Received: 12.7.2023. Accepted: 12.9.2023.

## NEW RECORD OF THE PYGMY CORMORANT Microcarbo pygmaeus DURING THE BREEDING SEASON IN CW BULGARIA

Novo opažanje malog vranca Microcarbo pygmaeus u sezoni gniježđenja u središnejm dijelu zapadne Bugarske

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The Pygmy Cormorant *Microcarbo pygmaeus* is a Least Concern (IUCN) species, listed in Annex II of the Bern Convention, Annex II of the Bonn Convention, European Conservation status: SPEC 2, Annex I of the Birds Directive. In Bulgaria, the pygmy cormorant is "Extant (resident)" (BIRDLIFE INTERNATIONAL 2019). It is categorized as Endangered (EN) in the Bulgarian Red Data Book (IVANOV 1985, NIKOLOV *et al.* 2014) and considered "a breeding summer visitor" (NIKOLOV *et al.* 2014) and a migratory, transiting and wintering species (MICHEV 1990).

On 1<sup>st</sup> July 2023 at 06:10 AM summer time EET (UTC+02:00 time zone) an adult in non-breeding plumage (CRAMP & SIMMONS 1977) was observed perching on the top of a willow tree (Fig. 1) at the southwest shore of the Ognyanovo Reservoir near Ognyanovo village (Sofia Region). The duration of the observation was approx. 20 minutes. Evidently, the bird had roosted in the place, as we had noticed it perched on the tree even before sunrise. Thus, we can conclude that it (at least temporarily) resided at this site.

The small white spots on the head and the chest of the bird, which are characteristic of adults during the breeding season, were clearly missing. Thus, the observed individual was a non-breeding adult.

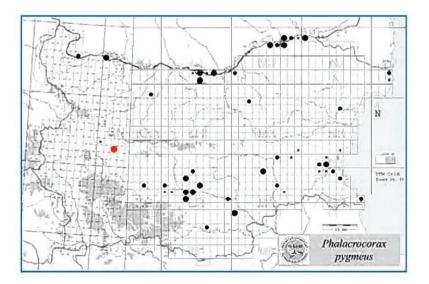
The morning temperature in the vicinity of Ognyanovo village (Elin Pelin Municipality, Sofia Region), the nearest settlement in the region, was about 13° C. The weather between 05:30 and 06:15 h was windless and calm.

The Ognyanovo reservoir (42°61> N, 23°74> E) is ca. 4 km long at its maximum and up to 1 km wide. It was built on the Lesnovska River. In most sectors of the reservoir, banks are sloping, while in most parts of the western half are shallow.

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Figure 1. Pygmy cormorant *Microcarbo pygmaeus*, Ognyanovo Reservoir, 1st July 2023. Photo: Zlatozar Z. Boev. Slika 1. Mali vranac Microcarbo pygmaeu, akumulacija Ognyanovo, 1. srpnja 2023. Foto: Zlatozar Z. Boev.





Ognyanovo Reservoir is one of the 30 most important water reservoirs in Bulgaria. The reservoir is stocked and regularly used by anglers for sport fishing. Fish species that breed in the reservoir are abundant: Danube Bleak *Alburnus chalcoides*, European Perch *Perca fluviatilis*, Prussian Carp *Carassius gibelio*, European Chub *Squalius cephalus*, Eurasian Carp *Cyprinus carpio*, Grass Carp *Ctenopharyngodon idella*, etc. Thus, it can be considered that there is also a diverse food resource for the Pygmy Cormorant. The woodlands in the northern and eastern parts of the dam (Fig. 3) could also provide suitable nesting habitats, although the species is a colonial breeder, usually in mixed heron colonies that haven't been recorded in the region.

