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Biodiversity Research & Conservation



# THE IMPERIAL EAGLE IN THE SOUTH-EAST OF KAZAKHSTAN 2022–2023: DISTRIBUTION, POPULATION NUMBERS, THREATS

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Almaty 2023



➤ Vulnerable under criteria C2a(ii)

➤ Red Data Book of KZ - Rare and Declining Species (Category III) (Pfeffer, 2010)

➤ The global population of Imperial Eagles as of 2016 was estimated at 2,500–9,900 adults (BirdLife International, 2019)



**ҚАРАҚҰС  
МОГИЛЬНИК**

*Aquila heliaca*  
Savigny, 1809

Сұңқартәрізділер отряды –  
Отряд Соколообразные – Falconiformes

Қаршығатектестер тұқымдасы –  
Семейство Ястребиные – Accipitridae



**ҚАЗАҚСТАН  
РЕСПУБЛИКАСЫНЫҢ  
ҚЫЗЫЛ КІТАБЫ**



**КРАСНАЯ КНИГА  
РЕСПУБЛИКИ КАЗАХСТАН**

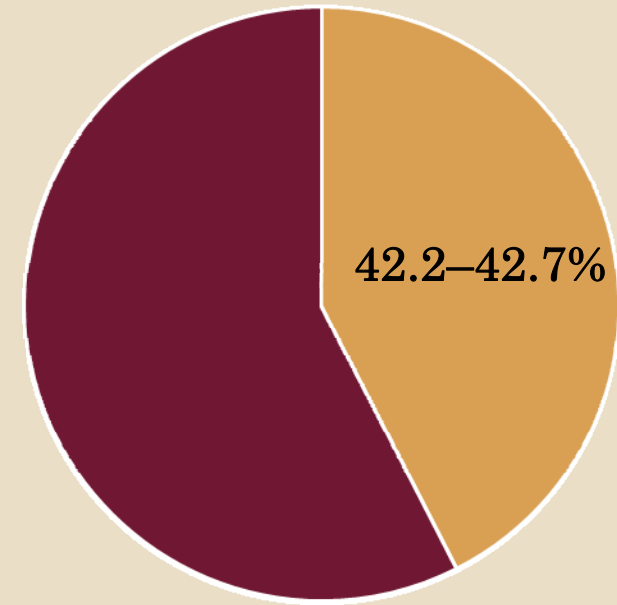
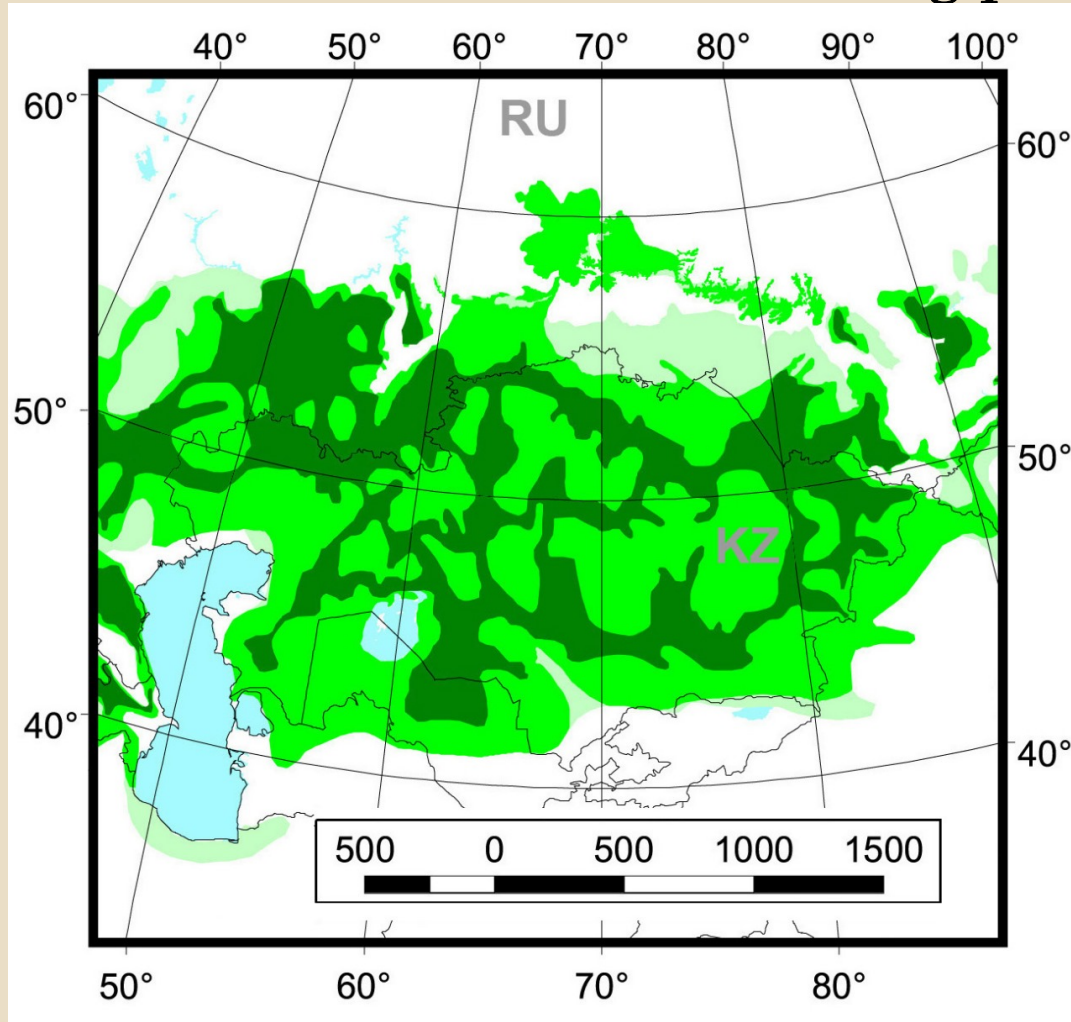
**THE RED DATA BOOK  
OF THE REPUBLIC  
OF KAZAKHSTAN**



