

Reintroduction of Griffon Vulture *Gyps fulvus* in Kotel Mountain, Bulgaria

Overview 2007-2011

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Project: "Recovery of the Populations of Large European Vultures In Bulgaria",
with the contribution of the LIFE financial instrument of the European Community.



Recommended citation

STOYNOV E., BONCHEV L. 2012. Reintroduction of Griffon Vulture *Gyps fulvus* in Kotel Mountain, Bulgaria, Overview 2007-2011, *Fund for Wild Flora and Fauna, Blagoevgrad*.

Introduction

In 2003 FWFF started preparation for re-introducing the Griffon Vulture in Kotel Mountain. The species used to breed in the area until the 1970ies. It went extinct from most of the country in that time due to mass, well organized and long lasting campaign for extirpation of predators – using poison baits and direct persecution.

Although growing, the population of the Griffon Vulture in Eastern Rodopi does not show capacity and tendency to colonize new areas. Extension of the species to the north was set as an important goal within the Balkan Vulture Action Plan started in 2002. Several places along the Stara Planina (Balkan Mountain chain) were assessed (Vrachanski Balkan Nature Park, Central Balkan National Park, Sinite Kamani Nature Park and Kotel Mountain) and viability studies prepared. FWFF, Green Balkans and Birds of Prey Protection Society started preparations for re-introduction of the Griffon Vulture in these areas. The project received financial support from the Frankfurt Zoological Society and Deutsche Bundes Umwelt and the methodological support from Black Vulture Conservation Foundation (later Vulture Conservation Foundation), LPO/Mission Rapaces and others.

Activities that generally improved the situation of the habitat and coped with the potential threats to vultures (e.g. against poison campaign, livestock rearing and Transhumance revival, compensation program for depredated livestock, public education and awareness etc) were put in practice by FWFF in Kotel Mountain and the organization received valuable support from many private donors (Zoo de Doue, Friends of Vienna Zoo, Rufford Small Grants Cottonwood Foundation, Bulgarian Partnership Foundation, and others). Some projects were also supported by UNDP/GEF small grants programme.

In 2008 a common LIFE+ proposal was prepared for the entire Balkan Mountain, where release of 150-200 vultures imported from Spain and/or zoos from France, Germany, Holland, Czech Republic, Sofia Zoo etc will be released in the wild at four sites. The project was approved and started officially in January 2010. The name of the project is “Vultures Return in Bulgaria” LIFE08 NAT/BG/000278, where Green Balkans – Stara Zagora is a leading beneficiary and FWFF associated beneficiary.

FWFF started releases in Kotel Mountain yet in 2007 in order to test the “French” method (using acclimatization aviaries) and to adapt it to the circumstances of the Balkan Mountain. The experiments showed that it is always better to “test the water” prior to release big numbers of vultures, as some aspects e.g. harsh winter conditions may lead to loss of inexperienced vultures.

We still learn and although we achieved a lot we still are far of the success. But the knowledge we gained and the few positive results keep our enthusiasm to high level and we will continue.

Transfers & Releases

| Nº | PVC ring and sex | Wing tag | Release date | Origin and transfers | Post release data |
|----|------------------|----------|--------------|---|---|
| 1 | B54 + EO ♂ | - | 01.09.2007 | - Born in 2002 in Zoo of Jerusalem in Israel from a pair of Bulgarian and Israely birds. - Transferred to Sofia Zoo in 2003. | - Observed at the release and feeding site until 09.11.2007 - In December 2007 and January 2008 observed several times at the rubbish dump near Omurtag. - 27.05.2008 returned to the |

