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First record of the Griffon Vulture (*Gyps fulvus* Hablizl, 1783), Accipitridae on Madeira Island

With 2 figures

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ABSTRACT: The griffon vulture (Gyps fulvus Hablizl, 1783) is newly recorded to Madeira archipelago.

Key words: Griffon vulture, Madeira Island, new record.

RESUMO: O grifo (Gyps fulvus Hablizl, 1783) é pela primeira vez registado no arquipélago da Madeira.

Palavras-chave: Grifo, ilha da Madeira, novo registo.

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INTRODUCTION

Gyps fulvus Hablizl (1783), commonly known as the griffon vulture or euroasian vulture, is a large carrioneating bird of prey (93-110 cm in length), with a wingspan of 230-270 cm and a weight ranging from 5.5 to 10.7 kg (ONRUBIA, 2021). The species has an extremely large range, occurring dispersed along the southern Palearctic Region, which includes populations across Central Asia, the Middle East, northern Africa and the Mediterranean region until the Iberian Peninsula (BOTHA *et al.*, 2017). Only 10% of the global range of the species falls within Europe, namely the Iberian Peninsula, some island populations in the Mediterranean (Mallorca, Sardinia, Crete and Cyprus) and in the Balkan region (BIRDLIFE INTERNATIONAL, 2022). During the 19-20th centuries, the species declined markedly throughout much of Europe, mainly due to poisoned carcasses set by farmers for livestock predators (IEZEKIEL *et al.*, 2004; NENOV *et al.*, 2018; HRIBSEK *et al.*, 2021; ONRUBIA, 2021). But successful conservation actions have contributed to the species recovery, especially in France, Italy and the Balkans (BOTHA *et al.*, 2017).

Although the griffon vulture is globally assessed as of "Least Concern" (BIRDLIFE INTERNATIONAL, 2021), in Europe it is a threatened bird of prey, protected by the EU Wild Birds Directive 79/409/EEC, as well as other international agreements, namely the Bern Convention (Appendix II), the Bonn Convention (Annex II) and CITES (Annex II). Presently, the European population is estimated at 34.800-44.700 pairs (BIRDLIFE INTERNATIONAL, 2021), the great majority of which occur in Spain (DEL MORAL, 2009; KELLER *et al.*, 2020). In Portugal the species occurs in the north and center of the mainland, especially along the eastern border with Spain and associated with the calm stretches of the Douro, Tejo and Guadiana river basins. The nesting population is estimated at around 280 couples (EQUIPA ATLAS, 2008).

Madeira Archipelago is a Portuguese territory located on the northeast Atlantic, at 900 km from Portugal mainland and 700 km from the Moroccan coast. It is part of Macaronesia, a region that includes five north Atlantic Ocean archipelagos and which is included in the Mediterranean basin biodiversity hotspot (MEYERS, 2000). Madeira Archipelago sustains a rich and diverse avifauna, with several endemisms and includes several Important Bird Areas (OLIVEIRA & MENEZES, 2004). Although it is out of the main bird migratory routes, except for some sea bird species, the number of bird species recorded in the Archipelago continues to rise as checklists are updated (CORREIA-FAGUNDES *et al.*, 2021). This paper reports the observation of the griffon vulture in Madeira Archipelago.

MATERIAL AND METHODS

In November 2021, a specimen of *Gyps fulvus* was found in Paul da Serra, lying dead on the ground near a wind turbine in the Loiral 2 wind farm (Fig. 1). The bird was intact, except for an amputated left wing (Figs. 2A and 2B). It was collected by GNR-SEPNA officers and is kept frozen at the Centro de Recuperação de Aves Selvagens of the Instituto das Florestas e Conservação da Natureza, IP-RAM.

RESULTS AND DISCUSSION

The griffon vulture found in Madeira has a total length of 99 cm, a wingspan of 240 cm and weighs around 7 kg (Figs. 2A and 2B). It seems to be a juvenile, judging mostly on the brown lanceolate ruff feathers (Fig. 2C), that tend to be white / cream in adult age (DURIEZ *et al.*, 2011).

The specimen died from a collision with a wind turbine, probably the rotor blades, which also resulted in the amputation of a wing (Fig. 2B). Although this type of incidence is registered as one of the major threats to the species, along with poison baits, electrocution and decline of food availability (BOTHA *et al.*, 2017), high mortality at wind-farms seems to be positively related to large-scale distribution and aggregation of griffon vultures near these areas (CARRETE *et al.*, 2012).

Until now, the occurrence of griffon vultures had not yet been registered for Madeira Archipelago (CORREIA-FAGUNDES *et al.*, 2021). The closest native breeding populations of this species to Madeira are in the Iberian Peninsula ((Portugal and mainly Spain) BIRDLIFE INTERNATIONAL, 2022). In literature, the griffon vulture is described as a partial migrant, whose juveniles and sub-adults disperse from breeding areas and perform long-distance flights for foraging, in contrast to adult birds that are largely sedentary and tightly linked to breeding colonies (BOTHA *et al.*, 2017; ARKUMAREV *et al.*, 2019; HRIBSEK *et al.*, 2021). Spain holds the largest griffon population in Europe and a significant proportion of juvenile birds from this population have been tracked migrating to Morroco through Gibraltar Strait (DONÁZAR, 1993; GRIESINGER, 1998; CAMIÑA, 2004; ONRUBIA, 2021; BIRDLIFE INTERNATIONAL, 2022). It is likely that the juvenile bird found in Madeira originated from the Iberian Peninsula population, that by chance found his way to Madeira Island from this migratory rout.



Fig. 1 – Madeira Island. The red square shows the location where the *Gyps fulvus* specimen was found. Dotted line delimits the central mountainous massif of Madeira.



Fig. 2 – Photographs of the specimen at the time it was found.

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