



New records for the first time in six decades of the Vulnerable Marbled Polecat *Vormela peregusna* in Iraq

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Abstract

The Marbled Polecat *Vormela peregusna* is one of Iraq's rarest mustelids; it is confined to the steppes, arid plains and sparsely vegetated foothills of the northern parts of the country. A few specimens were collected around the vicinity of Mosul in the 1950s; its current status and distribution is mostly unknown. This note describes two new records, obtained in northern Iraq in 2021.

Keywords: distribution; mammals of Iraq; Mustelidae; steppes, human-wildlife conflict

The Marbled Polecat *Vormela peregusna* is one of the most widely distributed Palaearctic mustelids. Its range extends from south-east Europe through Asia Minor, the Middle East, the Caucasus and Central Asia, to northern China and Mongolia (Abramov et al. 2016). It has a patchy distribution in the Middle East, having been recorded in Palestine/Israel, Jordan, Lebanon, Syria, north-western to southern Iran and northern Saudi Arabia (Gorsuch & Larivière 2005, Mallon & Budd 2011). The species's global population is declining in parts of its range as a result of deterioration of the natural steppe and desert habitats, poisoning by rodenticides, shortage of prey, desertification and poaching. The Marbled Polecat has been categorised as Vulnerable on the IUCN Red List of Threatened Species (Abramov et al. 2016).

The status of the Marbled Polecat in Iraq is enigmatic. It is a rare mustelid that inhabits the steppes, arid foothills and high grounds of Mosul (Nineveh Province) in northern Iraq, where a few specimens were collected from in the 1930s and 1950s (Al-Sheikhly et al. 2015). A specimen obtained from ca. 64 km south of Mosul was deposited in the Natural

History Museum, London (Pocock 1936). A mounted specimen was obtained from Mosul in 1950 and deposited in the Iraq Natural History Museum (Hatt 1959). A stuffed skin of unknown locality was found hanging in a shop in Kurkuk market in November 1952 and deposited in the Museum of Zoology of the University of Michigan (Hatt 1959, UMMZ 2022). The fourth and final specimen was obtained from Alkosh (Al-Qosh) Hill, 45 km north of Mosul in mid-1955 and deposited in the Natural History Museum, London (Hatt 1959, Harrison 1968, Harrison & Bates 1991, Puzachenko et al. 2017; Table 1, Fig. 1).

The Marbled Polecat was listed among the wild mammals of the Hawraman Mountain in north-eastern Iraq by Lahony et al. (2013). However, this claim is unsubstantiated, lacking detailed information or photographic evidence.

Recent records

Two records of the Marbled Polecat (local Arabic name *abulfiss*) were documented during a rapid field survey on wild mammals in northern Iraq conducted

Table 1. The pre-1960s and recent records of the Marbled Polecat *Vormela peregusna* (Güldenstädt, 1770) in Iraq.

No.	Locality name	Type of record	Coordinates	Date	Outcome	Reference
1	South of Mosul, Niniveh Province	Skin	35°17'N 43°07'E	?	Kept at Natural History Museum, London (BMNH 30.10.8.1)	Pocock 1936
2	Mosul, Niniveh Province	Dead specimen	36°20'N 43°08'E	1950	Kept at Iraq Natural History Museum	Hatt 1959
3	Kurkuk market, Kurkuk Province	Skin	35°27'59"N 44°23'26"E	1952	Kept at University of Michigan Museum of Zoology	Hatt 1959, UMMZ 2022
4	Alkosh, north of Mosul, Niniveh Province	Skull	36°44'01"N 43°05'56"E	1955	Kept at Natural History Museum, London (BMNH 66.3936)	Hatt 1959
5	West of Al-Shirqat, SalahAdin Province	Live specimen	35°30'18"N 43°11'26"E	6 Jun 2021	Died in captivity	This study
6	Sulaymaniyah Province	Live specimen	34°36'53"N 45°21'48"E	7 Nov 2021	Released	This study

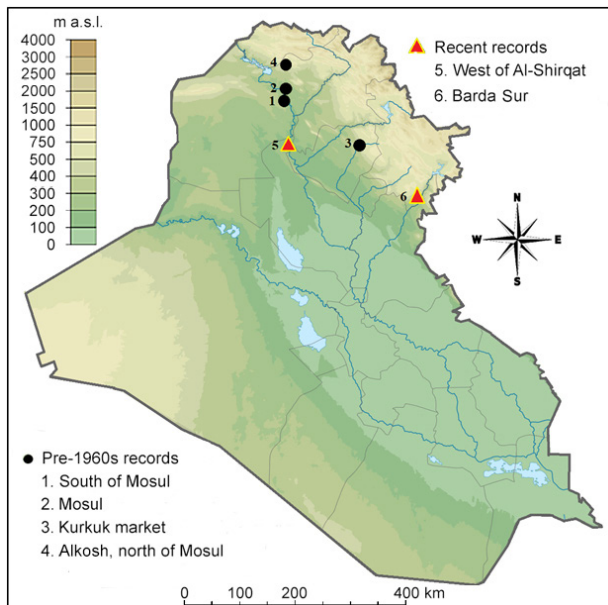


Fig. 1. The distribution of pre-1960s and recent records (2021) of the Marbled Polecat *Vormela peregusna* in Iraq.

