

## **Karvav Kamak Mnt. – a new locality of the Spotted Nutcracker (*Nucifraga caryocatactes* (Linnaeus, 1758)) in Bulgaria**

ZLATOZAR BOEV

*National Museum of Natural History, Bulgarian Academy of Sciences, 1 Blvd. Tsar Osvoboditel, 1000 Sofia, Bulgaria, boev@nmnhs.com; zlatozarboev@gmail.com*

**Abstract.** A new species locality of *Nucifraga caryocatactes* is reported in the Karvav Kamak Mnt. (part of the Milevska Mnt.) on the Bulgarian-Serbian state border. The site is remote 50-70 km from the nearest known localities in the Western Stara Planina, Vitoshka, and Osogovo mountains.

**Key-words:** Spotted Nutcracker, Bird range extensions, Boreal avifaunal elements, Bulgarian avifauna.

### **Introduction**

Spotted, or Eurasian nutcracker (*Nucifraga caryocatactes* (Linnaeus, 1758)) is a widely spread species of the Palearctic avifauna. Its distribution is restricted in the Northern Eurasia, and the high mountain region in Southern Europe (Roselaar, 1994), i. e. in the boreal and altitudinal boreal zones (Mattes & Sackl, 1997). Its European range is split into 6-9 major separate parts, one of them located on the Balkans (Roselaar, 1994). The species range in Bulgaria is also split in 5 parts: (1) Rila-Pirin-Rhodopes (and Slavyanka), (2) Western Stara Planina, (3) Central Stara Planina, (4) Vitoshka, and (5) Osogovo mountains (Nikolov, 2007).

The conservation status of the species after IUCN is “Least Concern”. In Bulgaria the species is protected under the Biodiversity Act, Annex 3. Its distribution and number trends are stable (Nikolov, 2007).

### **Results**

**Observation.** On 03 September 2021 in 12:45 h summer time EET (UTC+02:00 time zone) an adult individual perched on a branch of European (common) hornbeam (*Carpinus betulus* Linnaeus, 1758). The bird rested for a minute or so (Fig. 1) and flew away.

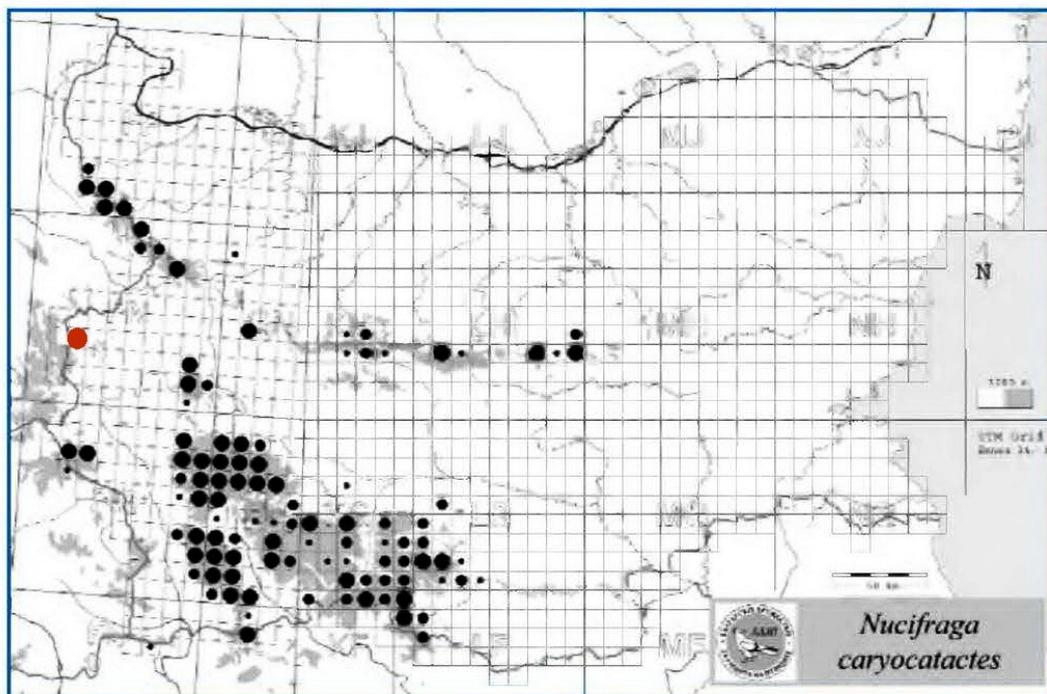
**Weather.** The maximal temperature in the vicinity of the Shipkovitsa village (Pernik Region), the nearest settlement in this area, was about 16° C. The weather was sunny, windless and calm.

