

# Coservation status and main threats to wolf population in Poland, 2016

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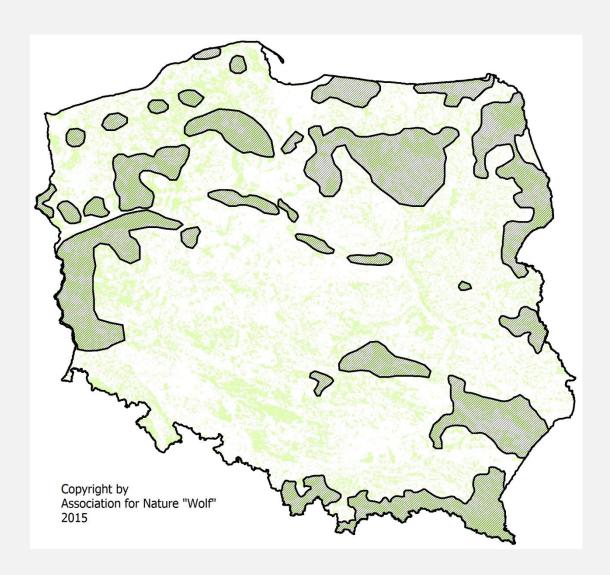




#### Wolves in Poland

Current population size ~ 1300 -1400 wolves in whole country

Legal status: fully protected since 1998

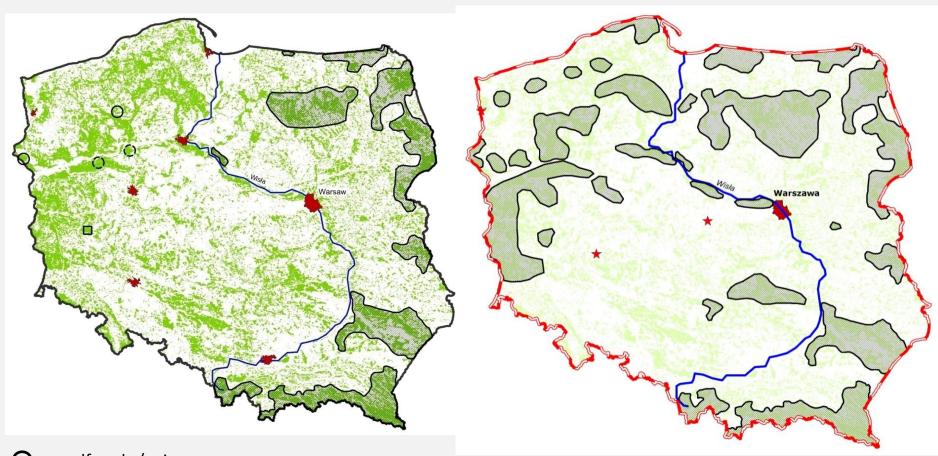




# Development of wolf number and range in Poland

**2001** (~ 570 wolves)

**2016** (~ 1300-1400 wolves)



O wolf packs/pairs

c ephemeral pairs/loners

wolves escaped from enclosure

main wolf range



# Standardized census and monitoring of wolf population

- Currently nation-wide system of standarized census is lacking.
- In 2014-2015 monitoring of status of wolves in 10 Natura 2000 sites by the Chief Inspectorate of Environmental Protection, but without field surveys
- Official number of wolves based on reports provided by regional directorates of environmental protection (RDEPs).
- RDEPs request for data from local forest divisions and hunters, NGOs, scientists, environmentalists. No scientific based analyses for whole country are involved



