

Update on the status and occurrence of Arabian Magpie *Pica pica asirensis* in Saudi Arabia

JEM BABBINGTON

The Eurasian Magpie *Pica pica* includes an isolated population, Arabian Magpie *Pica pica asirensis*, endemic to the Asir province of southwest Saudi Arabia where it has a very restricted range. The area where the birds occur is part of the Asir mountain range (which extends into Yemen), a region holding all but one of the Arabian endemic bird species, suggesting the magpie population has been isolated for a very long time (Madge & Burn 1993). The bird was first described by Bates 1936 after collection by Philby who said it was plentiful in the Asir mountain region and is unmistakable within its restricted range. Differences from the nominate population of Europe include a darker, duller overall colouration with only a slight sheen and with less white on the scapulars and primaries, all black rump, shorter wings, much shorter tail with a purple gloss and larger bill and feet (Plates 1–3). The juvenile differs from the adult by being duller, with black areas of the plumage unglossed, and white areas washed with brown (Madge 2016). Birds are very vocal as group members call to keep in contact with each other, generally calling throughout the day, and in my experience this is often how they are located in the field, with at least three types of calls noted: A full loud 'quaynk quaynk', made when the bird calls from a top branch or while moving which is presumably the main contact call. A similar tone 'Quenk Quenk', is uttered when the bird is searching for insects or under some



Plate 1. Arabian Magpies *Pica pica asirensis*, Sallal Al Dahna, Tanoumah, Asir province, Saudi Arabia, 5 July 2013. © Jem Babbington. Note large bill, strong legs, purple bronze gloss to tail and dull overall plumage compared to Eurasian Magpie *P. p. pica*.



Plate 2. Arabian Magpie *Pica pica asirensis*, Sallal Al Dahna, Tanoumah, Asir province, Saudi Arabia, 5 July 2013. © Jem Babbington. Note larger bill and feet, far less white on scapulars and duller and darker overall colouration compared to nominate Eurasian Magpie.



Plate 3. Arabian Magpie *Pica pica asirensis*, Sallal Al Dahna, Tanoumah, Asir province, Saudi Arabia, 8 July 2015. © Jem Babbington. Note shorter wings and tail compared to nominate Eurasian Magpie.

stress and may be some sort of alarm call; while the young birds make a much softer ‘*qua qua*’, which seems to be a soliciting call during food begging or when following their parents (Yahya & Salamah 1996). The distinct calls along with morphological differences have led a number of observers to suggest that *asirensis* is specifically distinct, however, others disagree and say the calls are similar to distress calls of nominate Eurasian Magpie. Recordings indicate Arabian Magpie calls are very different from nominate *pica* (Birkhead 1991), but there is debate whether the calls are substantially different. Mike Jennings (pers comm) says Eurasian Magpie calls sound like *asirensis* calls, but are not as loud, clear or as often repeated, whereas others (JB pers obs) suggest they are different.

The taxonomic position of Arabian Magpie is certainly uncertain, although it is generally regarded as a subspecies of Eurasian Magpie. Gill & Donsker (2016) regard it as such, though there is a caveat “MtDNA phylogeny suggests that Eurasian Magpie comprises several potential species including Korean Magpie *P. sericea*, Mahgreb Magpie *P. mauritanica* and Asir Magpie *P. asirensis* (Lee et al. 2003)”. Recently, *P. p. asirensis* has been listed as a separate species *P. asirensis* forming a superspecies with *P. pica*, *P. nuttalli* and *P. hudsonia*. Isolation within a very restricted range and differences in vocalizations and structural features suggested that treatment as a separate monotypic species is warranted (Madge 2016, van den Berg 2014). Arabian Magpies are sedentary and localised and occur especially in the juniper forest zone, often in well vegetated upland valleys and wadis, of the Asir highlands 1850–3000 m asl. Many of these areas are remote and difficult to access so the exact numbers of birds is difficult to assess but the estimated breeding population has been noted as a minimum of 135 pairs and maximum 500 pairs (Jennings 2010). Five surveys, February 1995–July 1996, resulted in a total of 147 sightings of 90 birds in the area



Plate 4. Sallal Al Dahna, Tanoumah, Asir province, Saudi Arabia, 11 July 2014. © *Jem Babbington*. The site is an upland valley at 1955 m asl with large mature trees and a year-round water supply.



Plate 5. Al Mehfar park, Tanoumah, Asir province, Saudi Arabia, 1 June 2016. © *Jem Babbington*. The breeding site is an upland valley at 1950 m asl with large mature trees, extensive areas of open ground and a small stream of water.

between Taif and Abha, although all sightings were limited to the area of Abha and 120 kilometres north of same, as well as Jebel Gaha (Ebels 2003).

