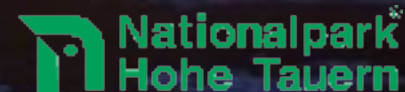


Workshop of ALPARC Large Carnivores Work Group

March 13<sup>th</sup> 2009

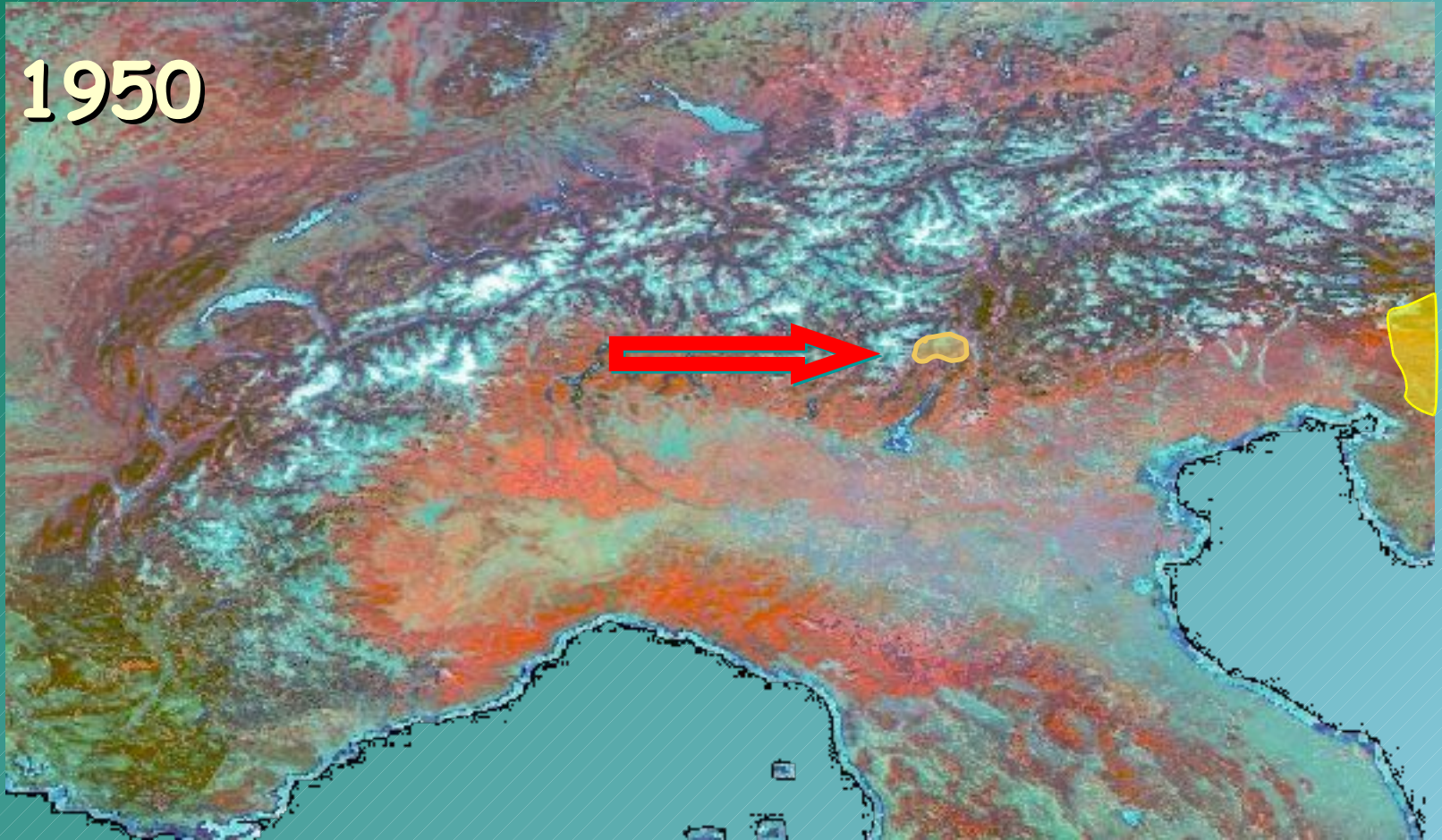
# The Bear Project of Adamello Brenta Nature Park

