NEW OCCURRENCE OF THE EURASIAN BEAVER (*CASTOR FIBER* LINNAEUS, 1758) ON THE SOMEŞ RIVER

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Rezumat. Noua apariţie a castorului eurasiatic (*Castor fiber* Linnaeus, 1758) pe Râul Someş. Apariţia spontană pe râul Someş a castorului protejat este rezultatul reintroducerii reuşite din Ungaria. Urmele de viaţă care dezvăluie prezenţa castorului au fost găsite în trei diferite secţiuni a râului. Din cauza condiţiilor meteorologice nefavorabile şi durata limitată a studiului, numai despre o secţiune de râu relativ scurtă putem oferi informaţii exacte. Pe porţiunea cuprinsă între Petin şi Ambud am identificat un singur teritoriu de castor.

Summary The spontaneous appearance of the protected beaver on the Someş river is the result of the successful reintroduction in Hungary. Signs that reveal the presence of beavers were found in three different sections of the river. Due to bad weather and limited duration of the study we can offer accurate information only from a relatively short section of the river. On the portion between Petin and Ambud, we identified a single beaver territory.

Introduction

The genus Castor comprises two species: the Eurasian beaver (*Castor fiber)* and the North American beaver (*Castor canadensis*). Both species have suffered from overexploitation. The Eurasian beaver was once widespread in Europe and Asia, but it was intensively hunted for meat, fur and castoreum (Rossel et al. 2005). Overhunting reduced Eurasian beaver populations to c. 1200 animals in eight isolated populations, around the end of the 19th Century (Batbold et al. 2008). The Eurasian beaver became extinct by 1824 in Romania (Filipaşcu 1969), and by 1865 in Hungary (Rakonczay 1990), because of overhunting. After its extinction, the beaver had been missing from the Romanian fauna for 175 years. In Hungary after almost 120 years (1985-86), it appeared again in Szigetköz area. The Hungarian animals probably wandered here from the population successfully established in Austria following a reintroduction (WWF Hungary 2011).

In the late 1990s, Romanian and German organizations started a

Satu Mare – Studii şi Comunicări Seria Ştiinţele Naturii
Vol XIII (2012) pp: 35-41.

reintroduction campaign in the most suitable habitats from Romania. Between 1998 and 2001, 91 beavers, adults and juveniles, were reintroduced on Mureş, Olt and Ialomiţa rivers. The Romanian population is seemingly stable, reproducing with success and showing strong presence on the Olt, Mureş, Ialomiţa rivers and on some of their tributaries. The estimated population in 2010 was approximately 1500 individuals (Ionescu et al. 2010).

In Hungary the reintroduction program was a collaboration between WWF Hungary and WWF Austria. In Hungary between 1996 and 2008, 234 beavers were reintroduced in the areas of Gemenc, Hanság and next to the rivers Tisza and Dráva (WWF Hungary 2008). The biggest beaver population of Hungary lives in Szigetköz. In 2011 the Hungarian beaver population was estimated at between 718 and 905 animals (WWF Hungary 2011).

Near the Hungarian-Romanian border, in Hortobágy National Park on the Öreg Túr River (between Fehérgyarmat and Kisar localities), reintroduction of Eurasian beaver took place in two different times. Five individuals were released in 31 October 2001 and another five in 30 October 2002 (Tallósi 2007). It appears that the reintroduction of Eurasian beaver was successful in Hungary, and some individuals reached the Romanian part of the Someș River.

Material and methods

The field study was conducted by foot; between May 2012 and January 2013 we checked several smaller sections on the river to find life singns of Eurasian beaver. The occurrence of beaver was only detected in three areas (Figure 1.). The first area is located near Petin village, the second near Păulești village, and the third near Oar village. We are only being able to provide accurate data about the first area near Petin, because of bad weather conditions and lack of time the other areas were not checked.

We marked every life sign of beavers, as harmed trees (old and fresh chew), paths and lodges (Figure 2.) whit the help of a GPS. The Eurasian beaver territory border was determined by GPS mapping

Results and Discussion

The occurrence of Eurasian beaver was only detected in three areas (Figure 1.). The first area is located near Petin village, the second area is near Păulești village, and the third is near Oar village.

