SHORT COMMUNICATIONS, NOTES AND REPORTS

Bird-strike of a Cinereous Vulture *Aegypius monachus* in the Balearic Islands, Spain

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On 15 September 2016 a Lufthansa flight *en route* from Munich (Germany) to Palma de Majorca (Balearic Islands, Spain) was on its final approach and descent at 11h55 when a Cinereous Vulture *Aegypius monachus* smashed into the radome causing enough damage to cancel the return flight (Figure 1). The remains of the vulture were collected by the Airport Falconry services and stored at the Balearic Island Rehabilitation Center (COFIB) for examination. Species identification and age diagnosis was made based on the remains: the right thigh, tibia, tarsus, claws, toes and feathers, in comparison with other live birds. The rest of the body was not recovered. The remains belonged to an immature bird more than one year old, not a fledgling nor an adult. This incident occurred at an altitude of 5000 feet, (1525 m a.s.l.) and 17 nautical miles from runway 24L. Considering the altitude of the area of around 100 meters, the bird was flying at 1400 m above ground. We have not found any other Old World vulture bird-strike in the bibliography except that of a Rüppell’s Griffon in Ivory Coast (Laybourne 1974) and four African White-backed vultures in Kenya (Owino et al. 2004). These latter events are perhaps due to the close
location of the Nairobi National Park in relation to Nairobi’s Jomo Kenyatta International Airport.

Figure 1: Cinereous Vulture remains smashed in the radome of the Lufthansa flight in Majorca on 15\textsuperscript{th} September 2016.

Cinereous Vultures live in mountainous areas of Majorca Island with an estimated population of 200 individuals. Thirty-seven breeding pairs laid 32 eggs and produced 24 fledglings in 2016. However, displacements to lower areas in the plains are common. During the days prior to the incident, up to three different vultures were seen over that area. It is the lambing time and Common ravens (\textit{Corvus corax}) also gather to scavenge for stillborn or even predate on live lambs themselves. Thus, food availability justifies the presence of vultures there.

In addition, Palma de Majorca Airport is the third-ranked airport in Spain in terms of average commercial aviation operations and number of passengers per year with 180,000 flights and 23,000,000 people transported, respectively. These data result in a bird-strike rate of 0.003 vultures /10,000 operations. Over the last 15 years no other incident has been reported with
vultures in Majorca but strikes, as well as crashes, of small aircraft have recently occurred at other Spanish airports. The increase in numbers of vulture strikes in Spain (Margalida 2016) are not related to a single cause but likely the result of interactions between an increase of flight operations, vulture abundance, food distribution and land use changes.

**Key words**: Aegypius monachus, Bird-strike, Cinereous Vulture, Majorca

**References**


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