



LIFE+ COORNATA

"New perspectives in the coordinated management of a protected species: the case study of the Apennine chamois"











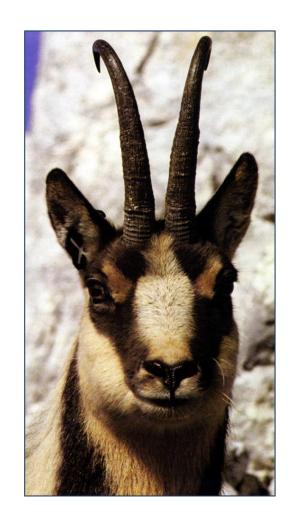




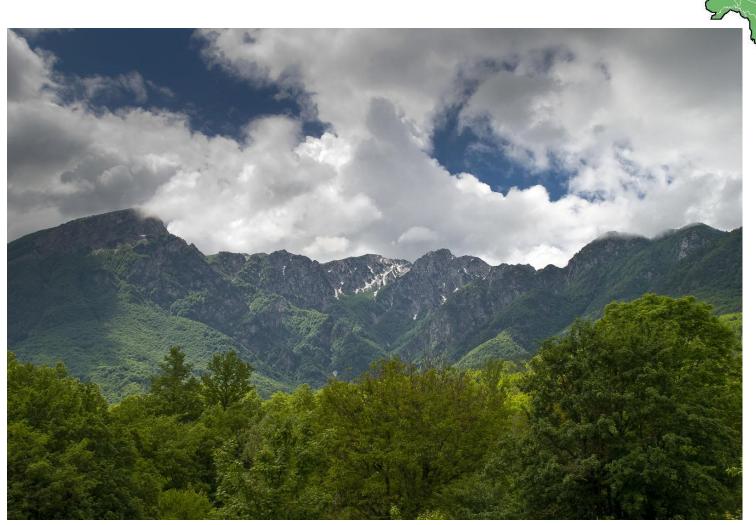
A «special» species...



- ✓ The only Italian endemic mammal species to be included in the IUCN Red List of threatened animals.
- ✓ Until 2013, the only Italian species to be included in CITES' Appendix 1.
- ✓ Defined as "Vulnerable" in the Red List of Italian Vertebrates.
- Considered as priority species by the Habitat Directive (Annexes II and IV)
- ✓ Strictly protected by the National Hunting Law n. 157/1992.



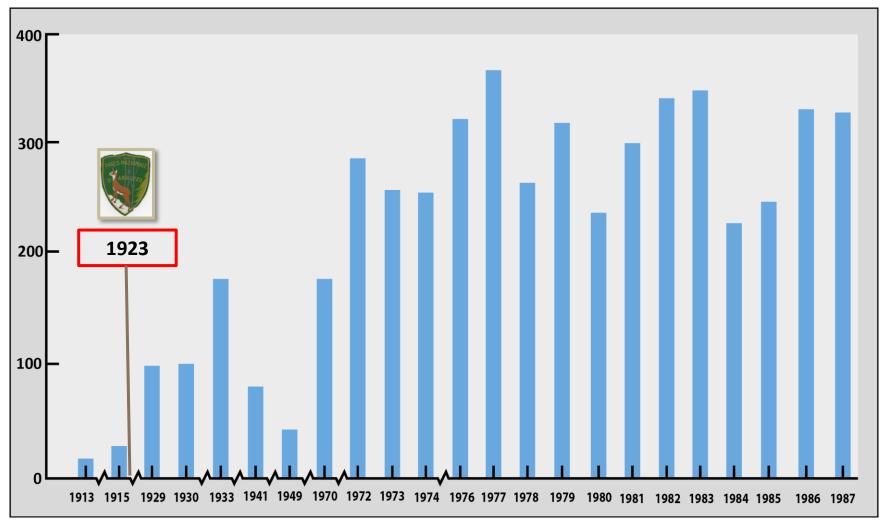
History of the Appennine chamois in the Park



- ✓ Until 1914 limited number of individuals spread in a small area
- ✓ Repeated bottle-necks

History of the Appennine chamois





Mission accomplished

1970 - 1990: first studies on the Apennine chamois and reintroduction planning

- First studies on biology, ethology and ecology
- First capture attempts
- Start of the captive breeding programme (1979)



Operazione Marsicano (1986)







Mission accomplished



Conservation of the last autochthonous population

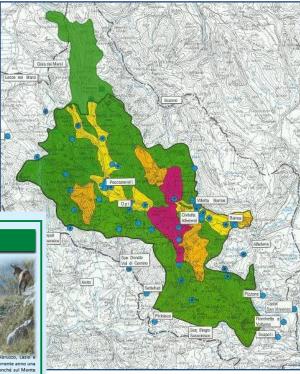
- ✓ Establishment of the Total Reserve
- ✓ Touristic regulation

Establishment of new populations

- ✓ Feasibility studies
- ✓ Genetic screening
- ✓ Ex-situ conservation







History of the Appennine chamois in the Park



Thanks to the strong conservation policy, the population experieced a new growth:
400 individual at the beginning of the nineties, but....