Filippo Zibordi



# Brown bear on the Italian Alps

1950



- bear presence
- slovenian population



# Parco Naturale Adamello Brenta

✓ Trento Province Town Planning 1967

✓ Province Law 6.5.1988 n.18





Parco Naturale  
Adamello Brenta  
Trentino - Italia

# PROGETTO ORSO



1996 Project Life "Ursus: protection of  
Brenta brown bear population"  
2001 Project Life "Ursus - second phase  
of Brenta brown bear protection"

1999



2000

2001



2002



# Life Ursus

## before

- only 3 bears in the area
- no reproduction since 1989

## after

- ~24 bears
- 16 reproductive events

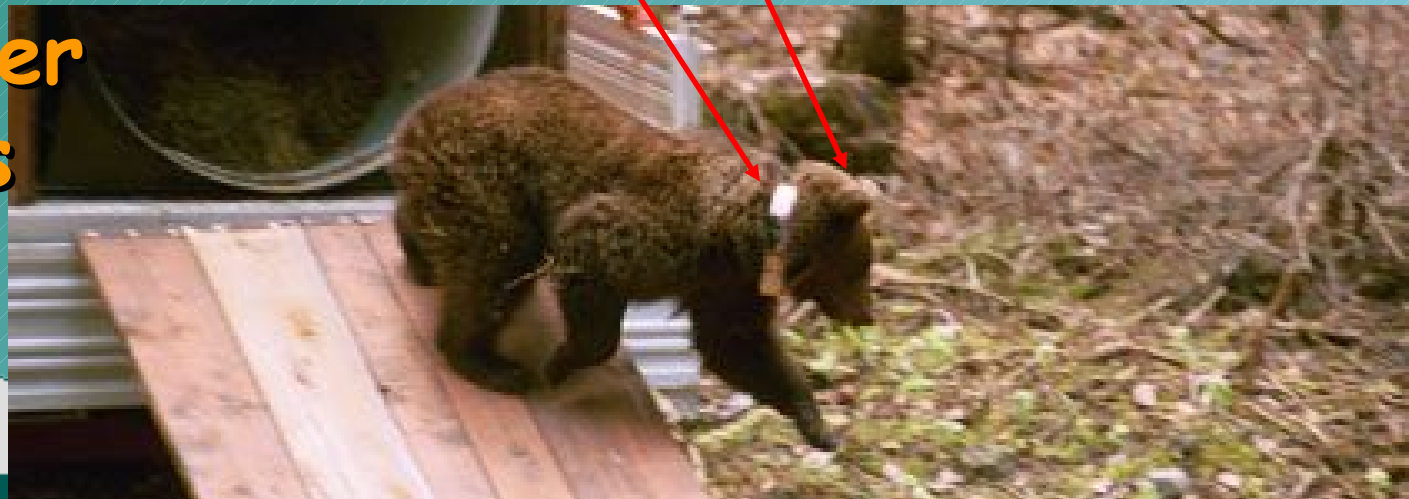


# Meanwhile...

- Monitoring
- Scientific research
- Communication



# Monitoring radio-tracking



Total number  
of fixes  
(1999-  
2003):  
**7773**

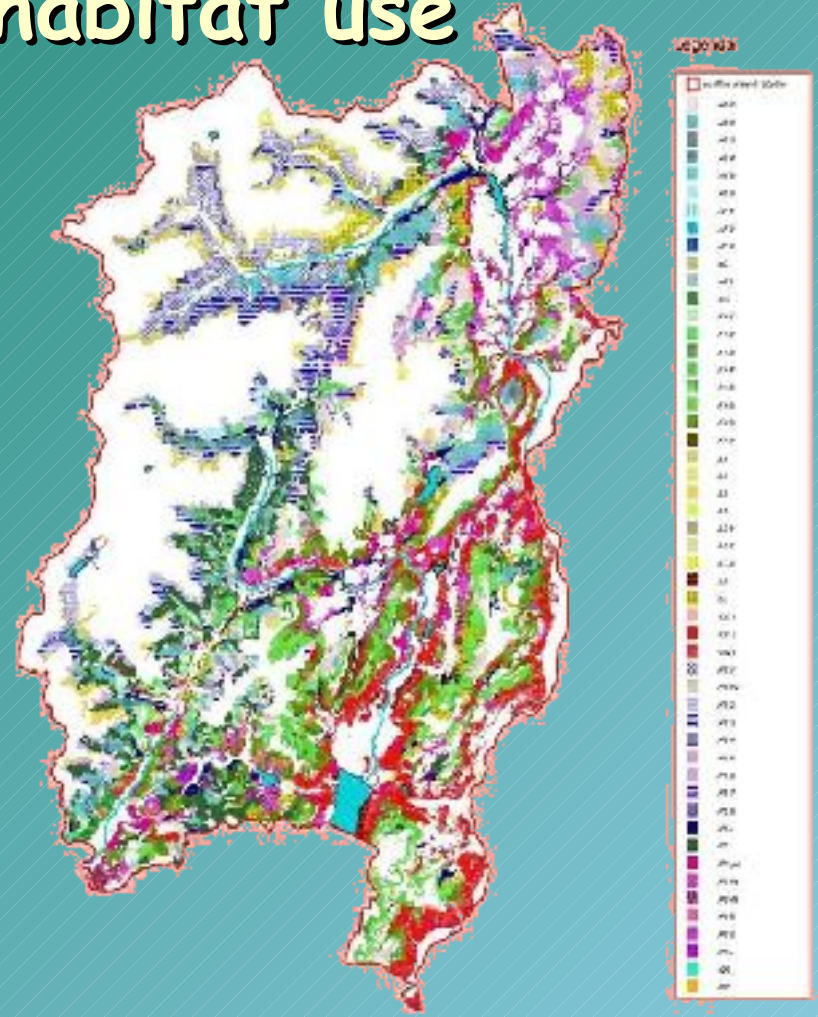
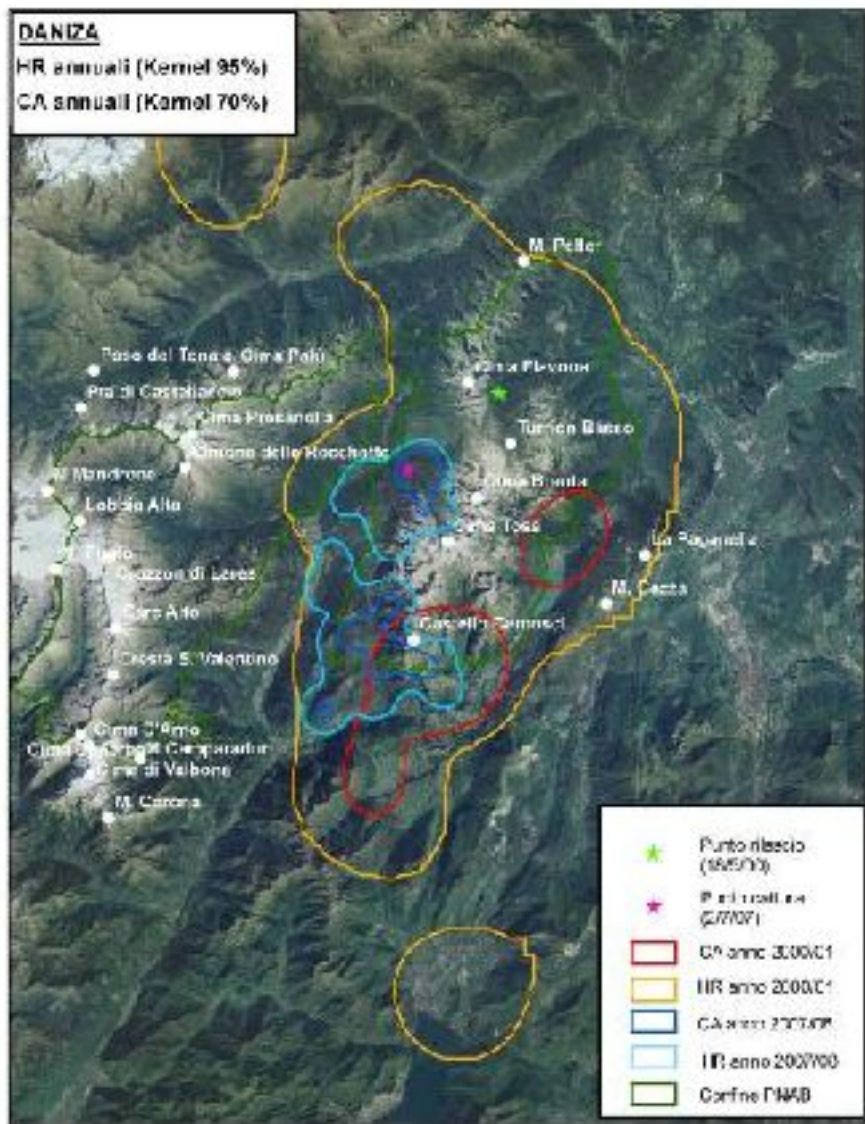
# Monitoring

