

Wildlife rabies in Italy: Epidemiological situation and response strategies

STANDING COMMITTEE ON PLANTS, ANIMALS,
FOOD AND FEED

Animal Health and Welfare

Brussels, 16 May 2017

Epidemiological situation 2016

The last rabid fox was detected on 14 February 2011.
No further cases were identified during the surveillance program for rabies in the wildlife in 2 years

Italy re-gain the rabies-free status as of 14 February 2013

according to Article 8.10.2 of Chapter 8.10. of the OIE Terrestrial Animal Health Code

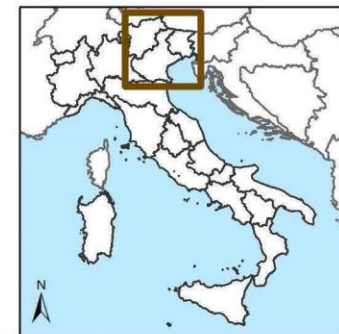
“Self-declaration from Italy on the recovery of its rabies-free status”

OIE bulletin 2013 No 2 (<http://www.oie.int/index.php?id=86>)

2016 – Passive surveillance 1° semester

Wild animals found dead or showing symptoms

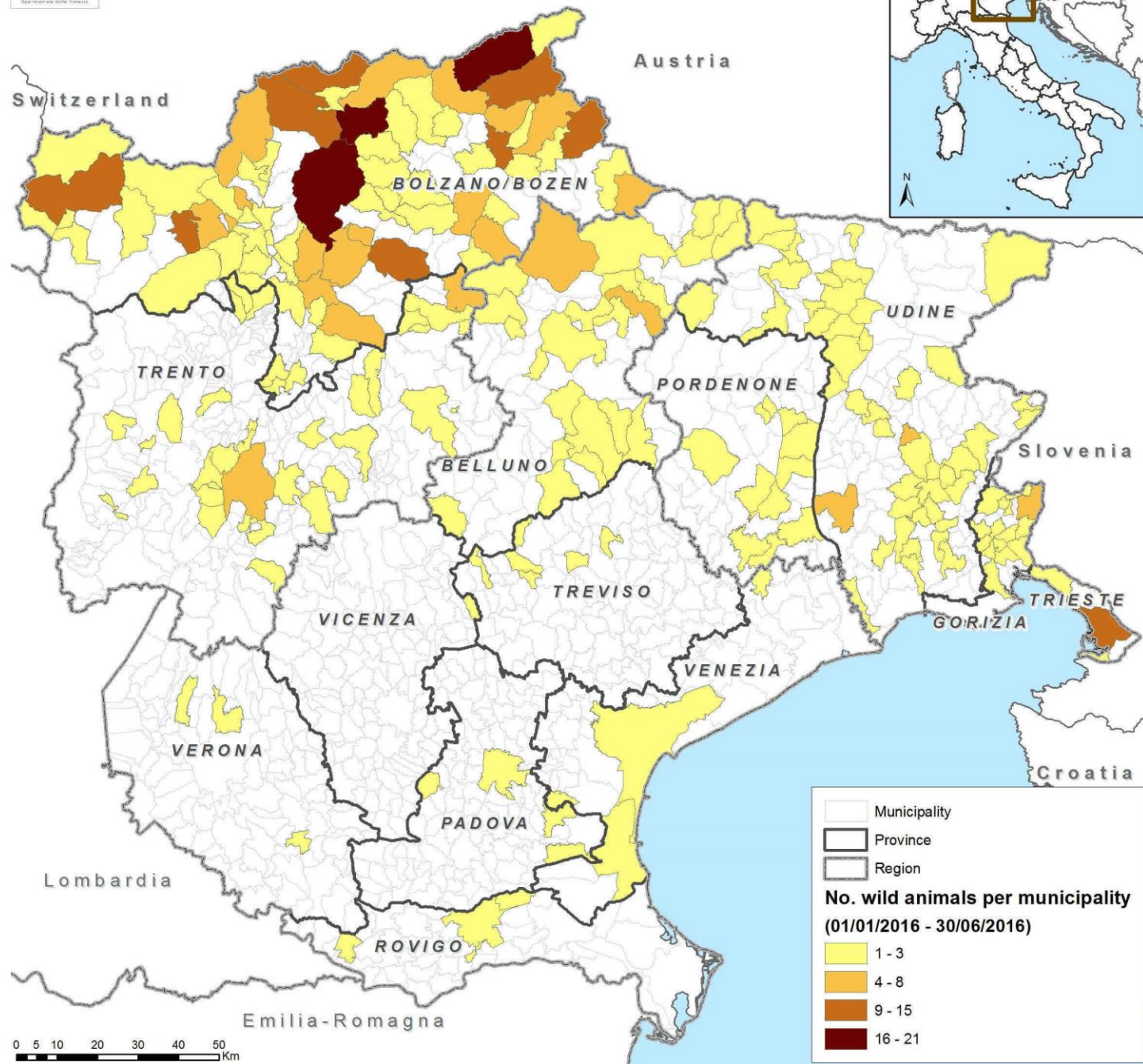
Region	Total wild animal tested	Red foxes	% Red foxes
Friuli Venezia Giulia	119	84	70.59%
P.A. Bolzano	321	150	46.73%
P.A. Trento	48	38	79.17%
Veneto	67	48	71.64%
Total	555	320	57.66%



