

# Muğla Pontieni Memeli Faunası

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Özet: Muğla İlinin NW da ve Muğla Aydın şosesinin N de Akgedik ve Bayır köyleri arasında Dr. G. OTKUN tarafından 1942 yılında zengin ve iyi muhafaza edilmiş bir memeli hayvan mecmuası keşfedilmiş ve bir kısım bakiyeler Maden Tetskik ve Arama Enstitüsüne getirilmiştir.

İngilizce metninde adı geçen espeslerin incelenmesi sonunda güney Balkanlar ve Susam adası ile, en az Batı İran Ponsien Memelileri arasında senkronik bir irtibatın mevcut olması icap ettiği kanaatına varılmıştır.

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## Preliminary Report On A Pontian Mammalian Fauna From Muğla

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A rich collection of fossils consisting of the remains of mammals, was found, by Dr. G. OTKUN in 1942 in very hard red clay beds between Akgedik and Bayır villages in North-Western part of the Vilayet of Muğla, in Western Anatolia.

The collection of 1942 represents only a half of the material from this locality. One half, at least, of the fossiliferous deposits of NW Muğla are still untouched and will be excavated in the coming years.

The collection submitted to my examination contains skulls, upper and lower jaws with teeth, some fragments of the larger limb-bones, small bones of the feet and a few horns. The fossil remains are generally well-preserved, although partly broken either in anterior or posterior parts. They represent at least the following three orders.

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1) M.T.A. Enstitüsünde. Bu tebliğ 24 Şubat 1950 toplantılarında yapılmış, makale 4/1/1951 tarihinde alınmıştır.

2) Vertebrate Paleontologist, M.T.A. Institute. Paper presented before a session of the Geol. Soc. in Feb. 24 1950, manuscript received 14 December 1950.

I) Perissodactyla: Represented by familles Rhinocerotidae "Rhinoceros schleiermacheri KAUP" "Pl. I, Fig. 1", "Rhinoceros cf. pachygnathus" Pl. I, Fig. 2, "Rhinoceros (Aceratherium) sp. and Equidae "Hipparion gracile DE CHRISTOL" sp. KAUP "Pl. I, Fig 3,, , "Hipparion sp."

II) Artiodactyla: Represented by three familles (1) Suidae "Sus erymanthus ROTS et WAGNER", "Pl. I, Fig 4" , (2) Cervicornia-Subfamily Giraffidae—"Helladotherium GAUDRY" "Pl. II, Fig. 1." Giraffa sp. (3) Cervicornia "Palaeoryx pallasi GAUDRY" "Pl. II, Fig. 2" , Tragocerus sp., Pseudotragus cf. longicornis, Gazella gaudryi SCHLOSSER, Gazella sp. "Pl. II, Fig. 3."

III ) Carnivora: Family Hyaenidae ( Hyaena eximia), family Viverridae, ZITTEL "Palhyaena - Ictitherium - cf. Hipparionum".

The necessity of this study will be readily appreciated by the mere inspection of the following table, giving the list of the fossil mammals I have recognized in the Muğla collection and in other localities studied by other authorities.

Fossils	Localités				
	P.	Sa.	SI.	M	Mu.
Rh. schleiermacheri	X	X			X
Rh pachygnathus	X	X	X		X
Aceratherium	X	X	X	X	X
Hipparion gracile	X		X	X	X
Sus erymanthus	X	X	X	X	X
Helladotherium	X	X	X	X	X
Palaeoryx pallasi	X	X	X	X	X
Tragocerus amaltheus	X	X	X	X	X
Hyaena eximia	X	X	X	X	X
Ictitherium hipparionum	X	X	X	X	X

These remains from Pikermi (P.) Samos (Sa.) Salonique (S1.), Maragha (M.) and Muğla (Mu.) are of the same species and of the same phylogenetic stage of development, they must be attributed to the same geological horizon. "The Hipparion fauna of the Pontian is one of the richest and widest-spread of fossil mammalian faunas." It is known from Spain ( Con-

cut), SW France (Cucuron, Mt. Luberon), Central Germany (Eppelsheim in Mainz Basin), the Vienne basin and Hungary, Macedonia, Turkey (Istanbul), Greece (Pikermi, and Isle of Samos), North Africa, W. Persia (Maragha), the Siwalik Hills of NW India, China and Malay region (DAVLES, 1935). But according to AIBIET MALİK and DAVIES the Hipparrion fauna of the Pontian is known from Upper Sarmatian in Turkey as in South Russia, although usually taken as Pontian<sup>1)</sup>.

