CREATING SUPPLEMENTARY FEEDING STATIONS FOR THE CONSERVATION OF THE EGYPTIAN VULTURE IN GREECE

TECHNICAL REPORT UNDER ACTION C3

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

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ABOUT THE PROJECT

The activities described in this report were carried out under the framework of action C3 of the **LIFE+ project "The Return of the Neophron"** (LIFE10 NAT/BG/000152, www.LifeNeophron.eu), further referred as "the LIFE project" funded by the European Commission and co-funded by the "A. G. Leventis Foundation", and implemented by the Bulgarian Society for the Protection of Birds (BirdLife Bulgaria), the Hellenic Ornithological Society (BirdLife Greece), the World Wildlife Fund Greece and the Royal Society for the Protection of Birds.

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INTRODUCTION

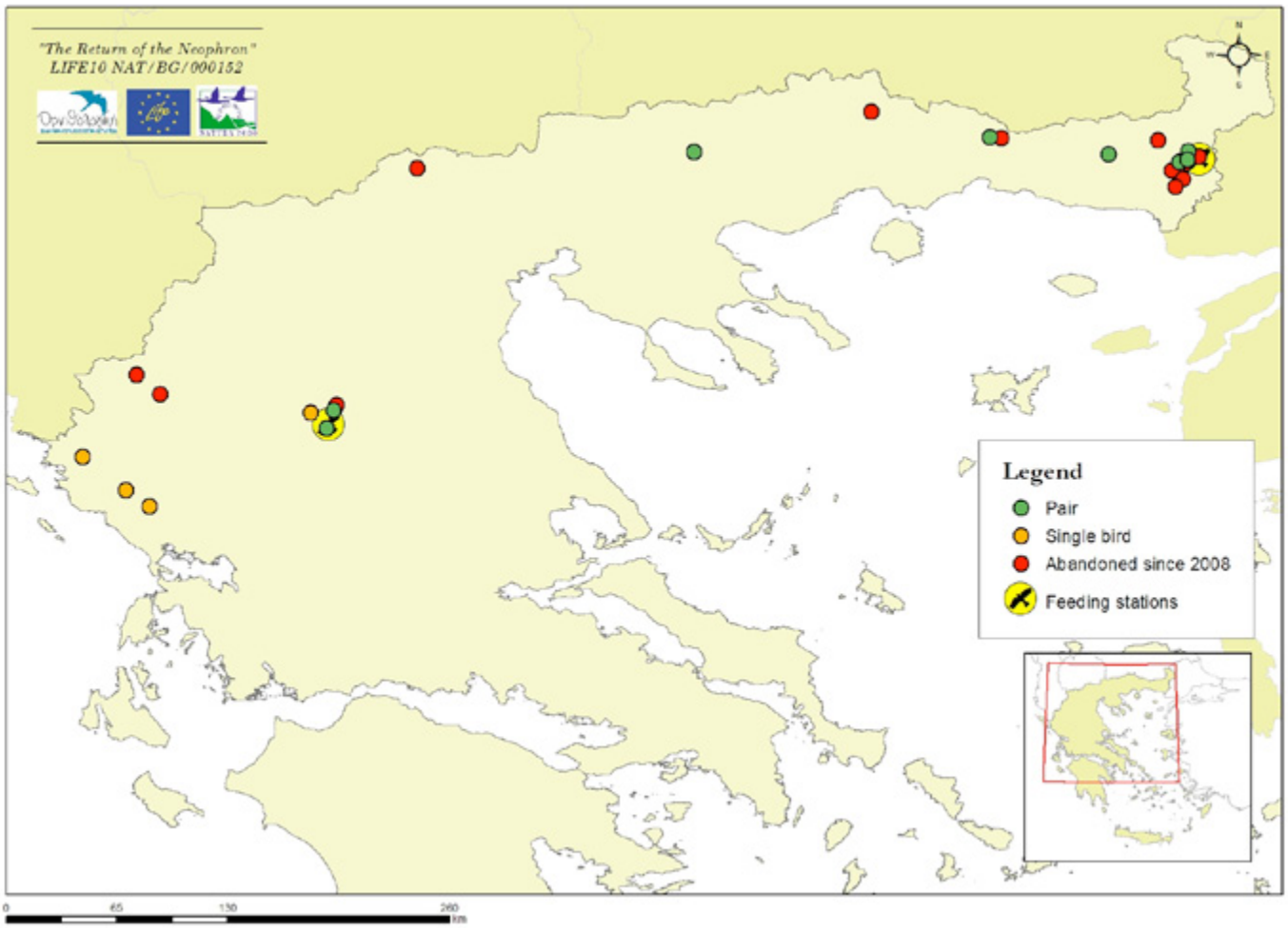
Controlled feeding in specific places known as supplementary feeding is considered a key management tool for the conservation of scavenger bird populations (Terrasse 1985, Houston 1987, Piper 2005). This provision of safe and high quality food to target species is believed to decrease the negative effects of mainly anthropogenic threats that cannot be eliminated in a short period of time (Robb et al. 2008, Moreno-Opo et al. 2015). It provides a number of benefits for the birds such as the increase of food availability, increase of survival rates, improvement of breeding performance (Gonzalez et al. 2006), increase of micronutrients availability such as calcium (Piper 2005) and reduction of the risk of poisoning (Oro et al. 2008, Grande et al. 2006) as well as environmental and economic benefits for people (Azmanis 2006, Morales-Reyes et al. 2015). Specifically for the case of the Egyptian Vulture, supplementary feeding stations may increase the population viability and also contribute to the settlement of new breeding territories as their abundance of food has been found to be closely related with the formation of communal roosts that hold congregations of non-breeding individuals (Tella 1991, Donazar et al. 1996, Grande et al. 2009, Benitez et al. 2009).

