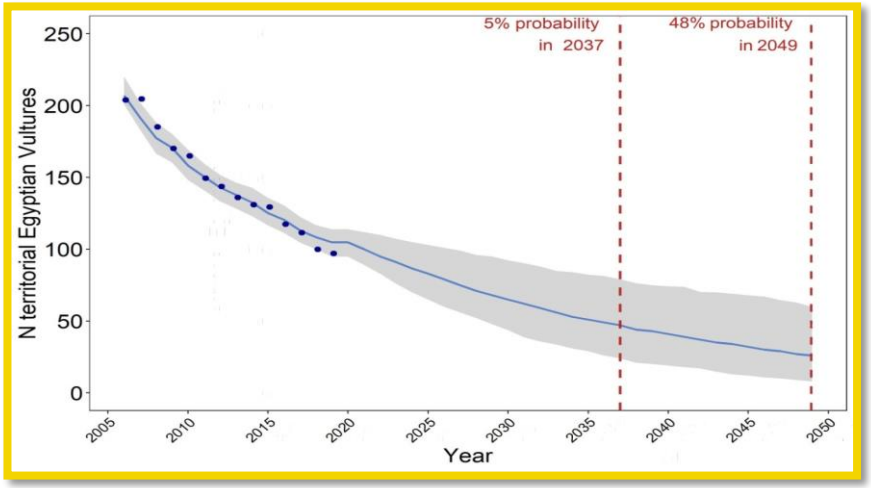
Reinforcment program for the Egyptian Vulture in the Balkans

Volen ARKUMAREV

Victoria Saravia-Mullin, Vladimir Dobrev, Dobromir Dobrev, Ivaylo Klisurov, Anastasios Bounas, Elzbieta Kret, Antonin Vaidl, Theodora Skartsi, Steffen Oppel & Stoyan Nikolov

LIFE16 NAT/BG/00874

Living legend or a symbol from the past?

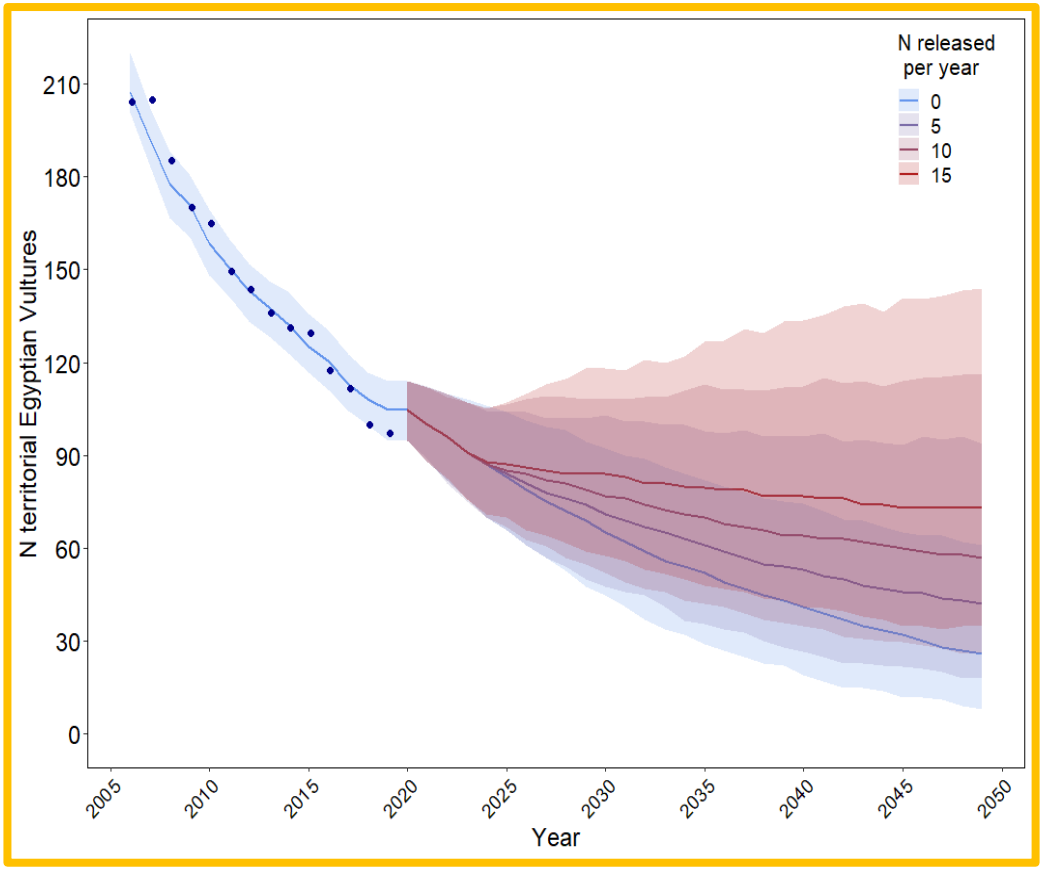


80% population decline on the Balkans over the past 30 years

We need to outrun the time!