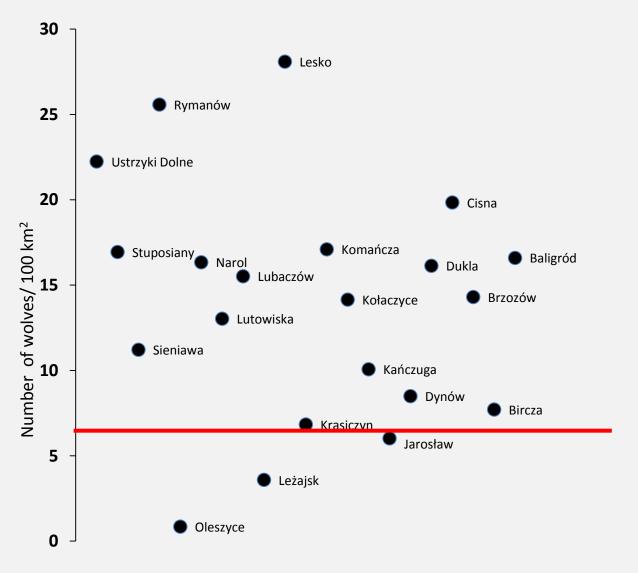


## Standardized census and monitoring of wolf population

Census and monitoring conducted as scientific projects or NGOs and State Forests initiatives on regional level

- 2001-2009. National wolf and lynx census, coordinated by the Mammal Research Institute Polish Academy of Sciences and the Association for Nature "Wolf", partly financed by the State Forest Service.
- 2001-present. Wolf monitoring in western Poland conducted by the Association for Nature "Wolf", supported by IFAW, EuroNatur, Wolves and Humans fundation and own sources.
- 1997-present. Wolf monitoring in the western-most part of Carpathian Mountains, conducted by the Association for Nature "Wolf", financed partly by Wolves and Humans Foundation and EuroNatur. Since 2014 joint project with Hnuti Duha from Czech Republic.
- 2014/2015. Wolf census in NE Poland conducted by State Forest Service in cooperation with Association for Nature "Wolf".

Wolf densities based on hunters' surveys (black dots) in forest districts in comparison with the highest wolf density (a red line) recorded during research project in the Bieszczady Mts. (eastern-most part of Carpathians)





# Spatial management units of wolf population in Poland

Three main European wolf population

in Poland

**Baltic wolf population** 

~ 450-480 wolves

Central European wolf population

~ 280-330 wolves

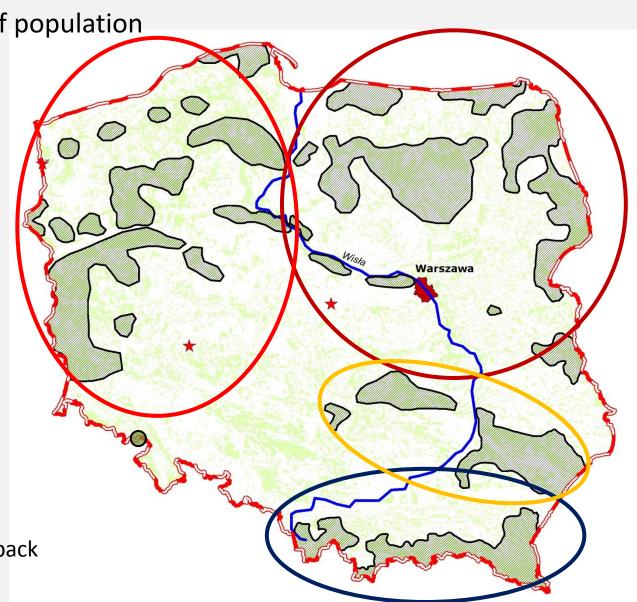
Carpathian wolf population

~ 300 - 400 wolves

**Roztocze wolf population** 

~ 150-180 wolves

**Sudety Mts.** – 1 reproducing pack





# Differences in wolf legal status



#### Wolves strictly protected

Central European population, Capathian population)

- Poland
- Germany
- Czech Republic
- Romania

#### **Wolves hunted**

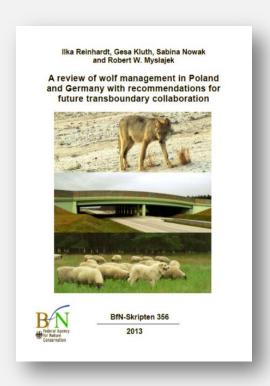
(Baltic and Carpathian populations)

