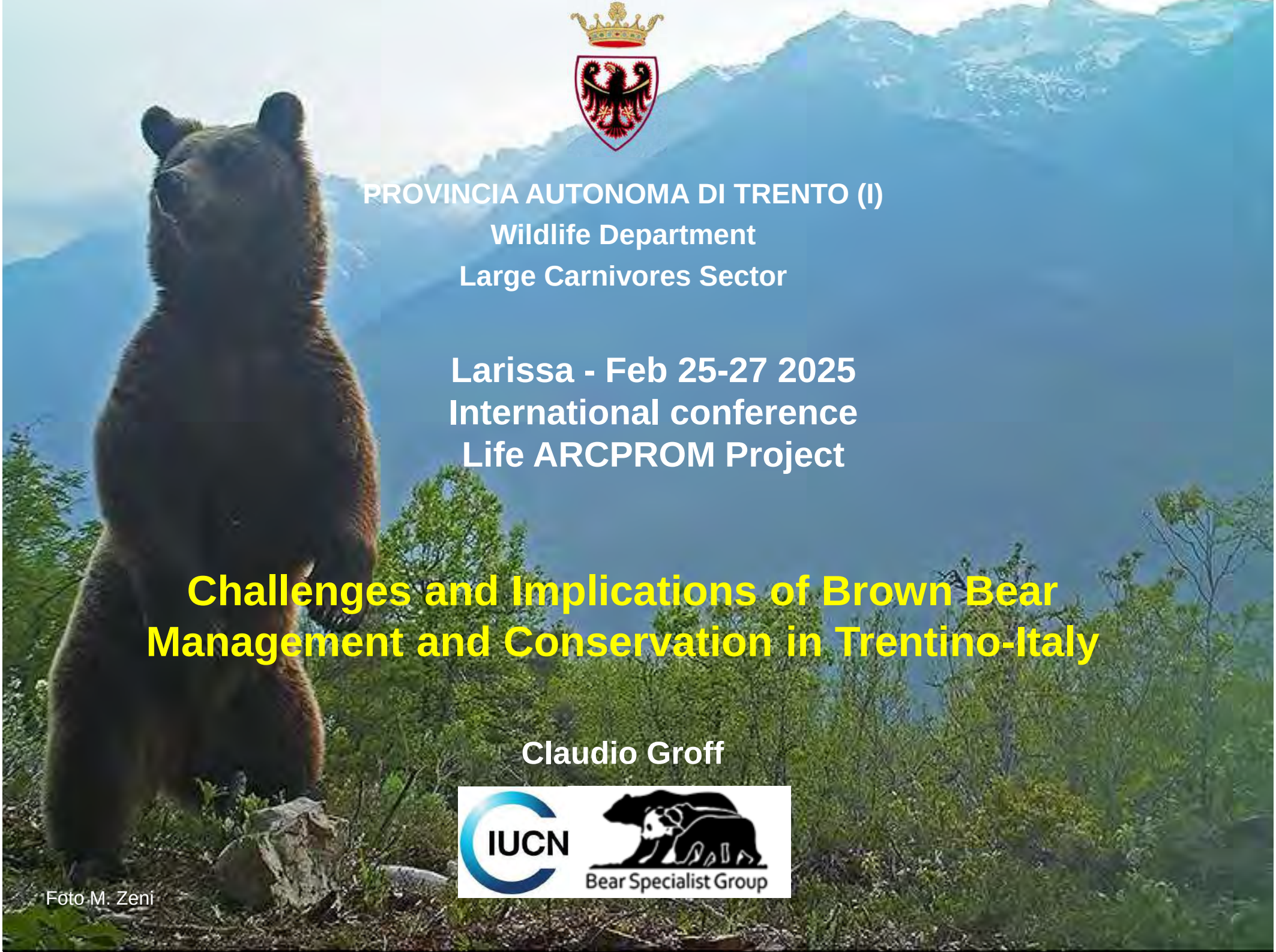
KEYNOTE SPEECHES

ROUNDTABLE

12:05-14:00

Coordination:
Yorgos Mertzanis, Spyros Psaroudas, Callisto



PROVINCIA AUTONOMA DI TRENTO (I)
Wildlife Department
Large Carnivores Sector

Larissa - Feb 25-27 2025
International conference
Life ARCPROM Project

Challenges and Implications of Brown Bear Management and Conservation in Trentino-Italy

Claudio Groff

IUCN Bear Specialist Group

Foto M. Zeni

Program

PART 1

History

Status

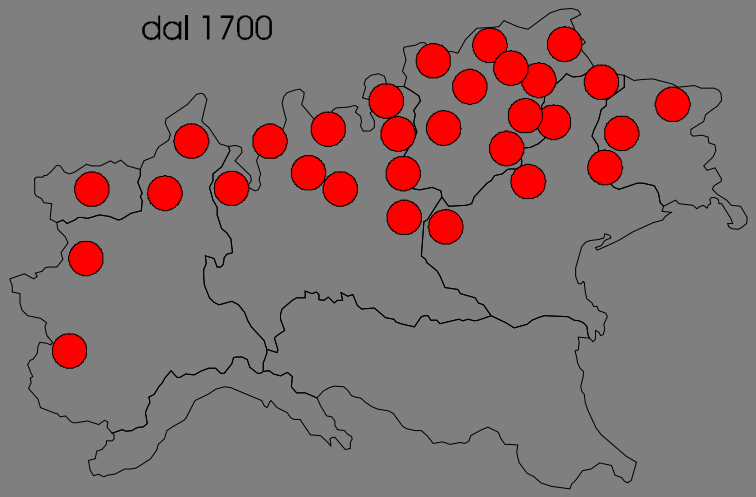
PART 2

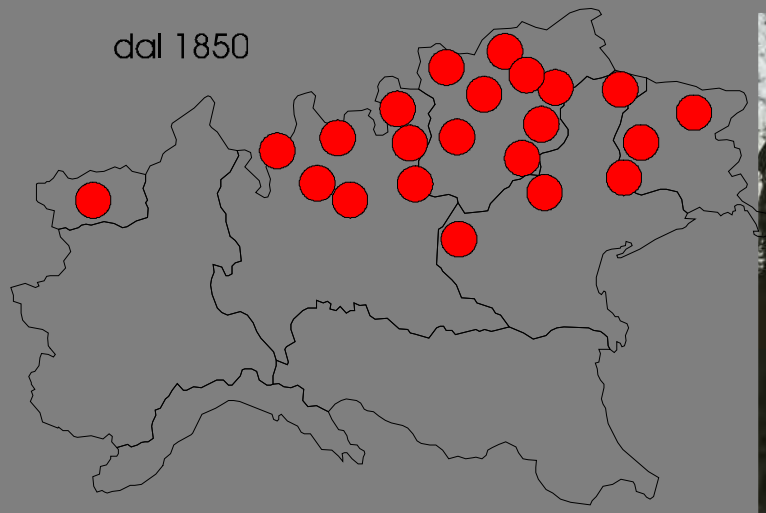
Management

Conflicts

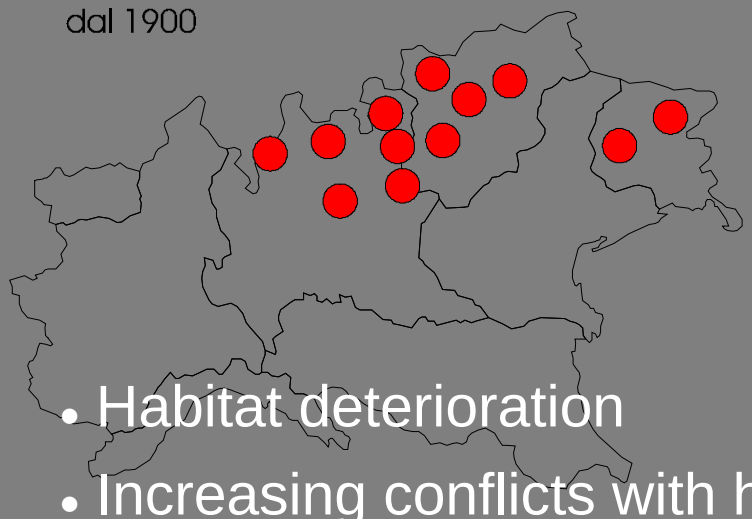
Prospects

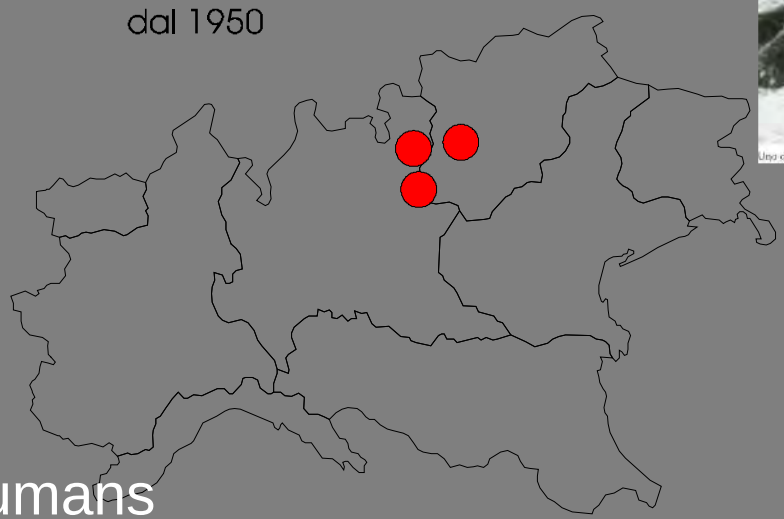
The decline of the brown bear on the Alps






Uno degli ultimi orsi uccisi legalmente in Trentino: femmina adulta del peso di 120 kg abbattuta il 26 settembre 1922.





- Habitat deterioration
- Increasing conflicts with humans
- Bounties and evolution of fire arms
- Protection since 1939 did not stop decline
- Active management since ‘70

The “Life Ursus” restocking project

Two UE Projects, 1997-2004, 3 millions euro

Feasability study (costs and risks highlighted)

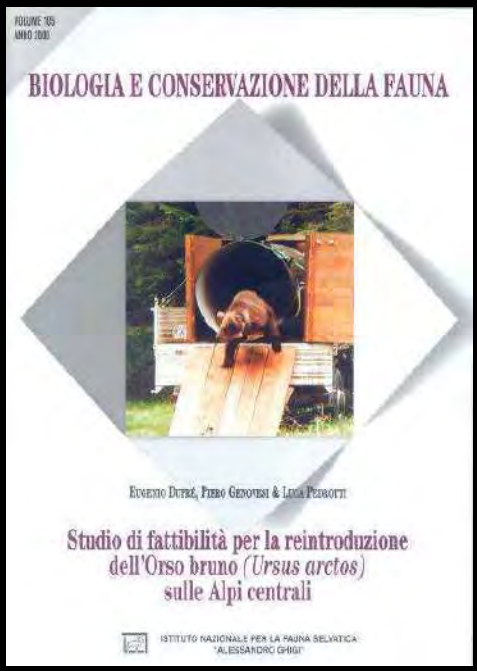
Demoscopic survey on human attitude: positive

Huge paperwork accomplished since 1994

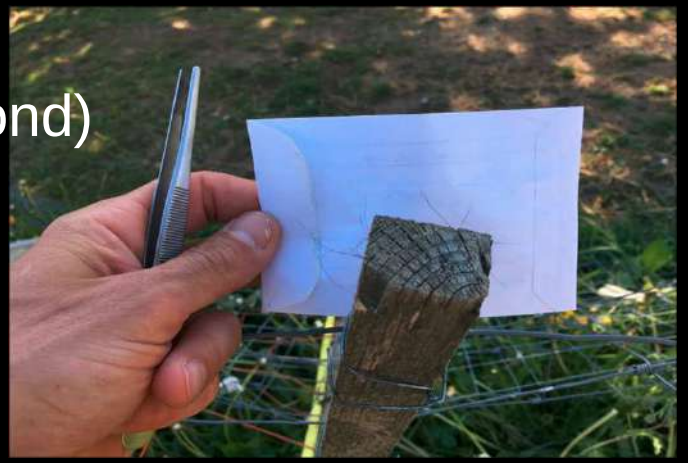
10 bears moved from Slovenia to Trentino (1999-2002)

VHF monitoring of all released bears

First reproduction in 2002



The importance of genetic monitoring



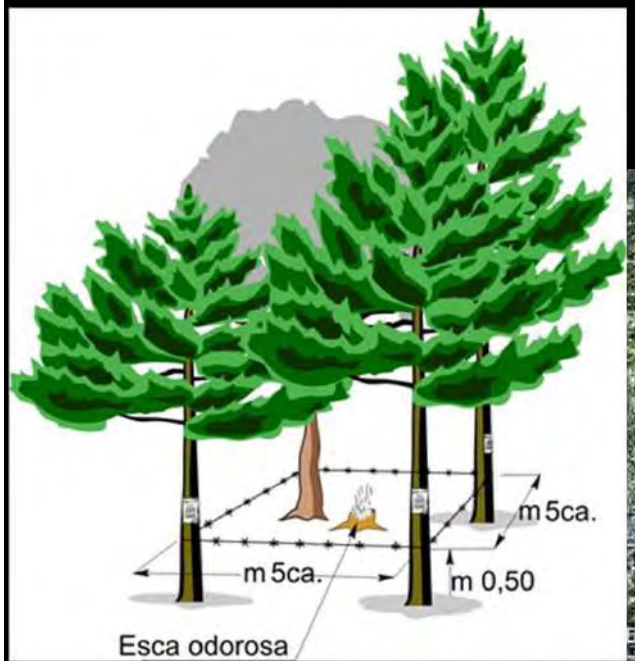
Long term genetic monitoring 2002-2024 (and beyond)

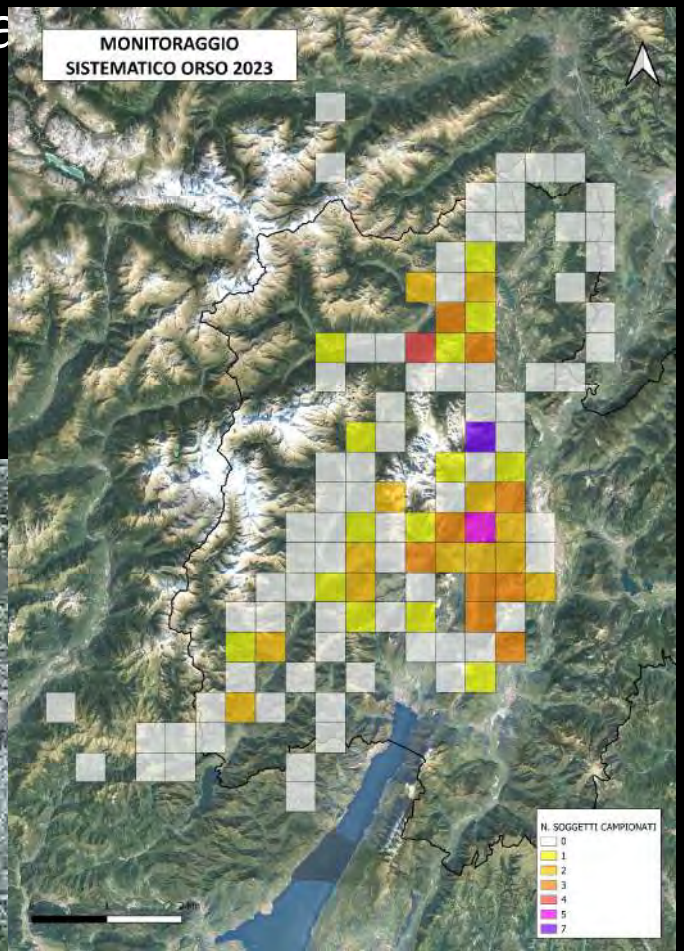
More than 12.000 samples processed so far

Standard monitoring every year

Intensive/systematic monitoring every second yea
> 100 cells grid with bait and barbed wires

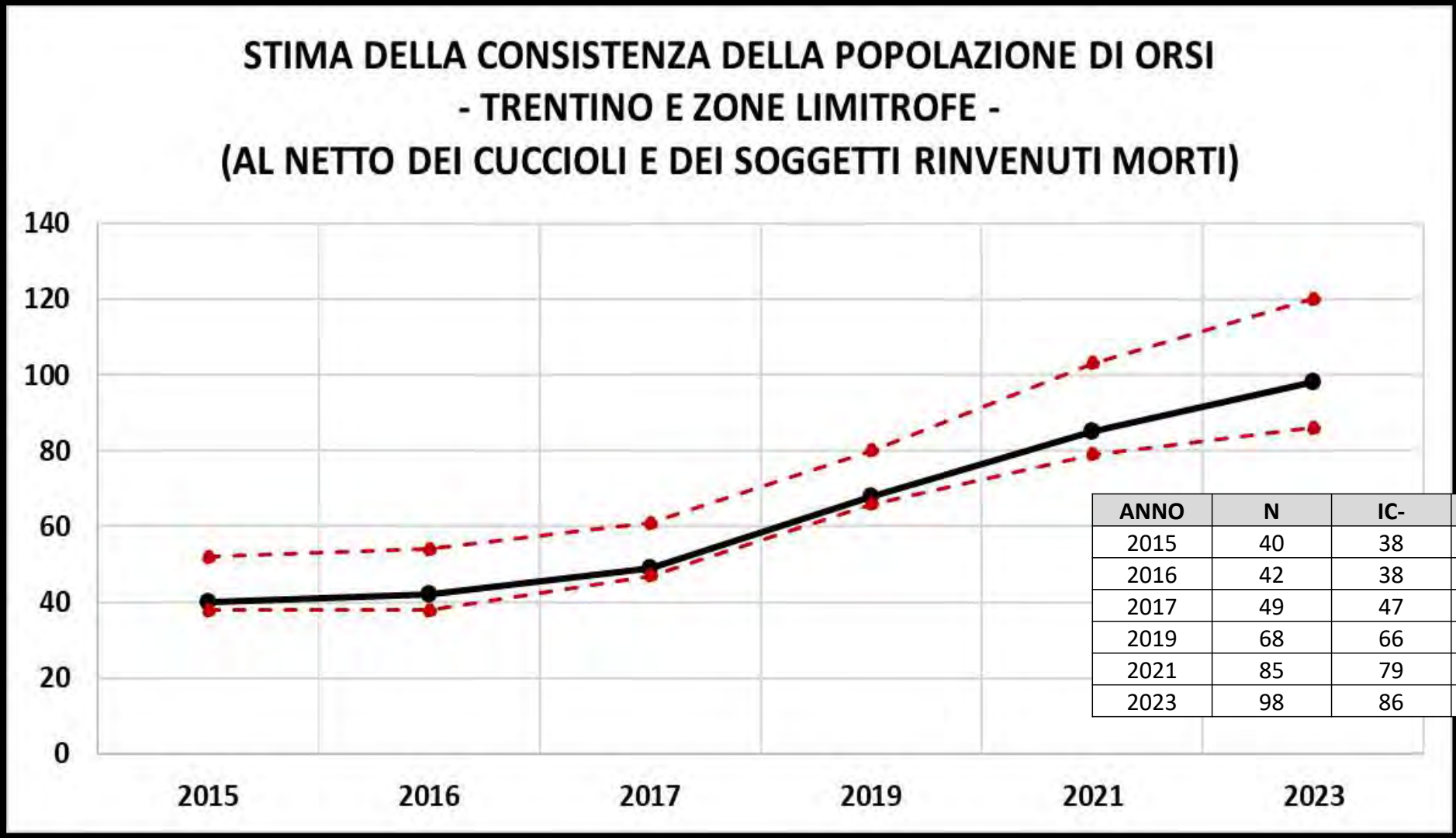
Volunteers support





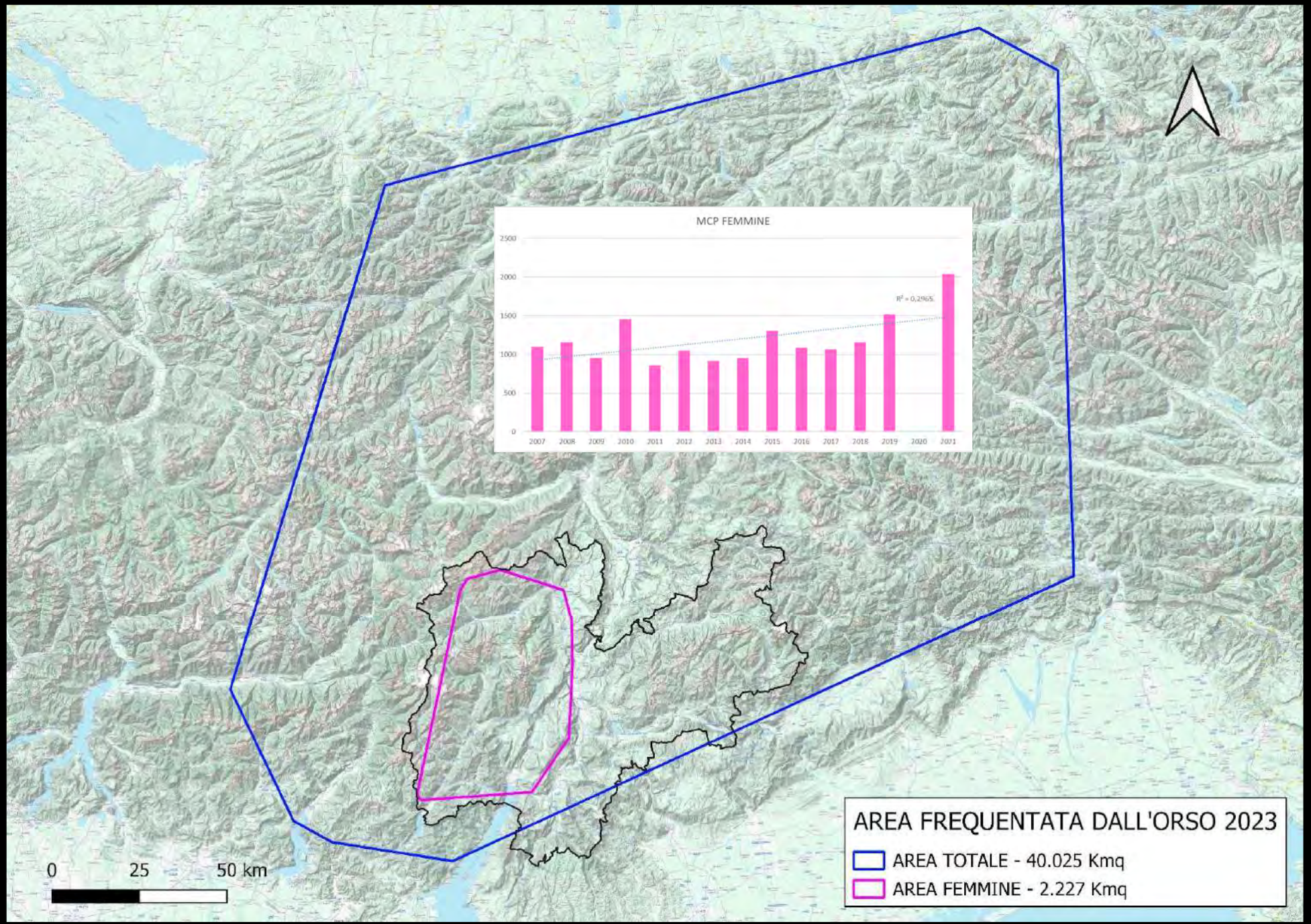
Status and trend

CMR 2023: **98 bears** (CI **86 – 120**) without coys



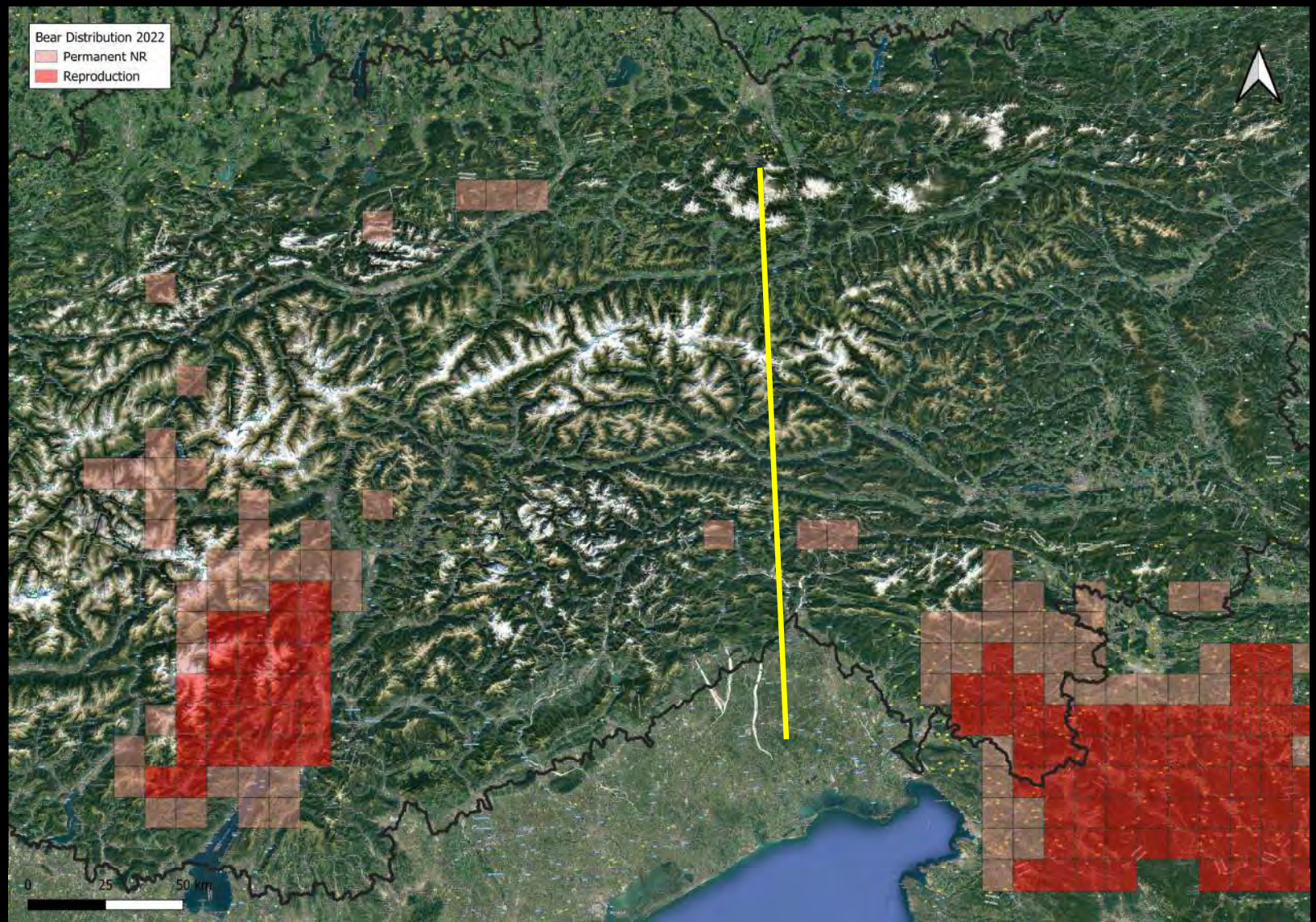
ANNO	N	IC-	IC+
2015	40	38	52
2016	42	38	54
2017	49	47	61
2019	68	66	80
2021	85	79	103
2023	98	86	120

Distribution: central Alps

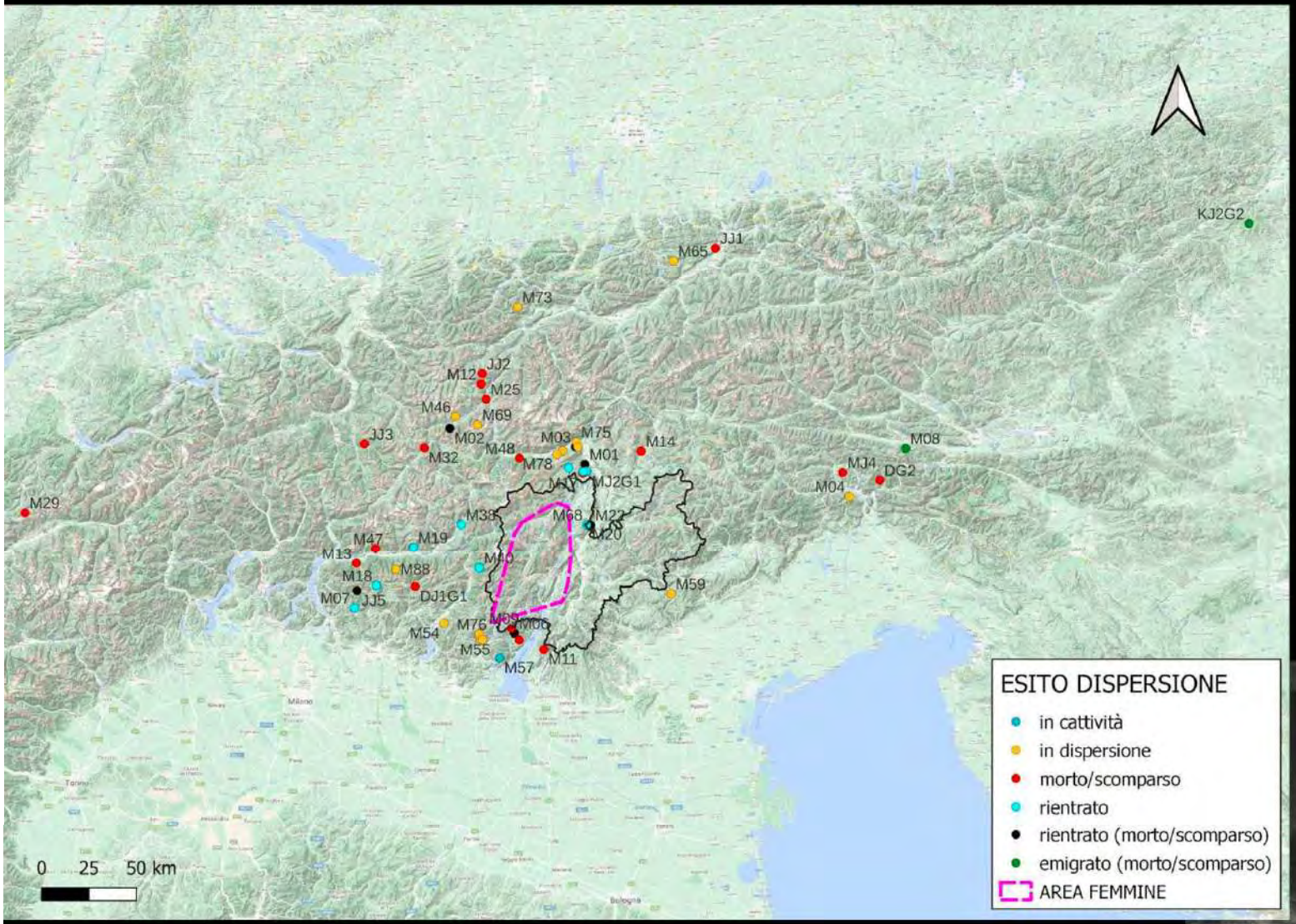


Status and distribution in the whole Alps

Trentino-central Alps: small, isolated population (around 100 bears)
Eastern Alps: big Dinaric-Pindo population (>3.000)
No connection
Genetic inbreeding regularly monitored



Dispersion (young males)



54 bears (‘05-’23):

15 dead or lost

24 came back

12 still dispersing

2 emigrated

1 in captivity

Organization & management

- **Wildlife Department** in charge of management (**5 people**, full time)
- Trained **forest rangers** (around **80 people**, part-time)
- **Emergency team** (**15** trained **rangers**, part-time) 24h on duty
- **Capture/culling team** (**6-7** trained **rangers**, part-time) 24h on duty
- **Forensic team** (4 trained people cooperating with Courts) 24h on duty
- **Scientific support** by Genetic Lab, Veterinary Institute, Science Museum, National Wildlife Institute (ISPRA), Natural parks, international network (i.e. IBA experts, IUCN-BSG, LCIE)

- **<u>Management activities</u>**:
  1. Monitoring
  2. Damages management
  3. Emergencies management
  4. Personnell training
  5. Communication
  6. Networking with other regions

Management since 50 years

1973 - 1999

Management of the **autochtonous population**

1999 - 2002

«Reintroducion project» *Life Ursus* - PNAB

Feasabilty study

First **demoscopic survey** (1997)

10 bears moved from Slovenia to Trentino

Goals:
a. At least **40-60 bears** in 18-41 years
b. One **meta-population** connected with Dinaric population in the long term

2002 - today

Management of the «**new population**»

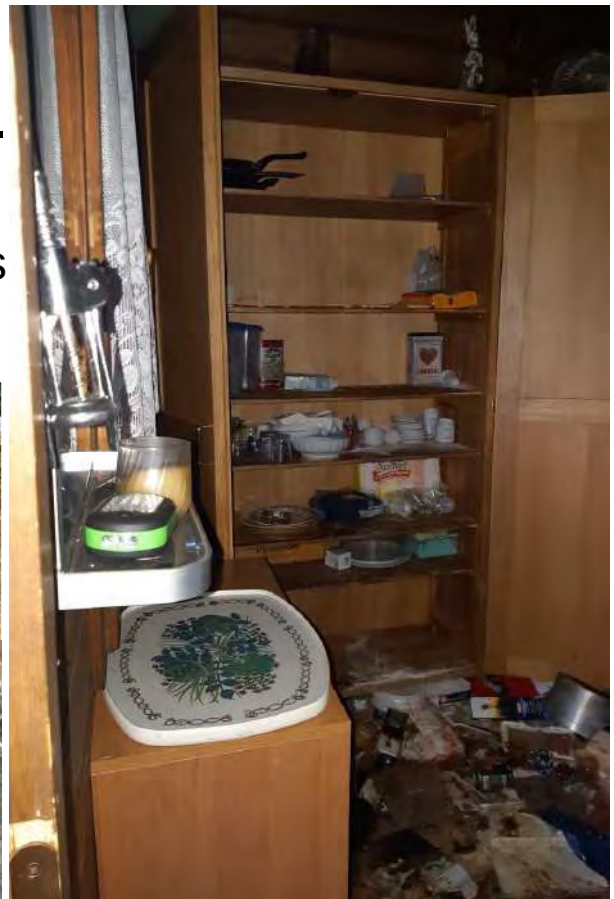
1976: first radiocollar in Eurasia

Conflicts: nature and development

- Bears in **human dominated landscapes** = **conflicts** (to property and human safety) despite all prevention and communication actions
- **Problem bears**: a) very **damaging**, b) **dangerous**/high risk (Pacobace)
- **27 problem bears** recorded **2007-2024**: 15 dangerous*, 7 high risk**, 5 very damaging
- **Average damages rate:** n. 250/year; 150.000 euro/y.

* repeatedly entering villages, following people, trying to enter houses

** bears who attacked people



Conflicts reduction: prioritary tools

- **Prevention**:
  - **attractans removal** (since 2011; 4 millions euro provincial Plan ‘24-’26)
  - **electric fences** (200/year; more than 1.200 in the field now)
  - **livestock guarding dogs** (promoted, around 150-200 in the field now)
  - **shelters** on pastures (15 mobile/year, 9 stable, more coming)
  - **bear spray** (still forbidden in Italy, allowed just to our personnel)

- **Communication**:
  - **safety practices** and **damage prevention**
  - **signs** in the field (around 1.000)
  - **round Tables** as a crucial tool

- **Aversive conditioning**:
  - **bear dogs**, **rubber bullets (radio collars)**: weak tool looking at the data

Conflicts reduction: ultimate tool

- **Bear removal**: shooting or captivity (*only tool in case of attacks on humans)**.** **Action Plan** rules**.** Issues with the **animal right associations**.

