

Conservation of dry grasslands on the edge of Mediterranean basin – a big challenge after changed socio-economic trends



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## Introduction

- Kraški rob a part of the North Adriatic karst, the northeastern most branch of Dinaric montane range.
- The position of the North Adriatic karst is on the edge of the Mediterranean basin.
- Primary vegetation deciduous forest, from *Carpinus orientalis*, *Quercus pubescens*, *Ostrya carpinifolia* to beechdominated forests

Severe deforestation, starting in Roman times - reaching the peak in 17th and 18th Century erosion.

The area still considered as traditionally scarce populated open landscape.



# afforestation process after abandonment.

biodiversity of those species-rich grasslands is declining, especially beta and gamma diversity



#### Methods – the area

- The LIFE-Nature granted project is covering the area of about 7000 ha
- It represent one of the most valuable karst areas within the North Adriaric karst
- Includes also the "karst edge", southern border of the limestone geological bedrock



## Methods - mapping

- PHYSIS typology, based on Palearctic classification (Devilliers & Devilliers, 1997).
- Some types, not present in typology were added.
- Due to various transitional stages between abandoned fields, meadows, pastures, scrub and forest, also "hybrids" (transitional forms or mosaic) between 2 or even 3 habitat types were used.
- Data were elaborated in GIS, using Arc.View 3.2.



#### Results

175 HT, including all the transitions. 17 aggregate habitat types on the map



Serratula lycopifolia











- Desertification in pure Mediterranean regions, not here!
- Precipitation above 1000 mm/year and temperature more favorable.
- Quick spontaneous afforestation after abandonment





- Changed socio-economic trends in the area (abandonment of agriculture due to nearby big cities with industry and tourism)
- Some villages are almost abandoned:
- old population or
- no interest nor knowledge about managing the grasslands.





LIFE – contract with nearby horse stud farm Lipica (Lipizzaners, founded in 1580)



# Mowing and transporting more than 65 tons of hay from the research area to the Lipica stud farm.

 Planned to be a long-term agreement with beneficial effect to grassland biodiversity