Many trips to this small area since 2010 by resident birdwatchers/bird photographers in Saudi Arabia, have found a substantial decline in numbers with a maximum of ten birds seen during any visit. The small population is restricted to the highest and wettest Asir, but they are not confined to juniper and are often found in acacia and terraced fields with fruit trees and mature juniper, habitat that is threatened by development and juniper die-

back, and as a result the taxon must be regarded as endangered (Jennings 2010). Habitat loss appears to be a major reason for the apparent decline in the population, mainly on account of tourism developments, with natural habitats in the Asir shrinking alarmingly quickly (Yahya & Salamah 1996). In 2010 a survey (Jennings *et al* 2010) was undertaken in part to look for the species with only a few birds located. Their report stated “it seems clear that this very scarce bird has declined further in numbers in recent years”. The decline of the Arabian Magpie is most clearly shown by the recent lack of records from Jebal Soudah area, near Abha, where during the above mentioned survey, 4 July–17 July 2010, no examples of the species were recorded there (or on the Raydah escarpment, at the Al Jarrah reserve or on a short visit to Jebal Aswad, areas that in the past were regarded as strongholds for the species, Jennings *et al* 2010). Jebal Soudah is now a popular tourist site with cable car rides and picnic sites and is heavily disturbed and no further records have occurred in the area since 2010 despite extensive searching. The decline has also been noted at the nearby Wadi Tale’a area that has also suffered from habitat loss but is significantly less disturbed than Jebal Soudah. Previously, birds were regularly seen in the Wadi Tale’a area with eight old nests located in less than one km 8 July 1987, but the only recent sighting there was on 22 July 2010 when three were at Sharma. The decline appears to be more complex than just habitat loss as the well forested and protected Raydah reserve has also suffered a significant reduction in sightings with only one brief sighting 4 October 2010 when a single bird was seen briefly on the ranger’s camp antenna at 2795 m asl (Brendan Kavanagh pers comm) and another in May 2016. No further birds have been noted there despite regular visits to the location at different times of year by many birdwatchers/bird photographers. A new drivable road has been constructed through the reserve creating more disturbance, but car numbers are few due to the steepness of the road and a Saudi Wildlife Authority ranger post barrier across the road restricting access. The isolated Jebal Gaha has also been reported as a stronghold for this species (Yahya & Salamah 1996, Ebels 2003) and on 21 July 2010 a pair were seen at 1850–1950 m asl on a cliff edge of the sandstone plateau there, an area of mainly dead juniper trees. The birds appeared to prefer the heavy shade of leafy fig and other trees in gullies just below the plateau lip with several old nests of this species seen on several occasions in dead juniper trees (Jennings *et al* 2010). Birds may still occur there, as two pairs were seen in May 2016 at nearby Haroub. No visits have been made to Jebal Gaha itself in recent years by birdwatchers due to its remoteness and difficulty in finding accommodation near the site.

Despite extensive searching since 2010, particularly in the Jebal Soudah and Wadi Tale’a areas, the only area where birds have been seen regularly has been that between Billasmar, Tanoumah and An Numas. Attempts to locate Arabian Magpie have been aided by a number of prolonged trips since 2014 to look for endemic bird species (Abdullah Alsuhaibany and Chris Boland pers comm). Also stand-alone camera traps have been set up by the Saudi Wildlife Authority in remote areas of the Asir mountains near Abha from 2010 until present, that would be suitable for photographing the species, however none of the cameras has recorded any magpie activity to date (M Zafar-ul Islam pers comm). An Numas (19° 10.00' N, 42° 10.00' E) is the most northerly place where the Arabian Magpie has been recorded since 2010 and is situated c30 km north of Tanoumah (an area where birds have been seen regularly since March 1985). Five km northwest of Tanoumah at 1950 m asl is Al Mehfar park, 18° 57' 50.9" N 42° 08' 00.6" E, a more open site with a mixture of terraced fields and boulders with large mature trees (Plate 5). A number of visits were made to this area in 2014 with a single bird seen feeding on leftovers 22 January, one bird seen collecting nest material from a dead palm tree 5 May, two birds and a nest found 23 May with 3 feathered chicks found in the nest the next day, and four birds (two adults and two juveniles) seen in July. This is a more open area than most locations where birds have



Plate 6. Arabian Magpie *Pica pica asirensis* nests, Al Mehfar park, Tanoumah, Asir province, Saudi Arabia, 1 June 2016. © Jem Babbington. Two new nests made from an oval mass of twigs with a side entrance at c5–6 m above ground at base of forks in an acacia tree.

