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YOUNG THRESHER SHARK *Alopias vulpinus* (Bonnaterre, 1788) Chondrichthys, Elasmobranchs (Sharks) Alopiidae, FROM THE TUNISIAN COAST (CENTRAL MEDITERRANEAN)

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ملخص

بعض المعطيات حول صغير قرش الثعلب *Alopias vulpinus* : تعرض هذه الدراسة المعطيات المورفولوجية والتوزيع الجغرافي لصغير قرش الثعلب الذي تم اصطياده بالمياه التونسية والذي ضمن الأنواع التي قلّ إنزالها بالمواني التونسية. كلمات مفاتيح : قرش ثعلب – مياه تونسية – وسط المتوسط

RESUME

Un jeune requin renard (*Alopias vulpinus*) des côtes tunisiennes : Au mois d'avril 2004, des jeunes requins renards ont été observés dans certains marchés aux poissons de Tunis. Un spécimen fût ramené à l'INSTM pour identification, Il s'agit bien d'un jeune *Alopias vulpinus*. Nous présentons dans cette note décrivons dans ce document la répartition géographique de l'espèce dont les débarquements dans les ports tunisiens deviennent de plus en plus rare.

Mots clés : *Alopiidae*, *Alopias vulpinus*, Méditerranée centrale, côtes tunisiennes

ABSTRACT

On April 2004, some young thresher sharks were observed in some municipal fish markets of Tunis. One specimen was brought back to the INSTM for identification; it is a juvenile *Alopias vulpinus*. This paper give a description of the juvenile and the geographical distribution of this species of which landings in the Tunisian harbors become more and more rare.

Key Words : *Alopiidae*, *Alopias vulpinus*, central Mediterranean, Tunisian coast

INTRODUCTION

The thresher shark is counted among elasmobranchs captured accidentally, between other by pelagic trawlers used in the Mediterranean sea particularly in the gulf of Lion, the north Adriatic and in Tunisian water. The small size of the mesh of that net can be responsible of accidental holds of some individuals of protected chondrichthyes and commercial pelagic sharks as *Alopias vulpinus* and *Prionace glauca*. For these species, the capture in the Mediterranean Sea reach its maximum between May and August, where pelagic trawling is in full activity (Sergi et Sacchi 2002)

The thresher (*Alopias vulpinus*) is an important economic species in many areas, it has been taken in large numbers as a targeted species, it makes part of the commercial fraction of the by catch of the Italian and Spanish's long liners targeting the albacore or the swordfish with the varied proportions (De Metrio and al. 2000; Orsi Relini and al., 1999). This, combined with its biological vulnerability, indicates that populations of thresher are at

risk. Finally this specie was listed in the IUCN list of threatened species (Hilton-Taylor, 2000)

Consequently we have noted the rarefaction of *Alopias vulpinus*, especially those of large size. The abundance of thresher shark in Tunisian waters apparently decreased dangerously. Small-scale fishery seems nowadays targeting currently the vulnerable neonate of this species.

IDENTIFICATION

Some specimens were caught on April 2004 from the gulf of Tunis by the trammel net, one of them carried to National Institute for Science and Marine Technology (INSTM) for identification (Fig. 1).

It is a shark with 145.5 cm total length and identified as *Alopias vulpinus*. Five other threshers shark *A. vulpinus* with 136 to 143 cm total length were also observed at local markets of La Marsa, and La Goulette, Tunisia on April 2004.

There are 3 species of *Alopias* recognized contemporary (Compagno, 1984; Quero, 1984; Nakabo, 2002): Pelagic thresher shark *Alopias pelagicus* (Nakamura), Bigeye

thresher *Alopias superciliosus* (Lowe), and Thresher shark *Alopias vulpinus* (Bonnaterre). Of them, the latter 2 species are distributed in the Mediterranean Sea (Fischer, Schneider and Bauchot, 1987).

The thresher shark is an Atlantic and Mediterranean specie, signaled in the oriental and western basins of the Mediterranean and in the Adriatic (Quignard and Capapé, 1971; fredj and Maurin 1987; Fisher and *al.*, 1987), the specie is also signaled in the levantin basin (Golari, 1996). In the Tunisian waters, the distribution of the species is generalized to all the coastline (Quignard and Capapé, 1971; Bradai and *al.*, 1992; Bradai, 2000). It represents among the 52 Elasmobranchi (Quignard and Capapé, 1971), counted among the 75 recorded in Mediterranean (Tortonèse, 1963) but a recent inventory has given 85 Elasmobranchi in the Tunisian water (Bradaï, 2000; Bradaï et *al.*, 2004) counted among the 85 recorded in the Mediterranean (Capapé 1989).

