

Breeding of the Red-breasted Flycatcher (*Ficedula parva*) in an old House Martin nest (*Delichon urbicum*) on a building wall in Slovakia

Hniezdenie muchárika malého (Ficedula parva) v starom hniezde belorítky obyčajnej (Delichon urbicum) na stene budovy na Slovensku

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Abstract. Breeding of the Red-breasted Flycatcher in holes in building walls is mentioned in the ornithological literature, but not for central Europe or the former Czechoslovakia. However, the records of breeding of this flycatcher in another species nests are totally absenting. In this article, we describe and document the first record of nesting by this species in an old House Martin nest located on a building wall in the abandoned spa resort in Korytnica, the Central Slovakia. The nest was found on 14. July 2020 and contained four 10–13 days old nestlings. Both adult sexes were observed feeding the nestlings. One year later, on 11. July 2021, a flycatcher pair was found breeding again in the same nest, also with four nestlings of similar age. This is, as far as we know, the first known breeding record of this species in an old House Martin nest and the first occurrence of using the same nest during two successive breeding seasons in the former Czechoslovakia.

Key words: flycatcher nesting in House Martin nest, re-use of the same nesting site, Red-breasted Flycatcher, *Ficedula parva*, repeated breeding.

The Red-breasted Flycatcher is a polytypic species with a Palearctic distribution, which has spread slowly westwards since 19th century (Krištín 2002). It breeds in the boreal taiga and temperate zone from Kamchatka and NW China to Holland and Norway (Flade 2020). In the Czechia, it has a fragmented breeding distribution, while in Slovakia, its breeding range is more continuous, mostly within the Western and Eastern Carpathians (Krištín 2002, Štastný & Hudec et al. 2011). This species occurs mostly in mid-aged and older Beech *Fagus sylvatica* and mixed forests with beech, at elevations up to 1300 m a.s.l. in the Carpathians and up to

2350 m a.s.l. in Caucasus (Krištín 2002, Štastný & Hudec et al. 2011). Its overall European population trend is stable to increasing, but strongly fluctuating on the edges of the breeding range. In some areas, such as in Germany, its populations have been in decline since the beginning of 1990s (Flade 2020).

Red-breasted Flycatchers have been found to use a diverse array of nesting sites. Štastný & Hudec et al. (2011) reported that 37 of 57 nests in the former Czechoslovakia were in semi-cavities or larger cavities on trees, 13 in dense side shoots near trunk, two in tree forks and one each behind peeling bark, on a broken branch,

in a rock semi-cavity near bank of brook (Hájek & Tecl 1965), under the roof of an open veranda, and on a house window. From another sample of nests in the Vsetínsko region in the Czech Republic ($n = 51$, 1977–2006), this species was found placing nests in dead broken tree branches (16 ×), within the trunks of dead tree (14 ×), in semi-cavities or forks on live beech trees (11 ×), behind bark of dead fir trees (7 ×), behind broken branch of live beech (1 ×), dead branch of alter tree (1 ×), and in broken place of a spruce tree (1 ×) (Štastný & Hudec et al. 2011). These authors also mentioned several other unusual breeding sites: in a nest box, in a willow tree on the dam of a fish pond, in a low shrub of the Savin Juniper (*Juniperus sabina*), in a hole in a soil bank, etc. Haffer (1993) mentioned this species nesting in a straw stack. Other international ornithological monographs indicate breeding in holes in trees or walls, among side shoots of trunk, sometimes on branch close to trunk, or even in forks of tree branches, and in nest boxes; occasionally in a bush are mentioned as the most common breeding sites (Cramp & Perrins 1993, Taylor et al. 2020). In the former Czechoslovakia, nesting in a cavity of a building wall has never been described, and no records in the international literature apparently exist on breeding in the nest of another bird species (Ferianc 1979, Cramp & Perrins 1993, Haffer 1993, Krištín 2002, Štastný & Hudec et al. 2011, Taylor et al. 2020). In this article, we describe and document the first breeding of this species in an old House Martin nest on a building wall in the abandoned spa resort in Korytnica in Central Slovakia.

