



alpenkonvention • convention alpine
convenzione delle alpi • alpska konvencija
www.alpconv.org



Ministry of the Environment
of the Czech Republic

Overview on the status of bear, wolf and lynx in the Alps

The role of the Alpine Convention

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research

UN
environment



I - Introduction: the **Alpine Convention** framework

II - **Status** of the **Large Carnivores** in the Alps

WISO: LARGE CARNIVORES, WILD UNGULATES AND SOCIETY PLATFORM:

- Alpine Convention as political host, mandated by ministerial conference;
- Currently chaired by the Deputy Secretary general of Alpine Convention (next Slovenia)
- Forum for cross-border and cross-sectorial cooperation.
- Strategic documents and guidance;
- Expert opinion based;
- No or limited stakeholder involvement;
- **Need for a new cross-border and participatory approach!**



Guidelines for Population Level Management Plans for Large Carnivores



Prepared by Large Carnivores Initiative for Europe
16-18 March 2007, Geneva, Switzerland, May 2007
16-18 March 2007, Geneva, Switzerland

Final Draft 7th May 2007

The screenshot shows the Alpine Convention website with a navigation menu including 'THE CONVENTION', 'ORGANIZATION', 'ACTIVITIES AND PROJECTS', 'PUBLICATIONS', and 'NEWS AND EVENTS'. The main content area features a photograph of several deer in a snowy landscape. Below the photo, the text reads: 'LARGE CARNIVORES, WILD UNGULATES AND SOCIETY PLATFORM. Presidency: Italy. Sustainable wildlife management requires balancing and harmonizing ecological, economical and socio-cultural interests; an antagonism needs to be managed: wildlife - society. 1. What is Large Carnivores, Wild Ungulates and Society Platform (WISO)? The objectives of the Large Carnivores, Wild Ungulates and Society Platform (also called the Platform WISO) embedded in the Alpine Convention are to find solutions to manage large carnivores and wild ungulates harmoniously, and based on an integrated approach. The platform goes beyond a strictly ecological approach and endeavors to take into account economic and social aspects on an equal level.'

Preventing damage by large carnivores:

A comparison of use of the European Agricultural Fund for Rural Development to protect livestock in the Alpine countries

Katrina Marsden

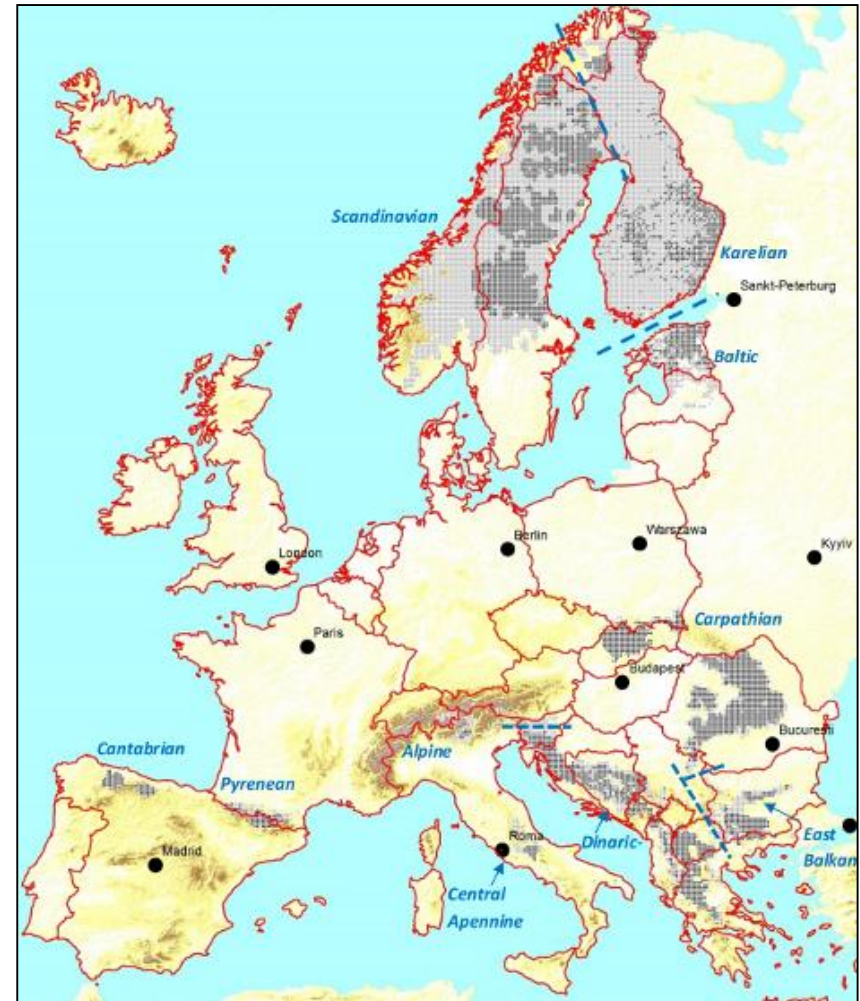
- to foster **exchange of information**, scientific data and experiences in order to support decision-making processes
- **to foster dialogue** among authorities, with wildlife managers, hunters and foresters by establishing information and consultation mechanisms;
- to further develop **coordinated programs** of genetic monitoring of large carnivores on an Alpine scale;
- to develop **recommendations** for internationally coordinated Brown Bear management actions at the Alpine level,
- to promote initiatives to **counteract inbreeding** in alpine lynx subpopulations (such as reinforcement);
- to report and exchange on national and regional approaches and (good) practices in **sustainable damage prevention and compensation** systems for livestock damages from large carnivores;

Proposal Mandate of WISO 2019-2021

- To **promote the exchange among the members** of information, scientific data and experiences in order to support decision-making processes as well as the coordination of responding actions for large carnivores
- To **foster dialogue** among the relevant alpine stakeholders (including authorities, civil society, wildlife managers, hunters, foresters and farmers).
- To draft, also based on the outcomes of the activities carried out in the mandate 2018-2019, a **report on lessons learned** through the experiences of application of prevention measures for damages by large carnivores.
- To develop a **series of recommendations on joint transnational management** at Alpine level of ungulates
- To address the issue of **illegal hunting**

Brown bear at the scale of the continent

- Species is expanding.
- Many populations extend far beyond national borders.
- Despite initiatives, not much population-level, transboundaries monitoring or management.



On an Alps-wide scale there are:

- countries with no bear presence (FL, F)
- and those with only occasional presence (CH, D);
- Countries in which there is continuous bear presence with only passive monitoring (A, I-South Tyrol);
- Those where there is an active monitoring, but there is no concrete management (I – Friuli);
- And there are those countries with a vital bear population, active monitoring and management (I – Trentino, SLO).
- There are countries in which bears are protected strongly, where not even problematic (dangerous) individuals are removed /shot (I), and those in which bears are regularly hunted (SLO).



Goal: Short term: to have a minimum viable population (around 50 bears) within a period of 20-40 years

Long term: to join the big Dinaric population

Method:

Move 9 bears from Slovenia to Trentino
in 4 years

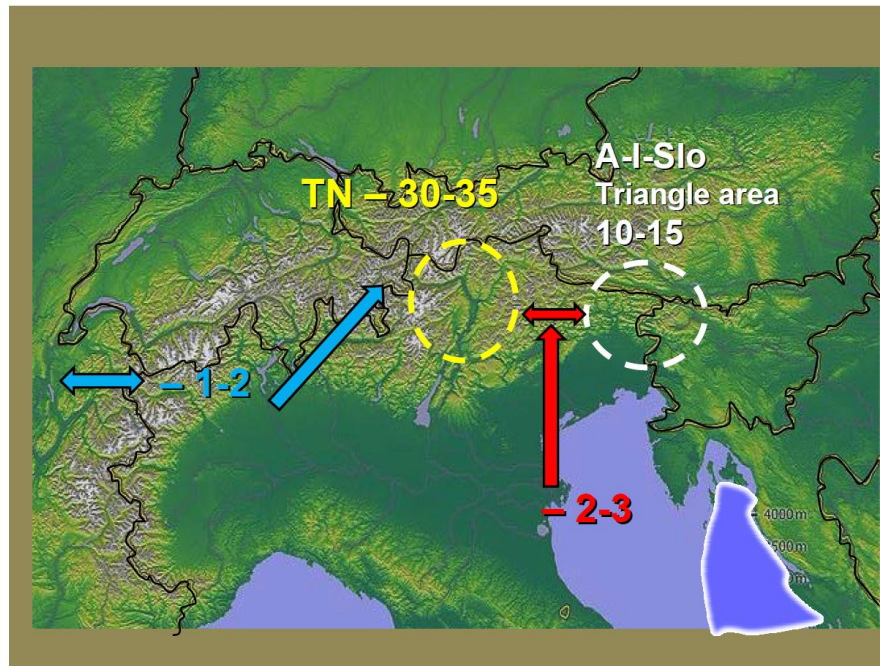


Prov Trento



Concerning the Slovenian population, the main source for the Alps, we have to stress an important factor regarding the management.

