

REPORT

THE STATUS OF IRAQ SMOOTH-COATED OTTER *Lutrogale perspicillata maxwelli* Hayman 1956 AND EURASIAN OTTER *Lutra lutra* Linnaeus 1758 IN IRAQ

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Abstract: Since the 1960s field expeditions, there has been little more knowledge acquired about the mammals of Iraq. There were also no previous surveys dedicated to assessing the status and presence of the two otter species described in Iraq: The Eurasian otter (*Lutra lutra*) and the Iraq smooth-coated otter (*Lutrogale perspicillata maxwelli*, an endemic subspecies). Historically, both species thrived among suitable habitats of Iraqi wetlands and were named by Iraqis "Chlaeib Al M'ai" meaning "The waterdog". Both species' populations have declined substantially 1991-2003 due to hunting and habitat destruction. During 2005-2012, intensive in situ field research has been done aimed at revealing the status of otters in Iraq. Different types of habitat at 21 sites across nine Iraqi provinces were visited and information about both species has been recorded. The smooth-coated otter (the endemic subspecies *maxwelli*) has proven by current research to be thriving in the southern Iraqi marshes with an additional remarkable sighting in northern Iraq (Kurdistan Region). Our research describes for the first time the geographical distribution, threats, and conservation status of both of these otter species in Iraq.

Keywords: Carnivores, *Lutra lutra*, *Lutrogale perspicillata maxwelli*, Mammals, Endemic, Eurasian otter, Marshes, Otter, smooth-coated otter.

INTRODUCTION

Iraq is situated at the northern range of the Arabian Peninsula and has a variety of suitable aquatic habitats for otters and other aquatic-associated species. The Tigris and Euphrates Rivers form the southern Iraqi marshland, which is one of the unique aquatic landscapes in the Middle East. The mountains of Zagros and Hasarost extend

to the north and northeast while western and southwestern Iraq are mainly desert and semi desert. The marshes of southern Iraq are crucial ecosystems, which influence, and also are influenced by many natural forces and human activities. These marshes are very important as incubators for fish and invertebrates, and play a vital role as habitat for the majority of wildlife in the region (Al-Saad et al., 2010).

Two otter species exist in Iraq: The Eurasian or Common otter (*Lutra lutra*) and the endemic Iraqi subspecies of the smooth-coated otter (*Lutrogale perspicillata maxwelli*). The Eurasian otter is known to occupy permanent rivers, lakes, and marshes throughout Iraq. Ainsworth (1838) reported the Eurasian otter from the Tigris and Euphrates Rivers. Later, Danford and Alston (1877) reported that otters were "not uncommon in Asia Minor, especially in the trout streams of the Taurus". They suggested that the species ranges through all of the major waterways in Iraq from the Arabian Gulf to the northern frontiers; Cheesman (1920) listed a specimen from Amara (Mayssan province); and Sanborn (1940) reported an individual from Qalat Salih near Amara. Hatt (1959) recorded two specimens; one from the Tigris near Al Zuhour Royal Place in Baghdad which was presented to the Iraq Natural History Museum by King Faisal II on December 1954, and another obtained from Mosul market as a trade skin. Hatt (1959) stated that otters occur at the Hindiya Barrage on the Euphrates where fishermen catch many otters, which were apparently numerous at the time because of an abundance of prey fish, and were also attracted by extensive fish netting in the river. Specimens of Eurasian otter collected from the southern shore of Hor Al-Hammar, west of Basra and Abusakhair, 35 miles south east of Amara on 29th of November 1956 are in the British Museum (Hayman, 1957; Harrison, 1968). The historical distribution of the Eurasian otter in northern Iraq is uncertain. Otters were not documented in mountain streams, but the remains of many partially eaten crabs reported from the Tigris River tributaries at Sarsank (Duhok province) indicate the possibility that one or both species once occupied the area (Hatt, 1959).

The Iraq smooth-coated otter is only known from the marshes of southern Iraq. Hayman (1956), in describing *Lutrogale perspicillata maxwelli* raised doubts about the reliability of earlier reports of otters from Iraq. Hayman said that Gavin Maxwell, when he returned from a journey with Major Wilfred Thesiger in the marshes of southern Iraq, brought to London two otter skins and one live cub which was about eight months old. The larger of the skins and the live cub undoubtedly represented the Smooth-coated otter, while the smaller skin was that of a Eurasian otter. The Iraq smooth-coated otter skin was from an apparently adult male (without skull) purchased on February 29th 1956 at the village of Abusakhair of Faraijat tribe, 35 miles south east of Amara on Tigris, and presented to British museum by Mr. Maxwell (Hayman, 1956). The live cub was probably obtained from a tumulus island village called Daub, 12 miles North West of Al-Azair, west of the Tigris (Hayman, 1956; Maxwell, 1957, 1960; Harrison, 1968). Both Maxwell (1957) and Thesiger (1964) saw otters on a number of occasions, and describe them as common around Hor Az Zikri in the Central Marshes and at Hor Al -Hawizeh. However, otters (presumably of both species) were heavily persecuted for their skins in the 1950s (Thesiger, 1964).

