

Italy country report

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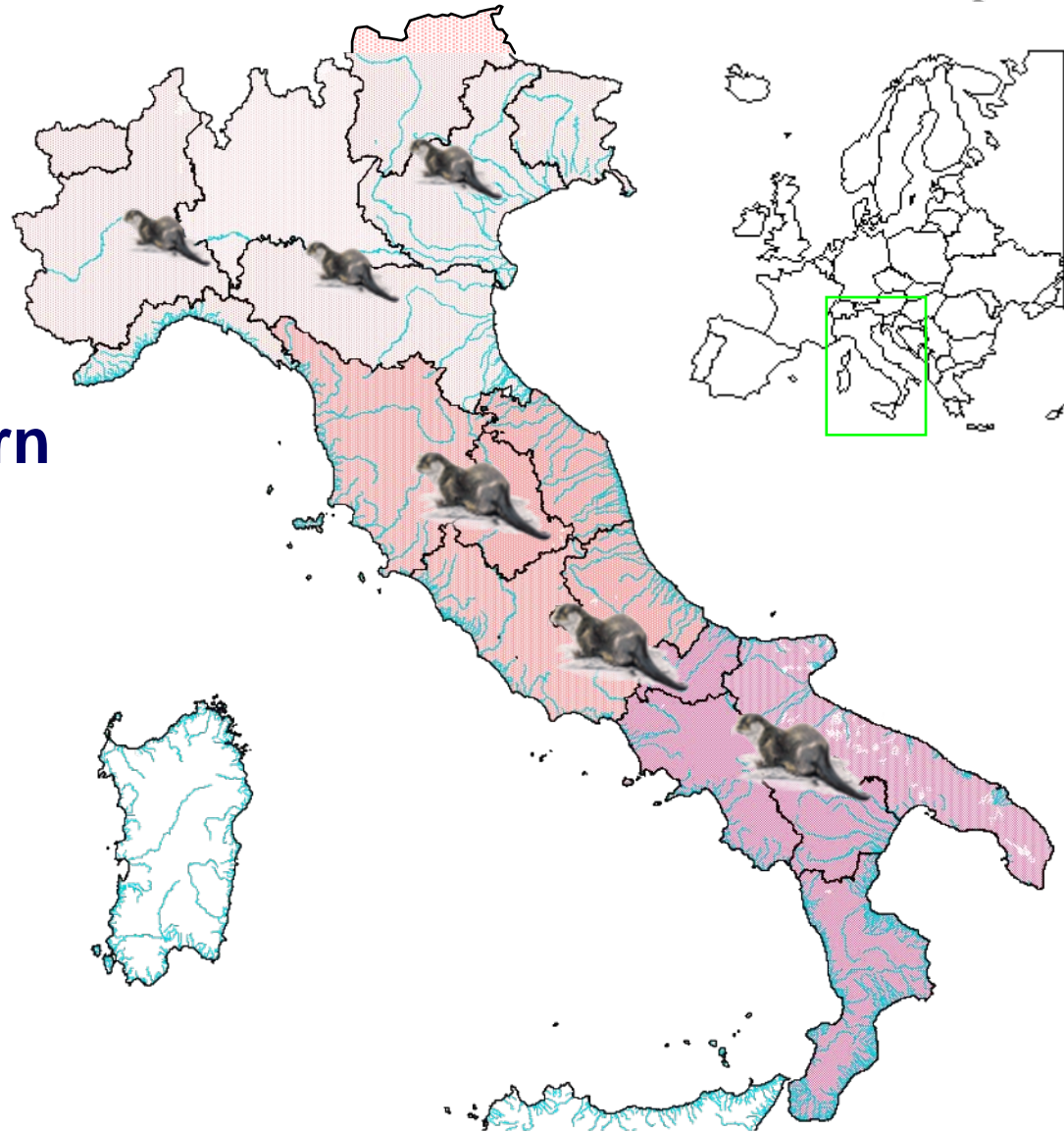


Otter distribution

1974-75 First national survey

(Cagnolaro et al. 1975)

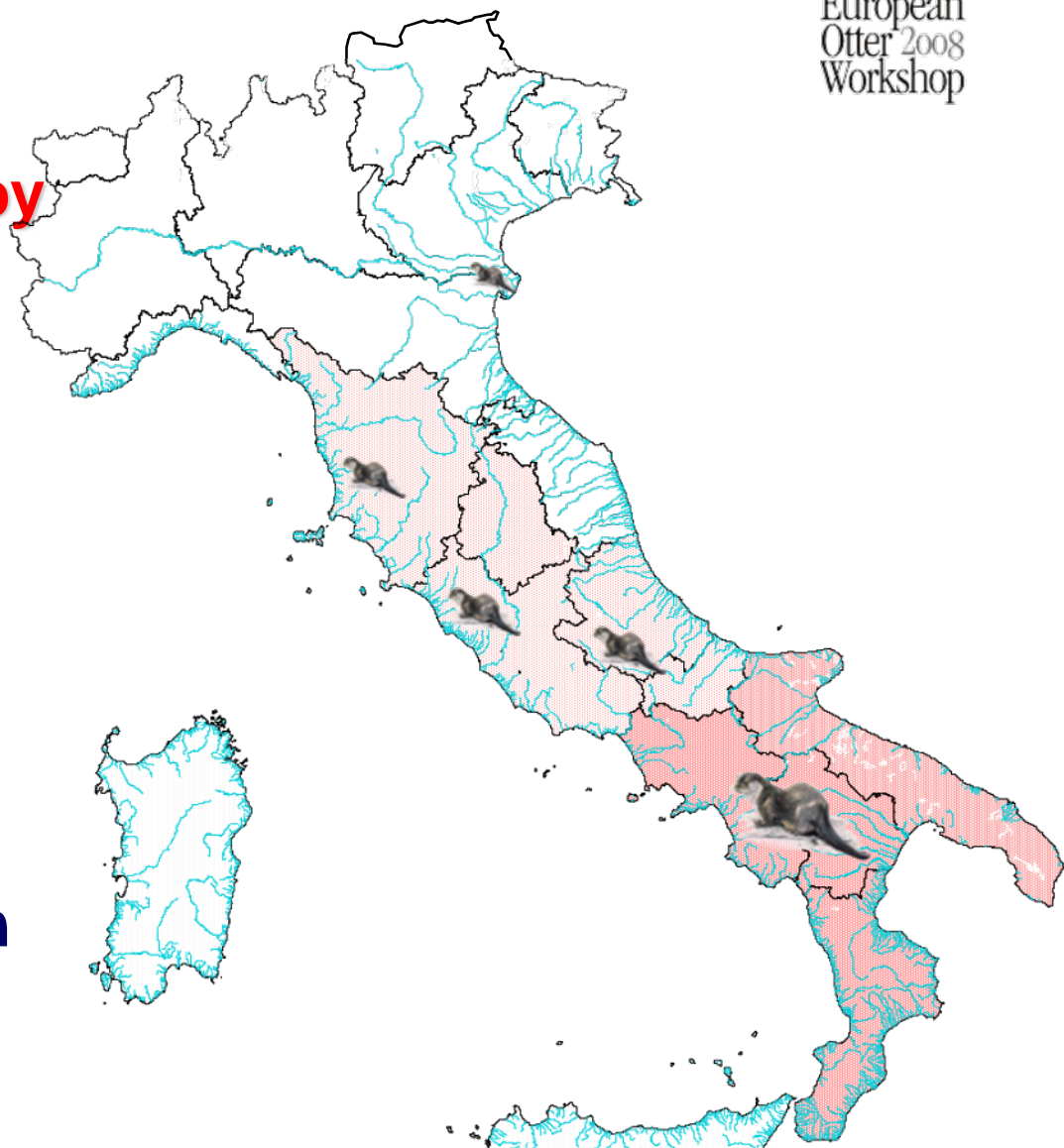
- reduced range
- fragmented in Northern Italy
- still abundant in Central and Southern regions



1984 – 1985

**National standard survey by
WWF Italia** (*Cassola 1986*)

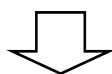
- Only 80/1300 positive sites (6,1%)
- Extinct in the North
- Few isolated populations in Central Italy
- Most of positive sites concentrated in Southern regions



1993-1996 surveys

- 1995 last record in the Orta-Orfento
- 1999 - 2000 disappears from Fiora, lake of Burano few individuals remain on Farma-Merse (Reggiani et al. 2001)

150 estimated mature individuals left (*Fumagalli & Prigioni, 1993; Prigioni, 1997*)

