

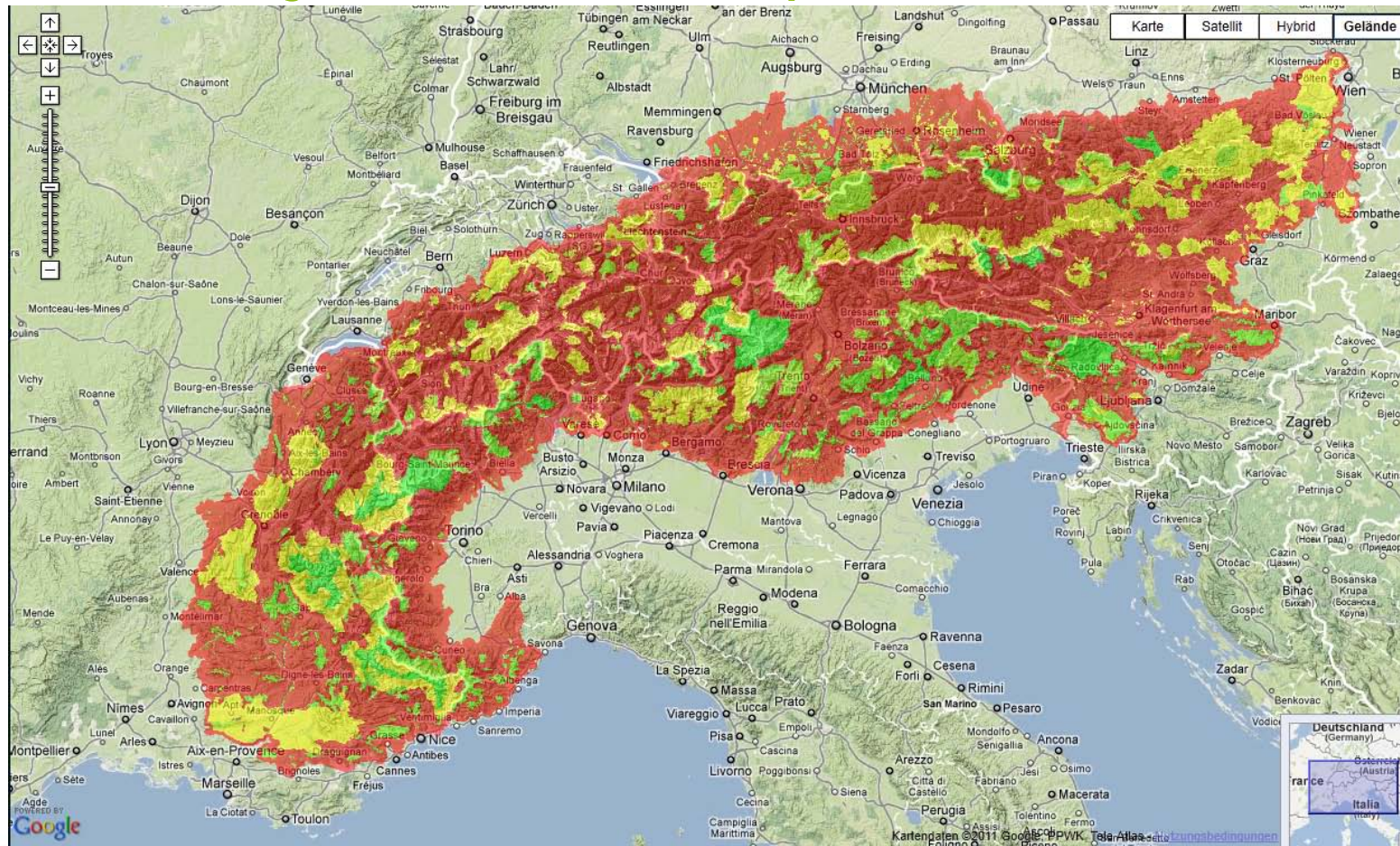
Econnect - Restoring the web of Life



The spatial dimension of connectivity

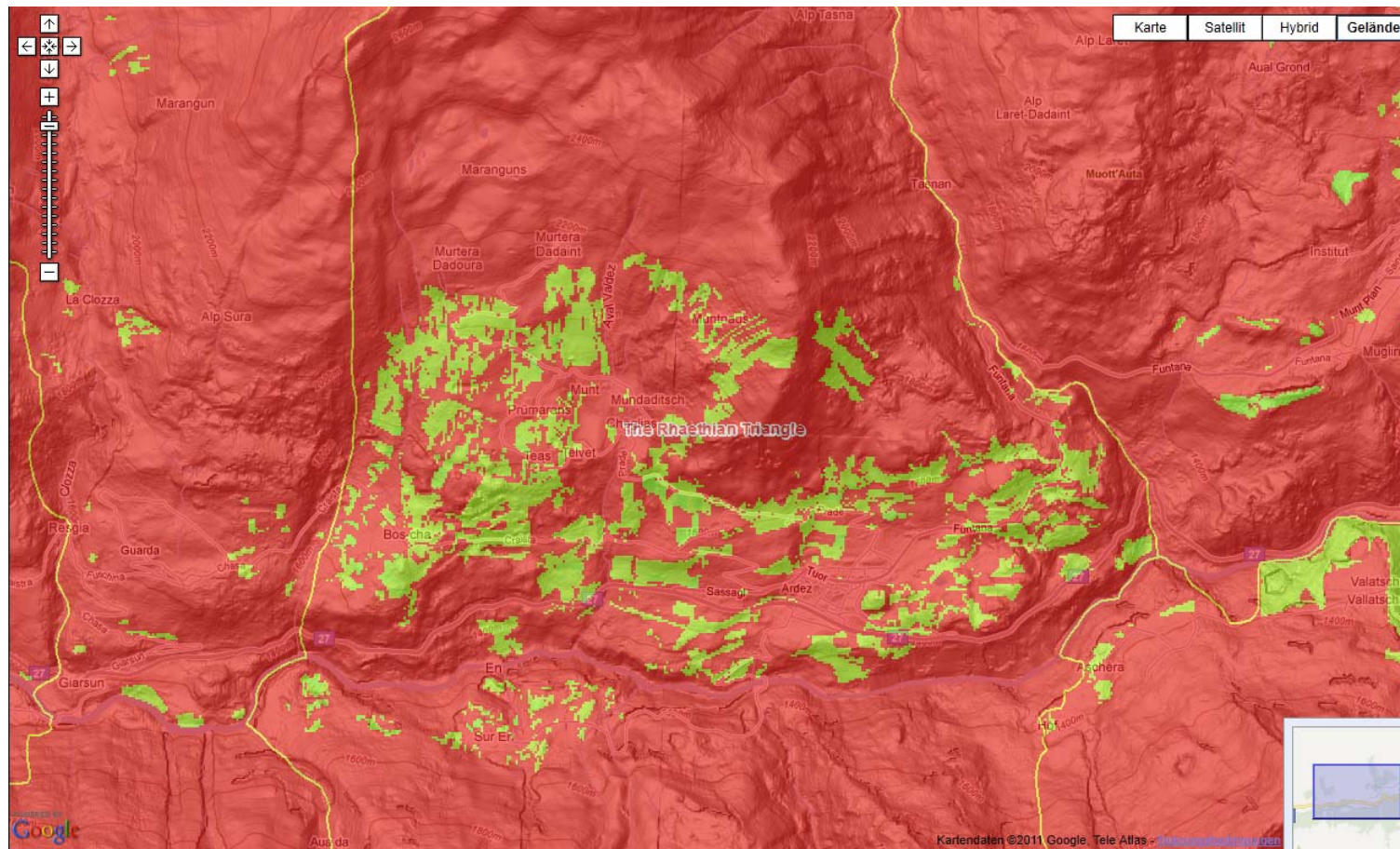
Webs of Life - Alpine Biodiversity needs ecological connectivity

