

# Rezultati kartiranja dnevnih metuljev na Goričkem

## Results of butterfly mapping in Goričko

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# Goričko

- NE part of Slovenia
- 460 km<sup>2</sup>
- hilly landscape (average altitude is 275 m)
- the lowest precipitation in Slovenia (800 mm)
- agriculture
- eastern/western part
- landscape park and Natura 2000 site
  - *P. teleius*
  - *P. nausithous*
  - *L. dispar*
  - *C. myrmidone*
  - *E. aurinia*



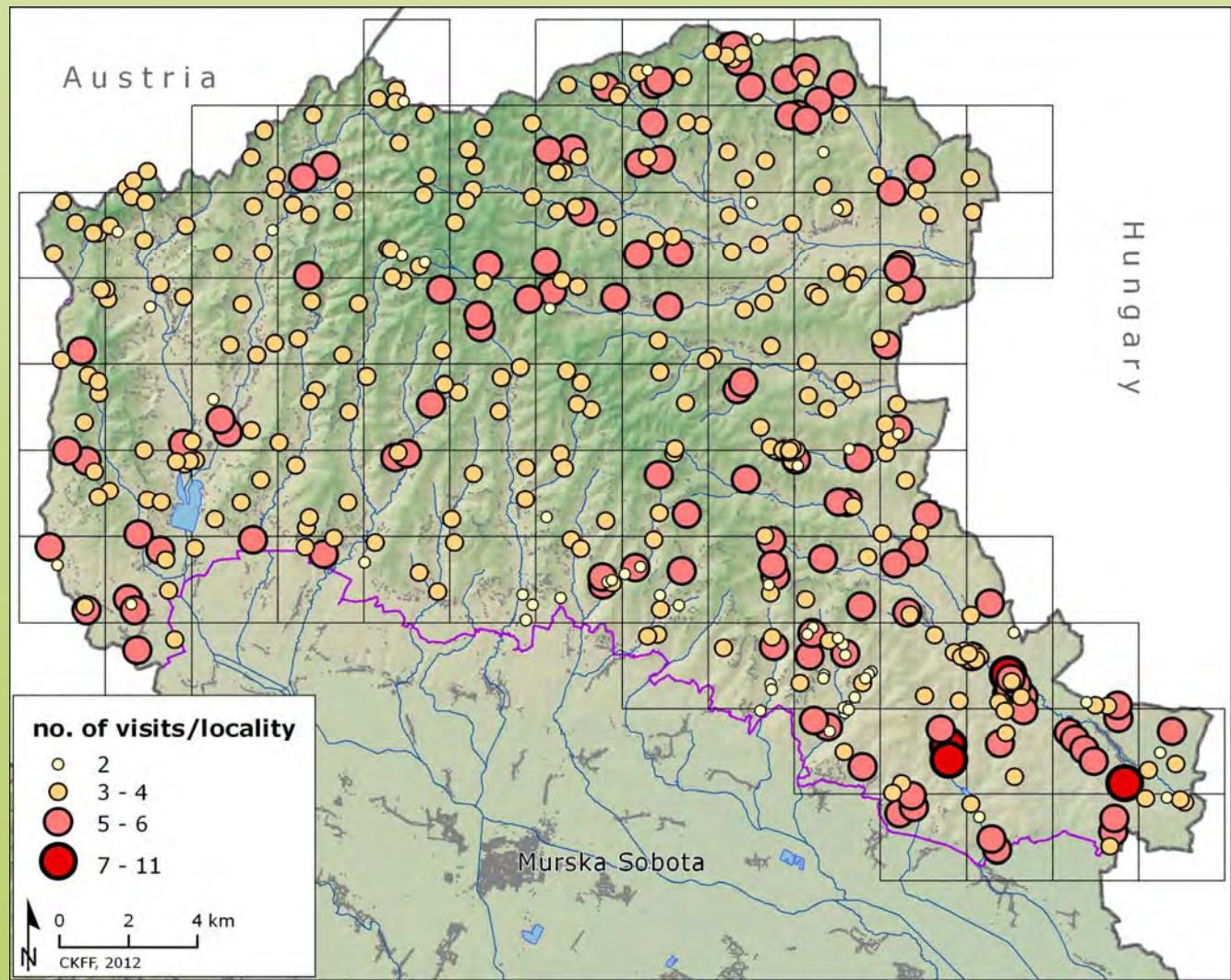
## What we knew before?

- Student research camp Šalovci 1999 (Verovnik 2000)
  - 2006: mapping of Large Blues (*Phengaris* spp.) at Goričko – PHARE Cross Border Cooperation Programme Slovenia Austria 2003 (Rebeušek et al. 2006)
- 

111 species of butterflies

## Methods

- polygons



## Methods

- polygons
- additional searching of selected species (*P. mnemosyne*, *P. aegeria*, *P. alcon* ...)
- coincidental findings (*N. antiopa*, *N. polychloros*)
- eggs searching (*T. betulae*, *P. alcon*)
- examination of male genitalia (*Melitaea britomartis/aurelia*)
- determination of *Leptidea sinapis/reali*
- searching for caterpillars of *Phengaris teleius* and *P. nausithous* (May, June 2012)

