The terraced area of Ulrichsberg - Upper Austria

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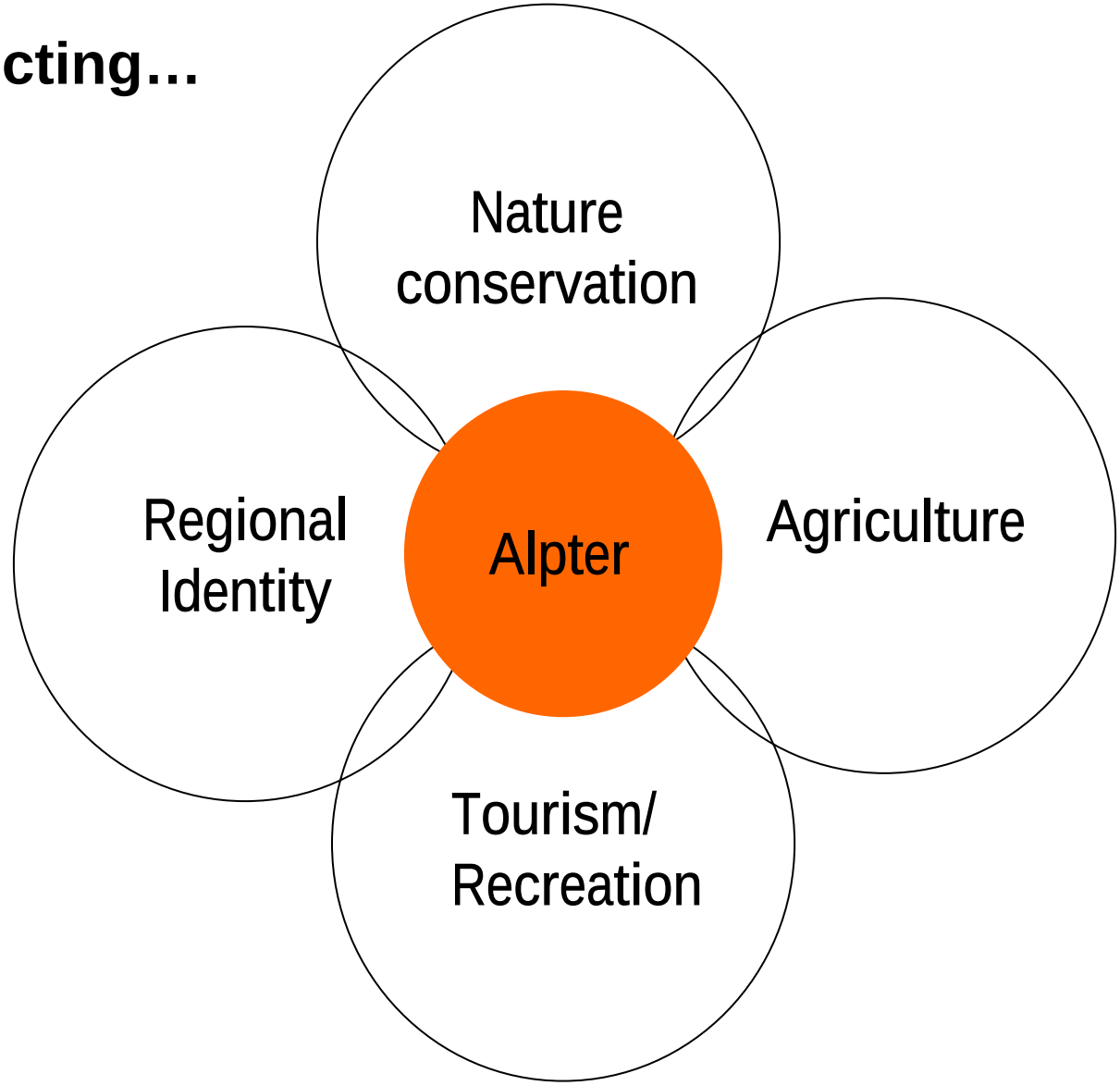
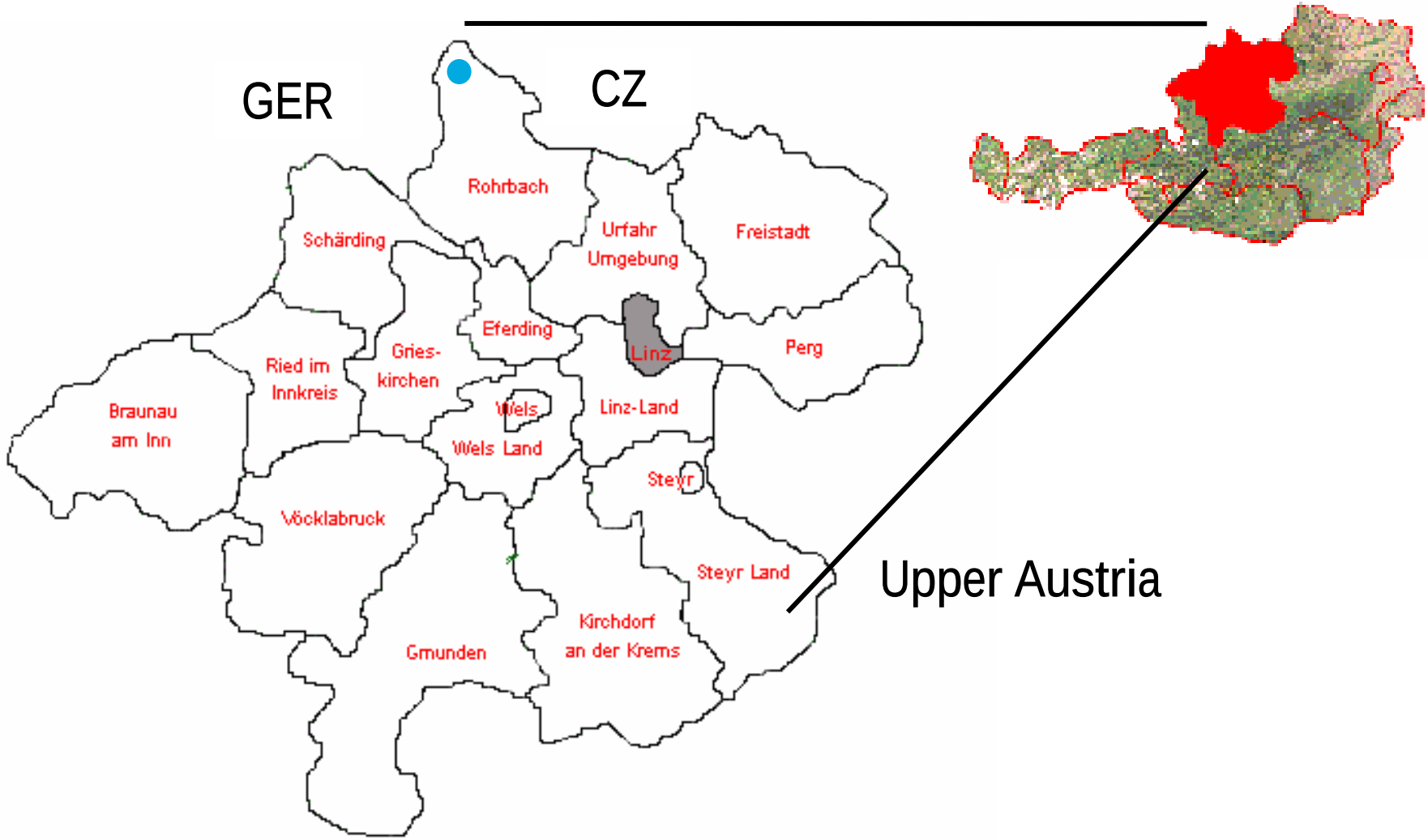
Connecting…


