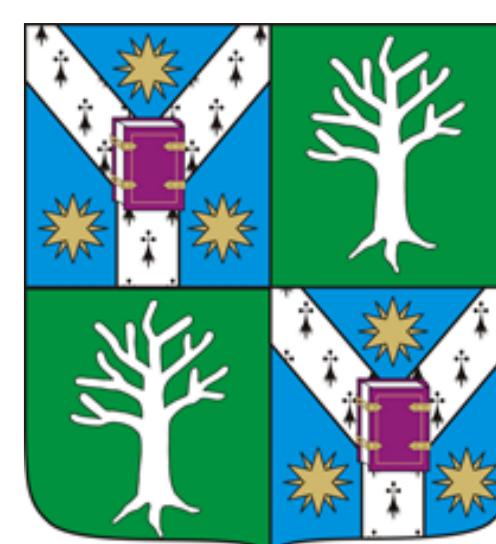


# Arqueología de la agricultura y la ganadería en la Alta Edad Media europea (Siglos V-X) / Archaeology of farming and animal husbandry in early medieval Europe (5<sup>th</sup>-10<sup>th</sup> centuries)

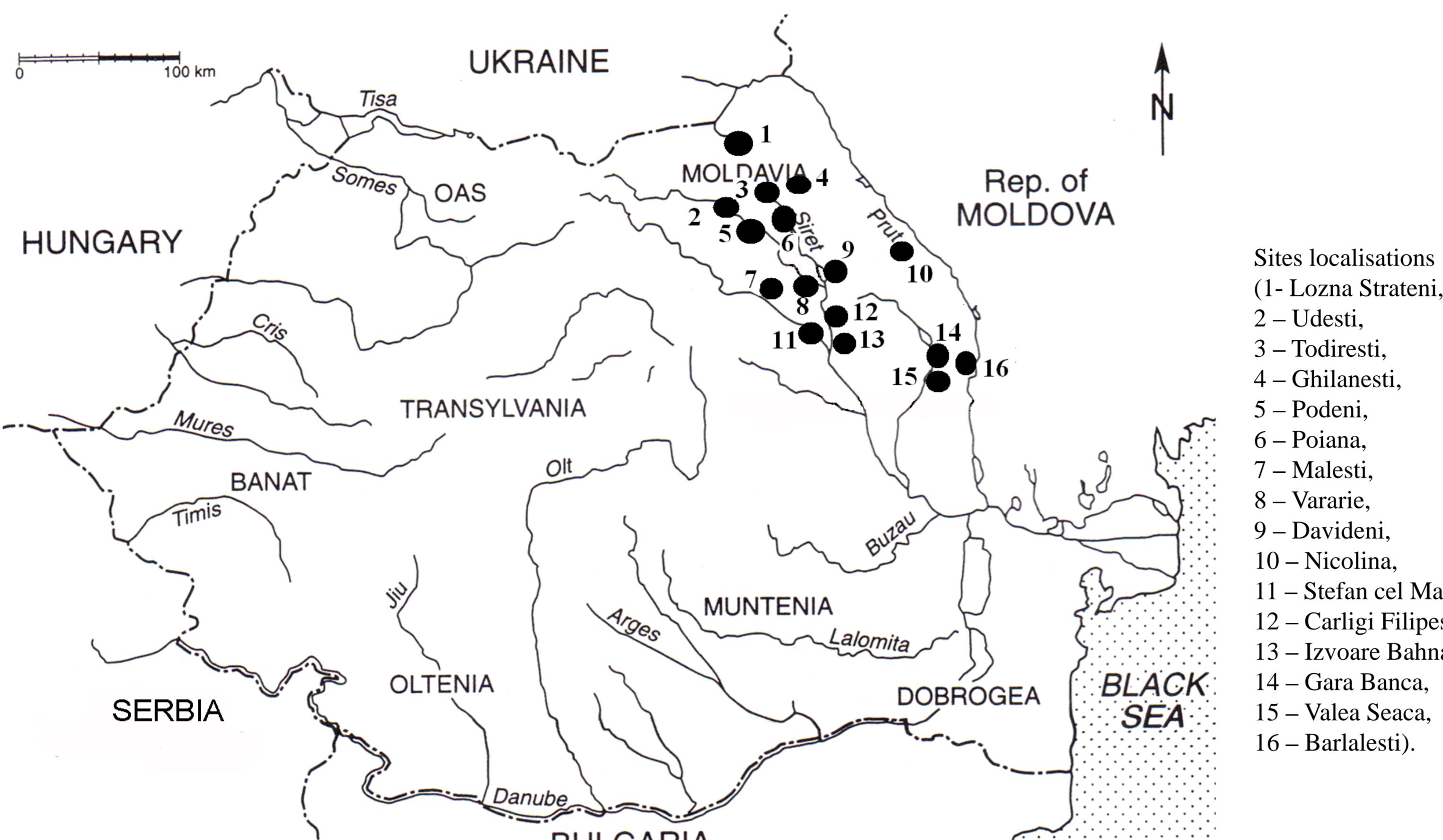


## DOMESTIC MAMMALS IN EASTERN ROMANIA DURING EARLY MIDDLE AGES



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The paper was realized on the study of sixteen archaeozoological samples taken from sites from Eastern Romania: Nicolina (IV-V<sup>th</sup> centuries) (Stanc, 2006), Podeni (III-V<sup>th</sup> centuries) (Haimovici et al., 1992), Gara Banca (III-V<sup>th</sup> centuries) (Stanc, 2006), Todiresti (IV-VII<sup>th</sup> centuries), Davideni (V-VII<sup>th</sup> centuries), Udesti (VII<sup>th</sup> century) (Haimovici, Carp, 1982), Malesti (VI-VIII<sup>th</sup> centuries), Vararie (VII-VIII<sup>th</sup> centuries) (Haimovici, 1987), Lozna (VII-VIII<sup>th</sup> centuries) (Haimovici, 1986), Cârligi Filipesti (III-V<sup>th</sup> centuries), Izvoare Bahna (VI-IX<sup>th</sup> centuries) (Haimovici, 1984), Poiana (VIII-X<sup>th</sup> centuries) (Stanc, 2006), Ghilanesti (VIII-X<sup>th</sup> centuries), Barlaesti (IX-X<sup>th</sup> centuries) (Haimovici, 1984), Gara Banca (IX-X<sup>th</sup> centuries) (Haimovici, 1986).

