

On some peculiar deer remains from Pleistocene deposits of Tuscany, Central Italy: the skull from Pitigliano

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The small town of Pitigliano in Southern Tuscany stands on the Western part of a volcanic district which characterizes Southern Tuscany and Northern Latium. Volcanites are locally covered by small diatomitic basins. In one of these, in a site called “Valle Nocchia”, a damaged skull of *Elephas antiquus* was collected by the present writer with drs. Vittorio Borselli and Annalisa Berzi in 1965. The fossil is now exhibited in the palaeontological Museum of Florence University.

In 1992 two students, Antonella Bolognini and Patrizia Landi, collected in the same site a somewhat damaged skull of a deer which is now exposed near the elephant skull and catalogued IGF 4812V. In the exhibit the fossil is inaccurately labelled *Cervus elephus* L.

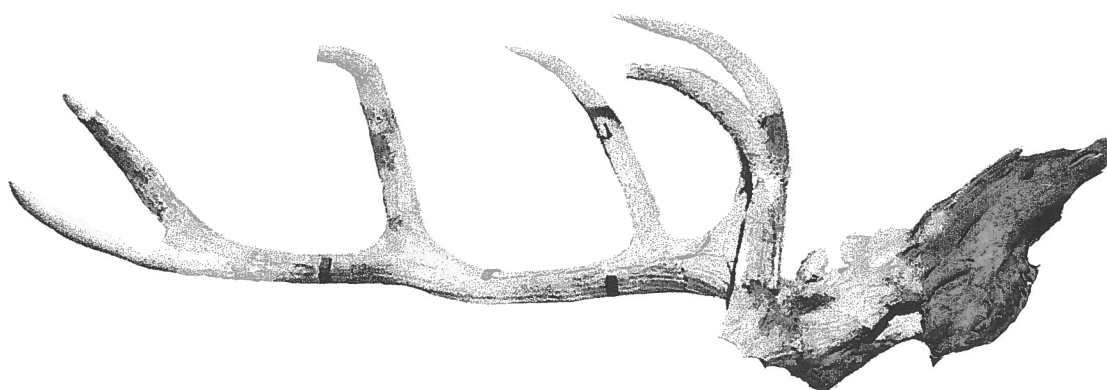
The skull is actually more primitive than the Linnean species. It belongs to an individual of middle age, as shown by the wear of its dentition, and may be identified with a species represented by several individuals from Mosbach, Southern Germany, described by J. Beninde in 1937 under the new name *Cervus acoronatus*. The site is now considered to be approximately 800 ky old.

All skulls of this species are distinguished by a primitive feature of their antlers; there is a brow tine followed by a bez and, further up, a median tine, but the termination of the antler as a simple bifurcation normal to the axis of the skull: there is no trace of the crown which characterizes living European deer. The two antler pairs figured by Beninde differ slightly from one another in their details but all conform to the same pattern. The Pitigliano skull may be ascribed to the same species.

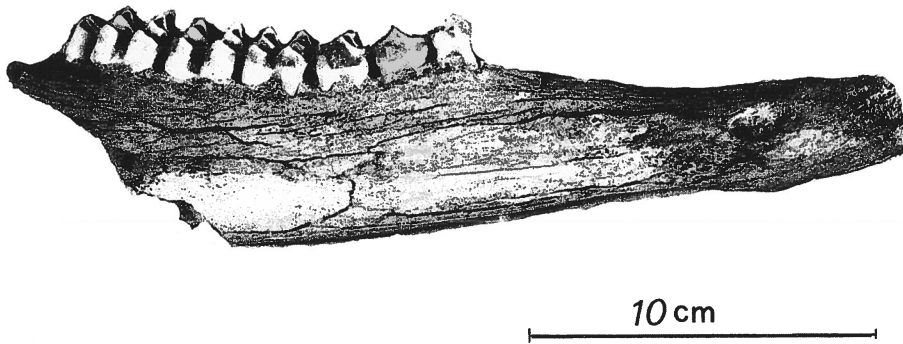
In 1960 H. D. Kahlke proposed the new name *Cervus elaphoides* for antlers of smaller size, from the same site, but Lister (1990) contends that this supposed new taxon is based on juvenile antlers.

The Valle Nocchia specimen is fully adult but not old. It lacks a large part of the right antler and part of the occiput, and has been slightly deformed and damaged in the left antler. The jaw is also damaged, it lacks the incisors and the ascending rami.

Recently Oswald (2001) illustrated several living deer from Asia. His “Bukhara-Rothirsch”, “Tibet-Rothirsch” and the Kashmirian “Hanglu” display the same antler pattern as the fossils from Mosbach and



Text-fig. 1 - *Cervus acoronatus* Beninde, 1937 from Valle Nocchia (Pitigliano). Skull and left antler. Palaeontological Museum of Florence, Cat. IGF 4812V. (About 1/7 of natural size).



Text-fig. 2 - *Cervus acoronatus* Beninde, 1937 from Valle Nocchia (Pitigliano). Jaw. Palaeontological Museum of Florence, Cat. IGF 4812.

Valle Nocchia. On the other hand living deer from Europe and from Western Asia display, with minor variations, the characteristic terminal crown.

REFERENCES

- BENINDE, J., 1937, Über die Edelhirschformen von Mosbach, Mauer und Steinheim a.d. Murr: Paläontologische Zeitschr., 19: 79-166.
- KAHLKE, H.D., 1960, Die Cervidenreste aus den altpleistozänen Sanden von Mosbach (Biebrich-Wiesbaden): Abh. dt. Akad. Wiss., Kl. Chem. Geol. Biol., 7: 1-75.
- LISTER, A., 1990, Critical reappraisal of the Middle Pleistocene Deer Species "*Cervus*" *elaphoides* Kahlke: Quaternaria, 4: 175-192.
- OSWALD, CH., 2001, Marale, die Rothirsche Asiens. Cerviden Museum: 7 pp., 9 figs.

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