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Two additional raptors to the Iraqi avifauna: The first observation of lappet-faced vulture (*Torgos tracheliotos negevensis*) and Amur falcon (*Falco amurensis*)

Dva ďalšie dravce do irackej avifauny: Prvé pozorovanie supa arabského (*Torgos tracheliotos negevensis*) a sokola amurského (*Falco amurensis*)

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Abstract: The Iraqi Organization for Conservation of Nature (IOCN) continuously conducts field surveys targeting key biodiversity areas within Iraq to discover the environmental conditions with more focus on the threatened species and their habitats. Two new bird species for Iraq were recorded during two of the ongoing field surveys conducted by IOCN, namely in the Khour Az-Zubair tidal mudflats in September 2022 and the Al-Najaf Desert in February 2023. Among the considerable list of the birds (and other fauna species) that have been observed, two bird species have been considered quite important: Amur falcon (*Falco amurensis*) and lappet-faced (or Arabian) vulture, *Torgos tracheliotos negevensis*]. Both of these observations have been carefully described and documented. Referring to the literature on the avifauna of Iraq, none of these bird species have already been considered Iraqi species and, subsequently, have been added to the list of avifauna of Iraq.

Abstrakt: Iracká organizácia na ochranu prírody (IOCN) kontinuálne realizuje terénne prieskumy zamerané na kľúčové oblasti biodiverzity v Iraku s cieľom poznania environmentálnych podmienok s dôrazom na ohrozené druhy a ich biotopy. Počas dvoch z týchto terénnych snímok v prílivových bahenných oblastiach Khour Az-Zubair v septembri 2022 a v púšti Al-Nadžaf vo februári 2023 boli zaznamenané dva nové druhy vtákov pre Irak. So značného zoznamu pozorovaných druhov vtákov (a iných druhov fauny) sa za pomerne významné považujú dva druhy vtákov: sokol amurský (*Falco amurensis*) a sup arabský (*Torgos tracheliotos negevensis*). Obe tieto pozorovania boli dôkladne opísané a zdokumentované. S odvolaním sa na literatúru o avifauny Iraku sa žiadny z týchto druhov vtákov nepovažoval za iracký druh a následne bol zaradený do zoznamu avifauny Iraku.

Key words: birds of prey, species range, field observation, non-breeding birds, Al-Najaf, Basra, Desert of Southern Iraq, Khour Az-Zubair

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Introduction

The lappet-faced vulture (*Torgos tracheliotos*; Order: Accipitriformes, family: Accipitridae) is one of the largest avian scavengers worldwide. It has been evaluated as an Endangered (EN) species in the IUCN RedList due to the continuous decline in its population (BirdLife 2024). This non-migrant species breeds along the African Sahel and other parts of Africa, where its breeding population is shrinking for various reasons (Shimelis et al. 2005, Ogada et al. 2016).

The Arabian vulture (*Torgos tracheliotos negevensis*) is the subspecies (considered a full species by some authorities) that inhibits dry savannas, arid plains, deserts and open mountain slopes (Shimelis et al. 2005) and breeds in scattered arid lands and deserts in the Arabian Peninsula with fragmented breeding areas (Newton & Shobrak 1993, Shobrak 2011). Arabian vulture is found in the Negev Desert of Palestine (where this subspecies was described for the first time), Israel, UAE, Oman, Yemen, Central, northern, and northwestern KSA, Syria, and Jordan (Hardy 1947, BirdLife 2024, Porter & Aspinall 2010), and it was recorded recently in Kuwait (Al-Suraeea et al. 2013).

With an estimated population range of around 600 pairs in the Arabian Peninsula (Botha et al. 2017), it seems the species has previously bred in Jordan (Evans & Al-Mashaqbah 1996), but there are no more observations. It was formerly common in Somaliland (Somalia) (BirdLife, 2024), while it is considered extinct in Israel, where only three birds remained until the mid-90s (Shimelis et al. 2005). Within the Middle East or elsewhere, these large scavengers appear to suffer from significant threats that affect their population and habitat within their distribution range (Newton & Shobrak 1993, Ogada et al. 2016).

