

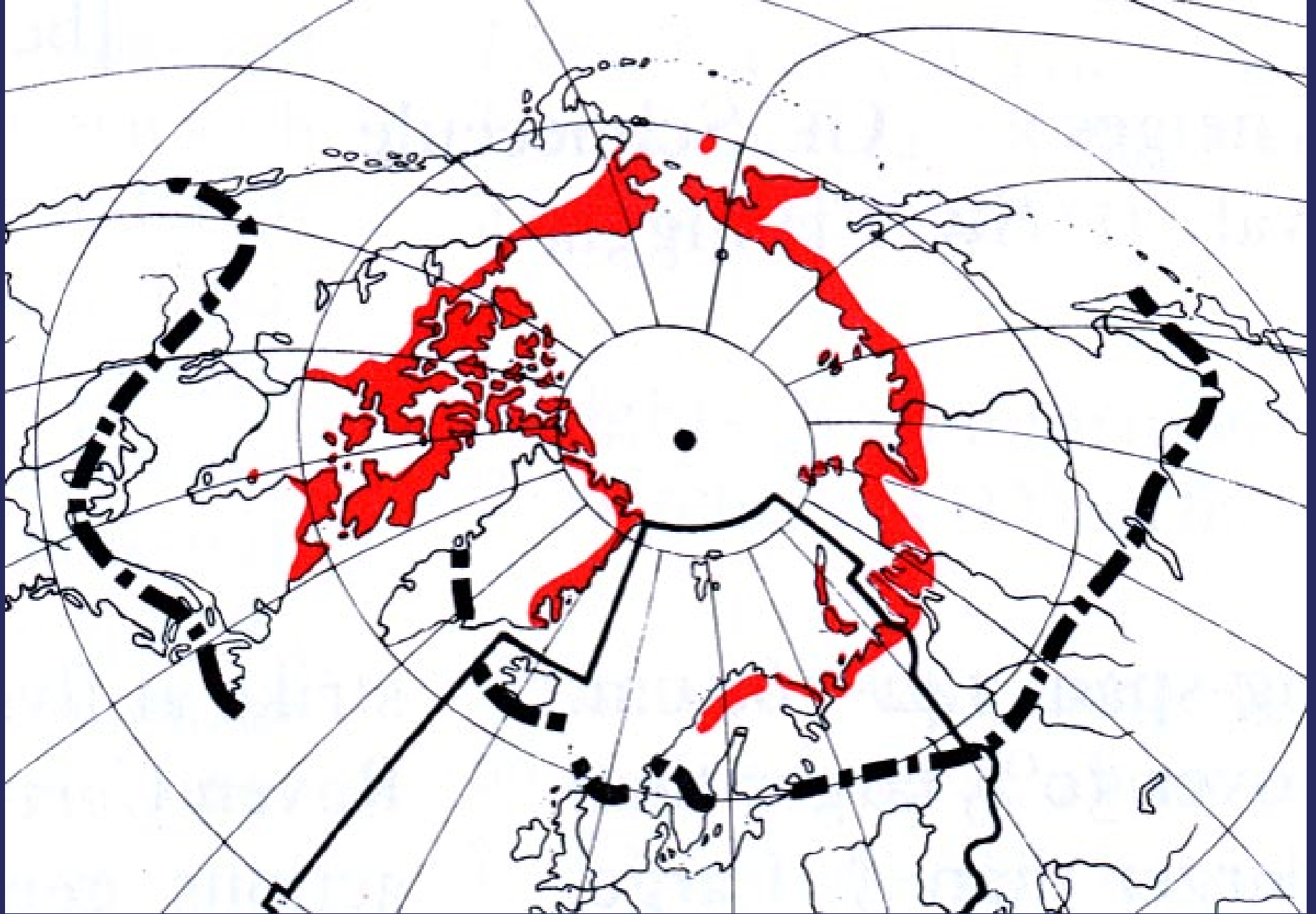
Where are the Snowy Owls?

