

SOME NEW FINDINGS OF PIGMY OWL *Glaucidium passerinum* AND TENGMALM'S OWL *Aegolius funereus* IN WESTERN AND SOUTHERN BULGARIA

Nekaj novih odkritij malega skovika *Glaucidium passerinum* in koconogega čuka *Aegolius funereus* v zahodni in južni Bolgariji

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Distribution and numbers of the Pigmy Owl *Glaucidium passerinum* and Tengmalm's Owl *Aegolius funereus* were studied in some Bulgarian mountains. A total of four new localities of Pigmy Owl and eight new localities of Tengmalm's Owl were found. The Pygmy Owl was found for the first time on Mt Pirin, in the Bulgarian part of Mt Rhodopes, and in Northeastern Rila. The Tengmalm's Owl was found in southern parts of Pirin and Rila, in Western Stara planina and western Rhodopes. Both species were confirmed for the second time in Mt Slavyanka. The two species inhabited old prime coniferous forests in the mountains at fairly high altitudes.

Key words: Pigmy Owl, *Glaucidium passerinum*, Tengmalm's Owl, *Aegolius funereus*, Bulgaria

Ključne besede: mali skovik, *Glaucidium passerinum*, koconogi čuk, *Aegolius funereus*, Bolgarija

1. Introduction

Pigmy Owl *Glaucidium passerinum* and Tengmalm's Owl *Aegolius funereus* occur as rare glacial relicts in the mountains of southern Europe (MIKKOLA 1983, SIMEONOV *et al.* 1990). In Bulgaria, their distribution and numbers are unclear to a great extent, especially as regards the Pigmy Owl (SIMEONOV *et al.* 1990). Until recently, both species were considered as very rare breeders, whereas the Pigmy Owl was even supposed to be an extinct species in Bulgaria (SIMEONOV 1985). During the last ten years, much new valuable data on the distribution of these species has been gathered in Bulgaria.

2. Material and methods

A total of nine expeditions were held in the mountains of western and southern Bulgaria in 2005, with the aim to obtain new data on the current range and numbers of the studied owl species. The studied mountains were Pirin, Rila, Rhodopes, Maleshevská,

Vlahina, Slavyanka and western Stara planina. The investigations were made during the spring period (April – May) and in the autumn (September – October) during the period of abortive autumn vocal activity by the owls. The birds were provoked to call by the imitation of their mating calls during the evening and early morning hours.

3. Results and discussion

3.1. Pigmy Owl

Until now, this species has been confirmed to live in Bulgaria only on Mt Rila, Mt central Stara planina ("Central Balkan" National Park) and Mt Slavyanka (SIMEONOV 1985, SPIRIDONOV & MILEVA 1988, KOUZMANOV *et al.* 1995, SPIRIDONOV 1999, NIKOLOV *et al.* 2001, NANKINOV 2002, SHURULINKOV & STOYANOV 2005b). According to the latest data, its breeding population in Bulgaria has been estimated at between 80 and 120 pairs (NANKINOV *et al.* 2004). During the present study, the Pigmy Owl was registered for the

first time on Mt Pirin, in the Bulgarian part of Mt Rhodopes and in the northeastern part (Ibar) of Mt Rila. The exact localities were as follows:

- “Mlakite” area below the peak of Mutorok (1970 m a.s.l.), Southern Pirin (UTM GL19): a male was heard singing its typical mating song and then observed in the evening of 2 Apr 2005. The bird began to sing almost immediately after the beginnig of our imitation and it sang between 19.32 and 19.58 h, making some short pauses. The Pigmy Owl sang from lateral branches of an old Spruce *Picea abies* tree and often changed its position. When excited during its singing, it wagged its tail. The habitat included a very old Spruce forest growing in a flat area with glades, at 1670 m a.s.l. The weather was clear and calm, -4°C, with thick snow cover.
- “Dulgiyat chuchur” area, to the south of Popovi Livadi pass, Southern Pirin (UTM GL29): a male Pigmy Owl was heard in the evening of 26 Apr 2005 (21.33 h). The bird produced only 7 – 8 calls. The habitat was an old Spruce forest with some Scots Pine *Pinus silvestris* trees, at 1550 m a.s.l. The weather was clear and almost calm, about +10°C.
- “Gazinchevtsi” area, close to the northeastern border of the “Beglika” Nature Reserve, Western Rhodopes (UTM KG64): a single male was heard singing in the evening of 11 Oct 2005 (between 19.05 and 19.13 h). The bird started singing almost immediately after the beginnig of our imitation. The habitat was an old Spruce forest with glades, at 1650 m a.s.l. The weather was cloudy and calm, about +8 to +9°C. The species was found in the 1980s in the Greek part of Rhodopes (BAUER & BOHR 1987).
- Upper course of the Kriva river, some 2.5 – 3 km below Belmeken Dam Lake, Northeastern Rila (Ibar part) (UTM GM37): a male was singing in the morning of 13 Oct 2005 between 7.07 and 7.10 h. The habitat was Spruce forest with some Macedonian Pine *Pinus peuce* trees in the upper part of the mountain valley with steep slopes of mostly northern exposition. The altitude was 1860 m a.s.l. The weather was clear, calm, about -2°C.
- “Livade” area, Mt Slavyanka (UTM GL18): one singing male was heard and seen in the evening of 27 Apr 2005 between 20.13 and 20.45 h and

again between 21.30 and 22.15 h. The habitat included old Bosnian Pine *Pinus heldreichii* forest around wide meadow at 1750 m a.s.l. with northern exposition of the slope. The weather was clear with mild western wind. In the same place and exactly in the same territory, a male Pigmy Owl was heard singing for the first time on 26 Apr 2003 (SHURULINKOV & STOYANOV 2005b).

