalhousie	Spring migration
80922	5-Jun-09	72.87	-126.32		42	L3	Meek Point	Spring migration
80922	6-Jun-09	73.64	-124.97		13	L3	Burnett Bay	Spring migration
80922	7-Jun-09	73.80	-124.79		11	L3	Burnett Bay	Spring migration
80922	8-Jun-09	73.79	-124.79		10	L3	Burnett Bay	Spring migration
80922	9-Jun-09	73.77	-124.80		7	L3	Burnett Bay	Spring migration
80922	11-Jun-09	73.76	-124.80		6	L2	Burnett Bay	Spring migration
80922	12-Jun-09	73.77	-124.81		8	L3	Burnett Bay	Spring migration
80922	13-Jun-09	73.78	-124.80		9	L2	Burnett Bay	Spring migration
80922	14-Jun-09	73.10	-121.51	109		L3	Central Banks Is	Spring migration
80922	15-Jun-09	72.68	-117.87	2		L3	Prince Albert Pen.	Nesting
80922	16-Jun-09	72.68	-117.85	3		L3	Prince Albert Pen.	Nesting
80922	18-Jun-09	72.68	-117.87	2		L3	Prince Albert Pen.	Nesting
80922	19-Jun-09	72.68	-117.85	2		L3	Prince Albert Pen.	Nesting
80922	20-Jun-09	72.68	-117.86	2		L3	Prince Albert Pen.	Nesting
80922	21-Jun-09	72.68	-117.87	2		L3	Prince Albert Pen.	Nesting
80922	23-Jun-09	72.68	-117.85	3		L3	Prince Albert Pen.	Nesting
80922	24-Jun-09	72.68	-117.85	3		L3	Prince Albert Pen.	Nesting
80922	25-Jun-09	72.68	-117.86	2		L3	Prince Albert Pen.	Nesting
80922	29-Jun-09	72.68	-117.86	2		L3	Prince Albert Pen.	Nesting
80922	3-Jul-09	72.76	-118.13		1	L3	P. of Wales Strait	Moult migration
80922	6-Jul-09	72.81	-118.28		4	L3	P. of Wales Strait	Moult migration
80922	10-Jul-09	72.82	-118.30		2	L3	P. of Wales Strait	Moult migration
80922	13-Jul-09	72.80	-118.28		5	L3	P. of Wales Strait	Moult migration
80922	17-Jul-09	72.84	-125.27		2	L2	Meek Point	Moult migration
80922	21-Jul-09	73.02	-124.70		0	L3	Meek Point	Moult migration
80922	24-Jul-09	72.96	-124.93		9	L3	Meek Point	Moult migration
80922	28-Jul-09	73.21	-125.02		11	L3	Meek Point	Moult migration
80922	1-Aug-09	71.03	-142.00		122	L3	Martin Point	Moult migration
80922	4-Aug-09	71.23	-154.27		28	L3	Smith Bay	Moult migration
80922	8-Aug-09	65.50	-170.88		5	L3	Cape Nunyagmo	Moult migration
80922	12-Aug-09	64.44	-172.26		1	L3	Cape Chaplin	Moult migration
80922	16-Aug-09	65.31	-176.34		18	L3	Anadyr Bay	Moult
80922	20-Aug-09	65.35	-176.48		17	L2	Anadyr Bay	Moult
80922	24-Aug-09	65.34	-176.51		19	L3	Anadyr Bay	Moult
80922	28-Aug-09	65.36	-176.53		18	L3	Anadyr Bay	Moult
80922	1-Sep-09	65.39	-176.58		15	L2	Anadyr Bay	Moult
80922	5-Sep-09	65.34	-176.43		17	L2	Anadyr Bay	Moult
80922	9-Sep-09	65.34	-176.56		21	L2	Anadyr Bay	Moult
80922	13-Sep-09	65.39	-176.57		15	L1	Anadyr Bay	Moult
80922	17-Sep-09	65.34	-176.61		21	L3	Anadyr Bay	Moult
80923	**Male**							
80923	16-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80923	17-Jun-08	72.39	-125.19	6		L3	Siksik Lake	Nesting
80923	19-Jun-08	72.42	-125.16	5		L1	Siksik Lake	Nesting
80923	23-Jun-08	72.43	-125.11	6		L3	Siksik Lake	Nesting
80923	25-Jun-08	72.43	-125.11	6		L3	Siksik Lake	Nesting
80923	28-Jun-08	72.43	-125.12	6		L3	Siksik Lake	Nesting
80923	2-Jul-08	72.41	-125.11	7		L3	Siksik Lake	Nesting
80923	5-Jul-08	72.43	-125.11	6		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80923	8-Jul-08	72.43	-125.11	7		L3	Siksik Lake	Nesting
80923	11-Jul-08	72.84	-125.20		0	L3	Meek Point	Moult migration
80923	14-Jul-08	72.68	-125.53		16	L3	Meek Point	Moult migration
80923	17-Jul-08	72.68	-125.07		0	L3	Meek Point	Moult migration
80923	20-Jul-08	72.68	-125.13		0	L3	Meek Point	Moult migration
80923	23-Jul-08	72.67	-125.23		4	L3	Meek Point	Moult migration
80923	26-Jul-08	72.70	-125.16		3	L3	Meek Point	Moult migration
80923	29-Jul-08	72.68	-125.11		0	L3	Meek Point	Moult migration
80923	1-Aug-08	72.71	-125.32		9	L2	Meek Point	Moult migration
80923	4-Aug-08	72.73	-125.48		16	L1	Meek Point	Moult migration
80923	13-Aug-08	69.92	-163.22		15	L2	Point Lay	Moult migration
80923	19-Aug-08	59.69	-162.59		30	L3	Etolin Strait	Moult
80923	22-Aug-08	59.87	-162.51		12	L3	Etolin Strait	Moult
80923	25-Aug-08	59.96	-162.46		5	L3	Etolin Strait	Moult
80923	28-Aug-08	59.84	-162.47		16	L3	Etolin Strait	Moult
80923	31-Aug-08	59.71	-162.58		28	L3	Etolin Strait	Moult
80923	3-Sep-08	59.70	-162.57		29	L2	Etolin Strait	Moult
80923	6-Sep-08	59.84	-162.57		15	L3	Etolin Strait	Moult
80923	9-Sep-08	59.88	-162.43		13	L3	Etolin Strait	Moult
80923	12-Sep-08	59.80	-162.53		20	L1	Etolin Strait	Moult
80923	15-Sep-08	59.82	-162.72		14	L2	Etolin Strait	Moult
80923	18-Sep-08	59.74	-162.50		26	L2	Etolin Strait	Moult
80923	21-Sep-08	59.80	-162.40		19	L3	Etolin Strait	Moult
80923	24-Sep-08	59.87	-162.43		13	L3	Etolin Strait	Moult
80923	27-Sep-08	59.77	-162.62		21	L3	Etolin Strait	Moult
80923	30-Sep-08	59.81	-162.54		19	L3	Etolin Strait	Moult
80923	3-Oct-08	59.76	-162.54		24	L3	Etolin Strait	Moult
80923	6-Oct-08	59.74	-162.52		27	L2	Etolin Strait	Moult
80923	9-Oct-08	59.81	-162.64		17	L2	Etolin Strait	Moult
80923	12-Oct-08	59.80	-162.49		20	L3	Etolin Strait	Moult
80923	15-Oct-08	59.76	-162.63		22	L3	Etolin Strait	Moult
80923	18-Oct-08	59.72	-162.54		28	L3	Etolin Strait	Moult
80923	22-Oct-08	59.69	-162.13		12	L3	Etolin Strait	Moult
80923	25-Oct-08	58.56	-160.39		5	L2	Hagemeister Is.	Fall migration
80923	28-Oct-08	58.42	-160.50		21	L3	Hagemeister Is.	Fall migration
80923	31-Oct-08	58.43	-160.54		22	L3	Hagemeister Is.	Fall migration
80923	3-Nov-08	58.43	-160.46		19	L3	Hagemeister Is.	Fall migration
80923	6-Nov-08	58.38	-160.62		26	L3	Hagemeister Is.	Fall migration
80923	9-Nov-08	58.40	-160.54		24	L2	Hagemeister Is.	Fall migration
80923	12-Nov-08	58.42	-160.34		19	L3	Hagemeister Is.	Fall migration
80923	15-Nov-08	58.43	-160.50		21	L3	Hagemeister Is.	Fall migration
80923	18-Nov-08	58.33	-160.63		31	L2	Hagemeister Is.	Fall migration
80923	21-Nov-08	58.32	-160.29		30	L3	Hagemeister Is.	Fall migration
80923	24-Nov-08	58.35	-160.37		27	L2	Hagemeister Is.	Fall migration
80923	27-Nov-08	58.48	-160.28		13	L3	Hagemeister Is.	Fall migration
80923	30-Nov-08	57.10	-158.76		10	L3	Port Heiden	Fall migration
80923	3-Dec-08	57.06	-159.00		20	L2	Port Heiden	Fall migration
80923	6-Dec-08	58.37	-160.54		28	L3	Hagemeister Is.	Fall migration
80923	10-Dec-08	58.41	-160.31		20	L3	Hagemeister Is.	Fall migration
80923	13-Dec-08	55.93	-155.34		13	L2	Kodiak Island	Winter
80923	16-Dec-08	55.88	-155.28		17	L2	Kodiak Island	Winter
80923	24-Dec-08	56.05	-155.33		20	L2	Kodiak Island	Winter
80923	1-Jan-09	55.93	-155.28		17	L2	Kodiak Island	Winter
80923	9-Jan-09	56.06	-155.50		16	L3	Kodiak Island	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80923	17-Jan-09	56.07	-155.30		24	L3	Kodiak Island	Winter
80923	25-Jan-09	56.13	-155.40		26	L3	Kodiak Island	Winter
80923	2-Feb-09	55.95	-155.28		17	L2	Kodiak Island	Winter
80923	10-Feb-09	56.08	-155.49		19	L2	Kodiak Island	Winter
80923	26-Feb-09	56.04	-155.40		17	L2	Kodiak Island	Winter
80923	6-Mar-09	56.03	-155.28		21	L1	Kodiak Island	Winter
80923	14-Mar-09	56.02	-155.40		15	L2	Kodiak Island	Winter
80923	22-Mar-09	56.10	-155.60		21	L3	Kodiak Island	Winter
80924	**Female**							
80924	16-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80924	17-Jun-08	72.39	-125.18	7		L3	Siksik Lake	Nesting
80924	20-Jun-08	72.39	-125.21	6		L3	Siksik Lake	Nesting
80924	23-Jun-08	72.41	-125.17	6		L3	Siksik Lake	Nesting
80924	26-Jun-08	72.41	-125.15	7		L3	Siksik Lake	Nesting
80924	29-Jun-08	72.41	-125.15	7		L3	Siksik Lake	Nesting
80924	2-Jul-08	72.41	-125.14	7		L3	Siksik Lake	Nesting
80924	5-Jul-08	72.41	-125.18	6		L3	Siksik Lake	Nesting
80924	8-Jul-08	72.36	-125.01	14		L3	Siksik Lake	Nesting
80924	11-Jul-08	72.42	-125.13	6		L3	Siksik Lake	Nesting
80924	14-Jul-08	72.40	-125.32	2		LA	Siksik Lake	Nesting
80924	18-Jul-08	72.41	-125.16	7		L3	Siksik Lake	Nesting
80924	21-Jul-08	72.40	-125.23	4		L1	Siksik Lake	Nesting
80924	24-Jul-08	72.41	-125.21	5		L2	Siksik Lake	Nesting
80924	27-Jul-08	72.42	-125.14	6		L2	Siksik Lake	Nesting
80924	30-Jul-08	72.39	-125.17	7		L2	Siksik Lake	Nesting
80924	2-Aug-08	72.42	-125.19	5		L3	Siksik Lake	Nesting
80924	5-Aug-08	73.69	-124.32		4	L2	Burnett Bay	Moult migration
80924	8-Aug-08	73.74	-124.28		10	L1	Burnett Bay	Moult migration
80924	11-Aug-08	73.71	-124.58		1	LB	Burnett Bay	Moult migration
80924	21-Aug-08	68.42	-167.46		29	L2	Chukchi Sea	Moult migration
80924	2-Sep-08	64.36	-172.58		2	LA	Cape Chukotsk	Moult / winter
80924	4-Nov-08	64.39	-172.19		3	LA	Cape Chukotsk	Moult / winter
80924	7-Nov-08	64.41	-171.84		19	L1	Cape Chaplin	Moult / winter
80924	14-Nov-08	64.29	-172.28		13	LB	Cape Chukotsk	Moult / winter
80924	27-Nov-08	64.29	-172.58		10	L0	Cape Chukotsk	Moult / winter
80924	30-Nov-08	64.28	-172.45		12	LB	Cape Chukotsk	Moult / winter
80924	15-Dec-08	64.43	-172.37	2		L1	Cape Chaplin	Moult / winter
80924	7-Jan-09	64.31	-172.51		8	LA	Cape Chukotsk	Moult / winter
80924	16-Jan-09	64.32	-172.31		9	LA	Cape Chukotsk	Moult / winter
80925	**Male**							
80925	16-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80925	17-Jun-08	72.39	-125.18	6		L3	Siksik Lake	Nesting
80925	20-Jun-08	72.39	-125.21	6		L3	Siksik Lake	Nesting
80925	23-Jun-08	72.41	-125.19	5		L3	Siksik Lake	Nesting
80925	26-Jun-08	72.41	-125.15	7		L3	Siksik Lake	Nesting
80925	29-Jun-08	72.41	-125.16	6		L3	Siksik Lake	Nesting
80925	2-Jul-08	72.41	-125.17	6		L3	Siksik Lake	Nesting
80925	5-Jul-08	72.81	-126.07		33	L3	Meek Point	Moult migration
80925	9-Jul-08	72.91	-126.07		34	L3	Meek Point	Moult migration
80925	12-Jul-08	72.72	-125.63		21	L3	Meek Point	Moult migration
80925	15-Jul-08	72.73	-125.43		14	L3	Meek Point	Moult migration
80925	18-Jul-08	72.68	-125.50		15	L3	Meek Point	Moult migration
80925	21-Jul-08	72.86	-125.32		4	L3	Meek Point	Moult migration
80925	24-Jul-08	72.87	-125.28		5	L3	Meek Point	Moult migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80925	27-Jul-08	71.30	-157.30		18	L3	Point Barrow	Moult migration
80925	31-Jul-08	69.88	-163.46		21	L3	Point Lay	Moult migration
80925	3-Aug-08	65.18	-171.68		21	L3	Cape Nygligan	Moult migration
80925	6-Aug-08	65.38	-176.32		11	L3	Anadyr Bay	Moult
80925	9-Aug-08	65.32	-176.55		22	L3	Anadyr Bay	Moult
80925	12-Aug-08	65.42	-176.90		17	L3	Anadyr Bay	Moult
80925	15-Aug-08	65.42	-177.08		11	L3	Anadyr Bay	Moult
80925	19-Aug-08	65.41	-176.90		18	L3	Anadyr Bay	Moult
80925	22-Aug-08	65.35	-176.61		20	L3	Anadyr Bay	Moult
80925	25-Aug-08	65.34	-176.58		21	L3	Anadyr Bay	Moult
80925	28-Aug-08	65.37	-176.57		18	L3	Anadyr Bay	Moult
80925	31-Aug-08	65.33	-176.69		25	L2	Anadyr Bay	Moult
80925	3-Sep-08	65.33	-176.54		20	L3	Anadyr Bay	Moult
80925	6-Sep-08	65.36	-176.51		17	L3	Anadyr Bay	Moult
80925	10-Sep-08	65.30	-176.44		23	L3	Anadyr Bay	Moult
80925	13-Sep-08	65.32	-176.40		19	L3	Anadyr Bay	Moult
80925	16-Sep-08	65.25	-176.07		10	L3	Anadyr Bay	Moult
80925	19-Sep-08	65.25	-176.08		10	L3	Anadyr Bay	Moult
80925	22-Sep-08	65.23	-176.19		16	L3	Anadyr Bay	Moult
80925	25-Sep-08	65.21	-176.20		17	L3	Anadyr Bay	Moult
80925	29-Sep-08	65.30	-176.14		10	L3	Anadyr Bay	Moult
80925	2-Oct-08	65.24	-176.09		11	L3	Anadyr Bay	Moult
80925	5-Oct-08	65.12	-176.06		14	L3	Anadyr Bay	Moult
80925	8-Oct-08	65.18	-176.08		13	L3	Anadyr Bay	Moult
80925	11-Oct-08	65.26	-176.12		11	L3	Anadyr Bay	Moult
80925	15-Oct-08	64.46	-172.10		9	L3	Cape Chaplin	Fall migration
80925	18-Oct-08	65.12	-171.58		25	L3	Cape Nygligan	Fall migration
80925	21-Oct-08	64.50	-172.05		14	L3	Cape Chaplin	Winter
80925	24-Oct-08	64.16	-172.47		25	L3	Cape Chukotsk	Winter
80925	27-Oct-08	64.60	-171.95		20	L2	Cape Chaplin	Winter
80925	30-Oct-08	64.43	-172.18		3	L3	Cape Chaplin	Winter
80925	3-Nov-08	64.58	-172.15		14	L3	Cape Chaplin	Winter
80925	6-Nov-08	64.22	-172.39		20	L2	Cape Chukotsk	Winter
80925	9-Nov-08	64.19	-172.40		23	LB	Cape Chukotsk	Winter
80925	12-Nov-08	64.24	-172.23		19	L3	Cape Chukotsk	Winter
80925	15-Nov-08	64.42	-171.96		13	L2	Cape Chaplin	Winter
80925	19-Nov-08	64.39	-172.09		7	L3	Cape Chukotsk	Winter
80925	22-Nov-08	64.28	-172.30		15	L2	Cape Chukotsk	Winter
80925	25-Nov-08	64.16	-172.30		28	L3	Cape Chukotsk	Winter
80925	28-Nov-08	64.22	-172.35		21	L2	Cape Chukotsk	Winter
80925	1-Dec-08	64.41	-171.81		21	L1	Cape Chaplin	Winter
80925	4-Dec-08	64.21	-173.19		5	L3	Cape Chukotsk	Winter
80925	8-Dec-08	64.59	-171.94		20	L3	Cape Chaplin	Winter
80925	11-Dec-08	64.34	-172.33		8	L2	Cape Chukotsk	Winter
80925	14-Dec-08	64.37	-172.25		4	L2	Cape Chukotsk	Winter
80925	17-Dec-08	64.50	-172.14		10	L3	Cape Chaplin	Winter
80925	20-Dec-08	64.38	-172.17		4	LA	Cape Chukotsk	Winter
80925	24-Dec-08	64.28	-172.25		14	L2	Cape Chukotsk	Winter
80925	1-Jan-09	64.42	-172.13		5	L2	Cape Chaplin	Winter
80925	9-Jan-09	64.25	-173.32		5	L3	Cape Chukotsk	Winter
80925	18-Jan-09	64.29	-172.84		1	L3	Cape Chukotsk	Winter
80926	**Female**							
80926	16-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80926	17-Jun-08	72.40	-125.18	6		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80926	20-Jun-08	72.40	-125.14	8		L1	Siksik Lake	Nesting
80926	23-Jun-08	72.39	-125.24	5		L2	Siksik Lake	Nesting
80926	26-Jun-08	72.37	-125.15	9		L1	Siksik Lake	Nesting
80926	29-Jun-08	72.39	-125.23	5		L3	Siksik Lake	Nesting
80926	2-Jul-08	72.39	-125.19	6		L3	Siksik Lake	Nesting
80926	5-Jul-08	72.39	-125.19	6		L3	Siksik Lake	Nesting
80926	9-Jul-08	72.41	-125.23	4		L3	Siksik Lake	Nesting
80926	12-Jul-08	72.39	-125.21	6		L2	Siksik Lake	Nesting
80926	18-Jul-08	72.39	-125.13	8		L0	Siksik Lake	Nesting
80926	21-Jul-08	72.39	-125.16	7		L3	Siksik Lake	Nesting
80926	24-Jul-08	72.37	-125.24	5		L3	Siksik Lake	Nesting
80926	27-Jul-08	72.40	-125.24	4		L3	Siksik Lake	Nesting
80926	30-Jul-08	72.39	-125.19	7		L3	Siksik Lake	Nesting
80926	3-Aug-08	72.39	-125.20	6		L1	Siksik Lake	Nesting
80926	6-Aug-08	73.20	-124.59	2		L1	Meek Point	Moult migration
80926	9-Aug-08	73.30	-124.55		0	L2	Meek Point	Moult migration
80926	12-Aug-08	73.70	-124.52		0	L2	Burnett Bay	Moult migration
80926	15-Aug-08	73.69	-124.54	0		L1	Burnett Bay	Moult migration
80926	22-Aug-08	70.77	-151.26		32	L2	Harrison Bay	Moult migration
80926	28-Aug-08	65.32	-172.08		6	LB	Cape Nygligan	Moult
80926	10-Sep-08	65.12	-172.04		3	LB	Cape Nygligan	Moult
80926	13-Sep-08	65.11	-172.09		1	L2	Cape Nygligan	Moult
80926	25-Sep-08	65.10	-172.08		0	L1	Cape Nygligan	Moult
80926	5-Oct-08	65.06	-172.06		2	LB	Cape Nygligan	Moult
80926	11-Oct-08	65.13	-172.10		1	LB	Cape Nygligan	Moult
80926	27-Oct-08	65.46	-171.75		3	L0	Mechigmen Bay	Moult
80926	1-Dec-08	64.31	-172.31		11	L0	Cape Chukotsk	Winter
80926	17-Dec-08	64.45	-172.16		5	LA	Cape Chaplin	Winter
80926	9-Jan-09	64.40	-172.54	1		L0	Cape Chukotsk	Winter
80926	3-Feb-09	64.37	-172.48		2	L2	Cape Chukotsk	Winter
80926	20-Feb-09	64.33	-172.29		8	L2	Cape Chukotsk	Winter
80926	8-Mar-09	64.39	-172.50	1		LA	Cape Chukotsk	Winter
80926	16-Mar-09	64.30	-172.38		11	LA	Cape Chukotsk	Winter
80926	2-Apr-09	64.39	-172.32		2	LA	Cape Chukotsk	Winter
80926	10-Apr-09	64.32	-172.32		10	L0	Cape Chukotsk	Winter
80926	11-Apr-09	64.30	-172.18		13	LA	Cape Chukotsk	Winter
80926	12-Apr-09	64.38	-172.20		3	LA	Cape Chukotsk	Winter
80926	14-Apr-09	64.52	-172.06		15	L2	Cape Chaplin	Winter
80926	18-Apr-09	65.26	-171.69		24	L0	Cape Nygligan	Spring migration
80926	19-Apr-09	65.21	-171.67		24	L1	Cape Nygligan	Spring migration
80926	21-Apr-09	65.23	-171.73		22	LA	Cape Nygligan	Spring migration
80926	28-Apr-09	70.25	-142.33		31	L1	Martin Point	Spring migration
80926	30-Apr-09	70.24	-132.17		47	L3	Cape Dalhousie	Spring migration
80926	1-May-09	70.21	-132.13		43	LA	Cape Dalhousie	Spring migration
80926	2-May-09	70.22	-131.95		39	LA	Cape Dalhousie	Spring migration
80926	3-May-09	70.37	-131.98		55	L1	Cape Dalhousie	Spring migration
80926	5-May-09	70.37	-132.10		59	LB	Cape Dalhousie	Spring migration
80926	6-May-09	70.33	-132.07		53	LB	Cape Dalhousie	Spring migration
80926	7-May-09	70.18	-132.08		39	L1	Cape Dalhousie	Spring migration
80926	8-May-09	70.21	-132.04		41	L2	Cape Dalhousie	Spring migration
80926	9-May-09	70.47	-132.70		84	L1	Cape Dalhousie	Spring migration
80926	11-May-09	70.66	-132.03		81	L2	Cape Dalhousie	Spring migration
80926	12-May-09	70.96	-129.47		63	L1	Cape Bathurst	Spring migration
80926	15-May-09	71.11	-128.90		64	L3	Cape Bathurst	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80926	17-May-09	70.78	-128.95		33	L3	Cape Bathurst	Spring migration
80926	18-May-09	70.92	-129.00		46	L1	Cape Bathurst	Spring migration
80926	19-May-09	70.96	-129.19		55	L2	Cape Bathurst	Spring migration
80926	20-May-09	70.98	-129.37		62	L3	Cape Bathurst	Spring migration
80926	21-May-09	70.93	-129.39		59	LB	Cape Bathurst	Spring migration
80926	24-May-09	70.89	-129.47		58	L1	Cape Bathurst	Spring migration
80926	25-May-09	70.88	-129.41		56	LB	Cape Bathurst	Spring migration
80926	26-May-09	72.20	-126.41		26	L3	Cape Kellet	Spring migration
80926	27-May-09	72.84	-126.35		43	L3	Meek Point	Spring migration
80926	28-May-09	72.62	-126.44		45	LB	Siksik Lake	Spring migration
80926	30-May-09	72.61	-126.52		48	LB	Siksik Lake	Spring migration
80926	1-Jun-09	72.52	-126.81		55	L1	Siksik Lake	Spring migration
80926	4-Jun-09	72.53	-126.73		53	L2	Siksik Lake	Spring migration
80926	5-Jun-09	72.53	-126.87		58	L2	Siksik Lake	Spring migration
80926	6-Jun-09	72.56	-126.79		56	L3	Siksik Lake	Spring migration
80926	7-Jun-09	72.54	-126.89		59	L3	Siksik Lake	Spring migration
80926	8-Jun-09	72.79	-125.41		10	L3	Meek Point	Spring migration
80926	10-Jun-09	72.86	-125.38		7	LA	Meek Point	Spring migration
80926	11-Jun-09	72.77	-125.65		18	L2	Meek Point	Spring migration
80926	12-Jun-09	72.79	-125.41		10	L3	Meek Point	Spring migration
80926	13-Jun-09	72.81	-125.53		13	LB	Meek Point	Spring migration
80926	14-Jun-09	72.50	-125.03	5		L2	Siksik Lake	Nesting
80926	16-Jun-09	72.39	-125.20	6		L2	Siksik Lake	Nesting
80926	17-Jun-09	72.40	-125.19	6		LA	Siksik Lake	Nesting
80926	18-Jun-09	72.39	-125.23	5		L3	Siksik Lake	Nesting
80926	19-Jun-09	72.39	-125.21	6		L3	Siksik Lake	Nesting
80926	20-Jun-09	72.39	-125.19	6		L3	Siksik Lake	Nesting
80926	22-Jun-09	72.40	-125.18	6		L3	Siksik Lake	Nesting
80926	23-Jun-09	72.39	-125.21	6		L3	Siksik Lake	Nesting
80926	24-Jun-09	72.39	-125.19	6		L3	Siksik Lake	Nesting
80926	25-Jun-09	72.40	-125.19	6		L3	Siksik Lake	Nesting
80926	26-Jun-09	72.40	-125.22	5		L3	Siksik Lake	Nesting
80926	28-Jun-09	72.38	-125.19	7		L2	Siksik Lake	Nesting
80926	29-Jun-09	72.40	-125.26	3		LB	Siksik Lake	Nesting
80926	30-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80926	3-Jul-09	72.39	-125.19	6		L3	Siksik Lake	Nesting
80926	7-Jul-09	72.37	-125.25	5		L2	Siksik Lake	Nesting
80926	10-Jul-09	72.36	-125.27	4		L2	Siksik Lake	Nesting
80926	14-Jul-09	72.41	-125.22	4		L1	Siksik Lake	Nesting
80926	18-Jul-09	72.35	-125.29	4		L2	Siksik Lake	Nesting
80926	28-Jul-09	72.41	-125.31	2		L0	Siksik Lake	Nesting
80926	1-Aug-09	72.45	-125.10	6		LB	Siksik Lake	Nesting
80926	4-Aug-09	73.14	-124.76	1		L3	Meek Point	Moult migration
80926	8-Aug-09	73.30	-124.53	0		L2	Meek Point	Moult migration
80926	12-Aug-09	73.35	-124.56		2	LB	Meek Point	Moult migration
80926	16-Aug-09	73.24	-124.60		1	L3	Meek Point	Moult migration
80926	19-Aug-09	72.81	-125.91		27	L0	Meek Point	Moult migration
80926	14-Sep-09	65.12	-172.12	0		L1	Cape Nygligan	Moult migration
80927	**Male**							
80927	16-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80927	17-Jun-08	72.39	-125.18	6		L3	Siksik Lake	Nesting
80927	20-Jun-08	72.39	-125.17	7		L3	Siksik Lake	Nesting
80927	23-Jun-08	72.41	-125.23	4		L3	Siksik Lake	Nesting
80927	26-Jun-08	72.43	-125.20	4		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80927	29-Jun-08	72.43	-125.18	4		L3	Siksik Lake	Nesting
80927	2-Jul-08	72.43	-125.17	4		L3	Siksik Lake	Nesting
80927	5-Jul-08	72.84	-125.63		16	L3	Meek Point	Moult migration
80927	8-Jul-08	72.87	-125.77		21	L3	Meek Point	Moult migration
80927	12-Jul-08	72.75	-125.45		15	L3	Meek Point	Moult migration
80927	15-Jul-08	72.91	-125.19		4	L3	Meek Point	Moult migration
80927	18-Jul-08	72.86	-125.12		0	L2	Meek Point	Moult migration
80927	21-Jul-08	72.86	-125.12		0	L3	Meek Point	Moult migration
80927	24-Jul-08	73.25	-124.86		9	L3	Meek Point	Moult migration
80927	27-Jul-08	73.19	-124.67	0		L3	Meek Point	Moult migration
80927	30-Jul-08	73.20	-124.66	0		L3	Meek Point	Moult migration
80927	2-Aug-08	73.20	-124.67	0		L3	Meek Point	Moult migration
80927	5-Aug-08	71.70	-134.62		240	L3	Mackenzie Delta	Moult migration
80927	8-Aug-08	70.97	-158.18		18	L2	Point Barrow	Moult migration
80927	11-Aug-08	64.76	-171.86		10	L2	Cape Chaplin	Moult / winter
80927	15-Aug-08	64.55	-172.13		14	L3	Cape Chaplin	Moult / winter
80927	18-Aug-08	64.63	-171.94		17	L3	Cape Chaplin	Moult / winter
80927	21-Aug-08	64.56	-172.02		19	L2	Cape Chaplin	Moult / winter
80927	24-Aug-08	64.63	-172.01		16	L3	Cape Chaplin	Moult / winter
80927	27-Aug-08	64.56	-171.94		23	LA	Cape Chaplin	Moult / winter
80927	30-Aug-08	64.59	-171.98		20	L3	Cape Chaplin	Moult / winter
80927	2-Sep-08	64.65	-171.96		14	L2	Cape Chaplin	Moult / winter
80927	5-Sep-08	64.60	-171.92		20	L3	Cape Chaplin	Moult / winter
80927	8-Sep-08	64.55	-172.03		18	L2	Cape Chaplin	Moult / winter
80927	12-Sep-08	64.51	-172.06		14	L3	Cape Chaplin	Moult / winter
80927	15-Sep-08	64.52	-172.01		17	L2	Cape Chaplin	Moult / winter
80927	18-Sep-08	64.46	-172.07		10	L3	Cape Chaplin	Moult / winter
80927	21-Sep-08	64.48	-172.11		10	L3	Cape Chaplin	Moult / winter
80927	24-Sep-08	64.53	-172.18		11	L2	Cape Chaplin	Moult / winter
80927	27-Sep-08	64.53	-172.06		15	L3	Cape Chaplin	Moult / winter
80927	30-Sep-08	64.45	-172.06		9	L2	Cape Chaplin	Moult / winter
80927	3-Oct-08	64.42	-172.07		8	L2	Cape Chaplin	Moult / winter
80927	6-Oct-08	64.43	-172.24		1	L2	Cape Chaplin	Moult / winter
80927	10-Oct-08	64.43	-172.21		2	L2	Cape Chaplin	Moult / winter
80927	13-Oct-08	64.45	-172.22		4	L3	Cape Chaplin	Moult / winter
80927	16-Oct-08	64.48	-172.16		8	L3	Cape Chaplin	Moult / winter
80927	19-Oct-08	64.40	-172.12		5	L2	Cape Chukotsk	Moult / winter
80927	22-Oct-08	64.43	-172.09		7	LA	Cape Chaplin	Moult / winter
80927	25-Oct-08	64.32	-172.07		13	L3	Cape Chukotsk	Moult / winter
80927	28-Oct-08	64.50	-172.38		0	L2	Cape Chaplin	Moult / winter
80927	31-Oct-08	64.42	-172.18		3	L2	Cape Chaplin	Moult / winter
80927	3-Nov-08	64.43	-172.20		3	L3	Cape Chaplin	Moult / winter
80927	7-Nov-08	64.40	-172.32		0	L2	Cape Chukotsk	Moult / winter
80927	10-Nov-08	64.42	-172.19		2	L3	Cape Chaplin	Moult / winter
80927	16-Nov-08	64.41	-172.23	0		LB	Cape Chukotsk	Moult / winter
80927	19-Nov-08	64.49	-171.99		15	L3	Cape Chaplin	Moult / winter
80927	22-Nov-08	64.28	-172.25		15	L0	Cape Chukotsk	Moult / winter
80927	25-Nov-08	64.11	-172.21		34	L3	Cape Chukotsk	Moult / winter
80927	28-Nov-08	64.28	-172.36		14	L2	Cape Chukotsk	Moult / winter
80927	1-Dec-08	64.36	-172.32		5	L0	Cape Chukotsk	Moult / winter
80927	5-Dec-08	64.20	-173.15		5	L2	Cape Chukotsk	Moult / winter
80927	8-Dec-08	64.47	-172.09		10	L2	Cape Chaplin	Moult / winter
80927	17-Dec-08	64.53	-172.39		1	L3	Cape Chaplin	Moult / winter
80927	20-Dec-08	64.29	-172.19		13	L1	Cape Chukotsk	Moult / winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80927	28-Dec-08	64.33	-172.54		6	L2	Cape Chukotsk	Moult / winter
80927	5-Jan-09	64.27	-172.38		14	L2	Cape Chukotsk	Moult / winter
80927	14-Jan-09	64.30	-172.39		11	L1	Cape Chukotsk	Moult / winter
80927	22-Jan-09	64.35	-172.22		6	L3	Cape Chukotsk	Moult / winter
80927	30-Jan-09	64.33	-172.51		6	L3	Cape Chukotsk	Moult / winter
80927	7-Feb-09	64.35	-172.59		3	L2	Cape Chukotsk	Moult / winter
80927	15-Feb-09	64.37	-172.55		1	L3	Cape Chukotsk	Moult / winter
80927	23-Feb-09	64.68	-171.67		21	L2	Cape Chaplin	Moult / winter
80927	3-Mar-09	64.38	-172.44		2	L3	Cape Chukotsk	Moult / winter
80927	11-Mar-09	64.34	-172.12		10	L3	Cape Chukotsk	Moult / winter
80927	19-Mar-09	64.58	-172.09		17	L2	Cape Chaplin	Moult / winter
80927	27-Mar-09	64.61	-172.18		13	L1	Cape Chaplin	Moult / winter
80927	4-Apr-09	65.28	-171.29		24	L2	Cape Nygligan	Spring migration
80927	5-Apr-09	65.24	-171.58		29	LB	Cape Nygligan	Spring migration
80927	6-Apr-09	65.43	-171.01		5	LA	Cape Nunyagmo	Spring migration
80927	7-Apr-09	65.42	-171.09		5	L2	Cape Nunyagmo	Spring migration
80927	10-Apr-09	65.32	-171.87		15	L3	Cape Nygligan	Spring migration
80927	12-Apr-09	65.76	-170.45		3	LB	Cape Nunyagmo	Spring migration
80927	13-Apr-09	65.90	-170.39		2	L3	Cape Nunyagmo	Spring migration
80927	16-Apr-09	65.75	-170.46		3	L3	Cape Nunyagmo	Spring migration
80927	17-Apr-09	67.18	-168.05		143	L1	Chukchi Sea	Spring migration
80927	21-Apr-09	69.28	-164.57		44	L3	Ledyard Bay	Spring migration
80927	24-Apr-09	69.30	-164.44		42	L3	Ledyard Bay	Spring migration
80927	26-Apr-09	69.35	-164.48		48	L3	Ledyard Bay	Spring migration
80927	27-Apr-09	70.05	-163.19		23	LB	Icy Cape	Spring migration
80927	28-Apr-09	70.92	-157.95		8	L1	Point Barrow	Spring migration
80927	30-Apr-09	70.68	-143.81		67	L3	Martin Point	Spring migration
80927	2-May-09	70.16	-134.42		47	L3	Mackenzie Delta	Spring migration
80927	3-May-09	70.26	-133.30		72	L3	Mackenzie Delta	Spring migration
80927	4-May-09	70.25	-133.28		71	L3	Mackenzie Delta	Spring migration
80927	5-May-09	70.36	-132.06		56	L3	Cape Dalhousie	Spring migration
80927	7-May-09	70.34	-131.97		52	L3	Cape Dalhousie	Spring migration
80927	8-May-09	70.32	-131.91		49	L3	Cape Dalhousie	Spring migration
80927	10-May-09	70.45	-132.13		65	L2	Cape Dalhousie	Spring migration
80927	11-May-09	70.47	-132.15		67	L2	Cape Dalhousie	Spring migration
80927	13-May-09	70.94	-129.22		54	L3	Cape Bathurst	Spring migration
80927	14-May-09	70.98	-129.26		59	L3	Cape Bathurst	Spring migration
80927	15-May-09	71.01	-129.26		62	L2	Cape Bathurst	Spring migration
80927	17-May-09	70.34	-132.94		77	L3	Cape Dalhousie	Spring migration
80927	18-May-09	70.55	-132.16		74	L2	Cape Dalhousie	Spring migration
80927	19-May-09	70.56	-132.27		78	L3	Cape Dalhousie	Spring migration
80927	20-May-09	70.57	-132.31		81	L3	Cape Dalhousie	Spring migration
80927	21-May-09	70.57	-132.29		80	LA	Cape Dalhousie	Spring migration
80927	22-May-09	70.64	-131.21		63	L2	Cape Dalhousie	Spring migration
80927	24-May-09	70.64	-131.51		67	L3	Cape Dalhousie	Spring migration
80927	25-May-09	70.58	-131.45		59	L3	Cape Dalhousie	Spring migration
80927	26-May-09	70.64	-130.38		52	L0	Cape Dalhousie	Spring migration
80927	27-May-09	70.87	-129.17		47	L2	Cape Bathurst	Spring migration
80927	28-May-09	70.96	-129.33		59	L3	Cape Bathurst	Spring migration
80927	29-May-09	72.48	-126.37		38	L2	Siksik Lake	Spring / moult mig
80927	31-May-09	72.52	-126.39		40	L3	Siksik Lake	Spring / moult mig
80927	1-Jun-09	72.64	-126.43		46	L3	Siksik Lake	Spring / moult mig
80927	2-Jun-09	72.64	-126.47		47	L3	Siksik Lake	Spring / moult mig
80927	3-Jun-09	72.65	-126.56		51	L3	Siksik Lake	Spring / moult mig

