

BOOK REVIEW

Sorin GEACU, 2023. *Buffaloes in the Romanian Plain. A Zoogeographical Study*. Romanian Academy Publishing House, Bucharest, 310 pages, 261 figures, 173 tables, references, English abstract.

After assessing the practical importance of bubalins (buffaloes), for milk and meat production, pulling in agricultural work, as well as their biological characteristics – a greater longevity compared to cattle, an increased immunity to various pathologies, an increased adaptability to various geoecological conditions and the consumption of the vegetation in the meadow lands, the author recorded the fact that it is not only the first work on the zoogeography of buffaloes in Romania, but also the first book that refers only to the buffaloes in the Romanian Plain.

Following a short introduction accurately supporting the study undertaken that raises the alarm regarding the drastic and continuous decrease in the number of buffaloes in the Danube Plain, we are familiar with the research methods, we are presented the research methods.

The paper is divided into two parts. The first (General aspects) includes: the relationships between the ecological potential of the Romanian Plain and the buffalo populations, the history of the introduction of buffaloes in Southern Romania, the morphological, anatomical-physiological and reproductive characteristics of buffaloes, the housing environment, feeding and output of buffaloes, the buffalo breeders, the toponymic evidence and the commercial activities related to buffaloes.

The most extensive part is the second one, which highlights the spatial-temporal dynamics of the buffalo populations in all the counties of the Romanian Plain.

The oldest statistical source identified by the author is the *Catagrafia* of 1838, which counted 31,700 buffaloes. The maximum population was recorded in 1873 (36,500 head), after which the herd continuously decreased: 35,500 head in 1900, then 29,500 in 1916, 16,700 in 1935, 11,200 in 1946, 5,100 in 1985, 2,100 in 2007, and in 2020 there were only 1,200 buffaloes in the entire Romanian Plain (mostly in Teleorman county). In 2022, there were no more buffaloes in five of the 16 southern counties.

Detailed studies on buffalo populations, raised over time in 15 of the southern counties, as well as in the municipality of Bucharest, the capital of Romania, comprise a multitude of information stemming from field research, but also numerous statistical data identified in many national, county or institutional archives. A number of elements were represented cartographically, on original maps. These detailed studies make up 72% of the work.

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The author lists the causes of the drastic decrease in the buffalo populations of the Romanian Plain over 1.5 pages.

The author's general conclusions are detailed over several pages, highlighting the ancient occupation of inhabitants in the Romanian Plains of raising buffaloes, mainly for milk production and for pulling-carting and ploughing.

After listing the characteristics of the buffaloes (a robust constitution, a life-span of up to three decades, docility, disease immunity, their ease in consuming coarse forage, a high energy capacity), the natural conditions favorable to the buffaloes are also listed.

For the rural population in the main agricultural region of the country, the buffalo was the most economical large ruminant having modest maintenance requirements and providing in return a satisfactory production of milk with superior qualities to cow's milk.

Among the causes that influenced the decrease in numbers of buffalo populations in the Romanian Plain, the collectivization of agriculture ranks first. Land reclamation works have also led to the disappearance of the buffalo's preferred bathing and feeding habitats.

The aging of buffalo breeders, the lack of involvement of young people in the raising and maintenance of animals in general, together with the difficulty of milking buffaloes (compared to milking cows), the lack of breeding bulls and other issues that arose after collectivization, have led to the continuous reduction in buffalo herds.

There are too few left of those who tried to restore the buffalo herds under the motto "*from tradition to business*", or "*we are proud of raising buffaloes, because we are used to having them in the household and...that's what we have inherited from our parents*". What emerges is the idea also mentioned by the author, according to which "*the breeding of buffaloes as a traditional activity must be maintained and supported*".

The paper is based on the author's investigations from 2018–2023, as the field research was carried out in 137 localities throughout 12 counties.

The author of the volume, a PhD of both Geography and Biology, a very active Senior Scientific Researcher to the Institute of Geography of the Romanian Academy, included hundreds of original figures (maps and photographs) in the zoogeographical study, while the wealth of statistical data in the text is synthesized in 173 tables.

Overall, we are afforded an entreaty for the preservation of buffaloes in the Romanian Plain.

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