

**EOW**'08  
European  
Otter 2008  
Workshop

# NATURA 2000 versus OTTER

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## CONTENT

1. Natura 2000 – legal background
2. Natura 2000 versus Otter – topics to discuss
3. Example from the Czech Republic

## WHAT IS NATURA 2000 NETWORK?

- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora „FFH directive“
- Article 2: Aim of FFH directive: contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora
- Article 3: Natura 2000 – coherent European ecological network of special areas of conservation (SAC)
  - ❖ Sites hosting the natural habitat types listed in Annex I
  - ❖ Sites hosting habitats of the species listed in Annex II
- Eurasian otter (*Lutra lutra* L.) listed in Annex II and IV

# FFH directive

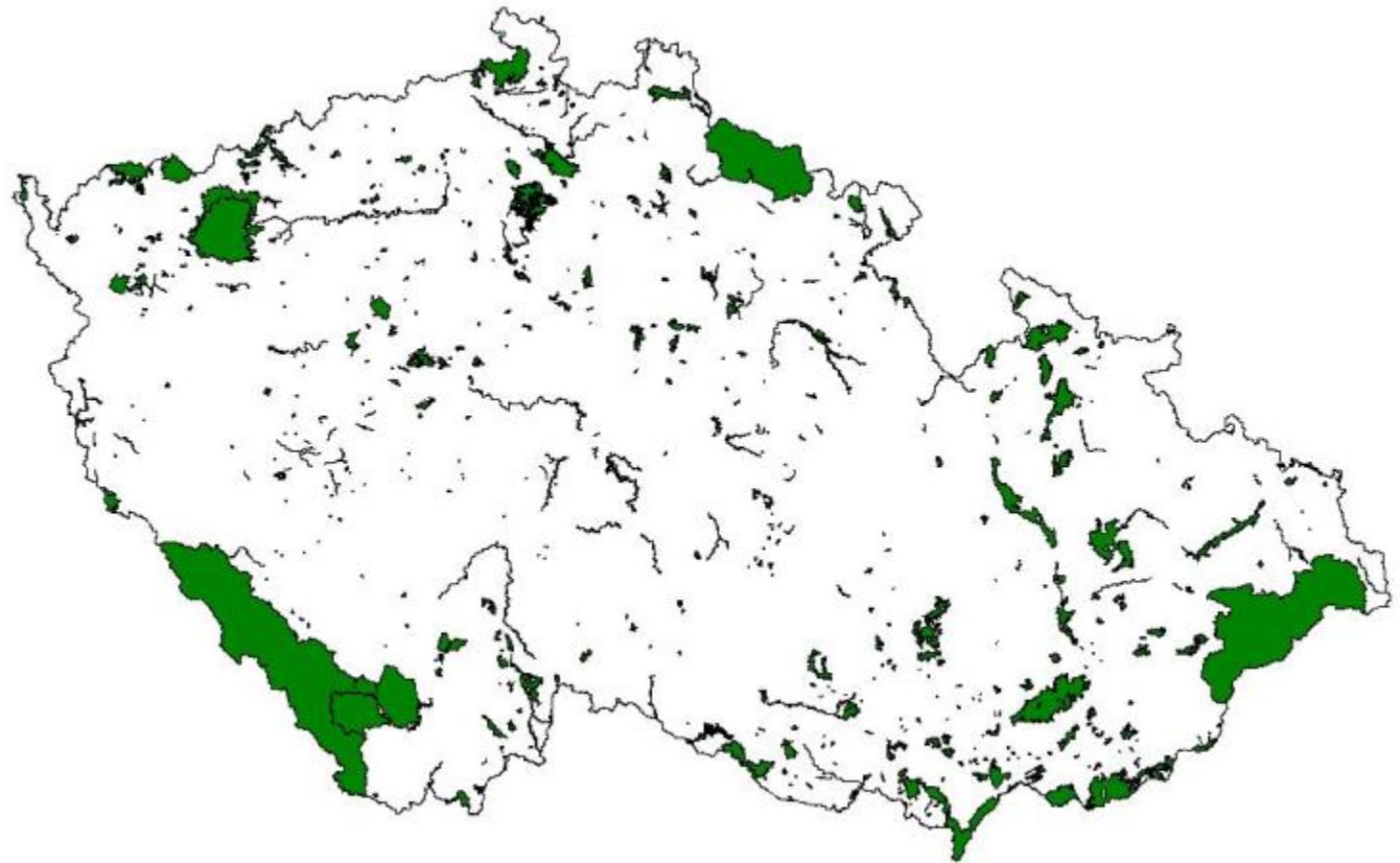
- Article 6: establishing conservation measures in SACs for species listed in Annex II present on the sites
- Article 11: undertaking surveillance of the conservation status of the species in Annex II
- Article 17: reporting
  - About conservation measures referred to in Article 6
  - evaluation of the impact of those measures on the conservation status of the species in Annex II
  - the main results of the surveillance referred to in Article 11

