

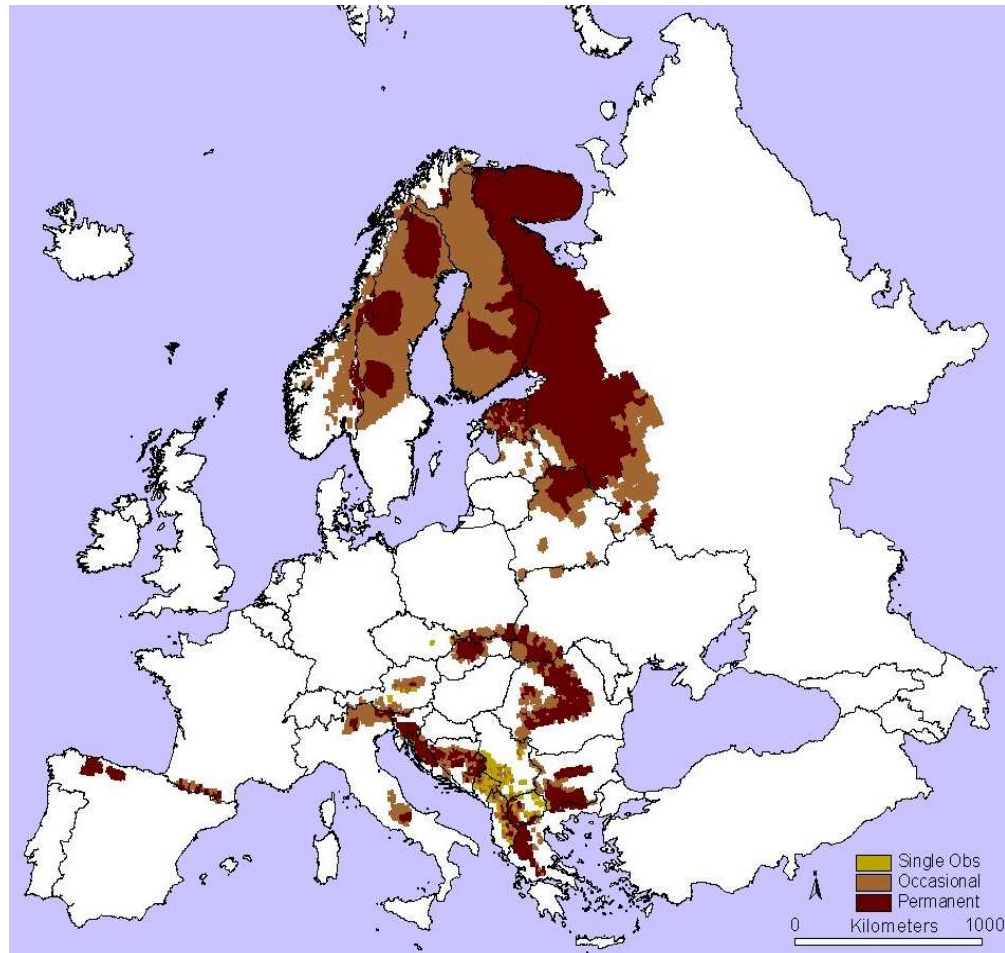
Population level management and human/wildlife issues concerning carnivores



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Large Carnivores Distribution