The managers view to the Alps



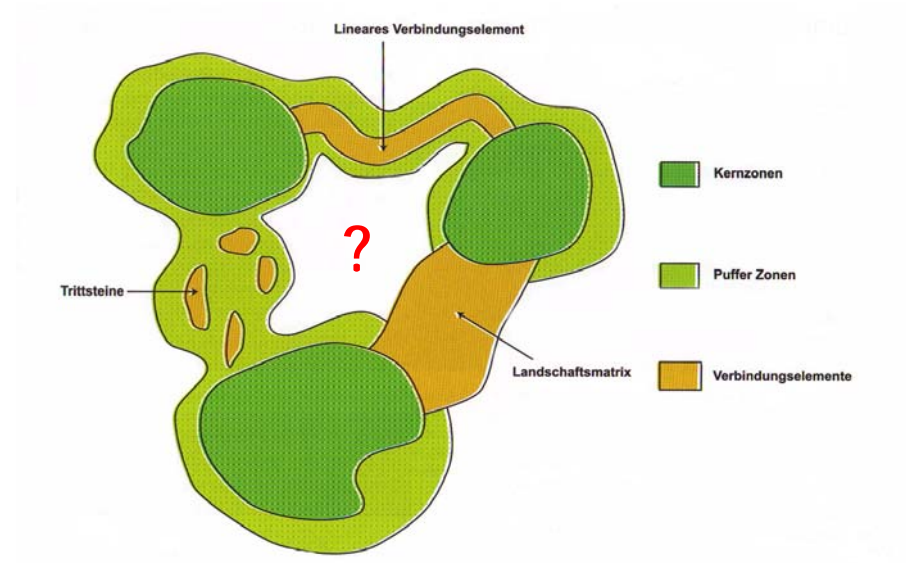
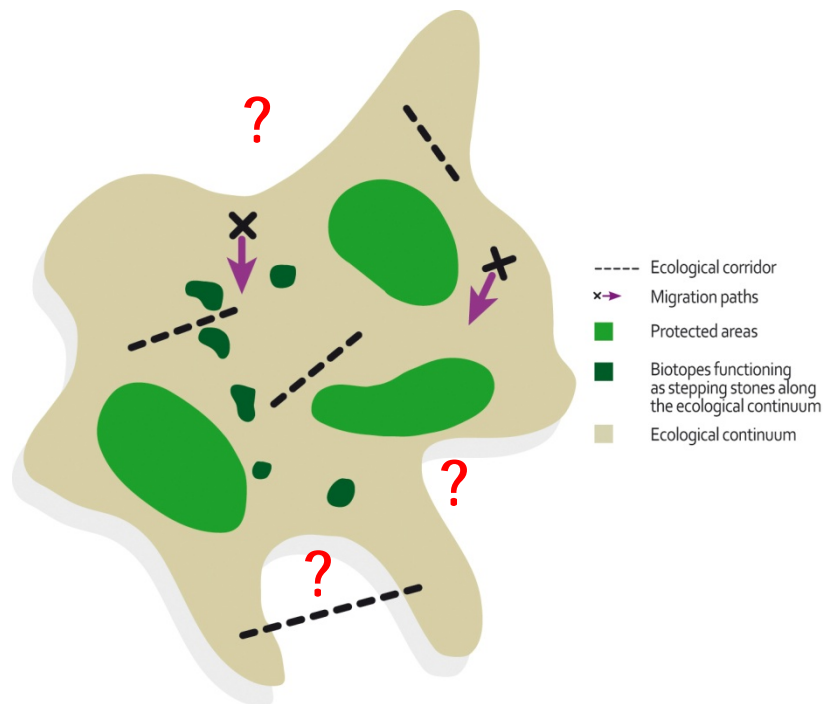
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The managers view to the locality



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Both do have a theory...