➤ Estimate of the global population - **8099–9981** breeding pairs



➤ Kazakhstan has **3420–4260** breeding pairs (Karyakin, 2020)



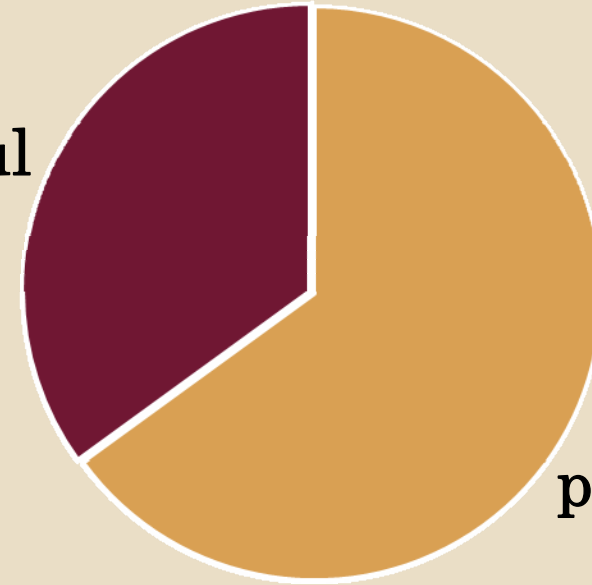
# Western Betpak-Dala



➤ 60 known inhabited nests (Gubin, 2018)



