

Maintaining traditional orchards: A biodiversity-friendly farming practice


Authors:

Sabine Ersing, Saorla Kavanagh,
Carolin Vogelsang (carolin.vogelsang@fibl.org)


Keywords:

Biodiversity, grassland, traditional orchards, trees


Geographical location:

Central Europe, Southern Germany, Austria, Switzerland,
Eastern France, Belgium, England, Poland, Slovenia
and occasionally Spain

Traditional orchards are low-density (minimum spacing 5 metres) fruit tree systems that combine fruit production and permanent grassland. Traditional orchards are abandoned due to high labour costs and low economic returns. Knowledge gaps in pruning techniques further increase uncertainty. Farmers face the challenge of balancing cultural and ecological value with economic realities.



Photo credit: Richard Auwärter

Well-managed traditional orchards are biodiversity hotspots, providing habitats for many plant and animal species. Their sparse tree structure and species-rich grassland create ideal conditions for birds, mammals, insects, spiders, and soil organisms. Structurally diverse canopies support natural pest regulation. Permanent grassland increases soil organic matter and reduces erosion. The combined tree grass system improves microclimate regulation and drought resilience. Farms can diversify income through processed products e.g. juice/cider.

What farmers can do?

Develop a multi-year management plan with defined pruning cycles, grassland management and tree replacement strategies. Use locally adapted varieties. Prune mature trees once a year and young trees two or three times a year to support stable crown structure, long-term productivity, and habitat diversity. Avoid mineral fertilisers and synthetic pesticides. Attend a pruning training course. Replant missing or declining trees with locally adapted high-stem varieties to preserve genetic diversity. Monitor tree health annually to check for diseases or structural risks. Cut or graze the orchard floor once or twice per year. Late mowing or grazing will enhance flowering plants and provide more food for pollinators and birds. Apply for available agri-environmental support schemes.

Further Information on farmbionet.eu

This project receives funding from the European Union's Horizon Europe Framework Programme under project No. 101082102. Grant agreement ID: 101182942. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Education,
Research and Innovation SERI



Funded by
the European Union