The Egyptian Vulture is the smallest of the European vultures and the most opportunistic. It feeds on carrion as well as domestic refuse, excrement, eggs and even small animals that captures alive (Negro et al. 2002, Hidalgo et al. 2005). Due to its rapid decline worldwide the species is listed as "Endagered" in the IUCN Red List of Threatened Species (Birdlife 2014), with populations in Europe declining around 50% the last 50 years (Inigo et al. 2008). Specifically in the Balkans the case is worse, as the species has suffered a steep decrease of 80% in the last 30 years, at an estimated rate of 6% per year the last decade (Velevski et al. 2015). Various factors led to this decline such as poisoning, electrocution and landscape changes (Carrete et al. 2007, Mateo-Tomas & Olea 2010). However, the new sanitary regulations imposed after the bovine spongiform encephalopathy crisis in the 2000s were amongst the most important threats to all vulture populations. The regulations banned the disposal of carrion in traditional dumps and out in the wild, thus depriving the birds from stable food sources that had been available for decades (Donazar et al. 2010, Margalida et al. 2010).

In Greece, Egyptian Vulture population has suffered a sharp decline especially after 1980, crashing from an estimated 250 breeding pairs (Handrinos & Akriotis 1997) to 13 active territories in 2014 (Saravia 2015) and is currently listed as Critically Endangered (Sidiropoulos & Tsiakiris 2009). More than 20 feeding stations that have been created in the past 30 years in Greece, most of them on the island of Crete for the supplemental feeding of Bearded Vulture (Alivizatos 2003), but only two are currently working systematically in mainland Greece: one in Dadia National Park in Northern Greece (working since 1987), and one in the area of Meteora in Central Greece (working only for a couple of years since 2001 under the framework of LIFE - Nature: B4-3200/97/243 and then reopened in 2012 under the framework of the LIFE Project "The Return of the Neophron" (see Map 1).

The extremely low number of Egyptian vultures left in Greece demands that urgent measures are taken. The creation of a network of small feeding stations distributed in the species last strongholds has been suggested on many occasions as one of the best conservation actions for the Greek Egyptian Vulture population as well as migrating birds from Balkan populations (Albania, FYRO Macedonia, Bulgaria). This report aims to present a set of comprehensive guidelines for the creation of future feeding stations in Greece, focusing in particular on enhancing their conservation potential for the Egyptian Vulture. The guidelines are based on a review of the existing national and international literature and particularly on successful conservation examples from other European countries (Spain, France, Bulgaria).