2016

Passive surveillance

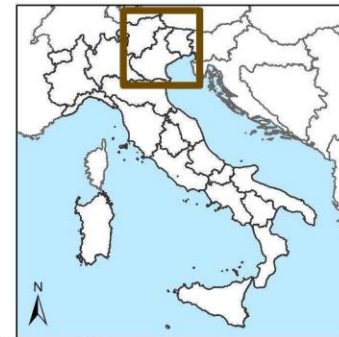
Wild animals found dead or showing symptoms in the 1st semester 2016



2016 – Passive surveillance 2° semester

Wild animals found dead or showing symptoms

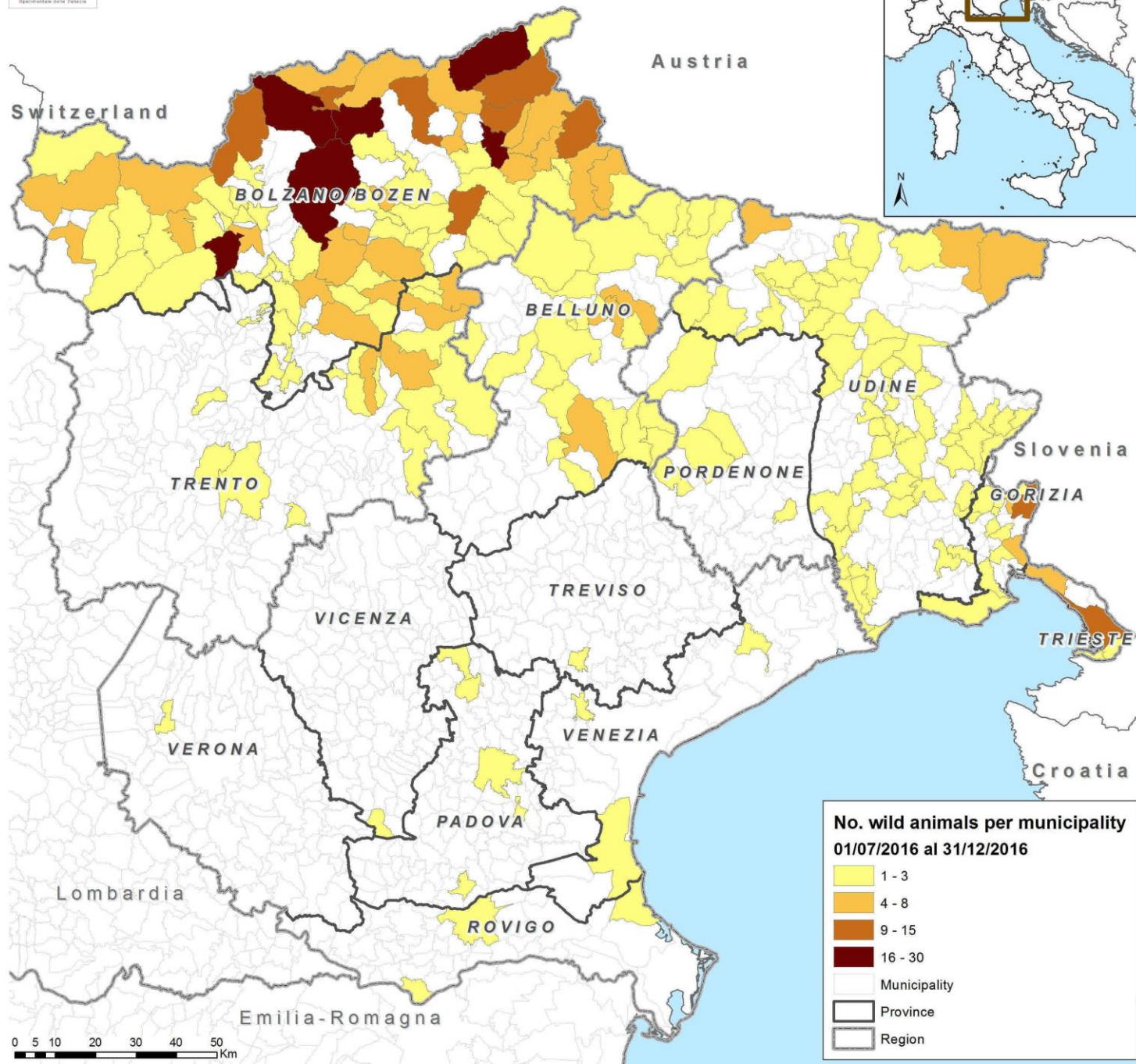
Region	Total wild animal tested	Red foxes	% Red foxes
Friuli Venezia Giulia	158	133	84.18%
P.A. Bolzano	412	207	50.24%
P.A. Trento	40	34	85.00%
Veneto	65	42	64.62%
Total	675	416	61.63%



