A black and white photograph of a vast, hilly African landscape. The foreground features a prominent mesa with a flat top and steep, eroded sides. The terrain extends into the distance with rolling hills and a wide, shallow valley. The sky is filled with soft, diffused light, suggesting an overcast day. The overall scene conveys a sense of a rugged, natural environment.

**Apport actualisé des études en  
Afrique dans le domaine de la  
Taphonomie**



## Taphonomie en Afrique (Phase 1)

Approche écologique; les hominidés sont responsables de la formation des sites à cause de:

Nombre de restes, nombre d'individues parties anatomiques et niches écologiques des animaux représentés.



*1. Le processus d'échantillonnage pour évaluer modes d'accumulation osseuse dans les savanes modernes a été fait au hasard. En conséquence, la tendance documentée est de basse densité d'os. En contraste, il y a des endroits dans les savanes modernes où les os s'accumulent plus densément qui n'ont pas été considéré adéquatement: endroits de prédation en série, des petits bassins de mare saisonniers, des sources, des zones humides, etc... Dans ces endroits, les os peuvent s'accumuler plusieurs fois plus densément que dans la plupart du paysage par des agents biotiques en absence de transport par des agents physiques.*

*2. Il ya des sites du Miocène qui ont la même densité d'os (considérant nombre de restes, d'individues, parties anatomiques et diversité spécifique) que les sites archéologiques Plio-Pléistocènes africaines. Donc, ces accumulations peuvent se créer sans l'intervention des hominidés.*

*3. La dynamique trophique du Plio-Pleistocène était différente de celle que l'on documente aujourd'hui dans les savanes africaines. La présence d'une diversité de felidés de dents de sabre probablement causait plus d'opportunités pour accumulation de restes d'animaux.*

*Conclusion: Aucune de ces variables est déterminante de l'agent d'accumulation.*



Les modèles explicatifs des sites archéologiques africaines:

Living floors, kill sites (Leakey, 1971)

Home bases, food-sharing (Isaac, 1978)

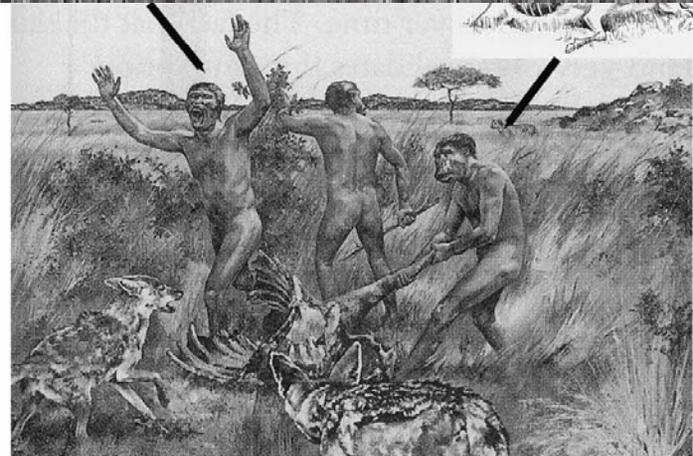
Marginal scavenger (Binford, 1981)

Central-place foraging (Isaac, 1983)

Stone-cache hypothesis (Potts, 1988)

Refuge and passive scavenger  
(Blumenschine, 1986, 1991)

Hunter and confrontational scavenger  
(Bunn & Kroll, 1986; Dominguez-Rodrigo, 1997)



# Pickering et al, 2004

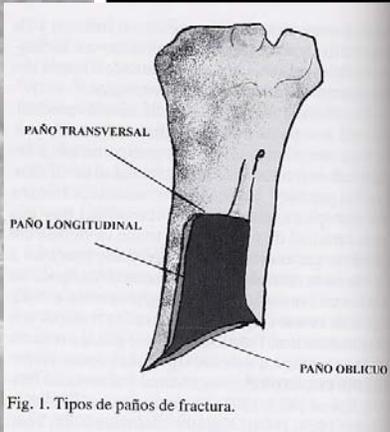
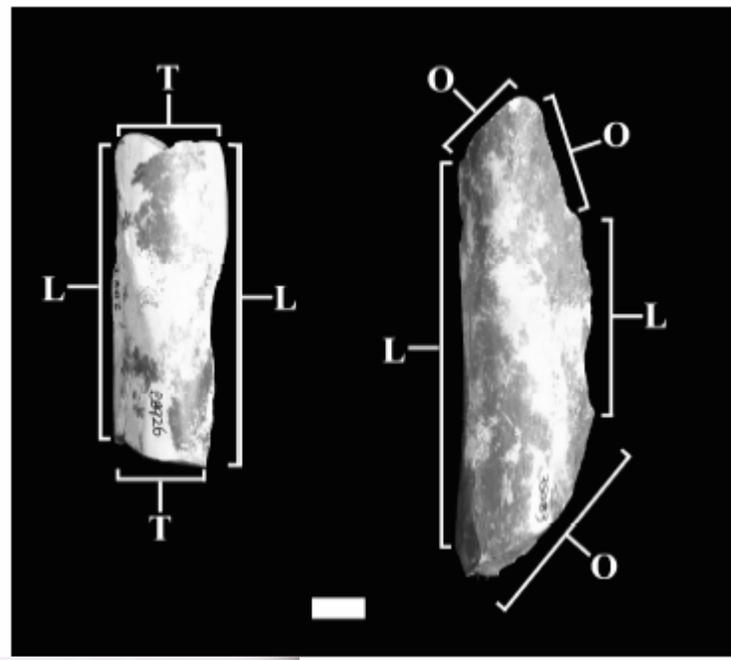


Fig. 1. Tipos de paños de fractura.