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| | | | | - Transferred to Kotel 2005. Escaped from the cage soon after and recaptured exhausted in November 2005. | release site in Kotel - 09.07.2008 (most probably) observed near Veselinovo. |
| 2 | B53 unknown | - | 01.09.2007 | - Born in Sofia Zoo in 2003. - Transferred to Kotel in 2005. | - 22.09.2007 observed near Zheravna (20 km south from the release site). - 10.10.2007 recaptured exhausted near Canakkale in Turkey (280 km south from the release site) - 10.11.2007 released after rehabilitation by local vet. All rings removed so the bird is indistinguishable. |
| 3 | B59 unknown | - | 01.09.2007 | - Born in Zoo de Doue in 2002. - Transferred to Kotel in 2003. | - 07.09.2007 observed in flight about 2 km from the release site, heavily attacked by a pair of Golden eagles (Aquila chrysaetos). The bird has never been seen after that. |
| 4 | M56 ♂ | 04 | 24.09.2008 | - Rehabilitated by Denjon des Aigles, France - wild cough bird from French Pyrenees. Most probably born in 2003. - Transferred to Sofia Zoo in 2005. - Transferred to Kotel on 24.07.2008. | - Observed permanently around the release and feeding site until 31.12.2008, when re-entered the aviary on its own. Released again on 03.01.2009. Last observed in the release area on 09.01.2009. |
| 5 | M58 ♂ | 03 | 28.09.2008 | - Rehabilitated by Denjon des Aigles, France - wild cough bird from French Pyrenees. Most probably born in 2003. - Transferred to Sofia Zoo in 2005. - Transferred to Kotel on 24.07.2008. | - Observed permanently around the release and feeding site until 31.12.2008, when re-entered the aviary on its own. Released again on 03.01.2009. Last observed in the release area on 11.01.2009. |
| 6 | B15 ♀ | 09 | 08.10.2008 | - Born in Zoo de Doue, France in 2006; - Transferred to Kotel on 06.05.2008. | Fixed in the release area after the release. Re-entered the cage on its own on 25.12.2008. Re-released on 03.01.2009. Found exhausted on 17.01.2009 near Kotel at 2 km south of the release site. Died 18.01.2009 in Rehab Center of Green Balkans |

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| | | | | | in Stara Zagora. |
| 7 | M52 ♀ | - | 14.10.2008 | <ul style="list-style-type: none"> - Rehabilitated by Denjon des Aigles, France (wild caught bird from French Pyrenees). Most probably born in 2003. - Transferred to Sofia Zoo in 2005. - Transferred to Kotel 02.10.2008. | The bird has never been seen after the release. |
| 8 | B14 unknown | 7G | 11.12.2008 escaped from the aviary | <ul style="list-style-type: none"> - Born in Zoo de Doue, France in 2007; - Transferred to Kotel on 06.05.2008. | <p>Permanently observed at the release and feeding site. Entered the aviary on its own on 27.12.2008. Released again on 03.01.2009. Entered the aviary again on 10.01.2009. Released again on 14.04.2009. Since then permanently observed in the area with about 15 times entering and exiting the aviary on its own.</p> |
| 9 | B18 | | 17.06.2009 | Born in 2006, wild caught, rehabilitated in (Extramadura) Spain and Transferred by BVCF to Mallorca and then transferred to Green Balkans Rehab Center in Bulgaria and then in Kotel on 15.04.2009 | <p>Permanently present in the release area until 22.01.2010, when moved south during harsh winter conditions. 10.02.2010 observed near Yambol (70 km south of the release site) together with B19. Stayed there for two weeks while has been fed by Green Balkans and disappeared. 27.04.2010 observed at the FWFF feeding site in Kresna Gorge (300 km WSW from the release site). Stayed there until 12 February 2011 and on 26 March 2011 was observed back in Kotel again.</p> |
| 10 | B19 | 10 | 05.05.2009 | <ul style="list-style-type: none"> - Born in Zoo de Doue, France in 2006; - Transferred to Kotel on 06.05.2008. | <p>Permanently present in the release area until 22.01.2010, when moved south during harsh winter conditions. 10.02.2010 observed near Yambol (70 km south of the release site) together with B18. Stayed there for two weeks while has been fed by Green Balkans and disappeared. 11.06.2010 observed near Studen Kladenets</p> |