2016

Passive surveillance

Wild animals found dead or showing symptoms in the 2nd semester 2016



Oral Foxes Vaccination (OFV) campaigns 2016

Two preventive campaigns were carried out
in Friuli Venezia Giulia,
on the Italian-Slovenian border
(20 km belt)

PREVENTIVE OFV

- APR 2016
- NOV 2016

OFV – Preventive campaigns

- **Preventive Campaign April 2016**
 - Spring Oral Vaccination:
 - about **2,200** sq.km,
 - **55,200** vaccine baits distributed by helicopter

OFV – Preventive campaign Spring 2016

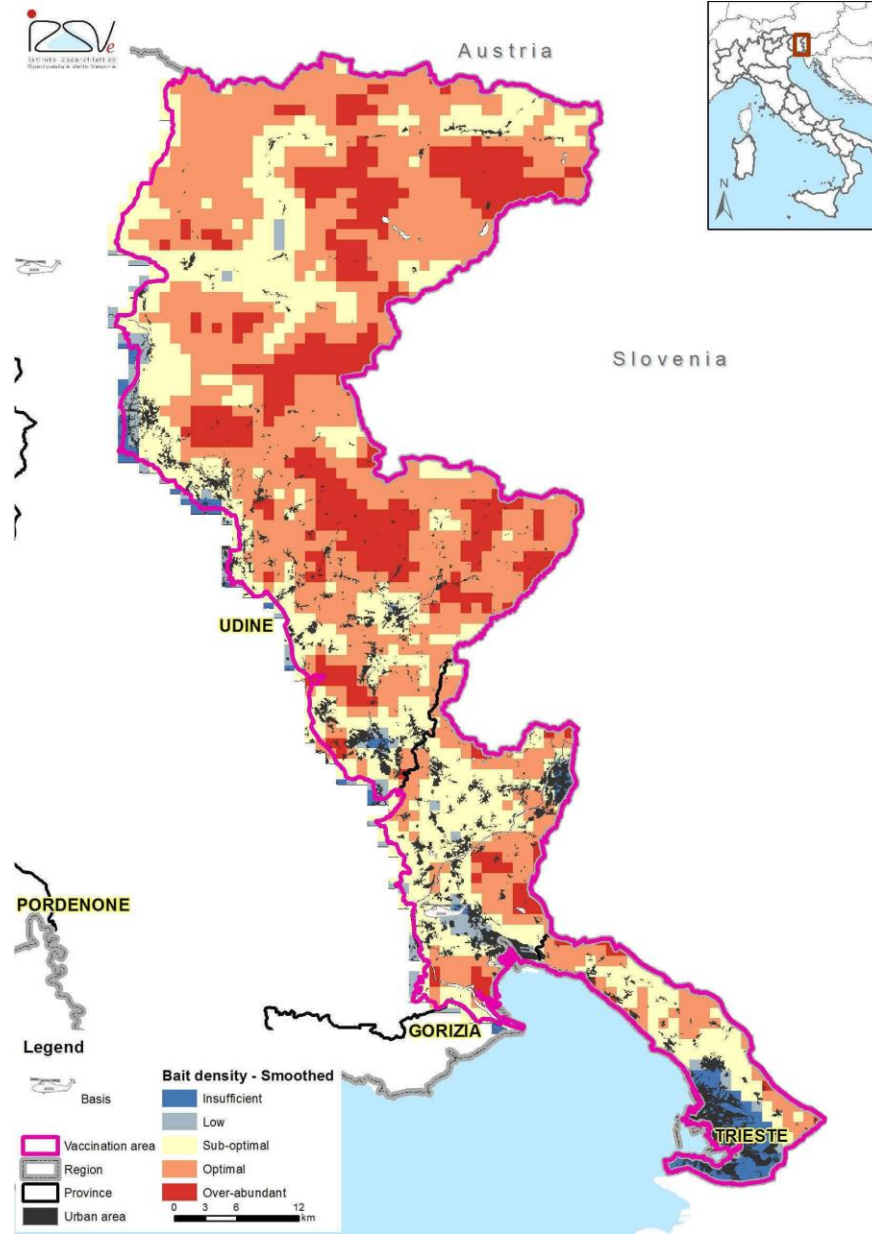
Territory on the Italian-Slovenian border considered suitable for Spring Oral Vaccination campaign in 2016 (about 2,200 sq. km)



OFV – Preventive campaign Spring 2016

Vaccine baits density obtained after the aerial distribution activities in the Spring Oral Vaccination 2016