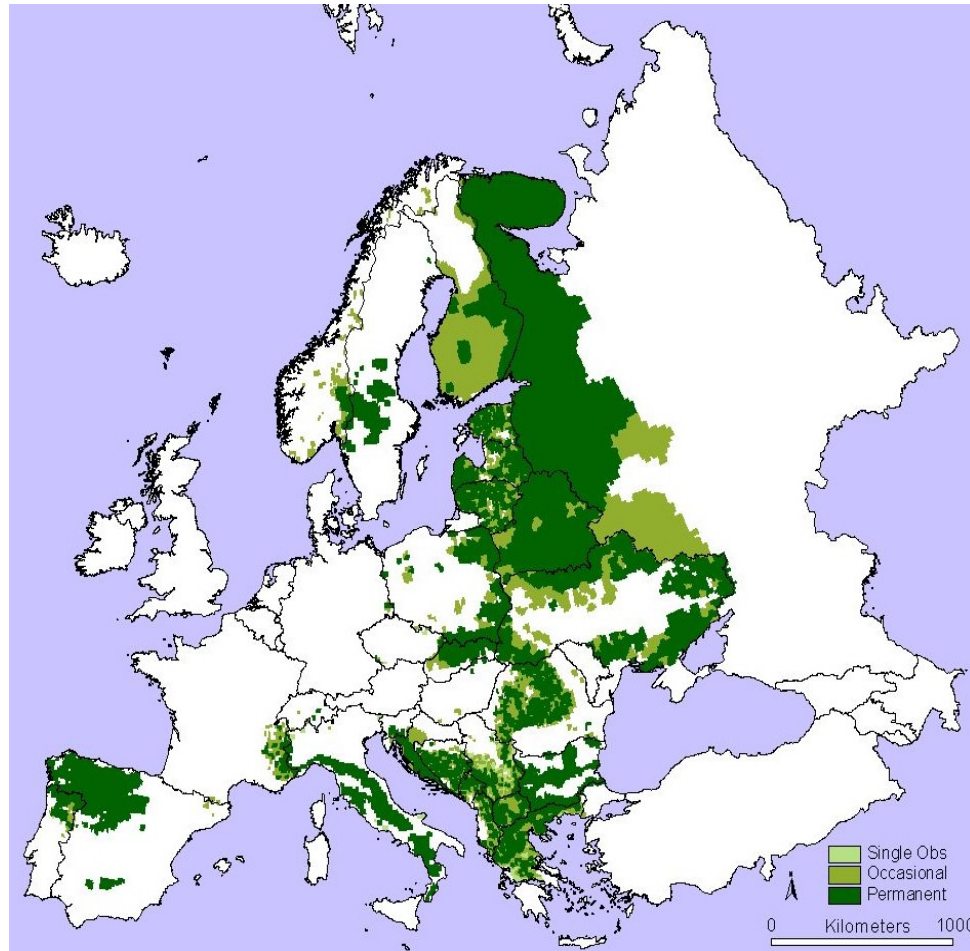
Bear distribution in Europe



Bears

Country	Population size (official data)	“Experts judgments”	Trend
Czech R Hungary Serbia	Sporadic occurrence Sporadic occurrence 8 (in Carpathians)	Accurate Probably 7 6-10	
Poland Ukraine	60 – 95 400	Accurate Accurate ?	Stable Stable
Romania Slovakia	6.000 – 6.500 1.100 – 1.200 (DNA analyses)	Accurate? Accurate	Stable Stable