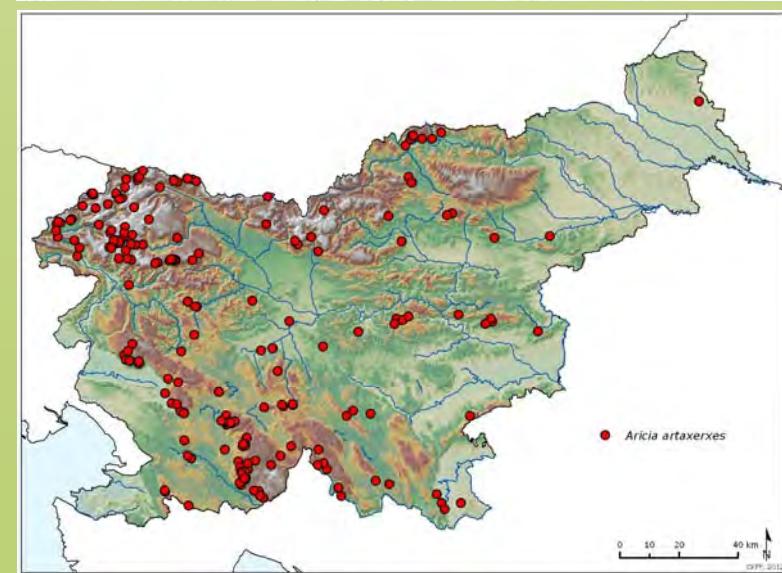
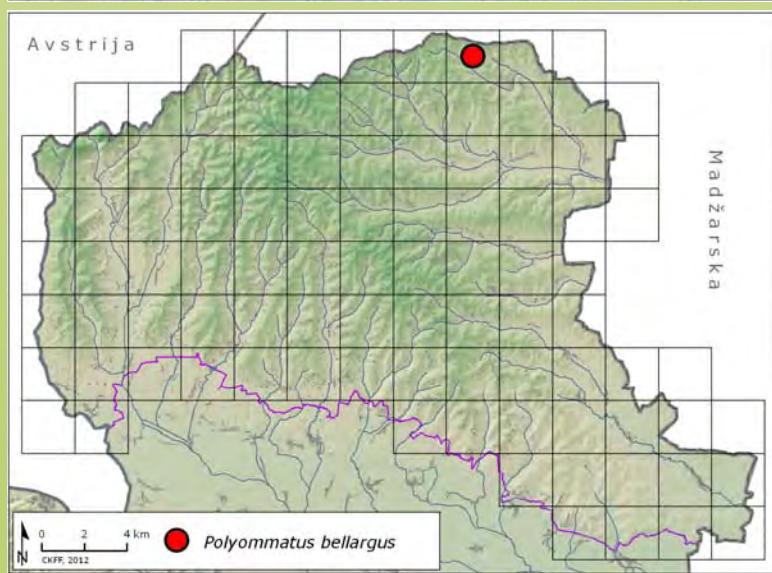
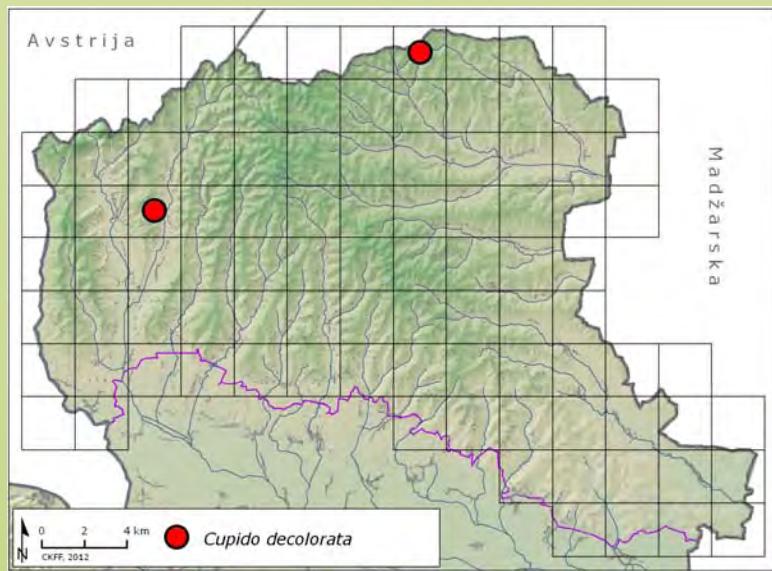
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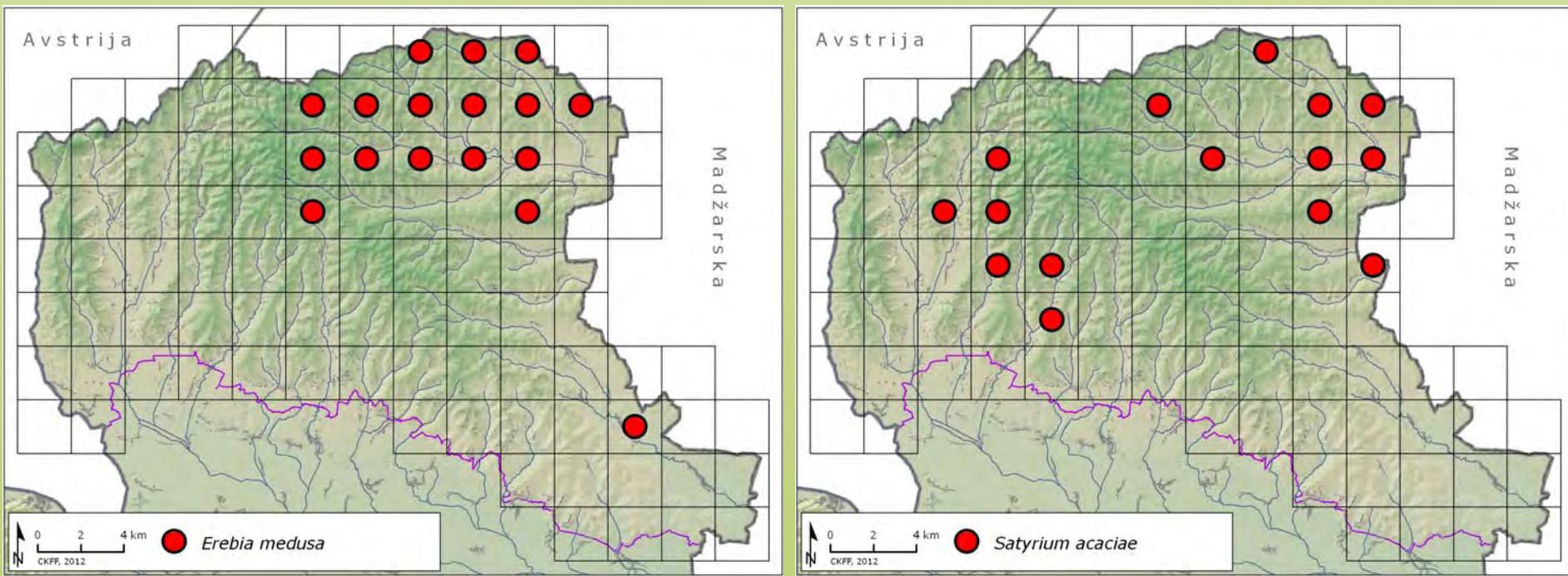
# Results

- 964 localities
- 28.404 records
- 99 species
  - 16 unconfirmed species
  - 5 new species
    - *Aricia artaxerxes*
    - *Polyommatus bellargus*
    - *Cupido decolorata*
    - *Erebia medusa*
    - *Satyrium acaciae*
  - *Spialia sertorius*
  - *Zerynthia polyxena*
  - *Colias alfacariensis*
  - *Polyommatus coridon*
  - *Argynnис niobe*
  - *Brenthis hecate*
  - *Chazara briseis*
  - *Pyrgus alveus*
  - *Colias myrmidone*
  - *Colias erate*
  - *Lycaena alciphron*
  - *Leptotes pirithous*
  - *Polyommatus daphnis*
  - *Limenitis reducta*
  - *Limenitis populi*
  - *Boloria euphrosyne*

