FATE OF SATELLITE-TRACKED EGYPTIAN VULTURES (NEOPHRON PERCNOPTERUS) IN THE BALKANS (2010-2016)

FACT SHEET UNDER ACTION A2

LIFE+ PROJECT
"THE RETURN OF THE NEOPHRON"
LIFE10 NAT/BG/000152



PREPARED BY RSPB, BSPB, HOS, WWF-GREECE OCTOBER 2016















AUTHORS:

Steffen Oppel¹, Vladimir Dobrev², Victoria Saravia³, Elzbieta Kret⁴ & Stoyan C. Nikolov²

- 1 RSPB Centre for Conservation Science, Royal Society for the Protection of Birds, Sandy, Bedfordshire, UK
- 2 Bulgarian Society for Protection of Birds / BirdLife Bulgaria, Yavorov complex, bl. 71, vh. 4, PO box 50, 1111 Sofia, Bulgaria
- 3 Hellenic Ornithological Society / BirdLife Greece, Themistokleous 80, GR-10681 Athens, Greece
- 4 WWF Greece, 21 Lambessi, Gr 117 43 Athens, Greece

RECOMMENDED CITATION:

Oppel, S., Dobrev, V., Saravia, V., Kret, E. & Nikolov S. C. 2016. Fate of satellite tracked Egyptian Vultures (*Neophron percnopterus*) in the Balkans (2010-2016).. Fact sheet under action A2 of the LIFE+ project "The Return of the Neophron" (LIFE10 NAT/BG/000152). RSPB, Cambridge. 2 p.

ABOUT THE PROJECT:

This fact sheet was prepared under the framework of the LIFE+ project "The Return of the Neophron" (LIFE10 NAT/BG/000152, www.LifeNeophron.eu) funded by the European Union, and co-funded by the "A. G. Leventis Foundation" and MAVA Foundation, and implemented by the Bulgarian Society for the Protection of Birds (BirdLife Bulgaria), the Hellenic Ornithological Society (BirdLife Greece), the World Wide Fund for Nature – WWF Greece and the Royal Society for the Protection of Birds (BirdLife UK).

BACKGROUND

"The Return of the Neophron" LIFE+ project (www.LifeNeophron.eu) started in late 2011 and was aiming to prevent the extinction of the globally threatened Egyptian Vulture (*Neophron percnopterus*) in the Balkans. The project is mostly operating in 27 NATURA 2000 sites in Bulgaria (12 Special Protection Areas, SPA) and Greece (15 SPA), but also along the flyway of the species. Before the project little was known on the migration, wintering grounds and age-specific survival of the Balkan population.

AIM AND METHODOLOGY

This study aimed to assess the mortality causes for the Balkan population of Egyptian Vulture along the flyway based on telemetry data. Since 2010, 28 individual Egyptian Vultures have been tracked with satellite transmitters from the Balkans, of which 23 were juvenile and 5 were adult birds. [NB: for detailed analysis on mortality causes of juveniles during migration see Oppel et al. (2015) Ibis, 157(3): 545-557]

RESULTS

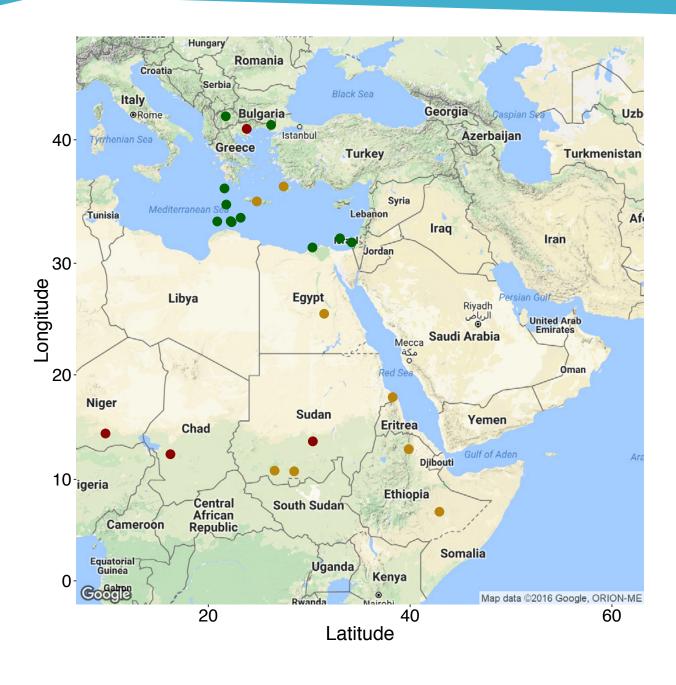
By mid October 2016, 87.5% of the juveniles had died (n = 21 birds), and 40% of the adult birds (n = 2). The average time that tagged juveniles survived was 297 days (range 7 - 1516 days), while it was 462 days for adult birds (range 281 - 642 days). Note that birds that are still alive are excluded from these metrics.

For the two recorded adult mortalities, one bird was poisoned in Greece, the other bird died of unknown causes in Ethiopia 1.5 years after being tagged in Greece.

Among the juvenile mortalities, the leading cause of death was poor navigation leading to drowning in the Mediterranean Sea (n = 9, 43% of mortalities). Six juvenile birds died of unknown causes (29%), and one bird (5%) was likely predated by a natural predator (eagle). For two birds (10%) there was unequivocal evidence that the birds had been shot by humans either for market trade in Nigeria or for another reason, and one further bird was likely to have been shot in Sudan.

The Mediterranean Sea was the single most important area for mortality of all birds (39% of all confirmed mortalities). The other mortalities were widely spread in both the Balkans (n = 3) and in Africa (n = 18), but no mortalities occurred along the flyway through Turkey and the Middle East (Fig. 1).

A robust estimation of survival probability indicated that during the first three months after fledging the average monthly survival probability was 0.806 (95% credible interval 0.692-0.900), which increased to 0.969 (0.941-0.989) for birds that had survived their first autumn migration. The annual survival probability for juvenile birds was therefore 0.403 (0.236 - 0.586), and it was 0.694 (0.480 - 0.871) for immature birds in their second year and 0.691 (0.443 - 0.895) for older immature and adult birds. These survival probabilities are likely too low to sustain a stable population.



Mortality cause

- human-caused mortality
- natural mortality
- unknown

Fig. 1: Location of recorded mortality events of satellite-tracked Egyptian Vultures marked between 2010 and 2016 in Bulgaria and Greece. Colour of the symbol indicates whether mortality was due to natural causes or caused by humans.