

A brown bear is sitting in a forest, looking towards the camera. The bear is positioned on the left side of the frame, with its body angled slightly towards the right. It has thick, brown fur and is looking directly at the viewer with a neutral expression. The background consists of several tree trunks and some green foliage, suggesting a forest environment. The lighting is natural, highlighting the texture of the bear's fur and the bark of the trees.

Monitoring of large carnivores in Slovakia

Slavomír Find'o
Slovak State Nature Conservancy

Distribution of bears, wolves and lynx

- **Comprehensive information and monitoring system – KIMS
(Ministry of environment)**
- **Hunting statistics
(Ministry of agriculture and rural development)**



CZECH
REPUBLIC

POLAND

SLOVAKIA

HUNGARY

WWW.FREEWORLDMAPS.NET

Maple Mountains

Little Fatra

High Tatras

Low Tatras

Great Fatra

Slovak Ore Mountains

Eastern Slovak Hills

Slovak Central Mountains

Little Carpathians

Danubian Lowland

Danubian Hills

Bratislava

Trnava

Zilina

Velky Krivan 1709

Velka Luka 1475

Bystra 2248

Gerlachovsky Stit 2655

Dumbier 2046

Kralova Hoha 1946

Banska Bystrica

Zvolen

Presov

Kosice

Morava

Váh

Hron

Ipel

Slana

Hornád


Ondava

Danube

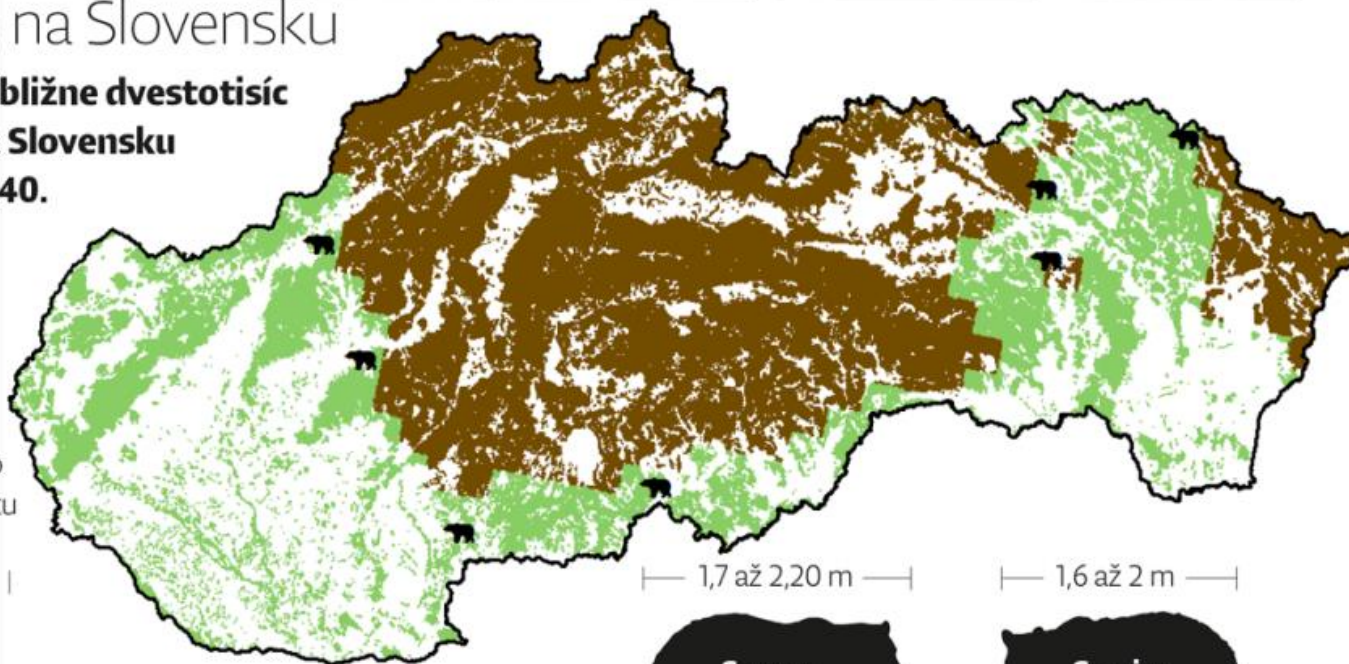
Medvede na Slovensku

Na svete je približne dvestotisíc medveďov. Na Slovensku ich žije vyše 1240.