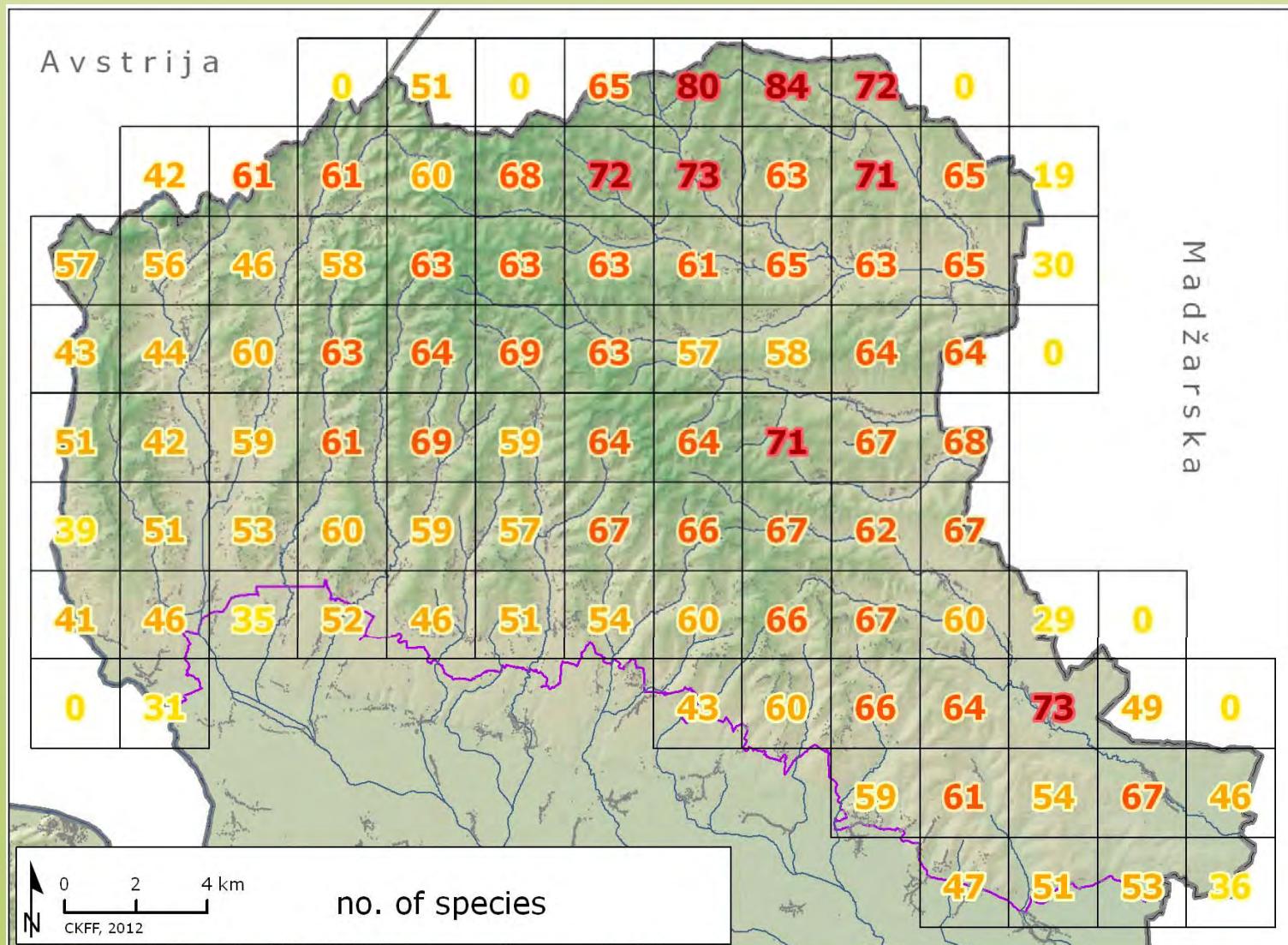
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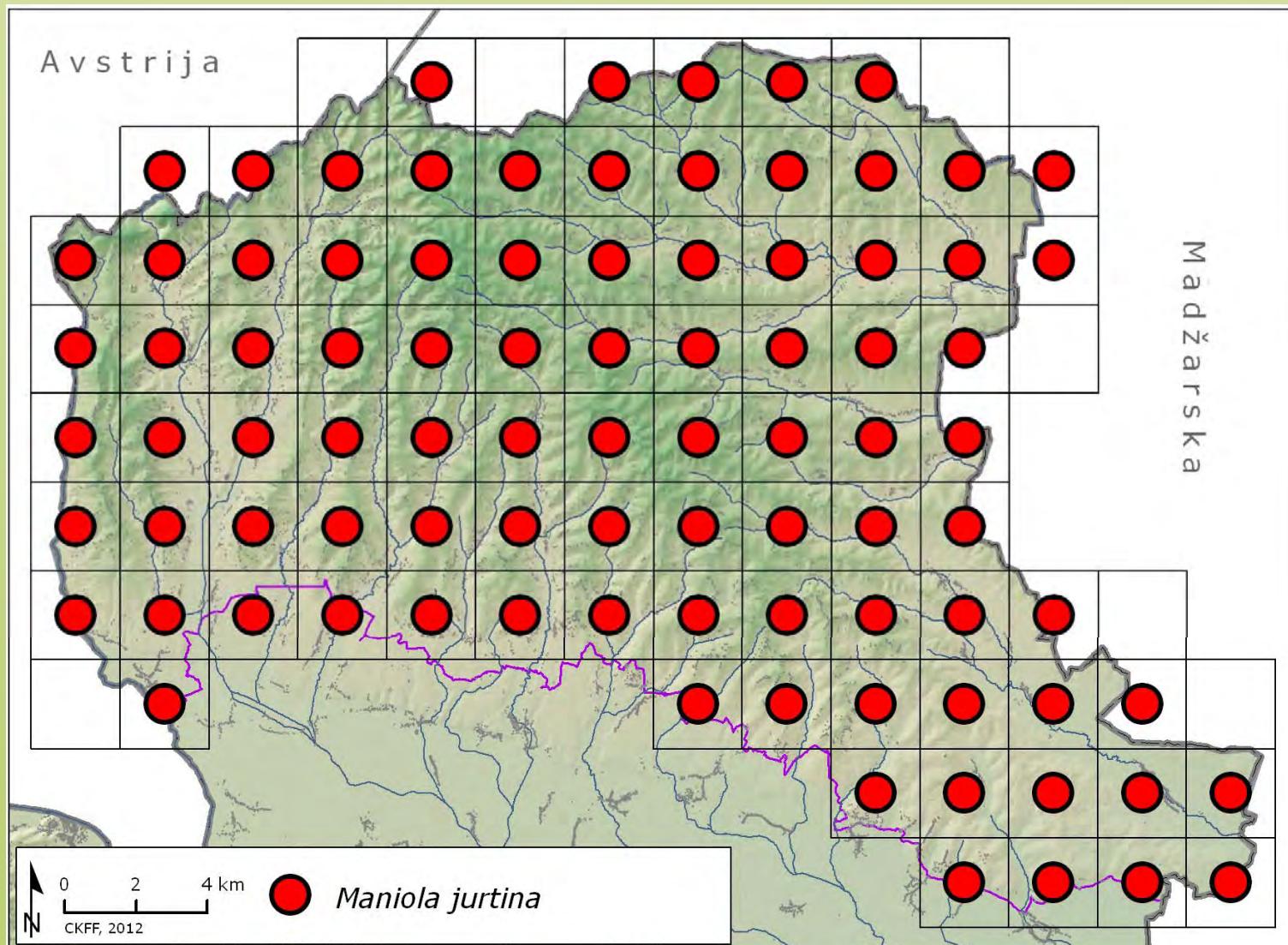
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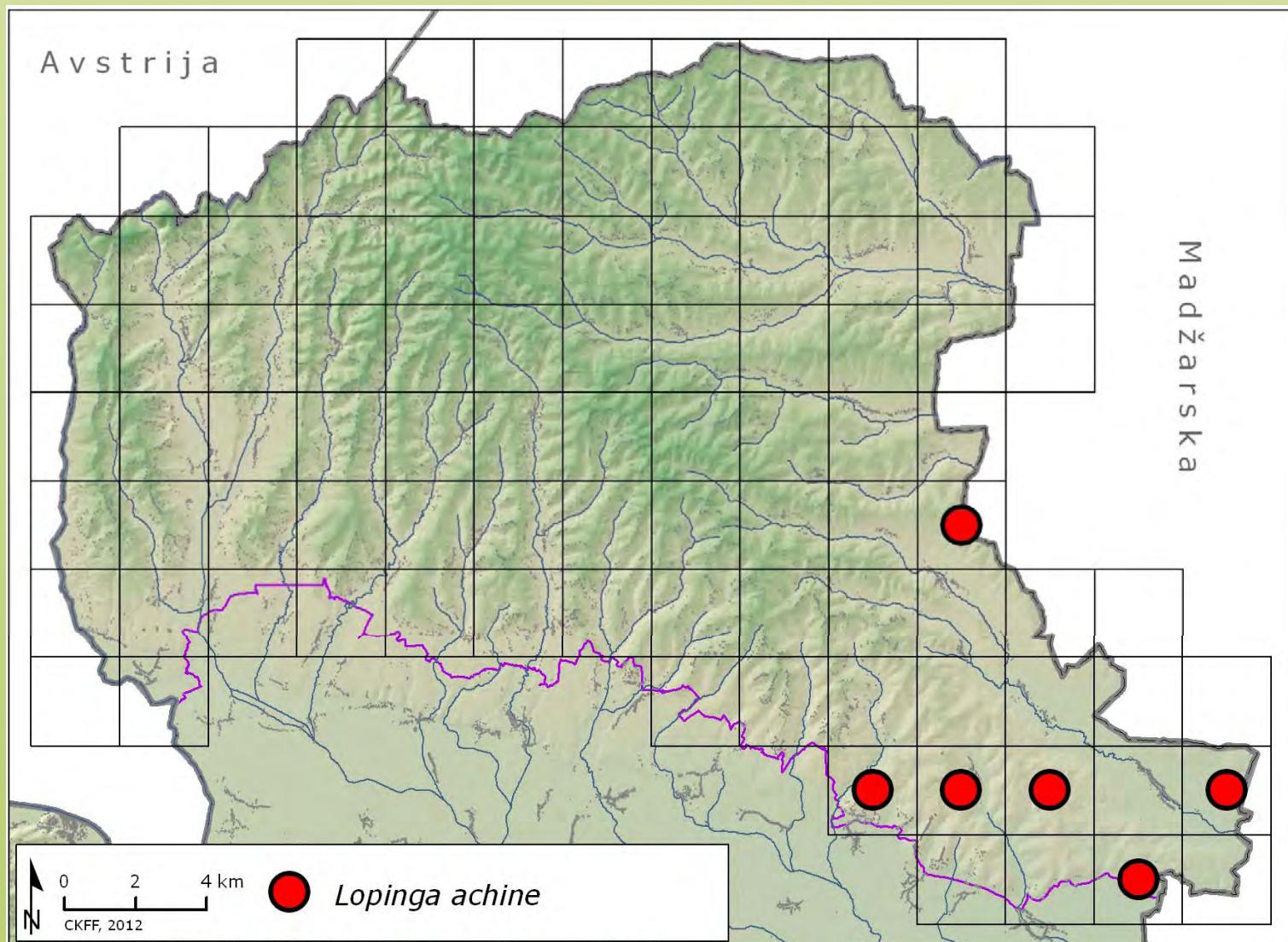