Roar Solheim

UNIS Longyearbyen 18.2.2009

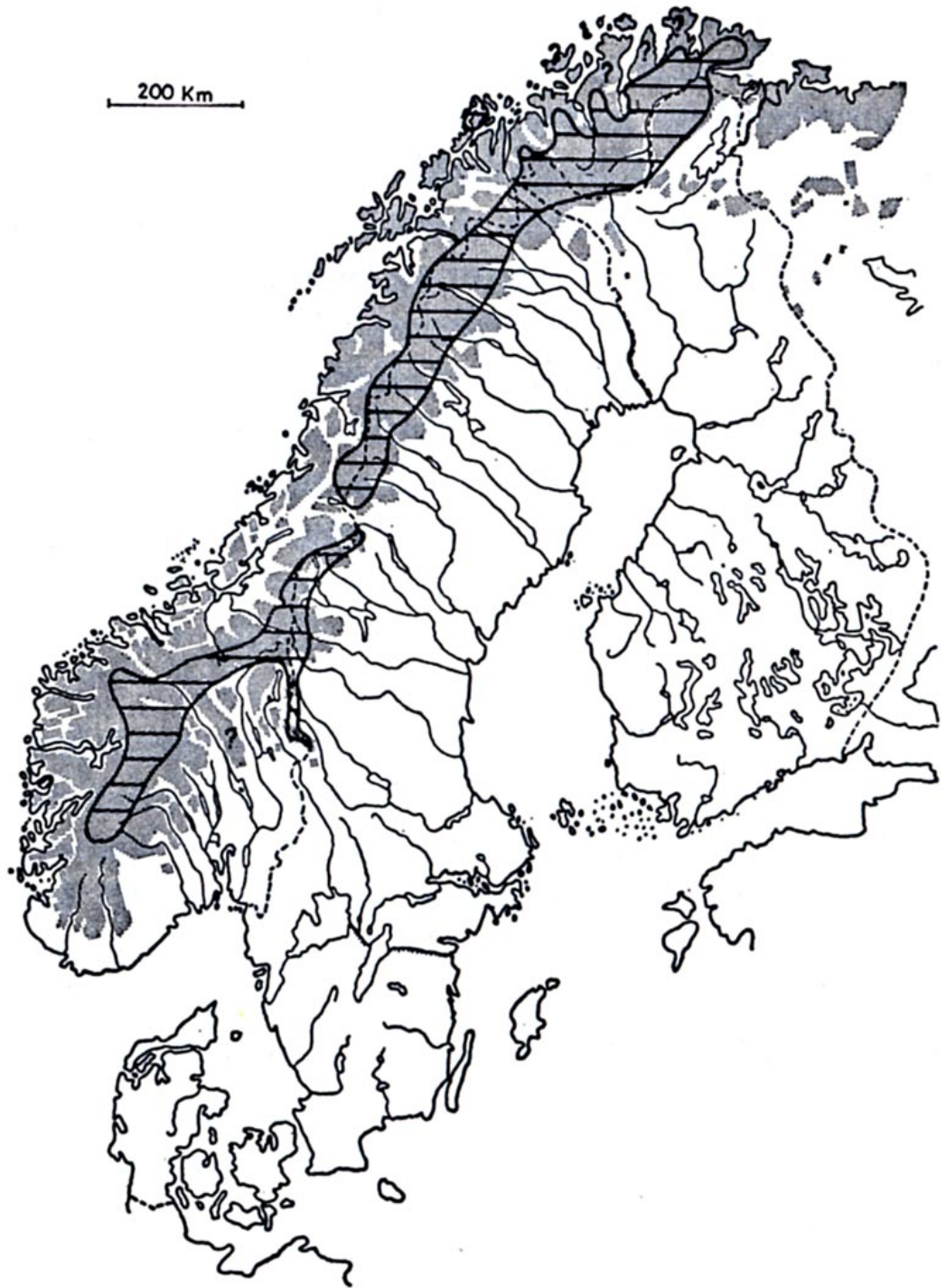


Photo and copyright: Roar Solheim



Snowy Owl distribution in the Arctic. Map from *Birds of the Western Palearctic*.

**Snowy Owl
distribution in
Scandinavia,
according to
Svein Haftorn 1971:
Norges fugler.**



Crucial data needed on Snowy Owl biology:

- Longevity
- Age at first breeding
- How often do individual birds breed?
- Distance between typical breeding "sites"/breeding "colonies"
- Do the owls use special winter habitats/areas?
- How are breeding areas distributed around the Arctic?
- Are we counting the same owls several times? – What is the actual world population of Snowy Owls?