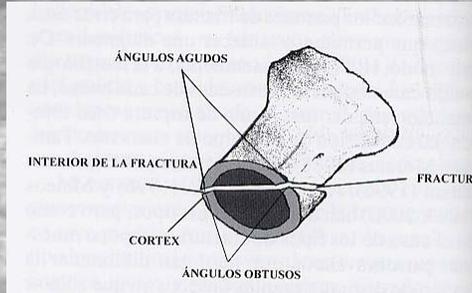
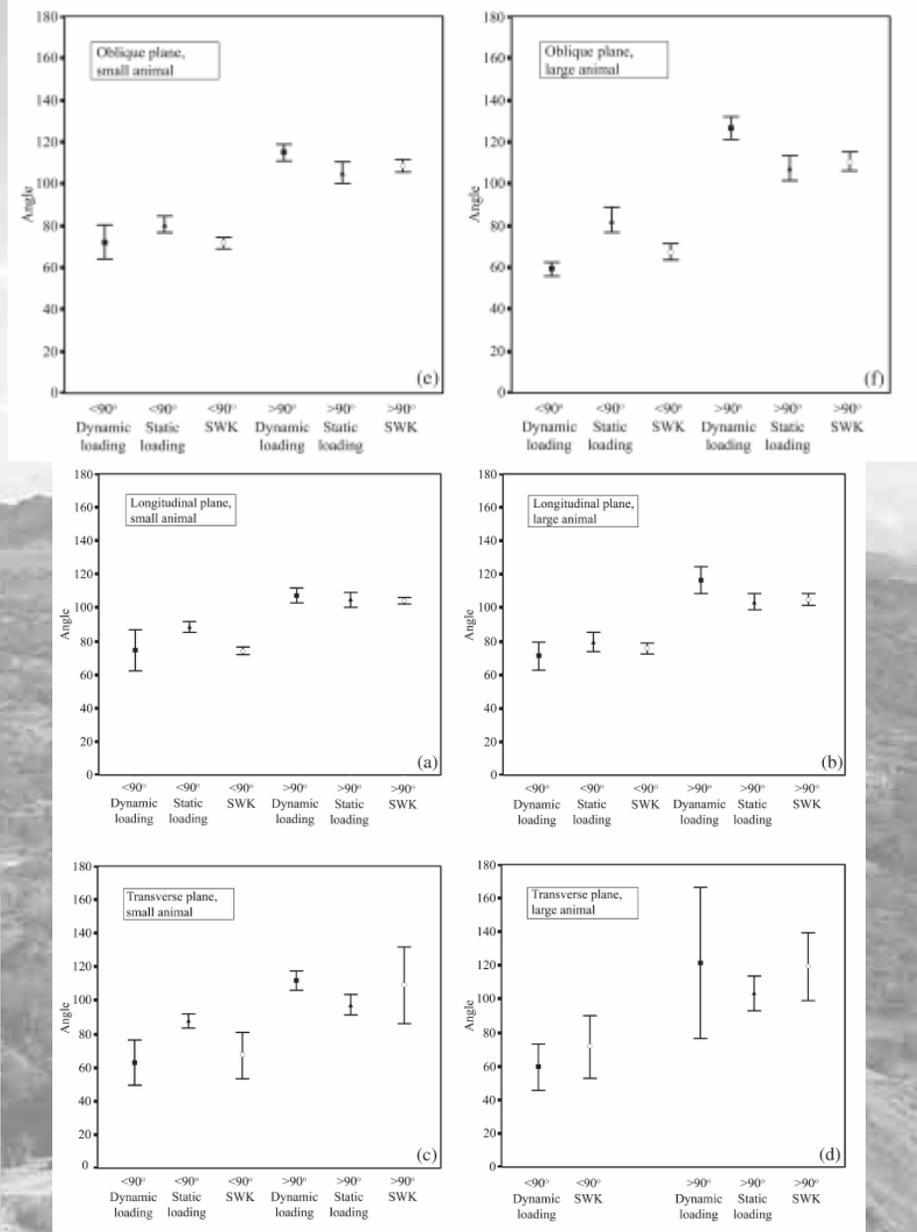


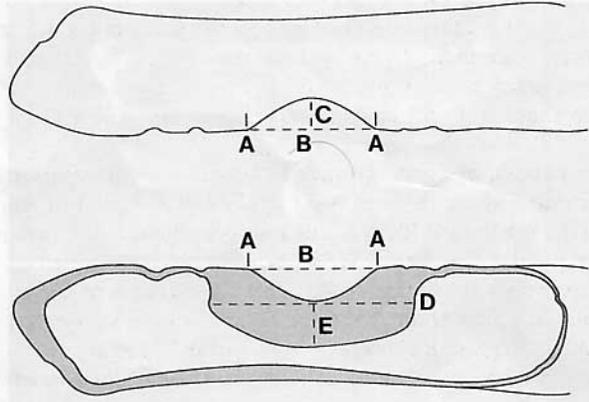
Fig. 2. Modelo de medición de los ángulos de fractura.



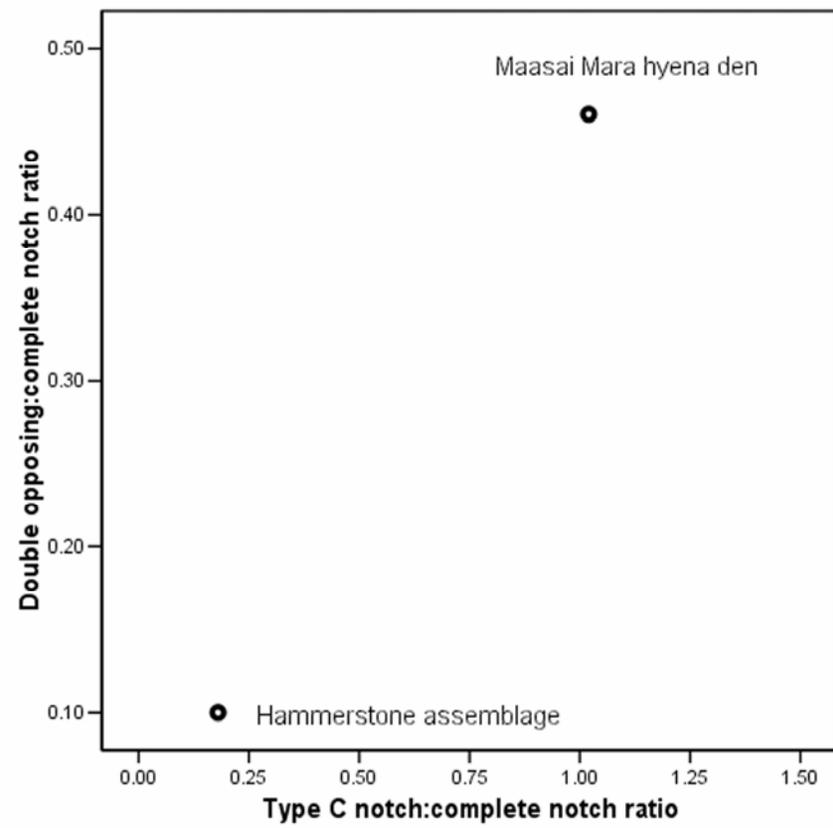
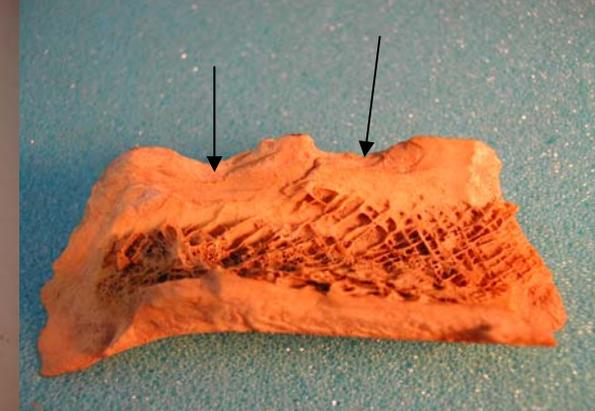
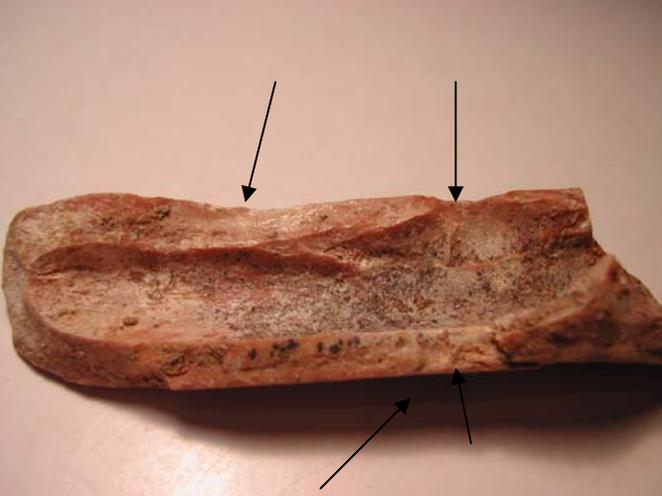
Fragmentation I: angles de plan de fracture