There is a hypothesis that the high vitality of the bear population in Slovenia (*high hunting quotas and despite this vital and increasing*) is only possible thanks to high immigration rate from Croatia (*where bears are hunted more conservatively*).



Since the 70s from the Autonomous Province of Trento

- Radiotelemetry
- Photo traps (60 sites in an area of 220 kmq, bear presence in 15/60)
- Genetic monitoring
- **Sistemic:** with barbed wire to collect hair samples (since 2018, every 2 years)
- **Opportunistic:** collection of organic material

In 2018, the opportunistic monitoring, allowed the collection of **524 bear organic samples**

Bear hair on barbed wire
(D. Asson - Archivio
Servizio Foreste e fauna
PAT)

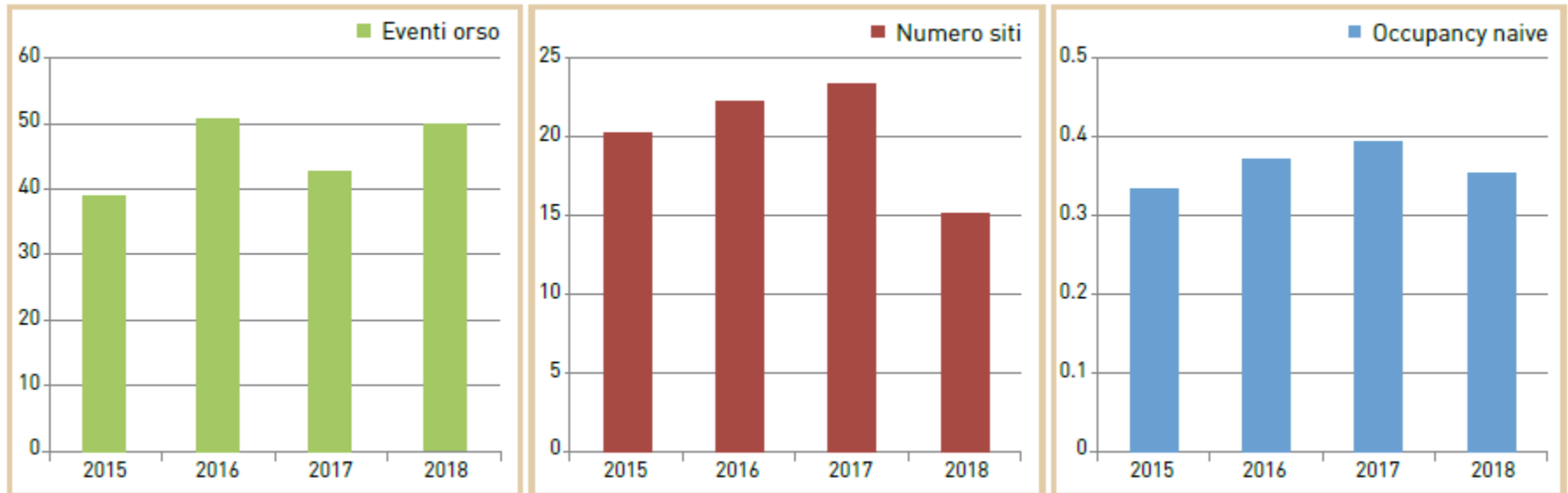


Numbers of independent bear events

Number of photo traps sites

Occupancy naïve (ratio between sites where the bear has been photo trapped and number of sampled sites)

The 4-years comparison does not point to identify temporal trends



2018:

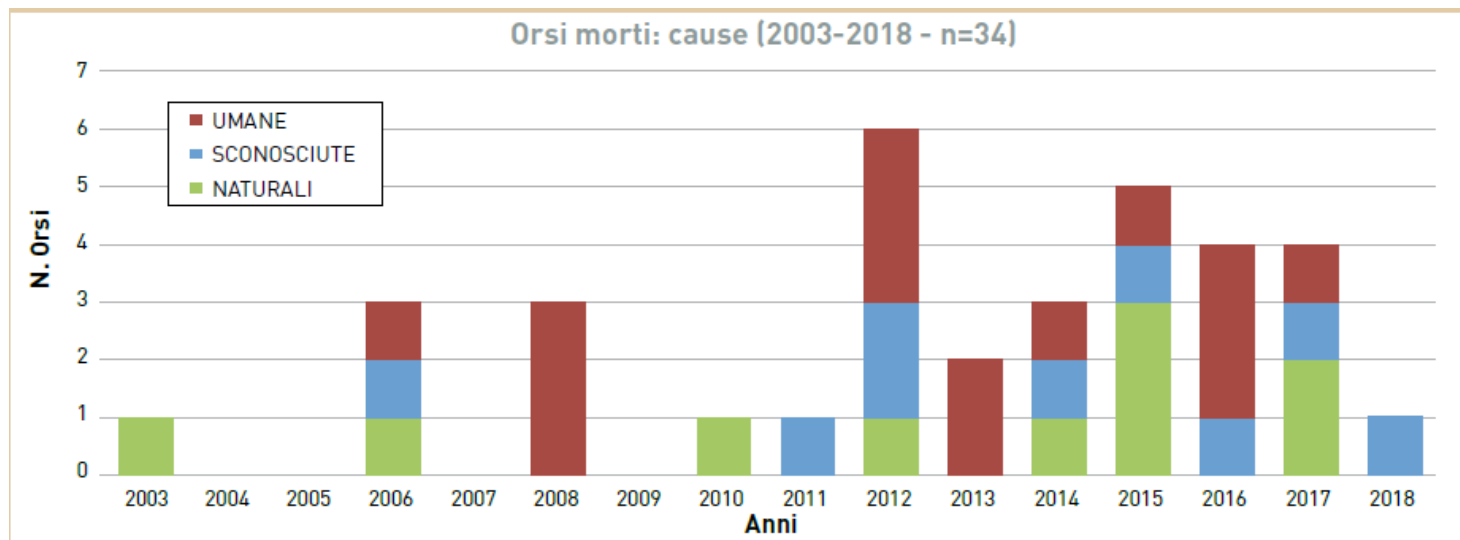
9-11 new litters, with 21-23 new cubs

4 recovered bears (genetically re-discovered after 2 years or more of absence)

