## Conference on Large Carnivores` Protection in the Carpathians Rožnov pod Radhoštěm, October 18-20th, 2016

## Status of large carnivores in the Czech Republic

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## **Historical distribution:**

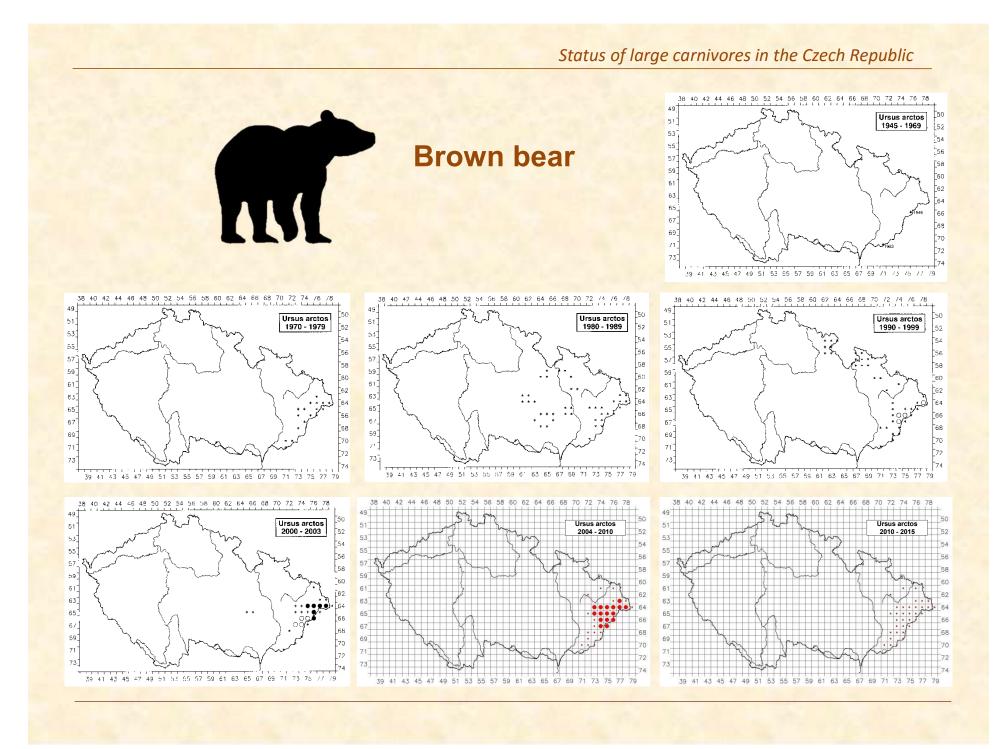
- Middle Ages whole territory of the Czech Republic
- persecution since the 15th century:
  - livestock, sheep killing
  - fear
- turn of the 19th and 20th century:
  - last bear 1890 Valašská Bystřice (1893 Hukvaldy?)
  - last wolf 1914 Černý Grúň (Bukovec u Jablunkova)
  - last lynx turn of the 19th and 20th century

### **Recent distribution:**

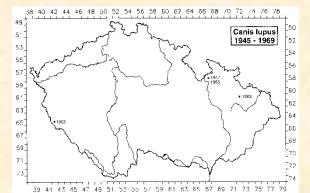
- migrants of all three species occurring in the first half of the 20th century
- evidence of distribution and population numbers after World War II