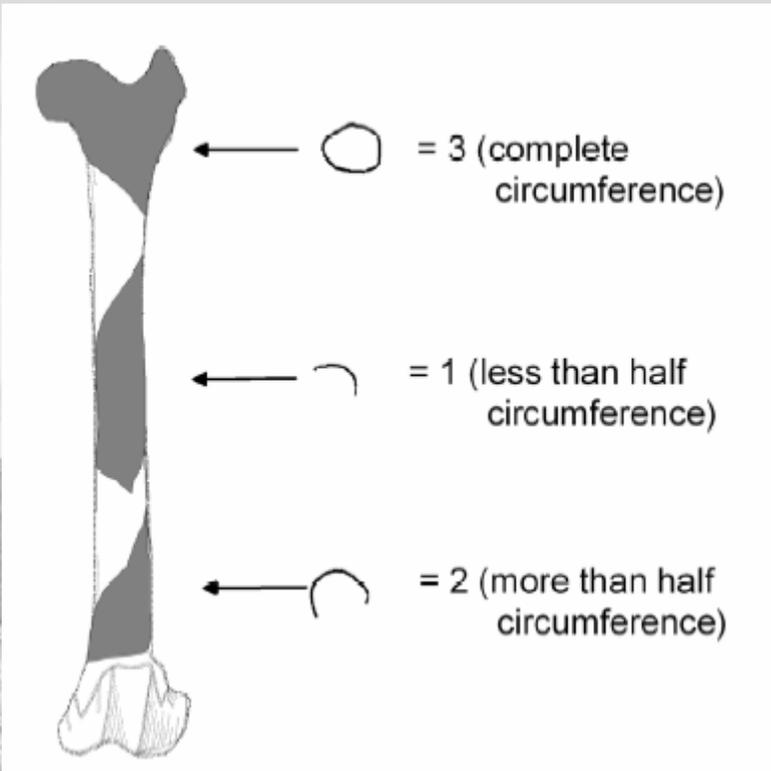
Fragmentation I: angles de plan de fracture

Capaldo & Blumenschine (1994)

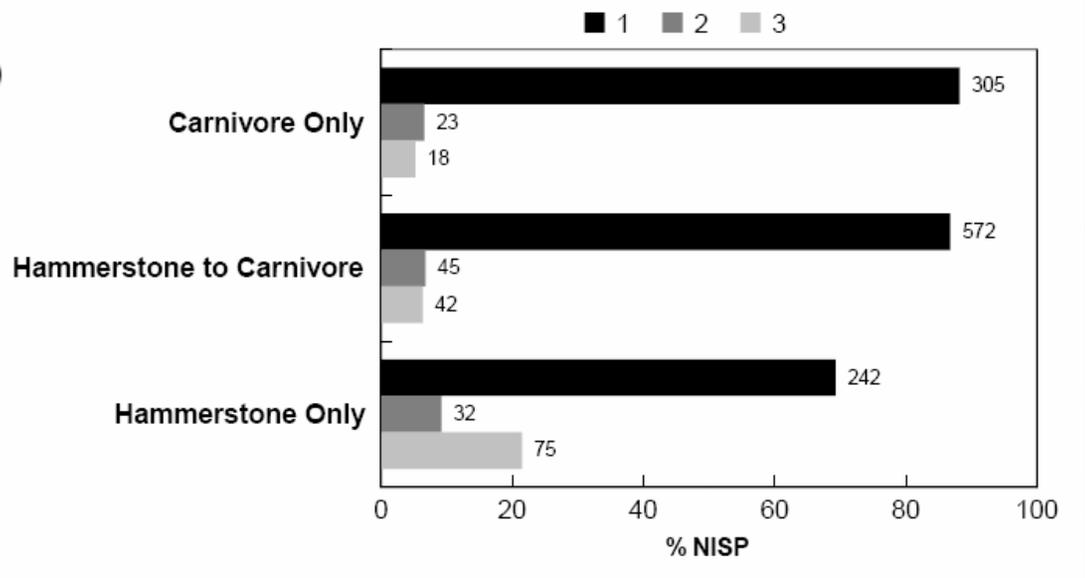


Fragmentation II: encoches  
Fragmentation II: encoches





Marean et al., 2004



Fragmentation III: types de circonference  
 Fragmentation III: types de circonference

# Taphonomie d'attributs physiques:

## Humaines modifiant animaux de moins de 300 kg de poids (os longues des membres):

Traces de boucherie (10%-30%) Lupo & O'Connell (2002) Dominguez-Rodrigo (1997)

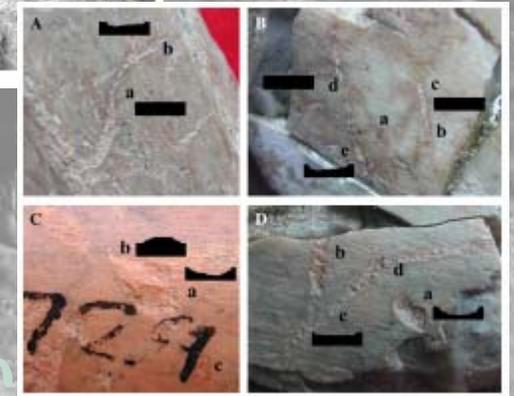
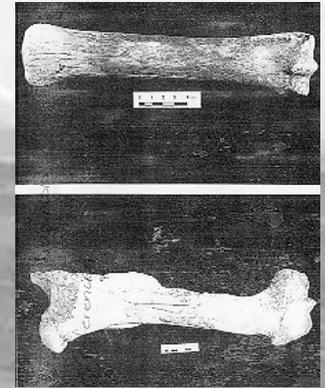
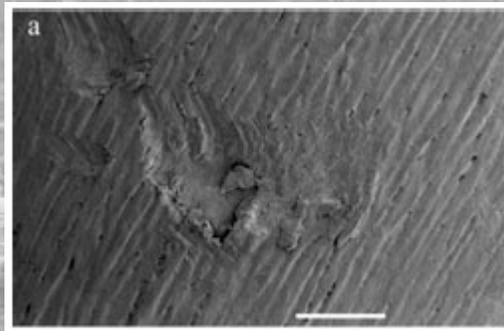
Traces de percussion (15%-30%) Blumenschine & Selvaggio (1988, 1991)

