

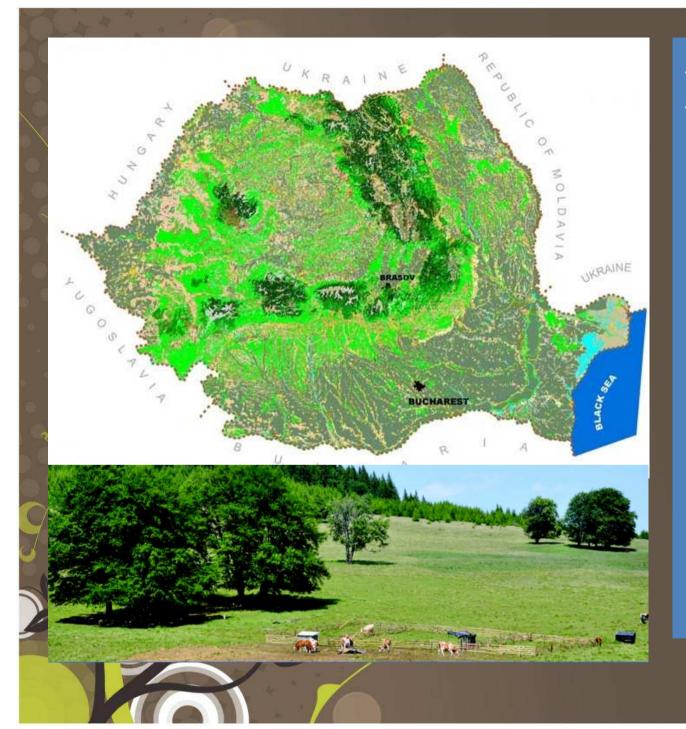
Experience from the LIFE EX-TRA Project "Improving the conditions for large carnivore conservation - a transfer of best practices" (LIEF 07NAT/IT/000502)