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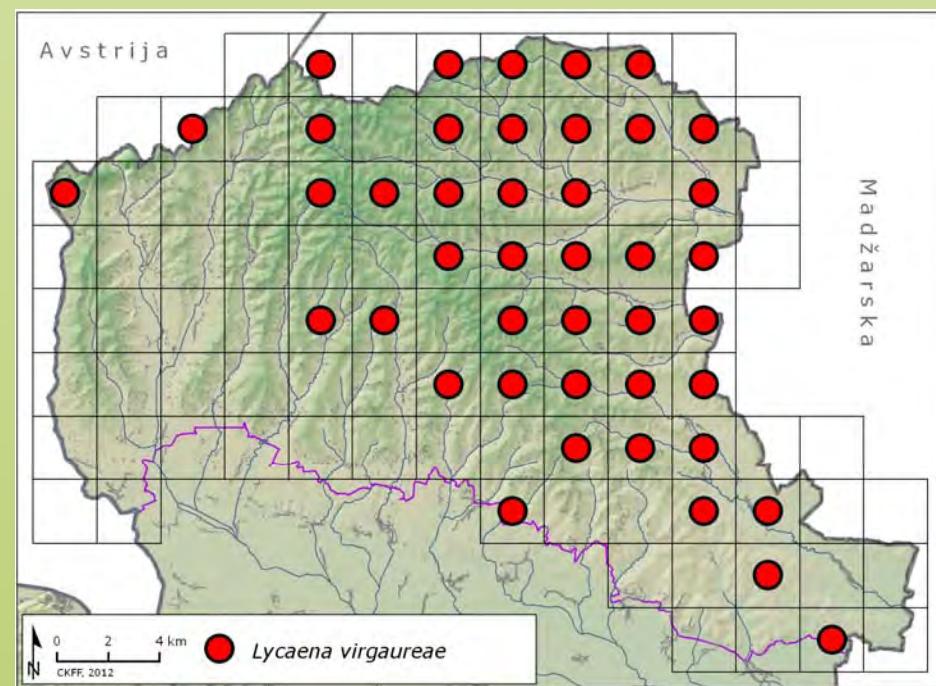
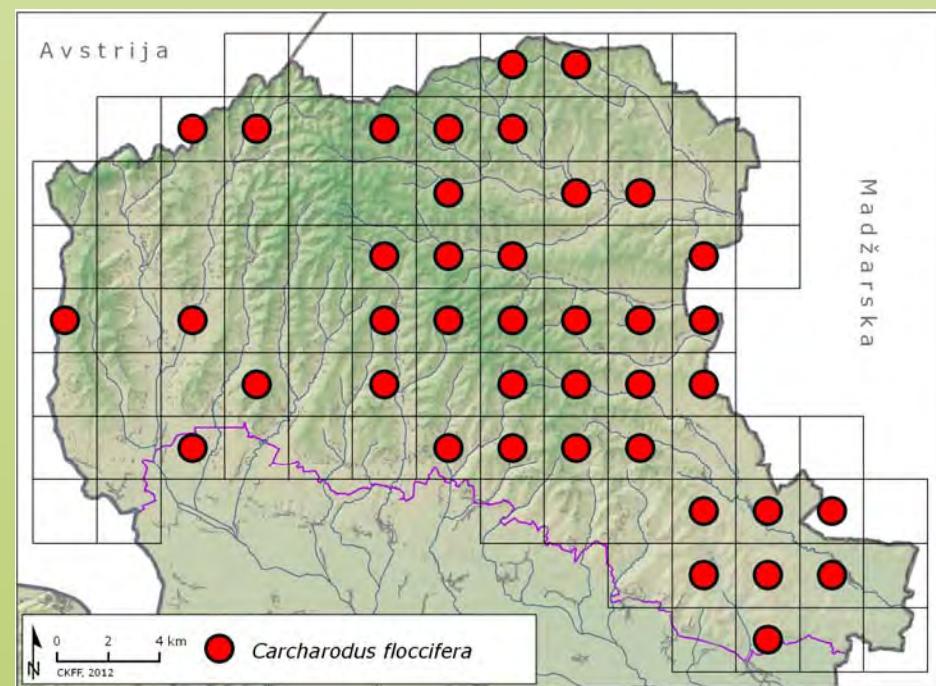
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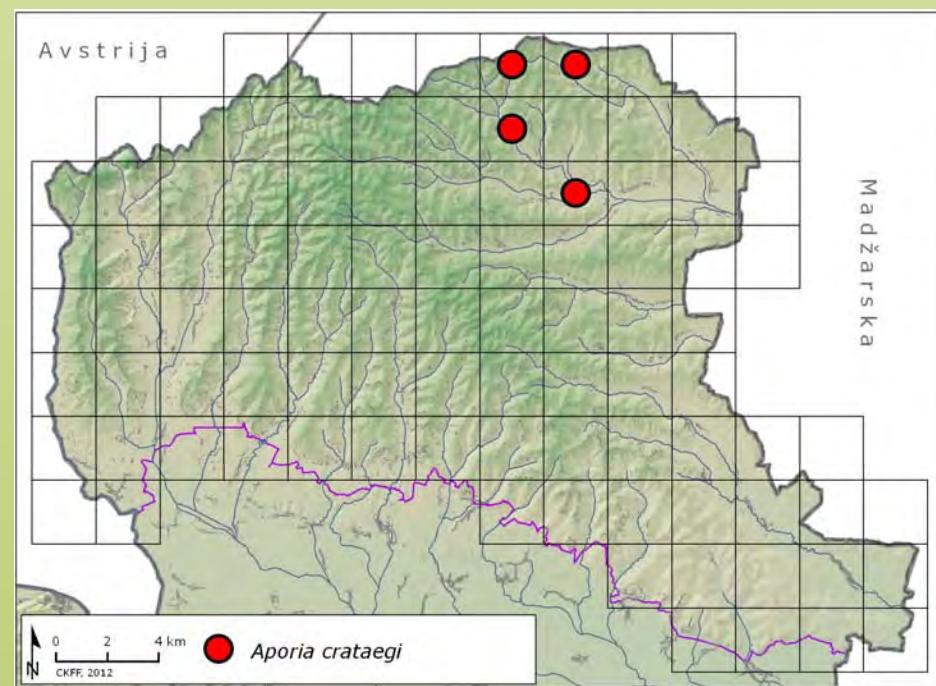
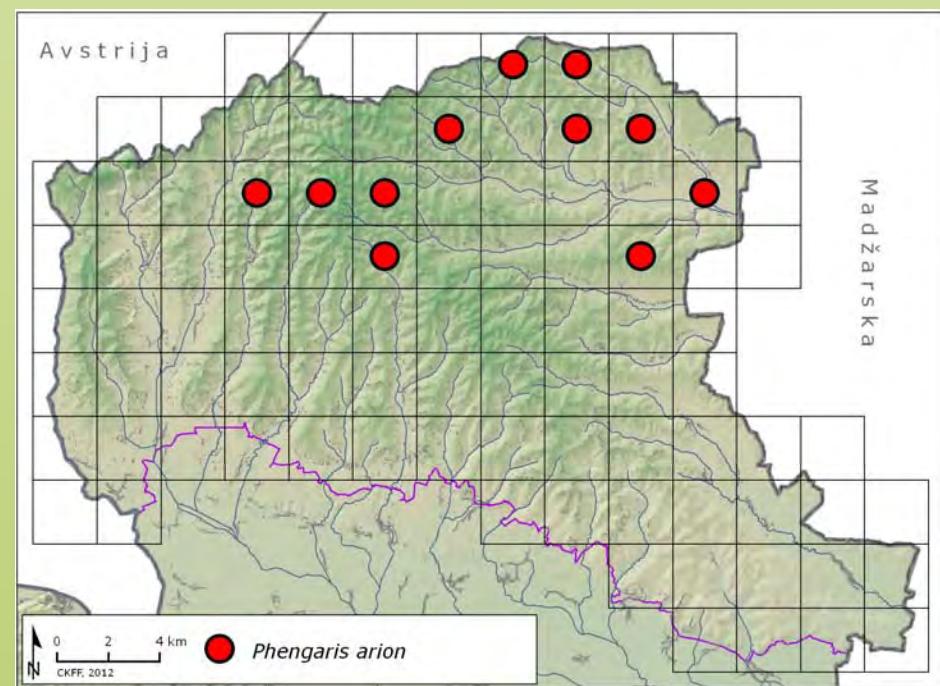