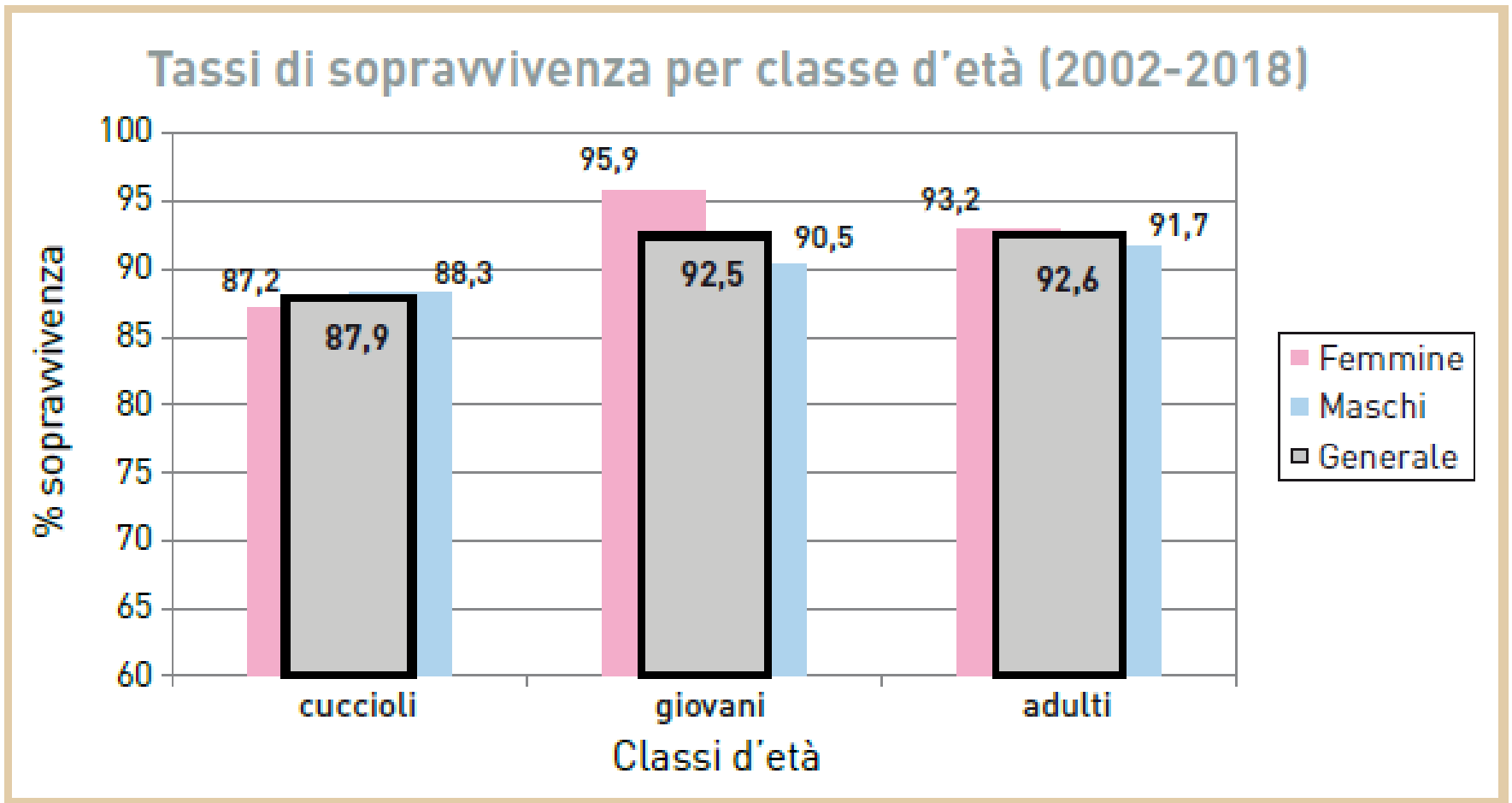
1 bear dead (16th June 2018 – not genetically identified yet)

Since 2003:

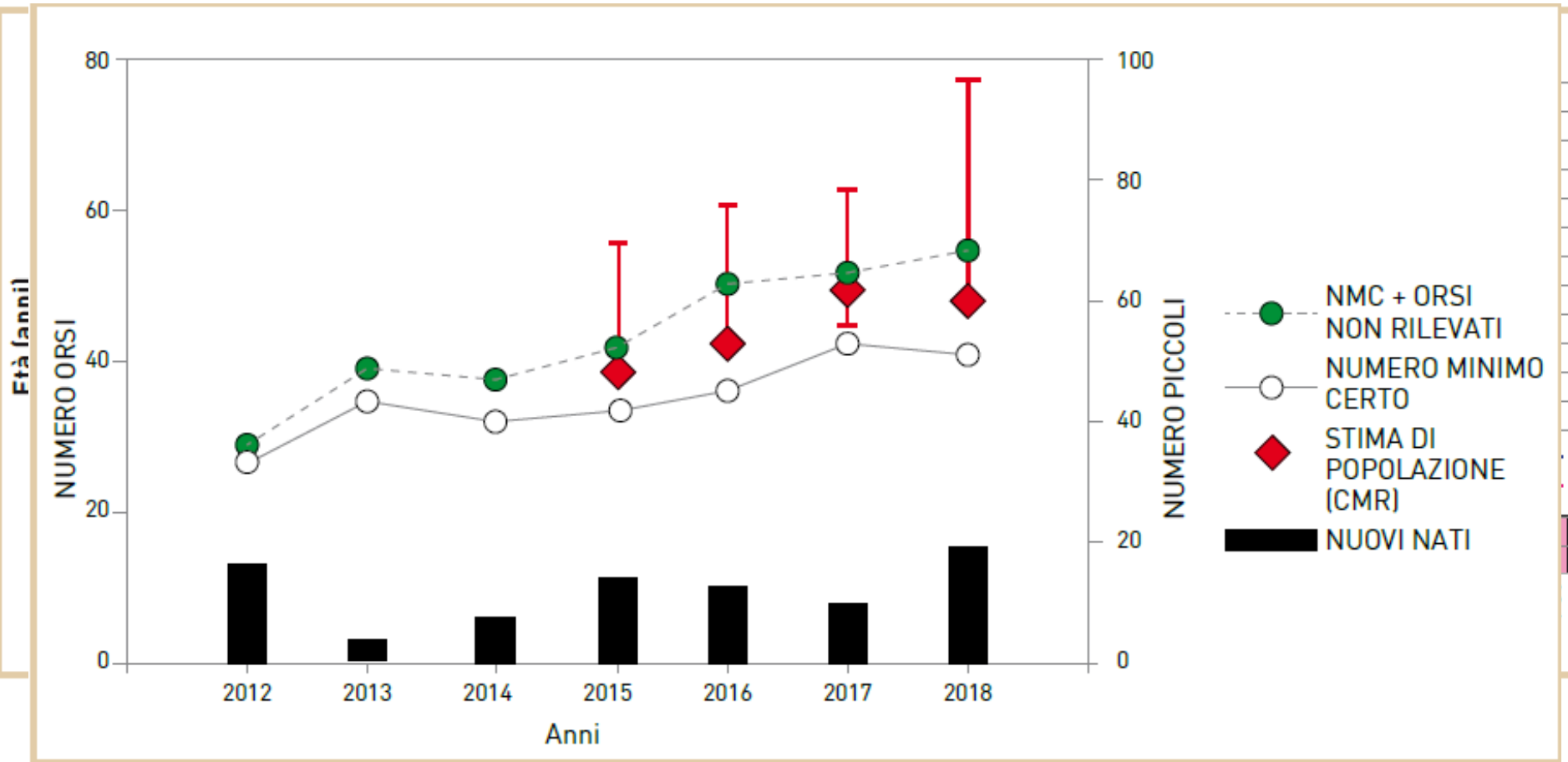
34 dead bears (natural causes 29%; anthropic 44%; unknown 27%)