Nature conservation
Regional Identity
Alpter
Agriculture
Tourism/ Recreation


GER
CZ
Rohrbach
Schärding
Urfahr Umgebung
Freistadt
Eferding
Linz
Perg
Ried im Innkreis
Gries-kirchen
Braunau am Inn
Wels
Wels Land
Linz-Land
Steyr
Vöcklabruck
Steyr Land
Kirchdorf an der Krems
Gmunden
Upper Austria

The region

Types of landscapes

- Wood dominated hills (f.ex. Bohemian Forest)
- Slopes and valleys with meadows and fields

Geology and climate

Geology: granite, gneiss
Böhmische Masse: very high
geological age – long time of decomposition

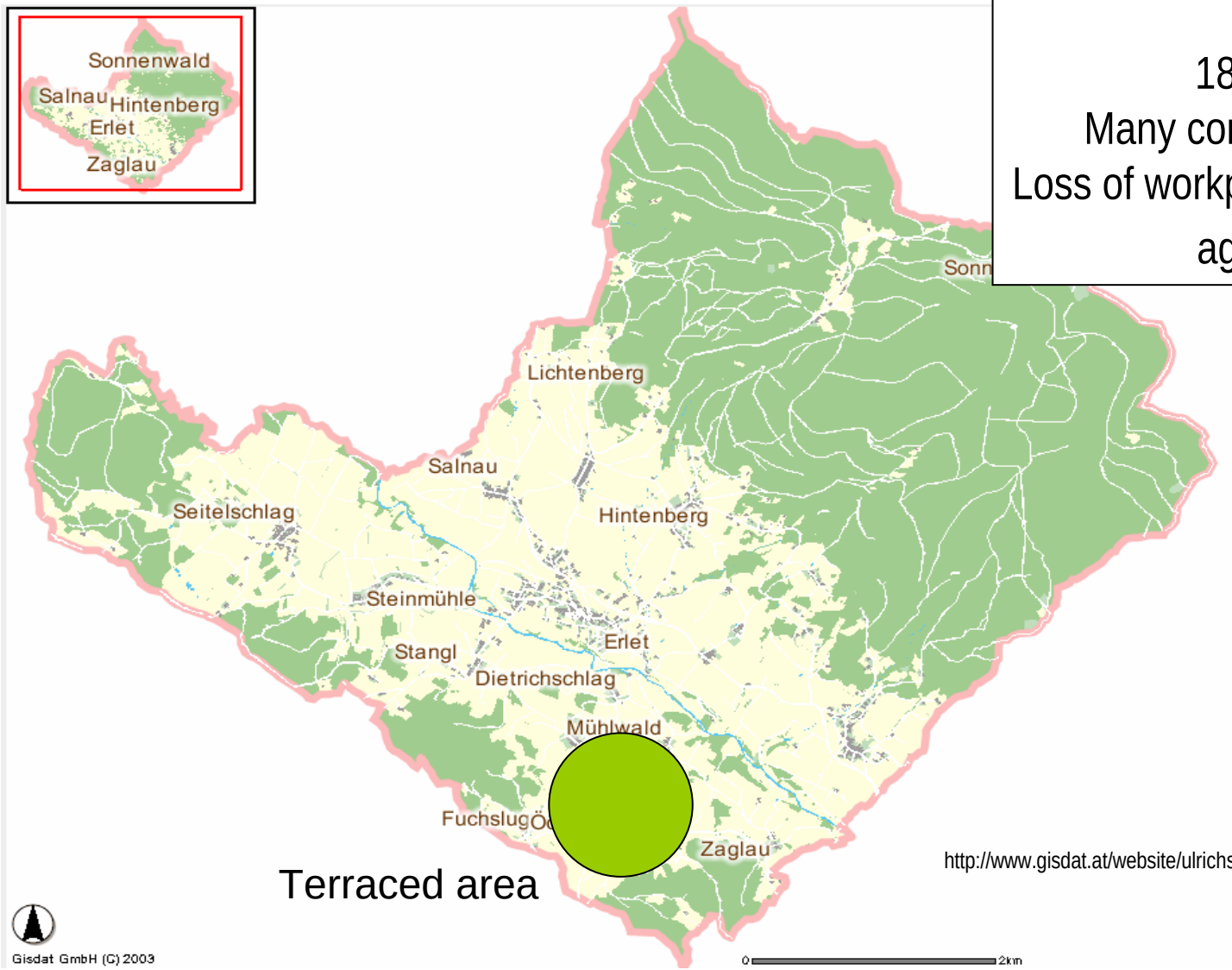
Precipitation: 1000 mm/yr (50% during growing season)