**Baits distributed
from 20 to 25 April 2016**

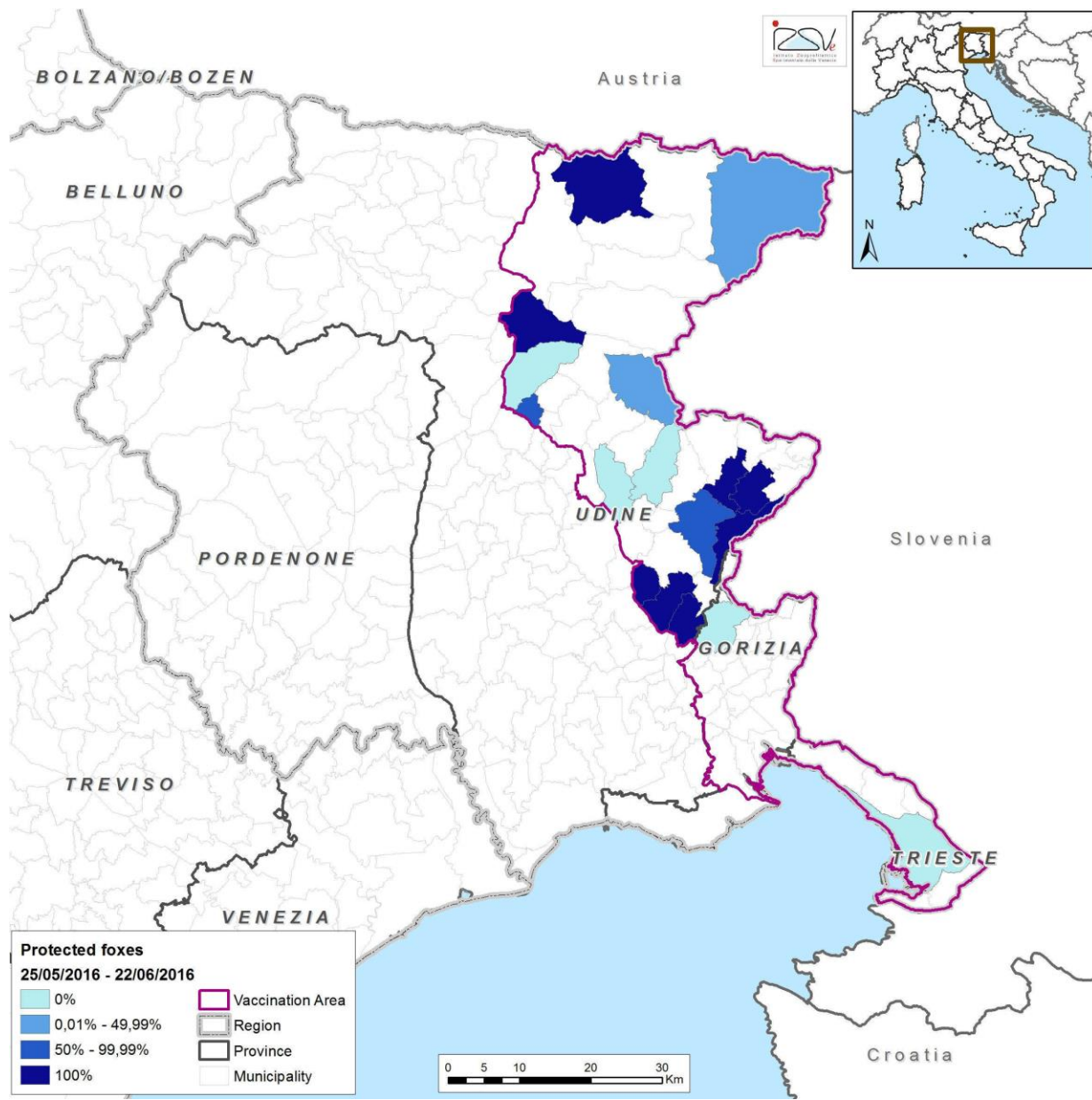


OFV – Preventive campaign Spring 2016

OFV Efficacy

From 25 May 2016 to 22 June 2016 foxes were tested to assess the level of seroconversion

% protected foxes
(Ab >0.5 UI)
per municipality



OFV – Preventive campaign Spring 2016

% Seroconversions in foxes

Province		Tested foxes	Protected foxes (Ab >0.5 UI)	% Protected foxes
Friuli Venezia Giulia	Gorizia	1	0	0.00%
Friuli Venezia Giulia	Trieste	1	0	0.00%
Friuli Venezia Giulia	Udine	25	14	56.00%
TOTAL		27	14	51.85%

Proportion of protected foxes: 51.85% (95% CI: 31.95% – 71.33%)

Bait uptake – biomarker

Region	Tested foxes	Biomarker in jawbone	%
Friuli Venezia Giulia	29	25	86.21%

Proportion of foxes which ingested vaccine baits: 86.21% (95% CI: 68.33% – 96.11%)

OFV – Preventive campaigns

- **Preventive Campaign November 2016**
 - Autumn Oral Vaccination:
 - about **2,000** sq.km,
 - **44,838** vaccine baits distributed by helicopter

OFV – Preventive campaign Autumn 2016

Territory on the Italian-Slovenian border considered suitable for Autumn Oral Vaccination campaign in 2016 (about 2,000 sq. km)