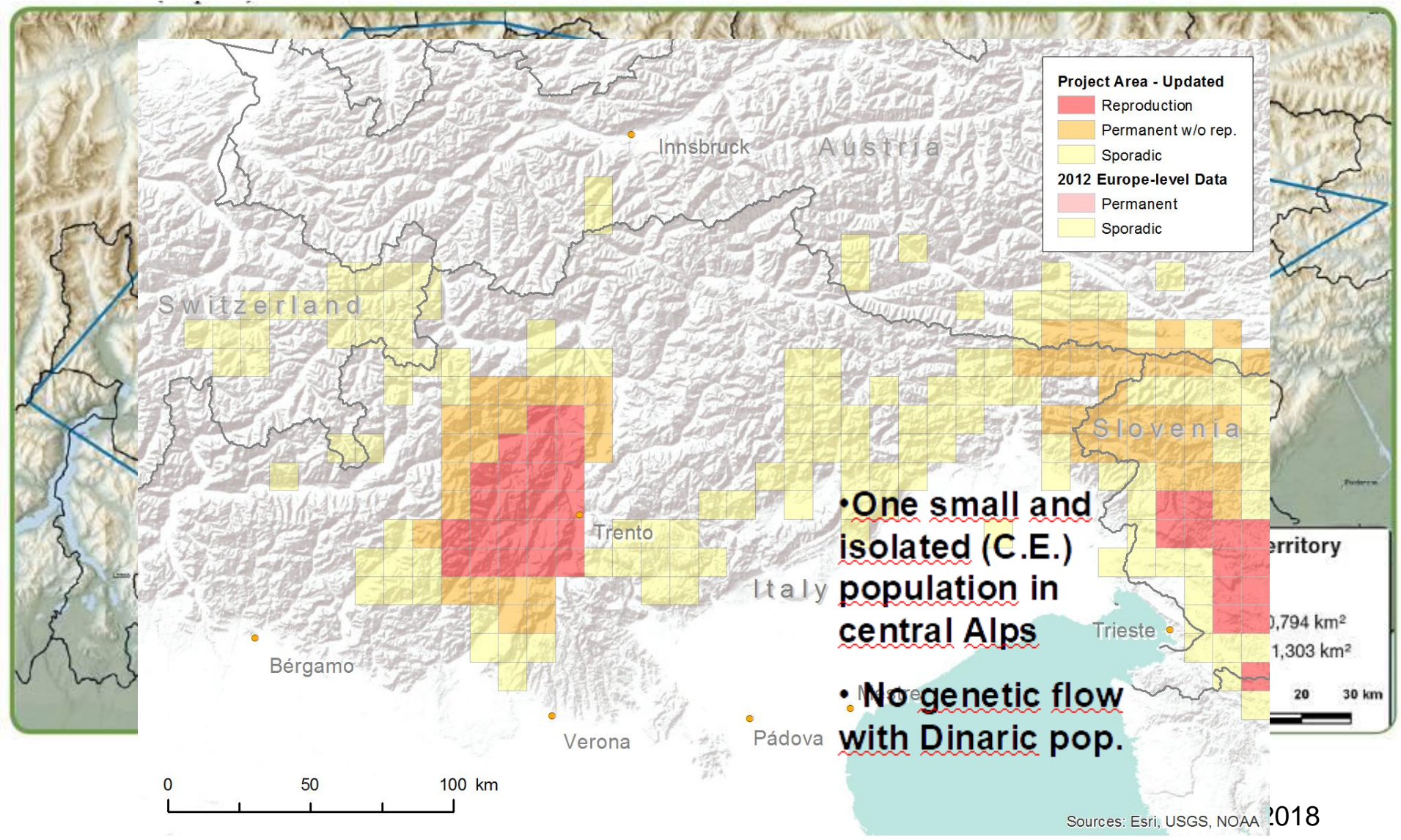
Survival rate and population structure



Survival rate and population structure

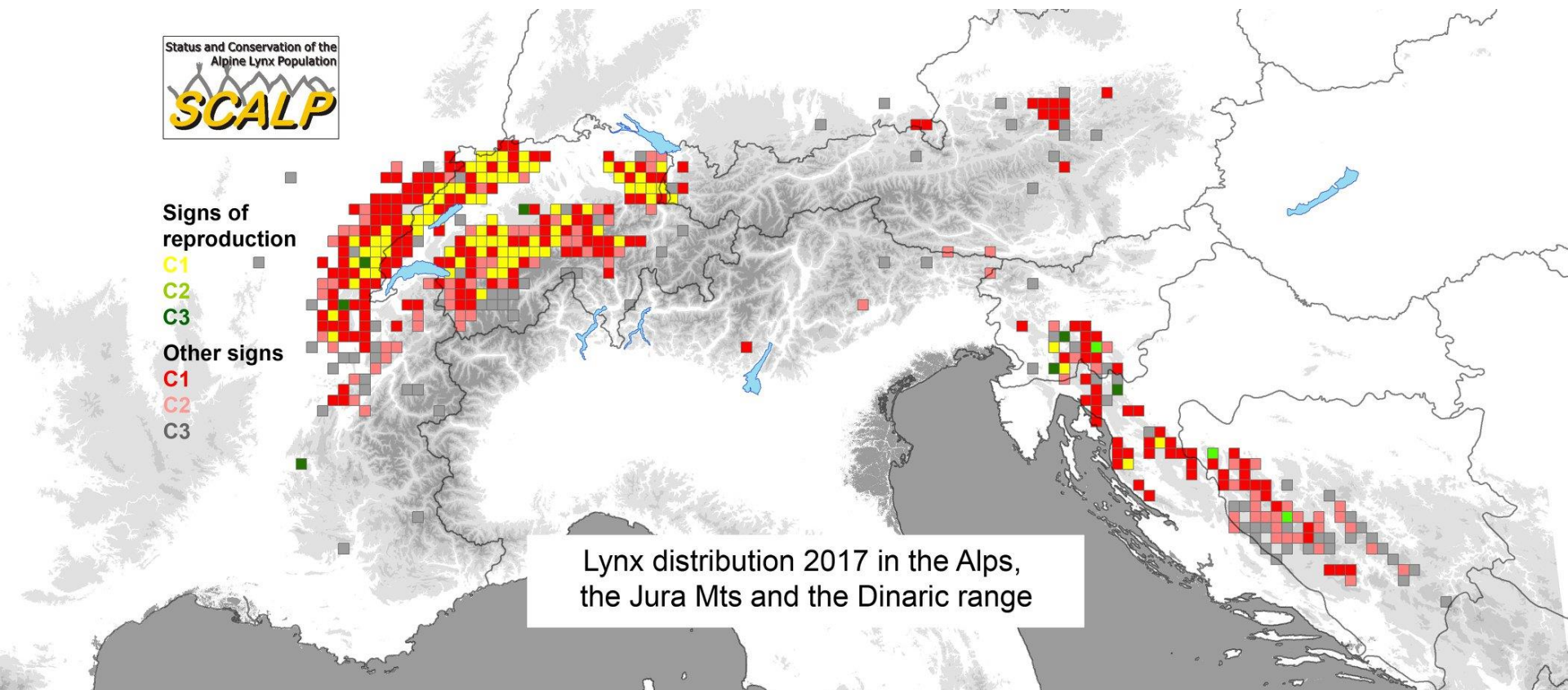


Brown Bear occupied range





Lynx presence and distribution



SCALP 2017 - <https://www.kora.ch/index.php?id=117&L=1>

Observed lynx distribution in the Alps and northern Dinaric Mountains based on a 10x10 km

In the Alps, 1123 signs of lynx presence (50% hard fact data)

In the Dinaric Mountains 338 signs were recorded (65% hard fact data)

Reproduction was reported from the Swiss and French Alps, and both from Slovenia and Croatia for the Dinaric population.

Presently, the Alpine population consists of 3 separated subpopulations:

1. one in the western Alps (west = west of the Brenner freeway),
2. the northern edge of the Dinaric population that spreads into the south-eastern Alps (southeast = triangle Slovenia, Italy and Austria)
3. the north-eastern Alps (north-east of Brenner).

The western subpopulation is expanding.

The observed number of occupied 100 km² cells in the Dinaric Mountains was also increasing.

However, in the Dinaric Mountains this increase is due to increased monitoring effort.

- **Collection of chance observations**

Data collection by means of citizen science

- **Camera Trapping**

The best season for camera trapping can be defined as from October to April.

- **Hair trapping**

following tracks in the snow to find urine or scat, take saliva samples from prey remains, search around prey remains for scats, hair traps, blood samples at captures, tissue samples from dead animals.