- Limited number of individuals
- A sole population
- Problems with inbreeding/inbreeding depression
- Low genetic variability





1991: «Operazione camoscio» starts











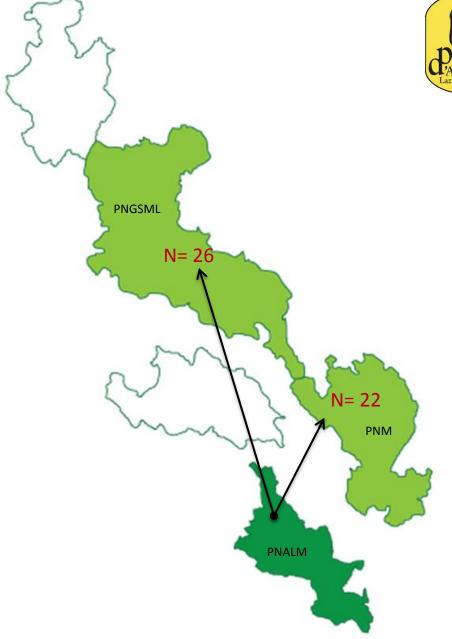






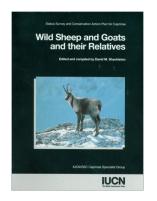


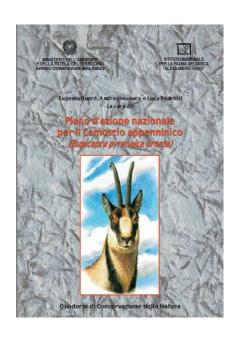




2001: Action plan for the Apennine chamois











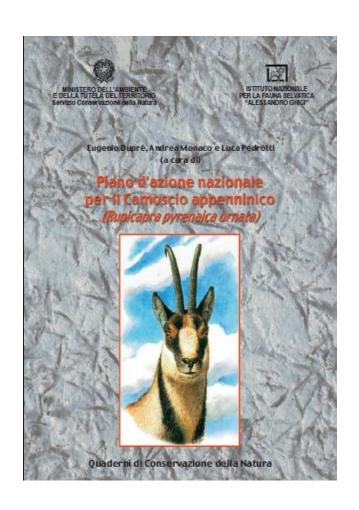


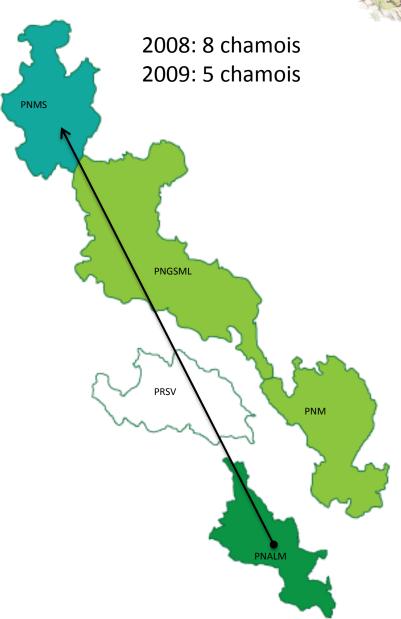
- Low genetic variability
- Limited number of individuals
- Restricted distribution
- Limited number of populations
- Low dispersal and colonization rate

- Creation of the IV population in the PNMS
- Creation of the V population in the PRSV
- 2.000 Apennine chamois in 5 populations!