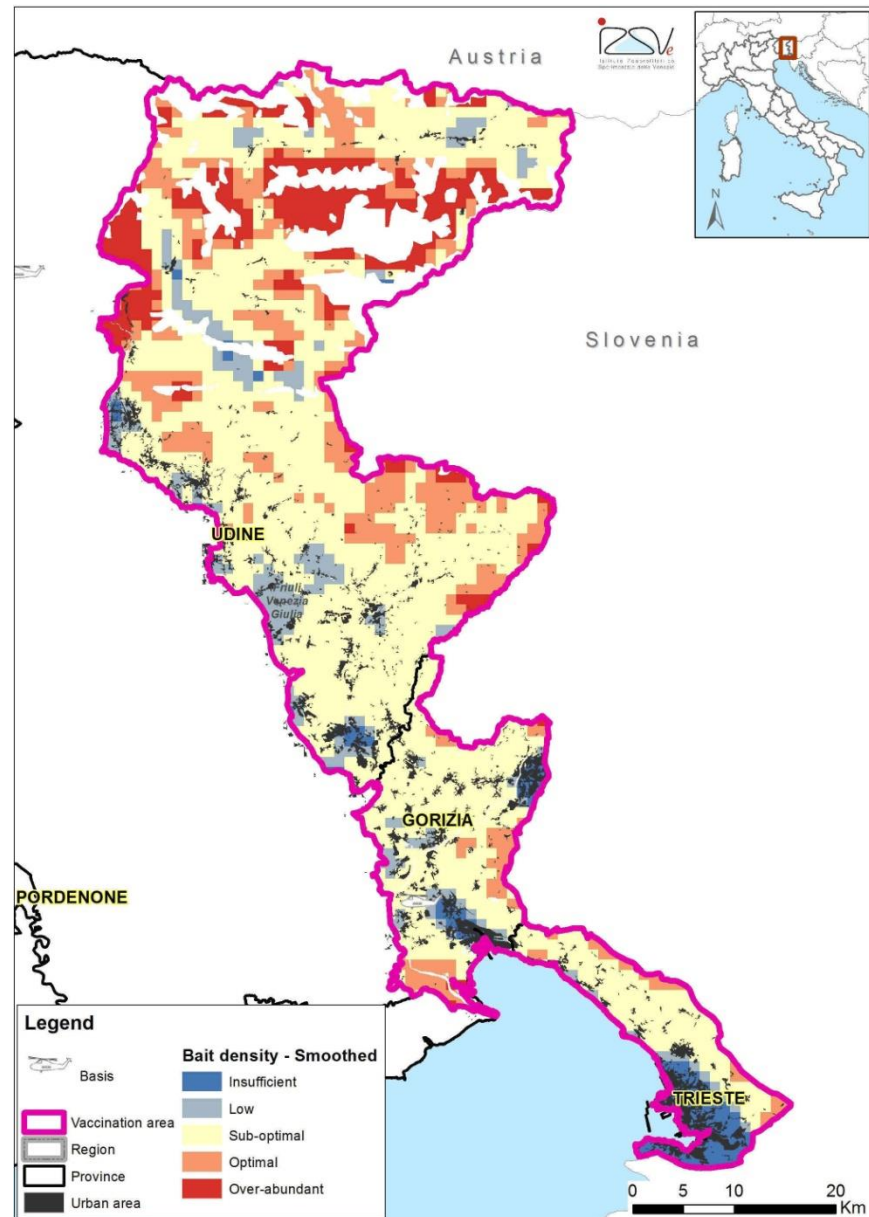


OFV – Preventive campaign Autumn 2016

Vaccine baits density obtained after the aerial distribution activities in the Autumn Oral Vaccination 2016