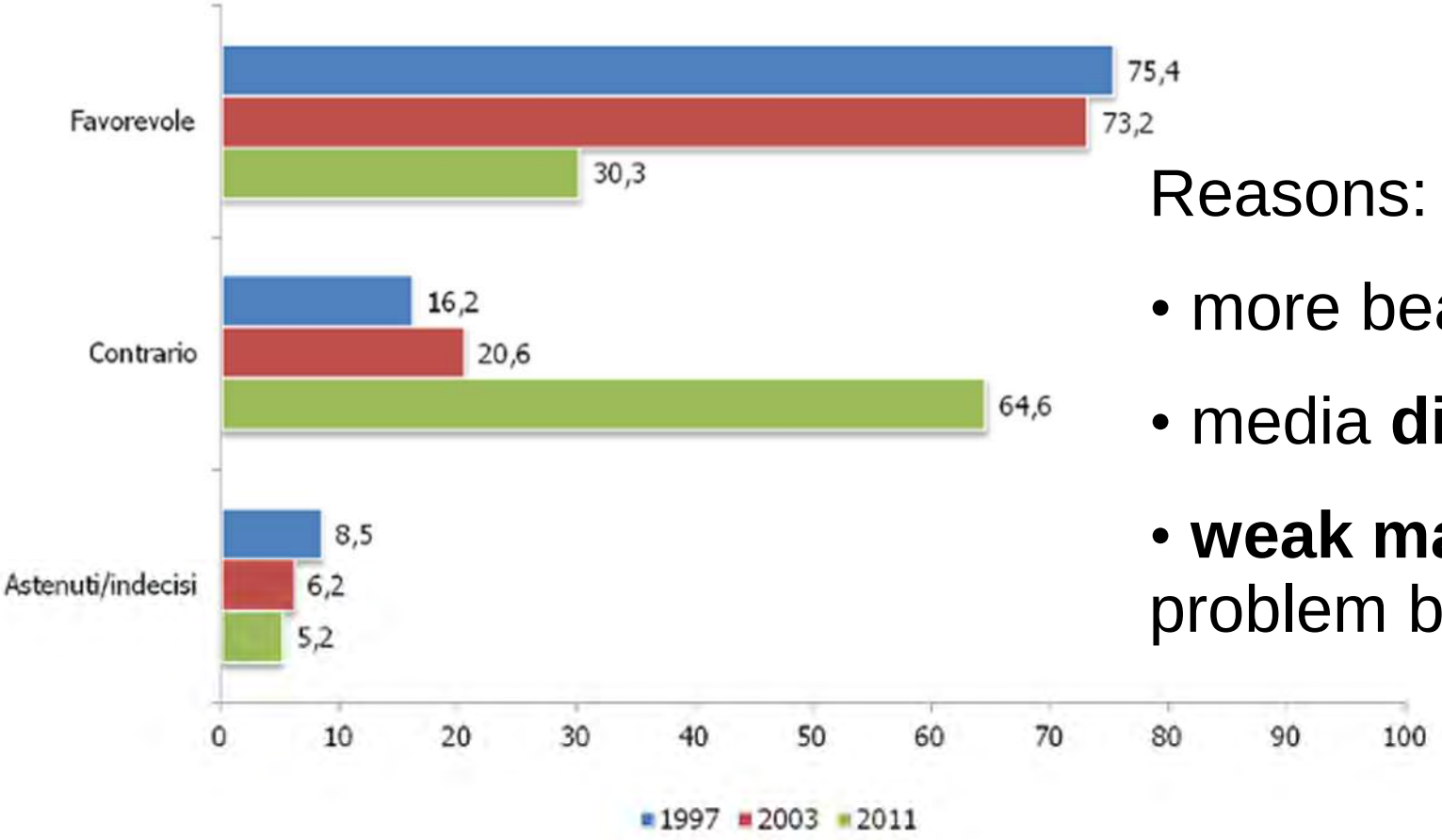
- **Fate of problem bears**: 6 legally **shot** (3 outside Trentino), 5 in **captivity**, 2 **found dead**, 4 died in **management accident**, 4 **poached**, 3 **disappeared**, 1 moved to another area, 2 free

Focus on attacks

- 7 bears performed **9 attacks** on humans **in eleven years** (2014-2024)
- **6 “defensive”** (females with cubs), **3 “non defensive”** attacks
- **5 females** and **2 males** involved
- **9** people **injured** and **1 killed**
- **All 7 bears** were **removed**: 3 shot, 1 in captivity, 1 dead during capture, 2 found dead/poached
- Both **females** not removed after first attack **repeated aggressions** two years later, when they had the next litter

Despite all efforts and activities support of society collapsed

Are you in favour or contrary to the bear presence?



Reasons:

- more bears around - **fear**
- media **disinformation**
- **weak management** of problem bears

Main issues and future scenarios

- **Weak reaction of government to the attacks**, hampered by animal right associations and Courts
- Consequent **worsening of human attitude** and growing of **poaching risk**
- **2024** has been the turning-point? (3 dangerous bears **removed** out of 3)

- Will population (and conflicts) **grow** more?
- Up to **5 problem bears per year expected** in the close future (ISPRA)
- Up to **8 problem bears per year removed are sustainable** today for the population
- **Population control** (quota)? – present EU law restrictions

Lessons learned

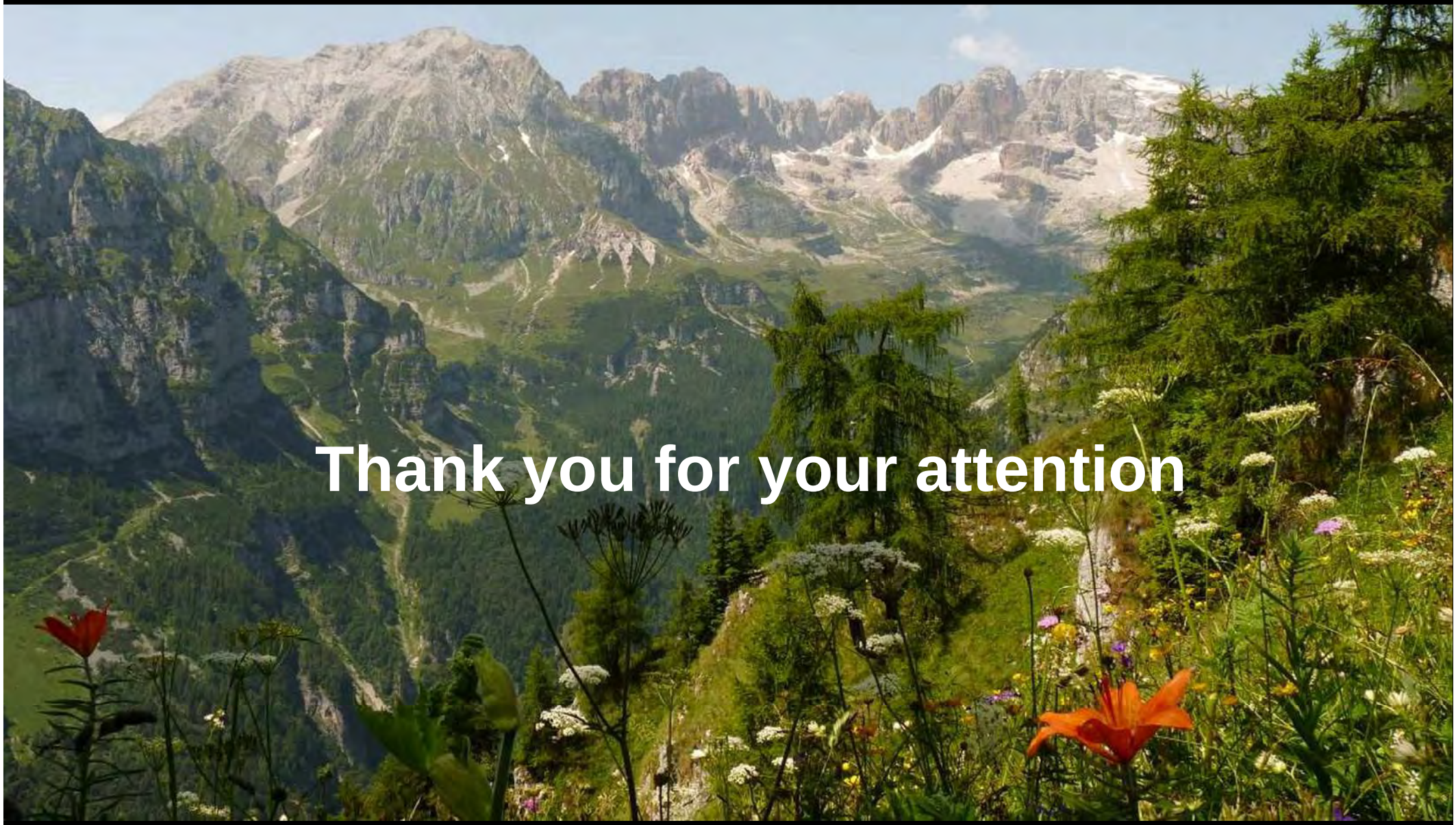
a) Improve **communication**, keep on the **round Table** with stakeholders

b) **Remove single dangerous bears** quickly; population-oriented management

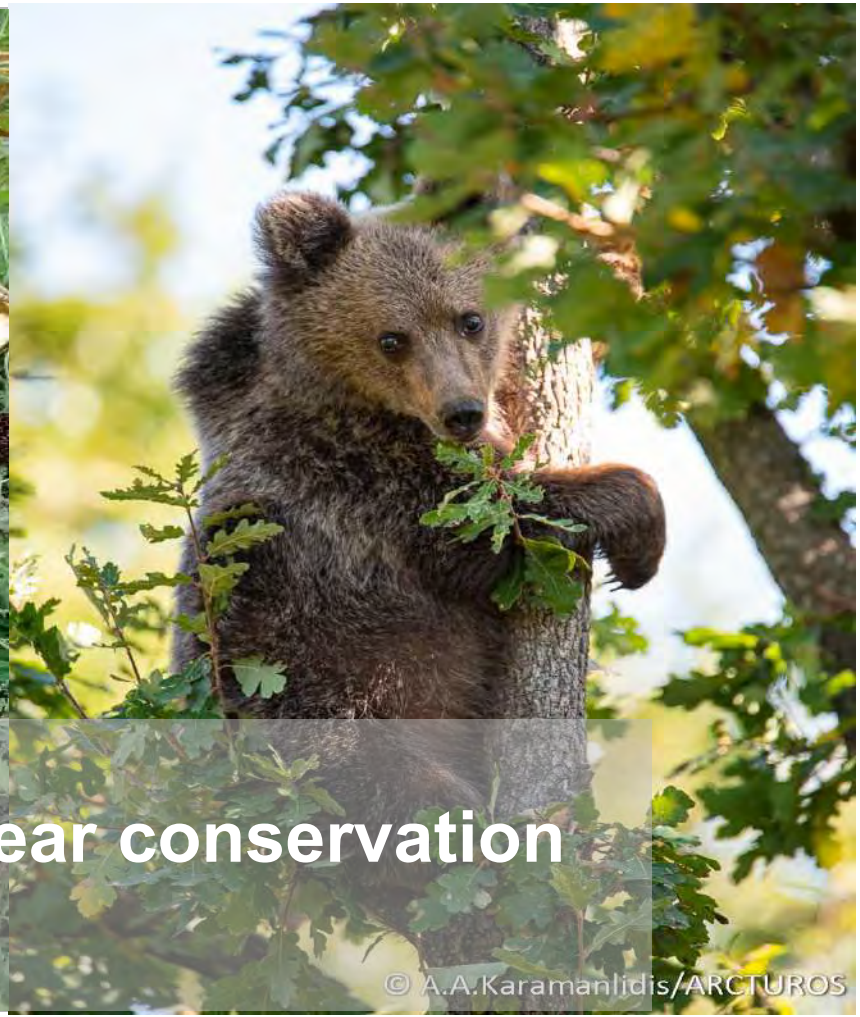
c) Involve L.C. **international experts** (i.e. LCIE, IUCN-BSG)

d) Coexistence is possible only if the **public safety** is guaranteed

e) **Bear-spray** is **needed**



https://grandicarnivori.provincia.tn.it/
claudio.groff@provincia.tn.it



Aleksandar Dutsov
Nikola Ganchev
d-r Vladimir Todorov
d-r Nikola Doykin
d-r Maria Kachamakova
Georgi Georgiev

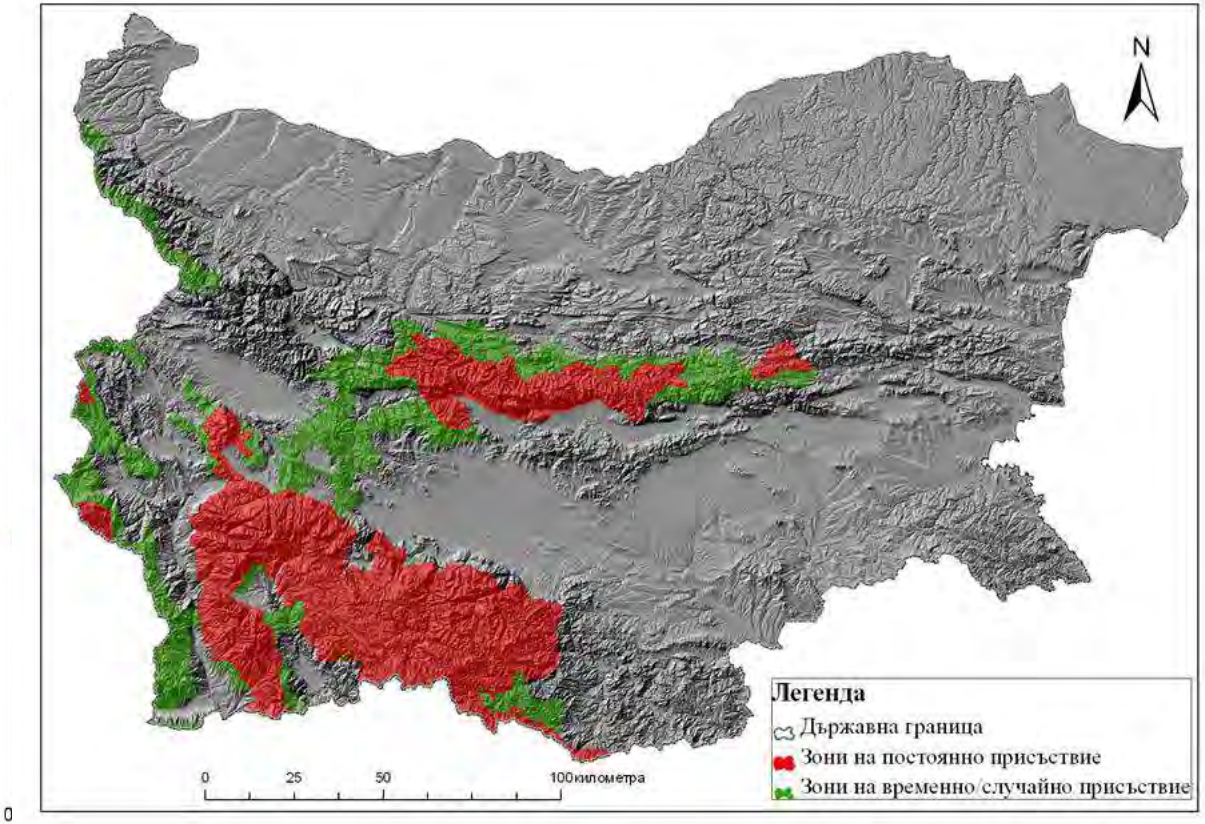
Challenges for bear conservation in Bulgaria

Bear

Species status

1. Protection level: Protected in 1992 with Ministry of Environment order
2. Biodiversity Protection Act – 2002 – strictly protected.
3. 2010 – Hunting and Game Protection Act
4. 2008 December – Brown bear management plan – until 2018. New one accepted December 2023.
5. Bear numbers – mystery.

Distribution

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26/04/2023 01:09:34
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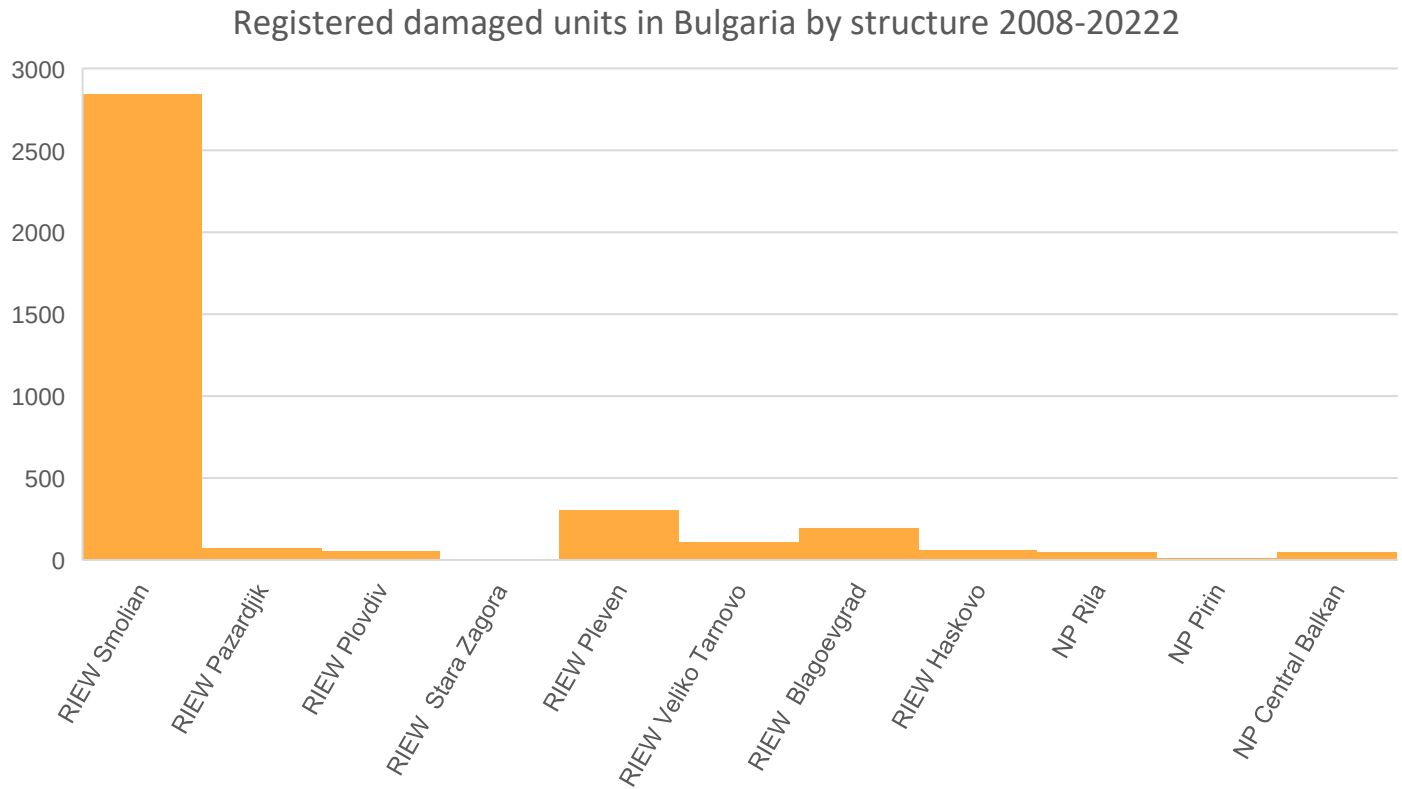
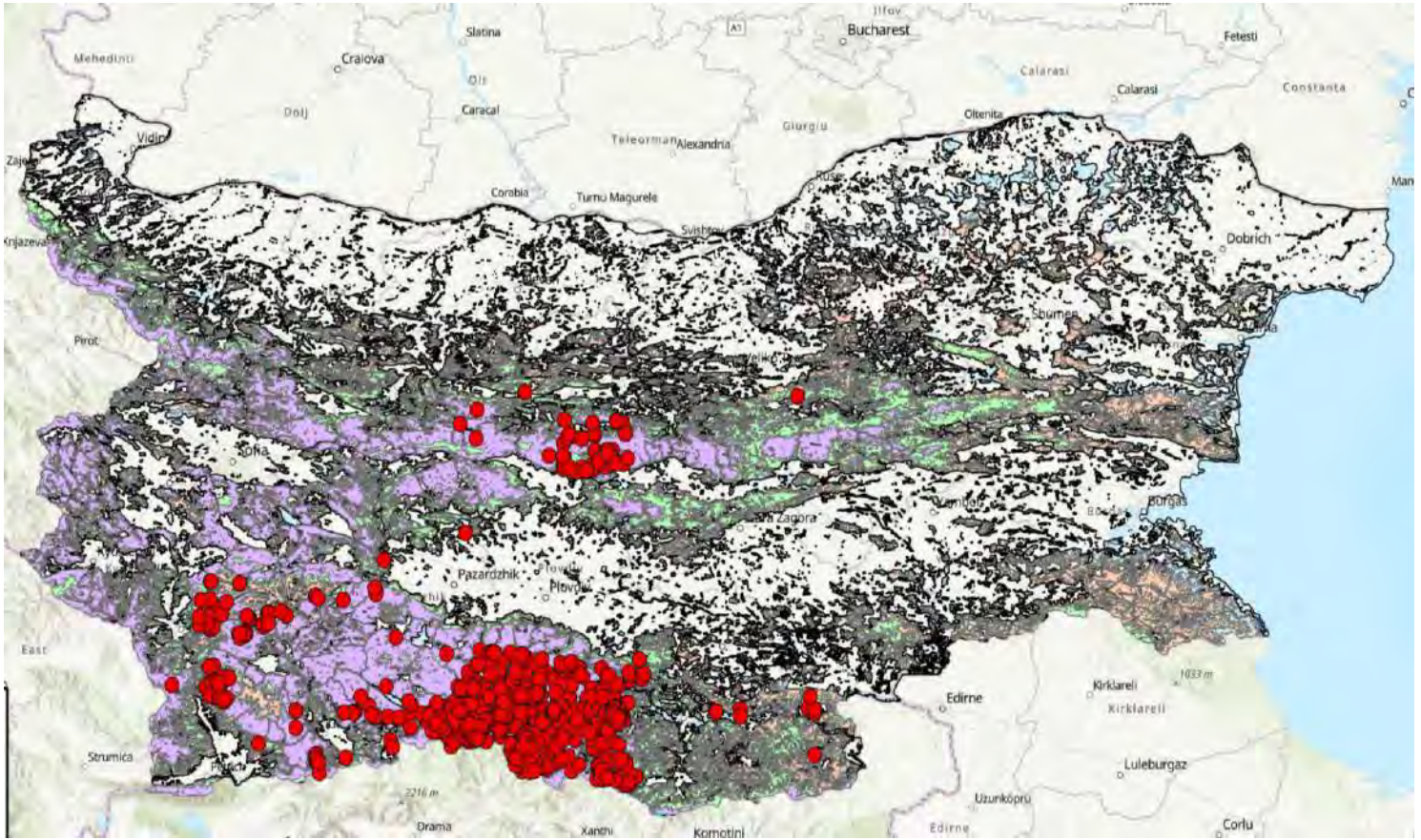
07 8°C 46°F

Concentration of Damages



Bear caused damages in Bulgaria 2008-2022



Compensation

Based on art. 79, para. 2 Hunting and Game protection Act

- Actual compensation of damages started in 2005-2006 due to personal engagement of Minister of Environment.
- Since this moment every year bear damages are registered and compensated – which is not the case for wolf.
- Damages caused by wolf are not recognised, not recorded and not compensated.
- In some regions – Smolian REI (Central and west Rhodopy Mountains), compensation system is well known and works way better than other regions.
- Functional Brown bear emergency team – only in Smolian REI – funded year by year (creates some difficulties and team members flow).
- Voluntary BET - Vladimir Todorov, Nikola Doykin and Aleksandar Dutsov.

Damages

Year	Compensation in BGN	Compensation in EURO
2011	28299	14438.27
2012	40243	20532.14
2013	38401.7	19592.70
2014	77587.58	39585.50
2015	39294.66	20048.30
2016	32324.8	16492.24
2017	81644.1	41655.15
2018	23265.34	11870.07
2019	214054.59	109211.53
2020	104697.59	53417.14
Total:	679812.72	346843.22

Prevention

1 . Electric Fences:

- LIFE Project – 2009-2012: 33+57 +90= 180
- Operational Program Project – RIEW Smolian 2013-2015 - 150
- WWF- BG with Belgium Co-funding

2. Livestock Guarding Dogs
LIFE Project – 2009-2012

3. Emergency team:

- Only one functioning from 2012 - 2021, and now the funding is restored.
- NGO Emergency team – 2009 – 2014

Prevention

Garbage bins

Relocation

1. Permitted in 2020

Totally 3 relocations and all of them not successful due to delay in decisions.

Poaching

- Data from 32 collared bears including saved and released back in nature cubs – totally 6
- 19 of these bears are under 4 year old and from this 19:
  - 8 were illegally shot.
  - 2 collars dropped and were retrieved
  - For 9 bears we have conscious doubt that have been poached and collars destroyed.

Questions

- Increased damages are the function of:
  - Increased bear numbers?
  - Climate change?
  - Better awareness of the local people?

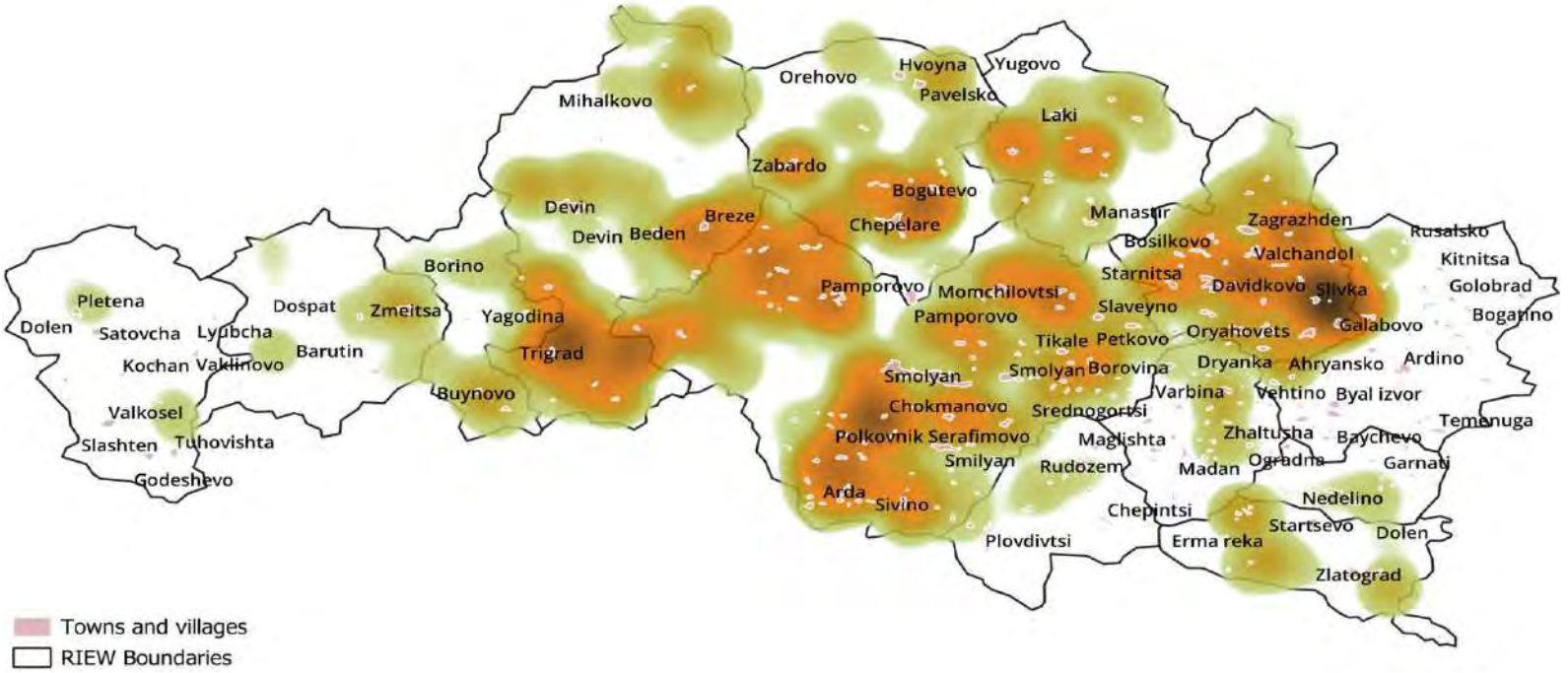
- Question.
  - Should we control the population?

  - Political issues – lack of stable government, lack of inheriting good practices from previous government.

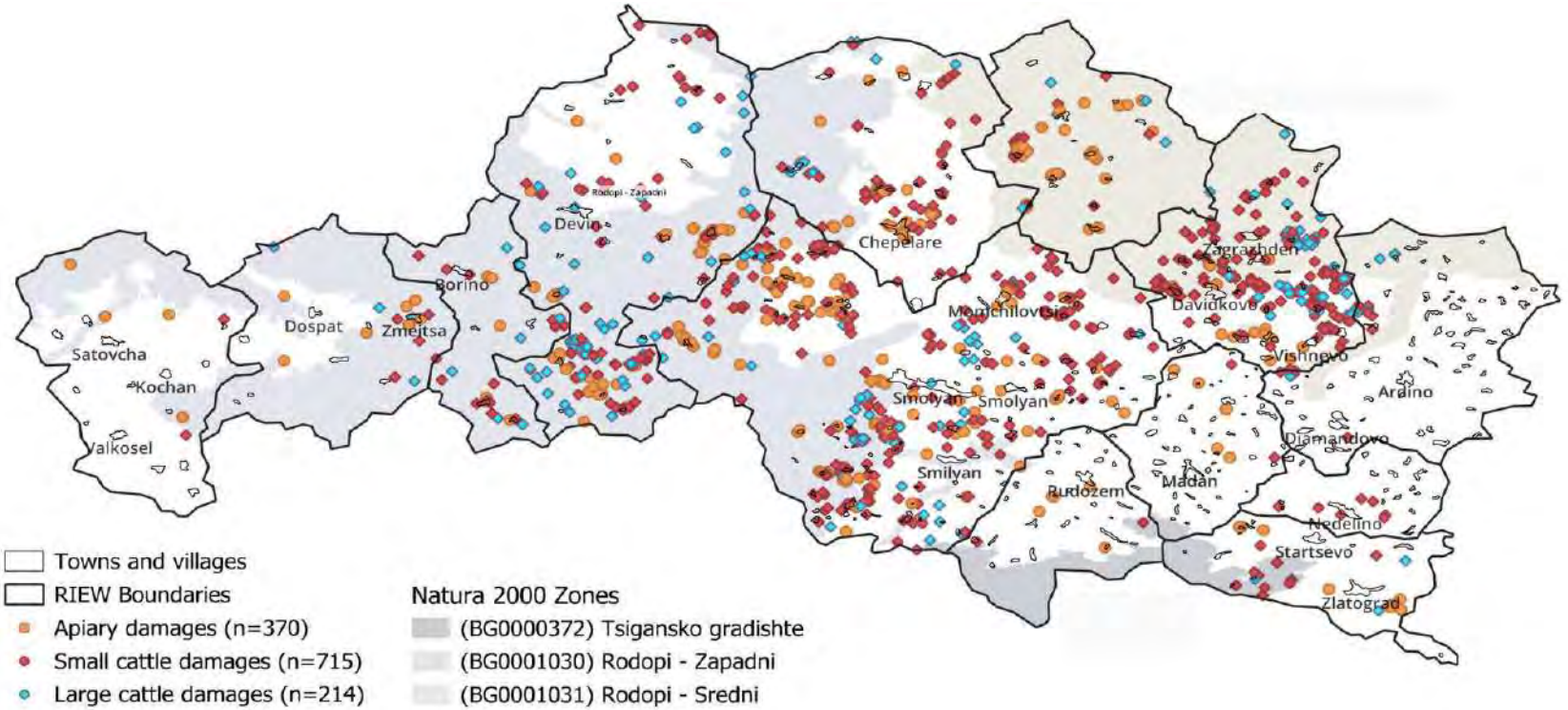
Rural exodus and bear damages.

- We predicted that rural exodus with the associated land abandonment would play a large role.
- As suspected analysis identified the percentage of human population decline as one of the primary correlates of conflict leading to a decrease in anthropogenic deterrents for bears (and other wildlife), while attractants like fruit and nut orchards are still present. Land use types characterised by the low-intensity of anthropogenic activity were found to account for the highest number of bear damages by MaxEnt and GLM models.
- the incidences on both higher and lower elevation show an increase within the study period (2004-2022), potentially due to unsupervised grazing on higher elevation and diminished anthropogenic deterrents around settlements on lower elevation.

Concentration of Damages



Prevention


Rodopi - Zapadni
Devin
Borino
Chepelare
Zagrazhden
Dospat
Zmejtsa
Satovcha
Kochan
Yalkosel
Smolyan
Smilyan
Rudozem
Madan
Davidkovo
Vishnevo
Ardino
Diamandovo
Nedelino
Startsevo
Zlatograd
Towns and villages
RIEW Boundaries
Apiary damages (n=370)
Small cattle damages (n=715)
Large cattle damages (n=214)
Natura 2000 Zones
(BG0000372) Tsigansko gradishte
(BG0001030) Rodopi - Zapadni
(BG0001031) Rodopi - Sredni

Conclusions

1. The rising trend of bear damage in recent years has serious implications for the local perceptions toward the species and the trust in the institutional capacity. Our results, spanning data from 2004-2022 highlight the alarming pattern of conflict intensification in increasingly depopulating and marginalised areas which poses risk to human livelihoods, sense of security and support for conservation actions due to expanding urbanisation in Bulgaria, Europe and worldwide.
2. In terms of damage prevention, the use of electric fences should become the norm rather than the exception in the region, as they have been proved as the most efficient tool for protecting human's property (especially apiaries) against bears

Challenges and future needs.

- At least 3 functional intervention teams
- Working institutions and securing the good practices in the government.
- Improving the monitoring and working for the consensus of acceptance of data.

And we have to fight human stupidity

Working to sustain the natural world for the benefit of people and wildlife.

together possible

panda.org

WWF, 28 rue Mauverney, 1196 Gland, Switzerland. Tel. +41 22 364 9111
CH-550.0.128.920-7

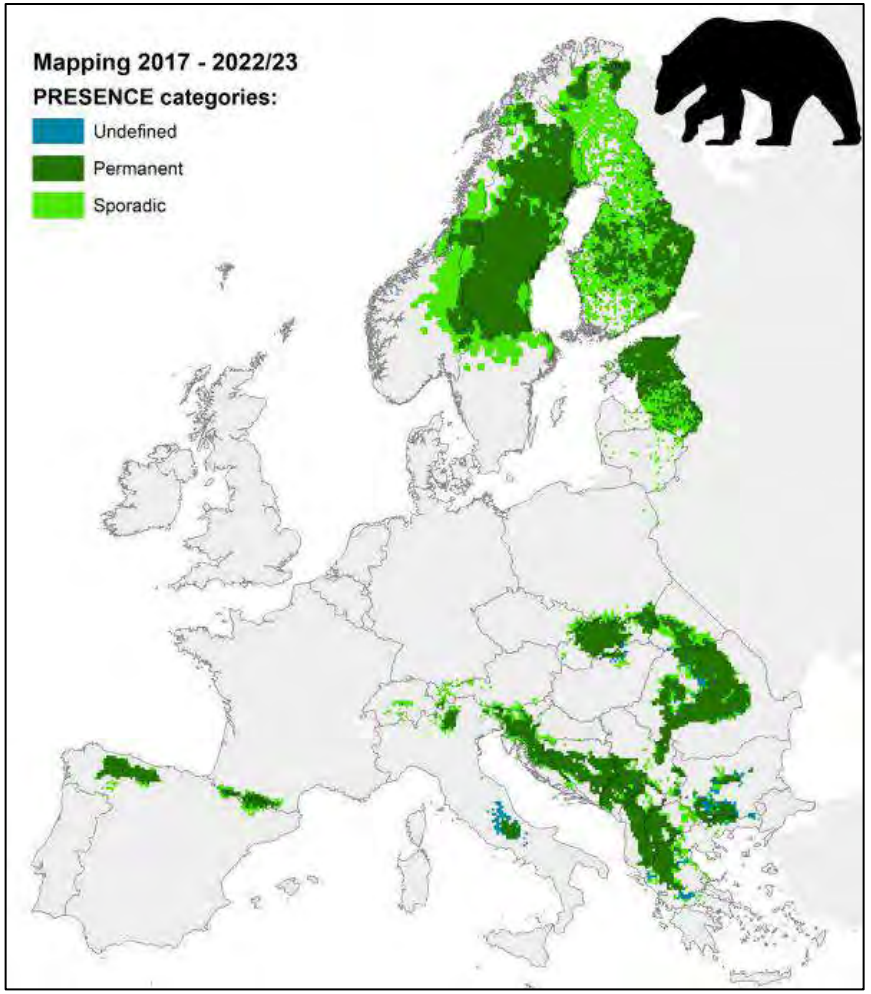
BEARS IN ALBANIA

Dr. Aleksandër Trajçe

LIFE ARCPROM International Conference Feb. 25-27 2025

Bears… where?

