

# Individual identification of Egyptian Vultures in Bulgaria

## Progress report 2010

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<http://www.neophron.bspb.org/index-en.html>



Photograph: Svetoslav Spasov, VII.2010, Studen Kladenetz



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The Egyptian vulture population in Bulgaria undergone a rapid decline throughout the last 20 years and only 33 pairs were left in 2010. Each year some adults or even pairs do not return to their traditional breeding territories and this most probably corresponds with mortality along the flyway. On the other hand death of some of the birds in the pair can happen during the breeding season and sometimes it can be very quickly replaced by another adult bird and this change could be extremely difficult to record. In practice we have only one such record of mate change in 2007 and it was possible thanks to the fact that both birds were ringed: the dead bird (male with a metal ring) was quickly found by local people in July and its partner (female with color rings) found a new mate in no more than 12 days and they successfully raised the two juveniles in the nest. While currently there are only two ringed adult territorial birds in Bulgaria, these limitations constrain the possibilities to make reliable measuring of the adult survival.

In 2010 thanks to the funding from Mike Madders Field Research Award (£500), granted by Natural Research Ltd., the Bulgarian Society for the Protection of Birds (BSPB), started pilot study on the individual identification of the Egyptian Vultures in Bulgaria. The aim was to develop working and reliable non-invasive methodology for assessment of the adult survival in the territorial breeders and non-territorial floaters (immatures and adults). In 2010 we achieved success in photographing and identification of 5 territorial adults from 3 pairs. Moreover we collected and continue collecting pictures of faces of Egyptian Vultures taken from professional and amateur photographers. The communal roosting site used by up to 26 birds (observed at one time) in previous years was

not used in 2010 (Green Balkans, pers. communication) and only up to 4 territorial birds of two neighboring pairs were observed, so effort to photograph immatures was not undertaken.

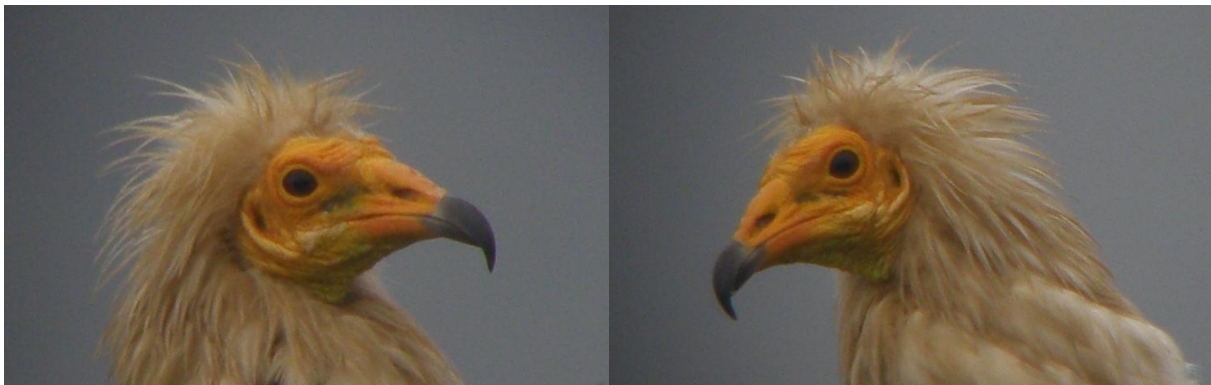
The main lesson learnt from 2010 is that the previously planned photographing through digiscoping from a hide at feeding place is very time consuming and not always successful. In 2011 the work will continue and we envisage buying of trap camera in order to significantly increase the success of the work. With it we intend to make photographs allowing individual identification of at least 20 birds from 15 pairs. The use of trap cameras should prove as much more effective way to photograph the face characteristics of the birds. It has at minimum the following advantages compared with the digiscoping from a hide at feeding site:

- The quality of the images will be better since the photographs can be taken from much closer distance to the birds (2-5 meters) and the trap cameras can make pictures up to the size of 12 MB;
- The camera does not depend on constant human presence and operation;
- The method is much less time consuming and the camera operator is free during the day to make other kind of field work (supplementary feeding, monitoring, nests searching etc.) and take the camera in the evening or even after some days;
- The birds will be less wary from the trap camera (camouflaged) than from the hide with the observer;

The observation of an adult with leucistic secondary feather will be soon published as short publication.

I would like to thank to Volen Arkumarev, Dobromir Dobrev, Vladimir Dobrev, Tsvetomira Yotsova, Sanie Mumun and Marin Kurtev for their help in the field.

Individual 1: Male, Madjarovo 18.04.2010. Breeder paired with individual 2, nest locality known. (Photograph: Volen Arkumarev);



Individual 2: Female, Madjarovo 18.04.2010 . Breeder, paired with individual 1, nest locality known. (Photograph: Volen Arkumarev);



Individual 3: Male with leucistic secondary on the right wing, Madjarovo. Breeder, nest known. (Photograph: Kaloyan Hristov)