2008-2009: creation of the IV population

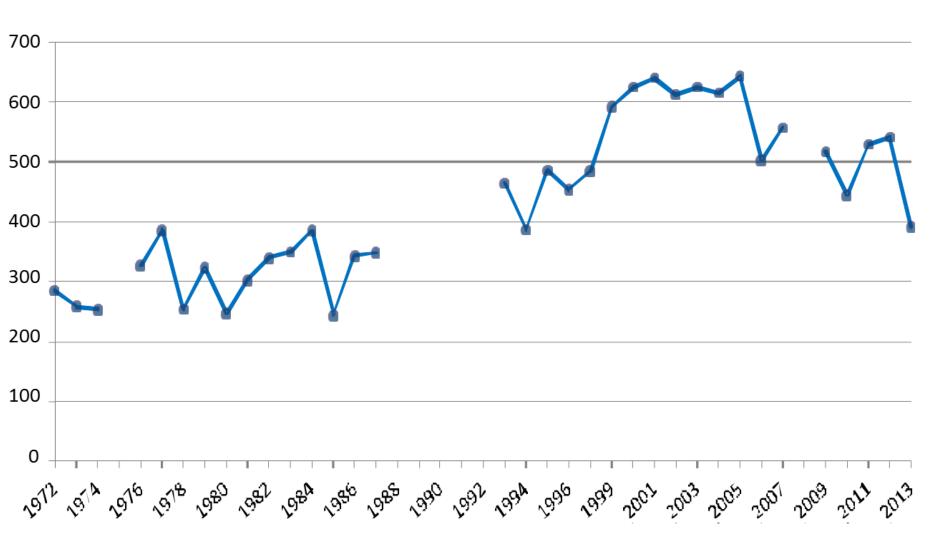






Possible problems in the historical population...





Stop capturing chamois in the PNALM for reintroduction purposes

Project life: COORNATA









- To implement a coordinated management of all the chamois nuclei.
- To finish the release of individuals in the PNMS.
- To start the construction of the 5th population in the Sirente Velino Natural Park (PRSV).
- To understand the causes of the critical situation in the PNALM e to write an Intervention Plan ad hoc.
- 5. To improve the health management for livestock living in the chamois range.
- 6. To augment the level of knowledge of the public and the stakeholders regarding the Apennine chamois and its biology.

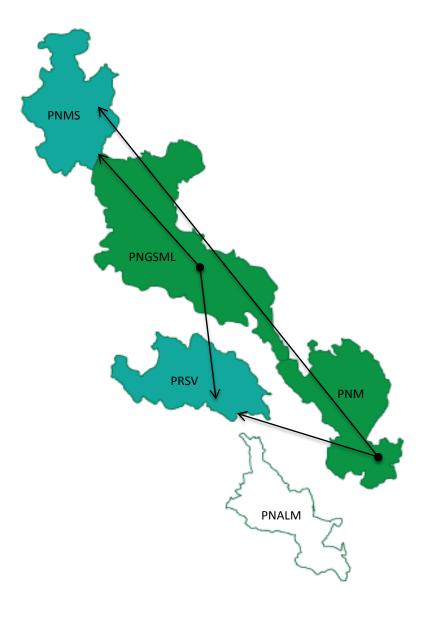


To reach the above-mentioned objectives, several activities have been developed and the key challenge has been the realization, for the first time, of wild-captures in the PNM and PNGSML using mechanical immobilization systems never used before for Apennine chamois

The PNALM passes the baton to Majella and Gran Sasso













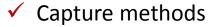
Criterias for the new reintroductions



- Individuation of the herd to be trapped
 - One herd was considered suitable if it was at least 4 years old
 - Herd size: at least 10 adult females
 - Presence of target animals
 - Knowlodge of the area used by chamois in different phases of the year
 - Feasibility of monitoring activity to guarantee the feasibility of the post-capure monitoring phase

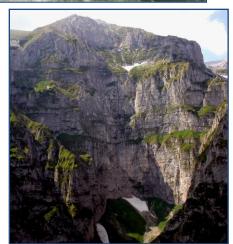


- ✓ Individuation of the area
 - Accessibility and feasibility of the capture-translocation management
 - Suitability for transportation of the animals (boxes and helicopter)



- Tele-injection
- Box trap
- Up-net







New areas and new systems of capture:

two goals very important!



















RESULTS

- ✓ To complete the creation of the IV population (18 chamois have been released in the PNMS)
- ✓ To start the creation of the V popoluation (17 chamois have been released in the PRSV)
 - ✓ 91-100 % of the livestock heads potentially in contact with the chamois have been treated













Over 2000!!!

Isernia





EU-SON.

622

70

2413

Minimum Number Alive

1.100

600

21

For Abruzzo, Molise e Lazio National Park

- Necroscopies and laboratory analysis
- ✓ Analysis of the spatial overlap between chamois and other wild ungulates and livestock
- ✓ Analysis of the dietary overlap between chamois and red deer
- ✓ Analysis of the population structure and estimation of the demographic parameters for each herd and for the whole population









Results

The situation in the PNALM is determined by multi-factorial causes and a specific Intervention Plan has been drafted to counterbalance the limiting factors emerged



Innovation and demonstration value



- ✓ Developing a unique strategy for Apennine chamois conservation
- ✓ First capture experiences in the wild for Majella and Gran Sasso National Park
- ✓ New capture methods never used before for the Apennine chamois, all: up-net, box trap and modified box trap

✓ Use for phytoterapic treatment (lower toxicity level and a lower persistence in the environment)

✓ Unique strategy for capting breeding Apennine chamois