# NATURA 2000 versus OTTER

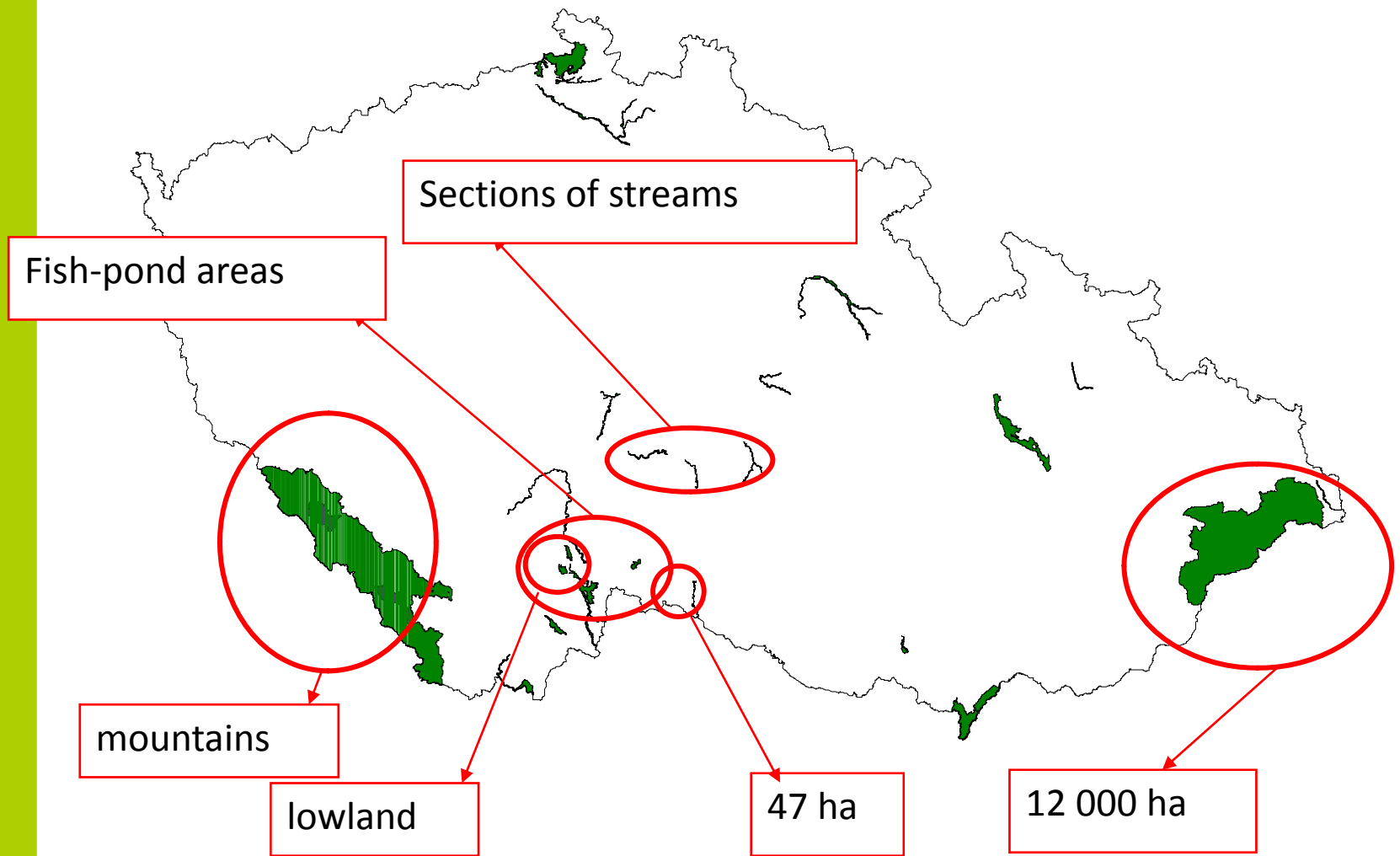
## ➤ Questions / topics

- In the context of otter is the Natura 2000 a network or patchwork?
- Is /could be Natura 2000 useful for otter conservation and how can we make the best of it for otter conservation?
- What measures should be taken in Natura 2000 sites to support otters there (guidelines?)?
- Is it a duty to monitor otter in the Natura 2000 sites?
- How to monitor otter in the Natura 2000 sites?

# Example from the Czech Republic



# Example from the Czech Republic



➤ First monitoring in 2006: testing

standard survey of otter signs (Reuther et al. 2000)