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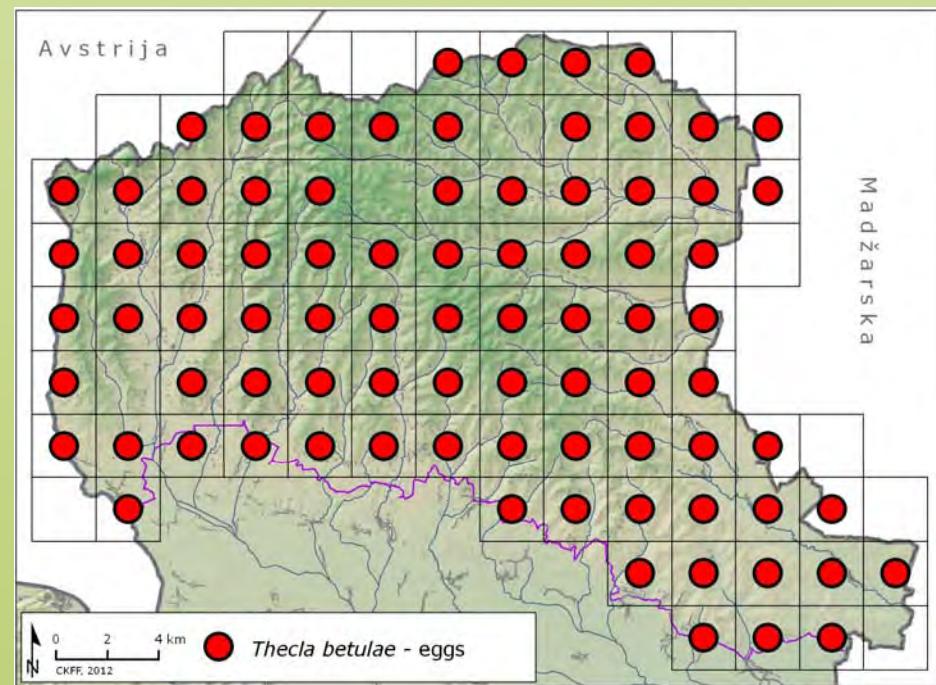
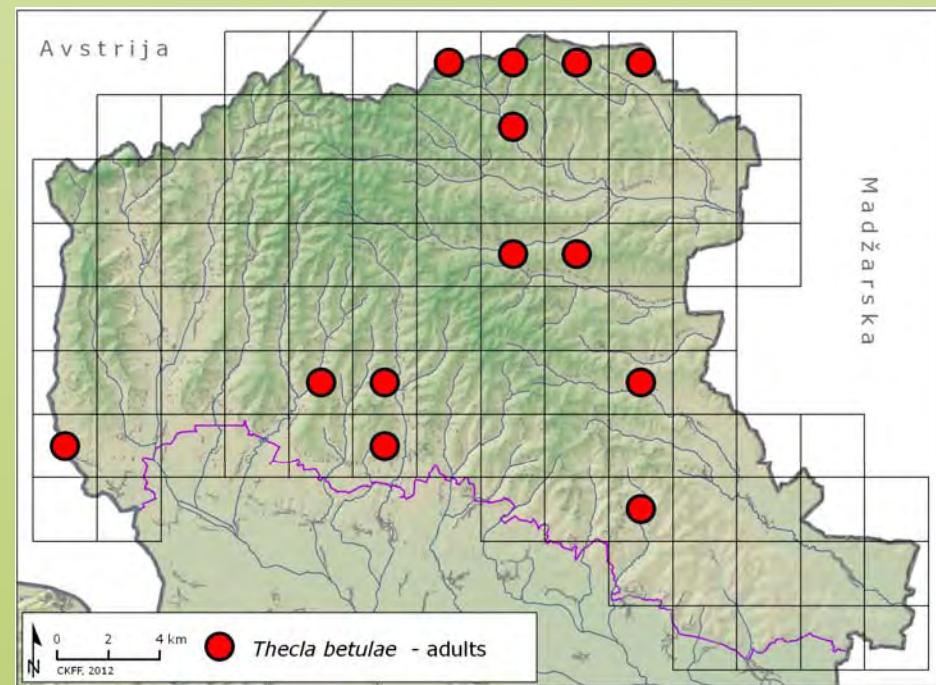
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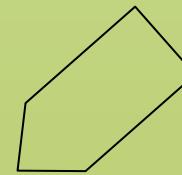