Tudor Stancioiu Transilvania University of Braşov

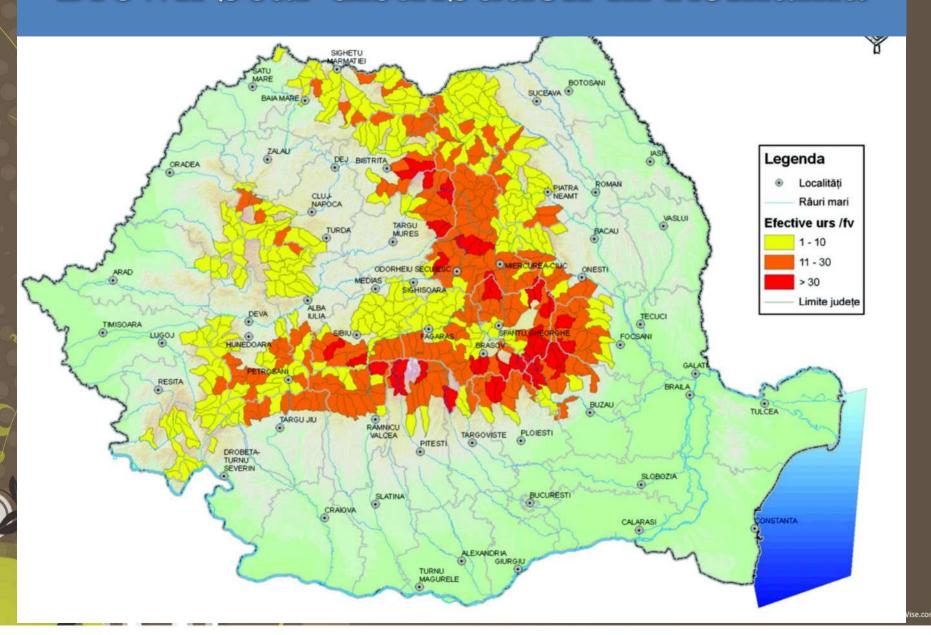


Romania

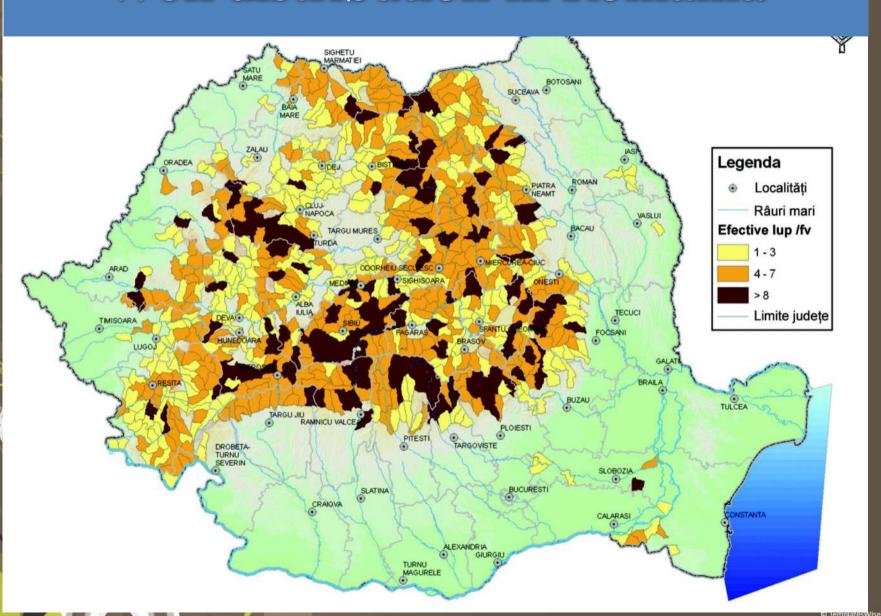
... a country
with rich
populations of
large
carnivores

... a country
with old
traditions in
terms of cattle
grazing,
hunting,
agriculture

Brown bear distribution in Romania



Wolf distribution in Romania



Large carnivores populations in Romania (2011-2012)



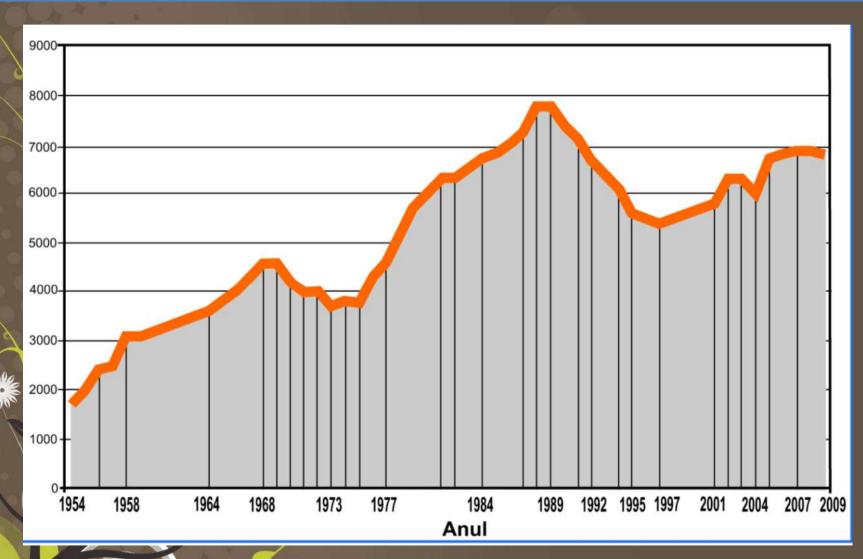






Species	Optimal populatio		Actual estimated population		Maximum intervention	Quota for culling		Nat. growth
cies	n (no.)	Max (no.)	Min (no.)	Mean (no.)	quota (no.)	#	%	rate (%)
Bear	3914	6380	5630	6005	365	335	5.5	10
Wolf	2070	2737	2346	2541	498	488	19	30
Lynx	1240	1374	1182	1278	119	103	8	25

Evolution of bear population in Romania



Large carnivores situation in Romania

- 1. Strictly protected species according to EU legislation
- 2. Influenced by ...
 - 1. Land ownership changes;
 - 2. Land administration changes;
 - 3. Land use changes;
 - 4. Infrastructure development.