## noninvasive genetic sampling



# Scientific research

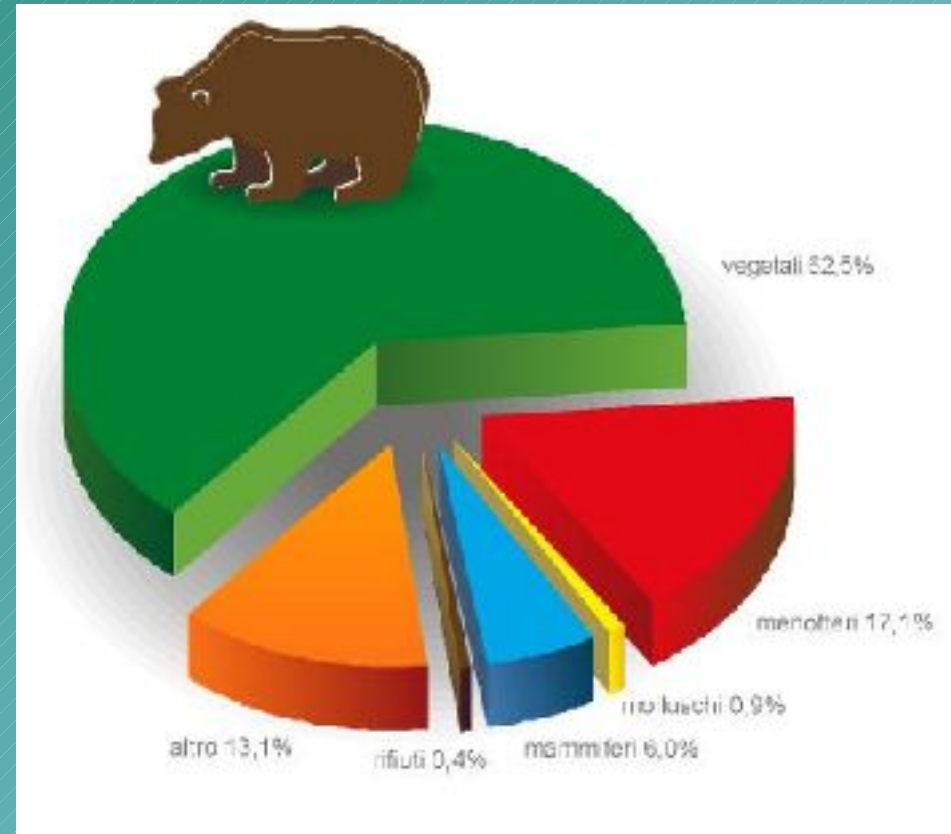
## home range - habitat use



➤ bear positively selects  
disetaneous mixed stands



# Scientific research diet



Scats collected and analysed:

- 65 (1999-2000)
- 109 (2001-2003)
- 350 (2004-2005)