Baits distributed

from 15 to 28 November 2016

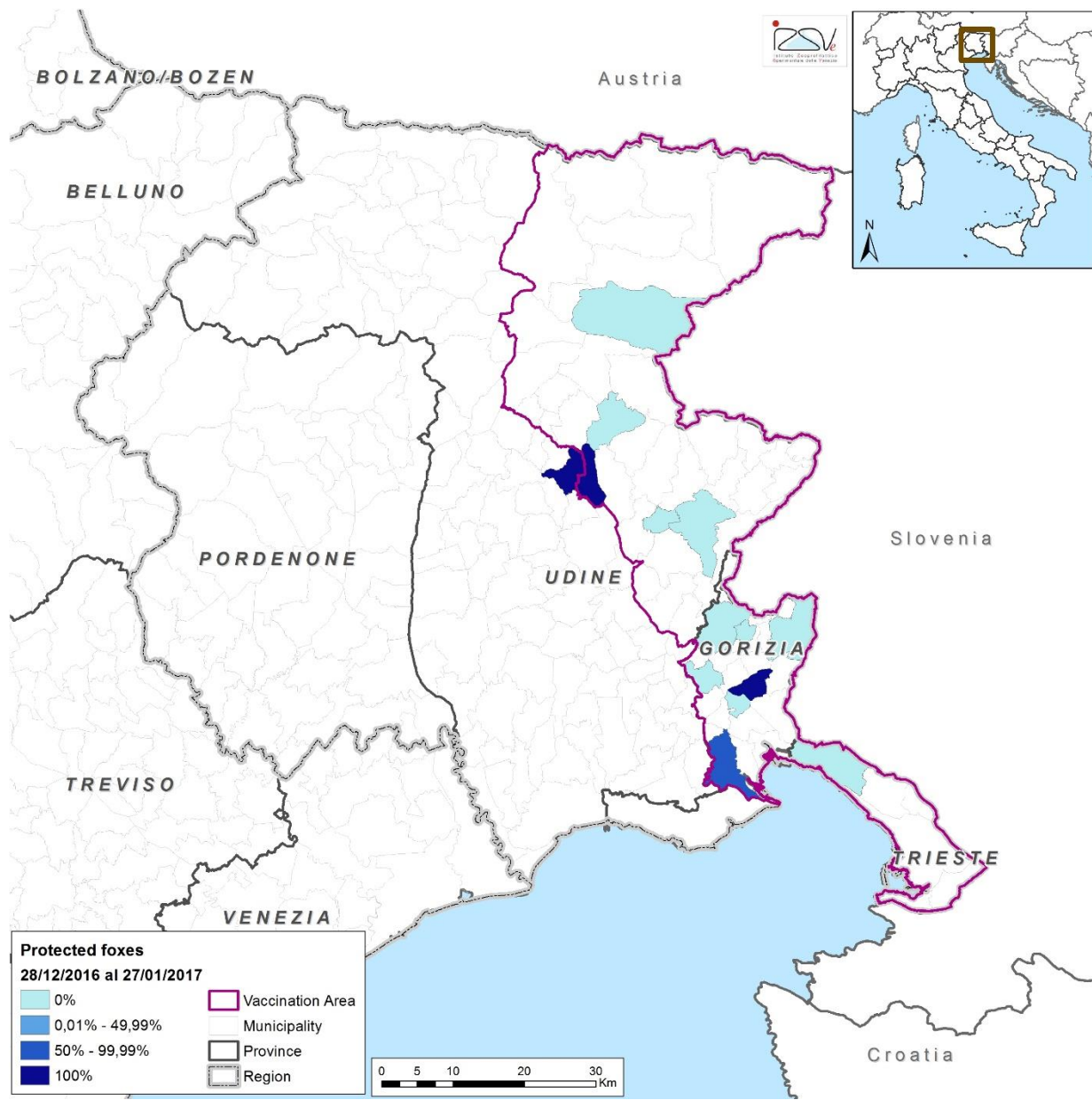


OFV – Preventive campaign Autumn 2016

OFV Efficacy

From 28 December 2016 to 27 January 2017 foxes were tested to assess the level of seroconversion

% protected foxes
(Ab >0.5 UI)
per municipality



OFV – Preventive campaign Autumn 2016

% Seroconversions in foxes

Province		Tested foxes	Protected foxes (Ab > 0.5 UI)	% Protected foxes
Friuli	Gorizia	8	2	25.00%
Venezia	Trieste	1	0	0.00%
Giulia	Udine	6	2	33.33%
TOTAL		15	4	26.67%

Proportion of protected foxes: 26.67% (95% CI: 7.8% – 55.1%)

Bait uptake – biomarker

Region	Tested foxes	Biomarker in Jawbone	%
Friuli Venezia Giulia	16	14	87.50%

Proportion of foxes which ingested vaccine baits: 87.50% (95% CI: 61.65% – 98.45%)

Final Remarks

- The 2017 OFV plan in Slovenia will be performed on the border with Croatia only
- The last rabies cases in Croatia did not occur in close proximity to the Italian territory
- The Italian Ministry of Health, in agreement with the NRL, has decided that **no further OFV campaigns will be performed in north-eastern Italy**
- Passive surveillance measures will be maintained to promptly identify potential rabies re-introductions

THANK YOU