Two pillars in the conservation strategy:

I. Mitigate threats along the flyway to improve survival with 6%
II. Reinforcement program – release 9 captive-bred individuals per year for 20 years

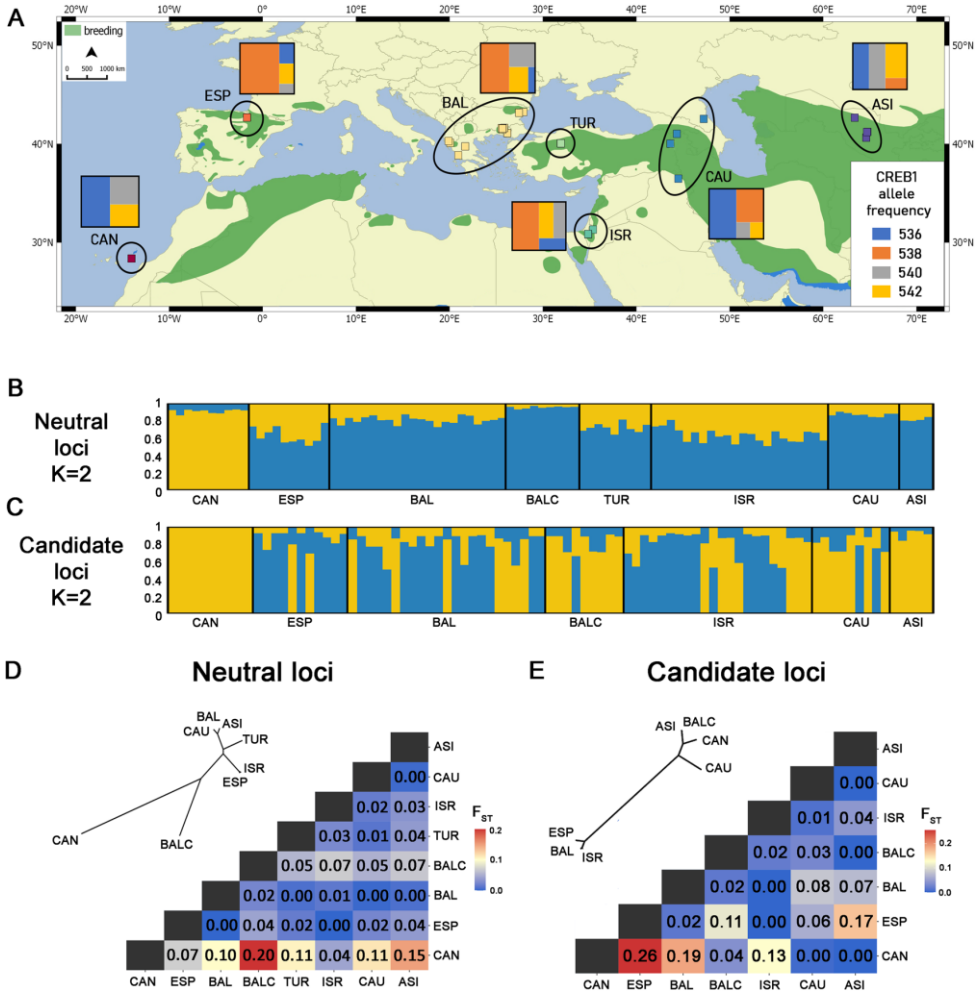


Oppel *et al.* 2021

Genetic analyses

We found:

- low differentiation values among populations and absence of genetic structure which point to past high gene flow.
- no predicted significant impact of different source populations on the genetic diversity of the recipient Balkan population.
- The Balkan EV population still retains high levels of genetic diversity and therefore genetic diversity restoration is not currently needed.



Bounas *et al.* 2023

Pilot reinforcement program in Bulgaria

Releases of captive-bred Egyptian Vultures in the Eastern Rhodopes, Bulgaria (2016-2023):

I. **Hacking**
II. **Fostering**
III. **Delayed release**

Sources of EVs for release

- ✓ The Egyptian Vulture EEP – WRBC (Bulgaria), Sofia Zoo (Bulgaria), Prague Zoo (Czech Republic), Schoenbrunn Zoo (Austria), Jerez Zoo (Spain)
- ✓ Extraction of EV chicks from wild nests and headstarting

Sources of EVs for release

- ✓ We supported the Egyptian Vulture EEP by importing confiscated or recovered EVs – 9 individuals: Syria (1 ind.), Lebanon (5 ind.), Turkey (1 ind.), Greece (1 ind.), Niger (1 ind. in process).