I am not in agreement with this conclusion, for, <<in the southern Balkans, Greece, and Phrygia (Asia Minor) with some of the Island of what is now the Aegean sea, the Pontian takes on a freshwater facies (1934)>>. EGERAN and LAHN (1948) too, agrees that there was a palaeogeographical connection between Anatolia and Greece up to the end of the Neogene. Also according to ZITTEL, the Hipparrion faunas of the Pontian were especially well developed in Greece at Pikermi, Salonique, in the western end of Asia-Minor-the Island of Samos (very near Muğla Region), and western Persia at Maragha.

With the discoveries of (Pontian) land mammals in southern Balkans, Samos and western Anatolia their possible migration route is discerned.

The close (phylogenetic) relationship between Muğla and the others would suggest a common origin for both possibly in this wide region. The Aegian Islands must have been connected by a land-bridge during the Pontian to Asia Minor and southern Balkans. If so, the Hipparrion faunas of the Pontian show a continuous distribution from Spain to China. Turkey is within this region. Indeed, in addition to the Muğla collection, the same Hipparrion faunas have been found by Profs. Hamit NAFİZ and A. MALİK (1933) at Küçükçekmece, near Istanbul; by Prof. KANSU in Ankara, at İlhançay (1937, 1946), KANSU and me at Cebeci; my friend O. EROL has found the same fauna at Elmadağ, TSCHATCHLI at Küçükyozgat (1942); YALÇINLAR (1947 and 1947) has found it in western Anatolia, at Eşme and the Gediz Valley; KÖKTEN ha also disovered a new Pontian mam-

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1) After the publication of the "Vertébrés Fossiles de Küçükçekmece" (1933) new exploration were made in the fossiliferous bed by Profs. H. Nafiz Pamir and E. Chaput (1934). According to these authors, besides of *Mactra bulgarica* and *M. caspia*, there also were some *Mactra subcaspia* and *M. karaburgazica* in the same level of Vertebrates, Whereas the invertebrates (*M. subcaspia*, *M. karaburgazica*) were attributed to the meotian in Bulgaria (Andressow). Thus Nafiz and Chaput have arrived at the meotian (Pontian) in Küçükçekmece.

malian bed in SE Anatolia, at Malatya. It is also known from the tufa area near Kayseri, at Ürgüp; in addition to these other new mammalian fossils of Pontian age have been found in eastern Kayseri by İZBIRAK.

During the Pontian, Anatolia was occupied by fossil animal species of Samos and Greece and Western Persia. Also the distribution of the Hipparrion gracile faunas of Pontian age passes through Anatolia.

Thus the Anatolian Pontian species connect the Aegian faunas with those of Asia.

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## LEVHA I — PLATE I

Şek. 1. *Rhinoceros schleiermacheri* KAUP. sol üst çene, taç üstünden görünüş.

Fig. 1. *Rhinoceros schleiermacheri* KAUP. Left upper jaw, crown view.

Şek. 2. *Rhinoceros cf. pachygriathus*. Sol üst çene, yandan görünüş, ( genç ).

Fig. 2. *Rhinoceros cf. pachygriathus* Left upper jaw, labial view.

Şek. 3. *Hipparium gracile* DE CHRiSTOL. Üst çene.

Fig. 3. *Hipparium gracile* DE CHRISTOL Maxilla in palatal view.

Şek. 4. *Sus erymanthus* ROTH et WAGNER. Üst çene.

Fig. 4. *Sus erymanthus* ROTH et WAGNER. Maxilla.

## LEVHA II — PLATE II

Şek. 1. *Helladotherium GAUDRY*. Sol alt çene, taç üstünden görünüş.

Fig. 1 *Helladotherium GADRAY*. Left mandibular, crown view.