Picture 1. The feeding station in the area of Meteora (photo: D. Vavylis).



Map 1. Egyptian Vulture territories in Greece (2014) and operating feeding stations.

LEGISLATION – PERMITS

Bovine spongiform encephalopathy (BSE) -commonly known as "mad cow disease"-, appeared between 1996 and 2000 and became a serious public health issue. This situation led to the application of sanitary legislation at European and national level that greatly restricted the use of animal by-products that were not intended for human consumption. According to the new legal framework, all livestock carcasses had to be collected from farms using specially authorized vehicles, in order to be transformed or destroyed at designated plants, depriving bird populations of these resources that would otherwise have been left out in the wild or dumped in traditionally designated sites (i.e. "muladares") for birds to consume.

The EC 1774/2002 Regulation (first European regulation on the matter, followed by several modifications in the subsequent years) classified the by-products into three categories, according to their potential risk to public and animal health. Category 1 includes the carcasses of cows, goats and sheep which are considered as very high-risk material (i.e. animals above 24 months of age at the time of death). The carcasses of horses, donkeys, pigs and chicken belong to a lower risk category (Category 2 materials). Category 3 materials are those intended for human consumption but are not used for this purpose (Margalida et al. 2010). The negative consequences of this regulation on endangered scavenger populations (Tella 2001) as well as the behavioral changes of the necrophagous species (Margalida et al. 2011) led to new dispositions (EC 322/2003, EC 830/2005, EC 1069/2009), which permitted for instance the feeding of certain necrophagous birds with certain category 1 material. Although the aim of these dispositions is to guarantee food supplies for avian scavengers, there are still serious administrative restrictions placed on the creation of feeding stations (Margalida et al. 2010).

The latest Commission Regulation (EC 142/2011) comes with derogations from certain provisions of Regulation 1069/2009 which are applicable for vultures. In contrast to previous regulations, article 14 in EC 142/2011 describes the possibility of feeding certain species in each Member State, not only at feeding stations, but also allowing once more – with certain preconditions -, to leave livestock carcasses in the wild, promoting and highlighting the natural role of vultures as "cleaners" of the ecosystem. In addition, the Egyptian Vulture (along with Bearded Vulture, Black Vulture, Griffon Vulture, Golden Eagle, Imperial Eagle, White-tailed Eagle and Black Kite) is one of the species of necrophagous birds that can be fed with Category 1 material in Greece.

For the actual establishment of a feeding station a set of permits from the relevant authorities are required. First, an authorization has to be granted by the competent authority (in the case of Greece, this would be the Veterinary Directorate of each Region). For this, an application has to be submitted to the Directorate along with an official permission from the Ministry of Environment, Energy & Climate Change as well as a technical description of the feeding station and the targeted species. In addition, depending on the ownership of the land (public or private) as well as the use of the land (forest land, farmland, etc) another set of permits might be required. If the selected area is in a public land, additional authorizations are required from the Forestry Service or the local Municipality (depending on State or Municipality ownership). Especially in the former case, permits may even require an Environmental Impact Assessment if they are cited within protected areas as well as a technical description of the proposed construction (fencing, ground protection etc). If however, it is located on private land (e.g fallow or uncultivated land), a written agreement between the landowner and the operator should be sufficient.

Once the permits are granted and the feeding station is running, the feeding station operator is obliged to send samples from at least 4% of the sheep and goat bodies intended for feeding to the Veterinary Directorate in order to be tested for BSE. Lastly, the operator should keep records of the number, estimated weight and origin of the carcasses deposited as well as the date and location of feeding.

Table 1. Summary of the legislation concerning the use or disposal of animal by-products in Greece.

Regulation No	Type	Summary
EC 1774/2002	European	The regulation lays down rules regarding the classification, collection, transport, storage, handling, processing and use of animal by-products
PD 211/2006	National	Integrates the EC 1774/2002 in the Greek legislation
EC 1069/2009	European	Facilitates the efficient management of animal by-products, while it maintains the high level of protection against risks to public health
EU 142/2011	European	Implements the EC 1069/2009 and actually replaces EC 1774/2002

CREATION OF THE SUPPLEMENTARY FEEDING STATION

Picture 2. Designing a small supplementary feeding station in the location of a former garbage dump used by Egyptian Vultures in the area of Epirus, Greece. (Photo: V. Saravia).

