

Silvopastoralism, local ecological knowledge and forest trajectories in a Category V- type management area

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Abstract

Preserving landscape heritage elements and indigenous and local knowledge is an increasingly popular approach in conservation. We focus on a globally very contentious practice, silvopastoral livestock raising, which along with other peasant practices, is slated for elimination according to projected Chilean conservation policy. We used ecological surveys to ask how central Chilean semi-arid woodlands in the locality of Alhué have responded to past human livelihoods practices, including silvopastoralism. Using interviews, we examined local ecological knowledge and uses of forest plants. We also conducted surveys on current agricultural practices. Many residents maintain a diversified, smallholder subsistence agricultural strategy. Residents identified 113 plants with 73 uses. They also demonstrated a good knowledge of woodland regulations. We found that woodlands recover well from historical disturbances over 50-100 year time scales. In fact, the presence of cattle year-round in the woodlands was associated with greater tree regeneration. We find that despite the conservation discourse, there is no evidence of a degradation problem, and we hypothesize based on our findings that eradicating peasants' silvopastoralism and other practices could increase degradation. We recommend that the Conservation Landscape programme be used to save key traditional practices, which should be studied further to determine optimal management. We show how conflicts and misalignments within and between ILK, data, and environmental discourse can signal complex socio-ecological issues where a closer look at how the evidence fits together is necessary.

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