



## **Large Carnivores in the Dinarides: Monitoring, Management, Threats and Conflicts**

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# Introduction

The comprehensive overview report assessing the situation regarding bear, wolf, lynx (LC) population status, monitoring, management and dialogue in the region:

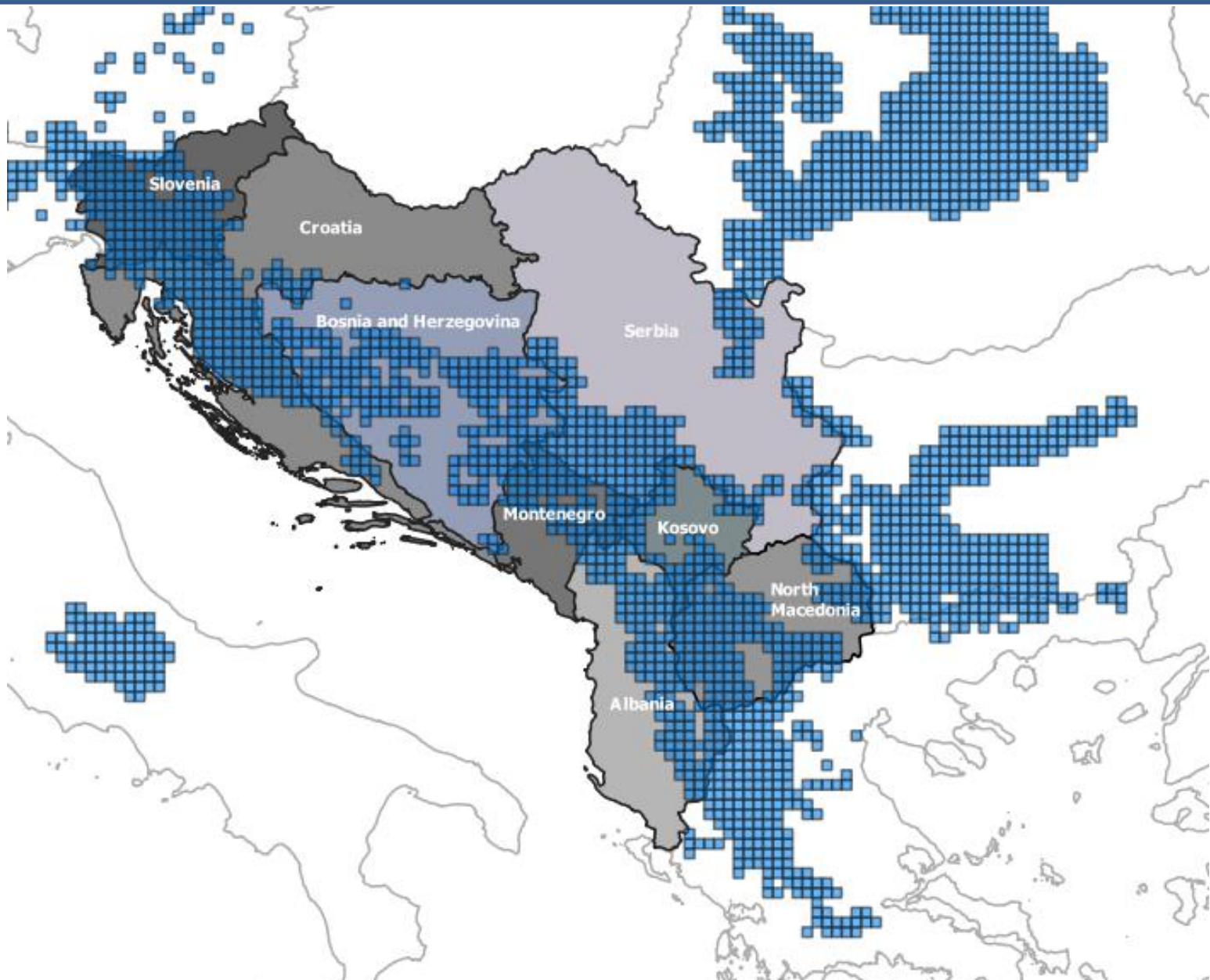
- ✓ Provide an overview of the current situation in the involved countries: Slovenia, Croatia, Bosnia & Herzegovina, Serbia, Montenegro, North Macedonia, Kosovo, Albania (Greece and Bulgaria not covered yet)
- ✓ Allow comparison between countries to identify similarities and differences
- ✓ Identify themes for the platform work