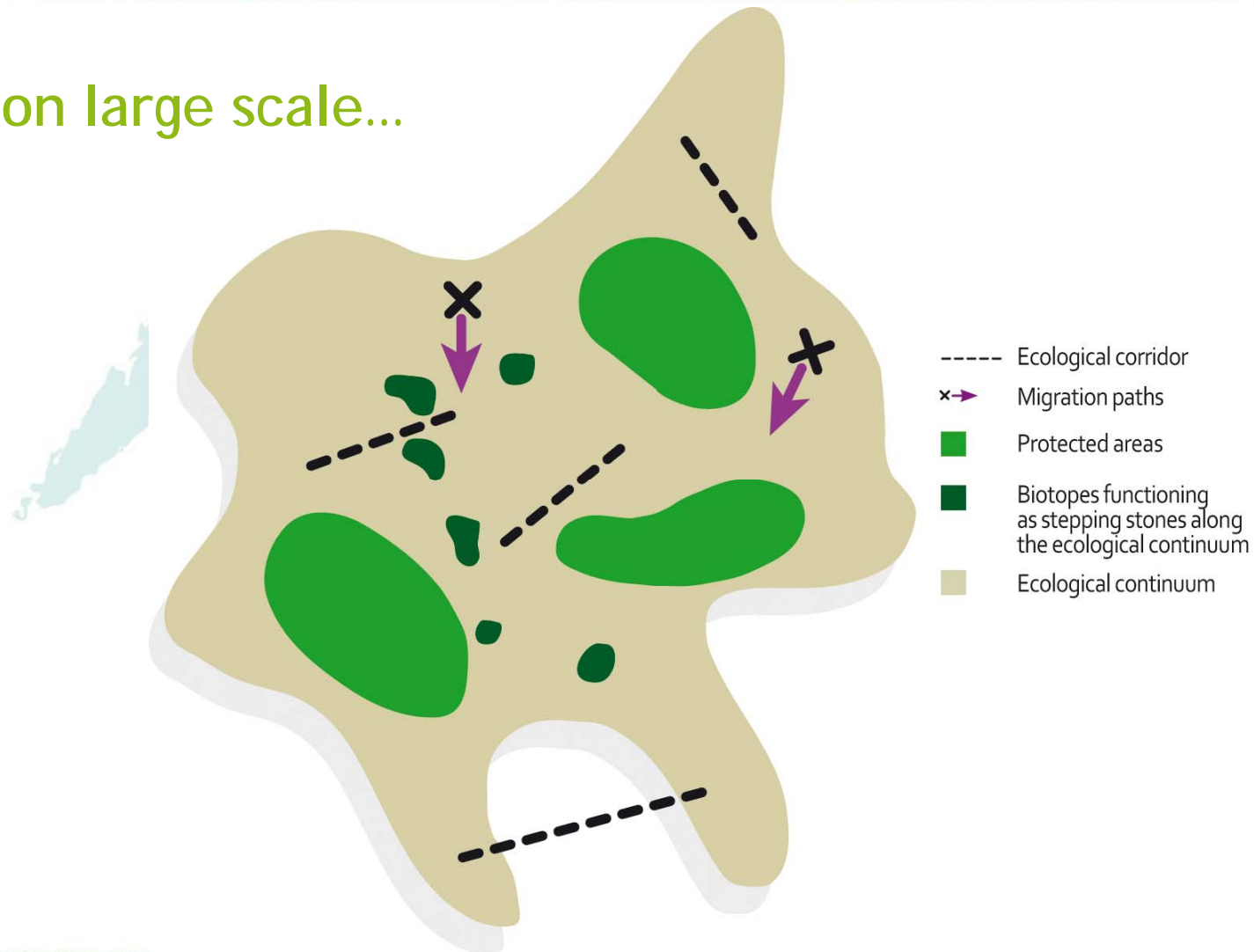


Schema 2: Elemente eines ökologischen Netzwerks

<http://www.alpine-ecological-network.org>

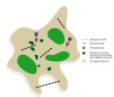
Signaux alpins 3

...on large scale...



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...or on small scale



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The managers tasks in the spatial dimension

Leading

Planning

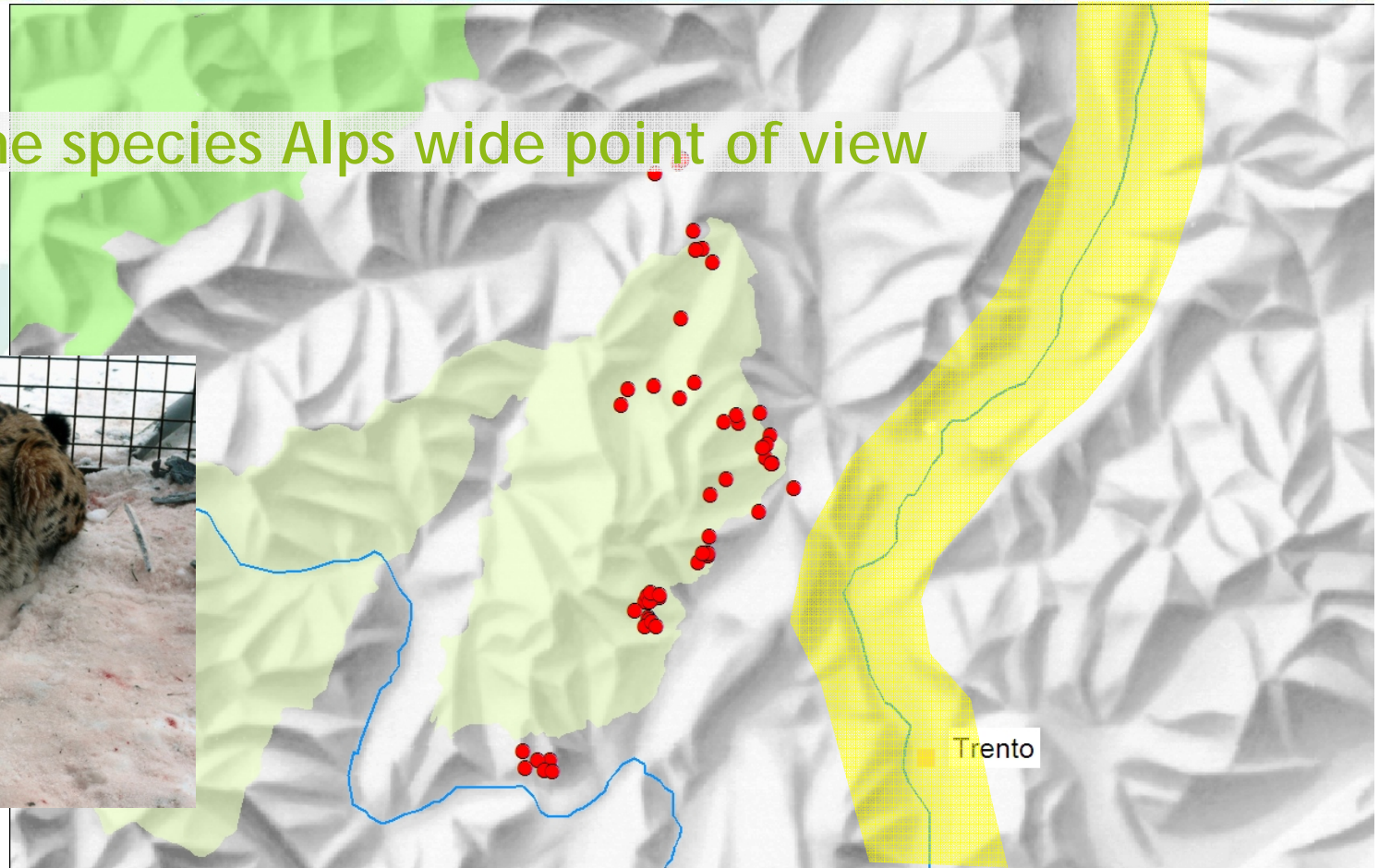
Implementing

Evaluating

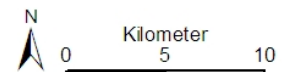
- ... in the entire connectivity site area
- ... on national state scale
- ... on landscape scale
- ... on international transboundary scale
- ... on individual site level

Worboys, 2010

Why? - The species Alps wide point of view



- Lokalisationen
- Parco Nazionale dello Stelvio
- Parco Naturale Adamello Brenta