Two specimens, a female and an immature male, were additionally recorded from the Tigris River near the vicinity of Al-Azair of Amara by Hatt (1959) who stated that the recognition of a second species of otter in the marshes of Iraq is a matter of great interest. Both species were mentioned by George and Mahdi (1969) in their list of the Iraqi mammals but without giving further details.

During the period of 1991 -2003, wide areas of reed beds and lakes of southern Iraqi marshes were ditched and drained by the previous Iraqi regime for political reasons. Scott and Evans (1993) concluded that drainage of the wetlands of Lower

Mesopotamia would almost certainly result in the global extinction of the Iraq smooth-coated otter. The destruction and drainage of the Iraqi marshes affect the wildlife of southern Iraq (Richardson and Hussain, 2006). Hussain et al. (2008) suspected that the global population of the Smooth-coated otter has declined by >30% over the past 30 years due to large-scale hydroelectric projects, reclamation of wetlands for settlements and agriculture, reduction in prey biomass, poaching and contamination of waterways by pesticides. Due to hunting and habitat destruction there has been a marked decline in both species population especially of the endemic Iraq smooth-coated otter (Al-Sheikhly, 2012).

During 2005-2012, an intensive wildlife monitoring program was established by Canada-Iraq Marshland Initiative CIMI, Nature Iraq, and the Iraqi Ministry of the Environment (IMoE). The surveys were focused on monitoring and assessing the status of wildlife all over Iraq. One of the program objectives was to survey and monitor the aquatic wildlife in the southern Iraqi marshlands. It was essential to determine the status of otters in general as they have a role as bio-indicators to measure the health of the aquatic ecosystem. In addition, the Iraq smooth-coated otter represents a flagship and endemic species to the Iraqi marshes and its current status and distribution in Iraq was not fully recognized. The monitoring surveys aimed to ensure the following objectives:

- proving the permanence presence of the Iraq endemic Smooth-coated otter in the southern Iraqi marshlands;
- evaluating the status (occurrence and distribution) of the Iraq endemic smooth-coated otter;
- evaluating the status (occurrence and distribution) of the Eurasian otter;
- determining the main habitats and landscapes which are suitable for both species of otter, and which are currently used by those animals;
- determining the main threats and their impact on both species and on their habitats, in order to address the most proper and effective actions to conserve both species.

STUDY AREA

We collected data pertaining to the presence of Eurasian otter and the endemic Iraq smooth-coated otter during in situ field surveys along the Tigris and Euphrates River drainages, tributaries, big lakes and reservoirs, seasonal and permanent streams, mountain water courses, and from the southern Iraqi marshlands. In southern Iraq the survey efforts covered the southern part of Tigris and Euphrates basin and their tributaries. Three main big Iraqi marshes (marsh = Hor in Arabic) situated in three Iraqi provinces, known as the Central Marshes, Hammar Marshes (Hor Al-Hammar), and Hawizeh Marshes (Hor Al-Hawizeh), were surveyed (Fig. 1). In addition the coastline of Fao at the extreme southern end of Iraq, near the national borders with Kuwait and Iran, have also been covered by the southern surveys.



Figure 1. Left: *Lutra lutra* and *Lutrogale perspicillata maxwelli* overlapping area in southern Iraq delineated in yellow. Right: The dense reed beds and waterways of Hor Al-Hammar a typical landscape for Iraq smooth-coated otter © Omar F. Al-Sheikhly 2008

In central Iraq, many lakes, permanent and seasonal shallow pools, and marshy streams in the drainage of the Tigris and Euphrates rivers, situated in three Iraqi provinces, were covered by the current survey. Hor Al-Dalmaj, Tigris River and its branches at Tarmiya and Al-Alam Areas, Samara Lake, and Himreen Lake were the main localities surveyed in central Iraq. The main Euphrates waterway in western Iraq, mainly near the Haditha and Khan Al- Baghdadi marshes of Anbar province, was surveyed. In Northern Iraq (Kurdistan region), the survey covered mountains streams, the upper Tigris basin and its tributaries, and big lakes and reservoirs situated in two provinces in northern Iraq (Table 1).

