

BirdLife

Observations of a White-tailed Eagle incubating eggs of a Greylag Goose

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Interspecific takeovers of nests are thought to be rare in birds. A female White-tailed Eagle *Haliaeetus albicilla* was observed incubating a nest of a Greylag Goose *Anser anser* with five eggs at Reinøya, Troms County, Norway in 2021. There were no signs of any killed geese in the area around the nest, and there had been no observations of interactions between the two species at the site before the eagle started incubating the eggs. The nest was discovered in the middle of May but was abandoned around midsummer. A similar case reported from the Isle of Mull, Scotland in 2017 was the first of its kind and originally believed to be unique, but the new case in Norway in 2021 suggests that interspecific nest takeover may not be as unusual as previously believed.

Keywords: Anser anser, Haliaeetus albicilla, interspecific nest takeover, Norway, Scotland

Interspecific nest parasitism is a rare reproductive strategy in birds. Only about 1% of bird species are obligate parasites that deposit eggs in the nests of different species (Payne 1977, Rothstein 1990, Slagsvold 1998). The advantage for the parasite is that the host will take over the parental care, and well-known examples include cuckoos and cowbirds (Payne 1977, Rothstein 1990). However, there are some examples of mixed clutches where parasitism of parental care has not been the purpose. In North America, several nests of Ospreys Pandion haliaetus contained eggs from both Osprey and Canada Goose Branta canadensis (Flath 1972, Johnson 1999). Fannin (1894) even found that the adult birds of both species defended the nest. The interaction between the Osprey and Canada Goose has been explained by the fact that the geese had probably taken over the nests before the Ospreys arrived from their wintering grounds in the spring. Similarly, Reese (1977) found eggs from Mallards Anas platyrhynchos in several clutches of Ospreys in Maryland.

A mixed egg clutch can occur for other reasons, including takeover of a suitable nest site. In Minnesota, a pair of Bald Eagles *Haliaeetus leucocephalus* adopted a duck egg in 2014. A live camera by the eagle nest discovered an egg inside a duck the birds had ripped apart and were eating. They believe that the female

Received 11 April 2023; Accepted 11 October 2023; Published 05 December 2023 eagle pulled the egg under her and incubated it like it was her own, probably a result of natural instinct (Anonymous 2014).

There are some reports where Bald Eagles have raised young of Red-tailed Hawks *Buteo jamaicensis* (Stefanek et al. 1992, Watson et al. 1993, 1996), and even Glaucous-winged Gulls *Larus glaucescens* (Anthony & Faris 2003). Similarly, there are a few cases in Europe where White-tailed Eagles *Haliaeetus albicilla* have raised young of Common Buzzards *Buteo buteo* (see Literak & Mraz 2011) and Rough-legged Buzzards *B. lagopus* (Folkestad 1990). The most proximate cause of the phenomena with White-tailed Eagles and Common Buzzards, is non-lethal predation followed by parental care (Literak & Mraz 2011).

However, to take over a nest and start incubating the eggs of a potential prey species, is a more unusual event. On the Isle of Mull, Scotland a pair of White-tailed Eagles was discovered incubating three eggs of Greylag Goose Anser anser in 2017. After a while, the eagles lost interest in the adopted eggs, and when the clutch was left unattended, the eggs were depredated by Hooded Crows Corvus cornix (Keivers 2017). When the male in the same territory was paired with a different female in the late 1990s, the pair did lay eggs. The previous female disappeared when a new female arrived in 2001. The eagle pair have now been monitored for 22 years but has never been known to lay a single egg. A hypothesis for an eagle incubating a clutch of goose eggs was that the event was a behavioural abnormality in response to a stimulus. Perhaps the eagles observed the eggs in the ground nest after they had depredated the adult geese, and then the combination of visual and tactile stimuli

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Figure 1. The pair of White-tailed Eagles sat about 100 meters above the goose nest during the author's visit at Reinøya, Norway. The female (right) was slightly larger and had a lighter head than the male (left). Photo: Karl-Otto Jacobsen.



Figure 2. The nest of a Greylag Goose with five goose eggs and eagle feathers at Reinøya, Norway. Photo: Karl-Otto Jacobsen.