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80927	5-Jun-09	72.70	-126.45		51	L3	Siksik Lake	Spring / moult mig
80927	6-Jun-09	72.75	-126.39		46	L3	Siksik Lake	Spring / moult mig
80927	7-Jun-09	72.90	-125.12		2	L3	Meek Point	Spring / moult mig
80927	8-Jun-09	72.95	-125.30		12	L3	Meek Point	Spring / moult mig
80927	9-Jun-09	72.90	-125.14		2	L3	Meek Point	Spring / moult mig
80927	10-Jun-09	73.02	-125.36		20	L3	Meek Point	Spring / moult mig
80927	12-Jun-09	73.29	-125.03		18	L3	Meek Point	Spring / moult mig
80927	13-Jun-09	73.35	-125.09		21	LA	Meek Point	Spring / moult mig
80927	14-Jun-09	73.39	-125.05		21	L3	Meek Point	Spring / moult mig
80927	15-Jun-09	73.41	-125.08		23	L3	Meek Point	Spring / moult mig
80927	16-Jun-09	73.66	-124.95		11	L2	Burnett Bay	Spring / moult mig
80927	18-Jun-09	73.71	-124.94		8	L2	Burnett Bay	Spring / moult mig
80927	19-Jun-09	73.65	-124.90		9	L0	Burnett Bay	Spring / moult mig
80927	20-Jun-09	73.65	-124.88		9	L3	Burnett Bay	Spring / moult mig
80927	21-Jun-09	73.65	-124.88		10	L3	Burnett Bay	Spring / moult mig
80927	22-Jun-09	73.66	-124.90		9	L3	Burnett Bay	Spring / moult mig
80927	26-Jun-09	73.66	-124.90		9	L3	Burnett Bay	Spring / moult mig
80927	29-Jun-09	73.66	-124.89		9	L3	Burnett Bay	Spring / moult mig
80927	3-Jul-09	73.66	-124.87		9	LB	Burnett Bay	Spring / moult mig
80927	6-Jul-09	70.77	-131.34		80	LB	Cape Dalhousie	Moult migration
80927	10-Jul-09	70.50	-130.00		31	L2	Cape Dalhousie	Moult migration
80927	13-Jul-09	70.67	-129.58		49	L3	Cape Bathurst	Moult migration
80927	17-Jul-09	70.72	-130.12		57	L2	Cape Dalhousie	Moult migration
80927	20-Jul-09	70.47	-128.56		10	L2	Cape Bathurst	Moult migration
80927	23-Jul-09	70.48	-128.68		14	LB	Cape Bathurst	Moult migration
80927	27-Jul-09	70.43	-128.33		5	LB	Cape Bathurst	Moult migration
80927	30-Jul-09	70.29	-137.50		103	L3	Herschel Island	Moult migration
80927	17-Aug-09	70.24	-162.58		11	LB	Icy Cape	Moult migration
80927	21-Aug-09	69.61	-163.86		30	LB	Ledyard Bay	Moult migration
80927	28-Aug-09	68.62	-166.72		22	L2	Ledyard Bay	Moult migration
80928	**Female**							
80928	18-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80928	22-Jun-08	72.39	-125.15	8		L2	Siksik Lake	Nesting
80928	25-Jun-08	72.36	-125.08	12		L3	Siksik Lake	Nesting
80928	28-Jun-08	72.36	-125.12	10		L3	Siksik Lake	Nesting
80928	1-Jul-08	72.39	-125.16	8		L3	Siksik Lake	Nesting
80928	4-Jul-08	72.38	-125.29	4		L3	Siksik Lake	Nesting
80928	8-Jul-08	72.38	-125.21	7		L3	Siksik Lake	Nesting
80928	11-Jul-08	72.79	-125.00	0		L0	Meek Point	Moult migration
80928	14-Jul-08	72.84	-125.17		0	L3	Meek Point	Moult migration
80928	17-Jul-08	72.90	-125.31		8	L1	Meek Point	Moult migration
80928	21-Jul-08	73.17	-124.75		1	L2	Meek Point	Moult migration
80928	24-Jul-08	73.59	-124.45		4	L2	Burnett Bay	Moult migration
80928	27-Jul-08	72.68	-124.96	0		L2	Meek Point	Moult migration
80928	30-Jul-08	72.63	-125.17		2	L2	Meek Point	Moult migration
80928	3-Aug-08	72.64	-125.83		26	L0	Meek Point	Moult migration
80928	6-Aug-08	72.74	-125.26		10	L3	Meek Point	Moult migration
80928	9-Aug-08	72.69	-125.27		6	L3	Meek Point	Moult migration
80928	12-Aug-08	72.83	-125.30		3	L1	Meek Point	Moult migration
80928	16-Aug-08	65.18	-172.08		5	L2	Cape Nygligan	Moult migration
80928	19-Aug-08	65.33	-176.22		12	L1	Anadyr Bay	Moult
80928	22-Aug-08	65.28	-176.17		13	L2	Anadyr Bay	Moult
80928	25-Aug-08	65.35	-176.17		9	L2	Anadyr Bay	Moult
80928	29-Aug-08	65.33	-176.18		10	L1	Anadyr Bay	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80928	1-Sep-08	65.36	-176.23		11	L1	Anadyr Bay	Moult
80928	4-Sep-08	65.35	-176.18		9	L1	Anadyr Bay	Moult
80928	7-Sep-08	65.35	-176.17		9	L1	Anadyr Bay	Moult
80928	11-Sep-08	65.36	-176.17		8	L2	Anadyr Bay	Moult
80928	14-Sep-08	65.34	-176.16		9	L2	Anadyr Bay	Moult
80928	17-Sep-08	65.34	-175.89	0		L1	Anadyr Bay	Moult
80928	20-Sep-08	65.36	-176.21		10	L2	Anadyr Bay	Moult
80928	24-Sep-08	65.35	-176.15		8	L3	Anadyr Bay	Moult
80928	27-Sep-08	65.29	-176.05		7	L3	Anadyr Bay	Moult
80928	30-Sep-08	65.24	-175.99		6	L2	Anadyr Bay	Moult
80928	4-Oct-08	65.24	-175.91		3	L2	Anadyr Bay	Moult
80928	7-Oct-08	65.22	-175.98		6	L3	Anadyr Bay	Moult
80928	10-Oct-08	65.06	-175.94		7	L3	Anadyr Bay	Moult
80928	14-Oct-08	65.15	-176.05		14	L2	Anadyr Bay	Moult
80928	17-Oct-08	65.13	-175.93		9	L2	Anadyr Bay	Moult
80928	20-Oct-08	65.10	-175.85		4	L2	Anadyr Bay	Moult
80928	23-Oct-08	65.19	-175.95		7	L1	Anadyr Bay	Moult
80928	27-Oct-08	65.14	-175.95		10	L2	Anadyr Bay	Moult
80928	30-Oct-08	65.07	-175.96		8	L2	Anadyr Bay	Moult
80928	2-Nov-08	65.11	-176.01		12	L2	Anadyr Bay	Moult
80928	6-Nov-08	64.41	-172.06		8	L0	Cape Chaplin	Winter
80928	9-Nov-08	64.38	-172.20		4	L3	Cape Chukotsk	Winter
80928	12-Nov-08	64.37	-172.16		5	L1	Cape Chukotsk	Winter
80928	15-Nov-08	64.70	-172.08		6	L2	Cape Chaplin	Winter
80928	19-Nov-08	64.49	-172.27		4	L1	Cape Chaplin	Winter
80928	25-Nov-08	64.29	-172.34		13	L2	Cape Chukotsk	Winter
80928	29-Nov-08	64.28	-172.32		15	L0	Cape Chukotsk	Winter
80928	5-Dec-08	64.22	-173.36		8	L1	Cape Chukotsk	Winter
80928	8-Dec-08	64.38	-172.08		8	L0	Cape Chukotsk	Winter
80928	12-Dec-08	64.28	-172.51		12	L2	Cape Chukotsk	Winter
80928	18-Dec-08	64.33	-172.12		10	L0	Cape Chukotsk	Winter
80928	22-Dec-08	64.33	-172.26		9	L2	Cape Chukotsk	Winter
80928	25-Dec-08	64.30	-172.39		12	LA	Cape Chukotsk	Winter
80928	28-Dec-08	64.30	-172.90	1		L1	Cape Chukotsk	Winter
80928	1-Jan-09	64.29	-172.46		11	L2	Cape Chukotsk	Winter
80928	9-Jan-09	64.34	-172.53		5	L0	Cape Chukotsk	Winter
80928	18-Jan-09	64.32	-172.74		5	L1	Cape Chukotsk	Winter
80928	26-Jan-09	64.34	-172.63		4	L2	Cape Chukotsk	Winter
80928	4-Feb-09	64.44	-172.31	0		L0	Cape Chaplin	Winter
80928	12-Feb-09	64.23	-172.95		3	L1	Cape Chukotsk	Winter
80928	21-Feb-09	64.35	-172.36		6	L3	Cape Chukotsk	Winter
80928	1-Mar-09	64.33	-172.37		9	L2	Cape Chukotsk	Winter
80928	10-Mar-09	64.26	-172.51		13	L2	Cape Chukotsk	Winter
80928	18-Mar-09	64.37	-172.04		10	L3	Cape Chukotsk	Winter
80928	27-Mar-09	64.33	-172.57		6	L3	Cape Chukotsk	Winter
80928	4-Apr-09	64.39	-172.38		2	L2	Cape Chukotsk	Winter
80928	13-Apr-09	64.33	-172.44		7	L3	Cape Chukotsk	Winter
80928	21-Apr-09	64.24	-172.32		19	LA	Cape Chukotsk	Winter
80928	22-Apr-09	64.36	-172.46		3	L3	Cape Chukotsk	Winter
80928	24-Apr-09	65.26	-171.20		25	L2	Cape Nygligan	Spring migration
80928	25-Apr-09	65.42	-170.77		14	L1	Cape Nunyagmo	Spring migration
80928	26-Apr-09	65.44	-170.71		15	L1	Cape Nunyagmo	Spring migration
80928	27-Apr-09	65.62	-170.08		21	L1	Cape Nunyagmo	Spring migration
80928	28-Apr-09	69.04	-166.40		21	L2	Ledyard Bay	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80928	30-Apr-09	69.64	-164.52		59	L1	Ledyard Bay	Spring migration
80928	1-May-09	69.68	-163.87		32	L1	Ledyard Bay	Spring migration
80928	2-May-09	69.64	-163.99		36	L2	Ledyard Bay	Spring migration
80928	3-May-09	69.75	-163.82		32	L1	Point Lay	Spring migration
80928	4-May-09	69.82	-163.59		24	L2	Point Lay	Spring migration
80928	6-May-09	69.70	-163.74		27	L1	Point Lay	Spring migration
80928	7-May-09	70.54	-161.76		26	L1	Icy Cape	Spring migration
80928	8-May-09	70.91	-160.00		20	L1	Wainwright	Spring migration
80928	9-May-09	70.22	-132.09		44	L0	Cape Dalhousie	Spring migration
80928	11-May-09	70.38	-132.13		60	L1	Cape Dalhousie	Spring migration
80928	12-May-09	70.89	-129.34		54	L0	Cape Bathurst	Spring migration
80928	13-May-09	70.94	-129.22		54	L2	Cape Bathurst	Spring migration
80928	14-May-09	70.96	-129.30		58	L2	Cape Bathurst	Spring migration
80928	15-May-09	71.07	-129.01		62	L3	Cape Bathurst	Spring migration
80928	17-May-09	70.63	-129.91		45	L2	Cape Dalhousie	Spring migration
80928	18-May-09	72.39	-126.88		50	L0	Siksik Lake	Spring migration
80928	19-May-09	70.68	-129.97		51	L1	Cape Dalhousie	Spring migration
80928	20-May-09	70.60	-130.88		55	L2	Cape Dalhousie	Spring migration
80928	21-May-09	70.65	-130.45		56	L1	Cape Dalhousie	Spring migration
80928	22-May-09	70.61	-130.93		58	L2	Cape Dalhousie	Spring migration
80928	24-May-09	70.58	-131.46		60	L1	Cape Dalhousie	Spring migration
80928	25-May-09	70.56	-131.76		64	L3	Cape Dalhousie	Spring migration
80928	26-May-09	70.67	-131.75		75	L2	Cape Dalhousie	Spring migration
80928	27-May-09	70.66	-130.65		61	L2	Cape Dalhousie	Spring migration
80928	29-May-09	70.82	-130.14		70	L3	Cape Dalhousie	Spring migration
80928	30-May-09	70.85	-129.92		72	L3	Cape Bathurst	Spring migration
80928	31-May-09	70.89	-129.53		60	L3	Cape Bathurst	Spring migration
80928	1-Jun-09	70.95	-129.38		60	L2	Cape Bathurst	Spring migration
80928	2-Jun-09	70.97	-129.48		65	L2	Cape Bathurst	Spring migration
80928	4-Jun-09	72.62	-126.07		32	L3	Meek Point	Spring migration
80928	5-Jun-09	72.83	-125.64		16	L2	Meek Point	Spring migration
80928	6-Jun-09	72.90	-125.13		3	L3	Meek Point	Spring migration
80928	7-Jun-09	72.94	-125.49		16	L2	Meek Point	Spring migration
80928	8-Jun-09	72.88	-125.34		7	L3	Meek Point	Spring migration
80928	10-Jun-09	72.89	-125.35		8	L3	Meek Point	Spring migration
80928	11-Jun-09	72.88	-125.46		11	L2	Meek Point	Spring migration
80928	12-Jun-09	72.87	-125.22		4	L2	Meek Point	Spring migration
80928	13-Jun-09	72.39	-125.15	8		L3	Siksik Lake	Nesting
80928	14-Jun-09	72.39	-125.16	7		L3	Siksik Lake	Nesting
80928	16-Jun-09	72.40	-125.14	7		L2	Siksik Lake	Nesting
80928	17-Jun-09	72.39	-125.20	6		L3	Siksik Lake	Nesting
80928	18-Jun-09	72.36	-125.25	5		L2	Siksik Lake	Nesting
80928	19-Jun-09	72.38	-125.30	4		L3	Siksik Lake	Nesting
80928	20-Jun-09	72.39	-125.14	8		L2	Siksik Lake	Nesting
80928	21-Jun-09	72.38	-125.16	8		L3	Siksik Lake	Nesting
80928	23-Jun-09	72.39	-125.17	7		L3	Siksik Lake	Nesting
80928	24-Jun-09	72.37	-125.21	7		L1	Siksik Lake	Nesting
80928	25-Jun-09	72.37	-125.16	9		L2	Siksik Lake	Nesting
80928	26-Jun-09	72.39	-125.21	6		L3	Siksik Lake	Nesting
80928	27-Jun-09	72.39	-125.11	9		L2	Siksik Lake	Nesting
80928	29-Jun-09	72.37	-125.15	9		L2	Siksik Lake	Nesting
80928	30-Jun-09	72.38	-125.16	8		L3	Siksik Lake	Nesting
80928	1-Jul-09	72.37	-124.97	15		L1	Siksik Lake	Nesting
80928	2-Jul-09	72.38	-125.21	7		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80928	4-Jul-09	72.39	-125.15	8		L2	Siksik Lake	Nesting
80928	5-Jul-09	72.38	-125.08	11		L1	Siksik Lake	Nesting
80928	6-Jul-09	72.37	-125.19	7		L3	Siksik Lake	Nesting
80928	7-Jul-09	72.36	-125.09	11		L1	Siksik Lake	Nesting
80928	9-Jul-09	72.38	-125.18	8		L2	Siksik Lake	Nesting
80928	10-Jul-09	72.39	-125.22	5		L3	Siksik Lake	Nesting
80928	11-Jul-09	72.40	-125.22	5		L1	Siksik Lake	Nesting
80928	12-Jul-09	72.40	-125.23	4		L2	Siksik Lake	Nesting
80928	16-Jul-09	72.39	-125.19	7		L3	Siksik Lake	Nesting
80928	19-Jul-09	72.45	-125.33	0		L3	Siksik Lake	Nesting
80928	23-Jul-09	73.54	-124.53		8	L1	Burnett Bay	Moult migration
80928	26-Jul-09	73.80	-124.34		12	L2	Burnett Bay	Moult migration
80928	29-Jul-09	74.09	-124.52		1	L3	Burnett Bay	Moult migration
80928	2-Aug-09	74.12	-124.71		6	L2	Burnett Bay	Moult migration
80928	5-Aug-09	74.21	-124.72		3	L2	Cape Prince Alfred	Moult migration
80928	9-Aug-09	74.30	-124.71		2	L3	Cape Prince Alfred	Moult migration
80928	12-Aug-09	73.24	-132.42		278	L2	Beaufort Sea	Moult migration
80928	16-Aug-09	70.69	-149.75		15	L2	Jones Island	Moult migration
80928	19-Aug-09	70.67	-149.31		16	L1	Jones Island	Moult migration
80928	23-Aug-09	64.40	-172.25		0	L2	Cape Chukotsk	Moult migration
80928	26-Aug-09	65.36	-176.19		9	L2	Anadyr Bay	Moult
80928	30-Aug-09	65.32	-176.19		11	L1	Anadyr Bay	Moult
80928	2-Sep-09	65.28	-176.21		14	L2	Anadyr Bay	Moult
80928	6-Sep-09	65.32	-176.29		16	L3	Anadyr Bay	Moult
80928	10-Sep-09	65.21	-175.96		7	L1	Anadyr Bay	Moult
80928	13-Sep-09	65.26	-175.97		4	L0	Anadyr Bay	Moult
80928	17-Sep-09	65.27	-175.97		4	L3	Anadyr Bay	Moult
80928	21-Sep-09	65.18	-176.20		18	L0	Anadyr Bay	Moult
80928	24-Sep-09	65.20	-176.00		8	L0	Anadyr Bay	Moult
80928	28-Sep-09	65.24	-176.08		10	L2	Anadyr Bay	Moult
80928	2-Oct-09	65.19	-176.00		9	L2	Anadyr Bay	Moult
80928	5-Oct-09	65.12	-175.90		7	L0	Anadyr Bay	Moult
80928	9-Oct-09	65.10	-175.90		6	L1	Anadyr Bay	Moult
80928	13-Oct-09	65.17	-175.83		3	L3	Anadyr Bay	Moult
80928	16-Oct-09	65.12	-175.87		6	L3	Anadyr Bay	Moult
80928	20-Oct-09	65.11	-175.92		7	LA	Anadyr Bay	Moult
80928	24-Oct-09	65.13	-175.90		8	L1	Anadyr Bay	Moult
80928	28-Oct-09	65.11	-175.87		5	L2	Anadyr Bay	Moult
80928	31-Oct-09	65.08	-175.87		5	L2	Anadyr Bay	Moult
80928	4-Nov-09	64.25	-173.30		4	L2	Cape Chukotsk	Fall migration
80928	8-Nov-09	64.38	-172.20		3	L0	Cape Chukotsk	Winter
80928	12-Nov-09	64.35	-172.52		4	LA	Cape Chukotsk	Winter
80928	16-Nov-09	64.29	-172.52		11	L0	Cape Chukotsk	Winter
80928	20-Nov-09	64.19	-172.42		23	LA	Cape Chukotsk	Winter
80928	24-Nov-09	64.29	-172.30		13	LA	Cape Chukotsk	Winter
80928	28-Nov-09	64.30	-172.50		9	L2	Cape Chukotsk	Winter
80928	2-Dec-09	64.19	-172.81		10	L0	Cape Chukotsk	Winter
80928	5-Dec-09	64.32	-172.36		10	L3	Cape Chaplin	Winter
80928	9-Dec-09	64.43	-172.21		2	L1	Cape Chaplin	Winter
80928	13-Dec-09	64.25	-172.37		17	L0	Cape Chaplin	Winter
80928	18-Dec-09	64.32	-172.22		9	LA	Cape Chaplin	Winter
80928	18-Dec-09	63.98	-173.62		38	LB	Cape Chaplin	Winter
80928	25-Dec-09	64.31	-172.22		10	LA	Cape Chaplin	Winter
80928	29-Dec-09	64.32	-172.04		14	LA	Cape Chaplin	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80928	2-Jan-10	64.21	-172.07		24	LA	Cape Chaplin	Winter
80928	6-Jan-10	64.15	-172.08		31	L0	Cape Chukotsk	Winter
80929	**Female**							
80929	18-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80929	19-Jun-08	72.39	-125.18	7		L3	Siksik Lake	Nesting
80929	22-Jun-08	72.42	-125.00	11		L3	Siksik Lake	Nesting
80929	25-Jun-08	72.42	-125.18	5		L3	Siksik Lake	Nesting
80929	28-Jun-08	72.43	-125.19	4		L3	Siksik Lake	Nesting
80929	1-Jul-08	72.41	-125.12	7		L3	Siksik Lake	Nesting
80929	4-Jul-08	72.41	-125.21	5		L3	Siksik Lake	Nesting
80929	7-Jul-08	72.42	-125.25	3		L3	Siksik Lake	Nesting
80929	10-Jul-08	72.42	-125.18	5		L3	Siksik Lake	Nesting
80929	13-Jul-08	72.41	-125.21	4		L3	Siksik Lake	Nesting
80929	16-Jul-08	72.43	-125.31	1		L3	Siksik Lake	Nesting
80929	19-Jul-08	72.41	-125.17	6		L3	Siksik Lake	Nesting
80929	22-Jul-08	72.40	-125.25	4		L3	Siksik Lake	Nesting
80929	25-Jul-08	72.91	-125.20		5	L3	Meek Point	Moult migration
80929	28-Jul-08	73.69	-124.25		6	L3	Burnett Bay	Moult migration
80929	31-Jul-08	73.68	-124.26		4	L3	Burnett Bay	Moult migration
80929	3-Aug-08	73.68	-124.24		5	L2	Burnett Bay	Moult migration
80929	6-Aug-08	73.70	-124.29		6	L3	Burnett Bay	Moult migration
80929	10-Aug-08	73.69	-124.30		4	L3	Burnett Bay	Moult migration
80929	13-Aug-08	70.80	-150.95		39	L3	Harrison Bay	Moult migration
80929	16-Aug-08	71.05	-153.65		20	L3	Smith Bay	Moult migration
80929	19-Aug-08	64.36	-172.77		2	L3	Cape Chukotsk	Moult
80929	22-Aug-08	64.38	-172.75		3	L3	Cape Chukotsk	Moult
80929	25-Aug-08	64.37	-172.78		2	L3	Cape Chukotsk	Moult
80929	28-Aug-08	64.36	-172.77		2	L3	Cape Chukotsk	Moult
80929	31-Aug-08	64.37	-172.77		2	L3	Cape Chukotsk	Moult
80929	3-Sep-08	64.40	-172.74		1	L3	Cape Chukotsk	Moult
80929	6-Sep-08	64.36	-172.81		0	L3	Cape Chukotsk	Moult
80929	9-Sep-08	64.33	-172.81		1	L3	Cape Chukotsk	Moult
80929	12-Sep-08	64.35	-172.81		1	L3	Cape Chukotsk	Moult
80929	15-Sep-08	64.32	-172.79		2	L3	Cape Chukotsk	Moult
80929	18-Sep-08	64.33	-172.80		1	L3	Cape Chukotsk	Moult
80929	22-Sep-08	64.34	-172.79		2	L3	Cape Chukotsk	Moult
80929	25-Sep-08	64.33	-172.81		1	L3	Cape Chukotsk	Moult
80929	28-Sep-08	64.36	-172.78		2	L3	Cape Chukotsk	Moult
80929	1-Oct-08	64.34	-172.79		2	L3	Cape Chukotsk	Moult
80929	4-Oct-08	64.34	-172.80		1	L3	Cape Chukotsk	Moult
80929	7-Oct-08	64.33	-172.75		4	L3	Cape Chukotsk	Moult
80929	10-Oct-08	64.59	-172.50		1	L3	Cape Chaplin	Moult
80929	13-Oct-08	64.39	-172.27		2	L2	Cape Chukotsk	Moult
80929	16-Oct-08	64.46	-172.15		7	L3	Cape Chaplin	Moult
80929	19-Oct-08	64.41	-172.30	0		L2	Cape Chukotsk	Moult
80929	22-Oct-08	63.84	-171.18		25	L2	St. Lawrence Is.	Fall migration
80929	26-Oct-08	63.88	-170.96		29	L3	St. Lawrence Is.	Fall migration
80929	29-Oct-08	63.90	-171.20		27	L3	St. Lawrence Is.	Fall migration
80929	1-Nov-08	63.75	-170.86		14	L2	St. Lawrence Is.	Fall migration
80929	4-Nov-08	63.84	-170.98		26	L1	St. Lawrence Is.	Fall migration
80929	7-Nov-08	63.84	-171.27		21	L2	St. Lawrence Is.	Fall migration
80929	10-Nov-08	63.81	-170.95		22	L3	St. Lawrence Is.	Fall migration
80929	13-Nov-08	63.87	-171.09		30	L3	St. Lawrence Is.	Fall migration
80929	16-Nov-08	63.84	-171.19		25	L2	St. Lawrence Is.	Fall migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80929	20-Nov-08	63.84	-170.64		18	L3	St. Lawrence Is.	Fall migration
80929	23-Nov-08	63.84	-170.94		25	L2	St. Lawrence Is.	Fall migration
80929	26-Nov-08	63.81	-170.66		15	L2	St. Lawrence Is.	Fall migration
80929	29-Nov-08	55.93	-161.99		11	L1	Cape Seniavin	Fall migration
80929	2-Dec-08	55.10	-164.23		15	L2	Unimak Island	Winter
80929	5-Dec-08	55.12	-163.92		9	L3	Unimak Island	Winter
80929	8-Dec-08	55.12	-163.93		9	L3	Unimak Island	Winter
80929	12-Dec-08	55.12	-163.95		9	L2	Unimak Island	Winter
80929	15-Dec-08	55.12	-163.99		10	L3	Unimak Island	Winter
80929	18-Dec-08	55.16	-164.03		16	L3	Unimak Island	Winter
80929	21-Dec-08	55.24	-163.93		22	L3	Unimak Island	Winter
80929	29-Dec-08	55.10	-164.02		10	L2	Unimak Island	Winter
80929	6-Jan-09	55.03	-164.14		7	L3	Unimak Island	Winter
80929	14-Jan-09	55.10	-163.97		8	L3	Unimak Island	Winter
80929	23-Jan-09	55.07	-164.17		11	L2	Unimak Island	Winter
80929	31-Jan-09	55.05	-164.12		9	L3	Unimak Island	Winter
80929	8-Feb-09	55.10	-164.06		12	L3	Unimak Island	Winter
80929	16-Feb-09	55.11	-163.81		7	L3	Unimak Island	Winter
80929	24-Feb-09	55.14	-163.65		10	L3	Unimak Island	Winter
80929	4-Mar-09	55.17	-163.89		15	L3	Unimak Island	Winter
80929	12-Mar-09	55.09	-164.08		13	L3	Unimak Island	Winter
80929	21-Mar-09	55.10	-163.99		9	L3	Unimak Island	Winter
80929	29-Mar-09	55.13	-163.96		11	L2	Unimak Island	Winter
80929	6-Apr-09	63.29	-171.18		9	L3	St. Lawrence Is.	Spring migration
80929	7-Apr-09	63.44	-171.87		3	L3	St. Lawrence Is.	Spring migration
80929	8-Apr-09	63.58	-171.92		4	L3	St. Lawrence Is.	Spring migration
80929	13-Apr-09	63.30	-171.58		2	L3	St. Lawrence Is.	Spring migration
80929	14-Apr-09	63.31	-171.57		1	L3	St. Lawrence Is.	Spring migration
80929	15-Apr-09	64.51	-172.12		12	L2	Cape Chaplin	Spring migration
80929	16-Apr-09	65.23	-171.44		33	L3	Cape Nygligan	Spring migration
80929	17-Apr-09	65.27	-171.40		28	L2	Cape Nygligan	Spring migration
80929	18-Apr-09	65.21	-171.49		32	L3	Cape Nygligan	Spring migration
80929	21-Apr-09	64.80	-171.96		6	L2	Cape Chaplin	Spring migration
80929	22-Apr-09	65.02	-171.90		11	L2	Cape Nygligan	Spring migration
80929	23-Apr-09	65.23	-171.38		31	L3	Cape Nygligan	Spring migration
80929	27-Apr-09	65.40	-170.83		13	L3	Cape Nunyagmo	Spring migration
80929	28-Apr-09	65.35	-170.30		32	L3	Cape Nunyagmo	Spring migration
80929	29-Apr-09	65.48	-170.15		25	L2	Cape Nunyagmo	Spring migration
80929	30-Apr-09	69.20	-165.86		40	L3	Ledyard Bay	Spring migration
80929	1-May-09	69.14	-165.66		35	L3	Ledyard Bay	Spring migration
80929	3-May-09	69.14	-165.61		35	L2	Ledyard Bay	Spring migration
80929	6-May-09	69.37	-164.56		52	L3	Ledyard Bay	Spring migration
80929	7-May-09	70.13	-141.25		46	L3	Demarcation Pt.	Spring migration
80929	8-May-09	69.86	-136.64		56	L3	Mackenzie Delta	Spring migration
80929	9-May-09	70.18	-132.68		55	L3	Mackenzie Delta	Spring migration
80929	11-May-09	70.27	-131.85		43	L3	Cape Dalhousie	Spring migration
80929	16-May-09	70.58	-130.86		54	L3	Cape Dalhousie	Spring migration
80929	17-May-09	70.33	-132.82		74	L3	Cape Dalhousie	Spring migration
80929	18-May-09	70.96	-129.35		60	L3	Cape Bathurst	Spring migration
80929	19-May-09	71.00	-129.58		70	L3	Cape Bathurst	Spring migration
80929	22-May-09	70.93	-129.47		61	L2	Cape Bathurst	Spring migration
80929	23-May-09	70.92	-129.59		65	L3	Cape Bathurst	Spring migration
80929	24-May-09	70.89	-129.98		77	L3	Cape Bathurst	Spring migration
80929	25-May-09	70.87	-129.59		61	L3	Cape Bathurst	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80929	26-May-09	70.97	-129.46		64	L3	Cape Bathurst	Spring migration
80929	29-May-09	70.76	-129.88		60	L3	Cape Dalhousie	Spring migration
80929	30-May-09	70.85	-129.56		59	L3	Cape Bathurst	Spring migration
80929	31-May-09	70.92	-129.84		73	L3	Cape Bathurst	Spring migration
80929	2-Jun-09	70.94	-129.75		72	L3	Cape Bathurst	Spring migration
80929	3-Jun-09	71.00	-129.96		83	L3	Cape Bathurst	Spring migration
80929	5-Jun-09	71.00	-130.23		92	L3	Cape Bathurst	Spring migration
80929	6-Jun-09	71.01	-130.24		93	L2	Cape Dalhousie	Spring migration
80929	7-Jun-09	70.98	-130.09		86	L3	Cape Bathurst	Spring migration
80929	8-Jun-09	70.89	-129.68		66	L3	Cape Bathurst	Spring migration
80929	9-Jun-09	71.78	-128.08		86	L3	Cape Kellet	Spring migration
80929	10-Jun-09	72.55	-126.38		41	L3	Siksik Lake	Spring migration
80929	12-Jun-09	72.48	-124.74	12		L3	Siksik Lake	Spring migration
80929	13-Jun-09	72.41	-125.18	5		L2	Siksik Lake	Nesting
80929	14-Jun-09	72.40	-125.22	5		L3	Siksik Lake	Nesting
80929	15-Jun-09	72.40	-125.25	3		L3	Siksik Lake	Nesting
80929	16-Jun-09	72.41	-125.22	4		L3	Siksik Lake	Nesting
80929	17-Jun-09	72.41	-125.25	3		L3	Siksik Lake	Nesting
80929	19-Jun-09	72.40	-125.25	4		L3	Siksik Lake	Nesting
80929	20-Jun-09	72.41	-125.25	3		L3	Siksik Lake	Nesting
80929	21-Jun-09	72.41	-125.25	3		L3	Siksik Lake	Nesting
80929	22-Jun-09	72.41	-125.25	3		L3	Siksik Lake	Nesting
80929	23-Jun-09	72.40	-125.23	4		L3	Siksik Lake	Nesting
80929	27-Jun-09	72.40	-125.25	3		L3	Siksik Lake	Nesting
80929	30-Jun-09	72.42	-125.22	4		L3	Siksik Lake	Nesting
80929	3-Jul-09	72.41	-125.19	5		L3	Siksik Lake	Nesting
80929	7-Jul-09	72.41	-125.24	3		L3	Siksik Lake	Nesting
80929	10-Jul-09	72.43	-125.31	0		L3	Siksik Lake	Nesting
80929	13-Jul-09	72.38	-125.37	1		L3	Siksik Lake	Nesting
80929	16-Jul-09	72.43	-125.32		0	L3	Siksik Lake	Nesting
80929	19-Jul-09	72.42	-125.24	3		L3	Siksik Lake	Nesting
80929	23-Jul-09	72.48	-125.23	2		L3	Siksik Lake	Nesting
80929	26-Jul-09	72.41	-125.24	3		L3	Siksik Lake	Nesting
80929	29-Jul-09	72.64	-125.70		21	L3	Meek Point	Moult migration
80929	2-Aug-09	73.29	-124.97		16	L2	Meek Point	Moult migration
80929	5-Aug-09	73.37	-124.51		2	L3	Meek Point	Moult migration
80929	9-Aug-09	73.89	-124.41		0	L3	Burnett Bay	Moult migration
80929	12-Aug-09	73.91	-124.40	0		L3	Burnett Bay	Moult migration
80929	15-Aug-09	72.87	-133.08		297	L3	Beaufort Sea	Moult migration
80929	19-Aug-09	71.04	-153.63		18	L3	Smith Bay	Moult migration
80929	22-Aug-09	68.79	-166.44		11	L3	Ledyard Bay	Moult migration
80929	26-Aug-09	64.41	-172.71	1		L3	Cape Chukotsk	Moult
80929	29-Aug-09	64.55	-172.54		0	L3	Cape Chaplin	Moult
80929	2-Sep-09	64.58	-172.51		2	L3	Cape Chaplin	Moult
80929	5-Sep-09	64.61	-172.42		1	L3	Cape Chaplin	Moult
80929	9-Sep-09	64.61	-172.43		0	L3	Cape Chaplin	Moult
80929	12-Sep-09	64.61	-172.41		2	L2	Cape Chaplin	Moult
80929	16-Sep-09	64.57	-172.44		3	L3	Cape Chaplin	Moult
80929	19-Sep-09	64.60	-172.39		3	L3	Cape Chaplin	Moult
80929	23-Sep-09	64.61	-172.45		1	L3	Cape Chaplin	Moult
80929	27-Sep-09	64.61	-172.43		1	L2	Cape Chaplin	Moult
80929	30-Sep-09	64.61	-172.42		1	L2	Cape Chaplin	Moult
80929	8-Oct-09	64.59	-172.49		0	L3	Cape Chaplin	Moult
80929	15-Oct-09	64.24	-173.08		0	LB	Cape Chukotsk	Moult

