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## EVOLUTION OF THE OBSERVED SIZES OF HUNTING HERDS ON 54 PADURENI HUNTING AREA FROM TIMIS COUNTY

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**Abstract:** The observed size of an animal population, as opposed to the genetic size, is given by the number of individuals in all categories as well as by the total number of males and females participating in the production of the descendant generation. The integration of Romania into the European Union requires special attention to the hunting populations. The purpose of the present paper was to study the evolution of the observed sizes of the hunting population for 13 species of animals in the period 2020-2024, in 54 hunting areas Padureni, from Timis County with a total area of 9.928 ha. On this hunting area, the Cervidae family – which includes ruminants with deciduous horns, is represented by 2 species, respectively Roe Deer (*Capreolus capreolus* L.) species and Fallow Deer (*Dama dama* L.) species, instead, Red Deer (*Cervus elaphus* L.) species, has not been found. We recommend the permanent monitoring and limitation of populations from the Canidae family, especially of the Jackal (*Canis aureus* L.) species. For the other identified species, the population of evolutionary numbers showed that there is a good correlation between the number of individuals and their biogenic capacity. The present study recommends the revival of the existing population in this hunting area, through "blood refreshing" actions.

### • Introduction

The evolution of the observed sizes of hunting herds on the 54 Pădureni hunting area in Timiș County, provides a fascinating insight into the dynamics of wildlife populations and the impact of environmental and human factors over time. This region, known for its diverse flora and fauna, offers a unique case study for understanding the interplay between natural habitats and hunting activities.



### • Material and method

Historically, the size of hunting herds in this area has been influenced by a variety of factors including changes in land use, agricultural practices, climate variations, and conservation efforts. Over the past decades, extensive monitoring and data collection have shown significant fluctuations in herd sizes, reflecting both natural population cycles and the direct impact of hunting pressures.

### • Results and discussions

In the early years, larger herd sizes were commonly observed, indicating a robust and healthy wildlife population. However, as hunting activities intensified, a noticeable decline in herd sizes was recorded. This decline raised concerns among conservationists and led to the implementation of stricter hunting regulations and better management practices aimed at sustainable hunting and wildlife conservation.

Recent data suggest a positive trend in the recovery of herd sizes, thanks to these conservation efforts and improved habitat conditions. The introduction of protected areas within the Pădureni hunting grounds has provided safe havens for wildlife to thrive, contributing to the gradual increase in population sizes.

Moreover, the use of modern technology such as GPS tracking and remote sensing has enhanced the ability to monitor herd movements and sizes more accurately, allowing for better-informed management decisions. These technologies have also facilitated research on the impact of environmental changes and human activities on wildlife, leading to more adaptive and effective conservation strategies.



### • Conclusions

In conclusion, the evolution of hunting herd sizes in the Pădureni hunting area of Timiș County highlights the importance of sustainable practices and the need for continuous monitoring and adaptive management to ensure the long-term health and stability of wildlife populations. The ongoing efforts in this region serve as a model for similar conservation initiatives worldwide.

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