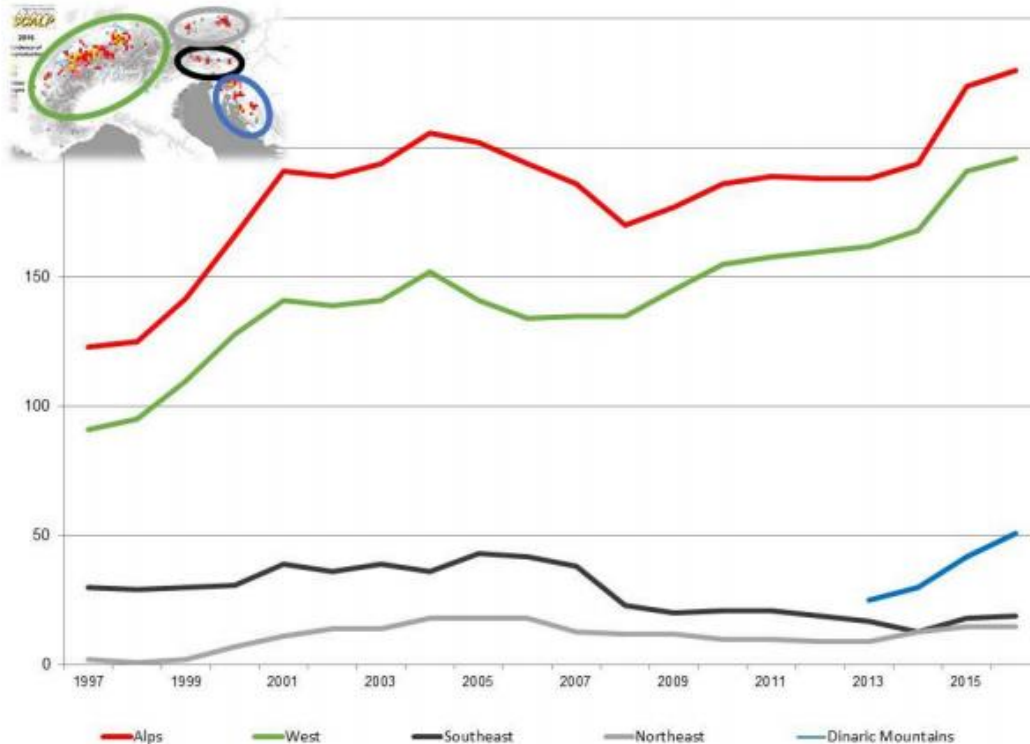
- **Snow tracking**

transect follows a forest road from the bottom of the valley up to the mountain ridge in order to cross a lynx track

(Progetto Lince Italia <https://www.progettolinceitalia.it/>)

Special events 2016:

- Lynx from north-eastern Switzerland have crossed the Rhine valley and are spreading into Liechtenstein and Vorarlberg.
- This is the second year with reported reproduction from the French Alps.



Number of occupied 100 km² cells in the Alps (3 years moving window).

SCALP Monitoring Report 2016

Population name	Countries	Size (c. 2012)	Trend
Scandinavian	Norway, Sweden	1800 – 2300	Stable
Karelian	Finland	2400-2600	Increase
Baltic	Estonia, Latvia, Lithuania, Poland, Ukraine	1600	Stable
Bohemian-Bavarian	Czech Republic, Germany, Austria	50	Stable or decrease
Carpathian	Romania, Slovakia, Poland, Ukraine, Czech Republic, Hungary, Serbia, Bulgaria	2300-2400	Stable
Alpine	Switzerland, Slovenia, Italy, Austria, France	130	Stable
Jura	France, Switzerland	100	Increase
Vosges Palatinian	France, Germany	19	Stable or slight decrease
Dinaric	Slovenia, Croatia, Bosnia & Herzegovina	120-130	Stable or decrease
Balkan	“the former Yugoslav Republic of Macedonia”, Albania, Serbia (incl. Kosovo*)	40-50	Decreasing?

Sources:

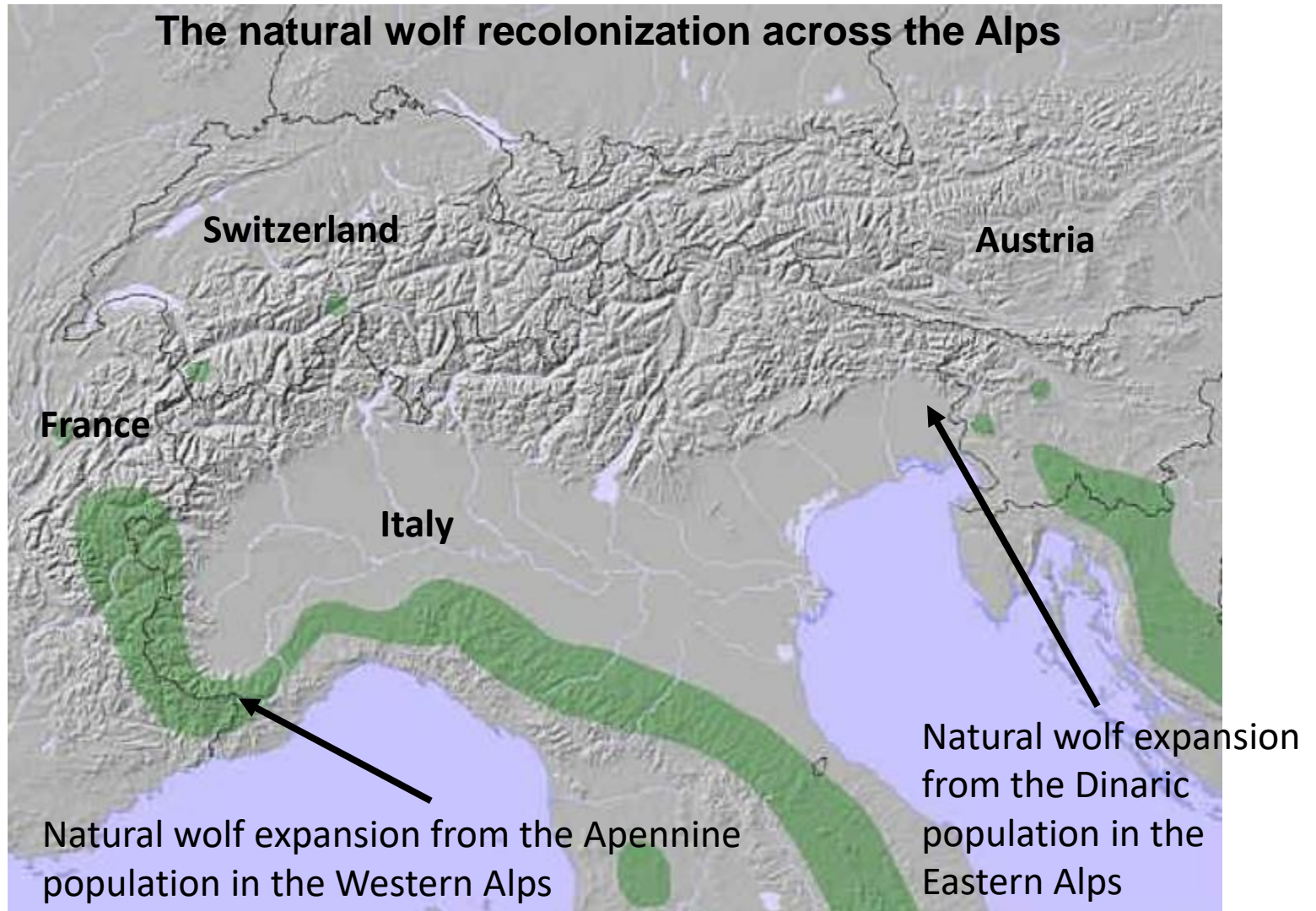
Large Carnivore initiative for Europe IUCN/SSC specialist group. 2012. Eurasian lynx.

<http://www.lcie.org/Large-carnivores/Eurasian-lynx> (December 2017)

<https://www.lifelynx.eu/populations/>



WolfAlps.eu

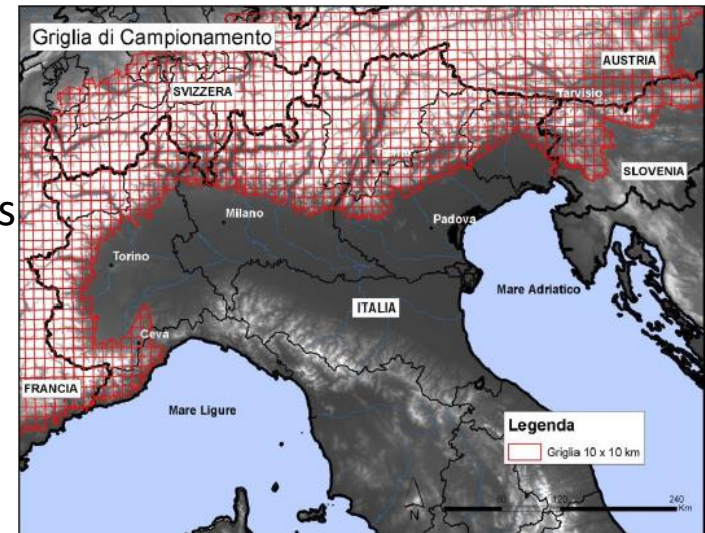


One of the first actions implemented by the project LIFE WOLFALPS was to organize a **systematic monitoring on the entire Italian Alpine region** to estimate wolf population trends and collect objective data on the status of the wolf population, critical for any management decision