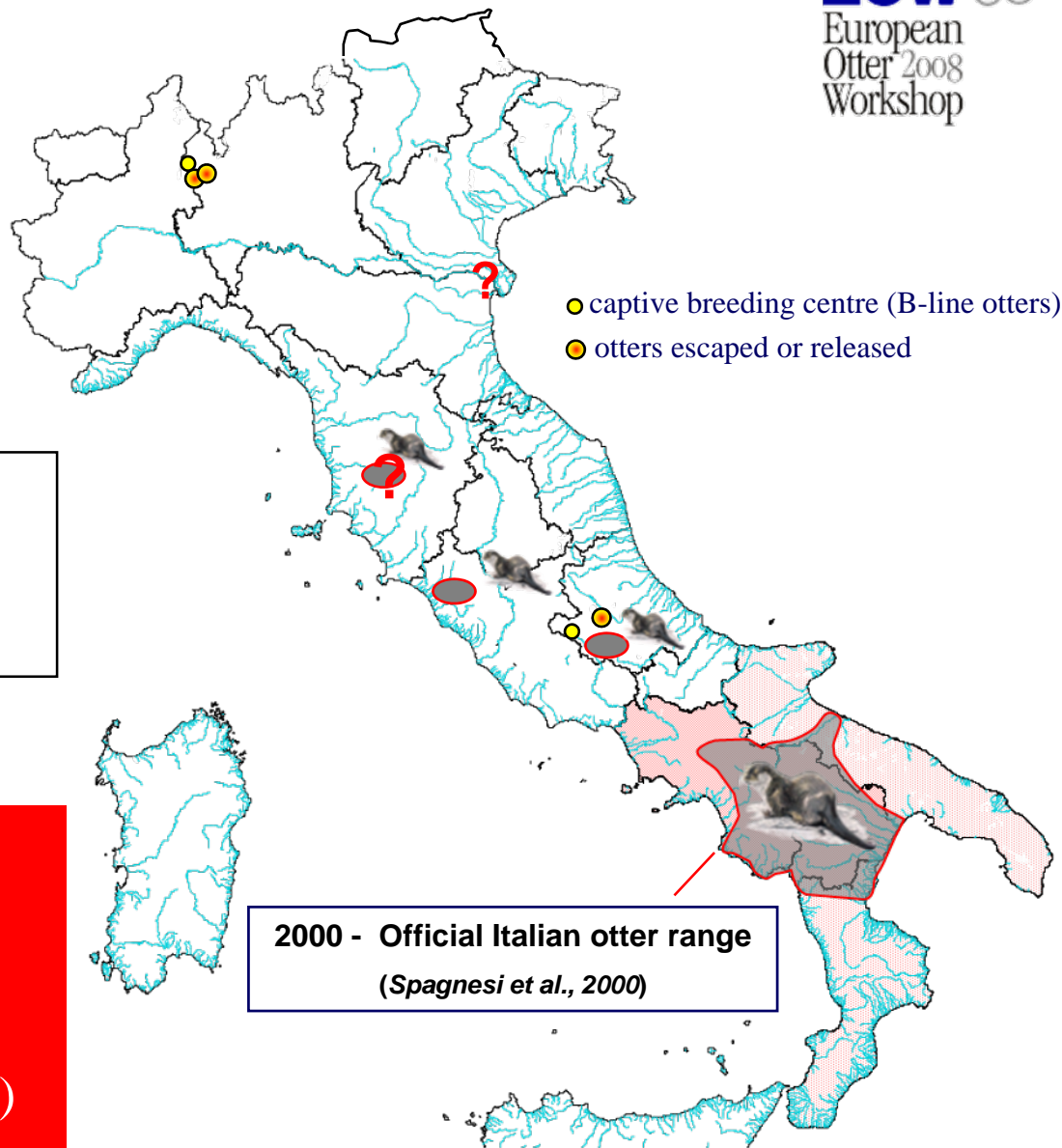


National Red List

Otter listed as critically endangered

(estimated less than 250 mature individuals - declining population)

(*Calvario et al., 1997*)

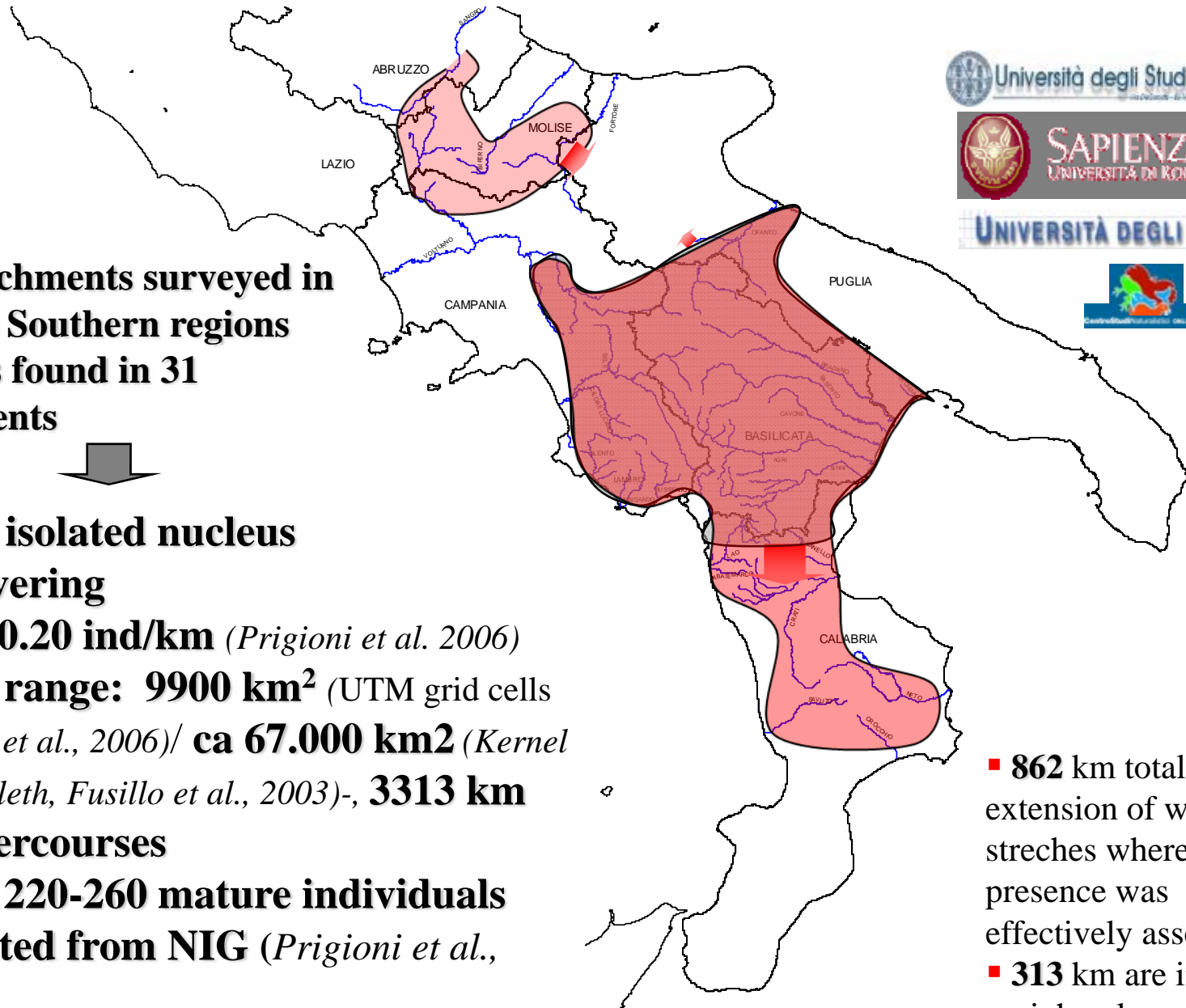




- 70 catchments surveyed in Central Southern regions
- otters found in 31 catchments

