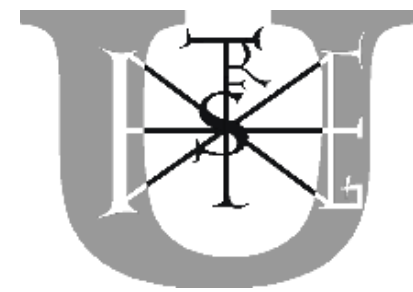




**Szent István University  
Institute for Wildlife Conservation**



# **THE MANAGEMENT POSSIBILITIES OF THE GOLDEN JACKAL POPULATIONS ON THE BASIS OF SCIENTIFIC RESULTS**

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Schweizerische Eidgenossenschaft  
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Confederazione Svizzera  
Confederaziun svizra



# Introduction

- The golden jackal became extinct in Hungary and the most part of the Balkans and Central Europe by the middle of the 20th century.
- Settled down again in the southern region of Hungary in the nineties.
- The southern and eastern parts of the Balkan Peninsula seem to hold the largest populations of jackals.
- Greece, was the one of the region's strongholds for the species, experienced a large-scale population decline during 3 decades till the first years of 2000s.

# The current distribution of the golden jackal and the possible directions of further spreading

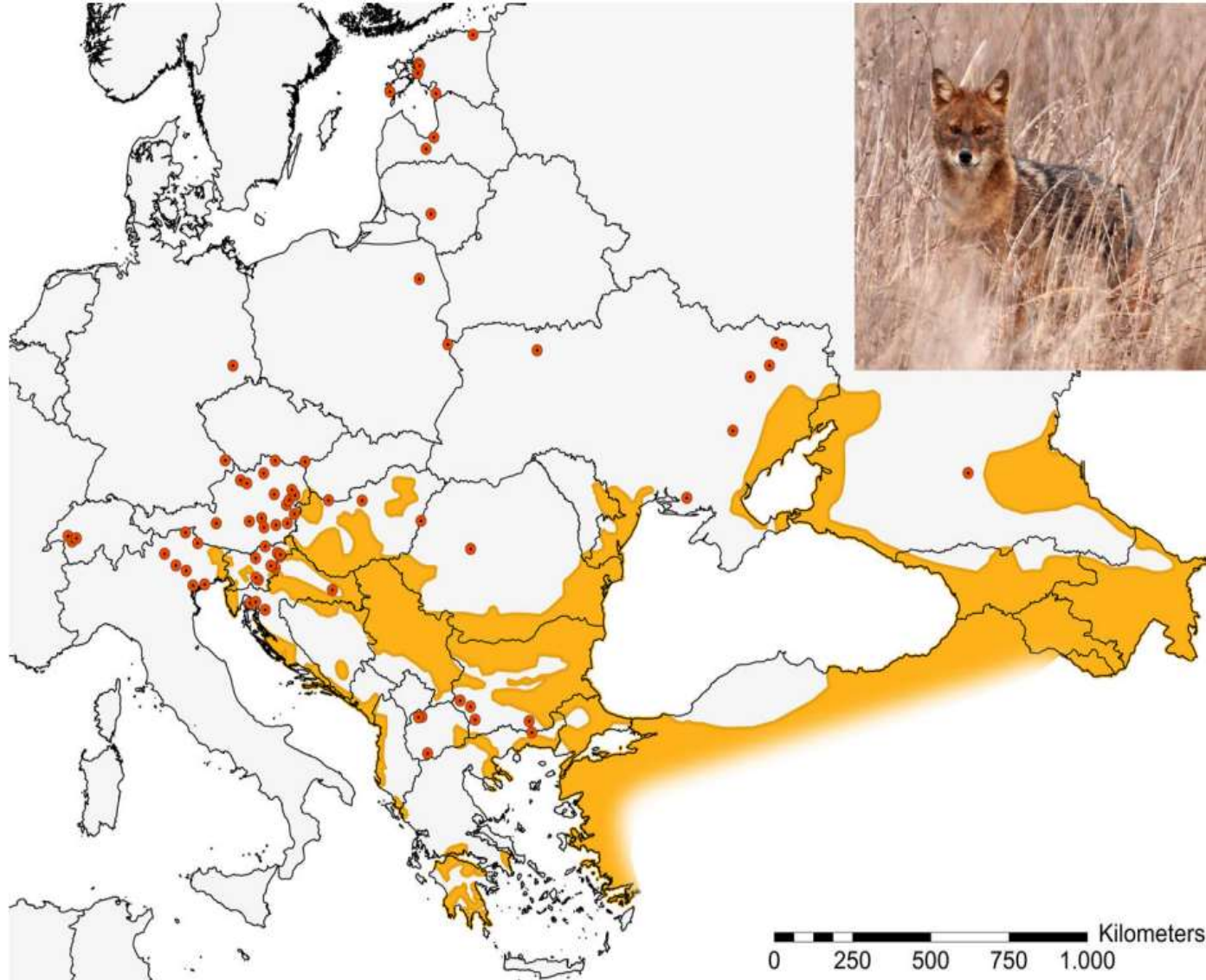


Fotó: Lanszki József



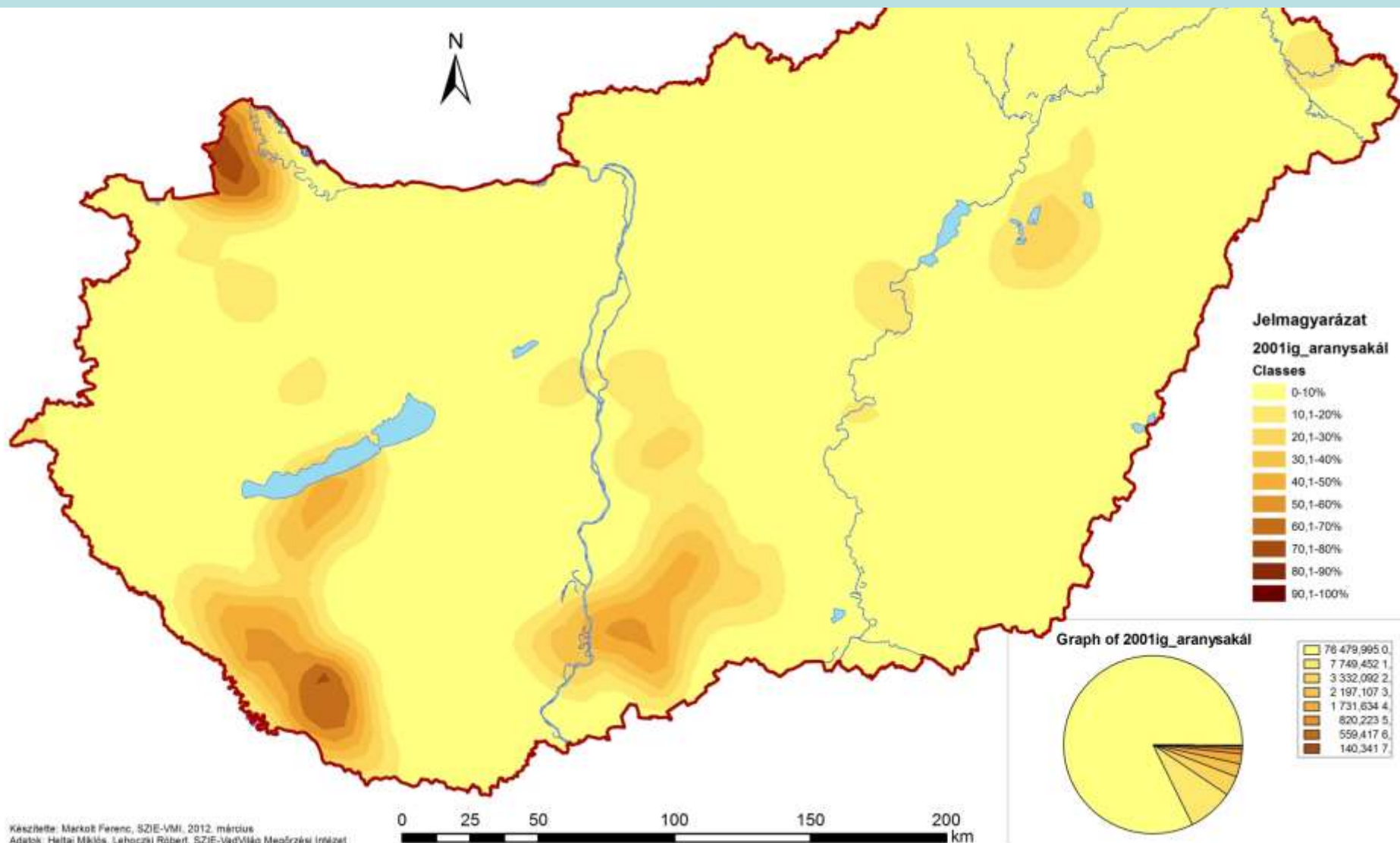
Janosch Arnold, Anna Humer, **Miklós Heltai**, Dumitru Murariu, Nikolai Spassov, Klaus Hackländer 2010. Current status and distribution of golden jackals (*Canis aureus* L., 1758) in Europe. *Mammal Review* 42: (1) pp. 1-11. (2012).