Selection of the site

An important factor when creating a supplementary feeding station is the selection of the site. The location of the feeding stations should be studied carefully in order to maximize the possibility of use by certain species with clear patterns of habitat use and of high conservation interest.

Feeding sites must be located in areas that maximize the attendance of and benefits the target species. To achieve this, many different parameters should be considered and evaluated beforehand. These include variables such as physiographic characteristics, distance to the breeding territories, absence of infrastructure dangerous to birds, such as power lines or wind farms, and the potential impacts of the feeding station on the ecosystem. An evaluation system for the creation of feeding sites has been described for Northern Greece (Tsiakiris et al. 2002) where a number of parameters are ranked from 1 to 5.

The key variables that should be taken into account when planning a supplementary feeding station targeting in particular Egyptian Vulture are as follows:

Slope: Measured over a radius of 1 km in the vicinity of the feeding site. It has been shown that the attendance of Griffon Vultures and Egyptian Vultures is related to the slope showing a negative linear response while Bearded Vulture abundance shows a positive linear response (Cortes-Avizanda et al. 2010).

Dangerous infrastructure: The presence of power lines and wind farms with risk of death by electrocution or collision. Potential feeding sites should be established at least 2 km away from such infrastructures.

Water: Constant presence of water in the vicinity of the feeding station is essential for birds to drink, bathe and socialize. Water bodies should be present within 2 km of the site. An additional factor is the type of water bodies found in the area. If only reservoirs for watering livestock occur in the area, a shallow concrete pool should be constructed in the feeding site in order to avoid conflicts with local livestock breeders as vultures could foul the water and thus not be used by domestic animals (Piper 2005). On the other hand birds could face the danger of drowning in large water reservoirs (Anderson et al. 1999), so these should be avoided in the vicinity of the station.

Trees to house roosts: Egyptian Vulture roosts are associated with one or more stable food sources (Grande et al. 2009). Trees that could provide roosting place for birds (preferably dead ones) should be present in a radius of 3 km from the feeding site (Donazar et al. 1996).

Traditional dumps: Sites that were traditionally used by farmers to dispose carrion and are already visited and used by scavenger birds should be favored during the selection process. Farmers should be consulted first in order to ensure their collaboration and avoid future problems concerning their sensitivity regarding disease transmission.

Existing roads: An existent road provides easy access for supplying the feeding site. Nevertheless if a road is in regular use from local stakeholders, could be a disturbance for the birds. This should be taken into consideration when planning a feeding site, and if there is indication of disturbance it should be avoided.

Distance from an Egyptian Vulture nest: The concentration of facultative scavengers around the supplementary feeding station could increase the probability of disturbance or even nest predation (Cortes-Avizanda et al. 2009). Thus, the location should be selected at least 2 km away from an active Egyptian Vulture nest.

Observation of non-breeding individuals: If immature or not-territorial adult birds (“floaters”) are present in the area, the creation of the feeding station would favor the survival of these individuals and even lead to re-colonization of abandoned territories (Benitez et al. 2009, Grande et al. 2009).

Since food sources in the feeding stations accumulate on one spot, they could lead to the impoverishment of plant and insect communities as well as foul the nearby water courses. So, these factors must also be taken into account when selecting the location of a supplementary feeding station (Selva & Cortes-Avizanda 2009), but also when building the station itself in order to limit all the potential consequences (see 3.2).

At last, a feeding site could not operate properly without the acceptance and help of local communities. So a series of awareness activities such as meetings and presentations with local stakeholders should take place before the creation of the feeding station.

Pictures 3, 4 & 5. Areas assessed as suitable for the establishment of a feeding station for the Egyptian Vulture in Epirus, Greece. (Photos: V. Saravia)

Technical characteristics

Fencing is essential for a supplementary feeding station in order to avoid mammal scavengers to approach and consume the remains intended for vultures. Several characteristics should be taken into account before constructing the fence such as the available space and the mammals that live in the area.