Temperature: average 7°C

The community of Ulrichsberg

The community of Ulrichsberg

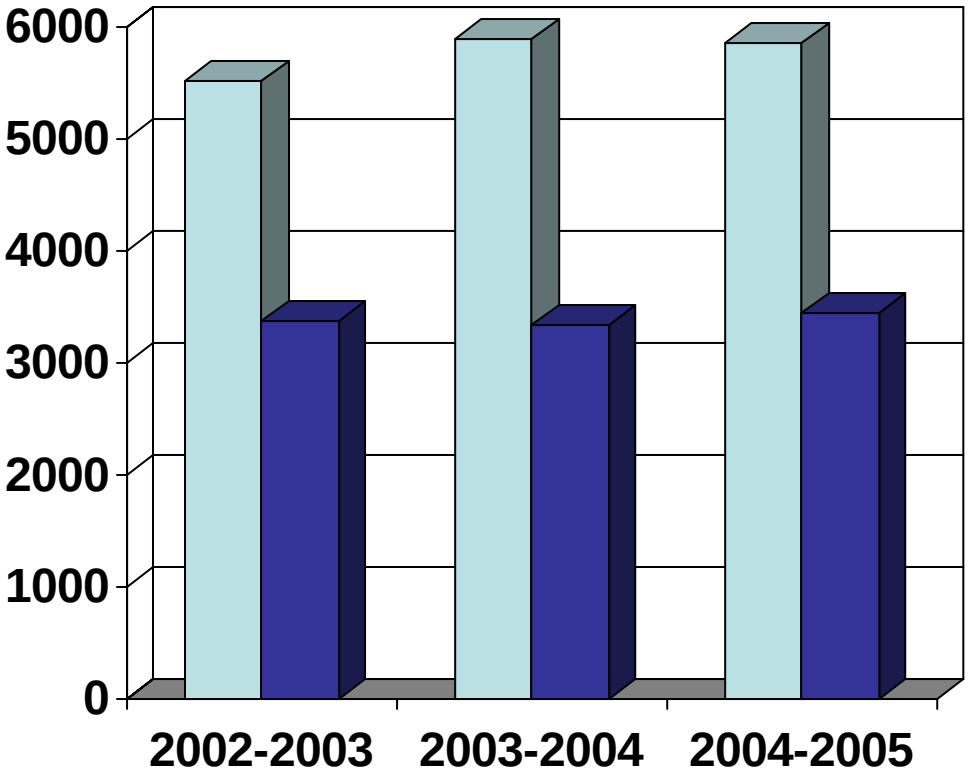
~3,100 Inhabitants
57 km²
18 villages
Many commuters
Loss of workplaces in agriculture



http://www.gisdat.at/website/ulrichsberg4161/viewer.htm

The community of Ulrichsberg

Tourism arrivals



Length of stay:

