Additional records of the Arabian Sand Cat Felis margarita harrisoni (Hemmer, Grubb & Groves, 1976) (Carnivora: Felidae) in Iraq

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Abstract. The Arabian Sand Cat *Felis margarita harrisoni* is a rare nocturnal feline associated with desert and arid steppes. The species has been recently recorded to Iraq from three specimens by Mohammad et al. (2013). However, its current status and population trends in Iraq still unknown. In 2014 and 2015, additional records with first photographic evidence were made. These new records confirm the resident occurrence of this species in Iraq.

Key words. Arabian Sand Cat, Carnivora, Felidae, Iraq, wild mammals.

INTRODUCTION

Sand Cat *Felis margarita* is a cryptic nocturnal feline well adapted to desert and arid plains. It is similar to Wild Cat Felis silvestris but noticeably smaller and paler. The head is rather flat with broad and large ears that lack the apical dark tufts in their tips. The vibrissae are white; the limbs are of medium length and marked with by at least two pronounced black elbow bars and with broad paws; the palms and soles are covered with a dense mat of long wavy hair which conceals the pads. The pelage is soft and dense with abundant soft woolly underfur, and the coloration is strikingly pallid with a pale sandy isabelline tint in the back. The face is marked with dark brownish stripes from the anterior canthus of each eye backwards across the cheeks. The tail is tipped with black and has two or three subterminal black bars (Harrison & Bates 1991). Four subspecies have been described: F. m. margarita in North Africa; F. m. harrisoni in Arabia; F. m. thinobia in Central Asia; and F. m. scheffeli in Pakistan (Sliwa 2013; Banfield et al. 2014). The Arabian Sand Cat F. m. harrisoni is known from many localities across the Middle East, but its current status and distribution across the Arabian Peninsula are not known in detail. Its population size is uncertain; it seems to be declining but at an unknown rate (Mallon & Budd 2011). It was recorded from Oman (type locality), Yemen, Saudi Arabia, United Arab Emirates, Qatar, Kuwait, Jordan, Syria, Israel, Sinai, and Iran (Harrison & Bates 1991; Cunningham 2002; Serra et al. 2007; Strauss et al. 2007; Sher Shah & Cunningham 2008; Mallon & Budd 2011; Banfield et al. 2014; Ghadirian et al. 2016).

The status of the Arabian Sand Cat in Iraq is still uncertain. It is a cryptic and rarely seen feline, confined to vegetated sandy desert, sand dunes, sand/gravel steppes, and rocky valleys (wadies) of south and western Iraq (Al-Sheikhly et al. 2015). Iraq's first record was based on three specimens (two males and one female). One of the males and the female were found alive at a private nursery in Baghdad on 27 January 2012. They were collected from a desert area situated in the west of Al-Najaf city in Al-Najaf province. A third specimen (another male) was a mounted skin which appeared to be has been trapped from Al-Jufaira oasis in the desert of Al-Najaf province in November 2012 (Mohammad et al. 2013).

NEW RECORDS

Three records (four specimens: three adult males and a juvenile female) were made (Table 1). On 28 February 2014, an adult male and juvenile female were presented at the local animal market in Baghdad. They were collected from desert area near Al-Shabakah (Shbecha) in Al-Najaf Province (Fig.1). Another adult male was presented at the local animal market in Baghdad on 7 March 2014. It was trapped near Takhadid (c.4 0 km) to the southwest of Nigr'at Al-Salman in Al-Muthana Province (a note on this record is found in Al-Sheikhly et al. 2015). On 14 April 2015, an adult male was presented at the local animal market in Baghdad. It was trapped in a desert area (c. 20 km) northwest of Al-Nekheab in Al-Anbar Province (Fig. 2). Sand Cats are vulnerable to indiscriminate trapping, but

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Fig. 1. Juvenile female Arabian Sand Cat *Felis margarita harrisoni* trapped near Al-Shabakah (Shbecha) in Al-Najaf Province and presented at the local animal market in Baghdad. © Omar Al-Sheikhly 2014.

unlikely to be directly targeted. They are sometimes caught for the international pet trade which is an ongoing activity, but the scale is not known (Mallon & Budd 2011). Illegal trapping with weak implementation of the hunting laws has been highlighted as a major threat on wildlife in Iraq (Al-Sheikhly et al. 2015). The newly recorded Sand cats were accidentally trapped by local truffle collectors who become active during rainy seasons (January - April) in southern and western deserts of Iraq. Interviews indicated that Sand cats were coincidently observed by truffle collectors at night and early morning. Sand cats accidentally flashed by the collectors' spotting torchlight, chased until they get tired and rest among desert vegetation, and then are caught by hand. After a few days, Sand cats are brought to Baghdad by the truffle collectors and presented in the local animal markets in order to be sold as pets. The trapped cats were stressed, suffering from careless handling, and exhausted due to long distance



Fig. 2. Adult male Arabian Sand Cat *Felis margarita har-risoni* in captivity trapped Al-Nekheab in Al-Anbar Province. © Omar Al-Sheikhly 2015.

transportation. The young female seemed to be born in the wild which suggests that Sand cats are breeding in suitable habitats in the southern and western deserts of Iraq (Fig.1).

