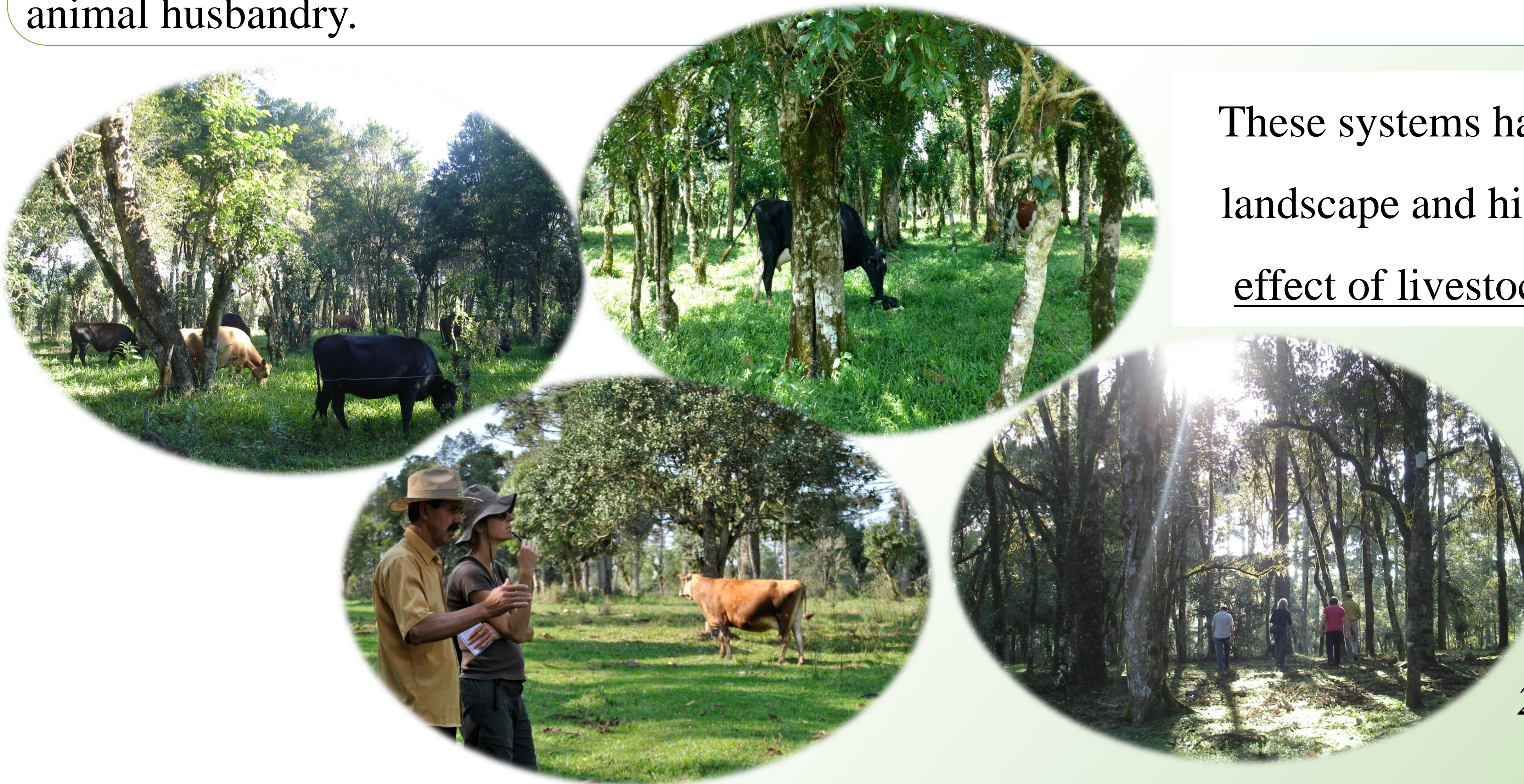


Conservation by use: the management of the Araucarian forest in the *caívas* areas in the Southern Brazil

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Part of forest remnants in Southern Brazil are used as traditional agroforestry systems, denominated *caívas*. In these areas, the arboreal canopy maintenance of the Araucarian Forest is combined with the extraction of erva mate (*Ilex paraguariensis* L.) and animal husbandry.



These systems have existed for over a century being an cultural, landscape and historical references for the region. However, the effect of livestock on forest regeneration is poorly understood.

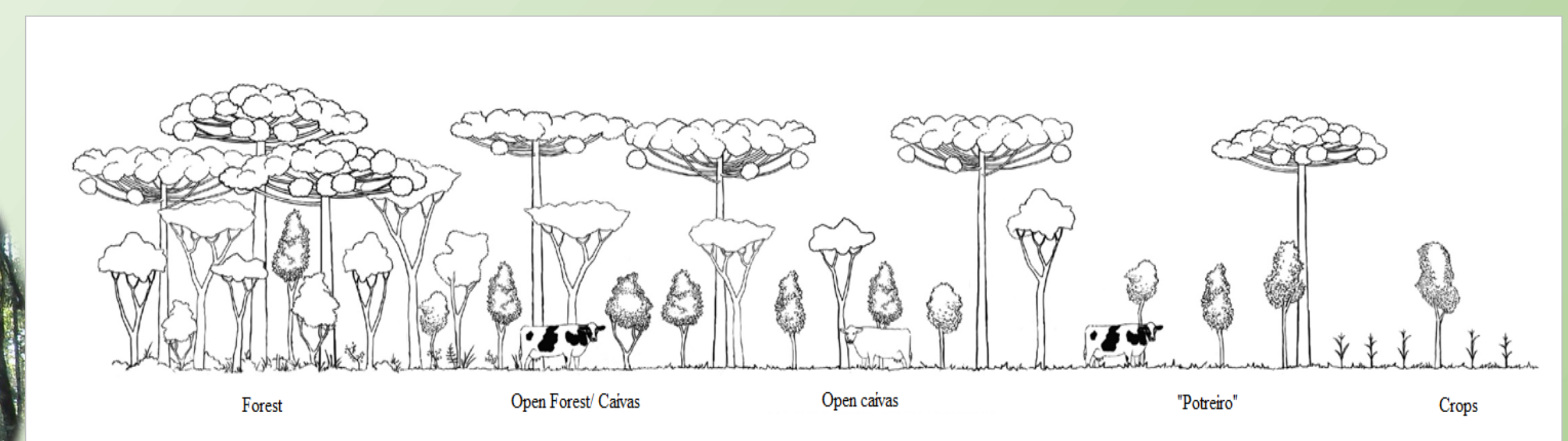


Figure 1 Graphic representation of a *caíva* (Marques, 2014)

What is the potential for maintaining forest biodiversity of caívas, despite the presence of grazing animals almost a century ago? In order to contribute to a better understanding of the effect of grazing on the regeneration of the Araucaria Forest, it was carried out an experiment in eight different *caívas* in the North Plateau region of Santa Catarina State throughout the years 2014 to 2017 .



Figure 2 - Evaluation in regeneration monitoring plots in caívas (every six months, for two years)

What did we find out? Regardless of the management used in the pasture, the regeneration of the tree species is dynamic, present and continuous process in the evaluated *caívas*. There are abundance of native species in regeneration, including many typical advanced stages species of Araucarian Forest. There were 49 tree species typical of the Araucaria Forest and more than 4000 regenerating individuals / ha, in the average of the two years of evaluation.

The results have confirmed that these systems present high resilience with respect to biodiversity conservation, despite its use with animal grazing for a long period.