

## REPORT

# OTTER HUNTING AND TRAPPING, A TRADITIONAL PRACTICE OF MARSH ARABS OF IRAQ

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**Abstract:** Two species of otter inhabit the marshes of southern Iraq: the European otter (*Lutra lutra*) and the smooth-coated otter (endemic subspecies: *Lutrogale perspicillata maxwelli*). Marsh Arabs have targeted otters since at least the 1950s. Nowadays, local marsh inhabitants are still heavily hunting otters for their fur or trapping their cubs to be raised as pets. These practices, together with habitat destruction (i.e., marshland drainage), represent primary threats to the otters' survival in Iraq, and have caused a dramatic decline in otter populations. We report on traditional hunting and trapping methods in Iraq on European and smooth-coated otter, and on the consequences on the conservation of these endangered species.

**Key Words:** Carnivores, Endemic, European otter, *Lutra lutra*, *Lutrogale perspicillata maxwelli*, Mammals, Marshes, Otter, Smooth-coated otter.

## OTTER TRAPPING AND HUNTING IN IRAQ: AN OVERVIEW WITH SOME HISTORICAL RECORDS

Mesopotamian marshlands are included in a huge wetland ecosystem covering an area of 20,000 km<sup>2</sup> (7,700 mi<sup>2</sup>), whose major part lies in southern Iraq while a minor one lies in southwestern Iran (Hussain, 2014). The marshes of southern Iraq comprise three major wetlands: the Central Marshes (31°0'N; 47°2'E), between the Tigris and Euphrates Rivers; the Hammar Marshes (30°50'N; 46°49'E), south of the Euphrates River; the Hawizeh Marsh (31°36'N; 47°36'E), east of the Tigris River. The marshes represent an important ecoregion of Iraq and provide an essential habitat for the unique flora and fauna of the country (Al-Saad et al., 2010).

The Marsh Arabs (“M’adan”) are the primary inhabitants of the Mesopotamian marshes. They usually live in secluded villages of decorative reed houses (“Seraeif”) that can often be reached only by boat (Thesiger, 1964). Marsh Arabs provisions mainly rely on fishing, waterfowl hunting, reed harvesting, and water buffalo

(*Bubalus bubalis*) raising. Two otter species can be found in the Iraqi marshlands: the European otter (*Lutra lutra*) and the endemic subspecies of the smooth-coated otter (*Lutrogale perspicillata maxwelli*) (Al-Sheikhly and Nader 2013). Since the 1950s locals have been persecuting both otter species for their skins (Thesiger, 1954). Hence, it does not come as a surprise that the discovery of the smooth-coated otter in Iraq in 1956 relied on a trapped otter cub and on a skin recovered from a dead individual (Hayman, 1956; Al-Sheikhly and Nader, 2013). For instance, the most “famous” cub was a six week old male otter named “Mjbil”, which was brought to G. Young by Marsh Arabs (i.e., G. Maxwell personal communication) in February 1956. Mjbil eventually was identified as a smooth-coated otter because of both its fur and tail, which were darker and flatter than in the European otter (Hayman, 1956; Young, 1977). In addition, Maxwell’s first female otter (named “Chahala”) was trapped in the eastern marshes. Marsh Arabs brought Chahala to W. Thesiger and Maxwell bought her for five Iraqi dinars. Therefore, both live otters reported by Maxwell were cubs provided to him by Marsh Arabs (Maxwell, 1960; Young, 1977).

Examples mentioned above clearly suggest that otter cub trapping and sale was a common practice in Iraq during the 1950s. Nevertheless, raising of otter cubs was not the only goal pursued by marshmen. Maxwell (1959) also reported that locals often killed otters to sell their skins. In this regard, Marsh Arabs recognize four local types of fur color: the so-called “black otter” (i.e., *Lutrogale perspicillata maxwelli*), the “common otter” (i.e., *Lutra lutra*), the “red” and “white” otter, the last two likely being variants of the “common otter”. Maxwell saw personally only a small piece of skin of the so-called “white otter” (also named “Al-Ashab”). Nevertheless, he wished to buy a young live otter. On 29<sup>th</sup> February 1956, four otter skins were offered for sale to Maxwell in Abusakhair. Two belonged to the smooth-coated otter (“black otter”), while the others were likely European otters. Maxwell bought one of each type and deposited both of them in the British Museum in London (Hayman, 1956).