The ecological requirements of Sand cats in Iraq and around the region are still poorly understood. Due to the rarity of the species, its distribution, status and the impact of threats are difficult to assess. Apart from new spatially and temporally localized records in a few range countries, no easily measurable changes within its distribution area are apparent (Sliwa 2013). Therefore, additional research needs to be performed to document the present continuous occurrence and to assess its status.

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Table 1. Records of the Arabian Sand Cat Felis margarita harrisoni in Iraq.

	Number	Site	Coordinates	Date of trapping	Province	Reference
1	Male	West of Al-Najaf city	_	January 2012	Al-Najaf	Mohammad et al. 2013
2	Female	West of Al-Najaf city	_	January 2012	Al-Najaf	Mohammad et al. 2013
3	Male	Al-Jufaira oasis in the desert of Al-Najaf	_	November 2012	Al-Najaf	Mohammad et al. 2013
4	Male (Ad.)	near Al-Shabakah (Shbecha)	30°48'N 43°40'E	February 2014	Al-Najaf	New observation
5	Female (Juv.))				
6	Male (Ad.)	Takhadid (<i>c</i> .40km) southwest Nigr'at Al-Salman	30°11'N 44°13'E	March 2014	Al-Muthana	New observation
7	Male (Ad.)	(c. 20) km northeast of Al-Nekheab	32° 6'N 42° 2'E	April 2015	Al-Anbar	New observation

REFERENCES

- Al-Sheikhly OF, Haba MK, Barbanera F, Csorba G, Harrison DL (2015) Checklist of the Mammals of Iraq (Chordata: Mammalia). Bonn Zoological Bulletin 64 (1): 33–58
- Banfield LM, Al Qahtani H, Mallon D (2014) Arabian Sand Cat Felis margarita harrisoni Status Reveiw and Conservation Strategy. Al Ain Zoo, Abu Dhabi, United Arab Emirates
- Bunaian F, Mashaqbeh S, Yousef M, Buduri A, Amr Z (1998) A new record of the Sand Cat, *Felis margarita*, from Jordan. Zoology in the Middle East 16: 5–7
- Cunningham P (2002) Status of the Sand Cat, *Felis margarita*, in the United Arab Emirates. Zoology in the Middle East 25: 9–14
- Ghadirian T, Akbari H, Mohammadreza B, Ghoddousi A, Hamidi A Kh, Dekhordi ME (2016) Sand cat in Iran: present status, distribution and conservation challenges. Cat News Special Issue 10 (in press).
- Harrison DL, Bates PJJ (1991) The Mammals of Arabia. Harrison Zoological Museum. Sevenoaks, Kent, U.K.
- Mallon D, Budd K (eds) (2011) Regional Red List Status of Carnivores in the Arabian Peninsula. Cambridge, UK and Gland

- Switzerland: IUCN, and Sharjah, UAE: Environment and Protected Areas Authority. 49 pp
- Mohammad MK, Lahony SR, Al-Rammahi HM (2013) First record of the Sand cat, *Felis margarita* Loche, 1858 (Mammalia: Carnivora, Felidae), from Iraq. Zoology in the Middle East 59(4): 358–359
- Serra G, Abdallah M S, Al Quaim G (2007) Occurrence of Ruppell's fox *Vulpes rueppelli* and Sand cat *Felis margarita* in Syria. Zoology in the Middle East 42: 99–101
- Sher Shah M, Cunningham P (2008) Fences as a threat to Sand cats *Felis margarita* Loche, 1958, in Saudi Arabia. Zoology in the Middle East 42: 99–101
- Sliwa A (2013) *Felis margarita*. In: Kingdon J S & Hoffmann M (eds), The Mammals of Africa, Academic Press, Amsterdam, The Netherlands
- Sliwa A, Breton G, Chevalier F (2013) Sand cat sightings in the Moroccan Sahara. Cat News 59: 28–30
- Strauss WM, Shobrak M, Sher Shah M (2007) First trapping results from a new sand cat study in Saudi Arabia. Cat News 47: 20–21