Tree-nesting Rüppell's Griffon Vultures

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The Rüppell's Griffon Vulture Gyps rueppellii (RGV) is considered to be an exclusive cliff-nester by most African vulture authorities. Brown (1970) mentioned that the rare records of RGV breeding in trees are questionable. Furthermore, other works on raptors, like Mundy et al. (1992) and Brown et al. (1982), dismissed the diverse reports of tree-nesting RGV, coming mostly from West Africa (Morel & Morel 1962, de Naurois 1962, Morel 1968, Salvan 1968, Lamarche 1980) and Uganda (Jackson in Mundy et al. 1992), believing that the records were doubtful or were misidentifications with African White-backed Vultures Gyps africanus (AWbV). Ferguson-Lees & Christie (2001) supported this position and also mentioned other recently dismissed reports in Gambia (Gore 1990) and Cameroon. However, a few reference and field guides (e.g. Mackworth-Praed & Grant 1970, Serle & Morel 1993, del Hoyo et al. 1994, Barlow et al. 1997, Kemp & Kemp 1998,) mentioned that RGV also nest in trees. In contrast, many works do not refer to this "atypical" habit (e.g. Bannerman 1953, Brown & Amadon 1989, Clark 1999, Borrow & Demey 2001). The majority of the tree-nesting reports found in the literature are relatively old, but there have been other more recent observations in West Africa. For example, in the 1980s, C. Barlow (pers. comm.) observed this species nesting in borassus palms Borassus aethiopum along the Gambia River in loose colonies with AWbVs. During the same period, F. Baillon (pers. comm.) also found RGVs nesting in loose colonies on the top of large baobab trees Adansonia digitata in the Saloum region of Senegal.

On 26 January 2005, in the Sudanese savannas of the W National Park in southern Niger, P. Pilard found an active nest in a fork of a 12 m tree (species unidentified) overhanging a road. One adult was on the nest (see Figure 1) with one chick. Unfortunately, it was not easy to obtain a clear view of the chick and no photographs could be taken. Its age was estimated at about five weeks old. After being informed about this nest, G. Rondeau visited the park a few weeks later (beginning of April) and found the nest empty. It was not possible to determine the outcome of the breeding attempt, but the nest was probably abandoned. It is highly unlikely that the chick would have fledged during the period between the two visits, considering that it was only five weeks old at the end of January. However, two additional active nests were located in a radius of 4 km around the first one. In both nests, one parent and one chick

were seen together and photographed (the nests' GPS coordinates were also recorded). The second nest was located on the top of a 10 m high tamarind tree *Tamarindus indica* (Figure 2). Following the descriptions in Mendelssohn & Leshem (1983), the age of the chick was estimated at about 12 weeks (Figure 3). The third nest, built on a large horizontal branch of a baobab, at about 9 m high (Figures 4 & 5), contained one chick of about 14 weeks old (Figure 6). Considering the amount of whitewash (vulture droppings) found in the vicinity of the nest, it is possible that it is not the first time it had been used by vultures. Another vulture nest was also found in the same sector, on top of a 14 m high unidentified defoliated tree. One chick was inside the nest, but it was not possible to get a good view of the nestling. It was probably younger than the chick in the second nest. Unfortunately, in spite of a long wait, the parents did not return to the nest to allow confirmation of the species (AWbV or RGV, or even White-headed Vulture *Trigonoceps occipitalis* (WHV)). In the two days spent in the park, neither AWbV nor WHV nests were found; however, the former species was observed in the area at the time. Remiges found under the nest were collected for later identification. It is not possible to say whether the nests seen in the W NP were forming a "loose colony", as was the case in the Saloum and also in the Gambia where the RGVs were breeding in association with AWbVs.

These recent documented observations of tree-nesting RGVs corroborate the ones made some decades ago and those reported more recently, mostly from West Africa. In fact, it can be alleged that some of the old dismissed reports of tree-nesting RGV could have been authentic. The records of Salvan (1968) in Chad, which were rejected by Mundy et al. (1992), and by Scholte (1998), who worked in the same country, could be accurate – in reality, one may wonder how it can be considered that observers could systematically have misidentified such a large and relatively easily identified bird sitting in nests on the top of 3–4 m high *Acacia* trees. In Kenya, S. Thomsett (pers. comm.) mentioned that he regularly sees RGV roosting in AWbV nests. In fact, this may have been the reason for some of the earlier reports made outside the breeding season or when no egg or chick was observed in the nest. For the observations reported in this note, we can discard the roosting theory for all these nests, as one parent was seen together with one chick, and photographic evidence is provided. Furthermore, for these three cases, the adults demonstrated normal breeding behaviour and never left the direct surrounding of the nests, even when the observers approached the sites. Misidentifications with AWbVs can also be ruled out.