Literature data on the past distribution of the Pygmy Cormorant in CW Bulgaria are scanty. From the interior of the country, nesting sites are known around Sofia, Plovdiv, Pazardzhik and Kyustendil. At the end of the 19<sup>th</sup> century (1890-s) near Sofia, the species was found nesting in the marshes near Kumanitsa, Chepintsi and Svetovrachane (HRISTOVICH 1890, NANKINOV 1989). During migration and wintering, it is found in the lowland parts of many regions of the country. On the



**Figure 3.** Ognyanovo Reservoir, view from the southwest part of the dam, 24 May 2021. Photo: Zlatozar N. Boev.

Slika 3. Akumulacija Ognyanovo, pogled s jugozapadnog dijela brane, 24. svibnja 2021. Foto: Zlatozar N. Boev. same date (1<sup>st</sup> July) on the island of Belene in the Danube River in 1968, birds that had already left the nests, have also been observed (MICHEV 1990). The egg-laying period in South-eastern Europe and the southern former USSR lasts from the end of April to the end of June or early July (CRAMP & SIMMONS 1977). In Bulgaria, nesting sites are occupied at the end of April and the beginning of May. Eggs are laid from mid-May to early June. Hatchlings were observed in the second half of June (PLACHIYSKI *et al.* 2014).

## References

- BIRDLIFE INTERNATIONAL (2019): *Microcarbo pygmaeus* (amended version of 2016 assessment). The IUCN Red List of Threatened Species 2019: https://dx.doi.org/10.2305/ IUCN.UK.2019-3.RLTS.T22696734A155598552.en. Accessed on 02 July 2023.
- Скамр, S., Simmons, K. (eds.) (1977): The Birds of the Western Palearctic. Vol. I. Oxford London - New York, Oxford University Press.
- HRISTOVICH, G. (1890): Materials for the study of the Bulgarian fauna. A list of the birds from some localities in Bulgaria. Sbornik za narodni umotvoteniya, nauka i knizhnina, 2: 188-225. (in Bulgarian).
- IVANOV, B. (1985): Malak kormoran, Malka dyavolitsa *Phalacrocorax pygmeus* (Pall., 1773) (*Carbo pygmaeus* (Pall., 1773) - Reiser, 189. pp. 48-40. In: BOTEV, B., PESHEV, Ts. (eds.). Red Data Book of the People's Republic of Bulgaria. Vol. 2. Animals. Publishing House of the Bulgarian Academy of Sciences, Sofia. (*In Bulgarian, English and Russian summaries*).
- MICHEV, T. (1990): *Halietor pygmeus* (Pallas,1773) Dyavolitsa. pp. 94-96. In: SIMEONOV, S., MICHEV, T., NANKINOV, D. Fauna of Bulgaria, Vol. 20, Part. I. Publishing House of the Bulgarian Academy of Sciences, Sofia. (*In Bulgarian, English and Russian summaries*).
- MICHEV, T., PETKOV, N., NIKOLOV, C., KUTSAROV, I., DEMERDJIEV, D., MITEV, D., (2007): Malak kormoran *Phalacrocorax pygmeus* Pygmy Cormorant. pp. 58-59. In: IANKOV, P. (ed.) 2007. Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10. Sofia, BSPB.
- NANKINOV, D. (1989): Früherer und jetziger Stand der Bestandsentwicklung der Zwergscharbe (*Phalacrocorax pygmaeus*) in Bulgarien (Aves, Pelecaniformes: Phalacrocoracidae). Faunistische Abhandlungen, 17(8): 79-84.
- NIKOLOV, H., MARIN, M., KAMBOUROVA, K., DEMERDJIEV, D. (2014): Pygmy Cormorant *Phalacrocorax pygmeus* Pallas, 1773. pp. 158. In: GOLEMANSKI, V. *et al.* (eds.). Red Data Book of the Republic of Bulgaria. Vol. 2. Animals. IBEI BAS & MOEW, Sofia.
- PLACHIYSKI, D., DEMERDZHIEV, D., POPGEORGIEV, G., PETKOV, N., KORNILEV, YU. (2014): Action plan for the conservation of the Pygmy cormorant (*Phalacrocorax pygmeus*) in Bulgaria (2014-2023). Sofia, Bulgarian Society for the Conservation of Birds, Ministry of the Environment and Waters, Sofia. (*in Bulgarian*).

## SAŽETAK

Opisano je opažanje odraslog malog vranca *Microcarbo pygmaeus* u negnijezdećem ruhu 1. srpnja 2023. na umjetnom jezeru Ognyanovo u blizini sela Ognyanovo (središnji dio zapadne Bugarske). Ovo je prvi zapis o prisutnosti vrste tijekom sezone gniježđenja od 1880.-ih u središnjem dijelu zapadne Bugarske.