been seen previously and holds some encouragement that birds may move to and breed in new habitat if their original habitat becomes unsuitable, with these birds resident in the area according to locals (Abdullah Alsuhaibany pers comm). In June 2016 four Arabian Magpie nests were found including two new nests since the last visit in 2014 indicating the birds built new nests each year and bred there (Plate 6). Four birds were seen in the Al Mehfar park area in July 2015 but none were seen in summer 2016. Seven km south of Tanoumah in the valley at Sallal Al Dahna $18^{\circ} 54' 39.6''$ N $42^{\circ} 12' 27.6''$ E, at a height of 1955 m asl, birds have been seen regularly from 2001 to present (Plates 1–3) with several nests found in 2013, 2014 and 2015. This site has perfect habitat with large mature trees to nest in and a year-round water supply with a small waterfall with a pool below (Plate 4) and in March 2013 a magpie was seen entering a nest structure, with three birds in the same location 5 July 2013 (two adults and a juvenile) indicating breeding had occurred nearby. Other sightings in this core area include four seen ten km south of Tanoumah in December 2014. Thirteen km south of Tanoumah at $18^{\circ} 51.11'$ N, $42^{\circ} 14.48'$ E, a wide wadi similar to Sallal Al Dahna but with gently sloping sides, held two birds in 2013 and one was seen flying across the road in June 2014. Twenty-six km south of Tanoumah, near Billasmar, at $18^{\circ} 47' 07.9''$ N $42^{\circ} 14' 40.2''$ E, a pair of adults and four juveniles were observed in July 2010, near the village of Al Azah at 2606 m asl. The birds were seen in an area of open hillsides with scattered juniper trees and terraced fields with other magpies seen in the same wide valley in 2013. Six magpies were recorded 23 May 2014 six km south of Billasmar at $18^{\circ} 43' 35.9''$ N $42^{\circ} 15' 27.6''$ E feeding from a rubbish container beside King Faisal road. Interestingly most of the recent sightings of Arabian Magpies have been below the altitude zone 2400–3000 m, mentioned in Madge (2016) and some have been associated with feeding on human leftovers.

In conclusion, *asirensis* is a taxon with a very restricted range, confined to a small region within Saudi Arabia. Numbers are decreasing probably because of heavy disturbance by tourism and perhaps changes in climate with warmer and drier weather experienced in the Asir mountains in the last few decades (Hasanean & Almazroui 2015). The good rains in the region in spring 2016 coincided with an increase in sightings of birds. The areas where Arabian Magpies have been seen in recent years appear to be restricted to three widely spaced areas, one near Abha with numbers in significant decline, one on the isolated Jebal Gaha where numbers are very low and lastly the main stronghold in the Billasmar, Tanoumah and An Numas areas. Estimating population size in this large and often inaccessible area is difficult, but the small number of recent records of Arabian Magpie and apparent reduction in its already very limited range suggests that the estimated population size of 135–500 pairs is probably too high. Numbers may be significantly less than this estimate with perhaps only 135 pairs or less. The good news is that the species is still breeding in its core area at least, and is found in areas near human habitation, sometimes utilizing waste food. The bad news is that if an action plan is not put in place soon then this taxon may die out entirely.

ACKNOWLEDGEMENTS

Mike Jennings supplied data on the Arabian Magpie from the ABBA database and M Zafar-ul Islam (National Wildlife Research Center, Taif) supplied details of the remote camera traps set up in the Asir mountains. Abdullah Alsuhaibany and Chris Boland provided details of sightings from their 2014 surveys of endemics and Mansur Al Fahad, Louis Regenmorter and Brendan Kavanagh gave details of their sightings. Phil Roberts provided company in the field as well as GPS references and altitude data for a number of trips we conducted looking for magpies over the last five years.

LITERATURE CITED

- van den Berg, AB. 2014. *Dutch Birding-vogelnamen*. www.dutchbirding.nl/page.php?page_id=229.
- Birkhead, TR. 1991. *The Magpies*. T & AD Poyser, London.
- Ebels, EB. 2003. Trends in systematics—Speciation in *Pica* magpies. *Dutch Birding* 25(2): 103–116.
- Gill, F & D Donsker (eds). 2016. *IOC World Bird List (v 6.1)*. DOI10.14344/IOC.ML.6.1. www.worldbirdnames.org. [Accessed 13 April 2016]
- Hasanean, H & M Almazroui. 2015. Rainfall: features and variations over Saudi Arabia, a review. *Climate* 2015, 3(3): 578–626. DOI10.3390/cli3030578.
- Jennings, MC. 2010. Atlas of the breeding birds of Arabia. *Fauna of Arabia* 25.
- Jennings, MC, ARH Al-Momen & JSY Haresi. 2010. *The birds of the highlands of south-west Saudi Arabia and adjacent parts of the Tihama: July 2010*. ABBA Survey 42. Jennings, UK.
- Lee S, CS Parr, Y Hwang, DP Mindell, JC Choe. 2003. Phylogeny of magpies (genus *Pica*) inferred from mtDNA data. *Molecular Phylogenetics and Evolution* 29: 250–257.
- Madge, S. 2016. Arabian Magpie (*Pica asirensis*). In: del Hoyo, J, A Elliott, J Sargatal, DA Christie & E de Juana (eds). *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona, www.hbw.com/node/60754. [Retrieved 13 April 2016]
- Madge, S & H Burn. 1993. *Crows and jays: a guide to the crows, jays and magpies of the world*. Helm Information, Robertsbridge, UK.
- Yahya, HSA & M Salamah. 1996. The Asir Magpie: results of recent field surveys. *Phoenix* 13: 13–14.
- Jem Babbington, c/o Saudi Aramco, PO Box 13007, Dhahran 31311, Saudi Arabia. jembabbington@btinternet.com