



**Provincia di Sondrio
Servizio Caccia e Pesca e
Corpo di Polizia Provinciale**

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**Monitoring and conservation actions on Bearded Vulture in the
Sondrio province**

*** Provincia di Sondrio**

**** Stelvio NP**

Foto E. Mozzetti

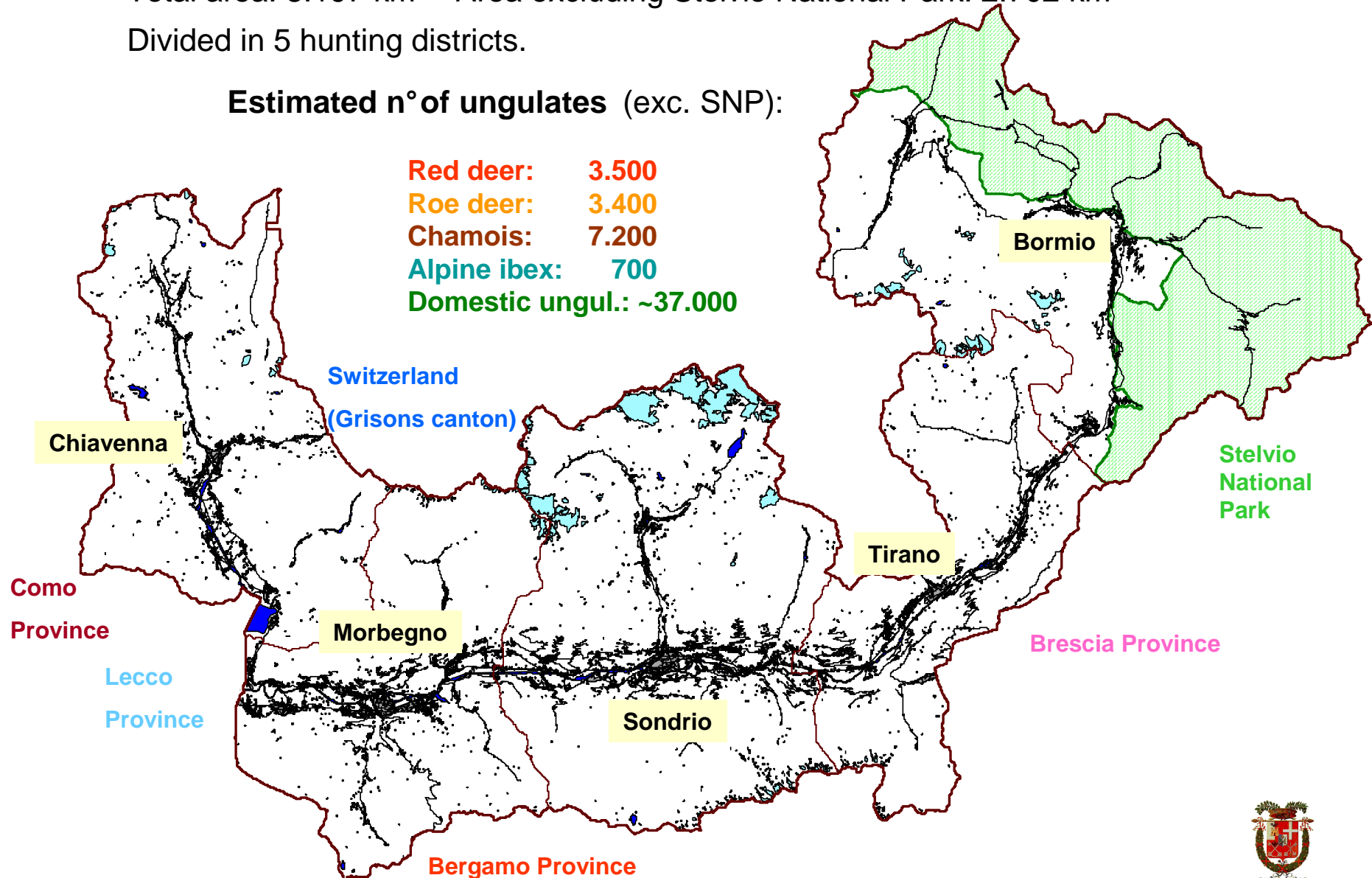
Sondrio PROVINCE

Total area: 3.197 km² - Area excluding Stelvio National Park: 2.702 km²

Divided in 5 hunting districts.