Hacking

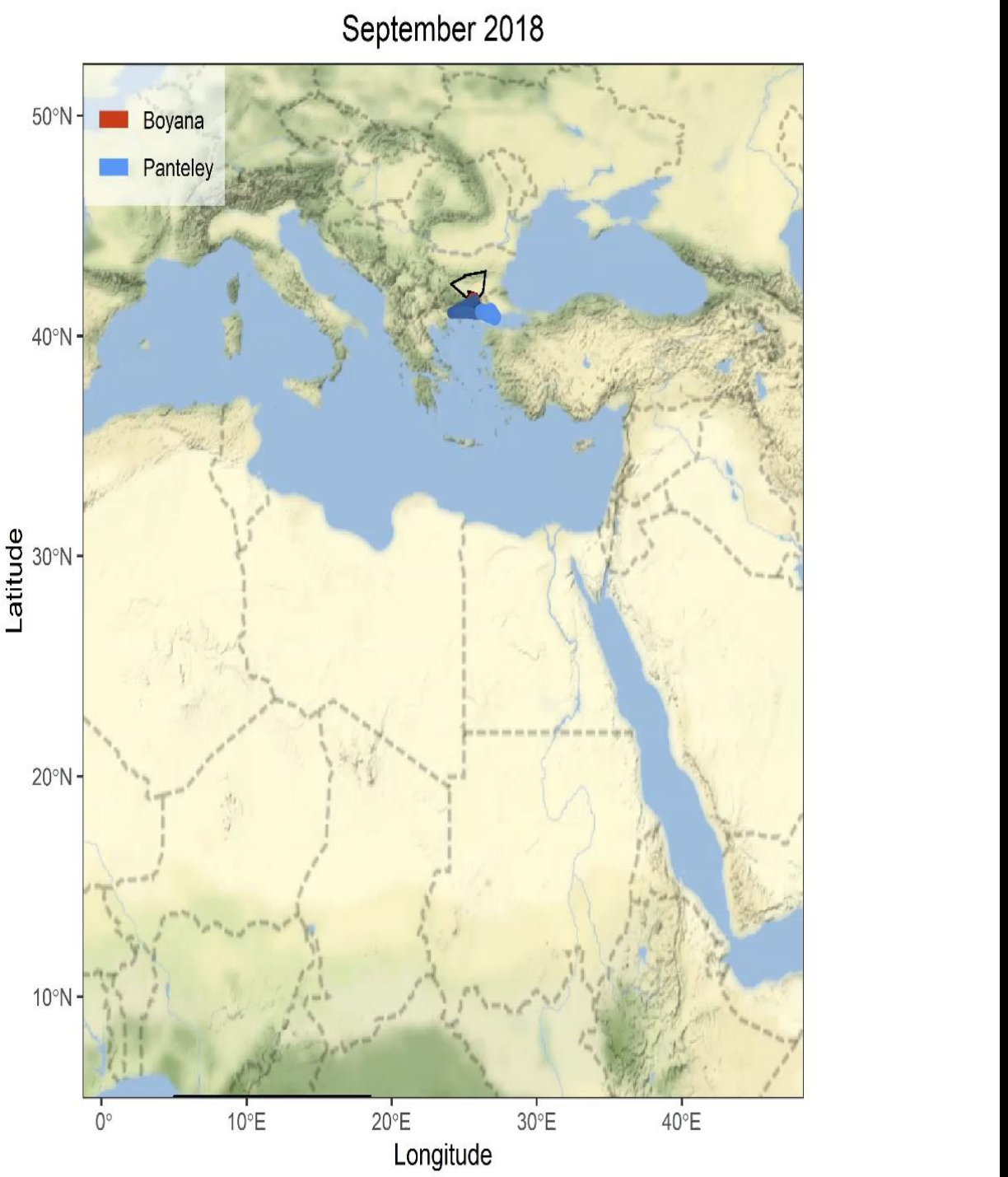
- ✓ Releasing young EVs from a hack at a cliff
- ✓ 3-4 weeks adaptation until the migration
- ✓ 9 EVs released (2016-2020)
- ✓ 22% survival until the end of first migration (2 out of 9)
- ✓ Only 1 survived until the end of the first wintering period and returned to release site

Fostering

- ✓ Juveniles fostered by experienced wild parents at age of 50-60 days
- ✓ 4 juveniles released (2018 – 2020)
- ✓ 50% survival until the end of first migration