The river section between Culciu Mic and Ambud village (approximately 10.48 river kilometers) was fully checked. The estimated size of the territory is about 1.26 km long (Figure 3.), which is much shorter than mentioned in the literature where the winter territories are about 7.9 ± 0.5 km long, with about 3 ± 0.4 km long riverside sector with trees (Nolet & Rossel 1994).

We have found only one active lodge, here the fresh chew marks (Figure 4.) dominated over the old ones.

Therefore we conclude that this is a very fresh territory owned by one or maximum two, recently settled

individuals. In these three areas the dominant vegetation of the river bank is made up of willow (*Salix sp.*) and poplar (*Populus sp.*). Beavers are known to select lodge places based on water depth and bank characteristics (Fustec et al. 2003).

The water depth here is sufficient (minimum 50 cm), the soil is well consolidated with a high degree of rooting. The steepness of the bank is proper for lodge establishment (15-45°), and the vegetation is generally extended, the coverage of the bank is about 90%, probably adequate for the survival and further reproduction of the species.

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ANNEXES

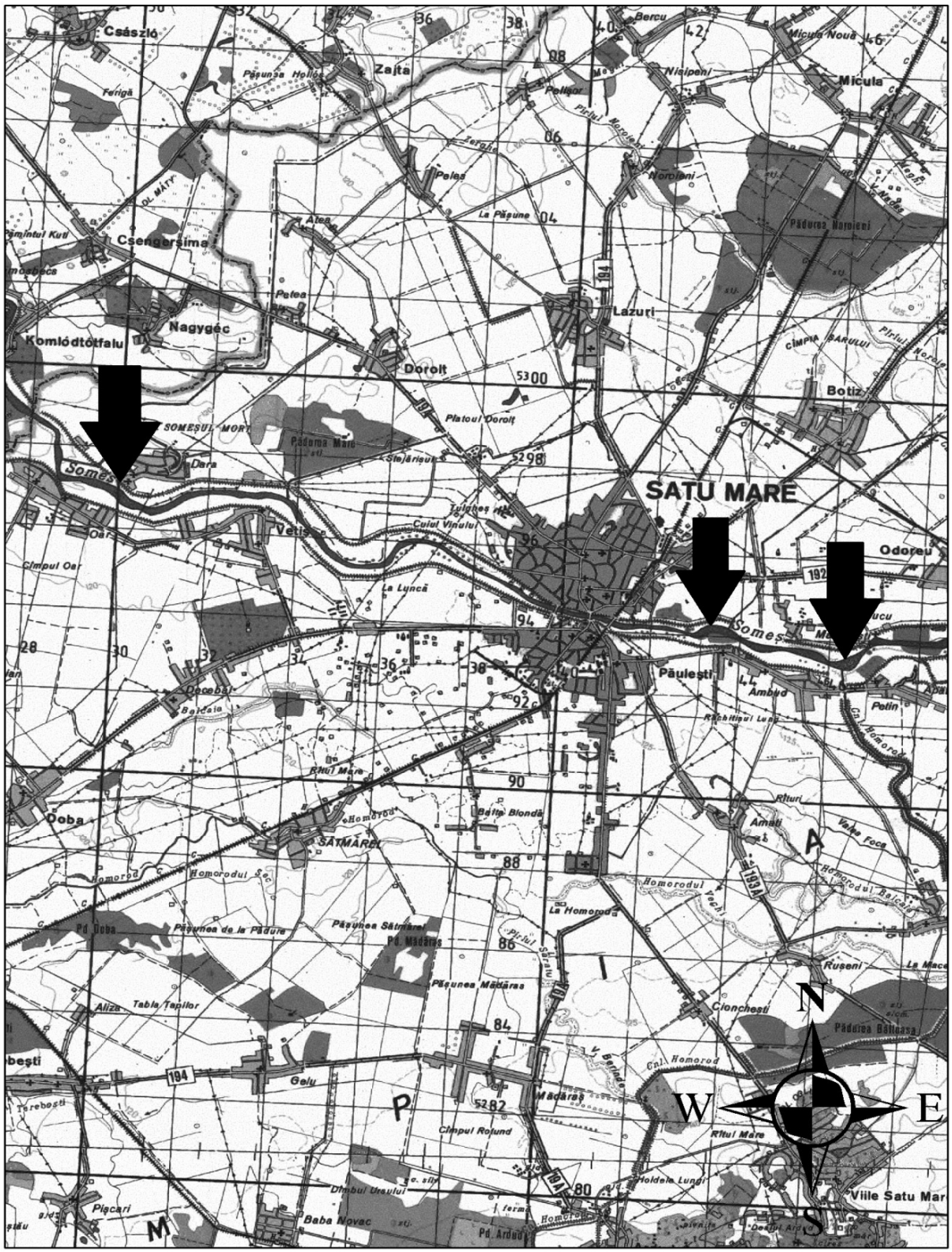

Figure 1. Beaver occurrences on the Someș River (arrows)