The ideal fence should be erected to create an area of 100x100m but a smaller area (minimum of 50x50m) could also be acceptable (Alivizatos 2004). Any fenced area smaller than this could affect the ability of larger vultures to land and take off especially after great amounts of carrion have been consumed as then they will require a longer runway. In addition, the fence should be placed at least 1m away from trees, bushes or rocks in order to avoid access to animals that can jump over it (Bousbouras et al. 1998). The fence should be 2m high above the ground. Stakes of 2.5m should be buried into the ground 0.5 m and placed at 2m intervals. The mesh should be strong enough to restrain animals from breaking through into the feeding station. For this, it is recommended to use a mesh with a maximum opening of 50mm (Fig. 1). The mesh should also be buried into the ground 0.5 m to hinder mammals from digging their way through into the feeding station. In case of a rocky substrate in areas inaccessible by heavy machinery, affixing sturdily a building mesh of at least 0.5 width on the base of the fence and covering it with heavy rocks may also serve. It is important that if wild boars are present in the area, the buried half meter of the fence is enhanced with concrete while it would also be recommendable to use double twisted wire mesh. Finally the entrance of the feeding station should be 2,5m wide to permit the entrance of the vehicle that will transfer the carcasses or any other animal by-products.

Depending on the location's substrate an additional construction could be needed to avoid the pollution of nearby and underground water. The remains could be deposited without a problem on an impermeable rock but in case the soil is permeable, the construction of a concrete slab or lining a pit with a waterproofing membrane and covering it where the carcasses will be deposited would stop the liquid waste from penetrating the subsoil. In addition, if natural water bodies in the vicinity of the feeding station (rivers for example) are absent, a concrete watering pool should be present at the feeding station as already mentioned (see 3.1).

A viewing hide could be built in the supplementary feeding station for research and photography purposes. The hide should be built at the same time with the feeding station and should be used with minimal disturbance to the birds (e.g. entering - exiting when still dark) . It should be placed as close as 20m from the remains in order to avoid disturbing the vultures. The proposed dimensions for a hide are 2m length, 1,5m width and 1,3m height. At last, it must face north (for photographic purposes) and the walkway should be sheltered to allow the visitors enter with minimum disturbance to the vultures.

In the absence of large vultures and when Egyptian Vultures are the targeted species, other type of light supplementary feeding station could be constructed as already used in France (Dupont et al. 2011). The area could be around 100-200m2 with a fence of 2m (1,5m high and 0,5m buried into the ground). The other preconditions mentioned above should be followed depending on mammalian scavengers present on the area.