MATERIALS AND METHODS

The data were collected during in situ field surveys and from additional notes obtained from personal field observations made by the authors in 2005-2012. We examined 21 sites throughout Iraq biannually from late November 2005 to early April 2012 or when access was possible. The records were derived from direct visual observations of live animals in the wild or in captivity, dead specimens due to hunting or trapping, and examination of skins or mounted specimens, tracks, scats, and field signs and otter calls or vocalization. Hunters', anglers', and local peoples' reports, pictures, and interviews were also considered. The Iraq Natural History Research Center and Museum, zoos, and local animals markets were visited. Records documented by photographs produced by provisional EOS Canon cameras, camera traps, and video recordings in order to gain more detailed information about the identification and actual status of otters in Iraq.

RESULTS

We found evidence of Eurasian otter and Iraq smooth-coated otters at 21 sites (Table 1) (Fig. 2). Earlier Iraqi historical records in Hatt (1959), Harrison (1968), and Harrison and Bates (1991) were the main guidelines used to decide otter hot spots for detailed surveying. In December 2005, three Iraqi provinces in southern Iraq were covered by CIMI and Nature Iraq fieldwork. One of the main challenges for the surveying team was to prove the permanence presence of Iraq endemic smooth-coated otters in the southern marshes. The areas where Iraq smooth-coated otter was described by Hayman (1956) and Maxwell (1960) have been drained by the previous

Iraqi political regime during 1990s and changed to barren semi-desert areas. Habitat destruction and shortage of prey were observed in many areas of the southern marshes in 2005 and 2006. During the survey in Rass Al-Beisha south of Fao in Basra province, an interview with local hunters indicated the presence of the “Waterdog” near the marshy ponds of Rass Al-Beisha in December 2005. The hunters spoke of otters swiftly sneaking among tall and dense reed beds and being occasionally seen preying on fish; also they described otters as having small sized bodies, black-gray coloration, rounded heads, and flattened tail, and such a description is very close to the forma description of the Iraq smooth-coated otter. In January 2006, a fresh skin of an adult male obtained by local fisherman was examined at Abu Al-Khasib (to the south east of Basra). The fisherman said that the otter was accidentally killed by his electro-fishing device when he was fishing at night. The area of Umm Al-Rassas, which is situated to the south of Abu Al-Khasib Township, is a unique mixture of date palm orchards and dense reed beds extends along river banks. The identification of the skin as an Iraq smooth-coated otter comprised the first indication of permanence occurrence of this subspecies in southern Iraq. In February 2008, hunters and fishermen reports from Al-Ebra Umm Al Sijian south of Hor Al - Hammar indicated active nocturnal movement of otters. Al-Ebra mainly consists of open shallow water with thick reed vegetation and muddy shores. In addition the site providing abundant prey, mainly fish such as *Barbus luteus* and *Liza abu* and crabs. Hunters of Al-Ebra said that otters were occasionally seen lying down on small muddy islands before they dive when agitated by human presence. Many suitable habitats, tracks, and feeding remnants found at the site.

In ThiQar province, otters were reported from three localities. Local reports indicated the presence of otter in Al - Baghdadiya Lake in Chebaeish in January 2009, and Hor Abu Zirig in the vicinity of Al-Isalah (in the Central Marshes west of ThiQar province) on December 2007. The open lakes lined with dense reed beds and submerged aquatic vegetation with muddy platforms are the main habitats in both sites. Local reports of two fresh killed otters and one preserved skin indicated the presence of otters in Chebaeish; the skin was obtained from the lake of Al - Baghdadiya. Another adult male otter was shot by a local hunter near Abu Ajaj to the west of Hor Al-Hammar on August 2008. The examination of the Abu Ajaj preserved skin confirmed the presence of the endemic Iraq smooth-coated otter at northern side of Hor Al-Hammar. In Mayssan province, both otter species were recorded from four localities.