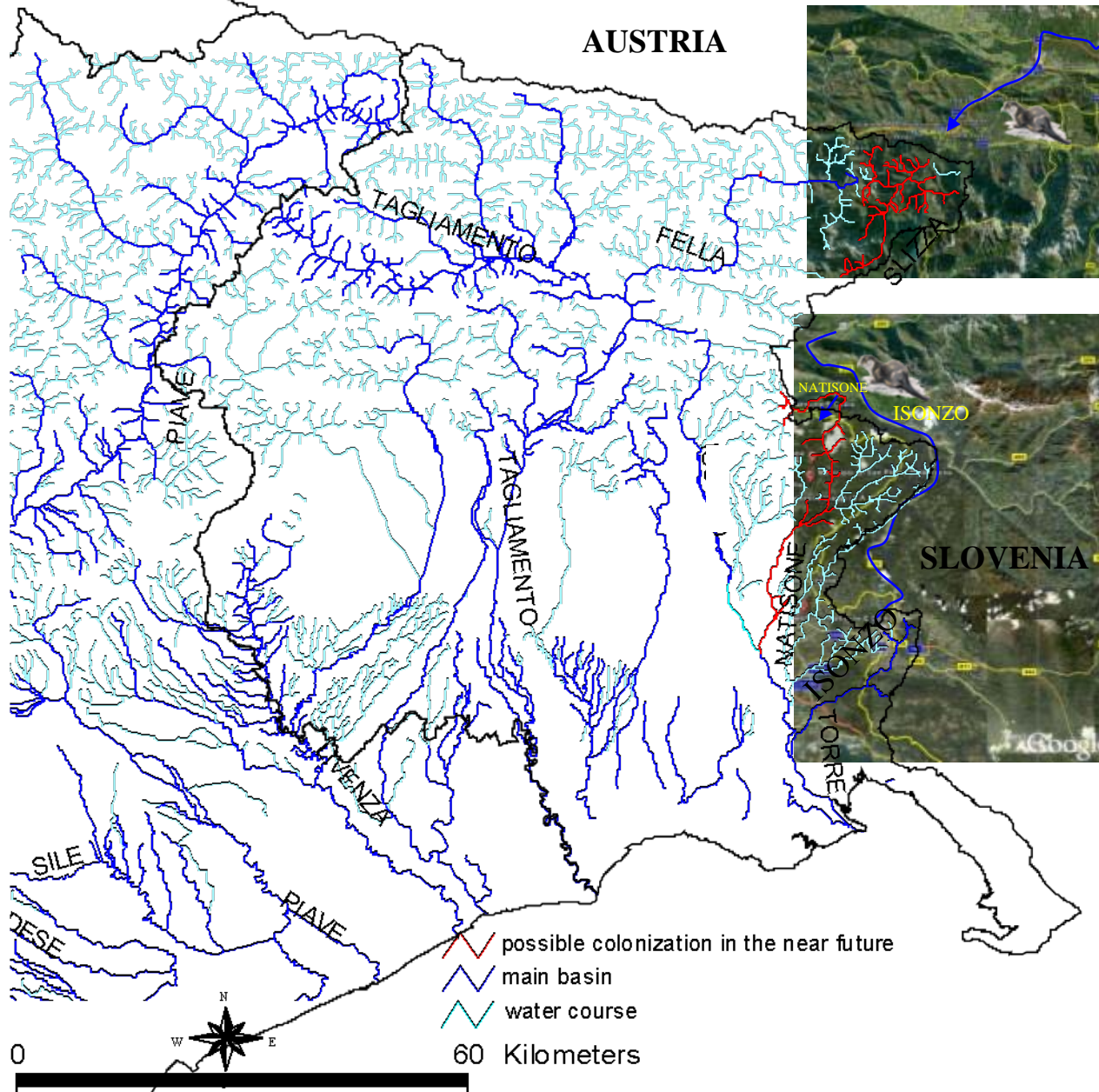


- new isolated nucleus
- recovering
- 0.18/0.20 ind/km (*Prigioni et al. 2006*)
- total range: 9900 km² (UTM grid cells *Prigioni et al., 2006*)/ ca 67.000 km² (Kernel *Prb isopleth, Fusillo et al., 2003*)-, 3313 km of watercourses
- total 220-260 mature individuals estimated from NIG (*Prigioni et al., 2006*)

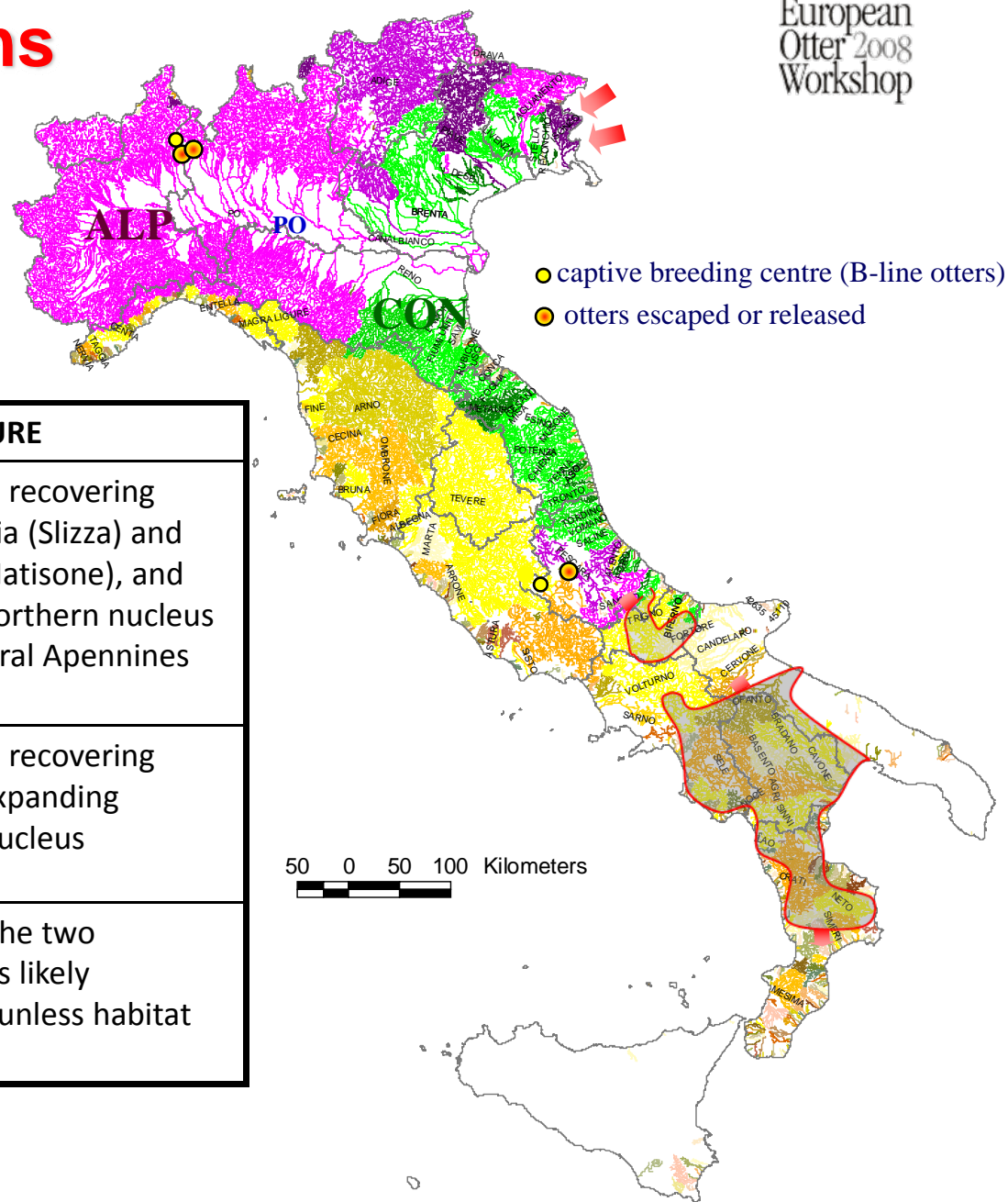


- 862 km total extension of water stretches where otter presence was effectively assessed
- 313 km are in the peripheral area

Natural recovering in the Alpine region?



Biogeographic regions



REGION	TODAY	NEXT FUTURE
ALPINE	B-line otters in the Ticino river, tributary to the Po	Wild otters recovering from Austria (Slizza) and Slovenia (Natisone), and from the northern nucleus in the Central Apennines (Sangro)
CONT	No otters	Wild otters recovering from the expanding northern nucleus
MEDIT	Wild otters. Two nuclei, both expandig.	Joining of the two populations likely prevented unless habitat restoration



Ministero dell'Ambiente e della Tutela
del Territorio e del Mare
Direzione per la Protezione della Natura



Istituto Nazionale
per la Fauna Selvatica

Manuela Panzacchi, Piero Genovesi, Anna Loy
(a cura di)

PIANO D' AZIONE NAZIONALE PER LA
CONSERVAZIONE DELLA LONTRA
(*Lutra lutra*)



Documento di supporto tecnico-scientifico

Dicembre 2006

PACLO - Action Plan for the Conservation of the Italian Otter

Due December 2008

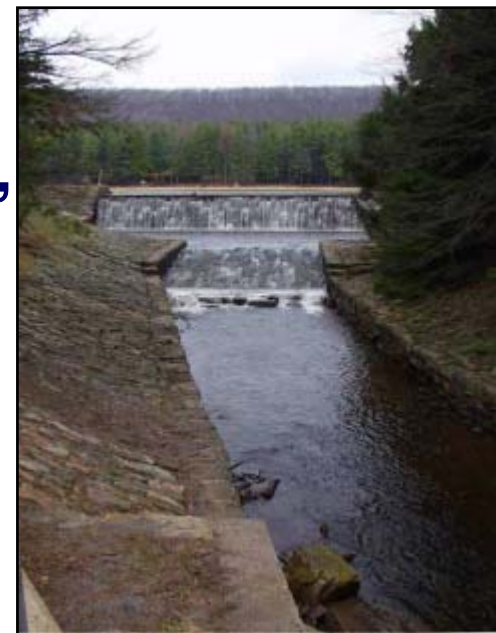
Organization:

