



Movements and Survival of King Eiders during their first year at sea

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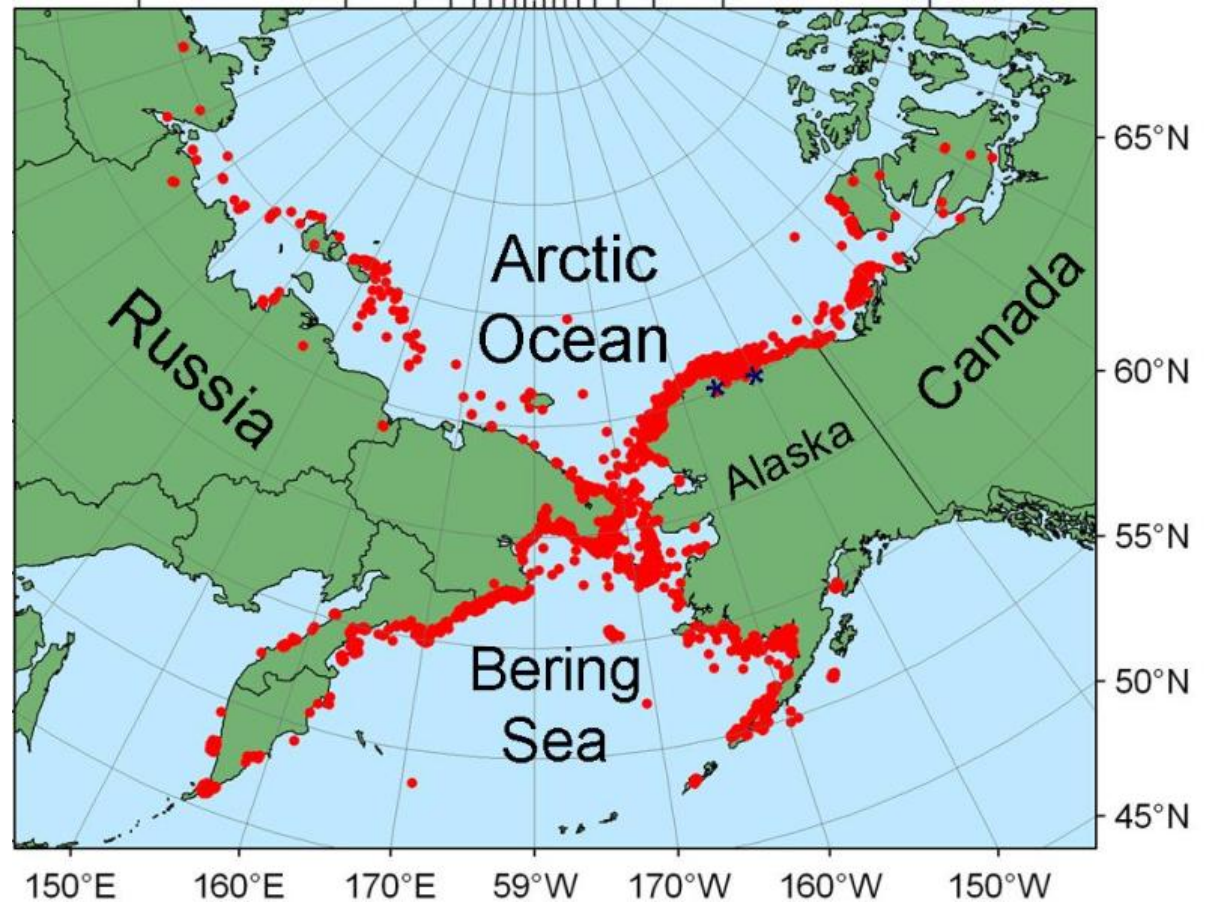
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Alaskan King Eiders



- We have tracked adults from Alaskan breeding grounds since 2002





Juvenile Eiders



Little is known about juveniles:

- First-year survival?
- Movements to wintering areas?
- Winter locations?
- Post-winter movements and locations?