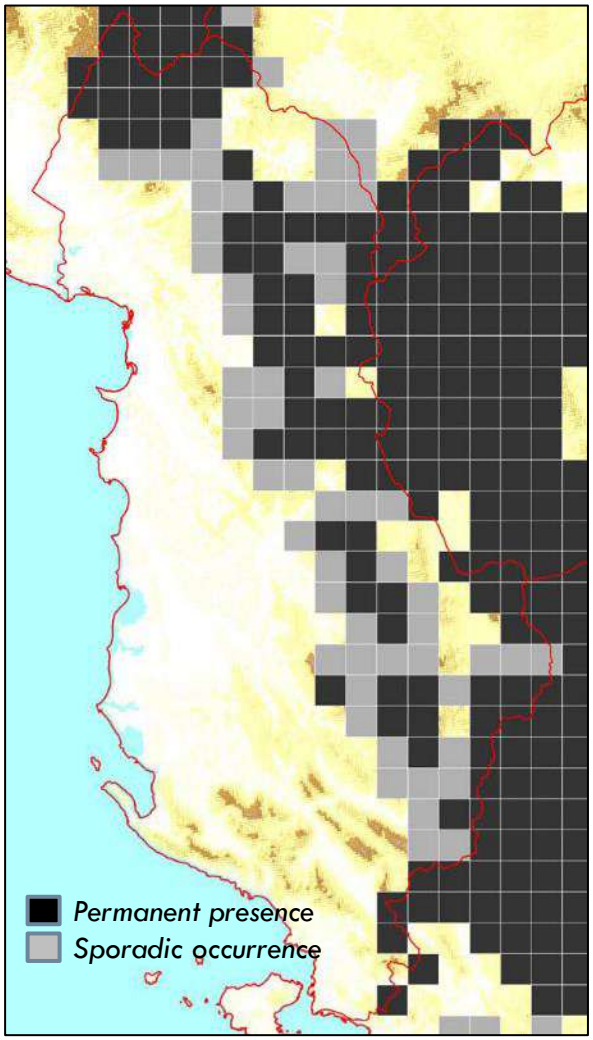
Promberger ed. 1997



Kaczensky, P., Ranc, N., Hatlauf, J., Payne, J.C. *et al*. 2024

Bears in Albania

Dinaric-Pindos Population



Kaczensky *et. al.* 2013

Bears in Albania

- Population ca. 180 – 200 individuals
- High discrepancy with data from official institutions; MoE 2010 estimate 686 bears
- Classified as Vulnerable (VU) at the National Red List of Flora and Fauna (2013) outdated
- Strictly protected species (Protected since 1956)
- Priority species for conservation in the National Biodiversity Strategy and Action Plan (1999 & 2014)

Data on bears

Camera-trapping

Signs recording

Genetics

Radio Telemetry

Camera-trapping

Valbona Valley, Albanian Alps

Bizë-Martanesh

Questionnaire surveys

2007-2009

2023-2024

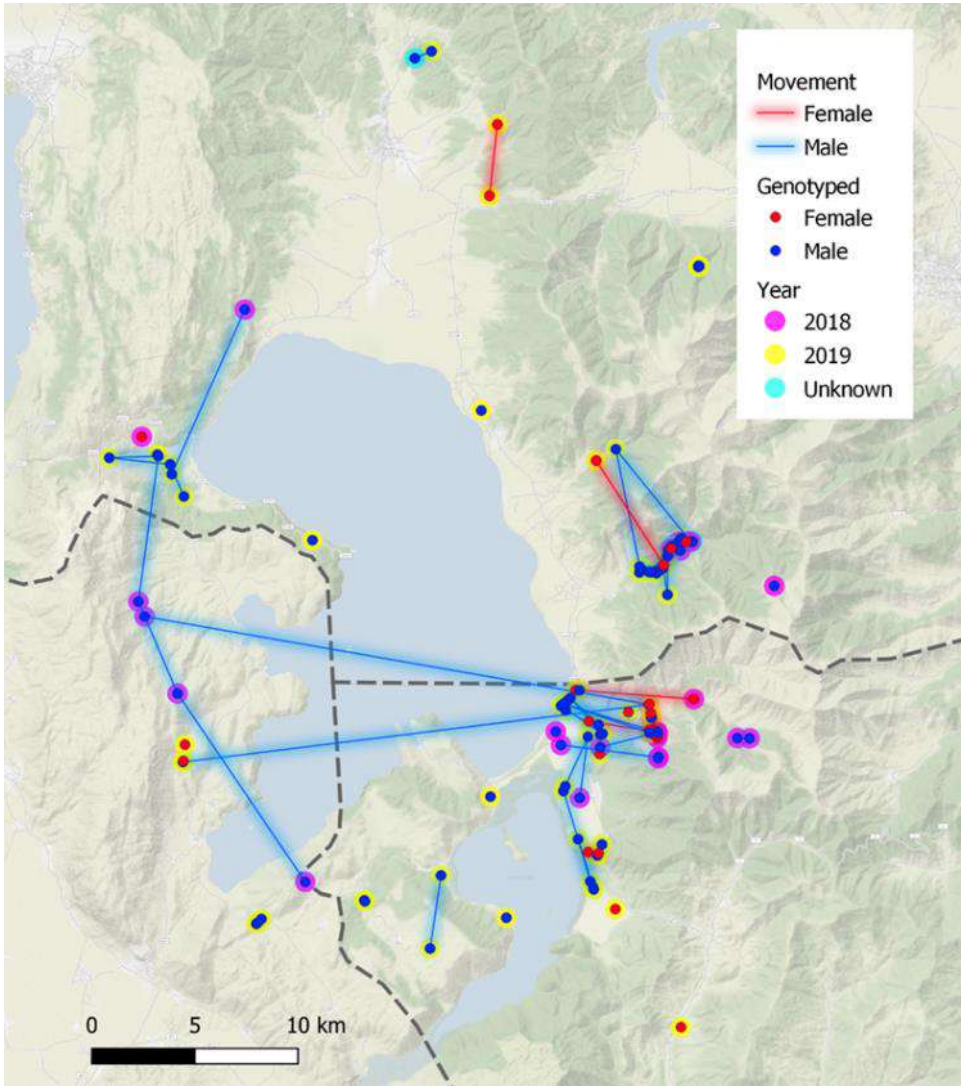
Bears in captivity issue

Identified bears 2006-14

- 42 captive
- 4 “dancing”
- Roughly 60 estimated in total
- All originating from the wild
- A “population sink”?
- Last case from 2023

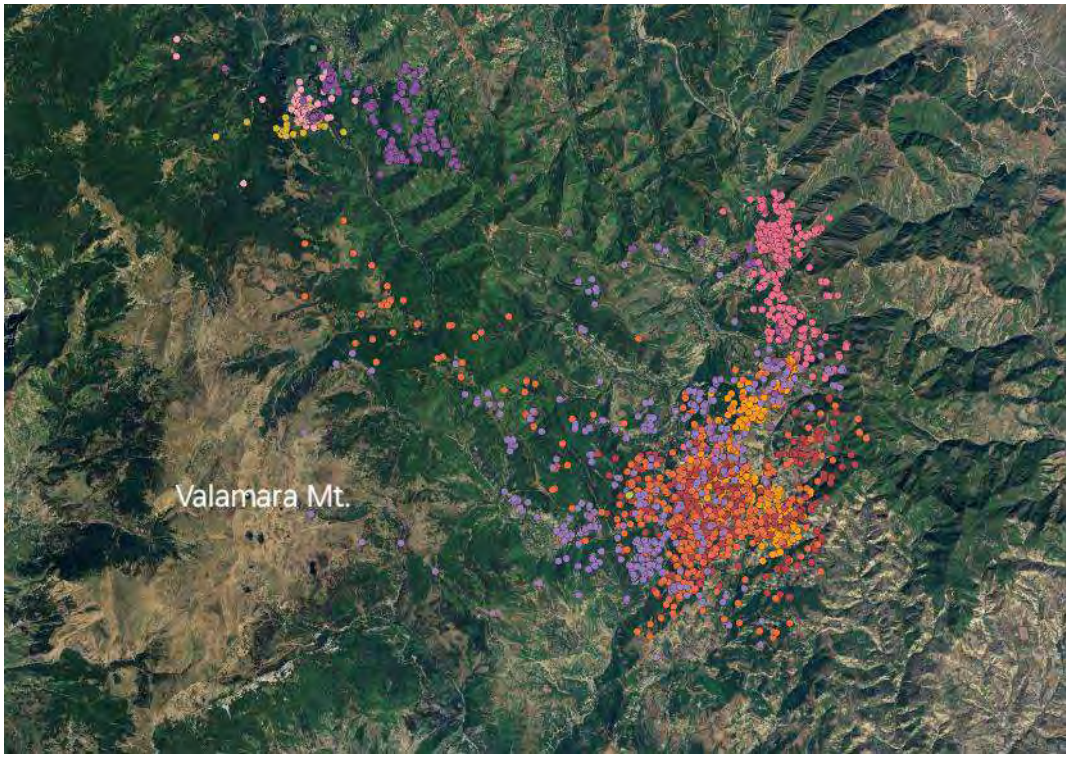
Genetic Studies

227 samples collected
51 individuals were identified
19 females
32 males



Radio telemetry in Albania

Bear Maya illegally trapped in a snare, Mokra Region, Dec. 2023



- First radio-tagged bear (and mammal) in the country
- Data under processing
- TBBC, transboundary collaboration

Threats

Deforestation

Infrastructure development

Poaching

The people

- Traditional communities
- Subsistence farming
- Shepherding
- Forestry
- Beekeeping
- Plant collection

The conflicts

- Bears mostly reported for damages on agriculture (crops & fruit trees)
- Beehive attack rate seems to be very low (linked to beekeeping method)
- Attacks on livestock are reportedly lower when compared to wolves
- No case of a human killed by bears has ever been reported; however attacks with injuries do occur
- Fear for personal safety

The gentleman ‘home owner’ vs the vagabond ‘homeless’

Sheep vs corn: a matter of place

The bear is not to be blamed…
Being a good shepherd = being a good/successful man

A system that works
Protecting the flock = protecting honour & integrity

Thank you!

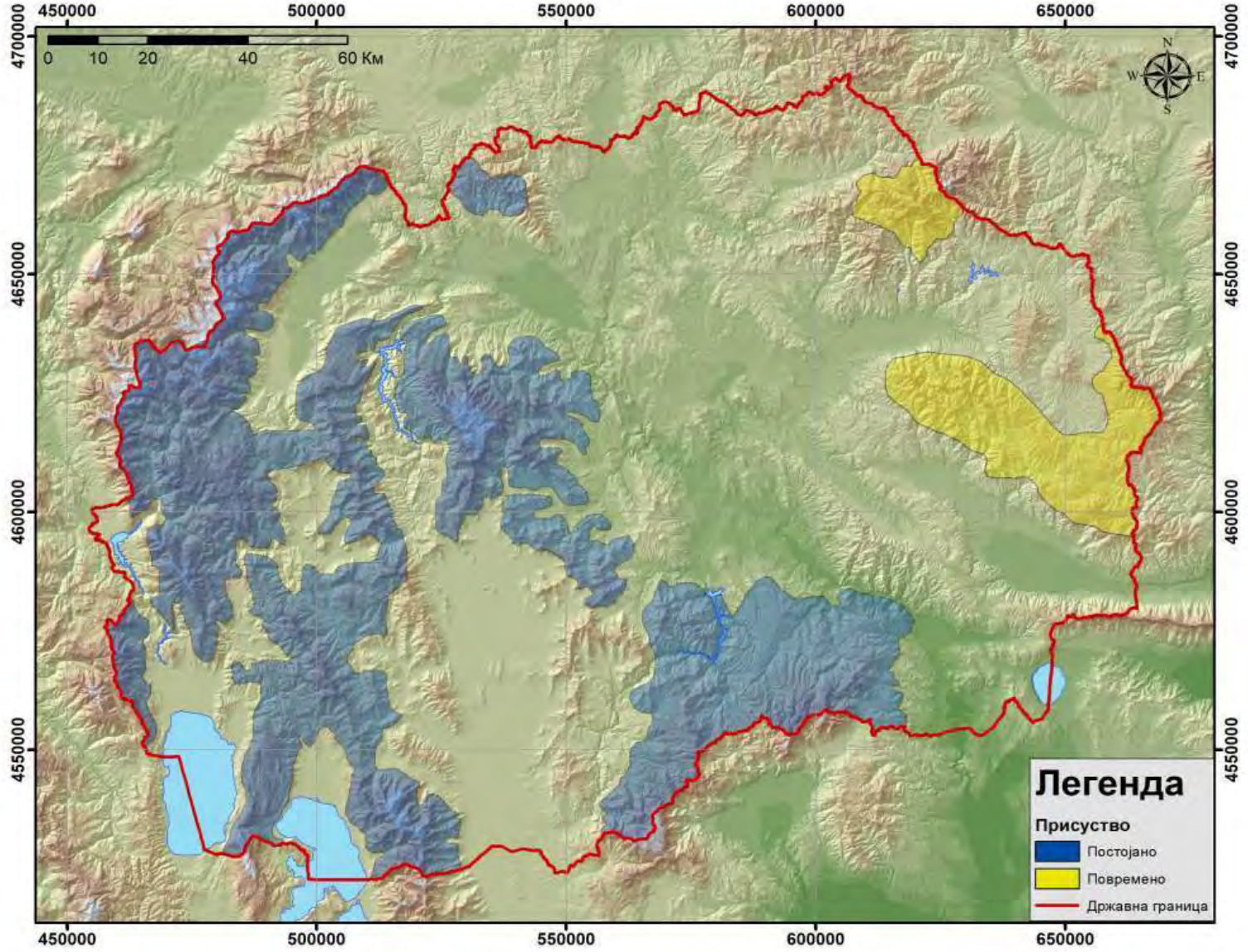
Current Status of the Brown Bear in North Macedonia

Aleksandar Pavlov
Macedonian Ecological Society

LIFE ARCPROM International Conference
25–27 February, Larissa, Greece

MACEDONIAN ECOLOGICAL SOCIETY

Distribution



National legislation

Law on Game Species and Hunting

- Game species under protection (since 1996)
- Permanent ban on hunting

Law on Nature Protection

- Strictly protected species

National IUCN Red List Assessment

Brown bear

Ursus arctos

Back to species overview

<< Previous -Grey wolf

Balkan lynx-Next >>

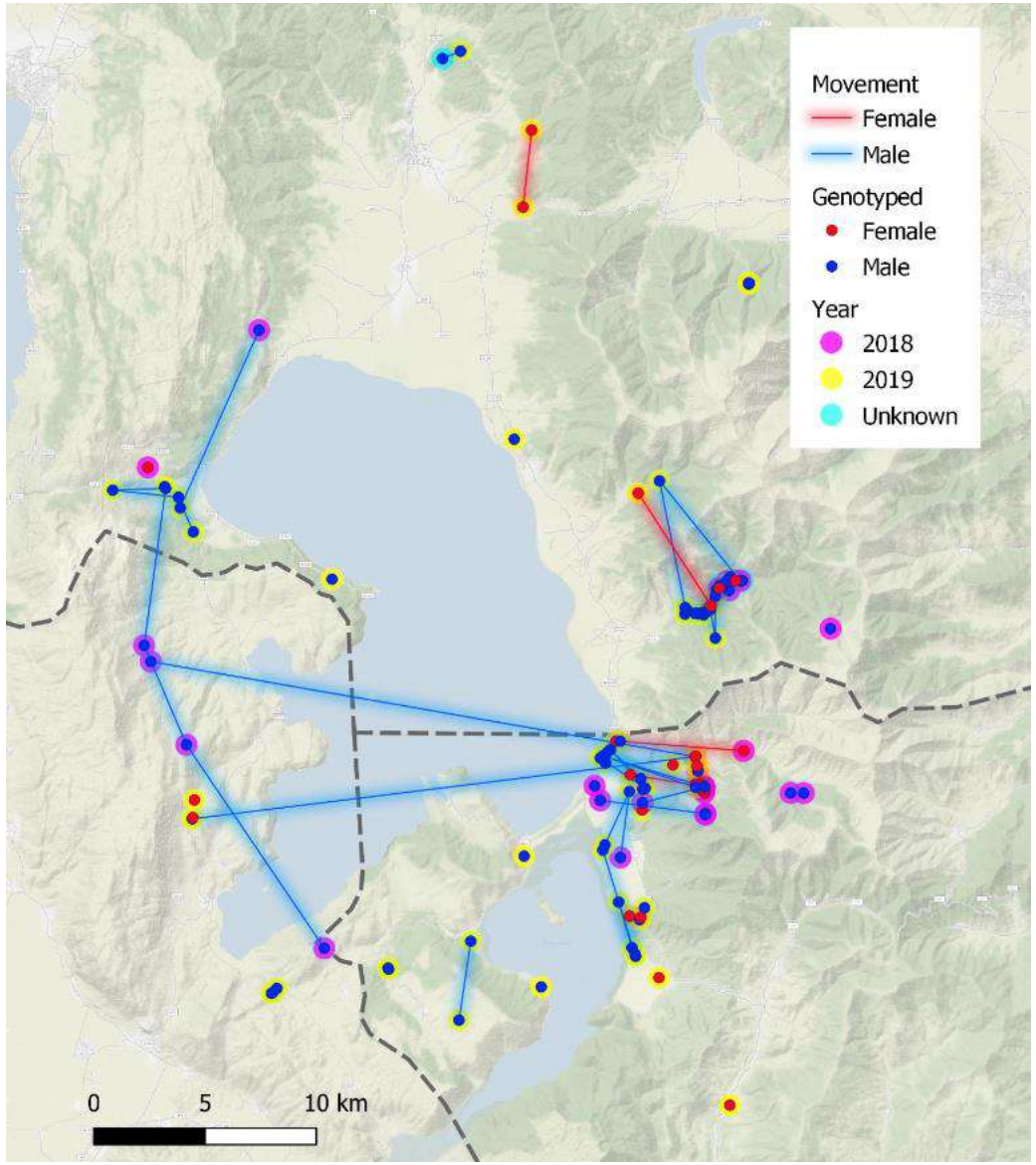
Macedonian	Albanian
Кафеава мечка	Ariu i kaftë

Not evaluated	Data deficient	Least concern	Near threatened	**VULNERABLE**	Endangered	Critically endangered	Extinct in the wild	Extinct
NE	DD	LC	NT	**VU**	EN	CR	EW	EX

Noninvasive genetic sampling

227 scats collected

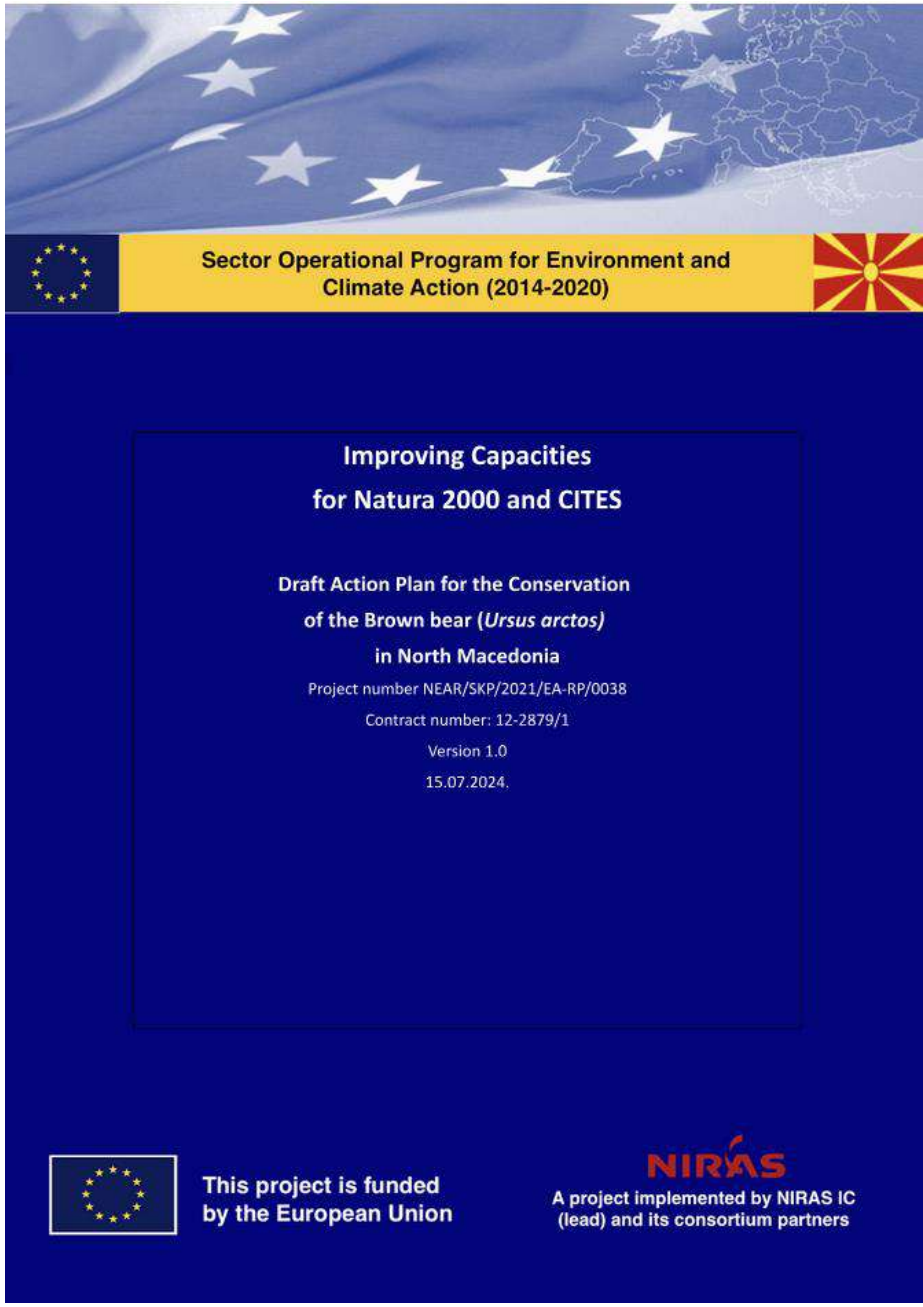
51 individual identified



National Brown Bear Action Plan

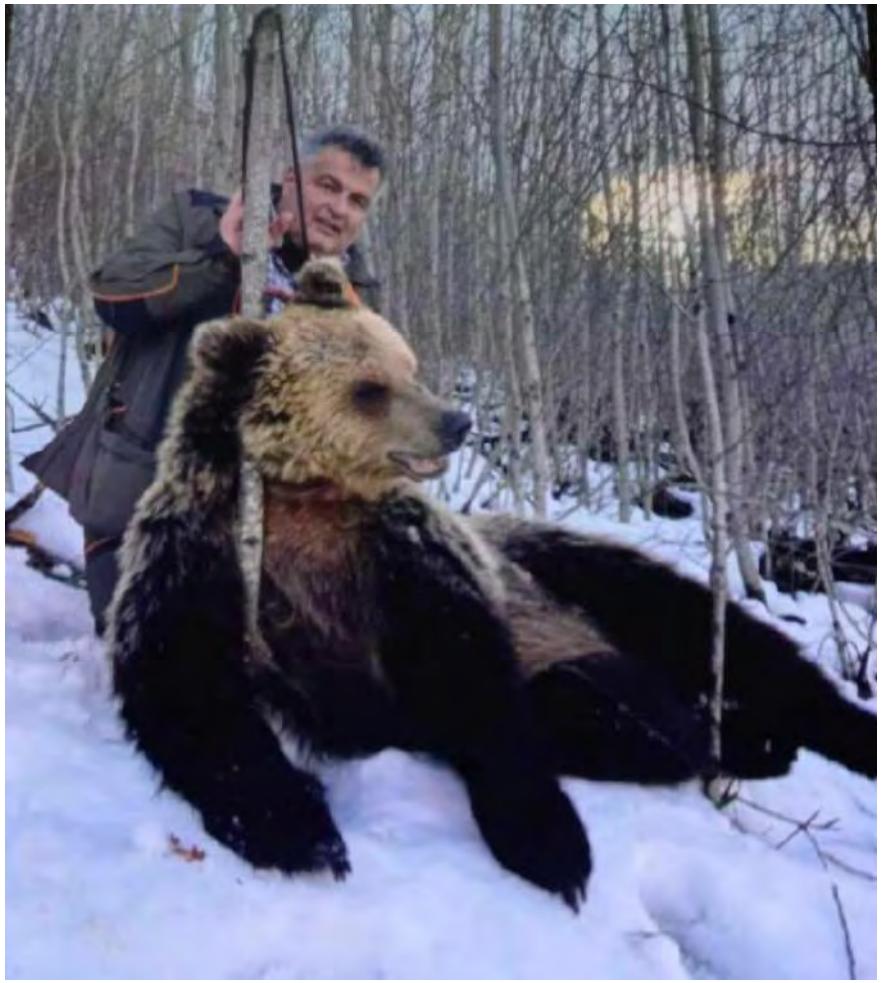
First AP on brown bears conservation and management in MK

Finalised but not officialised



Threats

- Habitat fragmentation
- Road collisions
- Poaching



Human-bear conflicts

Waste management


30.8.2023 at 10:47:48
1255 Mavrovo i Rostusha
North Macedonia
Mavrovo National Park

LC Intervention Team

LC Intervention Team

Collaborations and synergies

Large Carnivore Initiative for Europe
IUCN/SSC SPECIALIST GROUP

SSC Species Survival Commission IUCN

2023 LCIE Meeting

Ohrid, 06 October 2023

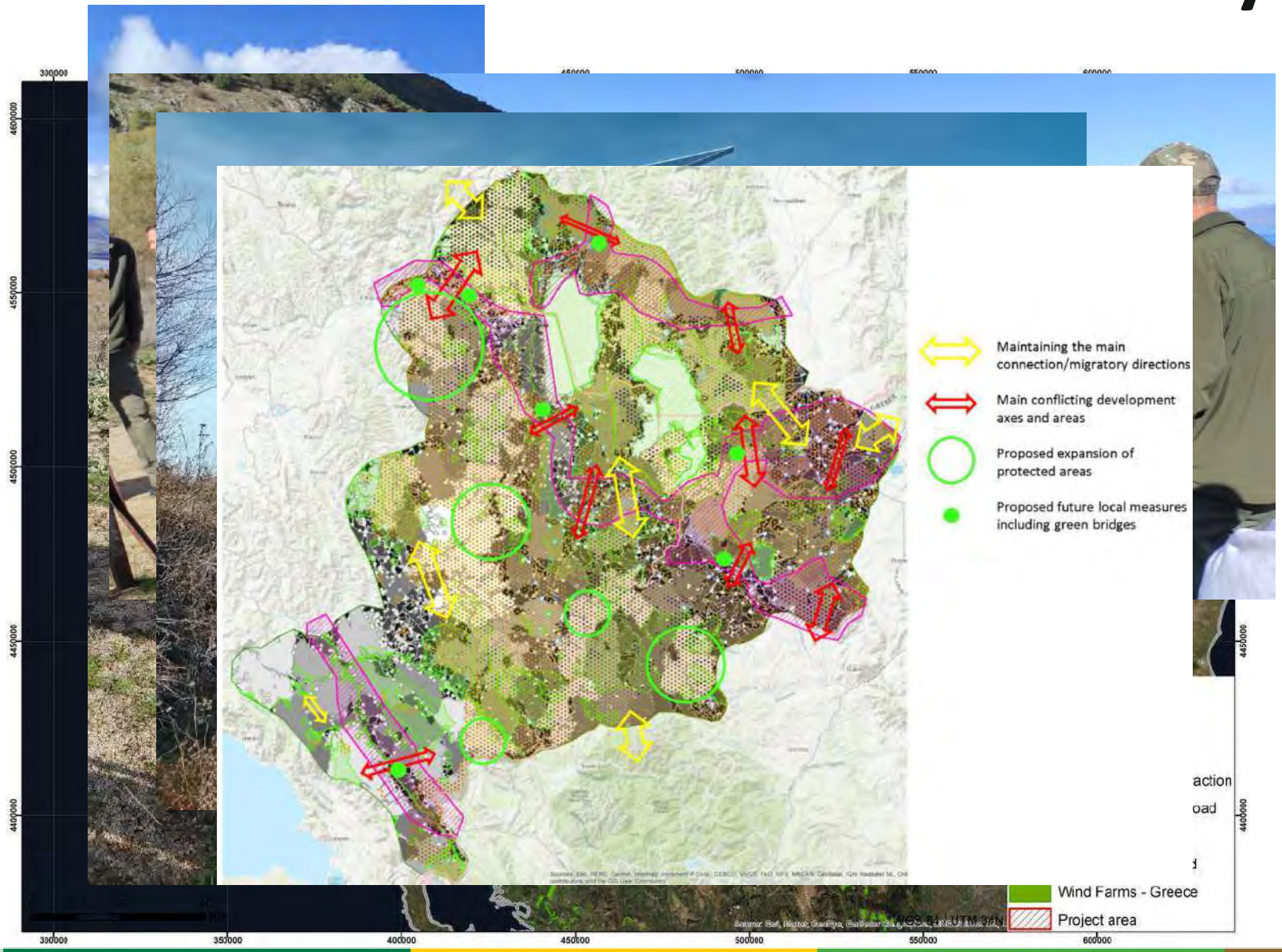
to

The Government of the Republic of North Macedonia

Statement of the Large Carnivore Initiative for Europe (LCIE)

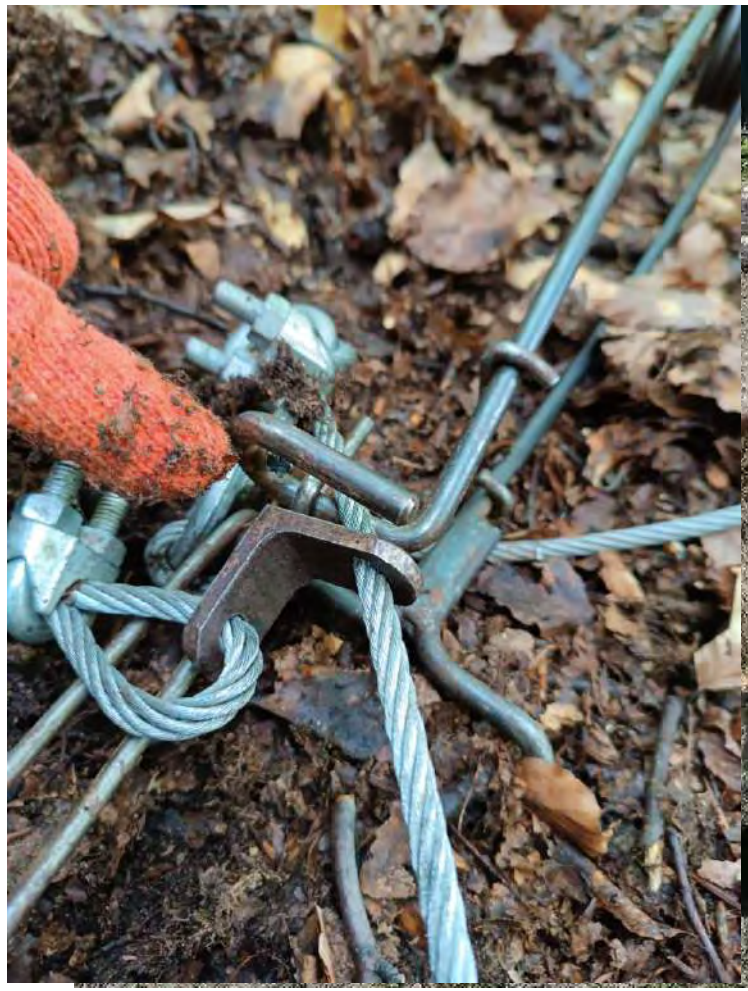
The management of problem bears in the Mavrovo National Park in Northern Macedonia

Collaborations and synergies



TBBC PROJECT

Collaborations and synergies



BALKAN LYNX RECOVERY PROGRAMME

Collaborations and synergies

TBBC PROJECT

BALKAN LYNX RECOVERY PROGRAMME

Where are we now?

