

Multistakeholder perspectives on ecosystem services of cultural oak landscapes: a case study in Northern Europe

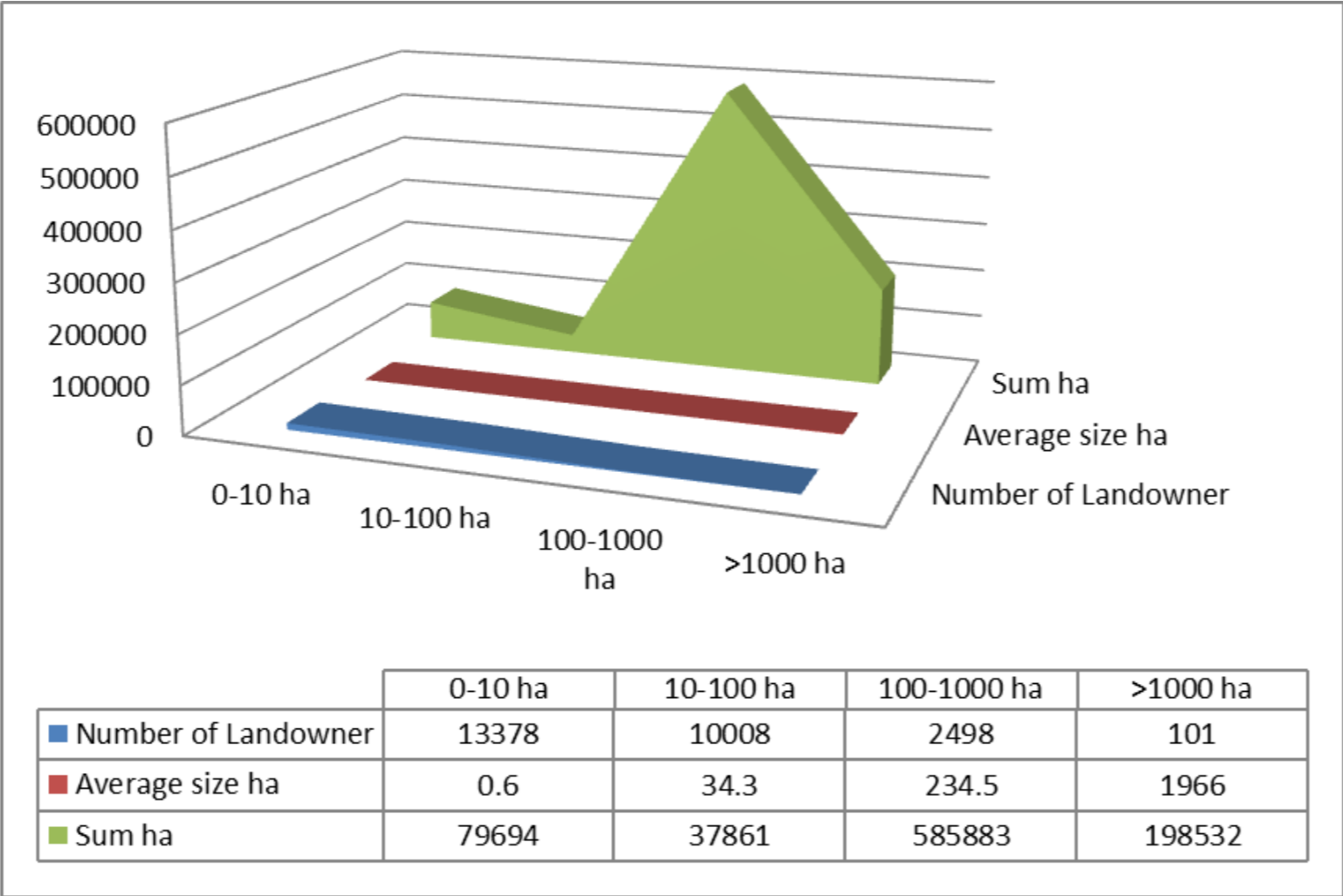
Pablo Garrido, Marine Elbakidze, Per Angelstam, Mickael Angelstam, Kjell Andersson

Swedish University of Agricultural Sciences, Faculty of Forest Sciences,
School for Forest Management, P.O. Box 43, SE-739 21 Skinnskatteberg, Sweden.



Introduction

Agroforestry as mixed systems of agriculture in combination with trees and grasslands, have formed key elements of European landscapes throughout historical times. These cultural landscapes are still examples of long term perpetuation of traditional activities and practices, and form integrated socio-ecological systems. Their importance has thus been recognized and promoted at international level. Today intense and rapid social and economic changes in many European countries exert a significant impact on cultural landscapes as sustainable multi-functional systems. While the favoured agricultural landscape perception is characterized by a predominance of provisioning ecosystem services, valuable delivered public goods without market prices are usually hindered. To cope with this imbalance holistic analyses are needed in order to understand multi-purpose interests.