As regards the second observed bird species, the Amur falcon (*Falco amurensis*) is one of the smallest falcons (Order: Accipitriformes, family: Accipitridae); however, it is one of the most long-distanced migrants worldwide (Rasmussen & Anderton 2005). It breeds in central Siberia, NE China, east to Amurland, south to northern and eastern China and winters in eastern and southern Africa (Naoroji 2006, Rasmussen & Anderton 2005). During migration, Amur falcons are crossing eastern and southern Asia, including China, Bangladesh, Bhutan, Nepal, Laos, Myanmar, Thailand, Pakistan and India, heading southwest to Africa (Meyberug et al. 2017).

This heroic migrant bird crosses the Indian Ocean twice a year during its spring and autumn migration, i.e., including a continuous flight from Somalia to India, covering 2,500 – 3,100 km of the open sea when it takes around two days and 5 to 17 hrs oversea, passing over the Indian Ocean, the Arab Sea, and the eastern waters of East African Continent (Meyburg et al. 2017, Ali & Ripley 1978). Amur falcon is a rare passage migrant in the Middle East region where it can be found in Oman, UAE, SW Arabia, and Socotra Island (Porter & Aspinall 2010), and accidental to Kuwait, Yemen, Iran, and Qatar (Pope & Zogaris 2012, Khaleghizadeh et al. 2011, Al-Suraeea et al. 2013, Porter & Aspinall 2010). There are few confirmed westerly records from Cyprus, Malta (Maltese Islands) (Fenech & Sammut 2015, Nature of Cyprus 2016) and as far west as the Canary Islands in the North Atlantic Ocean (Rodriguez et al. 2021). The distribution of Amur falcon and lappet-faced vulture within the Middle East, eastern Mediterranean, and northeastern Africa (including the Horn of Africa) are shown in Fig. 1.

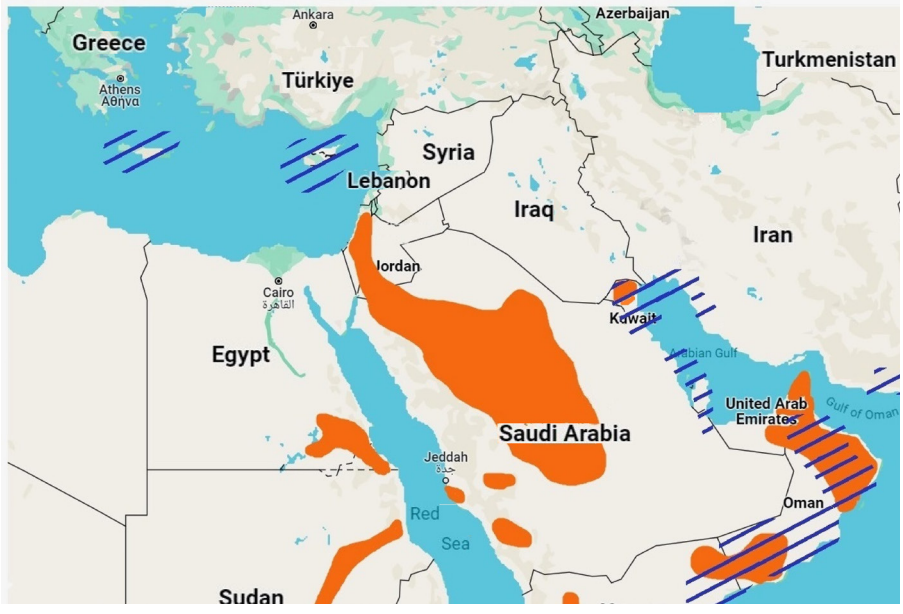

Fig. 1. The distribution of lappet-faced vulture (Orange) and Amur falcon (Blue shade) within the Middle East area. The distribution map was developed based on accumulative data from different dates in the literature.
Obr. 1. Rozšírenie supa arabského (oranžová farba) a sokola amurského (modrá šrafáž) v oblasti Blízkeho východu. Mapa rozšírenia bola vypracovaná na základe kumulatívnych údajov z rôznych dátumov v literatúre.

