

Archaeozoological contribution to the reconstruction of the chalcolithic environment: settlements of Cucuteni culture in eastern Romania

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Map showing the extent of the Cucuteni-Tripolye culture.

The Cucuteni-Tripolye cultural complex comprises the Precucuteni, Cucuteni and Tripolye cultures. The complex flourished in the area of southeastern Transylvania, central and northern Moldavia and Bessarabia, and western Ukraine. Dated to between ca. 5050 and 3500 Cal BC, the complex can be attributed to the Chalcolithic. The Cucuteni culture appeared and spread in the East of Romania, evolving along three chronological phases (A, A-B and B), between 4700-3500 Cal BC (Mantu, 1998).

Particularly in the Cucuteni culture and the Tripolye BI-CI, ceramic painting develops to a great extent. Many of the vessels from this period are true masterpieces. The Cucuteni-Tripolye art is characterised by a rigorous stylisation, even though realistic or even naturalistic depictions are not absent.

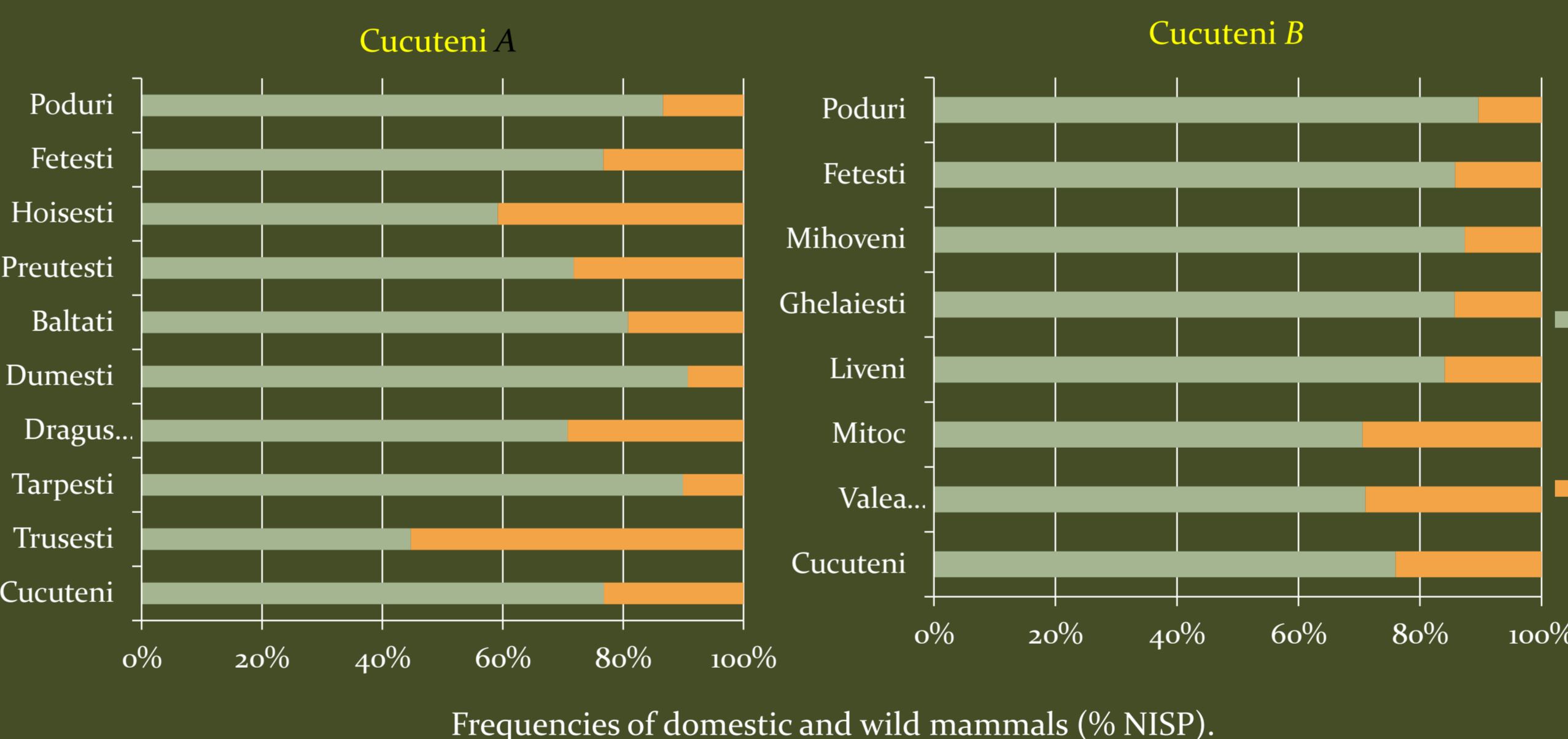
Cucuteni	years BC	Tripolye	years BC
Pre-Cucuteni I-III	5050-4700	Tripolye A	4800-4500
Cucuteni A1-A4	4700-4050	Tripolye A2-B1	4500-4000
Cucuteni A/B	4050-3800	Tripolye B2	4000-3800
Cucuteni B	3800-3500	Tripolye C1-CII	3800-3500



