

Evolution of the presence of the golden jackal in Slovakia



**3rd International
Jackal Symposium**
02-04. November 2022
Gödöllő, Hungary

NUNO GUIMARÃES¹, JOZEF BUČKO² & PETER URBAN¹



Evolution of the presence of the golden jackal in Slovakia

MATE



1. Review the distribution range
2. All records of the golden jackal from 2016 up to 2021
3. Potential conflicts
4. Recommendations



Status of the golden Jackal in Slovakia



Conservation

- **1995** Jedlička, categorized the presence of the species as **rare**
- **1997** Stollmann et al. and in **2001** Žiak & Urban, considered the **data available as insufficient** for the categorization of the status of the species



Legal Status

- **1999** the Ministry of Environment of the Slovak Republic Decree Coll. No. 93/1999 implemented a **year-round protection** for the species
- **2009** The Slovak Hunting law act no.274/2009 classify golden jackal within the group of **game species** (hunting allowance September to January)
- **2014** Amendment in Hunting law act. no.489/2013 (hunting allowance period expanded: **August to February**)



Introduction

MATE



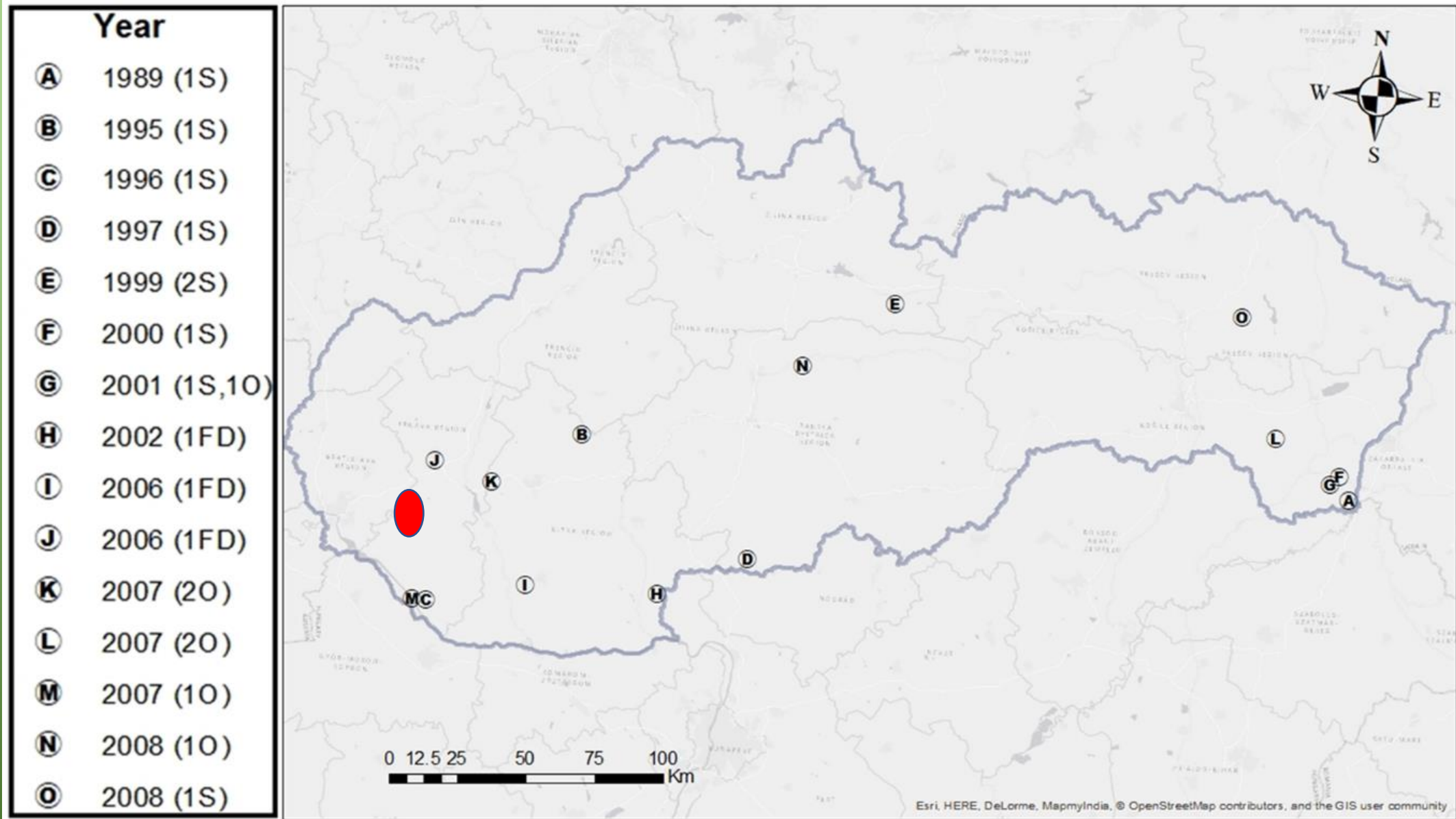
Golden jackal

Zlatý šakal - Šakal obyčejný – Trstinový vlk

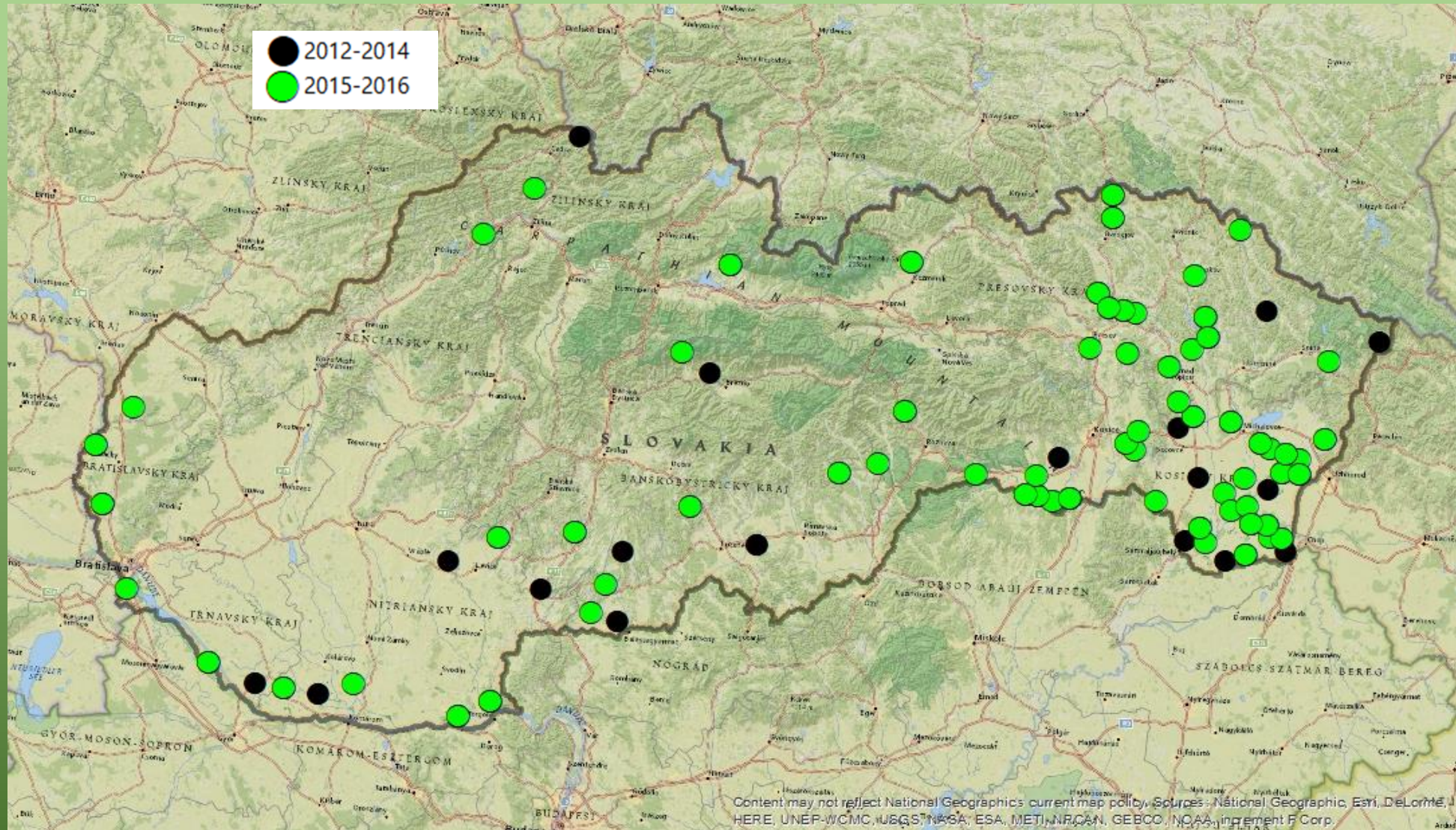


Ing. A
pr

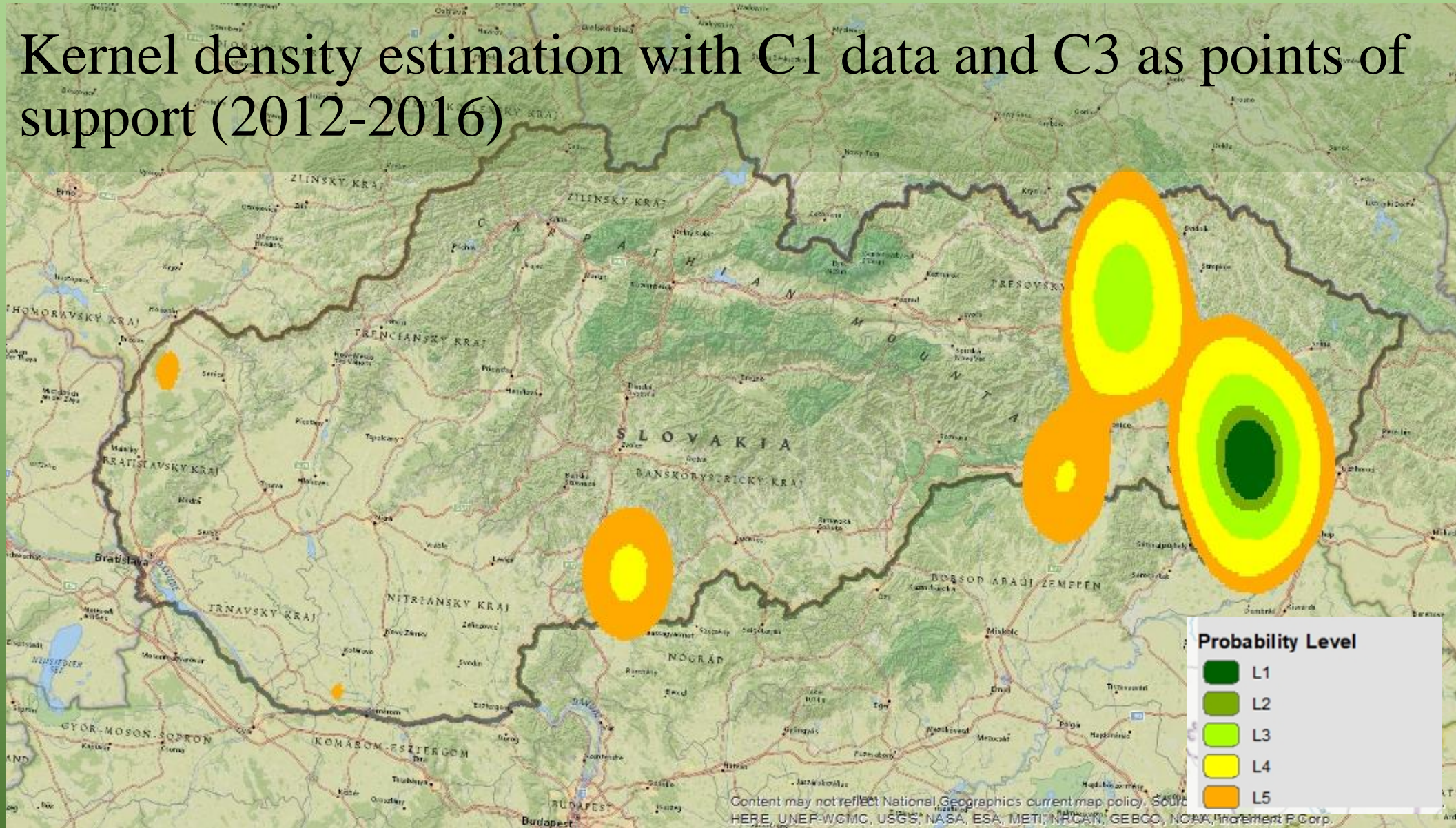
1st official evidences in Slovakia – 1947-2008



C3 Data 2012-2016 (Observations NLC+SOP)



Kernel density estimation with C1 data and C3 as points of support (2012-2016)