Low political prioritisation

Poaching and insufficient law enforcement

Lack of reliable data

Increasing habitat fragmentation

Human-bear-conflicts

LIFE ARCPROM

LIFE18 NAT/GR/000768

Improving human-bear coexistence in 4 National Parks of South Europe

Final Conference

APENNINE BROWN BEAR STATUS AND THE ROLE OF THE MAIELLA NATIONAL PARK IN ITS CONSERVATION

Presented by: Antonio Antonucci, Maiella National Park

THE STATUS OF THE APENNINE BROWN BEAR

IUCN RED LIST

LEAST CONCERN	NEAR THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
LC	NT	VU	EN	CR	EW	EX

Apendix II CITES

Annex II Bern Convention

Annex II ad IV Habitats Directive

Italian Law 157/92

Annexes B and D, D.P.R. 357/97

~ 5000 km²

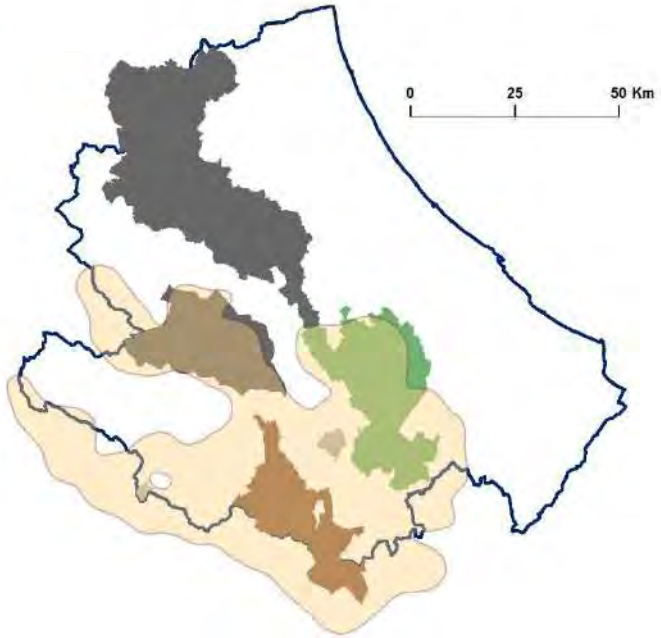
~ 1500 km²

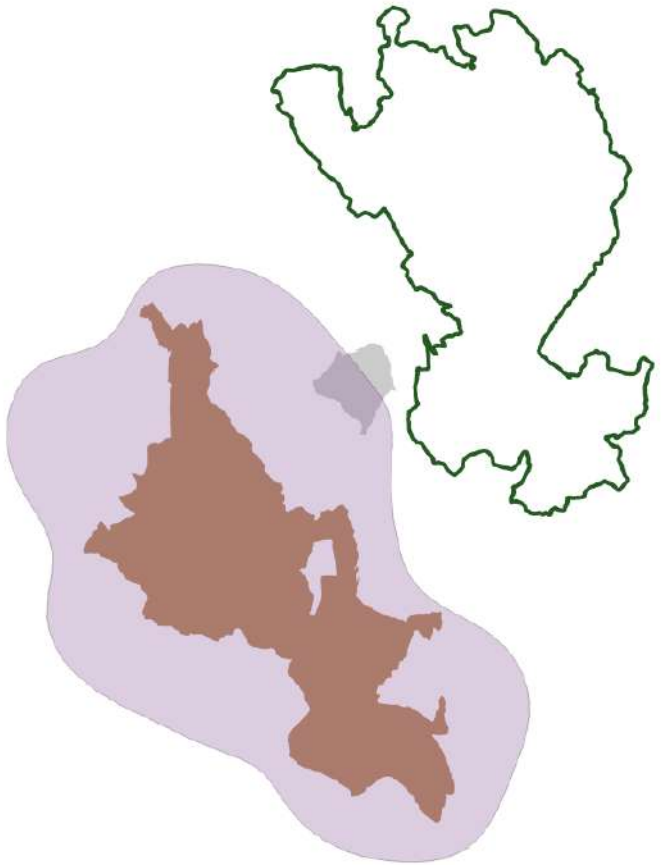
Last population size estimation (2014)*

50 (45-69) bears

28 (25–37) fremales

** New estimate in 2025*





KEY POINTS OF THE SITUATION

GOOD NEWS

FF:MM > 1

Females still reproduce

No visible signs of inbreeding depression

Signs of population growth (and consequent range expansion) in the last 15 years
(Data of the PAs and Lazio, Abruzzo & Molise monitoring networks)

Exaordinary outcomes from the first genome analysis
(Benazzo et al. 2017)

Adapted to the Apennine context = easier coexistence

BAD NEWS

High human-caused mortality
(Ciucci & Boitani, 2008; Gervasi & Ciucci 2018)

Low reproduction rate
(Gervasi & Ciucci 2018)

Low genetic variability and high levels of inbreeding
(Benazzo et al. 2017)

Probability of extinction in 100 years: 11%-21%
(Gervasi & Ciucci 2018)

Weak political coordination to implement the best conservation strategy

MAIN CONSERVATION STRATEGY

Counter all the human-based threats

Reduce mortality

Favor population growth and range expansion

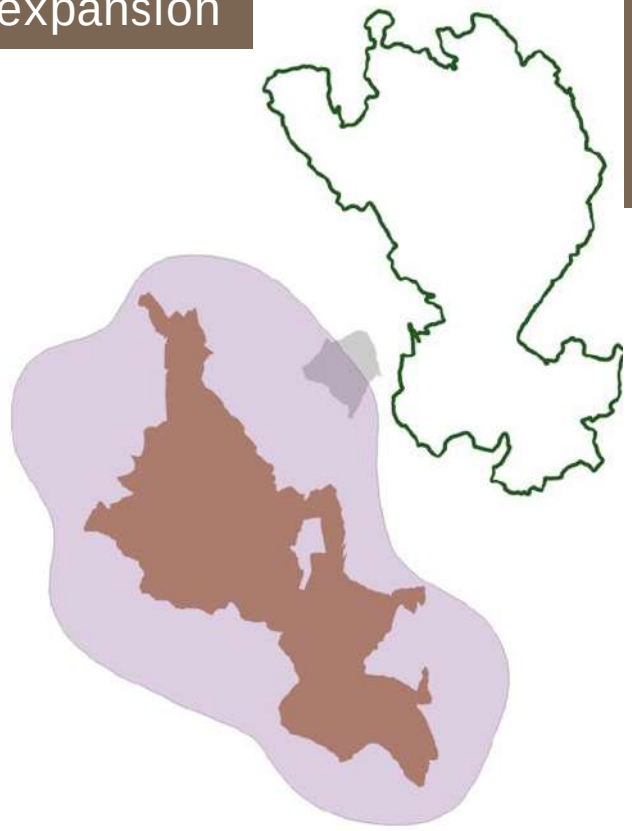
MNP (AND OTHER EXPANSION AREAS) ROLE:

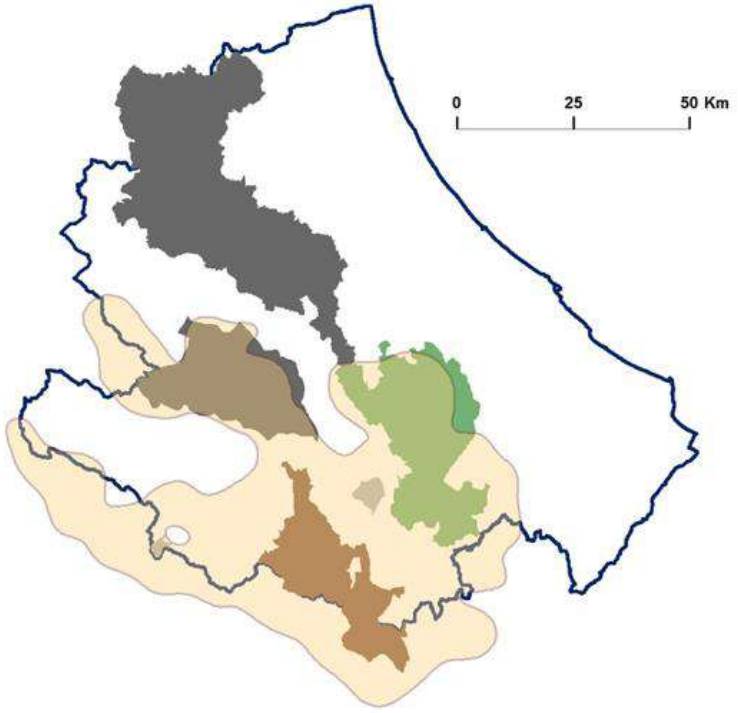
Favor the survival and reproduction of the bears «recolonizing» **the area**

Favor bear acceptance and human-bear coexistence

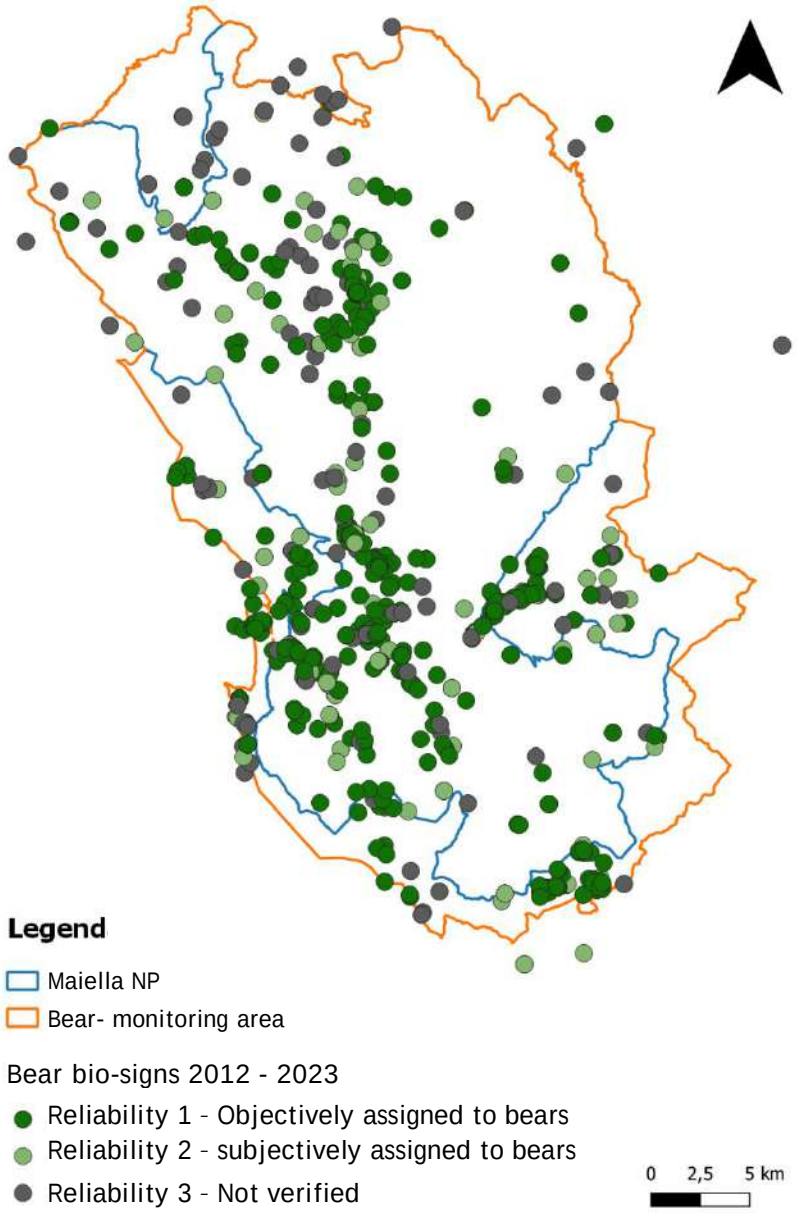
CENTRAL RANGE ROLE:

Preserve the historic population and make it grow





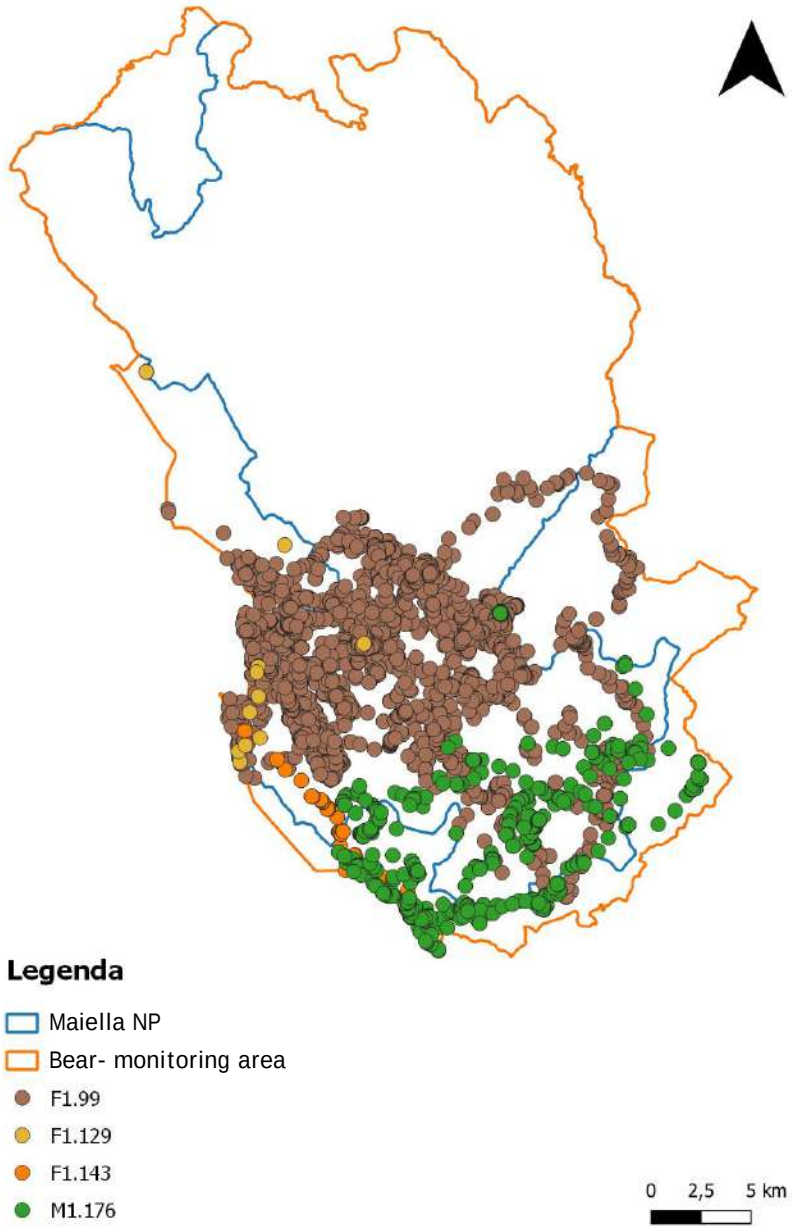
APENNINE BROWN BEAR PRESENCE IN MNP



1996 - 2011
106 Bear bio-signs
(63 Reliability 1 in 2001-2011)

2012-2023
1.016 Bear bio-signs
(899 Reliability 1 or 2)

APENNINE BROWN BEAR PRESENCE IN MNP



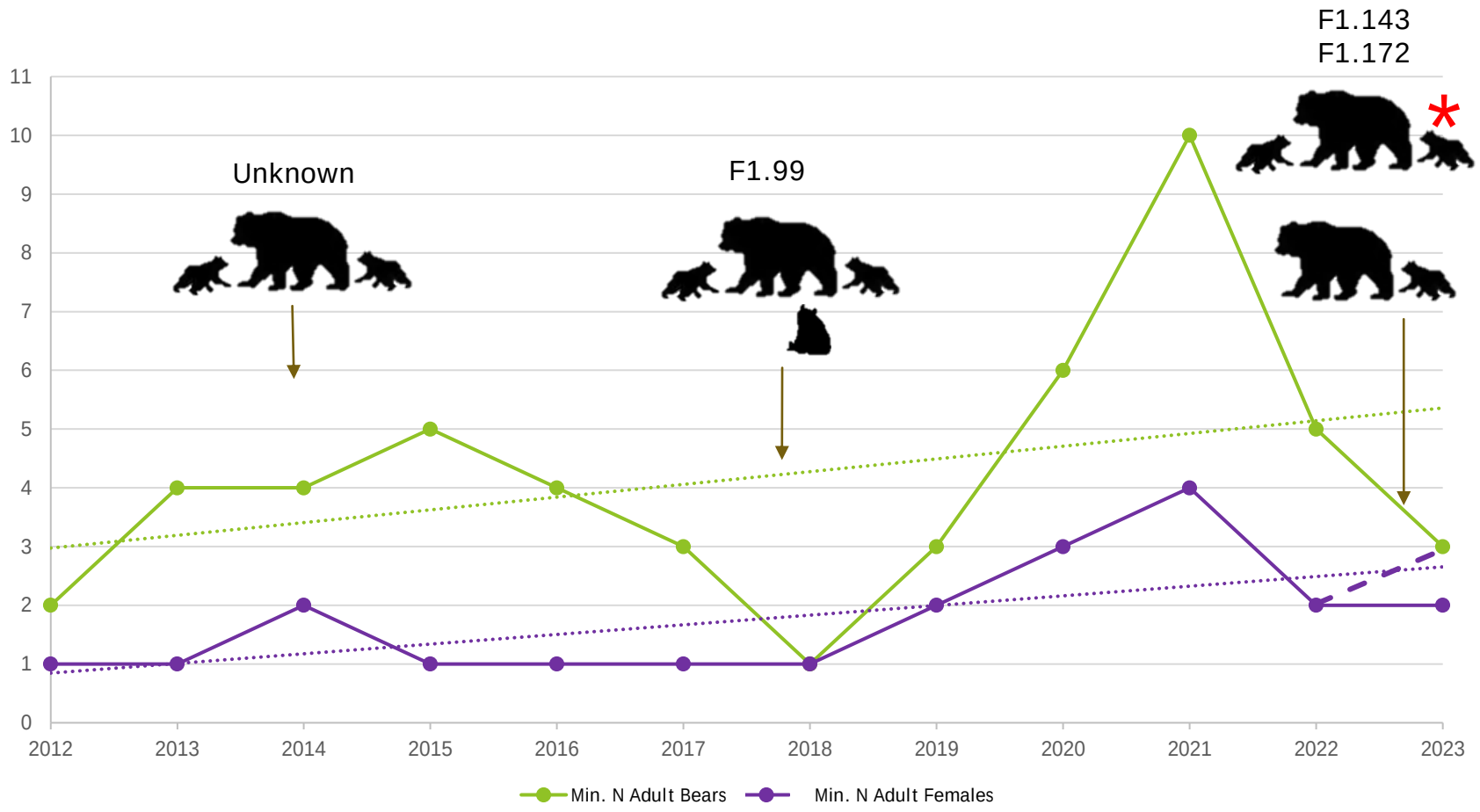
1996 - 2011
106 Bear bio-signs
(63 Reliability 1 in 2001-2011)

2012-2023
1.016 Bear bio-signs
(899 Reliability 1 or 2)

~ 6.800 locations of 4 bears
(MNP radio-collars ~ 5.500 and PNALM radio-collars ~1.300)

(F1.99, F1.129, F1.143 & M1.176)

APENNINE BROWN BEAR PRESENCE IN MNP



19 ADULT BEARS FROM 2012 TO 2023 (5F & 14M)

(6M REPORTED AS DEAD, F1.99 WITH HIGH PROBABILITY DEAD)

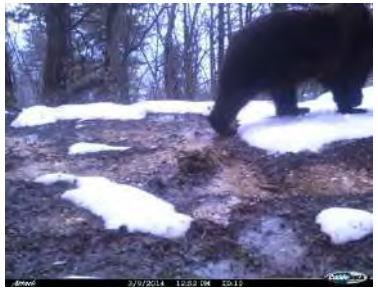
ABB MONITORING AND CONSERVATION EFFORTS IN MNP

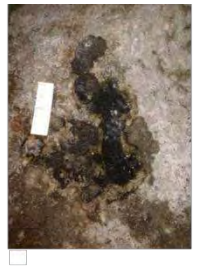
MONITORING

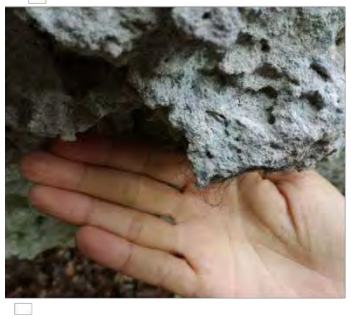
1998-2004

BIO-SIGNS RESEARCH ALONG SPECIFIC TRAILS

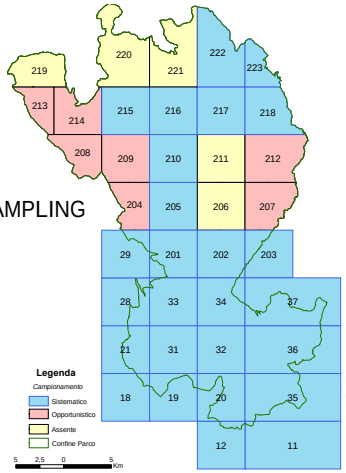
FALL/WINTER MONITORING ON THE SNOW







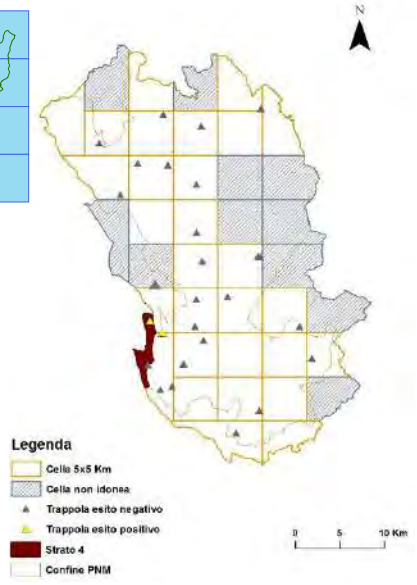
FROM 2005



NON-INVASIVE GENETIC SAMPLING

CAMERA-VIDEOTRAPPING

FROM 2012



TELEMETRY

LIVE - CAPTURES

YEARLY MONITORING PROTOCOL

ABB MONITORING AND CONSERVATION EFFORTS IN MNP

DAMAGE AND PROBLEMATIC/CONFIDENT BEARS MANAGEMENT


Progetto Life ARCTOS
Azione A5

PROTOCOLLO OPERATIVO

PER LA PREVENZIONE E LA GESTIONE DEL FENOMENO DEGLI ORSI CONFIDENTI E/O PROBLEMATICI


GIUNTA REGIONALE

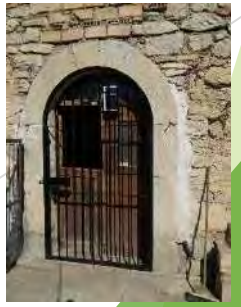


ABB MONITORING AND CONSERVATION EFFORTS IN MNP

EMERGENCIES MANAGEMENT

ABB MONITORING AND CONSERVATION EFFORTS IN MNP

STAKEHOLDER INVOLVEMENT AND AWARENESS RAISING

ABB MONITORING AND CONSERVATION EFFORTS IN MNP

RMAM

RETE DI MONITORAGGIO
ORSO BRUNO MARSICANO
ABRUZZO E MOLISE

FINANCIAL TOOLS FOR THE ABB CONSERVATION IN MNP

	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MNP funds	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
RDP																■										
Ministry funds																	■	■	■	■	■					
LIFE								■	■	■	■	■									■	■	■	■	■	■

LIFE COEX

LIFE SAFE CROSSING
PREVENTING ANIMAL-VEHICLE COLLISIONS

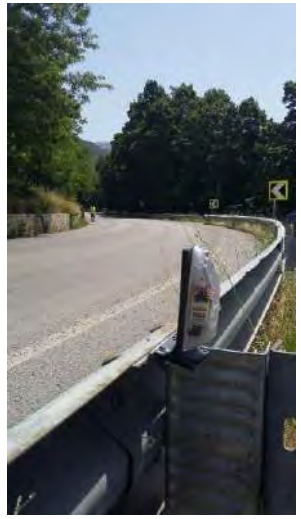
LIFE ARCPROM

NATURA 2000

LIFE SAFE-CROSSING 2018-2023

LIFE SAFE CROSSING
PREVENTING ANIMAL-VEHICLE COLLISIONS

5 AVC PS INSTALLED



20 Km VIRTUAL FENCE

3KM OF NR SS17 WITH «SAFE CROSSINGS»

60 PANELS INSTALLED

RAISING AWARENESS ACTIVITIES

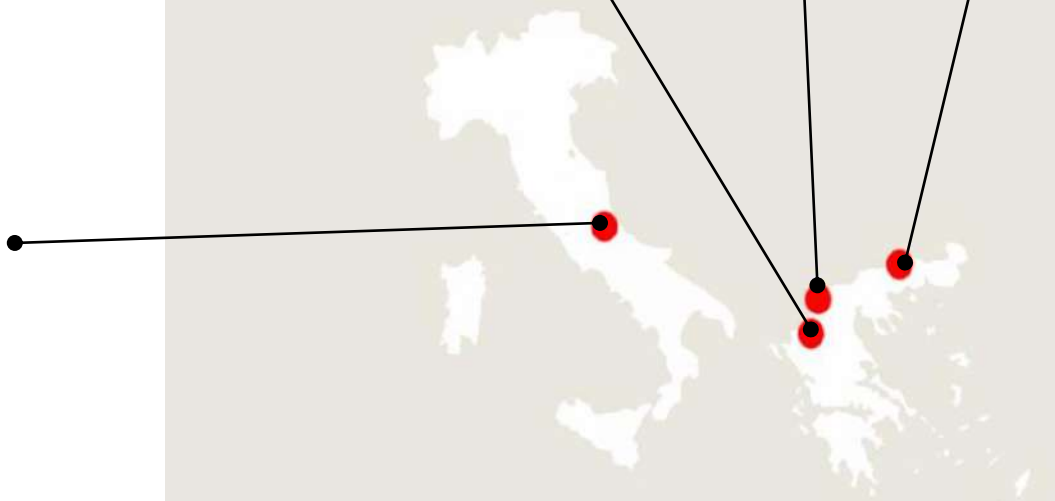
LIFE ARCPROM: 2019-2024 (2025)

Il progetto **LIFE ARCPROM** mira a migliorare la coesistenza tra uomo e orso in tre Parchi Nazionali in Grecia (Prespa, Pindos settentrionale e Monti Rodopi) e uno in Italia (Majella).

L'orso bruno (Ursus arctos) è una "specie prioritaria" a livello europeo. In Grecia la popolazione è considerata "minacciata" nelle liste rosse della IUCN, mentre la sottospecie appenninica (Ursus arctos marsicanus), presente nel Parco Nazionale della Majella, è considerata "in pericolo critico".

Il progetto **LIFE ARCPROM** si pone come obiettivi principali:

- Gestire il fenomeno della presenza di orsi abituati o confidenti nei pressi di aree abitate;
- Minimizzare l'uso di pratiche illegali, legate in particolar modo al bracconaggio tramite l'utilizzo di esche avvelenate;
- Implementare l'utilizzo di misure efficaci per la prevenzione dei danni e del conflitto, come recinzioni elettrificate, cani da guardiania e contenitori per rifiuti a prova d'orso.



Rewilding Apennines

THE EXPERIENCE OF

BEAR SMART COMMUNITIES

IN THE CENTRAL APENNINES - ITALY

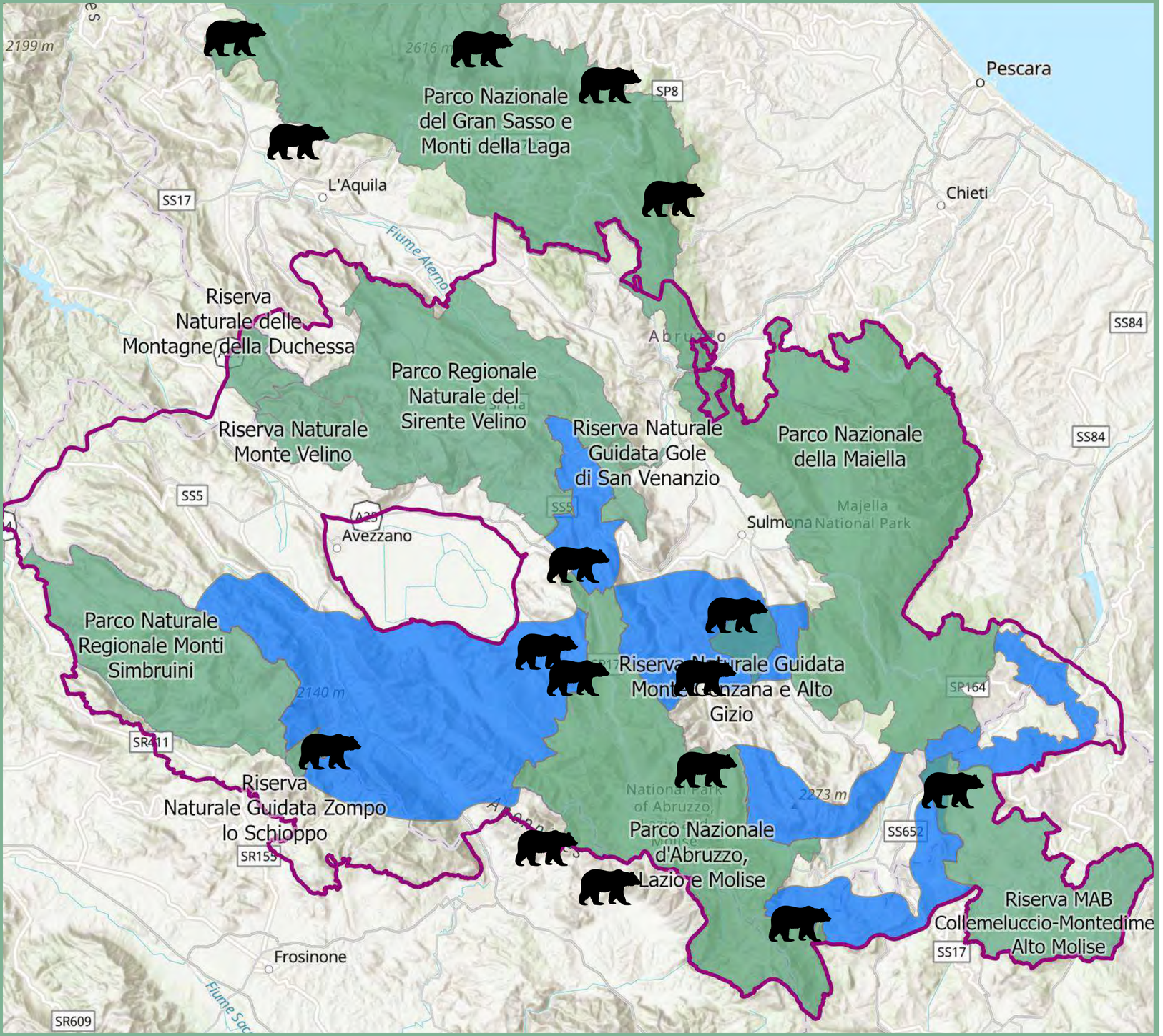
Towards a culture of coexistence

Daniela Gentile

NATURA 2000

LIFE BEAR SMART CORRIDORS

Life



THE CONTEXT

Relatively high population density, with many small villages surrounded by large natural areas

16 Bear Smart Communities

Protected areas

Rewilding Apennines operational area

Rewilding Apennines ecological&coexistence corridors

PH BRUNO D'AMICIS

BEAR SMART COMMUNITIES

KEYWORDS

#safety

#prevention

#GOVERNANCE

#tolerance

#COEXISTENCE

#sharedgoals

#mutualbenefits

#participation

PH BRUNO D'AMICIS

NOT JUST A “PRACTICAL” APPROACH BUT

A CULTURAL PATH

TOWARDS A CULTURE OF COEXISTENCE

PH BRUNO D’AMICIS

#GOVERNANCE

PH BRUNO D'AMICIS

JUST A LITTLE ABOUT

THE PATH

2014 *The story starts at the very low!*

A bear is illegaly shot in Pettorano

2015 *Crisis can also bring new energy!*

The first Bear Smart Community is born thanks to the the dedication of 2 NGOs

SINCE 2015 *Hard working!*

Damage and habituation prevention. Education and Participation

2019 *Let's walk and prosper together!*

2 new Bear Smart Communities are established by Rewilding Apennines & Salviamo l'Orso

LIFE | BEAR SMART CORRIDORS

2021 *A new life!*

Life Bears Smart Corridors begins to establish 13 new BSCs in Italy and to strengthen the existing ones

Rewilding Europe

LIFE | BEAR SMART CORRIDORS

APPROACH, STEPS AND LESSONS LEARNT TO BUILD EFFECTIVE AND EFFICENT BEAR SMART COMMUNITIES

GOVERNANCE

PH BRUNO D'AMICIS

GOVERNANCE

Technical board and Preliminary assessment

1. IDENTIFY A TECHNICAL BOARD TO LEAD THE WHOLE PROCESS FROM THE ESTABLISHMENT TO THE DEVELOPMENT OF THE BSC

2. A DEEP INVESTIGATION OF THE THREATS TO BEARS AND THE RISKS ASSOCIATED WITH INTERACTIONS WITH HUMANS IN THE AREA

PH DANIELA GENTILE

GOVERNANCE

The BSC Committee

MAIN OPERATIONAL BODY
1 FOR EACH BEAR SMART COMMUNITY
9 MEMBERS

Roles

BRINGING STAKEHOLDERS TOGETHER

SELECTED ON
THE BASIS
OF THE RISK ANALYSIS

PROVIDING information

SETTING UP
an information point or
front-office in each BSC

DEFINING THE COEXISTENCE plan

conflict
prevention and mitigation
MEAUSURES

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WARNING!

It is crucial that the
BSC Committee has political and
decision-making power!
In Italy, the approach that works is
at the municipality level or
at the level of a union of municipalities.

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WARNING!

In order to be effective and efficient, it is important that the Coexistence Plan is integrated into municipal planning and land management tools

PH NELLEKE DE WEERD

Coexistence plan

THREE-YEAR TERM

Only an institution that has the power to incorporate the coexistence plan into land management tools can make it truly effective

Protection of livestock and apiaries

Crop protection

Waste management

Protection of other food sources within towns -such as orchards - to prevent habituation

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Coexistence plan

THREE-YEAR TERM

Only an institution that has the power to incorporate the coexistence plan into land management tools can make it truly effective

Community engagement, education and volunteer programme

Damage compensation

Support for nature-based local businesses

Proposals for the development of legal frameworks and financial plans to support BSCs.

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Challenges ahead

Technical

1. **FINANCE**
   Fundraising and Maintenance

2. **HUMAN RESOURCES**

Priority interventions and long-term actions must be planned accordingly with the risk mapping

For each action, a cost estimate must be made

PH BRUNO D'AMICIS

Monitoring and evaluation are imperative!

PH BRUNO D'AMICIS

Challenges ahead

Technical

1. **FINANCE**
   Fundraising and Maintenance

2. **HUMAN RESOURCES**

3. **BSC AND BEAR MONITORING**
   Fragmented and discontinuous

Challenges ahead

Technical

1. **FINANCE**
   Fundraising and Maintenance
2. **HUMAN RESOURCES**
3. **BSC AND BEAR MONITORING**
   Fragmented and discontinuous

Social

1. Not all communities or municipalities are very receptive, so a lot of effort and time is needed to get people involved.
2. People's lack of trust in institutions

A good engagement strategy
is needed to get the message across that the
Bear-Smart Community is about people.
Not the organisation,
the association
or the local authority,
but each and every citizen.