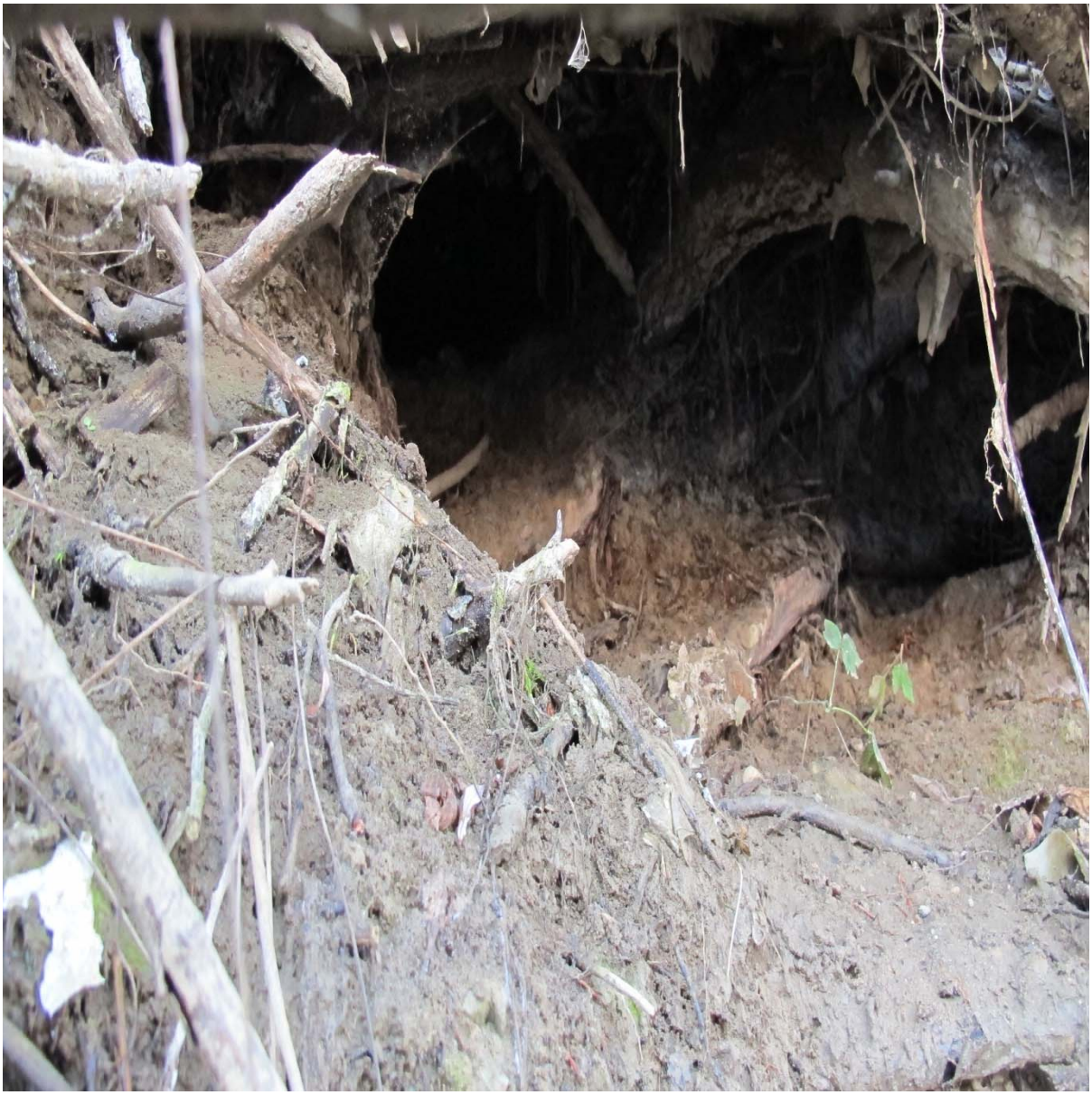

Figure 2. Temporary beaver lodge on the Someş river.