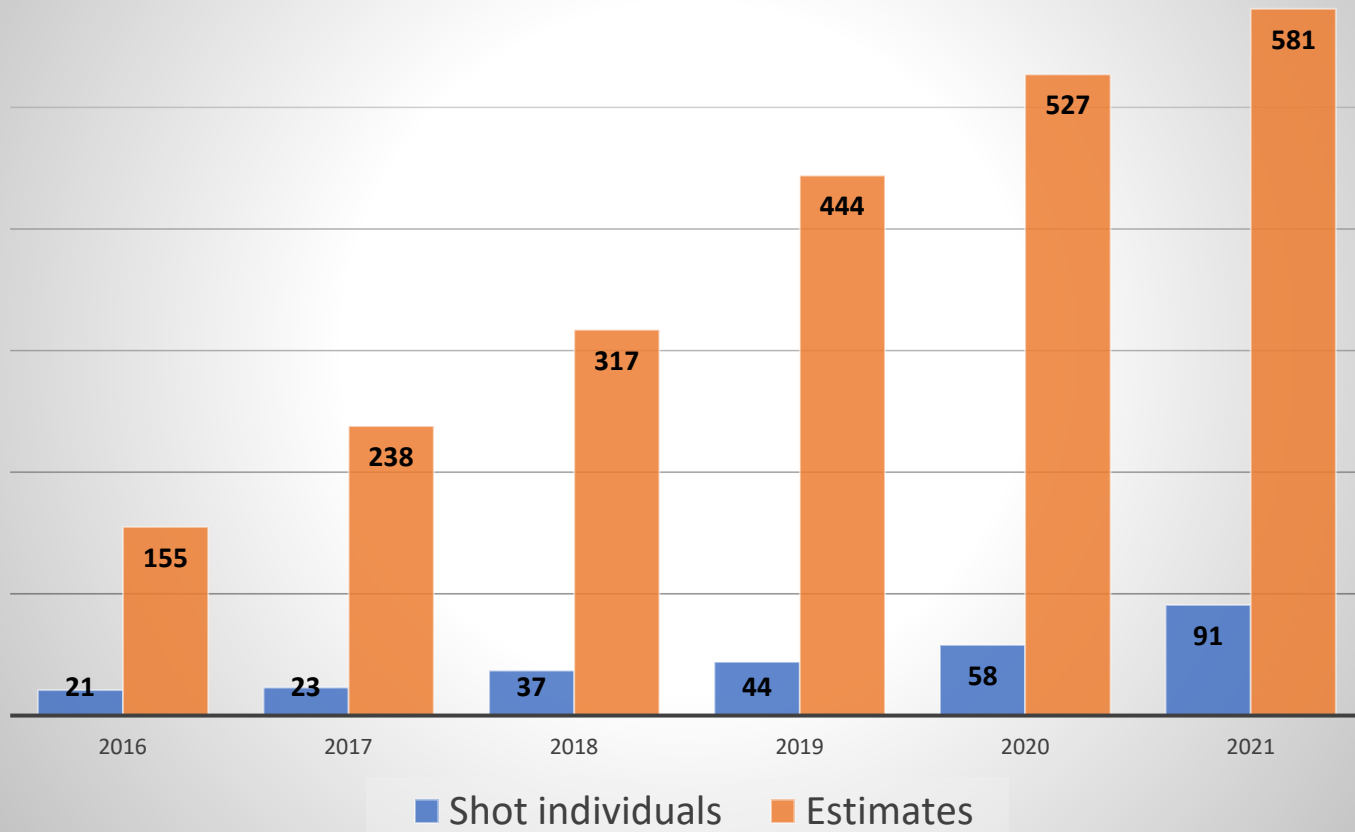


Golden jackal Estimates and hunting data 2016-2021

MATE

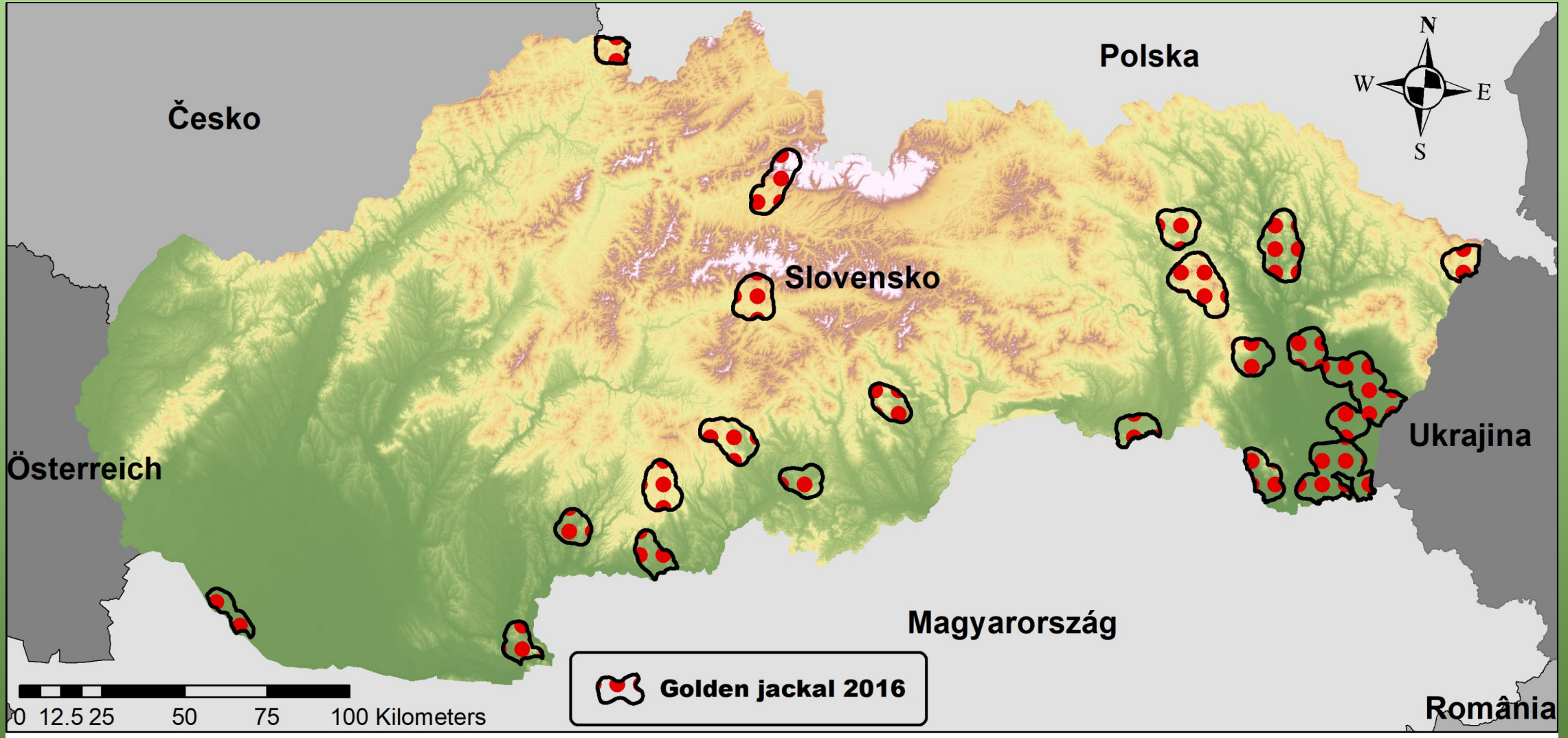


$R^2=0.9756$



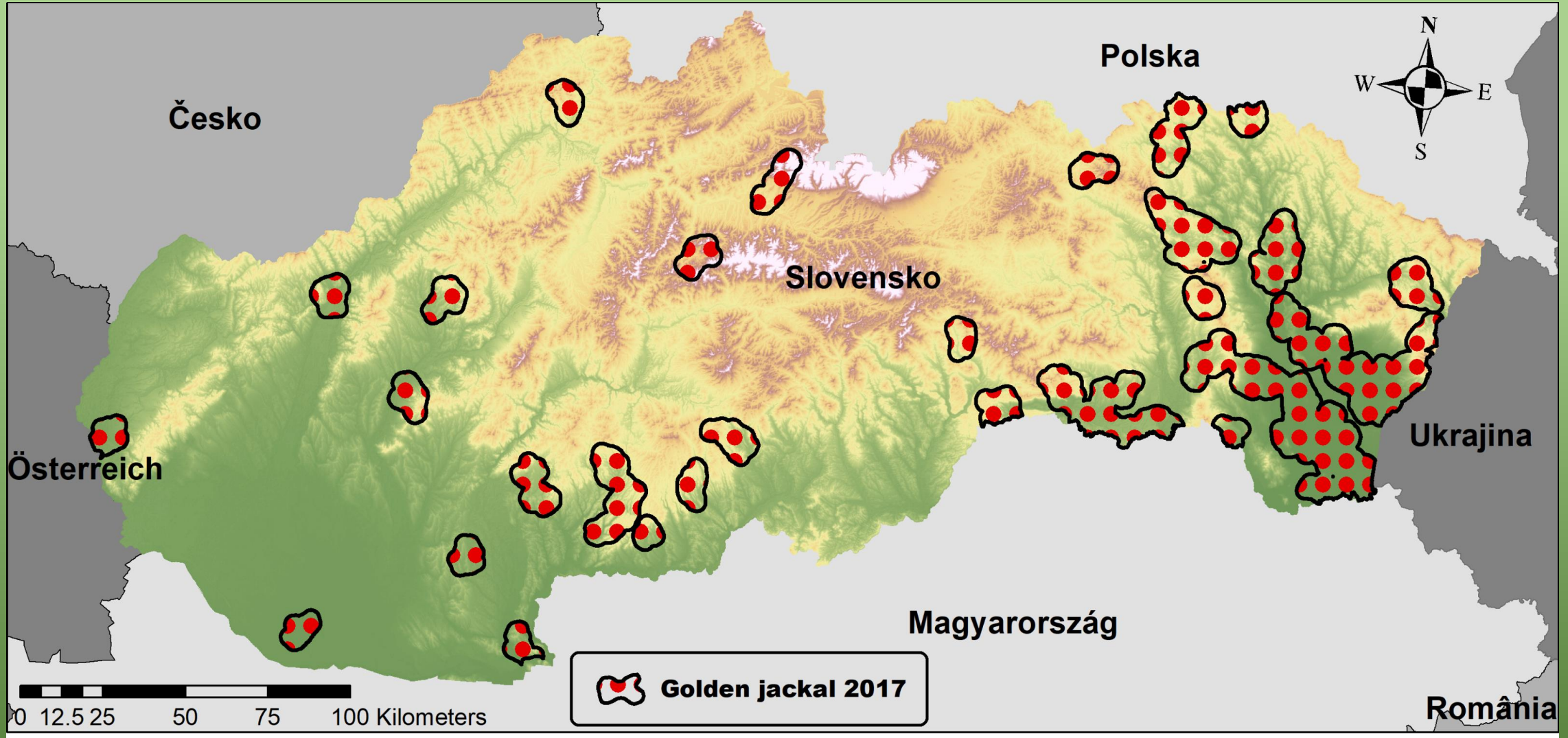
Golden Jackal 2016