In January 2008, two fresh skins of a recently killed adult male Eurasian otter and an adult male Iraq smooth-coated otter were obtained from a local animal trader at the old city of Amara (Fig. 3). The trader indicated that the Eurasian otter was killed in Al-Musharah River (one of Tigris tributaries in Mayssan), and the Smooth-coated otter was killed in Umm Al- Na’aj (the core lake of Hor Al-Hawizeh) and that both otters were killed by electrocution. The skin of the Hor Al-Hawizeh otter showed remarkable features and measurements. The total length (L: 1000mm) and the tail length (T: 370.5 mm) closely resembled Hatt's (1959) measurements of an adult female Iraq smooth-coated otter obtained from Al-Azair on the Tigris (Harisson, 1968). The tail of the Iraq smooth-coated otter provides the principle distinguishing feature, being dorso-ventrally flattened, lacking the cylindrical shape of that of the Eurasian otter, and covered with short dense hair. The shape of the head and muzzle were somewhat less flattened than in the Eurasian otter. The eyes were small and situated more anteriorly than in the Eurasian otter, so that the distance between the eye and rhinarium is shorter and that between eye and ear is relatively longer in Iraq smooth-coated otter. The dorsal coloration of the head and the back was uniformly

chocolate-brown; the under parts were slightly paler; the side of the neck, head, and muzzle were buffish; the throat was iron-grey.

The presence of otters has been noted at Hor Al-Dalmaj which is an isolated wetland situated in Qadisiya province. Hunters of Dalmaj reported dark and pale furred otters, but that they were rarely seen (Salim, M., pers. comm.).

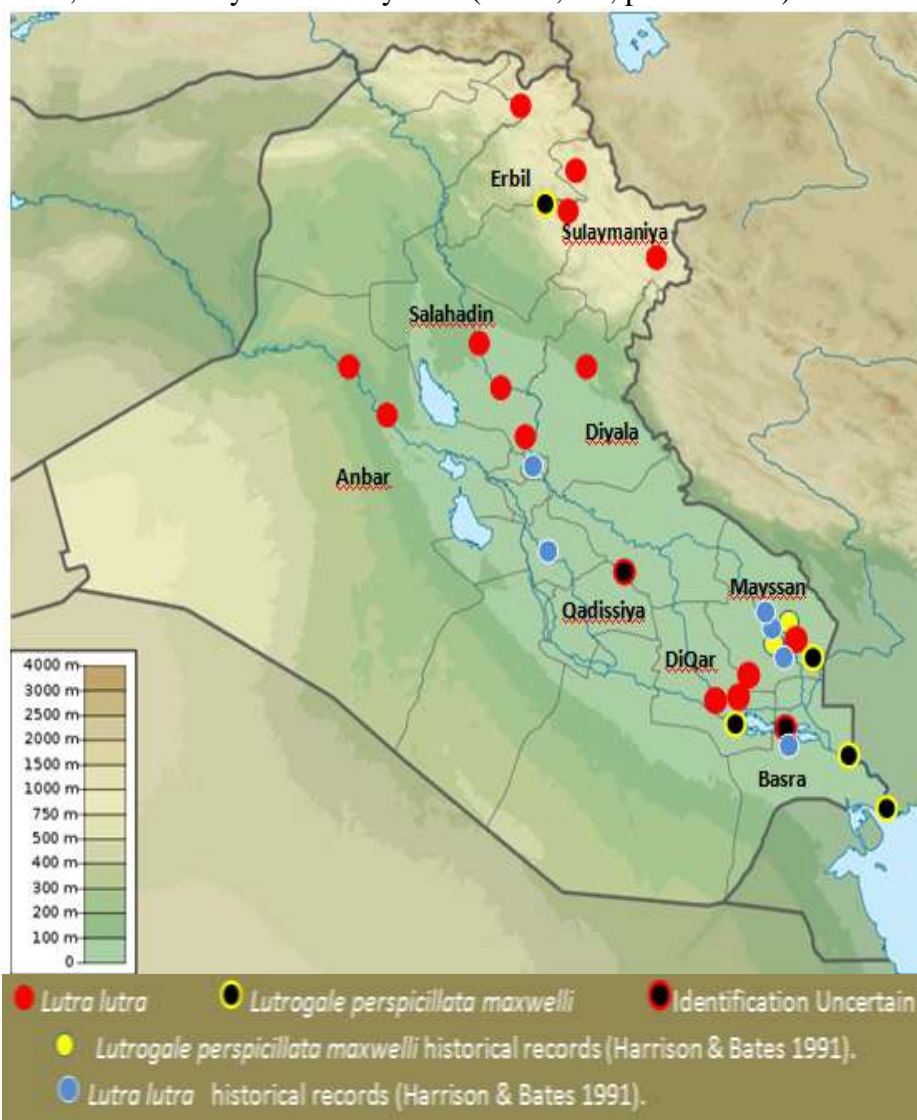


Figure 2. Iraq Map shows the historical and recent sightings of *Lutra lutra* and *Lutrogale perspicillata maxwelli*



Figure 3. Fresh otter skins obtained from Amara city in Mayssan province south of Iraq. © Mukhtar K. Habba.