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| | | | | | dam in Eastern Rodope (160 um SSW from the release site). |
| 11 | B20 | - | 30.06.2009 | Born in 2008, wild caught, rehabilitated in (Ciudad Real) Spain and Transferred by BVCF to Mallorca and then transferred to Green Balkans Rehab Center in Bulgaria and then in Kotel on 15.04.2009 | Observed at the feeding site on 02.07.2009. Disappeared from the release site soon after. A week later seems to have been seen not far of Sliven (25 km SW from the release site). Last report for (probably) this bird is from Sungurlare (35 km SE from the release site) reported from local people and seemed exhausted. |
| 12 | B60 ♀ | - | - | <ul style="list-style-type: none"> - Born in Jerez Zoo, Spain in 2001. - Transferred to Kotel in 2002. - Died in the aviary in 2006. | - |
| 13 | M54 ♀ | - | - | <ul style="list-style-type: none"> - Rehabilitated by Denjon des Aigles, France - wild cough bird from French Pyrenees. Most probably born in 2003. - Transferred to Sofia Zoo in 2005. Transferred to Kotel on 24.07.2008. - Died in the aviary in February 2009. | - |
| 14 | B58 ♂ | - | - | <ul style="list-style-type: none"> - Rehabilitated bird, caught as juvenile found exhausted near Lik Village NW Bulgaria in 1997. - Transferred to Sofia Zoo same year. - Transferred to Kotel in 2005. - Transferred to Green Balkans Rehab Center for captive breeding. | - |
| 15 | Agent 00 | | 20.08.2009 | Born in 2008, wild caught, rehabilitated in (Guadelajara) Spain and Transferred by BVCF to Mallorca and then transferred to Green Balkans Rehab Center in Bulgaria and then in | Re-entered the cage on its own on 03.11.2009. Released again on 30.03.2010. Observed in the area permanently until 29.12.2011 when found dead electrocuted 1.2 km from the release site. |

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| | | | | Kotel on 15.04.2009 | |
| 16 | K0L | K0L | 20.09.2010 | Born in 2008, wild caught, rehabilitated in (Cuenca) Spain and Transferred by BVCF to Mallorca and then transferred to Green Balkans Rehab Center in Bulgaria and then in Kotel on 15.04.2009 | Never observed after the release. |
| 17 | K0H | K0H | 20.10.2010 | Born in 2008 in Jerez Zoo, Spain and transferred by BVCF to Mallorca and then transferred to Green Balkans Rehab Center in Bulgaria and then in Kotel on 15.04.2009 | Frequently observed in Kotel and Sinite kamani. Moved to Studen kladenets and Dadia in July-August 2011. At least two times was observed to move between Sinite Kamani and Dadia in few days in the summer 2011. |
| 18 | K0M | K0M | 20.09.2010 | Born in 2008, wild caught, rehabilitated in (Guadelajara) Spain and Transferred by BVCF to Mallorca and then transferred to Green Balkans Rehab Center in Bulgaria and then in Kotel on 15.04.2009 | Re-entered the cage on its own and released again in March 2011. Present in the area of release until mid April, when moved to Sinite Kamani and later on was reported from Studen kladenets in Eastern Rhodopi. There it frequently moved between Studen Kladenets, Dadia National Park in Greece and Madzharovo. |
| 19 | K0J | K0J | 20.10.2010 | Born in 2008, wild caught, rehabilitated in (Cuenca) Spain and Transferred by BVCF to Mallorca and then transferred to Green Balkans Rehab Center in Bulgaria and then in Kotel on 15.04.2009 | Very well adapted to the area, moved frequently between Kotel and Sinite kamani and was present until its recapture due to injury in December 2011. |
| 20 | G44 ♀ | - | 20.10.2010 | Born in 2003, wild caught, rehabilitated by GREFA in Spain and transferred to Kresna Gorge aviary of FWFF on 18.02.2010. Transferred to Kotel on 09.07.2010. | Spent the winter around Kotel and in early spring expressed breeding behaviour with F08. Later were seen at the feeding site on Sinite kamani and disappeared after May 2011. It was again observed at the feeding site Sinite kamani on 15 and 16 October 2011. |
| 21 | F08 ♂ | - | 09.09.2010 | Born in 2001, wild caught, rehabilitated by GREFA in Spain and | Spent the winter around Kotel and in early spring expressed breeding behaviour with G44. |