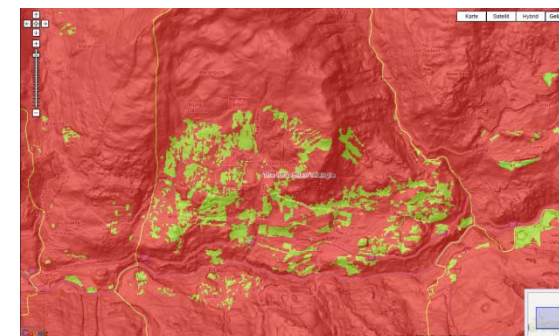
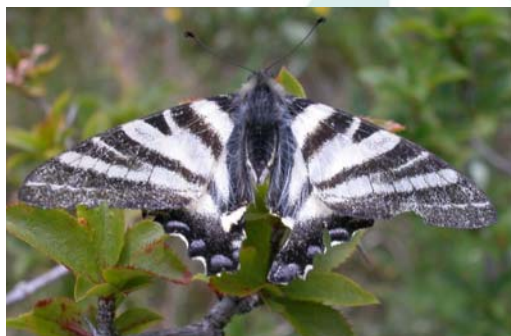


The lynx' problem



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The butterflies' problem

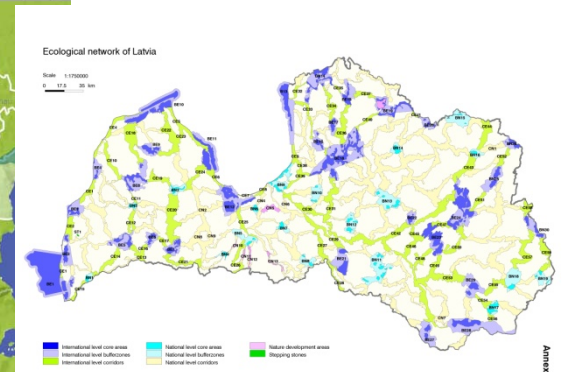
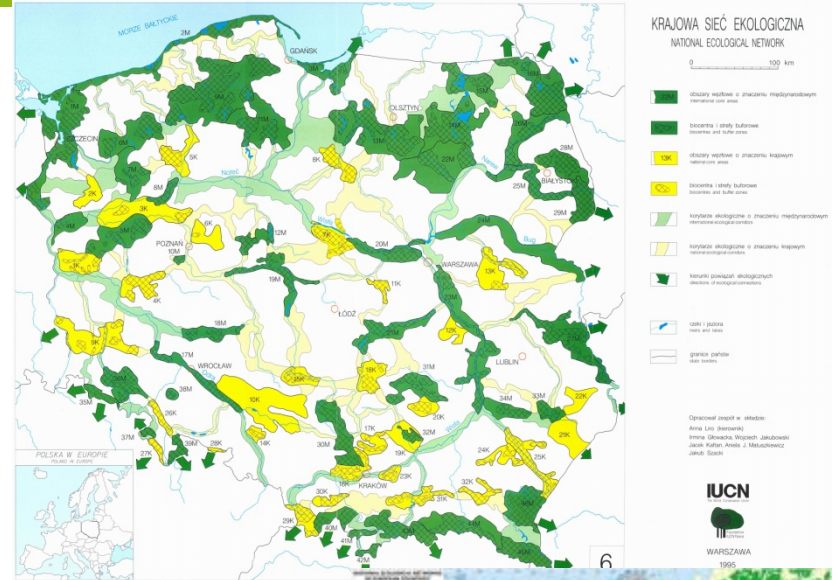
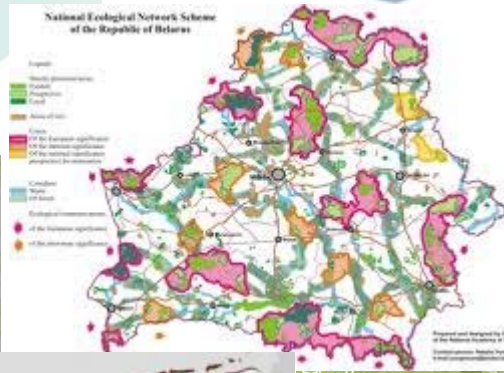
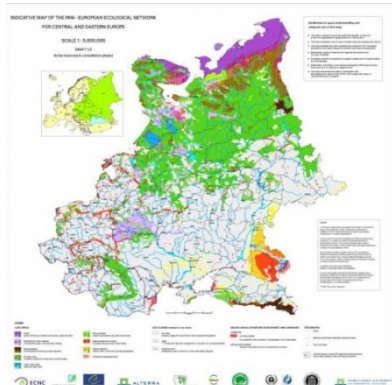


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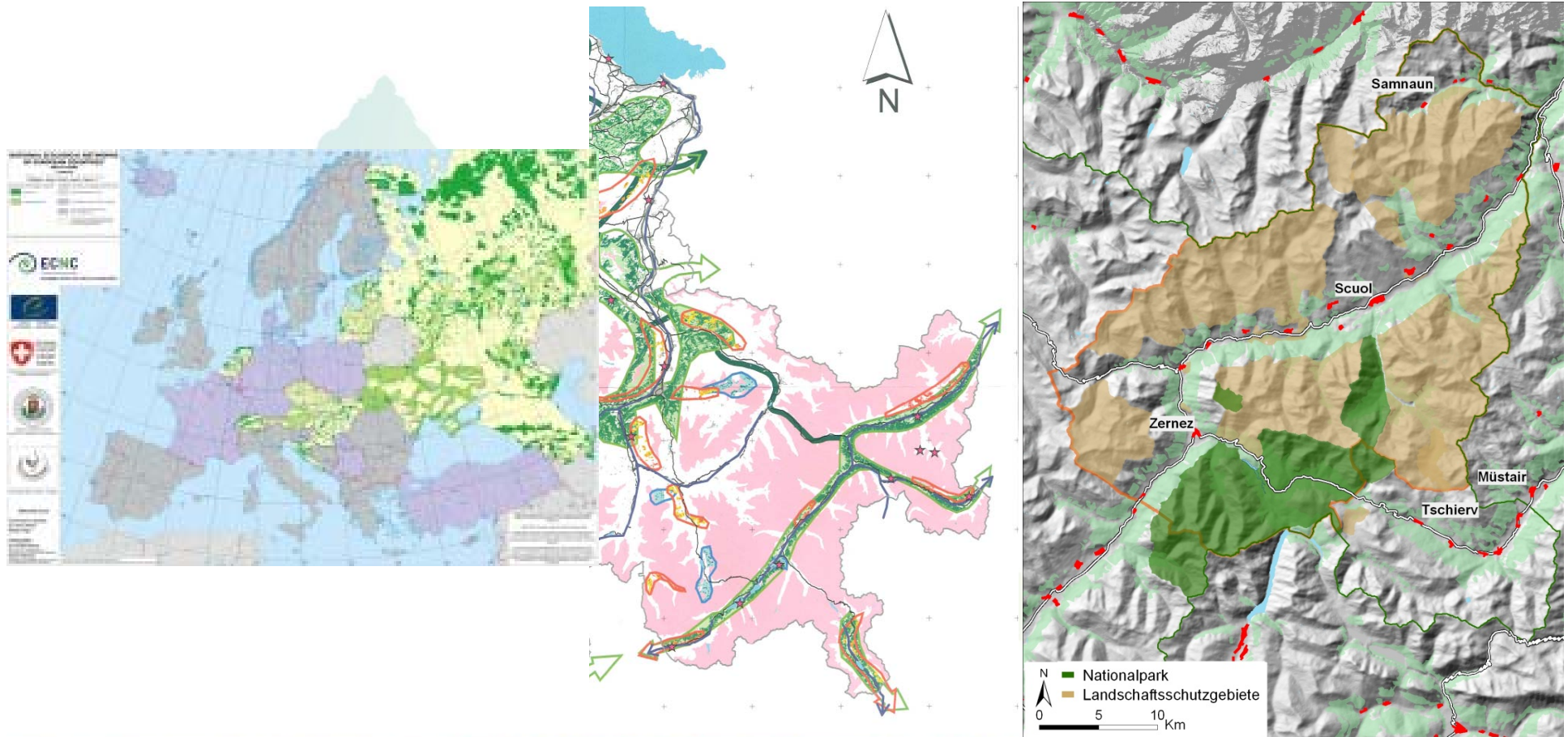
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Maps