Material and methods

Khour Az-Zubair area is located 35 km to the southeast of the centre of Basra city, Southern Iraq. The area consists of mudflats affected by the tide from the upper part of the Arabian Gulf. The end of the Khour trunk meets with Khour Mousa and Khour Abdullah close to the Iraqi-Kuwaiti marine borders (Yacoub 2011, Ali et al. 2022). The survey area consists of the main trunk of the Khour and its primary and secondary branches within soft mudflats (the study locations are depicted in Fig. 2). The area has a low, halophytic plant cover adapted to marine and brackish waters (Hassan et al. 2022).

Jal Al-Dhifeeri (or Batn Al-Dhifeeri) is a desert habitat area with a sandy/rocky bottom surrounded by higher cliffs extending southeastward to the Saudi borders, part of the Southern Desert of Iraq (Buringh 1960). The survey area is around 225 km southwest of Al-Najaf city centre (Fig. 2), quite close to the Iraq-Saudi borders where the IOCN team camped for several days. As part of the desert depressions and valleys, the area receives relatively large amounts of seasonal water during the rainy seasons, so it consists of denser plant cover (Guest & Al-Rawi 1966, Salim 2023).

Different navigation and monitoring/observation tools have been used during the surveys, for instance, the camera Nikon (Coolpix 900 & 1000), 12X45mm and 12X50mm binoculars, and location-detecting and tracking GPS devices.

The elements of the biodiversity (flora, fauna, and avifauna) have been targeted, observed and documented carefully. The species were listed in lists and discussed and consolidated in one list during the evening camp. More focus has been given to the threatened and conservation-concern species and habitats during the surveys.

Results

The targeted survey area where the first Amur falcon was found was in the Khour Az-Zubair wetlands in Basra on 29 September 2022, while the survey where the first lappet-faced vulture was found was in the Al-Najaf desert on 28 February 2023.

Observation of the first Amur falcon for Iraq

While surveying one of the key branches at the eastern parts of the Khour around the coordinates (30.164799°, 47.914538°), the team noticed a small falcon that was first thought to be a kestrel, but due to the distinctive different features, more attention was given to documenting this species (habitat of the area depicts Fig. 3).

The general appearance, silhouette, and way of flight that the observed individual has demonstrated, at first glance, suggested that it is one of the smaller falcon species. The breast and belly were streaked with conspicuous black streaks, and the streaking continued back but was relatively finer in the belly and flanks. The ventral area and undertail coverts were whitish. The undertail was barred, and the underwing coverts