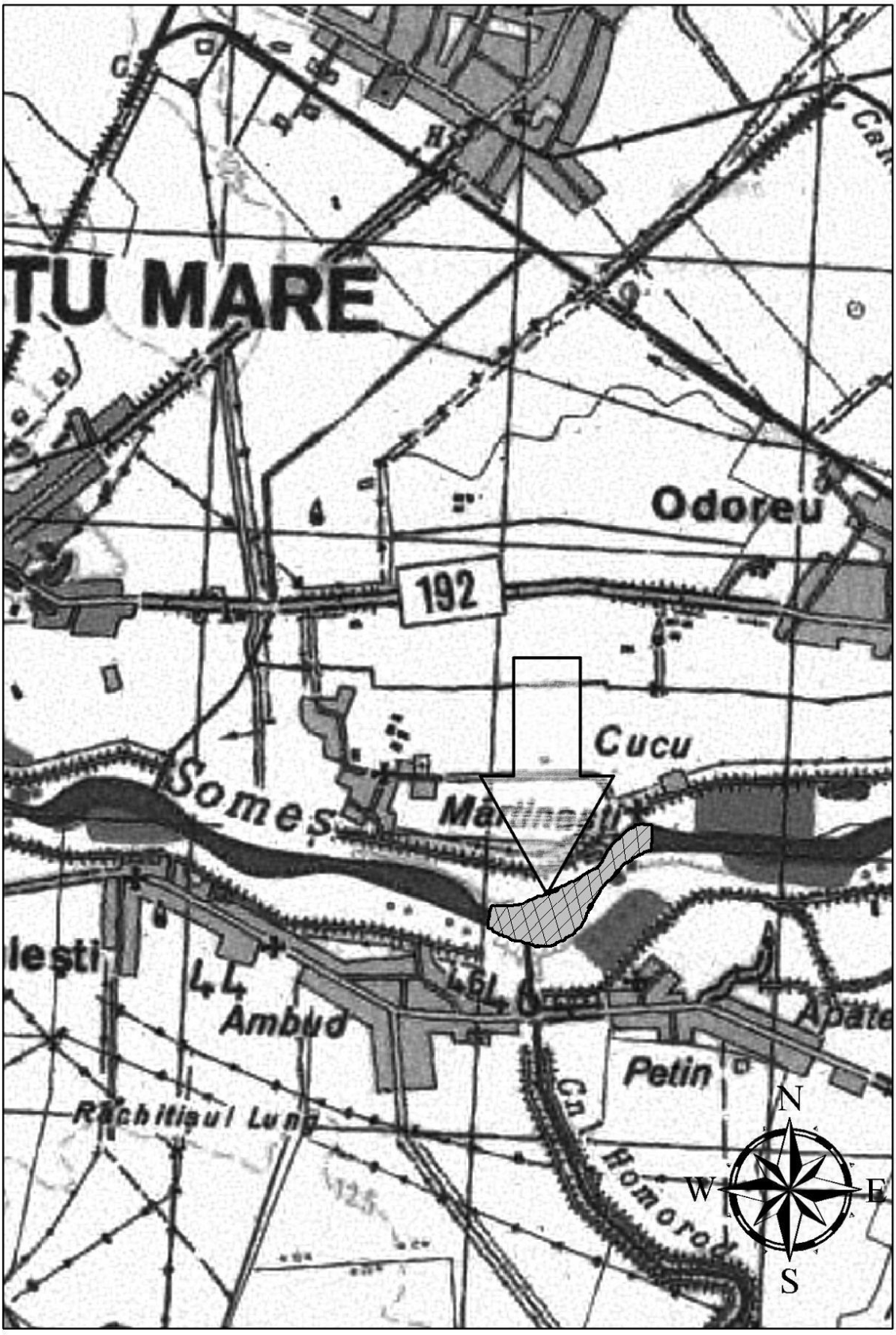

Figure 3. Location of the identified beaver territory near Petin village (shaded area, indicated by the arrow).

Figure 4. Fresh chew