during April – December 2021. As part of the survey, intensive interviews were held in rural communities; the interviews focused on the respondents' knowledge of the status of mammal species in nearby Key Biodiversity Areas. Both of the Marbled Polecat records detailed below are of live-captured animals observed during these interviews. The identification was made based on Harrison & Bates (1991).

On 6 June 2021, an adult Marbled Polecat (sex unknown) was captured alive by a villager ca. 10 km west of Al-Shirqat, north of SalahAdin Province in northern Iraq. An interview with the villager indicated that the Polecat was accidentally captured in a Tomahawk live cage trap set to trap Red Foxes *Vulpes vulpes*, which can be destructive to poultry. The Polecat was kept as a pet for a few days before it died in captivity (Fig. 2). Miller (1910) also documented that Marbled Polecats were occasionally caught in traps set for Red Foxes in China.

On 7 November 2021, another adult polecat (sex unknown) was captured alive by a villager on the eastern bank of the Sirwan River in Barda Sur, Kalar, south-east of Sulaymaniyah Province in north-east-

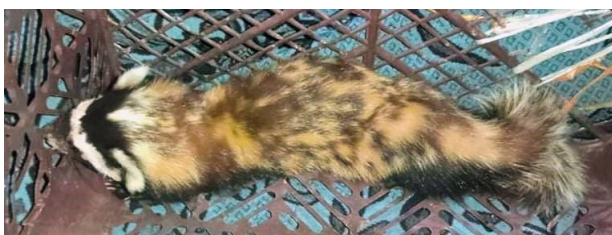


Fig. 2. A Marbled Polecat *Vormela peregusna*, west of Al-Shirqat, SalahAdin Province, northern Iraq, live-captured on 6 June 2021. (Photo: Ahmad H. Al-Gobori.)

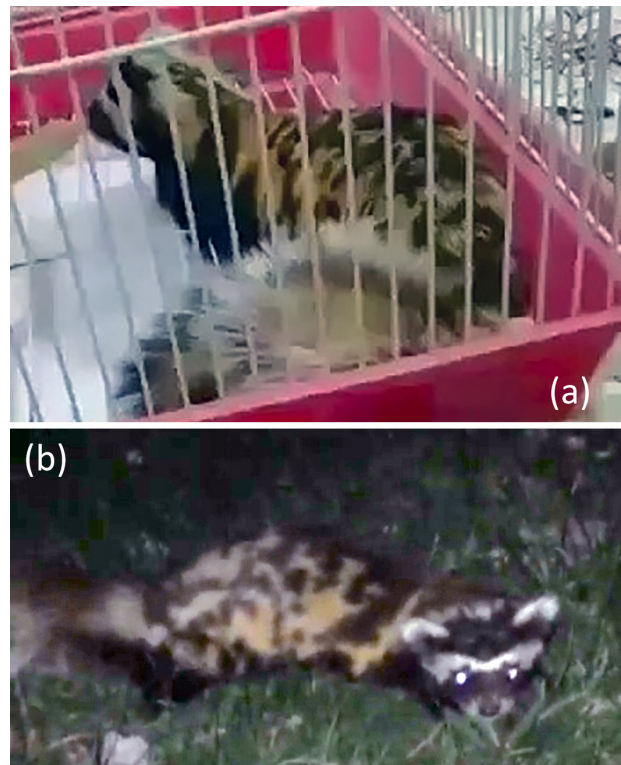


Fig. 3. A Marbled Polecat *Vormela peregusna* (a) live-captured in Barda Sur, Kalar, Sulaymaniyah Province, north-eastern Iraq, on 7 November and (b) at its release on 10 November 2021. (Photo: Shkar Kamaran.)

tern Iraq (Fig. 3a). The villager indicated that the “spotted weasel” was captured alive after entering his backyard and attacking his domestic cat. In captivity, the weasel squeaked loudly at humans and abstained from food, before being released back into the wild near the Sirwan River on 10 November 2021 (Fig. 3b).