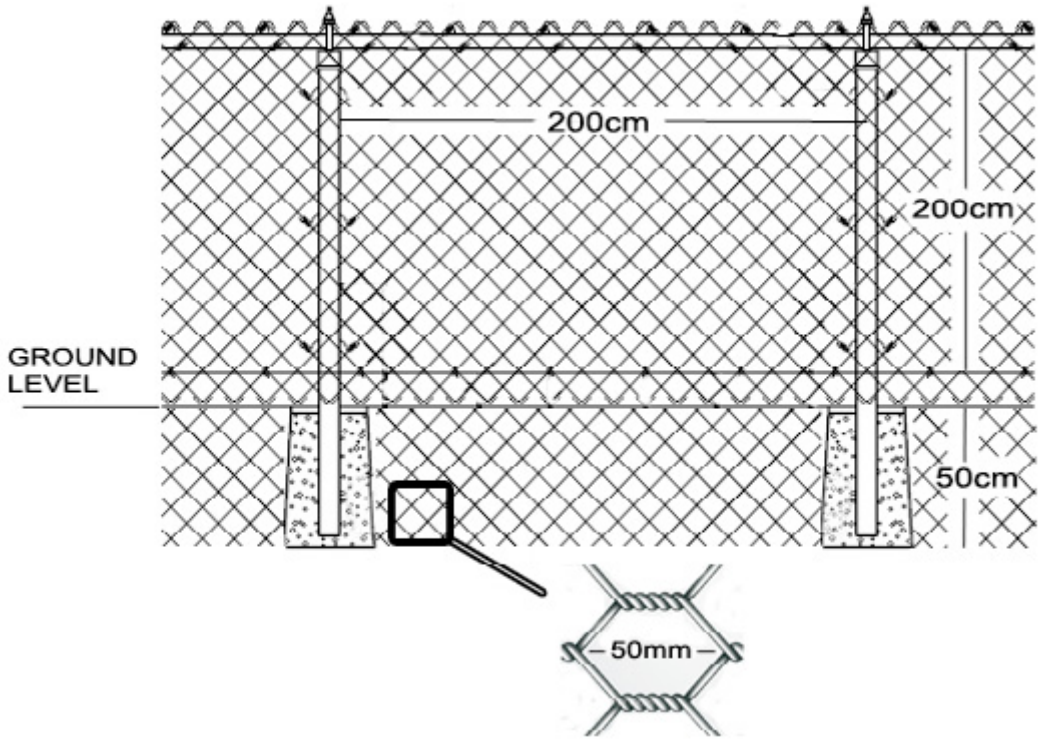


Fig. 1. Fence characteristics

Picture 6. Building a hide for the Meteora feeding station, Greece. (Photo: V. Saravia)

OPERATION OF THE SUPPLEMENTARY FEEDING STATION

Picture 7. Egyptian Vulture captured with motion detection camera trap (Photo: LIFE10 NAT/BG/000152).

Food deposition

Although vultures share common food sources, different species are specialized in the use of different parts of the carcass through morphological and behavioral adaptations. This interspecific resource-partitioning leads to the co-existence of difference species on carrion (Konig 1983, Wallace et al. 1987). Supplementary feeding stations should be optimized in order to favor a target-species within the scavenger guild. In that way their conservation function is channeled to the most threatened populations which in our case are small and medium sized scavengers like the Egyptian Vulture (Donazar et al. 2009).

When, how much and what kind food should be deposited are crucial questions when designing a supplementary feeding program tailored for a species. All of these aspects depend on the ecology of the target species, of the other scavenger species that are present in the specific area and last (but not at all least) if the supplemental feeding will be an emergency measure or a long-term management technique.

Smaller carcasses benefit smaller scavengers (Cortes-Avizanda et al. 2010). The disposal of many small pieces of remains dispersed in the feeding site (Moreno-Opo et al. 2015) appears to be an action that would favor the Egyptian Vulture. Providing lots of scattered remains not only allows rapid access to the food but also leads to adult birds not dominating the food sources. Thus, not only existing pairs can feed in order to improve their breeding performance but it is also a way to favor subadult survival (Meretsky & Mannan 1999).

Various animal remains can be used such as pieces of goats, sheep, pigs and chicken. In case of large remains like cattle, the carcass should be partially skinned/opened to allow immediate access to Egyptian vultures especially if Griffon or Black vultures are absent from the area. To avoid the possibility of using medicated

animal remains, thus placing the vultures in sanitary risks, personal arrangements with the livestock breeders when it is possible or providing remains from sources intended for human consumption will guarantee the disposal of antibiotic-free and steroid hormone-free remains. In the case of Greece, a good example would be using sheep and goats carcasses from the dairy sector, as controls for antibiotics are mandatory for dairy produce. Thus, carcasses from such animals could be deposited at the supplementary feeding station with reduced risk of containing these dangerous substances. Finally, although road kills might seem an attractive and easy source of carcasses for the feeding station, it would be advisable to avoid supplying dead carnivores (eg. dogs, foxes) as they could in fact be victims of poisoning or shooting.

Regular supplementary feeding stations should be supplied frequently (depending on the rate remains are consumed by the vultures visiting the site) in order to ensure the constant availability of carrion. Regarding Egyptian vultures, stable food sources are very important since they have been associated with the presence of communal roosts (Ceballos & Donazar 1990, Grande et al. 2009) and they could maximize the probability of attracting new individuals – breeding units (floaters) to recolonize the abandoned territories (Benitez et al. 2009). The timing of food deposits usually doesn't affect the probability of discovery and use of the carcass but in case of large numbers of Griffon vultures it would be preferable for the remains to be deposited in the evening when this dominant species is absent (Meretsky & Mannan 1999, but see Cortes-Avizanda et al. 2010).