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| | | | | transferred to Kresna Gorge aviary of FWFF on 18.02.2010. Transferred to Kotel on 09.07.2010. | Later were seen at the feeding site on Sinite kamani and disappeared after May 2011. |
| 22 | K1X | K1X | - | Born in 2009, wild caught, rehabilitated in (Castilla y Leon) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 26.10.2010- Died in the aviary in March 2011. | - |
| 23 | K1H | K1H | 27.05.2011 | Born in 2009, wild caught, rehabilitated in (Castilla y Leon) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 26.10.2010- | Frequently observed in Kotel and Sinite kamani. |
| 24 | K23 | K23 | 13.11.2010 Escaped from the aviary | Born in 2009, wild caught, rehabilitated in (Castilla y Leon) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 26.10.2010- | Never observed after the release. |
| 25 | K24 | K24 | 27.05.2011 | Born in 2009, wild caught, rehabilitated in (Castilla y Leon) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 26.10.2010- | Frequently observed in Kotel and Sinite kamani. |
| 26 | K25 | K25 | 27.05.2011 | Born in 2009, wild caught, rehabilitated in (Castilla y Leon) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 26.10.2010- | Frequently observed in Kotel and Sinite kamani till June 2011. |
| 27 | K26 | K26 | 27.05.2011 | Born in 2009, wild caught, rehabilitated in (Castilla y Leon) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 26.10.2010- | Observed in the area permanently until 29.12.2011 when found dead electrocuted 1.2 km from the release site. |
| 28 | K28 | K28 | 13.11.2010 | Born in 2009, wild | Not observed. |

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|----|-----|-----|---------------------------------------|---|---|
| | | | Escaped from the aviary | caught, rehabilitated in (Castilla y Leon) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 26.10.2010- | |
| 29 | K07 | K07 | 13.10.2011 | Born in 2010 in Amersfoort Zoo, Holland, Transferred to the aviary in Kotel on 27.06.2011. | Observed for few days around the release site and one month later reported from the area of Orestiada in Greece and soon after that recaptured exhausted near Edirne in Turkey. |
| 30 | K30 | K30 | Aviary | Born in 2010 in Allwetter Zoo, Germany in 2010. Transferred to the aviary in Kotel on 06.10.2011. | - |
| 31 | K31 | K31 | 06.11.2011 Escaped from the aviary | Born in 2011 in Allwetter Zoo, Germany in 2011. Transferred to the aviary in Kotel on 06.10.2011. | Observed for few days around the release site. Not observed later. |
| 32 | K2H | K2H | 01.11.2011 | Born in 2009, wild caught, rehabilitated by GREFA in Spain, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 27.06.2011 | Observed around the release site and at the feeding site. |
| 33 | K2T | K2T | 01.11.2011 | Born in 2009, wild caught, rehabilitated by GREFA in Spain, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 27.06.2011 | Observed in the area permanently until 29.12.2011 when found dead electrocuted 1.2 km from the release site. |
| 34 | K2V | K2V | 01.11.2011 | Born in 2008, wild caught, rehabilitated in (Bizkaia) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 27.06.2011 | Observed in the area permanently. |
| 35 | K3T | K3T | 20.12.2011 Escaped from the aviary | Born in 2005, wild caught, rehabilitated in (Guadalajara) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 19.11.2011 | Not observed. |
| 36 | K3R | K3R | Aviary | Born in 2011, wild caught and rehabilitated | - |

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| | | | | in (Canamares) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 19.11.2011 | |
| 37 | K3J | K3J | Aviary | Born in 2011, wild caught and rehabilitated in (Bizkaia) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 19.11.2011 | - |
| 38 | K3N | K3N | Aviary | Born in 2011, wild caught and rehabilitated in (La Loma) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 19.11.2011 | - |
| 39 | K3P | K3P | Aviary | Born in 2011, wild caught and rehabilitated in (Bizkaia) Spain, VCF, Transferred to Green Balkans Center in Bulgaria and then to Kotel on 19.11.2011 | - |

Released Griffon Vultures in Kotel Mountain by years in the period 2007 – 2011:

2007-3

2008-5 (one escapee)