The domestic mammals identified are: cattle (*Bos taurus*), sheep (*Ovis aries*), goat (*Capra hircus*), pig (*Sus scrofa domesticus*), horse (*Equus caballus*), and dog (*Canis familiaris*).

In all settlements under study, the predominant species are cattle, sheep/goat and pigs, both by the number of identified specimens (NISP) and by minimal number of individuals (MNI). The percentage of these species varies from one settlement to other, but cattle are dominant in most of them (the percentage from all the identified domestic mammals range between 38.2% at Udesti and 73.9% at Nicolina); at Udesti and Vararie pig exceed the cattle, and represent 44% for each sample. Cattle are followed by pig in the samples at: Podeni (21%), Todiresti (16.7%), Poiana (30.4%), Lozna Strateni (27.9%), Izvoare Bahna (26.4%), Malesti (35.9%), Ghilanesti (13.8%); at Nicolina (13%), Gara Banca (III-V<sup>th</sup> centuries; 17.4%), Davideni (17%), Barlaesti (8.3%), Gara Banca (IX-X<sup>th</sup> centuries) on the second place (after the cattle) is sheep/goat (Figure 2).

The percentage for *Sus scrofa domesticus* (%NISP) range between 7-8% (Barlaesti, Nicolina and Valea Seaca) and 43-45% (Udesti and Vararie). For *Ovis/Capra* the percentage varies from 5-6% (at Izvoare Bahna and Cârligi Filipesti) till 17% (Gara Banca) (figure 2).

