

Good practice in large carnivore conservation and management



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Conservation success and challenge

Conservation success

- Stabilization or even increase of large carnivore population sizes in many parts of Europe (wolf; bear; lynx; wolverine)
- Restoration of large carnivore populations where they have been absent for many decades
- Legislation
- Natura 2000 network
- Attitude change

Conservation challenge

- Large carnivore comeback in European human-dominated landscapes; land-sharing vs. land sparing models
- In areas where large carnivores return, local residents have forgotten how to live with them
- Human-carnivore conflicts
- Rural-urban divide
- Socio-cultural context

Damage prevention measures

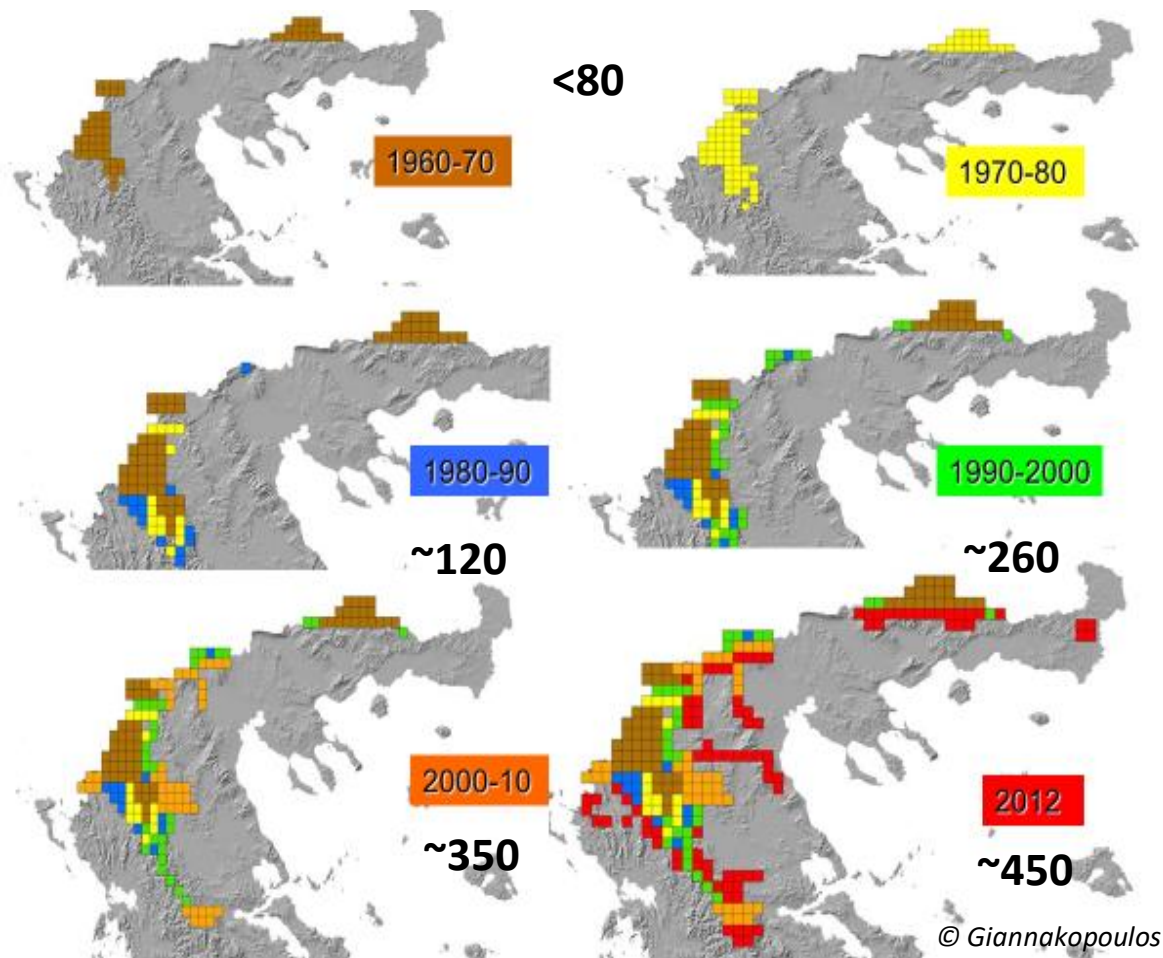


Human-carnivore coexistence measures in Rural Development Programmes (RDPs)