Otters’ trapping and hunting are not merely historical activities in Iraq. Indeed, we observed both of these practices during recent field surveys in April 2014 carried out in southern marshes during a National Geographic Society project on the smooth-coated otter (see Acknowledgments). Unfortunately, the conflict between otters and anglers is ongoing, and it is still producing marked effects on the populations of both European and smooth-coated otter (Al-Sheikhly and Nader 2013). We interviewed many experienced local anglers and hunters who were fully aware of otter habitat and behavior. It became clear that Marsh Arabs were still identifying otters according to their fur color, namely as “black” or “white” individual. Few marshmen confirmed the presence of “red” otters mentioned by Maxwell, and there was no further information available regarding this variant. European and smooth-coated otter are regularly hunted for their fur or trapped to raise cubs as pets. The fur is sold to smugglers along the borders of Iraq with prices ranging between US\$100 and US\$300 per item. Otter skins are often used as waterproof sacks, filled with contraband and placed inside the gasoline tanks of a smuggler’s car. The fur sacks prevent the contraband from getting wet or damaged (Al-Sheikhly, 2012).

## **OTTER TRAPPING AND HUNTING TECHNIQUES**

In the past, otters (especially adults) were killed by a spear-like stick (called “Fala”), a long reed stick tipped with branched spears (4-5) used by Marsh Arabs to collect fish (Fig. 1). The Fala was used by Sumerians and Babylonians to catch barbell fish in the marshlands of southern Mesopotamia (Saggs, 1987), and similar spears are now in use by Marsh Arabs (Hadid and Al-Mahdawi, 1977). Otters get speared when they accidentally enter an area occupied by anglers who are practicing

the so-called “Barbara” or “Tawareef” fishing. The latter was a fishing technique commonly used in the marshes of Iraq in the 1950s, mainly between February and April when fishermen and otters were both attracted by the occurrence of a large amount of fishes. However, such a method passed into disuse in the 1990s (Al-Hassnawi, 2004). During Tawareef, 10 to 20 anglers, using many boats (“Ma’shoof” or “Tarada”) practice spear and net fishing all together. On each boat, while one fisherman paddles, the others (usually two persons) stand at the edge of the boat equipped with their sharp Fala to spear fishes. Alternatively, anglers knock on tin to produce a noise to push fishes toward the nets. All boats start sailing and fishing together systematically. This method is particularly convenient when performed in long and wide waterways in order to cover large areas in the marshes. It was mainly practiced in Hammar and Hawizeh marshes, where large freshwater lakes and wide waterways (“Sibil”) occurred. Tawareef was likely derived by Marsh Arabs from the fishing strategy of the great white pelican (*Pelecanus onocrotalus*), when large flocks of this species were still abundant in the marshes. Nowadays, otters are still incidentally speared by Fala. Such an occurrence is not rare especially at night, when otters are most active and anglers practice “Serag” (fishing with lamp) using oil lamp (or torchlight) to attract large fishes (Fig. 1). The Fala strikes cause damage to the otters’ fur (holes, scars). Marsh Arabs report that in many cases otters are able to avoid Fala strikes due to their swift and agile maneuvers under the water. When hit by the Fala, otters usually snarl, whirl and bite the stick before attempting to escape. Through decades, otters suffered from massive injuries and bleedings caused by the strikes of Marsh Arabs’ traditional fishing spear.



**Figure 1.** Local angler with the “Fala” and practicing night fishing with his lamp (“Serag”) (eastern Hammar Marsh. Photo: Omar F. Al-Sheikhly).

In many localities of the southern marshes otters were also incidentally trapped by means of traditional fish net (“Al-Dast”). For instance, Hatt (1959) reported that otters were captured in high numbers at the Hindiya Barrage, where, at that time, prey

fish was very abundant. Nevertheless, otters are also attracted by the extensive fish netting placed in the river. This net is prepared *ad hoc* to trap large migrant fishes in running water streams and rivers such as the bunnei (*Barbus sharpeyi*), gattan (*B. xanthopterus*), and shabot (*B. grypus*) barb. The net consists of two dikes made of reed (*Phragmites* sp. or *Typha* sp.) sticks set together in an obtuse angle facing the water current, and leading to a narrow passage between them which ends in a small net attached to a bell, that rings when fish enter the net. Otters are attracted by large fishes struggling between the dikes, and they get stranded while they attempt to enter through the narrow passage to reach the net. As soon as the presence of an otter is noticed by the fisherman, the latter hits the stranded otter on its head with a short and heavy woody stick (“Muflaga”), thus causing immediate death to the animal. More frequently, otters are suffocated to death once they are stranded in the fish net. However, according to local fishermen, while adult otters (especially *Lutra lutra*) successfully escape as they aggressively bite and rip out the net using their sharp teeth, young otters die much more frequently once stranded in the net.