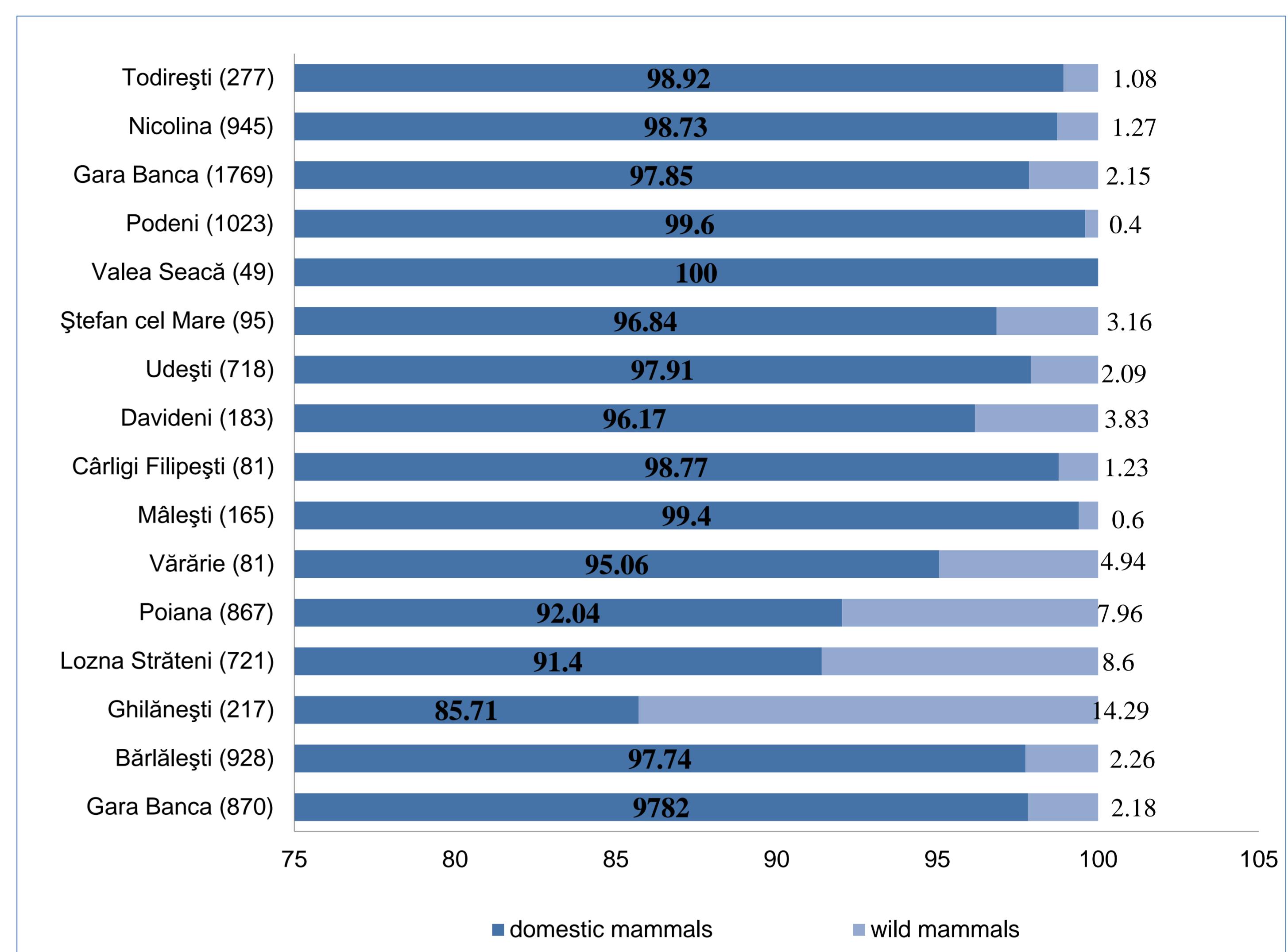


Figure 1. Frequencies for domestic and wild mammals remains identified in archaeozoological sample from the IV-X centuries in eastern Romania (%NISP).

As minimal number of individuals for *Bos taurus* the percentage ranges between 27% at Udesti and 50% at Davideni and Barlaesti. For *Sus scrofa domesticus* the frequencies are from 13% (at Barlaesti) till 55% (at Udesti) (Figure 3).

The frequency for *Equus caballus* is low in all the samples, but there are differences from one settlement to another.; the lowest frequency is 1-2% (at Vararie) and the highest is 12.5% (at Cârligi Filipesti).

