LIFE+ EGYPTIAN VULTURE NEW LIFE: URGENT ACTIONS TO STRENGTHEN THE BALKAN POPULATION OF THE EGYPTIAN VULTURE AND SECURE ITS FLYWAY
LIFE16 NAT/BG/000874

MONITORING OF EGYPTIAN VULTURE MIGRATION ON ANTIKYTHIRA ISLAND

ANNUAL REPORT 2017

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ABOUT THE PROJECT

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THE SITE

Antikythira is a small island of the Aegean Sea, located between Kythira and Crete in South Greece. Its total surface is approximately 20km2 and it is characterized by the steep cliffs of the west coast and the mountainous interior with highest peak of 378m. The island is mainly covered by low phrygana, maquis vegetation and scattered junipers (J. phoenicea), thickets of which are still found in a few spots of the island (Picture 1). A few olive groves and cultivated fields conclude the landscape.

Due to its location, 16nm SE of Kythira and 17nm NW of Crete the island serves as a leading line for migrating raptors which take advantage of the updrafts and the thermals created in the island in order to gain height before continuing their journey to and from Africa (Map 1). In some occasions (weather conditions, fatigue) the island is also used by migrating raptors for resting and refueling.

The island's north to south orientation along with its size (10km long, 3,3km width) and its geographical location at the tip of the Balkan Peninsula, make it ideal for monitoring the migrating raptors that attempt a longer water crossing instead of choosing the most preferred Central Mediterranean corridor or the Bosporus and Levant route.

Picture 1: Typical vegetation and landscape in the island of Antikythira (©HOS/T.Galani)

Map 1: Location of Antikythira Island in relation to the major bird migration routes of the country (©HOS).

METHODS

Observation of migrating raptors and other soaring birds took place from the 17th of August until the 30th of September. Direct visual observations were carried out daily from 9:00 to 19:00, at the peak Lidi, (N35 51.796 E23 17.825; altitude: 251 m) (Map 2). 8x and 10x binocular and a spotting scope 20-60x were used.

In total, 45 days or 450 hours of observations were carried out. Counting considered only birds on active migration. Resident birds were not counted and stopping-over birds were counted only at first appearance. Variables that are logged along with the observed birds are the height of flight and direction of flight. Meteorological variables recorded hourly are wind speed and direction, air temperature in the shade, visibility and precipitation.

Map 2: The Raptor Monitoring Observatory at Lidi peak, on Antikythira Island

Picture 2. Visibility from Lidi peak on a clear day. Kythira island and Cape Maleas in SE Peloponnese can be easily distinguished (©HOS/T.Galani)

Picture 3. Ornithologist (A. Evangelidis) during migration monitoring in Lidi peak (©HOS/T.Galani)

RESULTS

In total, 2064 raptors of 21 species and 237 soaring birds of four species were logged during the field season of autumn 2017 (a full list can be found in Annex I). Among them were two Egyptian Vultures, a subadult and a juvenile. Both birds were recorded on September the 13th between 14:00 and 15:00 (Pictures 4 & 5). It was a day with moderate to strong NW wind (5Bf), zero cloud cover and visibility up to 35km.

The subadult individual was spotted first entering the island from NE, a fact that indicated that it had probably been drifted east from the island by the NW wind and corrected its course to reach Antikythira. It was mobbed by a Booted Eagle and then turned SSE. The juvenile was spotted a few minutes later entering again from NE but a bit further south along the shoreline. The latter hesitated briefly, made a circle around the island before continuing SSE. None of the birds was spotted again that day, indicating that they continued their migration south. It should be noted that Crete Island is around 30km away from Antikythira and visible with naked eye that day thanks to the atmospheric conditions.

Picture 4: The subadult Egyptian Vulture, recorded on Antikythira on 13/09/2017(©HOS/A.Evangelidis)

Picture 5: The juvenile Egyptian Vulture, recorded on Antikythira on 13/09/2017(©HOS/A.Evangelidis)

The two Egyptian Vultures, along with a Saker Falcon (Falco cherrug) that was spotted on the 4th of September, are considered the most exceptional observations of the 2017 season. The Egyptian Vulture, is regularly passing though Antikythira during autumn migration (Panuccio et al. 2013) and it is believed that all observed birds most probably belong to the Greek and Balkan population (Oppel et al., 2015). The regular passage of the species in the area indicates that the island is a very important insular bottleneck for the species.

PAST OBSERVATIONS 2013-2017

From the raptor monitoring that has been conducted by HOS over the last 5 years (Table 1), the Egyptian Vulture shows a decrease in numbers through the term, with the exception of 2015, a trend that most likely mirrors the population status in Greece and the Balkans (Evangelidis et al, 2017).

	Annual observations					
Species	**2013**	**2014**	**2015**	**2016**	**2017**	**5ys Average**
Egyptian Vulture	5	3	5	2	2	3.4

REFERENCES

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ANNEX I

Totals of counted raptors and other soaring birds during field season of autumn 2017.

Common Name	Scientific name	N
European Honey Buzzard	*Pernis apivorus*	1158
Black Kite	*Milvus migrans*	101
Egyptian Vulture	***Neophron percnopterus***	**2**
Short-toed Snake Eagle	*Circaetus gallicus*	5
Western Marsh Harrier	*Circus aeruginosus*	562
Hen Harrier	*Circus cyaneus*	1
Montagu's Harrier	*Circus pygargus*	13
Pallid Harrier	*Circus macrourus*	16
Eurasian Sparrowhawk	*Accipiter nisus*	128
Goshawk	*Accipiter gentilis*	1
Common Buzzard	*Buteo buteo*	4
Long-legged Buzzard	*Buteo rufinus*	5
Lesser Spotted Eagle	*Aquila pomarina*	11
Greater Spotted Eagle	*Aquila clanga*	1
Booted Eagle	*Aquila pennata*	27
Osprey	*Pandion haliaetus*	9
Lesser Kestrel	*Falco naumanni*	3
Eurasian Hobby	*Falco subbuteo*	3
Red Footed Falcon	*Falco vespertinus*	1
Saker Falcon	*Falco cherug*	1
	Buteo spp	1
	Pallid or Montagus.	9
	Circus spp.	1
	Falco spp.	1
	Subtotal	***2064***
Little Egret	*Egretta garzetta*	*27*
Grey Heron	*Ardea Cinerea*	*100*
White Stroke	*Ciconia ciconia*	*94*
Black Stork	*Ciconia nigra*	*16*
	Subtotal	***237***
Total		**2301**