<http://www.lifewolfalps.eu/en>

The sampling strategy and the monitoring objectives have been defined in detail in the document

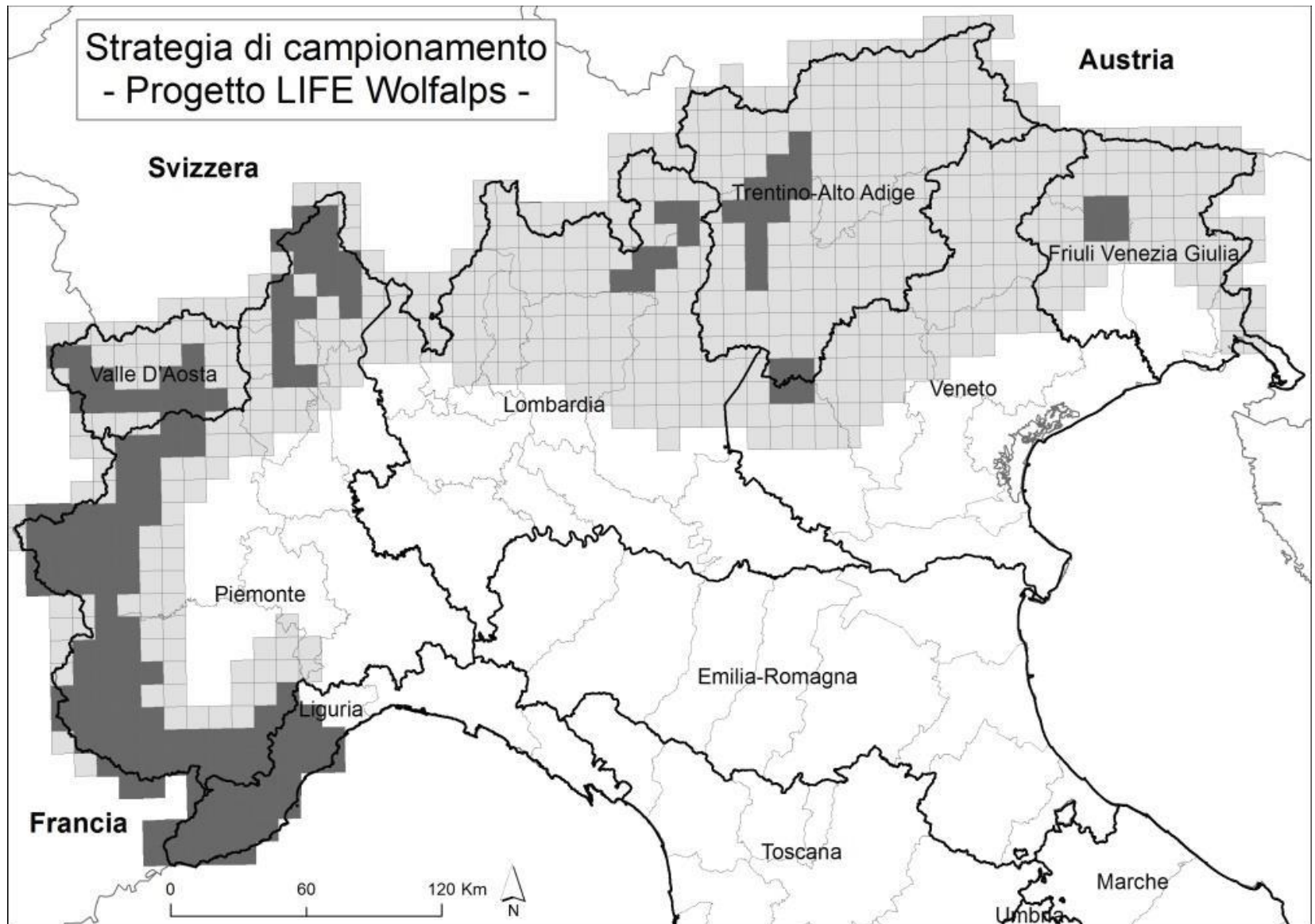
"Strategy, methods and criteria for monitoring the conservation status of the wolf population in the Italian Alps" (Marucco et al. 2014)



A stratified sampling was conducted upon a **10x10Km grid** of the territory where strata (i.e. sampling units grouped by typology) were determined by the probability of wolf presence based on previous knowledge on the species distribution.

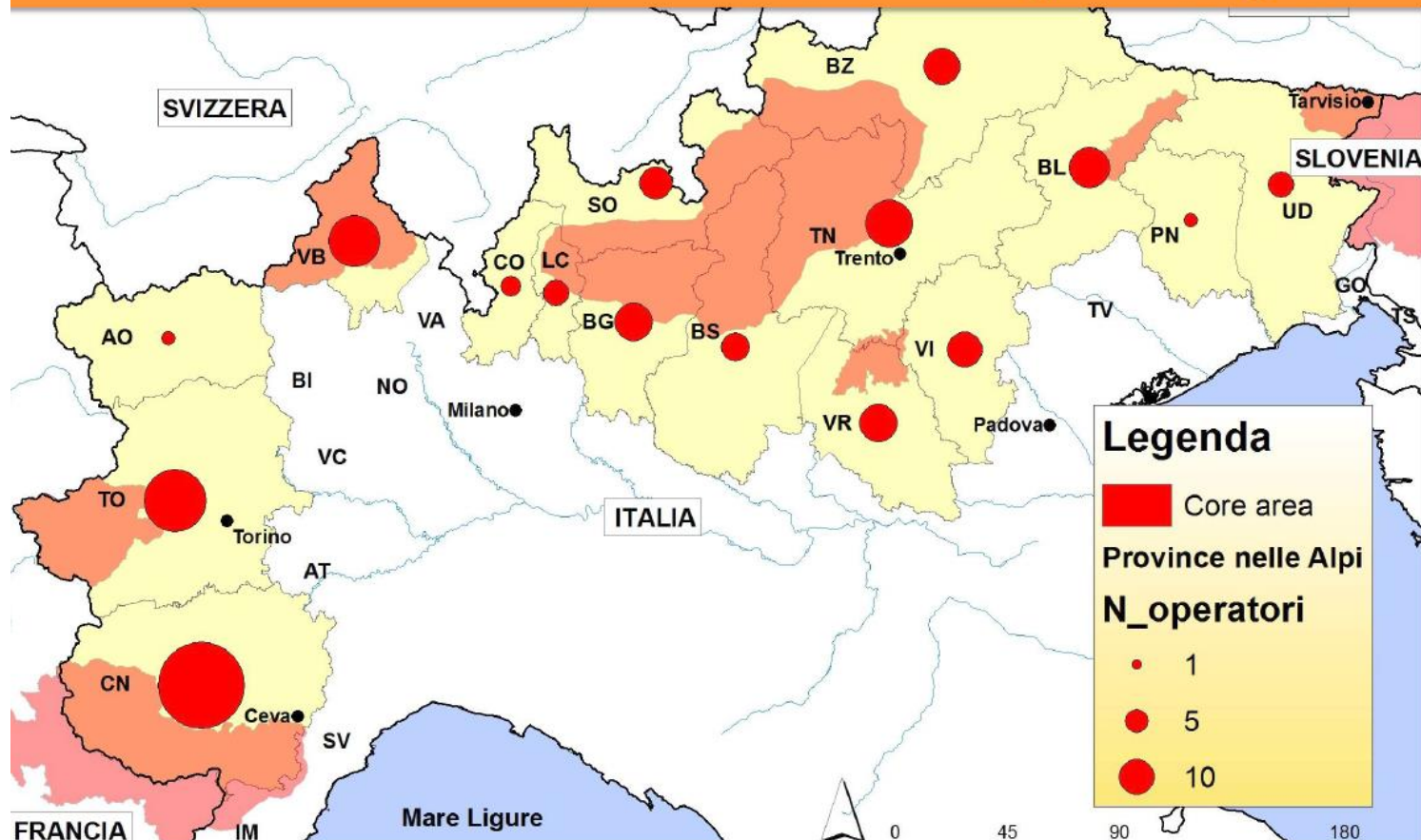
The year of monitoring was defined according to the reproductive cycle of the wolf, spanning from the **1st of May to the 31st of April**