Winter: 3.9-4.2 day
Summer: 3.7-4.1 days

Overnight stays: about 40,000 per year

The terraced area

Remnants of the former traditional cultural landscape of the region

Diversity of terraces

Meadow slope with perennials

Meadow slope with perennials, some trees and bushes

Dry stone wall with herbaceous plants

Slopes on cairns of picked up rocks

Diversity of terraces

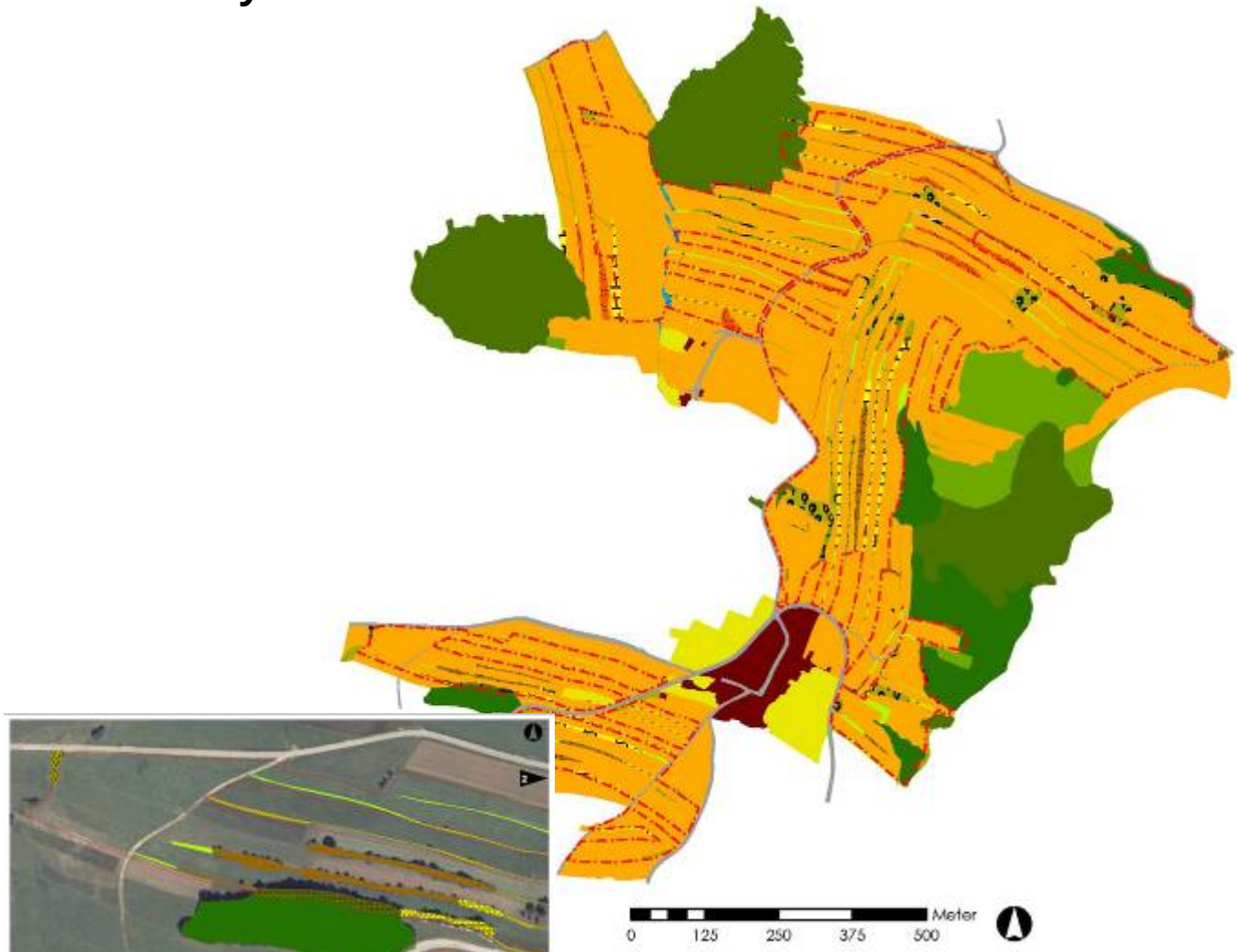
Slopes on cairns of picked up big rocks

Earth slope with hedge and herbaceous plants

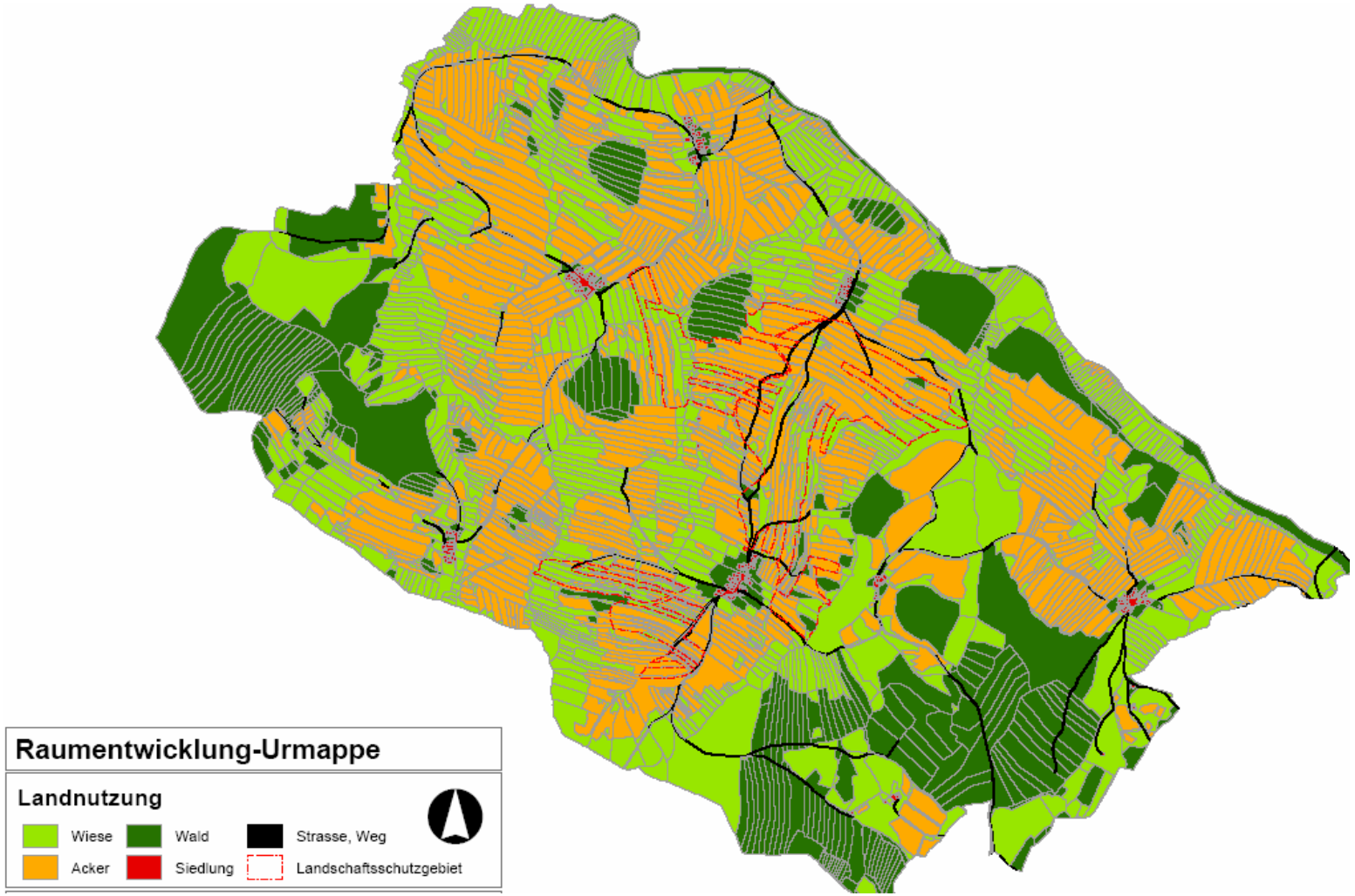
Earth slope with trees but poor in biodiversity