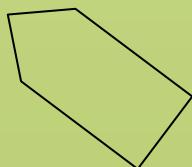
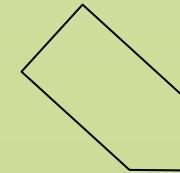
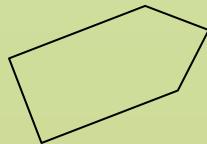
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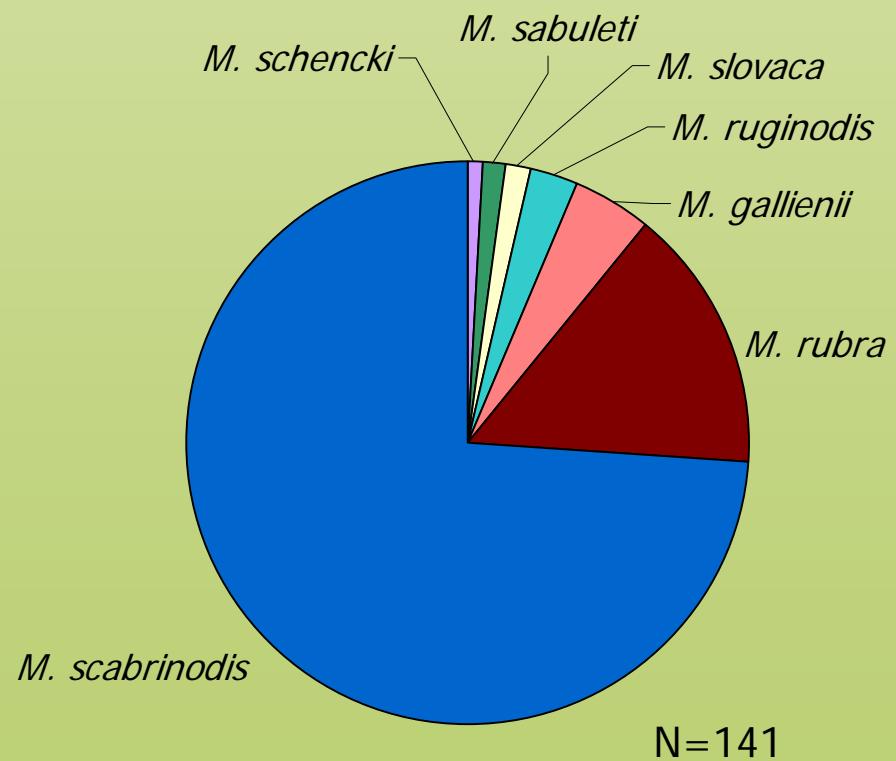
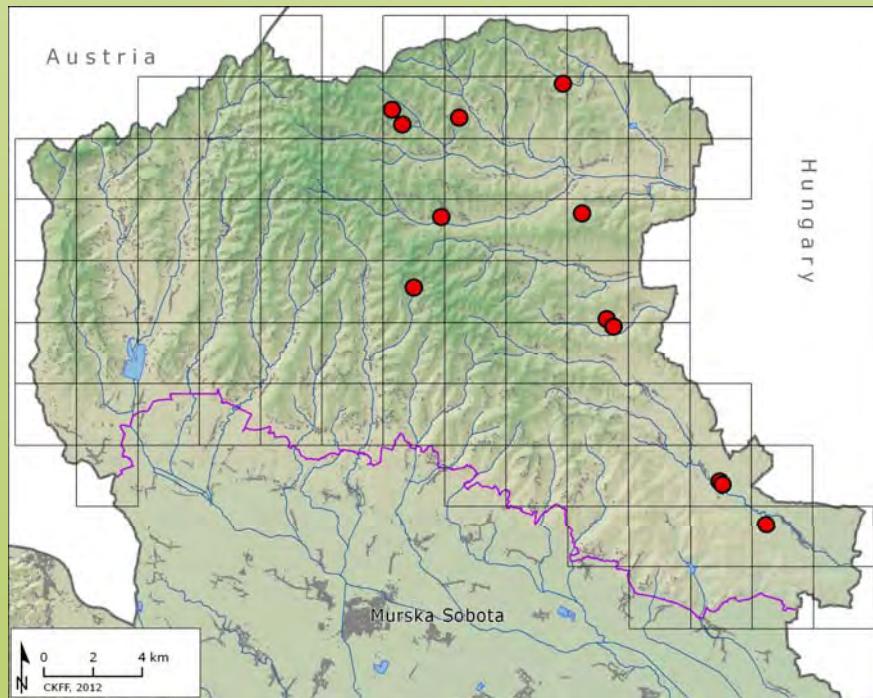