Wolf monitoring

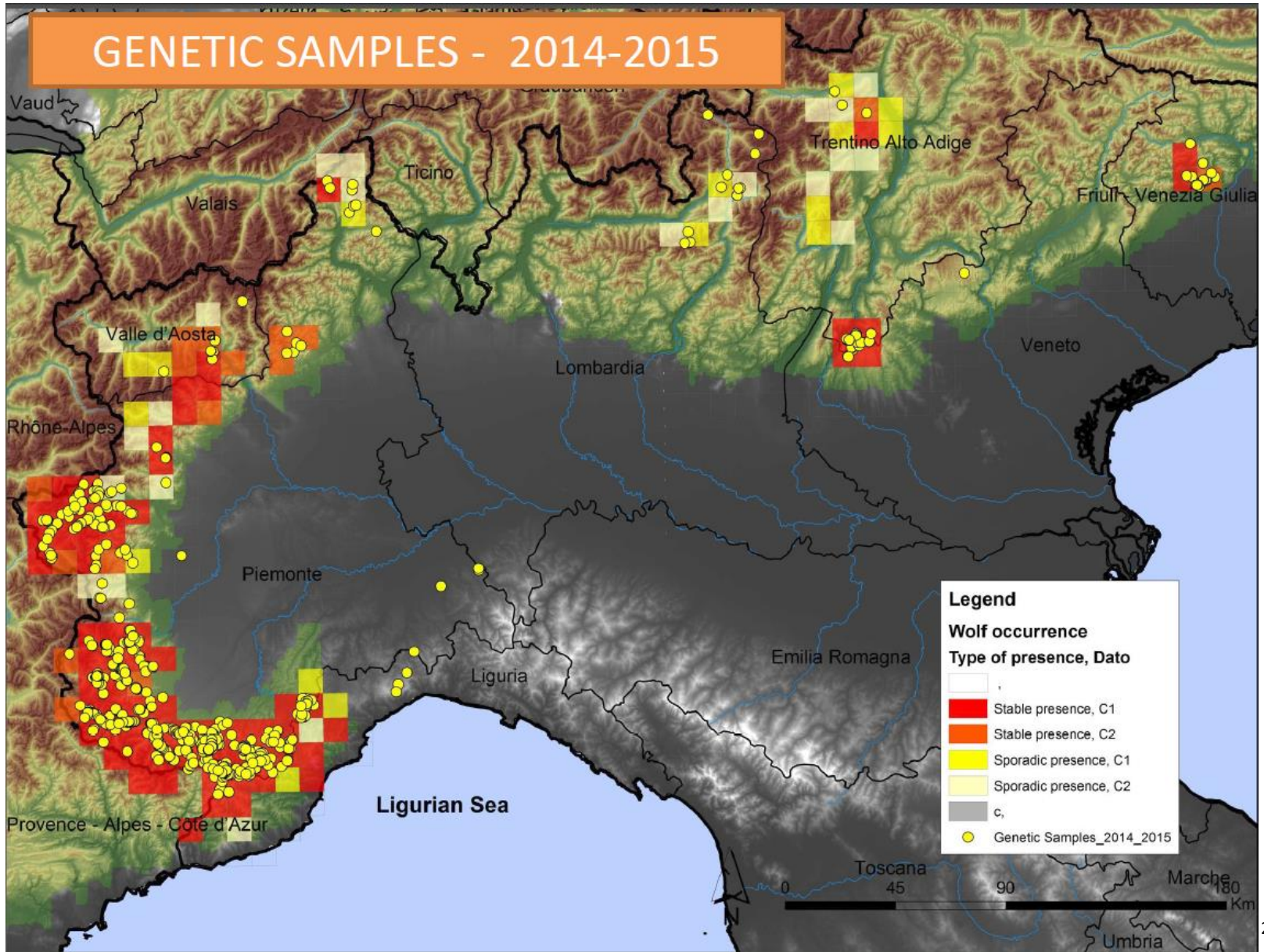


Progetto LIFE+ WOLFALPS - Azione A3 -

309 trained personnel from 41 Bodies distributed and coordinated over the Italian Alpine range



Wolf monitoring



The non-invasive sampling strategy based on

- snow-tracking,
- wolf-howling,
- camera-trapping
- genetic analysis of wolf scat samples

was aimed at documenting the presence of packs, pairs and solitary individuals with a stable territory (> 1 year of continuous recorded presence).

Monitoring standards were based on the SCALP criteria, classifying data according to their verifiability.

In order to estimate population size and distribution, only **C1 (certain) and C2 (confirmed observation) data were used.**

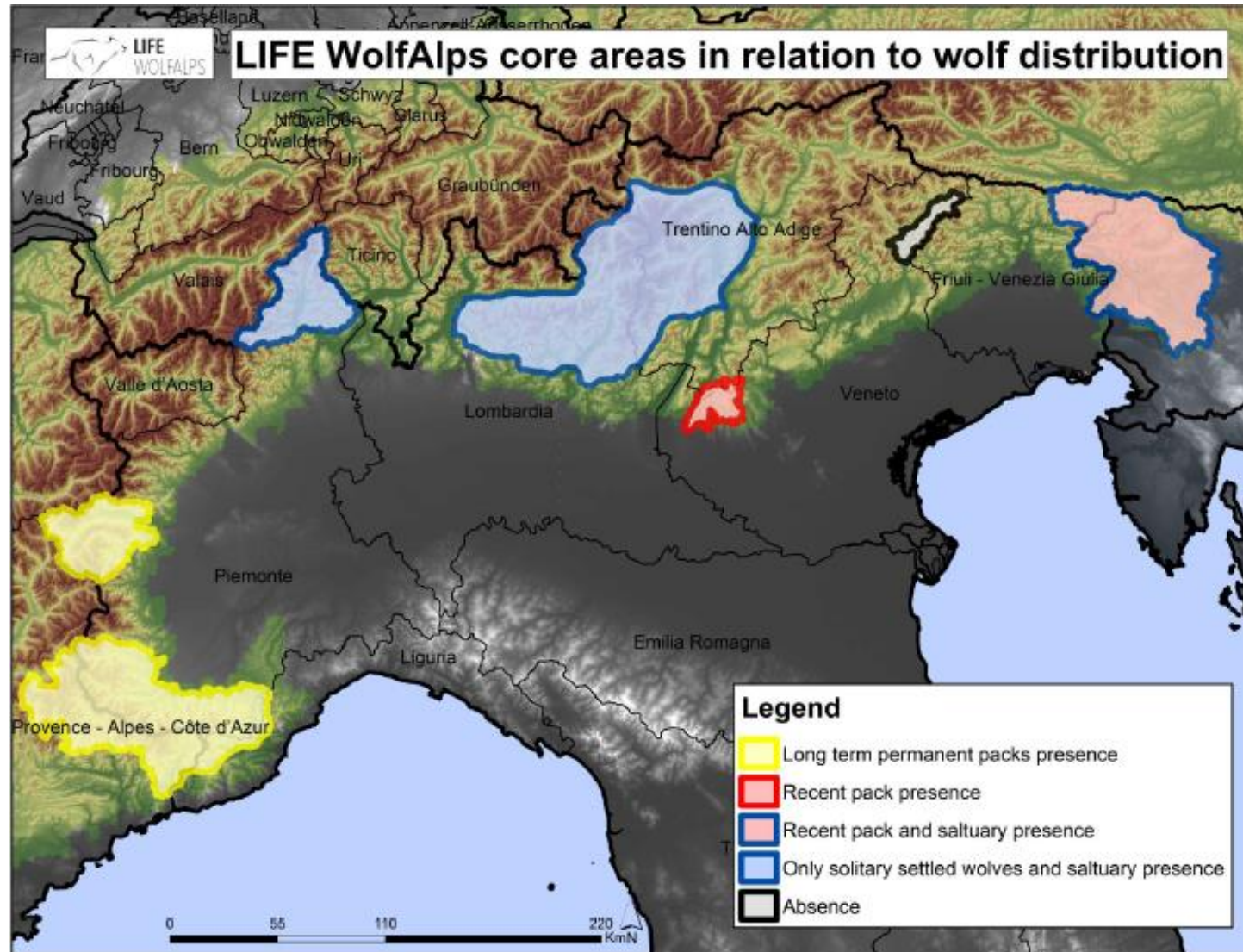
This sampling design allowed to obtain large scale comparable data and to carry out the first standardized alpine monitoring in 2014- 2015, followed by 2015-2016 and 2017-2018.