# Scientific research den monitoring

- search of bear dens: 63 monitored

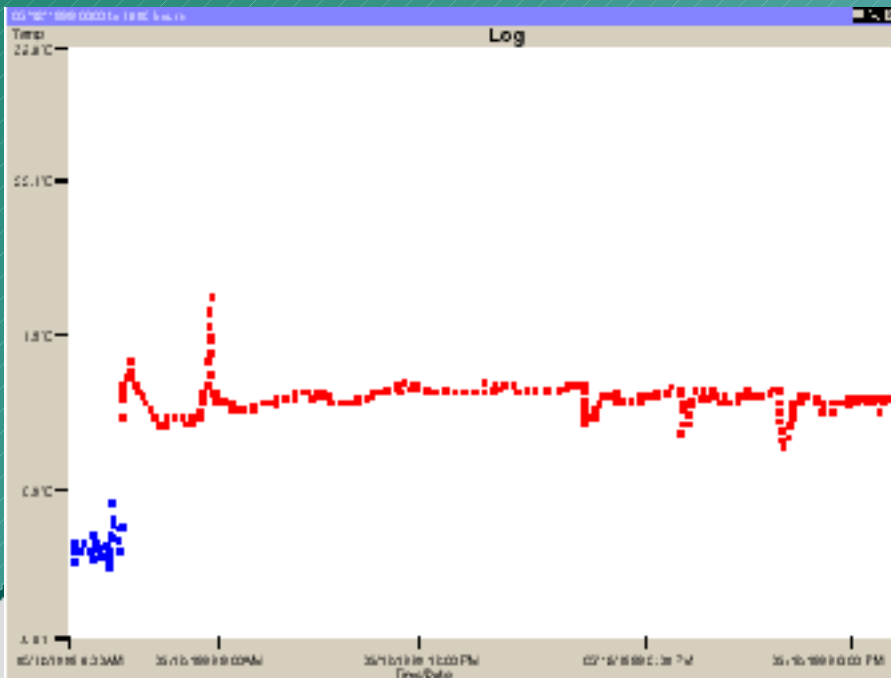


- localization of 74 potential cavities



# Scientific research den monitoring

- placement of temperature & humidity sensors in:
  - 27 dens
  - 31 potential cavities



# Scientific research

"man-bear encounters" survey



increase the knowledge about bear  
ethology

supposed aggressiveness and danger

15.04.2007 17:32

# Scientific research

## "man-bear encounters" survey

- 185 people contacted
- 355 questionnaires filled

**AVVISTAMENTI ORSO: QUESTIONARIO**

**COMPILAZIONE:** nel caso di più avvistamenti da parte della stessa persona, compilare un questionario per ogni singolo avvistamento. Segnare nella nota rilevare il dati dell'avvistatore (se non vuole che i dati su di lui vengano divulgati) e la persona che lavora (se lavorate nel campo "turistico", se appartiene ad associazioni ambientaliste, ecc.).

**AVVISTAMENTI ORSO: QUESTIONARIO**

**DATI AVVISTATORE:**

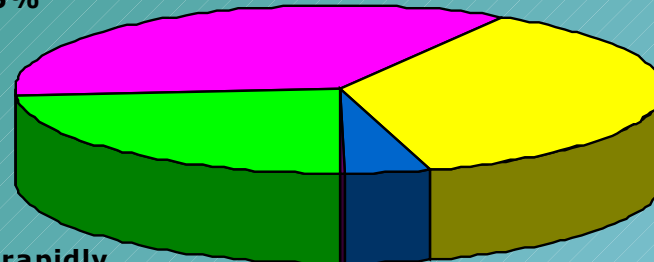
Nome: \_\_\_\_\_  
 Cognome: \_\_\_\_\_  
 Anno di nascita (se possibile): \_\_\_\_\_  
 Professione: \_\_\_\_\_  
 Indirizzo: \_\_\_\_\_  
 E-mail: \_\_\_\_\_  
 Telefono: \_\_\_\_\_  
 Note: \_\_\_\_\_

**DATI AVVISTAMENTO:**

Data: _____ Località: _____ Fui da solo o con altre persone: <input type="checkbox"/> solo <input type="checkbox"/> con altri (n° _____) Posizione osservatore "tipica": <input type="checkbox"/> abitazione <input type="checkbox"/> abitazione per caccia <input type="checkbox"/> veicolo <input type="checkbox"/> altro (_____) 	Ora: _____ Condizioni di luce: <input type="checkbox"/> luce <input type="checkbox"/> penombra <input type="checkbox"/> buio Condizioni di luce: <input type="checkbox"/> luce <input type="checkbox"/> penombra <input type="checkbox"/> buio Posizione osservatore "scoperta": <input type="checkbox"/> bosco <input type="checkbox"/> zona aperta (prato, pascolo, radura) <input type="checkbox"/> strada/cantiero <input type="checkbox"/> altro (_____)
--	--

### How did bear react to your presence

It went away calmly  
35%



It stayed still  
37%

It fled rapidly  
24%

It attacked you  
(physical contact)  
0%

It approached  
4%

It simulated an attack  
(no physical contact)  
0%

# Scientific research

## "Bear disturbance" survey

International Association for Bear Research & Management  
IUCN/SSC Bear Specialist Group



**Questionnaire**

**Disturbance on bear**

- ➔ Can you define what is disturbance for bears?
- ➔ In what habitats and countries stronger on bears?
- ➔ Can disturbance modify the carrying capacity of bear habitat?
- ➔ In what period is disturbance on bears stronger?
- ➔ What are the effects of bears?
- ➔ Does it change its effect during the day?
- ➔ How can bear react to disturbance?
- ➔ Can displacement be a reaction?
- ➔ Can disturbance modify the distribution of a bear population?
- ➔ Can disturbance modify bear behaviour? If so, in what way does it modify bear behaviour? A clear and consequent?
- ➔ Can bear strongly tolerate disturbance? If so, which kind of disturbance? When and under which circumstances?
- ➔ Can bear tolerate the effects of disturbance? In which way?