# Methodology

- Desktop research and analysis of initial situation of LC management in the region
  - LC Strategy, Management or Action plans
  - Latest literature
  - LC Management Projects
  - Existing databases
- Survey to better understand background situation
  - a range of experts in large carnivore management and stakeholder representatives, such as national and regional government, scientist, NGOs, land users, hunting and agriculture related organisations
  - 8 countries
  - 45 interviews

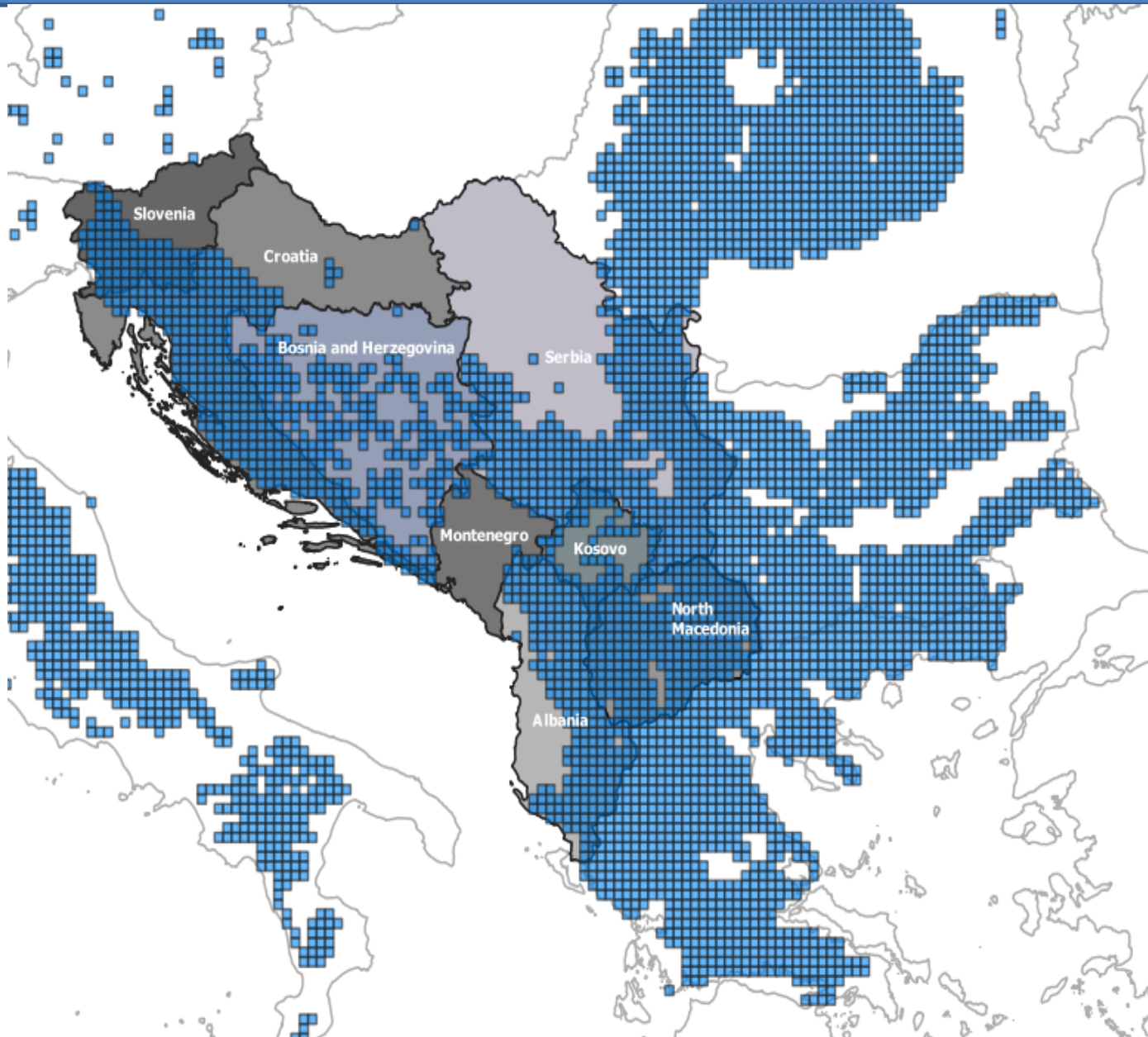


# Bear distribution

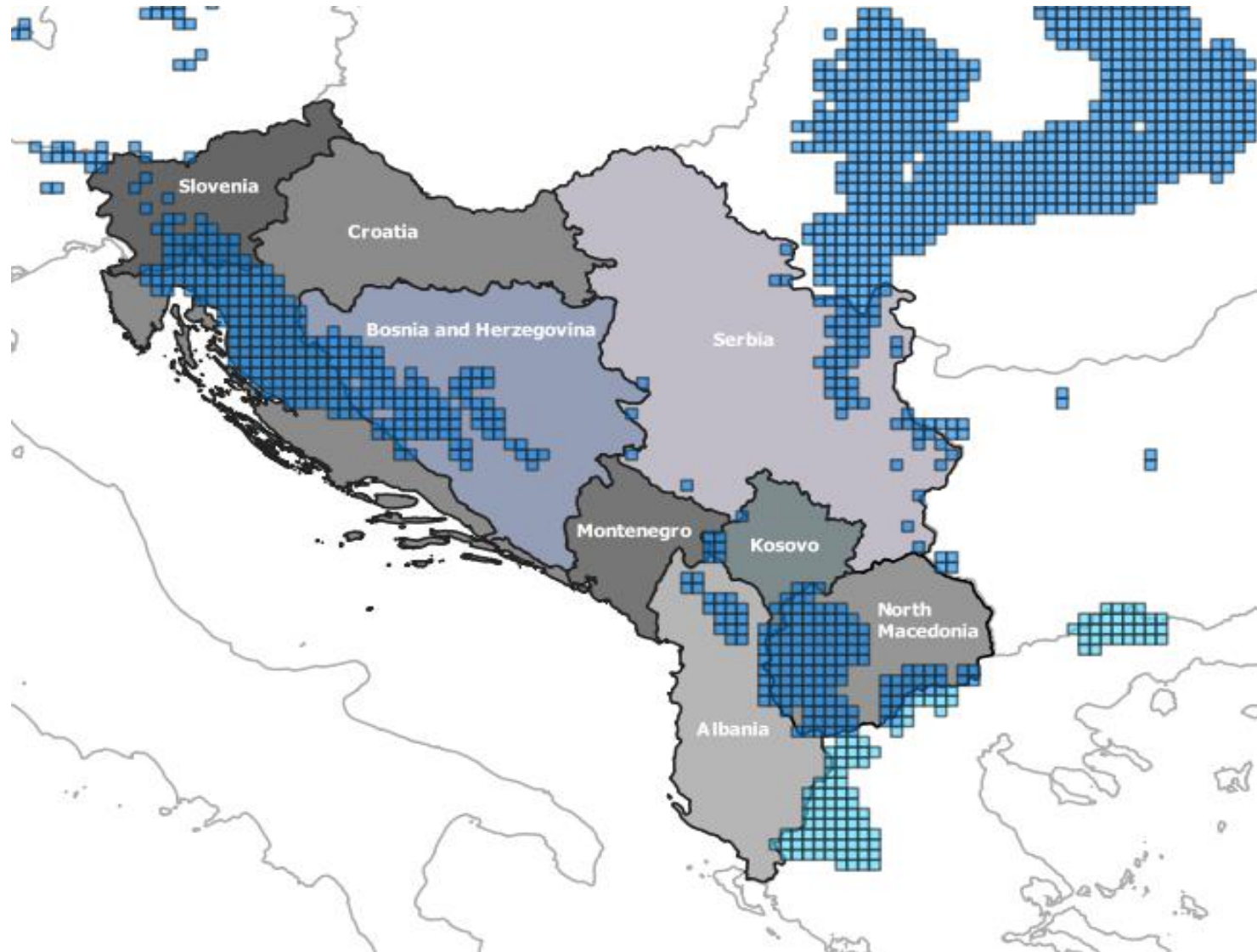




# Wolf distribution



# Lynx distribution



# Albania

	Bear	Wolf	Lynx
Population est.	*180-200	*200-250	(5-10) Balkan l.
Population trend	stable nationally	stable	stable /decreasing
Protection status	strictly protected (prot. since 1953)	protected species (since 1994)	strictly protected (prot. since 1969)
Hunting status	No, derogation for problematic animals	No, derogation for problematic animals	No
Monitoring	Estimates based on camera traps, expert opinion and extrapolation		Ext. & intensive camera-trapping, tracks, capture-mark-release-recapture
Management act (S, MP, AP)	Nat. AP, 2007	No	Nat AP, 2007 (B. lynx, 2009, never adopted)
Main threats	persecution / poaching / capture	persecution / poaching / capture	habitat degradation
Main conflicts	damages	damages	/
Prevention	livestock guarding dogs, shepherds, fences, enclosure at night as prevention measures		
Compensation	/	/	/

\* = estimate not verified, for lynx () = subpopulation Balkan lynx, “-” = no data



# Bosnia & Herzegovina (FBiH, RS)

	Bear	Wolf	Lynx
Population est.	*1000-1200	*400-600	*80-90
