The First Observation of the Vulnerable Sooty Falcon Falco concolor in Iraq

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Abstract

Sooty Falcon Falco concolor is small to medium-sized, greyish, migrant Falcon, breeds mainly in islands’ cliffs around Arabia and inland in Libya and Egypt, and migrates to east Africa. This species is classified as Vulnerable (VU) in the IUCN Red List. During one of the regular surveys conducted by the Iraqi Organization for Conservation of Nature (IOCN), the first Sooty Falcon for Iraq was found at Zibliya area close to Dalmaj protected area, approx. 35km northeast of Diwaniyah city in the Middle Euphrates region of Iraq. The habitat where the first Sooty Falcon was found consists of open farms with desert margins in addition to intensive, long rows of tall trees (Tamarix aphylla) distributed in different locations within Zibliya area. Considerable list of Passerines and other small bird species were also found in the area that might form preferred food items for Sooty Falcon. This observation represents the first record of Sooty Falcon for Iraq.

Keywords: Iraq, IOCN, Dalmaj, migrant raptors, Sooty Falcon, and Falco concolor.

1. Introduction

Sooty falcon Falco concolor belongs to Falconidae, Falco Genus (members of birds of prey) that includes group of medium-sized to relatively smaller, active with wide global distribution. The structure of this species ranges around 32–38 cm long with around 85 cm wingspan, and the general appearance resembles Hobby, however, a bit larger in size with pointed wings and relatively longer tail with relatively longer central tail-feathers; the upper parts of the adult are bluish-grey with darker primaries and tail feathers, dark underparts with paler underwing without contrast, female is darker than male [1-4]. [1], First, Sooty Falcon was classified by the IUCN RedList as ‘Least Concern’; then it uplisted at 2017 to ‘Vulnerable’ level due to set of different kinds of threats with estimated population ranges around 2800–4000 individual (IUCN, 2017) and [5].

The species distribution extends in Southwest Asia and North Africa ranging from the Libya in the west, eastward to Afghanistan throughout Middle East, in Turkey in the north and Yemen in the south, northeast Africa and around the Arabian shores where it breeds in the Arabian Gulf and Red Sea in small islands and inhibits the islands’ cliffs and dry areas; usually breeds in holes in cliffs over quite wide range that extends from Pakistan to Libya including Middle East [6]. Sooty Falcon Falco concolor has a long migration distance where they winter in east Africa and Madagascar, and it is considered as rare or vagrant within the latitudes above its breeding range [6-8], however, newer observations showed that the bird has an extension as northward as northern Iran [9,10], recording a distance of more than 1000km to the north of closest breeding colony that’s located in Hawar Islands, Kingdom of Bahrain.

This species in insectivorous, gregarious during breeding, breeds in very specific habitat (mainly in cliffs) in some countries north Africa and around Arabian Peninsula where it lives from the sea level up to 1500m above sea level ; however, it has been discovered recently in higher altitudes as 2900m asl. in Central Al-Borz, northern Iran [9]. Such a unprecedented observation in Iran, in addition to the current one in Iraq, might include potential indication to a recent higher latitude expansion of this species north-eastward, or even of higher altitudal dimension – this assumption requires more search and field surveys to be proven in future, especially in Iraq and Iran.

Within the Middle East, there are some breeding colonies of which the ones in Hawar Islands in Bahrain and the Sea of Oman are the largest breeding colonies [1,8], and in Bahrain, however, they seem to face some kind of threats that might cause continuous decline over decades [10,11]. There is also active breeding colony in Negev desert [12], Few nesting birds were found in the UAE, but it seems that this small breeding population facing some threats, and based on the conservation status of Sooty Falcon it was described as “highly endangered declining breeding visitor” in the UAE [13]. Unlike most of the other Falco species, Sooty Falcon nests in small colonies [6].
Sooty Falcon diet might consist of small birds warblers/pipits-sized in addition to larks and wheatears [14], but might include, in addition to insects, larger bird species like hoopoes and as larger preys as Golden orioles [15], where the parents select a breeding area that’s comparably rich with food items to provide their brood with an ample supply of food [16].

