

## THE CAVES' LITTLE CAT (*FELIS MINUTA* SCHM.)

M. FRIANT

Professor at the School of Anthropology, Paris.

ABSTRACT—Among the numerous Pleistocene Felidae, the wild cat (*Felis silvestris* Schreber) and the lynx (*Lynx lynx* L.) are the only ones that have persisted to-day in our regions; however, they are very uncommon.

### HISTORY

A cat, smaller than *Felis silvestris* Schreber, has been pointed out in the European Pleistocene period, at once, by P. C. Schmerling, that, under the name of *Cattus minuta*, has shown, in 1833, the bones found in the caves of the Liege's environs; then, by J. R. Bourguignat (1875) that gives to it the name of *Felis minuta* Schm. and indicates the dimensions of several exemplars found in the Pleistocene strata of the Grasse's environs (Alpes-maritimes, France), J. Woldrich (1881 and 1884) indicates its presence in a Würmian bearing (Zuzlawitz) of the Bohemia's forest (Tehéco Slo-Vaque).

Yet, this little cat was, during a long while, considered as a doubtful one.

*Felis minuta* SCHM. OF THE UPPER WÜRMIAN PERIOD  
OF OETRANGE, GREAT-DUTCHY OF LUXEMBOURG

In 1936, from the Upper Würmian bearing of Oetrange (Great-Duchy of Luxembourg),

I described with V. Ferrant, an hemi-mandible of adult cat, far more smaller than the one of the fossil wild cat (*Felis silvestris* Schreber), even smaller than the one of the actual wild cat, of which the size is lesser than the size of the fossil.

In comparison with the domestic cat (*Felis domestica* Briss.) of which this little cat comes nearer by its dimensions, we ought to note, above all, that its mandible has a masseter's foss far more deeper than the one of the actual domestic cat.

We have reported to the *Felis minuta* Schm. the little cat of the Upper Würmian Period of Oetrange.

*Felis minuta* SCHM. OF THE LOWER AURIGNACIAN OF  
PERIOD OF GOYET, BELGIUM

In 1948, at the Royal Museum of natural History of Belgium, I have studied the bones of a little cat, found in well dated beds of the Lower Aurignacian Period, in the "Sheep's

room" of the Goyet's caves near Namur, caves systematically explored by the Royal Museum of natural History in 1937-1939, under the direction of M. the Professor V. van Straelen.

Those bones are:

A left mandible (Text Fig. 1).

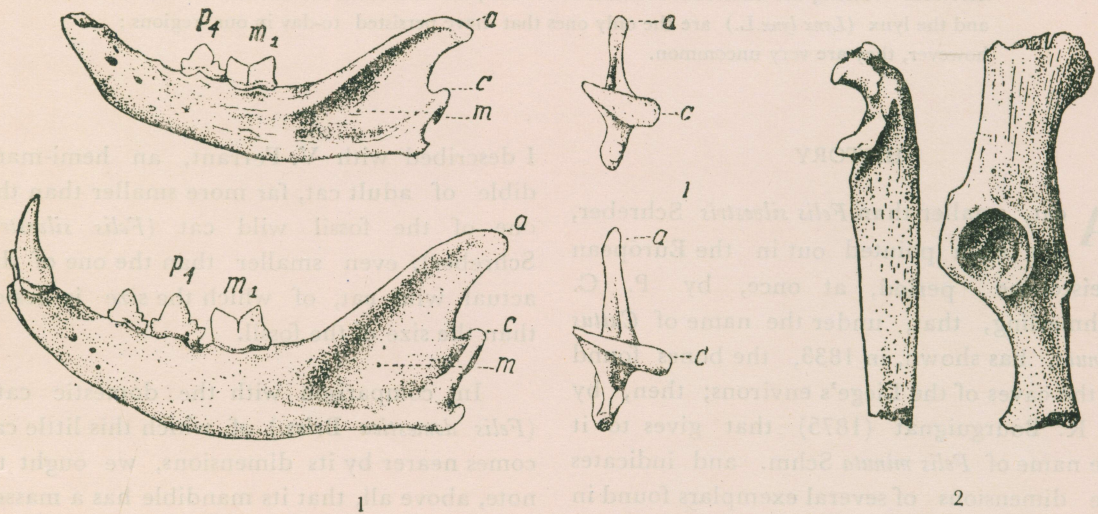
Two vertebrae i.e. a dorsal and a lumbar one.