## expert based opinions survey



# Scientific research

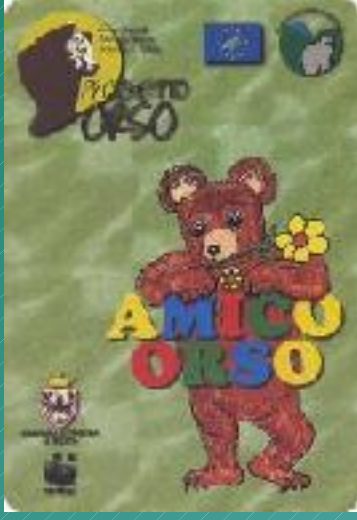
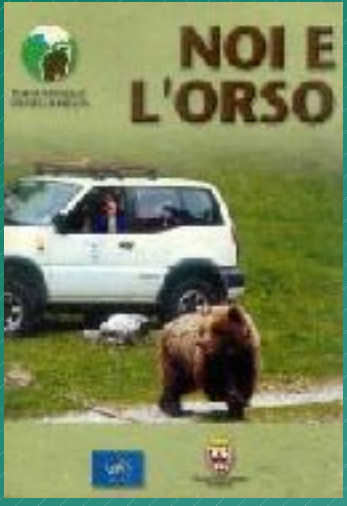
## rt data comparison

- 10 bears (collars VHF)
- 05/1999-08/2003



- 2 bears (collars VHF+GPS):
- 23/08/2006-05/05/2008

# Communication activities



**Orso**

**Specie favorite**

**Fauna**

**Flora del Parco**

**Focus su Orso**

**15 VISIONI 2015**

1. Orso: un grande mammifero	2
2. Orso: un grande carnivoro	2
3. Orso: un grande erbivoro	2
4. Orso: un grande onnivoro	2
5. Orso: un grande insettivoro	2
6. Orso: un grande piscivoro	2
7. Orso: un grande frugivoro	2
8. Orso: un grande insettivoro	2
9. Orso: un grande onnivoro	2
10. Orso: un grande erbivoro	2
11. Orso: un grande insettivoro	2
12. Orso: un grande piscivoro	2
13. Orso: un grande frugivoro	2
14. Orso: un grande insettivoro	2
15. Orso: un grande onnivoro	2

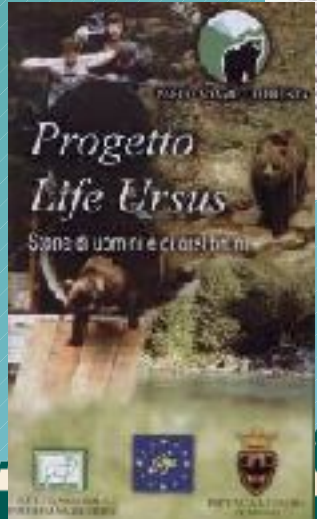


**PARCO ADAMELLO BRENTA**

**GIARDINO DEL TEMPIO**

**LA RINASCITA DEL TEMPIO**

**LA RINASCITA DEL TEMPIO**



# Communication activities

## Educational projects for schools

- Bear project
- One day with bears



## Recreative projects for kids

- Bear Osvaldo's friends
- On bear tracks



# Communication activities

## Park House "Bear"



# The role of the Park for bear conservation

- information and communication
- support the species management
  - ✓ genetic monitoring
  - ✓ ...
- scientific researches
  - ✓ Project "Den monitoring"
  - ✓ "Bear disturbance" survey
  - ✓ "Man-bear encounters" survey
  - ✓ data elaboration
  - ✓ scientific communication (conferences, papers...)

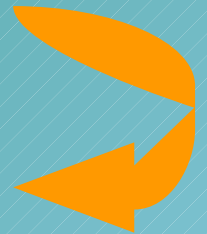


# The role of Parks for large carnivores conservation

- scientific researches
- communication



laboratory of  
experimentation



support the administration in charge  
of species management



**The role of Parks...**



**...is also elsewhere!**



Thank you for your  
attention



PARCO NATURALE  
ADAMELLO BRENTA  
*Geopark*