- Research expert team
- Public institutions directly

involved: National Forest Service, Regional and Province administrations, National Parks, WWF, Legambiente). Agreement signed on November 2007

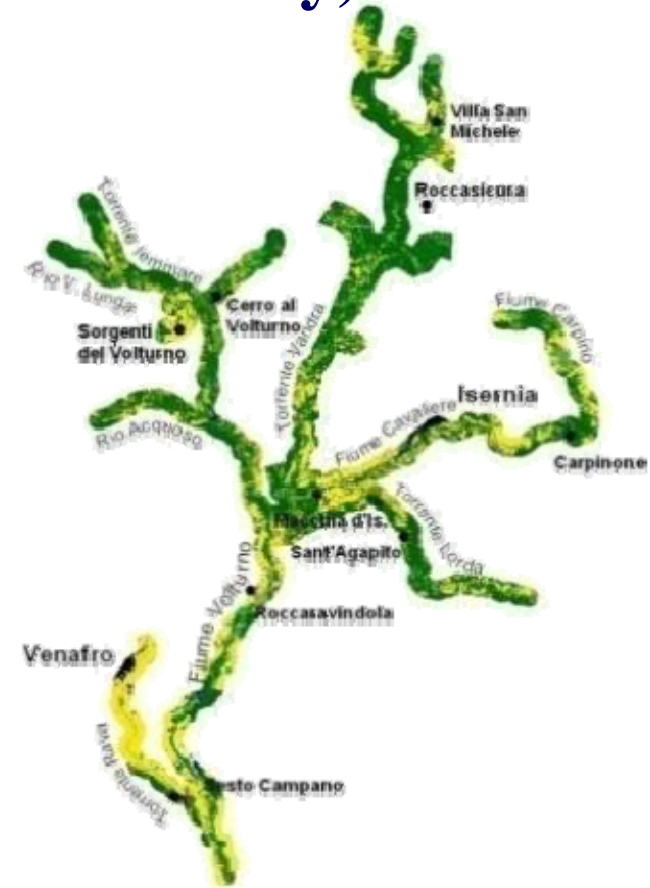
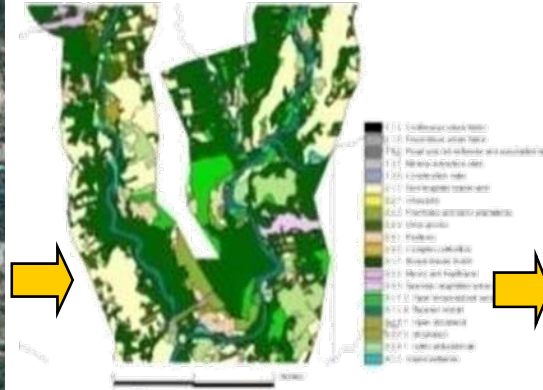
Pressures and threats

- Destruction of riparian habitat (dens, fish productivity)
- Accidental deaths (road casualties)
- Direct persecution
- Water abstraction
- Water pollution (PCB, heavy metals)?



- **Riparian habitat (dens, fish aproductivity)**

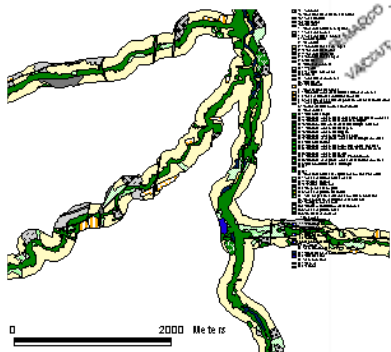
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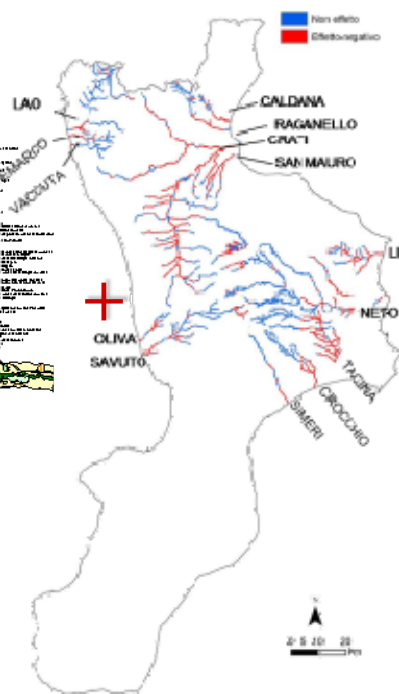
Corine Landcover 1:5.000 map from photointerpretation on 300 m buffer around main river courses and tributaries within otter range