The upper part of a left ulna (Text Fig. 2, on the left).

A fragment of a left *os innominatum* (Text Fig. 2, on the right), with the cotyloid cavity.

They are clearly smaller than the corresponding bones of the actual *Felis silvestris* and also of the Pleistocene *Felis silvestris*, often bigger than the living one, coming nearer, at this point of view, the domestic cat's bones.

The left hemi-mandible, rather well preserved is the most characteristic document.



TEXT FIGURES 1—2

1. Left hemi-mandible of two Cats of the Coll. of the R. Mus. of Nat. Hist. of Belgium on the left, external surface, on the right, posterior faces. Above: *Felis minuta* Schm. of the Lower Aurignacian period of the Goyet's caves (Belgium). Below: *Felis silvestris* Schreber, actual in Belgium. Note the difference between the hemi-mandibles of those two cats, for the size, the shape of the coronoid Process (*a*) and the condyle (*c*), the depth of the masseter's foss (*m*). *P*<sub>4</sub>—lower premolar.—*m*<sub>1</sub> lower molar (carnassial tooth).
2. Bones of *Felis minuta* Schm. of the Lower Aurignacian period of the Goyet's caves Coll. of the R. Mus. of Nat. Hist. of Belgium. On the left, left ulna upper fragment seen by its anterior surface. On the right, a fragment of left *os innominatum* (external surface), with the cotyloid cavity.

( All Figures in natural size )

**The Mandible of *Felis minuta* Schm.**

The hemi-mandible of Goyet presents the last premolar, P<sub>4</sub>, the molar, M<sub>1</sub>, and the sockets of the other teeth : I<sub>1</sub>, I<sub>2</sub>, I<sub>3</sub>, C, P<sub>3</sub>, the genus *Felis*' formula being :

$$\frac{3}{3} I, \frac{1}{1} C, \frac{3}{2} P, \frac{1}{1} M.$$

Here are some mensurations of the mandible of known 'caves' little cats' and of a *Felis silvestris*.

By their mandible, the three specimens of *Felis minuta* are clearly smaller than the *Felis silvestris*.

The known teeth of the *Felis minuta*, except by their dimensions, are not most unlike those of the *Felis silvestris*. But, the mandible of those two cats is different : in reference to this bone of the *Felis silvestris*, the coronoid process of the *Felis minuta* is far more bent, its masseter's foss, deeper, its condyle, proportionally, shorter and higher on its internal side, the mental foramen, wider.

In spite of its small size, the *Felis minuta* by what we know of it, especially the large development of the masticator muscles (shown by the deepness of the masseter foss), was more ferocious than the wild cat and came nearer the great Felines, the Pleistocene *Felis spelaea* Goldf., for instance.

	<i>Felis minuta</i>			<i>Felis silvestris</i>
	Grasse G. R. Bourguignat	Oetrange V. Ferrant et M. Friant	Goyet M. Friant	actual, Belgium
Distance from the incisive point to the hind part of the molar	27 mm	32 mm	28 mm 5	35 m
Length of the jugal teeth row	17 mm	17 mm 5	17 mm 5	21 mm
Height of P <sub>4</sub> and M <sub>1</sub>			4 mm	5 mm
Length of the condyle (L)			10 mm	15 mm
Height of the condyle on its internal side (H)			4 mm	4 mm
Condylarian indice:				
$\frac{H \times 100}{L}$			40	26

Certainly, by its bearing conditions in the Goyet's caves and the morphology of the mandible, the *Felis minuta* cannot be the result of "stray bones of domestic cats" (A. Dubois et H. G. Stehlin, 1932).