Farmers‘ wood on former terraced fields

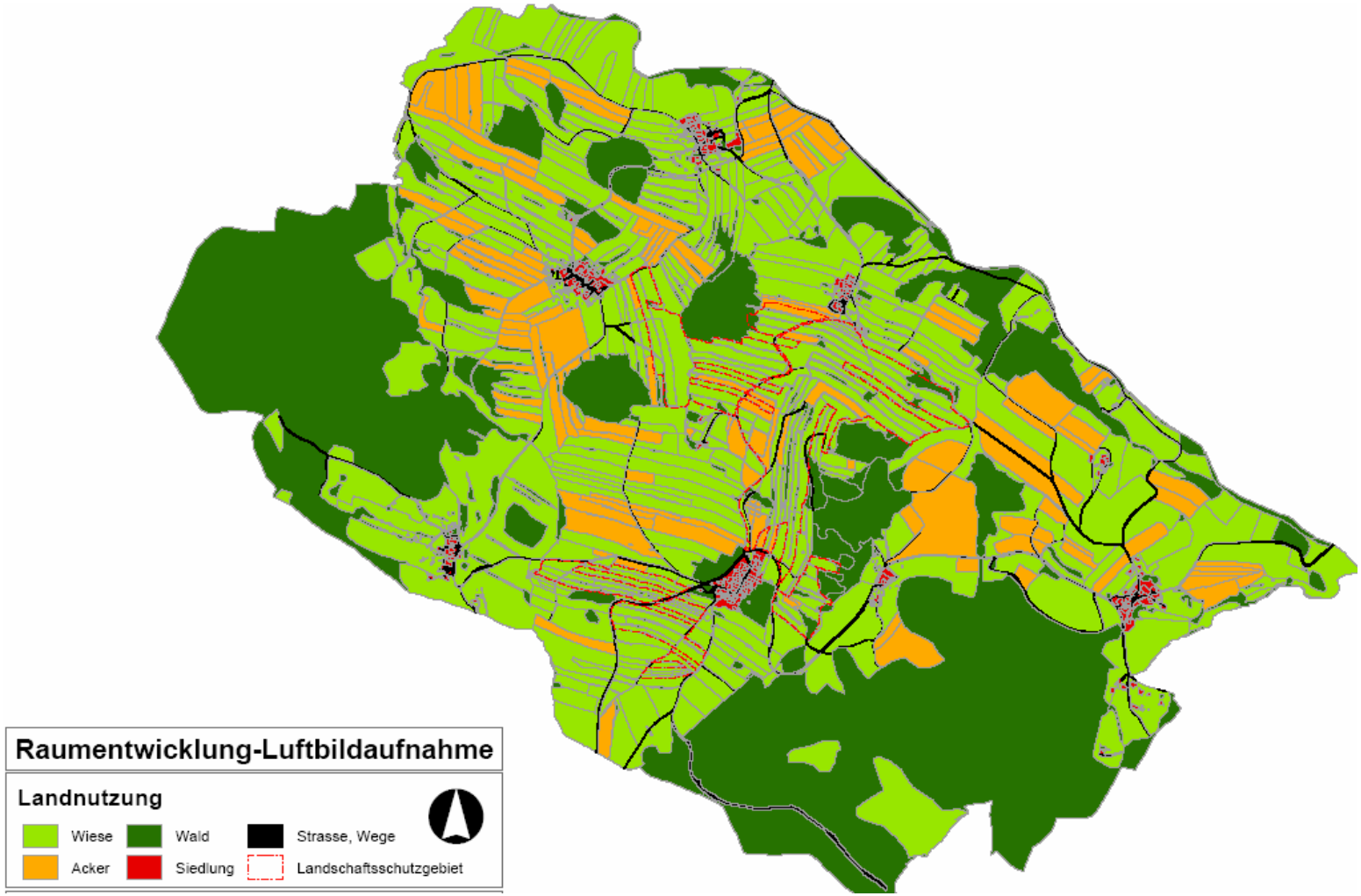
Diversity of terraces



Historical analyses - study area in 1828



Historical analyses - study area in 2003



Historical analyses

Comparison of land use 1828 - 2003; Katastralgemeinde Ödenkirchen: 706 ha

	1828	2003	Change
Meadows and pastures	37.8%	46.0%	+8.2%
Agricultural fields	36.4%	12.3%	-24.1%
Forest	23.9%	38.3%	+14.4%
Streets, settlements	1.9%	3.4%	+1.5%
Sum	100.0%	100.0%	

The terraced area

Difficulties in agricultural production because of …

- not optimal natural conditions: climate, soil
- high fragmentation: a lot of small parcels (length: 150-500m; width: 15-30m; field sizes < 1ha on average); stripe structure of landscape because of historical land development: spread of farmer's plots throughout the area ("Gewannflur")

  ➔ higher efforts to manage such areas, particularly the slopes

- a lot of border lines (up to 1/5 per plot)

  ➔ loss of production area of about 14% and loss of harvest up to 20% on average for each field

- Global developments in agriculture

➔ many slopes have been destroyed to enlarge the field plots

➔ fields have been transformed into meadows

➔ terraces have been afforested

The terraced area

BUT the terraced area...

- is of high value for nature protection:
  many different habitats in the small area (stone walls, hedges with different kinds of vegetation, meadows, small-scaled forests, orchards, streams etc.)
  different stages of "hedge management"
  different kinds of animals: more than 300 species of butterflies

  ➔ In 2002 declared as a nature (landscape) conservation area
  (19 farmers, area size ~50 ha; financial support for farmers)

- is characteristic for the regional landscape and important for the regional identity

- … and for tourism? Can terraced areas attract tourism?

Tourism – a strategy to maintain terraced areas through additional income for farmers?