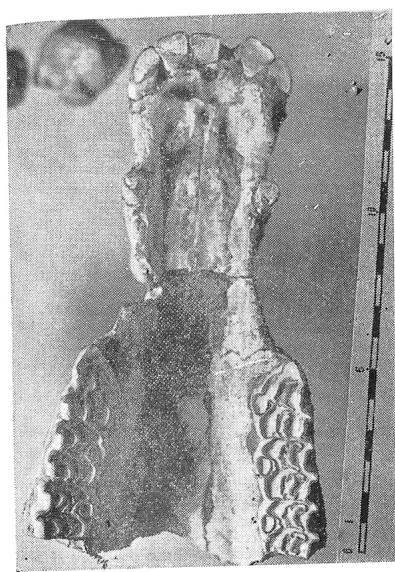
Şek. 2. *Palaeoryx pallasi* GAUDRY. Üst çene, taç üstü görünüş.

Fig. 2. *Palaeoryx pallasi* GAUDRY. Left maxilla, crown view.

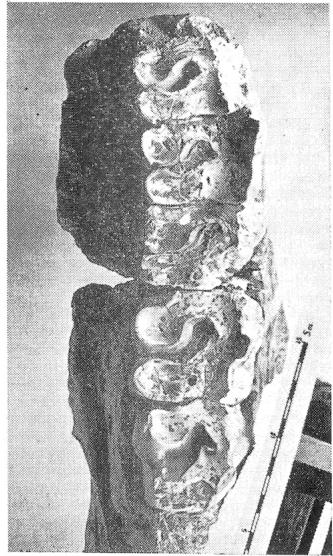
Şek. 3. *Gazella* sp. Üst çene.

Fig. 3. *Gazella* sp. Maxilla in patatal view

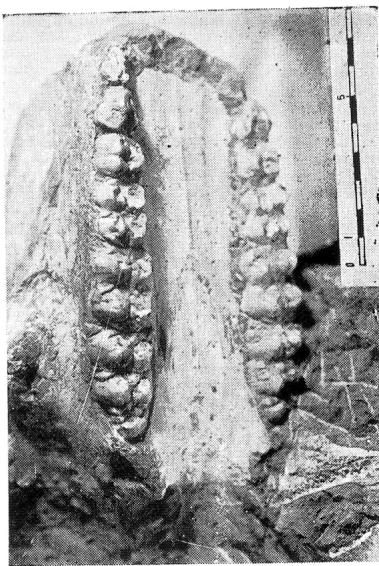




Sek. 1 Fig.

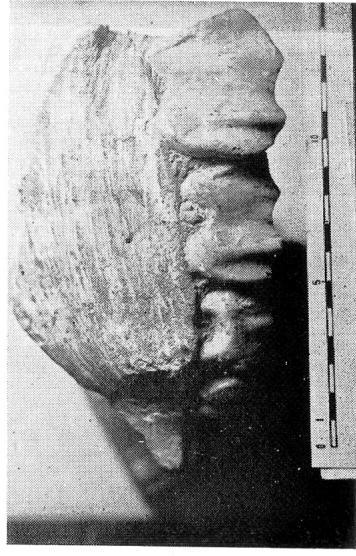


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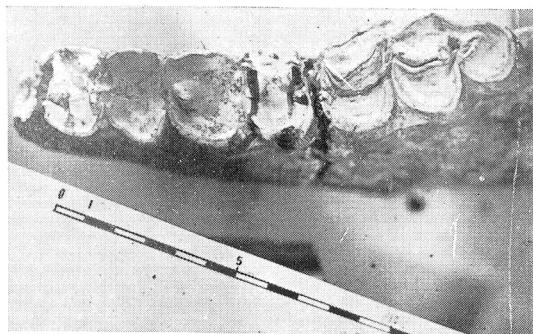
Sek. 3 Fig.

Sek. 4 Fig.