# Increasing distribution and wider sporadic appearance

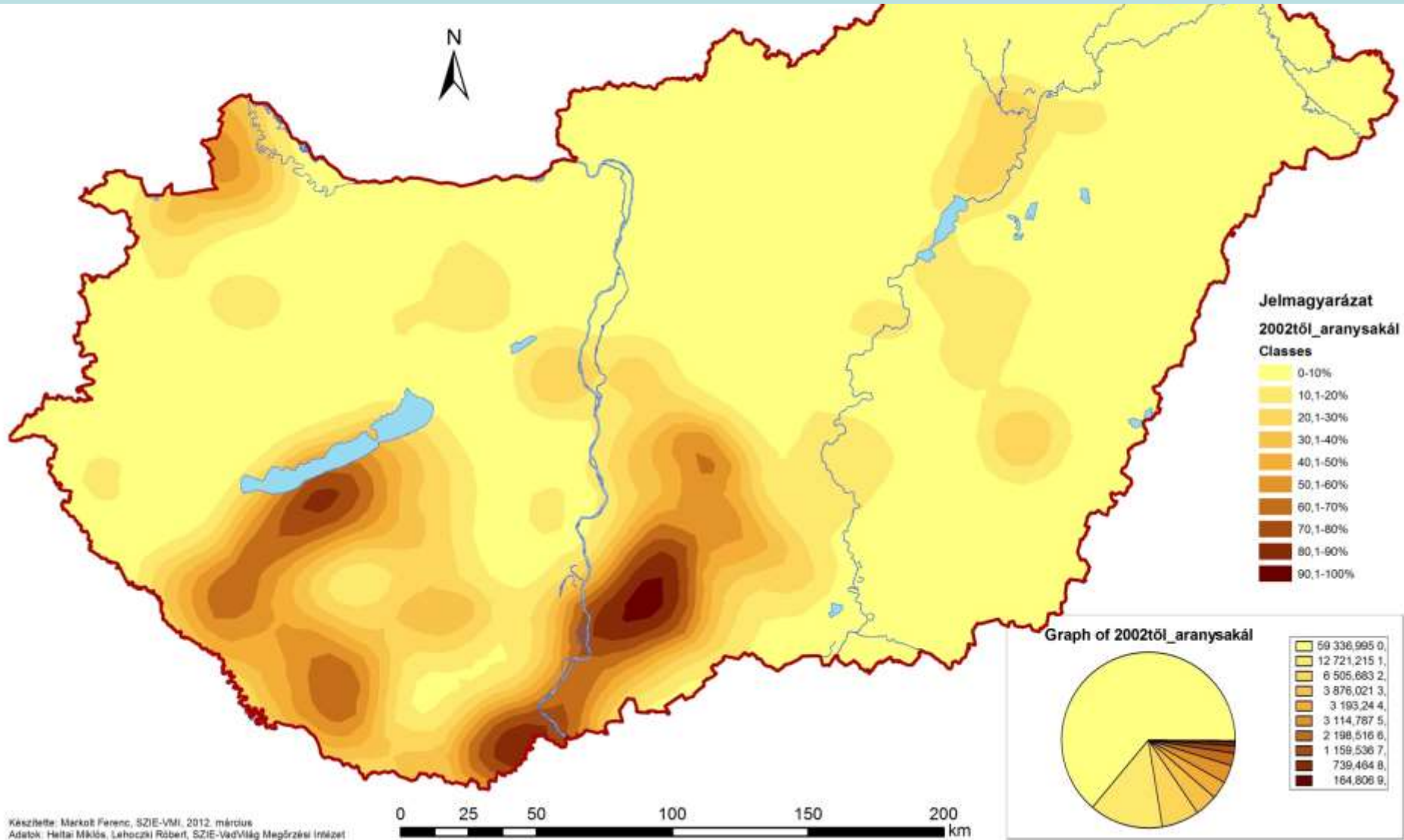


Trouwborst et al., 2015

# THE OCCURRENCE OF THE GOLDEN JACKAL IN HUNGARY