

Taxonomic identity of *Gyps fulvus spelaeus* Friant, 1950 (Aves: Accipitridae) from the Pleistocene of Belgium

Taxonomická identita poddruhu *Gyps fulvus spelaeus* Friant, 1950 (Aves: Accipitridae) z pleistocénu Belgie

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ABSTRACT. *Gyps fulvus spelaeus* Friant, 1950 was synonymized with the modern *Aegypius monachus* (Linnaeus, 1766). *Gyps fulvus spelaeus* Friant, 1951 is both a younger objective synonym and a younger primary homonym of *Gyps fulvus spelaeus* Friant, 1950.

Old World vultures (sensu JOLLIE 1977) are currently represented in Europe by the Eurasian Griffon Vulture *Gyps fulvus* (Hablizl, 1783) and Eurasian Black Vulture *Aegypius monachus* (Linnaeus, 1766). Both are commonly found in the late Quaternary deposits (TYRBERG 1998). Several authors suggested that extinct taxa of vultures inhabited continental Europe in the Quaternary past, and created names for them. Of the latter taxa, *Vultur fossilis* Keferstein, 1834 and its younger objective synonym *Vultur fossilis* Giebel, 1847 were relegated to the category of Aves incertae sedis, while *Torgos tracheliotus todei* Kleinschmidt, 1953 and *Gyps melitensis aegyptoides* Jánossy, 1989 were shown to be based on the remains of the modern *Aegypius monachus* by MLÍKOVSKÝ (1998). The last fossil vulture described from the Quaternary continental deposits of Europe is *Gyps fulvus spelaeus* Friant, 1950 from Belgium. Its taxonomic identity will be examined in the present paper.

Gyps fulvus spelaeus was based on a number of bones excavated in the Mouton hall of the Goyet cave near Namur in Belgium, which FRIANT (1950, 1951) attributed to six different individuals. All these bones form syntypes of the taxon. It has not been demonstrated that all these individuals belong to a single avian taxon, however, so that I select here the incomplete skeleton of the individual *b* (sensu FRIANT 1950, 1951) as the lectotype of *Gyps fulvus spelaeus* Friant, 1950, as well as of *Gyps fulvus spelaeus* Friant, 1951. This skeleton includes the following elements: right coracoid, distal end of left humerus, right radius, shaft of left radius, fragments of an ulna, distal end of left femur, and distal end of left tibiotarsus. Paralectotypes of *Gyps fulvus spelaeus* are thus as follows: fragment of left tibiotarsus of individual *a*, distal end of left humerus of individual *c*, shaft of right tibiotarsus of individual *d*, fragments of an ulna of individual *e*, and fragments of a coracoid, an ulna and ribs of individual *f*. The lectotype was figured by FRIANT 1950, unnumbered fig. (tibiotarsus), and FRIANT 1951, fig. 3/i (coracoid), 3/ii (humerus), 3/iii (femur), and 3/iv/1-2 (tibiotarsus), and fig. 4 (radius). The paralectotypes were not figured. All syntypes are housed in the Musée Royal d'Histoire Naturelle de Belgique in Bruxelles.

In describing this vulture FRIANT (1950, 1951) concluded that both modern European vultures are similar in osteology (which is not true), and that the only available character

distinguishing between them is the presence of a lateral opening of the tendineal groove on the distal end of the tibiotarsus in *Aegyptius*, this opening being absent from the tibiotarsi of *Gyps*. This was the only reason, why she attributed the bones to *Gyps*. I found this character variable in *Aegyptius*, however, which re-opened the question of the taxonomic identity of vulture skeletons from Goyot.

As judged from excellent figures published by FRIANT (1950, 1951), the lectotypical tibiotarsus of *Gyps fulvus spelaeus* differs from the same element of *Gyps* and agrees with that of *Aegyptius* in having anterior intercondylar fossa broader, groove for musculus peroneus profundus more distinct, and the whole distal end broader. The lectotypical femur of this subspecies differs from the same element of *Gyps* and agrees with that of *Aegyptius* in having fibular groove more open. I found no characters in which lectotypes of *Gyps fulvus spelaeus* differ from the modern *Aegyptius monachus*.

Summarizing this evidence, it is possible to conclude that vulture bones found in the cave of Goyet belong to the modern *Aegyptius monachus*, and that *Gyps fulvus spelaeus* Friant, 1950 is a younger synonym of *Aegyptius monachus* (Linnaeus, 1766). Friant described *spelaeus* in two independent papers (FRIANT 1950 and FRIANT 1951). Both these descriptions are valid and *Gyps fulvus spelaeus* Friant, 1951 is thus both a younger objective synonym and a younger primary homonym of *Gyps fulvus spelaeus* Friant, 1950.

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SOUHRN

Madelaine FRIANT (1950, 1951) popsala pod názvem *Gyps fulvus spelaeus* ze svrchně pleistocenních usazenin jeskyně Goyet v Belgii fosilní formu supa bělohlavého. Revize materiálu ukázala, že se ve skutečnosti jedná o kosti supa hnědého *Aegyptius monachus* (Linnaeus, 1766). *Gyps fulvus spelaeus* Friant, 1950 byl proto synonymizován s druhem *Aegyptius monachus* (Linnaeus, 1766). *Gyps fulvus spelaeus* Friant, 1951 je mladším objektivním synonymem i mladším primárním homonymem formy *Gyps fulvus spelaeus* Friant, 1951.

REFERENCES

- FRIANT, M. 1950: Sur le Vautour des cavernes, *Gyps fulvus* Gm. *spelaeus* nov. var. - *C. R. Acad. Sci. (Paris)*, 231: 1164-1165.
- FRIANT, M. 1951: Le "Vautour des Cavernes" (*Gyps fulvus* Gm. ssp. *spelaeus* nov.) de Goyet (Belgique). - *Proc. Zool. Soc. London*, 121: 417-426.
- GIEBEL, C.G. 1847: Fauna der Vorwelt mit steter Berücksichtigung der lebenden Thiere. Vol. I (2): Vögel und Amphibien. - *F. A. Brockhaus, Leipzig*.
- JÁNOSY, D. 1989: Geierfunde aus der Repolusthöhle bei Peggau (Steiermark, Österreich). - *Fragm. Mineral. Palaeont.*, 14: 117-119.
- JOLLIE, M. 1977: A contribution to the morphology and phylogeny of the Falconiformes (part IV). - *Evolutionary Theory*, 3: 1-141.
- KEFERSTEIN, C. 1834: Die Naturgeschichte des Erdkörpers in ihren ersten Grundzügen. - *Friedrich Fleischer, Leipzig*.
- JOLLIE, M. 1977: A contribution to the morphology and phylogeny of the Falconiformes (part IV). - *Evolutionary Theory*, 3: 1-141.
- KEFERSTEIN, C. 1834: Die Naturgeschichte des Erdkörpers in ihren ersten Grundzügen. - *Friedrich Fleischer, Leipzig*.
- JOLLIE, M. 1977: A contribution to the morphology and phylogeny of the Falconiformes (part IV). - *Evolutionary Theory*, 3: 1-141.
- KEFERSTEIN, C. 1834: Die Naturgeschichte des Erdkörpers in ihren ersten Grundzügen. - *Friedrich Fleischer, Leipzig*.
- JOLLIE, M. 1977: A contribution to the morphology and phylogeny of the Falconiformes (part IV). - *Evolutionary Theory*, 3: 1-141.
- KEFERSTEIN, C. 1834: Die Naturgeschichte des Erdkörpers in ihren ersten Grundzügen. - *Friedrich Fleischer, Leipzig*.

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