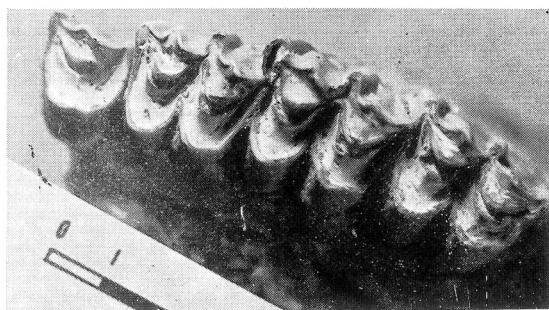


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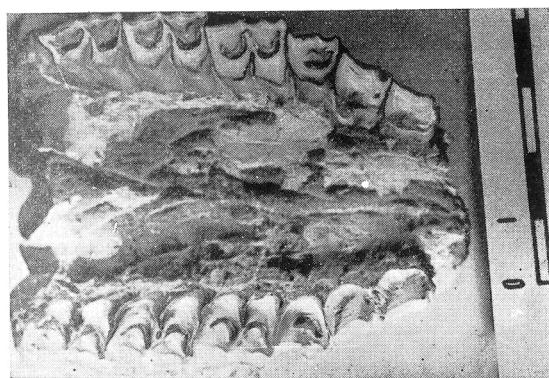




Şek. 1 Fig.

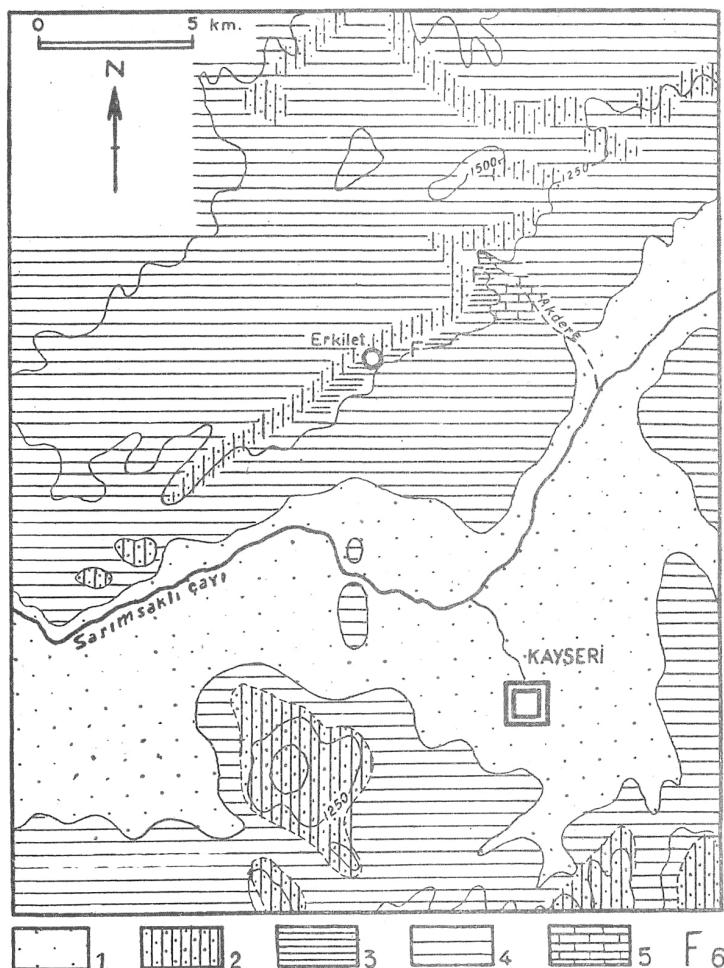


Şek. 2 Fig.



Şek. 3 Fig.





Tetkik edilen bölgesin we fosillin arazinin harita«  
(Cart© de la région étudiée et du terrains fossilifère)

1 — Alüyon (Alluvions), 2 — Yukarı Miosen veya Pliosen lavları (I aves  
du Miocene Supérieur ou du Pliocène), 3 — Fosilli yerler (Yukarı Miosen),  
(Terrain fossilifère) (Miocene Supérieur), 4 — Tüf, lav, kumtaşı ve tekustr  
mara (Neojen), (Tufs, laves, grès et marnes lacustres) (Néogène) 5 — Kil,  
marn ve lakistr kumtaşı (Miosen), (Argiles, marnes et grès lacustres)  
(Miocene), 6 — Fosilli 3'erler (Points fossilifères)