

Reviving Europe's orchard meadows: Researchers call for action

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An orchard in Rutesheim-Perouse, southern Germany. Credit: Klaus Henle. CC-BY4.0

A study spearheaded by researchers at the Helmholtz Center for Environmental Research and Macquarie University has highlighted the important ecological role of traditional orchard meadows, calling for political and public support and incentives for farmers to protect these landscapes.

[The paper](#), published in *Nature Conservation*, reviews the effects of management, habitat and landscape characteristics on the biodiversity of orchard meadows in Central Europe.

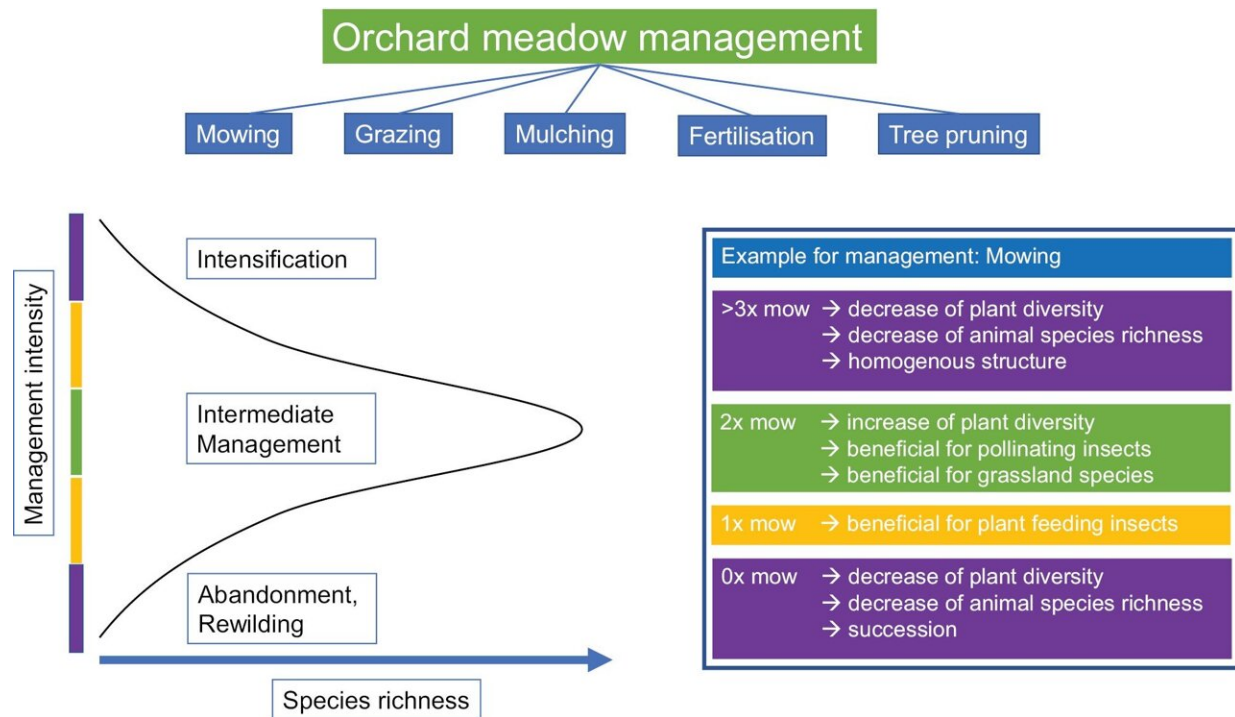
Orchard meadows, characterized by the combination of cultivated grasslands and scattered [fruit trees](#), exhibit high flora and fauna biodiversity. Despite their ecological value, these habitats have been in decline since the mid-19th century due their decreasing economic worth. They now face threats from land abandonment and intensification of agriculture.

The study emphasizes the importance of moderate management intensity, connectivity to neighboring habitats, and the preservation of structural diversity to maintain and enhance the conservation value of orchard meadows.

The findings also advocate for a nuanced understanding of management impacts across taxonomic groups and points out the limitation of available studies on orchard meadows in Central Europe.

Currently loose in definition, the research team advocated for a clear definition of orchard meadows to create a common term in Europe, which would make their assessment and protection more straightforward.

They suggest orchard meadows should be listed in the Habitats Directive of the Council of the European Union and farmers should get incentives for their maintenance. Finally, the research team calls for political and public support to prevent the loss and abandonment of these biodiverse landscapes.



Schematic figure illustrating the effects of management intensification on species richness. Credit: Sattler et al. CC-BY4.0

"One way the public support the protection of these habitats is through consumer behavior, specifically by purchasing local products from orchard meadows. However, it is crucial to subsidize these local products and prioritize them at local markets," says lead author Cornelia Sattler.

"As long as fruits from orchard meadows are treated as 'by-products' in the market, it will be challenging to convince people to buy [local products](#). This change is necessary to close the economic gap between intensified [fruit production](#) and extensive [orchard meadows](#)," she concludes.

More information: Cornelia Sattler et al, Effects of management, habitat and landscape characteristics on biodiversity of orchard meadows in Central Europe: A brief review, *Nature Conservation* (2024). [DOI: 10.3897/natureconservation.55.108688](https://doi.org/10.3897/natureconservation.55.108688)

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