Another type of surface gill net (“Al-Turra”) is alternatively used by local fishermen in the Iraqi marshes (Jawad, 2006). It is a large and long net dropped at night into big lakes and rivers and collected by early morning. When otters fail to set themselves free from the net, they drown and suffocated to death. Interviewed marshmen reported that otters are frequently found dead and attached to Al-Turra, although in many cases the net is found ripped out and damaged by otters that were able to escape. While fish spearing and netting are probably the most effective methods that have led a marked number of otter to death during 1950s-1970s, more recently otters are frequently killed in aquaculture systems. Marsh Arabs began to practice the aquaculture in the main channel of the Euphrates and Tigris Rivers. Fishermen reported that otters perform raids on fish cages during night and cause damage to both cages and fish stocks. Therefore, locals attempt to kill otters to protect their investment.

Another lethal method used to hunt otters in the Iraqi marshes during 1950s was the so-called “Al-Ja’za” (or “Bori”) which is a long and narrow pipe shotgun manually loaded with gunpowder and shotgun pellets (Fig.2). Al-Ja’za was largely used by waterfowl hunters, which is also used to chase otters. For instance, Thesiger (1964) reported that 40 otters were killed in this way by a single man during only two months. Due to the availability of modern and more effective automatic shotguns, at the present time this technique is seen only rarely in the Iraqi marshes.

When otters were abundant in the Iraqi marshes in the 1950s, many marshmen were practicing otter cub trapping. Trappers were basically waterfowl hunters or fishermen, who were able to find dens on the marsh banks or among reed beds, and collect young otters to raise them as pets. This happened to the two otter cubs collected by G. Maxwell and is documented by the photographic evidence provided in Al-Sheikhly and Nader (2013). Nowadays, experienced trappers still spend several days in the marshes looking for otter signs. This usually occurs in February and March when otter cubs are more vulnerable. Most of otter cubs are collected when they are still under parents’ care in dens. Alternatively, otter cubs are trapped when they swim after parents in lakes and rivers. Marsh Arabs usually rise and train them in for assistance while fishing for big catches during winter, a practice similar to that still occurring for the smooth-coated otter in East Asia (India, Bangladesh: Mason and Macdonald, 1986; Kruuk, 1995). It is worth mentioning that many otter cubs usually die when managed by humans in captivity because of many factors. Even G. Maxwell lost his female otter cub “Chahala” due to an unknown fever. Unfortunately, after

2003, very little information is available about how frequently otter trapping is practiced (especially for cubs).



**Figure 2.** “Bori” or “Al-Ja’za” shotgun was used by waterfowl hunters to hunt adult otters in the Iraqi marshes during 1950s (Photo: Omar F. Al-Sheikhly).

Otter populations were dramatically decreased due to hunting and to habitat destruction during the Iraq-Iran war and following the drainage of marshlands in the 1990s (Al-Sheikhly and Nader 2013). During our 2014 field surveys in the southern marshes, local Arabs reported that otters became very rare and adult trapping was almost an impossible task to be accomplished. Even rarer were sightings of otters with their cubs. However, we were informed of three *Lutra lutra* cubs trapped by a local fisherman in the eastern part of the Hammar Marsh (Fig.3). In addition, we knew that two adult otters with three young had been observed in the same area, suggesting a presumed otter population recovery in eastern Hammar Marsh. In conclusion, it is worth mentioning that at present time most of the Marsh Arabs who practiced otter trapping during 1970s have left marshland areas because of war and drought, thus abandoning their practice of hunting otters.

Reports of trapped/killed otters in the Iraqi marshes are now very scarce. Nevertheless, until 2003, most of the reports made clear that otters were incidentally killed during fishing or waterfowl hunting. Since then, fishing by electrocution (or electro-fishing) became the most important cause of death for otters in the southern marshes. This fishing technique was first time noted in 2005 in a few places of both Hammar and Central marshes. Nowadays, electrocution is widely practiced across all of Iraq (Fig. 4).



**Figure 3.** Three *Lutra lutra* cubs collected by a local marshman to raise them as pets (eastern Hammar Marsh, Basra province. Photos: Mr. Kamel Al-Batat 2014).



**Figure 4.** Otters are frequently killed by electro-fishing in southern Iraqi marshes (Photo: Mukhtar. K. Haba 2014).

According to local anglers, electro-fishing is faster and easier than other traditional methods. Fishermen use small generators to produce an electric shock. In particular, they use a long reed stick attached to a charged ring (with a net attached) to paralyze and collect fishes. Electro-fishing is practiced near rivers and waterways banks, marshland edges and among reed beds. Unfortunately, all these are habitats suitable to otters. Electric shocks are strong enough to lead to death to most of the aquatic biota found in the electrocuted zone. Al-Sheikhly and Nader (2013) reported that most of the otter specimens recently recorded in Iraq were individuals accidentally electrocuted by local fishermen. Electrocutation causes damage to otters' nervous system. As soon as otters come in contact with the charged ring, they get momentarily paralyzed, and then they either float or drown. Stunned individuals are immediately killed by fishermen, who use their boat paddles to club the otters' head. If necessary, fishermen electrocute further with high voltage waves at the spot where the otter was stunned the first time in order to ensure its death (Al-Sheikhly and Nader, 2013) (Fig. 5).