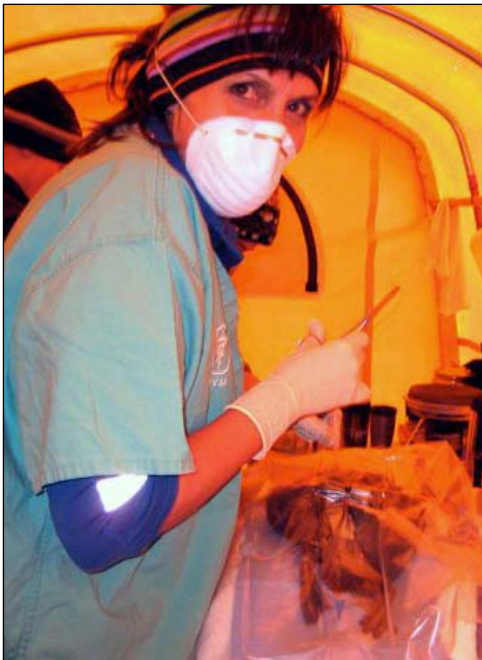


Methods



- 2006 - we caught and implanted 9 at breeding grounds in Kuparuk oilfield

- 2007 - 42 were implanted at a lake 10 km SE of Teshekpuk Lake



- 2008 - 6 implanted at the same lake





Methods

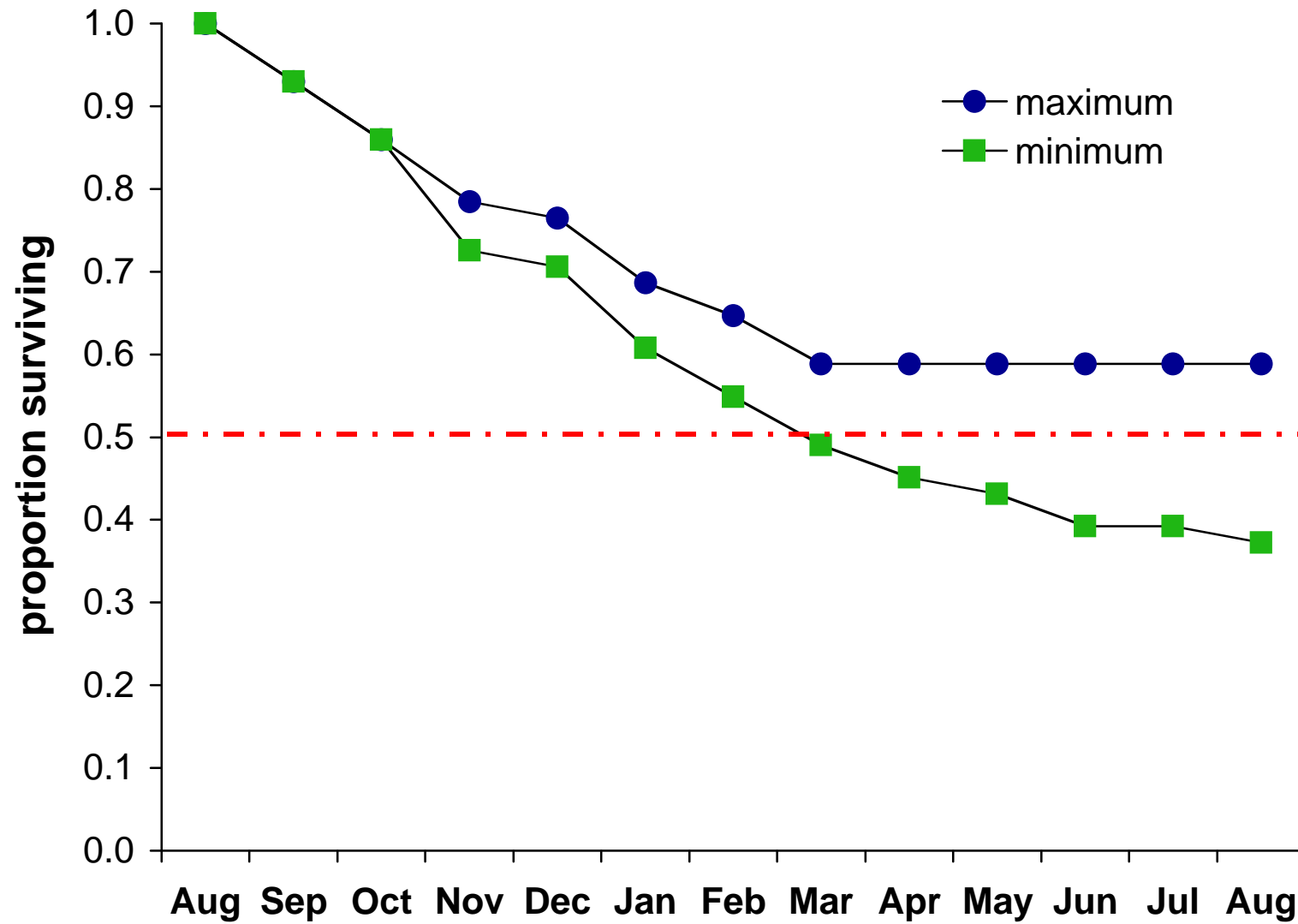


- 22 males, 29 females, 6 unknown
- We estimated survival each month after implantation
- Minimum survival estimates: failed transmitter = dead
- Maximum survival estimates: failed transmitter = alive
- We estimated average travel distance each month after capture