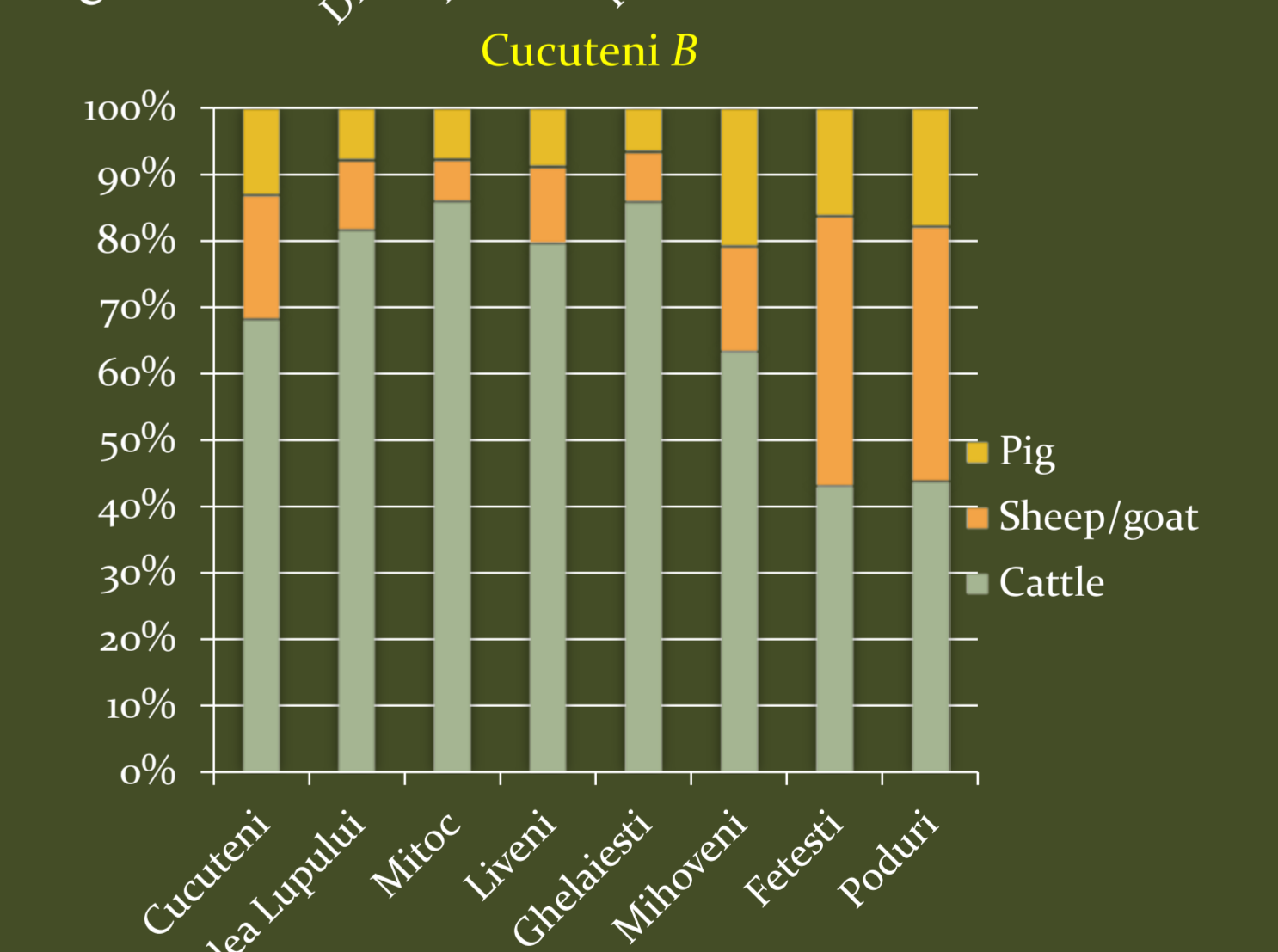
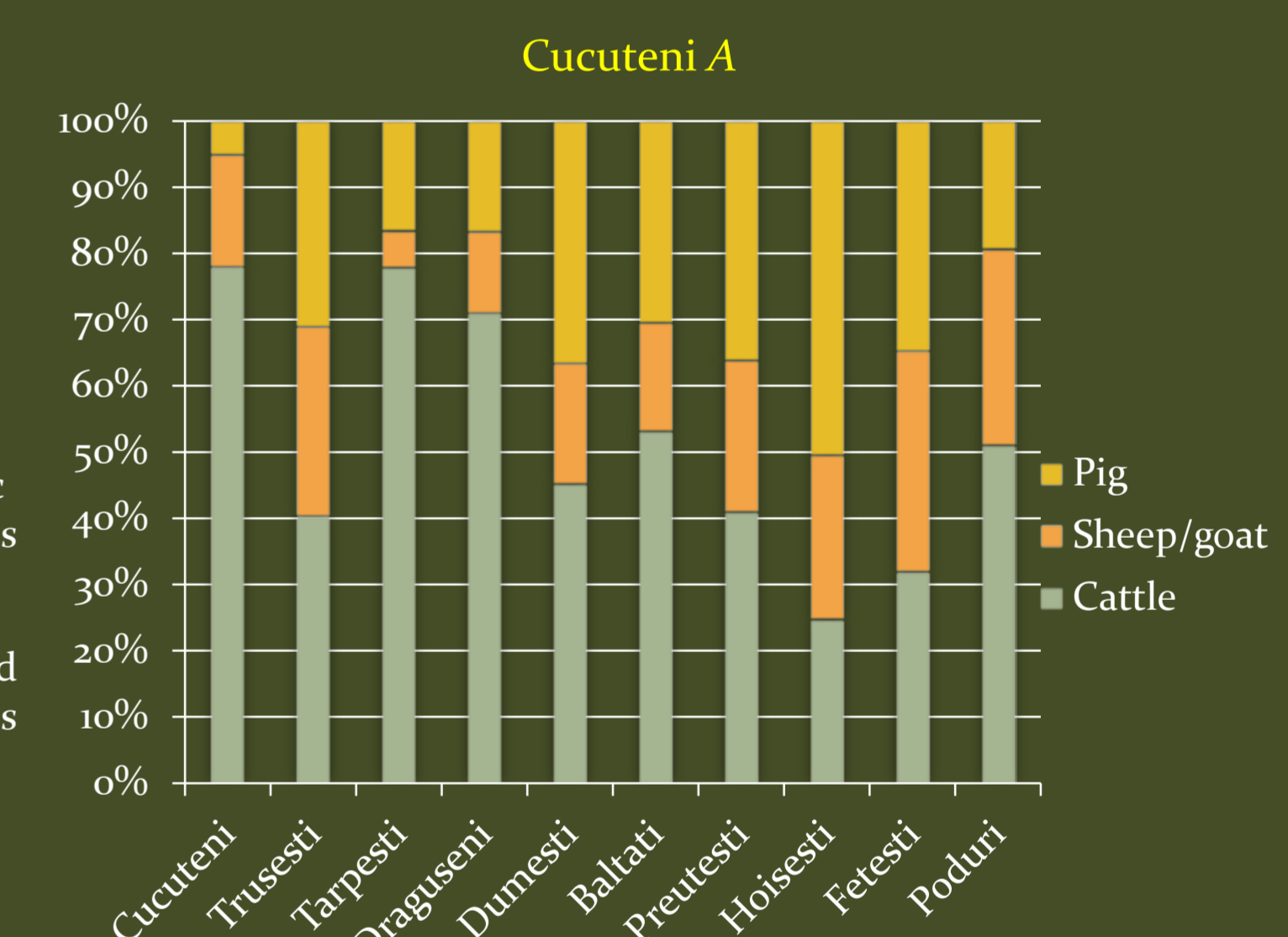
In the over 125 research years several settlements were excavated, some of them integrally, and several hundreds of habitations were studied (Monah & Cucos, 1985).