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80930	**Male**							
80930	18-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80930	19-Jun-08	72.39	-125.17	7		L3	Siksik Lake	Nesting
80930	22-Jun-08	72.40	-125.13	8		L3	Siksik Lake	Nesting
80930	25-Jun-08	72.63	-125.96		29	L3	Meek Point	Moult migration
80930	28-Jun-08	72.69	-126.04		35	L3	Meek Point	Moult migration
80930	1-Jul-08	72.69	-126.12		38	L3	Meek Point	Moult migration
80930	4-Jul-08	72.74	-126.28		43	L3	Meek Point	Moult migration
80930	7-Jul-08	72.74	-126.52		52	L3	Siksik Lake	Moult migration
80930	11-Jul-08	72.73	-125.71		24	L3	Meek Point	Moult migration
80930	14-Jul-08	70.66	-128.83		23	L3	Cape Bathurst	Moult migration
80930	17-Jul-08	70.51	-128.79		18	L3	Cape Bathurst	Moult migration
80930	20-Jul-08	70.47	-128.95		25	L3	Cape Bathurst	Moult migration
80930	23-Jul-08	70.34	-128.59		16	L3	Cape Bathurst	Moult migration
80930	26-Jul-08	70.52	-129.18		34	L3	Cape Bathurst	Moult migration
80930	29-Jul-08	71.03	-157.63		11	L3	Point Franklin	Moult migration
80930	2-Aug-08	71.03	-157.36		2	L3	Point Franklin	Moult migration
80930	5-Aug-08	70.20	-162.45		4	L3	Icy Cape	Moult migration
80930	8-Aug-08	64.78	-172.05		1	L3	Cape Chaplin	Moult
80930	11-Aug-08	64.75	-172.05		1	LA	Cape Chaplin	Moult
80930	14-Aug-08	64.75	-172.05		1	L2	Cape Chaplin	Moult
80930	17-Aug-08	64.76	-172.03		2	L3	Cape Chaplin	Moult
80930	20-Aug-08	64.76	-172.00		3	L3	Cape Chaplin	Moult
80930	24-Aug-08	64.75	-172.01		3	L3	Cape Chaplin	Moult
80930	27-Aug-08	64.76	-172.02		2	L3	Cape Chaplin	Moult
80930	30-Aug-08	64.77	-172.04		1	L3	Cape Chaplin	Moult
80930	2-Sep-08	64.75	-172.04		2	L2	Cape Chaplin	Moult
80930	5-Sep-08	64.75	-172.05		1	L3	Cape Chaplin	Moult
80930	8-Sep-08	64.75	-172.06		1	L2	Cape Chaplin	Moult
80930	12-Sep-08	64.75	-172.06		2	L3	Cape Chaplin	Moult
80930	15-Sep-08	64.75	-172.05		1	L3	Cape Chaplin	Moult
80930	18-Sep-08	64.75	-172.06		1	L3	Cape Chaplin	Moult
80930	21-Sep-08	64.70	-172.30		2	L3	Cape Chaplin	Moult
80930	24-Sep-08	64.68	-172.40		3	L3	Cape Chaplin	Moult
80930	27-Sep-08	64.69	-172.32		2	L3	Cape Chaplin	Moult
80930	1-Oct-08	64.68	-172.54		1	L3	Cape Chaplin	Moult
80930	4-Oct-08	64.68	-172.54		1	L3	Cape Chaplin	Moult
80930	7-Oct-08	64.67	-172.53		2	L3	Cape Chaplin	Moult
80930	10-Oct-08	64.66	-172.70		0	L3	Cape Chaplin	Moult
80930	13-Oct-08	64.73	-172.69		3	L3	Cape Chaplin	Moult
80930	16-Oct-08	64.68	-172.54		1	L3	Cape Chaplin	Moult
80930	20-Oct-08	64.59	-172.17		13	L3	Cape Chaplin	Moult
80930	23-Oct-08	64.57	-172.16		13	L2	Cape Chaplin	Moult
80930	26-Oct-08	64.54	-172.26		7	L3	Cape Chaplin	Moult
80930	29-Oct-08	64.66	-172.57		2	L3	Cape Chaplin	Moult
80930	1-Nov-08	64.68	-172.54		2	L2	Cape Chaplin	Moult
80930	4-Nov-08	64.68	-172.53		1	L2	Cape Chaplin	Moult
80930	8-Nov-08	64.50	-172.28		5	L2	Cape Chaplin	Moult
80930	11-Nov-08	64.48	-172.29		3	L3	Cape Chaplin	Moult
80930	17-Nov-08	64.52	-172.35		3	L1	Cape Chaplin	Moult
80930	20-Nov-08	64.51	-172.29		5	L2	Cape Chaplin	Moult
80930	24-Nov-08	59.86	-167.14		15	L3	Nunivak Island	Fall migration
80930	27-Nov-08	56.43	-155.01		13	L2	Kodiak Island	Winter
80930	30-Nov-08	56.39	-154.92		8	L0	Kodiak Island	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80930	3-Dec-08	56.73	-154.58		14	L3	Kodiak Island	Winter
80930	6-Dec-08	56.71	-154.36		12	L3	Kodiak Island	Winter
80930	10-Dec-08	56.66	-154.52		6	L2	Kodiak Island	Winter
80930	13-Dec-08	56.74	-154.52		14	L3	Kodiak Island	Winter
80930	16-Dec-08	56.35	-155.06		18	L2	Kodiak Island	Winter
80930	19-Dec-08	56.38	-154.92		9	L3	Kodiak Island	Winter
80930	22-Dec-08	56.35	-154.82		6	L2	Kodiak Island	Winter
80930	25-Dec-08	56.35	-154.87		9	L1	Kodiak Island	Winter
80930	3-Jan-09	56.29	-154.79		12	L3	Kodiak Island	Winter
80930	11-Jan-09	56.44	-154.96		10	L3	Kodiak Island	Winter
80930	19-Jan-09	56.32	-154.85		10	L2	Kodiak Island	Winter
80930	28-Jan-09	56.33	-154.90		11	L2	Kodiak Island	Winter
80930	5-Feb-09	56.51	-154.88		8	L2	Kodiak Island	Winter
80930	13-Feb-09	56.36	-155.00		14	L2	Kodiak Island	Winter
80930	22-Feb-09	56.37	-154.91		9	L3	Kodiak Island	Winter
80930	2-Mar-09	56.42	-154.97		10	L3	Kodiak Island	Winter
80930	10-Mar-09	58.66	-157.41		8	L3	Kvichak Bay	Spring migration
80930	18-Mar-09	58.25	-157.70		10	L2	Kvichak Bay	Spring migration
80930	27-Mar-09	58.56	-157.92		10	L2	Kvichak Bay	Spring migration
80930	4-Apr-09	58.19	-157.55		1	L2	Kvichak Bay	Spring migration
80930	12-Apr-09	58.80	-157.35		2	L3	Kvichak Bay	Spring migration
80930	14-Apr-09	58.66	-158.41		4	L2	Nushagak Bay	Spring migration
80930	16-Apr-09	58.66	-158.46		7	L3	Nushagak Bay	Spring migration
80930	17-Apr-09	58.53	-158.10		9	L2	Nushagak Bay	Spring migration
80930	18-Apr-09	58.46	-158.14		17	L3	Nushagak Bay	Spring migration
80930	19-Apr-09	58.40	-158.25		23	L3	Nushagak Bay	Spring migration
80930	20-Apr-09	58.47	-158.22		16	L3	Nushagak Bay	Spring migration
80930	23-Apr-09	58.52	-158.17		11	L3	Nushagak Bay	Spring migration
80930	24-Apr-09	58.52	-158.16		10	L3	Nushagak Bay	Spring migration
80930	25-Apr-09	58.54	-158.15		8	L3	Nushagak Bay	Spring migration
80930	26-Apr-09	58.71	-158.45		5	L3	Nushagak Bay	Spring migration
80930	27-Apr-09	58.72	-158.60		9	L3	Nushagak Bay	Spring migration
80930	28-Apr-09	58.72	-158.49		7	L2	Nushagak Bay	Spring migration
80930	29-Apr-09	58.73	-158.50		5	L2	Nushagak Bay	Spring migration
80930	1-May-09	58.74	-158.53		5	L3	Nushagak Bay	Spring migration
80930	2-May-09	58.64	-158.49		10	L3	Nushagak Bay	Spring migration
80930	3-May-09	58.44	-158.26		20	L1	Nushagak Bay	Spring migration
80930	4-May-09	58.45	-158.26		18	L3	Nushagak Bay	Spring migration
80930	5-May-09	58.52	-158.20		10	L3	Nushagak Bay	Spring migration
80930	7-May-09	58.50	-158.27		13	L3	Nushagak Bay	Spring migration
80930	8-May-09	58.51	-158.23		11	L2	Nushagak Bay	Spring migration
80930	9-May-09	58.56	-158.18		6	L2	Nushagak Bay	Spring migration
80930	10-May-09	58.61	-158.00		3	LB	Kvichak Bay	Spring migration
80930	11-May-09	58.40	-159.56		27	L3	Togiak Bay	Spring migration
80930	12-May-09	59.22	-164.19		60	L2	Etolin Strait	Spring migration
80930	14-May-09	59.38	-164.57		50	L3	Etolin Strait	Spring migration
80930	15-May-09	59.45	-165.18		56	L3	Etolin Strait	Spring migration
80930	16-May-09	59.41	-165.34		56	L3	Etolin Strait	Spring migration
80930	17-May-09	59.77	-165.61		14	L1	Nunivak Island	Spring migration
80930	18-May-09	59.99	-165.47		4	L3	Nunivak Island	Spring migration
80930	19-May-09	60.03	-165.57		4	L3	Nunivak Island	Spring migration
80930	21-May-09	60.07	-165.55		6	L3	Nunivak Island	Spring migration
80930	22-May-09	60.10	-165.48		10	L2	Nunivak Island	Spring migration
80930	23-May-09	60.04	-165.48		8	L2	Nunivak Island	Spring migration

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80930	24-May-09	59.88	-165.51		5	L3	Nunivak Island	Spring migration
80930	25-May-09	59.95	-165.56		1	L3	Nunivak Island	Spring migration
80930	28-May-09	60.03	-165.53		6	L2	Nunivak Island	Spring migration
80930	29-May-09	60.03	-165.54		5	L3	Nunivak Island	Spring migration
80930	30-May-09	60.05	-165.56		5	L2	Nunivak Island	Spring migration
80930	31-May-09	60.06	-165.60		4	L1	Nunivak Island	Spring migration
80930	1-Jun-09	60.05	-165.61		3	L2	Nunivak Island	Spring migration
80930	2-Jun-09	60.06	-165.59		4	L2	Nunivak Island	Spring migration
80930	4-Jun-09	60.53	-165.59		9	L3	Etolin Strait	Spring migration
80930	5-Jun-09	61.03	-165.85		16	L2	Etolin Strait	Spring migration
80930	6-Jun-09	63.12	-165.98		65	L2	Etolin Strait	Spring migration
80930	7-Jun-09	67.17	-165.27		70	L3	Ledyard Bay?	Spring migration
80930	8-Jun-09	70.25	-162.63		14	L3	Icy Cape	Spring migration
80930	10-Jun-09	71.19	-154.15		28	L3	Smith Bay	Spring / moult mig
80930	11-Jun-09	71.20	-154.29		24	L3	Smith Bay	Spring / moult mig
80930	12-Jun-09	71.19	-154.30		23	L3	Smith Bay	Spring / moult mig
80930	13-Jun-09	71.19	-154.24		25	L3	Smith Bay	Spring / moult mig
80930	14-Jun-09	71.19	-154.29		24	L3	Smith Bay	Spring / moult mig
80930	16-Jun-09	71.17	-154.19		25	L3	Smith Bay	Spring / moult mig
80930	17-Jun-09	71.17	-154.23		24	L3	Smith Bay	Spring / moult mig
80930	18-Jun-09	71.17	-154.26		23	L3	Smith Bay	Spring / moult mig
80930	19-Jun-09	71.28	-154.76		20	L2	Smith Bay	Spring / moult mig
80930	21-Jun-09	71.27	-154.78		19	L3	Smith Bay	Spring / moult mig
80930	22-Jun-09	71.30	-154.83		21	L3	Smith Bay	Spring / moult mig
80930	23-Jun-09	71.26	-154.68		20	L2	Smith Bay	Spring / moult mig
80930	24-Jun-09	71.24	-154.72		17	L3	Smith Bay	Spring / moult mig
80930	25-Jun-09	71.24	-154.69		18	L3	Smith Bay	Spring / moult mig
80930	27-Jun-09	71.24	-154.60		20	L3	Smith Bay	Spring / moult mig
80930	28-Jun-09	71.24	-154.72		17	L3	Smith Bay	Spring / moult mig
80930	29-Jun-09	71.23	-154.70		17	L3	Smith Bay	Spring / moult mig
80930	30-Jun-09	71.23	-154.57		20	L3	Smith Bay	Spring / moult mig
80930	1-Jul-09	71.25	-154.74		17	L3	Smith Bay	Spring / moult mig
80930	5-Jul-09	70.32	-161.62		1	L2	Icy Cape	Moult migration
80930	8-Jul-09	70.34	-161.84		1	L3	Icy Cape	Moult migration
80930	12-Jul-09	70.34	-161.26		4	L3	Icy Cape	Moult migration
80930	15-Jul-09	70.35	-161.14		3	L2	Icy Cape	Moult migration
80930	19-Jul-09	70.35	-161.72		4	L3	Icy Cape	Moult migration
80930	22-Jul-09	70.14	-162.44		0	L2	Icy Cape	Moult migration
80930	26-Jul-09	69.87	-163.19		10	L3	Point Lay	Moult migration
80930	29-Jul-09	69.83	-163.23		9	L3	Point Lay	Moult migration
80930	2-Aug-09	69.99	-162.95		9	L3	Icy Cape	Moult migration
80930	5-Aug-09	70.03	-163.02		15	L3	Icy Cape	Moult migration
80930	9-Aug-09	69.76	-163.44		16	L2	Point Lay	Moult migration
80930	13-Aug-09	68.96	-165.19		11	L3	Ledyard Bay	Moult migration
80930	16-Aug-09	68.96	-165.01		9	L3	Ledyard Bay	Moult migration
80930	20-Aug-09	68.96	-164.95		9	L2	Ledyard Bay	Moult migration
80930	24-Aug-09	68.95	-164.95		7	L3	Ledyard Bay	Moult migration
80931	**Female**							
80931	18-Jun-08	72.39	-125.17	7		DP	Siksik Lake	Nesting
80931	19-Jun-08	72.40	-125.17	7		L3	Siksik Lake	Nesting
80931	25-Jun-08	72.39	-125.17	7		L1	Siksik Lake	Nesting
80931	28-Jun-08	72.36	-125.08	12		L3	Siksik Lake	Nesting
80931	2-Jul-08	72.41	-125.17	6		L2	Siksik Lake	Nesting
80931	5-Jul-08	72.36	-124.96	16		L2	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80931	8-Jul-08	72.41	-125.16	7		L3	Siksik Lake	Nesting
80931	11-Jul-08	72.42	-125.13	7		L3	Siksik Lake	Nesting
80931	15-Jul-08	72.41	-125.28	2		L3	Siksik Lake	Nesting
80931	18-Jul-08	72.37	-125.09	11		L3	Siksik Lake	Nesting
80931	21-Jul-08	72.41	-125.12	7		L3	Siksik Lake	Nesting
80931	24-Jul-08	72.39	-125.16	7		L3	Siksik Lake	Nesting
80931	28-Jul-08	72.41	-125.13	7		L3	Siksik Lake	Nesting
80931	31-Jul-08	72.84	-125.20		0	L3	Meek Point	Moult migration
80931	3-Aug-08	73.46	-124.67		11	L3	Burnett Bay	Moult migration
80931	6-Aug-08	73.63	-124.68		8	L3	Burnett Bay	Moult migration
80931	10-Aug-08	73.69	-124.67		0	L3	Burnett Bay	Moult migration
80931	13-Aug-08	73.69	-124.53	0		L3	Burnett Bay	Moult migration
80931	16-Aug-08	70.14	-162.66		7	L3	Icy Cape	Moult migration
80931	20-Aug-08	65.45	-171.02		3	L3	Cape Nunyagmo	Moult migration
80931	23-Aug-08	62.95	-169.60		2	L3	St. Lawrence Is.	Moult
80931	26-Aug-08	62.96	-169.58		2	L3	St. Lawrence Is.	Moult
80931	29-Aug-08	62.95	-169.58		3	L2	St. Lawrence Is.	Moult
80931	2-Sep-08	62.95	-169.57		3	L3	St. Lawrence Is.	Moult
80931	5-Sep-08	62.96	-169.53		2	L3	St. Lawrence Is.	Moult
80931	8-Sep-08	62.94	-169.58		3	L3	St. Lawrence Is.	Moult
80931	12-Sep-08	62.93	-169.60		2	L2	St. Lawrence Is.	Moult
80931	15-Sep-08	62.98	-169.45		4	L3	St. Lawrence Is.	Moult
80931	18-Sep-08	62.95	-169.57		3	L3	St. Lawrence Is.	Moult
80931	22-Sep-08	62.97	-169.51		2	L3	St. Lawrence Is.	Moult
80931	25-Sep-08	62.96	-169.56		2	L3	St. Lawrence Is.	Moult
80931	28-Sep-08	62.96	-169.59		2	L3	St. Lawrence Is.	Moult
80931	1-Oct-08	62.96	-169.53		2	L3	St. Lawrence Is.	Moult
80931	5-Oct-08	62.95	-169.56		3	L3	St. Lawrence Is.	Moult
80931	8-Oct-08	62.97	-169.51		2	L3	St. Lawrence Is.	Moult
80931	11-Oct-08	62.95	-169.53		3	L2	St. Lawrence Is.	Moult
80931	15-Oct-08	62.95	-169.54		3	L3	St. Lawrence Is.	Moult
80931	18-Oct-08	62.91	-169.61		4	L3	St. Lawrence Is.	Moult
80931	21-Oct-08	62.95	-169.56		3	L3	St. Lawrence Is.	Moult
80931	25-Oct-08	62.95	-169.49		4	L3	St. Lawrence Is.	Moult
80931	28-Oct-08	62.98	-169.44		5	L1	St. Lawrence Is.	Moult
80931	31-Oct-08	62.99	-169.83		3	L3	St. Lawrence Is.	Moult
80931	4-Nov-08	62.90	-169.56		6	L3	St. Lawrence Is.	Moult
80931	7-Nov-08	62.89	-169.77		8	L2	St. Lawrence Is.	Moult
80931	10-Nov-08	62.96	-169.52		3	L2	St. Lawrence Is.	Moult
80931	14-Nov-08	62.93	-169.51		6	L3	St. Lawrence Is.	Moult
80931	17-Nov-08	62.91	-169.46		9	L3	St. Lawrence Is.	Moult
80931	20-Nov-08	62.68	-168.41		50	L2	St. Lawrence Is.	Fall migration
80931	24-Nov-08	62.64	-168.58		51	L3	St. Lawrence Is.	Fall migration
80931	27-Nov-08	62.59	-168.76		54	L1	St. Lawrence Is.	Fall migration
80931	30-Nov-08	61.02	-167.87		93	L3	Nunivak Island	Fall migration
80931	4-Dec-08	59.89	-167.59		24	L3	Nunivak Island	Fall migration
80931	7-Dec-08	56.59	-160.74		41	L3	Port Heiden	Fall migration
80931	11-Dec-08	55.05	-164.10		9	L2	Unimak Island	Winter
80931	14-Dec-08	55.06	-164.35		15	L3	Unimak Island	Winter
80931	17-Dec-08	55.12	-164.15		16	L2	Unimak Island	Winter
80931	21-Dec-08	55.03	-164.27		10	L2	Unimak Island	Winter
80931	24-Dec-08	55.02	-164.33		11	L3	Unimak Island	Winter
80931	27-Dec-08	55.05	-164.09		9	L2	Unimak Island	Winter
80931	31-Dec-08	55.05	-164.15		9	L2	Unimak Island	Winter

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80931	3-Jan-09	55.02	-164.34		11	L3	Unimak Island	Winter
80931	12-Jan-09	54.97	-164.41		4	L3	Unimak Island	Winter
80931	20-Jan-09	55.05	-164.21		10	L3	Unimak Island	Winter
80931	29-Jan-09	55.03	-164.25		10	L2	Unimak Island	Winter
80931	7-Feb-09	55.12	-163.91		9	L2	Unimak Island	Winter
80931	15-Feb-09	55.06	-164.08		10	L3	Unimak Island	Winter
80931	24-Feb-09	55.06	-164.20		11	L3	Unimak Island	Winter
80931	5-Mar-09	55.11	-164.02		11	L3	Unimak Island	Winter
80931	13-Mar-09	56.60	-160.10		16	L3	Port Heiden	Winter
80931	22-Mar-09	56.04	-161.84		16	LB	Cape Seniavin	Winter
80931	31-Mar-09	55.12	-164.02		12	L3	Unimak Island	Winter
80931	8-Apr-09	58.70	-158.44		5	L3	Nushagak Bay	Spring migration
80931	17-Apr-09	58.45	-158.11		19	L3	Nushagak Bay	Spring migration
80931	25-Apr-09	58.52	-158.23		11	L2	Nushagak Bay	Spring migration
80931	27-Apr-09	58.56	-158.28		8	L2	Nushagak Bay	Spring migration
80931	28-Apr-09	58.53	-158.19		9	L2	Nushagak Bay	Spring migration
80931	29-Apr-09	63.04	-166.99		93	L2	St. Lawrence Is.	Spring migration
80931	30-Apr-09	70.94	-163.70		107	L3	Icy Cape	Spring migration
80931	2-May-09	70.10	-142.19		21	L3	Martin Point	Spring migration
80931	3-May-09	70.08	-142.25		18	L3	Martin Point	Spring migration
80931	4-May-09	70.10	-142.22		19	L3	Martin Point	Spring migration
80931	5-May-09	70.10	-132.85		47	L3	Mackenzie Delta	Spring migration
80931	6-May-09	70.09	-132.88		46	L2	Mackenzie Delta	Spring migration
80931	8-May-09	70.09	-132.53		42	L2	Mackenzie Delta	Spring migration
80931	9-May-09	70.18	-132.16		41	L3	Cape Dalhousie	Spring migration
80931	10-May-09	70.41	-132.24		66	L3	Cape Dalhousie	Spring migration
80931	11-May-09	70.51	-130.29		37	L3	Cape Dalhousie	Spring migration
80931	13-May-09	70.78	-129.61		58	L3	Cape Bathurst	Spring migration
80931	14-May-09	70.97	-129.57		67	L3	Cape Bathurst	Spring migration
80931	15-May-09	70.97	-129.41		63	L3	Cape Bathurst	Spring migration
80931	16-May-09	70.13	-134.02		45	L3	Mackenzie Delta	Spring migration
80931	18-May-09	71.11	-129.17		70	L2	Cape Bathurst	Spring migration
80931	19-May-09	71.04	-129.02		59	L3	Cape Bathurst	Spring migration
80931	20-May-09	71.06	-129.30		67	L3	Cape Bathurst	Spring migration
80931	21-May-09	71.01	-129.33		64	L3	Cape Bathurst	Spring migration
80931	22-May-09	70.99	-129.38		64	L3	Cape Bathurst	Spring migration
80931	24-May-09	70.98	-129.67		72	L2	Cape Bathurst	Spring migration
80931	25-May-09	70.98	-129.84		77	L2	Cape Bathurst	Spring migration
80931	26-May-09	70.94	-129.43		61	L3	Cape Bathurst	Spring migration
80931	27-May-09	70.94	-129.16		52	L3	Cape Bathurst	Spring migration
80931	28-May-09	70.95	-129.36		59	L3	Cape Bathurst	Spring migration
80931	30-May-09	71.00	-129.34		63	L2	Cape Bathurst	Spring migration
80931	31-May-09	70.91	-129.68		67	L3	Cape Bathurst	Spring migration
80931	1-Jun-09	70.96	-129.36		60	L3	Cape Bathurst	Spring migration
80931	2-Jun-09	70.91	-129.56		63	L3	Cape Bathurst	Spring migration
80931	4-Jun-09	71.07	-129.88		85	L3	Cape Bathurst	Spring migration
80931	5-Jun-09	71.22	-129.91		99	L3	Cape Bathurst	Spring migration
80931	6-Jun-09	72.39	-125.19	6		L3	Siksik Lake	Nesting
80931	7-Jun-09	72.32	-124.96	17		L3	Siksik Lake	Nesting
80931	8-Jun-09	72.41	-125.16	6		L3	Siksik Lake	Nesting
80931	10-Jun-09	72.40	-125.19	5		L3	Siksik Lake	Nesting
80931	11-Jun-09	72.41	-125.16	6		L3	Siksik Lake	Nesting
80931	12-Jun-09	72.39	-125.13	8		L3	Siksik Lake	Nesting
80931	13-Jun-09	72.41	-125.14	7		L3	Siksik Lake	Nesting