Rewilding Apennines

Let's join forces to foster a culture of true coexistence

PH MARCO COLOMBO

INTERNATIONAL CONFERENCE

FEBRUARY 25-26-27, 2025
LARISSA, GREECE

LIFE ARCPROM

THE CANTABRIAN BROWN BEAR

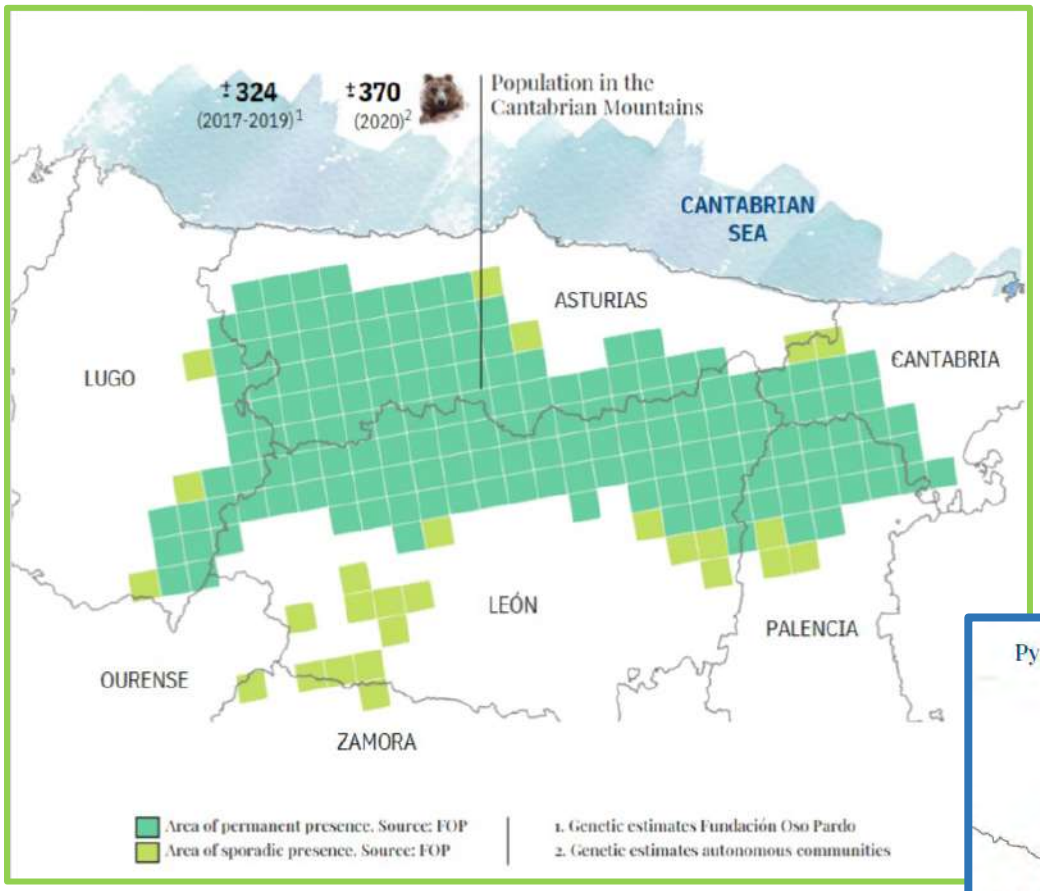
Current situation and conservation projects in Spain

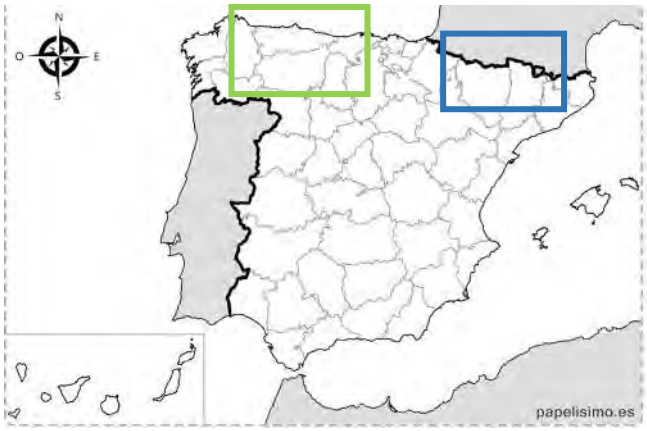
María Párraga

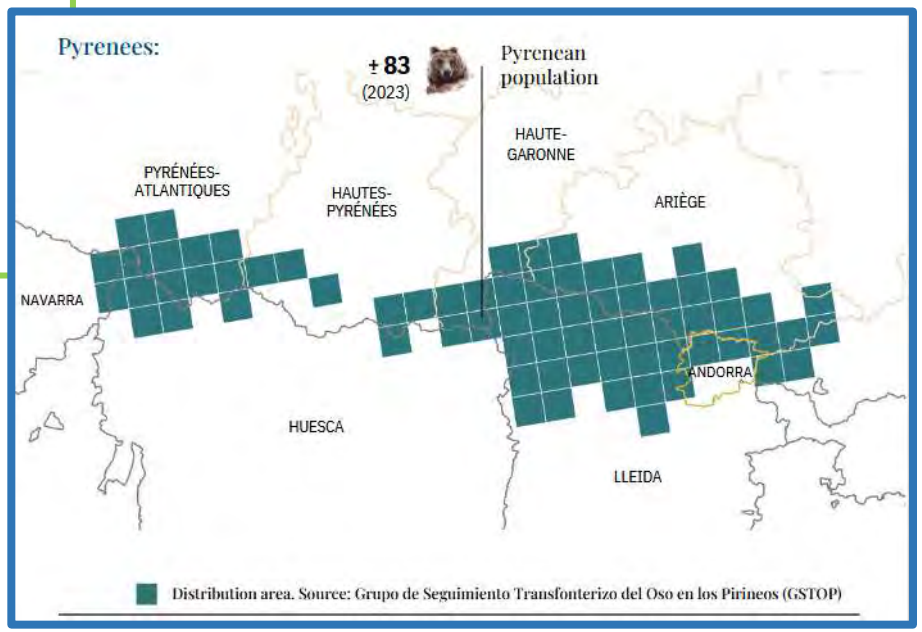
Project Coordinator

FUNDACION OSO PARDO

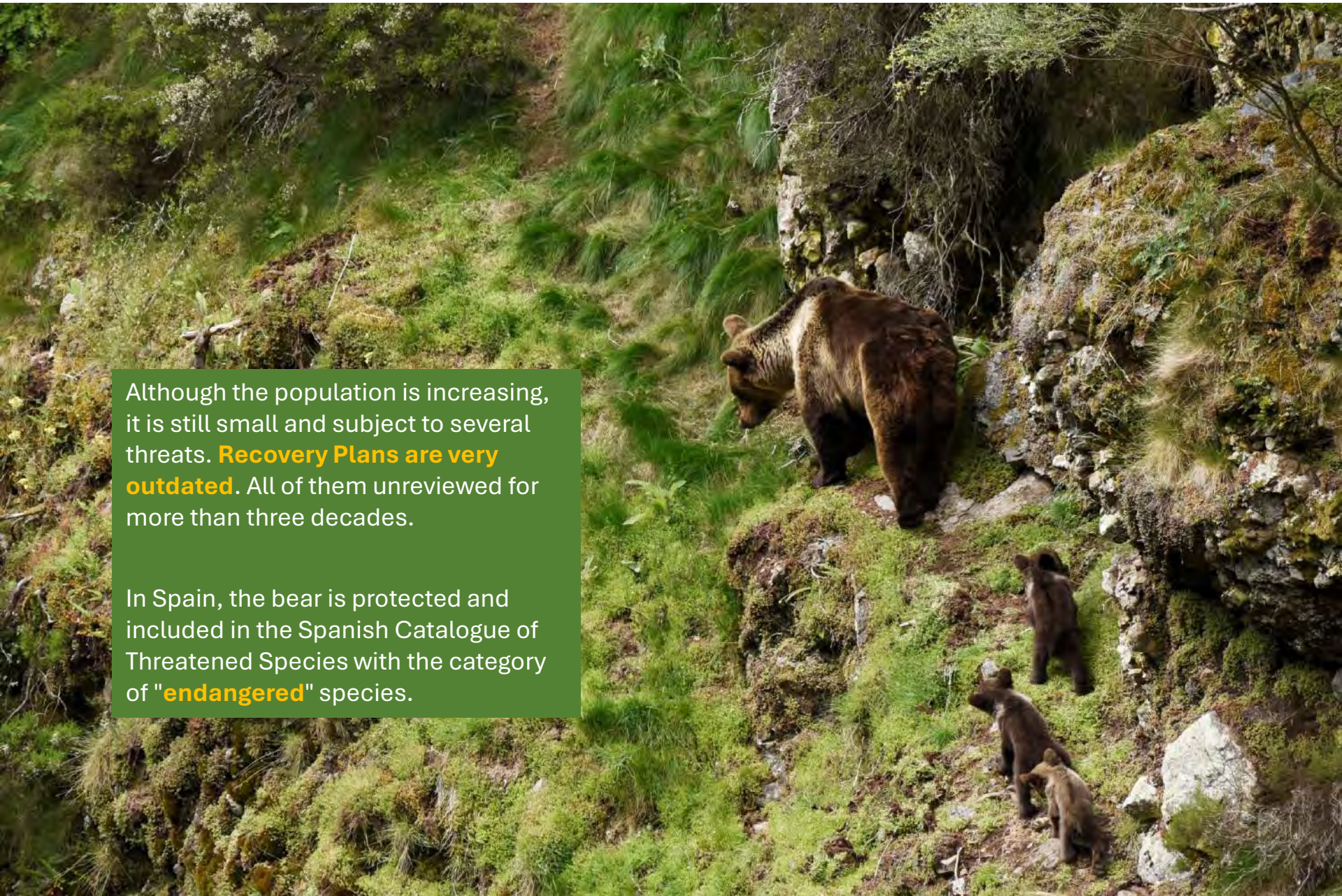
CURRENT DISTRIBUTION OF THE BROWN BEAR IN SPAIN







WHERE ARE WE NOW?



Although the population is increasing, it is still small and subject to several threats. **Recovery Plans are very outdated**. All of them unreviewed for more than three decades.

In Spain, the bear is protected and included in the Spanish Catalogue of Threatened Species with the category of "**endangered**" species.

THE CHALLENGE OF CLIMATE CHANGE

Climate models and data from the Intergovernmental Panel on Climate Change predict a 15% decrease in precipitation and an increase in temperature of up to 4 °C in the Cantabrian Mountains by the end of this century. Around 2040, **winter temperatures in the high mountain areas will have risen by about 2°C.**

Dietary variations

THE CHALLENGE OF CLIMATE CHANGE

Increased presence of active bears in winter

Global warming favours the situation of bears **hibernating less, or even not at all**. In parallel with greater winter bear activity, human outdoor recreational activities are also increasing.

WHAT ARE WE DOING?

Plantations in climate change scenarios

Trophic enrichment groves to increase food availability in the future. Always with local workers, **generating employment opportunities** in rural areas

Only in the framework of the **LIFE Bears with Future** *"Improving key food resources and preventing winter conflicts for Cantabrian brown bears under climate change scenarios"* **150,000 fruit trees and 25 chestnut trees are being planted.**

WHAT ARE WE DOING?

Information campaign for “mountain users”

We have signed **agreements with the main federations/associations** that carry out activities in the mountains of the brown bear.




Objective: to better understand the brown bear and recommendations to avoid encounters and incidents, even in winter.

So far **79 activities** (talks, routes and events).
Almost **3,000 participants**

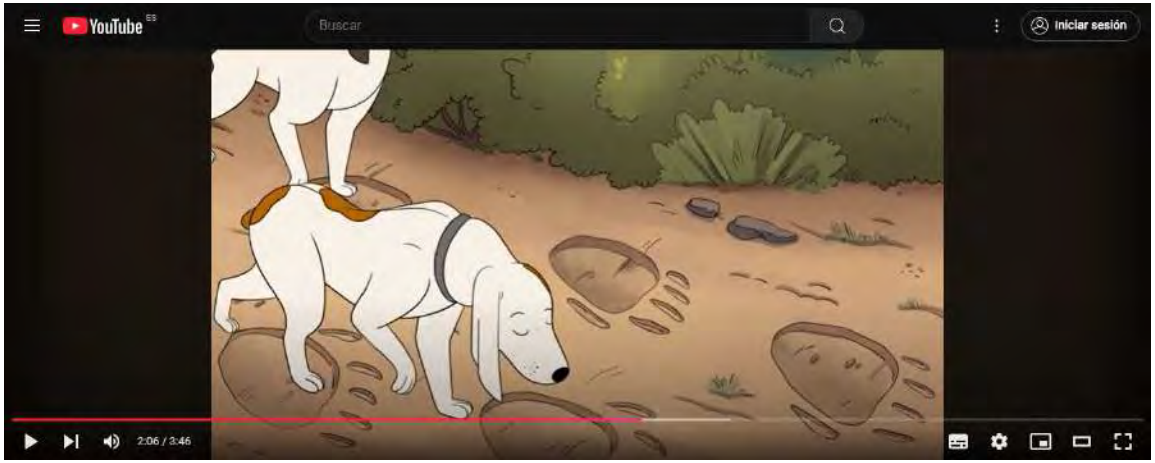
WHAT ARE WE DOING?

Information campaign for “mountain users”

Animated **short films** and digital **infographics** to spread the message. A project success.

Advice for visiting the mountains of the brown bear

Good practices for hunting in the mountains of the brown bear



More informative materials → www.fundacionosopardo.org

CANTABRIAN BEARS IN HUMAN SETTLEMENTS

The Cantabrian bear population was brought back from the brink of extinction and is experiencing a very hopeful recovery - although the species remains endangered. This population increase, combined with the ending of human persecution and social changes in rural areas over recent decades, has led to a greater likelihood of interactions between humans and bears.

The presence of bears in inhabited areas, seeking easy human-provided food such as orchards, fruit trees, or garbage, is a common situation in all bear populations worldwide. When bears **recurrently seek out** and **tolerate human presence** for such easy food, they are they are considered "habituated bears".

A MILESTONE IN THE CONSERVATION OF THE CANTABRIAN BROWN BEAR

LIFE HUMAN BEAR CoEx

Life

NATURA 2000

THE BEAR TOWNS, UNITED FOR COEXISTENCE

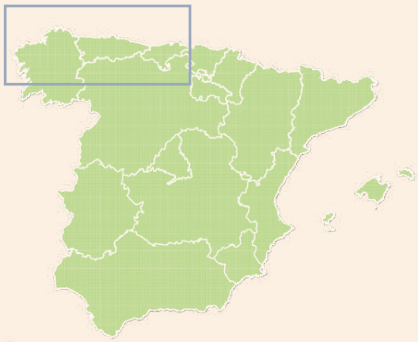
Six councils in Asturias and three municipalities in León, along with their respective regional administrations and the Brown Bear Foundation, have joined forces on this project to work towards a peaceful and positive coexistence with bears. Lessons learned and best practices will be disseminated throughout all bear areas with similar characteristics.

COORDINATOR	BENEFICIARIES	ASSOCIATED PARTNERS
FUNDACION OSO PARDO	Ayuntamiento de PROAZA Ayuntamiento de PALACIOS DEL SIL Ayuntamiento de BELMONTE DE MIRANDA Ayuntamiento de IBIAS Ayuntamiento de PÁRAMO DEL SIL Ayuntamiento de CANGAS DEL NARCEA Ayuntamiento de DEGAÑA Ayuntamiento de VILLABLINO Ayuntamiento de SOMIEDO	Gobierno del Principado de Asturias Junta de Castilla y León

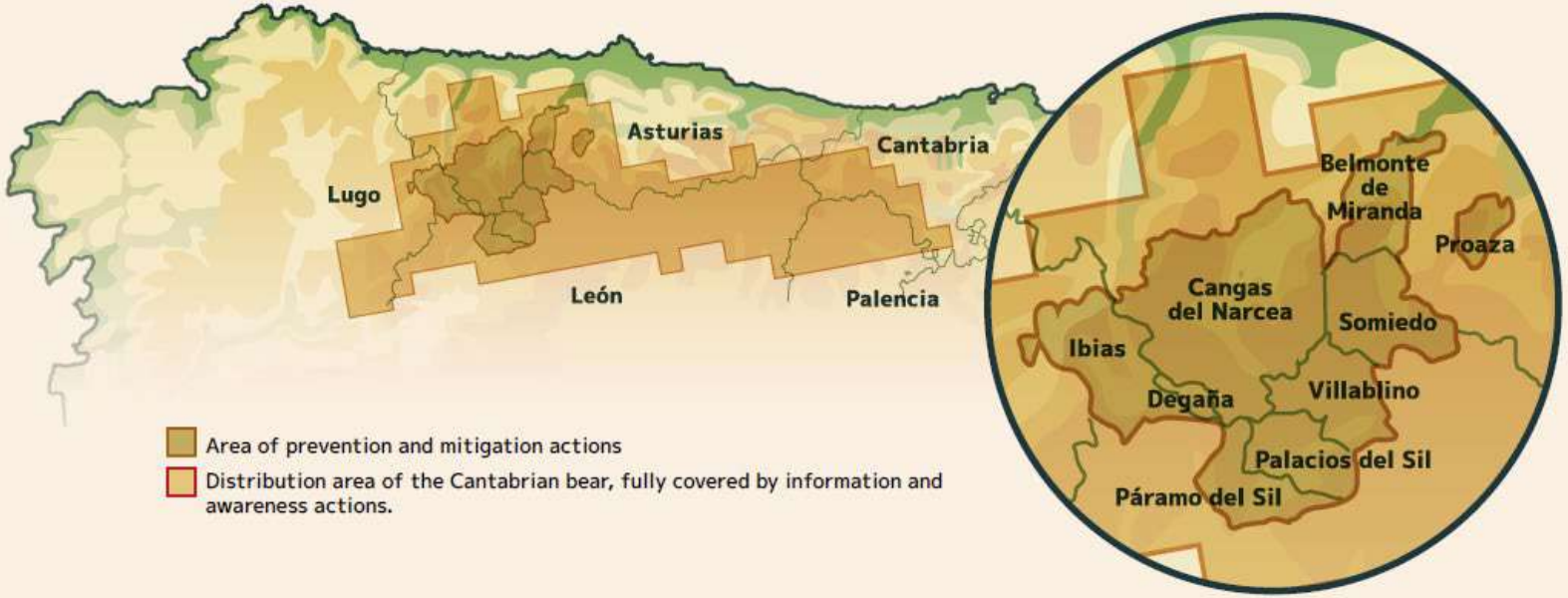
WHAT ARE WE DOING?

OBJECTIVE

To promote **human-bear coexistence** in the municipalities with the highest density of the species in the **Cantabrian Mountains** by strengthening the role of local leaders and actors.



AREA OF ACTION



WHAT ARE WE DOING?

PROJECT ACTIONS

Prevention with local work crews

Cleaning of safety perimeters around 120 inhabited areas and 100 paths.

Planting of 50,000 **fruit trees** in 250 **dissuasory fruit tree stands**, located well away from villages.

Awareness and communication

More than 160 **talks and meetings with residents, businesses, and social actors** to discuss the causes and consequences of bear presence in inhabited areas, and how to take preventive measures.

Environmental education campaign in 27 rural schools, reaching 2,300 students.

WHAT ARE WE DOING?

PROJECT ACTIONS

Management of interactions between humans and bears

Installation of 45 **containers** and 45 innovative, bear-proof cover **structures for containers.**

WHAT ARE WE DOING?

PROJECT ACTIONS

Management of interactions between humans and bears

Testing of 90 **detection and deterrent systems in orchards**, gardens, or other attractive elements.

Protection of domestic animal facilities and other property with 200 **electrified enclosures**.

WHAT ARE WE DOING?

PROJECT ACTIONS

Management of interactions between humans and bears

Marking and radio-tracking of habituated bears (in Asturias).

WHAT ARE WE DOING?

PROJECT ACTIONS

Support for socioeconomic development

Support for business **strategies** focused on the positive contribution of the brown bear to economic and social growth in rural areas, and the creation of **rural employment** in prevention teams.

GET TO KNOW THE PROJECTS IN MORE DETAIL

www.fundacionosopardo.org/en/life-projects/

María Párraga
mparraga@fundacionosopardo.org

Thank you!

Cultivating Conviviality in Human-wildlife Relations: Opportunities and challenges

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For quality of life

Robert Fletcher & Svetoslava Toncheva

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Mainstream conservation

- Brockington et al (2008: 9): “a particular historical and institutional strain of western conservation”, “practiced and promoted especially by large, powerful international conservation organisations and agencies”

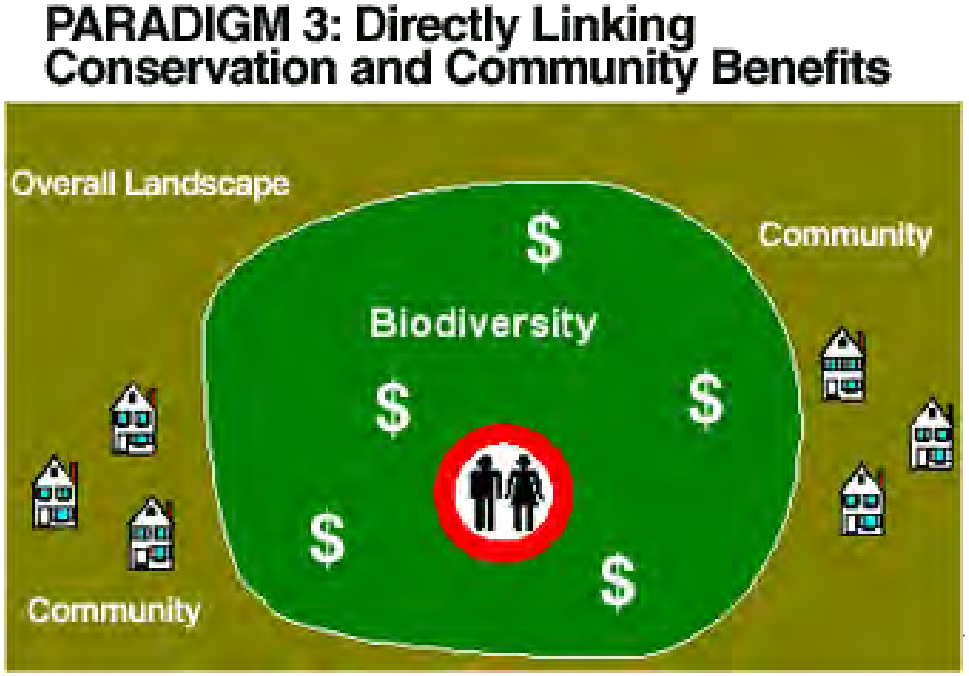
WWF

The Nature Conservancy
Protecting nature. Preserving life.™

CONSERVATION INTERNATIONAL

WILDLIFE CONSERVATION SOCIETY

Mainstream conservation



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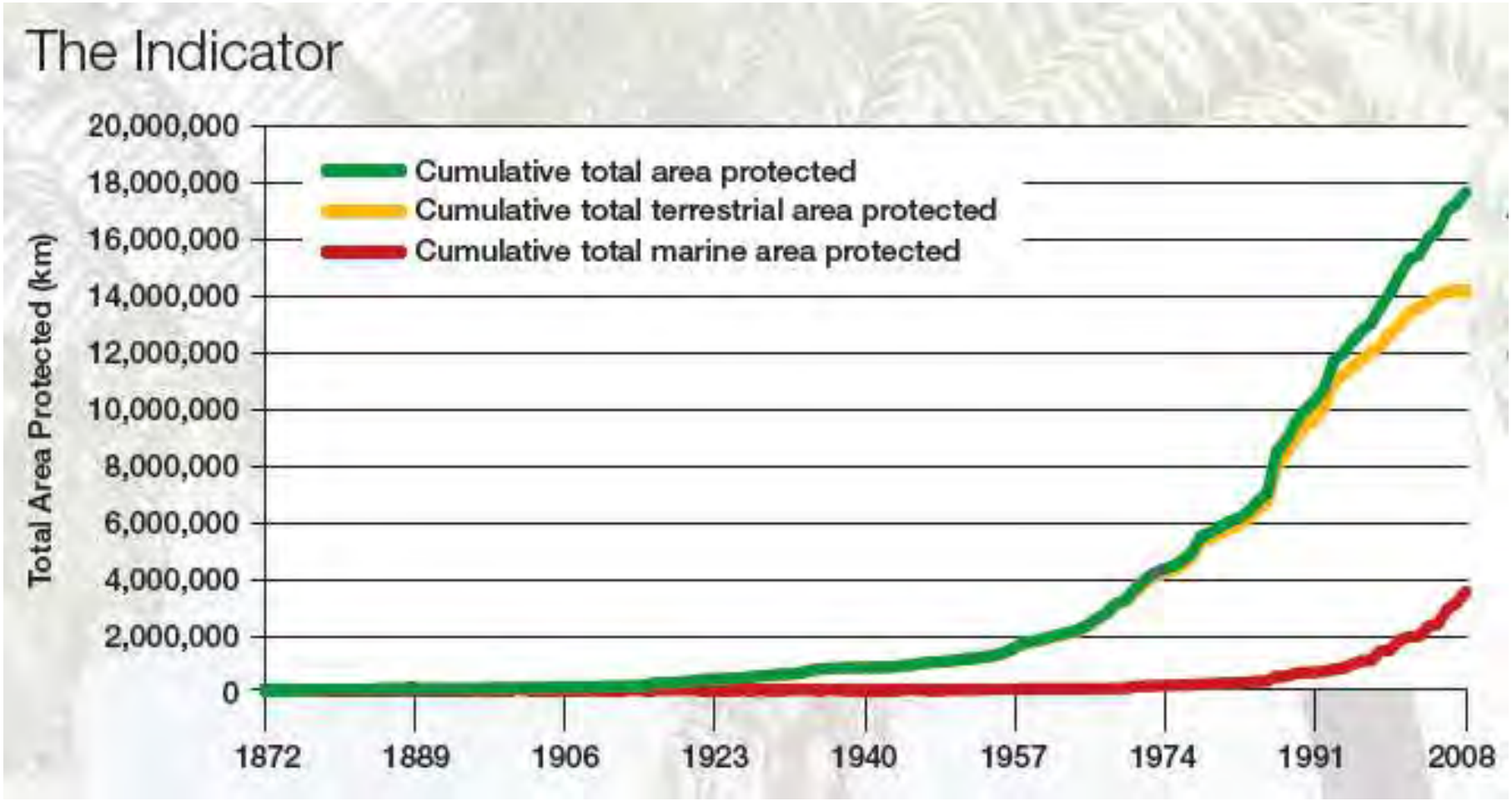
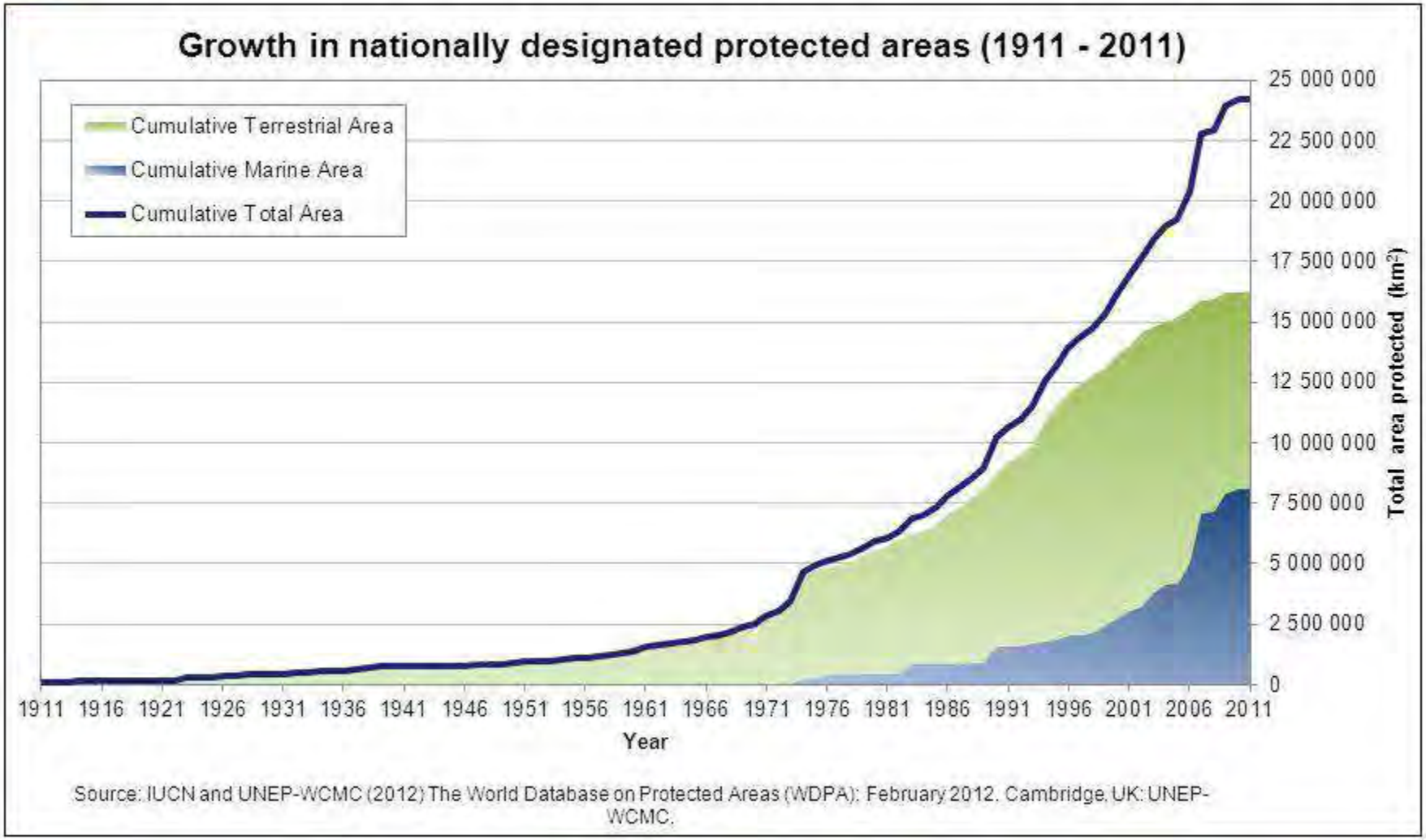
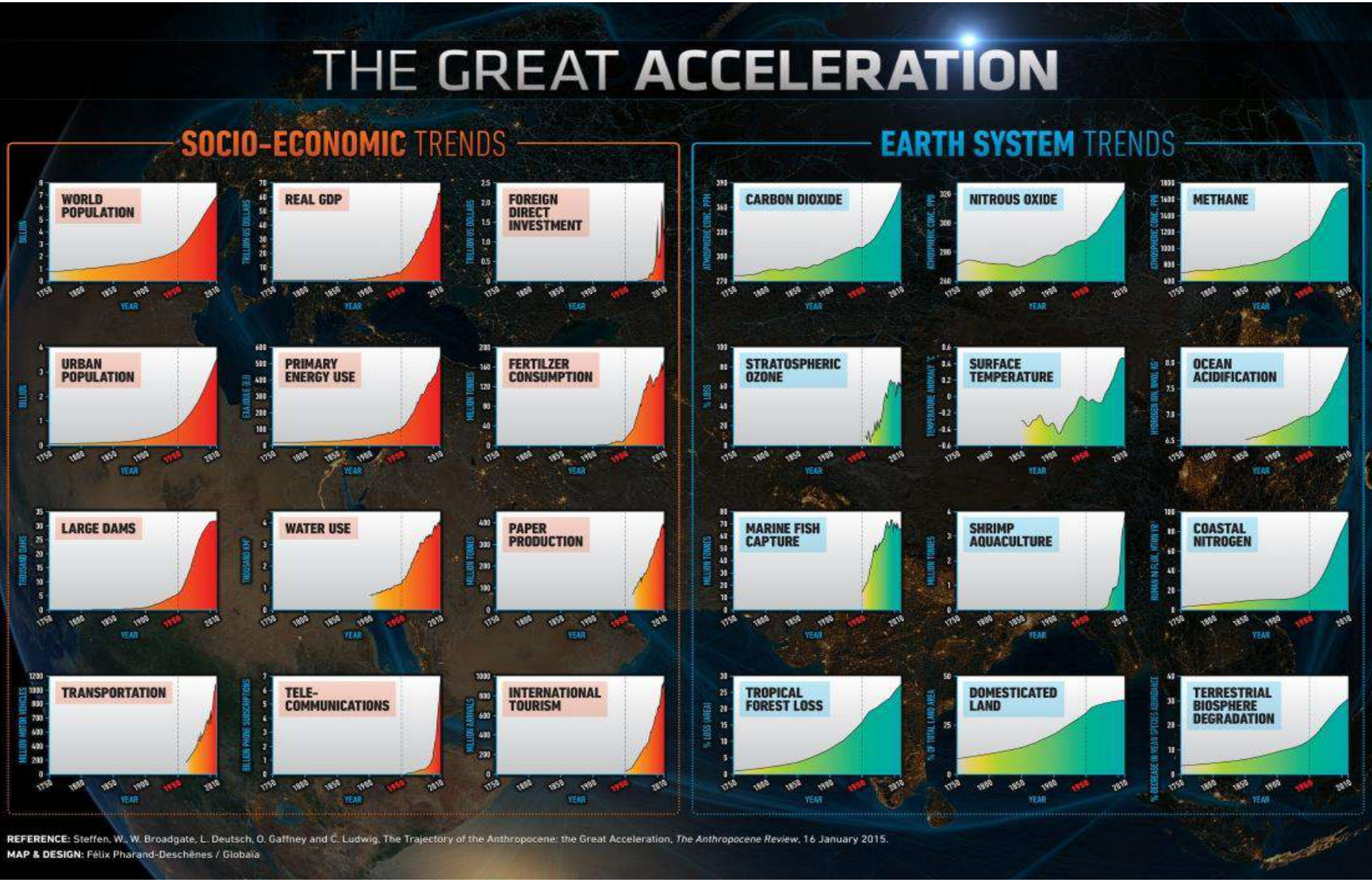
The Indicator



World Coverage of PAs (Extent)

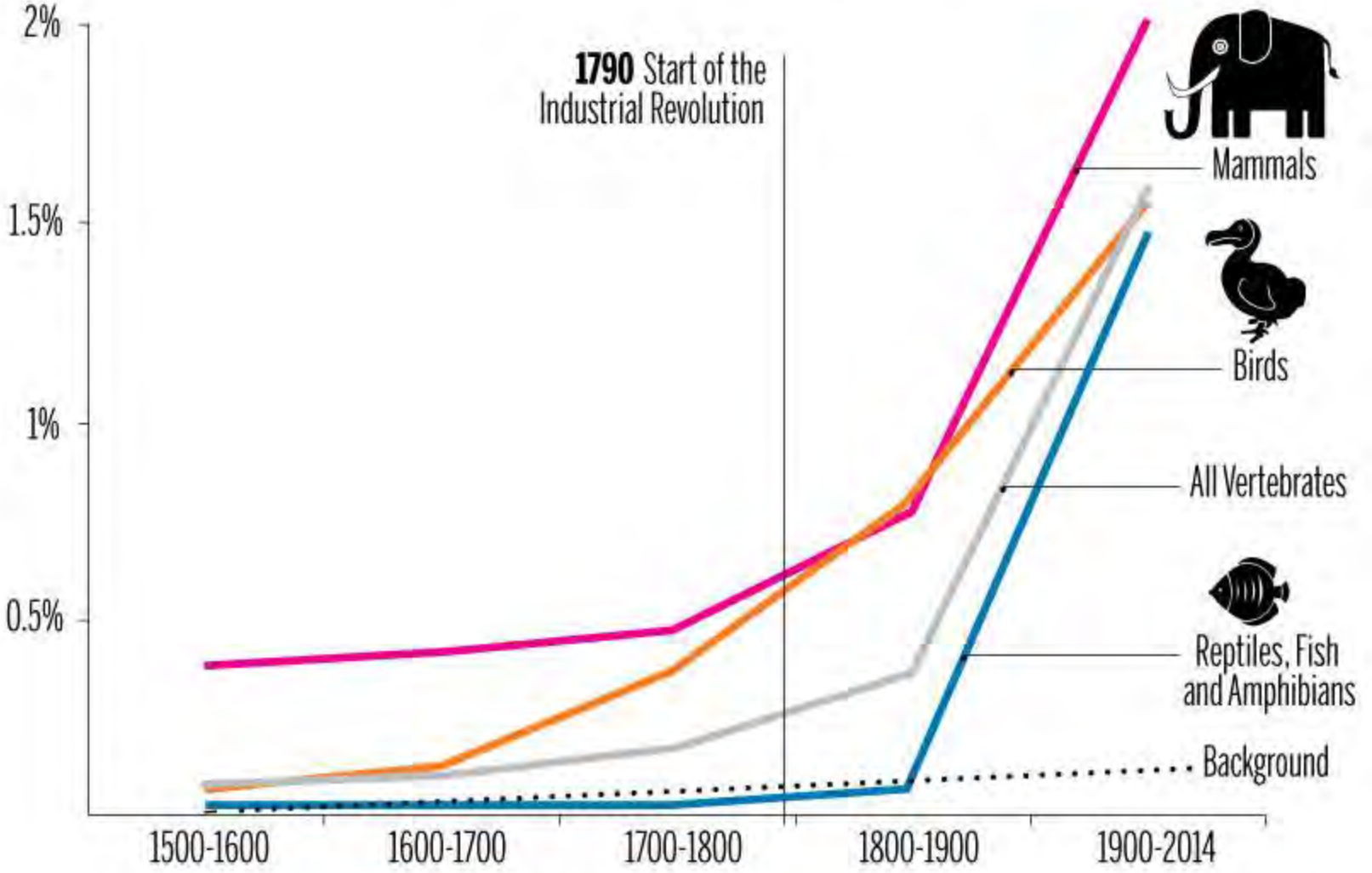


Source: IUCN and UNEP-WCMC (2012) The World Database on Protected Areas (WDPA): February 2012. Cambridge, UK: UNEP-WCMC.