Estimated n° of ungulates (exc. SNP):

Red deer:	3.500
Roe deer:	3.400
Chamois:	7.200
Alpine ibex:	700
Domestic unguil.:	~37.000



Sondrio PROVINCE & BV

- **2002:** first contacts with Stelvio National Park, to create a monitoring network;
- **since 2004:** Province rangers and technicians cooperate with SNP, for these activities:
 - ✓ **recording of all BV observations in a specific database**
(including previous years: actually **140** observations recorded);
 - ✓ **geo-referencing of all the BV observations outside SNP;**
 - ✓ **transmission of all data collected to SNP;**
 - ✓ **participation to Alpine observation days, (6-14 persons/time).**



Sondrio PROVINCE & BV

➤ **Since 2007:** specific **ACTIONS** are carried out for **BV** in **Sondrio** province:

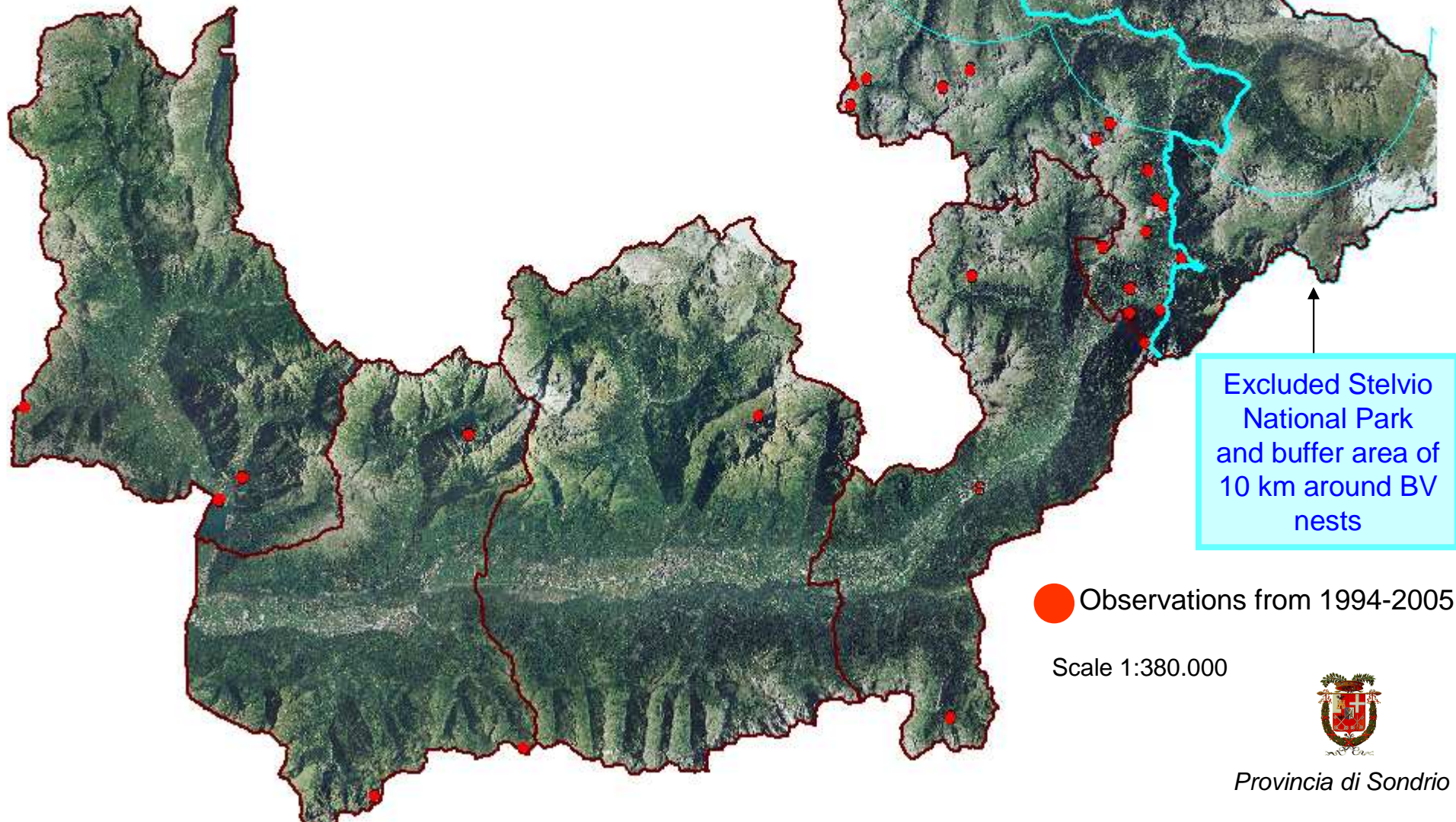
- ✓ the first **management plans established for Natura 2000 Sites** (e.g. for Val Viola Site) take into account the importance of BV conservation, by specific regulations to avoid disturbance of the species or site deterioration and active protection measures;
- ✓ the **assessment procedure for evaluating the impact of wildlife province plan for hunting activities** (approved by Province in febr-2008 and by Lombardia Region in sept -2008) pointed out -for the first time- the possible risks for BV and raptors, related to use of lead ammunitions for hunting ungulates, suggesting further research to assess the effective impacts;
- ✓ in nov-2008 Sondrio Province subscribes its involvement in an **experimental Project to investigate the risks of lead use**, by X-rays and CAT scan of 200 Ungulates viscera; the project is carried out with Stelvio NP, Cariplo Foundation and Milano Veterinary University, started in May 2009 and will finish in March 2011;