Range and status in the Middle East

The Marbled Polecat inhabits a wide range of arid habitats including deserts and semi-deserts, sparsely vegetated plains, rocky wadies, meadows, cultivated fields, upland valleys and foothills, but avoids mountainous regions; it can be found up to 2100 m a.s.l. (Novikov 1962, Stroganov 1969, Roberts 1977, Saleh & Basuony 1998, Gorsuch & Larivière 2005). The habitat of western Al-Shirqat, where one of the recent Marbled Polecat records occurred, is open, arid steppe with narrow, rocky wadies and sparse desert vegetation consisting mainly of *Alhagi* sp., *Haloxylon* sp., *Artemisia* sp., *Achillea* sp., *Teucrium* sp. and *Zizyphus* sp. (Fig. 4). The Barda Sur, Kalar, where the second Polecat record occurred, is an edge zone of mixed habitats of cultivated fields and foothills of the Zagros Mountains with riparian vegetation of *Phragmites australis* beds, *Tamarix* sp. shrubs, *Eucalyptus* sp., *Populus* sp. and date palm *Phoenix dacty-*



Fig. 4. The landscape of west Al-Shirqat, Iraq, 30 July 2012. (Photo: Omar Al-Sheikhly.)



Fig. 5. The landscape of Kalar, Iraq, 1 September 2010. (Photo: Omar Al-Sheikhly.)

lifera trees lining both banks of the Sirwan River, a tributary of the Tigris River (Fig. 5).

Based on previous records, the species seems to be confined to the Middle East Steppe (PA0812) ecoregion (see Olson et al. 2001). However, the recent records were made in the Mesopotamian Shrub Desert (PA1320) ecoregion, extending the known range in Iraq. These two globally vulnerable ecoregions extend from Iraq's north-eastern to north-western extremities (Abdulhasan et al. 2016).

The taxonomic status of the Marbled Polecat in Iraq is questionable. Gorsuch & Larivière (2005) delineated the zoogeographical range of the Syrian subspecies of Marbled Polecat *V. p. syriaca* (Pocock, 1936) from eastern Sinai, through Palestine/Israel, Lebanon, western Jordan and much of Syria, towards northern Iraq, south-eastern Turkey and north-western Iran. Al-Sheikhly et al. (2015) mentioned that *V. p. syriaca* is confined to the Syrian Desert, a trans-boundary habitat in eastern Syria towards the western bank of the Euphrates River in western Iraq. However, a specimen of Marbled Polecat from Iraq was placed in the western subspecies, i.e. the nominate subspecies *Vormela p. peregusna*, in a recent taxonomic revision (Puzachenko et al. 2017).

Conflict with humans

In Iraq, the conservation of carnivores is of great concern on account of the difficulty in managing their large spatial needs and their conflict with human activities (Al-Sheikhly et al. 2014, 2020). Small carnivore populations are declining and becoming rare mainly because of illegal hunting and trapping, which is banned by the Iraqi Wild Animals Protection Law No. 17, issued on 15 February 2010. Regardless, small carnivores are deliberately persecuted by people who consider them to be destructive to poultry or who want them for their fur or as pets; many die from stress and poor husbandry (Al-Sheikhly et al. 2015). Marbled Polecats are trapped for the fur trade in different parts of southern and western Asia and the Middle East (Miller 1910, Lewis et al. 1968, Roberts 1977). In Iraq, the use of small carnivore skins and other parts in traditional medicine and sorcery has been reported (Al-Sheikhly et al. 2015), as

evident by the Marbled Polecat skin found in a shop in Kurkuk market in 1952 (Hatt 1959, UMMZ 2022). It is also possible that the skin had been imported via the fur trade from Europe or elsewhere in Asia (see CPW 2022).

In recent years, as a consequence of residential development, wildlife-human interactions in Iraq have increased due to human intrusion, disturbance and habitat destruction (Al-Sheikhly et al. 2020). Marbled Polecats inhabit the outskirts of settlements in western Serbia (Milenkovic et al. 2000) and are found in cultivated areas in close association with humans in Lebanon (Lewis et al. 1968). They exhibit opportunistic behaviour, are known to take small poultry and rabbits, and enter rural communities and buildings to forage (see Milenkovic et al. 2000); such behaviour is evident by our recent observations. This will put the species at risk of human-wildlife conflict.

In 2021, Iraq has established its first protected areas network, which will provide its endangered biota a chance of survival through governmental protection. However, defining protected area boundaries, estimating the population size and home range of species under protection, and implementing environmental legislations supported by local communities' engagement remain major challenges in carnivore conservation in Iraq (Al-Sheikhly et al. 2020). Furthermore, additional wildlife monitoring programmes are urgently required to aid the establishment of the country's protected area network.

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