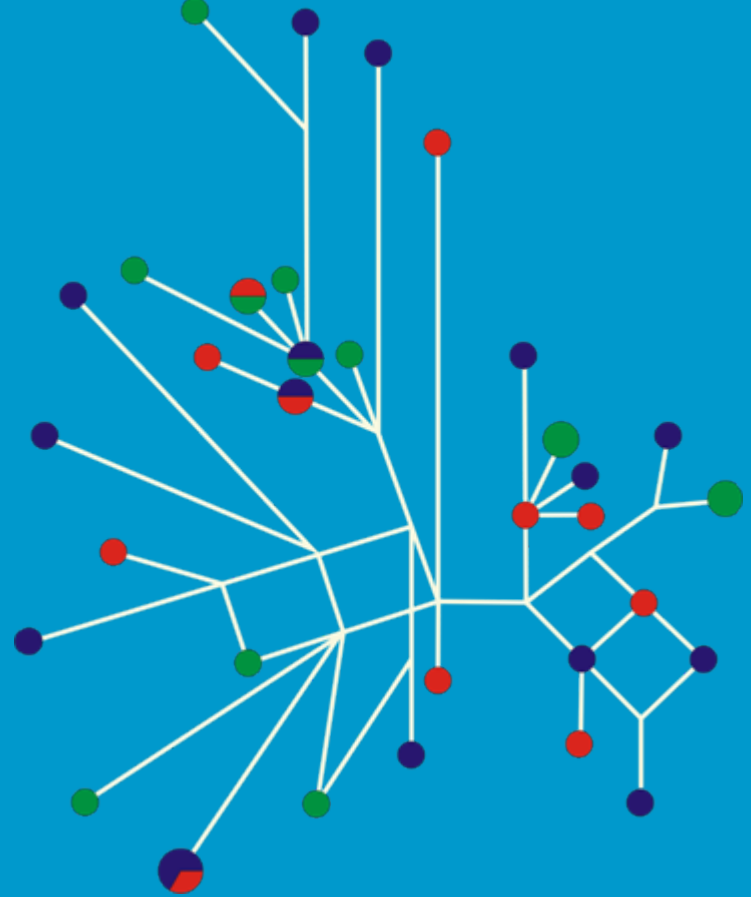
(Present estimate: 290.000 individuals: Genetics suggest it could be less than 100.000)

- Human threats to Snowy Owls
- Variance and long-term change in prey availability:

Is the Snowy Owl a victim of climate changes?



Snowy Owl distribution, and localities where DNA-samples originate. Dotted line: winter range.



Colours correspond to locations on the map. Length of “branches” correlates to mutational distance. Shortest length equals one mutation.

*Data based on G. Marthinsen, L. Wennerberg, R. Solheim & J. Lifjeld 2008: No phylogeographic structure in the circumpolar snowy owl *Bubo scandiacus*.*

The Norwegian Snowy Owl Project;
Since 2005. Birds caught July 2007:



Roar Solheim

Female

Albertine



Karl-Otto Jacobsen

Female

Høst



Ingar Jostein Øien

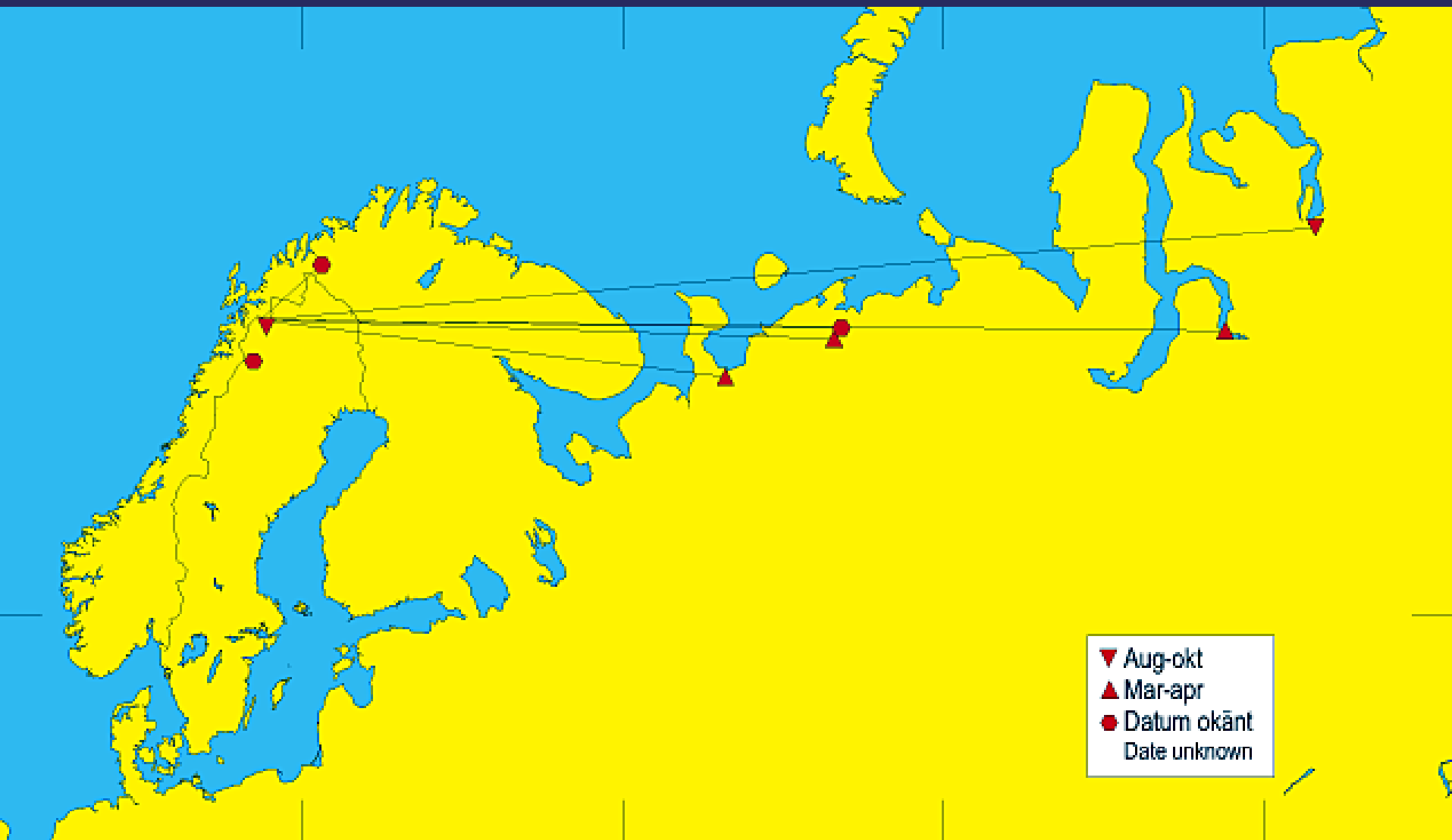
Male

Yngvar



Movements of three adult snowy owls with satellite transmitters, March-October 2008. Orange: male "Yngvar" spring and summer, red: male "Yngvar" August-October, green: female "Albertine" and pink: female "Høst".

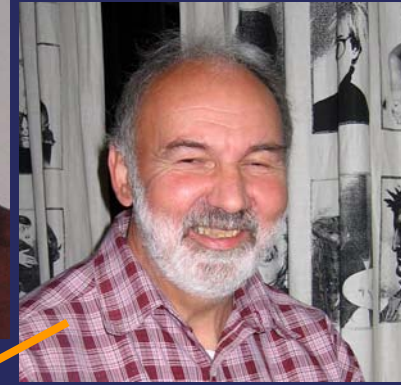
Data from the Norwegian Snowy Owl Project: Roar Solheim, Karl-Otto Jacobsen and Ingar Jostein Øien.



Ring recoveries of Snowy Owls banded as chicks in Northern Sweden 1978.

From Swedish Bird ringing Atlas.

World Snowy Owl Working Group



Snowy Nomads

The first snowy owls tracked by satellite returned dramatic results. One (route in brown) sprinted across more than 800 miles of ocean in just 11 days. Another (route in blue) flew an average of 40 miles per day for 48 days on an 1,800-mile trip from Siberia to Canada.



From National Geographic Dec. 2002.