## Looking for ants ...

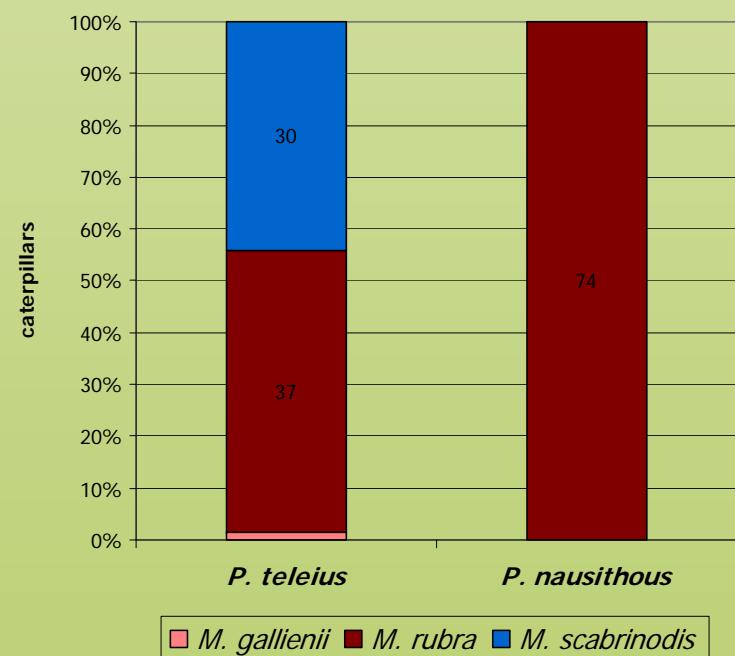
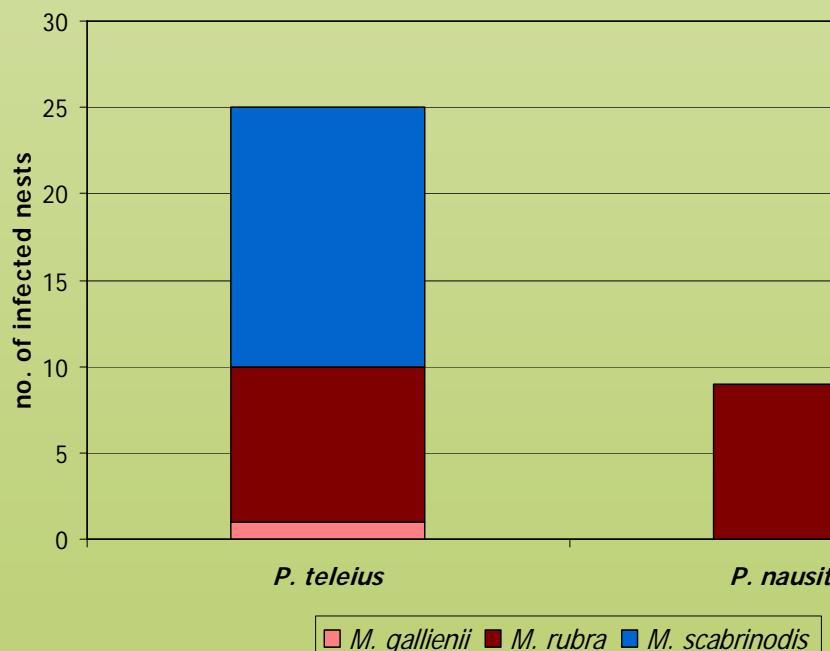


## Looking for ants ...

- 12 meadows
- 141 checked ant nests
- 7 Myrmica ant species

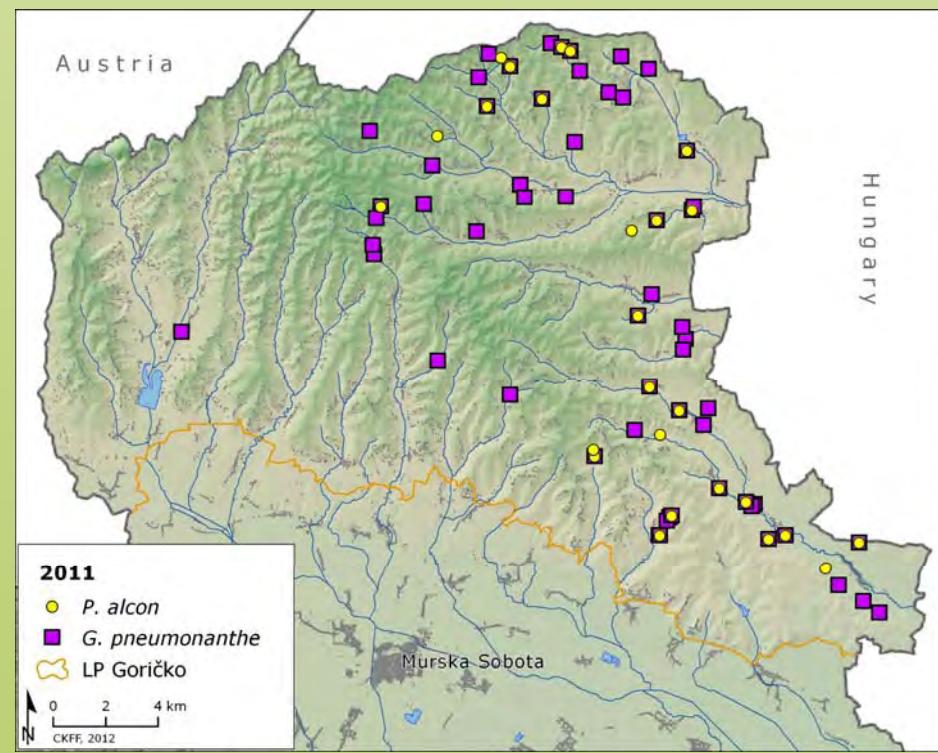
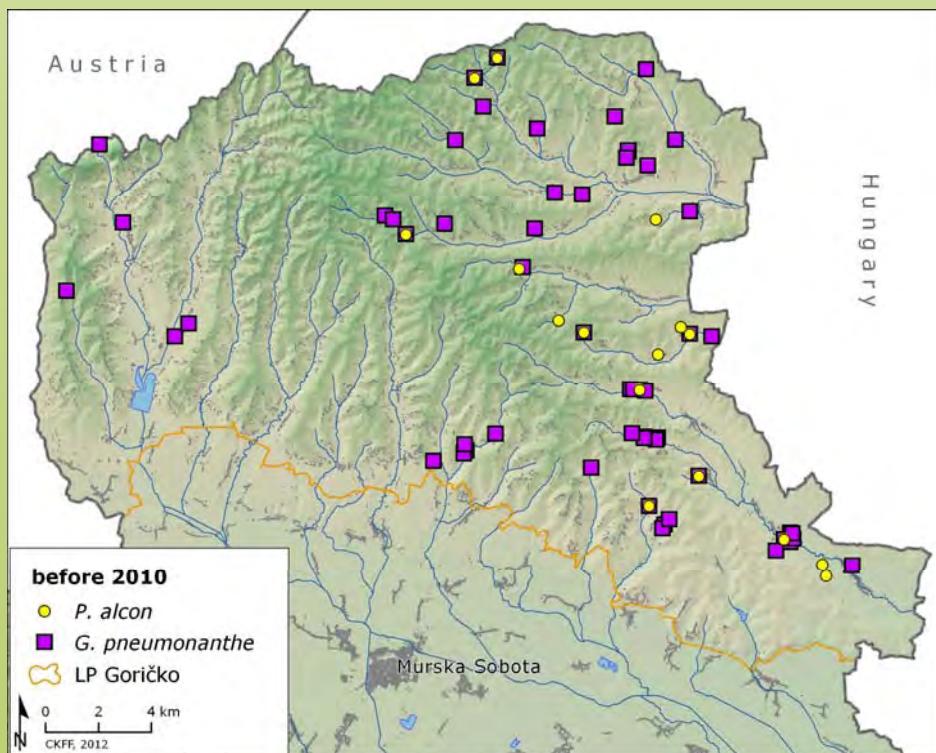


