Breeding of Lappet-faced Vulture *Torgos tracheliotos* in 27 nests during the 2012 breeding season in Mahazat as-Sayd protected area, Saudi Arabia.

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**Introduction**

The Mahazat as-Sayd protected Area is a 2553 km² completely fenced area located on the arid plains of western Saudi Arabia 170 km north-east of Taif city. It has been protected since 1989 mainly as a reintroduction site for Arabian Oryx *Oryx leucoryx*, Arabian Sand Gazelle *Gazella subgutturosa marica*, Arabian Mountain Gazelle *Gazella Arabica*, Arabian Bustard *Chlamydotis macqueenii* and Arabian Red-neck Ostrich *Struthio camelus* (Shobrak 2011).

Mahazat as-Sayd protected area is listed as an Important Bird Area on the basis that it regularly holds a significant number of a globally threatened species, the Lappet-faced Vulture *Torgos tracheliotos*. Out of 201 bird species recorded in the protected area, 24 species have been found breeding in Mahazat as-Sayd protected area (M. Zafarul Islam in litt. 2013).

Among the Old World vultures, the breeding biology of the Lappet-faced Vulture is poorly known. Newton and Newton (1996) and Shobrak (2011) published the first data on its breeding in Saudi Arabia, but more recent information on the species from this area has been limited. Here, I report on the outcome of 27 nests of Lappet-faced Vultures monitored between 13 December 2011 and 3 September 2012 in Mahazat as-Sayd protected area.

**Data collection**

Each nest was considered active if it contained an incubated egg or a chick. Incubation period was not possible to record because some nests already had an egg when they were found. Hatching was recorded between the end of January and mid-April. Data collection consisted of recording the following parameters from 27 active nests: Date nest located, GPS location, tree species, tree height, nest height, nest diameter, egg (y/n), chick (y/n), mass of egg or mass of chick. Hatch date was estimated where possible.

**Results**

There were 23 nests found at an average height of approximately 3m on *Acacia tortilis* trees that were not much taller (Table 1). The nests themselves were on average 210cm (170-240) x 188cm (150-220) in diameter. Only four nests were found on *Maerua crassifolia* trees, which were higher and in slightly taller trees that the *A. tortilis* nests (Table 1). The nests in *M. crassifolia* trees were larger than the *A. tortilis* nests (Table 1). The nests in *M. crassifolia* trees were larger than the *A. tortilis* nests, averaging 233cm (230-235) x 210cm (190-230).

Of all the 27 active monitored nests, 24 eggs hatched (89%). Nests were checked during the first two months after hatching and 19 chicks (79%) either fledged or survived 150 days. During the survey period, 15 individuals were recorded as fledged.

In summary, out of the 27 nests, 24 eggs hatched, one egg was broken, one egg was abandoned, one egg did not hatch, five chicks did not fledge (died) and one chick disappeared (outcome unknown).
Table 1: Tree and nest characteristics and breeding parameters for nesting Lappet-faced Vultures Torgos tracheliotos in the Mahazat as-Sayd protected area, Saudi Arabia.

<table>
<thead>
<tr>
<th>Tree species</th>
<th>Acacia tortilis</th>
<th>Maerua crassifolia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>Earliest date found</td>
<td>Dec</td>
<td>Aug</td>
</tr>
<tr>
<td>Tree height (cm)</td>
<td>270</td>
<td>390</td>
</tr>
<tr>
<td>Nest height (cm)</td>
<td>264</td>
<td>390</td>
</tr>
<tr>
<td>Hatch date (estimate)</td>
<td>Jan 26</td>
<td>Apr 10</td>
</tr>
<tr>
<td>Hatch success</td>
<td>87% (n = 20)</td>
<td>100% (n = 4)</td>
</tr>
<tr>
<td>Fledge success (or 150 days)</td>
<td>75% (n = 15)</td>
<td>75% (n = 3)</td>
</tr>
</tbody>
</table>

Figure 1: Lappet-faced Vulture Torgos tracheliotos nest in Mahazat as-Sayd protected area, Saudi Arabia.

References


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