2009- 5 (one from 2008 released second time)

2010- 7 (5 released + 2 escapees)

2011- 12 (2 released second time + 2 escapees)

- Total number of transferred Griffon Vultures to Kotel from 2003 to 2011 is 39.
- Three birds died into the aviary during the acclimatization period – (M54, B60, K1X).
- One is transferred for captive breeding to Green Balkans Center – (B58).
- For the period September 2007 –December 2011 30 birds were released.
- Five are still kept in the acclimatization aviary – (K3P, K3J, K3N, K3R, K30).
- Confirmed deaths of released birds are 4 - (Agent 00, K2T, K26, B15).
- Recaptured with injury (disabled) – 1 - (K0J).

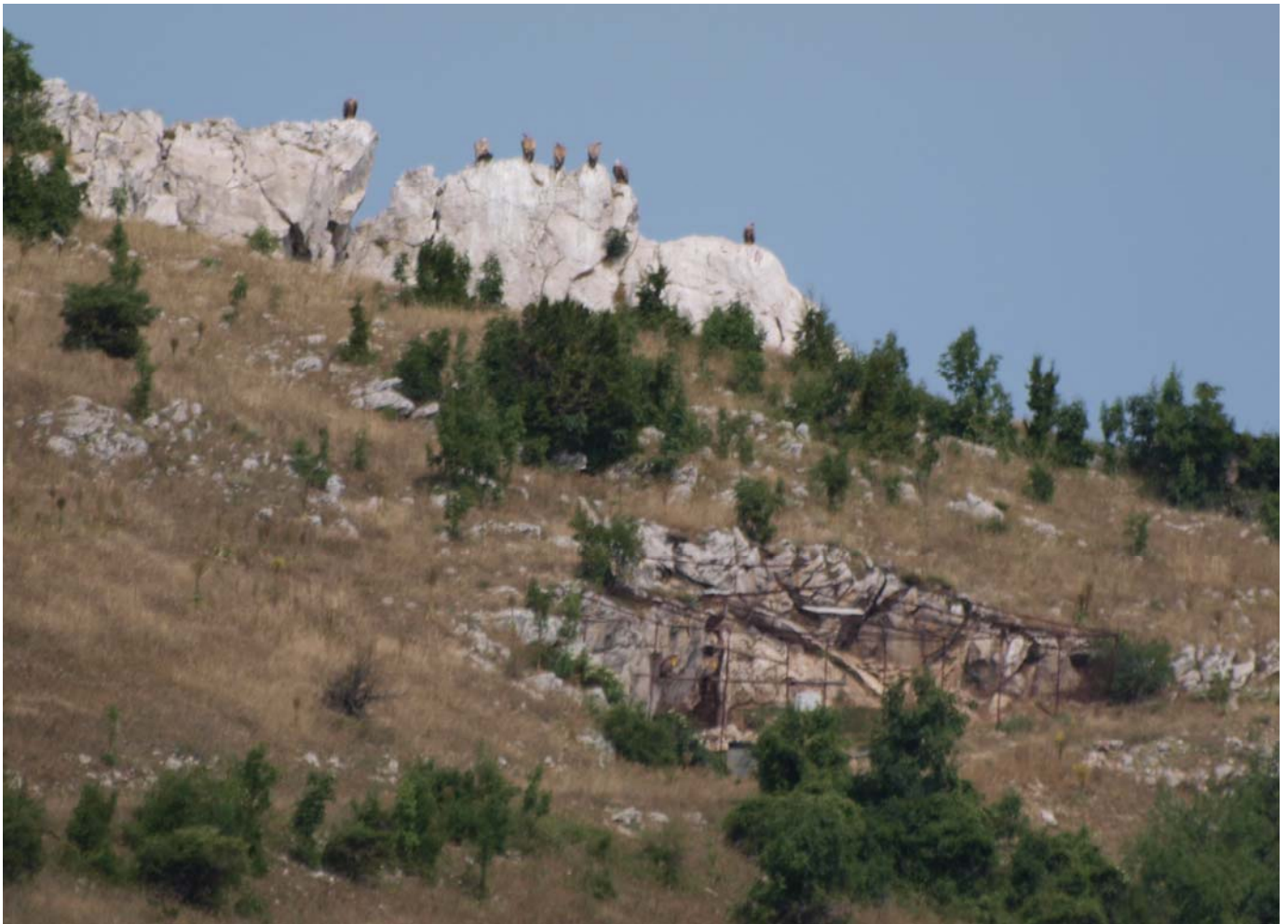


Figure 1. Griffon Vultures near the feeding site in Kotel Mountain and the aviary of FWWF. Picture taken by Emilian Stoyanov - August 2011.