Bannerman (1953) found that "birds

shot in Gambia in January have had enlarged sex organs" and suggested that this is because this species probably roams great distances from its nesting places, believing that the RGV could only breed on cliffs. However, in the same region – Saloum and Gambia – where tree-nesting RGVs were observed in the past few years, the closest suitable cliffs, located in the Fouta Djallon of north-west Guinea and the Kayes area of western Mali, are respectively at some 160 km and 280 km away, which is more than the 150 km maximum foraging distance covered by breeding birds in Tanzania (Pennycuick 1983).

The Eurasian Griffon Vulture Gyps fulvus (EGV), a colonial cliff-nester, also occasionally breeds in trees, as documented in parts of Spain and former Yugoslavia (for example, Gonzalez et al. (1984) and Traverso (1998)). Traverso (1998) suggested that the reason why EGVs breed in trees in Spain could be because of the absence of adequate cliff nesting sites and the increasing EGV population in the area. On the other hand, Gonzalez et al. (1984) proposed that the EGV nested in trees in an area without cliffs possibly due to a greater amount of carrion in that area, but also mentioned that there was a small cliff-nesting colony some 20 km away from the reported tree-nesting colony.

It is interesting to note that RGVs are breeding on the Gobnangou cliffs at the north of the Arly NP, which is situated some 90 km to the south-west of the W NP tree–nesting RGVs. At the beginning of April 2005, during the raptor road survey along these cliffs, three active nests were discovered – in one nest the chick was almost fledged (Rondeau et al. in prep). Furthermore, other small colonies (current status unknown) were also located on the cliffs at Pagou and Tambarga, in the sector of the Arli-W-Pendjari complex, (Green 1977, Green & Sayer 1979, Portier et al. 2002), which are respectively 80 km and 140 km from the W NP group of tree-nesting RGVs.

Considering the Senegambia and the Arli-W-Pendjari situations, where the RGV are nesting in trees indifferently in the absence or in the relative vicinity of suitable cliffs (some of them with small nesting colonies), it is not possible to assume that RGVs are nesting in trees necessarily because there are no cliff sites in the surrounding. Furthermore, for the West African context, with its generalized regional vulture decline (Rondeau & Thiollay 2004, Thiollay 2006, Rondeau et al. in prep), where most cliff-nesting colonies are now abandoned – like the ones in the Bafing area in eastern Mali (Rondeau et al. in prep), along with the Gandamia colony of Gourma, Mali – once the largest in West Africa (Elósegui 1975) that is now virtually abandoned (Rondeau & Thiollay 2004, Thiollay 2006), there is no overpopulation, nor lack of suitable cliffs, to explain the tree-nesting observations

made over the years in the sub-region. On the other hand, tree-nesting RGVs, as documented recently in West Africa, occurred in areas where there is a relative abundance of carcasses. This is particularly true in the W NP, one of the best preserved conservation areas of the sub-region. Also, lots of carcasses can be found in the Saloum-Gambia sector, an area with large quantities of free-ranging livestock and especially in contrast with the general situation in West Africa, with many domestic equidae (horses, donkeys, mules) which become available to scavengers as local religious customs forbid the consumption of their meat. It is thus possible that the large number and regular availability of carcasses could be a contributing factor for this breeding habit, as reported by Gonzalez et al. (1984). It would be interesting to determine whether RGVs young that are raised in tree-nests develop a tree-nest configuration fidelity. In any case, more observations should be recorded to better understand this habit that was, until now, mostly questioned by vulture experts. In this respect, any observations of tree-nesting RGV should be documented and reported.

Figure 1. An adult Rüppell's Griffon Vulture on the first tree-nest found in W NP, Niger (Photograph: Cyril Girard).

Figure 2. An adult Rüppell's Griffon Vulture on the second tree-nest found in W NP, Niger (Photograph: Guy Rondeau).

Figure 3. A 12 week-old Rüppell's Griffon Vulture chick in the second nest (Photograph: Guy Rondeau).

Figure 4. The third Rüppell's Griffon Vulture nest located on a baobab tree, W NP, Niger (Photograph: Guy Rondeau).

Figure 5. An adult Rüppell's Griffon Vulture on the baobab tree nest (Photograph: Guy Rondeau).

Figure 6. A 14-week-old Rüppell's Griffon Vulture chick in the baobab tree nest (Photograph: Guy Rondeau).

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