BV MONITORING: first results 1994-2005

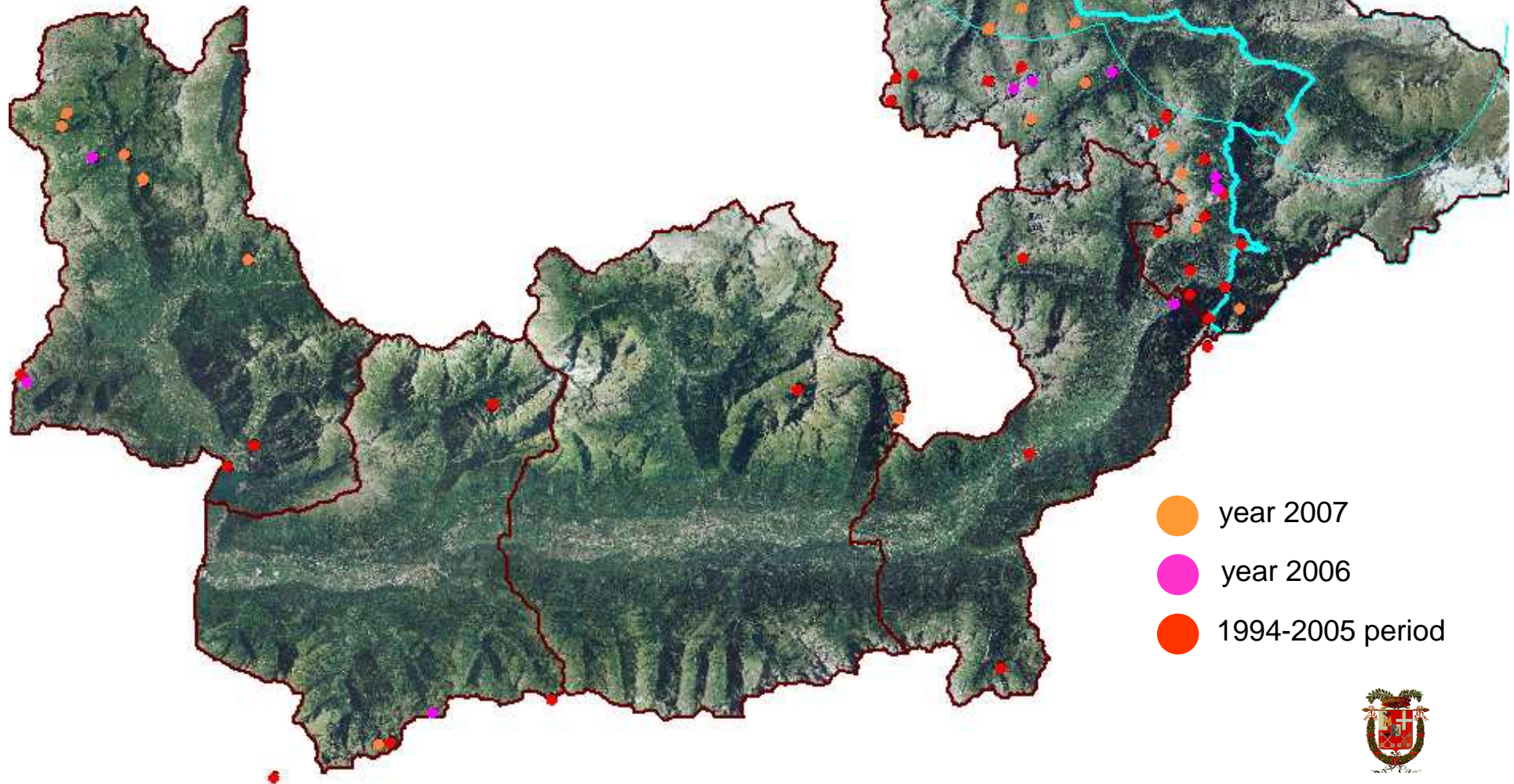
1994-2005: 37 observations

- mainly distributed in areas around SNP breeding sites
- but also many individuals in dispersal



BV MONITORING 2006-2007

2006: 10 observations
2007: 14 observations
- in areas around breeding sites (SNP);
- in Chiavenna valley.



