

Omani Owl at Wadi Wurayah, United Arab Emirates, in March 2015

An unknown *Strix* owl population was recently discovered in the eastern part of the Hajar Mountains of Oman and described as a new species, Omani Owl *Strix omanensis* (Robb et al 2013). Since then, the taxonomic status of this population and its relationship to *Strix* populations of western Arabia, until recently known as 'Hume's Owl *S butleri*', has been a subject of debate. Kirwan et al (2015) showed that populations in western Arabia were genetically different from the old type specimen of 'Hume's Owl' (collected in south-western Pakistan) and named them *S hadorami*. They proposed the vernacular name Desert Tawny Owl, to prevent confusion with the former 'Hume's Owl'. This is best shortened to Desert Owl (Gill & Donsker 2015). The most recent genetic study (Robb et al 2015) concluded that *S omanensis* is a junior synonym of *S butleri*, found in Oman and Iran and possibly still in south-western Pakistan, but recommended retaining the vernacular name Omani Owl for this taxon.

An owl heard in Wadi Wurayah National Park, United Arab Emirates (UAE), in October 2006 had been tentatively identified as what was then known as 'Hume's Owl' (Tourenq et al 2009). With hindsight, this suggested that Omani Owl might also be present in the UAE. In 2015, a three-month owl survey to study the status of owl populations and investigate the presence of Omani Owl took place in the park. On 8 March 2015, Elvin Miller obtained a first response to playback of Omani Owl. On 13 March 2015, he made sound recordings at the same location, which are described here.

Methods

The owl survey in Wadi Wurayah NP, Fujairah, UAE, roughly covered an 8 km² area and took place from 30 December 2014 to 8 March 2015. It consisted of playing back recordings of Pallid Scops Owl *Otus brucei*, Little Owl (*Cuculius*) *Athene noctua*, Pharaoh Eagle-Owl *Bubo ascalaphus* and Omani Owl. The only Omani Owl detected was recorded with a Marantz recorder PDM660, using the internal microphone. For comparison, we used recordings of Omani Owl and Desert Owl from Oman in the collection of The Sound Approach (figure 1). We measured sonagrams with Raven Pro version 1.5. Criteria for identifying Omani Owl vocalisations are those of Robb et al (2013), refined (with improved criteria

for sexing) in Robb & The Sound Approach (2015).

Identification

Based on its compound hooting (figure 1a), the owl at Wadi Wurayah was certainly an Omani Owl. This consisted of four notes, grouped as one, one and two. The first note was longest, the second and fourth were of similar length and the third was shortest. The second showed a noticeable rise in pitch and the final two remained at a higher pitch, suggesting the caller was a male (in females, the second note tends to be lower pitched than the rest of the strophe, which is higher pitched than in males). The very low pitch of the whole strophe also suggested a male. Modular frequency of the first note was 274 Hz, maximum frequency of remaining notes 300 Hz, length of strophe 3.04 s; means for n=20 strophes. In Al Jabal Al Akhdar, Oman (figure 1c), these measurements were 336 Hz, 361 Hz and 3.09 s, respectively (means of means for three presumed males, n=128 strophes).

Desert Owl compound hooting has a higher number of notes in a very different rhythmic pattern, as well as a higher pitch and much shorter length (figure 1e). It has five notes, grouped as one, two and two. The first is longest, the second and fifth are much shorter, and the third and fourth are shortest. In each of the groups of two, the notes are joined together. Modular frequency of first note is 598 Hz, maximum frequency of remaining notes 595 Hz, length of entire strophe 1.54 s (means of means for four presumed males from Dhofar, Oman, n=83 strophes).

Pulsed hooting of the owl at Wadi Wurayah (figure 1b) was also closer to Omani Owl than to Desert Owl, both in rate of delivery and frequency. Rate of delivery in Wadi Wurayah was 3.3 notes/s, minimum frequency 247 Hz and maximum frequency 293 Hz (n=8 strophes). By comparison, in Omani from Al Jabal Al Akhdar, Oman (figure 1d), these measurements were 3.52 notes/s, 290 Hz and 337 Hz, respectively (means of means for three presumed males, n=57 strophes). In Desert from Dhofar (figure 1f), they were 3.89 notes/s, 356 Hz and 473 Hz, respectively (means of means for two presumed males, n=18 strophes).