On 14. July 2020, I. Dolná (author of all observations) visited a former spa in Korytnica, located under the north slope of Prašivá Mt. in a deep valley in Low Tatra Mts. surrounded by coniferous forests, approximately 850 m a.s.l. (48°53'24.7"N, 19°17'5.7"E, Google Mercator). A typically coloured female flycatcher with food in its bill was observed flying into young shrubby vegetation near the abandoned building (Fig. 1a, b). Later, a typically colored young male probably in the second year of life (Fig. 1e) appeared and also flew into the same site where

a nest with nestlings was subsequently located under an overhanging roof. The nest was built on the old remains of a House Martin nest about 2.7 m above ground. The occupied martin nest was partially destroyed on approximately 40% with remaining of its lower part. The nest entrance was oriented to the west (Fig 1c, d), while the building wall had a southern orientation. There were four nestlings present, which judging by their plumage development, were about 10–13 days old. The nestlings were being fed by the both adults (Fig. 1d). The other unoccupied House Martin nest was located nearby on the building wall. The martin nests were probably at least a year old, if not older and martins did not breed at the site in the years of this observations.

We have no information on the previous occurrence or breeding of the flycatcher at this location. The observer did not see or hear the vocalizations of other flycatchers from the surrounding habitats in the three years of study (2020–22). Information on the previous occurrence of the flycatchers in this site are not available because the site was not checked in the past. However, the park-like habitat of the spa resort dominated by old limes, ashes and spruces may have provided suitable although perhaps suboptimal habitat for the flycatcher, thus the breeding pair might have been subordinate. In addition, habitat matrix structure in the surrounding landscape when considering tree species occurrence and dominance was also suboptimal. Based on the current breeding distribution from the Slovak Breeding Bird Atlas data 2014–2022 (J. Ridzoň in litt.), the flycatcher does not have continuous breeding distribution in the Low Tatra Mts. range and confirmed breeding was detected only in two mapping squares (ETRS 10 × 10 km).

In the next year on 11. July 2021, there were again four nestlings about the same age in the same nest on the same building as in the previous year (Fig. 1f, g). Because the adults were not individually marked, it was impossible to confirm whether it was the same breeding pair or not. However, based on plumage characteristics, both adults this year appeared to be older than two-years and could have been the same

individuals returning from the previous year. The female's plumage seemed to have a little pale orange path on the throat indicating a very old individual. The breeding site was checked again the following year (July 10, 2022), but the nest was not occupied. At that time, the building in which the flycatchers had nested was severely damaged by humans. Štastný & Hudec et al. (2011) do not mention repeated breeding of Red-breasted Flycatchers in the same nest during successive breeding seasons in the former Czechoslovakia. The international literature mentions using occasionally breeding sites on trees repeatedly for several years (Aleknonis 1976 in Haffer 1993).

Based on the literature review, this is the first documented record of repeat breeding of the Red-breasted Flycatcher in an abandoned House Martin nest on a building wall in the world based on our information.

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Súhrn

V svetovej ornitologickej literatúre sa spomína hniezdenie muchárika malého v dutinách stien domov, ale v stredo európskej a československej literatúre takýto prípad hniezdenia ešte nie je dokumentovaný. Úplne absentujú záznamy o hniezdení muchárikov v hniezdach iných druhov vtákov. V príspevku je opísané a dokumentované prvé hniezdenie v starom hniezde belorítky obyčajnej na stene budovy v opustených kúpeľoch Korytnica na strednom Slovensku. 14. júla 2020 bolo nájdené hniezdo muchárika malého so štyrmi mláďatami vo veku 10 – 13 dní, ktoré krmili oba dospelé vtáky. 11. júla 2021 muchárikovia hniezdili v rovnakom hniezde znovu a mali zase štyri mláďatá

v podobnom veku ako predošlý rok. Opísané hniezdenie je pravdepodobne prvý prípad hniezdenia tohto druhu v starom hniezde belorítky obyčajnej na svete počas dvoch nasledujúcich hniezdných sezón.

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Obr. 1. Prvé dokázané hniezdenie muchárika malého v starom poškodenom hniezde belorítky obyčajnej v opustenej budove kúpeľov v Korytnici v Nízkyh Tatrách v roku 2020 a 2021. Pohľad na hniezdnu lokalitu (a), umiestnenie hniezda na stene (b), hniezdo so štyrmi mláďatami (c), dospelého vtáka na hniezde s mláďatami (d) a samca s potravou v roku 2020 (e) a pohľad na hniezdo s mláďatami (f) a ich kŕmenie starou samicou (g) v roku 2021 (všetky fotografie I. Dolná).

Fig. 1. The first confirmed breeding of the Red-breasted Flycatcher in the old destroyed nest of House Martin on the abandoned building of the Korytnica Spa in the Low Tatra Mts. in 2020 and 2021. View on nesting habitat (a), the breeding site (b), the nest with four nestlings (c), an adult bird with nestlings (d) and the male with prey in 2020 (e), a view on nest with nestlings (f) and their feeding by an old female (g) in 2021 (all photos I. Dolná).