- year 2007
- year 2006
- 1994-2005 period

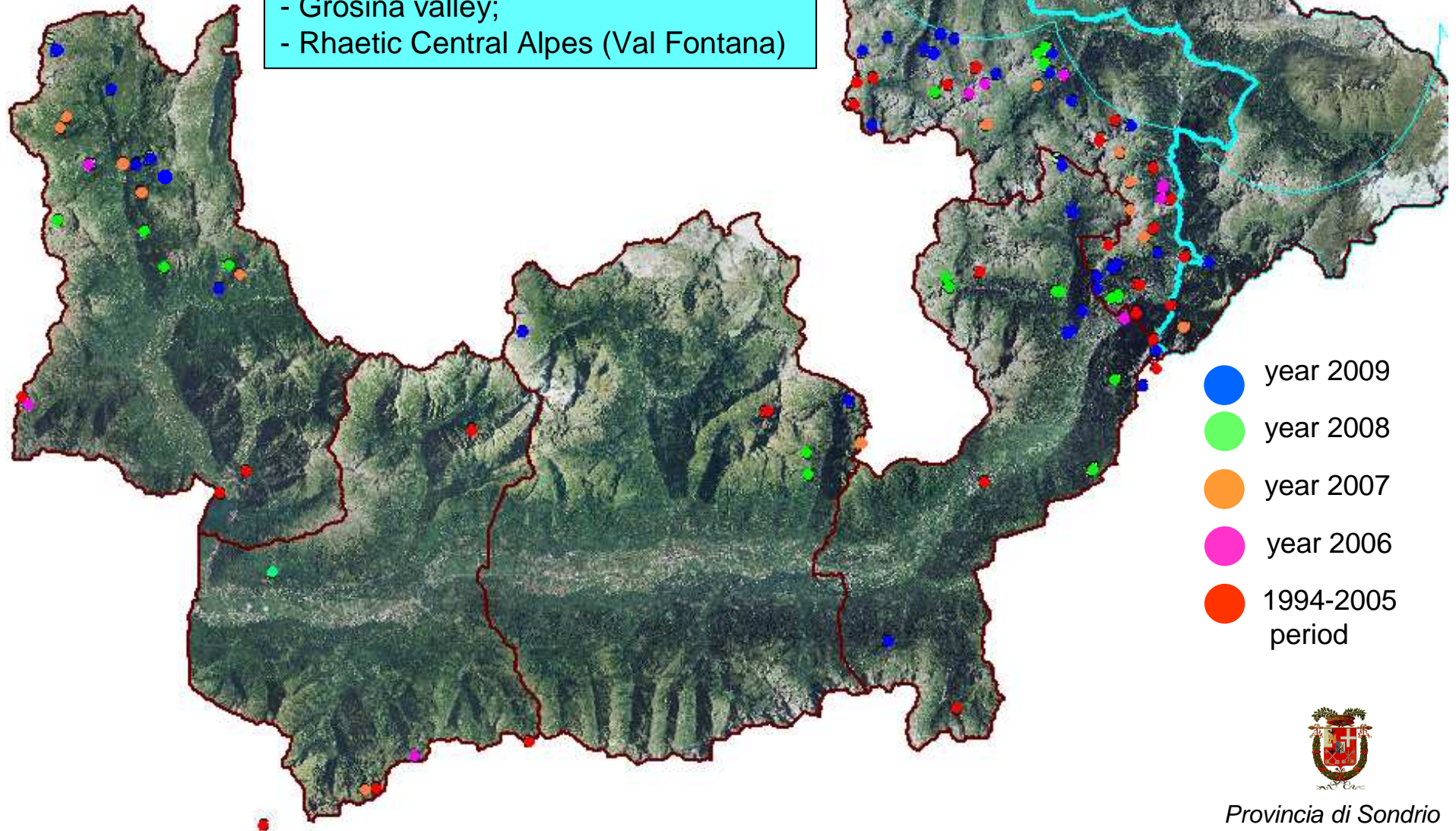


BV MONITORING: 2008-2009

2008: 25 observations

2009: 34 observations

- areas around breeding sites (SNP);
- Chiavenna valley
- Grosina valley;
- Rhaetic Central Alpes (Val Fontana)