THE GREAT ACCELERATION
SOCIO-ECONOMIC TRENDS
WORLD POPULATION
REAL GDP
FOREIGN DIRECT INVESTMENT
URBAN POPULATION
PRIMARY ENERGY USE
FERTILZER CONSUMPTION
LARGE DAMS
WATER USE
PAPER PRODUCTION
TRANSPORTATION
TELE-COMMUNICATIONS
INTERNATIONAL TOURISM
EARTH SYSTEM TRENDS
CARBON DIOXIDE
NITROUS OXIDE
METHANE
STRATOSPHERIC OZONE
SURFACE TEMPERATURE
OCEAN ACIDIFICATION
MARINE FISH CAPTURE
SHRIMP AQUACULTURE
COASTAL NITROGEN
TROPICAL FOREST LOSS
DOMESTICATED LAND
TERRESTRIAL BIOSPHERE DEGRADATION
YEAR
REFERENCE: Steffen, W., W. Broadgate, L. Deutsch, O. Gaffney and C. Ludwig. The Trajectory of the Anthropocene: the Great Acceleration, The Anthropocene Review, 16 January 2015.
MAP & DESIGN: Félix Pharand-Deschênes / Globaia

VERTEBRATE SPECIES EXTINCTION RATES

Cumulative, recorded as "extinct" or "extinct in the wild"



SOURCE: CEballos et al. Sci. Adv. 2015;1:e1400253 | GRAPHIC: Amanda Shendruk

MACLEAN'S

Welcome to.. the (second) Trump **moment in conservation…**

half-earth project

PARADIGM 1: Parks and Protected Areas

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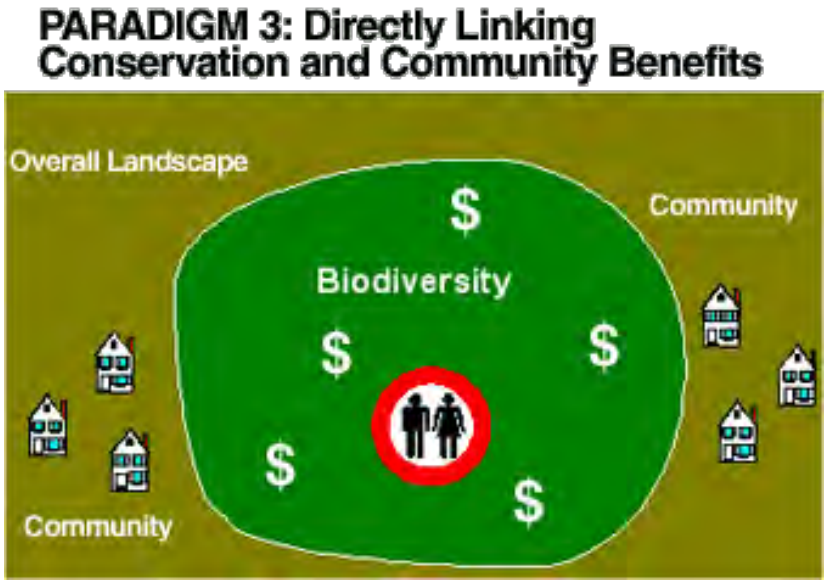
CAPITALS COALITION®



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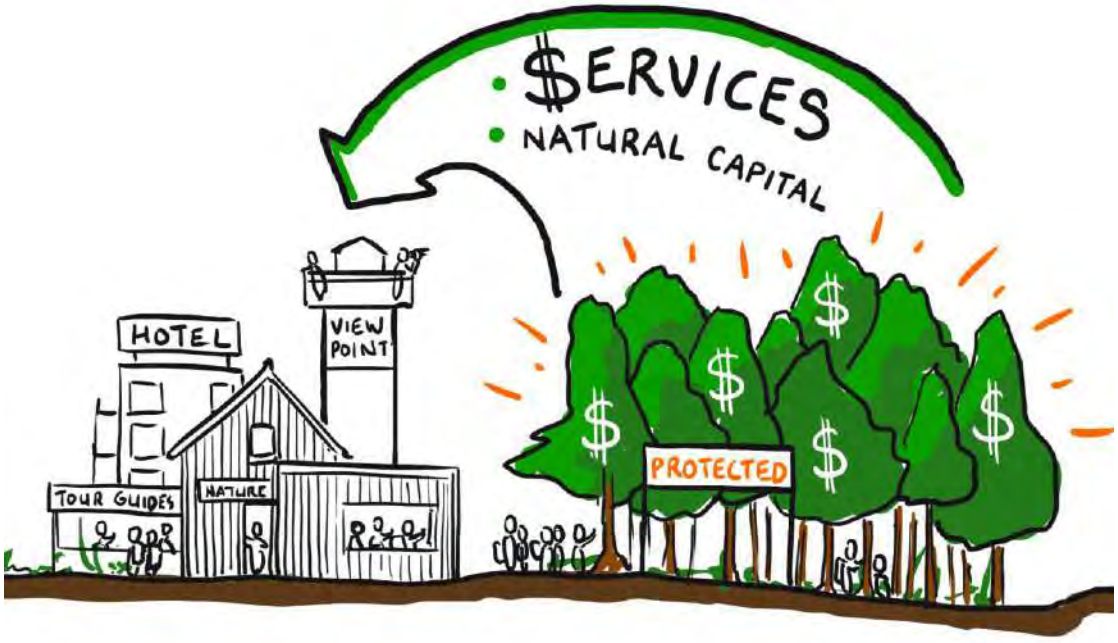

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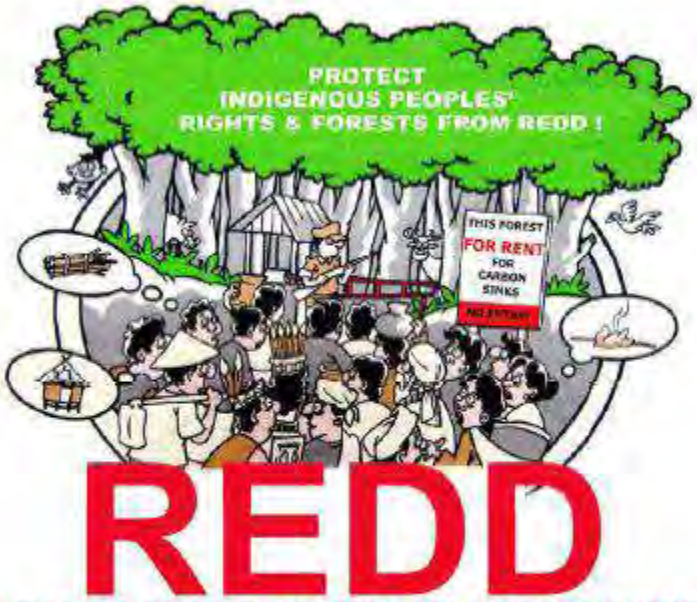

REDD

A FALSE SOLUTION TO CLIMATE CHANGE

"could unleash a devastating wave of further forest loss, land grabbing, corruption, cultural destruction and conflict." Indigenous Peoples "risk displacement, violence and lost of livelihoods."[16]

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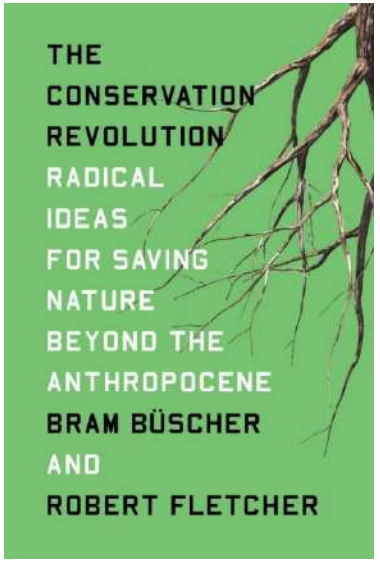
RIGHTS + RESOURCES

KALPAVRIKSH
कल्पवृक्ष

Survival

The ICCA Consortium

Forest Peoples Programme



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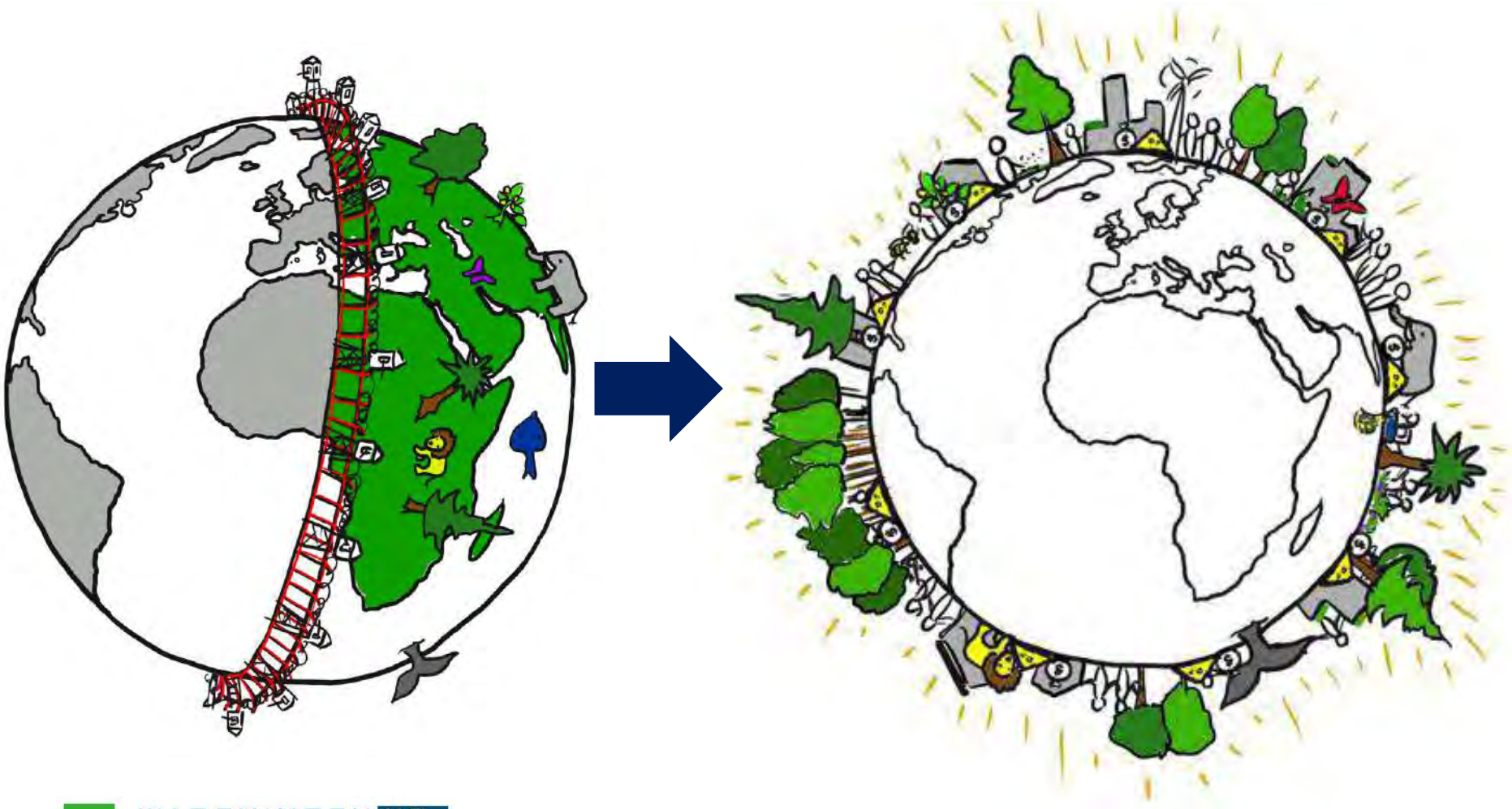
A convivial conservation?



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Convivial Conservation

1) *Integrated landscapes* that do not strictly separate humans and other species
2) *Direct democratic and equitable governance arrangements*
3) *Non-market, redistributive funding mechanisms*
4) *Valuation based on intrinsic/spiritual significance*
5) *Encompassing diverse forms of knowledge and ways of knowing*

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Source: Büscher & Fletcher 2020

Transforming conflict to conviviality: human-bear coexistence in the Rodopi mountains of Bulgaria

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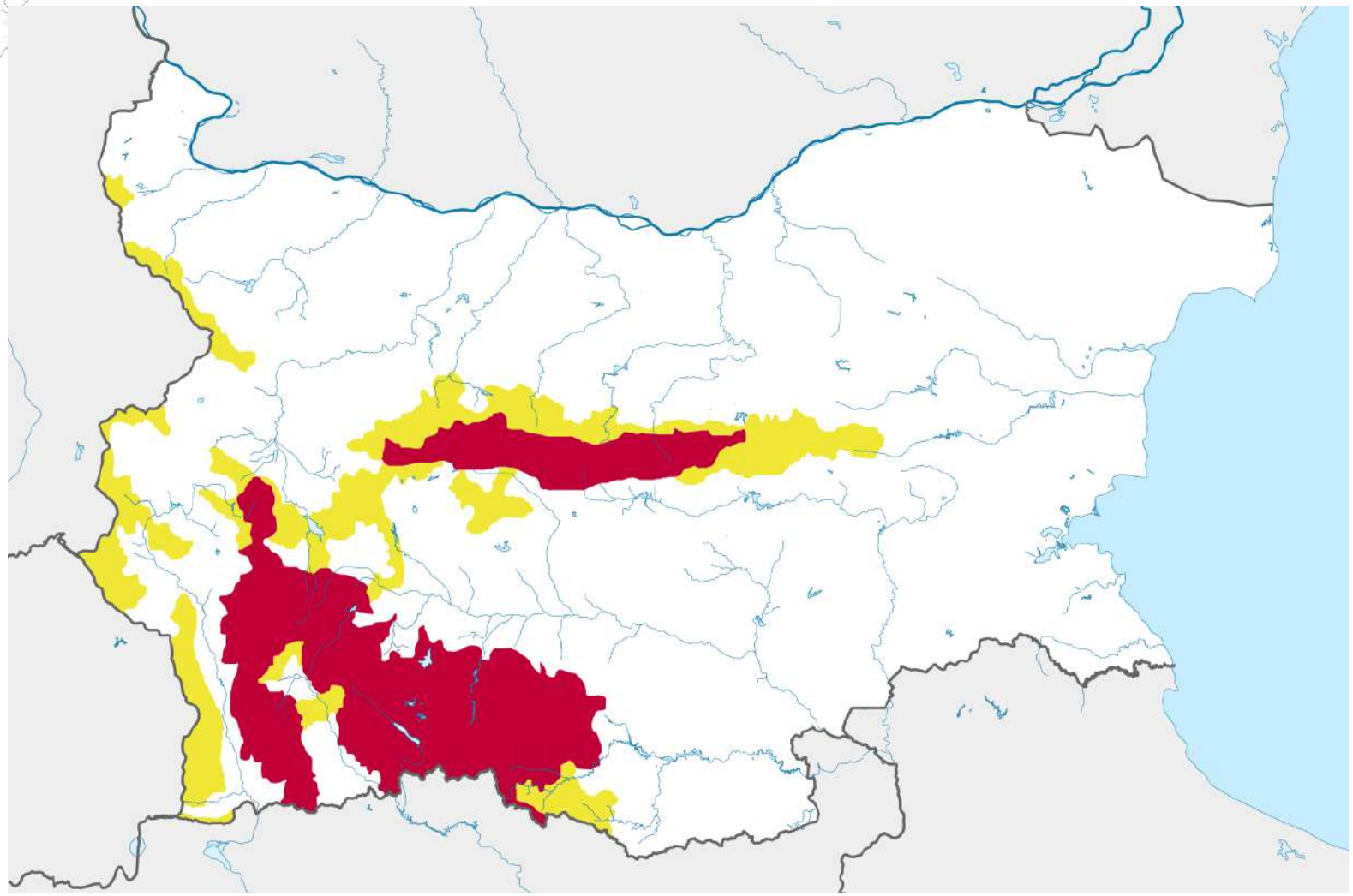
Distribution of brown bear in Bulgaria



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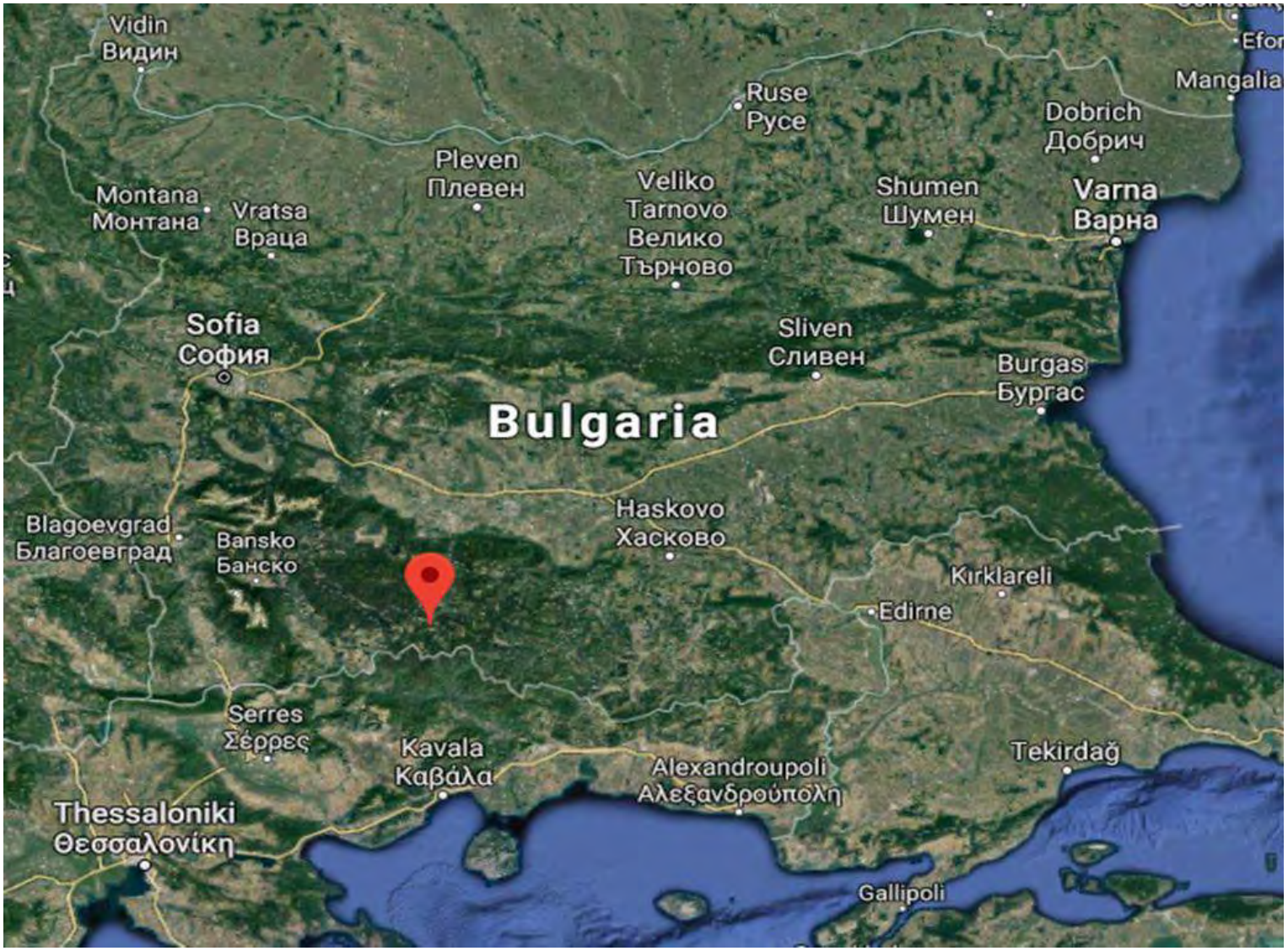
Introduction

- The question of how to transform human–wildlife relations from conflict to coexistence, rather than merely mitigating conflicts, has become a central focus of research and practice;
- Convivial conservation grounded in the idea that humans and animals can and should live together within shared landscapes (Büscher and Fletcher, 2020);
- Based on 2 case studies: explore the factors that may contribute to promoting successful coexistence between humans and brown bears, applying 3 of the main principles of CC - integrated spaces, democratic arrangement; novel finance mechanisms.

Methods and case studies

- Ethnographic research - semi-structured and semi-directive interviews (29/30);
- Different groups of stakeholders such as hunters (the group holding most experience with bears), local authorities, conservation experts, etc.;
- Multispecies encounter - interviews with ecologist who has performed long-term research in both areas in order to understand his perspective on bears' behavior (natural science data – camera traps, tracking data, and personal observations);
- Case #1 – village of Yagodina, Rodopi mountains; rather peaceful coexistence;
- Case #2 – 3 settlements along river Arda, Rodopi mountains; conflict situation;



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The village of Yagodina

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Mogilitsa

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Results:
Landscape of tolerance vs. landscape of fear

- Case #1 (Yagodina) – rather peaceful coexistence marked by: nontransgression of the intimate space; avoidance by both of potential conflict situations; reading signs left by the other; adaptation;
- Case #2 (Arda) - transgression of the intimate village space by the bears; bear population - increasing every year due to "lack of control over the population"; sense of fear and vulnerability: *"Many people are afraid, they don't enter the forest in order not to meet a bear."*
- Ecological data: lack of understanding of the particular bear behavior.

Knowledge of humans and bears

- Case 1# - general knowledge of bears, shared by the inhabitants who can read the bears' signs, elements of LEK comprising traditional folklore.
- Case 2# - LEK often appears incomplete or incorrect in comparison to the results of ecological research: disagreement regarding bear behavior in case of encounter; bears considered dangerous; etc.
- Conservation agencies - what is known by conservation experts is not sufficient and based on solid research; non-establishment of specialized group to deal with bear issues, limited to solving problems related to damage and compensation.

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Economy

- Case 1# - lack of economic losses caused by brown bears, inclusion in sustainable ecotourism activities - significant factors for facilitating peaceful human–bear coexistence.
- Ecotourism – strategy for sustainable development;
- Tourism that has developed around the bears - enters traditionally established human-bear relations and introduces economic aspects (lively commodities);
- Importance of tourism in Yagodina (caves and gorges, viewing platform), 90% of the total population view tourism as an essential livelihood.

Ecotourism – “bear biology” in action

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Svetoslava Toncheva,
Bulgarian Academy of

Brown bears at the bear hide near Yagodina

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Conflict economy

- Case 2# - human–bear conflict is exacerbated by economic loss due to bears: damage on livestock (sheep, calves), beehives, crops, etc.
- Loss is further enhanced by the economic situation and underdevelopment of the region, lack of alternative livelihood strategies except tourism.
- Compensation schemes and removal or lethal control of problematic bears: dissatisfaction with (and often lack of understanding of) the procedure; the perceived inadequacy of the value.

Conflict Economy

"What can you claim. . . it is so complex that in the end you will pay more and it's unknown what you would receive. Just one trip *to Smolyan* ***is at least 30 leva, what about the other work."***

- Legislation is perceived as anti-human and solely benefiting bears; lack of trust in state agents; local authorities - excluded from decision-making.

"Laws are insufficient. Only benefit the bears. Nowadays it's better to be a bear in Bulgaria."

Beehives damaged by brown bears, Mogilitsa

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Conclusions

- Case #1 - the lack of concrete management strategies imposed from outside has led to the establishment of bottom-up mechanisms of mutual adaptation.
- Case 2# - factors preventing coexistence:

  (1)transgression of the intimate village space by the bears; (2) common misinterpretation of this behavior; LEK regarding bears – often relatively incomplete or inaccurate; (3) underdevelopment of the region, the ambiguous position of bears in tourism, reliance on conventional compensatory mechanisms, fails to mitigate the effects of negative human–bear interaction.

Convivial conservation: From conflict to coexistence

- Need to encourage mutual tolerance and adaptation within cohabitation spaces;
- Further encouragement of tolerance (Case 2#), for example through dissemination of guidelines for negotiating human–bear encounters based on efforts to understand the bears' perspective;
- Need for greater democratization in conservation governance (Büscher and Fletcher, 2020), achieved via inclusion of local authorities and community members in discussion and decision-making;
- Finance mechanisms that do not promote overdependence on market engagement – responsible small scale tourism, CBI (Büscher and Fletcher, 2020).

Thank you for your attention!

Source:www.dailymail.co.uk

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WORKSHOP 14:30-16:30

Human Dimensions of Environmental Management

HUMAN DIMENSIONS IN LARGE CARNIVORE CONSERVATION AND MANAGEMENT

FROM THE “KNOWLEDGE-DEFICIT” MODEL TO PARTICIPATORY PROCESSES

Dr. Tasos Hovardas – Human Dimensions Group

CALLISTO

- LIFE COEX – Improving coexistence of large carnivores and agriculture in Southern Europe (LIFE04NAT/IT/000144); 2004-2008

-adolescents' knowledge, beliefs, and behavior

- LIFE EX-TRA – Improving the conditions for large carnivore conservation a transfer of best practices (LIFE07NAT/IT/000502); 2009-2013

-social learning templates

- LIFE ARCPIN - Conservation actions for improving conditions of human-bear coexistence in Northern Pindos (LIFE12 NAT/GR/000784) ; 2013-2017

-project impact

- LIFE AMYBEAR – Improving Human-Bear Coexistence Conditions in Municipality of Amyntaio (LIFE15 NAT/GR/001108); 2016-2021

-participatory processes

- LIFE ARCPROM – Improving human-bear coexistence in 4 National Parks of South Europe (LIFE18 NAT/GR/000768); 2019-2025

-local platforms (3GR, 1IT)

- LIFE Bear-Smart Corridors - Enhancing the viability of Brown Bears in Central Italy and Greece through the development of coexistence corridors (LIFE20 NAT/NL/001107); 2022-2026

-Bear-Smart Communities (16IT, 2GR)

- LIFE WILD WOLF - Concrete actions for maintaining wolves wild in anthropogenic landscapes of Europe (LIFE-2021-SAP-NAT-NATURE; Proposal number: 101074417); 2023-2027

-platforms in 8 different locations in Europe

Human Dimensions Actions in LIFE Projects (2004-)

- Knowledge, beliefs, attitudes, and behavior of stakeholder groups
- Participatory processes with stakeholder groups
- Platforms of Human-Carnivore Coexistence
- Co-creating project deliverables based on stakeholder input

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CRITICISM (1): SCIENTIFIC KNOWLEDGE MAY BE UTILIZED TO SERVE DIFFERENT INTERESTS OF DIFFERENT STAKEHOLDER GROUPS

CRITICISM (2): THERE ARE NO "GAPS" IN SOCIAL REPRESENTATIONS AND SOCIAL PRACTICES

CRITICISM (3): FEEDBACK LOOP CATALYZED RESENTMENT OF LOCAL PEOPLE DUE TO PERCEIVED LACK OF RECOGNITION AND FAIRNESS

CRITICISM (4) LOCAL PEOPLE POSSESS VALUABLE KNOWLEDGE ABOUT THE LOCAL CONTEXT

CRITICISM (5): GOOD PRACTICE CANNOT JUST BE "TRANSFERRED" BUT NEEDS TO BE ADAPTED TO FIT NEW CONTEXTS

CRITICISM (6): LOCAL KNOWLEDGE INDISPENSABLE FOR THE ADAPTATION OF GOOD PRACTICE

CRITICISM (7): LOCAL KNOWLEDGE INDISPENSABLE FOR INNOVATION (MOVING BEYOND ESTABLISHED PRACTICE)

Knowledge deficit model

- Core assumption: Members of a targeted group may change their beliefs, attitudes, and behavior, if they acquire valid scientific and technical knowledge
- More vs less knowledgeable stakeholders

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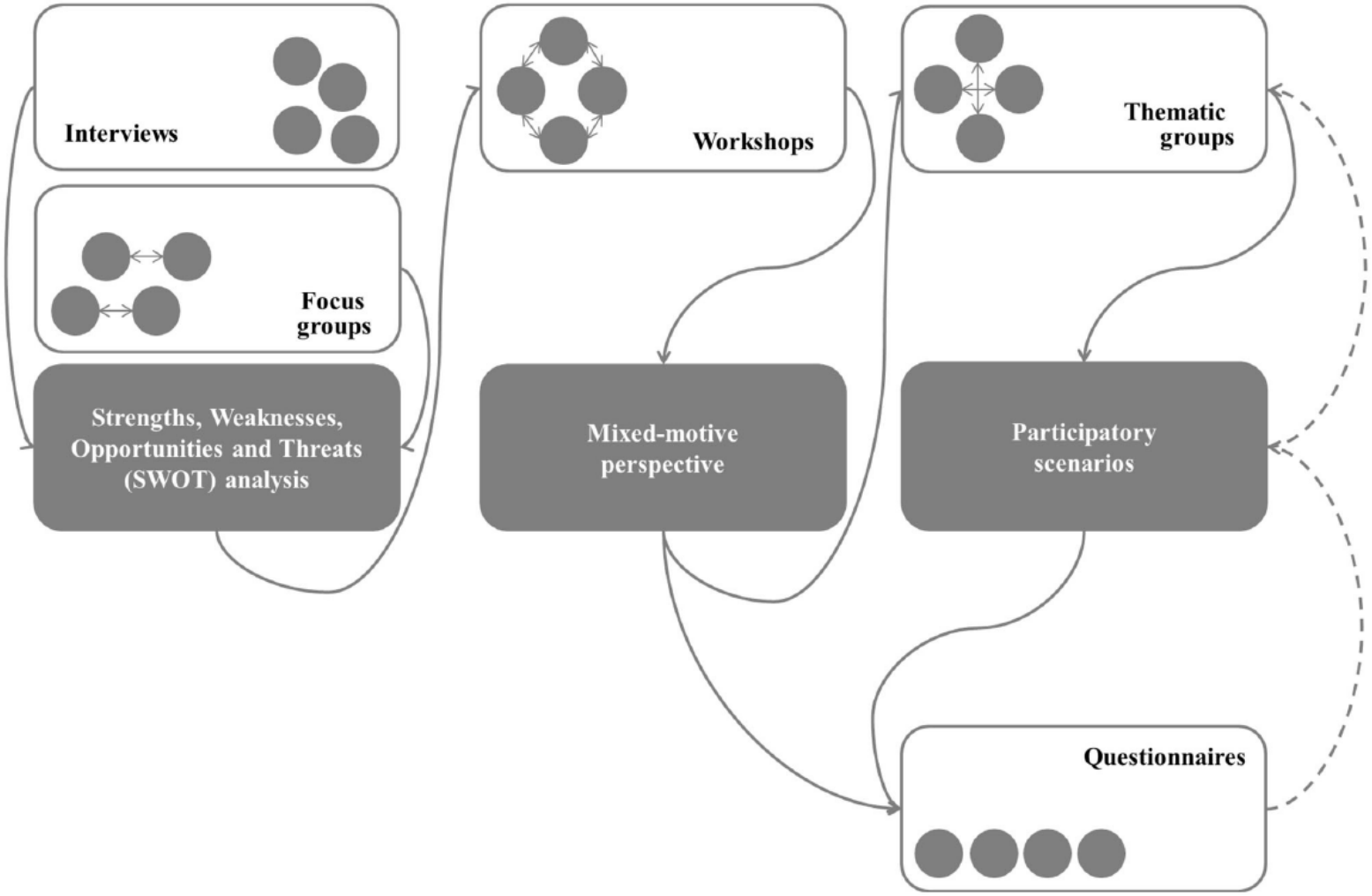

Social learning templates

Scaffolding participatory processes

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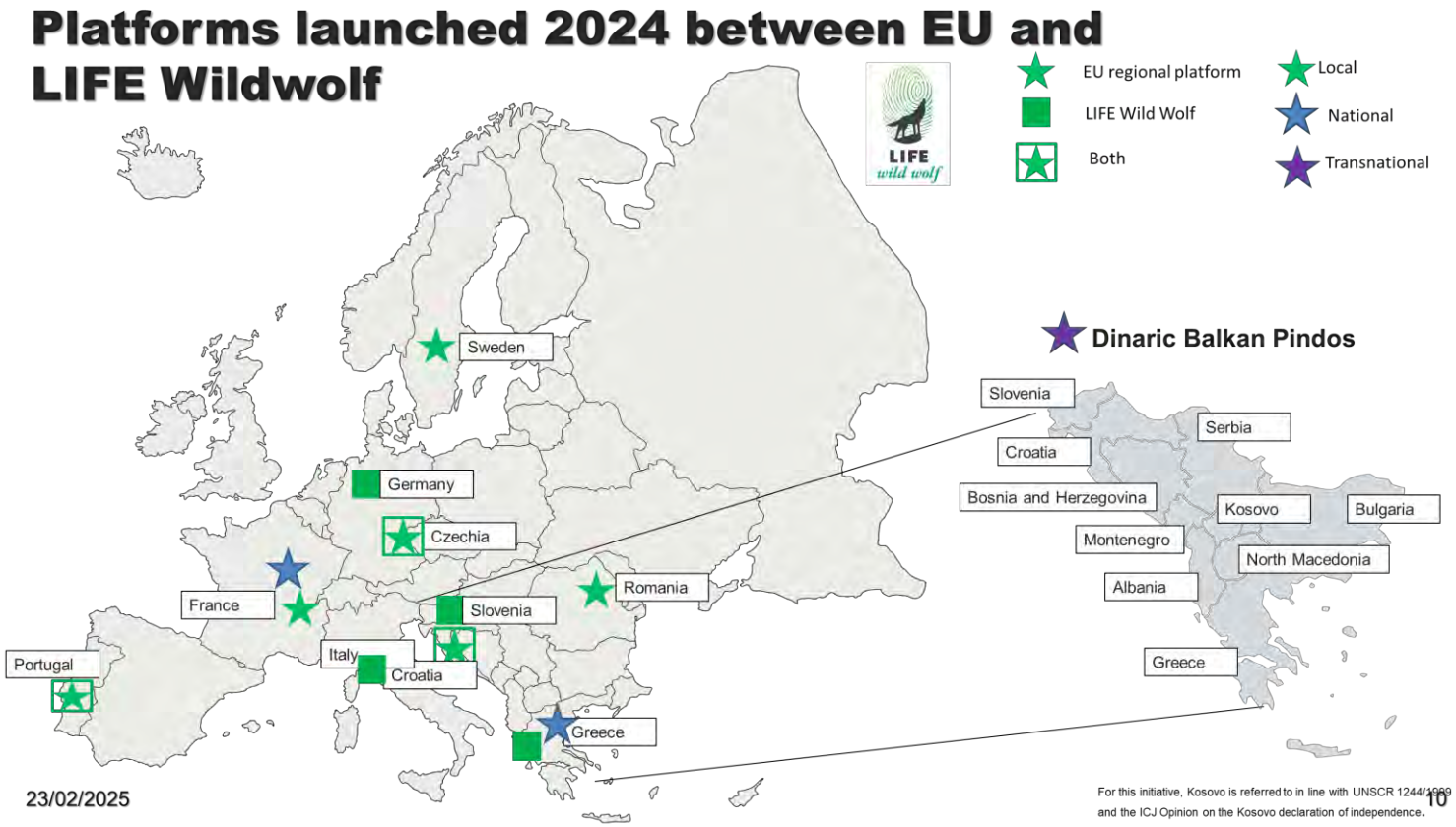

- Farmers, stock breeders, beekeepers, hunters, local and regional authorities, foresters, eNGOs, entrepreneurs in the tourism sector, Chambers of Commerce, Developmental Companies, etc.
- Multi-level governance: EU Platform, Greek National Platform, Local Platforms of LIFE ARCPROM, LBSC, LWW

European Platforms

- EU Platform on Coexistence between People and Large Carnivores (2014-)

CO-PRESIDENTS

MEMBERs

SECRETARIAT

- ELO - European Landowners' Organization
- FACE - The European Federation of Associations for Hunting & Conservation
- Joint representatives of Finnish and Swedish reindeer herders
- CIC - The International Council for Game and Wildlife Conservation
- IUCN – Species specialist group LCIE
- WWF European Policy Office
- EUROPARC Federation

- Regional Platforms (2018-)

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	Rodopi Mountain Range National Park	Prespa National Park	Northern Pindos National Park
No. of participatory processes (2021-2024)*	11 (6 Platforms; 5 Workshops)	11 (6 Platforms; 5 Workshops)	11 (6 Platforms; 5 Workshops)
No of participants**	240	177	159
No of questionnaires gathered	306	303	295

*Local Platforms for Human-Bear Coexistence; Workshops for Human-Bear Coexistence.
**Another 268 participants took part in three online workshops, where people from all three study areas could take part.