saxaul



power lines



# Chu Valley



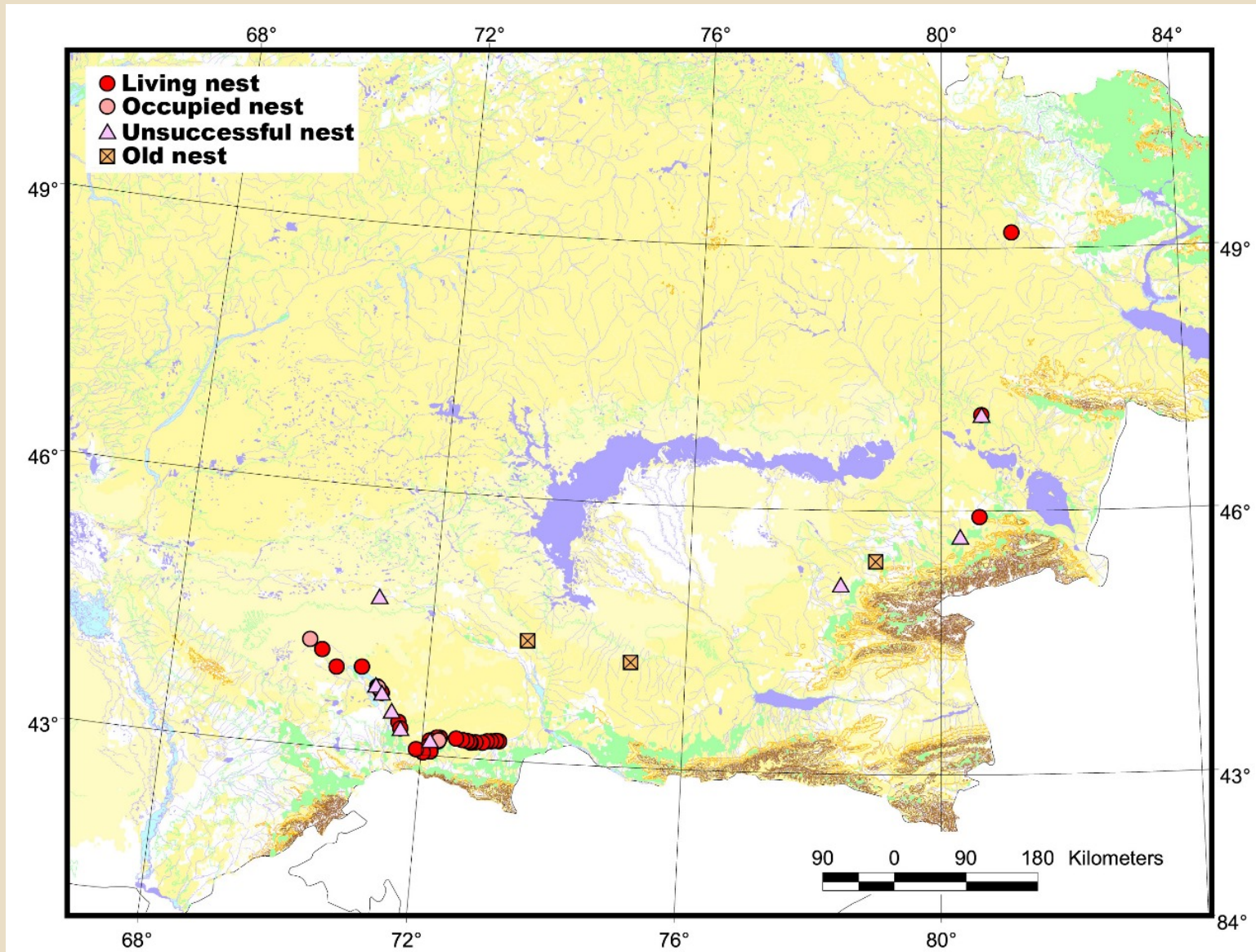
2018 → min. 18 breeding territories