BETWEEN 1997 AND 2001 ON THE BASIS OF MAIL QUESTIONNAIRE SURVEYS (N=4)

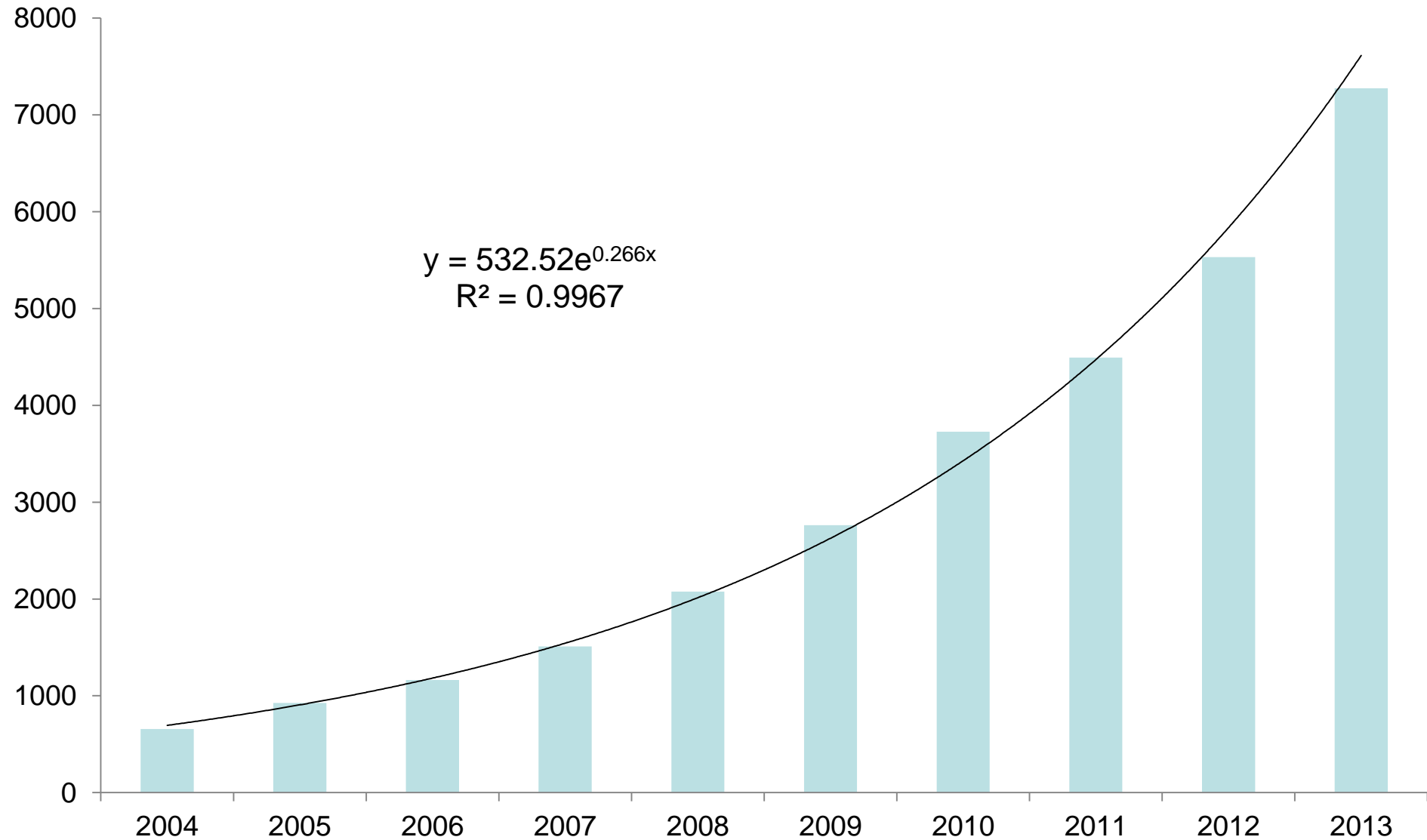


# THE OCCURRENCE OF THE GOLDEN JACKAL IN HUNGARY BETWEEN 2002 AND 