Appendix A (continued)

PTT#	Sex/Date	Lat.	Long.	km inland	km offshore	Signal quality	Location	Season
80931	14-Jun-09	72.37	-125.10	11		L3	Siksik Lake	Nesting
80931	16-Jun-09	72.39	-125.14	8		L3	Siksik Lake	Nesting
80931	17-Jun-09	72.39	-125.13	8		L3	Siksik Lake	Nesting
80931	18-Jun-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	19-Jun-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	20-Jun-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	22-Jun-09	72.38	-125.10	10		L3	Siksik Lake	Nesting
80931	23-Jun-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	24-Jun-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	25-Jun-09	72.38	-125.11	10		L2	Siksik Lake	Nesting
80931	27-Jun-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	29-Jun-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	30-Jun-09	72.38	-125.12	10		L2	Siksik Lake	Nesting
80931	2-Jul-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	3-Jul-09	72.38	-125.12	9		LA	Siksik Lake	Nesting
80931	4-Jul-09	72.38	-125.11	10		L3	Siksik Lake	Nesting
80931	5-Jul-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	7-Jul-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	8-Jul-09	72.38	-125.10	10		LA	Siksik Lake	Nesting
80931	9-Jul-09	72.38	-125.11	10		L3	Siksik Lake	Nesting
80931	10-Jul-09	72.38	-125.12	9		L3	Siksik Lake	Nesting
80931	12-Jul-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	13-Jul-09	72.38	-125.12	10		L3	Siksik Lake	Nesting
80931	14-Jul-09	72.38	-125.11	10		L3	Siksik Lake	Nesting
80931	15-Jul-09	72.42	-125.13	7		L2	Siksik Lake	Nesting
80931	17-Jul-09	72.42	-125.15	6		LA	Siksik Lake	Nesting
80931	18-Jul-09	72.43	-125.13	6		L3	Siksik Lake	Nesting
80931	22-Jul-09	72.42	-125.13	6		L3	Siksik Lake	Nesting
80931	25-Jul-09	72.42	-124.97	11		L2	Siksik Lake	Nesting
80931	28-Jul-09	72.42	-125.02	10		L3	Siksik Lake	Nesting
80931	1-Aug-09	72.41	-125.10	8		L3	Siksik Lake	Nesting
80931	4-Aug-09	72.42	-125.12	7		L3	Siksik Lake	Nesting
80931	8-Aug-09	72.81	-125.05		1	L2	Meek Point	Moult migration
80931	11-Aug-09	73.51	-124.48		7	L3	Burnett Bay	Moult migration
80931	15-Aug-09	73.68	-124.59	0		L3	Burnett Bay	Moult migration
80931	18-Aug-09	73.46	-124.59		8	L2	Burnett Bay	Moult migration
80931	22-Aug-09	73.47	-124.66		11	L3	Burnett Bay	Moult migration
80931	26-Aug-09	71.05	-153.57		20	L3	Smith Bay	Moult migration
80931	29-Aug-09	66.51	-170.57		11	L3	Cape Dezhnev	Moult migration
80931	2-Sep-09	63.20	-168.71		3	L3	St. Lawrence Is.	Moult migration
80931	6-Sep-09	62.94	-169.58		3	L3	St. Lawrence Is.	Moult
80931	9-Sep-09	62.95	-169.52		4	L2	St. Lawrence Is.	Moult
80931	13-Sep-09	62.95	-169.52		4	L3	St. Lawrence Is.	Moult
80931	17-Sep-09	62.95	-169.54		3	L2	St. Lawrence Is.	Moult
80931	21-Sep-09	62.94	-169.57		3	LA	St. Lawrence Is.	Moult
80931	24-Sep-09	62.95	-169.53		4	L2	St. Lawrence Is.	Moult
80931	28-Sep-09	62.95	-169.56		3	LA	St. Lawrence Is.	Moult
80931	2-Oct-09	62.96	-169.52		2	L2	St. Lawrence Is.	Moult
80931	6-Oct-09	62.94	-169.52		5	L1	St. Lawrence Is.	Moult

* Locations rejected by Douglas program and handpicked to provide information on timing; distance inland or offshore not calculated for these locations.
Signal quality: L0 = accuracy of > 1500 m; L1 = accuracy of 500–1500 m; L2 = accuracy of 250–500 m; L3 = accuracy of < 250 m; LA, LB, LZ = data insufficient to estimate accuracy; DP = deployment point.

APPENDIX B

Maps showing individual movement of King Eiders with satellite transmitters deployed on Banks Island, Northwest Territories, in June 2008

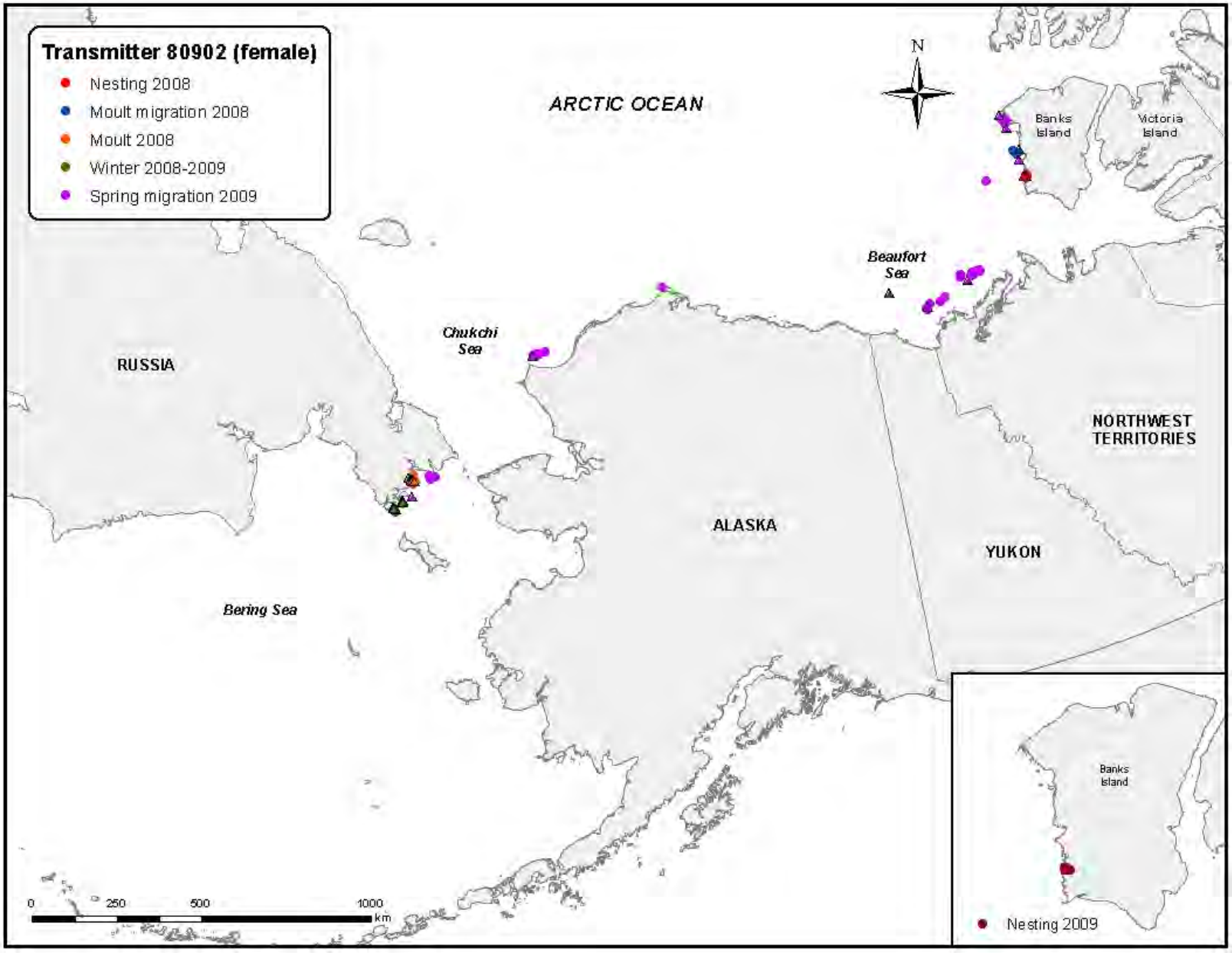

Figure B1. Locations obtained for female King Eider with satellite transmitter #80902. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

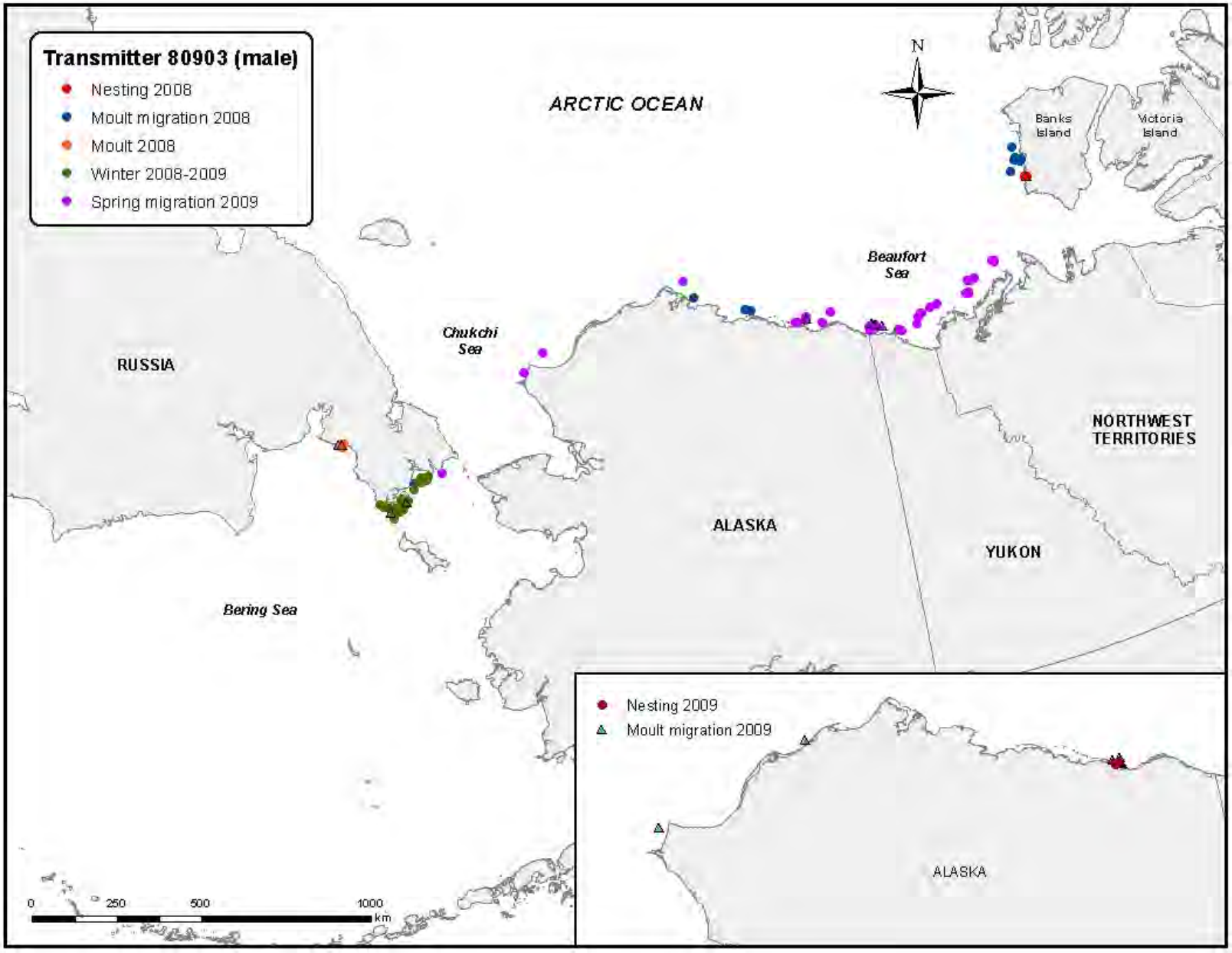

Figure B2. Locations obtained for male King Eider with satellite transmitter #80903. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

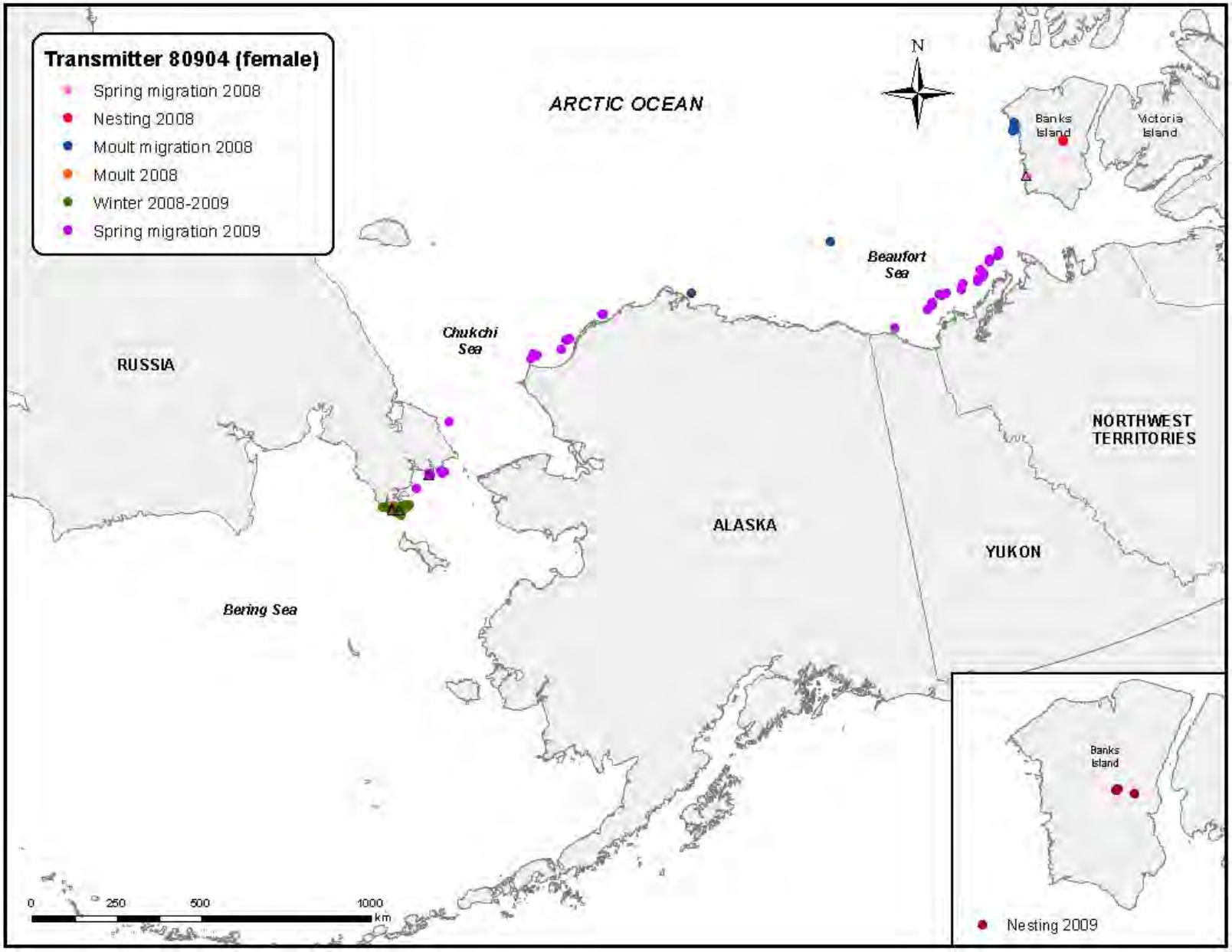

Figure B3. Locations obtained for female King Eider with satellite transmitter #80904. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

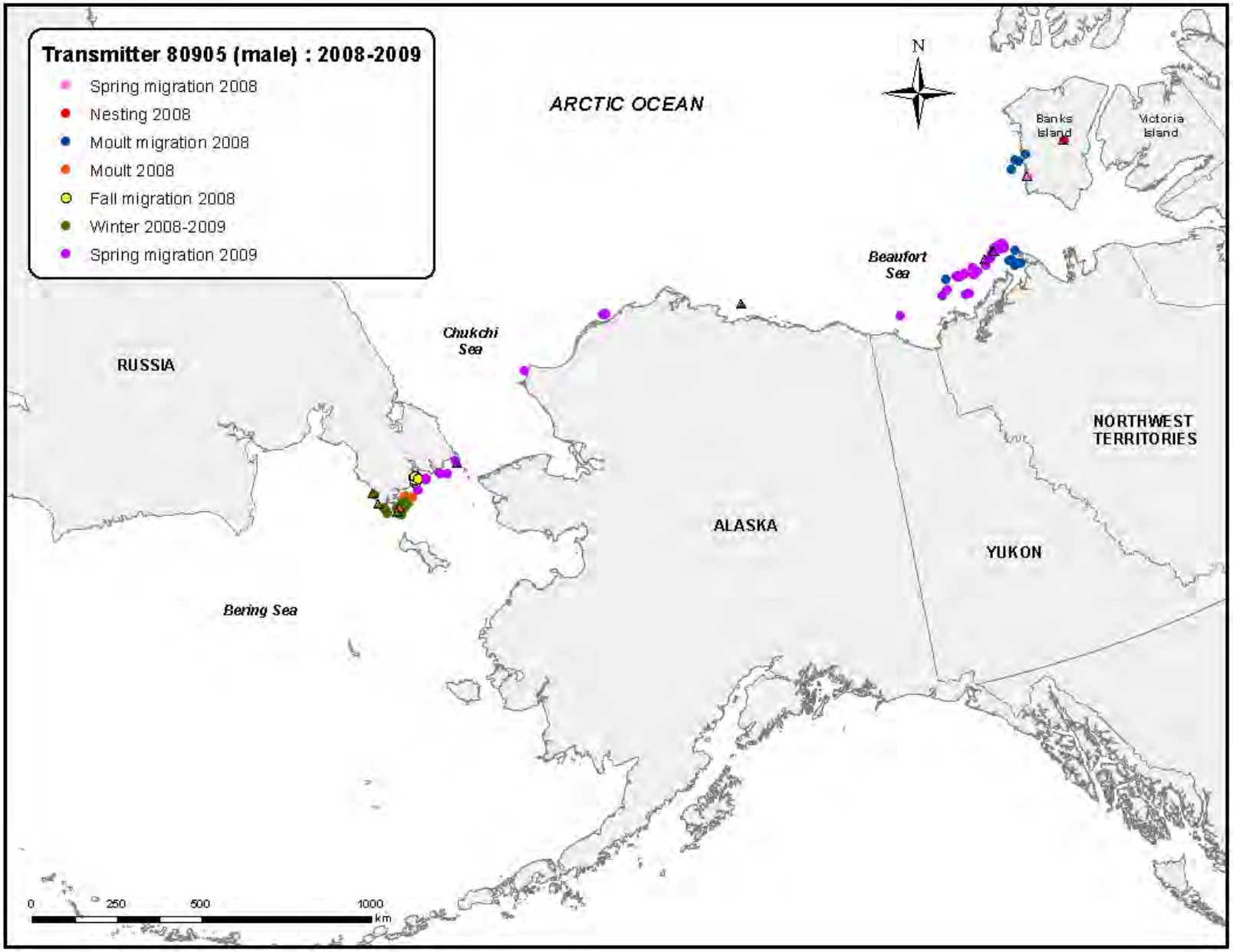

Figure B4. Locations obtained for male King Eider with satellite transmitter #80905 in 2008–2009. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

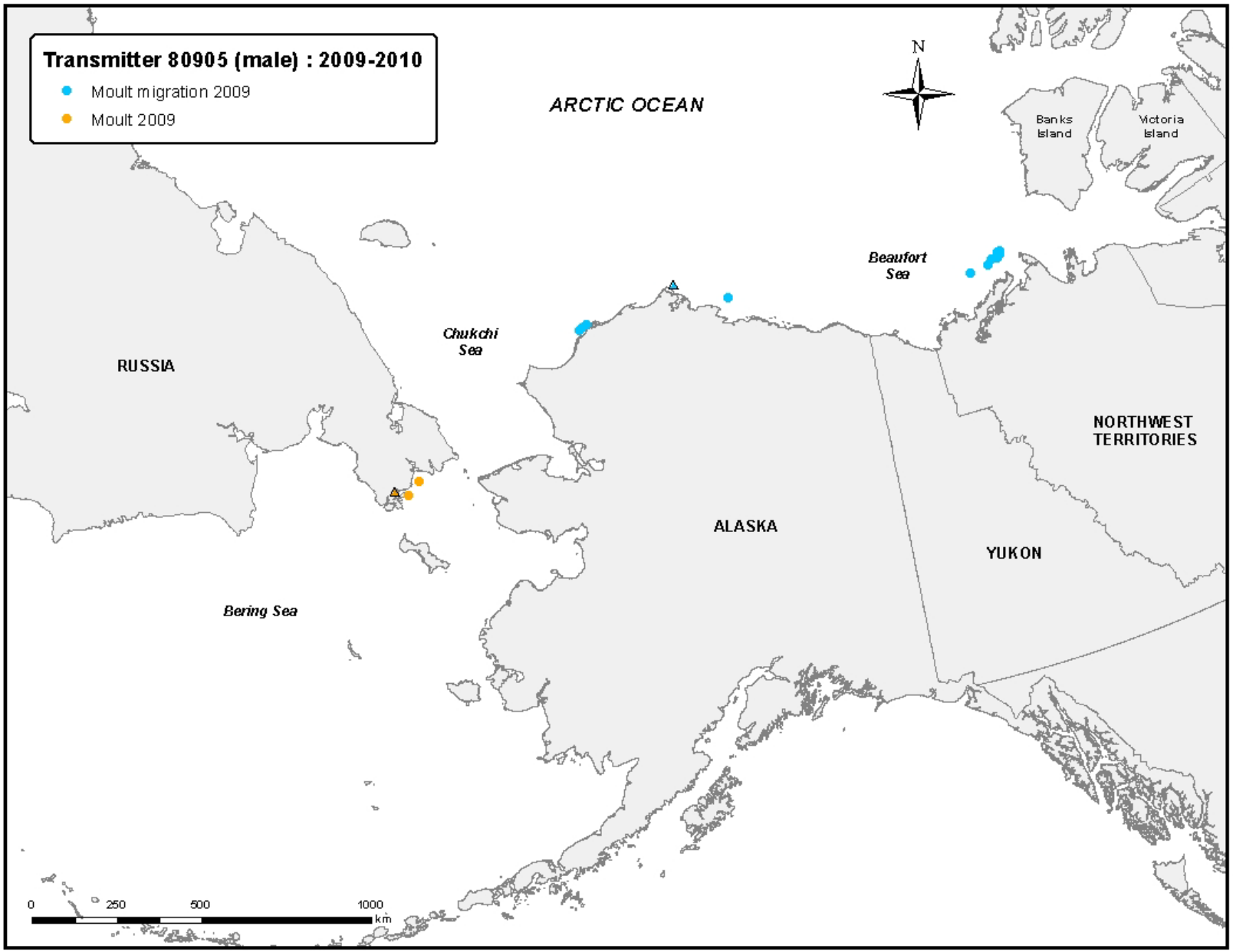

Figure B5. Locations obtained for male King Eider with satellite transmitter #80905 in 2009–2010. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

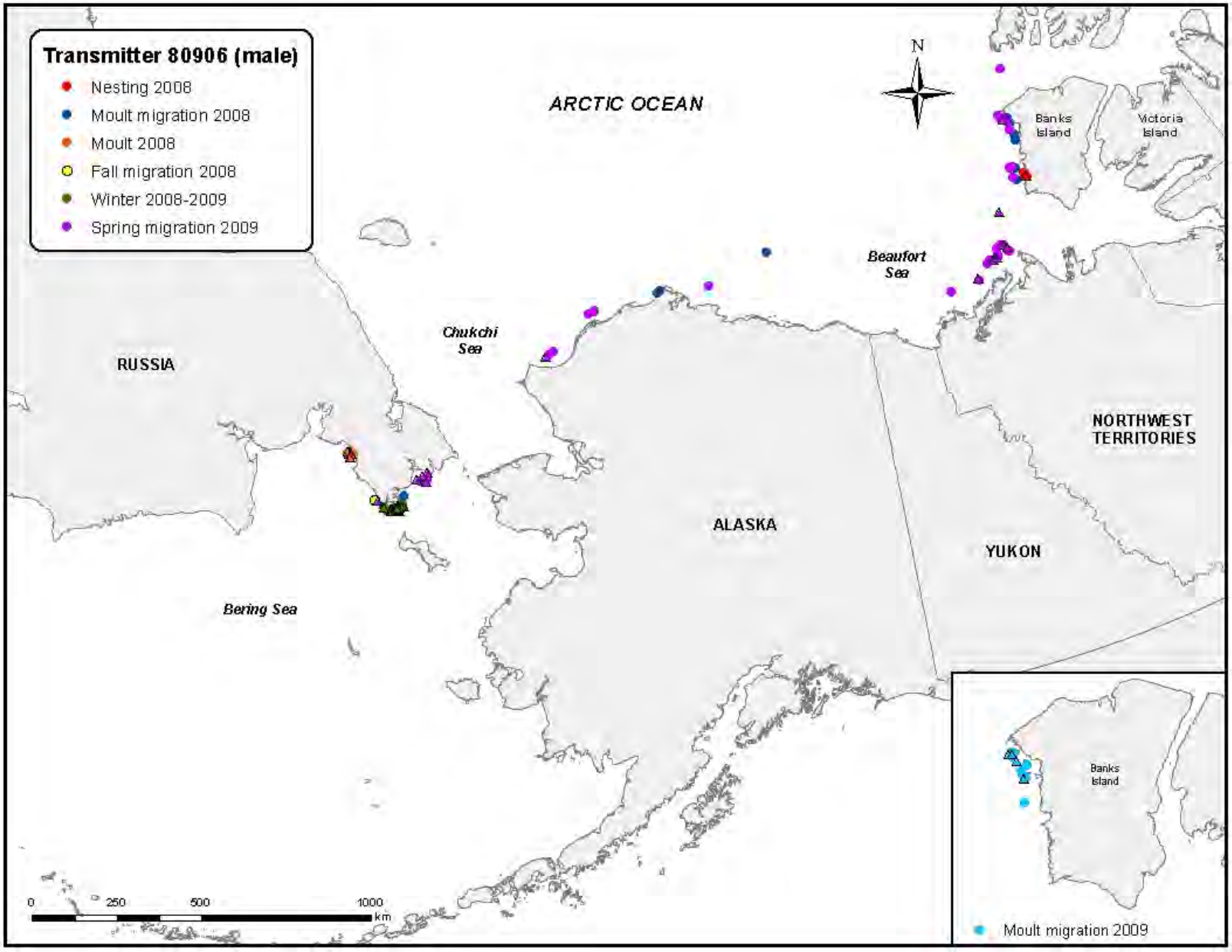

Figure B6. Locations obtained for male King Eider with satellite transmitter #80906. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

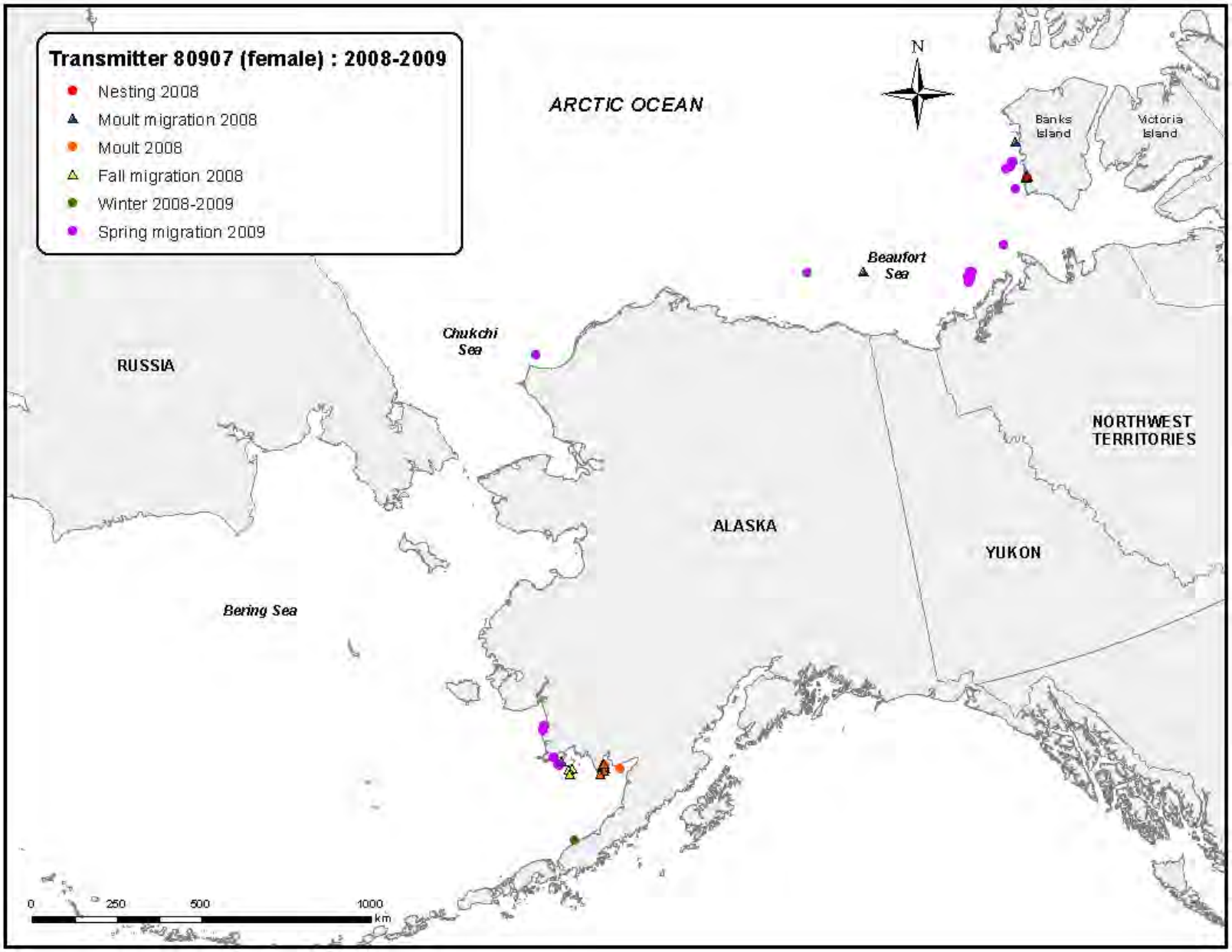

Figure B7. Locations obtained for female King Eider with satellite transmitter #80907 in 2008–2009. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