The status of otters in central and western Iraq was unclear, represented by a few notes and observations made by Harrison (1968). Otters have been recorded from six sites situated in Salahadin, Diyala, and Anbar provinces. An adult male Eurasian otter had been shot by local hunter in Tarmiya north of Baghdad in April 2009 and it was presented to Iraq Natural History Research Center and Museum. Interviews with local hunters in Samara reported that an adult male was killed in May 2011 by electrocution at Samara Lake south east of Salahadin province in central Iraq. In May 2012, adult male and female Eurasian otters were shot by a local hunter on the Tigris shore of Al-Alam near Tikrit. River banks, with muddy and gravelly shores lined with dense vegetation of *Tamarix* sp., *Populus* sp., *Ziziphus* sp., *Albizia* sp., *Salix* sp. and scattered *Phragmites* sp. and *Typha* sp. beds are the main habitat type in the areas where the otters were killed. In April 2012, a live specimen of adult female Eurasian otter was trapped by a local hunter at Himreen Lake in Diyala province; it later died due to injuries caused by trapping (Fig. 4).

Five sites distributed in two northern Iraqi provinces (Kurdistan region) have witnessed the presence of otters. The Little Zab River, a Tigris tributary, was one of the main otter hot spots in northern Iraq. Adult male and female otters were killed by local fisherman by electrocution at Little Zab near TaqTaq in Erbil province in March 2007 and their skins were collected by authors (Fig. 4). The killed otters examined by Al-Sheikhly and Dr. Mukhtar K. Haba and they were identified as Smooth-coated otters rather than Eurasian otters. Nature Iraq carried out an expedition to monitor the habitat and to locate live specimens to reveal the status of TaqTaq otters. Afterwards, DNA analysis on one of the TaqTaq otters confirmed the identification as *Lutrogale perspicillata*, which is marked range extension of more than 500km north, with the intervening area having poorly known otter species (Omer et al., in press). Apart from these TaqTaq otters, all other northern Iraq records were of Eurasian otters. Interviews with local hunters and fishermen indicated the presence of otters at the big lakes of Dukan and Derbendikhan in Sulaymaniya province, but no specimens obtained. On June 2010 otter scats and tracks were observed near Koi Sanjaq along the little Zab River, and later on two Eurasian otters were flushed by torchlight during a night survey on the Rezan River in the Barzan Area, Mergasour district, Erbil, northern Iraq on May 2011.

DISCUSSION

Monitoring wildlife and any related field work was not fully acknowledged by the previous Iraqi regime during 1990s; therefore little was known about the wildlife of Iraq in general and otters specifically. The marshland landscape of southern Iraq was totally drained and <10% of the area remained as functioning marshland by the year 2000. The only remaining marsh of any size was the northern portion of Hor Al-Hawizeh, which straddles the border between Iraq and Iran. The other two marshes, Central and Hor Al-Hammar, were virtually destroyed by 2000. The remaining Hor Al-Hawizeh was only 35% of its 1977 size of 3076 km² by 2000 (Richardson and Hussain, 2006). In 2003 the Iraqi authorities in cooperation with locals of the marshes "Marsh Arabs" broke the dikes and embankments that were constructed during previous Iraqi regime in order to block the water of Tigris and Euphrates from passing into the marshes of southern Iraq. 40% of these Iraqi marshes have been inundated during 2003 – 2006 (Richardson and Hussain, 2006). Hawizeh Marsh is the only Iraq Ramsar site and is one of the biggest marshes in southern Iraq. It is situated in the southeast of Iraq, east of Mayssan province, and extends beyond Iraq's southern national borders into Iran where it is known as the Al-Azem marshland. Hor Al-

Hawizeh was not drained completely during the 1990s but only 35% of its 1977 size of 3076 km² by 2000 (Richardson and Hussain, 2006) (Fig. 1). It is believed that Hor Al-Hawizeh was the last refuge for the endemic Iraq smooth-coated otter population and the skin found at of Umm Al- Na'aj was distinctive evidence of this.



Figure 4. Left: Adult female *Lutra lutra* trapped in Himreen Lake of Diyala. © Omar F. Al-Sheikhly 2012. Right: Dead *Lutrogale perspicillata maxwelli* in TaqTaq examined by author © Mukhtar K. Haba, 2007.