Animal breeding constituted an important preoccupation during the first millennium AD. For the IV-VII centuries more than 95% is the percentage for the domestic mammals compared to the wild ones. For the VIII-X centuries, domestic mammals record have lower percentage: 85.7% at Ghilănești, 92% at Poiana (Figure 1)

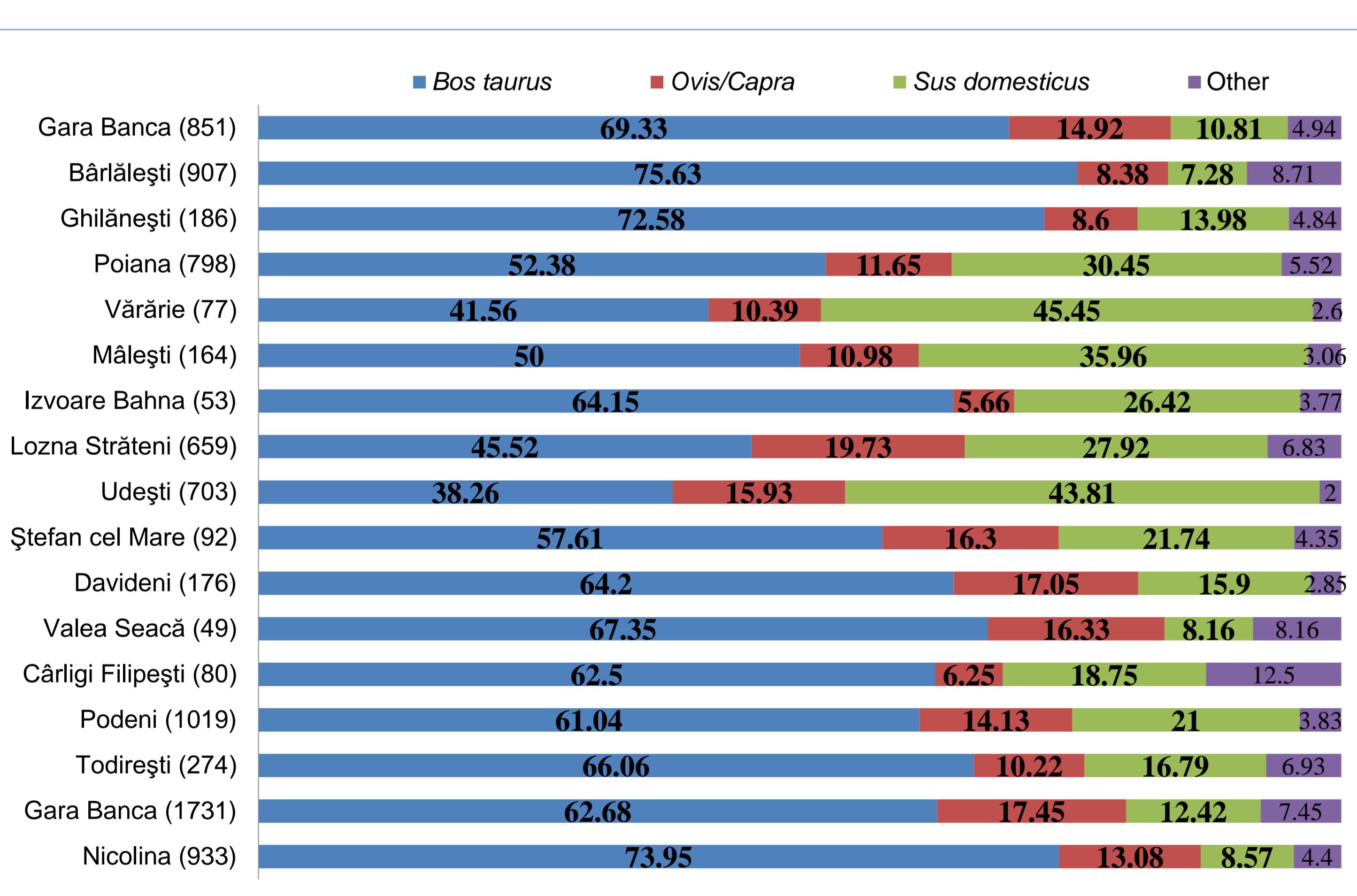


Figure 2. Percentage distribution of remains number (NISP) of domestic mammals in the samples from Eastern Romania.