Figure 3. The goose nest was located only 11 meters from the road at Reinøya, Norway. Photo: Karl-Otto Jacobsen.



Figure 4. A female eagle about to settle onto the goose nest at Reinøya, Norway. Screenshot from GoPro video. Photo: Jonny Eliassen.

led to induction of the nesting instinct and the females started incubating the clutch?

In 2021, a similar situation was discovered by local people on Reinøya, Troms og Finnmark County in Norway. A pair of White-tailed Eagles took over a nest containing five eggs of a Greylag Goose (Figures 1 & 2). The nest was located only 11 meters from a main road (Figure 3). According to video recordings from close to the goose nest, only the female eagle incubated the eggs. Every time a car drove past, the eagle took off from the nest, circled and then returned to the nest to resume incubation (Figure 4). There were no signs of any killed geese in the area around the nest, and there had been no observations of interactions between eagles and geese at the site before the eagles started incubating the eggs. The lack of goose down in the nest may indicate that the goose left during egg-laying and before incubation began. It is not known where the pair of eagles usually breed, but the nearest known eagle nest was 2.6 km from the goose nest. The nest was discovered in middle of May and was eventually abandoned around midsummer. A video documenting the event is available at YouTube; https://youtu.be/6oXmao_HnN0.

The previous case of White-tailed Eagles incubating a clutch of goose eggs on Mull, Scotland in 2017 was believed to be unique and the first of its kind. However, our new report of a pair of eagles incubating a goose nest in northern Norway suggests that nest takeover behavior may not be as unusual as previously believed. The authors would welcome news of any other similar cases from elsewhere in the range of White-tailed Eagles. Acknowledgements: We thank Alex Keivers, Jonny Eliassen and Roger Sørensen for contacting us about the special events that they discovered.

References

- Anonymous 2014. Central Minnesota bald eagle adopts duck egg. *Bring me the news*: <u>https://bringmethenews.</u> <u>com/minnesota-news/central-minnesota-bald-eagleadopts-duck-egg</u> (Accessed 05 December 2023).
- Anthony RG & Faris JT. 2003. Observations of a live Glaucouswinged Gull chick in an active Bald Eagle nest. *Wilson Bulletin* **115**: 481–483.
- Fannin J. 1894. The Canada Goose and Osprey laying in the same nest. *Auk* **11**: 322
- Flath DL. 1972. Canada goose–Osprey interactions. Auk 89: 446–447.
- Folkestad AO. 1990. Havørn adopterte fjellvåk! Vår Fuglefauna 13: 92. (In Norwegian)
- Johnson DR. 1999. Osprey incubate goose egg to hatching. Journal of Raptor Research **33**: 176
- Keivers A. 2017. Alex stumbles across strange eagle behaviour that has never been recorded before. *BBC Wildlife Magazine. Tales from the Bush.* June 2017: 106.
- Literak I & Mraz J. 2011. Adoptions of young Common Buzzards in White-tailed Sea Eagle nests. *Wilson Journal* of Ornithology **123**: 174–176.
- Payne RB. 1977. The ecology of brood parasitism in birds. Annual Review of Ecology and Systematics 8: 1–28.
- Reese JG. 1977. Reproductive success of Ospreys in central Chesapeake Bay. *Auk* **94**: 202–221.
- Rothstein S. 1990. A model system for coevolution: avian brood parasitism. *Annual Review of Ecology and Systematics* **21**: 481–508.

- Slagsvold T. 1998. On the origin and rarity of interspecific nest parasitism in birds. *American Naturalist* **152**: 264–272.
- Stefanek PR, Bowerman WW, Grubb TG & Holt JB. 1992. Nestling Red-tailed Hawk in occupied Bald Eagle nest. *Journal of Raptor Research* **26**: 40–41.
- Watson JW, Davison M & Leschner L. 1993. Bald Eagles rear Red-tailed Hawks. *Journal of Raptor Research* 27: 126– 127.
- Watson JW & Cunningham B. 1996. Another occurrence of Bald Eagles rearing a Red-tailed Hawk. *Washington Birds* **5**: 51–52.



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