Assessing landscape preferences of potential visitors using a choice model presenting 128 landscape scenarios (different degrees of intensified agriculture, afforesting, tourism use, nature conservation …)

Attributes included in each scenario:

(1) Amount of terraces (4 levels)

(2) Amount of vegetation on slopes (4 Levels)

(3) Presence of cows/pastures and orchards (4 Levels)

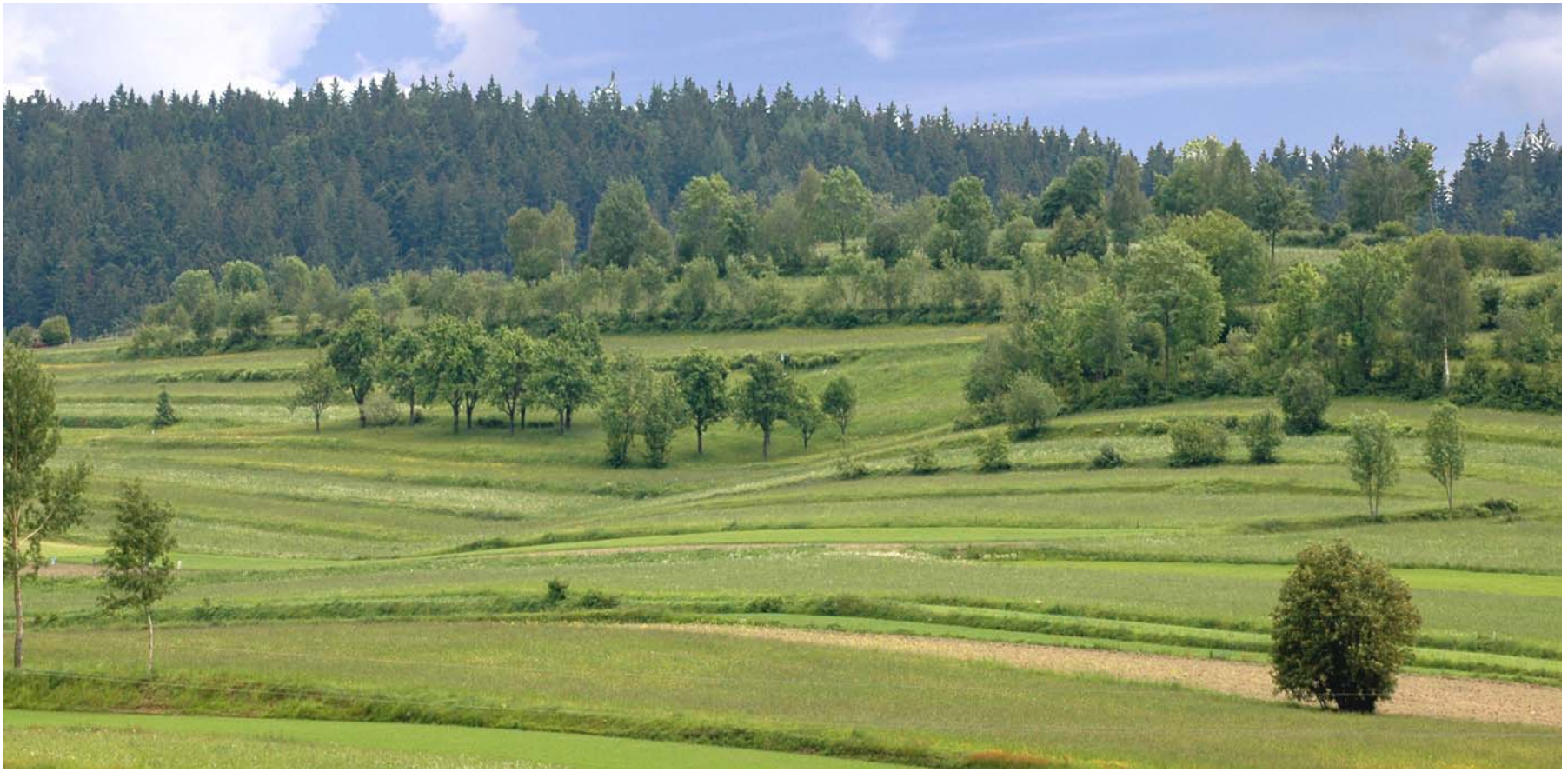
(4) Kinds of area uses – meadows, agriculture, forest (4 Levels)

(5) Signs of current agricultural use - tractors, hay balls (4 Levels)

(6) Tourism: number of visitors and tourism infrastructure: educational trail, restaurant (8 levels)

N=416, asked in Vienna

Choice model on landscape preferences – original image



Choice model on landscape preferences

„Please choose the most and the least preferred landscape”

Choice model on landscape preferences

Results:

The more terraces, the more preferred, and the more vegetation on slopes, the more preferred

➔ This terraced area is not only important for nature conservation, but also for summer tourism!

Thank you!