**Locality.** The observation was in the immediate proximity of the Karvav Kamak rock massive 42°41' N, 22°28' E (1660 m. a.s.l.), a nature monument. The region is declared (31.03.2021) as a Natura 2000 Special Protected Area, BG0001017 (Directive 92/43 / EEC on the conservation of natural habitats and of wild fauna and flora).

**Status in Bulgaria.** The Spotted Nutcracker is a mountain forest belt inhabitant. It is a resident and breeding species (Ivanov, 2011).



**Fig. 1.** The observed Spotted Nutcracker (*Nucifraga caryocatactes*) in the Karvav Kamak BG0001017 Natura 2000 SPA, 03.10.2021. Photo: Z. Boev.



**Fig. 2.** Distribution of the Spotted Nutcracker (*Nucifraga caryocatactes*) in Bulgaria (after Nikolov, 2011). The locality in Karvav Kamak Mnt. is marked with red dot.

### Discussion

The observation of *N. caryocatactes* in Karvav Kamak (now considered a part of the Milevska Mnt.) is an important spot filling the gap of our knowledge on the distribution of this species in the western periphery of the country. As seen from the map (Fig. 2) this locality is remote and relatively far from the three neighbouring parts of the species' range – Western Stara Planina, Vitosha, and Osogovo, at 50-70 km each.

After Ivanov (2011) it occurs "... in the coniferous forests in all our high mountains." (p. 167). It is worthy to mention that present observation was in a hornbeam-beech forest, and no coniferous trees occurred in all the area, except scattered trees of Austrian (black) pine (*Pinus nigra* J. F. Arnoldon) near the Bilo Peak (1737 m a.s.l.), which is ca. 1.250 km away from the Karvav Kamak rock.

### Conclusions

The lack of information of the distribution of the nutcracker in the visited region is probably due to the insufficient field observations in the remote border regions. The occurrence of the species in the broad-leaved forest is a new detail of possible trend of its ecological adaptations. As known, the broad-leaved forests are visited in winter periods. The record of the species there in the early autumn is unusual detail of its phenology.

### References

- Ivanov, B. (2011) *Nucifraga caryocatactes* (Linnaeus , 1758). – In: Ivanov, B. (Ed.), *Fauna of Bulgaria*, 30. Aves, Part 3. Akademichno izdatelstvo "Prof. Marin Drinov". Sofia, pp. 162-167. (in Bulgarian, English summary).
- Mattes, H. & Sackl, P. (1997) *Nucifraga caryocatactes* Nutcracker. – In: Hagemeyer, W. J. M. & Blair, M. J. (Eds.), *The EBCC Atlas of European Breeding Birds. Their Distribution and Abundance*. T & A D Poyser, London, pp. 678-679.
- Nikolov, Ch. (2007) (Spotted) Nutcracker *Nucifraga caryocatactes*. - In: Iankov, P. (Ed.), *Atlas of the Breeding Birds in Bulgaria*. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10. Sofia, BSPB, pp. 578-579.
- Roselaar, C. S. (1994) *Nucifraga caryocatactes* Nutcracker. – In: Cramp, St. (Ed.) *Handbook of the Birds of Europe the Middle East and North Africa. The Birds of the Western Palearctic*. Volume VIII Crows to Finches, Oxford University Press, Oxford New York, pp. 76-95.