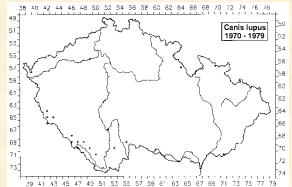


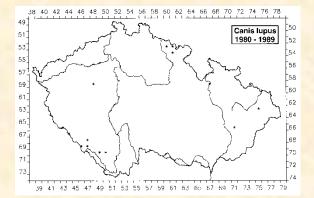


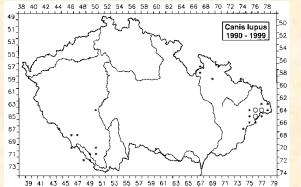


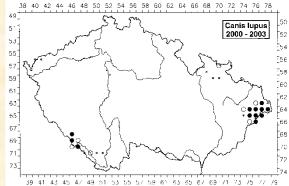
Grey wolf

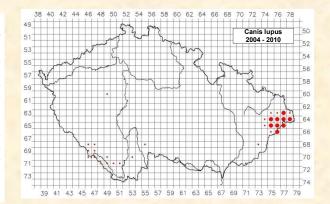


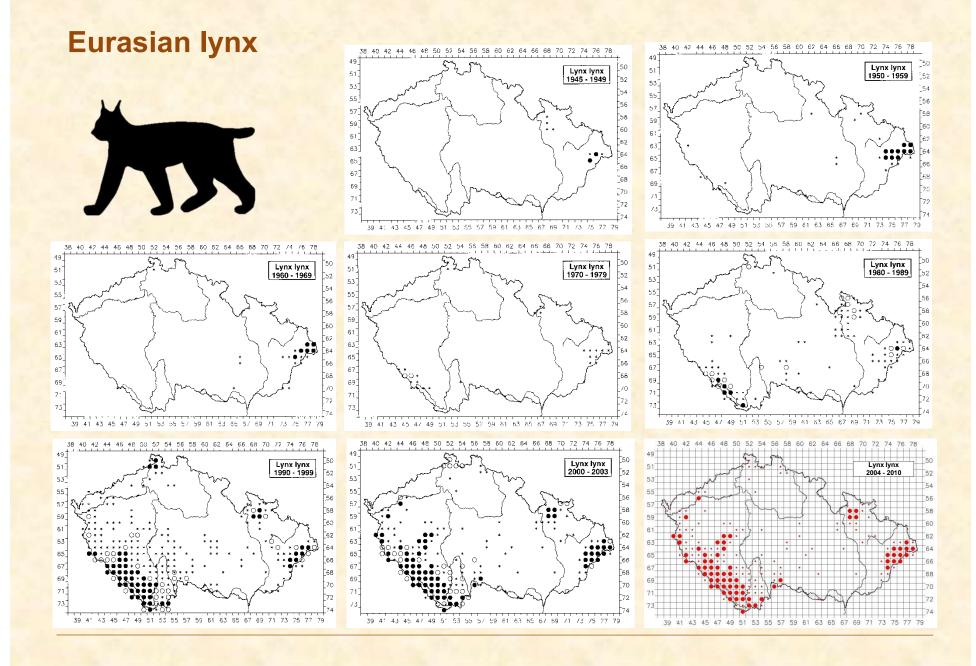






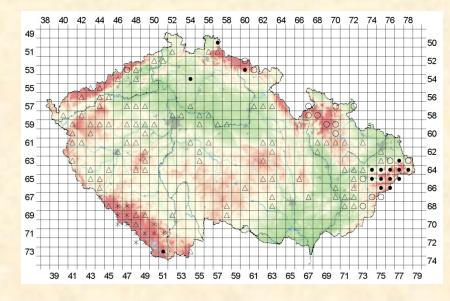






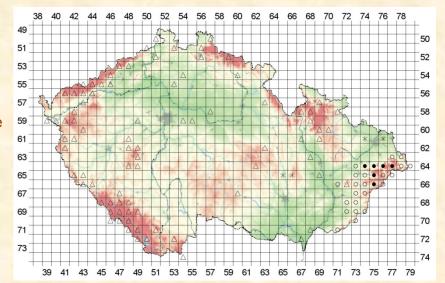
## Current distribution and population numbers

**Brown bear** no permanent occurrence in the Czech Republic



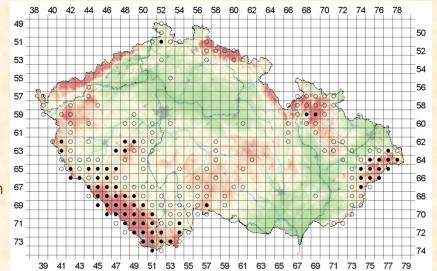
#### **Eurasian lynx**

60-80 individuals in BBA population677-10 individuals in SCI Beskydy69



#### **Grey wolf**

7-10 individuals (N Bohemia) no permanent occurrence in SCI Beskydy



## Large carnivores research in the Czech Republic:

## **Bohemia:**

NP Šumava / Czech University of Life Sciences Prague Alka Wildlife National Conservation Agency CR Friends of the Earth CR

<u>Ecology of European lynx and roe deer in mountain ecosystem (</u>2009-2013) EU - Interreg CR/Bavaria 2007-2013