Large Carnivore Distribution



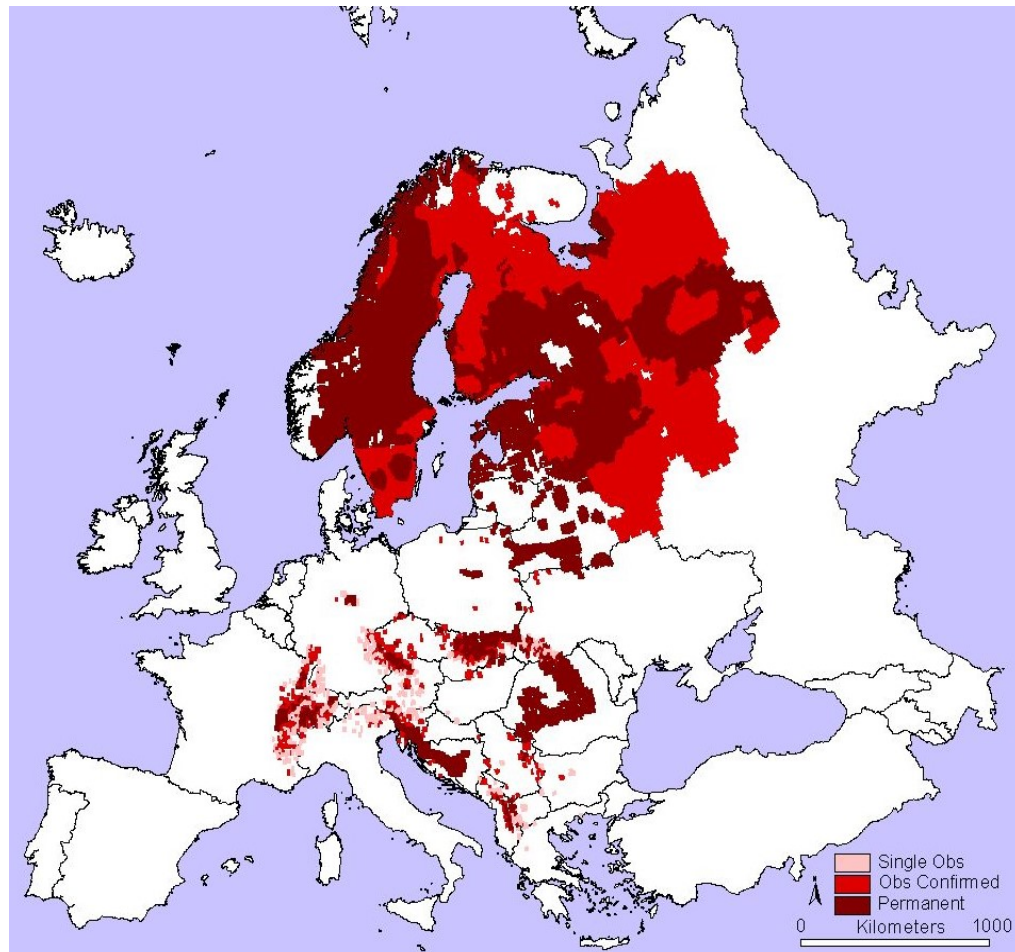
Wolf distribution in Europe



Wolves

Country	Population size (official data)	“Experts judgments”	Trend
Czech R	No data	7 – 10?	
Hungary	No data	<5	
Serbia	extinct	0	
Poland	1300 – 1400	Accurate?	Stable
Ukraine	350	Accurate ?	Stable
Slovakia	300– 400	Accurate	Stable
Romania	2.000- 2.500	Accurate	Stable

Large Carnivores Distribution



Lynx distribution in Europe



Lynxes

Country	Population size (official data)	“Experts judgments”	Trend
Czech R	67 – 90 (10 in Carpathians)	67 – 90	Stable
Hungary	No data		
Serbia	40-60		
Poland	250	Accurate	Stable
Ukraine	300	Accurate ?	Stable
Slovakia	300 - 400	200 – 400	Stable
Romania	1.200-1.500	Accurate ?	Stable

Large Carnivores in Carpathian Mountains

- Pan-Carpathian populations of brown bear, wolf and lynx still exist in considerable numbers. However, there is a great difference in density in the countries.
- Generally, Romania and Slovakia harbour the largest populations,
- Poland, Serbia and Ukraine have medium sized populations, while the Czech Republic and Hungary have the smallest number of individuals.

A problem of scale „think regional – act local”

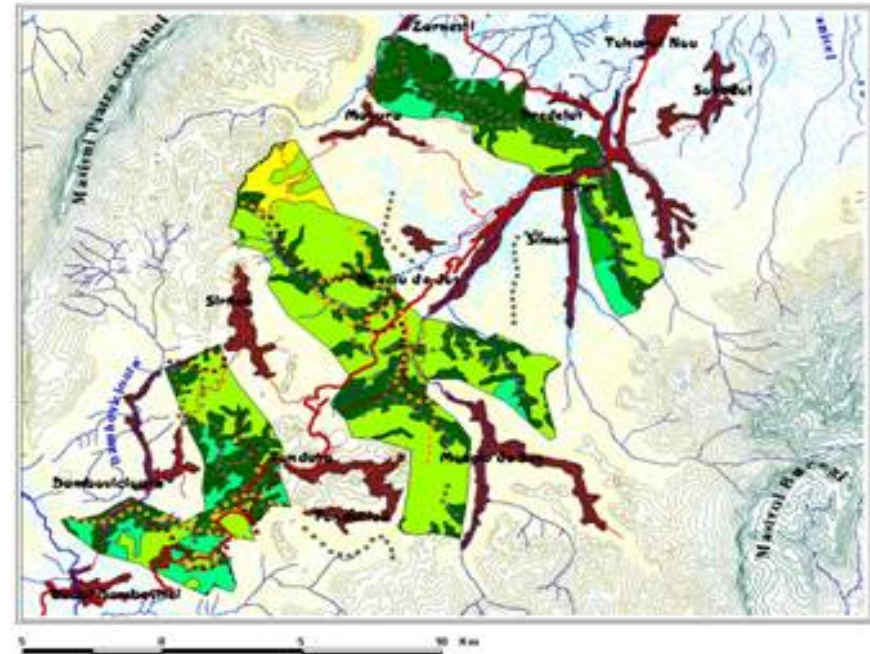
- conservation actions occur mostly at local scale
- size of the hunting areas is important
- great diversity of solutions



Avoidance of the habitat fragmentation

- All activities with potential negative impact for large carnivores has to be done after a careful analyzes with mitigation measurers if they can't be avoid

Harta culoarelor cu natura folosintei terenului si traseele urmelor partie





The conservation status will be taken as “favorable” when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long term basis as a viable component of its natural habitat, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its population on a long-term basis.”