**Representations of *Felis minuta* Schm.  
in Prehistoric Art**

In 1967, M. Rousseau pointed out two figures of a little cat that, represented by the paleolithic artists, are arrived to us :

- (1) The silhouette of Saint Michel d'Arudy (Basses-Pyrénées, France), cut out of a flat bone; it subsists the bust with the bulky eye and the pricked up ear (Text Fig. 3). This piece has been ascribed to the Upper Aurignacian Period.



TEXT FIGURE 3

- (2) An engraving that has 16 cm of height, in the Gabillou's cave (Dordogne, France). It is a bust without anterior leg, of which the head, rather enigmatical, is the one of a Cat or a Devil (J. Gaussen, 1964). This engraving should be from the Solutrean or more recent Period.

M. Rousseau says that those two representations are not relative to the wild cat; then, they are relative to the *Felis minuta* Schm.

SUMMARY

The caves' little cat (*Felis minuta* Schm.), extinct Pleistocene Feline, is separated from the wild cat (*Felis silvestris* Schreber), yet actual, not only by its *small size*, but also by the mandible's characters: above all, the *great development of the masseter*, strong masticator muscle (as it is shown by the depth of the masseter's foss).

The caves' little cat, fiercer than the cat of our forests, was, till a certain point, nearer the extinct "caves' great cat", *Felis spelaea* Goldf. It lived, in our regions, during the Upper Würmian Period and the Artists of that epoch left of it an interesting representation.

RÉSUMÉ

Le petit Chat des cavernes (*Felis minuta* Schm.), Félin Pléistocène disparu, diffère du Chat sauvage (*Felis silvestris* Schreber), encore actuel, non seulement par ses *faibles dimensions*, mais également par les caractères de sa mandibule : surtout le *grand développement du masseter*, muscle masticateur puissant (comme le montre la profondeur de la fosse massétérine).

Le petit Chat des cavernes, plus féroce que le Chat sauvage de nos forêts, se rapprochait, jusqu'à un certain point, du "grand Chat des cavernes", *Felis spelaea* Goldf. Il vécut dans nos régions durant le würmien supérieur et les Artistes de cette époque nous en ont laissé une représentation de valeur.

TEXT FIGURE 3

Silhouette of a caves' "little Cat" (*Felis minuta* Schm.) cut out of a flat bone of which subsists the bust with the bulky eye and the pricked up ear.—Saint-Michel d'Arudy (Basses-Pyrénées, France); undoubtedly, upper Aurignacian period. From L. Capitan H. Breuil and D. Peyrony.

## REFERENCES

- BOURGUIGNAT, J. R., 1875. Recherches sur les ossements de *Canidae*, etc. Paris: 44-46.
- CAPITAN, L., BREUIL, H. AND PERONY, D., 1902. La caverne de Font de Gaume, aux Eyzies (Dordogne), Paris: 154. Fig. 122.
- DUBOIS, A. AND STEHLIN, H. G., 1932. La grotte de Cotencher, station moustérienne. *Mem. Soc. paléontol. suisse*. **52-53**: 97, en note.
- FERRANT, V. AND FRIANT, M., 1936. La Faune pléistocène d' Oetrange (Grand-Duché de Luxembourg). Fasc. I. Les Carnassiers. *Bull. Soc. Naturalistes Luxembourgeois*: 48-49 et Fig. 15.
- FRIANT, M., 1948. La question du "Petit Chat des cavernes" (*Felis minuta* Schm.). *Bull. Mus. R. Hist. nat. Belgique*. **24**, (10): 1-6.
- GAUSSEN, J., 1964. La grotte ornée de Gabillou. *Publ. Inst. Préhistoire del 'Univ. Bordeaux*. Delmas.
- ROUSSEAU, M., 1967. Les grands Félines dans l' art de notre Préhistoire. Picard, Paris.
- SCHMERLING, P. C., 1833, Recherches sur les ossements fossiles découverts dans les cavernes de la province de Liège. **2**: 92 et 94, pl. 18. P.S. Collardin, Liège.
- WOLDRICH, J., 1881, 1884. Diluviale Fauna von Zuzlowitz bei Winterberg im Böhmerwalde, **2, 3**. Sitzungsberichte der Math.-naturw. Klasse der K. Akad. der Wissenschaften. Wien, **2**: 84, 64; **3**: 88, 39.