<u>Trans-Lynx</u> (2013-2015) EU - Interreg CR/Bavaria 2007-2013; Ministry of the Environment CR, Ministry of Regional Development CR

## Moravia – West Carpathians:

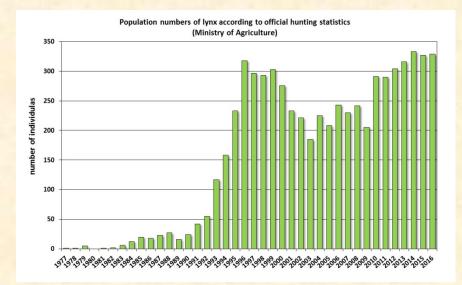
Friends of the Earth CR Institute of Vertebrate Biology AS CR National Conservation Agency CR

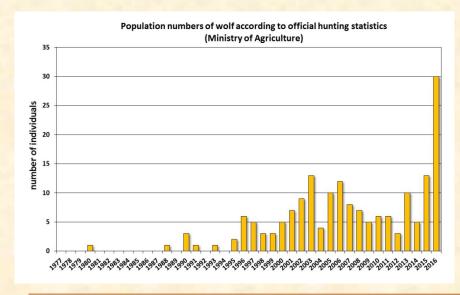
<u>Monitoring of Large Carnivores in SCI Beskydy (</u>2011-2014) EU - Operational Programme Environment, State Environmental Fund of the CR, NCA CR <u>Large carnivore conservation in long term: permeable landscape, sustainability</u> (2011-2013) Swiss-Czech Cooperation Programme

Large carnivore conservation: education, awareness and public involvement (2013-2015) Swiss-Czech Cooperation Programme

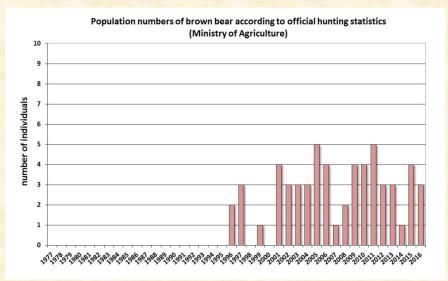
<u>Management plan for large carnivores in the CR</u> (2015-2016) EEA grants, Záchranné programy pro zvláště chráněné druhy MGSII, EHP fondy 2009-2014

## **Current distribution and population numbers**

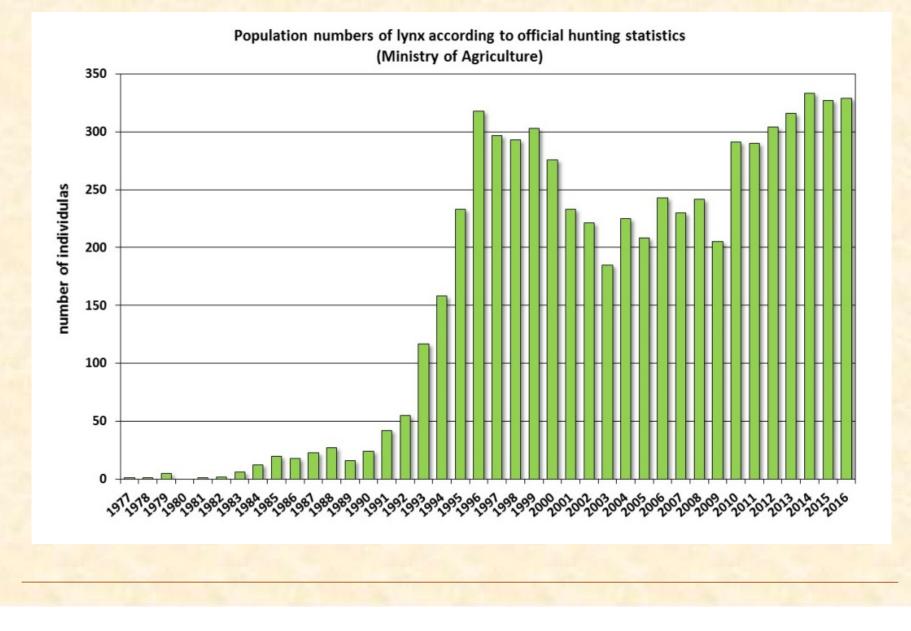




- official hunting statistics by the Ministry of Agriculture
- footprints / tracks, faeces, sightings, prey remains
- regardless of home-range size