Results - Survival



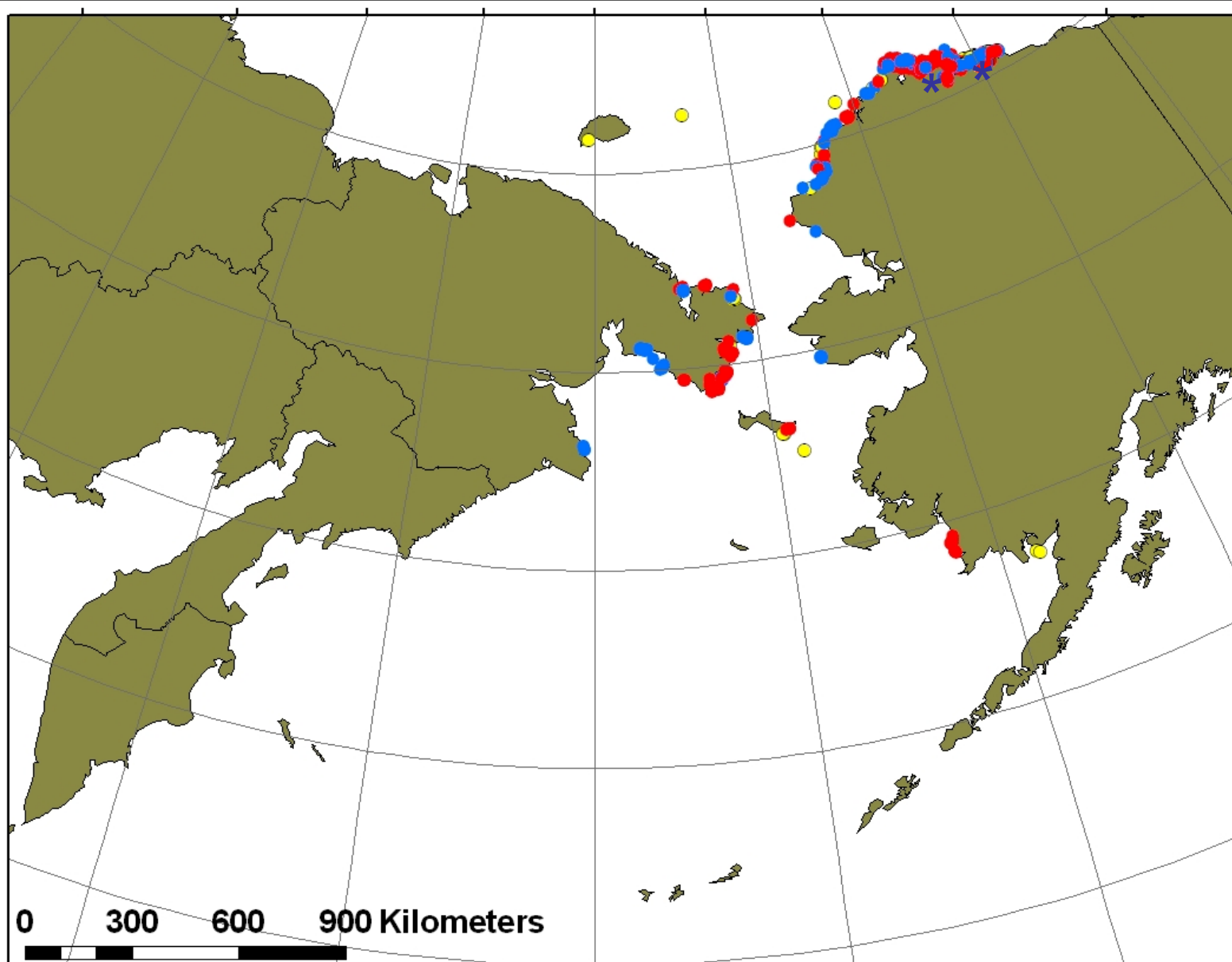


Results - Summer Locations



Aug-Sep

- = female
- = male
- = unknown



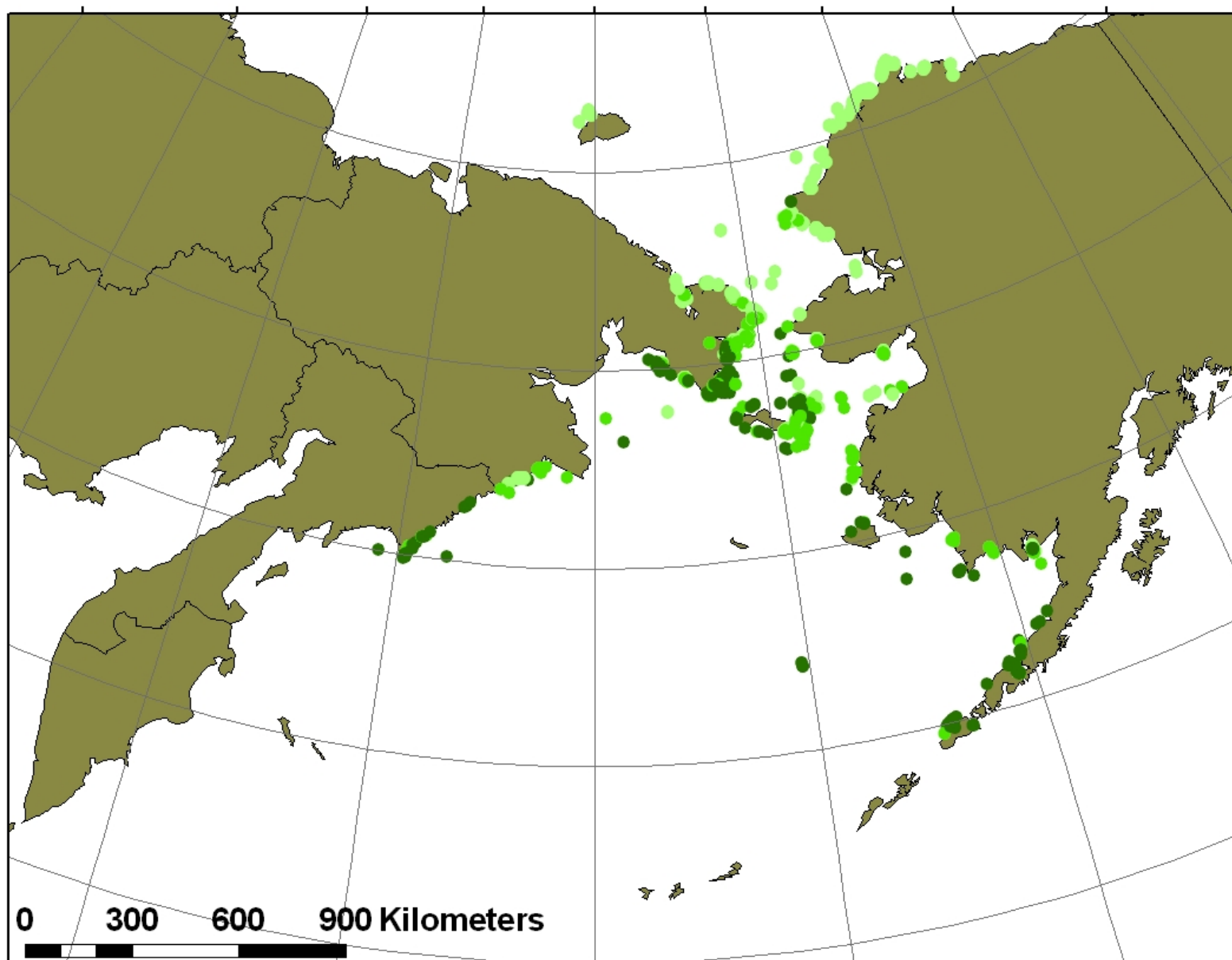