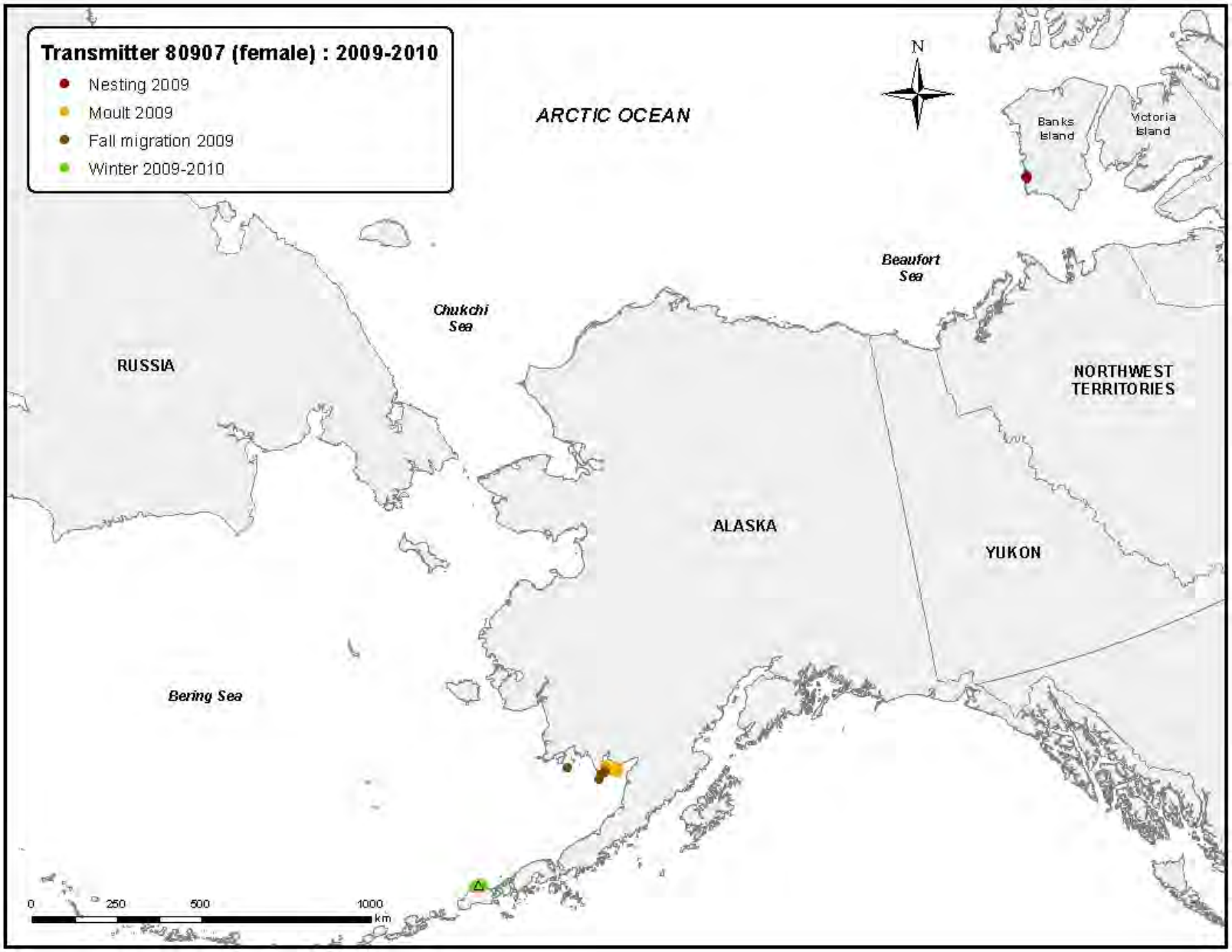

Figure B8. Locations obtained for female King Eider with satellite transmitter #80907 in 2009–2010. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

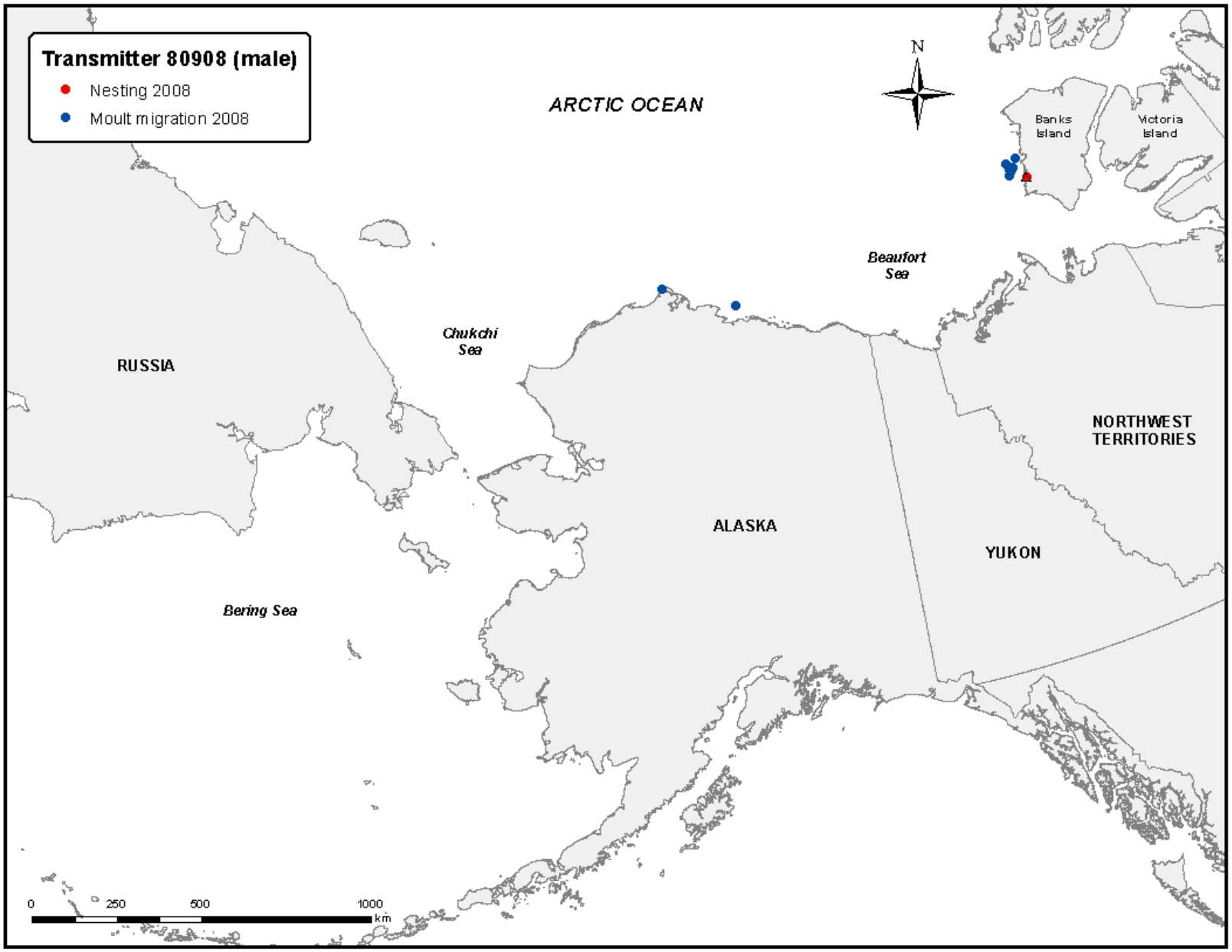

Figure B9. Locations obtained for male King Eider with satellite transmitter #80908. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

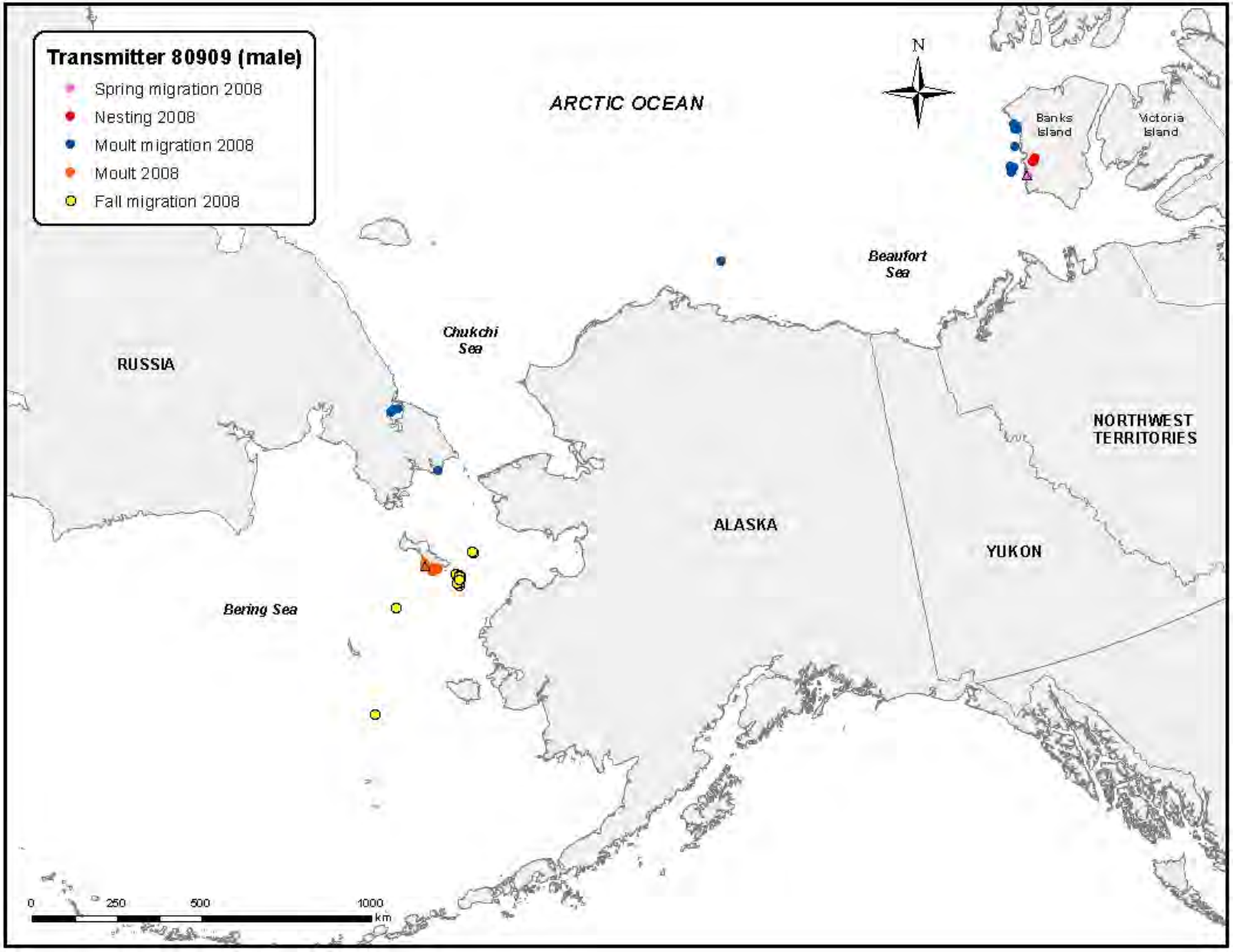

Figure B10. Locations obtained for male King Eider with satellite transmitter #80909. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

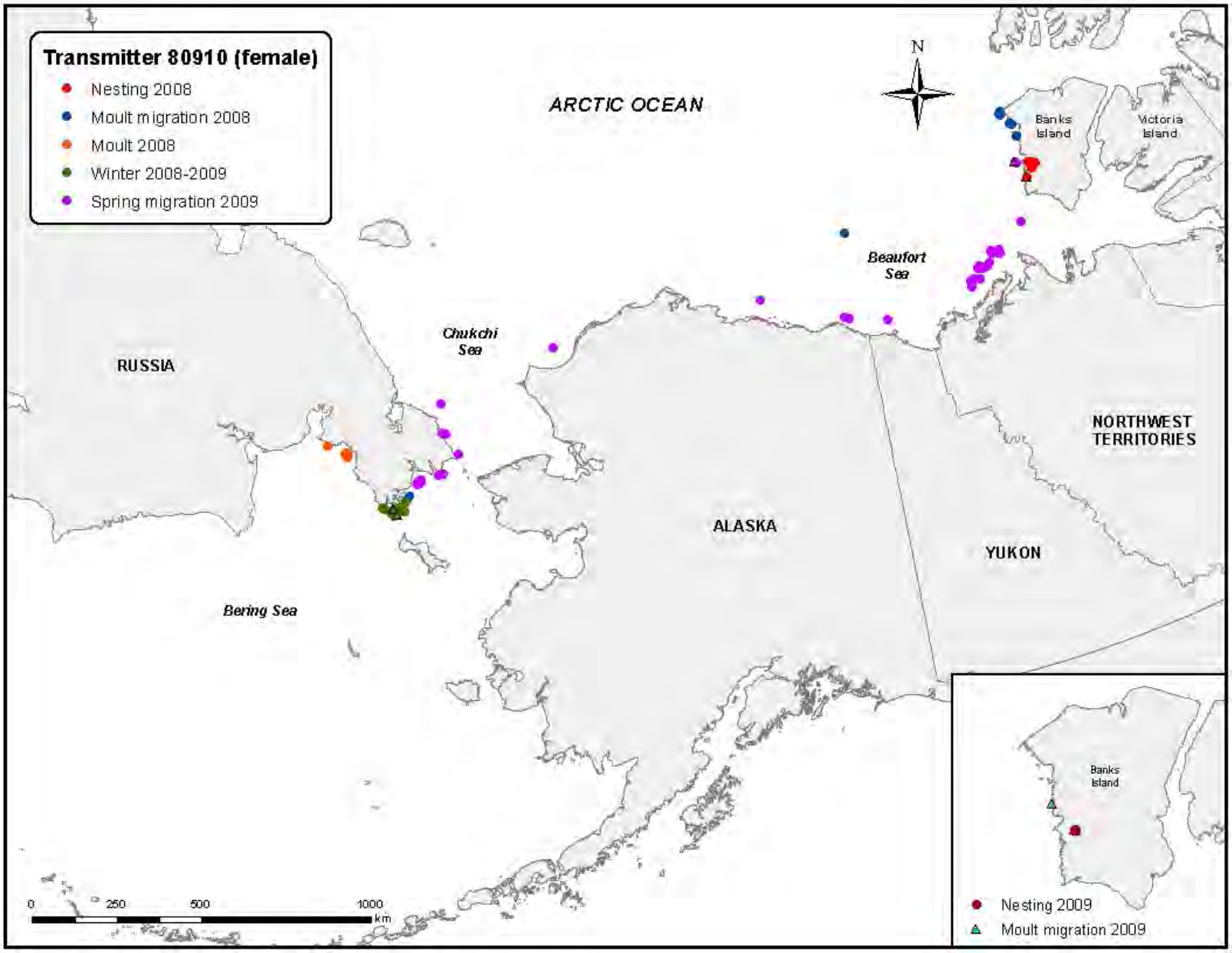

Figure B11. Locations obtained for female King Eider with satellite transmitter #80910. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

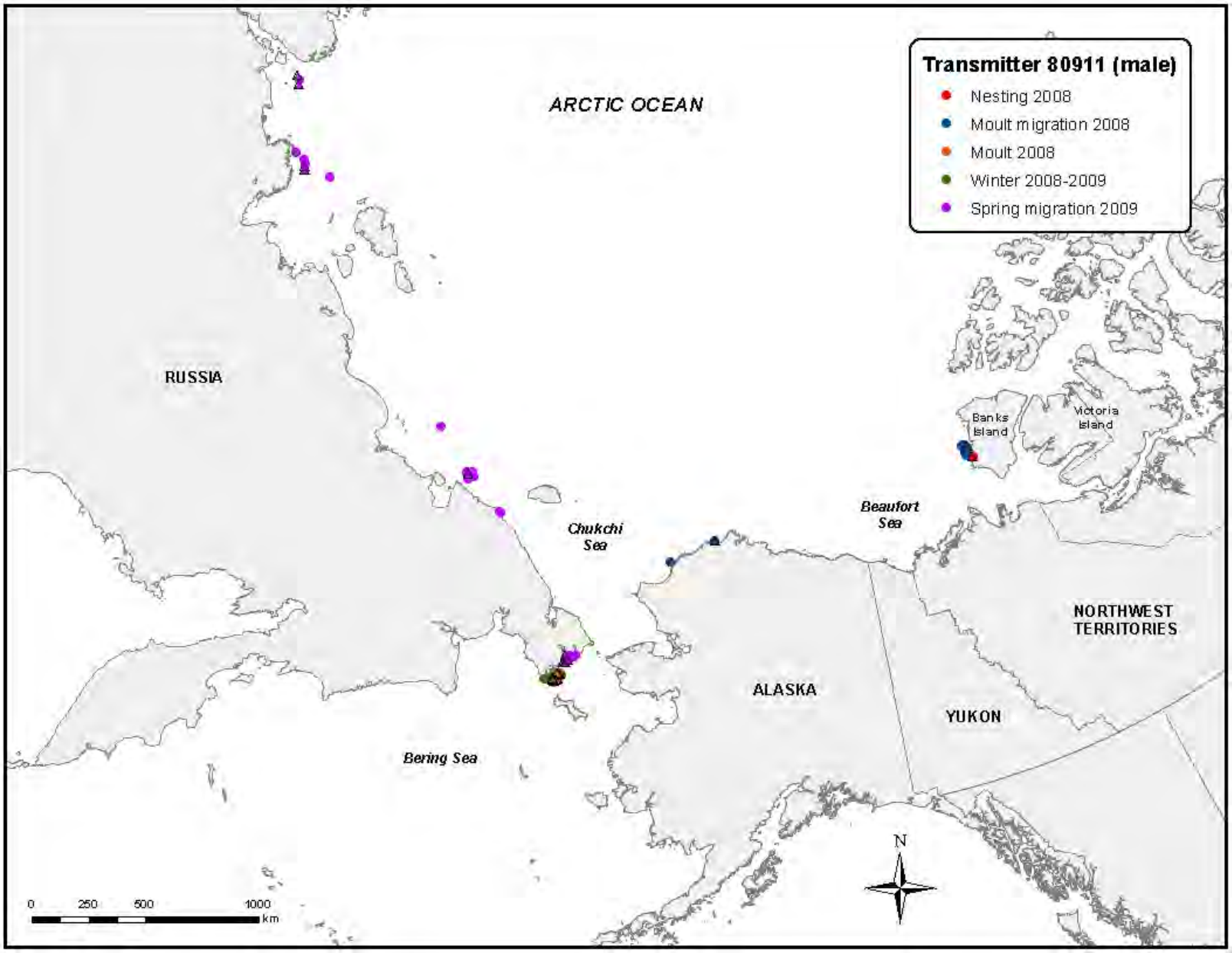

Figure B12. Locations obtained for male King Eider with satellite transmitter #80911. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

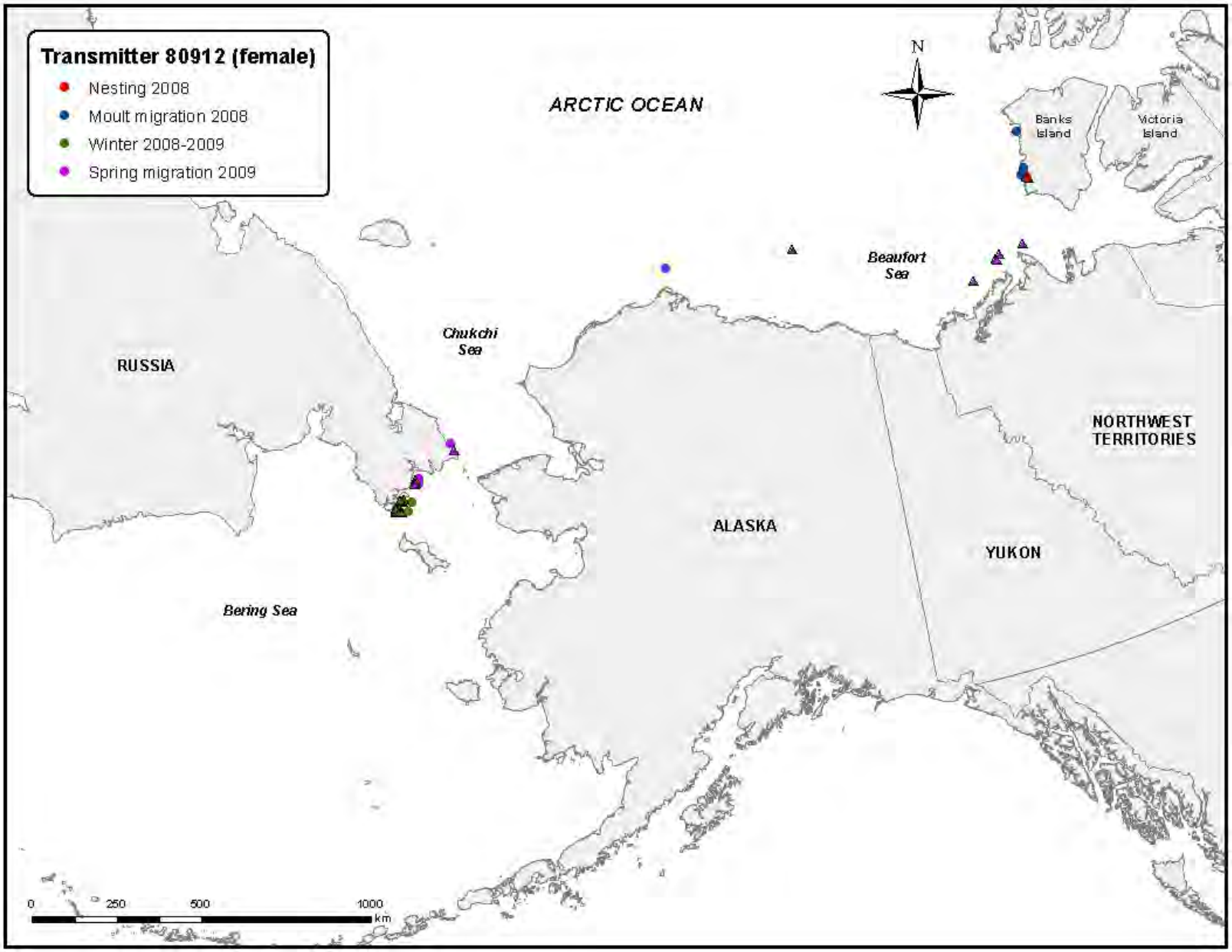

Figure B13. Locations obtained for female King Eider with satellite transmitter #80912. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

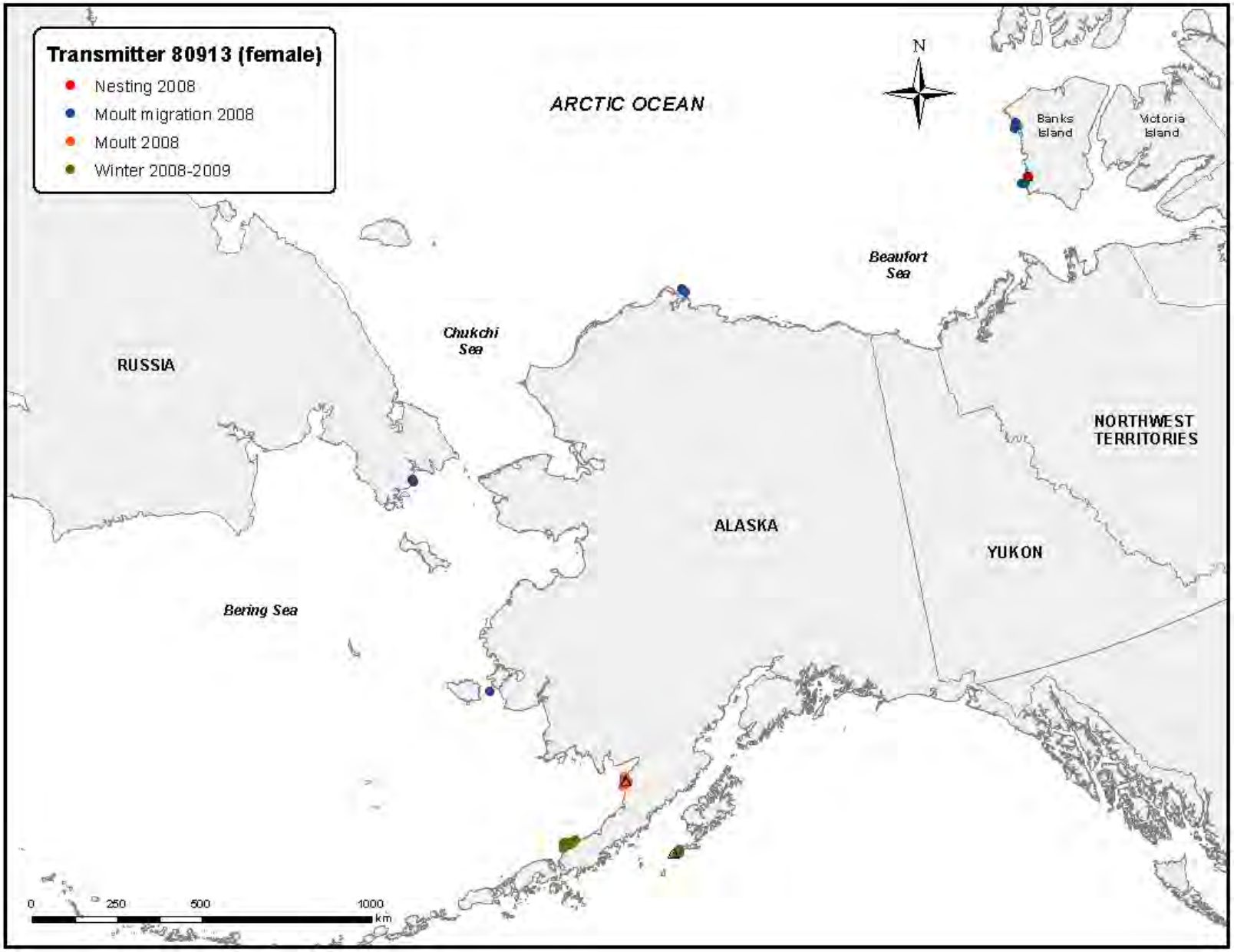

Figure B14. Locations obtained for female King Eider with satellite transmitter #80913. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

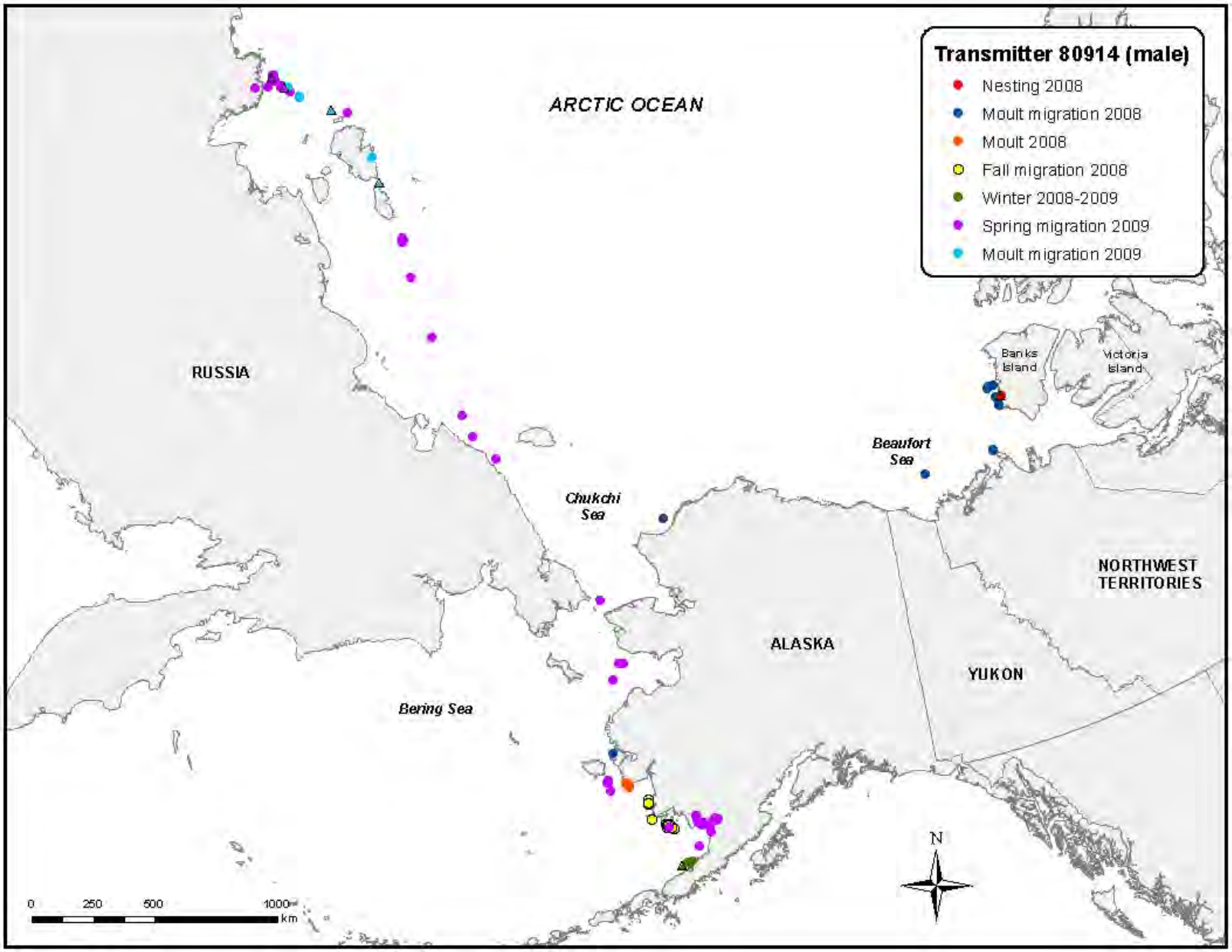

Figure B15. Locations obtained for male King Eider with satellite transmitter #80914. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

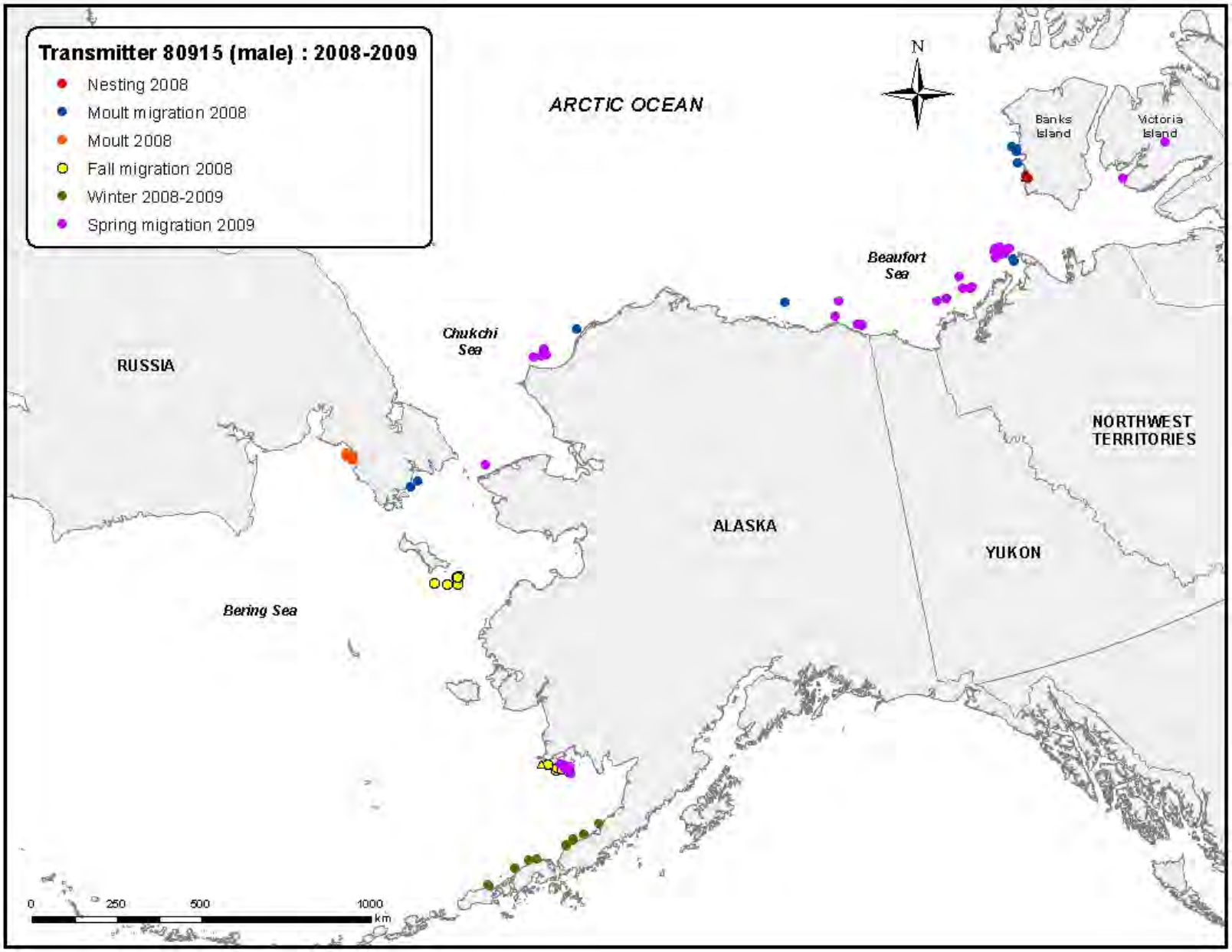

Figure B16. Locations obtained for male King Eider with satellite transmitter #80915 in 2008–2009. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