Delayed release

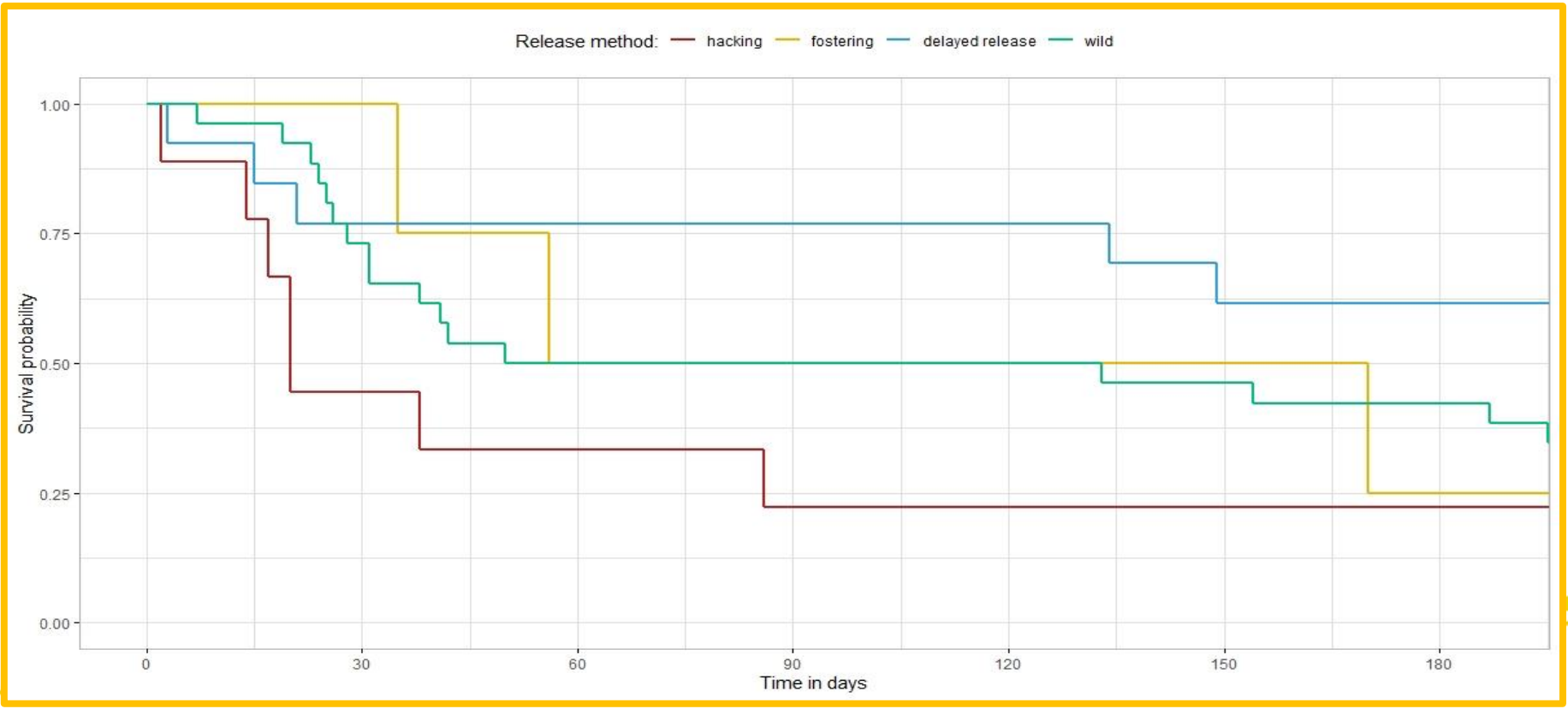
- ✓ Release of captive-bred EVs in spring at age of 1-2 years.
- ✓ Two months adaptation in the aviary and 4 months in the wild before migration
- ✓ 21 released EVs (2018-2023)
- ✓ 68.4% survival until the end of first migration
- ✓ 46 % (n=6) returned to release site at least once


September 2018
Boyana
Panteley
50°N
40°N
30°N
20°N
10°N
Latitude
0°
10°E
20°E
30°E
40°E
Longitude