2006 ON THE BASIS OF MAIL QUESTIONNAIRE SURVEYS (N=5)



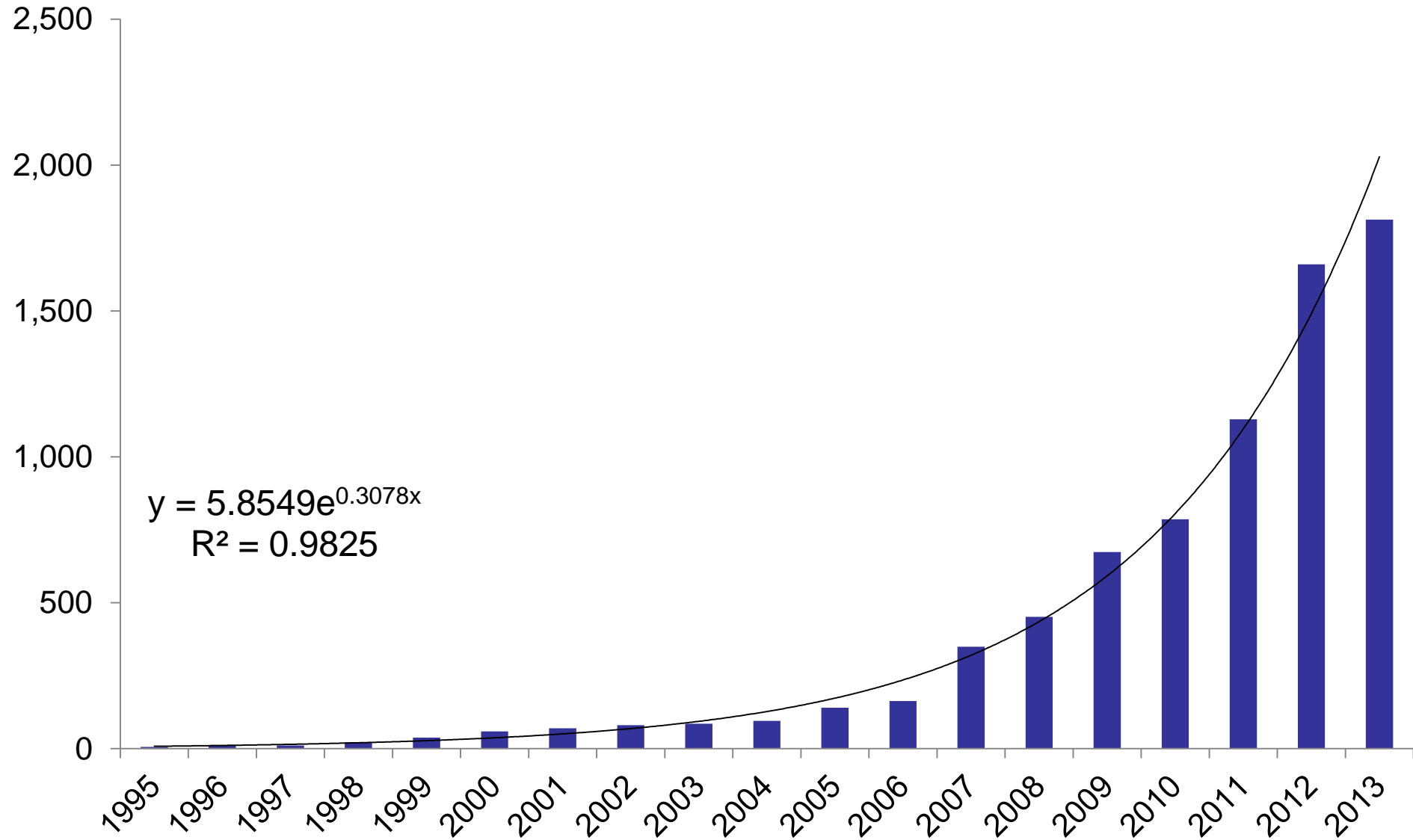
# Estimated population size

(source: Hungarian Game Management Database)



