

LATE NESTING OF THE COMMON SWIFT *Apus apus* AND THE PALLID SWIFT *Apus pallidus* IN BULGARIA

Pozno gnezdenje hudournika *Apus apus* and bledega hudournika *Apus pallidus* v Bolgariji

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Common Swift *Apus apus* is a widespread breeding migratory bird in Bulgaria. Its breeding period starts in May and lasts till the end of July (NANKINOV *et al.* 1997). Pallid Swift *Apus pallidus*, on the other hand, is a rare migratory species in Bulgaria, breeding mainly in the southern part of the country but showing an increase in its population in the recent years (NANKINOV *et al.* 1997, ANTONOV & ATANASOVA 2001). It was established that the first clutches of the species in Bulgaria were laid during the second half of May and second clutches at the end of July and in the first half of August (ANTONOV & ATANASOVA 2001).

On 4 Oct 2002 two pairs of Common Swifts were observed feeding nestlings in two regions of Mt. Osogovo (SW Bulgaria). The first was in the centre of the village of Vaksevo (550 m a.s.l., UTM FM56), located in the southeastern part of the mountain that belongs to the historic–geographical region “Pianets” (DELIRADEV 1927). The nestlings were clearly heard. The adults fed them twice a day between 16:30 and 17:00. The nesting site was situated in a crack between the gutter and the concrete eaves of the building. The height from the ground was around 8.5 m. The exposure was southeastern. The weather was calm, sunny and clear, the air temperature between 18 to 20°C.

On the same day the second pair of Common Swifts was observed feeding nestlings in the area of Mandrata – Trite buki (UTM FM26). The location is situated around 1600 m a.s.l. in the central and higher zone of the Bulgarian part of the Mt. Osogovo. This pair also bred in a crack between the gutter and the facade of the southern exposure of a building. The building stands alone in a meadow. The area is covered with natural Beech *Fagus sylvatica* and Scots Pine *Pinus sylvestris* forests, as well as with planted Norway Spruce *Picea abies* forests. Above 1800 m a.s.l. there is some open grass slope. The pair fed its

nestlings three times between 18:20 and 19:00. The nestlings were clearly heard during the swooping of the adult birds. They could be heard more weakly throughout the whole day and also during some parts of the night. During the observation the weather was clear. The temperature was around 12°C, and during the night it dropped to 1°C. On 5 Oct 2002 we have heard the begging cries of the nestlings between 8:00 and 9:30 during their feeding by the adults.

On 13 Oct 2002 between 18:25 and 18:45 we observed around 10 Pallid Swifts at the Rila Monastery (UTM FM96), which is situated at 1140 m a.s.l. on the Mt. Rila (SW Bulgaria). Some of the birds swooped into cracks in the rock plates of the eaves of the church. We heard cries of nestlings from four separate places (fissures). The nestlings were hatched after 6 Sep 2002 when we visited the spot and no young swifts were heard. On this date we saw 10 to 12 adult birds between 17:45 and 18:00, which swooped in and out from 5 to 6 cracks. During our visit at the Rila Monastery on 3 Nov 2002 begging calls of the nestlings could still be heard in two of the cracks. The air temperature during the day was between 6 and 9°C. The weather was rainy and no active adult birds were observed in the interval between 13:10 and 15:00. We collected fresh excrements from the area under the two active nesting sites. Hymenoptera seemed to be the predominant prey of Swifts in our case (mostly *Tetramorium* sp. and a few separate specimen of Myrmicinae). Only one specimen was found from Coleoptera and Heteroptera.

Such late nesting of the Common Swift has not been recorded in the available literature (NANKINOV 1982, CRAMP 1985, HANDRINOS & AKRIOTIS 1997, NANKINOV *et al.* 1997, SNOW & PERRINS 1998). It is probable that some of the late encounters of the Common Swifts are actually late breeders (e.g. as

observed by NANKINOV (1982) annually until 15 to 20 Nov in Sofia) rather than migrants from the northern areas.

Fledged nestlings from the second clutch of Pallid Swifts were seen during the second week of October at Gibraltar (CRAMP 1985). Recently flown away youngsters were observed in the middle of October in Greece (HANDRINOS & AKRIOTIS 1997). ANTONOV & ATANASOVA (2001) have also observed at the Rila Monastery a second clutch of the Pallid Swift in late October 1998. Our current observations complement the data for the latest possible breeding of the Pallid Swift.

The reason for the late nesting of the Common and the Pallid Swift in Bulgaria was most probably the atypical meteorological conditions in 2002. The summer was unusually rainy with a humid autumn. At the two regions where we observed late nesting of these two species it snowed a few times during November, with temperatures between -2 and 0°C. In the same conditions Pallid Swifts were observed at Rila Monastery by ANTONOV & ATANASOVA (2001). As these observations show, Pallid and Common Swifts can, in some cases, cope with such weather conditions in their breeding habitats, including sudden cold spells with temperatures below and around 0°C as well as temporary snow cover, for one or two days. IANKOV (1991) indicated that 8.2% of the nesting Common Swifts in Bulgaria breed within the zone between 1600 and 2700 m a.s.l., while 1.2% are known to nest even above 2700 m a.s.l. We observed them many times nesting in the zone between 1600 and 2400 m a.s.l. in the mountains Rila, Pirin, Central Balkan and Western Rhodopes. These observations of nesting in the higher parts of the Bulgarian mountains further contribute to the notion of the ability of the Common and Pallid Swifts to adapt to more severe weather conditions. When the weather conditions are bad, we have often observed birds that nest in the higher zone flying away to hunt in the lower parts of the mountains and the plains around. They also fly up to their nests for short periods to feed their nestlings with food captured at lower territories. Probably this feeding strategy is one of the most widespread ways of coping with bad weather conditions for Common and Pallid Swifts.

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Summary

At least two pairs of Common Swifts *Apus apus* and four pairs of Pallid Swifts *Apus pallidus* were found feeding their nestlings during October 2002 in two high mountains of Southwestern Bulgaria (Mt. Osogovo and Mt. Rila). Nestlings of two pairs of Pallid Swifts were also heard on 3 Nov 2002 in Mt. Rila. The reasons for such late nesting of the swifts are discussed.

Povzetek

Oktober 2002 sta bila visoko v gorah jugozahodne Bolgarije (Osogovo in Rila) opažena najmanj dva para hudournikov *Apus apus* in štirje pari bledih hudournikov *Apus pallidus* med hranjenjem mladičev. Mladiče dveh parov bledih hudournikov je bilo mogoče slišati tudi 3.11.2002 na gori Rila. Avtorja razpravljata o razlogih za tako pozno gnezdenje hudournikov v tem delu Evrope.

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