- Slovakia
- Lithuania
- Belarus
- Russia
- Ukraine



# Transboundary cooperation

- Polish-German wolf working group
- One or two meetings per year
- Joint reports

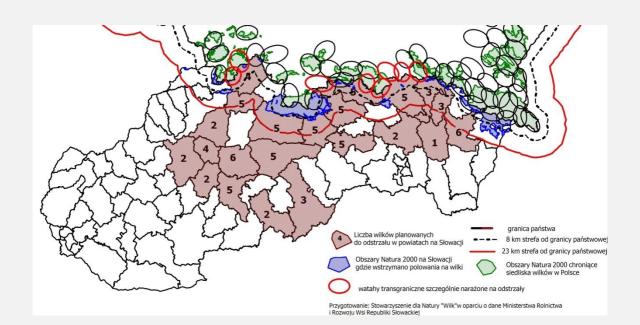






# Transboundary cooperation

- Polish-Slovak large carnivore working group
- Irregular meetings: June 2012, April 2013.
- Since 2013/14 harvest quota limited to 80-90 wolves in Slovakia
- Buffer zone along Polish-Slovak state border without wolf hunting

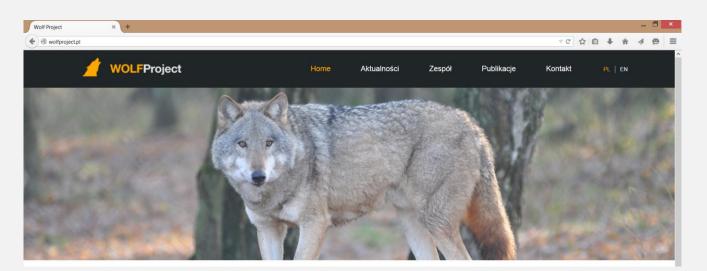




#### Genetic studies

- Population genetics of the wolf population re-colonizing western Poland
- Gene flow in the wolf population in Western Carpathians (Poland-Slovakia-Czechia)
- Diversity of immune related genes (MHC, TLR) in the wolf population

Project conducted by Institute of Genetics and Biotechnology University of Warsaw in co-operation with the Association for Nature "Wolf" and partners from Czechia and Germany.



http://wolfproject.pl







Wolf habitats fragmentation and isolation by roads and motorways

Increasing traffic = increasing mortality on roads







#### Wolf habitats fragmentation and isolation by roads and motorways

Fencing - obligatory along all motorways



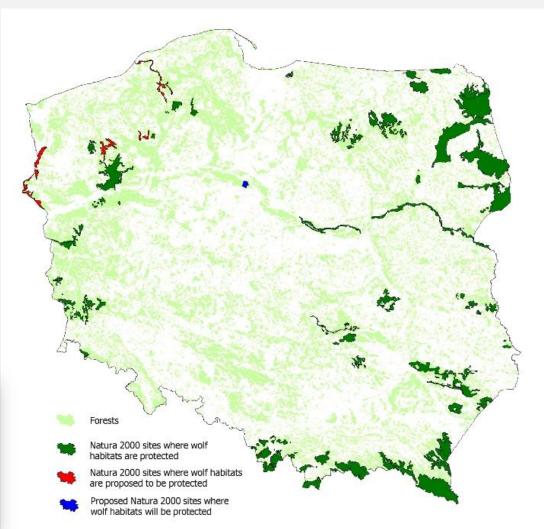




# Natura 2000 sites protecting wolf habitats

- > 73 Natura 2000 sites
- > 15,284 km<sup>2</sup>
- ➤ 25% of wolf habitats in Poland