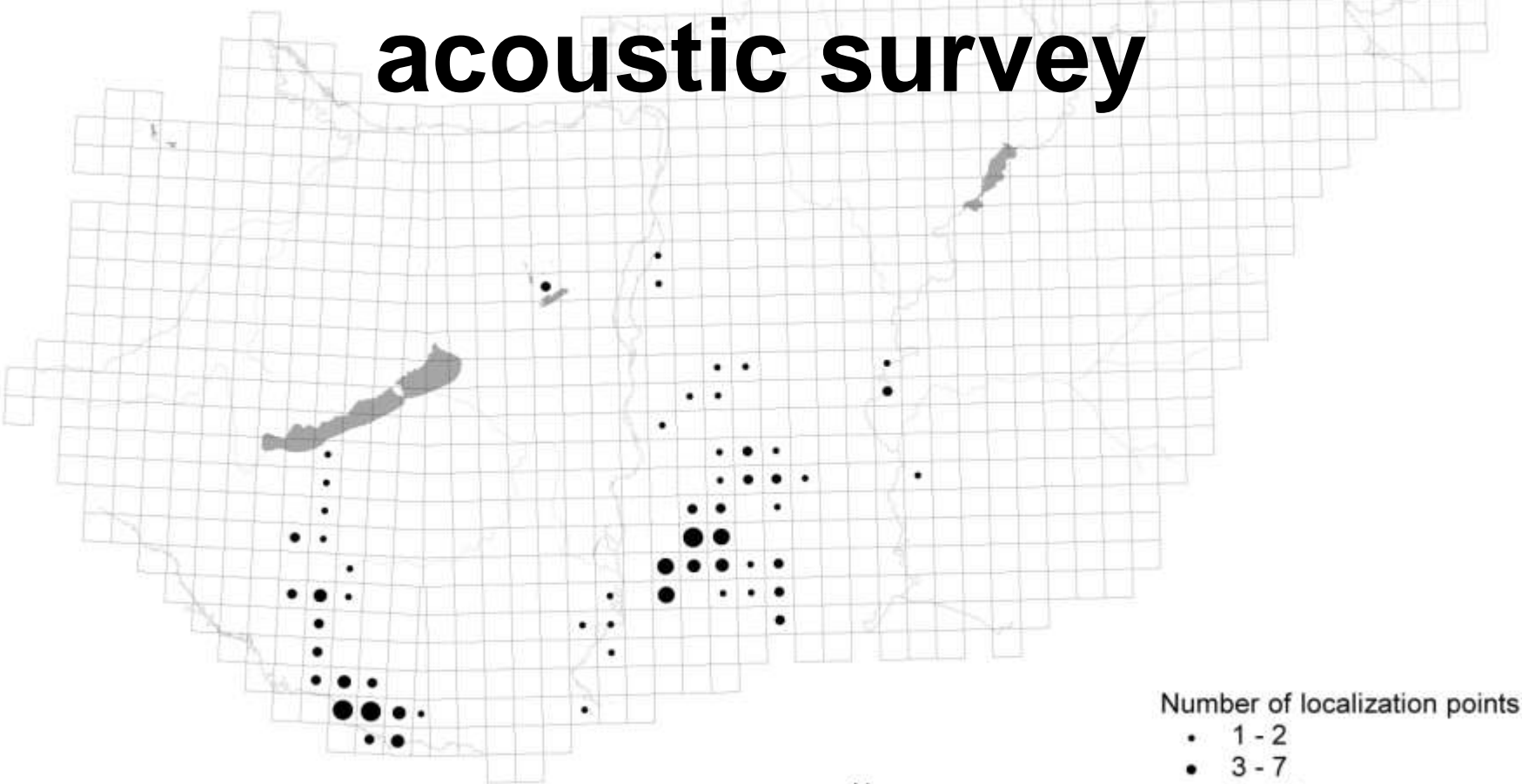
# Hunting bag data

(source: Hungarian Game Management Database)