Webs of Life - Alpine Biodiversity needs ecological connectivity

How to concatenate these spatial levels?



Econnect's response to spatial permeability



„Mapping relevant factors“

JECAMI

Joint Ecological Continuum Analysis and Mapping Initiative

A platform to analyze and visualize ecological connectivity in the Alps

„Mapping relevant factors“



CSI

„The landscape approach“



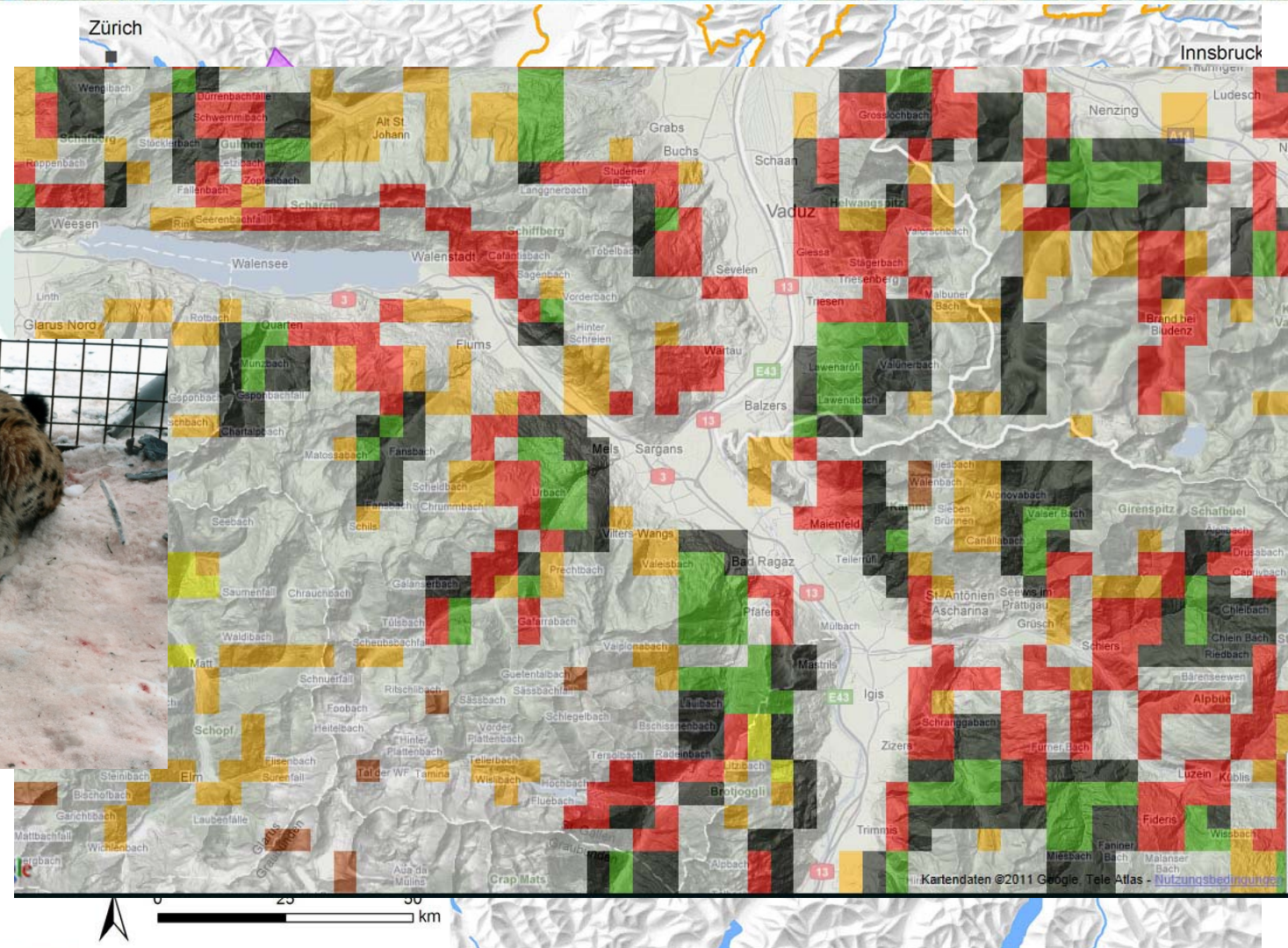
SMA

„The species approach“



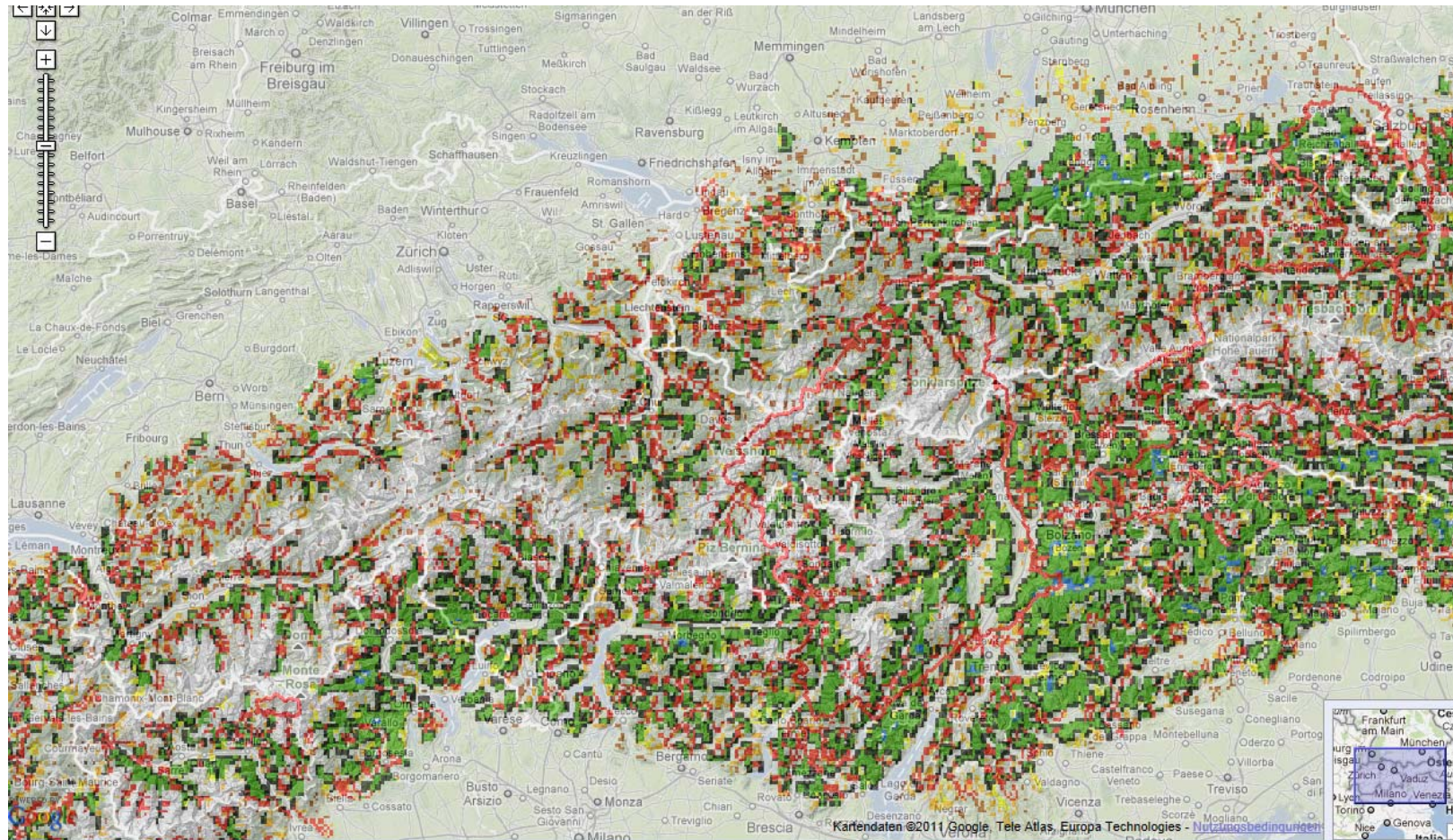
CARL

„The network approach“