2023 → 1 breeding territories



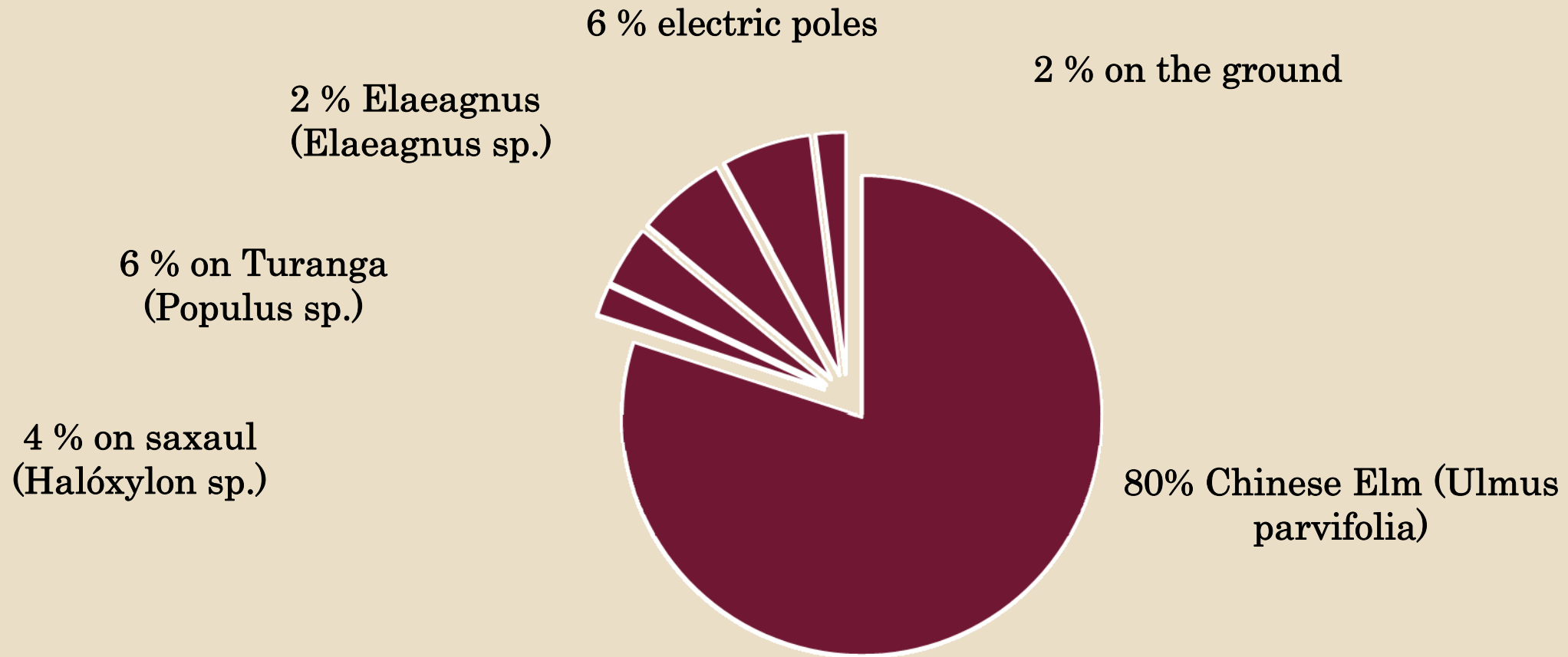
# Moiynkum sands

more than 100 breeding pairs (Karyakin, 2020)



