

Large Carnivore of the Ukrainian Carpathians

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Ukrainian (Eastern) Carpathians consist about 10% of territory of the Carpathian mountain system. They are a “bridge” between the southern and western parts of Carpathian Mountains.

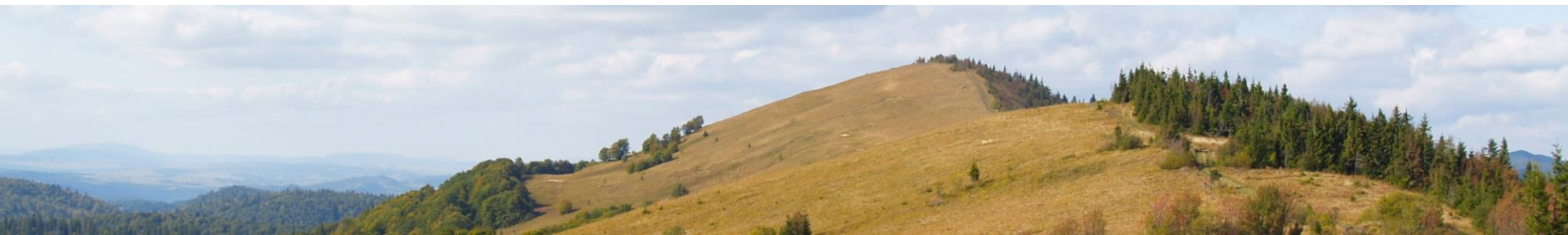


Carpathians

- Carpathian mountain system is
 - a spreading channel of boreal animal species southwards and alpine species to the east of Europe;
 - isolation barrier for Pannonia and Balkan fauna from the Eastern-European plain.

Carpathians for wild fauna

- The Carpathian Mts are still remain favorable habitats for the large mammals.
- Increasing human pressure on the Carpathians is fragmenting wildlife habitats, of large mammals, carnivore among them.



Carnivores

- 17 carnivore mammal species occur in Ukraine, 16 of them are noted in the Ukrainian Carpathians area.

Large carnivore are an integral part of natural heritage of the Ukrainian Carpathians :

- Brown bear *Ursus arctos* Linnaeus, 1758
- Wolf *Canis lupus* Linnaeus, 1758
- Lynx *Lynx lynx* (Linnaeus, 1758)

Brown bear *Ursus arctos* L., 1758

Conservation status:

- ❑ Red Data Book of Ukraine: disappearing
- ❑ Bern Convention (II)
- ❑ Habitat Directive (II/IV)
- ❑ CITES, Annex II