Monitoring techniques

The birds were observed mostly by binoculars and spotting scopes close to the feeding site and on the cliff. VHF transmitters were used in the first several releases. This proved to work in finding birds that keep close to the release area, not more than 2 km. B15 was found exhausted using this method. In 2011 GPS-GSM transmitter was adopted, but unfortunately the first transmitters we took stopped to work shortly after the release of the birds. In late 2011 we received renewed version of the above mentioned transmitters and one bird was released equipped with it. This method of tracking helped us to find where the group of vultures spent the nights, when not seen on the traditional roosting site. Also this way we found some of the dead birds.

Mortalities

2006- B60 died in the cage, 2008- M54 died in the cage, 2011- K1X – died in the cage,

2009 - B15- died exhausted 1,5 km from the release site during long lasting harsh winter conditions (snow cover of about 60 cm with extreme cold temperatures of -28° C).

2011- K26, K2T and Agent 00 died electrocuted.

In the area of Kotel have died 3 more birds released in Sliven in 2011 – K02 – electrocuted; K2M – poisoned; K27- collision with powerline wires;

Recaptures

B14 was several times recaptured on its own from 2008 to 2011 it entered the cage about 15 times and has been escaping again soon after.

K0J was recaptured with wing injury (probably due to collision with powerline wires) in 2011. Most probably the same reason led to recapturing the **K1R** (released in Sinite Kamani Nature Park) during the same period, but the injury was not too serious and the bird was rehabilitated and recovered.

K07 was recaptured exhausted near Odrin in Turkey and recovered in a Rehabilitation center in Bursa.

Dispersals

The bird **B53** that was released on 01.09.2007 was captured exhausted with injured leg near Canakkale in Turkey (220 km south from the release area) in October 2007. After treatment in local veterinary clinic it was released in the same area without any markings a month later.

The birds **B18** and **B19** released in 2009 moved south in February 2010 and were observed near a rubbish dump site not far from the town of Yambol (60 km south from the release area). There they spent about two weeks and were fed by Green Balkans team. Later **B19** was observed in the Eastern Rodopi (170 km south from the release area), while **B18** arrived in Kresna Gorge (300 km WSW from the release area). In March 2011 **B18** returned to Kotel. **B19** arrived in the same period to Sinite Kamani, but later also returned to Eastern Rodopi where it was many times observed near Madjarovo, Sturden kladenets and also in Dadia National Park in Greece.



Figure 2. **B18** is released by FWFF in Kotel, but visited Kresna Gorge at about 300 km from Kotel, where is the other Griffon Vulture re-introduction project of FWFF. Picture taken by Hristo Peshev – May 2010.

On 16.03.2010 **B14** was reported to feed on a dead donkey with another non identified immature Griffon Vulture near the village of Rish – 40 km east from the release site.

K0M was released in March 2011 and yet in April moved to Eastern Rodopi and is still there.

K0H that is released in October 2010 has moved frequently to Sinite Kamani and back until June 2011 when it made several movements to Eastern Rodopi where it was observed on Studen Kaledents feeding site and also in Dadia National Park in Greece.

F08 released in October 2010 was present in Kotel to April 2011 when it started to go and return to Sinite kamani, where it was last seen in May 2011. In August 2011 this bird was reported from the feeding site Vitachevo in FYR of Macedonia (450 km WSW from the release area) .