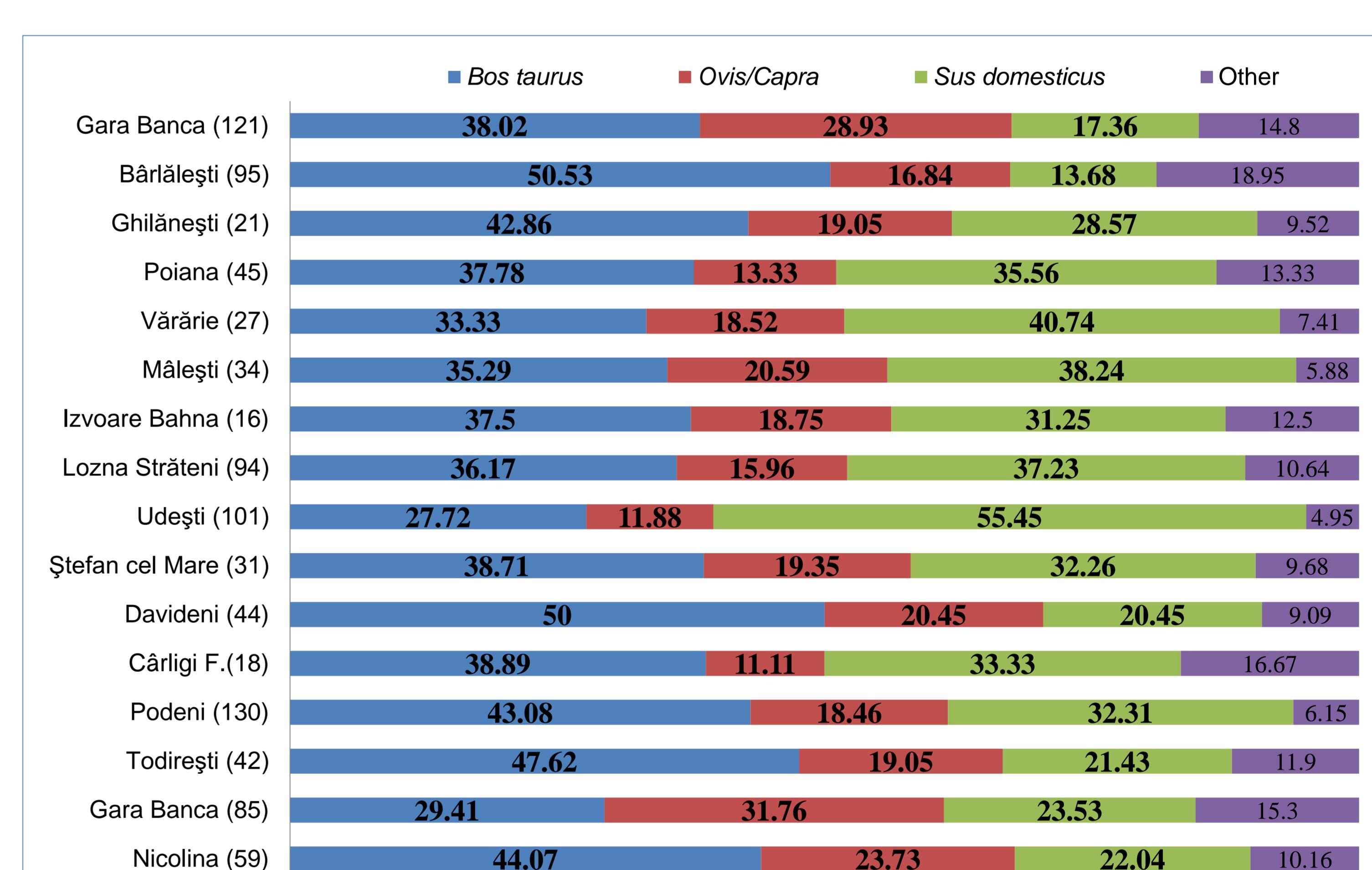


Figure 3. Percentage distribution of the minimum number of individuals (MNI) for domestic mammals, in the samples from Eastern Romania.