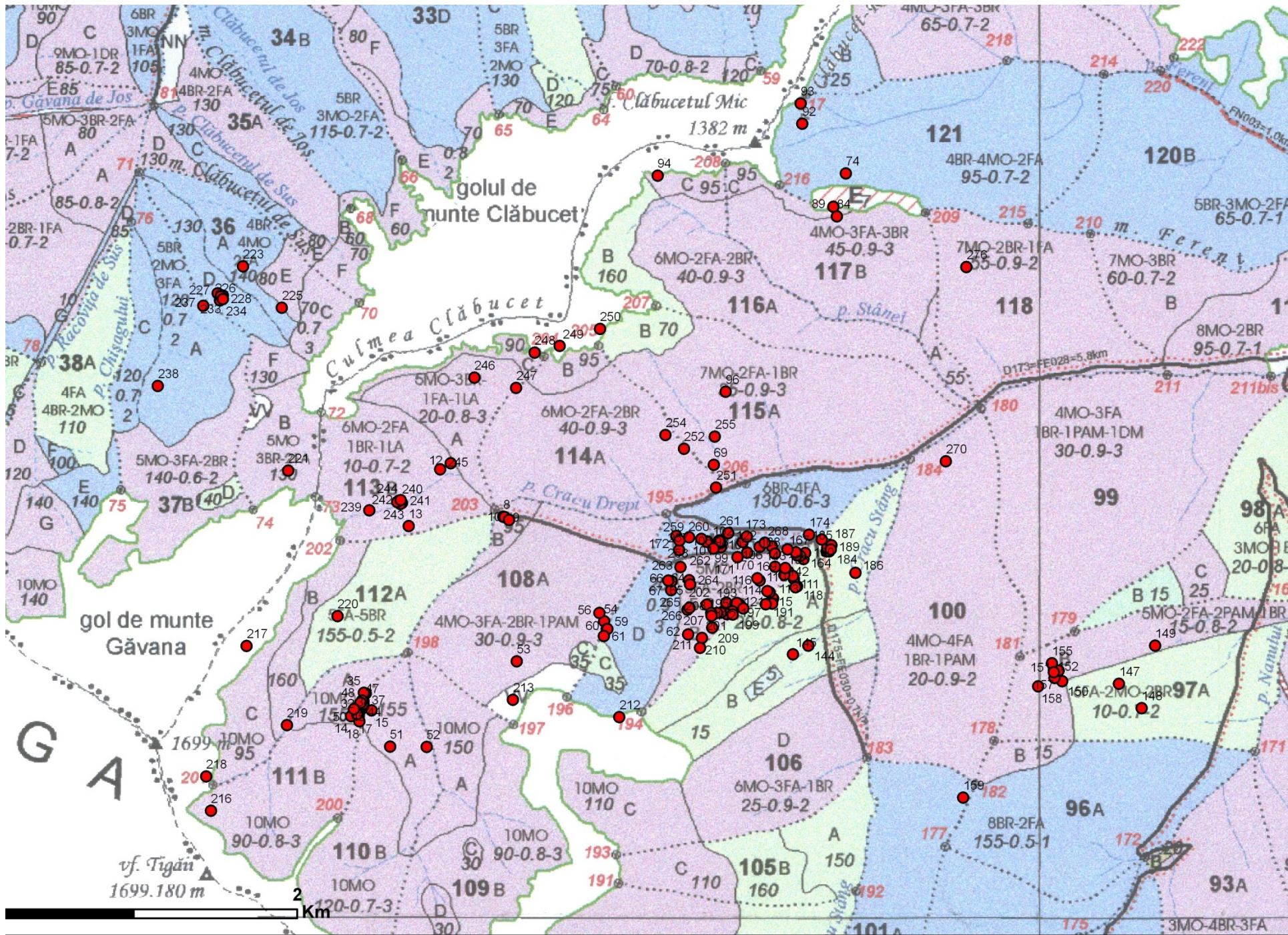
Population level management

- (More) large carnivores in wider suitable ranges
- Good science to inform political decisions
- Management of biological populations
- Hunting and lethal control can be acceptable to maintain coexistence
- Conservation with people's support
- Freedom within frames





Attaching collar with GPS-transmitter



Social attitudes through time

Cultural Attitudes

Antic people - Folk legends indicate generally positive perception: Romulus and Remus / ancient flag of Dacia / "Daois"



16th -20th century - fear of the unknown
Carnivores seen as uncontrollable forces of nature at the beginning- seen more as a controllable pest at the end. Competition between carnivores and humans for habitat and pray.