a) In the whole republic monitoring of distribution

- 4-6 sites(bridges)/ 11,2 x 12 km square

b) In SAC

- 3 sites: a bridge + 600 m of a bank



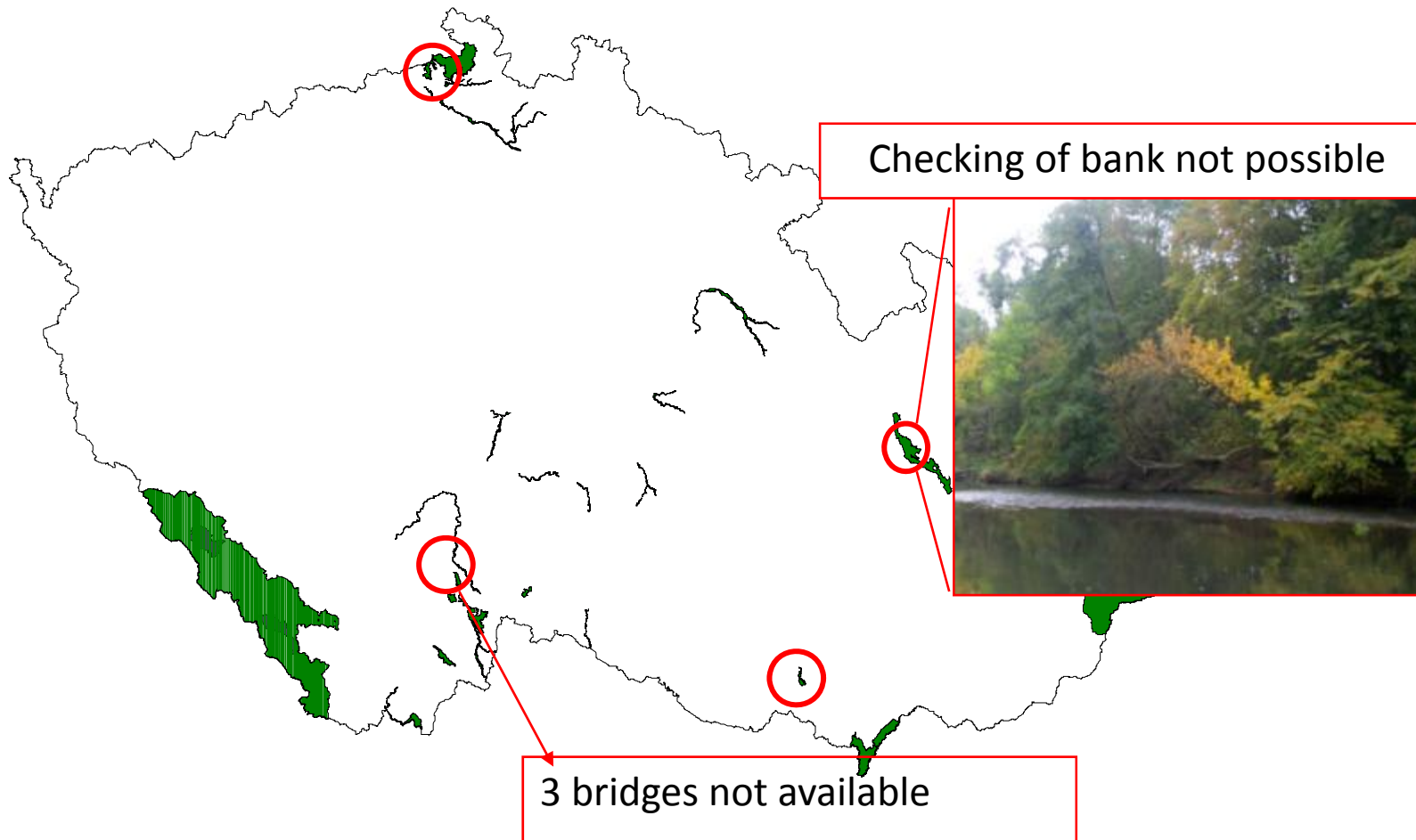
# Example from the Czech Republic

## Results:

26 positive  
2 negative



Information yes/no



# Example from the Czech Republic

## Evaluation of other possible methods:

~~Visual census (e.g. Ruiz Olmo *et al.* 2001 )~~

~~Counting of holts (e.g. Kruuk *et al.* 1989)~~

~~Hunting records~~

~~Collecting otter carcasses~~

~~Questionnaires~~

~~Expert estimation~~

~~Capture/recapture~~

~~Radio-tracking (e.g. Mitchell-Jones *et al.* 1984 )~~

~~Radio-nuclides marking (Kruuk *et al.* 1993)~~

~~DNA analysis of spraints (e.g. Coxon *et al.* 1999)~~

~~Camera or video monitoring (e.g. Garcia de Lear)~~

Snow tracking (e.g. Sulkava 2007)

Measuring of footprints (Hertweck *et al.* 2002)

Group of methods based on indirect signs (summarised in Reuther *et al.* 2000)