## Looking for ants ...



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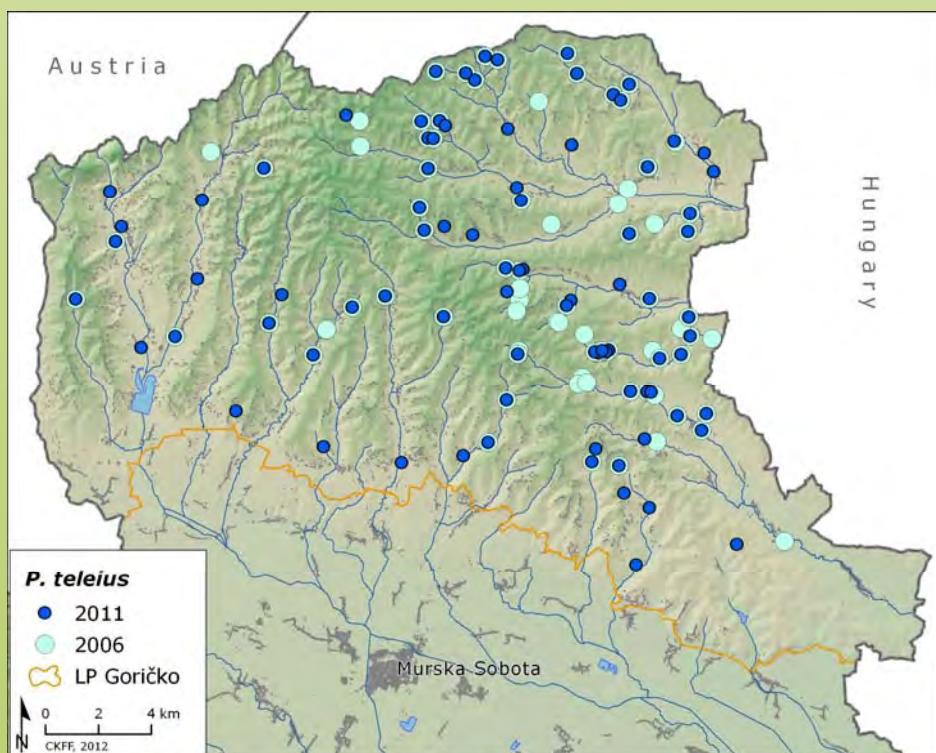
- 73% patches with *G. pneumonanthe* disappeared
- *P. alcon* was recorded just on 36% of formerly known sites



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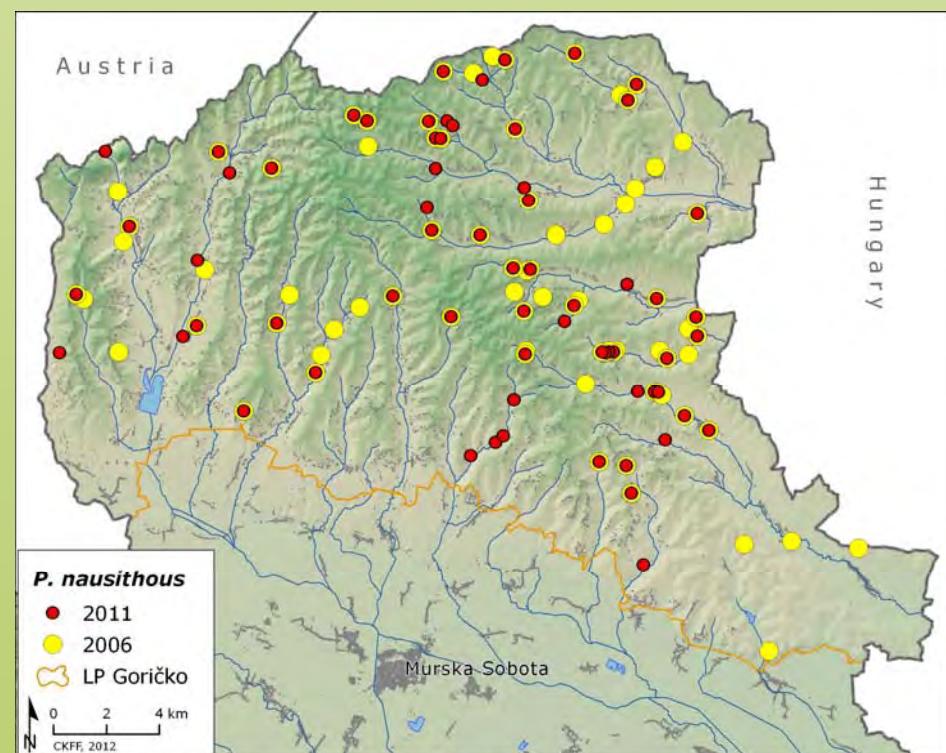
### *Phengaris teleius*

- 83 patches occupied in 2006
- 68% of these were still occupied in 2011
- in addition 30 patches unoccupied in 2006 were noted in 2011



### *Phengaris nausithous*

- 82 patches occupied in 2006
- 55% of these were still occupied in 2011
- in addition 20 patches unoccupied in 2006 were noted in 2011



Thank you for your attention!