# **Incertae sedis from MA zone**

mercredi 19 juillet 2017

**Upper Cheek Teeth**  
Some teeth from MA zone resemble *A. koobiforensis* by long and indented protocones but differ by shallow post-protoconal grooves and smaller size (Fig. 32).  
Fig. 32

**Lower Cheek Teeth**(Fig. 33)  
Both teeth from MA zone are very probably molars because of their elongated hypoconulids. In both the vestibular groove is shallow although not as much as it would be in premolars. This shallow groove added to a symmetrical double knot with rounded metaconid and metastylid is a character found in extant Asses. The lower premolar or molar FS 17 has no origin but belonged certainly to the same form.  
Fig. 33

**Associated Limb bones**  
The MC KNM ER 2069 B-C is associated with two first phalanges (Fig. 34).  
Fig. 34  
Among the extant *Equus* I have been unable to find a closer fit to this MC than the much larger *E. grevyi* (Fig. 35).  
Fig. 35  
The associated Ph1 KNM ER 2069 D and 2069 E resemble *E. grevyi*although they are smaller (Fig. 36).  
Fig. 36  
Radius  
KNM ER 2055 (Fig. 36) is similar to the minimum of extant *E. grevyi*(Fig. 37).  
Fig. 37  
Fig. 38

**Metacarpals**  
Most are damaged and altogether they do not form an homogeneous group (Fig. 39, 40).  
Fig. 39  
Fig. 40  
– KNM ER 1275 L (Fig. 29) has as wide a proximal epiphysis as KNM ER 1276 from NS zone (Fig. 16).  
– KNM ER 1274 ( Fig. 41) is slender and would fit with Wild Asses or very small *E. grevyi* if not the development of its distal keel (measure 12) not found in *E. africanus*nor *E. grevyi*(Fig. 42) but found in the more robust KNM ER 2069 (Fig. 35, 36).  
Fig. 41  
Fig. 42  
– KNM ER 1297, 103-0235/9 is much smaller but looks alike KNM ER 1276 from NS zone (Fig. 43, 44).  
Fig. 43  
Fig. 44  
– KNM ER 2050 (Fig. 45) is damaged but some approximate dimensions can still be used for comparisons (Fig. 46).  
Fig. 45  
The closest fit I could find is the MC of one extant Poitou donkey (BM 81-1338).  
Fig. 46  
– The damaged KNM ER 1431, 1717, and the juvenile 2215 are not very informative (Fig. 39).

**Tali**(Fig. 47)  
KNM ER 1275 J, associated with MT and other limb bones, was referred to ?*Allohippus* sp. The other are smaller.  
Fig. 47  
– KNM ER 685 A, 1296, 2048, 1385 (06A-0309, MA) and 2049 have the proportions and size of *E. hydruntinus* and the proportions of the extant *E. grevyi* ;  
– KNM ER 661 A, 1290, and 2047 (123, AssHom 1811) have the proportions of extant *E. hemionus* (Fig. 48).  
Fig. 48

**Metatarsals**  
The specimens are few and fragmentary (Fig. 49)  
Fig. 49  
KNM ER 2057 has a rather deep proximal epiphysis not unlike some extant *E. grevyi* (Fig. 50).  
Fig. 50

**First Phalanges**  
From MA zone, Chari-, Area 06A-0301, there is an anterior phalanx (Fig. 52)  
Fig. 51  
which very probably belongs to a Wild Ass (Fig. 53).  
Fig. 52