

The Peregrine Falcon in Greenland

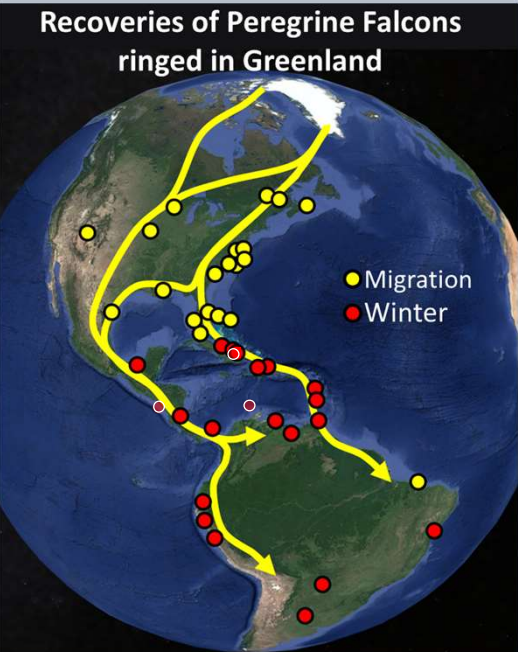
– a long-distance traveller



A ringed pair of Peregrines
The falcons return to breed at the same cliff every year – we have records of up to 14 years. About 20% of the females disappear each year, and the territory is taken over by a new bird.



In South Greenland, the Peregrine feeds mainly on small birds such as Lapland Bunting and Wheatear (left); newly fledged and inexperienced young birds are abundant when the falcons need to carry a lot of food to their hungry chicks



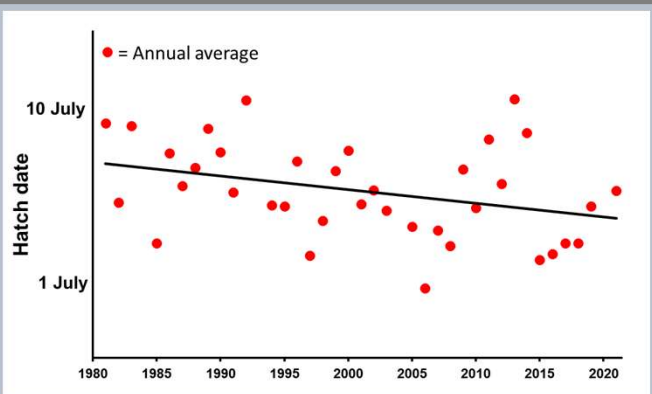
The Peregrines migrate from Greenland through North America to spend the winter in Latin America. They arrive in Greenland in May, and leave again around late September. Travelling between arctic and tropical areas requires an ability to capture many different types of prey along the way.



Peregrines on average have three chicks per year in South Greenland; four is the maximum.

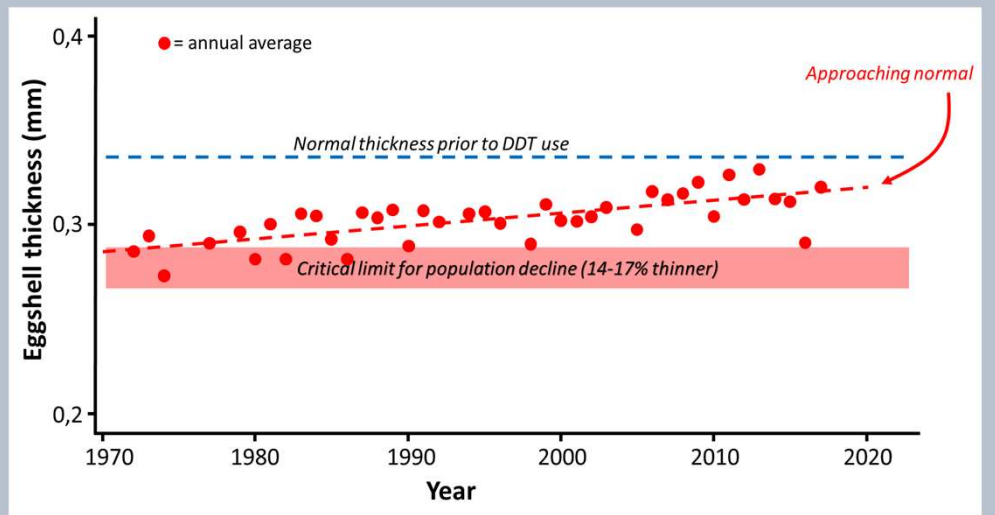


Peregrines nest on tall cliffs; to study them requires long ropes



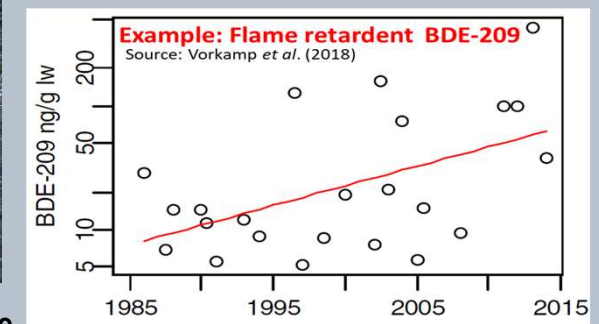
Peregrines are breeding gradually earlier as a result of climate change, the first egg now hatches about 6 days earlier on average than in 1981 (figure above).

In addition, in cold and very wet years the Peregrines produce fewer young. Future climate change probably brings more variable weather, including some very wet summers, so the falcons may face more variable breeding success.



Collecting eggshell bits

Eggshell thickness is improving (above). Pesticides (DDT) used from the 1940's caused Peregrines to lay eggs with thin shells, leading to breeding failure in many parts of the world. Eggshells collected in Greenland show a gradual improvement from the danger level (red bar) since DDT use was reduced, but the shell thickness will not be "normal" (blue dashed line) until 2030's.



New pollutants are on the rise

Dead eggs that do not produce a young (picture left) are collected and analysed for pollutants. While the eggs contain decreasing loads of the "old" compounds like DDT and PCB, new chemicals such as 'brominated flame retardants' are now found to increase (graph above). The Peregrine remains an alarm bell for environmental contaminants that can also affect humans.



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The Peregrine Falcons in South Greenland have been monitored annually in the Narsarsuaq – Qaqortoq area since 1981. From 2024 the project will be managed by Pinngortitaleriffik/ Greenland Institute of Natural Resources, Nuuk, with support from Aage V. Jensen Charity Foundation.
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Movie with main results; in Danish with Greenlandic subtitles

Vandrefalken i Sydgrønland – 40 års miljøovervågning
Kiinaaleeraq Kujataani – avatangiisik ukiuni 40-ini malinnaavigineqarnerat