 Výskyt mimo areálu výskytu medveďa hnedého

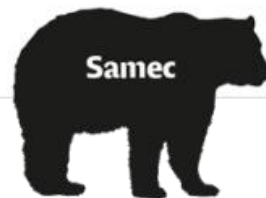
 Lesy s výskytom medveďa hnedého


 Ostatné lesy




1,7 až 2,20 m

1,6 až 2 m



 140 až 320

 80 až 200



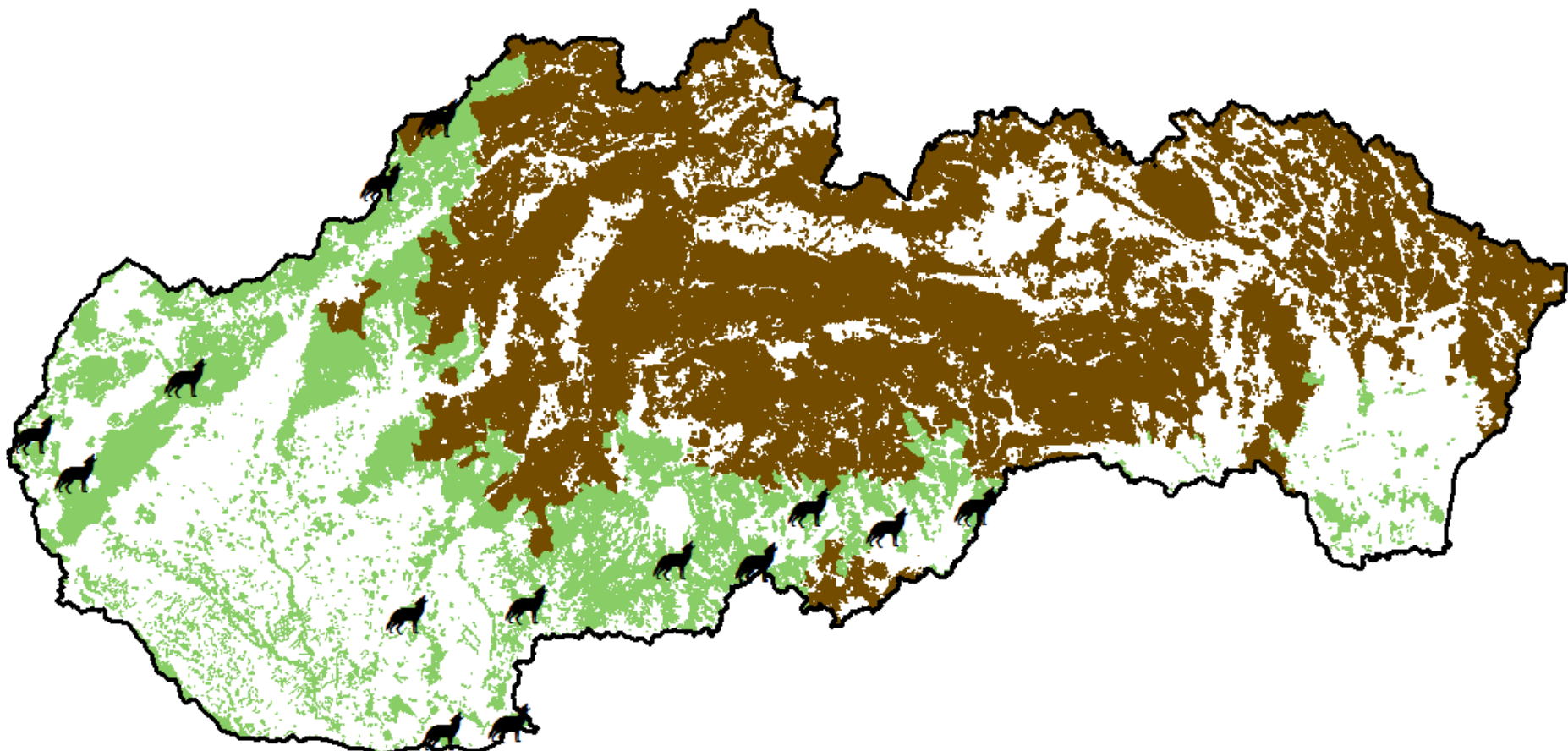
Výskyt mimo areálu rozšírenia vlka dravého (1984 - 2015)



Lesy osídlené vlkom dravým (1984 - 2015)



Ostatné lesné porasty bez zaznamenaného výskytu vlka dravého





Estimation of population size

Natiowide – bear, wolf packs

Model areas – wolf, lynx

Assessments of conservation status of species and habitats

Management purposes

- Noninvasive DNA sampling (bear and wolf)
- Camera trapping (lynx- CMR)
- Snow tracking (wolf, lynx in selected model areas)
- Summer monitoring of breeding wolf packs (nationwide)
- Bear observation (Malá Fatra Mts)
- Hunting statistics (bear, wolf, lynx)

Noninvasive DNA sampling CMR of bears

- **Nationwide**
- **2013 – 2015**
- **Estimated population size 1 256, range 1 023 – 1 489**
- **Sex ratio 1 : 1.37 in favor of females**

Wolf monitoring in Liptov region – Northern Slovakia

**Non-invasive DNA sampling CMR
In 2016 – 45 wolves**

Population size overestimated in official hunting statistics approx, 6 times.