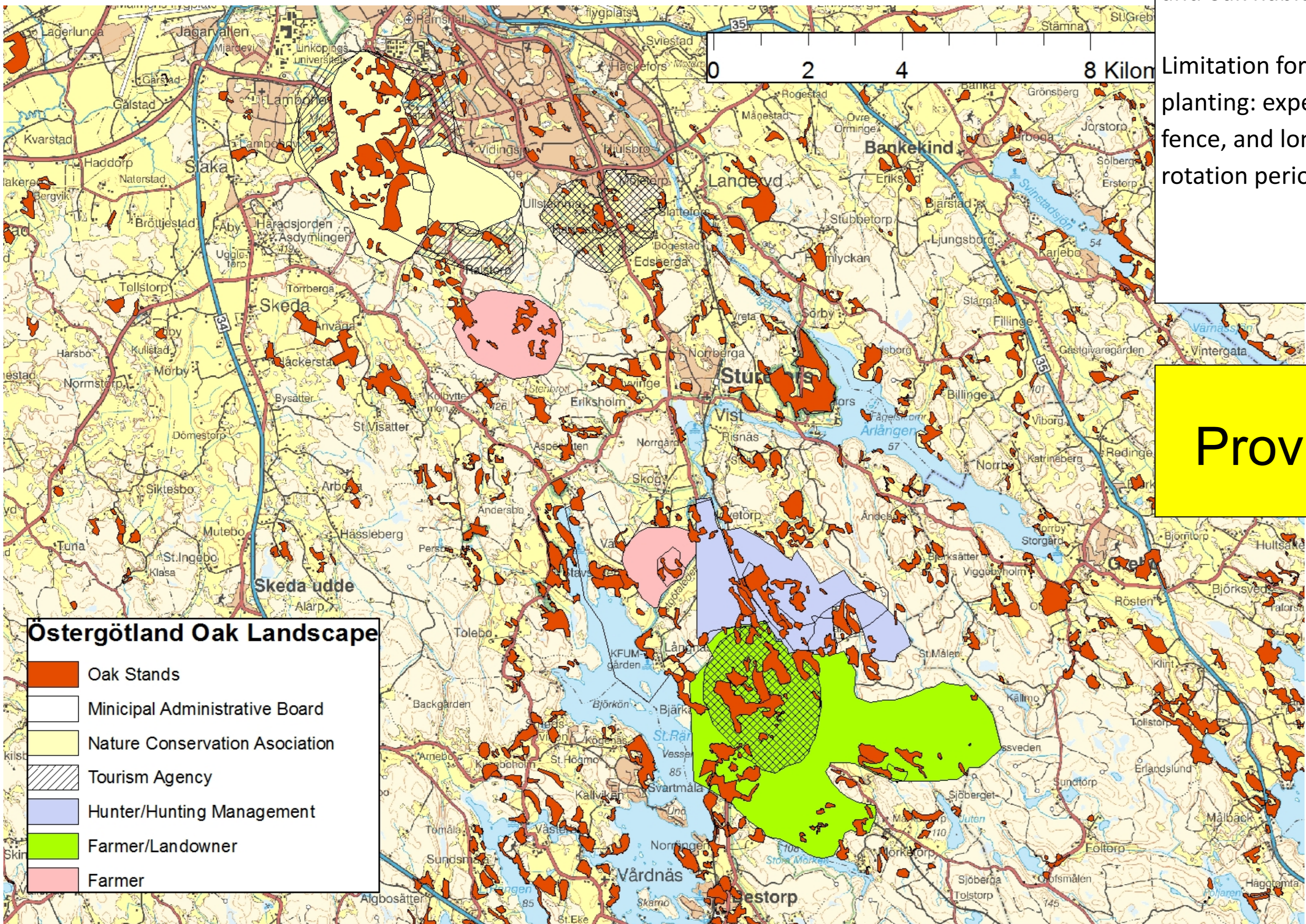
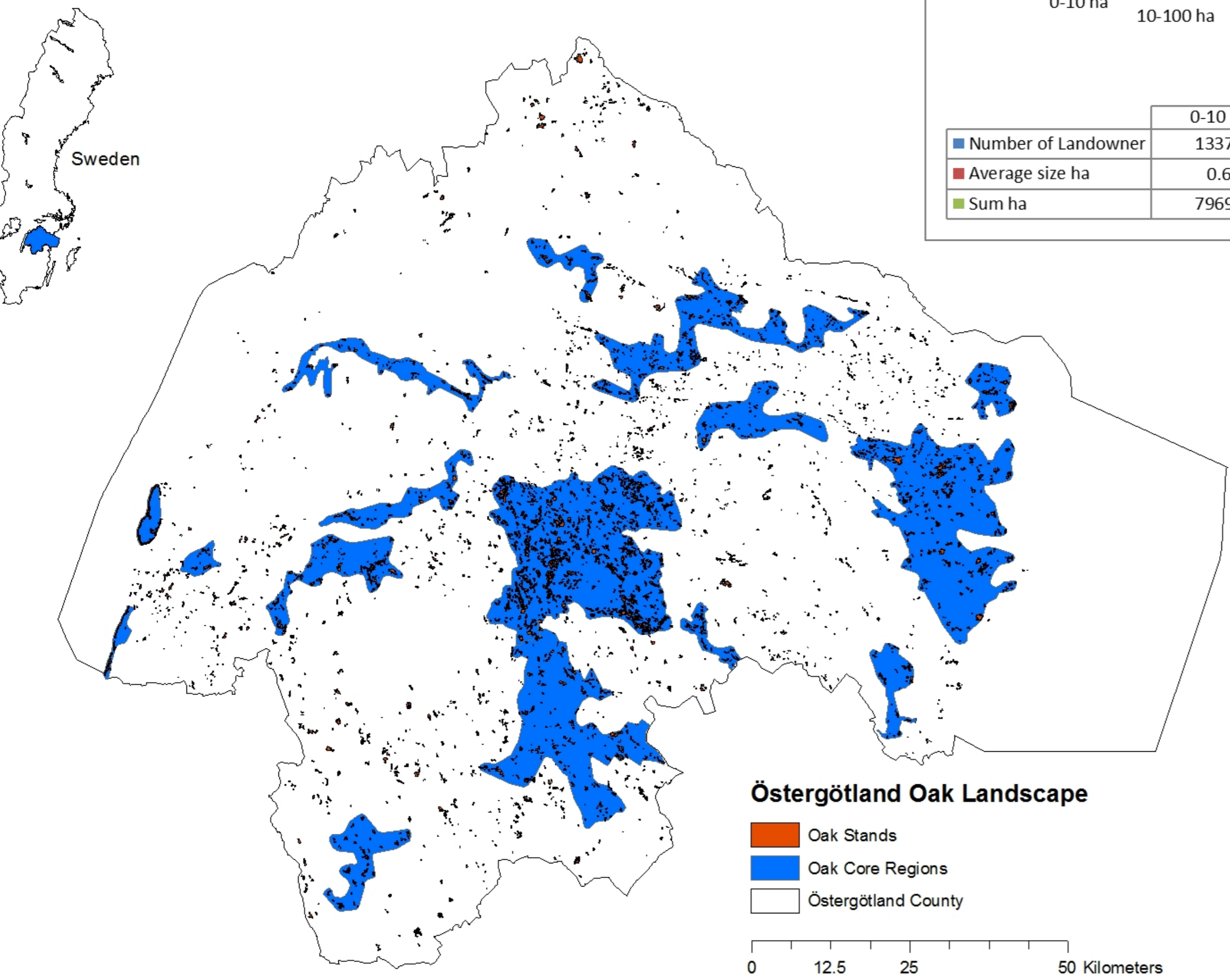