Domestic and wild mammal remains discovered in the Cucuteni sites from Eastern Romania are described in terms of their frequency, based on the number of identified specimens (NISP) and the minimum number of individuals (MNI) (Cavaleriu & Bejenaru, 2009; Oleniuc, 2010).

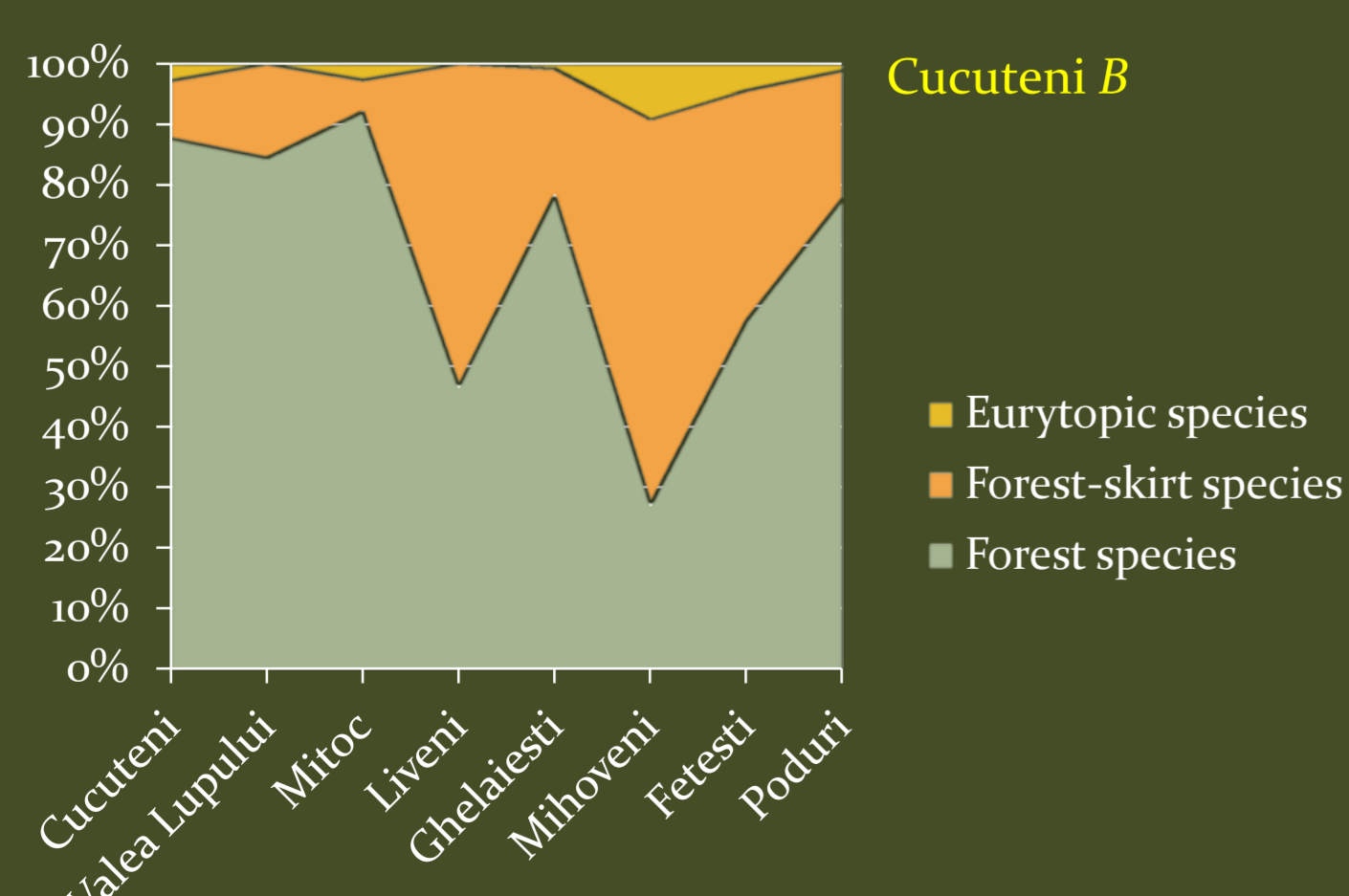
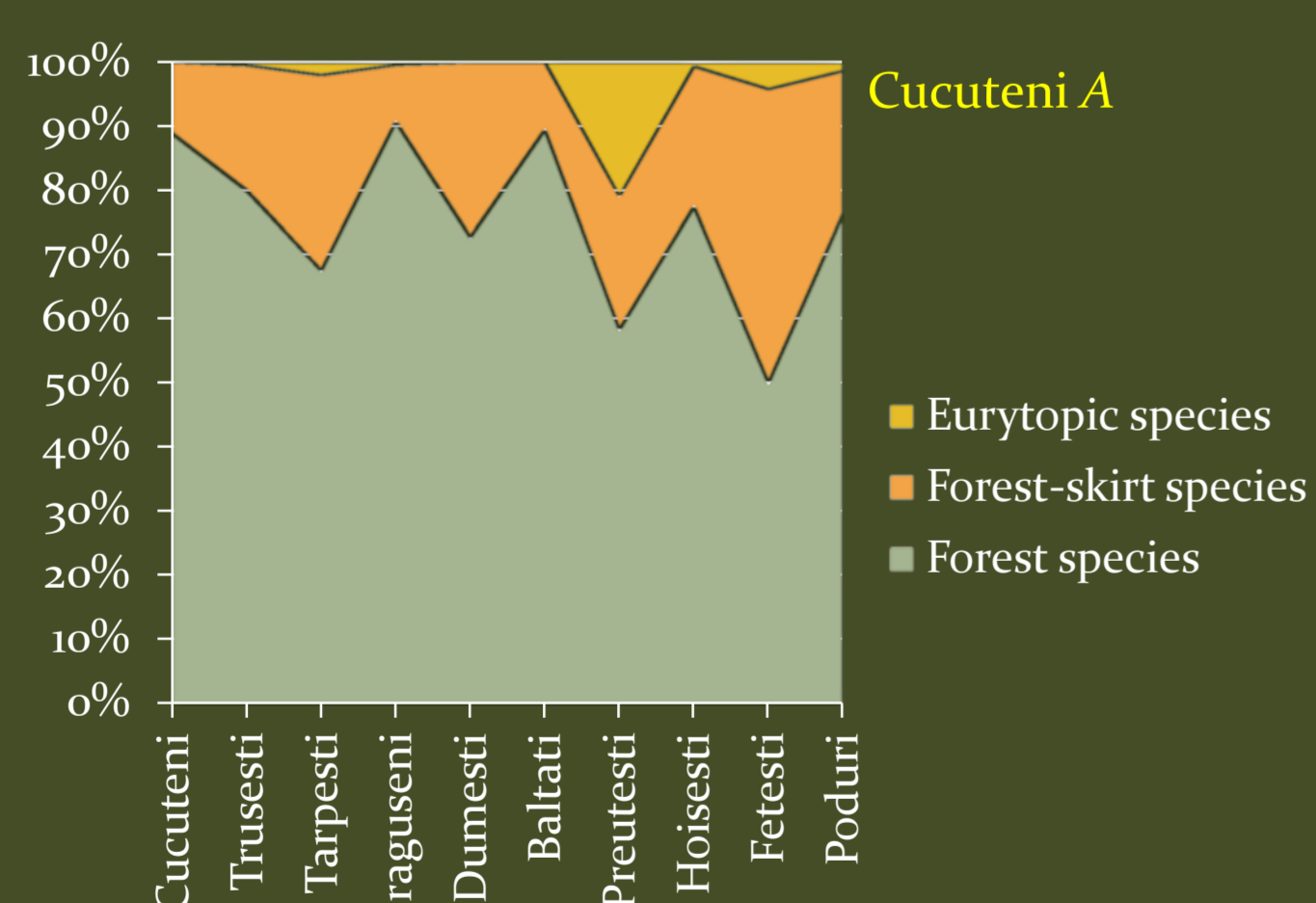
Analysis of archaeozoological assemblages provides important data about Chalcolithic environment. The domestic species discussed are cattle (*Bos taurus*), sheep/goat (*Ovis aries/Capra hircus*), pig (*Sus scrofa domestica*) and dog (*Canis familiaris*). The predominance of cattle is typical for the Cucuteni A sites (Haimovici, 1987), while in certain Cucuteni B assemblages, sheep and goat remains are more numerous indicating that this group contributed more to the subsistence economy. Probably, the expansion of open fields, with characteristic vegetation and dry climate, favoured sheep and goat husbandry more than cattle breeding. It is considered that during the 5th-4th millennium BC, in the range of Cucuteni culture, the annual average temperature was about 2°C higher than today (Dolukhanov, 1997).