Thresher shark is a rather rare fish in the coastal waters of Tunisia. So the detailed description and measurement of this species on 145.5 cm TL specimen are given following Compagno, 1984).

DESCRIPTION OF ALOPIAS VULPINUS

Snout rather short, conical and pointed with no grooves on nape on each side above gill slits. Eyes rather small, orbits not expanded onto dorsal surface of head. Dorsal profile of head convex with forehead strongly convex in lateral view. Labial furrows present. Mouth rather small with teeth in about 28 rows in upper and lower jaws. Tips of first dorsal fin, pectoral fin and pelvic fin pointed. Pectoral fins falcate. Long curving dorsal lobe of caudal fin about as long as rest of shark. Terminal caudal lobe of caudal fin rather large. Body almost uniformly dark brown with abdomen slightly whitish.



Fig. 1- *Alopias vulpinus* (Bonnaterre, 1788

Table I- measurements (in mm) done on the specimen (male)

Total length	1455	First dorsal inner margin	10
Fork length	748	First dorsal posterior margin	71
Precaudal length	681	Second dorsal length	26
Pre-second dorsal length	601	Second dorsal anterior margin	08
Pre-first dorsal length	333	Second dorsal base	07
Head length	217	Second dorsal height	07
Prebranchial length	166	Second dorsal inner margin	18
Preorbital length	40	Second dorsal posterior margin	15
Prepectoral length	198	Pelvic length	93
Prepelvic length	473	Pelvic anterior margin	81
Snout-vent length	501	Pelvic base	69
Preanal length	621	Pelvic height	54
Interdorsal space	192	Pelvic inner margin length	25
Dorsal-caudal space	73	Pelvic posterior margin length	69
Pectoral-pelvic space	224	Anal length	32
Pelvic-anal space	86	Anal anterior margin	18
Anal-caudal space	51	Anal base	14
Pelvic caudal space	143	Anal height	08
Vent-caudal length	960	Anal inner margin	17

Preanal length	33	Anal posterior margin	15
Preoral length	71	Head height	125
Eye length	13	Trunk height	151
Eye height	17	Abdomen height	139
Intergill length	57	Tail height	91
First gill slit length	30	Caudal peduncle height	59
Second gill slit length	29	First dorsal midpoint-pelvic origin	107
Third gill slit length	34	Pelvic midpoint-first dorsal insertion	95
Fourth gill slit length	30	Pelvic midpoint-second dorsal origin	47
Fifth gill slit length	27	Second dorsal origin-anal origin	17
Pectoral anterior margin	201	Second dorsal insertion-anal insertion	18
Pectoral radial length	174	First dorsal midpoint-anal insertion	102
Pectoral base	86	Mouth length	19
Pectoral inner margin	25	Mouth width	70
Pectoral posterior margin	154	Upper labial furrow length	11
Pectoral height	168	Lower labial furrow length	12
Dorsal caudal margin	791	Nostril width	09
Preventral caudal margin	99	Internal space	19
Upper postventral caudal margin	695	Anterior nasal flap length	02
Lower postventral caudal margin	43	Clasper outer length	30
Caudal fork width	98	Clasper inner length	65
Caudal fork length	68	Clasper base width	06
Subterminal caudal margin	13	Girth	405
Subterminal caudal width	23	Interorbital space	61
Terminal caudal margin	35	Head width	95
Terminal caudal lobe	45	Trunk width	125
First dorsal length	99	Abdominal width	100
First dorsal anterior margin	104	Tail width	75
First dorsal base	83	Caudal peduncle width	31
First dorsal height	72		

SOME NOTES

This species is aplacental ovoviviparous and uterine cannibal shark with the size at birth 1140 to 1500 mm TL (Compagno, 1984). So that, the observed thresher sharks were between 1360 and 1455 mm TL should be juveniles that spent several days or weeks after birth. White color of abdomen paler and extending to near pectoral fin bases, while it is more conspicuous and extending over pectoral fin bases.

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