Habitat suitability map

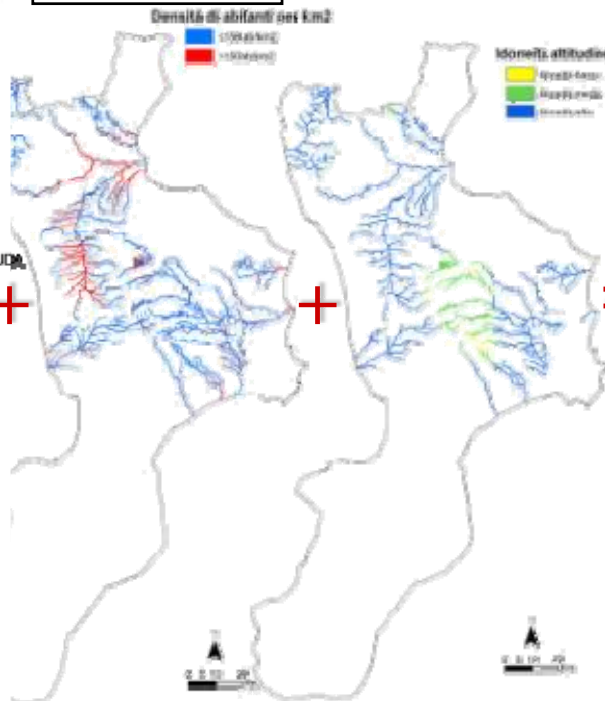
riparian land cover



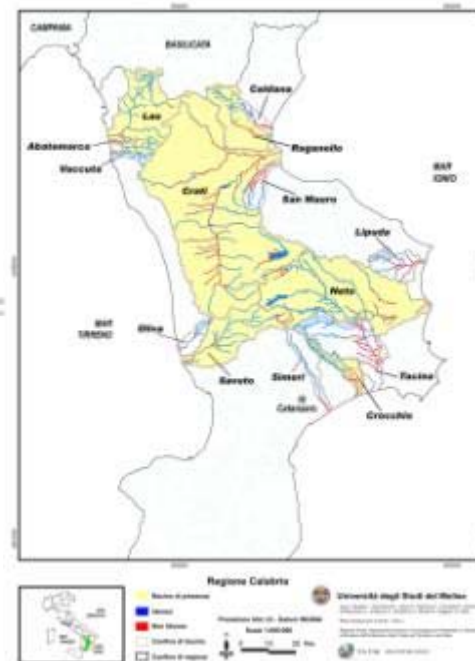
Extra riparian land use



Human density

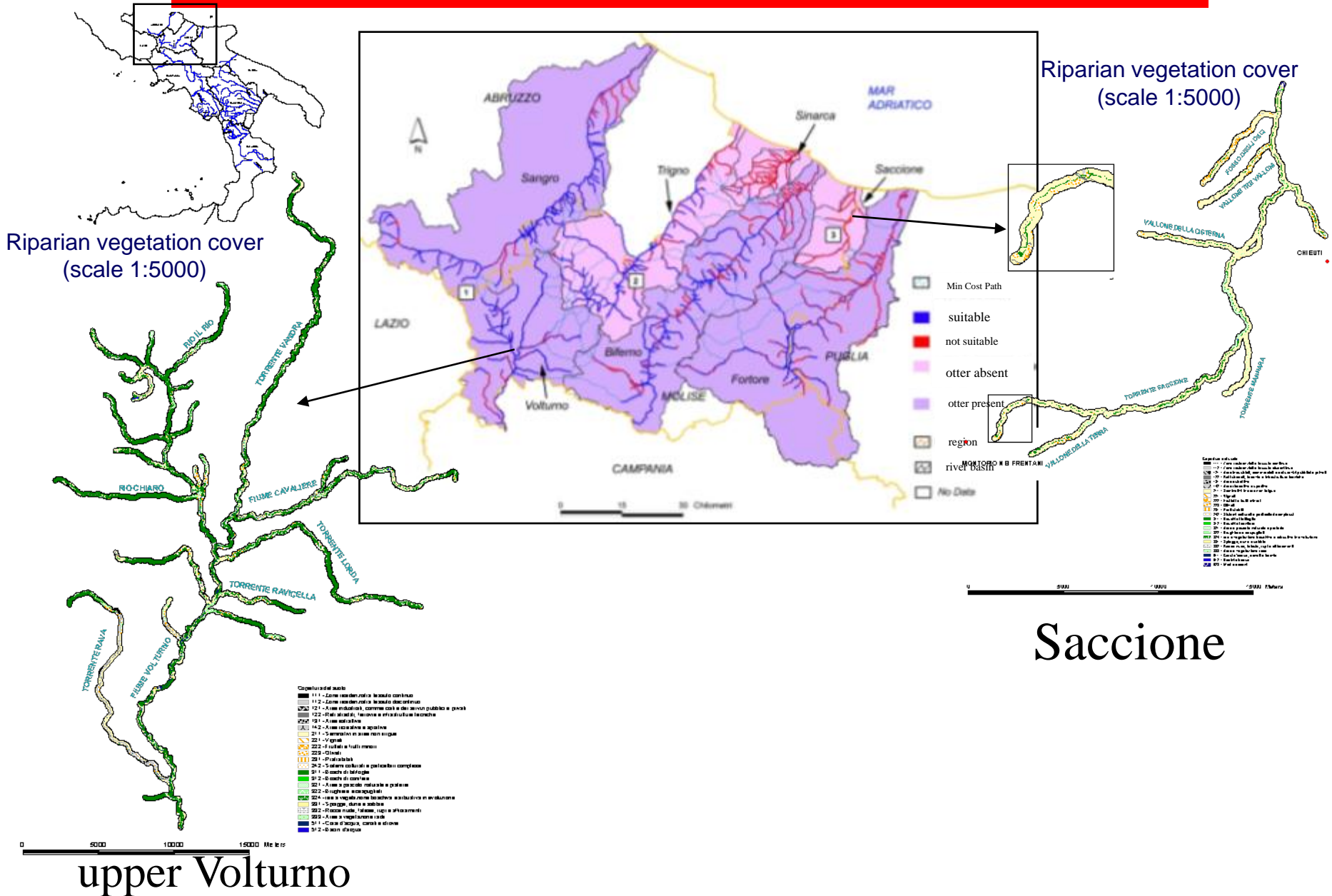


Altitude

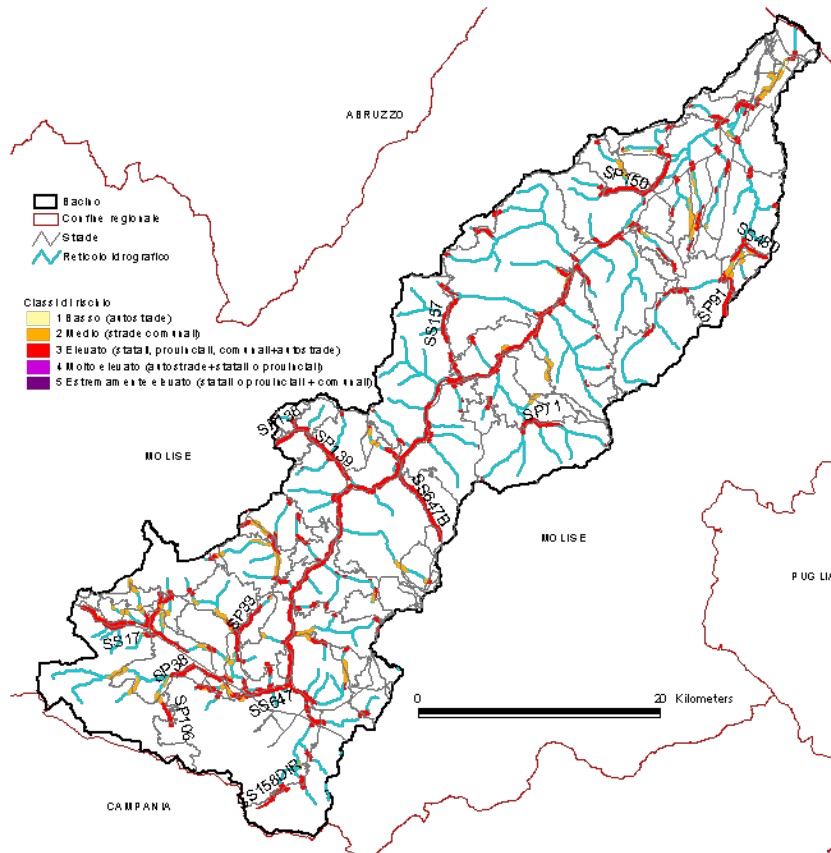


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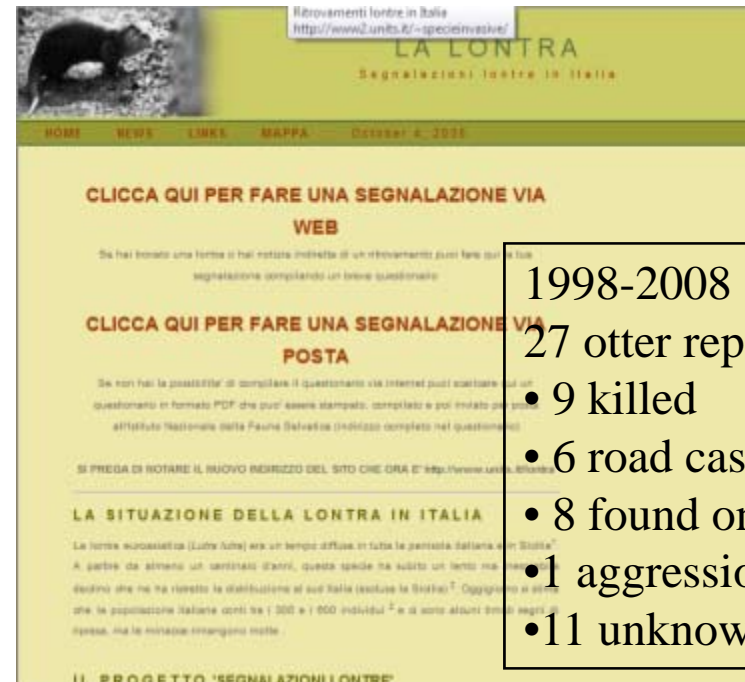
Habitat suitability and connectivity



• Road casualties and poaching



Risk assessment map for each river catchment within otter range
University of Molise- Italian Ministry of Environment

