

Dumitru MURARIU, Sanda MAICAN, 2025. *De la lup la câine. Istoria unei transformări evolutive (From wolf to dog. The history of an evolutionary transformation)*. Romanian Academy Publishing House, Bucharest, 15 figures, 172 pages.



The volume was compiled by Acad. Dumitru Murariu, a renowned specialist in mammal research and the current Vice President of the Romanian Academy, together with Dr. Sanda Maican, a zoologist from the Institute of Biology of the Romanian Academy in Bucharest. Relying on a vast informational background, the work is based on a broad interdisciplinary approach. This approach regarding the aspects related to the origin and process of dog domestication is based both on zoological data, as well as on information from other fields (paleontology, ethology, genetics, evolution, etc.).

The key moments taken into account were those regarding the process of domestication of the wolf, whereby it was transformed into man's most loyal

companion. This impressive evolutionary journey was carefully relayed in the book's more than 30 chapters.

After stating various general aspects (a brief characterization of mammals, the physical features and functions of dogs) the author moves on to depict the value of paleontology for clarifying the pursued problem and the relevance of canid fossils in the research carried out. At the same time, the evidence concerning molecular biology and its role in assessing the process of separation of dogs from wolves was also presented. The aspects of phylogeny and ontogeny and their implications in the tackled issue are also not missing.

The hypotheses regarding the domestication of the dog are presented in another chapter, which is followed by another in which the stages of the domestication process are revealed (including the motivations for domestication). The authors concluded that "*the process of domestication of the dog took place at*

least 12,000 years ago” (p. 148). Unlike wolves, dogs evolved over thousands of years in the presence of humans.

The authors also dedicated several pages to the debate regarding the role of dogs in human settlements, their sensitivity to and ability concerning human signals, the diversity of dog breeds, and the importance of human proximity for domestic dogs. The differences between dogs and anthropoid primates in perceiving social cues are also listed.

At the same time, there is also data on the geographical distribution of various representatives of the Canidae family (*Canis lupus*, *Canis rufus*, *Canis simensis*, *Canis latrans*, *Canis aureus*, *Canis mesomelas*, *Canis adustus*).

We believe that one of the fundamental chapters, titled “Why Man Domesticated the Dog – Motivations and Perspectives,” could have been placed, from an organizational point of view, closer to the beginning of the volume.

Another issue addressed was also that of genetic variability, both between different dog breeds and within the same breed. Especially since, over time, through artificial selection and controlled reproduction, man has created approximately 400 dog breeds adapted to his needs and lifestyle.

What is also interesting is the fact that a series of details are provided about the “singing” dogs from the island of New Guinea, which still survive in the wild.

The rich Bibliography, consisting only of works published abroad, is displayed on no fewer than 15 pages. At the same time, an index of scientific names has also been compiled.

Overall, the volume constitutes a beautiful and interesting scientific synthesis, useful not only to biologists, but also to the general public, because, as the authors have highlighted, the domestication of the dog is one of the most fascinating and remarkable events in the history of the relationship between humans and animals.

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