Results - Fall Locations



Oct-Dec

- = Oct
- = Nov
- = Dec





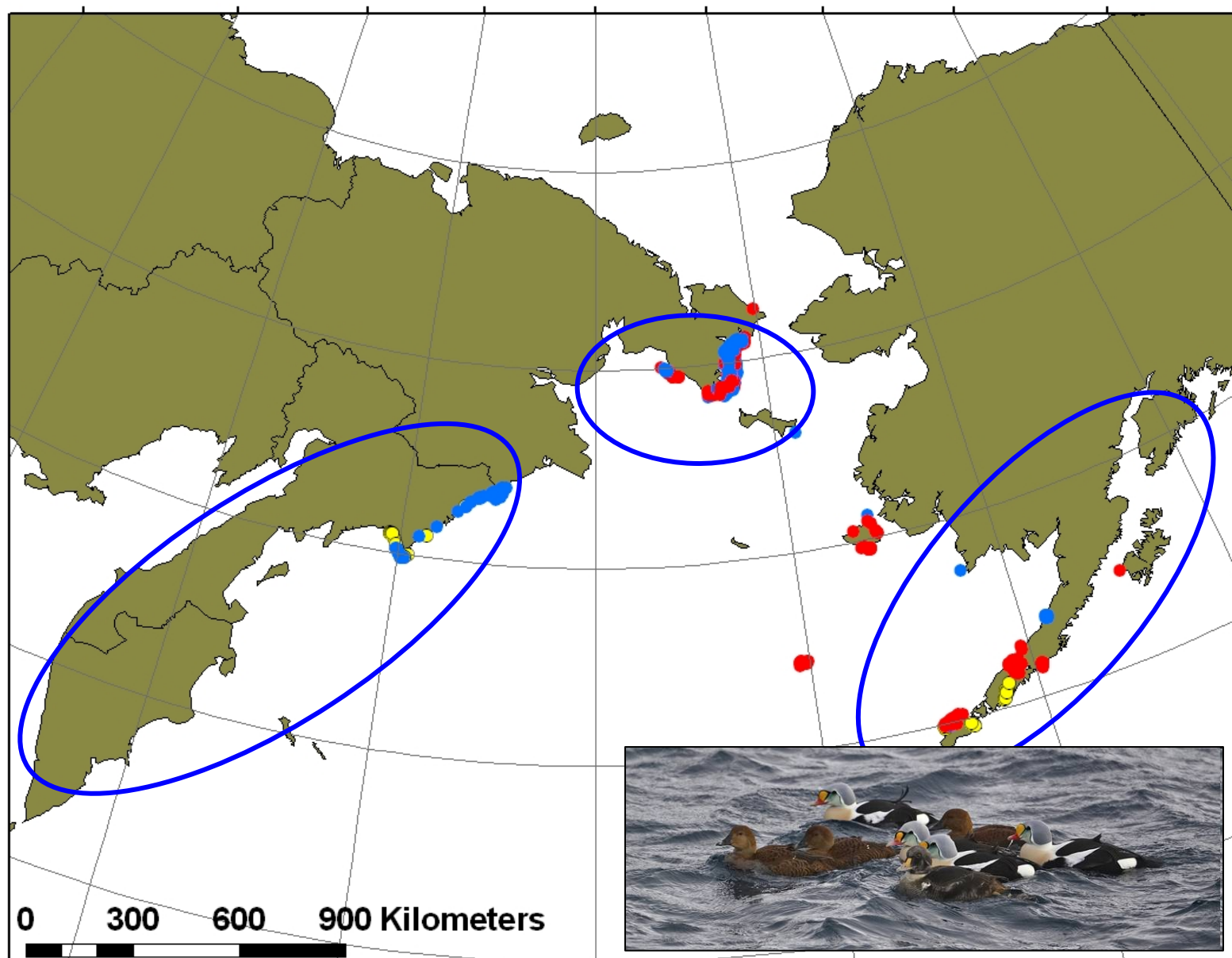
Results - Winter Locations



Jan-Apr

- = female