The data from southern Iraq indicates that Hor Al-Hammar and Hor Al-Hawizeh are overlapping areas of two otter species. The Iraq Smooth-coated otter seems to be restricted to deep fresh water lakes with dense and tall reed beds in remote areas of extreme southern Iraq along the Iranian borders, or resident in small patches of western and southern Hor Al-Hammar. The Eurasian otter, which is the more abundant species, thrives in the tributaries, streams, and estuaries of the Tigris and Euphrates rivers in southern Iraq.

The identification of the Al-Ebra Umm Al Sijian otter in Basra was uncertain. The site is close to Hatt's (1959) previously recorded Eurasian otter, and our current observations at Al-Ebra Umm Al Sijian are of animals resembling this species, but further research and sampling from Al-Ebra Umm Al Sijian is needed to be certain.

The reports of otters in Hor Al-Dalmaj most likely indicate Eurasian otters because of the habitat and the large distance from any other observation of smooth-coated otters (Hayman, 1956), but more sampling is required from Dalmaj to reveal the identity of otters present there.

The situation in northern (Kurdistan Region) and central Iraq was similar to southern Iraq: Most sites such as big lakes and main river tributaries were restricted as far as civilian activity goes during 1980s - 1990s. Very few reports related to wildlife in general and mammals in particular are known from northern and central Iraq. Only permitted hunters were allowed limited access to certain areas in central and western

Iraq, and these were the only source of information from that part of Iraq during 1980s - 1990s.

The remarkable observation of an Iraq smooth-coated otter in TaqTaq, Erbil in northern Iraq was a matter of interest. The general landscape in the site was ideal for Eurasian otters, which is the species originally suspected to have been observed, and which thrive at the site. It was surprising that the DNA analysis of the two otters obtained from TaqTaq indicated *Lutrogale perspicillata* since the next firm identification of this species is about 500km further south (Omer et al., in press). Consequently, further sampling and research is recommended in TaqTaq.

Hunting and trapping are the main threats impacting wildlife in Iraq, because of weak implementation of current hunting laws and legislations. Thesiger (1964) noted that otters (*Lutra spp.*) were widely hunted for their skins, and mentioned one person who shot 40 otters in the space of two months. The hunting impact and the absence of scientific knowledge about endemic Iraqi species among many of the local hunters and fishermen has led to a worrying decline in many species' populations (Al-Sheikhly, 2012). Otters are targeted by local hunters and fishermen all over Iraq wherever and whenever possible. The local hunters of the southern marshes used to collect otter cubs during early March and mid April each year in order to be raised as pets by marsh Arabs "Ma'dan" or to be trained by fishermen to chase and catch large fishes (Fig. 5). Today, adults of both species are trapped by submerged cages, traps and nets mainly for their fur. The fur is sold to smugglers along the borders of Iraq with prices ranging from \$100 to \$300 each. Otter skins are used as waterproof sacs, filled with contraband and inserted inside the gasoline tanks of the smuggling cars. The otter fur sac prevents the contraband from getting wet or damaged (Al-Sheikhly, 2012). Otter hunting was a famous profession during the 1980s and 1990s in certain places in central Iraq, especially near Samarra Lake. Otters were trapped using handmade submerged cages called "Fakhatt Al M'ai" which were set up near reed beds or lakes outlets, and were sold in the old bazaars of Tikrit (Al-Azawi, H., pers. comm.).



Figure 5. A very rare photograph of the Marsh Arab "Ma'dan" of southern Iraq shows one of the local hunters holding otter cub obtained from Mayssan marshes. The picture was obtained from local hunter collection and presented in M.Sc thesis of M. Al-Hilli from 1950s. Photo of photo © Omar F. Al-Sheikhly.

The conflict between otters and fishermen is producing a marked effect on the otter population in Iraq. Most of the otter specimens examined during the research were killed accidentally by local fishermen via electro-fishing devises. Electrocutation caused serious damage to the otter's nervous system as they get temporally paralyzed, and they start to float or drown as soon as they come in contact with the electricity waves. Most of the fishermen have no or little experience with stunned otters; they get terrified when they see the shocked otters and they try to kill them immediately. Some fishermen use their boat paddles to hit the otters on the head, while others continued shocking the water with high voltage waves at the spot where the otter was stunned the first time in order to ensure the otter's death.

Table 1. Otter sightings in Iraq 2005-2012. No. sp. =Number of Specimens; Sp. =Species; Sc. = Scat; Tr. =Tracks; Re. =Remnants; In. =Interview; Sk. =Skin; Ds. =Dead specimen; Ls. =Live specimen.

