Master-Thesis: "Detecting dynamic changes in vegetation patterns in areas of semi-natural Vegetation in southern Chile."

Objective: The objective of the Master-Thesis is to classify a series of historical aereal photographes due to vegetation cover and to analyse temporal changes in vegetation patterns. These information should be used to identify areas of progressive degradation of forest to shrubland, areas of forest succession due to abandonment, and aereas with a dynamic conversion between shrubland and human-induced types of land cover, in particular pastures.

Background: The study area is located in southern Chile, close to the city of Valdivia. Forests in this area have been used by the local population particularly for animal grazing and firewood cutting. That has lead to a vegetation mosaic of degraded and successional forests, shrublands and pastures (see picture). The actual vegetation is recently studied within a PhD-project.

Tasks:

- classification of the vegetation types from aereal photographs
- implementation of additional suitable information (e.g. sattelite images)
- statistical analysis of vegetation changes in time and space

Prerequisites:
Knowledge of ArcGIS

Contact persons:
Katja Seis (Institute of Silviculture): katja.seis@waldbau.uni-freiburg.de
C.P. Gross (Department of Remote Sensing and Landscape Information Systems, FeLis): claus-peter.gross@felis.uni-freiburg.de