A more efficient way of managing supplementary feeding for vultures would be the creation of a network of feeding stations which would be supplied sporadically with food resembling the traditional practices of the past (Bobbe 2009). In that way, there will be a constant food source in the area but the resources will be unpredictable in time and space (see Deygout et al. 2010, Lopez-Lopez et al. 2013, Monsarrat et al. 2013). In this case food disposal could be made from local livestock breeders in irregular time periods. These so called "Light Feeding Stations" (LFS) present various conservation and public awareness advantages (Sarrazin & Duriez 2011):

- The food is unpredictable in time and spread over the region, thus they reduce competition between vultures (adults/youngs).
- LFS help the vultures to increase their foraging area and to be less dependent on the heavy feeding stations.
- LFS help the farmers to consider the vultures as "carrion managers",
- The efficiency of carcass removal combined with the reduced economic costs for farmers as well as the important decrease in carbon emission, make the LFS a perfect tool to maintain this reciprocal and long term benefit between human and scavengers.

Specifically in France, the LFS created under the framework of a LIFE project, proved to be one of the most efficient conservation measures since the Egyptian Vulture population not only ceased to decline but started to grow, resulting from 8 to 16 breeding pairs between 2002 and 2008 (http://rapaces.lpo.fr/vautour-percnoptere).

Monitoring

In order to monitor the use of the feeding station by birds, a minimum of one visit should be conducted the same day the carrion is disposed, although subsequent visits are recommended.

Recordings must include: date, start and end times of survey, the amount of available carrion (kg) (including the amount deposited that day, if any) and the approximate amount consumed by the birds (%). Also any disturbance has to be noted (for example protocol see Annex 1). The observation point should be at least 300m away from the remains so that the behavior of birds is not altered. Depending on the size of the feeding site

and the bird visiting frequency, recording should be carried out continuously in case of small feeding stations (with expected low activity), but could be implemented every 30 minutes in larger feeding stations (where high visiting frequency is expected). In either case, the species and the number of individuals present at the station and in a radius of 200m should be noted as well as a distinction between the birds that are actively feeding and the ones that are not, but found in the vicinity of the feeding area like the fly-overs (Garcia-Ripolles et al. 2004, Benitez et al. 2009).

Additional data include the ageing of visiting Egyptian vultures whenever possible, by at least assigning them in the categories: juvenile (1st winter), immature (2nd, 3rd winter), subadult (4th winter) and adult (after 5th winter) (Clark & Schmitt 1998). If possible a record with flight routes of vultures departing from the station could be helpful. At last, phenotypic characteristics of the birds should be noted either by photography or drawn into blank silhouettes of Egyptian Vultures in the field (Annex 2). Special facial markings or plumage patterns can result in the identification of individuals in order to examine the use of the feeding station by birds that come from specific territories. Particular attention is needed in order to spot individuals with rings or wing tags. Such observations could be most valuable to better understand the movements of specific individuals.

In case that only data about the presence of birds feeding on the carcass is needed, the monitoring of the SFS could be implemented with motion detection camera traps as they can provide proof of the feeding event (species) as well as date and time.

Management

Who is going to be responsible for the management of the supplementary feeding station is a key matter for its long term operation. Depending on the situation, there are different bodies who could be responsible for managing the feeding station Although in the past, there have been several examples of NGOs creating and operating feeding stations however, it would be advisable, in particular regarding the operation that public authorities took an active role. Both municipalities and forestry services could provide the staff and transportation needed for the disposal and the maintenance of the station. In cases when the FS is in a protected area, with an operating Management Body, the latter could also take responsibility for it.

A very good opportunity could be that with the right guidance, local farmers or livestock breeders could not only create but also supply and maintain light supplementary feeding stations. This could be done by careful design and application of agri-environmental measures in Greece specifically for this cause.

The Veterinary Directorate should be in charge of the correct operation of the supplementary feeding station from a health safety point of view by means of veterinary tests and keeping records of the dead animals supplied (mandatory according to EU regulations).