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Action areas



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Karte Satellit Hybrid Gelände

CSI SMA PAM

SMA Service (Prototyp v.7)

Legend

- Black grouse model (a)
- Black grouse model (b)
- Brown bear model
- Lynx model

Your uploaded KML-File!

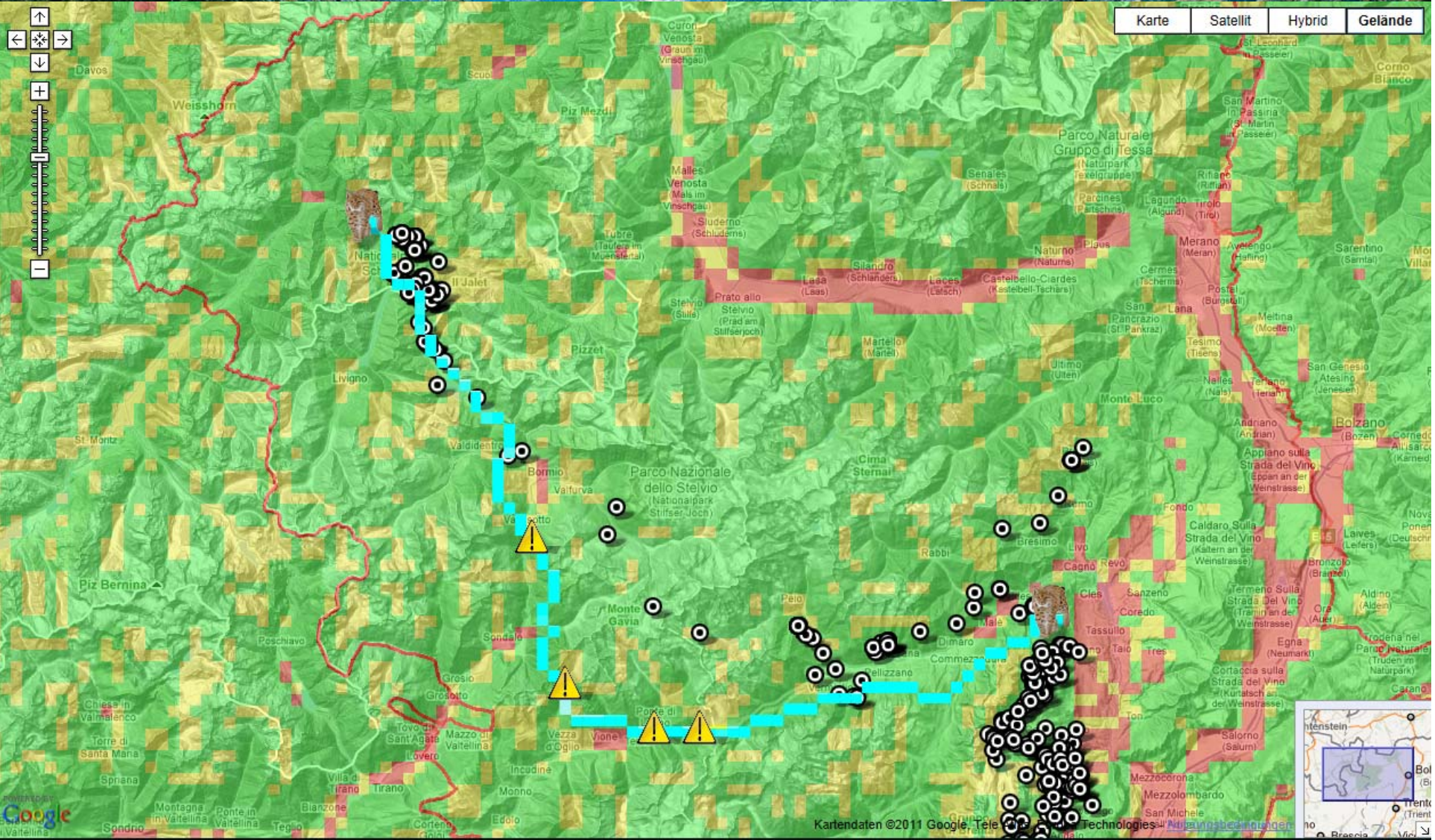
Activate function and display Indizes by clicking in the map

Barrier Tool

This tool calculates the most barrier-free path from point A to B for a certain species (see profiles) using a Cost-Path function.

