**Supplementary Material**

**Long-term size and range changes of the Griffon Vulture *Gyps fulvus* population in the Balkans: a review**

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Appendix S1. Supplementary references and metadata for Methods and Population monitoring

References

Table S1. Supplementary references and metadata for Methods and Population monitoring

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| **Source** | **Country** | **Number** | **Region** | **Date** |
| Vasić *et al.* 1985 | Yugoslavia | 200+ | Bosnia and Herzegovina, Montenegro, Dalmatia, Macedonia | 1972–1982 |
| Iankov and Profirov 1991 | Bulgaria | 1-10 | Eastern Rhodopes, Balkan Mountains range | 1978–1987 |
| Hristov 1997 | Bulgaria | 18 | Eastern Rhodopes | 1997 |
| Marinković 1999 | Bosnia and Herzegovina | 5 | Bosnia and Herzegovina | 1992 |
| Bourdakis 2003 | Greece | 175-192 | Mainland and islands | 2001–2002 |
| Sušić 2002 | Croatia | ~ 90 | Dalmatia | 2002 |
| Sušić 2004 | Croatia | 85-94 | Dalmatia | 2002 |
| Marinković *et al.* 2006 | East Herzegovina and Serbia | n/a | Uvac, Serbia | 1995 |
| Marinković *et al.* 2007 | Herzegovina | 83 (all colonies) | Blagaj, Zitomislic, Stolac, Popovo polje | 1980–1991 |
| Marinković *et al.* 2008 | Herzegovina | 83 (all colonies) | Blagaj, Zitomislic, Stolac, Popovo polje | 1980–1991 |
| Marinković and Karadzić 2008 | Serbia | 120 | Serbia | 2008 |
| Bourdakis *et al.* 2010 | Greece | 175-192 | Mainland and islands | 2001–2002 |
| Poirazidis *et al.* 2011 | Greece | 0 | Dadia | 2001–2005 |
| Grubach 2013 | Serbia | 60-120 | Western Serbia | 2003–2012 |
| Tsiakiris *et al.* 2014 | Grece | <15 | Pindos | 2014 |
| Hallman 2013 | Albania | 0 | Tepelena | 1996 |
| Xirouchakis *et al.* 2019 | Greece | 350-400 | Crete | 2019 |

**References**

Bourdakis, S., Xirouchakis, S., Skartsi, T., Tsougrakis, Y., Panagiotopoulou, M., Tsiakiris, R., Bousbouras, D. and Rousopoulos, Y. (2010) Overview of vultures of Greece: distribution, population status and conservation issues during the period 1994*–*2005. *10th International Zoogeographical and Ecological Conference of Greece and Adjacent Regions*. Patras, Greece.

Grubach, B. (2013) Status and conservation of vultures in Serbia. Pp. 28-31 in J. Andevski, ed. *Vulture Conservation in the Balkan Peninsula and Adjacent Regions. 10 Years of Vulture Research and Conservation. Action Plan for the Recovery and Conservation of Vultures on the Balkan Peninsula and Adjacent Regions*. Skopje, North Macedonia: Vulture Conservation Foundation & Frankfurt Zoological Society.

Hallman, B. (2013) Status and conservation of vultures in Albania. Pp. 6-7 in J. Andevski, ed. *Vulture Conservation in the Balkan Peninsula and Adjacent Regions. 10 Years of Vulture Research and Conservation. Action Plan for the Recovery and Conservation of Vultures on the Balkan Peninsula and Adjacent Regions*. Skopje, North Macedonia: Vulture Conservation Foundation & Frankfurt Zoological Society.

Hristov, H. (1997) Status, monitoring and supplementation to the vultures in the Eastern Rhodopes. Technical Reports on Eastern Rhodopes project. Sofia, Bulgaria: BSBDP – BSPB.

Iankov, P. and Profirov, L. (1991) Contemporary status of the Griffon Vulture (*Gyps fulvus* Hablizl) population in Bulgaria. *Ecology* 24: 44-52*.*

Marinković, S. (1999) Ekološke osnove zaštite i održavanja beloglavog supa *Gyps fulvus* (Hablizl, 1783) na Balkanskom poluostrvu. PhD thesis. Biološki fakultet, University of Belgrade, Serbia. (In Serbian).

Marinković, S. and Karadzic, R. (1999) The role of nomadic farming in the distribution of the Griffon Vulture (*Gyps fulvus*) in the Balkan peninsula. Contributions to the zoogeography and ecology of the Eastern Mediterranean Region. Pp. 141-152 in the *7th International Congress of the Zoogeography and Ecology of Greece and Adjacent Regions.*

Marinković, S., Orlandic, L. and Karadzic, B. (2006) The census of Vultures (Aegypiinae) in Herzegovina before the Balkan civil conflict. Pp. 165 in D. C. Houston and S. E. Piper, eds. *Proceedings of the International Conference on Conservation and Management of Vulture Populations.* Thessaloniki, Greece: Natural History Museum of Crete & WWF Greece.

Marinković, S., Orlandic, L., Micković, B. and Karadžić, B. (2007) Census of vultures in Herzegovina. *Vulture News* 56: 14-28.

Marinković, S. and Karadzic, B. (2008) Griffon Vulture *Gyps* *fulvus* Hablizl 1883. Belgrade, Serbia: Institute for Biological Research “Siniša Stanković”.

Poirazidis, K., Schindler, S., Kakalis, E., Ruiz, C., Bakaloudis, D., Scandolara, Ch., Eastham, Ch., Hristov, H., and Catsadorakis, G. (2011) Population estimates for the diverse raptor assemblage of Dadia National Park, Greece. *Ardeola* 58: 3-17.

Sušić, G. (2002) The Eurasian Griffon in Croatia. Pp. 66-89 in G. Sušić and I. Grbac, eds. *Do you want reality or myth: the story of Eurasian griffon*. Zagreb, Croatia: Croatian Natural History Museum.

Sušić, G. (2004) The situation of the Griffon Vulture in Croatia. Pp. 32-37 in L. Slotta-Bachmayr, R. Bogel, and A. C. Cardenal, eds. *The Eurasian Griffon Vulture (Gyps fulvus) in Europe and the Mеditerranean – Status report and Action plan.* East European Mediterranean Griffon Vulture Group.

Tsiakiris, R., Stara, K., Mpetsis, A. and Rousopoulos, Y. (2014) Conservation, threats and challenges of rangeland management in western Greece mountain SPAs: The example of Griffon Vultures (*Gyps fulvus*). Thessaloniki, Greece: 8th Hellenic Range and Pasture Congress.

Vasić, V., Grubać, B., Sušić, G. and Marinković, S. (1985) The status of birds of prey in Yugoslavia, with particular references to Macedonia. Cambridge, UK: International Council for Bird Preservation. (ICBP Technical Publication No. S).

Xirouchakis, S. (2019) [The Cretan vulture Paradise: an overview](https://drive.google.com/open?id=12xV872gA5j3Ei449uSFutZPcYQ2kCpF5). P. 18 in R. Tsiakiris and F. Pergantis, eds. *Book of abstracts of the International Workshop on “*The future of vultures in Balkans: Tackling threats and building network opportunities”*.* Messolonghi, Greece.