Site	Province	Coordinates	No. sp.	Sp.	Sc	Tr	Re	In	Sk	Ds	Ls
Southern Iraq	Fao – Rass Al-Beisha	Basra	N 29°56' E 48°32'		<i>Lutrogale</i>			+			
	Al-Ebra Umm Al Sijian – South of Hor Al – Hammar		N 30°41' E 47°12'		uncertain			+	+		
	Abu Al-Khasib and Umm Al Rassas Island		N 30°26' E 48° 6'	1♂	<i>Lutrogale</i>				+	+	
	Abu Ajaj –Hor Al-Hammar	ThiQar	N 30°49' E 46°36'	1♂	<i>Lutrogale</i>					+	
	Al – Baghdadiya Lake Chebaeish-Central Marshes		N 31° 3' E 47° 2'		<i>Lutra</i>				+		
	Hor Abu Zirig – vicinity of Al-Isalah-Central Marshes		N 31° 1' E 46°41'		<i>Lutra</i>				+		
	Umm Al- Na'aj lake-Hawizeh Marshes	Mayssan	N 31°37' E 47°35'	1♂	<i>Lutrogale</i>				+	+	
	The vicinity of Al-Maimona		N 31°25' E 46°59'		<i>Lutra</i>				+		
	Al-Musharah River	Qadissiya	N 31°51' E 47°15'	1♂	<i>Lutra</i>				+	+	
	Hor Al-Dalmagj		N 32°11' E 45°25'		uncertain				+		
Central Iraq	Tarmiya Area	Salahadin	N 33°43' E 44°24'	1 ♂	<i>Lutra</i>				+		
	Al-Alam Area		N 34°42' E 43°40'	2♀, ♂	<i>Lutra</i>				+	+	
	Samarra Lake		N 34°12' E 43°49'		<i>Lutra</i>				+		
	Himreen Lake	Diyala	N 34° 9' E 45° 1'	1♀	<i>Lutra</i>				+		+
Western Iraq	Khan Al-Baghdadi Marshes	Anbar	N 33°52' E 42°31'		<i>Lutra</i>				+		
	Haditha Marshes		N 34°10' E 42°23'		<i>Lutra</i>				+		
Northern Iraq (Kurdistan Region)	Darbendikhan Lake	Sulaymaniya	N 35° 7' E 45°44'		<i>Lutra</i>				+		
	Dukan Lake		N 35°58' E 44°57'		<i>Lutra</i>				+		
	little Zab River		N 35°51' E 44°47'		<i>Lutra</i>	+	+				
	Rezan River- Barzan Area	Erbil	N 36°55' E 44° 0'	2	<i>Lutra</i>		+				+
	Taq Taq		N 35°54' E 44°36'	2♀, ♂	<i>Lutrogale</i>	+	+		+		+

CONCLUSION

The Eurasian otter and Iraq smooth-coated otter are still thriving in the wetlands of Iraq. We worked from 12 samples obtained from 21 sites all over Iraq in addition to confident reports and field observations. The Iraq smooth-coated otter was recorded from five specimens from five localities in four Iraqi provinces. The Eurasian otter was the most common species recorded by seven specimens obtained from five localities in four Iraqi provinces in northern, central and western Iraq. The Eurasian Otter is restricted to dense vegetated river banks, stationary rain puddles, mountain streams, and reservoirs of Tigers and Euphrates basin. The Iraq smooth-coated otter prefers dense, tall reed beds, marshy lakes and ponds in southern Iraqi

marshes with one interesting observation at a mountain river in TaqTaq. The range extension of Iraq smooth-coated otter ca. 500km to the north of its described range is a subject of great interest and further investigation. Two overlapping areas between both species occur in southern Iraq: the Hor Al-Hawizeh and Hor Al-Hammar Marshes. The presence of both species in one area is a matter of further research especially when Hor Al-Hammar has faced a marked ecological devastation and secondary ecological succession during 1990s which might lead to a re-distribution of the fauna of the site. A great deal of advice has been given to the Iraqi authorities, and huge efforts proposed in order to conserve and protect the last few populations of otters in Iraq. In addition, enforcing the implementation of the existing hunting legislation will be essential in order to reduce the hunting impact on both species especially at a time when Iraq is currently discussing becoming a signatory state to the Convention on International Trade in Endangered Species of Fauna and Flora (CITES).

