



Changing farming landscapes in the Mediterranean: the Portofino and Lesvos cases

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Background

The Mediterranean landscape is a hotspot for biodiversity. Its long history of human habitation has modified and enriched this landscape. Over the past decades the landscape has been changing rapidly. A population decline resulted in changing land use. Abandonment of marginal lands lead to colonization by shrubs and tree species. Labour intensive practices such as maintenance of terraces and dry stone walls or livestock herding and transhumance were abandoned.

Objective

We assess the landscape changes that took place in two areas: in Portofino, a typical Mediterranean landscape on the Italian Riviera, and Lesvos, a Greek island near the Turkish coast. The objective was to assess what the role of man has been in the shaping of this landscape, and what future management should be to maintain its specific landscape and biodiversity values.

Introduction

The landscapes of two areas analysed are exemplary for the Mediterranean, and show all major processes that occur in this region. Portofino is an iconic landscape on a peninsula at the Italian Riviera. Farm land decreased from 577 ha in 1936 to 50 ha today, giving way to macchia.

Lesvos is a rural island, depending on farming mostly. Lesvos is rapidly changing as a result of European agricultural policy and emerging tourism on the island.

A long history of land management has resulted in a high biodiversity. The survey in both case study areas included farmer interviews, field work, inventories and map analysis.

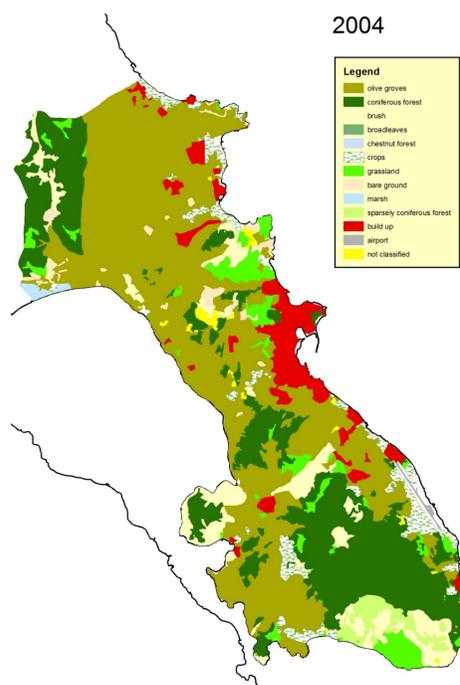


Figure 1. Land cover at Lesvos



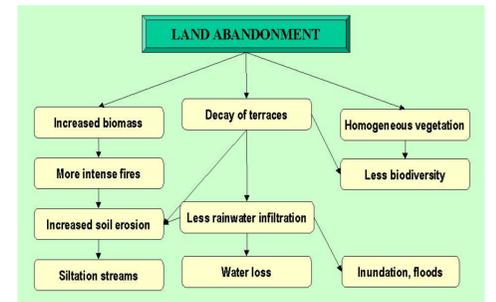
Figure 2. Few small farms in Portofino are still continuing, but almost at garden scale ...



Figure 3. Farming terraces on Lesvos are still maintained. Price for olive oil is too low, which leads to a gradual decline of olive yards.



The landscapes of Portofino.



Land abandonment is a threat for different ecosystem services.

Results

Land abandonment and migration changed the landscapes. Features like farming terraces, olive yards, and upland grasslands have been decreasing over the past 50 years. This results in a declining biodiversity and loss of traditional landscapes, typical for the Mediterranean region.

In Portofino terraces are not maintained, falling apart and destroyed by wildlife. At Lesvos maintenance still takes place, but subsidies for olive oil have been abolished. An aging population and urban migration at some point will lead to further decline of farming. Autonomous processes in land use change today lead to landscape degradation. Considering the important values attributed to these landscapes, new strategies are required. New functions for traditional landscapes, to maintain landscape identity and biodiversity.



Olive trees at Lesvos cut for firewood

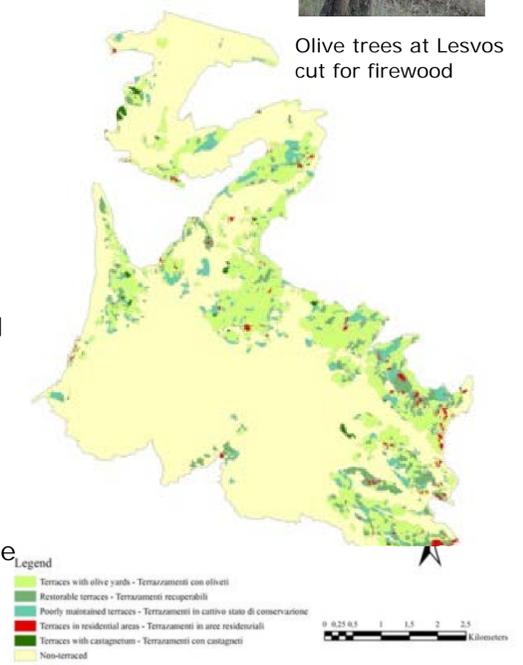


Figure 4. Farming terraces in different states of maintenance, from well maintained to almost collapsing

Conclusions

- Lesvos farming is in decline, but forms still a mainstay for the households.
- Portofino is beyond the process of marginalization.
- Marginalization is a process ending with new functions and landscape values as well
- Without guidance important cultural values, biodiversity and the landscape identity may be lost due to 'new nature'.

Acknowledgements

- B. PEDROLI, S. TAGLIASACCHI, T. VAN DER SLUIS & W. VOS, 2013. *Ecologia del paesaggio del Monte di Portofino / Landscape Ecology of the Monte di Portofino. (bilingual Italian-English edition) [incl. Landscape-ecological map 1: 10,000]*, FERGUS Foundation, Wageningen.