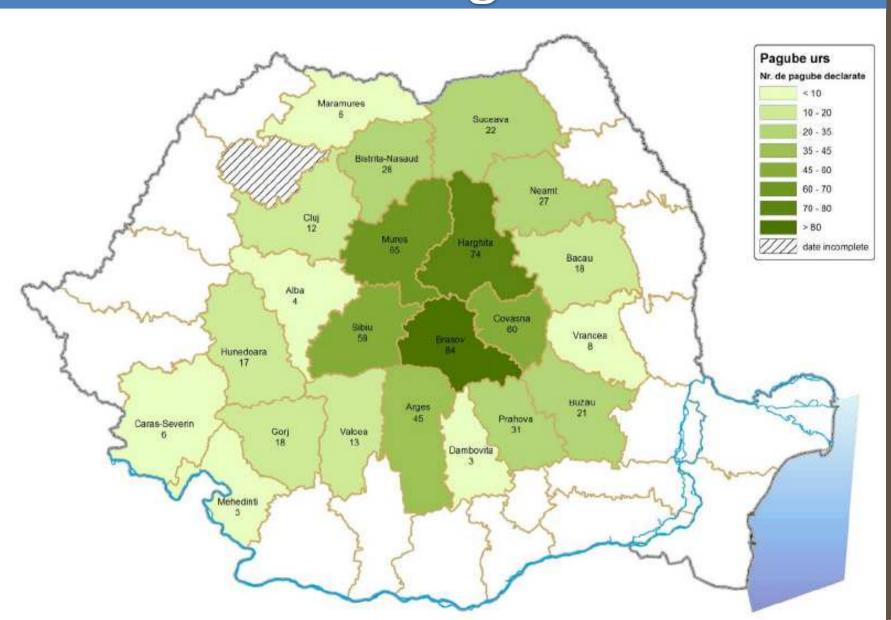




RESULTS

- Interaction and competition for growing space is increasing
- 2. Potential for conflicts is increasing

Bear damages 2011



The LIFE Extra project area in Romania RO BRASOV CS BUCURESTI

MSOffice1 MIERCUREA. Romania - location of project areas Project areas County borders BARAOLT Dalnic GHEORGHE BRASOV



The project areas in Romania

Herculian – Cormoş (Covasna county) –Natura 2000 site designated for large carnivores conservation

Dalnic (Covasna county) –high densities of large carnivores and intense grazing and livestock levels

Săcele (Braşov county) – partially included in 2 Natura 2000 sites (Piatra Mare şi Ciucaş)

Diapositiva 10

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Large carnivores and public beliefs and attitudes

In such a changing natural, social and economic environment, evaluation of public beliefs and attitudes becomes important and necessary for coexistence of humans and large carnivores.

A questionnaire was prepared with 24 questions about the 3 species (bear, wolf, lynx). A total of 400 persons (198 men, 202 women) from the project area were interviewed.

	Locality	Persons interviewed (no.)	Percent of total sample (%)
PIN A	Săcele	245	61,3
ME	Cernat	30	7,5
	Dalnic	7	1,8
	Moacşa	10	2,5
	Baraolt	72	18,0
	Băţani	36	9,0
	TOTAL	400	100,0

Age class	Persons (no.)	Percent of total sample (%)
18-24	58	14,5
25-34	92	23,0
35-49	102	25,5
50-64	95	23,8
Over 64	53	13,3
TOTAL	400	100,0

Ideas for testing public beliefs and attitudes ...



