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Going Against the Flow: Notes on the re-colonisation of the Eurasian Beaver Castor fiber Linnaeus, 1758 in Northern Bulgaria

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Abstract. Beaver activity in the form of gnawed wood was observed at the Rositsa River near the village of Gorsko Kosovo, at a distance of 60 river kilometres from its confluence into the river of Yantra, and around 143 river kilometres from the Danube River. This is a previously unknown location of the Eurasian beaver in Bulgaria in the Yantra River basin. Our observation confirms the recent findings of the re-colonisation of the Eurasian Beaver in Bulgaria.

Key words: Castor fiber, Beaver, reintroduction.

Introduction

The Eurasian beaver (*Castor fiber* Linnaeus, 1758) was once wide-ranging across Northern Europe and Asia (Lavrov 1981). However, anthropogenic factors such as the intensive hunting for their fur, meat, and oils, along with significant habitat loss, have caused a drastic decline in their population over the last 300 years. This decline seemed irreversible until recent observations have shown promising signs of their return. Recently, the beaver was observed to return to Bulgaria, on the Danube River and its tributaries (Kodzhabashev *et al.* 2021). Observations in the country's interior were limited (Kodzhabashev, 2022, Kodzhbashev *et al.*, 2023). Here we report the recent observation of this species in a new location - the Rositsa River, a tributary of the Yantra River.

Material and Methods

The observations were made during a wildlife survey on 16th March 2025 near the river Rositsa, a tributary of Yantra, near Gorsko Kosovo, Suhindol Municipality, Veliko Tarnovo region, North Central Bulgaria. A smartphone camera, Ulefone Armor 27T Pro (Shenzhen Gotron Electronic Co., LTD), with a built-in GPS function, was used to record the observation.

Results

Gnawed out wood, fallen trees and bitemarks were observed by the first author along the riverbank of the Rositsa River. near the village of Gorsko Kosovo, at a distance of around 60 river kilometres from its confluence into the river of Yantra, andaround 143 river kilometres from the Danube River. The locations of the observations were N 43.149100, E 25.183500, alt. 134 m (Fig. 1) and N 43.149000, E 25.183600, alt. 135 m (Fig. 2). Details of bitemarks with a scale are shown in Fig. 3.



Fig. 1. Beaver activity, gnawed tree on the riverbank. Photos taken on 16/03/25.

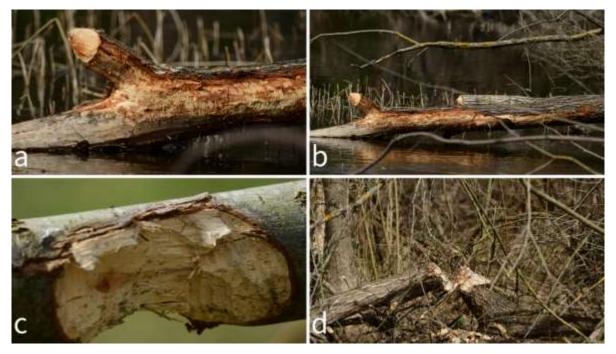


Fig. 2. Beaver activity, a and b – fallen tree inside the river, c and d – fallen tree with gnaw marks on the riverbank. Photos taken on 16/03/25.

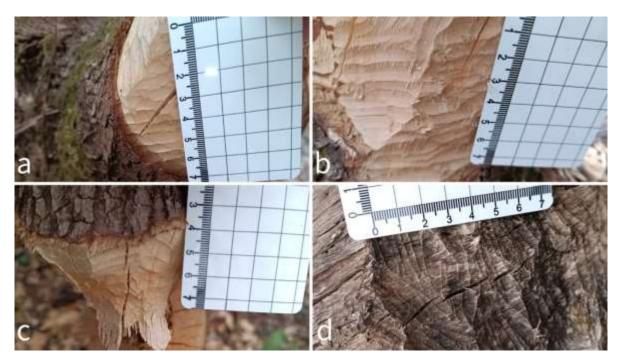


Fig. 3. Beaver activity, a, b, c and d – gnaw markings with a scale. Photos taken on 23.03.2025.

Discussion

In the past four years, beavers have been observed naturally colonising local rivers in the Northeast of Bulgaria (Kodznabashev 2022, Kodzhabashev *et al.* 2023, Marinova *et al.* 2025). This resurgence marks an exciting development in the conservation of this species. Our observations along the banks of the Rositsa River have provided concrete evidence of this phenomenon. In two specific locations, which are seldom frequented by fishermen, we have found signs of beaver activity, including felled trees. We have documented these signs with photographic evidence and recorded the precise GPS coordinates for reference. Recent findings have confirmed that the Bulgarian populations belong to the native Eurasian beaver (*Castor fiber*), rather than the introduced American beaver (*Castor canadensis*), thereby heightening the importance of these observations for the conservation of the species (Bobeva *et al.* 2025).

The beaver's return to Bulgaria appears to be a gradual process, starting from the North, with the animals migrating along rivers that feed into the Danube. To our knowledge, this is the furthest observation from the Danube River of the recent expansion of the Eurasian beaver in Bulgaria (Kodzhabashev *et al.* 2023). The distance from the locality to the mouth of Yantra at the Danube is 143 river kilometres, which is a record so far for the expansion of this species in Bulgaria. This natural expansion is a testament to the resilience of the species and the success of conservation efforts across Europe (Wróbel 2020).

As we continue to monitor and document this re-colonisation, it is crucial to ensure the protection of their habitats and to promote awareness about the importance of beavers in maintaining healthy river ecosystems. The beaver's role in creating wetlands, reducing soil erosion, and supporting biodiversity is invaluable, making their return not only a triumph for conservation but also a positive indicator for the environment as a whole. As our research is limited by time, further observations will provide more information on the population size and structure.

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