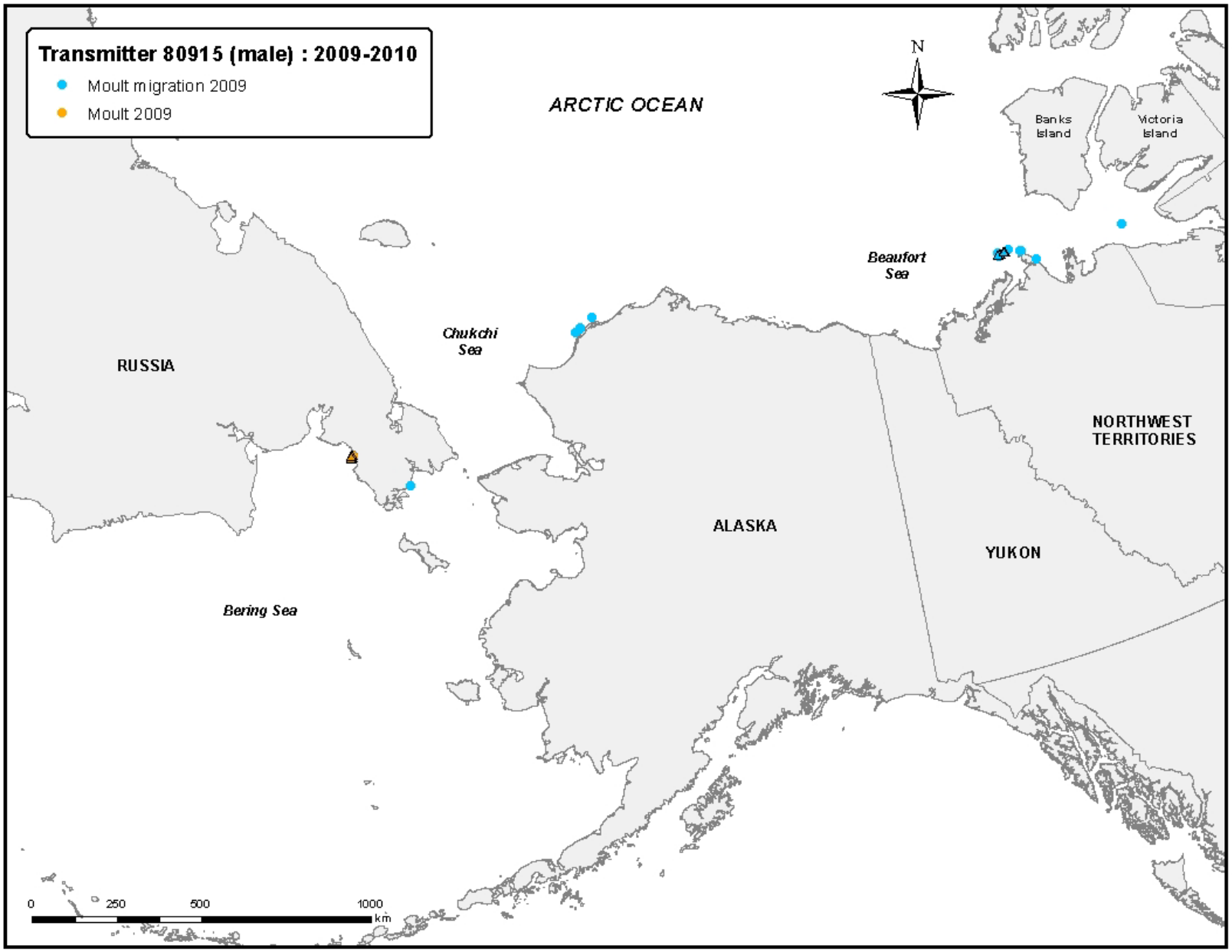

Figure B17. Locations obtained for male King Eider with satellite transmitter #80915 in 2009–2010. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

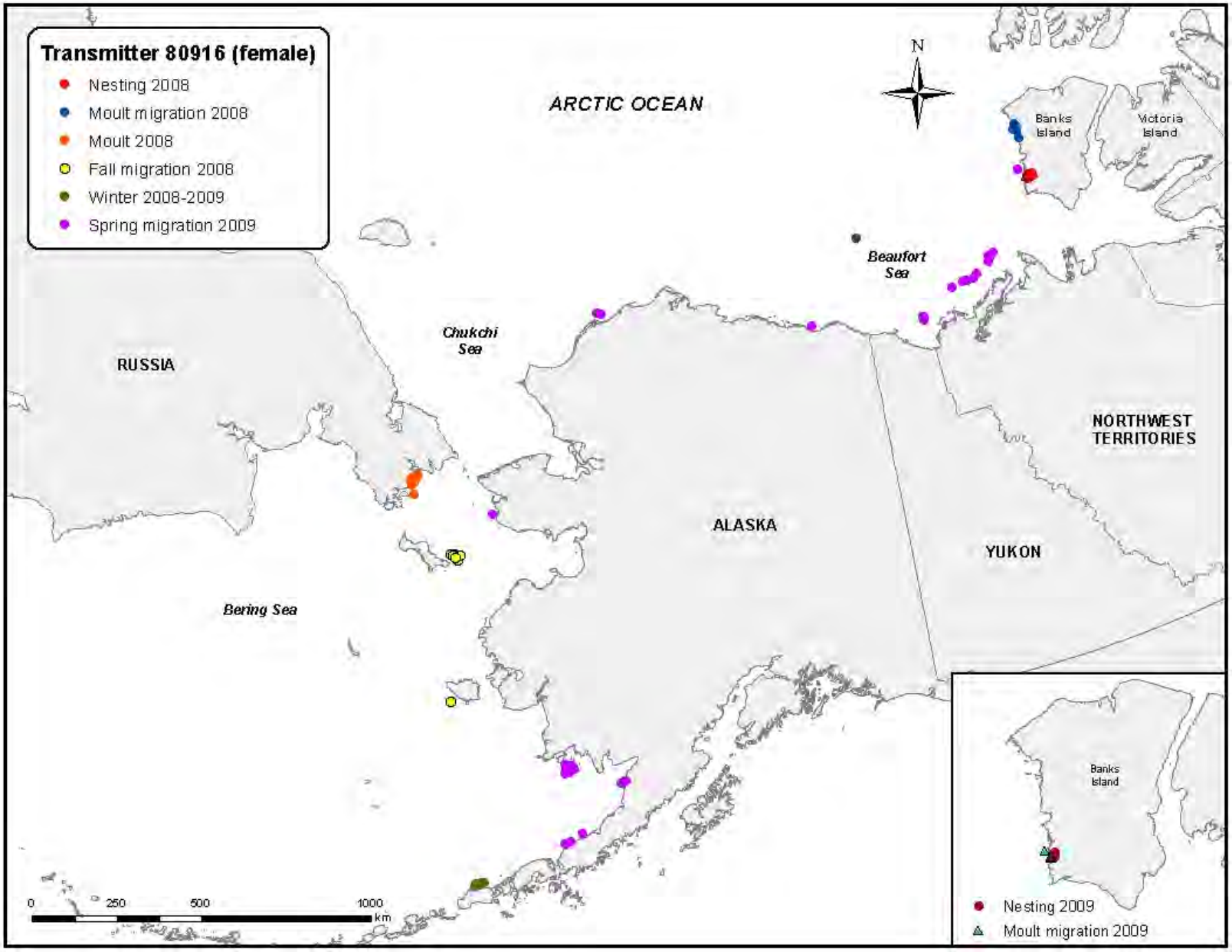

Figure B18. Locations obtained for female King Eider with satellite transmitter #80916. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

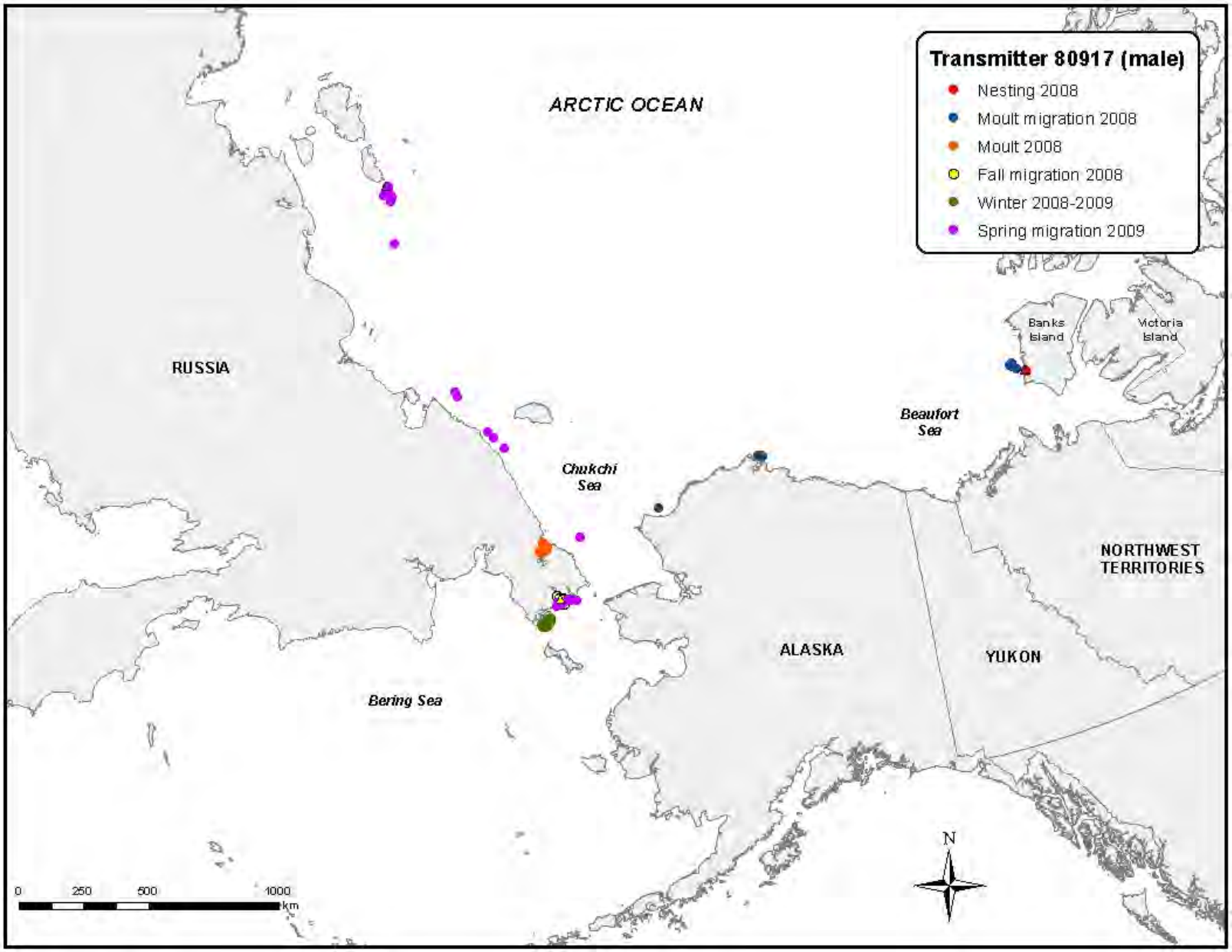

Figure B19. Locations obtained for male King Eider with satellite transmitter #80917. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

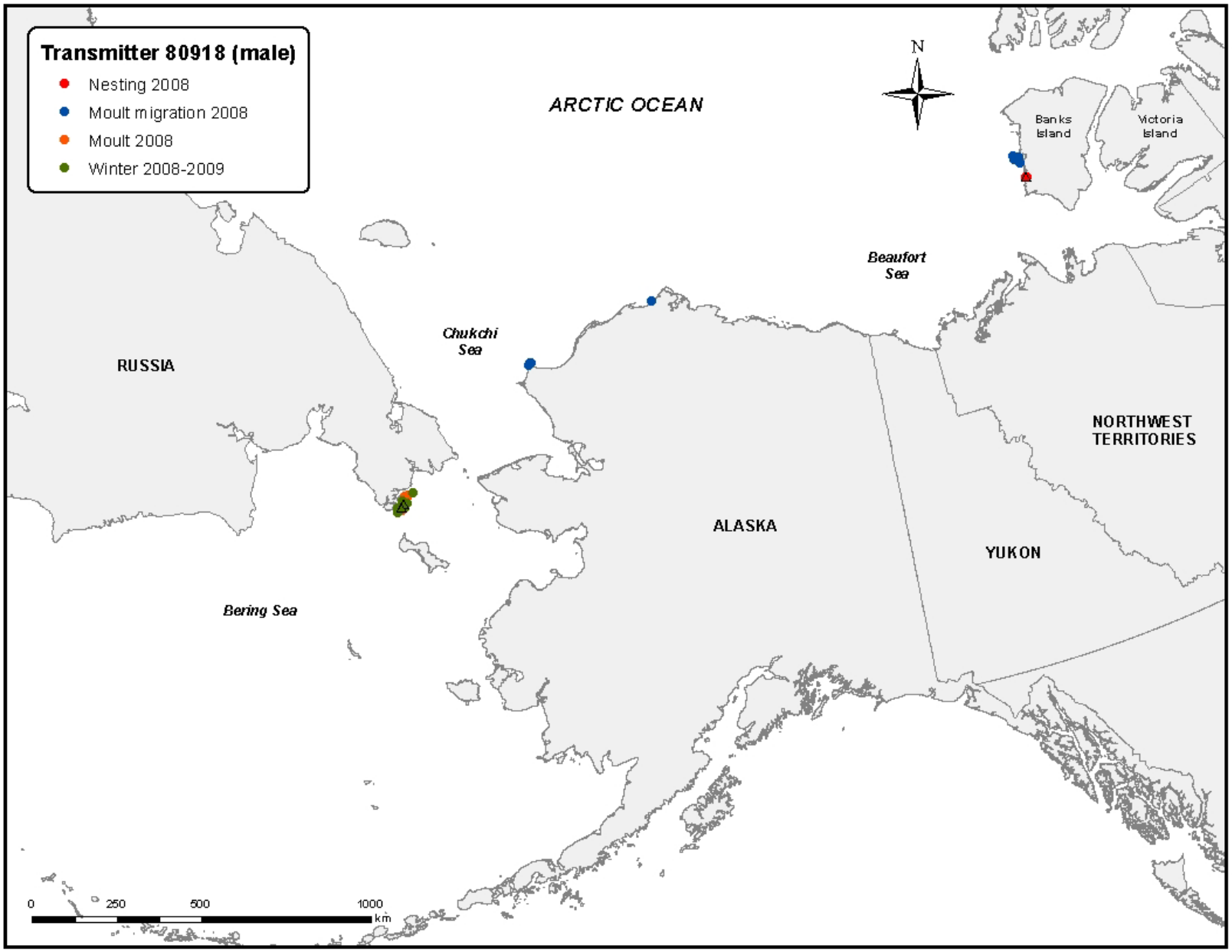

Figure B20. Locations obtained for male King Eider with satellite transmitter #80918. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

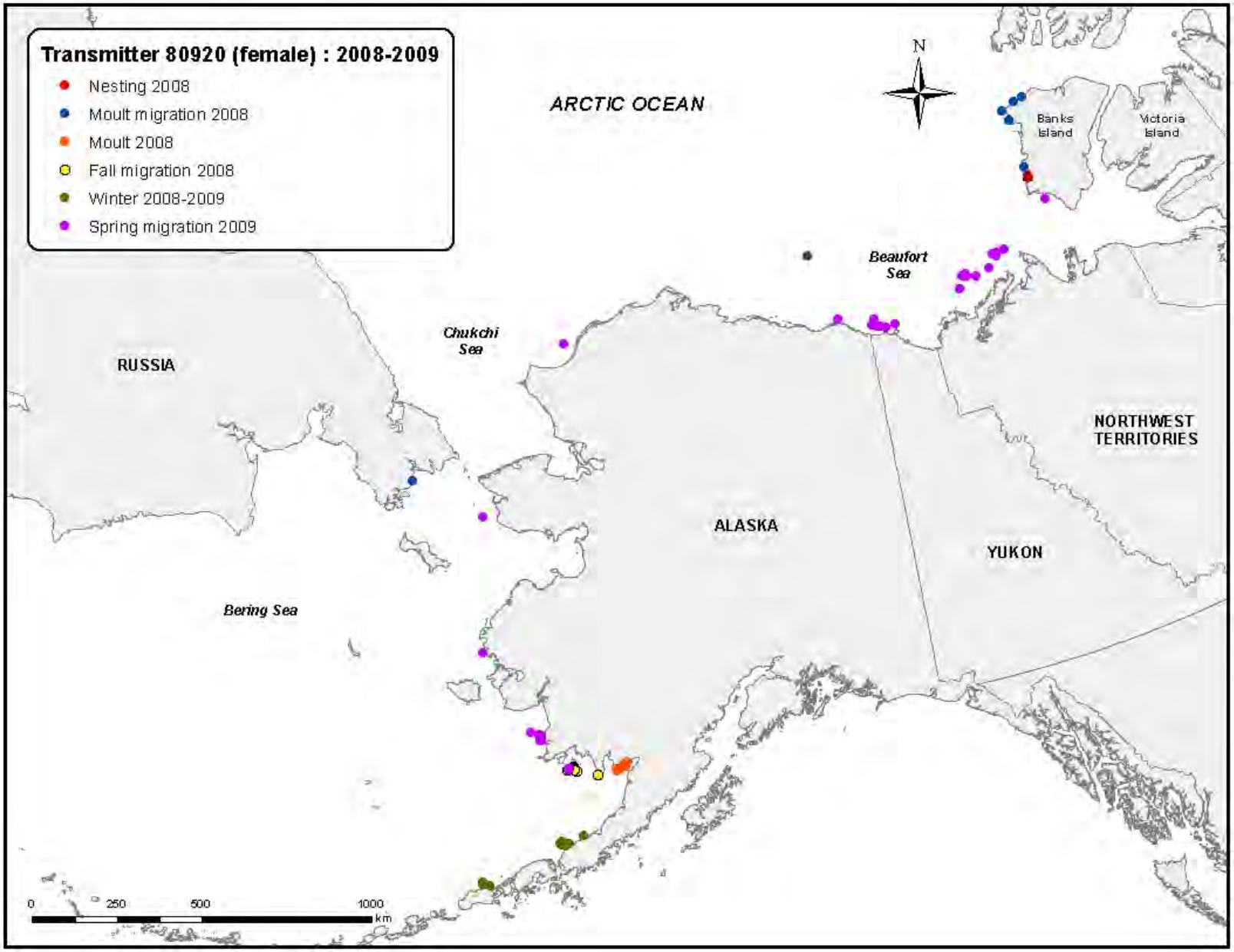

Figure B21. Locations obtained for female King Eider with satellite transmitter #80920 in 2008–2009. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

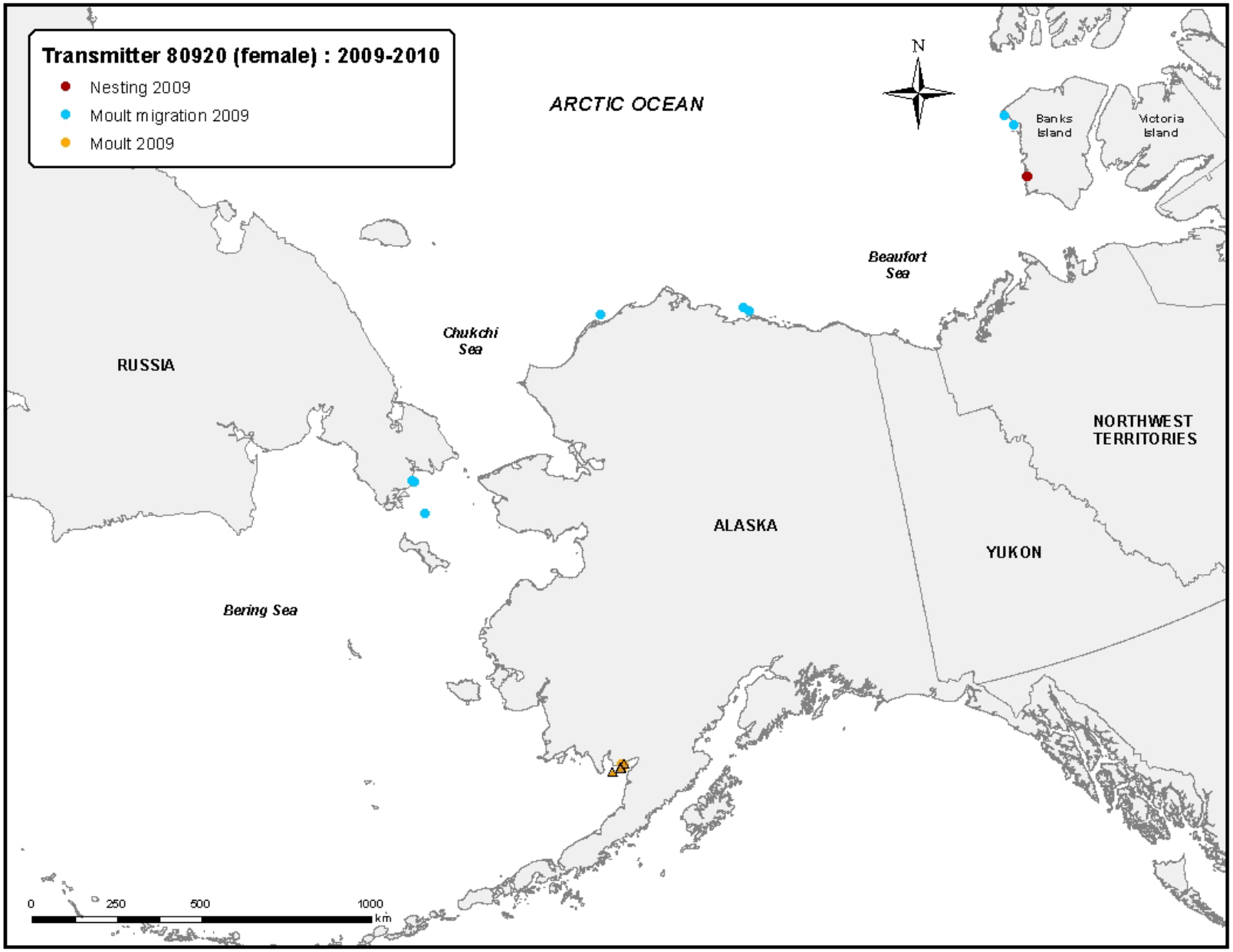

Figure B22. Locations obtained for female King Eider with satellite transmitter #80920 in 2009–2010. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

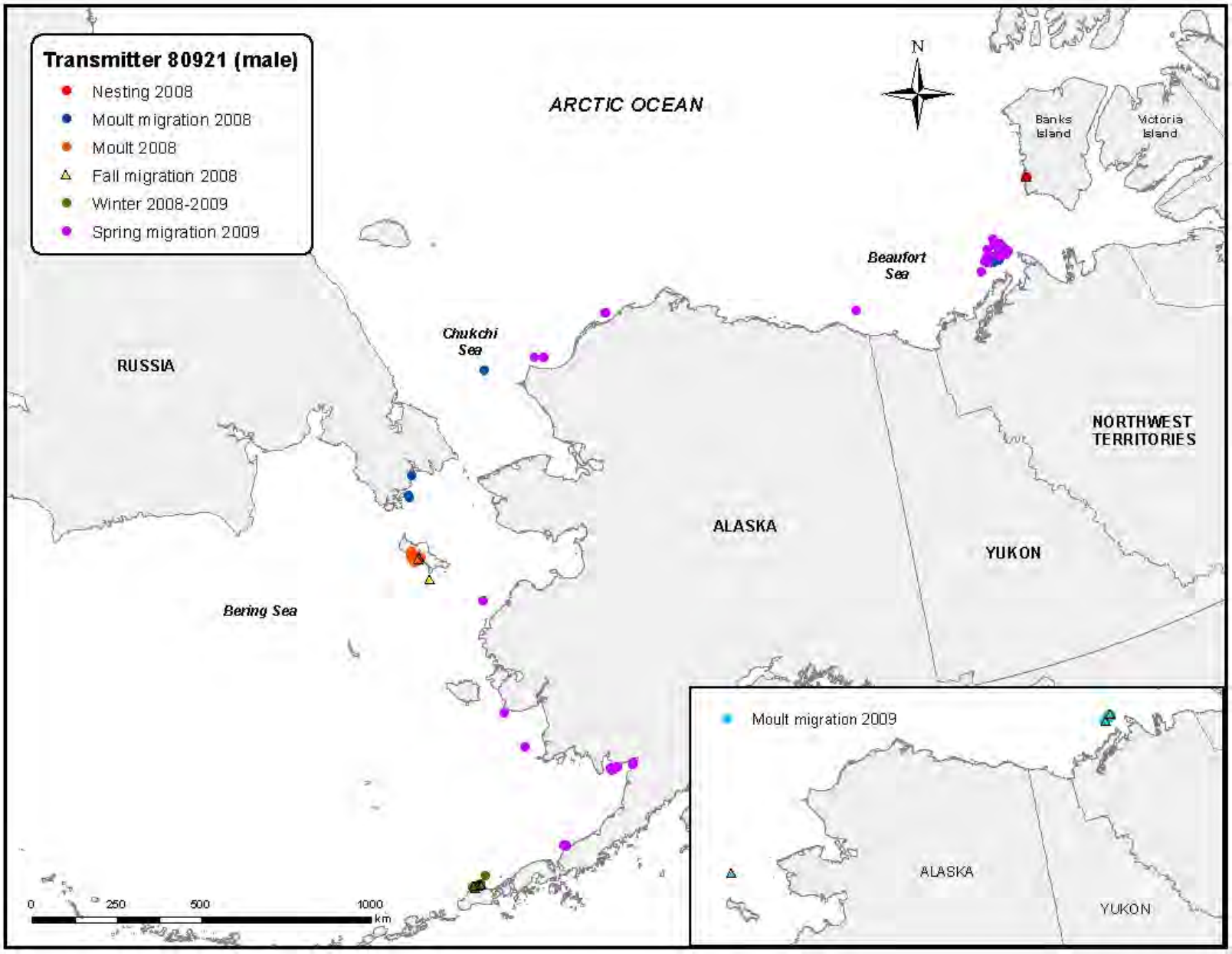

Figure B23. Locations obtained for male King Eider with satellite transmitter #80921. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

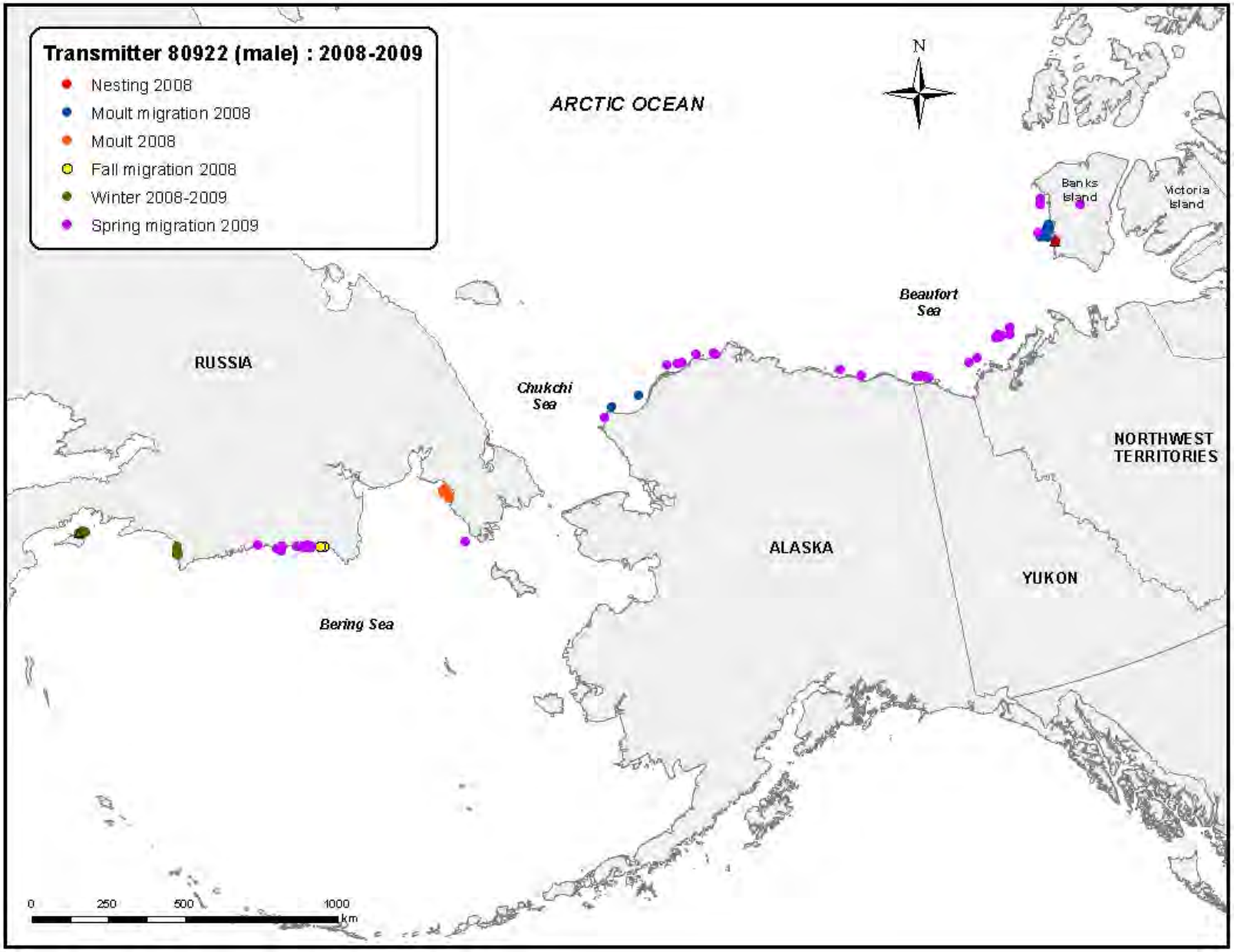

Figure B24. Locations obtained for male King Eider with satellite transmitter #80922 in 2008–2009. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