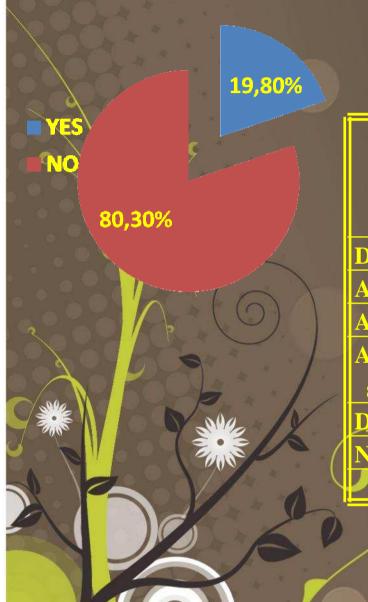




- Interactions with large carnivores (If they experienced or not; the kind of conflict; if they received compensation)
- 2. <u>Solutions</u> for conflicts (What should happen to the animal which produced a damage?)
- 3. <u>Perception</u> of the large carnivores (suffering or not; needed for natural equilibrium; valuable as a species; threat to humans or vice-versa; use of lethal methods for defense)
- 4. <u>Feelings</u> about carnivores (how would they feel if they would meet them in the wild fear, freezing horror, curiosity, hate, indifferent, sympathy)

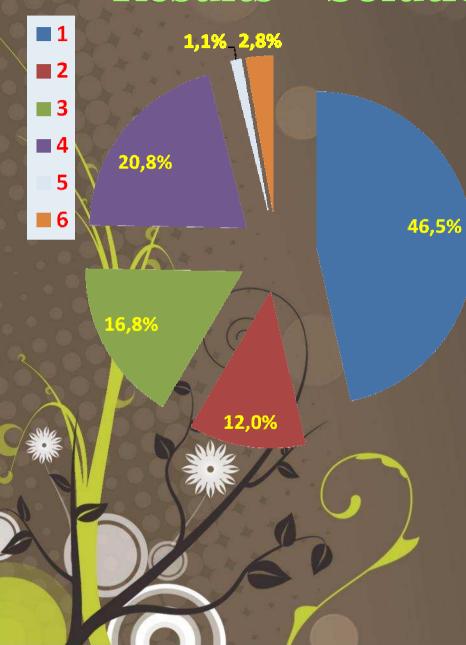
Incidents (direct or family members)

Results – interactions



	Answers		
Conflict type	Absolute numbers	Percent	
Direct attack	10	11,8%	
Attack on family member	11	12,9%	
Attack on livestock in the village	6	7,1%	
Attack on livestock in the shepherd camp	13	15,3%	
Damage to crops	16	18,8%	
No answer	29	34,1%	
Total	85	100%	

Results – Solutions for conflicts



Category 1 – bear should be captured and removed far away from area (46.5%)

Category 2 – animal should be captured and put in a Zoo or sanctuary (12.0%)

Category 3 – animal should be carefully monitored with a GPS collar (16.8%)

Category 4 – animal should be killed (20.8%)

<u>Category 5</u> – animal should be punished (1.1%)

Category 6 – not sure (2.8%)

Results – Perceptions

Opinion	Mean
Bear useful for natural equilibrium	1,61
Bear useful for hunting	2,70
Bear is intrinsic value	1,40
Humans entered bears habitat	2,46
Humans take bear's resources from forest	2,90
Bear threats livestock	2,34
Bear threats those who enter the forest	2,72
Humans threat bears	2,52
Bear threats humans	2,62