20th -21st century - people remain fearful but positive of large carnivores (in the towns)
Wolf remains iconic in embodying these fears
Most people want viable populations in their country ...
... **BUT NOT IN THEIR BACKYARD**
Concerns remain among farmers and rural population



Social attitudes through time



Current LC management systems in Carpathians have not secured stability of LC-human relationship

- **widespread controversial (negative) attitudes**
- **protection is often not enforced;**
- **“laissez-faire” management**
- **persisting (increasing) livestock, agriculture and hunter conflicts**
- **absence of a coordinated pan-Carpathian management**

Livestock predation can be a very serious problem to marginal economies



An old and never solved problem...



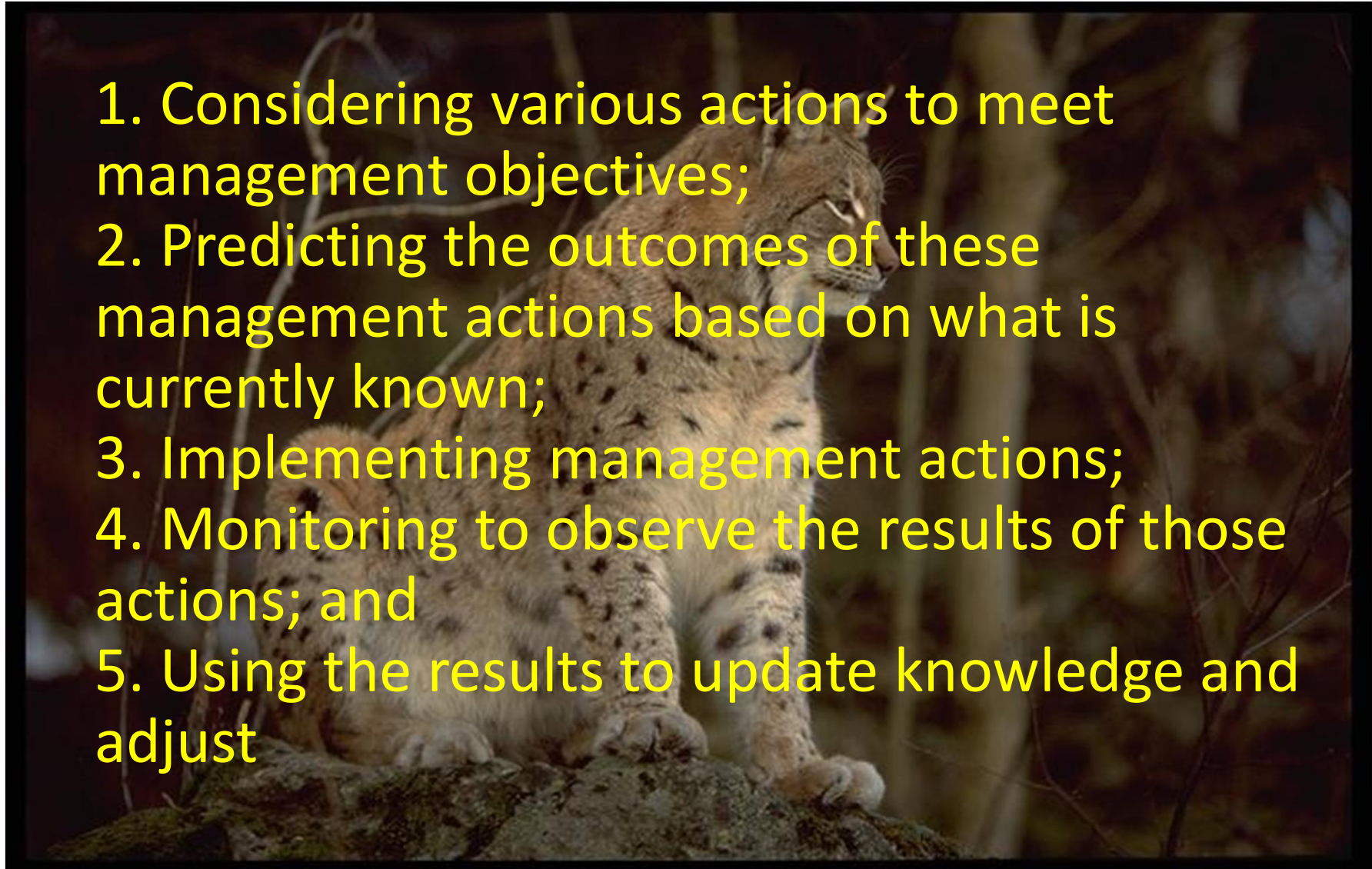
Adaptative Management

- Management should be viewed as an adaptative process: one learns about the potentials of natural populations to sustain harvesting mainly through experience with management itself, rather than through basic research or the development of general ecological theory.
- The need for an adaptive view of management has become increasingly obvious over the last two decades, as management has turned more often to quantitative model building as a tool for prediction of responses to alternative harvesting policies.