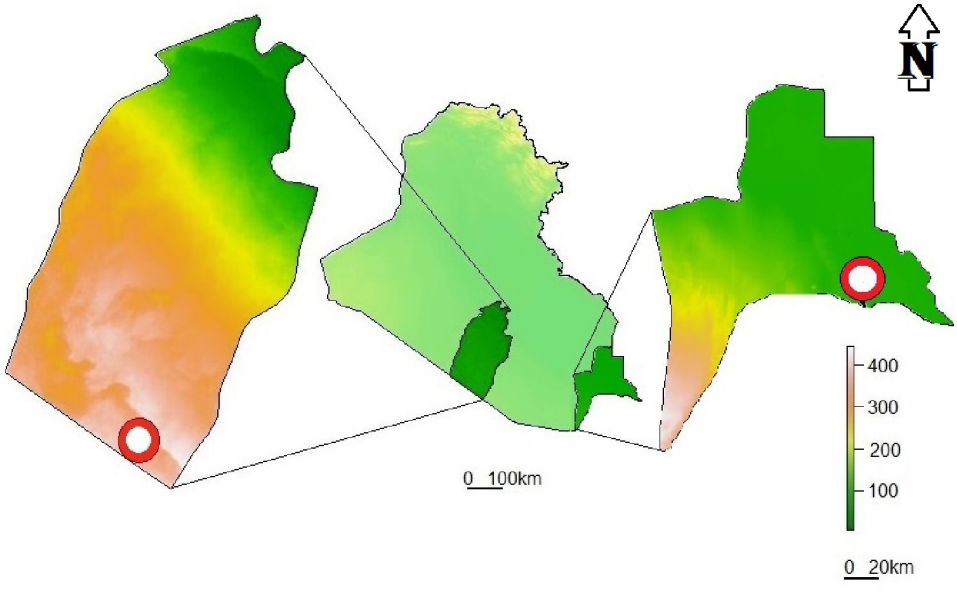

Fig. 2. The Iraq Map shows the location of Al-Najaf and Basra provinces. The map to the left shows Najaf, where the first lappet-faced vulture was observed soaring, not far from the KSA-Iraq borders. The map to the right shows Basra, where the first Amur falcon was observed in Kour Az-Zubair.

Obr. 2. Mapa Iraku zobrazuje polohu provincií Al-Nadžaf a Basra. Na mape vľavo je znázornený Nadžaf, kde bol pozorovaný prvý vznášajúci sa sup arabský, neďaleko hraníc Saudskej Arábie a Iraku. Na mape vpravo je znázornená Basra, kde bol pozorovaný prvý sokol amurský v Kour Az-Zubair.

Fig 3. Amur falcon observed in Kour Az-Zubair as the first record for Iraq (on the left); habitat landscape shows where the first Amur falcon was observed (on the right) ©IOCN Team.
Obr. 3. Sokol amurský pozorovaný v Kour Az-Zubair ako prvý záznam pre Irak (vľavo); biotop kde bol sokol amurský pozorovaný (vpravo) ©IOCN Team.

were of black markings with a whitish background. The dark moustache on the face was still visible from below, obviously contrasting with its whitish cheek.

This species can be separated from the Eurasian hobby (*F. subbuteo*) by its paler under-surface and the way of flight and from the red-footed falcon (*F. vespertinus*) by the pattern of the underwing and the breast and belly streaks. Also, the underwing background was whitish (puffish in *F. vespertinus*) (Porter & Aspinall 2010).

Observation of the first lappet-faced vulture for Iraq

While surveying Jal Al-Dhifeeri cliff on 28 February 2023, around the central coordinates (30.097398°, 43.615938°) in the Southern Desert, 7 km northeast of the Saudi borders (the landscape of the area is shown in Fig. 4), one of the team members saw a large soaring vulture passing over the survey area eastward where we were able to check it by binoculars while it was gliding on high elevation. Following the bird was impossible due to the rough rocky area. After further discussions and consulting bird field guides, it was evident that the observed bird was a sub-adult lappet-faced vulture.

The general colour of the individual found soaring over the Jal Al-Dhifeeri area was brownish, with relatively darker primaries, secondaries, and tail feathers, with paler head and legs from a distance. It was quickly identified based on its quite wide wing span and spread 'fingers' in addition to its massive bill. The tail was short and fan-shaped with distinguishable pointed feathers. The flight feathers and tail were darker than the brown belly and the lower wing coverts. It can be promptly distinguished from the other vultures found in Iraq by its heavier bill, shorter, rounded/fan-shaped tail, and larger size (Shirihai 1987).

The present precise observation of this individual bird in this location recalled a previous observation of a similar vulture that the team spotted in the southern parts of Al-Muthanna Desert, not far from the Saudi borders at the coordinates (29.372679°, 45.443143°) when the IOCN team was camping and birding few kilometres south of Jabal Al-'Amghar, in the southern desert of Al-Mothanna when a large brownish vulture was perching on an embankment in March 2021. The present observation in the Al-Najaf desert has confirmed with trust that the observation in 2021 was of the same species as it was similar in size, silhouette and colours.

