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# **Fluctuating Asymmetry in Ungulates**

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Deadline for manuscript submissions:

30 September 2024

## **Message from the Guest Editors**

Dear colleagues,

Fluctuating asymmetry (FA) is defined as nondirectional variation between the left and right sides of a bilateral character, and it may arise as a result of an inability to control development in different ecological contexts, showing an individual's failure to produce a consistent phenotype in a given environment. FA is particularly manifested in physiologically expensive anatomical structures, such as horns and antlers of ungulates, with potential a impact on production, reproduction, and behavioral parameters.

For this Special Issue, we invite review, theoretical, and experimental papers, addressing methodological evaluation and the application of fluctuating asymmetry in the understanding of fitness at the individual and population levels in ungulates, as well as manuscripts supporting the use of fluctuating asymmetry as a tool for detecting environmental factors such as climatic pressures or anthropization.











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### **Editor-in-Chief**

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# Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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