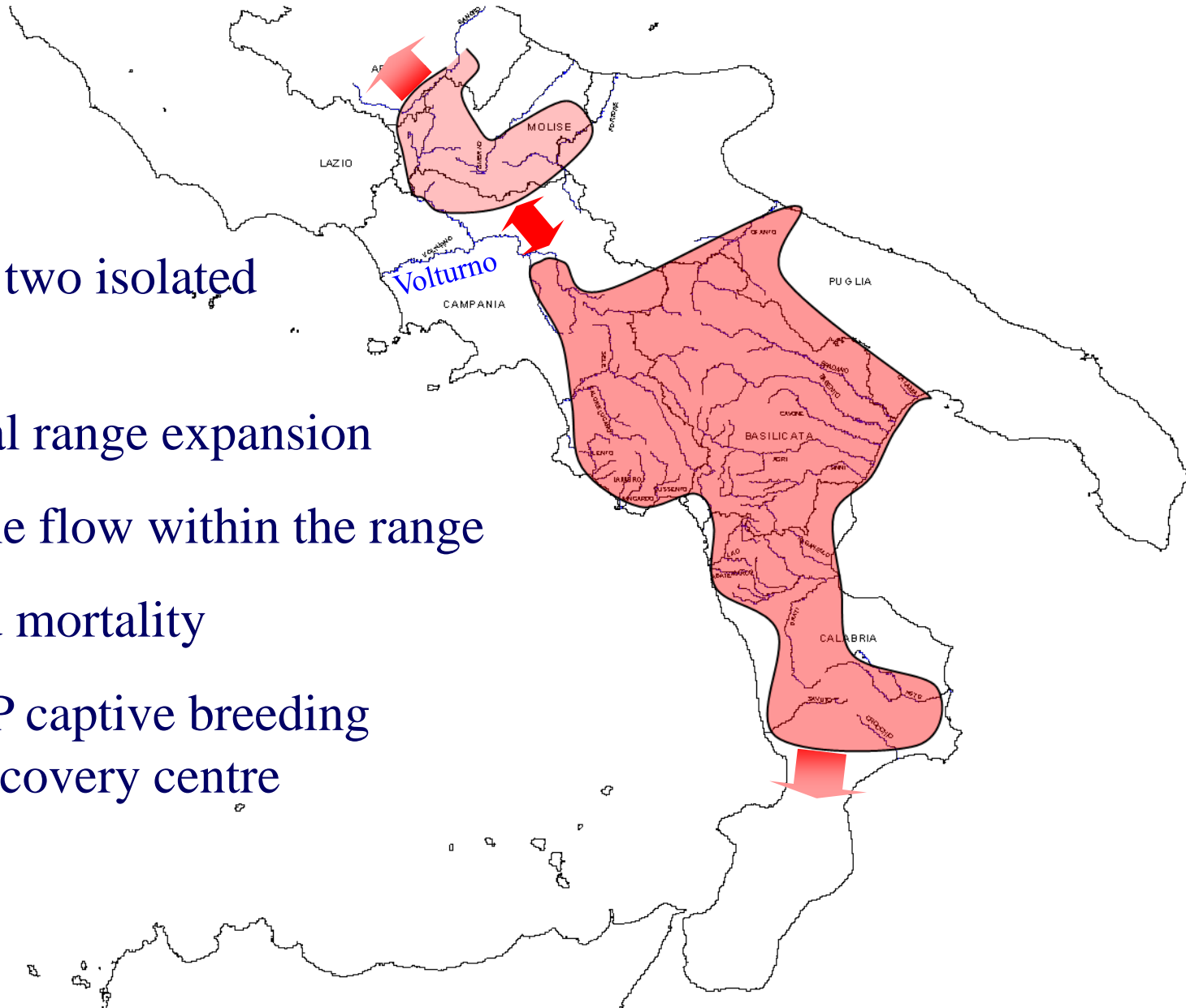


1998-2008
27 otter reported:
• 9 killed
• 6 road casualties
• 8 found on roads
• 1 aggression
• 11 unknown

Online register for wounded and killed otters
by Laura Bonesi , Univeristy of Trieste

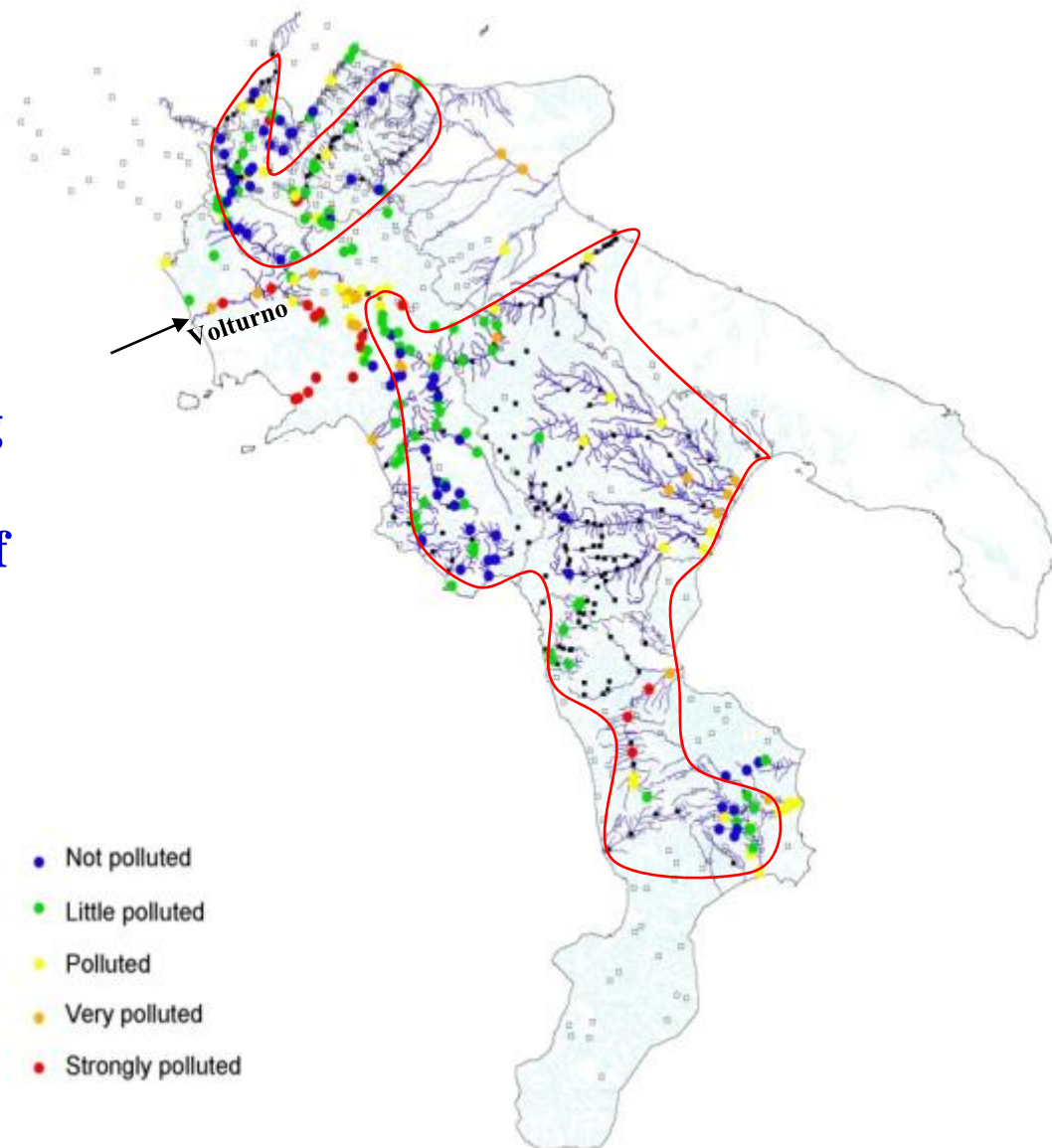
Priorities for conservation

- Connect the two isolated populations
- Favor natural range expansion
- Mantain gene flow within the range
- Reduce road mortality
- Convert EEP captive breeding centres into recovery centre



Water quality: Extended Biotic Index

Highly polluted medium and low course of the Volturno river basin might prevent the joining of the two populations living in the upper parts of the basin



1980-2000 Captive breeding centres and reintroduction programmes



LA TORBIERA (private Zoo)
- **Conservation** (EEP - Studbook)
- **Education**
Est. **1986** B-line otters from Norfolk + Bern Zoo and Zurich Zoo. **1990** first birth



REGIONAL PARK TICINO PIEMONTE
- **Conservation** (Reintroduction programme)
Est. **1995** – 2 animals released
1996 Reintroduction programme halted, but other 4 otters escaped from enclosures
2008 Reintroduction Workshop with OSG-IUCN representative



PENNE - WWF NATURE RESERVE
- **Education**
Est. **1991** 14 ind (4 born in the centre)