## Carnivores modifiant animaux de moins de 300 kg (os longues des membres):

Hyénidé-Humaine= 80% traces de dents sur les diaphyses

Humaine-Hyénidé= 15% traces de dents sur les diaphyses

Felidé-Humaine= <15% traces de dents sur les diaphyses

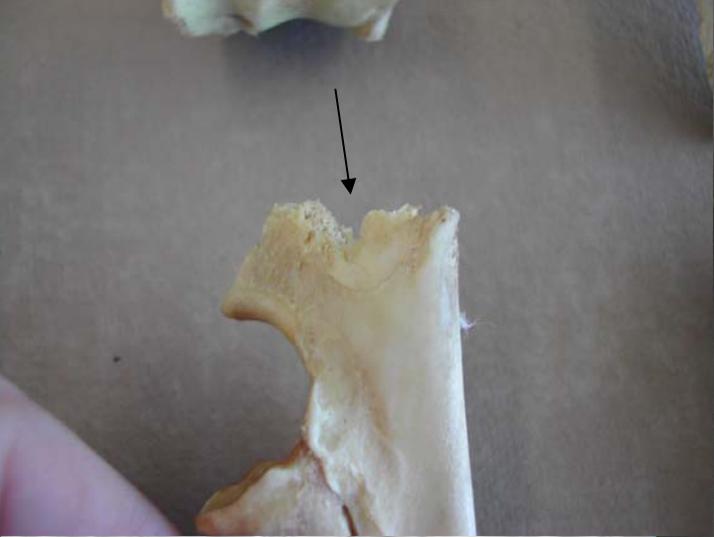


Modifications de la surface des os  
Modifications de la surface des os

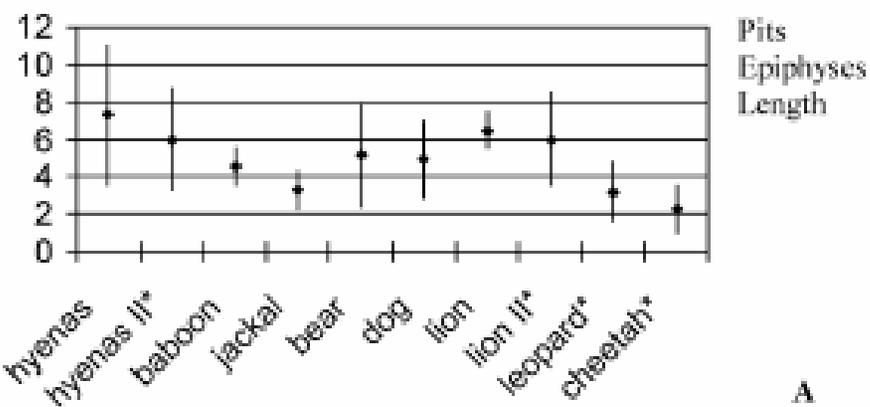


Quelques exemples de la collection  
d'animaux modifiés par des felidés  
de B. Brain.

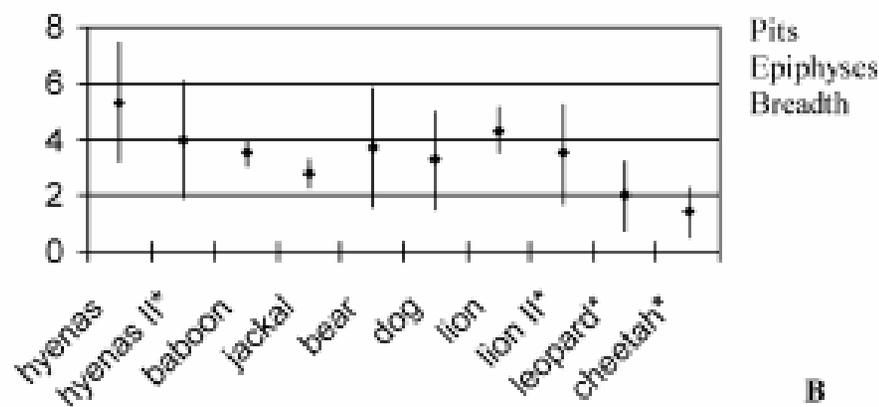




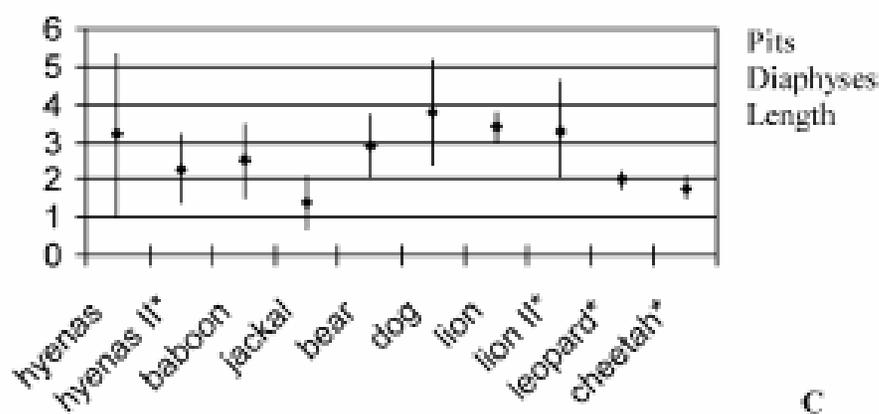
Des os modifiés par felidés.