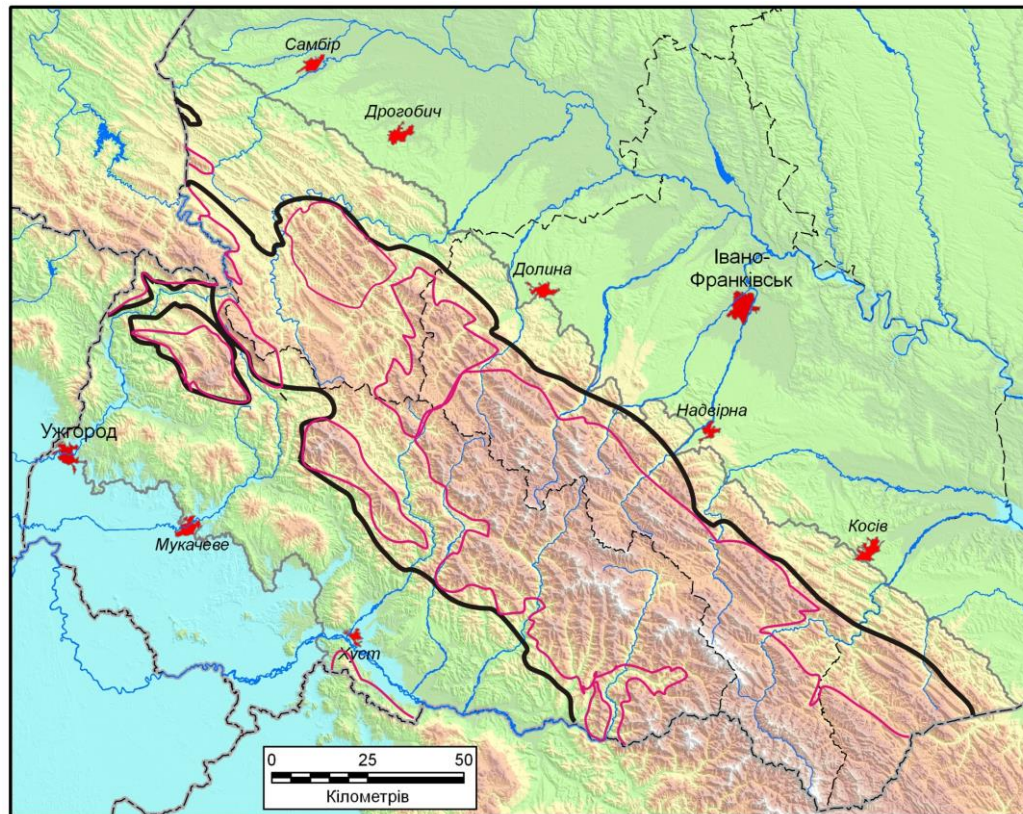


Population of the Brown bear

- ❑ In the Ukrainian Carpathians, the number of population of the brown bear was more than 1300 individuals in 1970th (0,5-0,7 ind. per 10 km²), but a considerable decline was recorded in subsequent years.
- ❑ The current population in the Ukrainian Carpathians is estimated no more 200-220 individuals.
- ❑ Carpathians: 7 200 (Chapron et al. 2014)

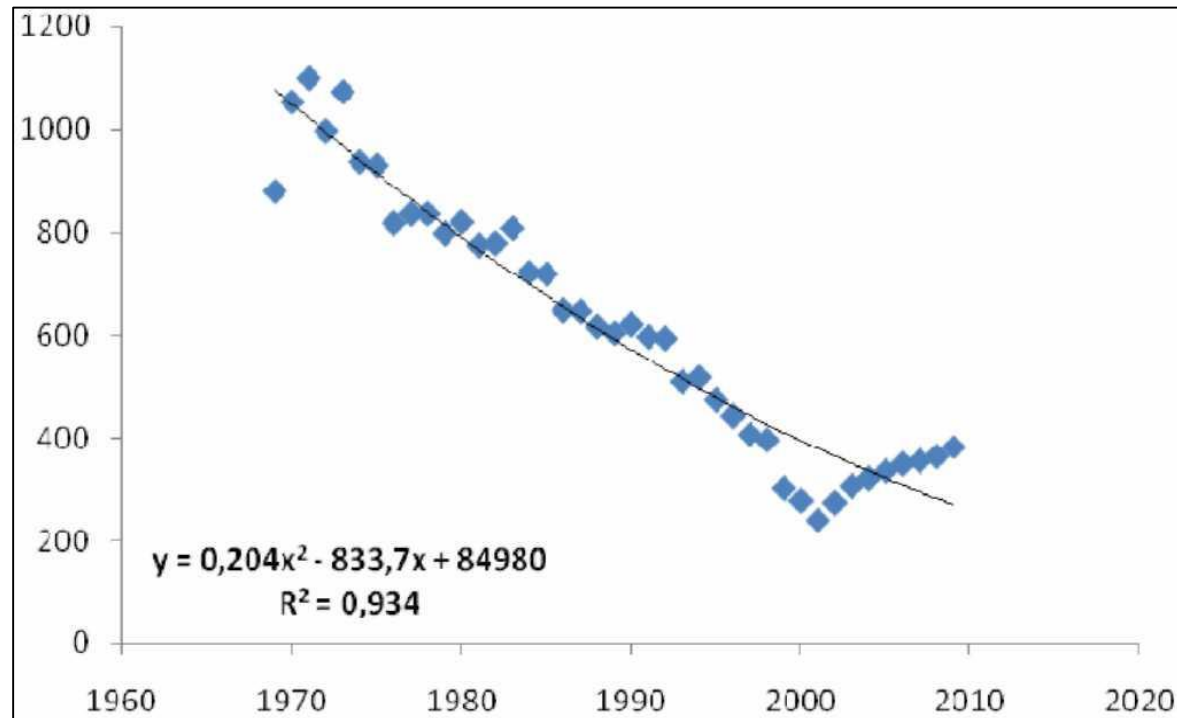


Distribution



Brown bear population dynamics fluctuations in the Ukrainian Carpathians:

- during 1969-2000 - the general tendencies to decreasing;
- after 2000 - some level of stability.