# Occurrence of the golden jackal in Hungary by the results of acoustic survey



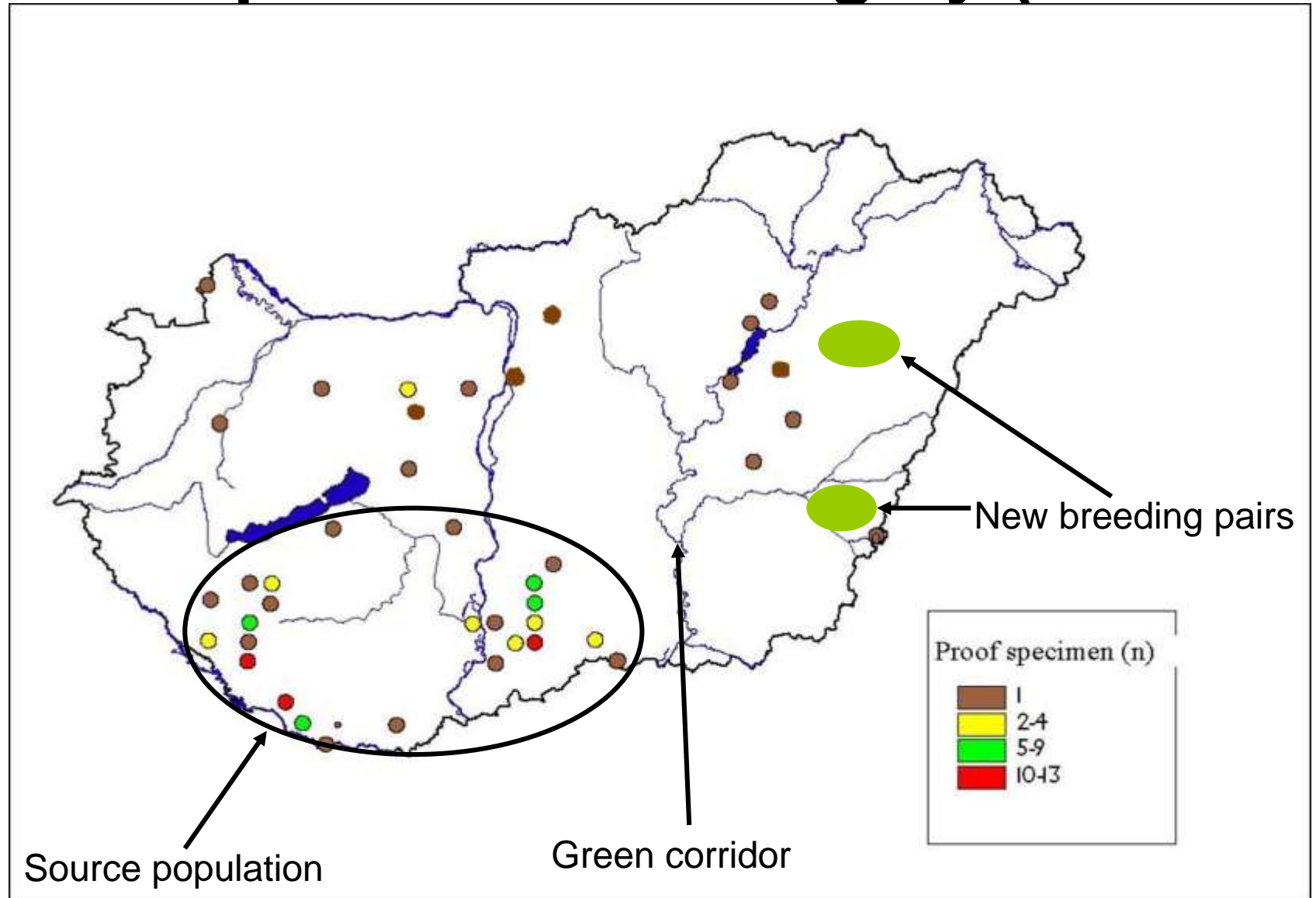
Number of localization points

- 1 - 2
- 3 - 7
- 8 - 21
- 22 - 31
- 32 - 42

50 0 50 100 150 Kilometers



# Proof specimens in Hungary (2000-2009)



L., Szabó, **M. Heltai**, and J. Lanszki 2008. Factors that influence the Golden jackal's (*Canis aureus* L. 1758) spreading in Hungary. 92nd Annual Meeting of the German Society of Mammalogy. Mammalian Biology. Special Issue Vol. 73: 41 p.

# Questions and Answers

- What were the earlier occurrences of the golden jackal in Hungary like?
  - Sporadic occurrences – edge of the former occurrence area
- Is there any impact on wildlife ?
  - Eating small mammals, but can eat young big game
- What factors help its intensive spreading?
  - No competitors; stronger than the red fox, better reproduction strategy; habitat and food generalist
- Unlimited spreading? What is the limiting factor?
  - Habitat without hiding place – intensive agricultural areas
- What can be expected in the future?
  - Common predator species with countrywide occurrence

# Conclusions

- Anthropogenic sources (waste, viscera, domestic animals remains or carcasses) seem to have a massive impact on the spreading of the golden jackal.
- Social expectations are ambivalent: people do not understand the necessity of hunting, but if any human & wildlife conflict occurs, they ask for the most intensive shooting.
- The sport hunting based wildlife management is unable to regulate the population of species with a high reproduction rate, such as golden jackal, red fox, wild boar etc.