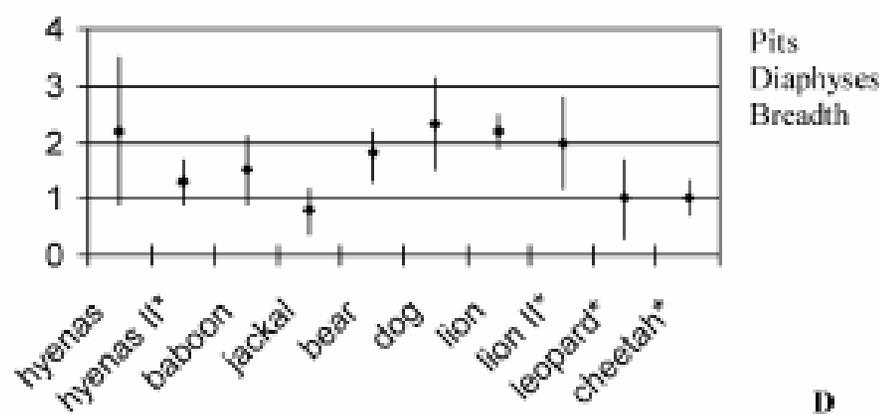
**A**



**B**

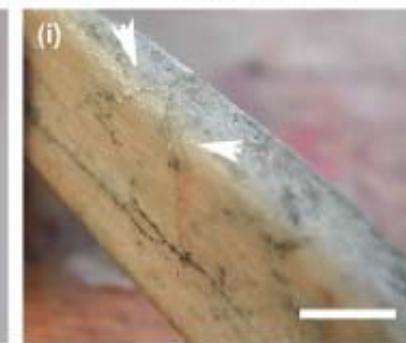
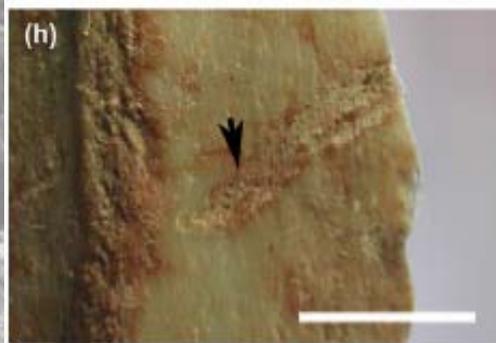
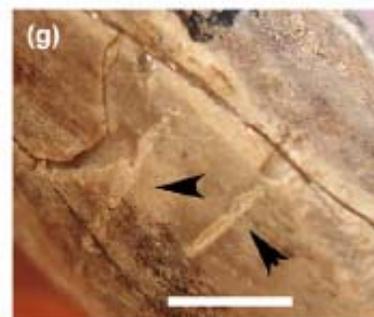
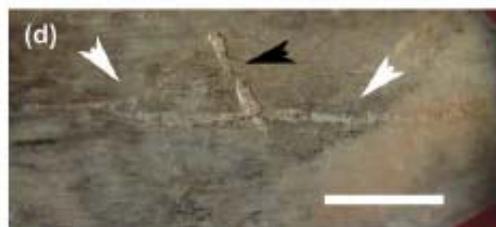
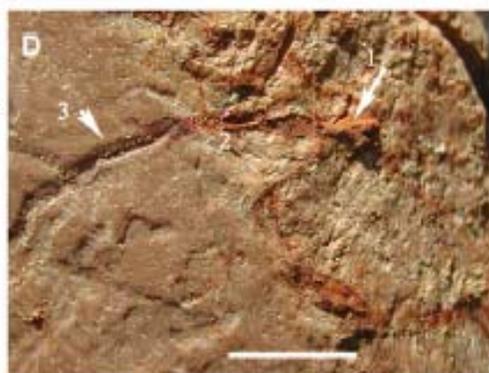
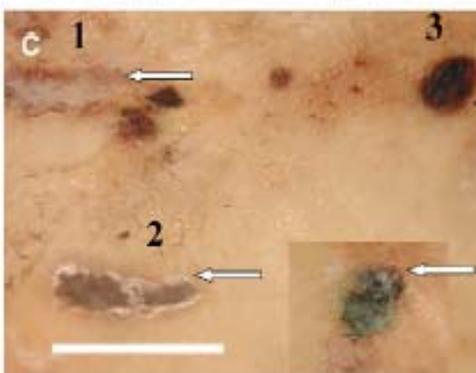
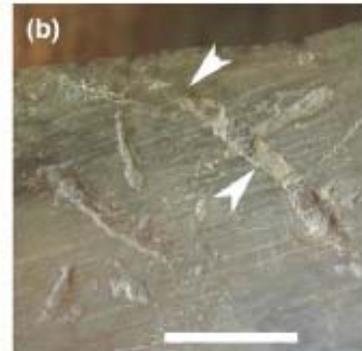
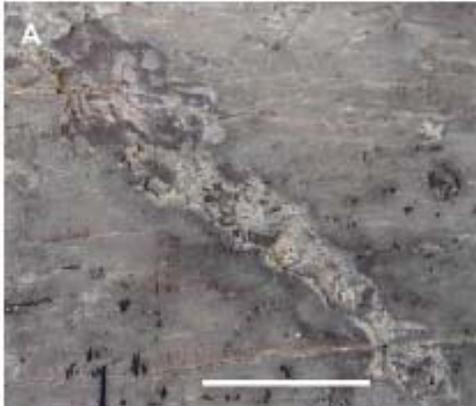


**C**



**D**





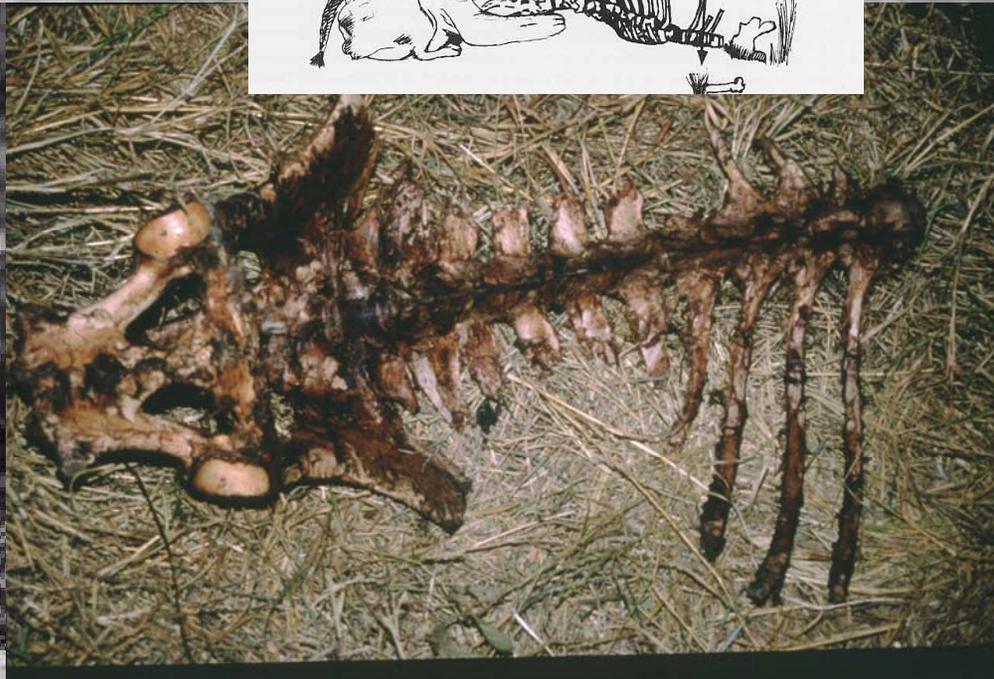
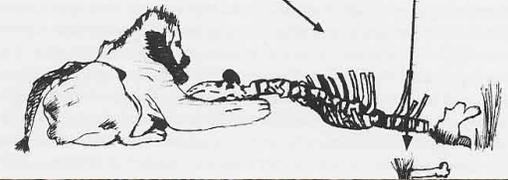
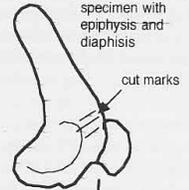
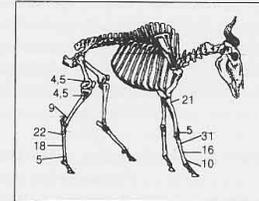
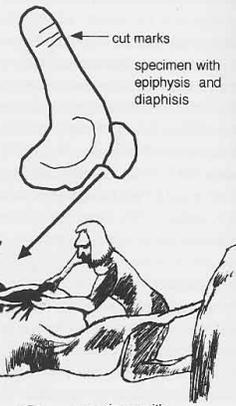
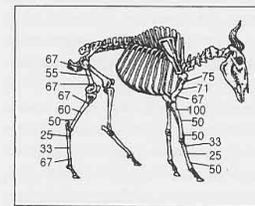
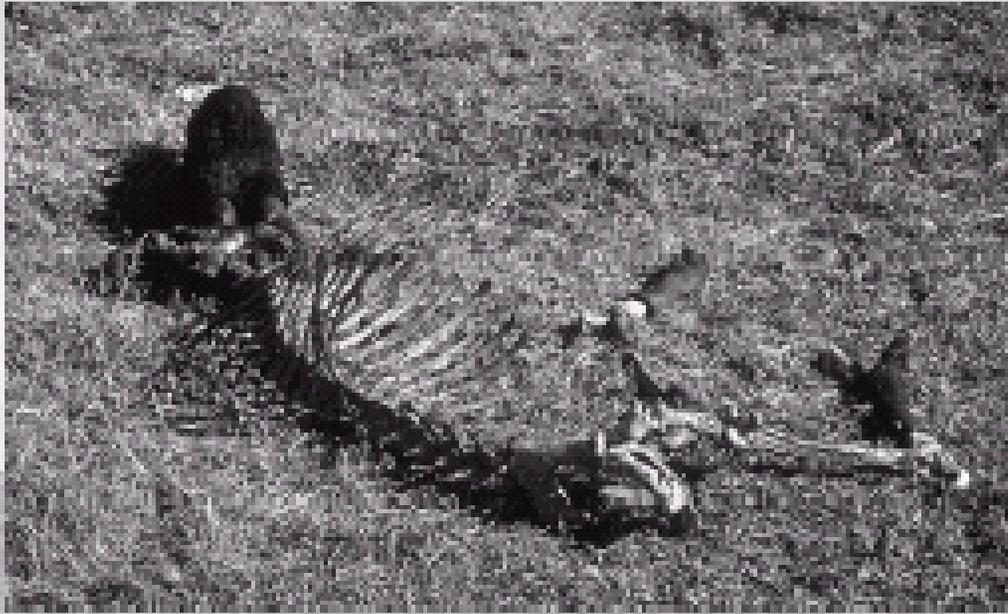
Sample NP 1				
Fungi CFU/cm	Bacteria CFU/cm	Culture 1 CFU/cm	Culture 2 CFU/cm	Culture 3 CFU/cm
14,2	1,6	3,4	1,4	2,5