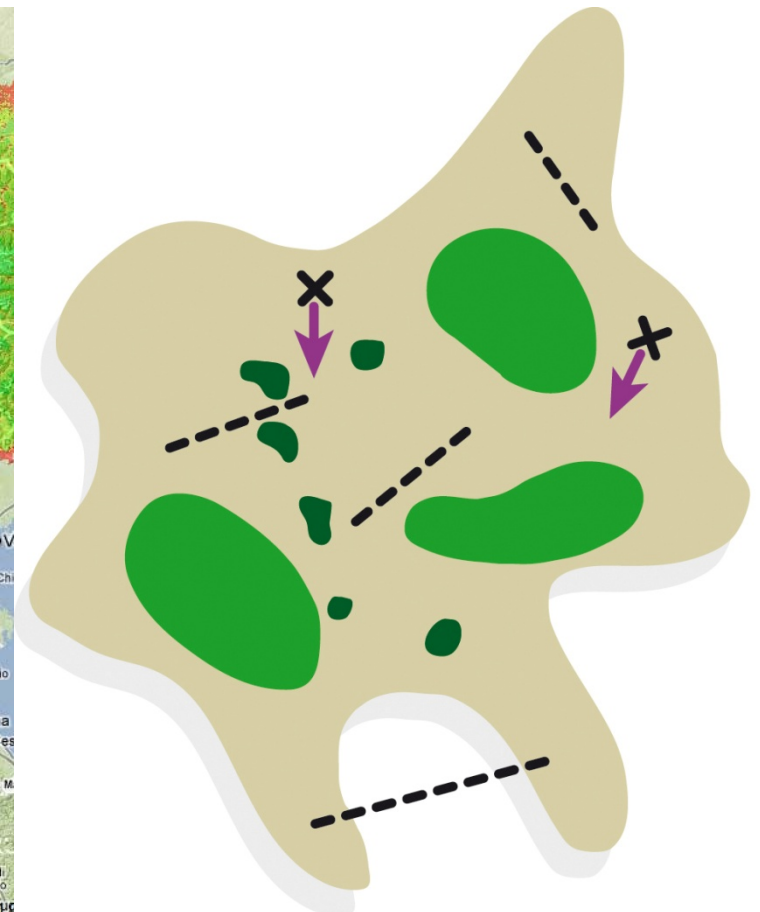
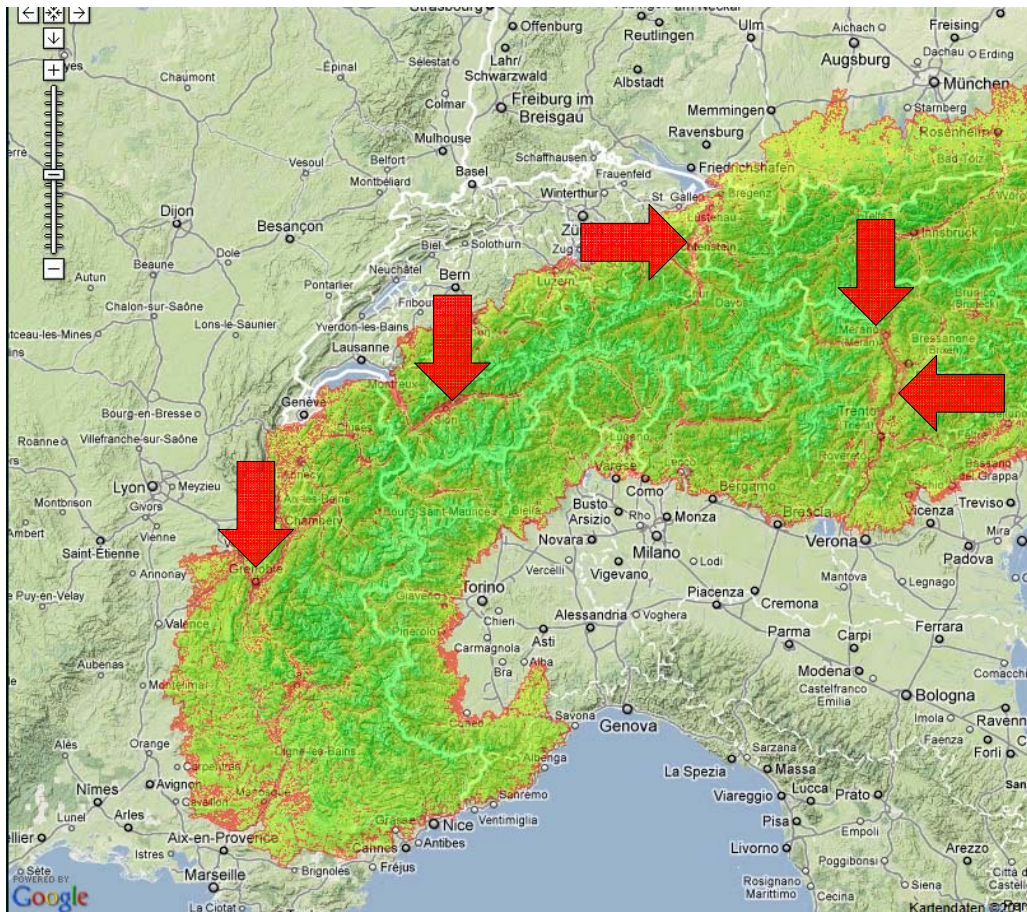
Draw 2 points: On/Off