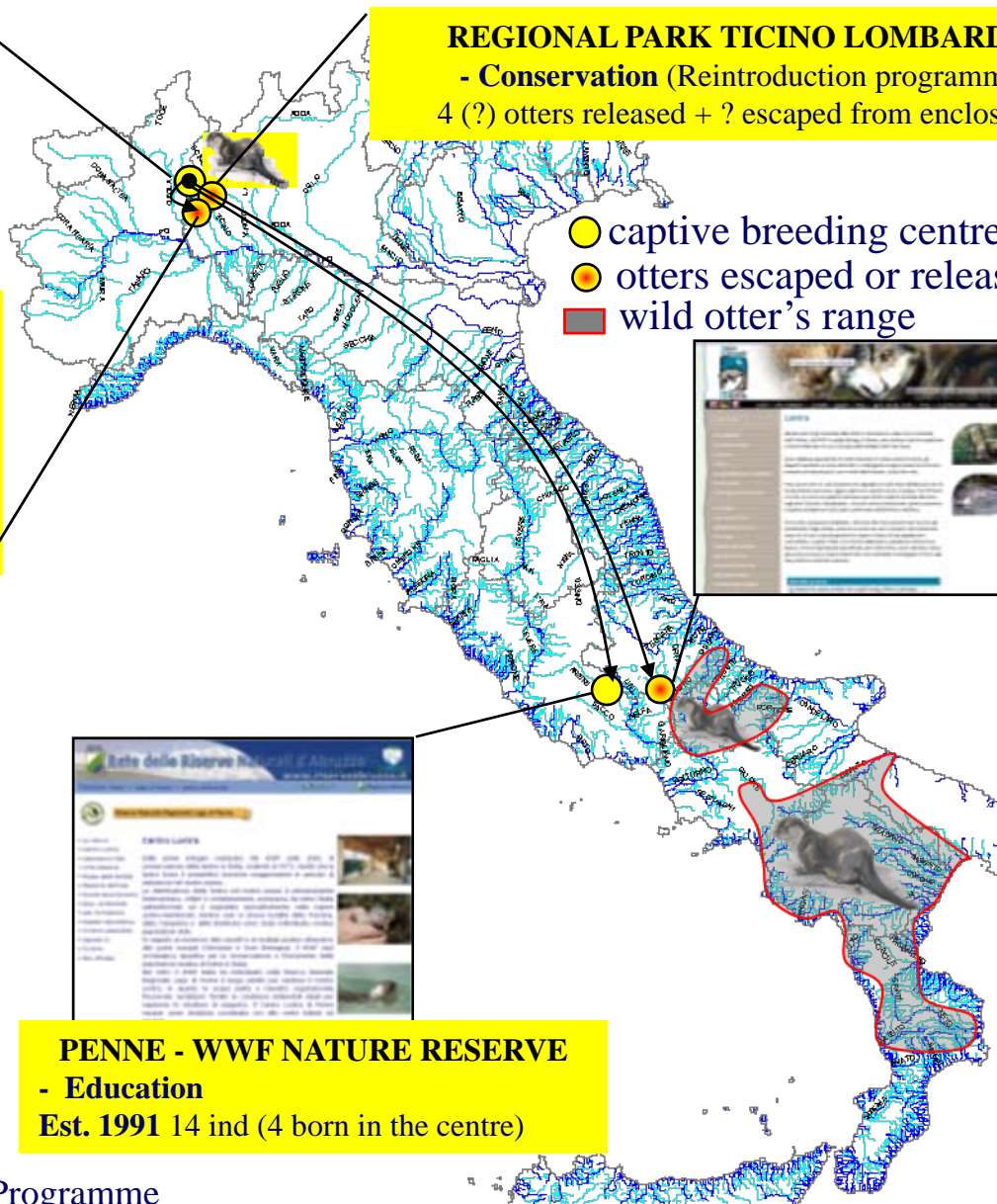
REGIONAL PARK TICINO LOMBARDIA

- **Conservation** (Reintroduction programme)
4 (?) otters released + ? escaped from enclosures

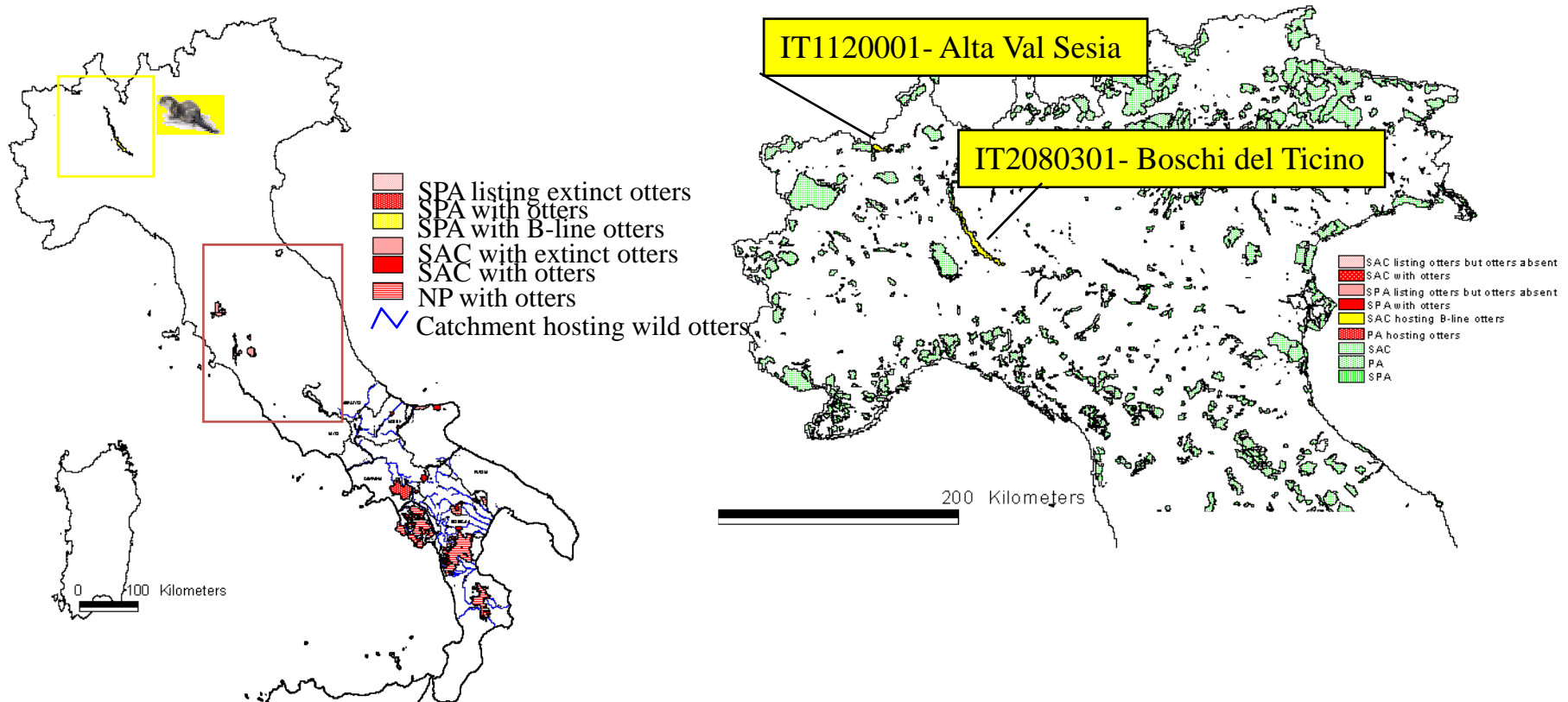
● captive breeding centre (B-line otters)
● otters escaped or released
■ wild otter's range



MAIELLA NP
Est. **1989**
- **Conservation** (EEP – Studbook & Reintroduction programme)
- **Research**
- **Education**.
12 enclosures. 26 ind. born
2000 Experimental release 3 F – 3 M (sterilized): 3 killed – 2 recaptured – 1F lost

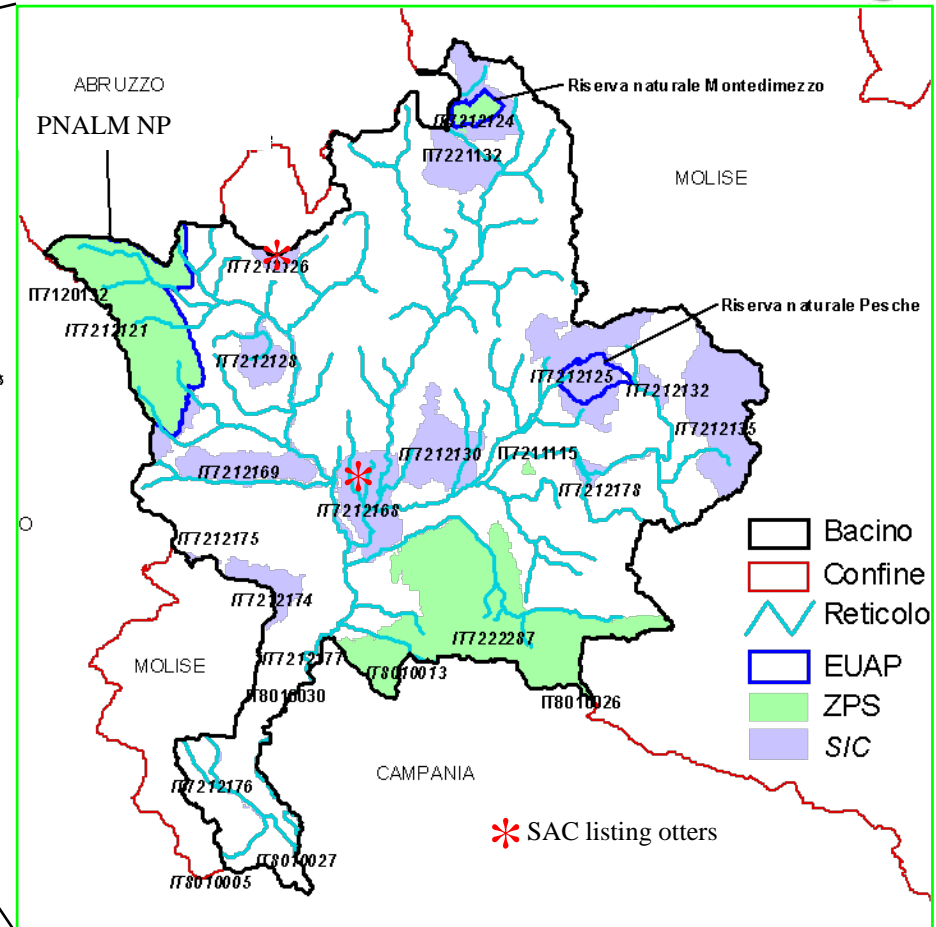
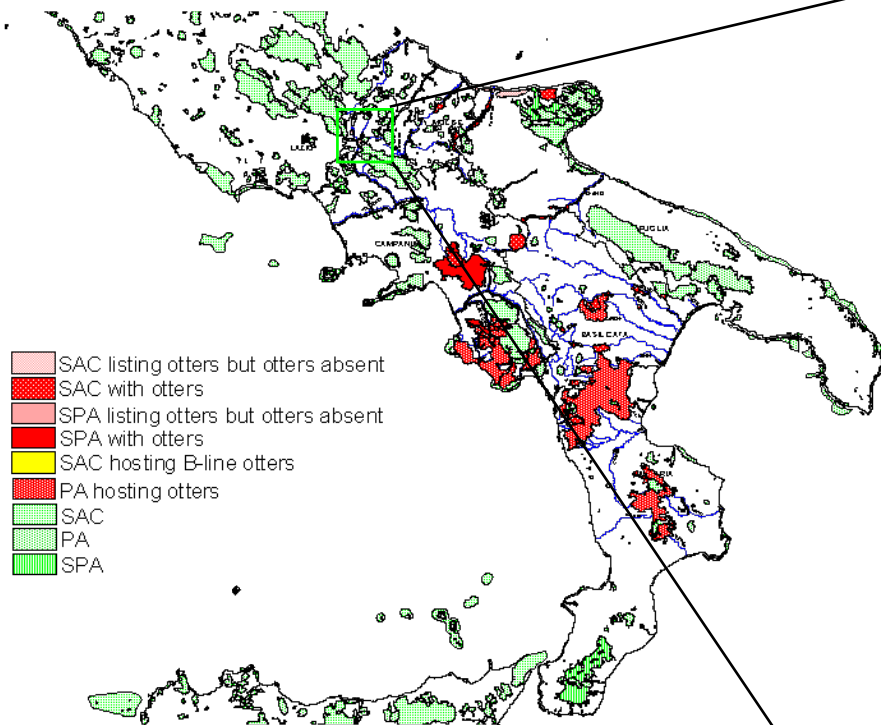


