

Paweł CZECHOWSKI

Institute for Tourism and Recreation, State Higher Vocational School in Sulechów, Armii Krajowej Str. 51, 66-100 Sulechów; e-mail: paczech@wp.pl

**NESTING OF TREE SPARROW *Passer montanus*
IN THE NEST OF BARN SWALLOW *Hirundo rustica***

During research on the breeding biology of Barn Swallows *Hirundo rustica* nesting in abandoned war bunkers in the Odra valley near Czerwieńsk (Lubuskie province) in 2005, I recorded the clutch of Tree Sparrow *Passer montanus* in the nest of a Barn Swallow. Bunkers, in which Barn Swallows nest, are small 2-3 rooms war shelters built before Second World War. Barn Swallows nesting inside attach their nests to walls (Czechowski 2004). The aforementioned nest was located in the flooded room (depth of water around 0,5 meter) located as a first nest from the entrance to the bunker. The nest was attached to the wall and propped up with the steel hook sticking out of the wall. Inspection during May revealed that the nest is undamaged and inlaid with weeds and straws without feathers lining.

On 3 June the nest was disturbed, with the lining removed, and some pieces were hanging at the edge of the nest. There was one egg of a Tree Sparrow in the nest. On the next inspection (date?) revealed 5 eggs in the nest which was deepened and filled with significant amount of weeds. During nest inspections (on 20 and 27 June) I recorded 5 healthy nestlings of Tree Sparrow. On 27 June the plumage of nestlings was in „E” stage (Kania 1983). During the next inspection on 11 July I noted that the nest was empty which most probably indicated that the Tree Sparrows had fledged. I have not recorded any feathers, bird remains or any other circumstances in the surroundings of the nest which could prove that the clutch was lost. I have not recorded any adult Tree Sparrows near the nest during any of the inspections. The birds must have left the bunker while I was approaching it. Simultaneously, there were 5 breeding pairs of Barn Swallow in that bunker.

During observations on 21 July in the nest in question I recorded fresh lining from feathers and 1 egg of Barn Swallow, on 3 August there were 3 eggs. During inspection on 13 and 23 August I recorded that the nest is empty. I have not noted any signs of predators, the nest was not destroyed. Thus, I could not determine the cause of the clutch lost. The nest in question was built 2001 and every year Barn Swallows successfully bred there (in the period 2001-2003 – 1 brood a year, in 2004 – 2 broods).

During 5 years of research (2001-2005) I recorded single clutches of Tree Sparrows in ventilation holes in the outside walls of bunkers. However, previously I have never recorded any attempts of nesting inside the bunker.

The Tree Sparrow is quite flexible in choosing places for nesting. It nests in holes of trees, building under roofs, in lamps or in lower parts of the nests of larger bird species (Cramp, Perrins 1994, Nankinov 1984). Tree Sparrows' clutches were recorded in the nest of the following bird species Magpie *Pica pica* and other species of Corvids *Corvidae*, White-tailed Eagle *Haliaeetus albicilla*, Osprey *Pandion haliaetus*, Black Kite *Milvus migrans*, Grey Heron *Ardea cinerea* (Makatsch 1957, Cramp, Perrins 1994). Quite frequently, its nests were recorded in the nest of White Stork *Ciconia ciconia* (Makatsch 1957, Indykiewicz 1998, Bocheński 2005).

Clutches of Tree Sparrows were also recorded in burrows of Sand Martins *Riparia riparia* and Bee-Eaters *Merops apiaster* (Makatsch 1957, Nankinov 1984). Tree Sparrows' nesting locations were precisely described in Bulgaria by Nankinov (1984). This author observed them in the following swallows' nests: House Martin *Delichon urbicum* and Barn Swallow. Breeding of three species of sparrows in swallow nests were recorded: Tree Sparrow, House Sparrow *Passer domesticus* and Spanish Sparrow *Passer hispaniolensis*. The last one is the less common. As of the other two species, it is hard to say which one is the more frequent breeder in Barn Swallow's nest. In some colonies Tree Sparrow is more numerous, however House Sparrow can also be more frequent. In wall colonies, Tree Sparrow more frequently occupied House Martins' nests – based on the sample of 53 Tree Sparrow nests in the swallows' nest, 42 were originally owned by House Martin and 10 by Barn Swallow. Moreover, one clutch of Tree Sparrow was located in the nest originally owned by Crag Martin *Ptyonoprogne rupestris* (Nankinov 1984). The author does not provide details on localization of the nest (type of the building, outside or inside) with respect to described cases of Tree Sparrows' nesting in Barn Swallow nest.

The appearance of the nest during the first inspection with 1 egg of Tree Sparrow (lining pulled out) may prove that the pair of Barn Swallows defended its nest. Nankinov

(1984) stated that often when taking over the nests by Tree Sparrows there were fights which resulted in pulling out the lining, damaging the nest or even destroying the clutch.

Based on the five years of research in the Odra valley, other less regular observations of Barn Swallows breeding in this region (G. Jędro – personal comm. and my own research) and quoted literature it may be concluded that successful broods of Tree Sparrows in the nest of Barn Swallow are rare.

BIBLIOGRAPHY

- Bocheński M. (2005) – Nesting of the sparrows *Passer spp.* In: The White Stork *Ciconia ciconia* nests in a stork colony in Kłopot (W Poland) – International Studies on Sparrows 30: 39-41.
- Cramp S., Perrins C.M. [eds.] (1994) – The birds of the Western Palearctic. Vol. VIII – Oxford University Press, 906 p.
- Czechowski P. (2004) – Abandoned bunkers as a nesting location for the Barn Swallow *Hirundo rustica* – Przegl. Przyr., 15: 133-136 (in Polish, English summary).
- Indykiewicz P. (1998) – Breeding of the House Sparrow *Passer domesticus*, Tree Sparrow *Passer montanus*, and Starling *Sturnus vulgaris* in the White Stork *Ciconia ciconia* nests – Not. Ornit., 39: 97-104 (in Polish, English summary).
- Makatsch W. (1957) – Ptak i gniazdo, jajo, piskłę – PWN, Warszaw, 316 p.
- Nankinov D.N. (1984) – Nesting habits of Tree Sparrow *Passer montanus* (L.) in Bulgaria – International Studies on Sparrows, 11: 47-70.