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## A description of two small Asiatic Felines: *Felis (Pardofelis) marmorata* Martin, 1836; *Felis (Prionailurus) planiceps* Vigors & Horsfield, 1827

By JAMES DOLAN

*Eingang des Ms. 9. 9. 1964*

Considering the number of large zoological gardens distributed throughout the United States, it is of interest to note that comparatively few of the smaller Old World felines have been exhibited in this country. According to the records kept by Sergeant MARVIN JONES, Fort Knox, Kentucky, it would appear that not more than fourteen species have been imported into the United States between the years 1880 and 1964. In a number of instances it must be assumed that some of these cats were misidentified in the various collections. I have in my possession photographs of what was alluded



Fig. 1. *Felis (Pardofelis) marmorata*, female left, male right, showing the characteristic markings of the species

to as being a Marbled Cat, *Felis (Pardofelis) marmorata* Martin, 1836, exhibited in the New York Zoological Park in 1900. Contrary to the identification made in New York, this animal was actually one of the subspecies of *Felis chaus* Güldenstädt, 1776, as can be seen by its size, short tail, coat pattern and tufted ears. Similarly, a pair of Marbled Cats acquired by the Dallas Zoological Garden in 1961, have proven to be, on the basis of a color slide sent to San Diego for identification, a subspecies of *Felis (Prionailurus) bengalensis* Kerr, 1792. Therefore, it is most likely that the Marbled Cat exhibited in the National Zoological Park, Washington, D. C., in 1910 and a pair in St. Louis in 1937, were the only specimens to have reached North America until the acquisition of a young adult pair by the San Diego Zoological Garden on the 20th of June 1964.

Ranging from Nepal through Sikkim, Assam, Northern Burma, Indo-China, Malaya, Sumatra and Borneo, the Marbled Cat closely approaches a domestic cat in size. In its body proportions it is a great deal smaller than the Clouded Leopard, *Panthera (Neofelis) nebulosa* (Griffith, 1821), with which it has often been confused in this country.

The ground color in *Felis marmorata* ranges from deep grey-brown to ochre-brown as in the San Diego specimens. The forehead is spotted (fig. 1); crown of the head

spotted with two stripes running from the upper eye-lid to the shoulders. On the neck the spots elongate, forming stripes. In the region of the withers there are two short, fairly broad stripes between the shoulder blades, the neck stripes running along the former's inner border. Along the back there is a longitudinal line of spots which, as in our specimens, may form an almost continuous stripe. At the base of the tail this stripe is broken up, forming halo-shaped spots on the hips, that in some instances may unite in longitudinal bands. The long, bushy tail is finely speckled at its base, terminating in a group of darker hairs. Throughout its length the tail is marked by large black blotches. The spots on the upper lip are joined to form short black stripes. Behind the eye there is a well developed stripe, while that below the eye is weakly developed. On the shoulder is a large spot, generously sprinkled within, surrounded by a darker border. From the postscapular region, the neck stripe extends to the hip, the lighter central portion being rather broad and uniting anteriorly with the shoulder markings. On the flanks the large spots, with their heavily speckled central areas, tend to longitudinal bands with the same clouded pattern at the shoulder. The feet are finely sprinkled with black, the legs showing longitudinal rows of black spots. There are two very distinct black dots on the ventral portion of the lips as well as three black throat bands. The chest is marked by numerous black dots (fig. 2), the stomach with rows of black spots. The upper inner portions of both fore and hind limbs are white, while the ventral surface of the tail is of a greyish-yellow coloration in the case of both specimens. The ears are black with a white patch in their center.

Our Marbled Cats were received from Java, where they had been in captivity for some time. Both specimens were, however, taken as young animals on the Island of Sumatra; therefore representing the nominate form, *Felis (Pardofelis) m. marmorata* Martin, 1836, which ranges from Indo-China through Tonkin, Thailand, Malaya, to Sumatra and Borneo. A further subspecies, *Felis (Pardofelis) m. charltoni* Gray, 1846, is native to Nepal, Sikkim, Assam



Fig. 2. Adult male Marbled Cat in the San Diego Zoological Garden





Fig. 3. Adult female Flat-headed Cat, *Felis (Prionailurus) planiceps*, from Borneo

and Northern Burma. Apparently this cat is sparsely distributed over its rather extensive range and there is little or nothing known of its habits in the wild state. BLANDFORD (1888–91) remarks that it is arboreal by nature as does Pocock (1932) who also states that it is of nocturnal habits. It should be noted here that our male specimen, the female having died on the 27th of June, 1964, has frequently been observed abroad during the day which may indicate it is not quite as nocturnal as it has supposed.

While the acquisition of a pair of Marbled Cats was looked upon as a matter of extreme good fortune, we were further delighted by the offer of a female Flat-headed Cat, *Felis (Prionailurus) planiceps*, Vigors & Horsfield, 1827, (fig. 3) which entered the collection on the 26th of August, 1964. This animal is native to Lower Thailand, Malaya, Sumatra and Borneo, our specimen coming from Borneo. As in the case of the Marbled Cat, almost nothing is known of the habits of *Felis planiceps*, although Pocock (1932) infers, due to the long, narrow feet with their large pads, that it is of a terrestrial nature. The Flat-headed Cat has always been rare in confinement, the present specimen being the fourth example exhibited in the United States. Previous specimens were shown in Philadelphia in 1904 and 1930 and Washington, D. C. in 1922.

The Flat-headed Cat is scarcely larger than a Leopard Cat, with a relatively short



Fig. 4. Flat-headed Cat

tail. The general color of the pelage ranges from ochre-yellow to ochre-brown as in the San Diego female. The shoulders, withers, back, and tail are an unpatterned dark ochre-brown, while the sides of the body are likewise unpatterned although of a lighter hue. On the forehead are two blackish-brown longitudinal stripes, with a clear white stripe found above each eye. There are four barely discernible dark stripes on the crown of the head and neck. The outer portions of the legs are ochre-brown, the inner portions, however, showing black spots and horizontal bands. The upper lip is marked by longitudinal black spots, the cheeks and throat by two reddish-brown stripes. The breast and stomach are marked by numerous black spots, the ventral surface of the tail being yellow; upper inner portions of the fore and hind legs grey, ears black with ochre spots.

Since we have so little knowledge of the life histories of either the Marbled or Flat-headed Cat, it is hoped that the specimens of both animals now living in the San Diego Zoological Garden will help to shed some light on the habits of two rare and interesting Asiatic felines.

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## Neue Daten über die geographische Veränderlichkeit und die Entwicklung der Gattung *Mesocricetus* Nehring, 1898 (Glires, Mammalia)

Von MARTIN HAMAR und MAJA SCHUTOWA

*Eingang des Ms. 16. 1. 1965*

Die Vertreter der Gattung *Mesocricetus* Nehring, 1898 gehören zu den wenig studierten Tieren der Familie Cricetidae. Nach den Arbeiten von NEHRING (1898, a, b, c) und MILLER (1912) erschien lange nichts über die Arten der Gattung *Mesocricetus*.

ARGYROPULO (1933) machte den ersten Versuch, die Familie Cricetidae zu überprüfen, wobei er die *Mesocricetus*-Gruppe als eine Untergattung mit vier Arten erwähnt:

*Mesocricetus newtoni* (NEHRING, 1898)

*Mesocricetus raddei* (NEHRING, 1894) mit den Unterarten *M. raddei raddei* (NEHRING, 1894)

*M. raddei nigriculus* (NEHRING, 1898) und

*M. raddei avaricus* (OGNEW & HEPTNER, 1927),

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