## **Current distribution and population numbers**



#### **Protection status:**

- specially protected species the Law No. 114/1992 Coll. about nature protection
- brown bear and grey wolf critically endangered species
- Eurasian lynx endangered species
- listed in these categories also in the Red List of Threatened Species in the Czech Republic (Vertebrates)
- listed also in the Hunting Law as a game with a year round protection (No. 449/2001 Coll.)
- preparation of the Management plan for large carnivores in the CR



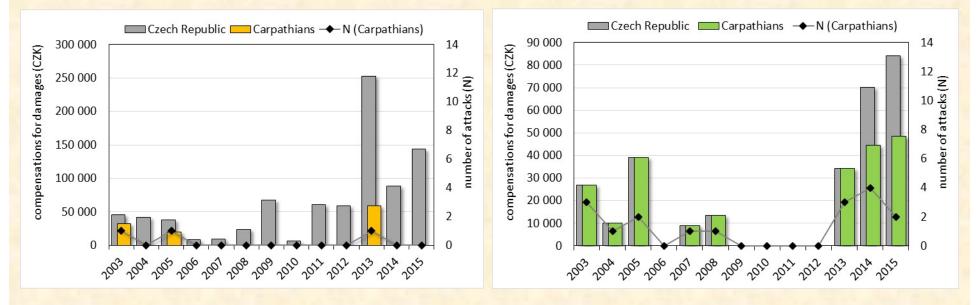
Management of large carnivores in the Czech Republic

Compensations for damages caused by large carnivores on the human health, domestic animals (defined species of domestic animals including guarding dogs) and bee colonies are paid by the state (No. 115/2000 Coll.)

#### **Eurasian lynx**

#### **Grey wolf**

844 024 CZK (cca 31 260 EUR) (Carpathians - 111 221 CZK / cca 4 120 EUR) 332 093CZK (cca 12 300 EUR) (Carpathians - 225 750 CZK / 8 360 cca EUR)

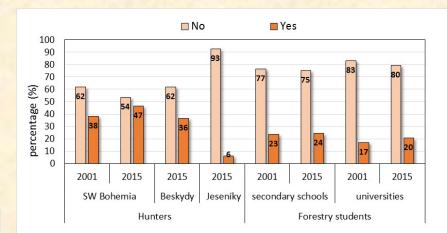


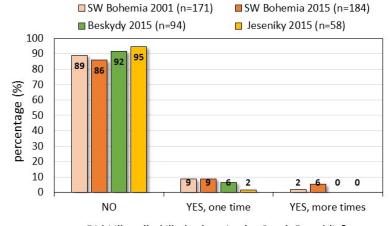
#### **Brown bear**

3 cases, all in Carpathians damage13 000 CZK (cca 490 EUR)

## Main threats: • illegal hunting

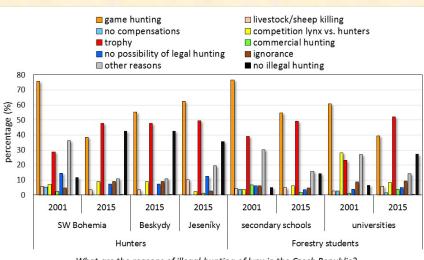
**questionnaires** N = 1 160 (2001/2015 - 382/778)





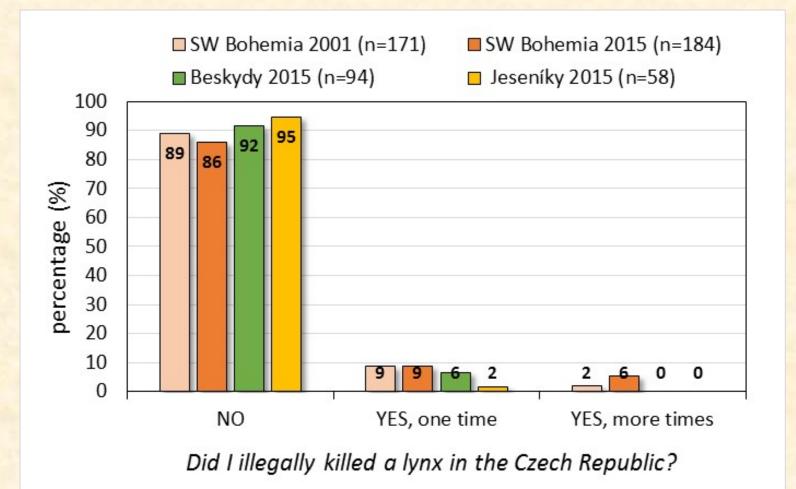
Did I illegally killed a lynx in the Czech Republic?