A color-marked snowy owl perched on a post. The bird has preened the transmitter into its feathers but the antenna is still visible.

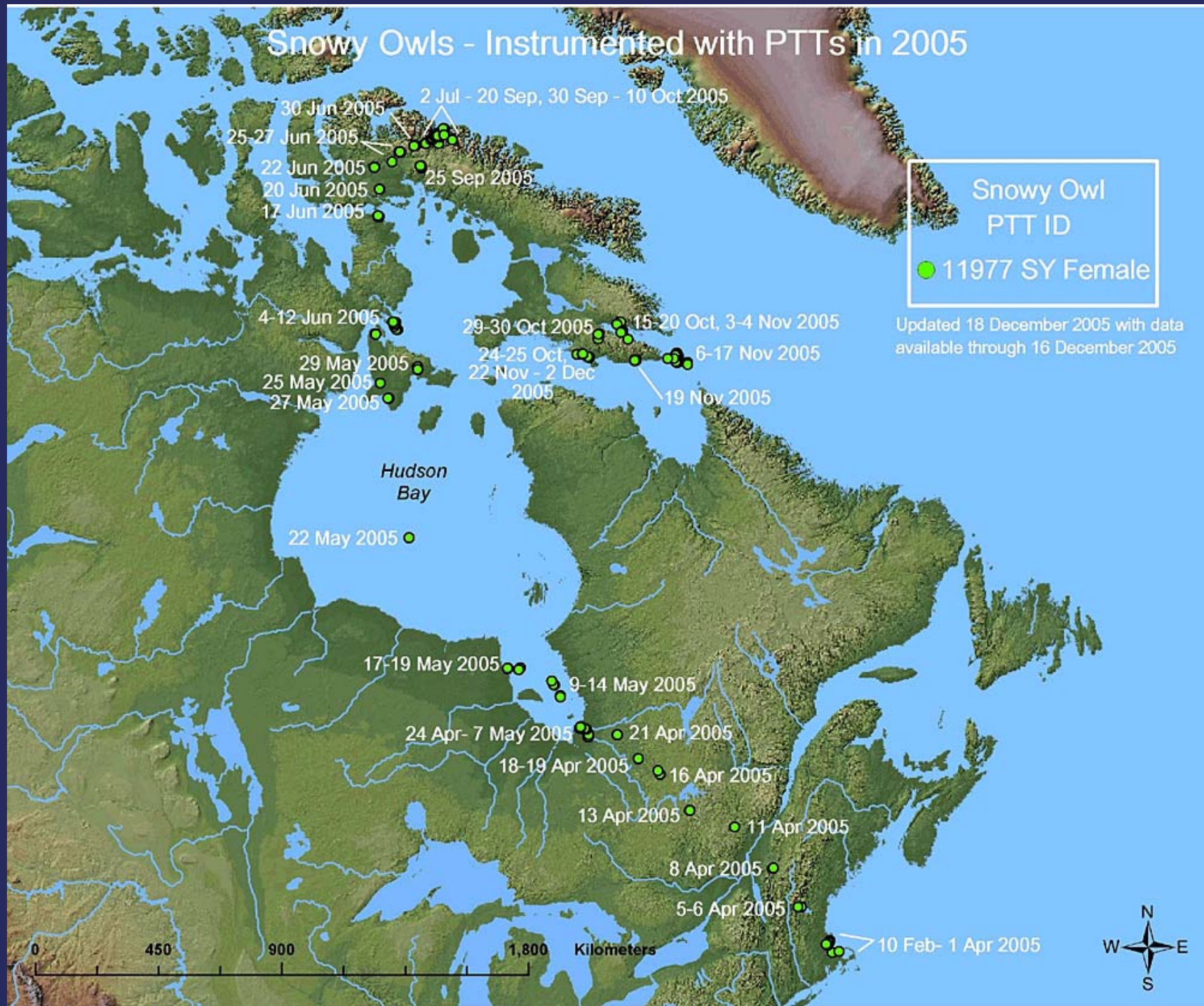


From the project's internet-pages; the two following maps are from the same net pages.

Snowy Owls - Instrumented with PTTs in 2006



Snowy Owls - Instrumented with PTTs in 2005



The Norwegian Snowy Owl Project:

Please send reports on Snowy Owl observations to us:

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