3.2. Tengmalm's Owl

The species is rare in the forest zone of some high Bulgarian mountains. Most of the records were from Mt Rila, Central Stara planina, Mt Pirin and Mt Vitosha (SPIRIDONOV *et al.* 1982, SIMEONOV 1985, PAČENOVSKY 1996, NIKOLOV *et al.* 2001, SHURULINKOV *et al.* 2003). In the last years, it was found locally also in Western Stara planina, Mt Slavyanka, Mt Osogovo, Mt Plana and Western Rhodopes (KOUZMANOV *et al.* 1995, NIKOLOV *et al.* 2001, NANKINOV 2002; SHURULINKOV & STOYANOV 2005a). According to the latest estimates, the breeding population of the species in Bulgaria was supposed to be between 1,000 and 1,200 pairs (NANKINOV *et al.* 2004). Here we also report on the following new Tengmalm's Owl localities in Southern Pirin, Western Rhodopes, Western Stara planina and Southern Rila:

- “Mlakite” area below the peak of Mutorok (1970 m a.s.l.), Southern Pirin (UTM GL19): two males were heard singing their mating song about 500 m from each other on the evening of 26 Apr 2005 (A. DUTSOV, S. VELKOV *pers. comm.*). As for the habitat there – see Pigmy Owl localities. The weather was clear, windless, +10°C.
- “Dulgiyat chuchur” area to the south of the Popovi Livadi pass, Southern Pirin (UTM GL29): a singing male was heard in the evening of 26 Apr 2005 (between 21.28 and 21.43 h). As for the habitat there – see Pigmy Owl localities. The weather was clear and almost calm, about +10°C.
- “Pionerskiyat lager” area to the south of the Popovi livadi pass, Southern Pirin (UTM GL29): two singing males were registered in the evening of 23 Apr 2005 (R. STANCHEV *pers. comm.*). The habitat (at 1500 m a.s.l.) included an old Spruce forest with some Scots Pine trees.
- At the eastern border of “Beglika” Nature Reserve, Western Rhodopes (UTM KG64): two birds were heard producing “smacking call” 5 – 6 times in the

evening of 11 Oct 2005 (between 20.50 and 20.54 h). The area situated at 1600 m a.s.l. was covered by an old forest with sparse Spruce trees. The weather was cloudy, calm with light rain, about +7°C.

- Above the hut Treshtenik, Southern Rila (UTM GM16): one individual made its “smacking call” in the evening of 13 Oct 2005 (at 20.28 h). The forest was mixed Spruce – Scots Pine with many glades. The immediate vicinity of the forest is built up by many small buildings. The altitude of this locality was 1820 m a.s.l. The weather was clear with some clouds, almost calm, about +2°C.
- “Semkovo” area, Southern Rila (UTM GM05): a male was heard during April and May 2004 (R. KOLCHAGOV *pers. comm.*)
- “Shishkovitsa” area, Southern Rila (UTM GM16): one male was seen in active display during May 2004, at about 2000 m a.s.l. (R. KOLCHAGOV *pers. comm.*)
- “Bekinska shobarka” area in “Chuprene” Nature Reserve, Western Stara planina (UTM FP31): two birds were heard singing their mating song in the evening of 2 May 2005, the first between 21.31 and 22.00 h in a dense old Spruce forest at 1595 m a.s.l., the second between 21.58 and 22.30 in a Spruce forest close to a Beech *Fagus sylvatica* forest at 1340 m a.s.l.
- “Livade” area, Mt Slavyanka (UTM GL18): one singing male was heard on 27 Apr 2005 between 21.50 and 22.00 h. As for the habitat there – see Pigmy Owl localities. The weather was clear with mild western wind. At the same place, but from the other sides of the valley, two singing males were registered also on 26 Apr 2003 (SHURULINKOV & STOYANOV 2005b).

According to the obtained results, we can assume that the Pigmy Owl is widely distributed and much more numerous in Bulgaria compared with the estimates made so far. In the future, as a result of more precise and special investigations, the estimated number of the national population will possibly grow. It is of great importance to study the numbers and distribution of Pigmy Owl in the Rhodopes, where the largest areas of the species’ prime habitat exist – old Spruce forests at altitudes between 1400 and 1900 m a.s.l. The Tengmalm’s Owl was found in the

southern parts of Mt Pirin for the first time, and the previous single findings of the species in Western Stara planina and southern parts of Mt Rila (KOUZMANOV *et al.* 1995, NANKINOV 2002) were confirmed again. The species was found in its most favourable habitats in Bulgaria – old coniferous (mostly Spruce) forests between 1500 and 2000 m a.s.l.

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4. Povzetek

Avtorja pričajočega prispevka sta preučevala razširjenost in številčnost malega skovika *Glauucidium passerinum* in koconogega čuka *Aegolius funereus* v nekaterih bolgarskih gorah. Malega skovika sta kot prva odkrila na gori Pirin, in sicer v bolgarskem delu Rodopov, in v severovzhodnem delu Rile, koconogega čuka pa v južnih delih Pirina in Rile, v zahodnem delu Stare planine in v zahodnih Rodopih. Tako mali skovik kot koconogi čuk sta bila že drugič najdena na gori Slavjanka. Oba sta naseljevala stare gorske iglaste gozdove na kar precejšnjih nadmorskih višinah.

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