2. Site Description and Methods

Zibliya is one of the key study areas targeted by the Iraqi Organization for Conservation of Nature (IOCN) team for long-term monitoring programme on the habitats of this area with more concentration on the bird species and their habitats and migration patterns, and this is due to the noticeable frequency of observing large amounts of migrant birds, especially birds and Raptor. The study area (Zibliya) consists in general on dry-land that is originally desert with moving sand dunes, but due to the recent agricultural expansion, most of the area turned into vast agricultural farms to grow wheat; however, considerable areas are still having the natural status of the area which is the true desert. In order to mitigate the movement of the sand dunes, the in-charged authorities have planted rows of large trees (*Tamarix aphylla*) in long straight lines within Zibliya area. These trees have become quite useful habitat for perching of the birds of prey, in addition they provided quite good shelter and roosting sites for wide range of Passerines and other small birds. There are some prominent ground areas (small hills) with approx. 20m height within the area (including Zibliya Ziggurat itself) that represent suitable vantage and roosting points for the birds of prey, mainly eagles and buzzards within Zibliya area.

During the observation where the present Sooty Falcon was found in Zibliya, the team used 12x45 & 8x30 binoculars, and 7D Canon with 50-500mm tele-zoom, and Nikon Coolpix 900 cameras. 4x4 vehicles were used during surveying Zibliya in order to cross the soft, sandy, and other rough areas within the area. [1], (Birds of the Middle East) and [17], (Birds of Iraq) bird field guides were used to identify the birds observed in the field. 1-100,000 scale maps were used in addition to a GPS unit to determine the locations of our surveys specifically. Observing Sooty Falcon in Zibliya was at the coordinates (32.311084, 45.147699) at the 16th of September, 2020. The map bellow (Fig 1) shows the location of Zibliya area in Iraq along with recent areal image that shows the area where Sooty Falcon was observed for the first time for Iraq.

![Figure 1](image-url)
‘small, dark falcon’ flew suddenly departing its perching site on the upper parts of one of the *T. aphylla* trees where we were able to get closer observation to this ‘small falcon’ when it was crossing to the opposite trees line and realized that it was not a Sparrowhawk as a first impression – few Sparrowhawks were also seen within the area at the same survey. After quick consulting the Field Guide to the Birds of the Middle East to check the key features, we’ve immediately found that it was an adult Sooty Falcon *Falco concolor*. The team has followed the bird to take closer view, but it was quite shy and did not allow any further approaching distance, then it dived away beyond the tree-line where we weren’t able to find it again (Fig 2).

Figure 2. (left) Adult Sooty Falcon was flying low among the trees lines; (right) habitat landscape of the site where the first Sooty Falcon was first observed by the IOCN team. ©IOCN.

The current observation of Sooty Falcon *Falco concolor* represents the first record of this species for Iraq as none of the key references have listed this species yet among the birds checklist of Iraq y [17-19].

Before and after the observation time of Sooty Falcon *Falco concolor* in Zibliya, some bird species were also observed by the team either close to the observation location or around it where most of these species were photographed as well. We thought that mentioning these species might be interesting to increase the benefit of the current observation. Some of these bird species were already mentioned as food items for Sooty Falcon *Falco concolor*:

- Phasianidae: Common Quail and Black Francolin
- Raptors: Long-legged Buzzard, Great Spotted Eagle, Eurasian Sparrowhawk, Black-shouldered Kite, and Eurasian Kestrel;
- Columbidae: Collared Dove and Wood Pigeon;
- Larks: Crested Lark and Skylark
- Muscicapidae: Black Redstart, European Robin, Northern Wheatear, and European Stonechat
- Motacillidae: Water Pipit, White Wagtail, Grey Wagtail, and Citrine Wagtail
- Passeridae: House Sparrow and Spanish Sparrow

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