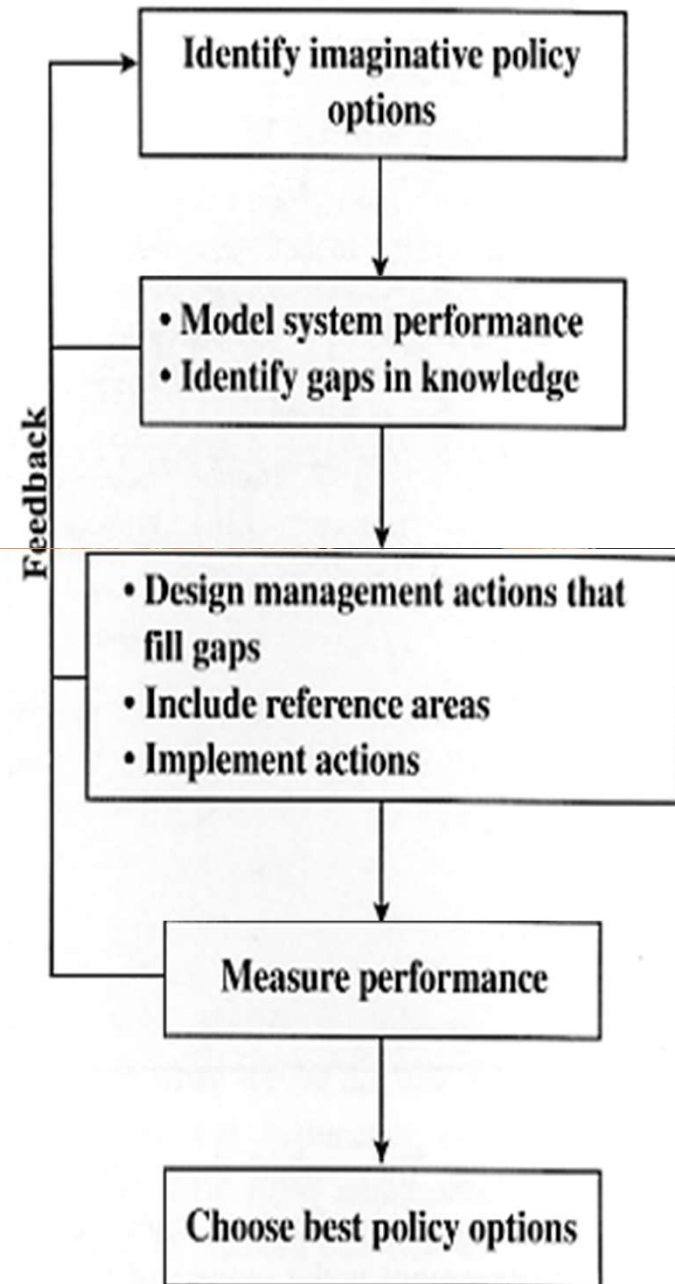


Adaptive Management entails a multi-step process:

1. Considering various actions to meet management objectives;
2. Predicting the outcomes of these management actions based on what is currently known;
3. Implementing management actions;
4. Monitoring to observe the results of those actions; and
5. Using the results to update knowledge and adjust



Adaptative
management as an
experiment- but-
“Don't destroy what
is working”



Conclusions

- The Carpathian countries share the same populations of large carnivores. For this reason management policy should be coordinated on a regional level and between neighboring countries.
- Proposed changes in national environmental and hunting laws should take into consideration the needs of proper conservation of large carnivores but have the acceptance of local people.



Conclusions

- National management plans for carnivores should be developed according to guidelines worked out by the Large Carnivore Initiative for Europe and adopted by the countries, coordinated with neighboring countries.
- Population dynamics of large carnivores should be monitored in order to have an **adaptative management.**

Thanks a lot for your attention!