Country/ region	2007-13 Measure code ^b	2014-20 Measure code ^b	Large carnivore species targeted ^c
Bulgaria	214	10.1	W, B, L
Croatia		4.4	W, B
Finland		4.4, 19	W, B, L, Wn
France ^a		7.6 (8 Regions)	W
Germany ^a	216, 323 (2 Regions)		W
Greece	214, 216	4.4	W, B
Italy ^a	121, 216 (3 Regions)	4.1, 4.4, 10.1 (12 Regions)	W, B
Latvia		4.1	W
Lithuania		4.1	W
Portugal		10.1	W
Slovenia	214	10.1	W, B
Spain ^a	227 (1 Region)	4.1, 4.4, 10.1 (7 Regions)	W, B
Sweden	216	4.1	W, B, L

- Significant increase in the number of RDPs with human-carnivore coexistence measures in the programming period 2014-2020
- Managing Authorities in the Member States with large carnivore populations make use of RDP measures to promote human-carnivore coexistence

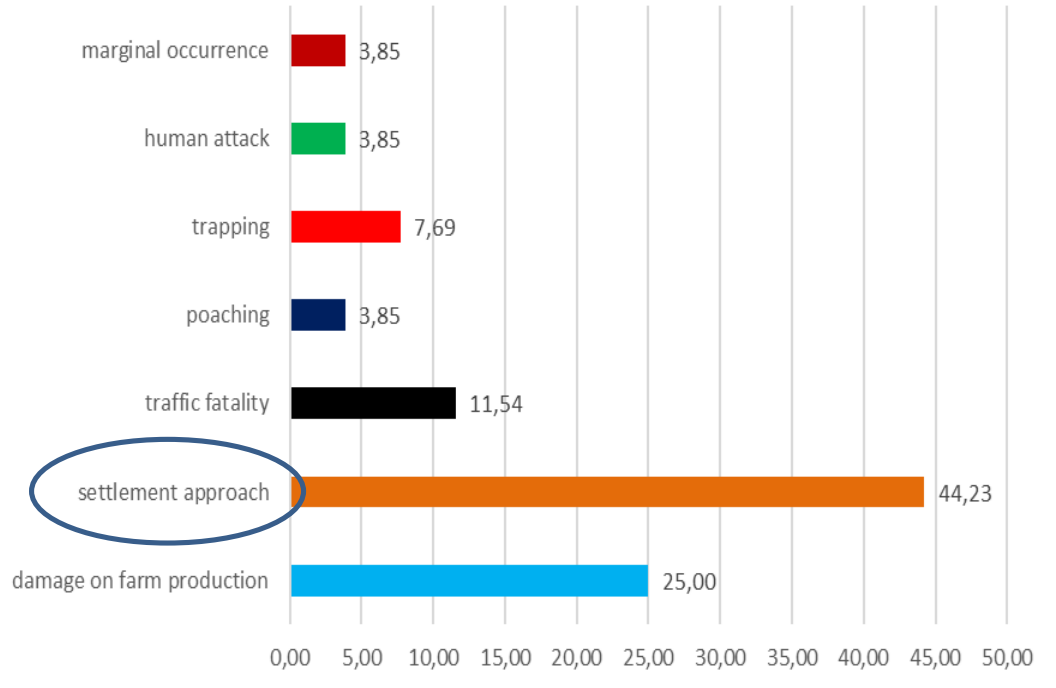
Bear Emergency Teams



- Increasing trend of bear population size (>500 ind)
- Bear range expansion (24.100km²), potentially affecting 160.000 inhabitants in 1.110 villages
- Increase of human-bear interference at about 15 incidents recorded annually
- Bear Emergency Teams established and operating to address emergent cases of bears approaching human settlements/ infrastructure

Bear Emergency Teams

Frequency distribution of BET incidents/category (n=52)
(2017-21)



