



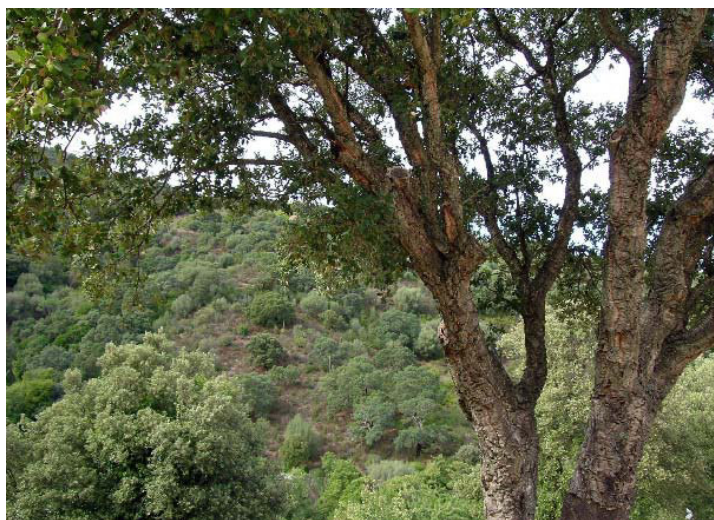
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Tipiditappi



*Sughero d'albero fatto a pezzetti,
tipi di tappi , quelli che vuoi.
Tagliali lunghi, tagliali stretti,
tipi di tappi, fatti da noi.
Taglialo bene, taglialo tondo,
tipi di tappi, quanti ne vuoi.
Tappi di sughero per tutto il mondo,
tipi di tappi fatti da noi.*
(Cecchi-Tognolini, Filastrocche e Canzoni)

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POSTER

Session 3: *Multifunctionality of cork oak systems, biodiversity, climate change mitigation and landscape/ecosystem services*



LOCAL LANDSCAPE DYNAMICS IN A TRADITIONAL CORK- OAK AGRO-FOREST SYSTEM (SARDINIA)

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The *Alta Gallura* region contributed to the development of Italian cork industry that since the nineteenth century has driven the improvement of a multi-functional model based on the breeding of beef cattle into the cork oak forests.

The study case is a cork-oak agro-forest farm extended to 212 hectares, with a quantity of livestock close to 0.1 LU ha⁻¹. It were collected data from the farm registry (business records of the last 70 years) and by photo-interpretation of images related to 1955 (GAI), 1977 (CGR), 2006 (Terra Italy) and 2013 (AGEA). The current landscape types are:

a) ICOF (Intensive cork oak forest: 500÷600 trees ha⁻¹), in 2013 extended for 121 ha (57% of the farm surface). ICOF represents the major source of income by the cork production (5.8÷9.6 q ha⁻¹ per year). Until 1950, the invasive species (holm oak and arbutus overall) was removed and used for coal production.

b) SAV (Savanna: 50÷100 trees ha⁻¹), for 22 ha (10% of the area). It originated in the fifties because of the oak thinning aimed to the durum wheat cultivation, now disused.

c) MEDm (Mediterranean maquis) extended for 26 ha (12% of thse area). It is a transitional community vegetation formed following the 1983 wildfire and evolving to pre-forest shrubs with holm oaks.

e) HOC (Holm oak coppice), with 12 ha (6% of the area). It is another transitional vegetation community developed following the 1983 wildfire, evolving at long-term to the holm oak high forest.

f) PAS. Pastures, extended for 31 ha (15% of the area), It is localized in the valley floor, where are the traditional farm buildings (in *Gallura* named *stazzo*). Finally, the 49% of the surfaces has preserved the 1954. The major changes regard recolonization areas (+10%, taken from the ICOF) and pastures (+9%, taken from SAV). The evaluation at local level highlighted the richness of the landscape mosaic and its changes in space and time.,

Keywords: *Quercus suber*, rural landscape, land use changes, GIS, Gallura.