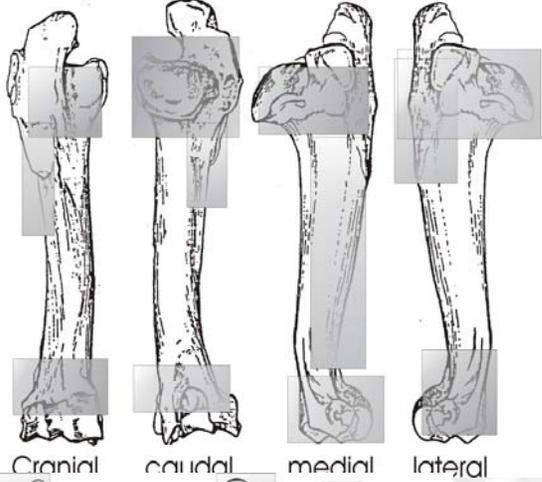


**(a)** Sample point 1

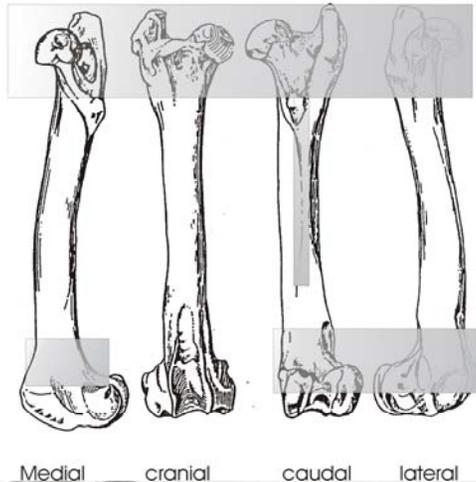
**(b)** Growth of fungal flag from sample 1

Taxonomic identification: *Cladobotryum* sp.





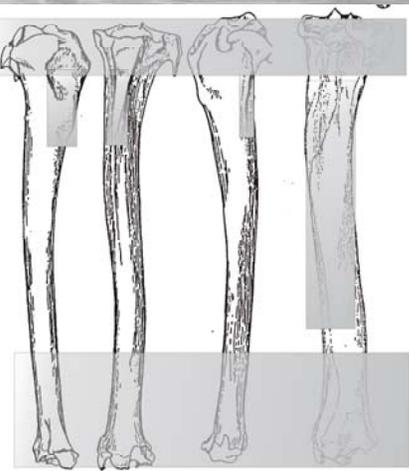
Cranial caudal medial lateral



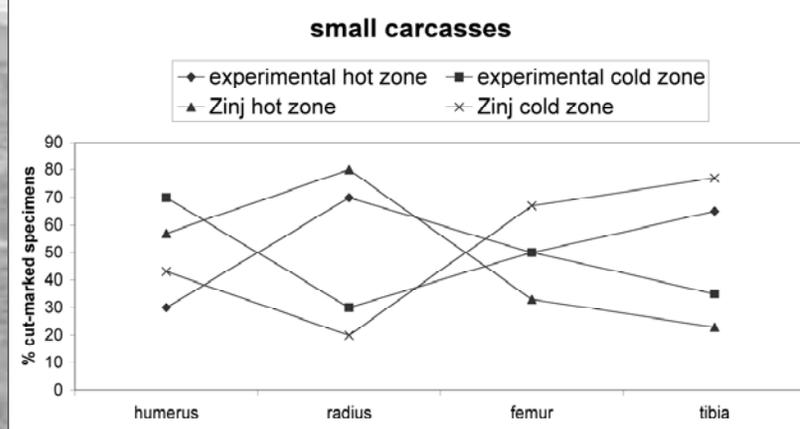
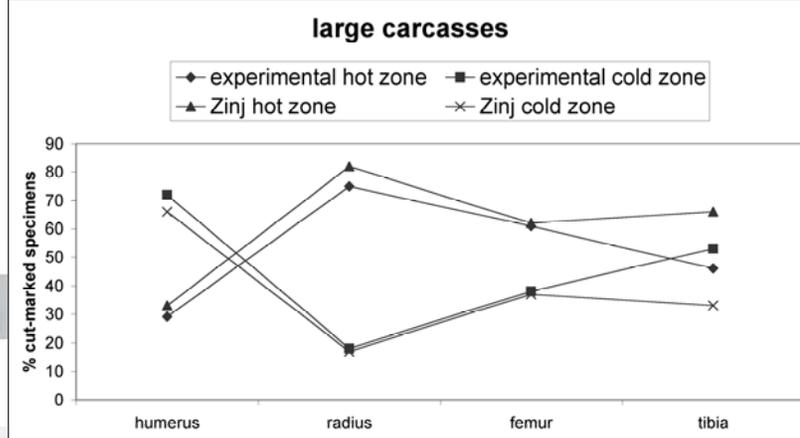
Medial cranial caudal lateral