Frequencies of domestic and wild mammals (% NISP).



Frequencies of cattle, sheep/goat and pig remains (% NISP).



Distribution of wild mammal remains according to the ecological characteristics of species (% NISP).

Seventeen wild mammal species were archaeozoologically identified in the Cucuteni sites, but the samples size has an important effect on the number of wild species identified. The red deer was the most frequently hunted species, excepting the settlements of Hoisesti and Fetesti, where the wild boar remains dominate.

The identified wild mammals were grouped corresponding to ecological characteristics in: forest species (*Cervus elaphus*, *Dama dama*, *Alces alces*, *Sus scrofa ferus*, *Bison bonasus*, *Ursus arctos*, *Felis silvestris*, *Lynx lynx*, *Sciurus vulgaris* and *Castor fiber*), forest-skirts (transitional zones between forest and steppe) species (*Capreolus capreolus*, *Lepus europaeus* and *Bos primigenius*), and eurytopic species (*Canis lupus*, *Vulpes vulpes*, *Mustela putorius*, and *Meles meles*). Forest species are dominant in all the assemblages.

As main exploited animal group, the domestic and wild artiodactyls served different economic (food, clothing, raw materials for tool manufacture) and ceremonial purposes. However, we have to remark a higher percentage of lagomorphs, in some Cucuteni B assemblages, that could be correlated with an expansion of open fields, with characteristic vegetation and dry climate. The horse, representing the perissodactyls, has a low frequency in the Cucuteni samples; it was very probably a rarely hunted wild species.

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