Population trend	slightly increasing	stable /decreasing	/
Hunting status	F: No RS: Yes, 1 Oct-15 May	Yes (? hunting season, closed season for female+ pups?) No	No No
Monitoring	game counting, piloting genetic monitoring		
Management act (S, MP, AP)	F: No RS: Draft MP, 2020	No	NO
Main threats	persecution / poaching / capture, habitat degradation, problem bear	persecution / poaching / capture / bold wolf	persecution / poaching / capture
Main conflicts	damages, fear	damages, hunting conflict, fear	/
Prevention	yes	no	yes
Compensation	Yes, with prevention measures as pre-condition	F: No RS: Yes, with prevention measures as pre-condition	Yes, with prevention measures as pre-condition

\* = estimate not verified, for lynx () = subpopulation Balkan lynx, “-“ = no data

# Croatia

	Bear	Wolf	Lynx
Population est.	846-1072	*163	85-90
Population trend	stable	stable / decreasing	stable /increasing
Protection status	strictly protected	strictly protected	strictly protected
Hunting status	No, derogation for 16% (130) of the population and up to 20 problematic bears	No, derogation for problematic animals	No
Monitoring	genetic, damages, snow tracking, camera traps, counting of on feeding areas by hunters	genetic (incomplete), damages, telemetry, camera traps, collection of presence signs (scat, tracks etc.)	camera traps, genetic samplings
Management act (S, MP, AP)	Yes, MP, 2019 + AP annually	Yes, Expert study for MP, 2019	Yes, Expert study for MP, 2019
Main threats	problem bear / bold wolf, disturbance / tourism / access to garbage	persecution / poaching / lack of natural prey/ bold wolf, hybridization	Inbreeding / persecution / poaching/ lack of natural prey (?)