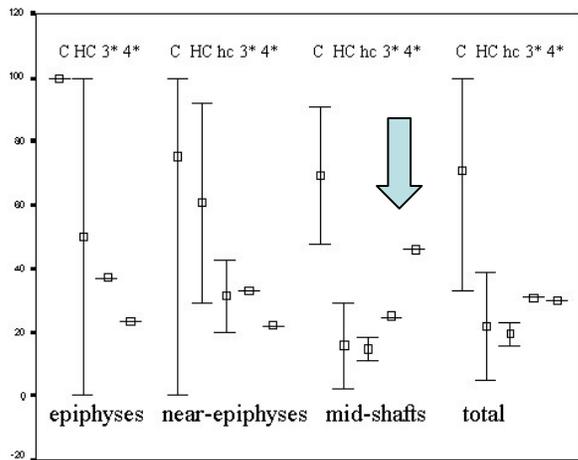
Lateral cranial medial caudal



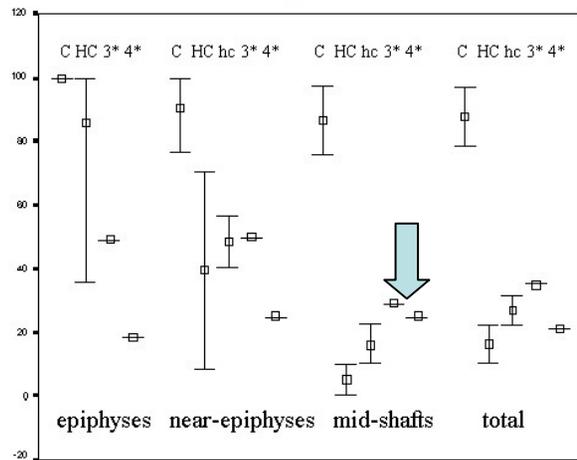
Lateral cranial medial caudal



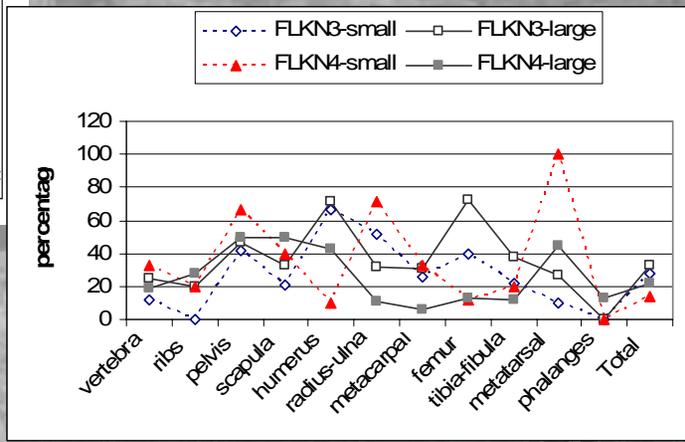
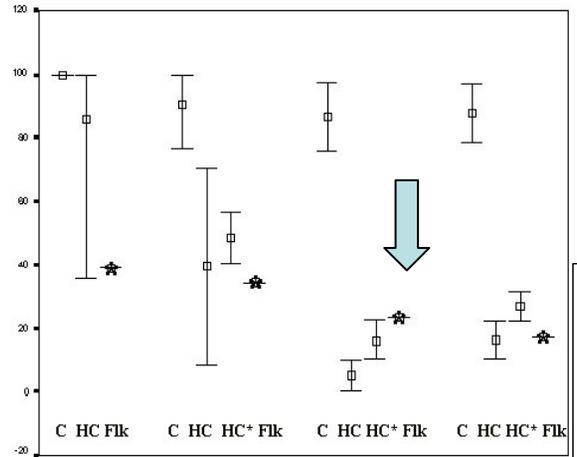
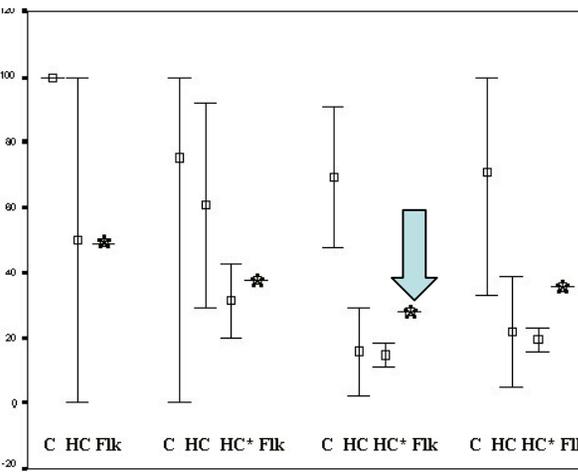
small carcasses