G44, **F08**, **B14**, **B18**, Agent 00, **K0H**, **K0J**, **K0M**, **K1H**, **K24**, **K25**, **K26** all started to visit Sinite Kamani (20 km from SW from the release area) feeding and release site as from April 2011 onwards. This correlate with the increasing number of birds released on Sinite Kamani, that attracted the already experienced subadult and adult birds from Kotel, as well as the improved flight conditions with the coming spring. Soon after that, the birds from Sinite Kamani started to visit the feeding site in Kotel as

well together with the birds released in Kotel. And the exchange continued throughout the summer and autumn to stop in early winter. Then beside some emigrations (K0H, K25, G44, F08) the entire common group (highest number 18) settled near Kotel and with the first snow falls several birds died by one reason or another (see section Mortalities).

Attracted exogenous birds

In 2011 for first time several exogenous Griffon Vultures were attracted. Most of them (n= 7) originate from the release site Sinite Kamani, but 1 came from the Kresna Gorge and at least 2 birds were immatures without rings – so native to Balkan Peninsula birds. Having in mind the observation of a marked Serbian bird near Sinite kamani in October 2011 one may suggest that the non marked wild immature birds are also coming from Central or West Balkan Peninsula (Serbia or Croatia) on their route to Bosphorus.

Other species attracted by the released vultures and the feeding site

12.06.2009 – subadult Egyptian Vulture (*Neophron percnopterus*) appeared and was observed in the area until 05.09.2009.

06.07.2009 – imm 2 cy Egyptian Vulture appeared and was observed in the area until 25.07.2009.

16.07.2009 – subadult Egyptian Vulture appeared (second one) and was observed in the area until 05.09.2009.

20.08.2009 – adult Egyptian Vulture appeared and was observed in the area until 29.08.2009.

In total 4 Egyptian Vultures were attracted in the area in 2009.

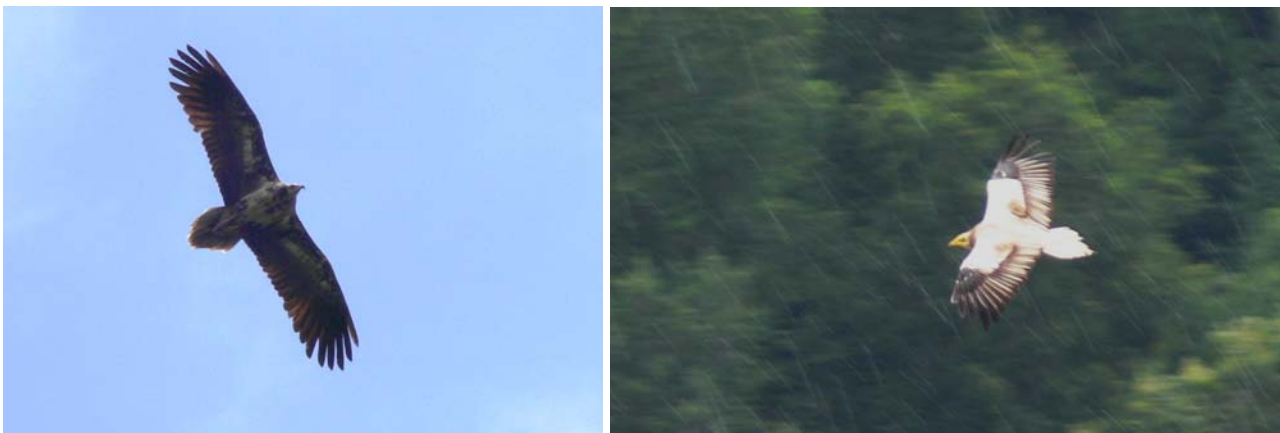


Figure 3 and 4. Egyptian Vultures reappeared in Kotel Mountain after 20 years of absence, after the release of Griffon Vultures and feeding site maintenance. Pictures by Emilian Stoyanov – June 2009.

31.07.2009 Immature Imperial Eagle (*Aquila heliaca*) was present at the feeding site. It was a marked bird with satellite PTT and the sighting was also proved by the data received from the transmitter by BSPB/BirdLife Bulgaria.

20.07.2010 – subadult Egyptian Vulture appeared and was present for few days.