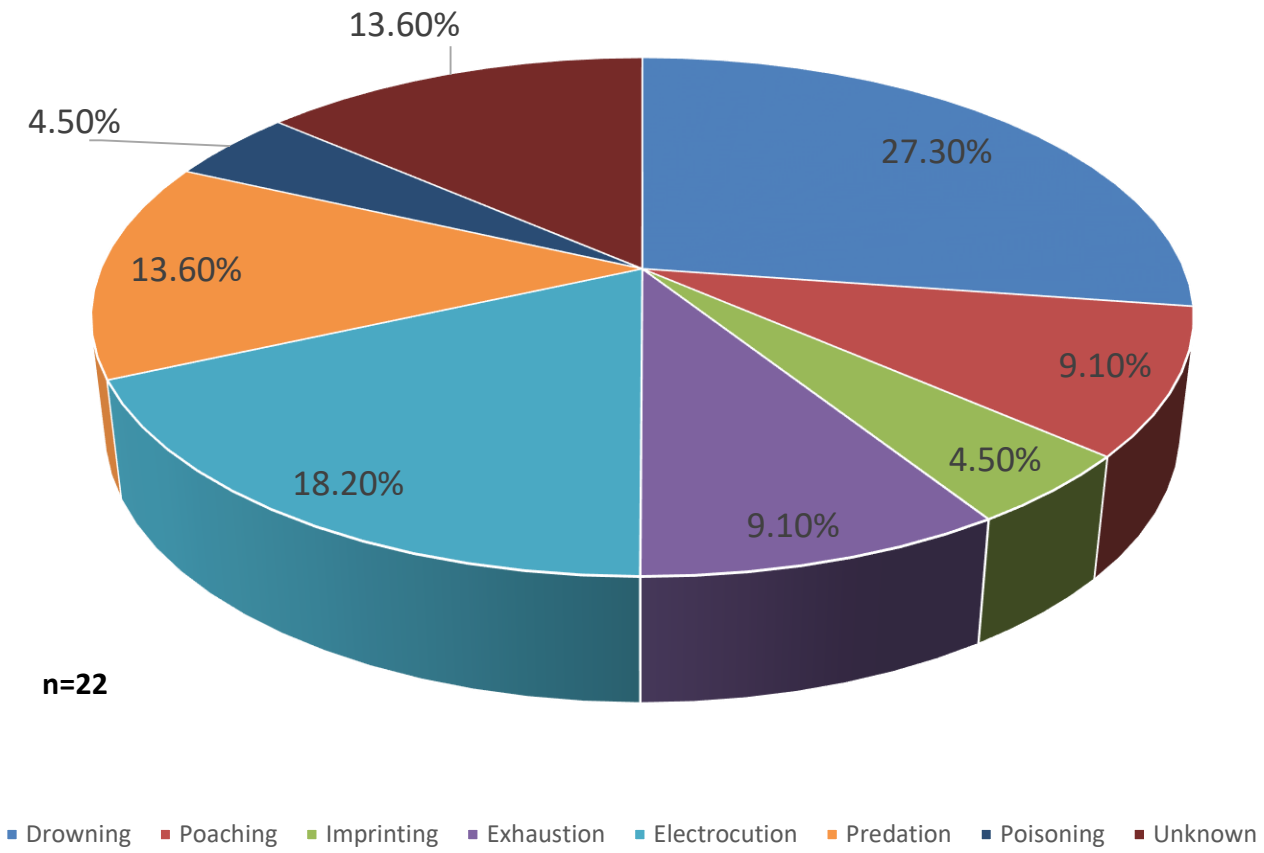
Comparison of the results

Survival until the end of first migration

- ✓ Wild (n=17) – 59%
- ✓ Delayed release (n=19) – 68.4%
- ✓ Fostering (n=4) – 50%
- ✓ Hacking (n=9) – 22%