Do you have knowledge of illegal killing of lynx in the Czech Republic?

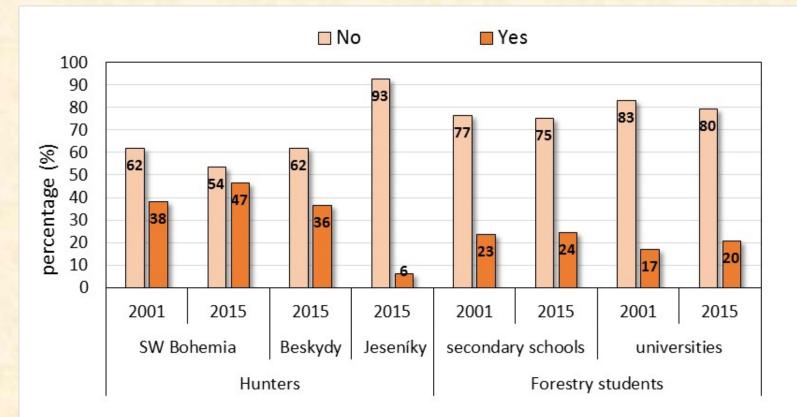


What are the reasons of illegal hunting of lynx in the Czech Republic?

## Main threats: • illegal hunting

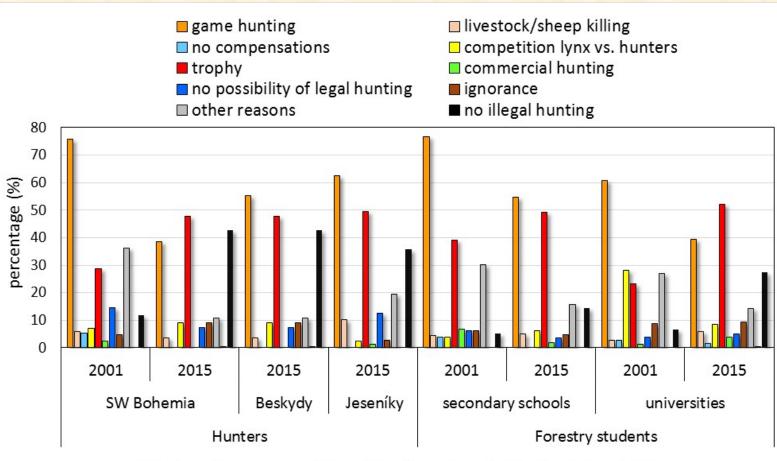


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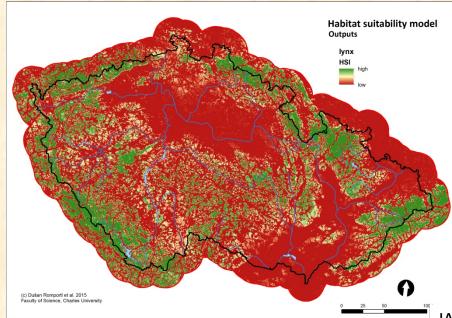
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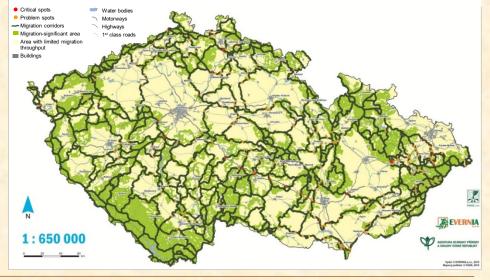


What are the reasons of illegal hunting of lynx in the Czech Republic?