1 Search 2 Select & Upload 3 Calculation Results Chart Results Table Results Report



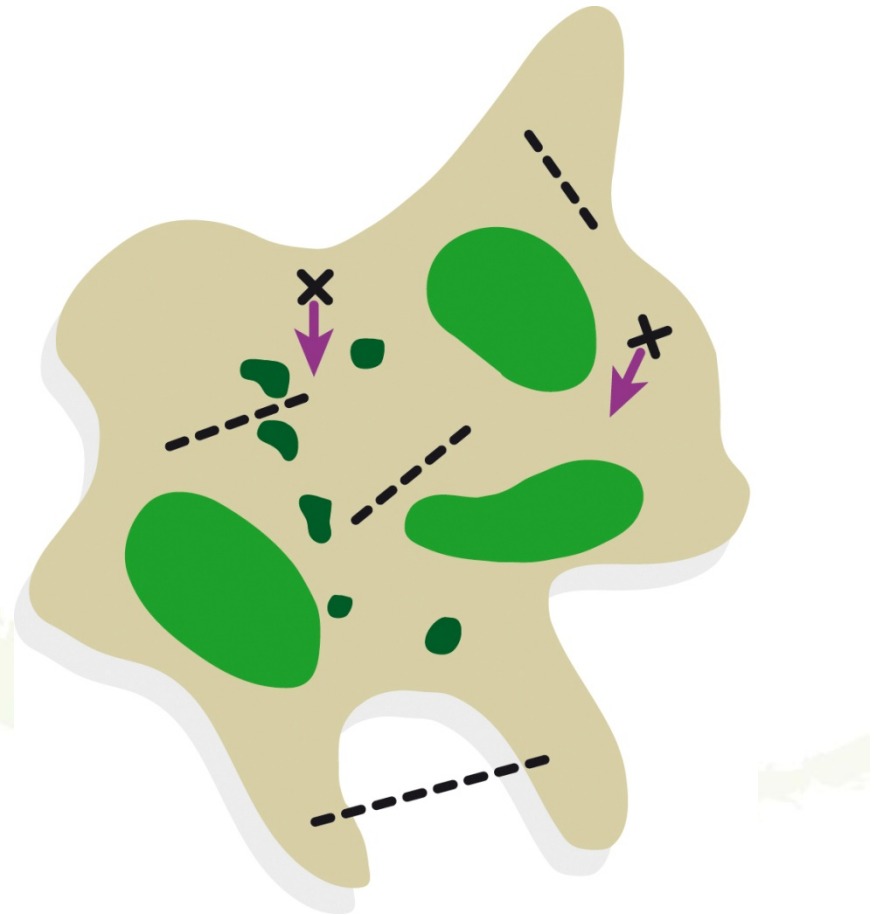
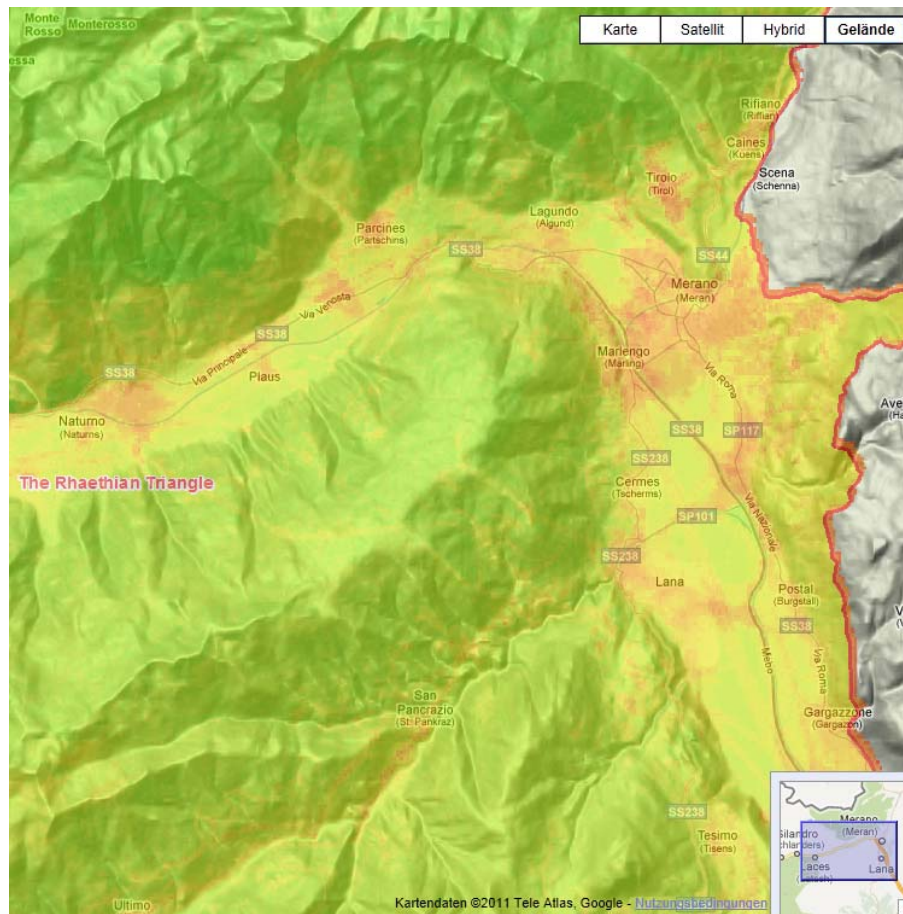
Webs of Life - Alpine Biodiversity needs ecological connectivity

A step into real environments and real scales



Webs of Life - Alpine Biodiversity needs ecological connectivity

A step into real environments and real scales



Webs of Life - Alpine Biodiversity needs ecological connectivity

Current problems and obstacles to implement connectivity in real environments and scales

- Missing legal framework for spatial explicit measures
- Missing funds for spatial explicit organisation of measures
- Missing collaboration over landscape sectors

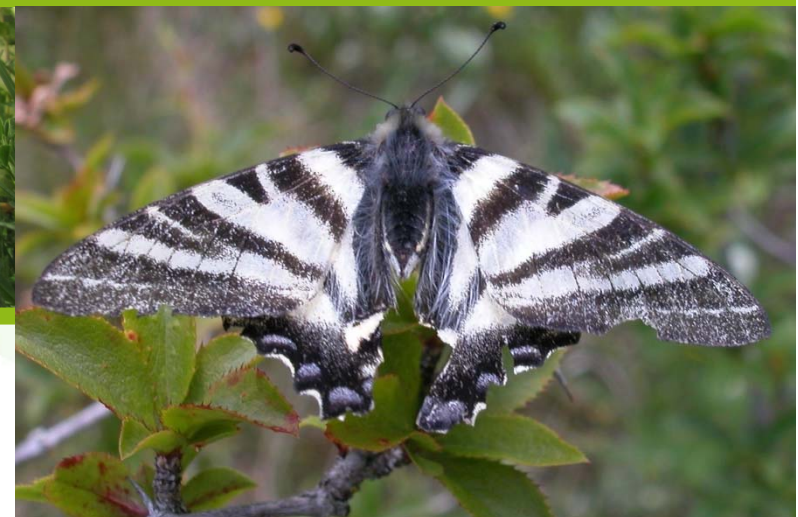
Biodiversity

Scale
Distance
Distribution
Pattern
Size



Ruedi Haller
Swiss National Park
CH-7530 Zernez
gis@nationalpark.ch

Christian Schmid, Dominik Affolter,
Angelika Abderhalden, Katrin Sedy,
Johannes Signer, Andrea Bouvinals, Leo
Füreder, Kathrin Renner



Messages

European vision versus local implementation

European approaches

Where to implement-> spatial distribution

Beispiel UE

Where to implement?

Theory versus example Zürich

Very local restriction with european effect

Where to act? Priority areas (green or red)

UE

Take, what is possible or insist on for connectivity effective areas

UE

Terms

Scale, distance, distribution, pattern, size, classes
(types)

Theory, implementation

Europe (and the Alps) do have a strategy for corridors,
but we miss a clear strategy for the other aspects of
connectivity