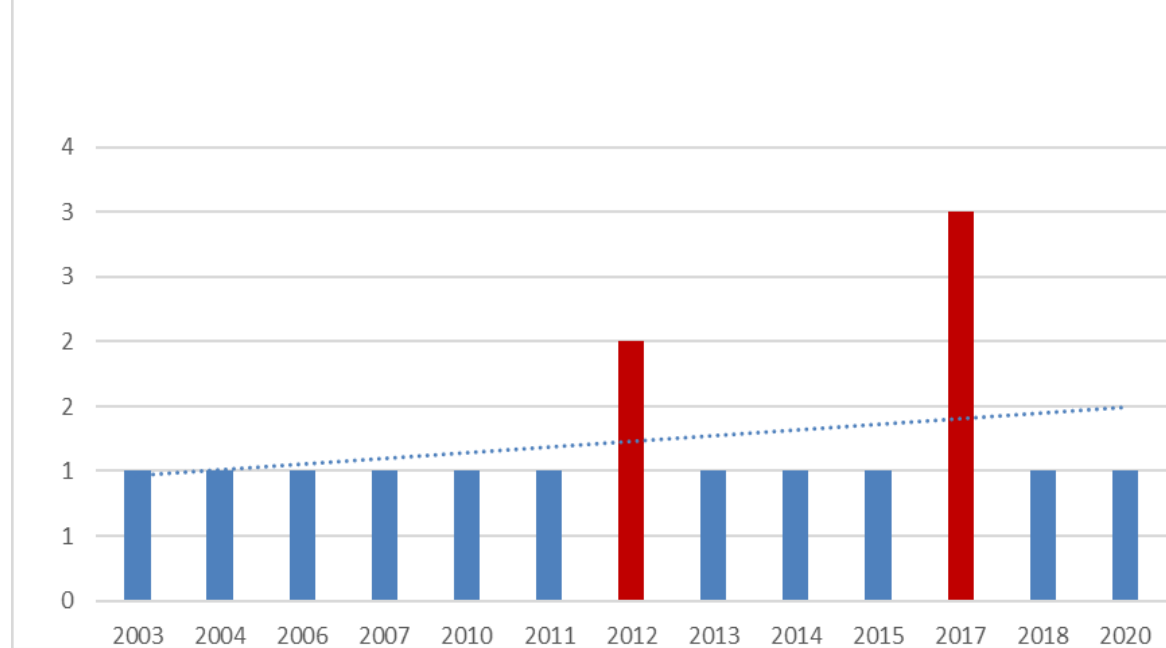
- BETs involve trained members from a broad coalition of stakeholders: Forest Service, Police, Fire Brigade, Civil Protection, Municipalities, eNGOs (CALLISTO, ARCTUROS), Protected Areas' personnel, Hunters Associations
- BETs intervene when there is an emergency: (1) bears approach human settlements; (2) bears cause damage to crops, beehives, and livestock; (3) bears are involved in traffic accidents; and when (4) autopsies are carried out for cases of trapping or poaching, including the use of illegal poisoned baits
- BETs operate according to a protocol that addresses outcome of human-bear interaction and level of food conditioning; use of special equipment (deterrents)

Preventing bear-vehicle collisions



LIFE AMYBEAR
LIFE SAFE-CROSSING
LIFE ARCPROM

Bear road mortality (n=16) 2003-2020



- Identification of hot-spot areas: Prediction of accident risk based on habitat selection by bears and road characteristics
- Installation of wildlife reflectors (1534 devices)
- Installation of a virtual fence with acoustic-optic deterrents (378 devices)
- Zero bear road fatalities after the installation of the virtual fence