20.07.2010 – immature Egyptian Vulture appeared and was present for few days.

29.08.2010 – juvenile Egyptian Vulture appeared and spent few days in the area until 03.09.2010.

In total 3 Egyptian Vultures were attracted in the area in 2010.

14.10.2011 – juvenile White-tailed Eagle (*Haliaeetus albicila*) was present at the feeding site together with the group of Griffon Vultures.

Interspecific competition

The optimal nesting site for Griffon Vultures in Kotel Mountain is Zlosten Protected site. It is situated at about 5 km east from the release and feeding site. With the time we expected that the Griffon Vultures will occupy the Zlosten cliffs, but they always keep a distance and until now have not been seen to visit this area. In winter 2011 we observed that the vultures are severely attacked and chased by the Golden Eagles that breed in the Zlosten cliffs area. Although there is cliffs facing south suitable for the vultures at about 1 km from the active nest (facing north) of the Golden Eagle it seems it is not enough.

Also during the winter the offspring Golden Eagle of the above mentioned pair was frequently present at the feeding site, where just at a distance of about 100 meters was the most used roosting site for the vultures. They tend to fly away in panic and soon after the whole flock perched at electric pylons 1.2 km from the feeding and roosting site. There some of the birds perched at 110 kW pylons and they survived, but four birds perched at 20 kW pylons and were electrocuted.

In winter, especially in snowy weather, when too many ravens gather at the feeding site it is hard for the vultures to visit the site. This is especially problematic for the inexperienced birds and in bad weather conditions, so releases of inexperienced Griffon Vultures in autumn are probably not suitable in this sense.

Overview

Obviously we try to re-introduce the Griffon Vulture in a sub-optimal habitat for it in Kotel Mountain. The best breeding cliff is occupied by Golden Eagle and it seems it will not give up. So the potential breeding site in the beginning will be the rock massif of Sinite Kamani Nature Park. Although the best for the Griffon Vulture breeding gorge in that area is also occupied by a pair of Golden Eagle still there is enough space for a Griffon Vulture colony to be established. The Golden Eagle's and the Raven's competition around the feeding sites was also underestimated. However this might be managed with provision of smaller quantities of food at several different feeding sites within the larger area.

The willingness of the vultures to perch on electric facilities led to high mortality of released birds due to electrocution. This factor was also underestimated. Hopefully it is also at least partly manageable, as insulation of several pylons was already made and some more will be insulated in future. At least in the closest proximity to the release and feeding sites and garbage dumps. The good point is that vultures started to explore the two release and feeding sites of Kotel and Sinite kamani as one common area (the two sites are at 20 km one from another). Also it is encouraging that the livestock number is increasing in Kotel Mountain and the vultures were many times observed to find food by their own. It seems in future in autumn we should try to concentrate the vultures at the Sinite kamani Nature Park, where they may better overwinter in the lowest parts of the Park (around 400 m. above sea level, south faced slope, with sub-Mediterranean climate). Kotel Mountain should be explored as foraging area during warmer part of the year.

Acknowledgements

We are grateful to our donors and supporters that helped the project directly or indirectly.

We still remember our friend Veselin Talazov – the director of the Natural History Museum in Kotel, who died in 2007 and did not see the Griffons flying in Kotel Mountain again. He helped us a lot in the preparation work. We highly appreciate the support of George Kochev and Yordanka Kocheva that did a great effort to start the project in 2003.

Many thanks to all farmers in the area of Kotel that support our work, while we should mention Radostin Parmakov, Atanas Batanov, Dorgud Djambaz and his family and Kosta Karanashev.

Many people informed us about observed vultures – Dobri Berov, Yanko Yankov, Gergina Daskalova, Peter Shurulinkov, Ivailo Ivanov, Deyan Kolibarov, Stamen Stanchev, Ahmed Djambaz, Ivelin Ivanov, Ilian Stoev, Elena Kmetova, Marin Kurtev, Ivailo Angelov, Volen Arkumarev, Theodora Skartsi, Ivailo Klisurov, Tsvety Yotsova, Hristo Peshev, Lybomir Profirov, Dobromir Domuschiev and others.