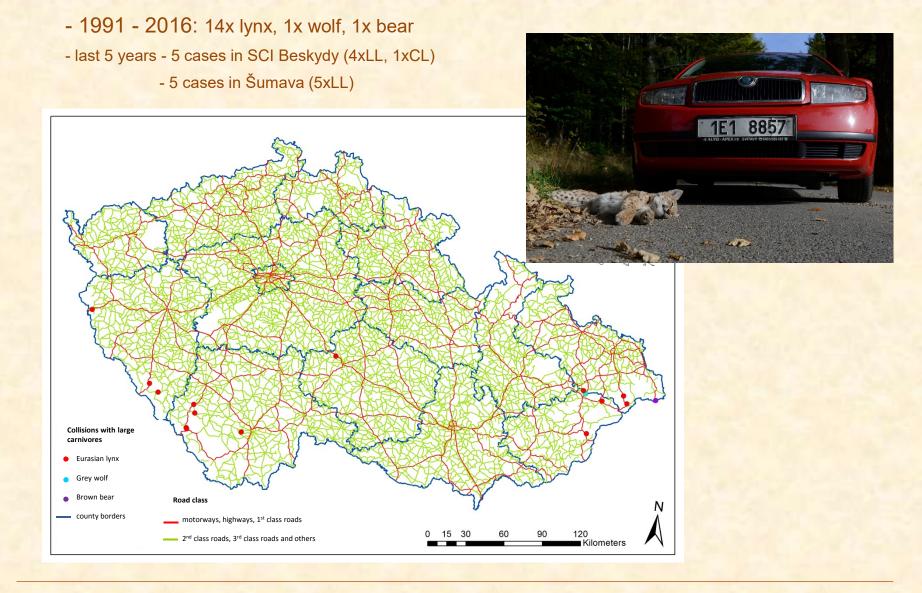
## Main threats: • landscape fragmentation and isolation



#### LARGE MAMMALS MIGRATION CORRIDORS IN THE CZECH REPUBLIC



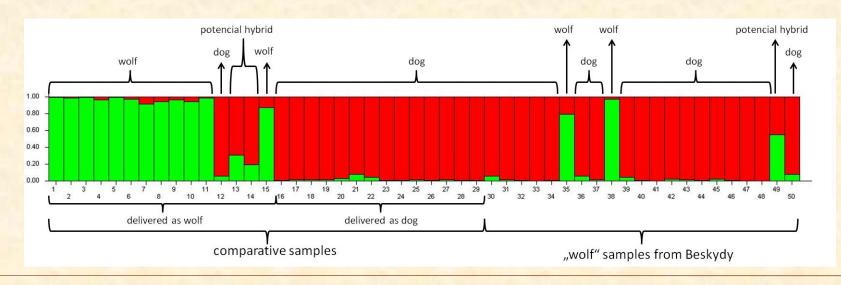
## Main threats: • mortality due to collisions with vehicles



## Main threats: • isolation and low genetic variability of BBA lynx population

	introduce	d popula	ations	natural populations							
	source Carpathians			Carpathians		· NE Poland ·	Baltic		-Scandinavia	Finland	Pussia
	BBA VP	Alps	Din	Beskydy	Slovakia	NE FOIAIIU	Estonia	Latvia	Scanunavia	rinaliu	Nussia
Sindičic et al. 2013			0.480								
Bull et al. 2016	0.473 0.47	4	0.511		0.523	0.601	0.662	0.682			0.700
Breitenmoser-	0.420							0.680	0.540		
Würsten & Obexer-		0.420						0.000	0.540		
Hellborg et al. 2002							0.600	0.600	0.510	0.620	
Schmidt et al. 2011						0.620	0.594	0.695			
2000-2016 own data	0.447 0.496			0.548	0.593				0.495		0.793
1948-1996				0.499	0.572				0.495		0.795

## wolf x dog hybridisation



## Carpathian population of large carnivores in the Czech Republic:

#### Status of large carnivores

•European lynx - permanent occurrence of cca 10 individuals, regular reproduction

•Grey wolf - repeated occurrence of migrants

•Brown bear - repeated occurrence of migrants

#### Main threats

habitat fragmentation / migration corridors
illegal hunting
car collision
wolf x dog hybridisation

#### **Future**

#### habitat protection

•preservation of migration corridors - connection with the source Carpathian population, migration, connection with SW Bohemian population

#### continued field monitoring

•education - presentations for public, cooperation with hunters and breeders

•international cooperation - preparation of Interreg project with Slovakia

•legislative changes - Management plan

# Thank you for your attention

