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Some data on Biometry and Stomach Content of a Meditterranean Monk Seal found in Santorini Island (Greece)

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ABSTRACT

A Meditterranean Monk seal strangled by a fishing net,was dissected. The content of the stomach and measurements of the digestive system are reported.From these measurements no conclusion was made about this Monk's eating habits.

Materials and Methods

A male *Monachus monachus*, was strangled by a tramel net and was found in Santorini island, south of the village Acrotiri, on March 13,1990. The Monk was 239cm long, measured from the tip of the snout to the tip of the flippers and 218cm long from the tip of the snout to the tip of the tail. The perimeter at the level of the navel was 121cm.

The Monk seal was transported and dissected in Athens about 65 hours after its death. The stomach was immersed and filled as well as,with 37% formaline.

Results

A. Measurements of the digestive system:
Length of esophagus: 0.25m.
Length of the stomach: 0.50m.
Length of the small intestine: 16.66m.
External diameter of the small intestine: 31.00mm.
Length of the large intestine: 1.36m.

B. Stomach content:
The stomach was almost full and its content weighted 5.5kg. From all this mass we separated 22 fish speciments (53% of the total weight). We have identified eleven fish individuals (39% of the total weight) which belong to nine different species. (see table 1). We have also found a small piece of fishing net (39mm net's eye opening).

Table 1. Species of fish and squid which were identified in the stomach of the seal which was found in Santorini island.

Species	Length(cm)	Weight(g)
Boops boops	23	148
Boops boops	19	100
Boops boops	16.5	58
Oblada melanura	25	218
Diplodus vulgaris	21	218
Lophius sp.(piece)	39	517
Lophius sp.(piece)	-	223
Serranus sp.	21	88
Scomber scombrus	17	120
Mullus sp.(piece)	80	32
Triglidae (piece)	210	264
Sepia officinalis	-	163

Discussion

The fishing net where the animal was trapped presented many holes, some of them typically made by the seals. This fact along with the presence of a piece of the same fishing net inside the stomach indicate that, at least the last amount of the digested fish (53% of the total food mass), were catched by the seal from the fishing net. Therefore, from these data, we cannot obtain a definite answer on the seal's diet in the wild environment.However, we found out that the animal did not eviscerated the preys taken from the net.

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Investigation on Mediterranean Monk Seals, *Monachus monachus*, (Hermann, 1779) in the caves along the Coastline of Western Black Sea, Marmara and Aegean Seas

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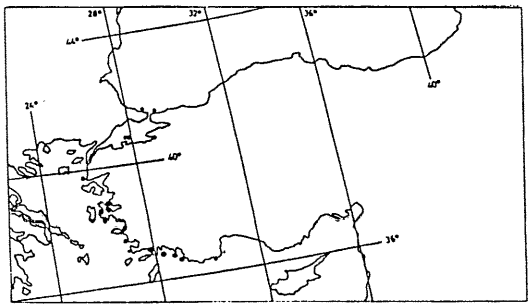
ABSTRACT:
This research has been done in a nearly three months period, from 20 th of June to 10 th Septembe in 1989, with the aim of finding out the number of monk seals inhabiting Turkish Coasts. All observatisons were recorded by film at the same time, to get more information about the environment they live in the caves, and how they behave in water.
During the reserach, two in the western Black Sea, two in the Marmara Sea and twelve in the Aegean sea , totaly 16 caves, an islet were closly observed while observing the caves dives also have been done in to caves, however no monk seals were seen and all were abandoned.
The only place where we could have the chance to observe an adult monk seal was a isolated islet in the Aegean Sea, near Çeşme. This observed, indivudual monk seal was taken in to a film under broadcoast standarts. Oceanographic measurement around the islet revealed the water temperature on surfece as 22 °C in agust and the current speed as 2 miles per hour. Chronoatric measurements revealed that she was spending different periods of time under the water, varying from 1' 49" to 4' 56" minutes.

INTRODUCTION:
Mediterranean Monk Seal, Monachus monachus, which, considering the enormous reduction in their number, is now forming endangered species in habits these caves, breeds and grows the pups. These monk seals habitats are usually located on isolated islands or shores and known by local fishermen.
The purpose behind this research is to find out the present conditions of the caves where monk seals used to inhabit and investigate the pattern of their behavior with observations and films both on surface and underwater. Our other important aim is, by showing the film to masses, to focus Turkish People's attention on the subject and provide their support. An additional target was to get more information about the physico-cheaical proporties and meteorological parameters of the water where monk seals prefer living.

MATERIAL AND METHOD:
During the whole research period a 25 meter long fishermen boat has been used, which had a speed 15 miles per hour and a capacity of 20 people. The research has begun in the western Black Sea. Night and day observations and scuba dives have been done to on islet near Çeşme and totaly 16 caves which, with the order of our proceeding direction, were as follows: Two in Igneada and Şile, two is Ekinlik and Marmara Island is the Marmara Sea, 12 in the Aegean Sea (Foça, Hayırsız Island, Eşendere, Ildır, Süngükaya Island, Alaçatı, Dilek, Kiremit Island, Nar Island, Toprak Island, Sulu Island, üç Islands).



Map 1 : Mentioned caves is the research and localisation of the islet the monk seal inhabited. All these previously datermined caves have been observed and dived having the aim of coming across with monk seals or their traces.

RESULTS AND DISCUSSION:
It was only five years ago that these caves were famous and known as "Monk Seal Caves". However during our 80 day-research program neither monk seals nor their traces were come across. This made us to reduce that the monk seals have migrated from the shores to desolate islands. We think that the monk seal we observed in Süngükaya, the desolate islet near Çeşme, is actualy one of the monk seals which abandoned Alaçatı Coasts. Because the caves is Alaçatı, Çeşme and the Süngükaya Island are only two miles apart from each other.
As a conclusion, the Süngükaya Island shoud be preserved as a National Park. All necessray precautions should be taken to keep the fishermen away from all monk seal habitats. It is a must and the crux of our message that all these islands and coasts serving as monk seal habitats should be turned in to preserved National Parks. In addition against all disturbances and conciousless or ignorant touristical settlements or urbanization must be ensured. It is also extremely important to emphasize the need of more detailed research opportunities.

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