MATE



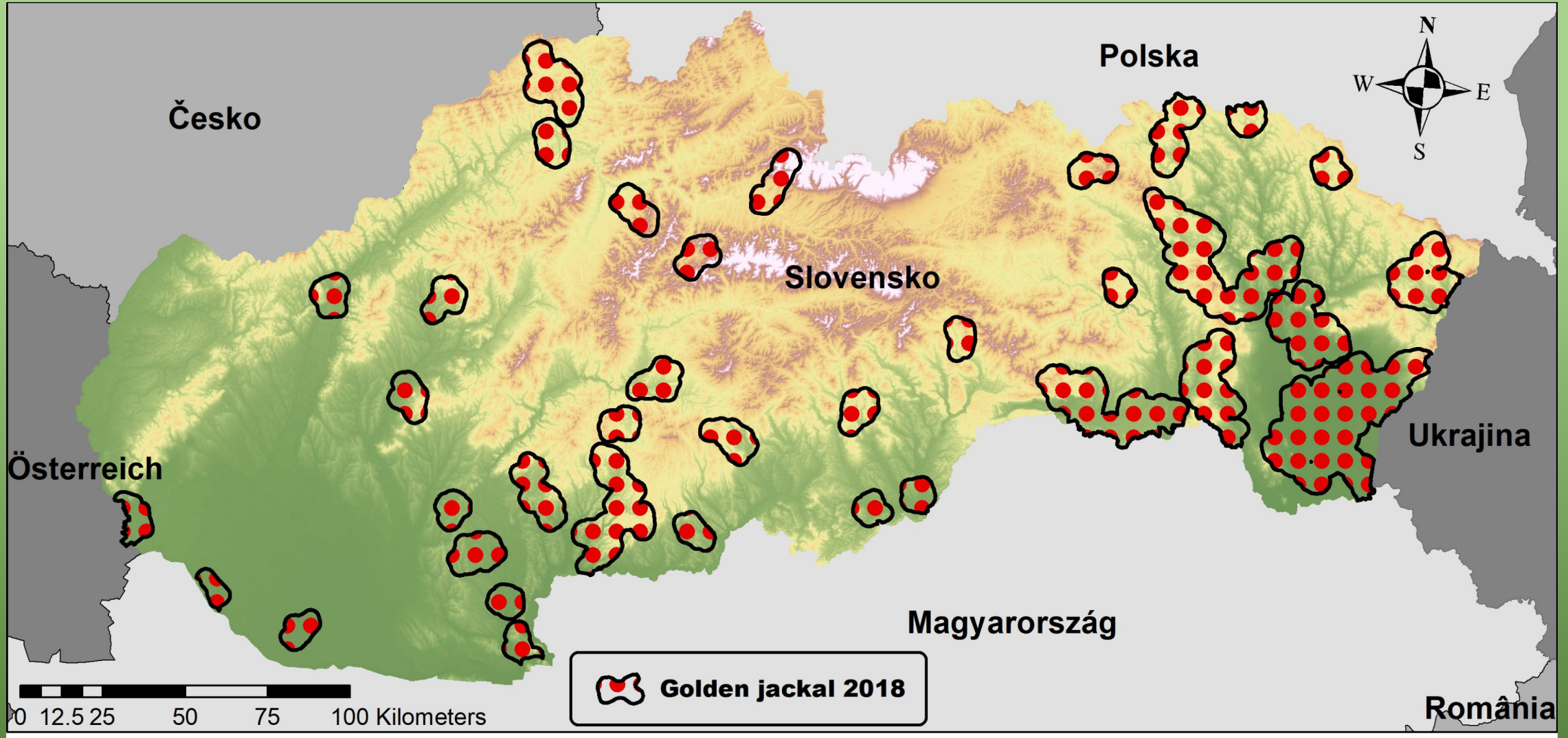
Golden Jackal 2017

MATE



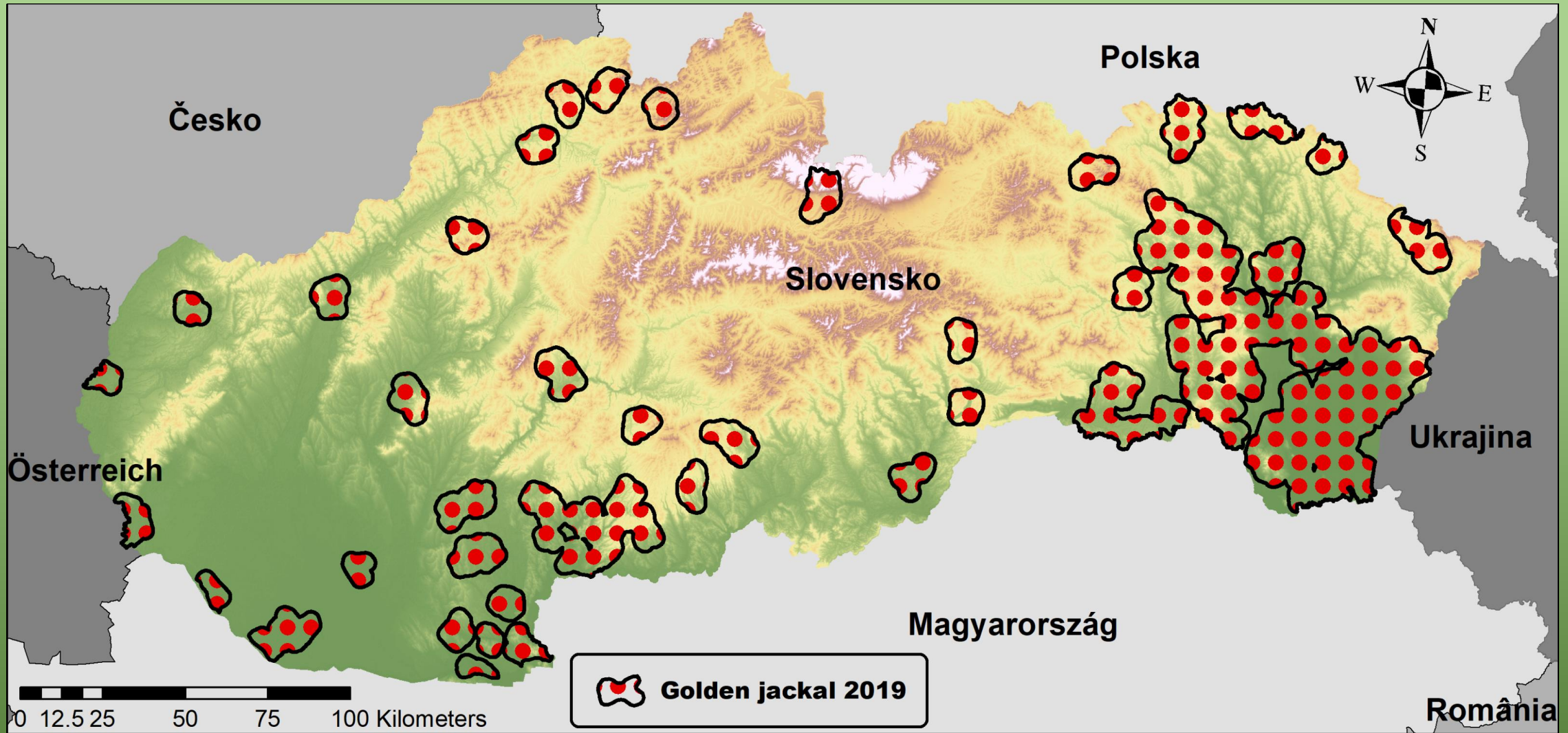
Golden Jackal 2018

MATE



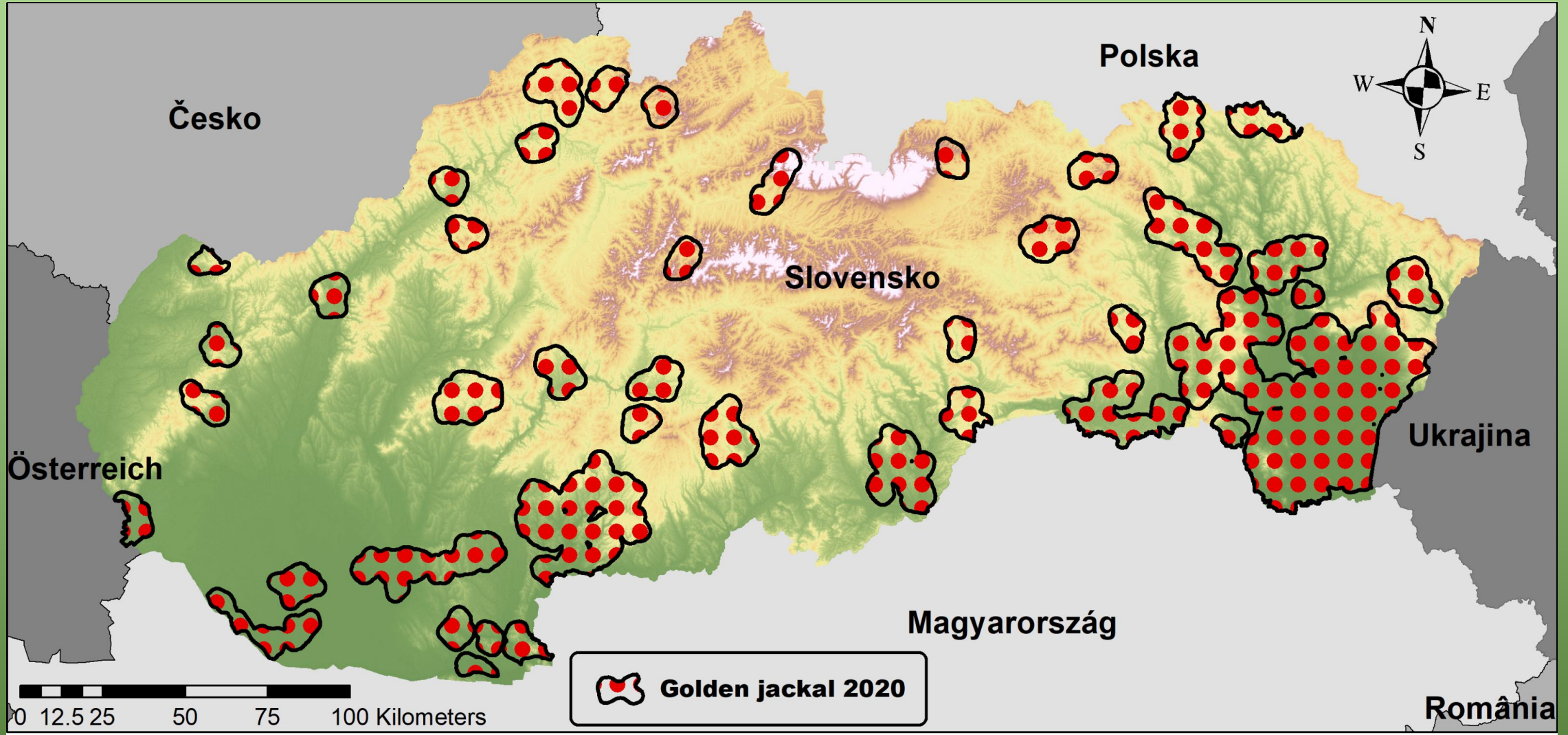
Golden Jackal 2019