PROPOSITIONS - PRIORITIES

FOR THE FUTURE ESTABLISHMENT OF SFS IN GREECE

Due to the rapid decline of Egyptian Vulture populations in the country, the highest priority should be that supplementary feeding stations are used for the immediate support of the remaining individuals. This way, food availability will increase but most importantly the risk of poisoning will be reduced. Creation of feeding stations in areas such as Epirus and Western Greece are crucial not only to bolster the survival of the Egyptian Vultures but also benefit the last breeding pairs of Griffon Vultures in the area (Paramythia mountains, Akarnanika mountains).

On the long-term, a network of light supplementary feeding stations would be of critical importance. This strategy can increase the survival of immature birds especially in western Greece that appears to be an important wintering area for immature individuals of different scavenger bird species from other Balkan countries due to its high food availability (Azmanis et al. 2009). Also, regular supplementary feeding can attract Egyptian vulture and Griffon Vulture floaters as proved in Bulgaria (http://www.greenbalkans.org/birdsofprey/life) helping birds to recolonize formerly abandoned territories. This could be the case for Epirus region and specifically Aoos valley since immature birds can be attracted from neighboring Albania that still holds breeding pairs of Egyptian Vultures. The network of light SFS could be designed to reach its maximum potential in such areas if combined with proper agri-environmental measures so that local livestock breeders could create and maintain feeding sites.

In addition, supplementary feeding stations could prove important for migrating Egyptian Vultures through Greece. This would help complete the Balkan network of feeding stations, benefitting the species Balkan population as a whole. In addition, the operation of the already established feeding stations in Crete at least through the autumn migration could be critical for migrating Egyptian Vultures, especially juveniles, to fuel up before crossing the Libyan sea.

Finally, already established and operational feeding stations could aid in case of future reintroduction projects.

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APPENDIX 1

Visit and Observation Protocols used in Meteora Feeding Station

EGYPTIAN VULTURE KALABAKA FEEDING STATION VISIT PROTOCOL
(LIFE10 NAT/BG/000152)

Date:	Start of monitoring:	End of monitoring :	Observer/s:
Days afer disposal:	Amount (%) of food at the end of monitoring[1]:		

If food is deposited during this visit please fill in the following	Weather Conditions					
Food disposal time:		Cloudness	Wind	Rain	Visibility	Temperature[4]
Food amount (Kg):	6:00					
Food type[2]:	8:00					
Food origin[3]:	10:00					
Comments	12:00					
	14:00					
	16:00					
	18:00					
	20:00					
	In case of dramatic change of weather please between the recording hours please fill in					
	Time	Cloudness	Wind	Rain	Visibility	Temperature

[1] Compared to the amount of food at the beginning of monitoring

[2] Pork intestines (PI), Other pork remains (PR), Goat remains (GR), Sheep remains (SR), Cattle remains (CR), Other (please fill in comments)

[3] Slaughterhouse (Sl), Butchers (Bu), Farmer (Fa), Shepherd (Sh), Other (please fill in comments)

[4] If exact temperature is not possible fill in the following categories 0 (<5°C), 1 (5°C to 15°C), 2 (16°C to 25°C), 3 (26°C to 35°C), 4 (> 35°C)

EGYPTIAN VULTURE KALABAKA FEEDING STATION OBSERVATIONS PROTOCOL (other species)
LIFE10 NAT/BG/000152

Date:			Start of monitoring:						End of monitoring :
Corvidae		*Corvus cornix*		*Corvus corax*		*Pica pica*		*Corvus monedula*	Other .....
Max number									
Time									
Other Species									
ID	*Species*	*Time of arrival*	*Time of departure*	*Number*	*Age*	*Behaviour*			*Comments*

APPENDIX 2

Blank form for drawing special facial markings and plumage patterns of observed Egyptian Vultures

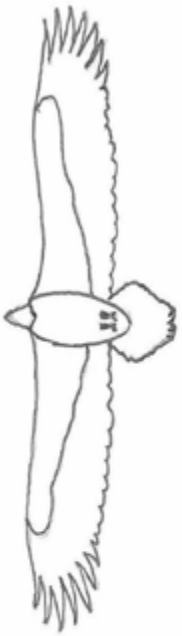
EV Individual Identification

Date:

Location:

Age:

Sex:



Plumage pattern (from below)