

Short communications

Yellowhammer *Emberiza citrinella* nesting in reed *Phragmites australis*

Inge Hafstad¹ & Geir Rudolfson²

⁽¹⁾ Department of Biology, Norwegian University of Science and Technology, NTNU, N-7491 Trondheim, Norway

⁽²⁾ Department of Evolution and Ecology, Institute of Biology, University of Tromsø, N-9037 Tromsø, Norway

Corresponding author: Inge Hafstad, e-mail: iha@nofnt.no

During fieldwork at Hellesjøvatnet (59°44'N, 11°27'E) in Aurskog-Høland municipality, Akershus county, about 50 km east of Oslo city in the south-eastern part of Norway summer of 2002, we located a Yellowhammer *Emberiza citrinella* nest at a strange site. The fieldwork area consisted of the littoral zone surrounding Hellesjøvatnet situated in a typical agricultural district, mixed with patches of deciduous and coniferous forests. The Yellowhammer nest was located in the littoral vegetation surrounding Hellesjøvatnet during systematically search for Reed Warbler *Acrocephalus scirpaceus* nests. The vegetation is dominated by reeds *Phragmites australis*, but substantial parts consist of narrow-leaved cattail *Typha angustifolia*, water horsetail *Equisetum fluviatile* and bitter nightshade *Solanum dulcamara*. The nest, built with dry grass, leaves, old plant stems, was built between canes of reeds with a platform of old destroyed reeds 0.7 meter above water surface. The location was approximately four meters from the water edge and ten meters from the shore edge of the reedbed. When found on 22 June, the nest consisted of one egg that probably was laid that day. After a re-visit on 27 June the nest consisted of four eggs.

Yellowhammers nearly always locate their nests on or just above the ground. Typically location sites will be bank or base of hedge, small trees and bushes (Cramp & Perrins 1994). The edge of the farmland with bushes and small trees, such as the surrounding area around Hellesjøvatnet, is the most common used nest site by the Yellowhammer (Perrins & Birkhead 1983, Cramp & Perrins 1994). However, to our knowledge there is not been reported any incidents where the Yellowhammer have placed their nest in a reedbed above water surface. In the literature, nest site are always described as on or just above ground and none are described to be above water surface (Peakall 1960, Cramp & Perrins 1994, Opheim 1994). In Great Britain, 31 % of over 600 nests were located at the ground, while 57 % were located in bushes or trees with an average height at 46.2 cm, all above ground (Peakall 1960). In Scandinavia, Yellowhammers breed mostly on ground with vegetation consisting of blueberry *Vaccinium myrtillus* (Cramp & Perrins 1994, Opheim 1994). Yet, there are also some indications that Yellowhammers more often locate their nest above the ground late in the breeding season (Parkhurst & Lack 1946,

Peakall 1960, Cramp & Perrins 1994). This could likely be due to reduced predation, as the leaves on tree and bushes conceal the nest late in the breeding season, but not early (Cresswell 1997). In addition, increasing abundance and/or nourishment needs due to growing youngsters in red foxes *Vulpes vulpes*, which probably are the most common ground predator, nest site above ground late in the breeding season may be adaptive. This is found in other ground breeding species like the Capercaillie *Tetrao urogallus*, where there are a negative correlation between breeding success and abundance of predators (Baines *et al.* 2004). However, the Capercaillie has not the opportunity to select an above-ground nest site as the Yellowhammer. Also among Blackbirds *Turdus merula* it is findings which indicate a relation between abundance of predators and nest characteristics as nest size and site (see Møller 1990, Garnier *et al.* 2003).

In our case, the Yellowhammer pair may have re-nested after failing in the first attempt, i.e. the first nest has been depredated. As the location of the nest above water in reeds in this case could hinder ground living predator's access, the nest was highly visible for avian predators. Locating the nest above the ground late in the season could decrease the risk of predation. However, locating the nest in reeds would not necessary conceal the nest from avian predator. This feature and the facts that Yellowhammer hatchlings are poorly adapted to climb in reeds may be the explanation why there is no advantage for the Yellowhammer to breed in reeds. Nevertheless, this is, to our knowledge, the first documented case where a pair of Yellowhammers has built their nest in reeds above water surface.

SAMMENDRAG

Hekkende gulspurv over vannflaten i takrørskog

I forbindelse med feltarbeid ved Hellesjøvatnet i Aurskog-Høland kommune, Akershus fylke, fant

vi et reir fra gulspurv i takrørskogen. Reiret ble funnet den 22. juni 2002 og var festet mellom noen stammer fra takrør. Deler av gammelt takrør var brukket og fungerte som plattform for reiret. Gulspurven plasserer sitt reir som oftest på bakken eller i busker og små trær opp til omtrent en halv meter over bakken. Reir i busker og små trær er vanligere utover i hekkesesongen, noe som skjuler reiret. I vårt tilfelle lå reiret godt beskyttet for bakkelevende predatorer, men meget åpent til for predasjon av fugler. Det kan også være forklaringen på at, så vidt vi vet, det tidligere ikke er beskrevet at gulspurven plasserer reiret sitt rett over vannflaten i takrør.

REFERENCES

- Baines, D., Moss, R. & Dugan, D. 2004. Capercaillie breeding success in relation to forest habitat and predator abundance. - *J. Appl. Ecol.* 41: 59-71.
- Cramp, S. & Perrins, C.M. (Eds.). 1994. *The Birds of the Western Palearctic, Vol. IX.* Oxford University Press, Oxford.
- Cresswell, W. 1997. Nest predation rates and nest detect ability in different stages of breeding in Blackbirds *Turdus merula*. - *J. Avian Biol.* 28: 296-302.
- Garnier, A., Dreano, N. & Faivre, B. 2003. Nest predation in Blackbirds (*Turdus merula*) and the influence of nest characteristics. - *Ornis Fennica.* 80: 1-10.
- Møller, A.P. 1990. Nest predation selects for small nest size in the blackbird. - *Oikos* 57: 237-240.
- Opheim, J. 1994. Gulspurv *Emberiza citronella*. s 496 i: Gjershaug, J.O., Thingstad, P.G., Eldøy, S. & Byrkjeland, S. (eds): *Norsk fugleatlas*. Norsk Ornitologisk Forening, Klæbu. 551 s.
- Parkhurst, R. & Lack, D. 1946. The clutch-size of the Yellowhammer. - *Br. Birds.* 39: 358-364.
- Peakall, D.B. 1960. Nest records of the Yellowhammer. - *Bird Study* 7: 94-102.
- Perrins, C.M. & Birkhead, T.R. 1983. *Avian ecology*. Glasgow.