MATE



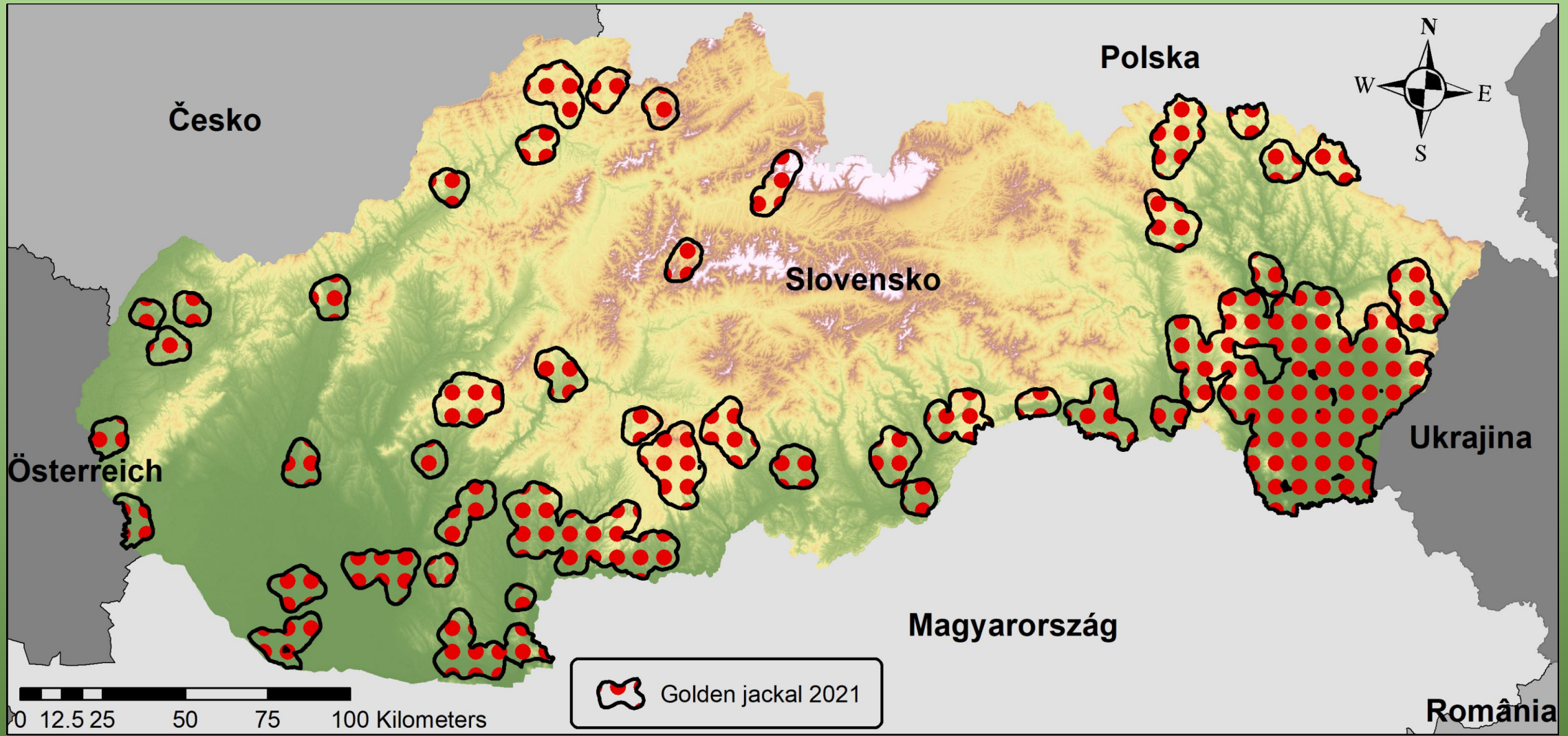
Golden Jackal 2020

MATE



Golden Jackal 2021

MATE



Golden jackal and the 3 Large carnivores

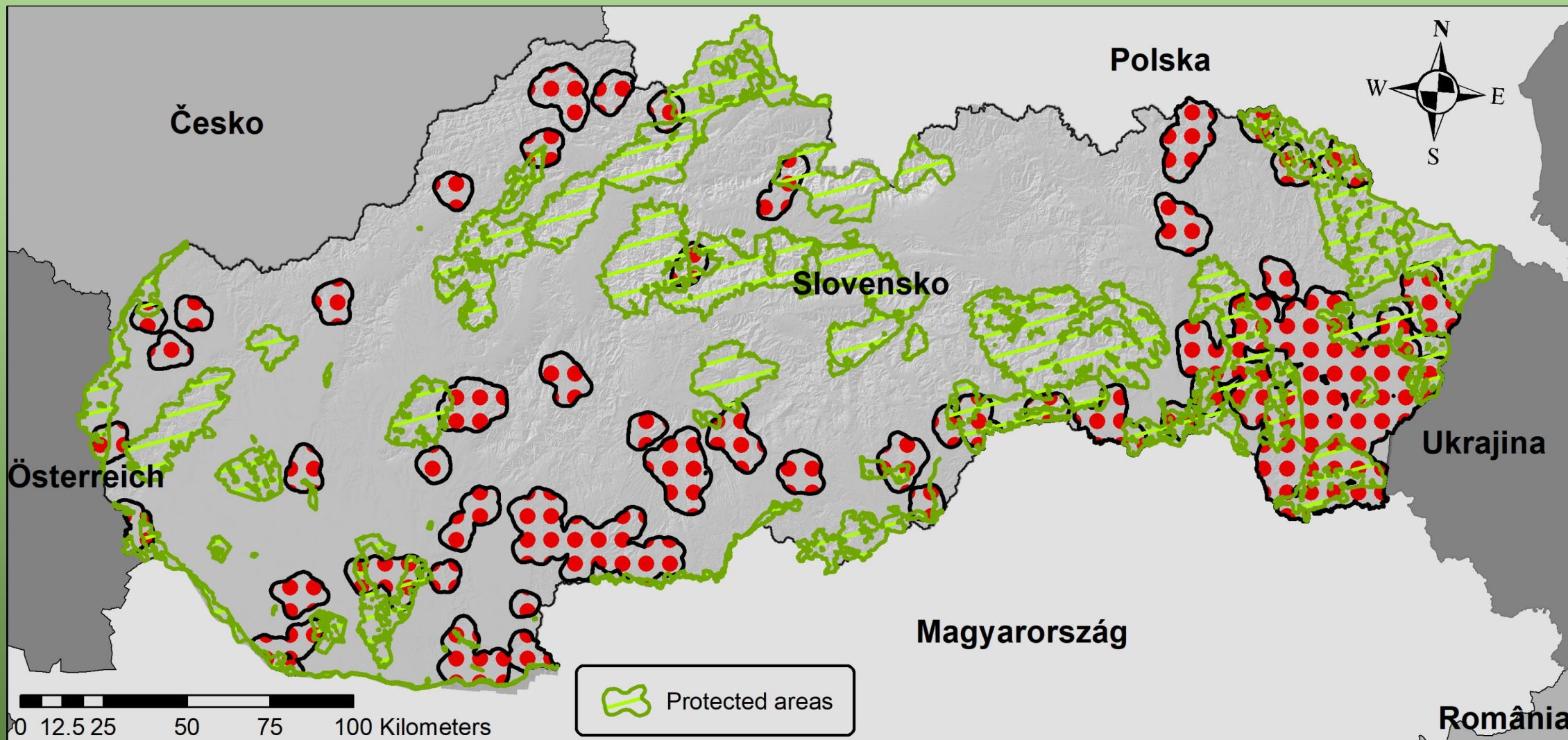
MATE



Guimaraes, N., Bučko, J. and Slamka, M., 2021. At the table with the big three carnivores—a sympatric occurrence of the golden jackal with bear, wolf and lynx captured on a camera trap in Slovakia. *European Journal of Ecology*, 7(1).

