Agroforestry Systems and Forests Proposals for the ecological and productive restoration of the Patagonian landscape

Report from the 5th International Patagonian Agroforestry Congress (CIAP) and the 2nd Patagonian Forestry Congress (CFP), both held on 4-6 December 2024 in Coyhaique, Región de Aysén, Chile

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Meeting website

The 5th Patagonian Agroforestry Congress and 2nd Patagonian Forestry Congress held in December 2024 in Chile brought together experts from Chile, Argentina and Colombia to exchange cutting-edge scientific, technological, and practical knowledge. Discussions focused on advancing agroforestry systems and forest resources, including native forests and plantations, as their implementation and sustainable use represent an opportunity to promote the development of the Patagonian Region in Chile and Argentina.

Topics and conclusions:

Sustainable Silvopastoral Management: Optimized regeneration through strategic forest management. Long-term forest management evaluations for multipurpose use identified optimal regeneration practices that support sustainable silvopastoral systems.

Agroforestry Systems: Enhanced forage quality and ecosystem services.

Research emphasized the integration of forest and agricultural systems to improve forage quality and ecosystem services

Restoration Strategies: Effective passive and active methods balancing conservation and livestock. Innovative strategies for passive and active ecological restoration of degraded forests highlighted the importance of silvopastoral models and participatory approaches to balance conservation with livestock production.

Sustainability Indicators: Framework for assessing trends and risks in silvopastoral systems. Comprehensive economic, environmental, and social indicators were developed to evaluate sustainability trends and risks associated with silvopastoral systems in forested areas.

Biodiversity Benefits: Silvopastoral systems boost biodiversity and ecosystem services. Assessments of vegetational diversity in silvopastoral systems demonstrated significant benefits for biodiversity conservation and essential ecosystem services in native forests.

Innovative Restoration: Cost-effective reforestation using biological legacies.

The use of biological legacies, such as deadwood, in reforestation efforts to enhance tree survival and growth, proved to offer cost-efficient, nature-based restoration solutions.

Climate Adaptation: Managed impacts of temperature and canopy changes on ecosystems.

Topics such as landscape restoration, carbon capture, soil recovery, and agro-environmental practices are considered, along with the managed impacts of temperature and canopy changes on ecosystems

Community Role: Collaborative ownership and participation improve conservation outcomes. The adoption of collaborative property ownership and active community involvement was shown to enhance public engagement and improve the success of conservation and restoration initiatives.

The Congresses were organized by the Forestry Institute (INFOR), Research Center in Ecosystems of Patagonia (CIEP), Municipality of Coyhaique, and the National Forestry Corporation (CONAF). In addition, the events were supported by the Regional Government of Aysén, Institute of Agricultural Development (INDAP), Foundation for Agricultural Innovation (FIA), Agricultural Research Institute (INIA), CMPC, University of Aysén (UAYSEN), Bicentennial High School of Patagonia, Reforestemos Foundation and the International Union of Forest Research Organizations (IUFRO).

Outlook

IUFRO Division 8 Forest Environment Conference: "Forests as hubs of biodiversity and ecosystem services in the Anthropocene" in Patagonia, Chile, on 24-27 March 2026.



Presentation: IUFRO by Dr. Mónica Toro Manríquez.Credit: CIEP