# Research 2022 / 2023

2022 + 2023 = 59 nests

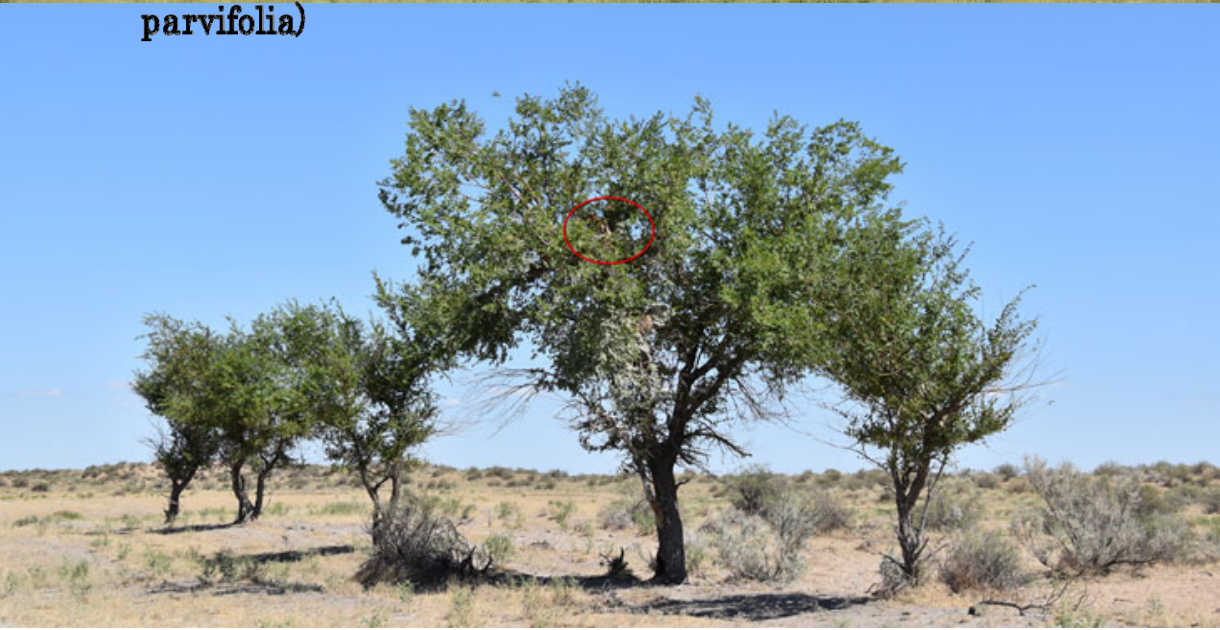




**86% Chinese Elm (*Ulmus parvifolia*)**



**4 % on saxaul (*Halóxylon* sp.)**



**2 % Elaeagnus (*Elaeagnus* sp.)**



# Research 2022



- Breeding success – 44 %
- Breeding efficiency - 58 %
- 9 active nests - 4 nests in which chicks have survived
- 12 eggs – 7 chicks that flew out of the nest
- by the end of the season brood size ranged from 1 to 2 fledglings