Golden jackal vs Protected areas

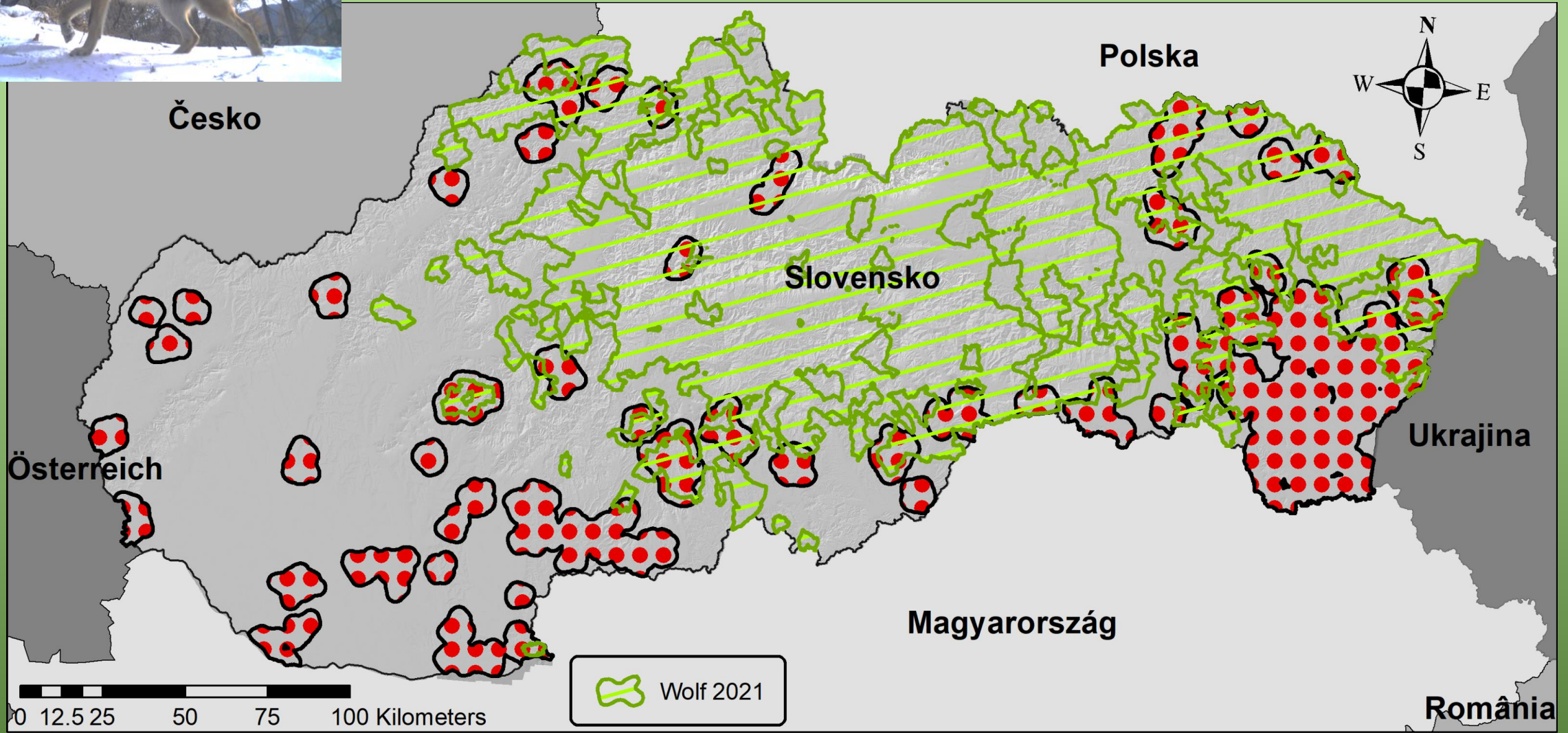
MATE





Golden jackal vs Wolf

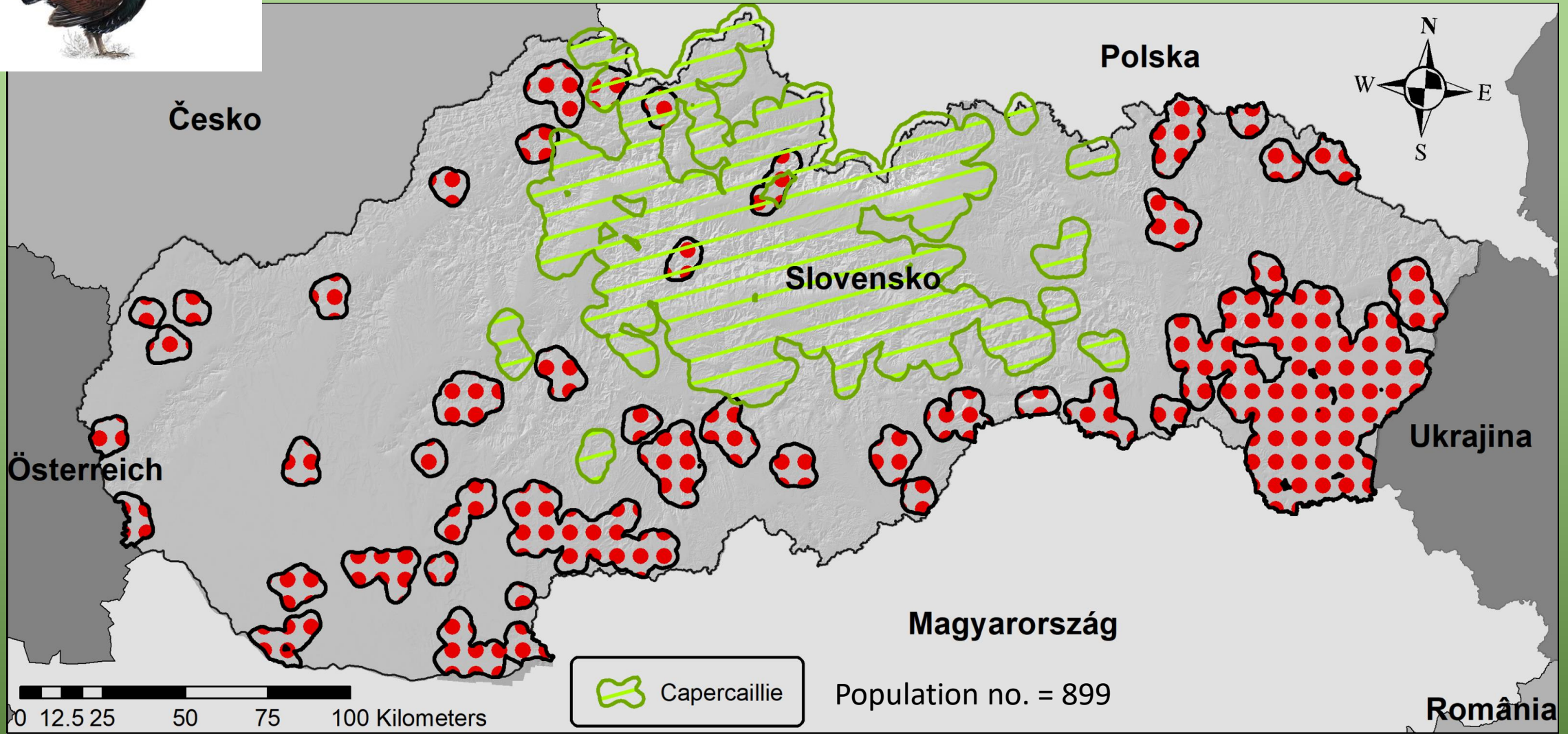
MATE





Golden jackal vs Capercaillie

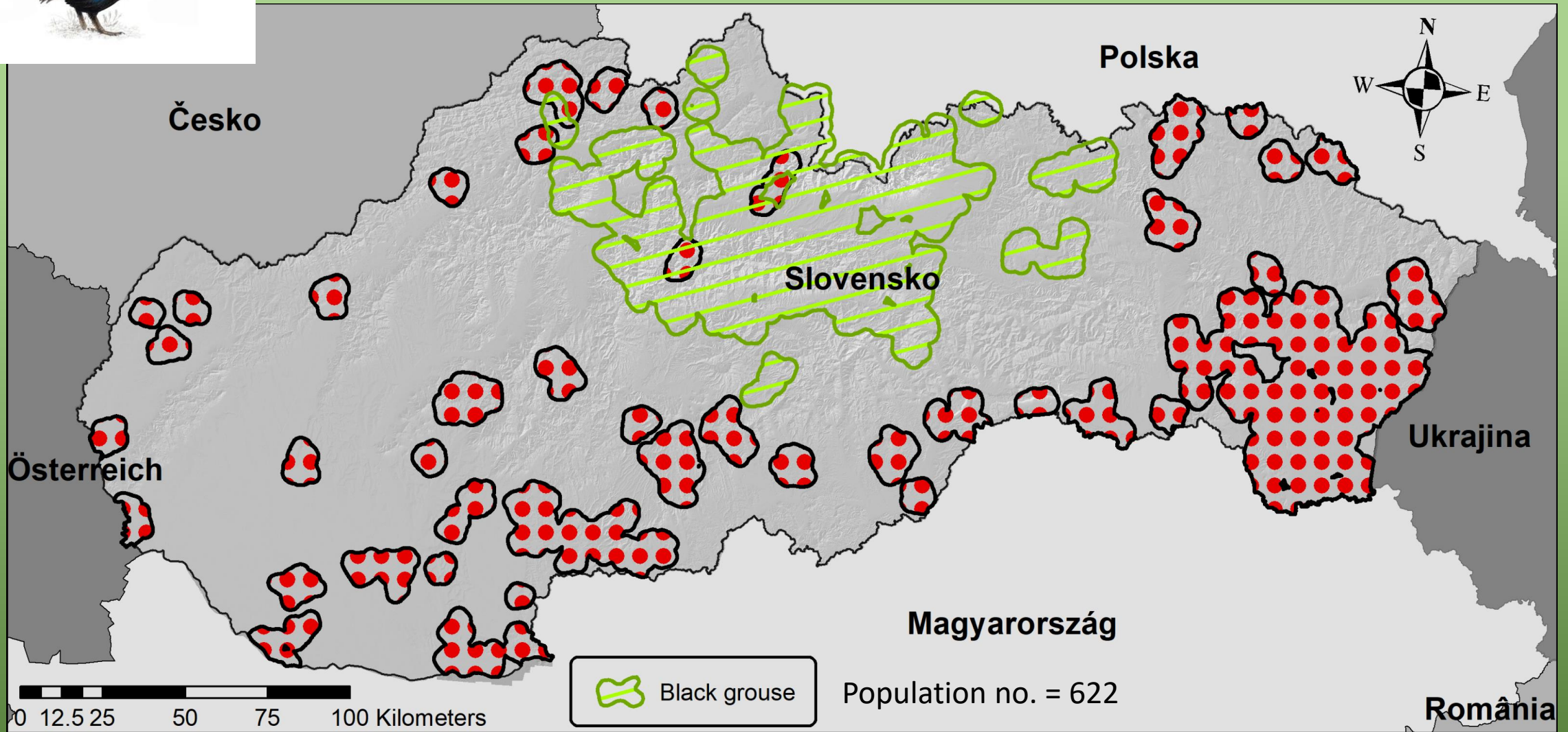
MATE





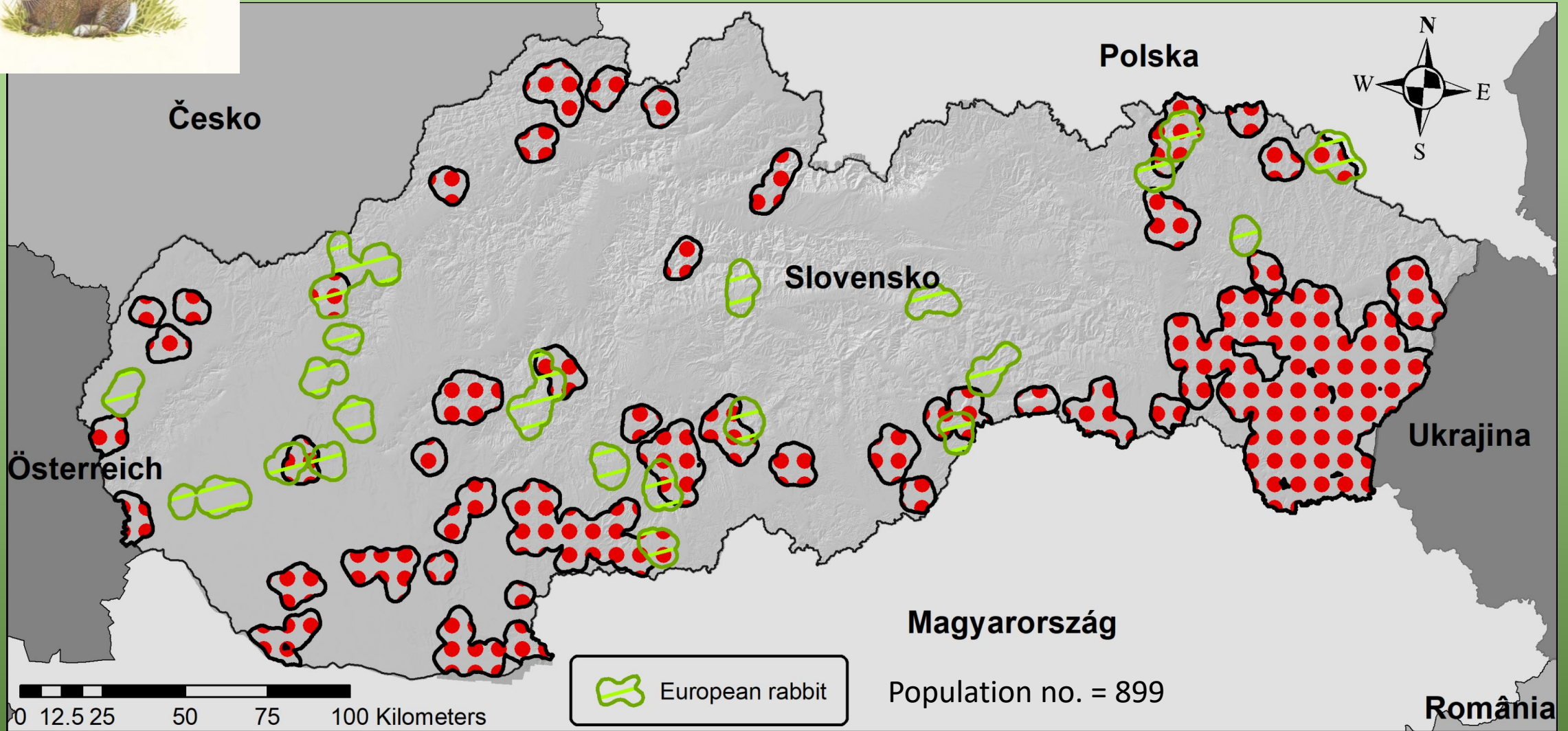
Golden jackal vs Black Grouse

MATE



Golden jackal vs European rabbit

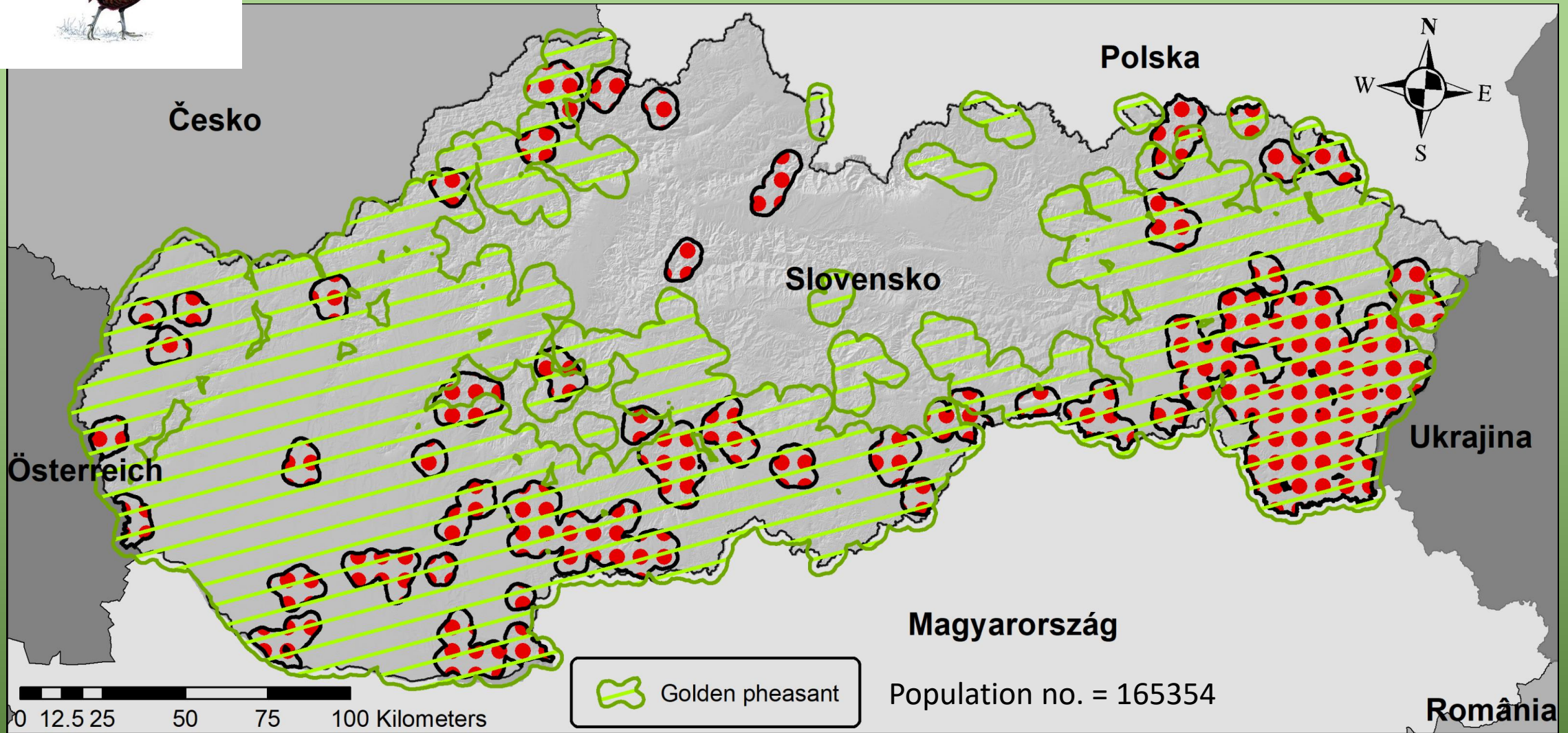
MATE





Golden jackal vs Golden pheasant

MATE



Golden Jackal - SWOT ANALYSIS

MATE



Strengths

- ❖ High adaptability
- ❖ High expansion rates
- ❖ Opportunistic behavior
- ❖ Generalist species

Weaknesses

- ❖ Difficult recognition
- ❖ Presence of the wolf

Opportunities

- ❖ Climate change
- ❖ Habitat availability
- ❖ Sanitary effects (ASF)

Threats

- ❖ Lack of knowledge of the species
- ❖ Risk of conflicts



Conclusion and Future research

MATE



- **MIND THE GAP:** vagrant population vs stable groups;
- **HOUDY NEIGHBOUR:** where and how dispersion/expansion is occurring (DNA)
- **STOP:** presence of wolf, climate change, habitat availability (competition)
- **WHERE ARE YOU?:** increase bioacoustics monitoring spots and ground survey (in the snow)
- **Implementation of Species action plan/Census:** support favorable management





**3rd International
Jackal Symposium**
02-04. November 2022
Gödöllő, Hungary



TECHNICAL UNIVERSITY IN ZVOLEN



LESNÍCKA FAKULTA
TECHNICKÁ UNIVERZITA VO ZVOLENE

T. G. Masaryka 20, 960 53 Zvolen, Slovenská republika
tel.: +421 45 5206 250
email: kazmz@tuzvo.sk
www.tuzvo.sk

Katedra aplikovanej zoológie a manažmentu zveri

nunoguimaraes08@gmail.com



Thank you for your attention!!!