Human Dimensions Actions in LIFE ARCPROM

- Action C1. Stakeholder consultation and involvement
- ✓ 844 participants
- ✓ 33 participatory processes
- ✓ >25 participants per process
- Action D5 Follow-up surveys on the perception and behavior of the stakeholder groups
- ✓ 904 questionnaires gathered and analyzed

	Iteration	Gaps and inconsistencies identified
Electric fences	LIFE ARCPROM involved the installation and operation of electric fences to increase their availability and use by beekeepers, farmers and livestock breeders	Several bears in several locations managed to find ways to deal with the fence, for instance, by throwing branches over the cable, which led to the result that the fence lost its strength
	Local technicians in areas with bear presence started manufacturing electric fences in order to respond to the needs of local farmers and livestock breeders who suffered bear damages; the price of such fences was lower than imported fences.	Local technicians who managed to manufacture electric fences were not certified, which compromised considerably the scaling up of this initiative.
Livestock guarding dogs	LIFE ARCPROM implemented an action for establishing and supporting a volunteer network of livestock breeders for exchanging livestock guarding dogs.	Because of the relatively high risk of losing one's dogs to poisoned baits, many livestock breeders were quite reluctant to join the network for exchanging guarding dogs.
	LIFE ARCPROM implemented an action for producing and distributing an anti-poison first-aid kit to be used in poisoning events.	There were indications that the anti-poison first-aid kit could function as a counter-motive for effectively sanctioning the illegal use of poisoned baits.
Bear-proof garbage containers/bins	Using state funding, the staff of the Northern Pindos National Park, who were among the partners in the consortium of LIFE ARCPROM, decided to design and test a novel container prototype to foster their usability by rural residents (summer 2021); this new design was tested for waste that attracted bears, while other waste was disposed in conventional garbage bins.	• A contraction absorber was added in the design to address temperatures below zero expected in the winter period, increasing the total cost of the container • The novel design was calculated to increase time needed to collect waste to about one minute per container; a considerable operational delay. • The design necessitates a solid and flat surface to carry the weight of the bin.
	Bear-proof garbage containers were scaled up in LIFE ARCPROM; six additional containers were tested in different locations of Northern Pindos National Park (2022) with small modifications in the prototype to decrease cost to about 2200 Euros per item without compromising functionality.	• Iron prices doubled during the COVID pandemic; scaling up compromised by cost (2500 Euros per container) • More information campaigns and stakeholder synergies were needed for the proper integration of bear-proof garbage bins in waste management systems
	A final contract for procurement of 14 extra bear-proof containers was signed by LIFE ARCPROM partners in 2023 (4 for Northern Pindos National Park, 10 for Prespa National Park)	Rural residents in Prespa National Park presented examples of how bear eating habits may change over time, which can have implications for bear attraction to waste as well as bear habituation and approach to human settlements.

	Primary producers (livestock breeders and farmers)	Beekeepers	Resident-other	Employees of the Natural Environment Climate & Change Agency (NECCA)	Entrepreneurs and employees in the tourism sector
Strengths [ingroup aspects favoring (good practice in/agreement for) bear conservation and management]	Believed that stakeholder interaction in the Platform can influence wider stakeholder interaction	Optimistic about platform dynamics	Optimistic about platform dynamics	Valued Platforms for information credibility, reducing human-bear conflict, and local expectations	Believed that stakeholder interaction in the Platform can influence wider stakeholder interaction
Weaknesses [ingroup aspects hindering (good practice in/agreement for) bear conservation and management]	• Perceived human-bear conflict increasing • Pessimistic about platform dynamics • Concerns that Platforms may introduce stakeholder conflict	Perceived human-bear conflict increasing	Concerns that Platforms may introduce stakeholder conflict	Considerable fluctuation of perceived Platform outcomes and weaknesses	Peripheral role in stakeholder interaction
Opportunities [intergroup aspects favoring (good practice in/agreement for) bear conservation and management]	• Quite high percentages of good working relations and trust • Decreasing ingroup favoritism	Preference of working with and trusting primary producers	Balanced preference of working with stakeholder groups and trust	Quite high percentages of good working relations and trust	Balanced preference of working with stakeholder groups and trust
Threats [inter-group aspects hindering (good practice in/agreement for) bear conservation and management]	• Increasing time trend of stakeholder conflict • Lack of common and practical action	• Increasing time trend of stakeholder conflict • Challenging intergroup collaboration • Persistent trust deficit • Lack of common and practical action	Lack of common and practical action	Lack of common and practical action	Lack of common and practical action

Transition

- From documenting and targeting knowledge, beliefs, attitudes, and behavior to co-creating project deliverables with stakeholders
- Participatory processes make use of social learning templates to scaffold stakeholder collaboration and joint action
- More than words: Participatory processes can drive social experimentation and optimization of tools and technologies
- Positioning for environmental issues and conflicts cannot be easily delegated; representative democracy “lacking”

Implications for research and policy

- Human dimensions are not just about organizing meetings and distributing questionnaires: Optimization, co-creation, social experimentation
- Participatory processes produce novel products (social learning products), knowledge, and skills (transversal skills, soft skills, 21st century skills)
- Participatory processes need to be pronounced in after-LIFE plans to facilitate social innovation in the European countryside
- Participatory processes can be employed to sustain primary sector activities in post-Fordist rural economies

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CALLISTO

- 14:50-15:05: Lessons learned from participatory processes in LIFE ARCPROM: Implications for stakeholder engagement in large carnivore conservation and management, Dr. Chatzinakos, Callisto
- 15:05-15:20: Small-technologies, social innovation, and human-wildlife coexistence in rural Greece, Dr. Bormpoudakis, Callisto
- 15:20-15:35: Stakeholder involvement in the Maiella National Park during the LIFE ARCPROM: methods, highlights and results, Anna Crimella, MNP
- 15:35-15:50 Human-large carnivores coexistence: the context matters! Differences between Alps and Apennines in Italy, Anna Crimella, MNP
- 15:50-16:10 Interactive session: Methods and tools for participatory processes in large carnivore conservation and management, Callisto HD Group, Dr. Chatzinakos
- 16:10-16:30 Interactive session: Emerging tools and technologies at the wildlife-livestock interface, Callisto HD Group, Dr. Bormpoudakis
- 18:30-19:15 Keynote speech: Cultivating Conviviality in Human-Wildlife Relations: Challenges and Opportunities Prof. Fletcher and Prof. Toncheva

Tools

Interactive sessions by Dr. Chatzinakos and Dr. Bormpoudakis

Conviviality

Keynote by Prof. Fletcher and Prof. Toncheva

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LESSONS LEARNED FROM PARTICIPATORY PROCESSES IN LIFE ARCPROM:

IMPLICATIONS FOR STAKEHOLDER ENGAGEMENT IN LARGE CARNIVORE CONSERVATION AND MANAGEMENT

Dr. Giorgos Chatzinakos
Human Dimensions Group

CALLISTO


Trail Network
Prefecture of Ioannina
ZAGORI
ΓΕΩΠΑΡΚΟ
ΒΙΚΟΥ - ΑΩΟΥ
GEOPARK
ΕΘΝΙΚΟ ΠΑΡΚΟ ΒΟΡΕΙΑΣ ΠΙΝΔΟΥ
ΚΕΝΤΡΟ ΠΛΗΡΟΦΟΡΗΣΗΣ
NATIONAL PARK OF NORTHERN PINDOS
INFORMATION CENTRE

Being in the Field…

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	Rodopi Mountain Range National Park	Prespa National Park	Northern Pindos National Park
No. of participatory processes (2021-2024)*	11 (6 Platforms; 5 Workshops)	11 (6 Platforms; 5 Workshops)	11 (6 Platforms; 5 Workshops)
No of participants**	240	177	159
No of questionnaires gathered	306	303	295

*Local Platforms for Human-Bear Coexistence; Workshops for Human-Bear Coexistence.
**Another 268 participants took part in three online workshops, where people from all three study areas could take part.

Human Dimensions Actions in LIFE ARCPROM

- **Action C1:** Stakeholder Consultation and Involvement
  - ✓ 844 participants
  - ✓ 33 events
- **Action D5:** Follow-up surveys on the perception and behaviour of the stakeholder groups

✓ 904 questionnaires gathered and analysed

Central Platform Themes

- Managing **human-bear conflicts** & bear deterrence methods
- The use of **electrified fencing** and other damage prevention measures
- The need to improve ELGA's **compensation schemes**
- **Local Development Strategies** & Smart Villages
- The **certification** of bear-friendly products
- The management of **fruit trees**

Open Events and Workshops

- ✓ In community spaces
- ✓ Communicating Results
- ✓ Community Feedback

Linking to other Actions and Projects.

- ✓ A3 & C10: Bear Friendly Certifications
- ✓ EcoVARIETY
- ✓ C5, C7 & C8

RESPECT
FOR WILD LIFE
& BIODIVERSITY

The community is the expert …

ΦΕΣΤΙΒΑΛ ΒΩΒΟΥΣΑΣ
ΦΒΣ
VOVOUSA FESTIVAL

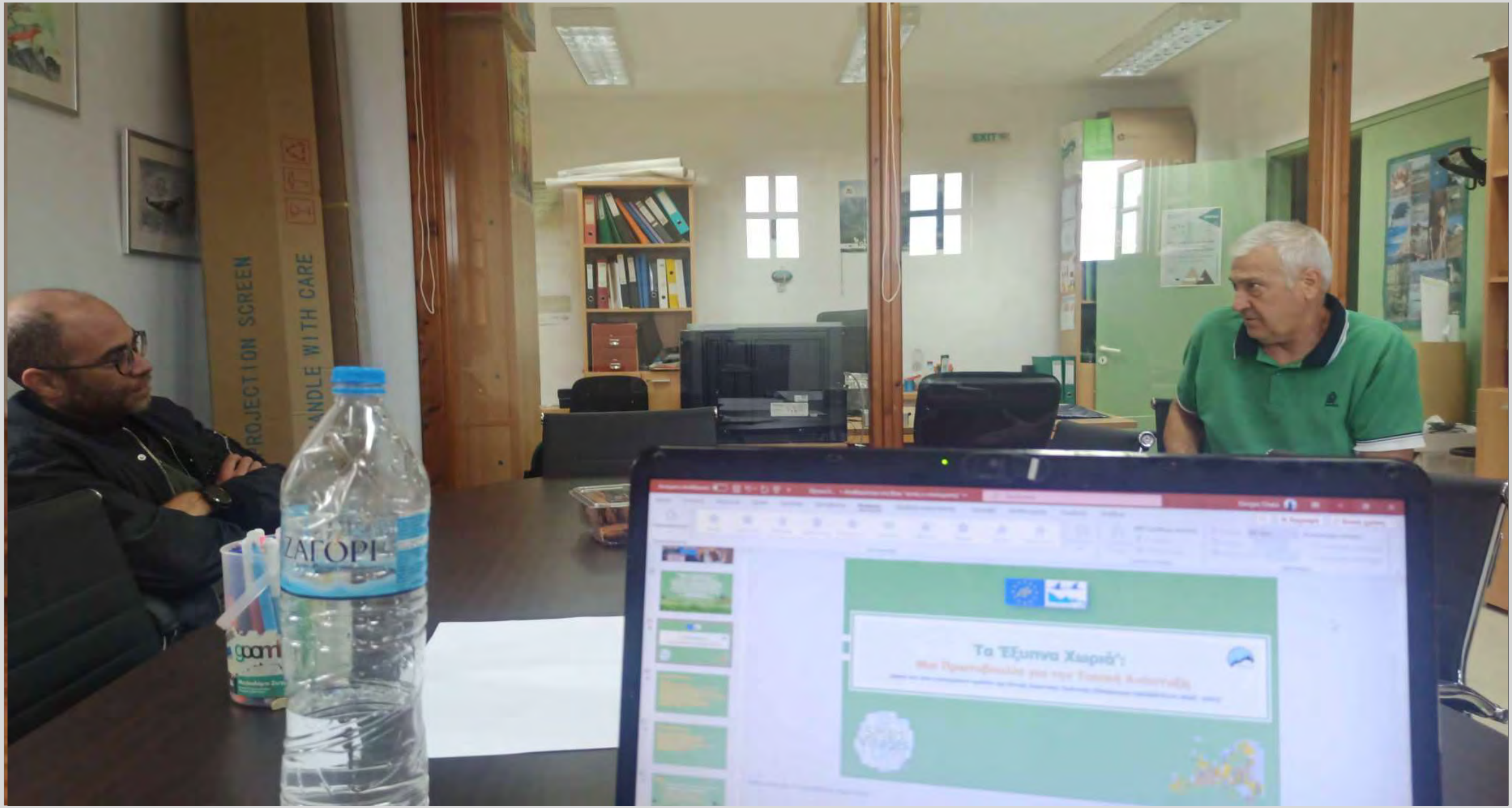
The Guardians of the Mountains:

Sustainable Coexistence of Humans and Bears in Northern Pindos


ΔΗΜΟΣ
ΖΑΓΟΡΙΟΥ
2023

Limitations

- ✓ Lack of Participation
- ✓ Lack of Awareness
- ✓ Lack of Day2Day Presence
- ✓ 3 Parks – over 9.800 km
- ✓ Different Conflicts


PROJECTION SCREEN
HANDLE WITH CARE
ΖΑΓΟΡΙ
Τα Έξυπνα Χωριά:

Lessons learned:

- Recognition of the complexity of conflicts
- Variation according to the local specificities and needs of each region
- Challenges in the implementation of protection measures
- Cooperation and involvement of stakeholders
- Compensation of producers by ELGA and improvement of the process
- Use of electric fences and prevention measures
- Smart Villages and LEADER
- Cultural and Cooperative Actions
- Education and awareness-raising of local communities

Conclusions:

- **Coexistence Platforms** can make an important contribution to improving cooperation between stakeholders and local communities
- **Gaps in coordination** between local and central authorities delayed implementation of proposed measures.
- The absence of a **culture of participation** and the **lack of continuous monitoring** of the results of the meetings hampered the effectiveness of the consultation.
- Although the formulation of strategies for human-bear coexistence was considered positive, the practical implementation of the proposals requires **better coordination, more time and additional financial resources.**

THANK YOU FOR YOUR ATTENTION!

Dr. Giorgos Chatzinakos
Human Geographer

CALLISTO

SMALL-TECHNOLOGIES, SOCIAL INNOVATION, AND HUMAN-WILDLIFE COEXISTENCE IN RURAL GREECE

Dr. Dimitris Bormpoudakis

CALLISTO

Context

Rural decline and depopulation

- Loss of population, scarcity of employment opportunities, and insufficient infrastructure.
- Fewer people remain to manage farmland or livestock.

Resurgence of bears and large carnivores

- Bears are reclaiming their ranges, increasing the likelihood of conflict.
- Damages to livestock, beehives, and crops add pressure to already struggling rural communities, often leading to increased human wildlife conflicts

Urgency and policy shifts

- European-level debates around changing the protection status of certain species signal a need to reconcile conservation objectives with local livelihoods.

The challenge: How can communities and wildlife coexist sustainably in marginalized areas?

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Overall question

Under what conditions can technologies effectively foster human-bear (and other carnivore) coexistence?

What is the role of social innovation?

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The 3 approaches to technology and HWC

Technical	Technology is the **solution** to coexistence
Critical	Technology-as-**barrier** to coexistence
Pluralism	"**Pluriversal** technologies"*

*** Millner and Amador-Jimenez, 2024**

1. It is understood **smart** (or digital, algorithmic, robotic, etc.)
2. It is **innovative in the dictionary sense of the term**
3. It is brought-in **from outside**

*** With exceptions, e.g. Essen et al. 2023, Poerting 2023**







Technology & coexistence

- Social innovation
- Smart Villages - Rurality
- Small / Degrowth technologies
- Political ecology of conservation technology

Technology & coexistence

Place it in a European **rural socio-ecological context** – rural decline, infrastructural gaps

Reconfigured “smartness” vis-à-vis smart rurality and smart villages – **beyond “digital” smartness**

Participation enables **collective memory**

Socio-technical re-use **beyond innovation**

Experimental adaptation

Electric fences

Livestock guarding dogs

Bear-proof bins

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	Rodopi Mountain Range	Prespa	Northern Pindos
Surface area (ha)	173115	32700	196974
Bear population	~70	~175	~120
Human population	8779	3787	1570
No. of participatory processes (2021-2024)*	11 (6 Platforms; 5 Workshops)	11 (6 Platforms; 5 Workshops)	11 (6 Platforms; 5 Workshops)
No of participants**	240	177	159

***Another 268 participants took part in three online workshops, where people from all three study areas could take part.**

	Iterations	Gaps and inconsistencies identified
Electric fences	LIFE ARCPROM involved the installation and operation of electric fences to increase their availability and use	Several bears in several locations managed to find ways to deal with the fence
	Local technicians started manufacturing electric fences to respond to bear damages; the price of such fences was lower than imported fences.	Local technicians were not certified, which compromised considerably the scaling up of this initiative.
Livestock guarding dogs	LIFE ARCPROM implemented an action for establishing and supporting a volunteer network of livestock breeders for exchanging livestock guarding dogs.	Because of the relatively high risk of losing one's dogs to poisoned baits, many livestock breeders were quite reluctant to join the network
	LIFE ARCPROM implemented an action for producing and distributing an anti-poison first-aid kit to be used in poisoning events.	There were indications that the anti-poison first-aid kit could function as a counter-motive for effectively sanctioning the illegal use of poisoned baits.

SIMRA framework

Social Innovations in Marginalized Rural Areas – SIMRA: SI is "the reconfiguring of social practices, in response to societal challenges, which seeks to enhance outcomes on societal well-being and necessarily includes the engagement of civil society actors".

Iterations	Electric fences	Gaps and inconsistencies identified
Iteration 1	**Electric fences** were included as a damage prevention measure in the Rural Development Programme of Greece (2007-2013); beneficiaries were registered farmers, who were subsidized to purchase and install an electric fence	**Low uptake** because information and outreach campaigns were not properly designed and implemented by key stakeholders Many primary producers were **not eligible** for subsidies because they were **not registered as professional farmers (beekeepers) or their barns were not licensed (livestock farmers)**
Iteration 2	Additional funding schemes were implemented to increase use of electric fences by primary producers (LIFE projects like LIFE ARCPROM) Natural Environment & Climate Change Agency obtained electric fences to lend them to local users employing a list of selection or rotation criteria .	Fences with a grounding imported from Germany, which was specified for **different soils** and **could not maintain the impulse energy** needed to deter the bear **Improper installation** of electric fences **Bear agency** - several bears managed to find ways to deal with the fence, for instance, by throwing branches over the cable
Iteration 3	Technicians in areas started manufacturing cheaper electric fences to respond to the needs of local primary producers.	Local technicians were **not certified**, which compromised considerably the scaling up of this initiative
Iteration 4	Electric fences have been included as a damage prevention measure in the initial drafts of the National Action Plan for the Brown Bear in Greece	Consideration if electric fences will be **included in the draft of the Strategic Plan for the Common Agricultural Policy in Greece**

Electric fences

Designed to deliver a mild electric shock that deters bears from crossing the boundary. When properly installed, fences significantly reduce livestock and beehive damage.

Local adaptations:
– Grounding systems need modification to account for different soil moisture conditions.
– New users sometimes installed fences incorrectly (e.g., only two lines, fence too high above the ground), leading to failures.

Iterative refinements:
– Early subsidy programs had low uptake and technical oversight.
– Ongoing local manufacturing initiatives showed promise but faced certification barriers.

Main Takeaway
– Training, clear installation guidelines, and soil-specific adjustments are essential for success.

Iterations	Livestock Guarding Dogs	Gaps and inconsistencies identified
Iteration 1	The Greek environmental non-governmental organization **Arcturos initiated a programme** for breeding and redistributing to farmers the Greek LGDs (Greek shepherd dog) in 1998	There were farmers who **could wait quite long** to get a puppy, in some cases, for more than two years.
Iteration 2	LGDs were **subsidized for registered farmers** as a measure from preventing damage from large carnivores in the Rural Development Programme of Greece (2007-2013)	Purchasing of LGDs never materialized due to the **lack of a reliable mechanism for genetic profiling and genetic certification of Greek guardian** dog breeds as well as the lack of any competent certification authority.
Iteration 3	LIFE AMYBEAR and LIFE ARCPROM implemented actions for establishing and supporting a volunteer network of livestock breeders for exchanging LGDs LIFE AMYBEAR and LIFE ARCPROM implemented actions for producing and distributing to livestock breeders and hunters an anti-poison first-aid kit to be used in poisoning events until the poisoned dog was taken over by a veterinarian	**Intergroup conflict between livestock breeders and hunters** increased **risk of losing** LGDs **to poisoned baits.** Many LGDs end up as **stray dogs,** a considerable safety threat for rural residents, bicyclists, hikers, or other tourists walking through rural and forested areas There were indications that the anti-poison first-aid kit could function as a **counter-motive for effectively sanctioning** the illegal use of poisoned baits; in this regard, this kit could exacerbate a local **omerta** existing around poisoned baits
Iteration 4	LGDs have been included as a damage prevention measure in the initial drafts of the National Action Plan for the Brown Bear in Greece.	Consideration if LGDs will be **included in the draft of the Strategic Plan for the Common Agricultural Policy in Greece**

Local Adaptations:
– Bins must be strong enough to deter bears, yet easy for residents and waste companies to open.
– Time for collecting trash is longer, which raises cost and logistical challenges.

Iterative refinements:
– Incorporation of feedback on temperature ranges, simpler latches, and flat surfaces to ensure stability.
– Placement matters: if bins are too far from households, residents will dump trash elsewhere.

Main takeaway:
– Strategic placement and integration with local waste management practices is paramount.





Bear-proof bins

Garbage is a strong attractant for bears, bringing them into close contact with communities and increasing human-wildlife conflict.

Iterations	Bear-proof bins	Gaps and inconsistencies identified
Iteration 1	**Bear-proof bins** introduced as an action of LIFE AMYBEAR to prevent bears from having access to anthropogenic food sources, being habituated and approaching human settlements.	Bear-proof bins **increased time to collect damage** not **adequately integrated** in the existing waste management system and were underused. There were stakeholder concerns whether bear-proof garbage containers/bins could redirect bear routes and increase the risk of damages caused by bears and human safety risks elsewhere
Iteration 2	Using state funding, the staff of the Northern Pindos National Park, decided to **design and test a novel** container prototype to foster their usability by rural residents (summer 2021); this new design was tested for waste that attracted bears, while other waste was disposed in conventional garbage bins.	A **contraction absorber** was added to address temperatures below zero (winter period). The novel design was estimated to increase **operational delays** (~1 min per container – considered significant) The design necessitates a solid and flat surface to carry the weight of the bin.
Iteration 3	Bear-proof bins were scaled up in LIFE ARCPROM; six additional containers were tested in different locations of Northern Pindos National Park (2022) with small modifications in the prototype to decrease cost to about 2200 Euros per item.	Iron **prices doubled** during the COVID pandemic; scaling up compromised by **cost** (2500 Euros per container). More information campaigns and stakeholder synergies were needed
Iteration 4	A final contract for procurement of 14 new bear-proof containers was signed by LIFE ARCPROM partners (2023), another 4 for Northern Pindos National Park and 10 for Prespa National Park.	**Bear agency** - Rural residents in Prespa National Park presented examples of how **bear eating habits may change over time**, which can have implications for bear attraction to waste and approach to human settlements

Local Adaptations:
– LIFE projects encouraged farmers to exchange puppies, share best practices, and conduct on-the-ground testing.
– Illegal poisoned baits linked to tension between livestock farmers and hunters, discourage uptake.

Iterative refinements:
– Anti-poison first-aid kits were introduced to mitigate dog mortality but can complicate local “omerta” about baiting.

Main takeaway:
– Social networks that breed and circulate well-trained dogs strengthen damage prevention, but conflict resolution is needed to reduce poisoning risks.

Livestock Guarding Dogs

Traditional but effective tool. Reintroducing or breeding traditional Greek shepherd dogs helps deter bears from preying on livestock. Dogs remain one of the oldest and most proven methods of preventing large carnivore attacks.

Implications for research and policy

Participatory iterative processes

- All three "small technologies" require continual trial and error, local adaptation, and **community buy-in** to succeed.
- No single solution fits every context—engagement with farmers, beekeepers, local government, and other stakeholders is crucial – **ready-made solutions rarely work.**

Social innovation in action

- Combining technical fixes with participatory processes and helps communities refine technologies over time - harnesses "**collective intelligence**"
- Traditional or low-tech solutions (e.g., guardian dogs) can be as "smart" as high-tech ones when communities truly own and adapt them – **small-but-smart technologies**

Human-bear coexistence demands:

- **Integrated, landscape-level approaches**, rather than individual/ local adoption.
- **Genuine local involvement**, long-term **coordination**, and **conflict sensitivity** (relevant to programmes like LEADER or new Rural Development measures).
- Synergy between **small-scale technology solutions and active participation** from local communities; this approach can strengthen rural resilience in marginalized areas.

Future plans

- Beyond small technologies: what about **Smart Earth** and **Smart Agriculture technologies**? AI, Big Data, Earth Observation, sensors, even robots?

- Studying coexistence technology **adoption patterns**

- **Scaling-up** to landscape / socio-ecologically meaningful scale

- Conceptualising and co-developing **convivial technologies** for human-carnivore coexistence

Metal construction in Makrino, Northern Pindos NP, Zagori

CoCo
Co-creating Coexistence

Co-creating coexistence: Advancing policies, practices, and stakeholder engagement for integrating wildlife and livestock into sustainable multi-functional landscapes in Europe

WP5: Emerging tools and technologies for rapid assessment and management of the wildlife-livestock interface

A critical assessment of their documented or potential utility and application in real life pastoralist operations.

Task breakdown	**Methodology**
1. Identify the full variety of technologies	Desk study + Stakeholder feedback
2. Construct a typology	Desk study + Stakeholder feedback
3. Search for any evidence, documentation or experience of their utility in the field	Desk study + Stakeholder feedback + pastoralist interviews

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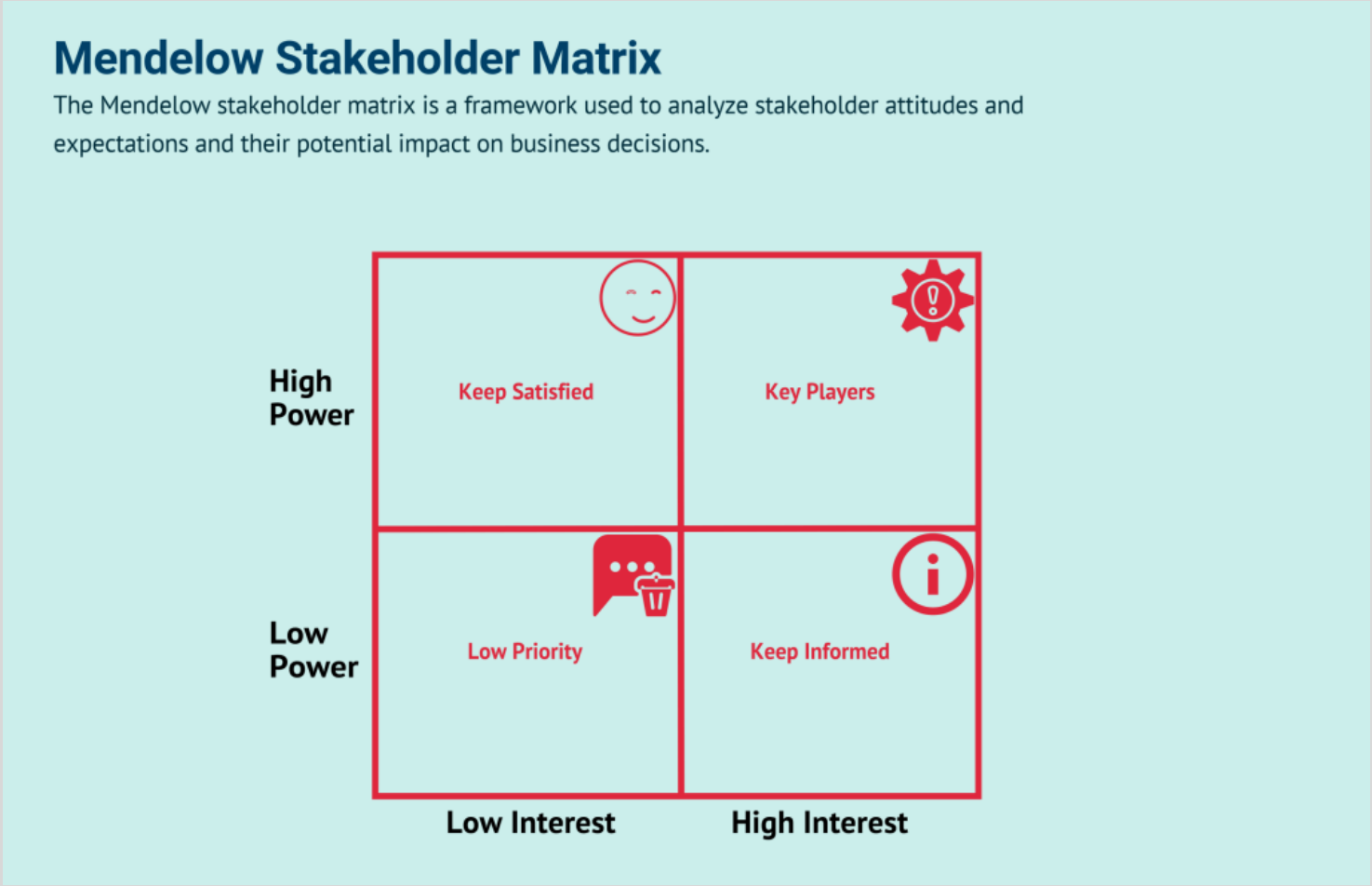
STAKEHOLDER INVOLVEMENT IN THE MAIELLA NATIONAL PARK DURING THE LIFE ARCPROM: METHODS, HIGHLIGHTS AND RESULTS

Anna Crimella, MNP

Who is invited to participate in a participatory process?



Stakeholders of the ARCPROM Project in the Maiella National Park

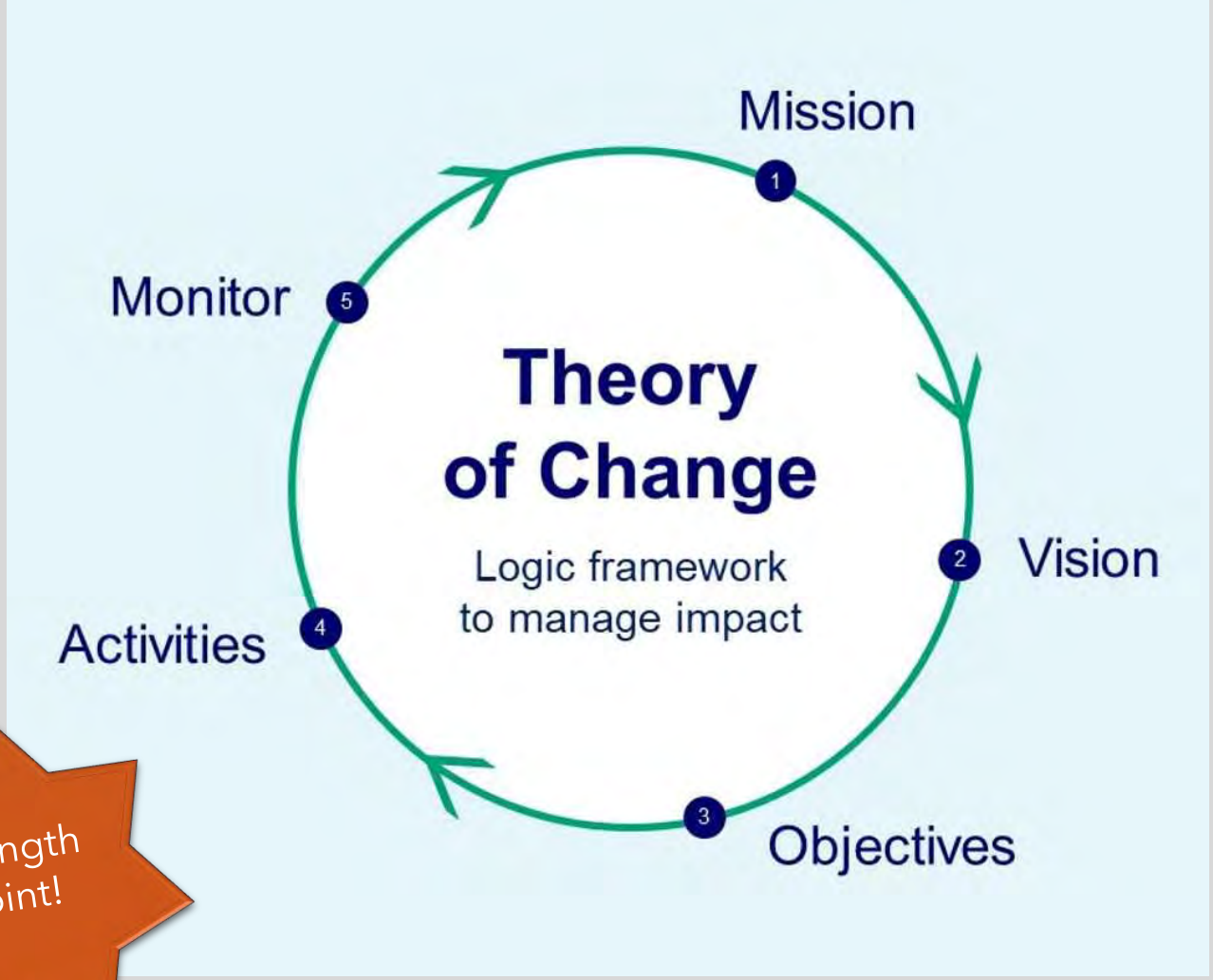
- Relevant territorial authorities (Abruzzo Region, Park Community, affected Municipalities, Park Officials)
- Surveillance bodies
- Veterinary ASL
- Associations of beekeepers and truffle hunters
- Agricultural associations
- Tourism operators
- Environmental organizations recognized by MITE (formerly MASE) working in the project area
- Groups offering environmental education services
- Hunting associations

How did we work in the Maiella National Park?

Theory of Change

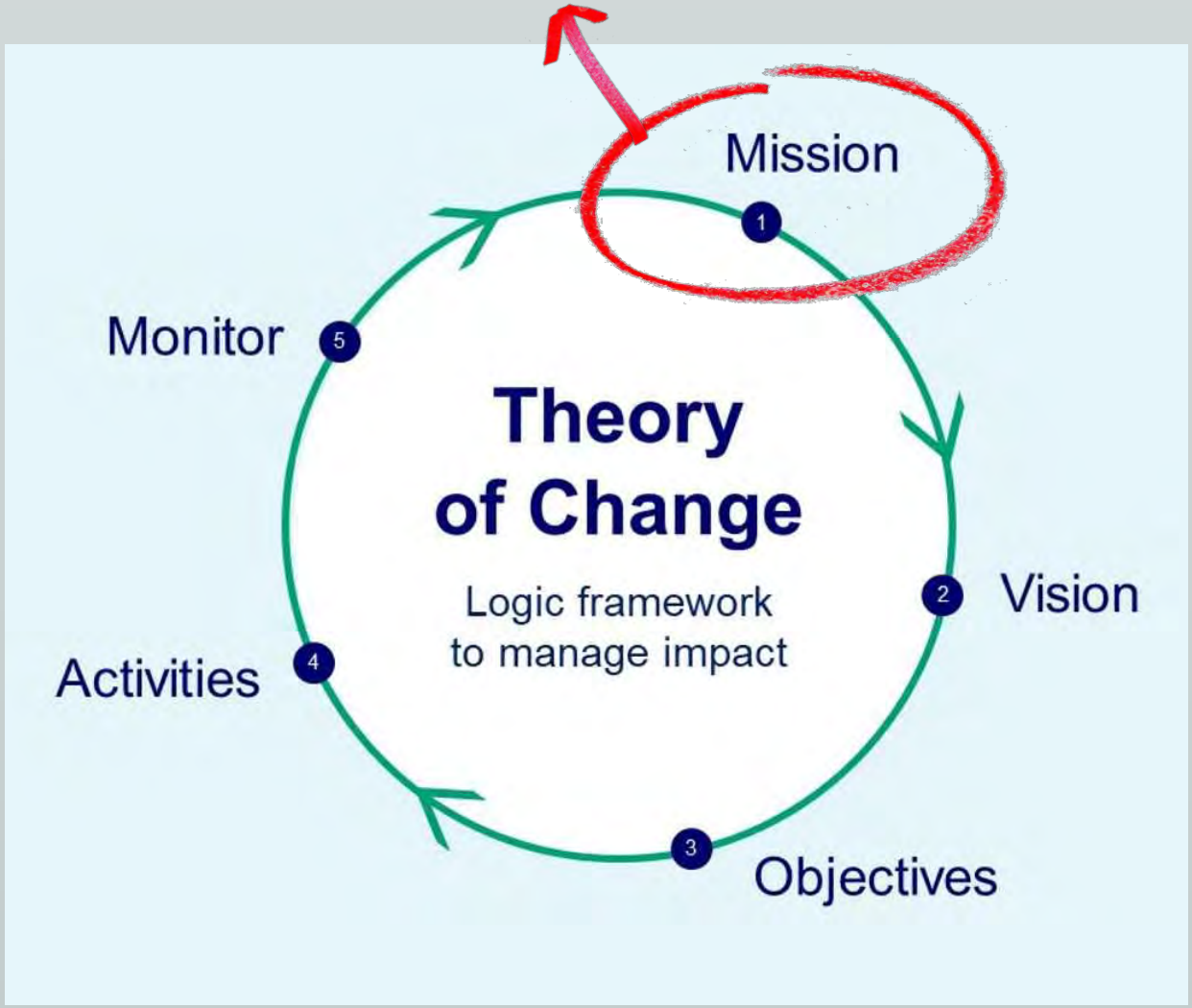
The Theory of Change is a rigorous and participatory process through which organization members and stakeholders, during planning, articulate their long-term goals and identify the conditions they deem necessary to achieve them.