Authors: R. Rigg, M. Jelenčič, M. Konec, P. Bedo, S. Puls and T. Skrbinšek

Lynx monitoring – Štiavnické Mts and Veľká Fatra Mts

Camera trapping 2013/2014
Sample size 843 images

Štiavnické Mts	7 lynx
Veľká Fatra Mts	9 lynx

Authors: R. Rigg and J. Kubala

Assessment of damage to livestock and other human properties

Since 2002 (Act 543/2002) introduced damage compensation. Every reported damage has to be assessed by a group of 2-3 experts.

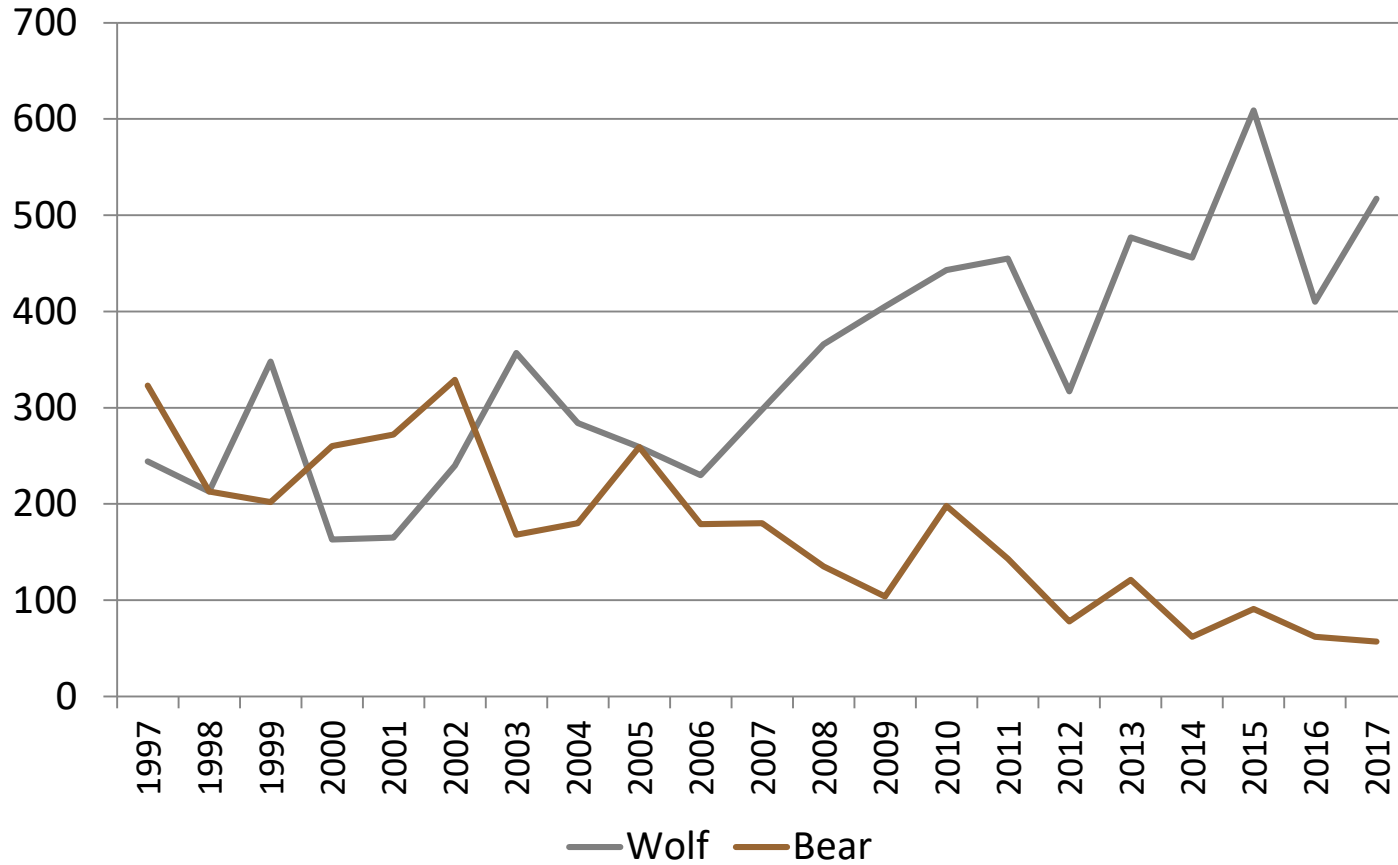
District Office, Department of Environmental Care
(Ministry of Interior)

Results reported to the Slovak State Nature Conservancy
(Ministry of Environment)

Type o damages:

- Wolf and bear attacks to livestock (sheep, goats, cattle)
- Damage caused by bears to beehives, crops (corfields), fruit trees, small domestic animals (rabbits, poultry), livestock guarding dogs
- Health care after bear attack to a human being

Number of sheep/goats killed by wolves and bears



Thank you for your attention