Multi-stakeholder platforms for Coexistence between People and Large Carnivores

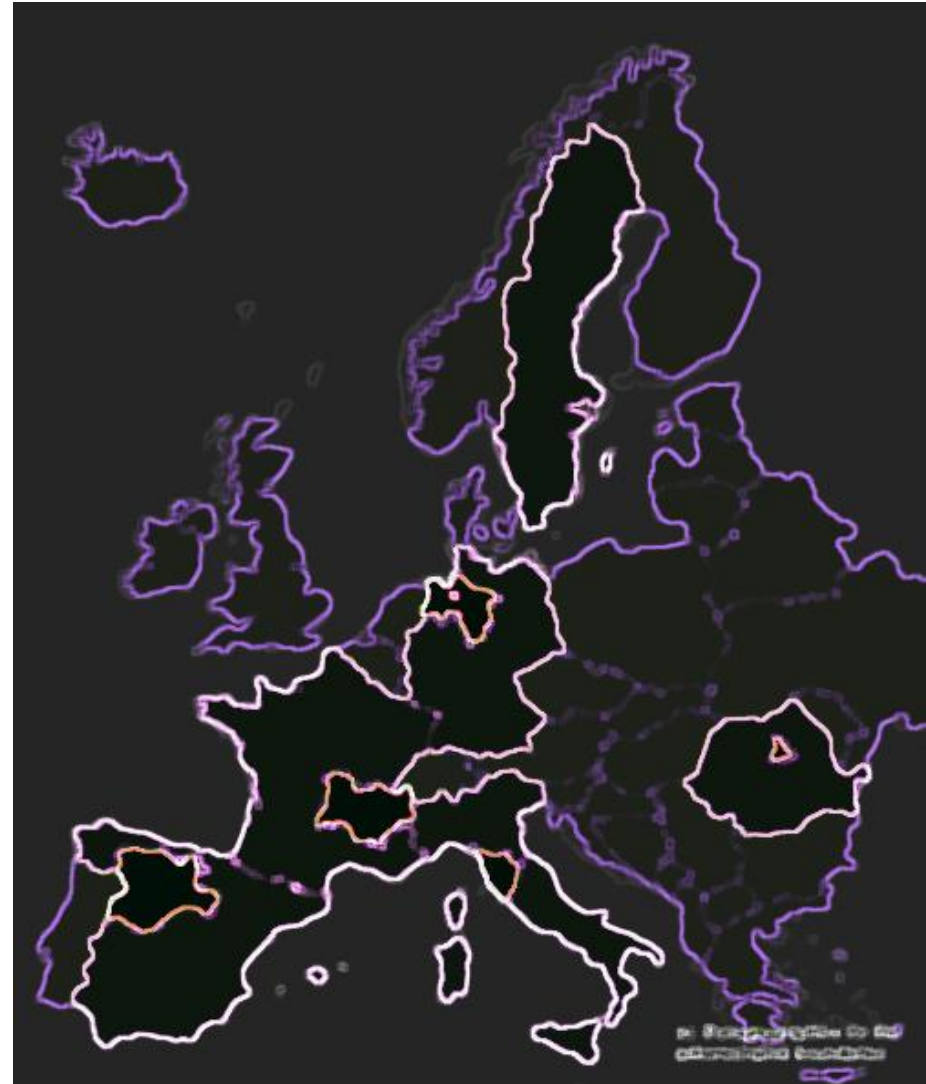
European Platform on Coexistence between People and Large Carnivores (2015-)

https://ec.europa.eu/environment/nature/conservation/species/carnivores/coexistence_platform.htm

Regional Platforms on People and Large Carnivores

https://ec.europa.eu/environment/nature/conservation/species/carnivores/regional_platforms.htm

- Spain; Ávila Regional Platform
- Italy; Grosseto Local Platform on Large Carnivores
- Romania; Harghita Regional Platform
- France; Vercors Regional Natural Park Regional Platform
- Germany; Lüneburg Heath Regional Platform
- Sweden; National



Multi-stakeholder platforms for Coexistence between People and Large Carnivores

LIFE ARCPROM

- Prespa National Park (Greece)
- Northern Pindos National Park (Greece)
- Rodopi Mountain Range National Park (Greece)
- Maiella National Park (Italy)

LIFE Bear-Smart Corridors

- 2 Bear-Smart Communities in Greece (Amyntaio & Trikala-Meteora)
- 16 Bear-Smart Communities in Italy (Gran Sasso e Monti della Laga National Park)



Main lessons learnt and future challenges

- Human-carnivore coexistence is possible in human-dominated landscapes
- The comeback of large carnivores is associated with increase of damage to livestock and crops as well as increased concerns for human safety
- Before implemented, good practice solutions need to be adapted to local contexts by a coalition of stakeholders working together in the ground
- Good practice solutions need to be optimized to account for trends and developments in local contexts
- Collaboration for good practice improves working conditions and trust between stakeholders
- Stakeholder interaction and joint action for human-carnivore coexistence can be institutionalized in multi-stakeholder platforms
- Templates for scaffolding social learning (adapted SWOT template; mixed-motive perspective; participatory scenario development)
- Sustainability of good practice solutions: After LIFE plans; ownership taken over by local stakeholders

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