Discussion

The strong analogy of the calls recorded in Wadi Wurayah with those from Al Jabal Al Akhdar confirmed the presence of Omani Owl in UAE (figure 2), as the earlier report of 'Hume's Owl' (Tourenq

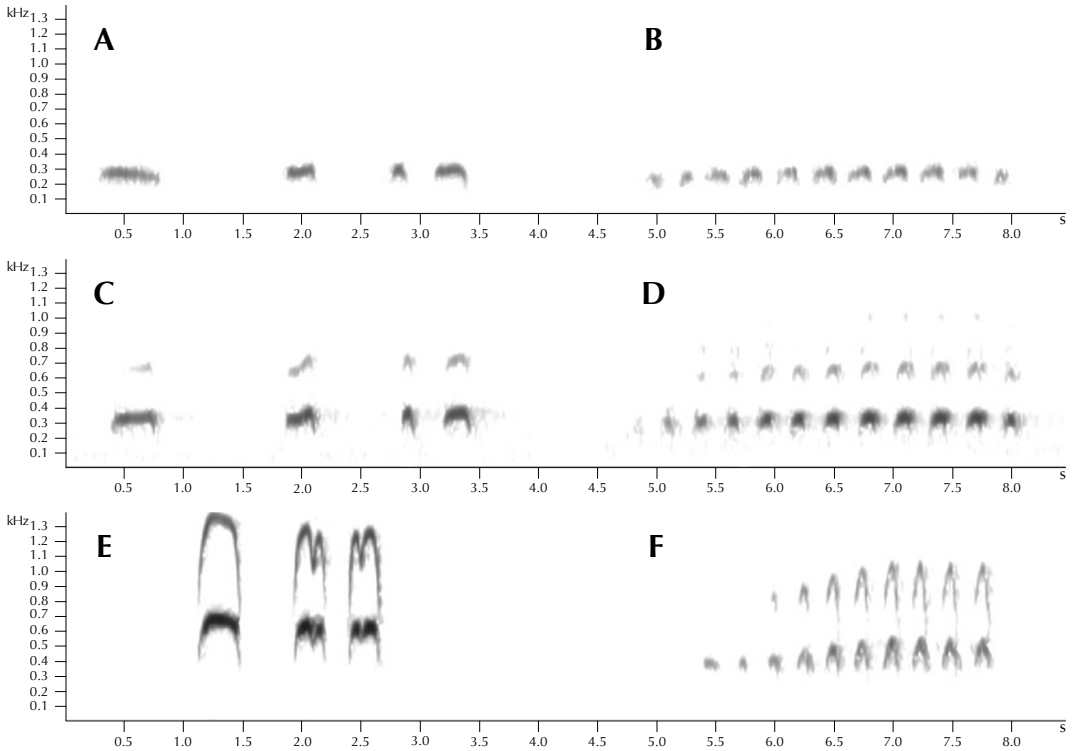


FIGURE 1 Hooting of (presumed male) *Strix* owls. Omani Owl / Omaanse Uil *S butleri* (= *S omanensis*), Wadi Wurayah National Park, Fujairah, United Arab Emirates, 13 March 2015 (*Elvin Miller*): **A** compound hooting and **B** pulsed hooting. Omani Owl, Al Jabal Al Akhdar, Al Hajar Mountains, Al Batinah, Oman (*Arnoud B van den Berg/The Sound Approach*): **C** compound hooting, 27 May 2013 (130527.AB.233200) and **D** pulsed hooting, 28 May 2013 (130528.AB.003000). Desert Owl / Palestijnse Bosuil *S hadorami*, Wadi Al Mughsayl, Dhofar, Oman (*Magnus Robb/The Sound Approach*): **E** compound hooting, 15 April 2010 (100415.MR.211332) and **F** pulsed hooting, 22 February 2014 (140222.MR.200554).

et al 2009) had suggested. The putative identification turned out to be correct retrospectively, despite the fact that, at the time, the authors were referring to 'Hume's Owl' from western Arabia (Dhofar being the closest known location), now recognized as Desert Owl. All attempts to re-locate the owl heard in 2006 failed, and in 2015 it was only after three months of survey in a rather small area that the species could be contacted twice over a week. Since then, no more signs of activity have been recorded, which once more underlines the difficulty of detecting this species. Intensive and long field surveys may be required to clarify its distribution range and learn more about the ecology of this species.

The habitat occupied in Wadi Wurayah is at lower elevation (150 to 350 m above sea level from wadi bed to surrounding ridges), has lower cliffs and receives less precipitation than in the

currently known sites of Al Jabal Al Akhdar. Consequently, vegetation cover is scarcer and trees much smaller and rare. Rock composition and geomorphology also differ. The bedrock in Wadi Wurayah NP is composed of the ultrabasic Semail Ophiolites, while carbonates sediments are dominant in Jabal Akhdar sites. All these differences suggest that suitable habitats for the Omani Owl could potentially cover the whole Hajar Mountains range of UAE and Oman.

References

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FIGURE 2 Map showing locations of Omani Owl in Al Hajar Mountains. Red star: new record from Wadi Wurayah National Park, UAE, presented in this note; red circle: location of Omani Owl in Oman (Robb et al 2013).

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