**Figure 5.** A young smooth-coated otter *Lutrogale perspicillata* was killed by electrocution and its fur showed at the local hunter mud house (Hawizeh Marsh. Photo: Omar F. Al-Sheikhly 2014).

## CONCLUSION

While otter cub trapping was practiced by local marshmen at least until a few years ago, otter hunting is still widely practiced by Marsh Arabs to obtain skins. Discovery of endemic-to-Iraq smooth-coated otter is anecdotal at this time, as it is based on a skin from hunted individual and on a trapped cub. In the past, traditional fishing and waterfowl hunting methods were used to provide most of the otter skins, while otters' cub trapping was practiced only by experienced marshmen. Recently, more advanced and lethal hunting techniques are used to target otters, especially shotguns and electro-fishing.

Otters became very rare after the Iraqi marshlands inundation in 2003. Both European and smooth-coated otter populations' size are dramatically decreasing due to hunting, trapping, and habitat destruction. Iraqi legislation regulates hunting with laws numbered 57 and 48. Hunting law n. 57 was issued on 3<sup>rd</sup> of May 1938 and published later on (14<sup>th</sup> of May 1938), while law n. 48 was issued and published on 3<sup>rd</sup> of May 1976. Both laws are effective and ban illegal hunting practices in Iraq, yet none specifically refers to either European or smooth-coated otter. Iraqi authorities should be promptly advised to enforce present legislation by listing otters among the species that cannot be hunted. Indeed, the protection of endangered taxa is an environmental responsibility that needs to be achieved at a national level by Iraq. Recently, the government has made an important first step for the achievement of this goal by signing (2013) the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). Hence, restrictions against the illegal commerce of live otters as well as of their parts (e.g., skins) are in force, as the European and smooth-coated otter are listed in Appendix I and II, respectively.

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## RÉSUMÉ

### OTTER HUNTING AND TRAPPING, A TRADITIONAL PRACTICE OF MARSH ARABS OF IRAQ

Two species of otter inhabit the marshes of southern Iraq: the European otter (*Lutra lutra*) and the smooth-coated otter (endemic subspecies: *Lutrogale perspicillata maxwelli*). Marsh Arabs have targeted otters since at least the 1950s. Nowadays, local marsh inhabitants are still heavily hunting otters for their fur or trapping their cubs to be raised as pets. These practices, together with habitat destruction (i.e., marshland drainage), represent primary threats to the otters' survival in Iraq, and have caused a dramatic decline in otter populations. We report on traditional hunting and trapping methods in Iraq on European and smooth-coated otter, and on the consequences on the conservation of these endangered species.

## RESUMEN

### OTTER HUNTING AND TRAPPING, A TRADITIONAL PRACTICE OF MARSH ARABS OF IRAQ

Two species of otter inhabit the marshes of southern Iraq: the European otter (*Lutra lutra*) and the smooth-coated otter (endemic subspecies: *Lutrogale perspicillata maxwelli*). Marsh Arabs have targeted otters since at least the 1950s. Nowadays, local marsh inhabitants are still heavily hunting otters for their fur or trapping their cubs to be raised as pets. These practices, together with habitat destruction (i.e., marshland drainage), represent primary threats to the otters' survival in Iraq, and have caused a dramatic decline in otter populations. We report on traditional hunting and trapping methods in Iraq on European and smooth-coated otter, and on the consequences on the conservation of these endangered species.

## الخلاصة

### صيد وأسر القضاعات (كلاب الماء)، من الممارسات التقليدية لعرب الأهوار في جنوب العراق

يتواجد نوعين من القضاعات (كلاب الماء) في أهوار جنوب العراق، وهما القضاعة الأوربية (*Lutra lutra*) والقضاعة العراقية ملساء الفراء، ضرب ماكسويل المستوطن (*Lutrogale perspicillata maxwelli*). تصاد القضاعات وتأسر من قبل عرب الأهوار بكثرة على الأقل خلال خمسينيات القرن المنصرم من أجل فرائها أو جرائها لتربي كحيوانات مستأنسة. يعتبر الصيد الجائر والأسر من البرية وتدمير الموائل الطبيعية أهم المهددات التي أدت إلى انحدار مأساوي في المجموع السكانية للقضاعات في العراق. فيما يلي وصف لوسائل وممارسات الصيد والأسر التقليدية الخاصة بصيد القضاعات، والعواقب التي تساهم في صون كلا النوعين المهددين بخطر الانقراض في العراق.