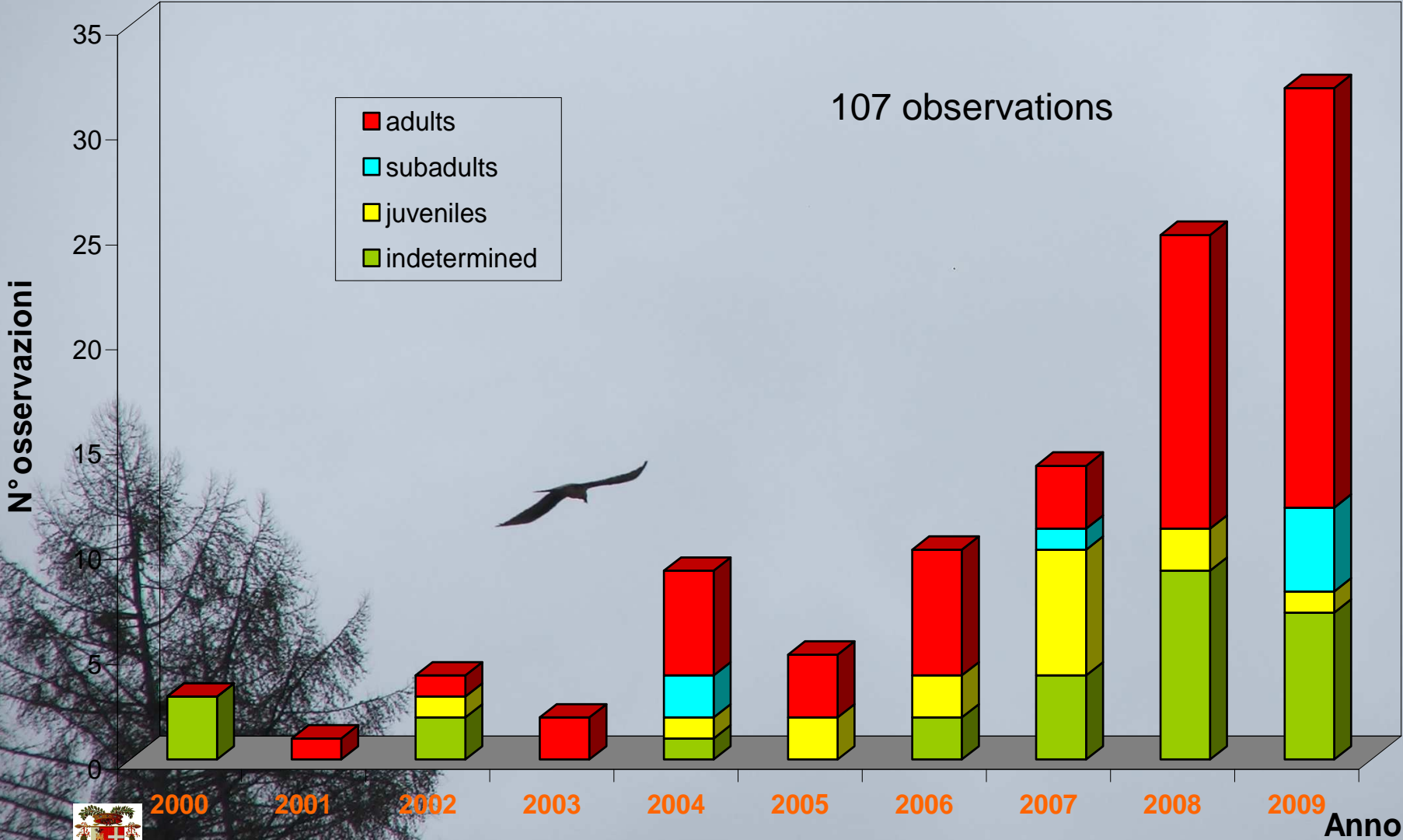


- year 2009
- year 2008
- year 2007
- year 2006
- 1994-2005 period



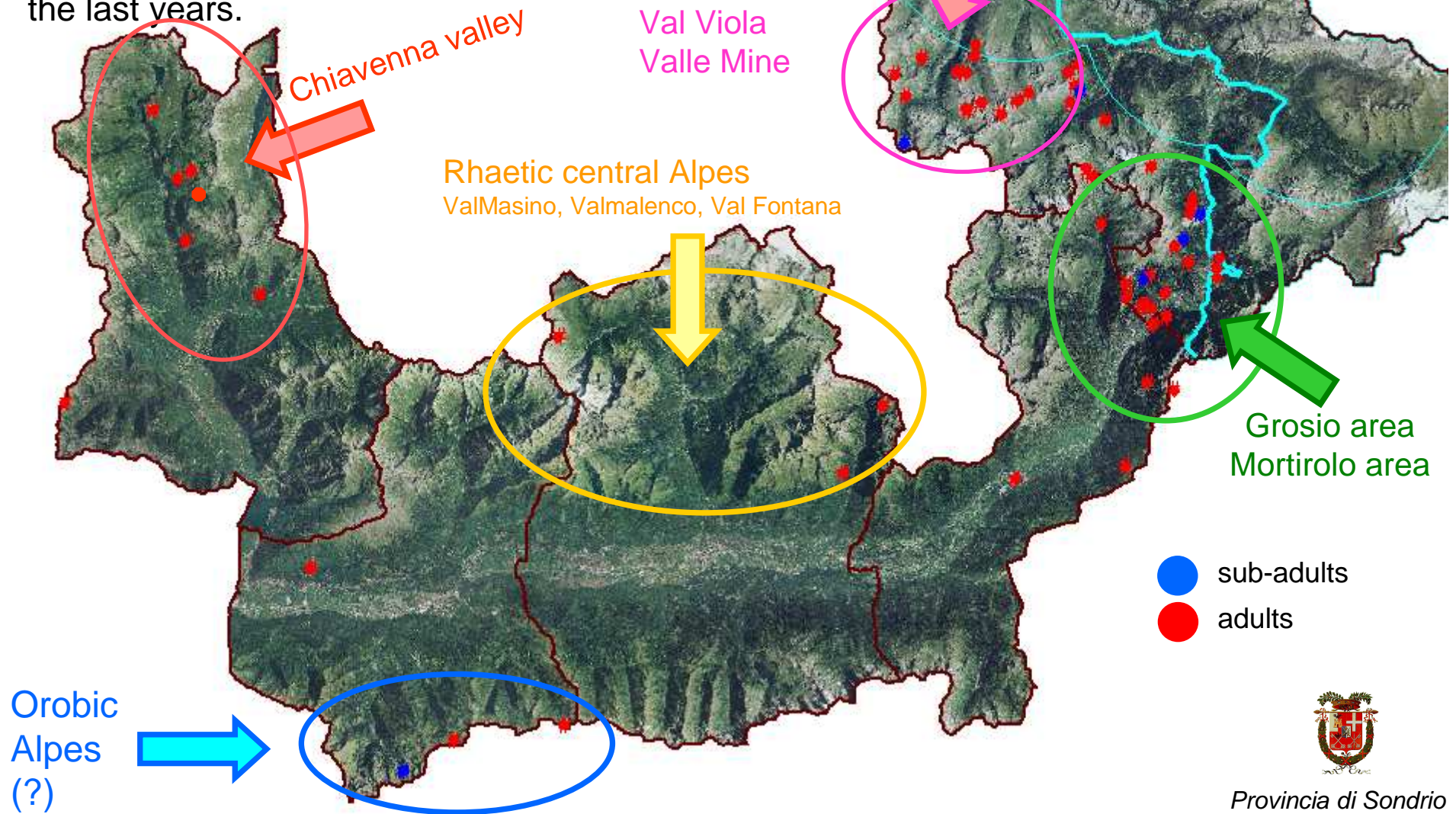
BV MONITORING: 2000-2009

Bearded vulture observations in Sondrio Province (anni 2000-2009)