- = male
- = unknown

○ Adult
winter
regions



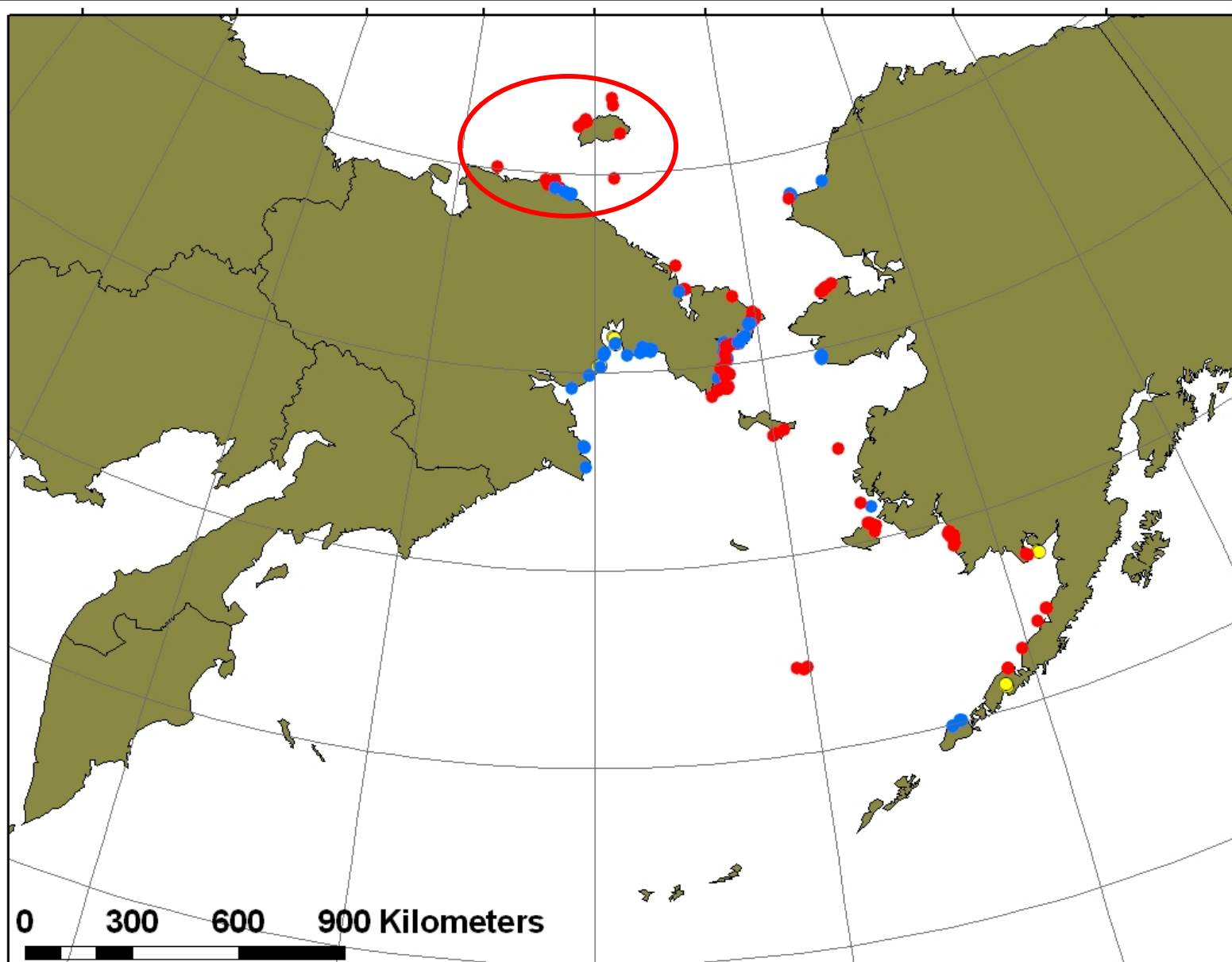


Results - First Summer Locations



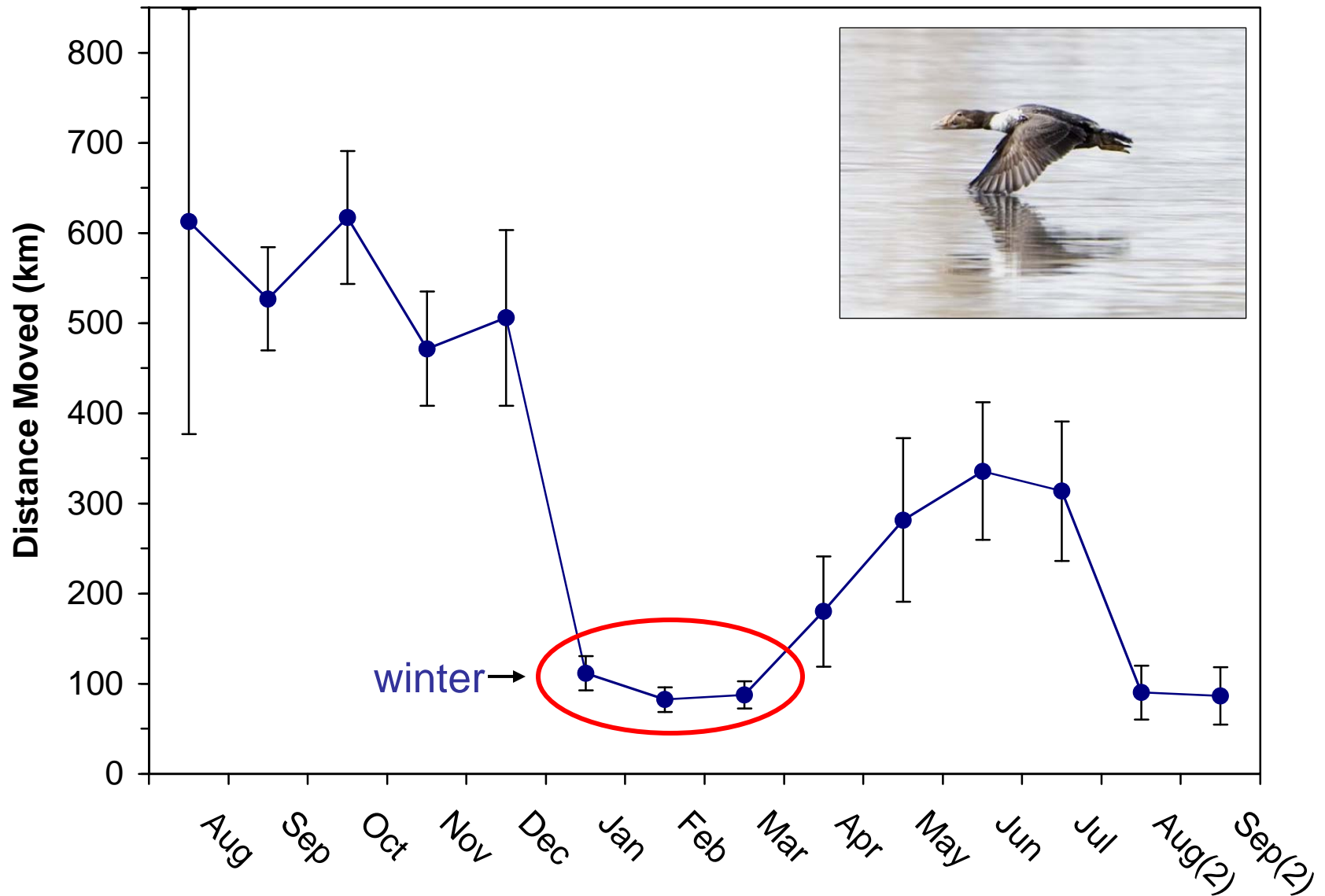