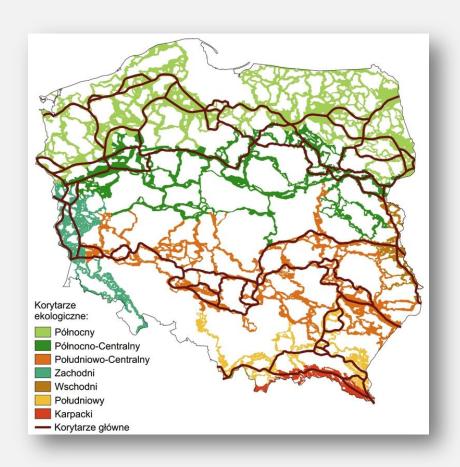


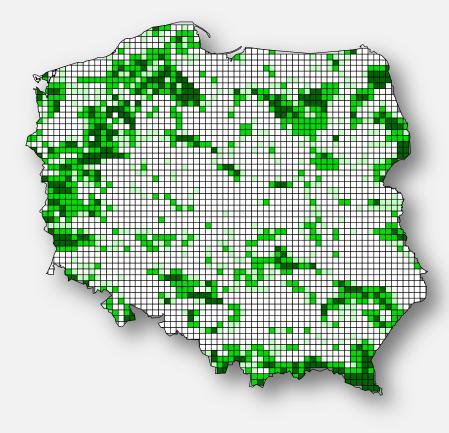
Source: Reinhardt, Kluth, Nowak & Mysłajek, 2013



# Habitat connectivity

- Project of ecological corridors linking Natura 2000 sites elaborated in 2004
- Habitat suitability model for wolves in Poland elaborated in 2008 and 2011



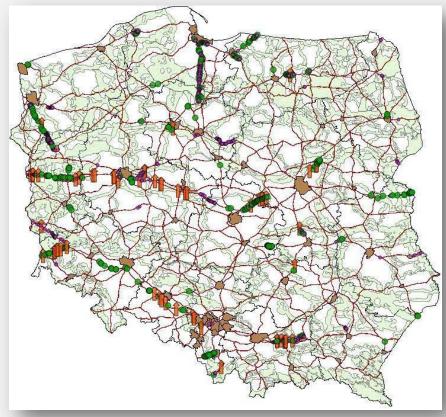




## Mitigation measures

- 96 overpasses and 353 underpasses for large terrestrial mammals already built (over 200 planned on new motorways).
- Post-investment monitoring proved that wolves use these wildlife crossing structures.







### Poaching

intentional: wolves shot by hunters

accidental: wolves in snares set for wild ungulates









Off-road recreaction and investments in wolf habitats – skii resorts, hotels, weekend cabbins







# Natural mortality factors: diseases and parasites







# Damage to livestock

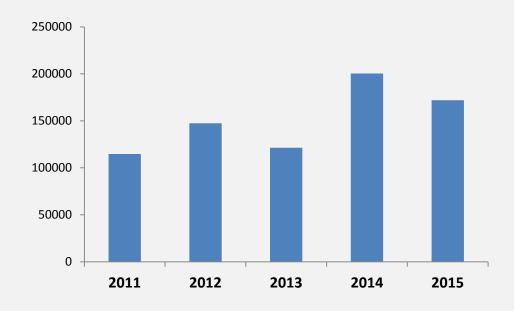
About 1000 livestock per year killed by wolves (range 800 -1200)

sheep (85,5%), catlle (7%), goats (2,3%), farm fallow deer (3,8%) horses (1,7%)

➤ Damage assesment done and compensation paid by regional directorates for environmental protection



Compensation for damage caused by wolves in Poland (in Euro)



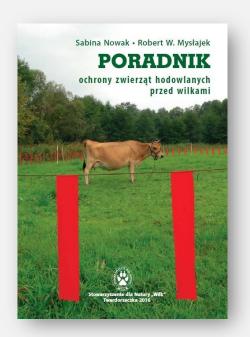
on average 151.000 Euro per year (2011-2015)

in 2015: wolf 3.9 % of all compensations paid for protected species (beaver 86,4%, European bison 4.9%, brown bear 0.2%, lynx 0.04%)



# Prevention and measures to reduce livestock depredation

# Numerous projects supporting farmers – livestock protection measures, guidebooks and trainings







# Thank you for your attention Fot. A. Adamczewski