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RÉSUMÉ

STATUT DE LA LOUTRE A POIL RAS *Lutrogale perspicillata maxwelli*, Hayman 1956 ET DE LA LOUTRE D'EUROPE *Lutra lutra* Linnaeus 1758 EN IRAK

Depuis les expéditions sur le terrain de 1960, il existe peu de données sur les mammifères d'Irak. Il n'y a d'ailleurs pas de sondages destinés à évaluer le statut et la présence des deux espèces de loutres décrites en Irak; La Loutre d'Europe (*Lutra lutra*) et la Loutre à poil lisse d'Irak (*Lutrogale perspicillata maxwelli*; une sous-espèce endémique). Historiquement, les deux espèces nommées «Chlaeib Al M'ai» par les Irakiens ce qui signifie «chien d'eau», ont prospéré dans les habitats favorables qu'étaient les zones humides irakiennes. Les deux populations ont diminué de manière substantielle à cause de la chasse et la destruction des habitats entre 1991 et 2003. Durant la période 2005-2012, un vaste programme de recherche sur le terrain visait à définir les statuts des loutres en Irak. Différents types d'habitats répartis sur 21 sites des neuf provinces irakiennes ont été visités et les deux espèces ont été enregistrées. La Loutre à poil lisse est en pleine progression dans les marais du sud où elle est actuellement suivie, et elle est présente de façon remarquable dans le nord du pays (Kurdistan). Nos recherches décrivent pour la première fois la répartition géographique, les menaces et l'état de conservation de ces deux espèces de loutres en Irak.

RESUMEN

STATUS DE LA NUTRIA LISA *Lutrogale perspicillata* Hayman 1956, Y DE LA NUTRIA EUROASIÁTICA *Lutra lutra* Linnaeus 1758, EN IRAQ

Desde las expediciones de los 1960s, se ha agregado poca información sobre los mamíferos de Iraq. Asimismo, no había prospecciones previas dedicadas a evaluar el status y presencia de las dos especies de nutrias registradas en Iraq: la nutria euroasiática (*Lutra lutra*) y la nutria lisa de Iraq (*Lutrogale perspicillata maxwelli* - una subespecie endémica). Históricamente, ambas especies prosperaron en hábitats aptos en los humedales de Iraq, y han sido nombradas por los Iraquíes "Chlaeib Al M'ai", que significa "el perro de agua". Las poblaciones de ambas especies han declinado sustancialmente debido a la caza y la destrucción de hábitats, entre 1991-2003. Entre 2005-2012 se hizo una investigación de terreno intensiva, dirigida a revelar el status de las nutrias en Iraq. Se visitaron diferentes tipos de hábitat distribuidos en 21 sitios, en nueve provincias de Iraq, y se registraron ambas especies. La nutria lisa (subespecie endémica *L. p. maxwelli*), como lo demostró esta investigación, está prosperando en las marismas del sur de Iraq, con el agregado de un avistaje notable en el norte (Región de Kurdistan). Nuestra investigación describe por primera vez la distribución geográfica, amenazas, y status de conservación de estas dos especies de nutria en Iraq.

الخلاصة

منذ البعثات الحقلية التي أجريت في ستينيات القرن الماضي لم يتوفر سوى القليل من المعلومات حول الثدييات في العراق. كما لا توجد هناك مسوحات حقلية مكرسة لتقييم حالة وتواجد النوعين من كلاب الماء " القضاعات" الموصوفة والمسجلة من العراق وهما : كلب الماء " القضاعة" الأوراسية (*Lutra lutra*) و كلب الماء " القضاعة" ملساء الفراء العراقية, الضرب المستوطن (*Lutrogale perspicillata maxwelli*). في السابق كان كلا النوعين يؤمان العديد من الموائل الملائمة في الأراضي الرطبة العراقية ويعرفان من قبل السكان المحليين باللغة العامية العراقية بـ " جليب الماي" والتي تعني " كلب الماء". تعرضت المجاميع السكانية لكلا النوعين الى انحدار مستمر نتيجة لعمليات الصيد الجائر وتدمير الموائل خلال الأعوام 1991-2003. تم خلال الاعوام من 2003-2012 دراسة حقلية مستفيضة تهدف الى معرفة وابطاح حالة القضاعات في العراق . تم زيارة العديد من الموائل المختلفة لـ 21 موقعا موزعا ضمن تسعة محافظات في انحاء العراق وتم تسجيل كلا النوعين خلال المسوحات الحالية. أن بقاء تواجد الضرب المستوطن من كلب الماء " القضاعة" ملساء الفراء العراقية في الاهوار الجنوبية العراقية , يترافق مع تسجيل بقعة تواجد وانتشار مميزة له في كردستان شمال العراق تم اثباته خلال المسوحات الحالية. ان البحث الحالي يصف ولأول مرة الأنتشار الجغرافي , المهددات, وحالة صون كلا النوعين من القضاعات في العراق.