Discussion

The first observations of lapped-faced vulture and Amur falcon were made in different locations within southern Iraq in different habitats. Lapped-faced vulture was observed in the Al-Najaf desert. The time of the survey is considered ideal for conducting the exploration field surveys in the Iraqi deserts primarily for the suitability of the weather for camping for prolonged periods to cover as many areas as possible, and secondly, for easier logistical purposes. During the survey time (late Feb. 2023), most of the southern deserts of Iraq were covered by spring shrubs and grass, especially the depressions (*Feidhaat*), and this attracts considerable numbers of Bedouins and shepherds to graze in these vast areas of southern Iraq with their large herds of cattle (Shimelis et al. 2005). During the surveys in the desert,

Fig. 4. The first observed lappet-faced vulture was soaring over the survey area close to the Saudi borders (on the left); habitat landscape shows where the lappet-faced vulture was observed (on the right) ©IOCN Team.
Obr. 4. Prvý pozorovaný sup chochlatý sa vznášal nad oblasťou výskumu v blízkosti hraníc Saudskej Arábie (vľavo); biotopov, kde bol pozorovaný sup chochlatý (vpravo) ©IOCN Team.

it is quite usual to find the carcasses of dead cattle gathered and thrown by the shepherds in specific locations (Fig. 5). They throw them away from their temporary tents to prevent the wolves' attacks (Results of different interviews with Bedouin, IOCN). These locations with the cattle carcasses attract the passing and soaring vultures and eagles especially, and it coincides with scavenger birds' passage time, where they find enough food to continue their long journey to their breeding grounds northward (Botha et al. 2017).

Fig. 5. Sheep and goat carcasses that the Bedouins and shepherds throw in clusters away from their temporary tents forming attractive feeding hotspots for vultures and other raptors. Photo by IOCN Team 5 km from where the first lapped-faced vulture was observed.
Obr. 5. Kadávery oviec a kôz, ktoré beduíni a pastieri hádžu do zhlukov mimo svojich dočasných stanov a vytvárajú tak atraktívne kŕmne miesta pre supy a iné dravce. Fotografia od tímu IOCN 5 km od miesta, kde bol pozorovaný prvý sup arabský.

The closest breeding location of this species in Saudi Arabia is a few hundred kilometres west of the current location where the first individual was observed in Iraq. It seems that the bird (like other scavenger vultures) makes extensive daily tours searching for carcasses riding the local thermals (Shimelis et al. 2005). Additionally, the observations of lapped-faced vultures in Kuwait in similar habitats might support the suggestion that this species occasionally visits the southern deserts of Iraq but is overlooked (IOCN, intra-team communications).

It seems that few individuals of Amur falcon visit the area of the Middle East during its annual passage in autumn and spring migration. During their passage, they may visit some countries around Iraq, like Kuwait and Iran (Porter & Aspinall 2010, Khaleghizadeh et al. 2011, Al-Suraeea et al. 2013). The Google Earth satellite image (Fig. 6) represents the nearest confirmed observations of Amur falcons around the upper part of the Arabian Gulf. Obviously, some individuals of this species occasionally occur within the upper Arabian Gulf area. Still, they might be overlooked due to their small numbers or the similarity of this species with other falcon species.

None of the older and recent literature on the avifauna of Iraq has mentioned the lappet-faced vulture and Amur falcon as bird species observed or listed in the Iraqi checklist or even the possibility of their potential occurrence in the country (Allouse 1953, 1962, Salim et al. 2006, 2012). Thus, the presently documented and described observations provided the first recordings and confirmed both species for Iraq.

Fig. 6. The confirmed observations of Amur falcon around the upper parts of the Arabian Gulf. The white circle (A) is the location of the first Amur falcon observed in Kour Az-Zubair; the two red circles (B) represent the two observations of the species in Kuwait; and the eastern red circle (C) represents one of the Iranian observations of Amur falcon in this region.

Obr. 6. Potvrdené pozorovania sokola amurského v hornej časti Arabského zálivu. Biely kruh (A) predstavuje miesto prvého pozorovania sokola amurského v Kour Az-Zubaire (; dva červené kruhy (B) predstavujú dve pozorovania tohto druhu v Kuvajte; a východný červený kruh (C) predstavuje jedno z iránskych pozorovaní sokola amurského v tejto oblasti.

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