Large carnivores research in the Ukrainian Carpathians

Monitoring of potential ecological corridors by using motion sensor and infrared video cameras



One of the shots
captured by the
installed camera





Methods

- Monitoring of Brown bears – dynamics of distribution and population number
- Mapping of habitats
- Monitoring of potential migration corridors (trap camera)
- Collecting of material for genetic investigations
- Damage reports
- Questionnaires and observations from the public/hunters



Gaps and tasks

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- Distribution, quantity, movements (esp. in the border areas)
 - Genetic research of brown bear population monitoring and abundance data based on DNA analysis
 - Research of brown bear spatial activity, home ranges based on telemetry and photo-trap monitoring

Wolf *Canis lupus* Linnaeus, 1758

Conservation status:

- ❑ CITES, Annex II
- ❑ Bern Convention, Annex II
- ❑ Habitat Directive: Annex II/IV
- ❑ UA: hunting restricted

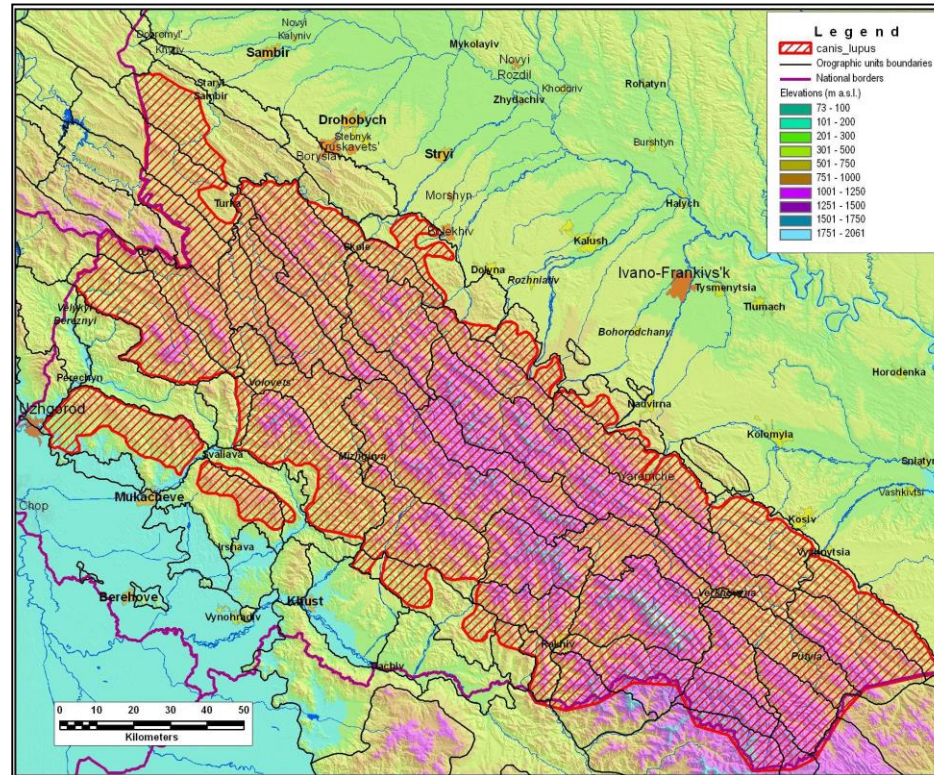


Population

- The Carpathians – 3000 inds. (Chapron et al. 2014)


Rough recent evaluation: about 400 wolves in the Ukrainian Carpathians. The methods of counting not allow ascertain real number of wolves.

Distribution



Population estimate

- In comparison to the 70th, the number increased in 5-6 times.
- Recent data show that population density consisted 11,0 inds./100 km² in the Transcarpathian region and 4-7,9 inds./100 km² in other Carpathian regions of Ukraine.

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- Until recently, the law "On hunting activity" allowed hunting on wolves during all the year.
 - Last years Ukraine strengthened the protection of wolves in order to conserve the species. The hunting is allowed only from October to February.



Methods:

- Monitoring for dynamics of distribution and population number
- Monitoring of pack movement
- Tracking in winter
- Questionnaires
- Annual winter census in hunting areas



Tasks and needs

- Distribution, quantity, movements (esp. in the border areas)
- Population genetics and gene flow in the wolf population in the Ukrainian Carpathians
- Development of management plans



Lynx

Lynx lynx (Linnaeus, 1758)

Distribution

- The lynx is a rare species of the Eastern Carpathians; it sporadically occurs throughout the region, mainly in the Gorgany, Svydovets, Chornohora, Beskydy mountain massifs.
- The population number and trends of lynx population in the Ukrainian Carpathians need to be further studied.



Population

- The Carpathian population is estimated about 2300-2400 individuals (Chapron et al. 2014)
- The Ukrainian Carpathian population is estimated about 250 individuals.
- Density of the Lynx consists 1,3 ind./100 km² in the NP "Skolivski Beskydy".
- The average density in RoC – 3,9 ind./100 km².



Methods:

- Monitoring of lynx – dynamics of distribution and population number
- Mapping of observations
- Using of trap camera
- Tracking
- Annual winter census in hunting areas
- Questionnaires and observations from public and hunters



Tasks and needs

- Distribution, quantity, movements in the Ukrainian Carpathians
- Genetic research of lynx population: monitoring and abundance data based on DNA analysis

Thank you for attention!