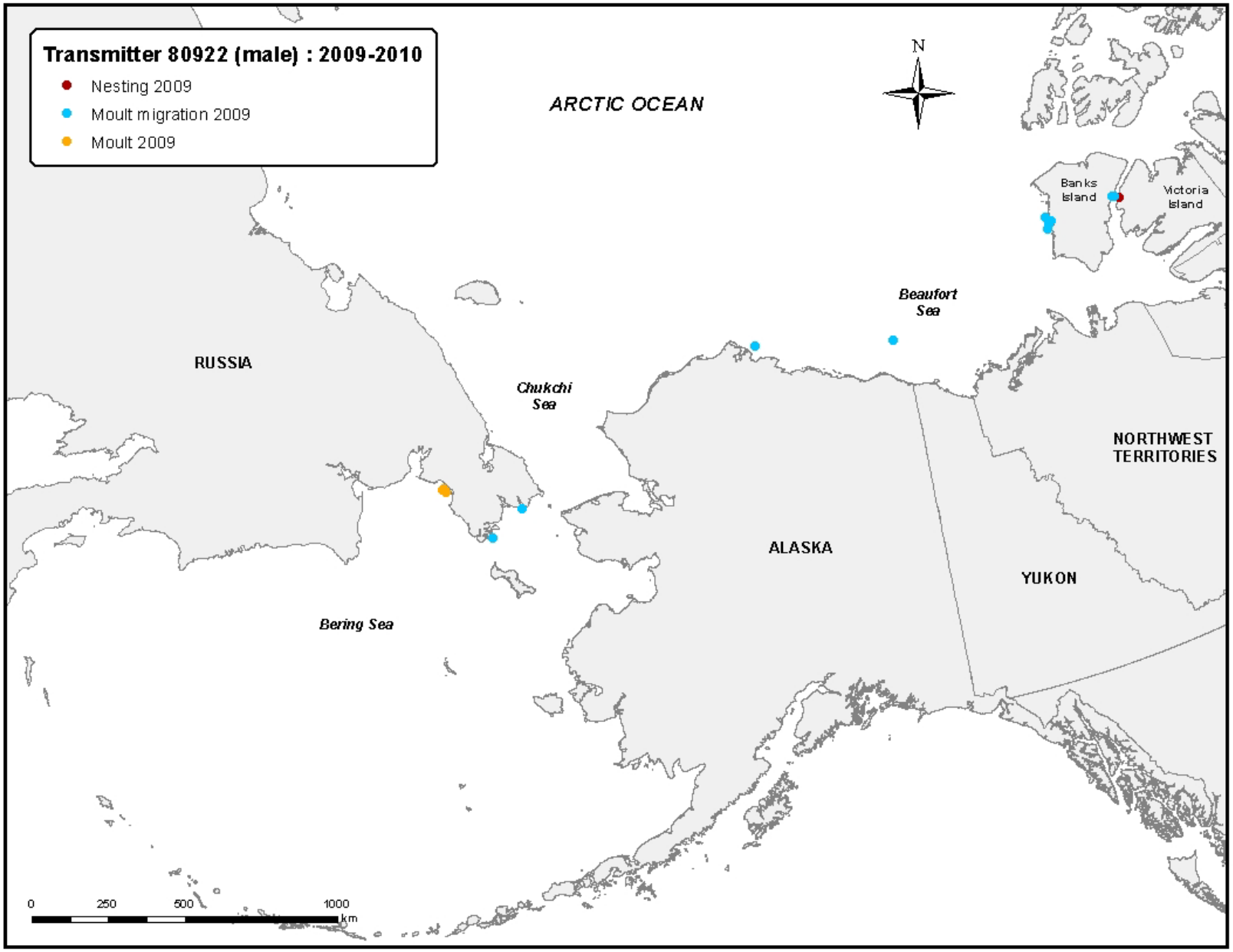

Figure B25. Locations obtained for male King Eider with satellite transmitter #80922 in 2009–2010. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

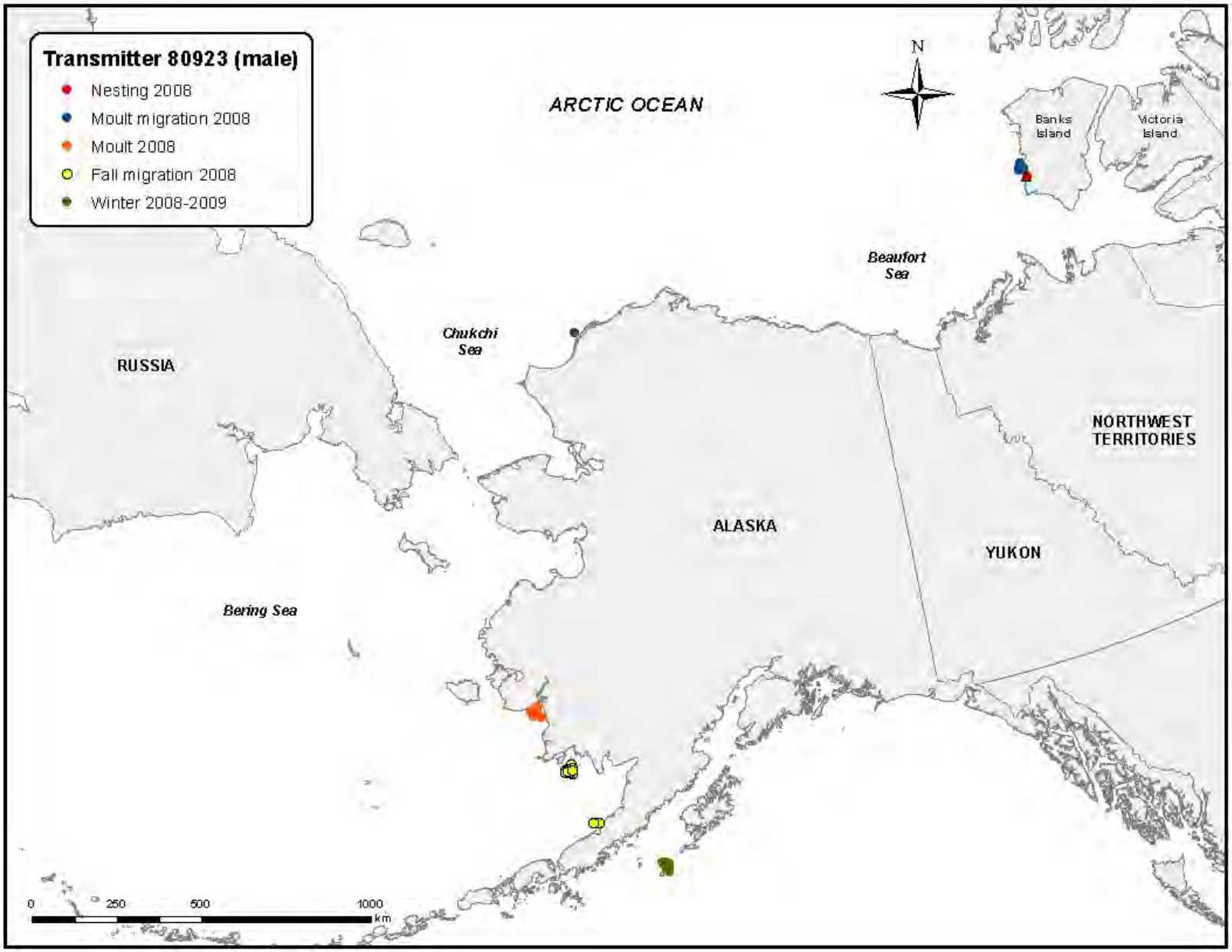

Figure B26. Locations obtained for male King Eider with satellite transmitter #80923. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

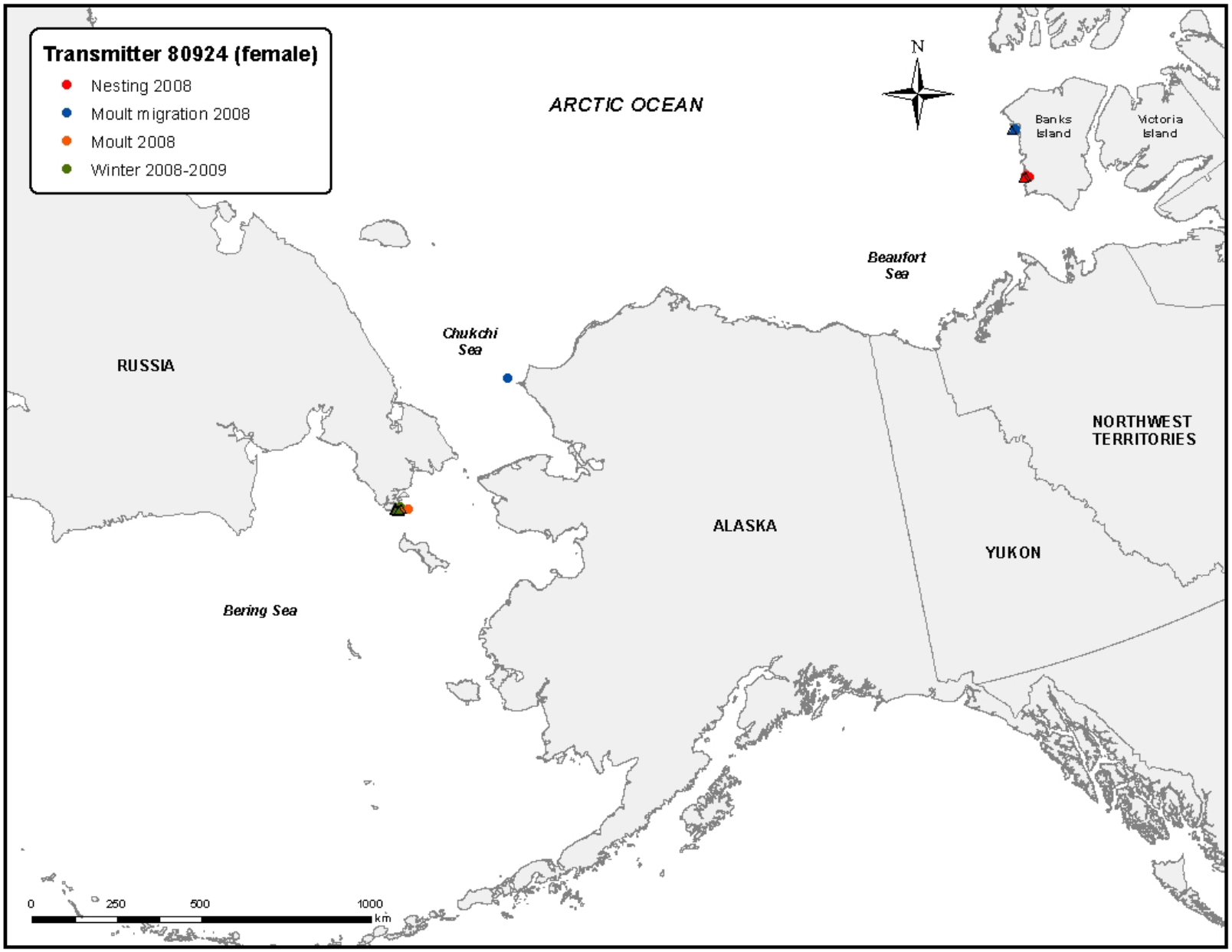

Figure B27. Locations obtained for female King Eider with satellite transmitter #80924. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

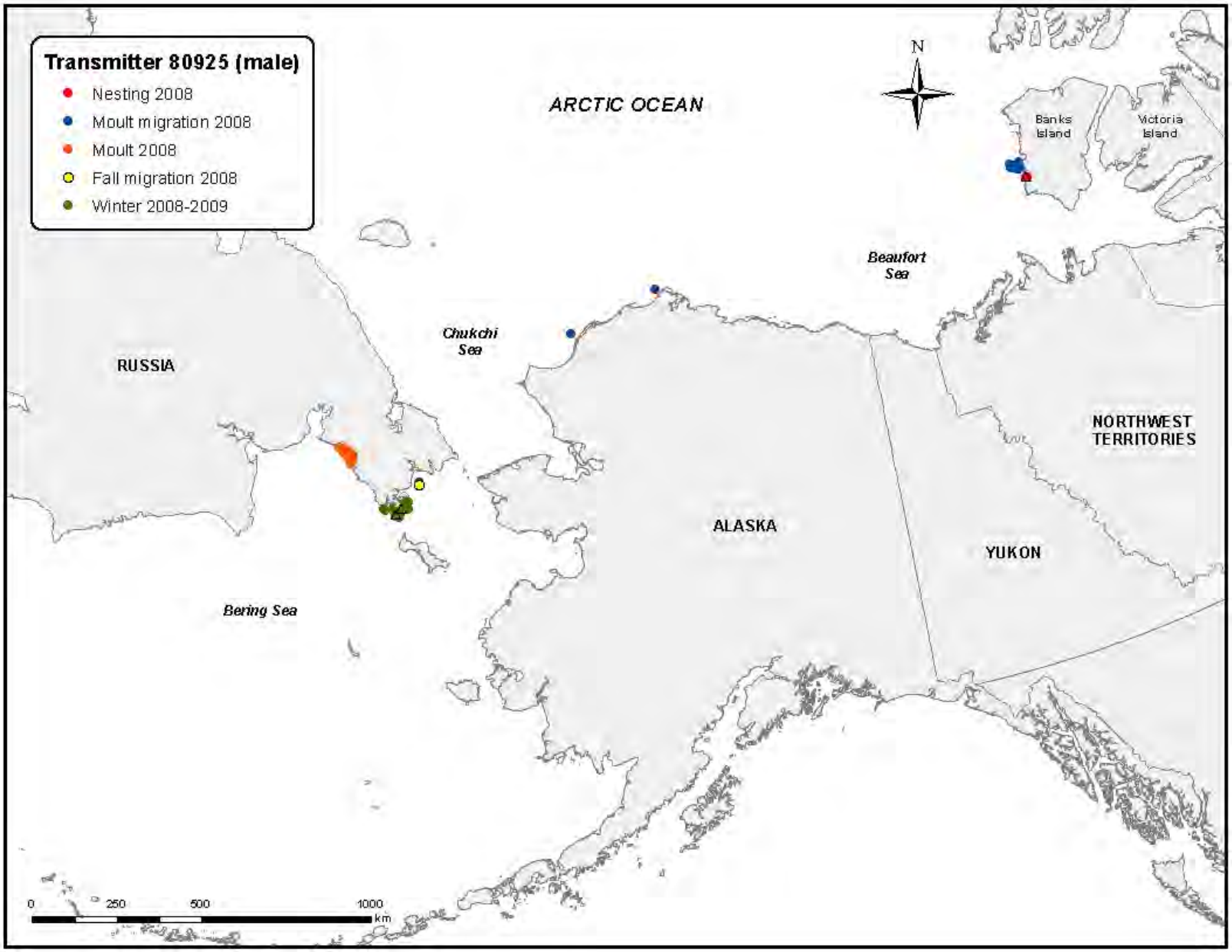

Figure B28. Locations obtained for male King Eider with satellite transmitter #80925. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

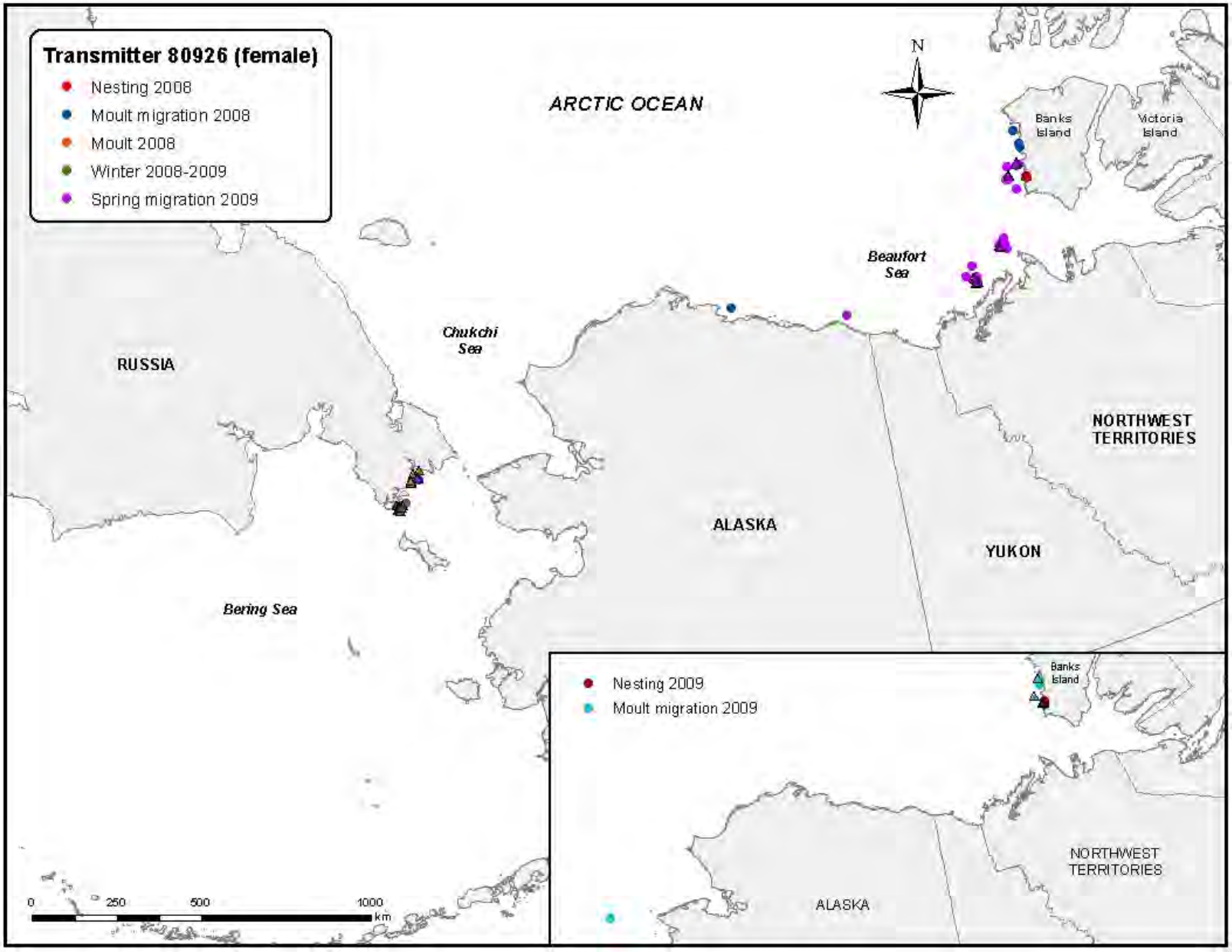

Figure B29. Locations obtained for female King Eider with satellite transmitter #80926. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

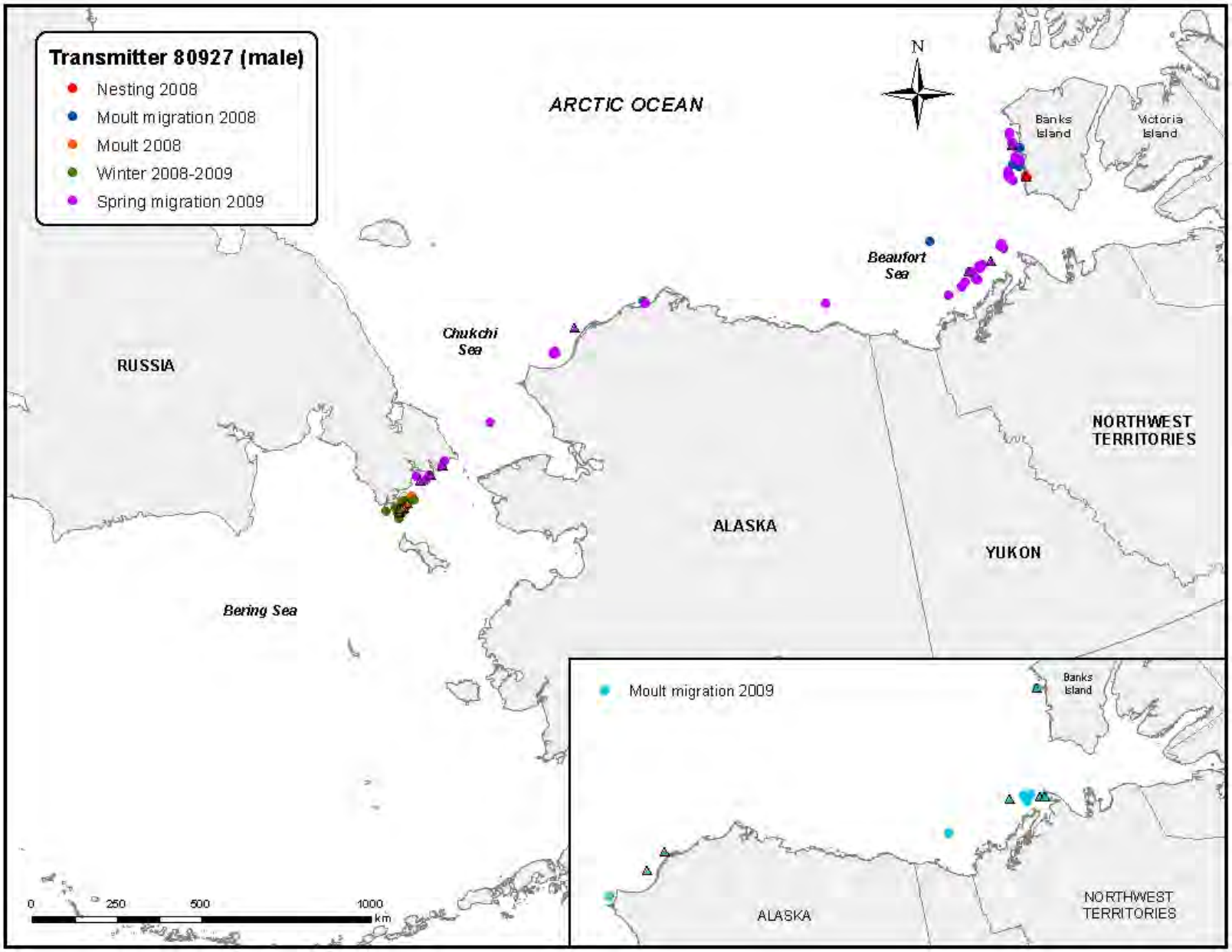

Figure B30. Locations obtained for male King Eider with satellite transmitter #80927. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

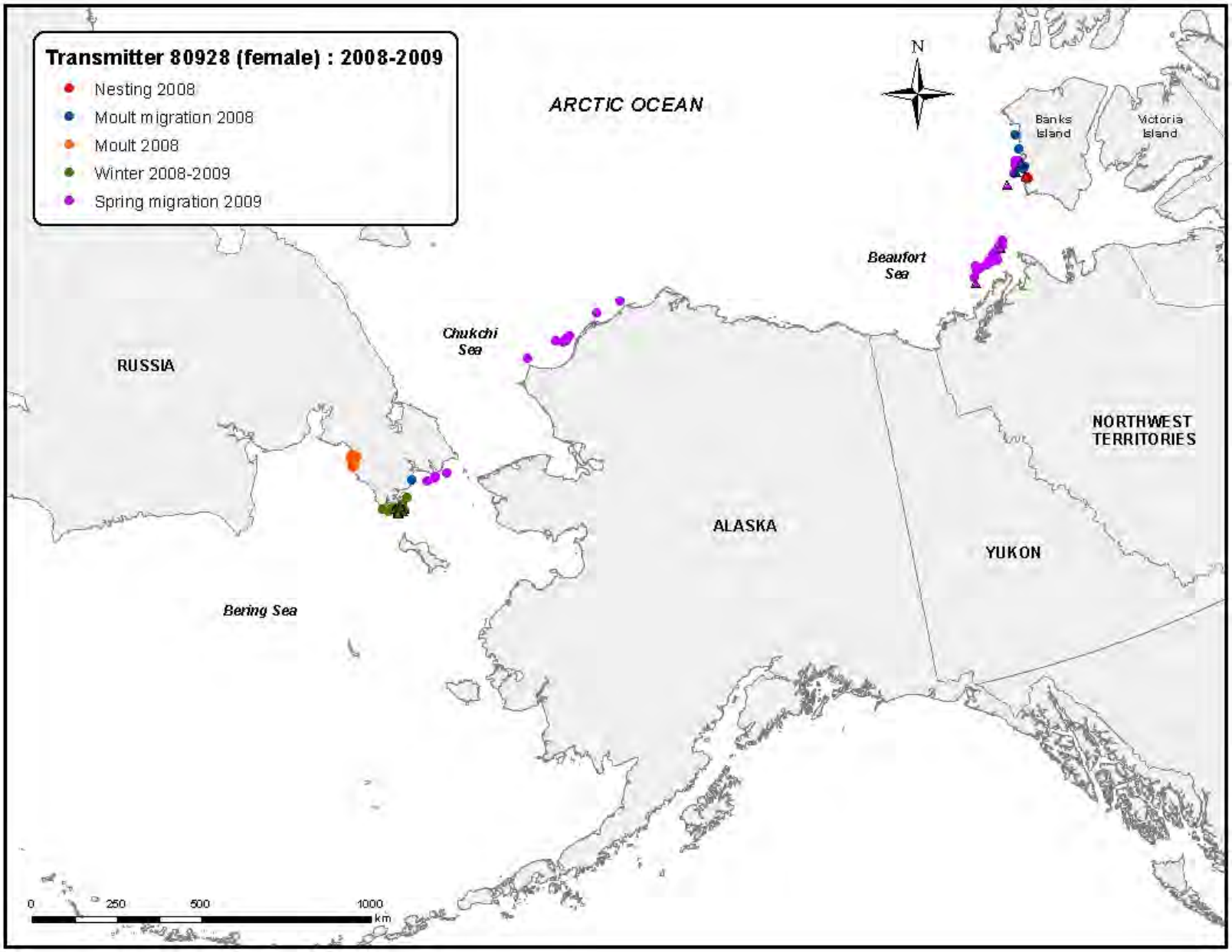

Figure B31. Locations obtained for female King Eider with satellite transmitter #80928 in 2008–2009. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

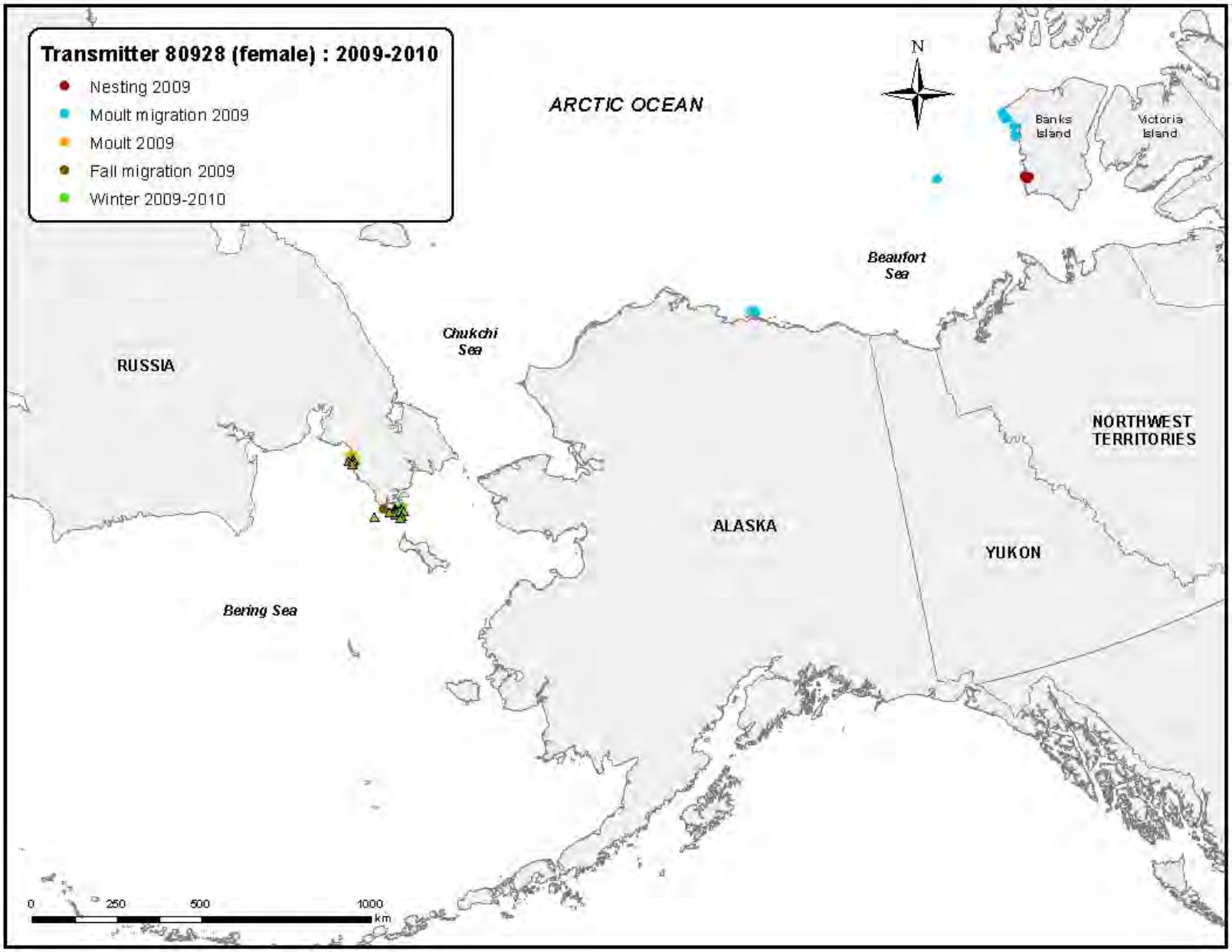

Figure B32. Locations obtained for female King Eider with satellite transmitter #80928 in 2009–2010. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

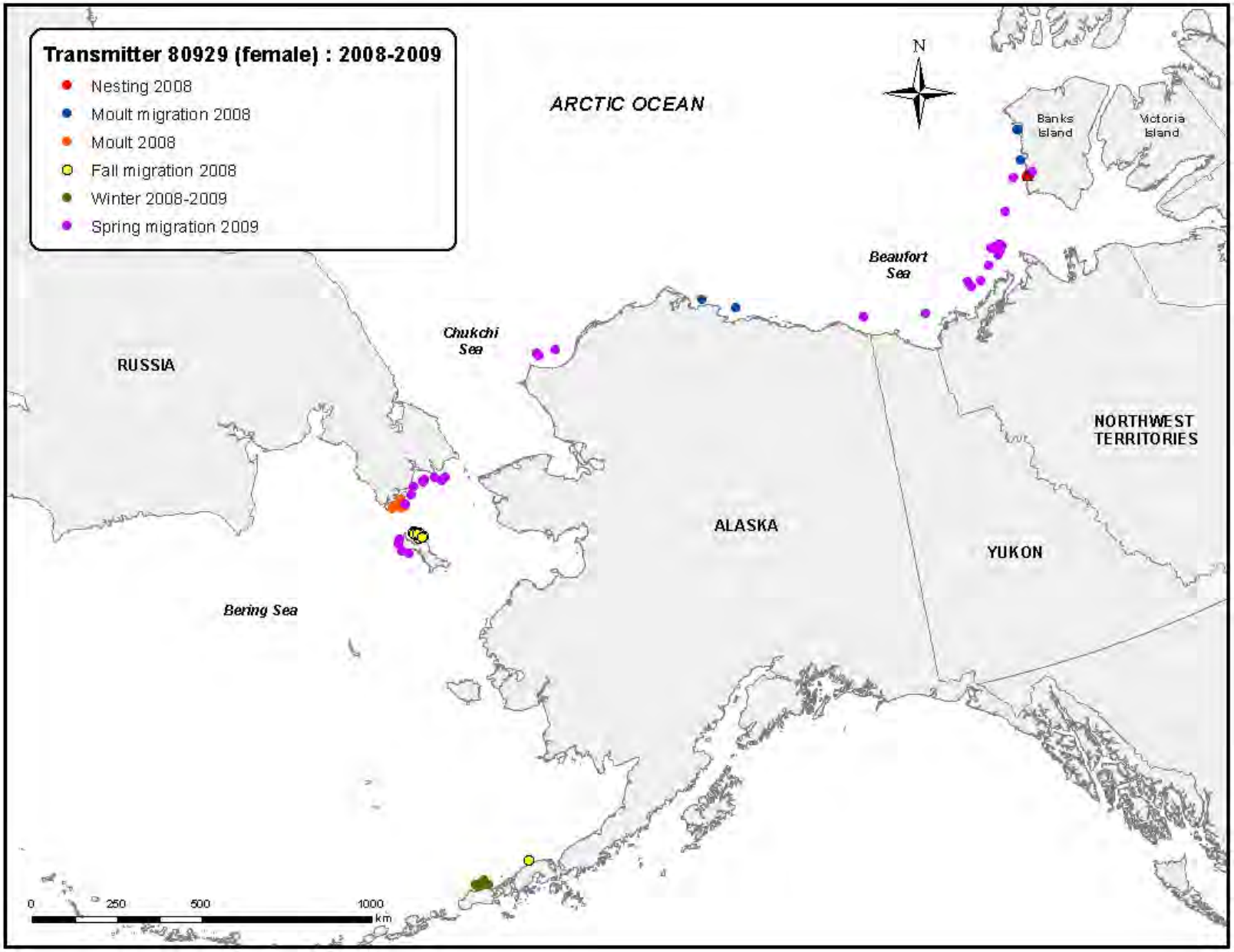

Figure B33. Locations obtained for female King Eider with satellite transmitter #80929 in 2008–2009. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