Main conflicts	fear of habituated bears	damages, fear, hunt. conflict	hunting conflict
Prevention	livestock guarding dogs, shepherds, fences, enclosure at night as prevention measures		
Compensation	yes, prevention measures as a pre-condition (difference in case of bears, wolves, lynxes)		

# Kosovo\*

	Bear	Wolf	Lynx
Population est.	**80-100	*100	*(6) Balkan l.
Population trend	/	/	/
Protection status	protected	strictly protected	strictly protected
Hunting status	No	No	No
Monitoring	counting by hunters		data from hunting ground managers, photo traps
Management act (S, MP, AP)	No	No	No
Main threats	persecution / poaching / capture, disturbance / tourism, waste	persecution / poaching / capture, disturbance / tourism	persecution / poaching / capture, disturbance / tourism
Main conflicts	damages	damages	/
Prevention	prevention measures as a pre-condition for compensation (?)		
Compensation	/	exists, not applied	exists, not applied

\* = estimate not verified, for lynx () = subpopulation Balkan lynx, “-” = no data

# Montenegro

	Bear	Wolf	Lynx
Population est.	*250-280 (413)	*593	(0) Balkan l.
Population trend	stable /increasing	stable / decreasing	/
Protection status	?	?	NA
Hunting status	yes, zero quota	yes	NA
Monitoring	Survey by hunters (h. ground) and protected area staff (?)		/
Management act (S, MP, AP)	No (drafting 2021)	No	NA
Main threats	persecution / poaching / capture, disturbance / tourism, habitat degradation	persecution / poaching / capture, lack of natural prey, habitat degradation	/
Main conflicts	damages, fear	damages	/
Prevention	no		
Compensation	compensation, prevention measures as a pre-condition		