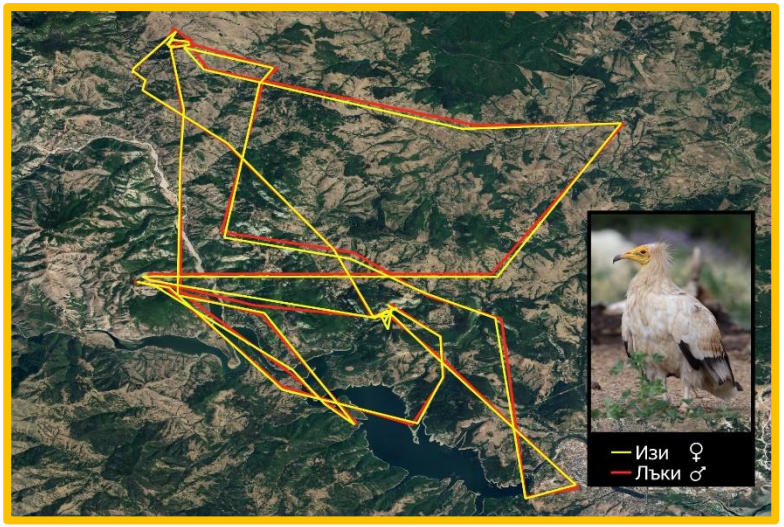


Mortality causes



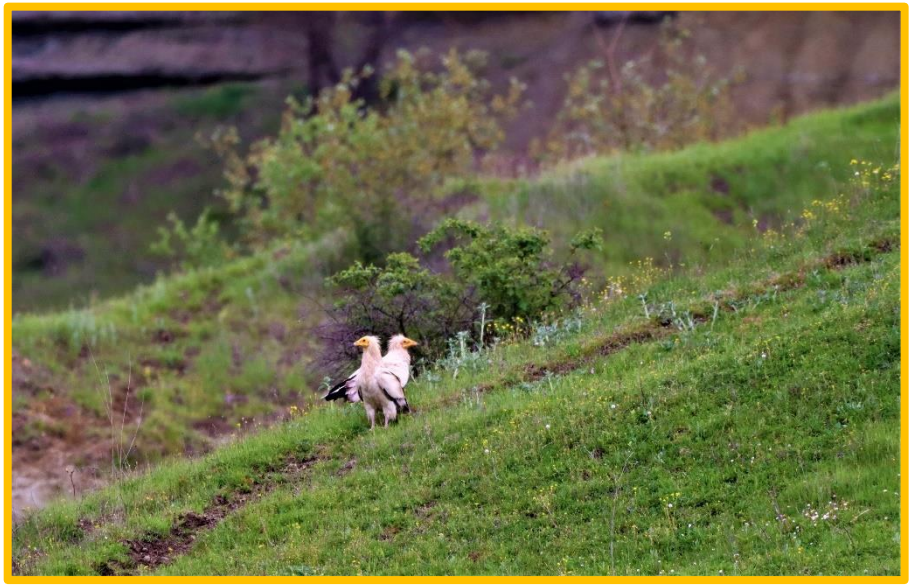
Results for the wild population

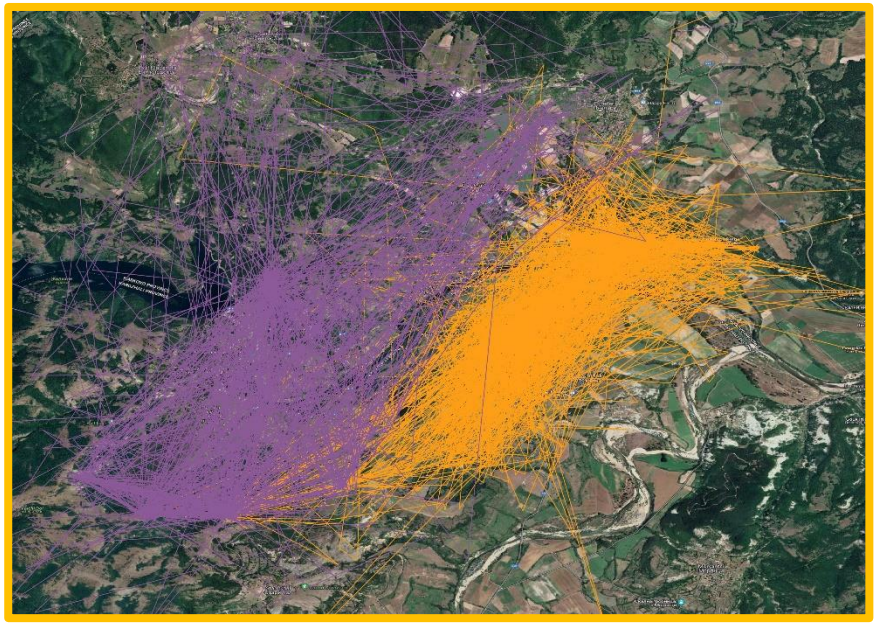
- In 2022 two released individuals occupied territories with wild partners – **only 4 years after the start of the releases**
- Boyana (5 y.) and Izi (3 y.)



Results for the wild population

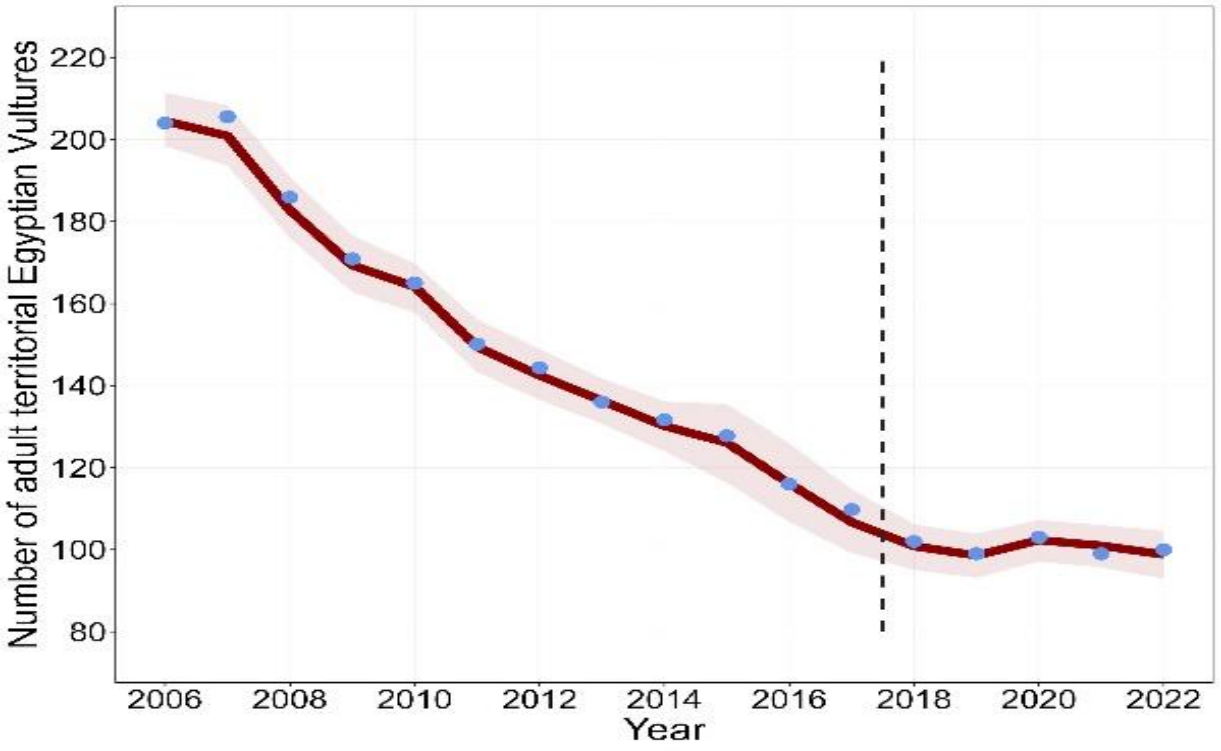
- In 2023 two more released individuals occupied territories – one with wild partner **Zara (5 y.)** and the other one remained single **Panteley (6 y.)**
- All 4 birds that occupied territories were released through the delayed release method