May-Aug

- = female
- = male
- = unknown





Results - Distance Moved

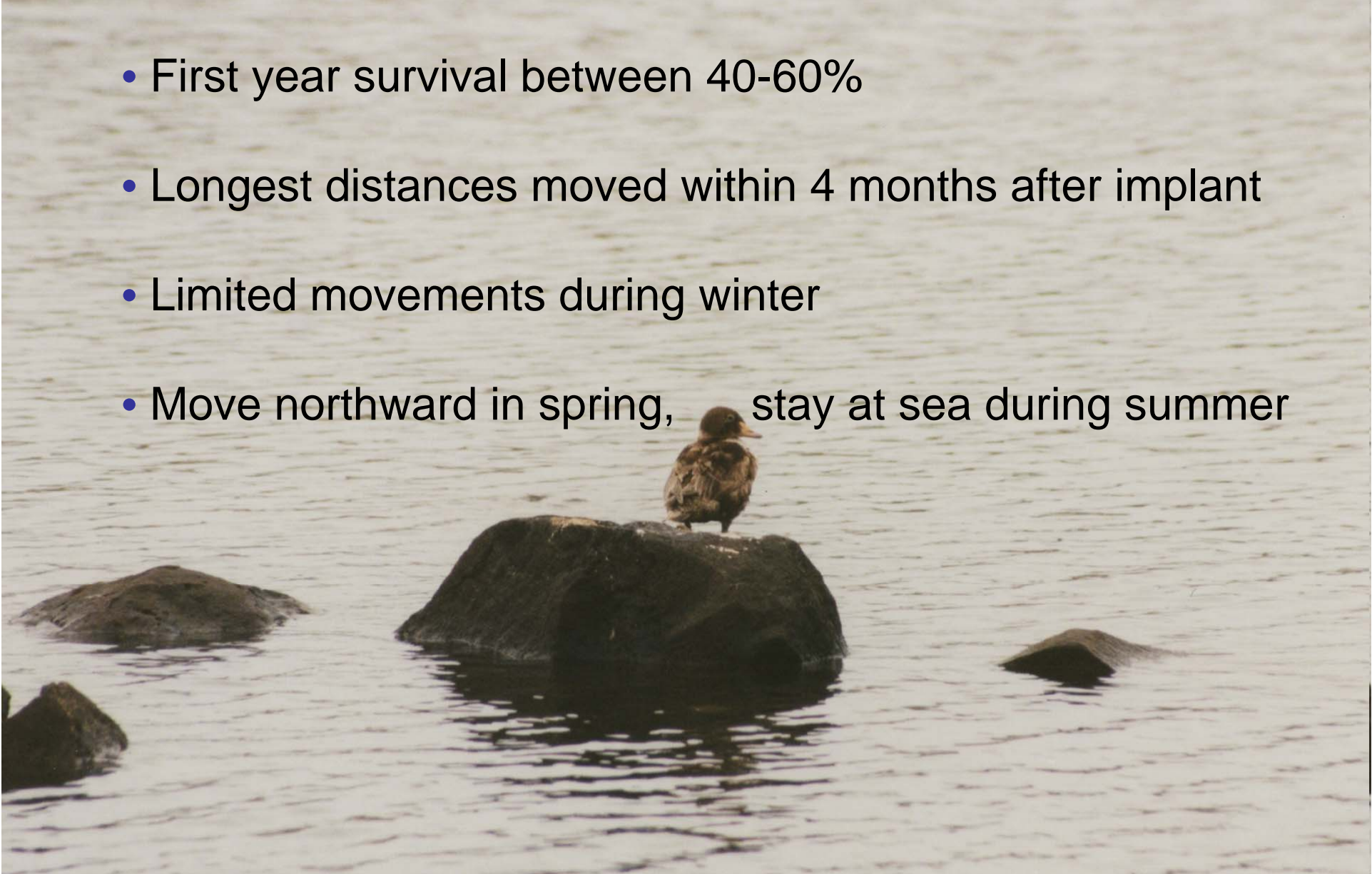




Conclusions



- First year survival between 40-60%
- Longest distances moved within 4 months after implant
- Limited movements during winter
- Move northward in spring, stay at sea during summer





What's Next?



IF transmitters last another year:

- second year survival
- second year breeding?
- natal site fidelity?





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