\* = estimate not verified, for lynx () = subpopulation Balkan lynx, “-” = no data

# North Macedonia

	Bear	Wolf	Lynx
Population est.	*333 – 381	*400 – 1100	(32) Balkan l.
Population trend	Stable / increasing	unknown /decreasing	stable
Protection status	strictly protected (prot. since 1996)	no	strictly protected (prot. since 1949)
Hunting status	no	yes	no
Monitoring	oportunistic camera trapping, pilot genetic study		camera-trapping, tracks, GPS
Management act (S, MP, AP)	no	no	AP, for Mavrovo NP, 2015
Main threats	persecution / poaching / capture / habitat degradation	persecution / poaching / capture / hunting	lack of natural prey / inbreeding / persecution / poaching / capture/ habitat degradation
Main conflicts	Damages, fear	damages	/
Prevention	no		
Compensation	yes	no	no

\* = estimate not verified, for lynx () = subpopulation Balkan lynx, “-” = no data



# Serbia

	Bear	Wolf	Lynx
Population est.	*120	*800-900	*100-110 (10-20?) Balkan l.
Population trend	increasing	stable	stable /increasing
Hunting status	No, derogation for problematic animals	Yes, (except in AP Vojvodina), up to a max 30% of the pop.	No
Monitoring	No camera trapping, telemetry, pilot genetic count	No genetic sampling, telemetry, camera trapping	No Projects findend only (?)
Management act (S, MP, AP)	no	no	no
Main threats	habitat degradation / persecution / poaching / capture / infrastructure development	habitat degradation / lack of natural prey / hybridisation	poaching / inbreeding
Main conflicts	damages, fear	damages, hunting conflict, fear	/
Prevention	prevention pre-conditioned ?		
Compensation	yes	no	yes

\* = estimate not verified, for lynx () = subpopulation Balkan lynx, “-“ = no data

# Slovenia

	Bear	Wolf	Lynx
Population est.	700-900	86-110	10-20
Population trend	increasing	increasing	/ (decreasing / increasing)
Protection status	strictly protected	strictly protected	strictly protected
Hunting status	No, derogation for problematic animals	No, derogation for problematic animals	No
Monitoring	genetic count / census / population modelling / count at feeding sites	genetic count, analysis of population size + genetic parentage / howling / tracks	camera trapping, genetic samples
Management act (S, MP, AP)	yes, S + AP, 2017, new drafted AP	Yes, new drafted S, 2021-2030 + AP	Yes, S2016, new AP in 2023
Main threats	problem bear / habitat degradation / mediatisation	bold wolf / habitat degradation / hybridisation / mediatisation	Inbreeding / persecution / poaching / capture / habitat degradation
Main conflicts	Damages, fear	damages	/
Prevention	Livestock guarding dogs, shepherds, fences, enclosure at night as prevention measures		
Compensation	yes	yes	yes

# Country comparisons over time

	Bern convention review (COE) (Bear only) (2002)	LCIE population review (2012)	Interviewees (2021)
AL	/	*	*
B&H	/	/	*
HR	*	*+	+*
KS	/	/	/*
MNE	/*	*	*
N.MK	/*	*	*
SER	/*	*	*
SLO	*	*+	+*
BG	?	?	?
GR	?	?	?

# Potential for development and collaboration

A snapshot view:

- Need for more capacity and exchange on LC monitoring and management
- Relevant skills
- Clarities about competencies
- Concerns about high costs
- Political will

# Potential for development and collaboration

## Ideas:

- Accurate cross border monitoring - HD standards
- Establishing (bi, trilateral) transnational management planning - capacity and ideas on MP processes and implementation
- Consultation and engagement of stakeholders in management planning – platforms
- Compensation and protection schemes – use of EU RDP, IPARD
- Broad-scale coordination and exchange on transnational management - find a means of collaborating on a longer-lasting level
- Dinaric LC Trust Fund 😊



# Dinaric Regional Platform on Large Carnivores

*Managed by adelphi research and  
Carnivora Magna*

*For more information on the project please  
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*More information: <https://www.umweltbundesamt.de/en/topics/sustainability-strategies-international/cooperation-eeca-centraleastern-european-states/project-database-advisory-assistance-programme/a-transnational-exchange-platform-for-the>*