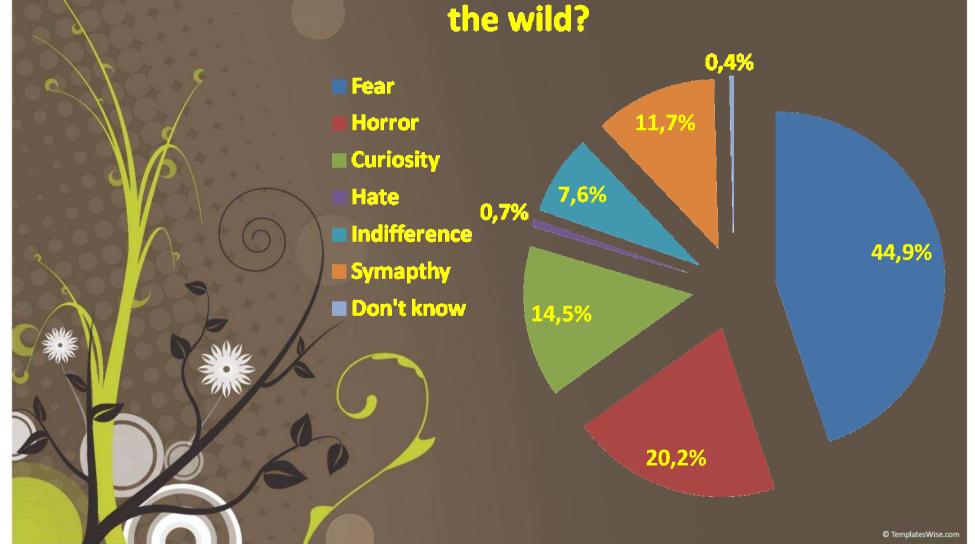
Note: answers were noted on a scale from 1 (completely agree) to 5 (completely disagree)

Results – Perceptions

How do you	Answ	vers Sex		ex
perceive the bear?	absolute numbers	Percent	Men	Women
A suffering animal	147	37,8%	33,3%	42,3%
Does not suffer	242	62,2%	66,7%	57,7%
Total	389	100%	100%	100%

	Have you had direct	How do yo	T-4-1	
-	conflicts with the bear?	Suffering animal	Does not suffer	Total
	YES	23,1%	76,9%	100%
		41,5%	58,5%	100%

Results – Feelings What would you feel if you would meet a bear in



Large carnivores and institutions

Interviews were carried out for the key institutions (EPA, ITRSV, hunting associations, forest administration, local administration, research institute).

Topics covered in interviews:

- Responsibilities of the institution on large carnivores conservation/management
- Identifying other institutions addressing the issue of large carnivores. Overlapping responsibilities, expectations, partnerships or conflicts.
- Legislation aspects (efficiency, overlaps, gaps)
- Threats for carnivores, opportunities, best practices

Large carnivores and institutions - RESULTS

Some of the most important conclusions resulting from the study:

- 1. Conflicting opinions among institutions (conservation vs. hunting; current population level; density above vs. below optimum; lethal non-lethal methods for problem bears; complementary feeding; threats for carnivores)
- 2. Unclear and inefficient legislation (hard to apply, small effects)
- 3. Overlapping responsibilities among institutions



- 4. Intricate structure and long distance from top to bottom of the hierarchy in state institutions
 - Institutional instability (political influence, changing too often leaders and strategies)

Large carnivores and institutions

Results of interviews were presented to and discussed with the most important stakeholders (EPA, ITRSV, hunting associations, Sanitary Inspection Service, landowners, forest administration, local administration, NGOs).



A follow-up questionnaire was sent to all participants to previous meetings.

Large carnivores and institutions – follow-up







The follow-up questionnaire - Ideas to be tested:

- 1. Ways to reach an equilibrium between conservation and development
- 2. Large carnivores management (active hunting, or passive strict protection).
- 3. Institutional framework, functionality and overlapping responsibilities
- 4. Usefulness of methods used so far for *problem*bears
- 5. Importance and need for tolerance towards large carnivores

Large carnivores and institutions – follow-up RESULTS I

1. <u>Ways to reach an equilibrium between conservation and development</u>:

All respondents are reluctant. At the actual pace it is impossible to reach a common ground unless human interventions will be limited in the natural habitat of carnivores and periods of the year when these species are vulnerable.

Carnivores should have priority in the forest! Potentially disturbing human activities within the forest (massive tourism, tourism on motorcycles, ATV, Enduro etc) should be completely banned or restricted to areas less important or not important for carnivores.