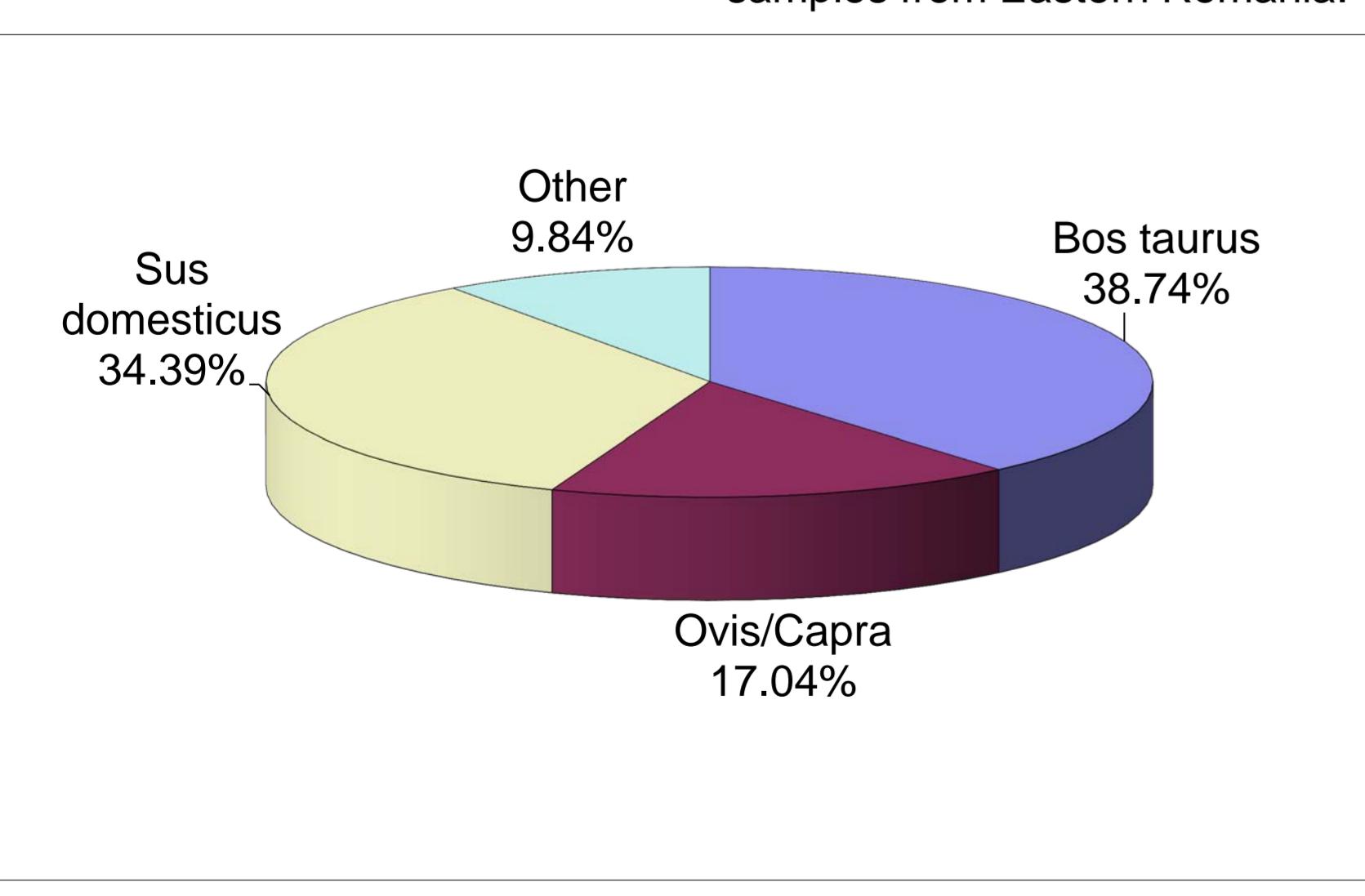


Figure 4. The percentage (% MNI) of domestic mammals in the western part of Moldavia (the Suceava tableland and the Moldova-Siret valley).

In some samples cattle represent half of the live-stock. In the settlements from the lower parts of the Moldavia (Moldavian plain and the Bârlad tableland), sheep/goat are on the second place (28% MNI) and pig on the third place (24.28% MNI), the quite small difference being only a four percent (Figure 5). In the Suceava tableland and the Moldova-Siret rivers narrow strait pig are on the second place (38%) quite close to cattle (43.1% MNI) and almost double the percentage of sheep/goat (18.87% MNI) (Figure 4), evidencing another type of animal breeding, predominating cattle and pig.

### Conclusions.

Animal breeding was an essential activity for the inhabitants of early middle ages settlement from eastern Romania. The archaeozoological samples contain large amounts of domestic mammals remains. As far as the number of remains and the minimum number of individuals are concerned, the prevailing domestic mammal in the investigated sites is cattle, excepting the sites at Udesti and Vararie, where pig is on the first place.

