

ICCB 2023



KIGALI RWANDA





ICCB is a global forum for addressing conservation challenges and for presenting new research in conservation science and practice.

With ~1,500 conservation professionals and students in attendance, ICCB is the major networking event for anyone interested in conservation.



Conservation of the endangered mountain gorilla is a national success & constant test

About the International Congress for Conservation Biology

SCB's 31st International Congress for Conservation Biology (ICCB 2023) will take place from July 23-27, 2023 in Kigali, Rwanda at the [Kigali Convention Centre](#).

ICCB is the premier global meeting for conservation scientists and professionals, including researchers, students, agency personnel, environmental educators, practitioners, and other conservation stakeholders. Attendees gather for lively discussions and scientific presentations on the nexus between biodiversity conservation and genetics, ecology, biogeography, anthropology, history, psychology, economics, conservation marketing, religion, and more.

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Abstract Title:

Leave uncut refuge strips on hay meadows to support arthropods

Abstract:

Vast grassland areas are disappearing as a result of abandonment and conversion to agricultural fields or urban areas. Thus, grassland species declined dramatically during and since the last century. The majority of remaining European grasslands are managed, many of them by mowing, which, in general, decreases arthropods' abundance and species richness. We aimed to study the effectiveness of uncut refuge strips and their arrangement in arthropod conservation. We established refuge strips with different width (3 and 9 m) and ratio (10 and 25 %) in semi-natural grasslands using a randomised block design with six replicates per combination. We studied four arthropod groups (grasshoppers, spiders, true bugs and ground beetles), which we sampled two weeks after mowing by pitfall traps and sweep-net. Furthermore, we recorded relative moisture and air temperature. Uncut strips were moister and warmer than the mowed areas. Mowing negatively affected all studied taxa and the effect was stronger on vegetation-dweller arthropods. Furthermore, grasshopper abundances were positively affected by increasing ratio of uncut strips. The negative effect of mowing was stronger in case of wide strips and high ratio of uncut strips on the abundance of vegetation-dwelling true bugs. Our results suggest that leaving uncut refuge strips in hay-meadows strongly supports the conservation of arthropods. Wider strips and higher ratio of strips would presumably support the successful overwintering of arthropods by offering more suitable overwintering sites and more hiding places against vertebrate predators.

Approved Symposium:

No

Conservation & Social Science:

Ecology and behaviour

Drivers of Biodiversity Loss and Ecosystem Degradation and Fragmentations:

Exploitation of natural resources

Conservation Management and Policy / Solutions:

Adaptive management

Ecosystem:

Grassland ecosystem

Are you a graduate student who would like to be considered for the Student Awards Competition?:

No

Author Registration Deadline:

Yes, I am aware and I accept.

Attendance Support:

Yes

Equity, Inclusion & Diversity in Conservation Science:

No