Large carnivores and institutions – follow-up RESULTS II

2. <u>Large carnivores management (active – hunting, or passive - strict protection).</u>

EPA – protected but with prompt interventions on problem bears (now is delayed and not efficient at all)

Forest administration, Sanitary Control – hunting for keeping density normal

3. <u>Institutional framework, functionality and overlapping</u>
<u>responsibilities</u>

There is a need for changing legislation and institutional framework for a transparent and efficient management. The management should be unique, without any overlapping attributions and conflicting procedures. All key stakeholders should be involved and must respect the rules.

Large carnivores and institutions – follow-up RESULTS III

4. Usefulness of methods used so far for problem bears

Relocation of problem bears is not a solution for neither people or bears (it has very low success with bears). Problem bears should be either eliminated or put in sanctuaries for the rest of their lives.

5. Importance and need for tolerance towards large carnivores

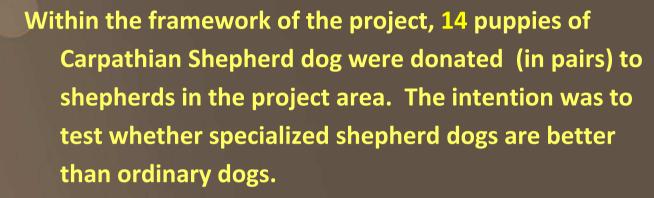
Tolerance is hard to reach (or even impossible) after the damage is done, regardless whether compensation is given or not.

Procedures must be simplified for faster and easier

compensation. Authorities must raise awareness of the public

on these procedures and their rights in case of such damages.

Livestock Guarding Dogs and Large carnivores



Meetings with shepherds and Carpathian Shepherd Dog Breeding Association were also organized to explain advantages.

Afterwards, a follow-up questionnaire was sent out shepherds within project area to check again their opinion on LGD use in large carnivores damage management (43 were completed)

Livestock Guarding Dogs - questionnaire



Ideas to be tested:

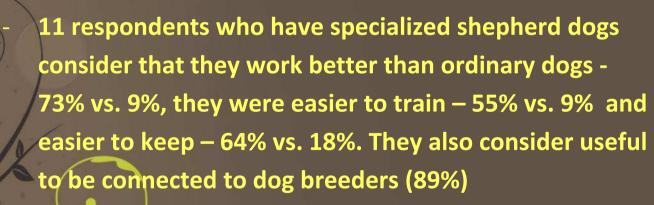
- 1. What is important at a shepherd dog in terms of where it stays most of the time, what is the relationship with the flock, what is its reaction to intruders
- 2. Comparing specialized shepherd dogs with ordinary dogs... which is better guarding the flock, which is easier to train, which is easier to keep.
- 3. The usefulness of a close connection with shepherd dog breeders

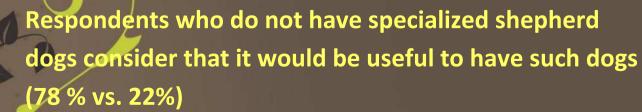
Livestock Guarding Dogs - RESULTS



The RESULTS of the study showed that ...

- (93%) the LGDs should stay close to the flock and watch out for animals.
- (65%) the LGDs should only alert shepherds and attack only animals attacking the flock (35% say they should attack any stranger – human or animal)







Livestock Guarding Dogs - CONCLUSIONS

Shepherd dogs are preferred and seem to be better (in both terms of training, efficiency, behavior.

Probably the acquisition and food price (=quite expensive) and the lack of a connection to specialized breeders is the main cause for low numbers in the project area.

Also, attachment and affection to their dogs makes them reluctant to change. Furthermore acquisition of ordinary dogs is much easier, low cost, and therefore replacement in case of





OVERALL CONCLUSION

In a changing social, economic and natural environment, a thorough and comprehensive analysis of the human dimensions of natural resources is needed.

This is important not only to understand the evolution of ecosystems but also helps taking wise management decisions to preserve the tolerance towards powerful species like large carnivores.

Understanding the relationship between humans and these species (and understanding that this relationship could change in time) will help attain/maintain low levels of conflict and thus will bring tolerance and ensure coexistence of the two key players.