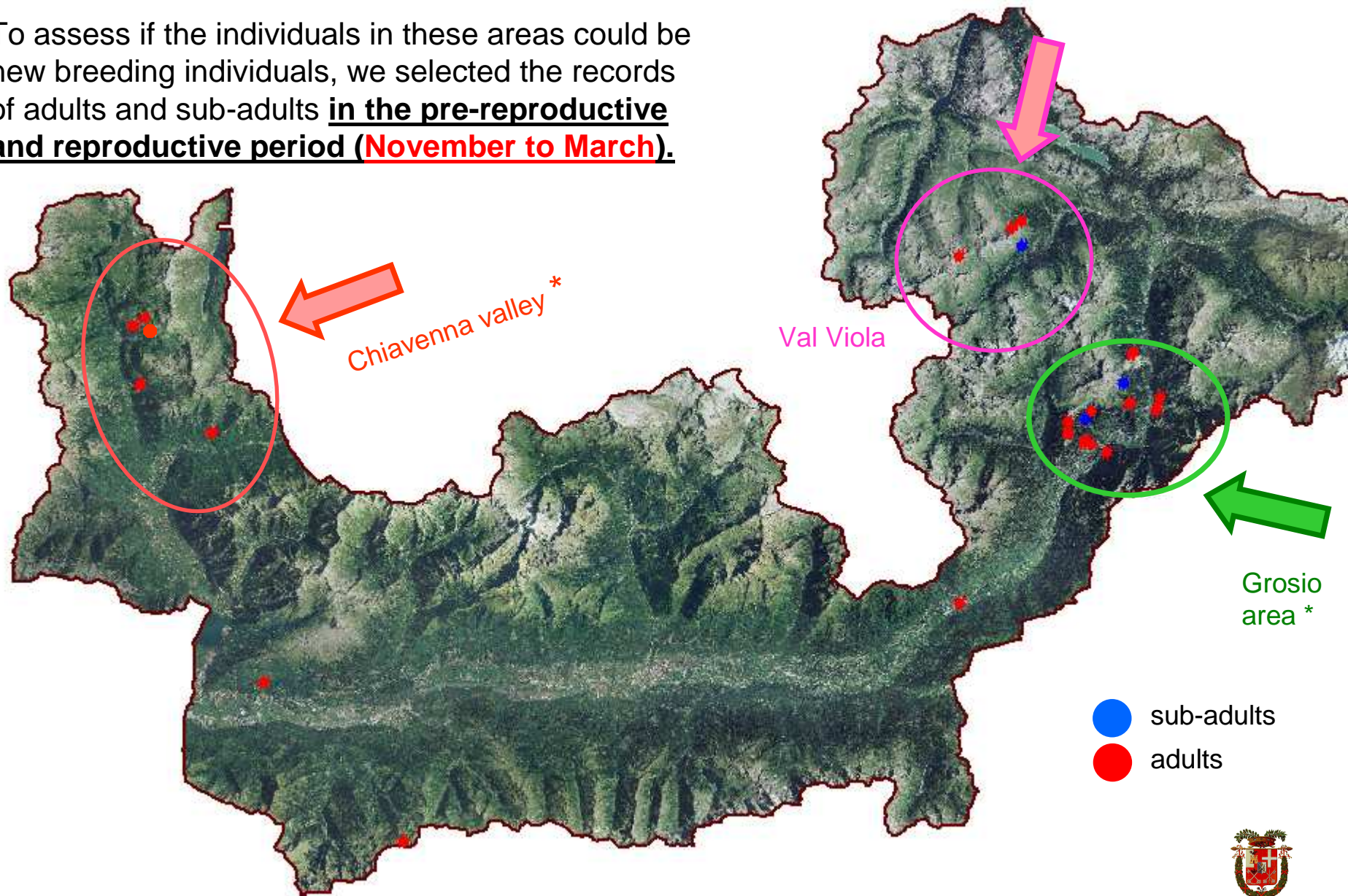
BV MONITORING

If we select **only adults and sub-adults** observations, there seem to be 4 or 5 main areas in Sondrio province where BV **individuals** have been regularly observed in the last years.



BV MONITORING