July 2022



# Talas Alatau / Pribalkhashie





June 2023



# South-East of Kazakhstan



♀ *Aquila heliaca*

♂ *Aquila nipalensis*

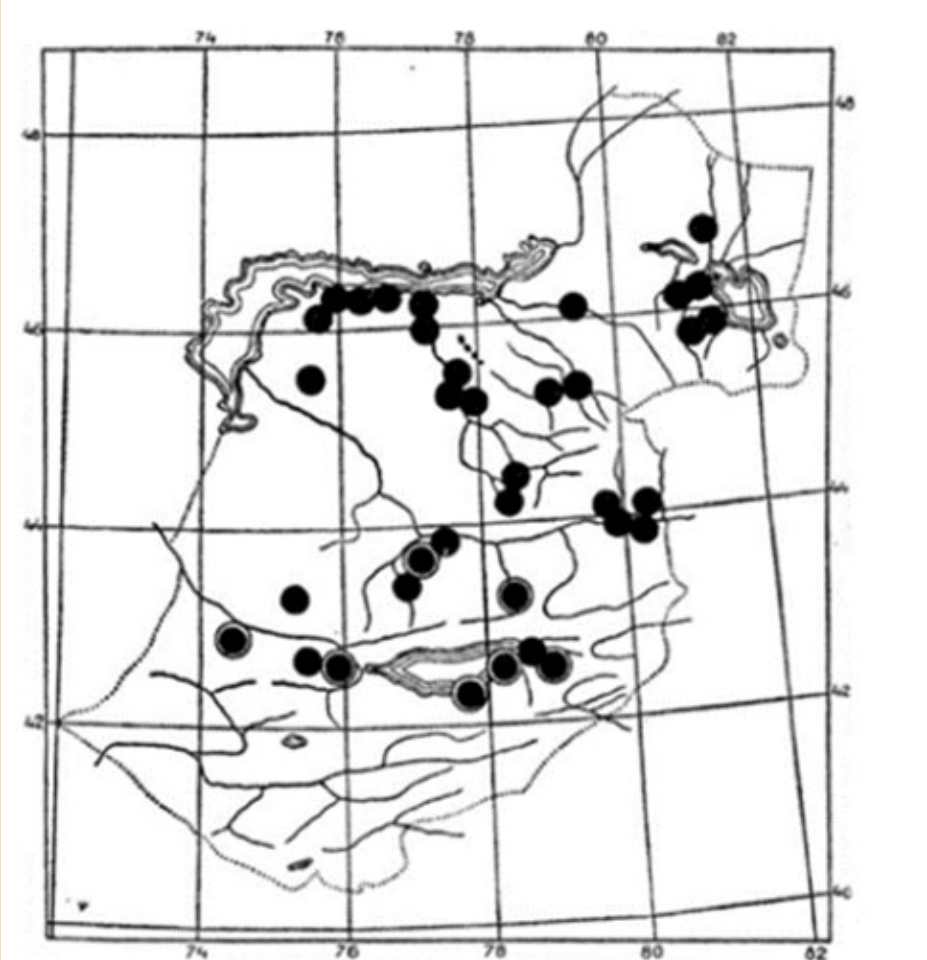


# South-East of Kazakhstan



Distribution of the Imperial Eagle in Semirechye (SouthEast of Kazakhstan and Kyrgyzstan)

