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**OBSERVATION OF AN UNUSUAL NESTING ASSOCIATION
BETWEEN SPANISH SPARROWS *PASSER HISPANIOLENSIS*
AND LESSER GREY SHRIKES *LANIUS MINOR***

ABSTRACT

We report a case of unusual mixed nesting association of several pairs of Spanish Sparrows *Passer hispaniolensis* and one pair of Lesser Grey Shrikes *Lanius minor* near Pepelište village (41° 31' 11" N, 22° 7' 41.43" E), central Macedonia. All nests were built near the trunk of a Black Locust *Robinia pseudoacacia* at a height of ca. 8 m. Although the nests of both species were in close proximity, we observed no interspecific aggression. Such a mixed colony could be advantageous for both species in a locality with abundant nest predators.

Key words: Mixed breeding colony, Lesser Grey Shrike, Spanish Sparrow, Macedonia

It has been suggested that nesting in colonies has many advantages, such as mutual foraging (e.g., Krebs 1974), reduced nest predation and increased survival rate of adults (Serrano et al. 2005). Furthermore, colonies can act as “information centres” (Ward & Zahavi 1973). In addition to single-species breeding colonies there are multiple cases of different bird species building their nests in close proximity. Such mixed-species nesting is well known in several systematic groups such as weavers (Ploceidae), herons (Ardeidae), ibises (Threskiornithinae), grebes (Podicipedidae), gulls and terns (Laridae) as well as many other groups of seabirds (Krebs 1978, Burger 1979, 1981, del Hoyo et al. 2010). In the present paper we report a case of so far undescribed mixed nesting of Spanish Sparrows *Passer hispaniolensis* and Lesser Grey Shrikes *Lanius minor*.

The Spanish Sparrow is one of the four European species of sparrows from the genus *Passer*. In Europe it is confined to the Mediterranean region, but its distribution range reaches Northern Africa and central Asia (del Hoyo et al. 2009). Spanish Sparrows typically nest in high spiny scrubs, open deciduous woodlands, plantations or roadside trees, often in colonies (Svensson et al. 2012).

Similar to the Spanish Sparrow, the Lesser Grey Shrike inhabits open country, with cultivated areas, orchards, tree alleys, scattered trees and hedgerows but its distribution

range reaches further north (Central Europe). Although social breeding is known in true shrikes (Laniidae), the Lesser Grey Shrike typically breeds solitary (Lefranc & Worfolk 1997, Harris & Franklin 2000).

On 13th and 14th June 2014, we observed a pair of Lesser Grey Shrikes that had built its nest in close proximity to a breeding colony of Spanish Sparrows (*Passer domesticus*) in the Vardar River valley near Pepelište village (41° 31' 11" N, 22° 7' 41" E; 125 m a. s. l.), in central Macedonia. The closely spaced nests of Spanish Sparrows made up a small colony (height 40-50 cm, width 50-60 cm, depth 30-40 cm) of two to four nesting pairs (we were not able to determine the exact number of sparrow pairs in the colony). A nest of the Lesser Grey Shrike (outer diameter 10-13 cm, height ca. 10 cm) was built about 0.5 m beneath the sparrows' colony. Although we did not directly check the shrike nest for nestlings, we repeatedly observed the adults bringing prey items (coleopterans and orthopterans) and, therefore, assume that nestlings were present. Nests of both species were built in the apical part (1-1.5 m below the tree tip) of a roadside Black Locust *Robinia pseudoacacia* at a height of about 8 m near the trunk and oriented to N to NE. The colony was located about 150-200 m from the Vardar River and surrounded by wheat fields, plantations of grapes, cherries and other fruit trees. When one of the shrikes approached its nest, the sparrows seemed to get excited, with wing fluttering followed by harsh alarm calls. However, no mobbing or physical attacks on the shrikes were observed (in contrast to behaviour described for other sparrow species; see Cramp & Perrins 1994). Accordingly, we did not record any predation attempt of the Lesser Grey Shrikes on the sparrows, although this could have been overlooked because of the limited period of observation. The Lesser Grey Shrike is known to occasionally hunt vertebrates (Lefranc & Worfolk 1997, Harris & Franklin 2000) and, therefore, could rob nests of Spanish Sparrows or even prey upon adults. However, its known strong preference for arthropods, especially beetles (Lefranc & Worfolk 1997, Krištín & Žilinec 1998), and the non-aggressive behaviour of the sparrows suggest that the pair of shrikes probably did not pose a substantial risk for the breeding Spanish Sparrows.

For true shrikes, there is a well-documented nesting association between the Red-backed Shrike *Lanius collurio* and the Barred Warbler *Sylvia nisoria* (Kuzniak et al. 2001, Goławski 2007). Goławski (2007) found that the number of Red-backed Shrike fledglings was higher in pairs which nested in the vicinity of a Barred Warbler territory in comparison to solitary nesting pairs. In addition, nesting association probably exist between the Woodchat Shrike *Lanius senator* and the Orphean Warbler *Sylvia hortensis* (Isenmann & Fradet 1995). For both these cases of nesting association, it has been suggested that such an interspecific relation can be considered as an antipredator mutualism which reduces the risk of nest predation in the associated species. Although clumped nests are easier to detect for potential predators than scattered ones, the presence of many adults in a nesting colony can decrease predation rate, e.g. by communal mobbing or noisier vocal commotion (Hoogland & Sherman 1976, Andersson & Wiklund 1978). Because we observed numerous avian nest predators (e.g., Hooded



Fig. 1. Mixed colony consisting of several nests of Spanish Sparrows *Passer hispaniolensis* and one nest of the Lesser Grey Shrike *Lanius minor* (see arrow)

Crows *Corone cornix*, Western Jackdaws *Corvus monedula*, Eurasian Magpies *Pica pica*, European Rollers *Coracias garrulus* and Common Kestrels *Falco tinnunculus*) in close proximity (< 1 km) to the reported colony, it could be assumed that building a nest near a Spanish Sparrow colony reduces nest predation in shrikes (Götmark & Andersson 1984). This assumption, however, still needs to be tested.

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