Aim of case Study

Swedish policy states that “The value of cultivated landscapes shall be protected, while the biodiversity and the cultural heritage values preserved and strengthened”. Focusing on the largest area of cultural oak landscapes in Östergötland (Sweden) we identify and analyze the diversity of delivered ES as perceived by different stakeholder categories at different levels.



Forest Companies	Farmers	Tourist Companies	Local/Regional Adm. Board	Environmental NGOs
Economic importance: Furniture, and flooring, outdoor terracing	Production: Milk, meat, crops, grass Recreation	Recreational values related with open landscape Natural values (biodiversity)	Biodiversity linked to traditional use Landscape beauty (recreation)	Biodiversity connected to oaks and oak habitats Landscape beauty
Biological importance, species related to oak and oak habitat	Biodiversity Cultural/Historical values	Educational values Cultural values	Cultural and Historical values Wood and cattle production	Recreational value (easy accessibility)
Limitation for planting: expensive fence, and long rotation period				



Results and Discussion

We found a bias towards provisioning ecosystem services by landowners, farmers and cattle holders, whereas environmental NGOs, nature conservation organizations, administrative boards and tourist companies highlighted the importance of biological values (regulating and supporting ES), and cultural services in terms of recreational values and landscape beauty respectively. The ecosystem services concept is a useful tool to communicate multiple perceptions on landscape use. Additionally, holistic analyses such as systems thinking and causal loop diagramming techniques could be an important tool in order to identify and analyze complex realities at different levels among stakeholder categories. To conclude, we stress the need for holistic analyses as a base for a process towards multi-purpose landscape management.