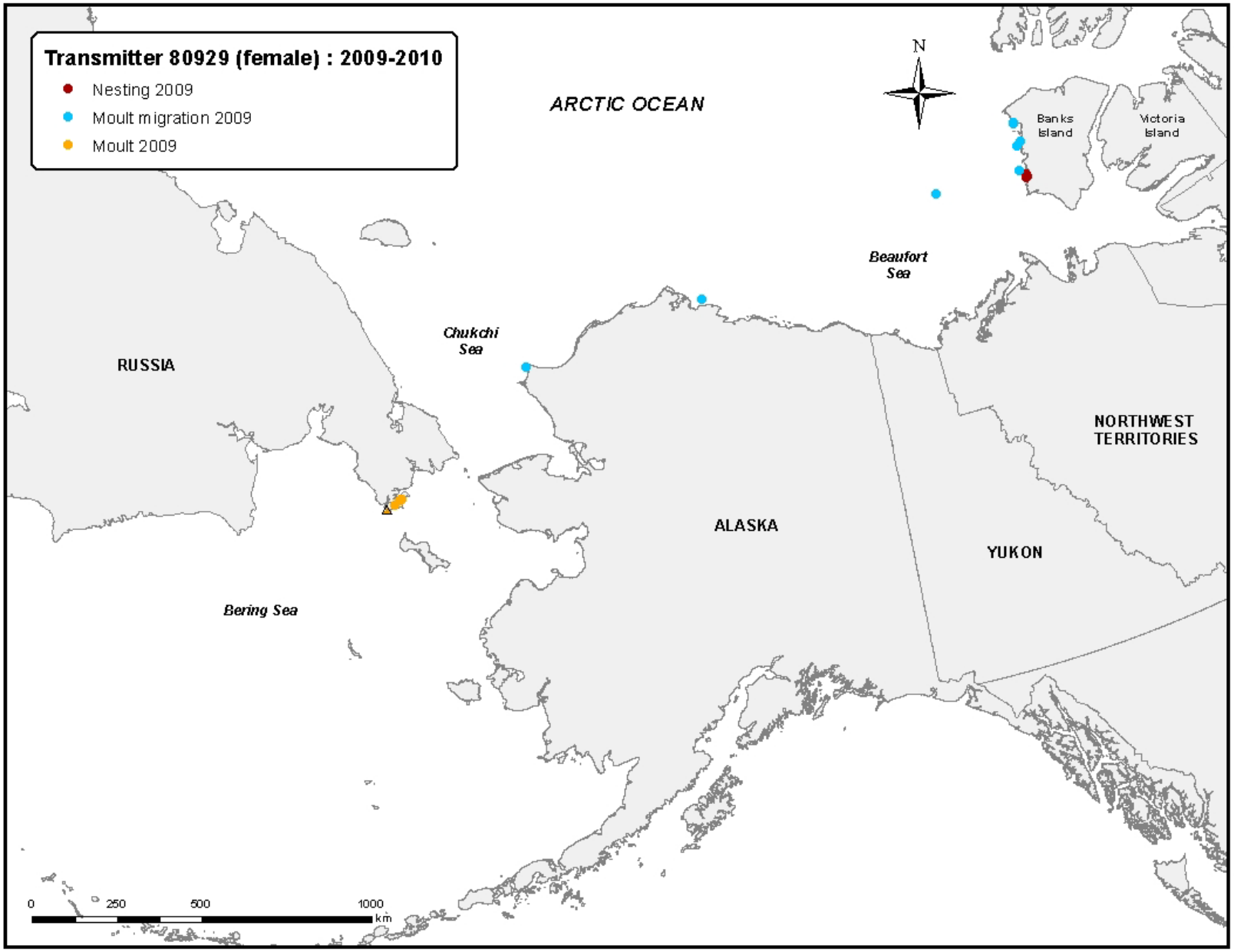

Figure B34. Locations obtained for female King Eider with satellite transmitter #80929 in 2009–2010. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

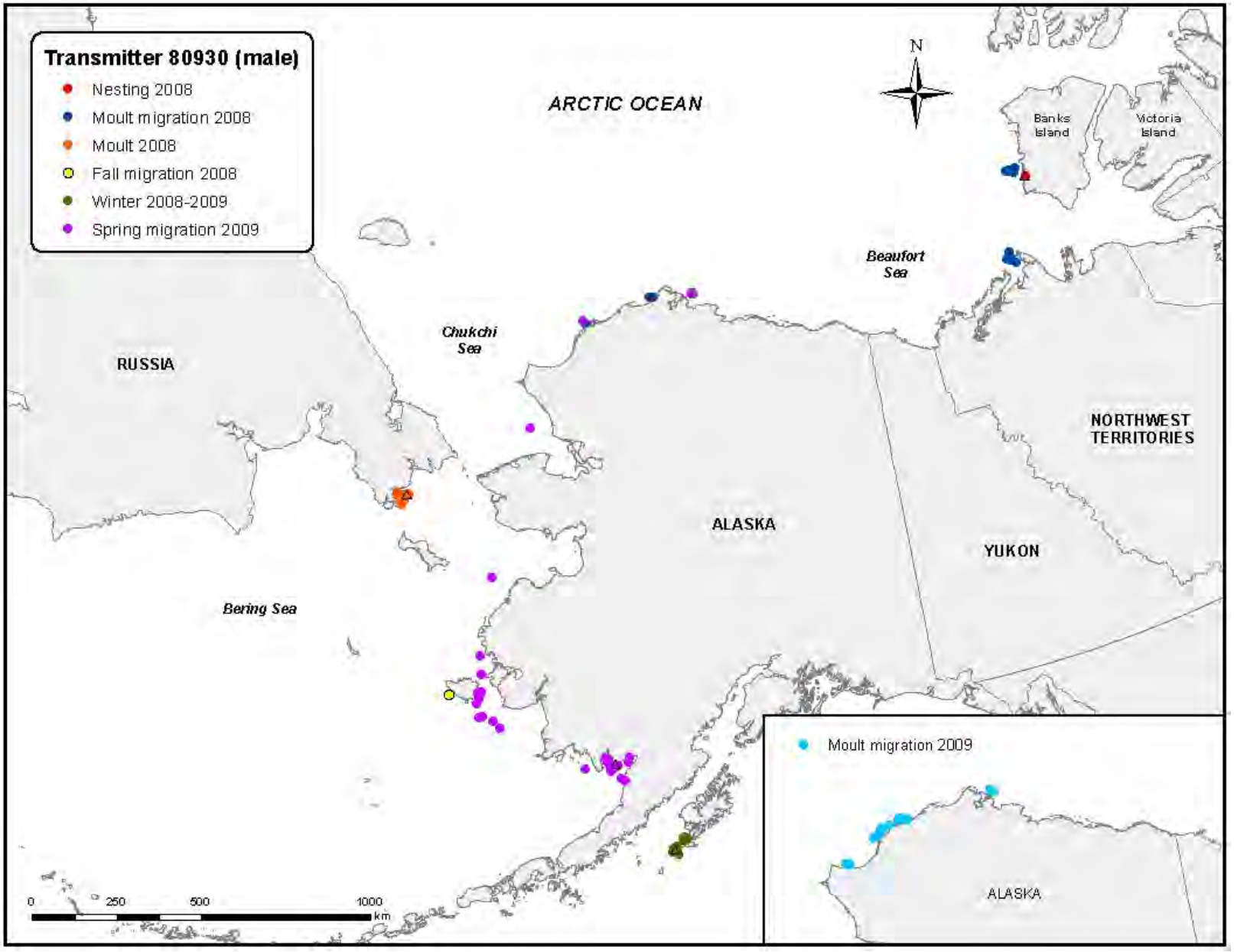

Figure B35. Locations obtained for male King Eider with satellite transmitter #80930. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

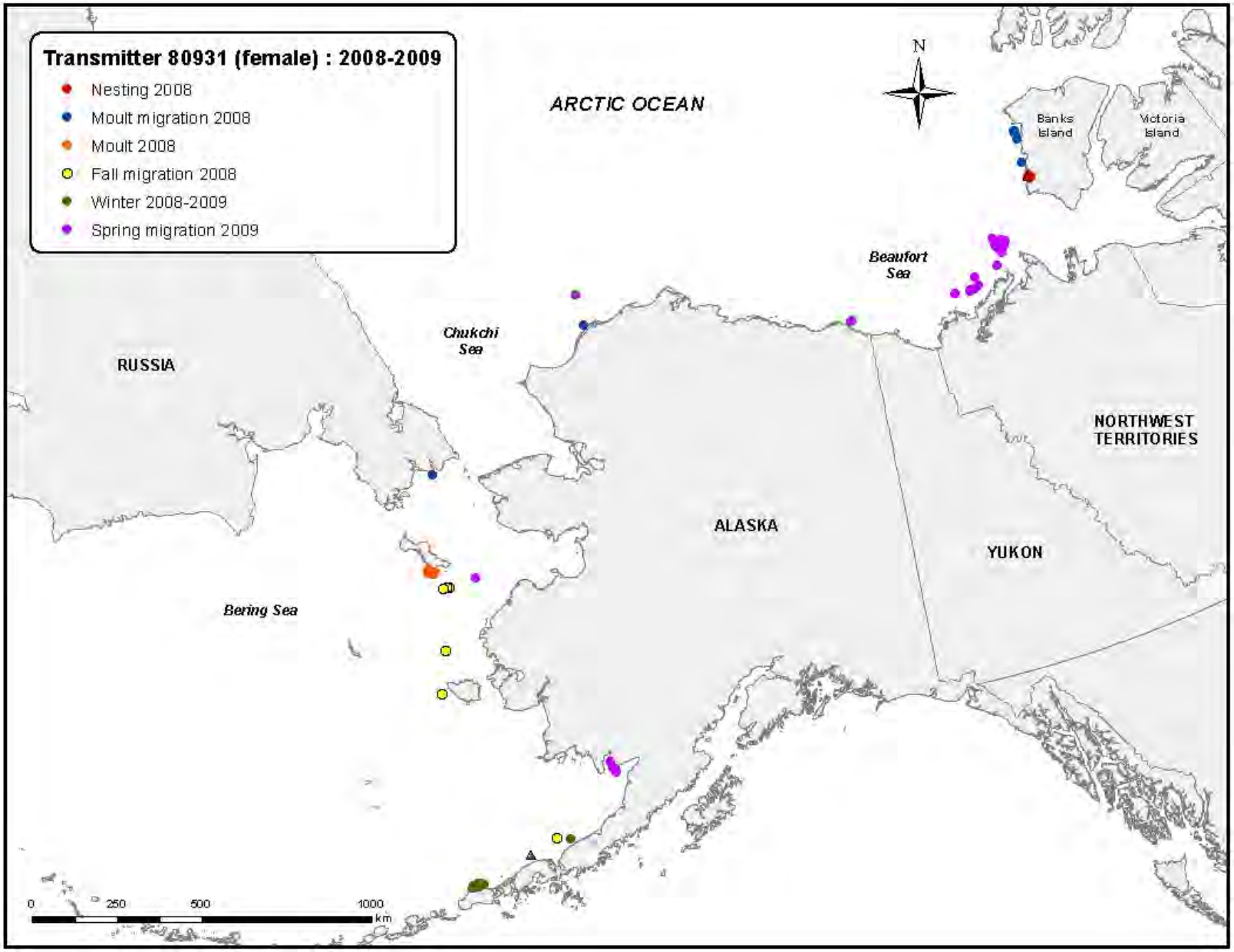

Figure B36. Locations obtained for female King Eider with satellite transmitter #80931 in 2008–2009. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

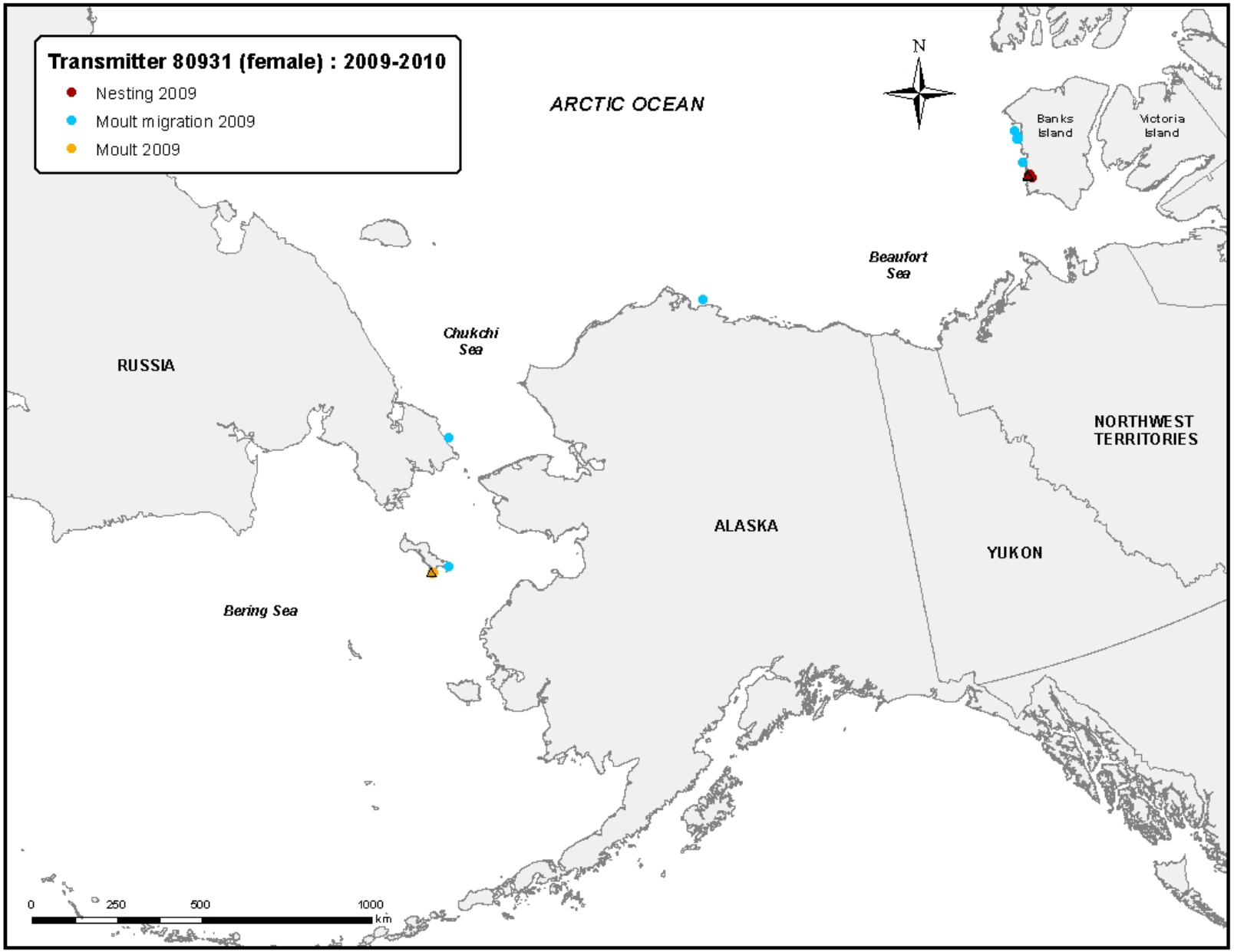

Figure B37. Locations obtained for female King Eider with satellite transmitter #80931 in 2009–2010. Circles depict locations accurate to within 1500 m; triangles indicate less accurate locations.

APPENDIX C

Timing of movement of King Eiders with satellite transmitters deployed on Banks Island, Northwest Territories, in June 2008

Appendix C1a. Summary of movement of **male** King Eiders

PTT #	Nest location 2008	Depart nesting 2008	Depart nearby staging area		Arrive moulting 2008	Moult migration # of days	Moult locations 2008	Depart moulting 2008	Fall migration # of days	
80903	Siksik Lake	28-Jun	27-Jul		12-Aug	42	Anadyr Bay	9-Oct	< 4	
80905	Central Banks Island	27-Jun	10-Jul		10-Aug	41	Cape Chukotsk	5-Oct	23	
80906	Siksik Lake	18-Jun	24-Jul		9-Aug	49	Anadyr Bay	1-Oct	4	
80908	Siksik Lake	25-Jun	20-Jul			*end*				
80909	NE of Siksik Lake	23-Jun	22-Jul		11-Aug	46	St. Lawrence Island	7-Oct	*end*	
80911	Siksik Lake	28-Jun	26-Jul		14-Aug	44	Cape Chaplin			
80914	Siksik Lake	29-Jun	02-Aug		20-Aug	49	Etolin Strait	18-Oct	71	*
80915	Siksik Lake	27-Jun	10-Jul		1-Aug	32	Anadyr Bay	5-Nov	49	
80917	Siksik Lake	26-Jun	12-Jul		27-Jul	28	Kolyuchin Bay	10-Oct	32	
80918	Siksik Lake	30-Jun	19-Jul		7-Aug	35	Cape Chaplin			
80921	Siksik Lake	25-Jun			9-Aug	42	St. Lawrence Island	22-Nov	4	
80922	Siksik Lake	28-Jun	26-Jul		4-Aug	34	Anadyr Bay	12-Oct	10	
80923	Siksik Lake	8-Jul	04-Aug	*	19-Aug	38	Etolin Strait	22-Oct	49	
80925	Siksik Lake	2-Jul	24-Jul		6-Aug	32	Anadyr Bay	11-Oct	7	
80927	Siksik Lake	2-Jul	02-Aug		11-Aug	37	Cape Chaplin			
80930	Siksik Lake	22-Jun	11-Jul		8-Aug	44	Cape Chaplin	20-Nov	4	

Appendix C1a. Summary of movement of **male** King Eiders (continued)

PTT #	Arrive winter 2008		Winter locations 2008–2009	Depart winter 2009		Depart winter region[1]	Arrive nesting 2009	Spring migration # of days		Nest locations 2009 (approximate)[2]	Depart nesting 2009
80903	13-Oct		Cape Chaplin	25-Apr		27-Apr	27-Jun	61		Martin Point	13-Jul
80905	31-Oct		Cape Chaplin	14-Apr		26-Apr				(Cape Dalhousie)	
80906	8-Oct		Cape Chaplin	30-Mar	*	26-Apr		*end*		(Burnett Bay)	
80908											
80909											
80911			Cape Chaplin	11-Mar	*	30-Apr		*end*		(northern Russia)	
80914	2-Jan	*	Port Heiden	4-Feb	*	2-May				(Lena River Delta)	
80915	27-Dec		Port Heiden	31-Mar	*	28-Apr	19 Jun	76	*	East of Minto Inlet	
80917	14-Nov		Cape Chukotsk	15-Apr		29-Apr		*end*		(northern Russia)	
80918			Cape Chaplin	*end*							
80921	29-Nov		Unimak Island	8-Mar	*	5-May				(Cape Dalhousie)	
80922	25-Oct		Karagin Bay/ Olyutor Bay	16-Feb	*	26-Apr	15-Jun	115	*	Prince Albert Peninsula	29-Jun
80923	13-Dec		Kodiak Island	*end*							
80925	21-Oct		Cape Chukotsk	*end*							
80927			Cape Chaplin	27-Mar	*	16-Apr				(Burnett Bay)	
80930	27-Nov		Kodiak Island	2-Mar	*	11-May				(Smith Bay)	

Appendix C1a. Summary of movement of **male** King Eiders (continued)

PTT #	Depart nearby staging area	Arrive moulting 2009	Moult migration # of days	Moult locations 2009	Depart moulting 2009	Arrive winter 2009	Fall migration # of days	Winter locations 2009–2010
80903			*end*					
80905		6-Aug		Cape Chaplin	*end*			
80906								
80908								
80909								
80911								
80914			*end*					
80915		10-Aug	50	Anadyr Bay	*end*			
80917								
80918								
80921			*end*					
80922	13-Jul	16-Aug	44	Anadyr Bay	*end*			
80923								
80925								
80927			*end*					
80930			*end*					

* Gap of 7 to 10 days between locations received.
[1] Based on winter regions described in Oppel et al. (2008).
[2] Brackets indicate bird remained offshore, so breeding location is approximate and based on farthest movement away from wintering area.

Appendix C1b. Summary of movement of **female** King Eiders

PTT #	Nest location 2008	Depart nesting 2008	Depart nearby staging area		Arrive moulting 2008		Moult migration # of days		Moult locations 2008	Depart moulting 2008		Fall migration # of days	
80902	Siksik Lake	28-Jul	7-Aug		17-Aug		17		Cape Nygligan	27-Oct		< 6	
80904	Central Banks Island	1-Aug	20-Aug		29-Aug		25		Cape Chukotsk				
80907	Siksik Lake	3-Aug	11-Aug		1-Sep	**	20	**	Nushagak Bay	25-Oct		38	**
80910	NE of Siksik Lake	19-Jul	10-Aug		22-Aug		31		Anadyr Bay	14-Oct		< 3	
80912	Siksik Lake	17-Jul	30-Jul	**	15-Aug		26		Cape Nygligan	14-Oct	**	< 16	**
80913	Siksik Lake	15-Jul	13-Aug		8-Sep		52		Kvichak Bay	18-Nov		< 3	
80916	Siksik Lake	2-Aug	17-Aug		24-Aug		19		Cape Nygligan	3-Nov		26	
80920	Siksik Lake	26-Jul	11-Aug		24-Aug		26		Kvichak Bay	29-Oct		29	
80924	Siksik Lake	2-Aug	11-Aug	**	2-Sep	**	24	**	Cape Chukotsk				
80926	Siksik Lake	3-Aug	15-Aug	*	28-Aug		21		Cape Nygligan	27-Oct	**	< 35	**
80928	Siksik Lake	8-Jul	12-Aug		19-Aug		39		Anadyr Bay	2-Nov		<4	
80929	Siksik Lake	22-Jul	10-Aug		19-Aug		25		Cape Chukotsk	19-Oct		41	
80931	Siksik Lake	28-Jul	13-Aug		23-Aug		23		St. Lawrence Island	17-Nov		21	

Appendix C1b. Summary of movement of **female** King Eiders (continued)

PTT #	Arrive winter 2008		Winter locations 2008–2009	Depart winter 2009		Depart winter region[1]		Arrive nesting 2009	Spring migration # of days		Nest locations 2009 (approximate)[2]	Depart nesting 2009	
80902	2-Nov		Cape Chukotsk	28-Mar	*	26-Apr		15-Jun	74	*	Siksik Lake	*end*	
80904			Cape Chaplin	19-Apr		28-Apr		15-Jun	55		Central Banks Island	*end*	
80907	10-Dec	**	Port Heiden			27-Apr		15-Jun	127	**	Siksik Lake	4-Aug	**
80910	17-Oct		Cape Chaplin	11-Apr		28-Apr		17-Jun	65		NE of Siksik Lake	13-Jul	**
80912	30-Oct	**	Cape Chukotsk	14-Apr		28-Apr			*end*		(E Beaufort Sea)		
80913	21-Nov		Port Heiden/ Kodiac Island	*end*									
80916	2-Dec		Unimak Island	10-Mar	*	7-May		10-Jun	88	*	Siksik Lake	1-Jul	
80920	30-Nov		Port Heiden	2-Apr	*	9-May		11-Jun	66	*	Siksik Lake	29-Jul	
80924			Cape Chaplin	*end*									
80926	1-Dec	**	Cape Chukotsk	14-Apr		21-Apr	*	14-Jun	59		Siksik Lake	1-Aug	
80928	6-Nov		Cape Chukotsk	22-Apr		27-Apr		13-Jun	51		Siksik Lake	19-Jul	
80929	2-Dec		Unimak Island	29-Mar	*	29-Mar	*	13-Jun	72	*	Siksik Lake	26-Jul	
80931	11-Dec		Unimak Island	31-Mar	*	28-Apr		6-Jun	63	*	Siksik Lake	4-Aug	

Appendix C1b. Summary of movement of **female** King Eiders (continued)

PTT #	Depart nearby staging area	Arrive moulting 2009		Moult migration # of days	Moult locations 2009	Depart moulting 2009	Arrive winter 2009	Fall migration # of days	Winter locations 2009–2010	Depart winter 2010
80902										
80904										
80907		8-Sep	* *		Nushagak Bay	31-Oct	21-Nov	17	Unimak Island	24-Mar
80910				*end*						
80912										
80913										
80916				*end*						
80920	9-Aug	4-Sep		34	Kvichak Bay	*end*				
80924										
80926	16-Aug			*end*						
80928	9-Aug	26-Aug		35	Anadyr Bay	31-Oct	8-Nov	4	Cape Chaplin	
80929	12-Aug	26-Aug		28	Cape Chaplin	*end*				
80931	22-Aug	6-Sep		29	St. Lawrence Island	*end*				

* Gap of 7 to 10 days between locations received.
** Gap of > 10 days.
[1] based on winter regions described in Oppel et al. (2008).
[2] brackets indicate bird remained offshore, so breeding location is approximate and based on farthest movement away from wintering area.

Appendix C2a. Timing of moult migration across the Beaufort Sea: **male** King Eiders

PTT#	2008					2009					
	Date arrive	Date depart		# of days in Beaufort		Location of staging areas[1]	Date arrive		Date depart		# of days in Beaufort		Location of staging areas[1]
80903	1-Jul	6-Aug		39		Meek Point, Jones Islands	15-Jun	^	15-Jun	^	<4	^	
80905	30-Jun	7-Aug		41		Meek Point, Cape Bathurst	19-Jun	***	22-Jul		36	***	Cape Dalhousie
80906	22-Jun	27-Jul		39		Burnett Bay	19-Jun	***	*end*				Burnett Bay
80908	28-Jun	23-Jul		28		Meek Point							
80909	26-Jun	26-Jul		33		Meek Point, Burnett Bay							
80911	1-Jul	26-Jul		28		Meek Point							
80914	2-Jul	11-Aug		43		Meek Point, Cape Kellet							
80915	30-Jun	19-Jul		22		Meek Point	22-Jun		15-Jul		27		Cape Bathurst
80917	29-Jun	21-Jul		25		Meek Point, Smith Bay							
80918	3-Jul	19-Jul		19		Meek Point							
80921	28-Jun	25-Jul		30		Cape Bathurst, C. Dalhousie	19-Jun	***	18-Jul	**	38	***	Cape Bathurst
80922	1-Jul	26-Jul		28		Meek Point	17-Jul		4-Aug		22		Meek Point
80923	11-Jul	4-Aug	*	30	*	Meek Point							
80925	5-Jul	24-Jul		22		Meek Point							
80927	5-Jul	5-Aug		34		Meek Point	19-Jun	***	30-Jul	**	51	***	Burnett Bay, Cape Bathurst, Cape Dalhousie
80930	25-Jun	26-Jul		34		Meek Point, Cape Bathurst	19-Jun	***	1-Jul		15	***	Smith Bay

[1] Considered a staging area if eider remained in area for at least 7 days.

* Gap of 7 to 10 days between locations received.

** Gap of > 10 days.

*** Bird remained in Beaufort Sea throughout the nesting season in 2nd year, so selected June18, peak nest initiation period for King Eiders on Banks Island (Cotter et al. 1997), to divide spring from moult migration.

^ If no location in Beaufort Sea, selected midpoint of period when crossed Beaufort Sea as both arrival and departure date.

Appendix C2b. Timing of moult migration across the Beaufort Sea: **female** King Eiders

PTT#	2008						2009							
	Date arrive	Date depart		# of days in Beaufort Sea		Location of staging areas[1]	Date arrive		Date depart		# of days in Beaufort Sea		Location of staging areas[1]	
80902	31-Jul	13-Aug		17		Meek Point	end							
80904	4-Aug	26-Aug		25		Burnett Bay	end							
80907	6-Aug	17-Aug	**	20	**	Meek Point	21-Aug	^**	21-Aug	^**	<34	^**	(unknown)	
80910	22-Jul	13-Aug		25		Burnett Bay	28-Jul	**	end					
80912	21-Jul	12-Aug		26		Burnett Bay								
80913	18-Jul	23-Aug		39		Worth Point, Burnett Bay, Smith Bay								
80916	5-Aug	20-Aug		19		Burnett Bay	end							
80920	29-Jul	14-Aug		19		Cape Prince Alfred, Meek Point	2-Aug		17-Aug		19		Cape Prince Alfred, Jones Islands	
80924	5-Aug	11-Aug	*	13	*	Burnett Bay								
80926	6-Aug	22-Aug		21		Meek Point	4-Aug		19-Aug	**	30	**	Meek Point	
80928	11-Jul	12-Aug		36		Meek Point	23-Jul		19-Aug		31		Burnett Bay	
80929	25-Jul	16-Aug		25		Burnett Bay	29-Jul		19-Aug		24		Meek Point, Burnett Bay	
80931	31-Jul	13-Aug		16		Burnett Bay	8-Aug		26-Aug		22		Burnett Bay	

[1] Considered a staging area if eider remained in area for at least 7 days.
* Gap of 7 to 10 days between locations received.
** Gap of > 10 days.
^ If no location in Beaufort Sea, selected midpoint of period when crossed Beaufort Sea as both arrival and departure date.

Appendix C3a. Timing of 2009 spring migration across the Beaufort Sea: **male** King Eiders

PTT #	2009						
	Date arrive	**Date depart**		**# of days in Beaufort Sea**		**Location of staging areas[1]**	**Comments**
80903	1-May	25-Jun		57		Mackenzie Delta, Cape Dalhousie, Kay Point, Herschel Island, Demarcation Point, Martin Point	
80905	4-May	18-Jun	***	48	***	Cape Dalhousie, Cape Bathurst, Mackenzie Delta	
80906	5-May	18-Jun	***	46	***	Cape Dalhousie, Cape Bathurst, Burnett Bay	
80908	*end*						
80909	*end*						
80911	*end*						migrated to N. Russia
80914							migrated to N. Russia
80915	7-May	16-Jun		42		Mackenzie Delta, Demarcation Point, Cape Bathurst	
80917	*end*						migrated to N. Russia
80918	*end*						
80921	15-May	18-Jun	***	36	***	Cape Dalhousie, Cape Bathurst	
80922	12-May	13-Jun		34		Komakuk, Cape Dalhousie, Burnett Bay	
80923	*end*						
80925	*end*						
80927	30-Apr	18-Jun	***	51	***	Cape Dalhousie, Meek Point	
80930	10-Jun	18-Jun	***	10	***	Smith Bay	

[1] Considered a staging area if eider remained in area for at least 7 days.

*** Bird remained in Beaufort Sea throughout the nesting season in 2nd year, so selected June 18, peak nest initiation period for King Eiders on Banks Island (Cotter et al. 1997), to divide spring from moult migration.

Appendix C3b. Timing of 2009 spring migration across the Beaufort Sea: **female** King Eiders

	2009				
PTT #	**Date arrive**	**Date depart**	**# of days in Beaufort Sea**	**Location of staging areas[1]**	**Comments**
80902	8-May	14-Jun	38	Cape Dalhousie, Mackenzie Delta, Burnett Bay	
80904	14-May	12-Jun	31	Mackenzie Delta, Cape Dalhousie	
80907	8-May	12-Jun	40	Cape Dalhousie, Meek Point	
80910	7-May	15-Jun	41	Cape Dalhousie, Cape Bathurst	
80912	7-May	*end*		Cape Dalhousie, Cape Bathurst	
80913	*end*				
80916	12-May	9-Jun	29	Mackenzie Delta, Cape Dalhousie	
80920	15-May	10-Jun	28	Komakuk, Cape Dalhousie	
80924	*end*				
80926	28-Apr *	13-Jun	50	Cape Dalhousie, Cape Bathurst, Big River delta, Meek Point	
80928	9-May	12-Jun	35	Cape Dalhousie, Cape Bathurst, Meek Point	
80929	7-May	12-Jun	37	Cape Dalhousie, Cape Bathurst	
80931	2-May	5-Jun	36	Cape Bathurst, Cape Dalhousie	

[1] Considered a staging area if eider remained in area for at least 7 days.

* Gap of 7 to 10 days between locations received.

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Additional information can be obtained at:

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