not possible in Central Europe

bias in estimates

invasive

expensive

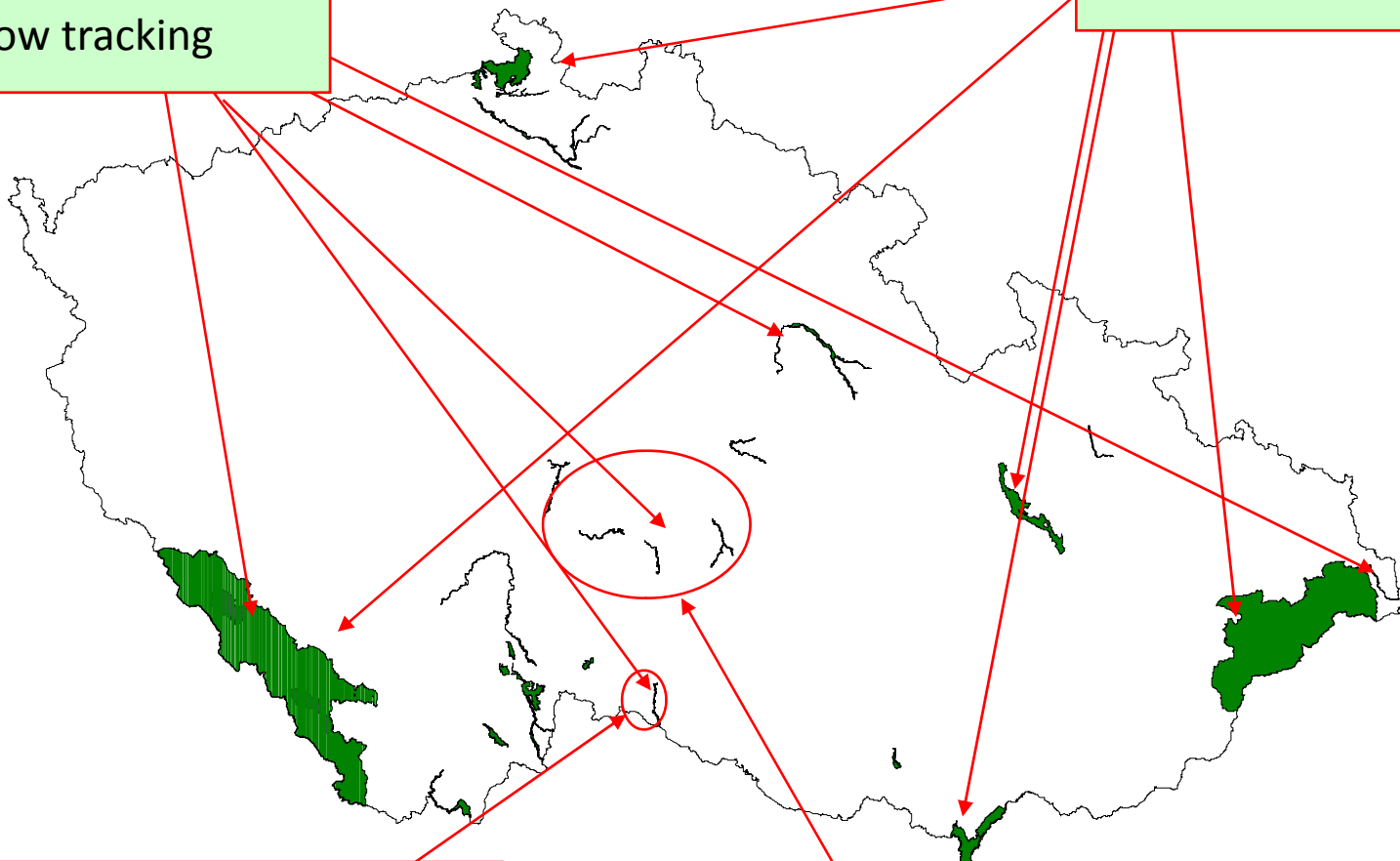
## Second monitoring in 2007: testing

Snow tracking

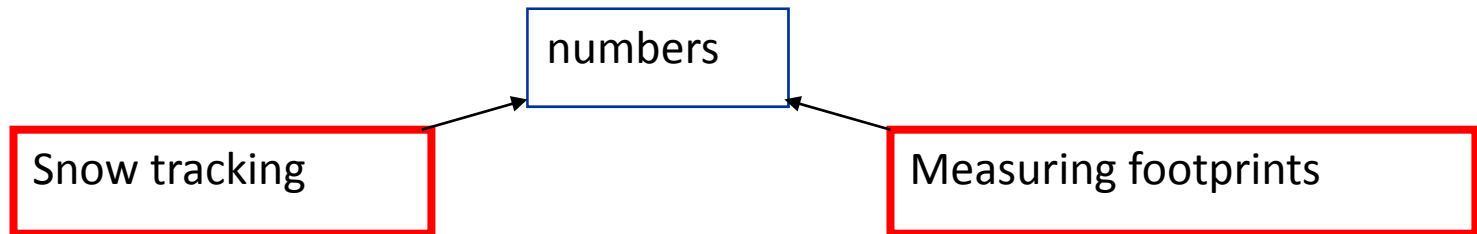
1. control of 10 bridges

Measuring of footprints

2. Repetitive controls of a bridge

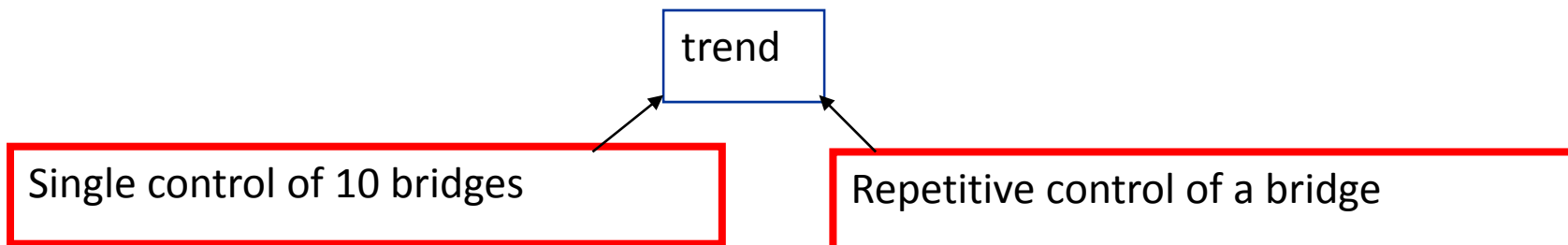


# Example from the Czech Republic



Limited by weather conditions

Limited by costs



Bigger areas (catchment)

Small areas (stream, pond)

## CONCLUSION

- Information yes/no is not enough
- Effective monitoring of otters in SAC request:
  - Evaluation of possible methods
  - Cost-effectiveness analysis
  - Use of different methods fitting for specific SACs
  - Combination of methods with absolute/relative data

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