These conditions are represented in predefined **outcomes** and illustrated in a **causal model (results chain).**



Strength point!

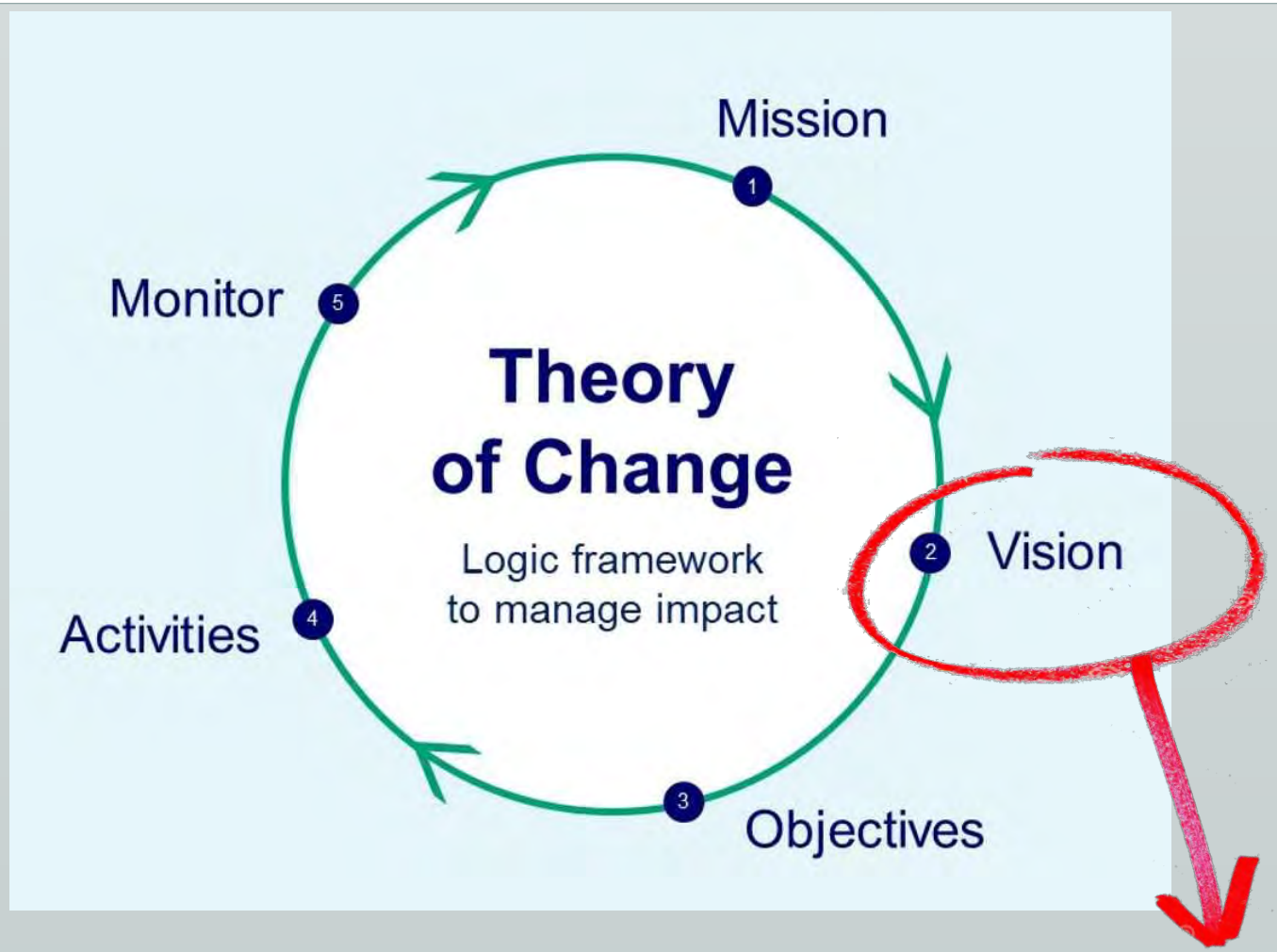
Designing and testing
effective coexistence strategies between
human activities and bears
in the Maiella National Park area



Who defines the Mission?

In general, the project organizers, those who identify the need to initiate a participatory process.

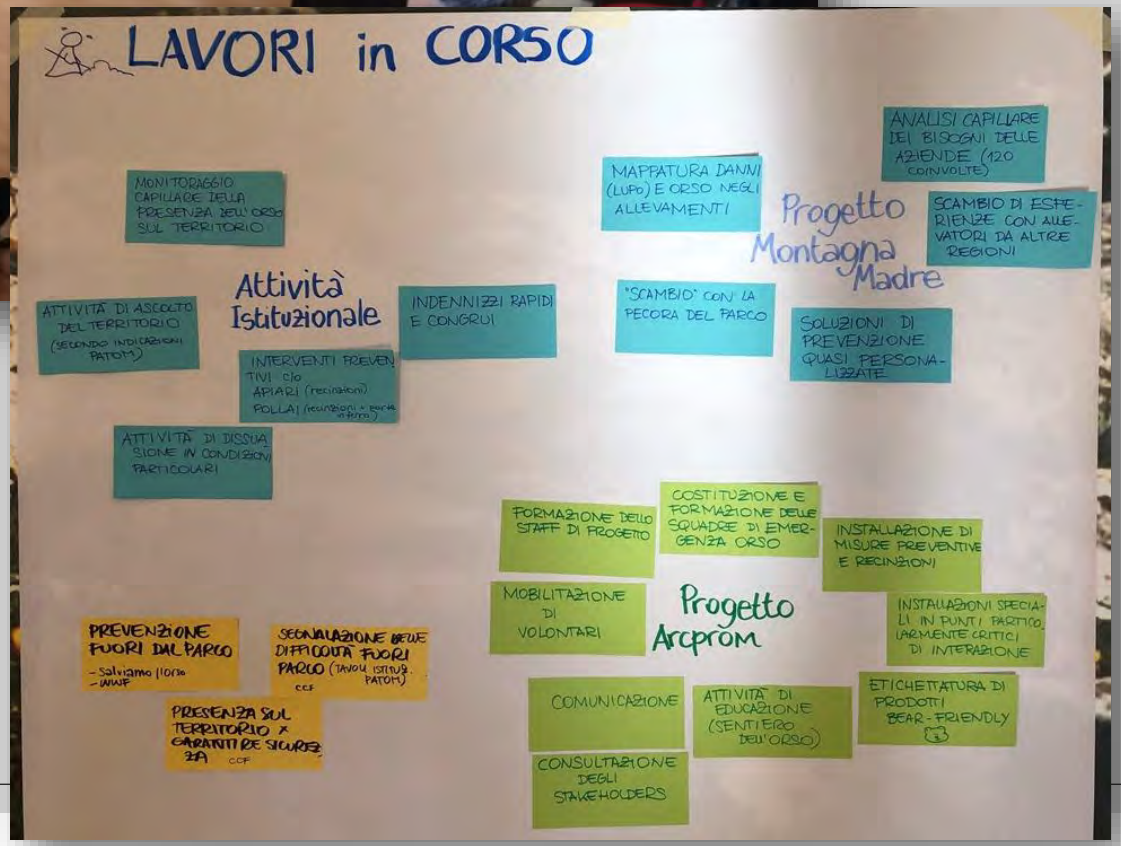
→ **The Mission is defined within the Life ARCPROM Project.**



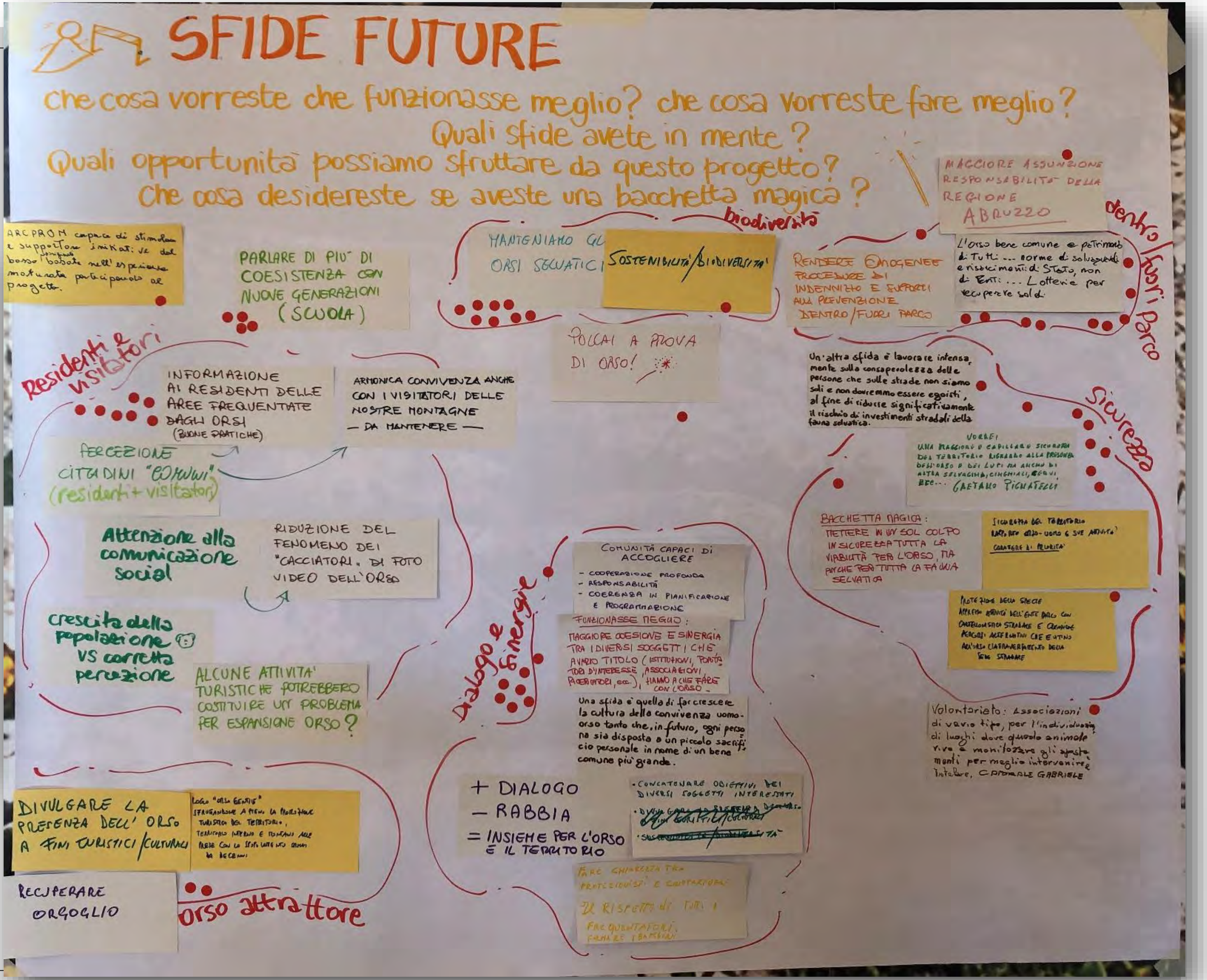
The Apennine brown bear lives in the wild in a territory shared with humans.

Who defines the Vision?

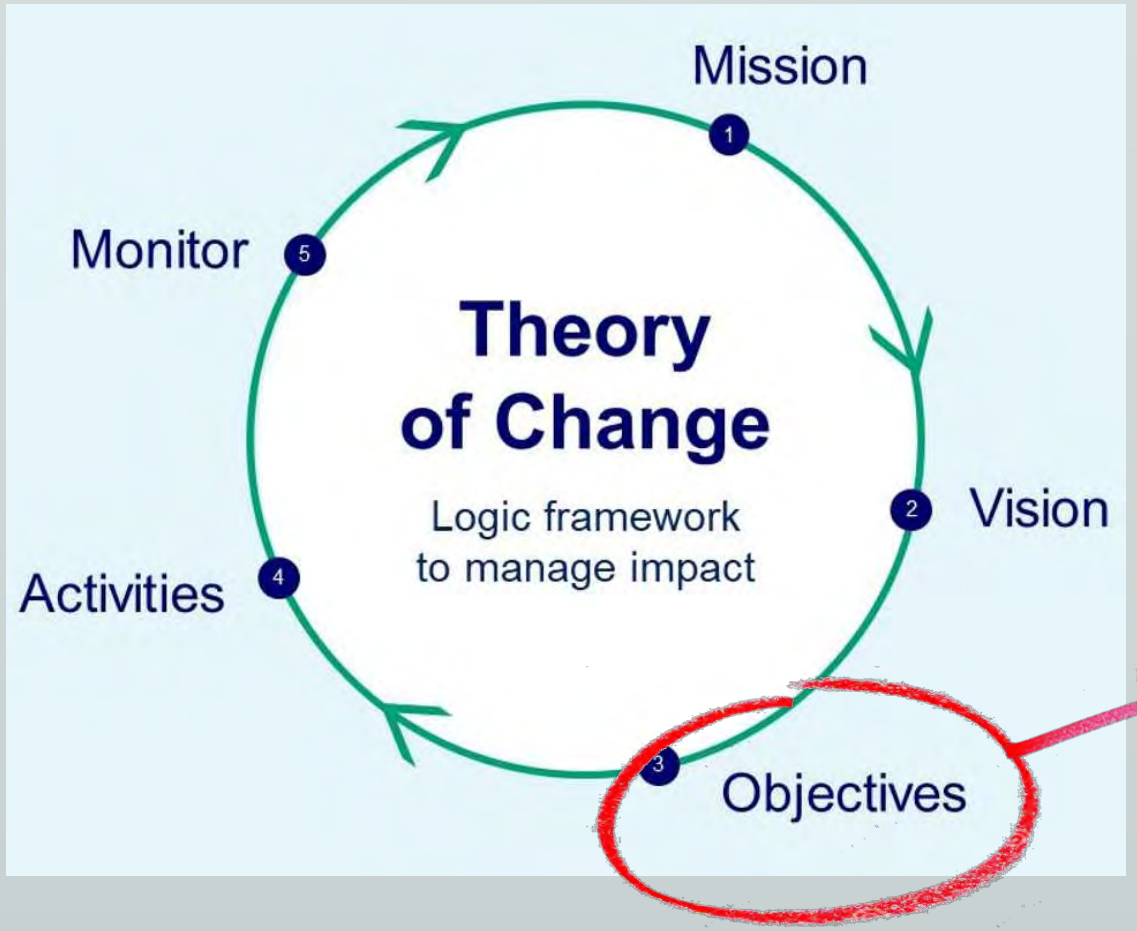
Those who participate in the participatory process (stakeholders). Everyone with an interest in the topic and legitimate expectations for their future concerning the addressed issue.


LAVORI in CORSO
MONITORAGGIO CAPILLARE DELLA PRESENZA DELL'ORSO SUL TERRITORIO
ATTIVITÀ DI ASCOLTO DEL TERRITORIO (SECONDO INDICAZIONI PATOM)
Attività Istituzionale
INTERVENTI PREVENTIVI c/o APIARI (recinzioni) POLLAI (recinzioni + porte a prova d'orso)
ATTIVITÀ DI DISSUASIONE IN CONDIZIONI PARTICOLARI
INDENNIZZI RAPIDI E CONGRUI
MAPPATURA DANNI (LUPO) E ORSO NEGLI ALLEVAMENTI
ANALISI CAPILLARE DEI BISOGNI DELLE AZIENDE (120 COINVOLTE)
Progetto Montagna Madre
SCAMBIO DI ESPERIENZE CON ALLEVATORI DA ALTRE REGIONI
"SCAMBIO" CON LA PECORA DEL PARCO
SOLUZIONI DI PREVENZIONE QUASI PERSONALIZZATE
PREVENZIONE FUORI DAL PARCO
- Salviamo l'Orso
- WWF
SEGNALAZIONE DELLE DIFFICOLTÀ FUORI PARCO (TAVOLI ISTITUZ. PATOM)
CCF
PRESENZA SUL TERRITORIO X GARANTIRE SICUREZZA
CCF
FORMAZIONE DELLO STAFF DI PROGETTO
COSTITUZIONE E FORMAZIONE DELLE SQUADRE DI EMERGENZA ORSO
INSTALLAZIONE DI MISURE PREVENTIVE E RECINZIONI
MOBILITAZIONE DI VOLONTARI
Progetto Arcprom
INSTALLAZIONI SPECIALI IN PUNTI PARTICOLARMENTE CRITICI DI INTERAZIONE
COMUNICAZIONE
ATTIVITÀ DI EDUCAZIONE (SENTIERO DELL'ORSO)
ETICHETTATURA DI PRODOTTI BEAR-FRIENDLY
CONSULTAZIONE DEGLI STAKEHOLDERS

SFIDE FUTURE



SFIDE FUTURE
Che cosa vorreste che funzionasse meglio? Che cosa vorreste fare meglio?
Quali sfide avete in mente?
Quali opportunità possiamo sfruttare da questo progetto?
Che cosa desidereste se aveste una bacchetta magica?
PARLARE DI PIU' DI COESISTENZA CON NUOVE GENERAZIONI (SCUOLA)
MANTENIAMO GLI ORSI SELVATICI
SOSTENIBILITÀ/BIODIVERSITA'
biodiversità
MAGGIORE ASSUNZIONE RESPONSABILITA' DELLA REGIONE ABRUZZO
RENDERE OMOGENEE PROCEDURE DI INDENNIZZO E SUPPORTI ALLA PREVENZIONE DENTRO/FUORI PARCO
L'orso bene comune e patrimonio di Tutti ... norme di salvaguardia e risarcimenti di Stato, non di Enti: ... Lotterie per recuperare soldi
dentro/fuori Parco
Residenti e visitatori
INFORMAZIONE AI RESIDENTI DELLE AREE FREQUENTATE DAGLI ORSI (BUONE PRATICHE)
ARMONICA CONVIVENZA ANCHE CON I VISITATORI DELLE NOSTRE MONTAGNE — DA MANTENERE —
POLLAI A PROVA DI ORSO!
PERCEZIONE CITTADINI "COMUNI" (residenti + visitatori)
Attenzione alla comunicazione social
RIDUZIONE DEL FENOMENO DEI "CACCIATORI" DI FOTO VIDEO DELL'ORSO
crescita della popolazione VS corretta percezione
ALCUNE ATTIVITA' TURISTICHE POTREBBERO COSTITUIRE UN PROBLEMA PER ESPANSIONE ORSO?
Un'altra sfida è lavorare intensamente sulla consapevolezza delle persone che sulle strade non siamo soli e non dovremmo essere egoisti, al fine di ridurre significativamente il rischio di investimenti stradali della fauna selvatica.
Sicurezza
VORREI UNA MAGGIORE E CAPILLARE SICUREZZA DEL TERRITORIO LEGATA ALLA PRESENZA DELL'ORSO E DEI LUPI MA ANCHE DI ALTRA SELVAGGINA, CINGHIALI, CERVI, ECC... GAETANO PIGNATELLI
BACCHETTA MAGICA: METTERE IN UN SOL COLPO IN SICUREZZA TUTTA LA VIABILITÀ PER L'ORSO, MA ANCHE PER TUTTA LA FAUNA SELVATICA
Dialogo e sinergie
COMUNITÀ CAPACI DI ACCOGLIERE
- COOPERAZIONE PROFONDA
- RESPONSABILITÀ
- COERENZA IN PIANIFICAZIONE E PROGRAMMAZIONE
FUNZIONASSE MEGLIO: MAGGIORE COESIONE E SINERGIA TRA I DIVERSI SOGGETTI CHE A VARIO TITOLO (ISTITUZIONI, PORTATORI D'INTERESSE, ASSOCIAZIONI, RICERCATORI, ecc.), HANNO A CHE FARE CON L'ORSO.
Una sfida è quella di far crescere la cultura della convivenza uomo-orso tanto che, in futuro, ogni persona sia disposta a un piccolo sacrificio personale in nome di un bene comune più grande.
Volontariato: Associazioni di vario tipo, per l'individuazione di luoghi dove questo animale vive e monitorare gli spostamenti per meglio intervenire e tutelare. CARDINALE GABRIELE
DIVULGARE LA PRESENZA DELL'ORSO A FINI TURISTICI/CULTURALI
RECUPERARE ORGOGLIO
orso attrattore
+ DIALOGO
— RABBIA
= INSIEME PER L'ORSO E IL TERRITORIO
• CONCATENARE OBIETTIVI DEI DIVERSI SOGGETTI INTERESSATI



- There is **management consistency** inside and outside the Park.
- **Knowledge and awareness** are widespread among the local community (residents and tourists).
- Situations that make the bear accustomed to human presence are **mitigated and controlled**.
- The bear's habitat is **protected**.

How are targets/objectives defined?

Based on the macro-themes composing the vision for the future, stakeholders engage in a detailed analysis.

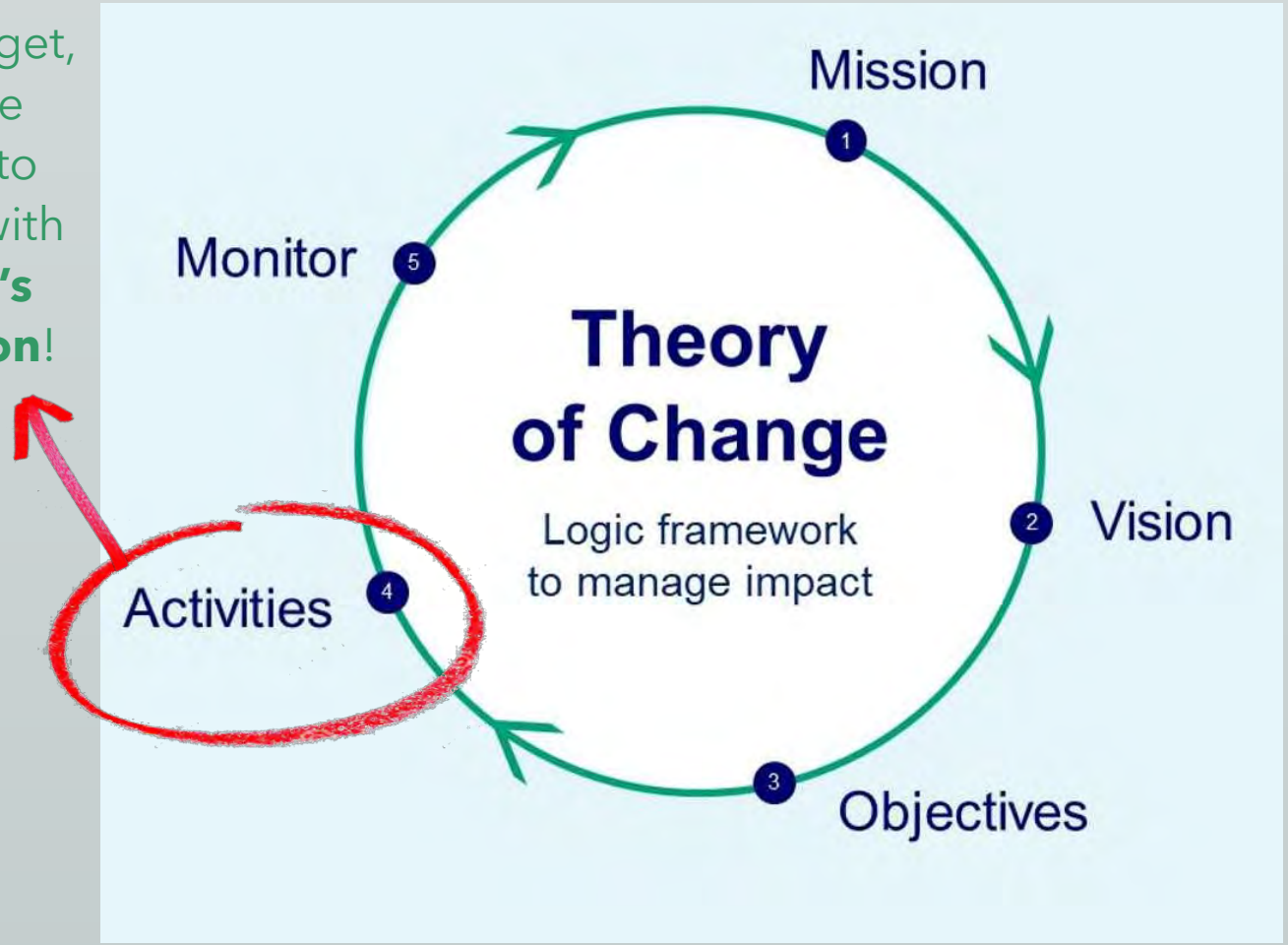
Starting from the critical issues identified for each theme, they clearly define the specific objective.


TAVOLO 3
Parco, Associazioni e Istituzioni: l'unione fa la forza!


TAVOLO 4


LAVORI in CORSO

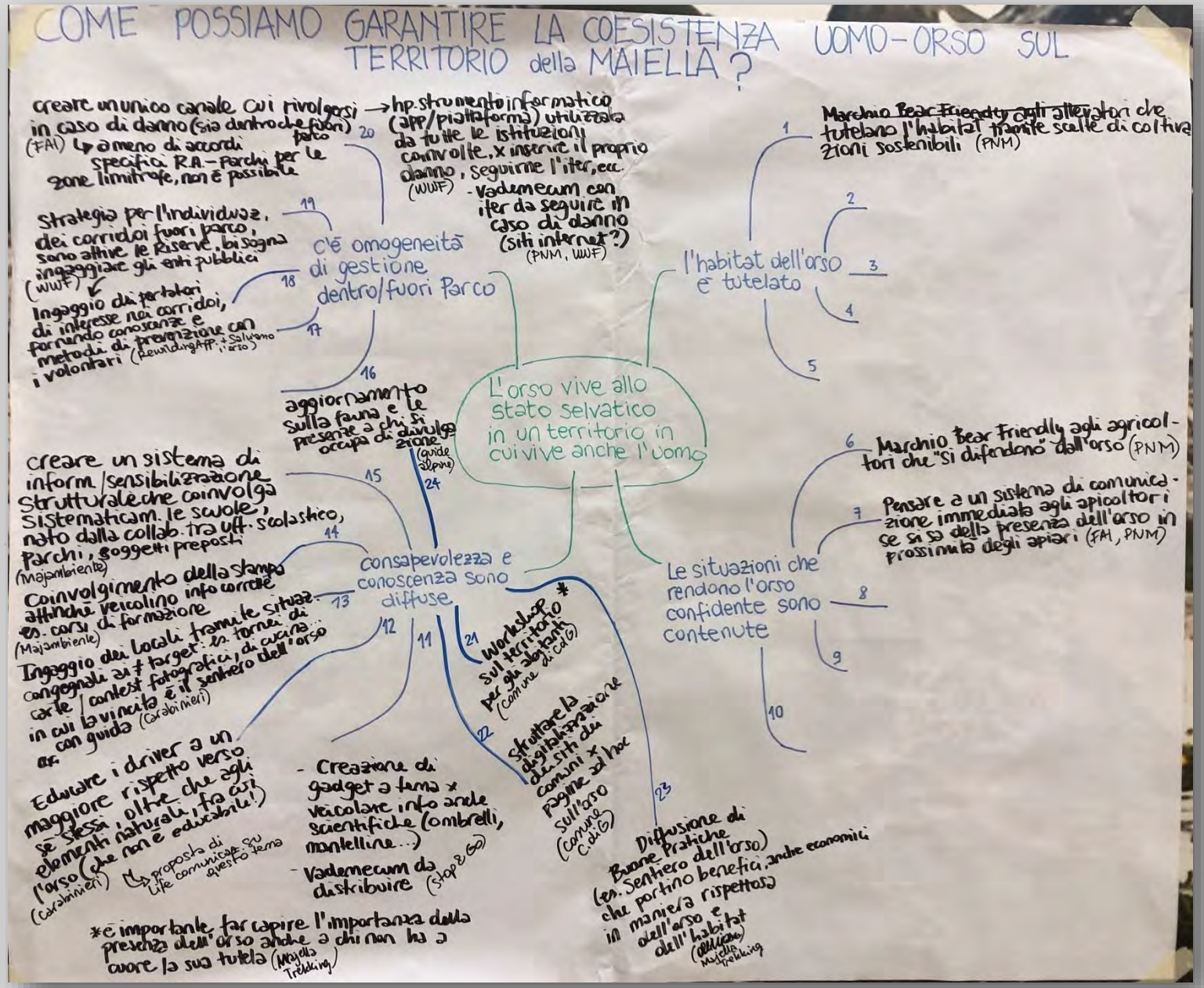
For each target, actions are identified to achieve it, with **everyone's contribution**!



How are actions defined?

Based on their expertise and the interests of their represented categories, stakeholders propose **actions addressing the previously identified objectives**.

Activity carried out in **plenary**, after **individual reflection** on how the participating organizations could **contribute** to achieving the set objectives



Actions' co-design

	Who/With whom?	What?	When?
È garantita omogeneità di gestione, dentro e fuori dal Parco, attraverso:			
l'individuazione di una strategia per l'individuazione di corridoi "sicuri" al di fuori delle aree protette (ingaggiando gli Enti locali)			
il coinvolgimento di tutta la popolazione in tali corridoi, affinchè nascano comunità "a misura di orso"			
lo studio della possibilità di istituire un unico canale cui rivolgersi in caso di danno da orso, ad esempio uno strumento informatico in cui inserire il proprio caso che rimandi automaticamente all'autorità preposta oppure un vademecum sull'iter da seguire in caso di danno ...			

Can I think of other actions that could help achieve the target?

Can my organization contribute to implementing this action? Which other entities are needed?

Is any preliminary activity required? What steps are necessary to implement the action?

Is this action a priority? Can it be implemented/started in the short term?

Action Plan


Timberland


È garantita omogeneità di gestione, dentro e fuori dal Parco, attraverso
Chi/con chi
Cosa
Quando
La condivisione di una strategia per l'individuazione di corridoi sicuri al di fuori delle aree protette
Il coinvolgimento della comunità locale (all'interno di tali corridoi) affinché nascano comunità a misura di orso
L'istituzione di un unico canale per rivolgersi in caso di danno da orso, ad esempio uno strumento informatico in cui inserire il proprio caso, che rimandi automaticamente all'autorità preposta, oppure un vademecum sull'iter da seguire in caso di danno

Design and Implementation

Thanks to WWF Italy, it was possible to develop a financing call for the implementation of the best actions of the Stakeholder Action Plan

Strength point!

Involving Local Community: Workshops and Questionnaires

Not only organized interests matter!

The **local community was engaged** in multiple ways:

5 events in 4 Park Municipalities to share the work carried out within the Stakeholder Platform and gather public perceptions.
1 Workshop with the Agricultural Institute of Pratola Peligna.

New!

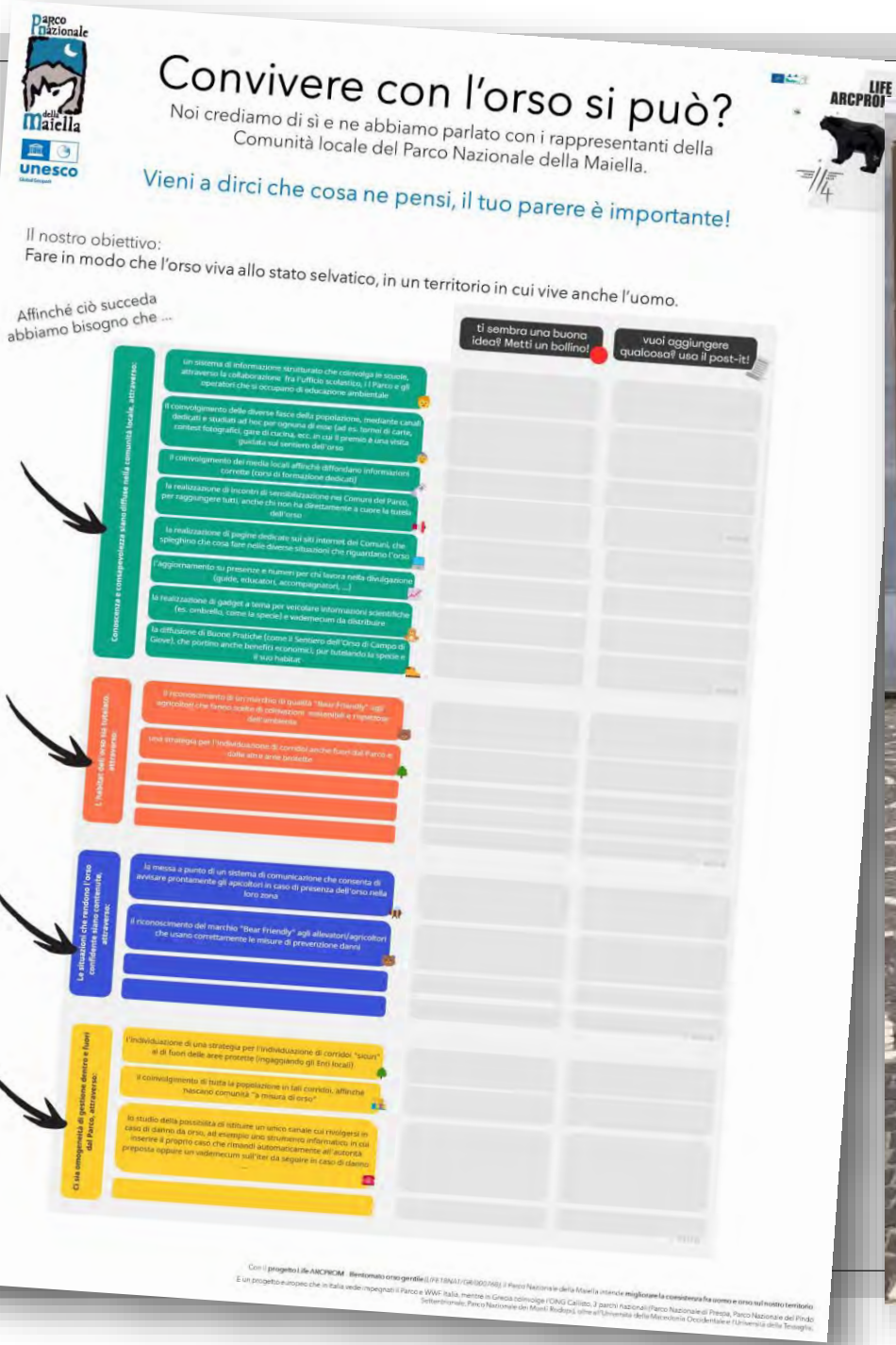
A **questionnaire** on perceptions regarding coexistence with the Apennine brown bear, distributed among stakeholders, their associates, and citizens

1st Workshop: Priority topics for the platform

Objectives and critical issues were presented and **enriched with citizen contributions**

2nd Workshop: Actions of the Platform

A new workshop was held to gather **opinions on actions** proposed by stakeholders and assist them in prioritization.



Workshop at the Agricultural Institute

Strength point!

A **role-playing** exercise to understand how decision-makers work and the complexity of policy-making.

Thanks for your attention!

Grazie per l'attenzione!