To assess if the individuals in these areas could be new breeding individuals, we selected the records of adults and sub-adults in the pre-reproductive and reproductive period (November to March).



* 2 adults seen together in march '09.

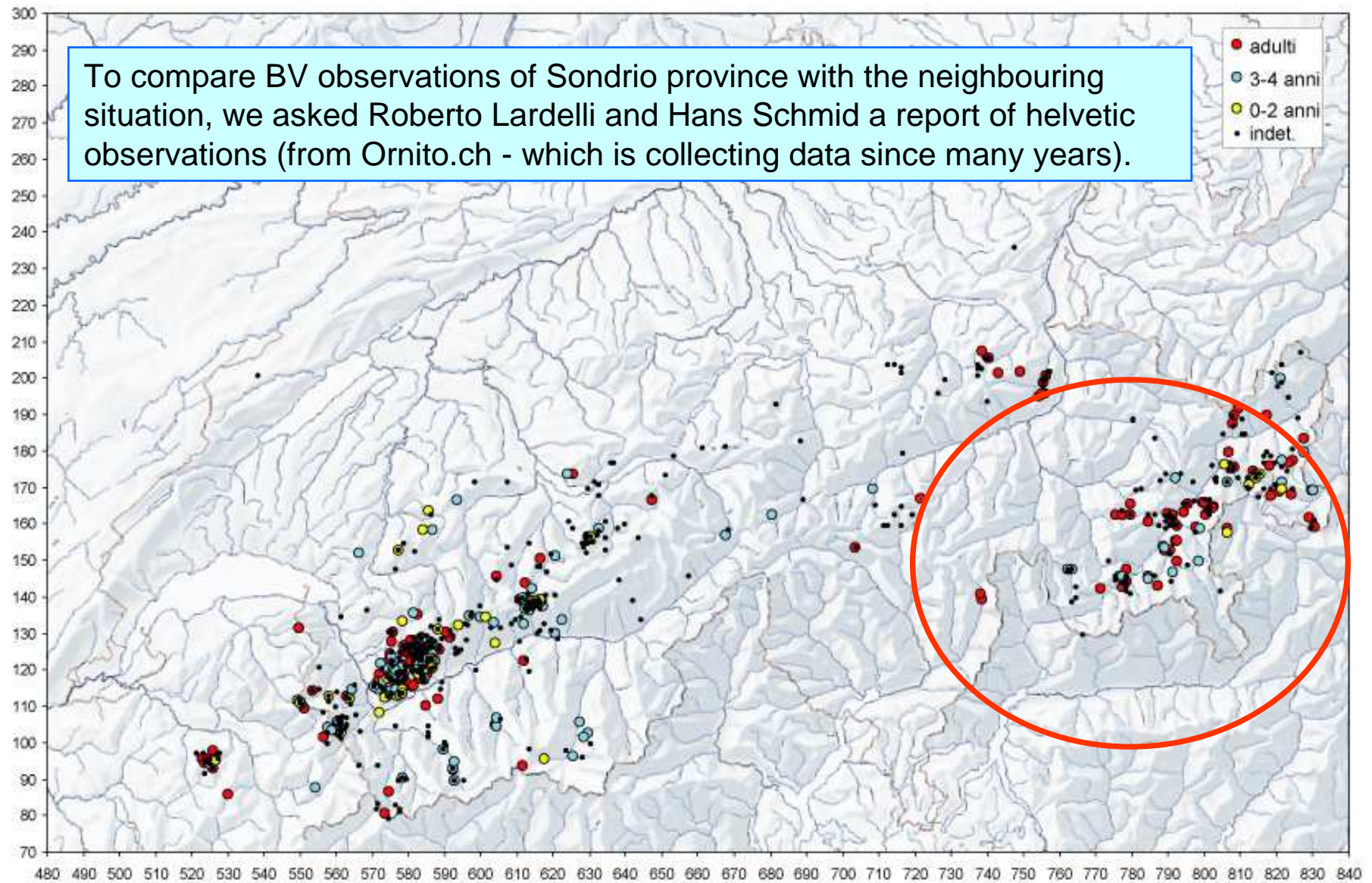
* 1 new adult in last Alpine observ. day