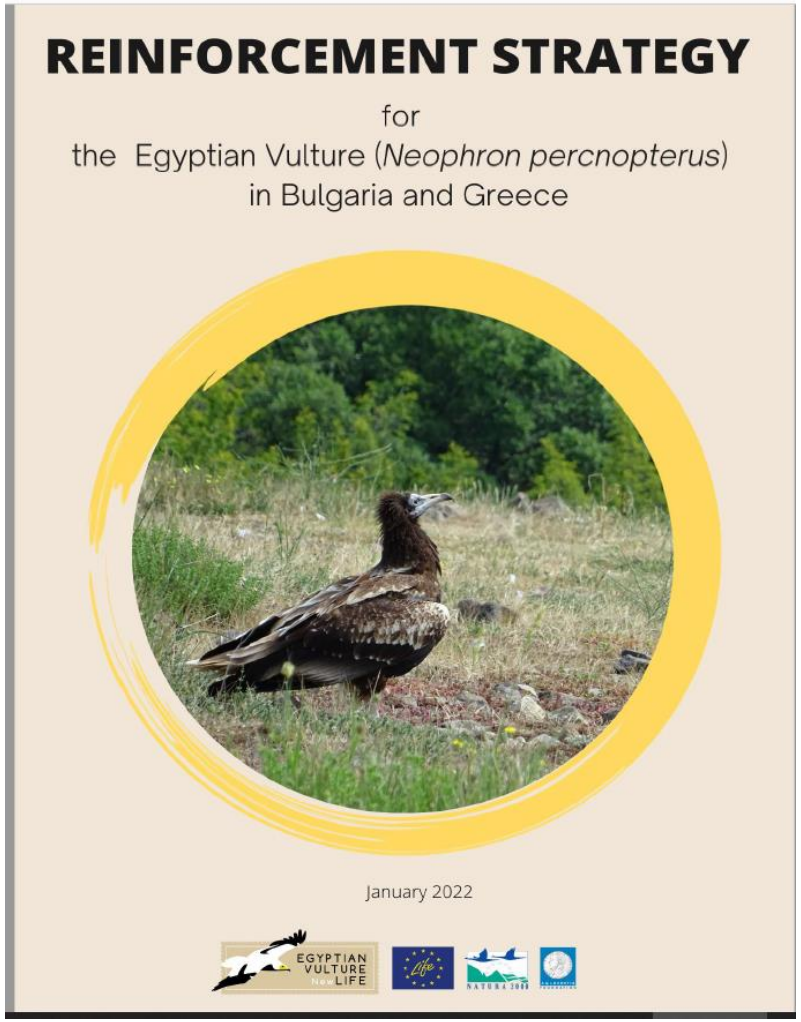
Results for the wild population

First signs of population stabilization in the Balkans



Next steps

- ✓ Reinforcement Strategy for the Egyptian Vulture in Bulgaria and Greece was developed with a scope of 20 years and regular updates
- ✓ Increase of the captive-breeding pool is needed and improvement of the breeding success in captivity
- ✓ Wild juveniles which have hatched late or lost parents will be collected in Bulgaria and released through delayed release – “headstarting”