Shnitnikov, 1949



# Tagging / ringing birds

➤ Tagged - 5 juvenile birds

Ringed – 11 juvenile birds



# What happened to these birds a year later?

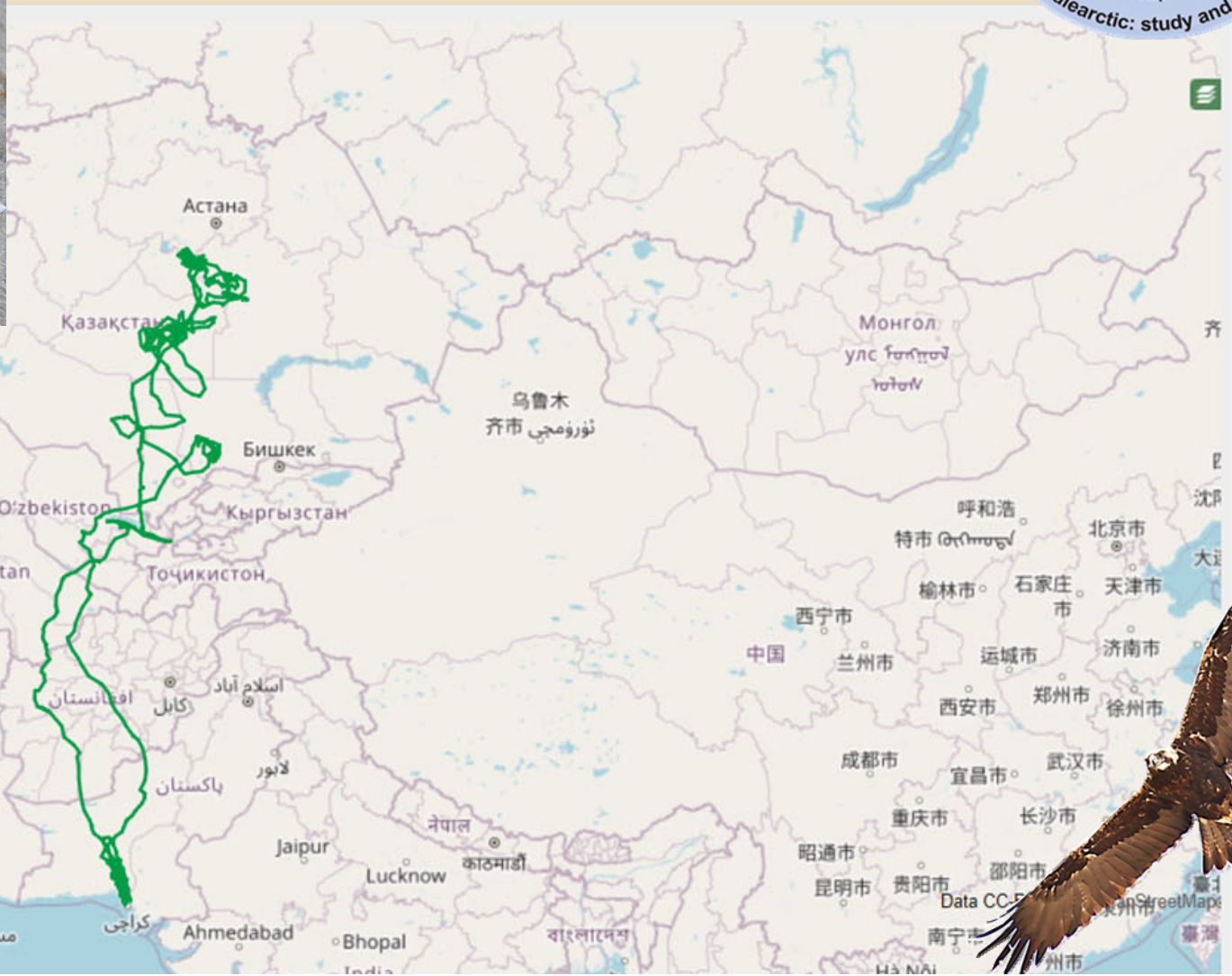


- 1 bird was in Afghanistan during the winter
- 1 bird the last coordinates were transmitted in the fall from Kazakhstan





# The only bird that still talks about where it is - Tomiris





*Rhombomys opimus*



Photo: Kaptyonkina A.

## Threats

*Spermophilus fulvus*



Photo; Amirekul K.

*Microtus socialis*



Photo: Nukusbekov M.



# Threats



2006

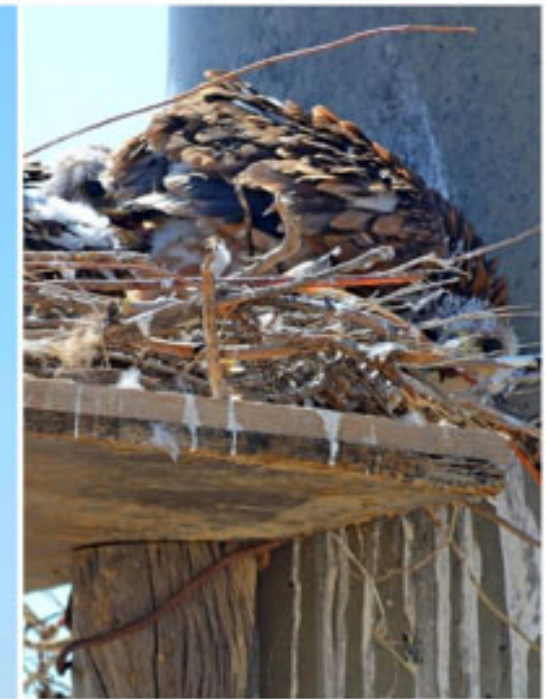
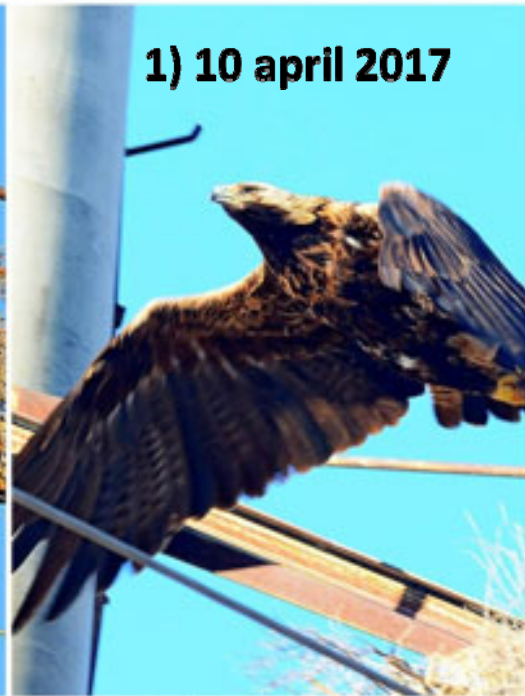
Photo: Ilya Smelansky





2023  
Photo: Igor Karyakin





RRRCN

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# Thank you for your attention!

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