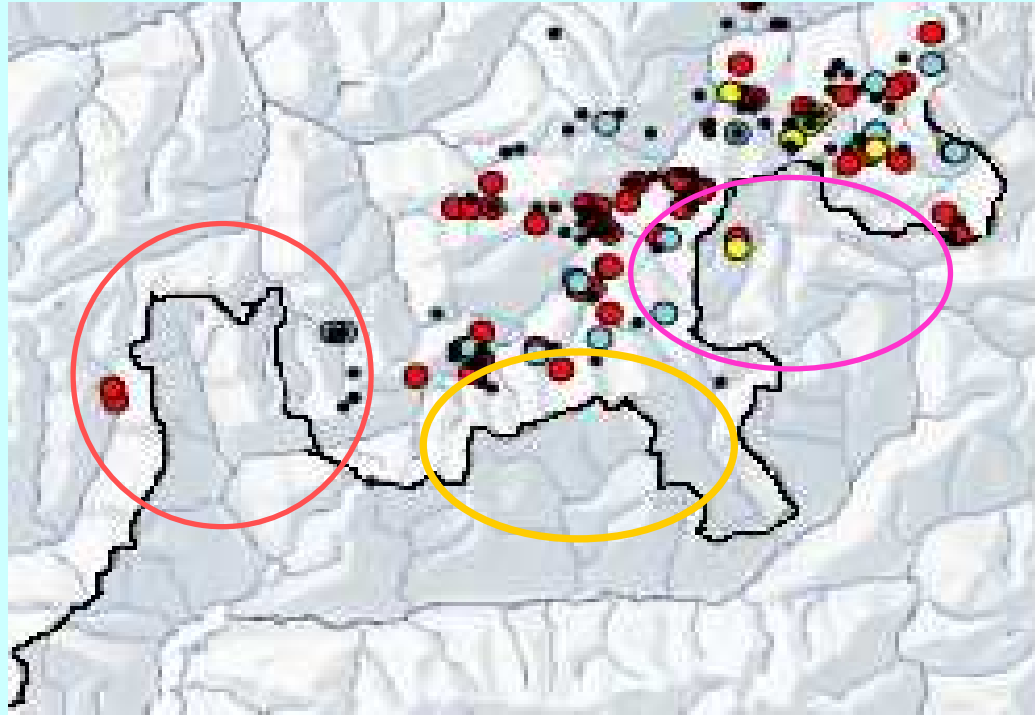
Provincia di Sondrio

Just behind the corner.. BV in Switzerland

To compare BV observations of Sondrio province with the neighbouring situation, we asked Roberto Lardelli and Hans Schmid a report of helvetic observations (from Ornito.ch - which is collecting data since many years).



BV in Switzerland.. a closer zoom



- Helvetic results are interesting for our territory, and demonstrate the importance of data exchange, in the future, to assess the presence of new breeding pairs, their home-range, and consequently define the most appropriate conservation measures.
- Data exchange should be promoted between Italy and Switzerland, based on common standards.

NEXT STEPS: PROVINCE PROJECTS

➤ SURVEY AND MONITORING:

- ✓ collaboration with SNP to **Alpine days observations** in province areas (for BV & GE);
- ✓ organization of **new contemporary censuses** in Province areas where BV adults could be settling as pairs (at local scale);
- ✓ **standardize data exchange** of geo-referenced observations with SNP;
- ✓ **improve data collection** on BV in Sondrio Province, in particular in Natura 2000 sites (SPA – special protected areas and SIC – sites of community importance);
- ✓ developing a **monitoring network** in Province, by training and educating new groups of persons (like hunters, volunteers, tourists etc..), with the help of SNP (if possible..)

➤ ACTIVE CONSERVATION ACTIONS:

- ✓ Establishment of **specific conservation actions for BV in Natura 2000 sites management plans** such as administrative measures to minimize the risks for species survival/breeding and site deterioration; we actually have 10 new management plans in progress, and BV has been observed in ALL of them;
- ✓ Prosecution **of experimental project on lead analyses** (until 2010), to assess the potential saturnism risks related to hunting habits, and evaluation of the possible conservation measures to reduce these risk.



A photograph of a mountain landscape. A snowy path winds through a forest of bare trees. A bird of prey is in flight in the center of the image. The sky is overcast.

THANK YOU TO

- Italo Armanasco and Alta Valle guards**
- Ettore Mozzetti and Chiavenna guards**
- Corpo di Polizia Provinciale**
- Stelvio National Park: Enrico Bassi, Luca Pedrotti, Francesca Diana & Paolo Trotti**
- Amerino Pirola**

THANKS FOR YOUR ATTENTION

Foto E. Mozzetti