Arkumarev *et al.* 2022

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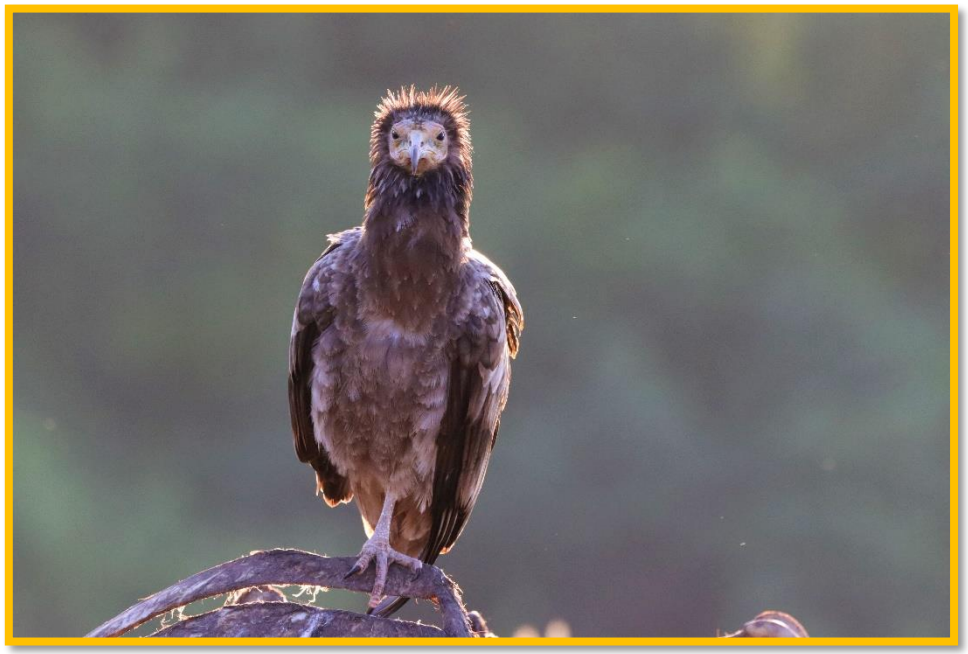

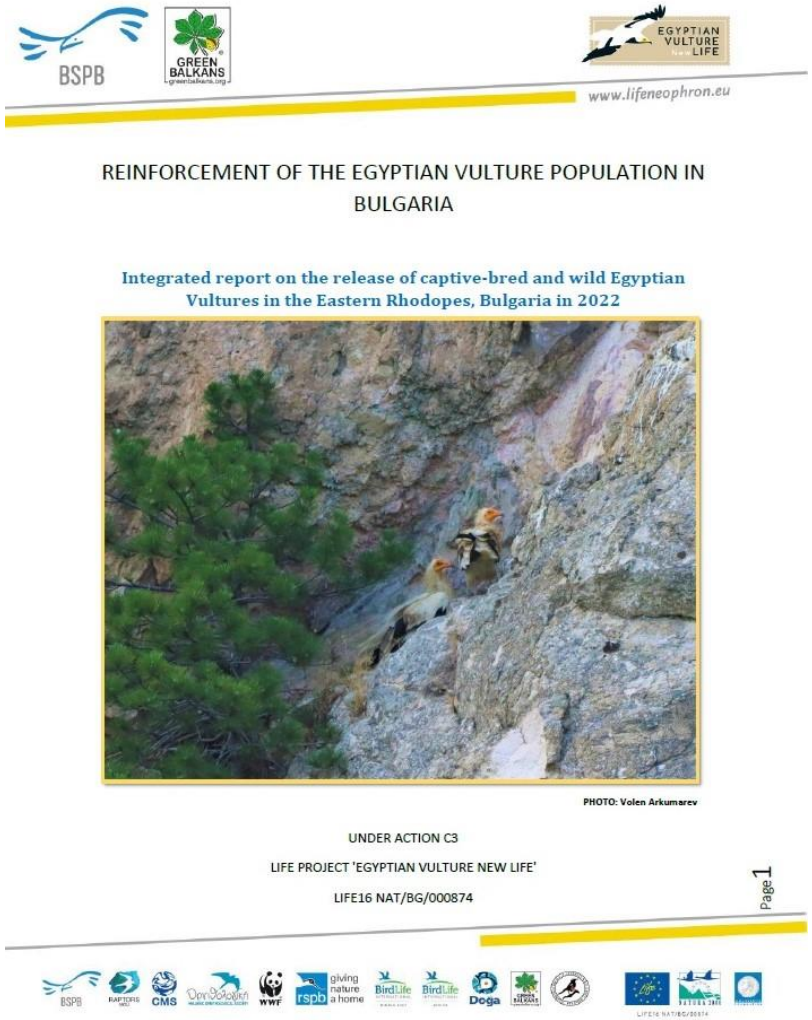

BSPB GREEN BALKANS

EGYPTIAN VULTURE NEW LIFE

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REINFORCEMENT OF THE EGYPTIAN VULTURE POPULATION IN BULGARIA

Integrated report on the release of captive-bred and wild Egyptian Vultures in the Eastern Rhodopes, Bulgaria in 2022

PHOTO: Volen Arkumarev

UNDER ACTION C3

LIFE PROJECT 'EGYPTIAN VULTURE NEW LIFE'

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Thank you for your attention!

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