http://www.lifewolfalps.eu/wp-content/uploads/2014/05/Report_monitoraggio_Alpi_completo.pdf

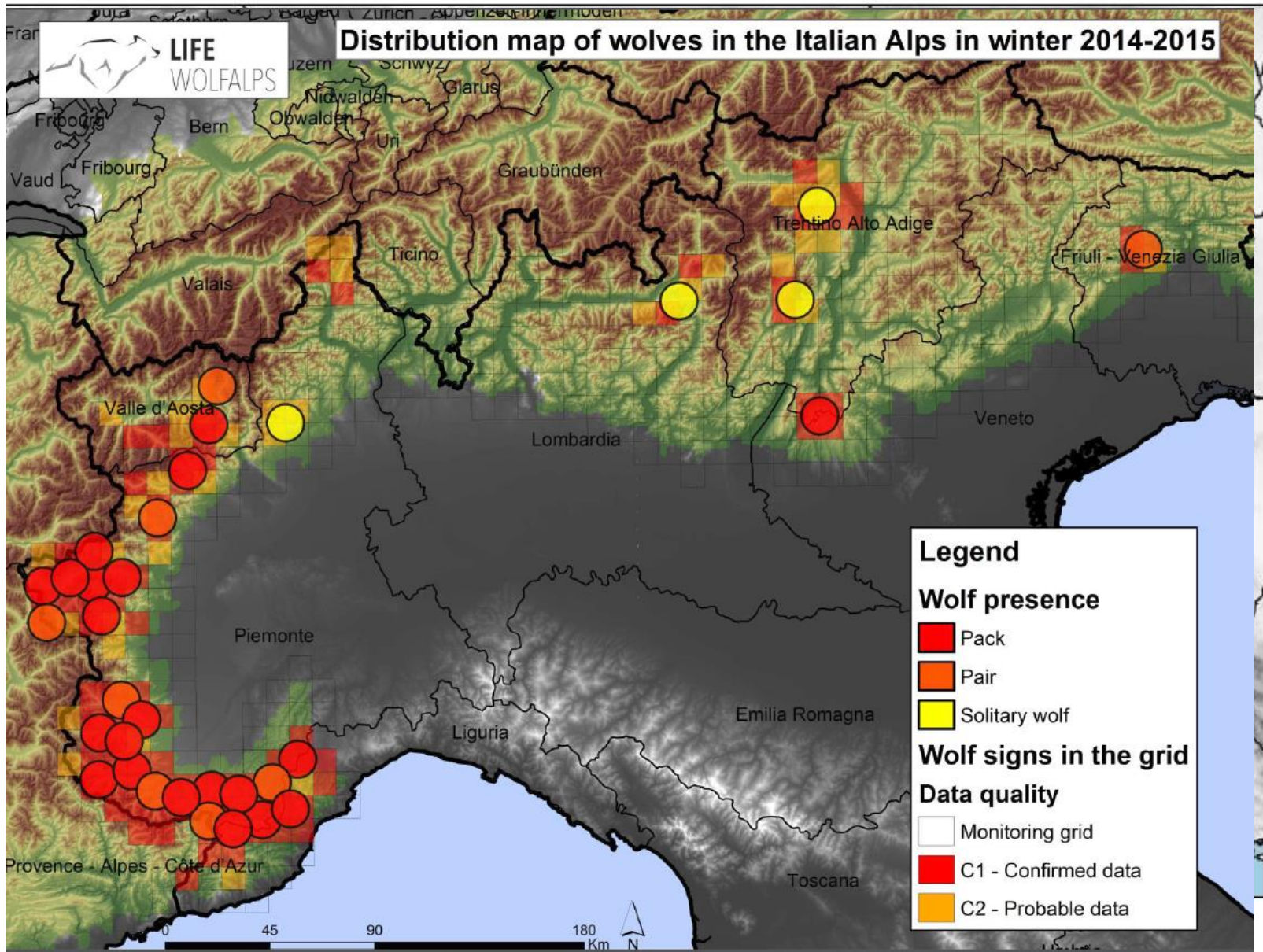
https://www2.nina.no/lcie_new/pdf/636744930769081011_WAG_report_2015_2016_final.pdf

http://www.lifewolfalps.eu/wp-content/uploads/2014/05/LWA_report_A2_monitoraggio.pdf

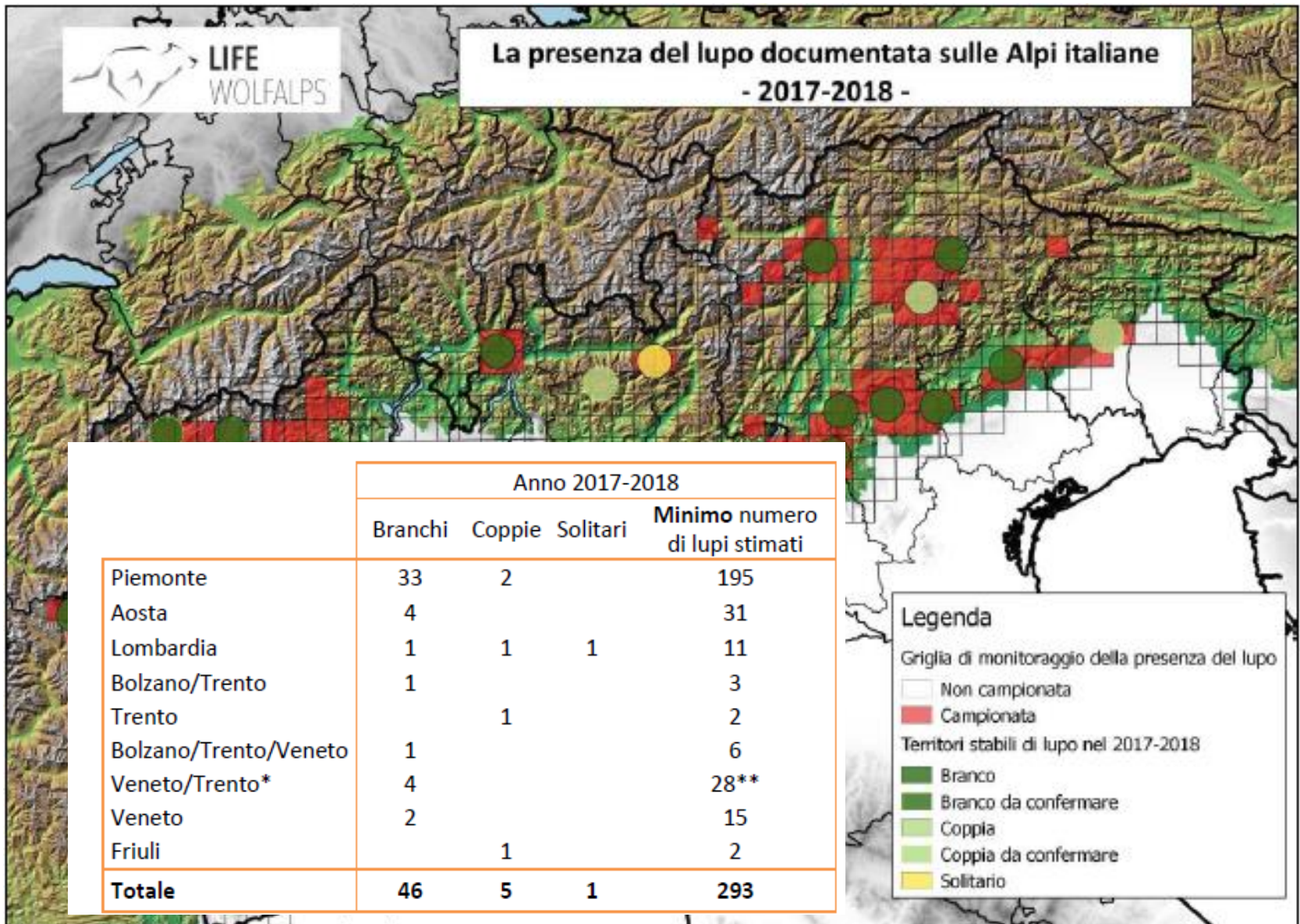
Wolf presence and distribution



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