The domestic mammals identified are: cattle, sheep, goat, pig, horse, and dog.

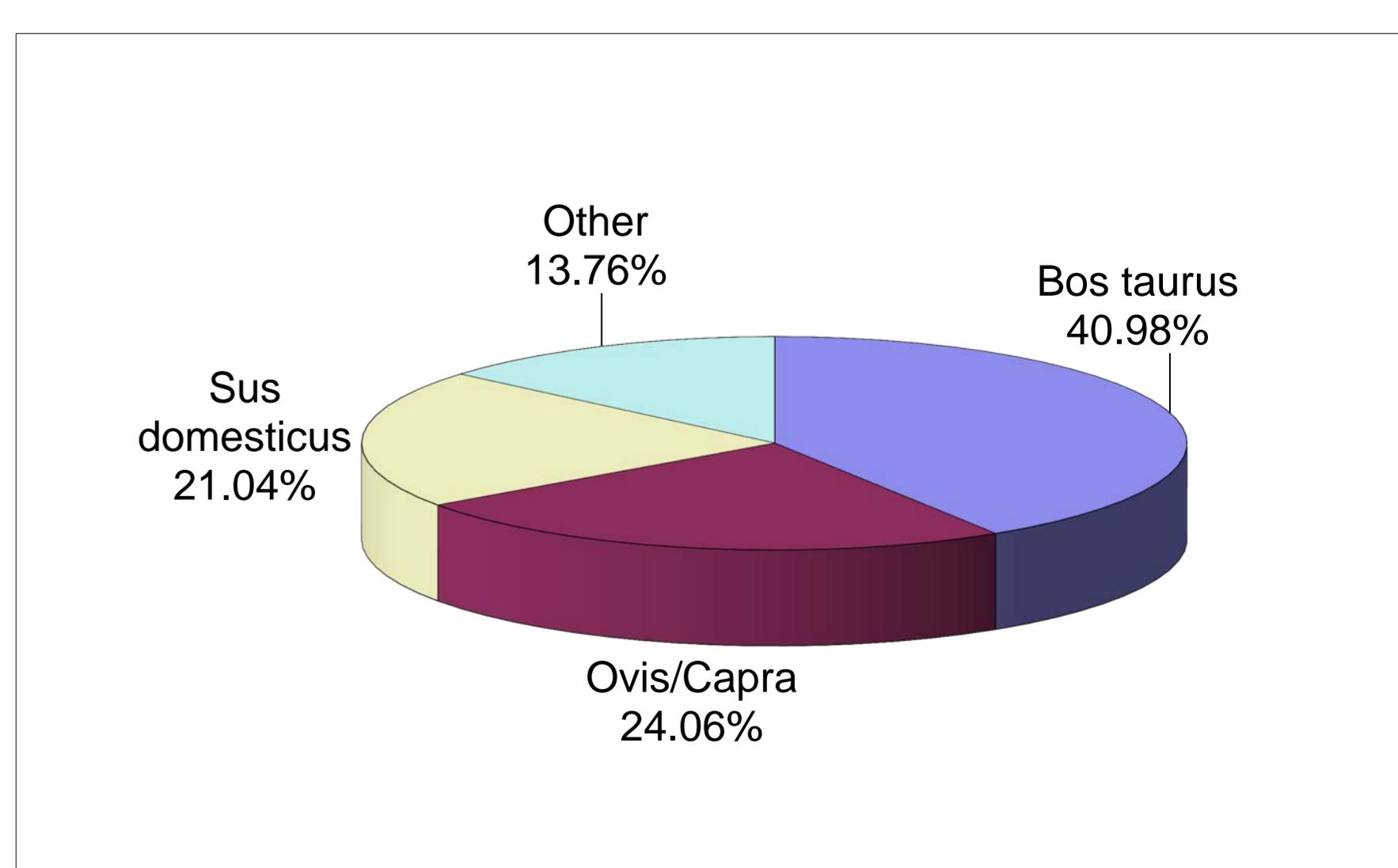


Figure 5. The percentage (% MNI) of domestic mammals in the eastern part of Moldavia (the Moldavian plain and the Barlad tableland).

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