Habitat Directive 79/409/EEC SAC-SPA



	SAC-SPA	National Parks	Regional Parks and Nature Reserves (EUAP)
B-LINE OTTERS	2	0	2
A-LINE OTTERS LISTED BUT ABSENT	12	2	0
A-LINE OTTERS PRESENT and listed	39	3	22
A-LINE OTTERS PRESENT – not LISTED	10	0	0

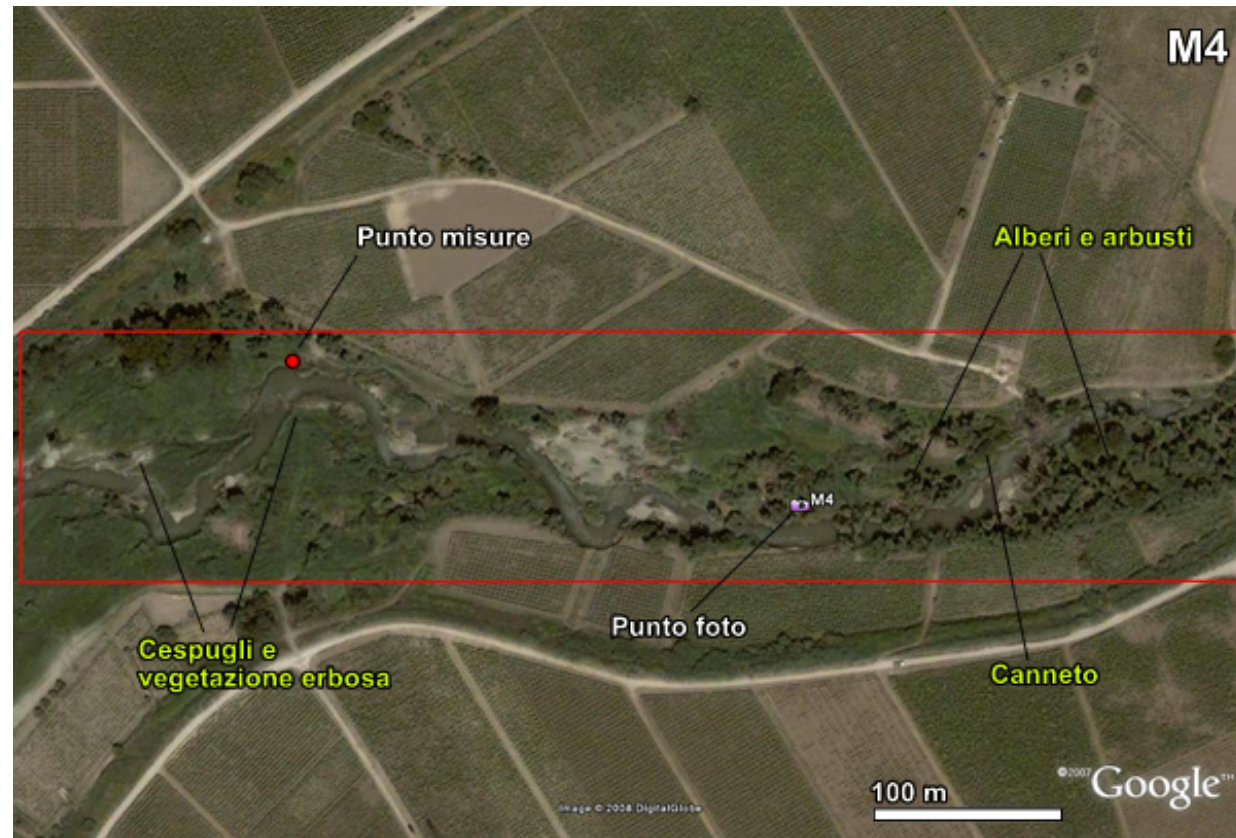
Protected areas



Upper Volturno

CONFLICTS

- **FARMERS**
USING RIPARIAN
LAND relevant (e.g
OFANTO)
- **FISH FARMS**
(few) might be
locally relevant
- **ANGLERS** not
relevant
- **FISH PONDS** not
relevant



NGO devoted to otters

GRUPPO LAVORO LONTRA ITALIA (1992-1998) self funded, voluntary based.

Founders: Public and private institutions, NGOs (University of Rome 'La Sapienza', National Forest Service (CFS), WWF Italia, Centro Faunistico 'La Torbiera', Ente Parco Ticino Lombardia, IEA, NP Cilento e Vallo di Diano).

Aims: promote otter conservation and a national action plan.

Produced two 'Manifesto'.



GRUPPO LONTRA MOLISE (2005) self fund, voluntary based.

Founders: Graduate students in Environmental Sciences at University of Molise

Aims: monitoring and education of otters (northern nucleus)



CENTRO STUDI NATURALISTICI.

Aims: Otter and other wildlife conservation and education. Mostly active in Puglia region.

Created and moderate the forum

LONTRA-LIST yahoogroup.com (since 2000)

RESEARCH PROJECTS



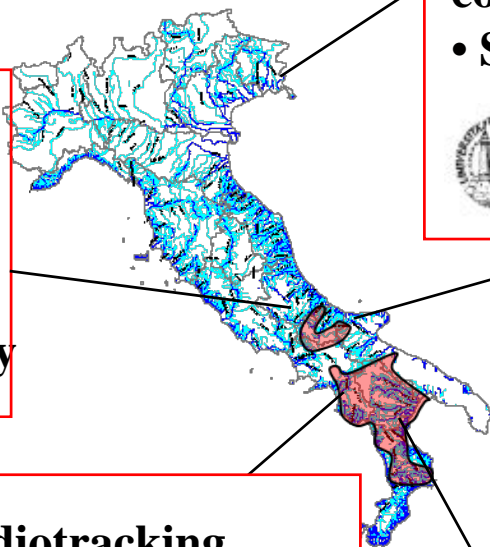
National Forest
Service

- **Experimental release (radiotracking)**



NP Majella

- **Captive breeding**
- **Habitat suitability**



- **Habitat suitability and connectivity**
- **Survey**



Università
di Trieste



Il Museo Friulano
di Storia Naturale

- **Habitat suitability and connectivity**
- **Survey**



Ministry of
Environment



Università degli Studi del Molise



NP Cilento e
Vallo di Diano

- **Radiotracking**
- **Diet**
- **Survey**
- **Habitat and distribution modeling**



SAPIENZA
UNIVERSITÀ DI ROMA

- **Non Invasive Genetics**
- **Diet**
- **Monitoring**



NP Pollino

UNIVERSITÀ DEGLI STUDI DI PAVIA

Istituto Nazionale per la
Fauna Selvatica



See you in Pavia!



National and Regional Parks and Nature reserve within otter range