large carcasses

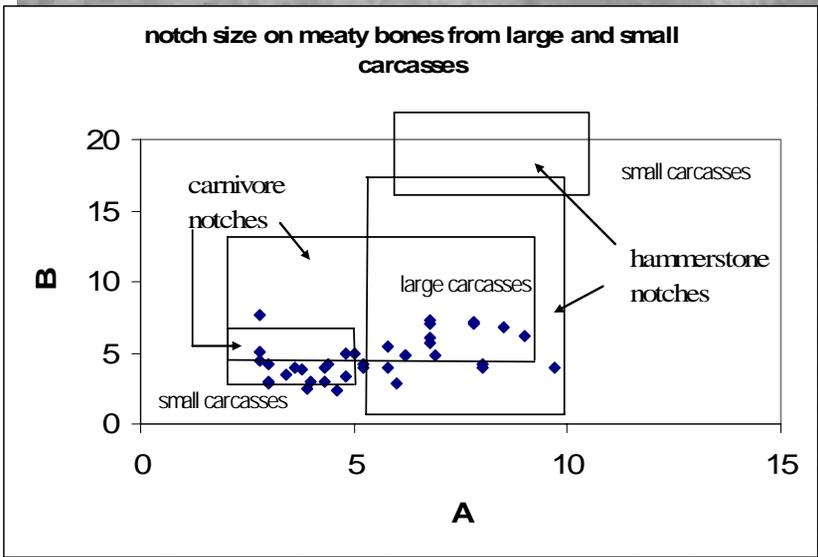
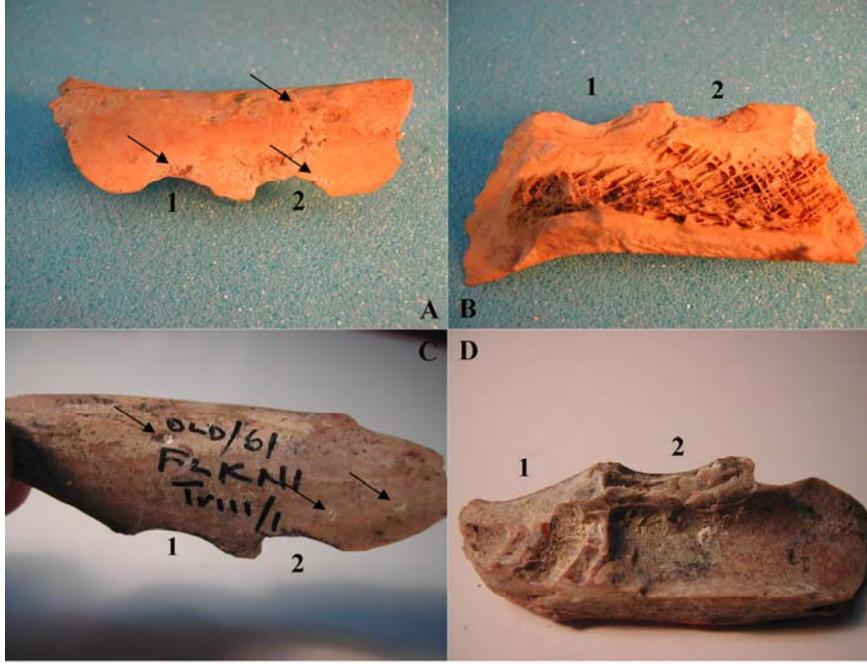
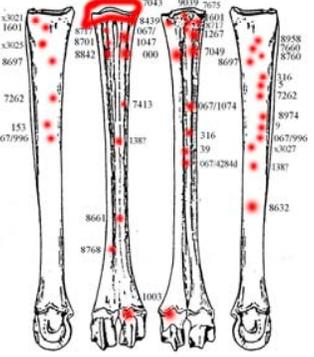
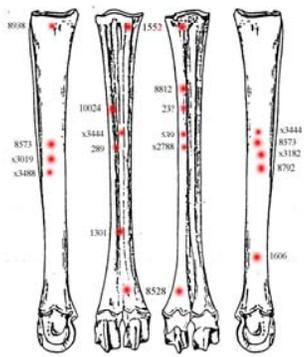
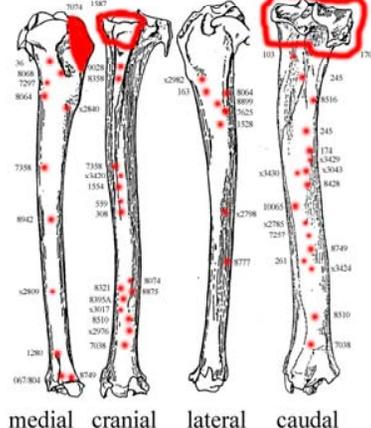
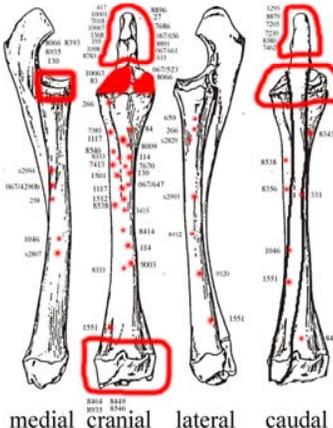
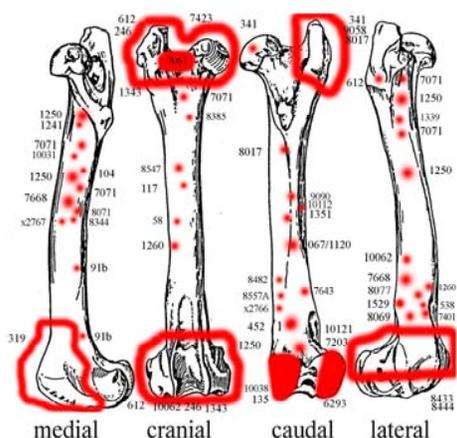
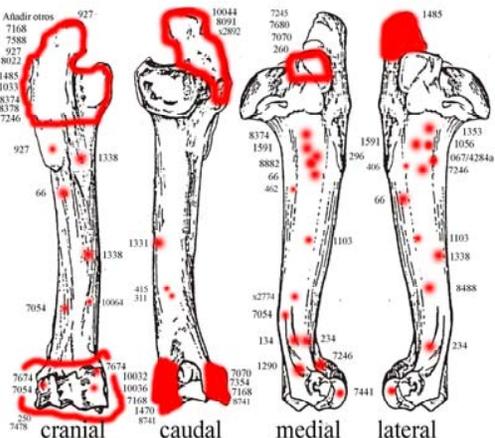


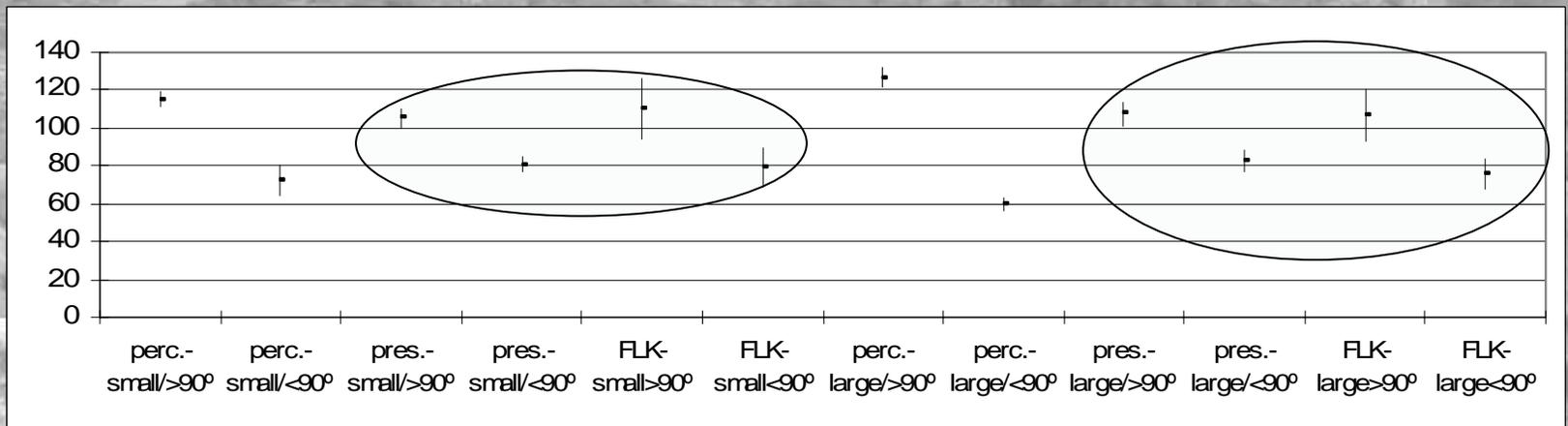
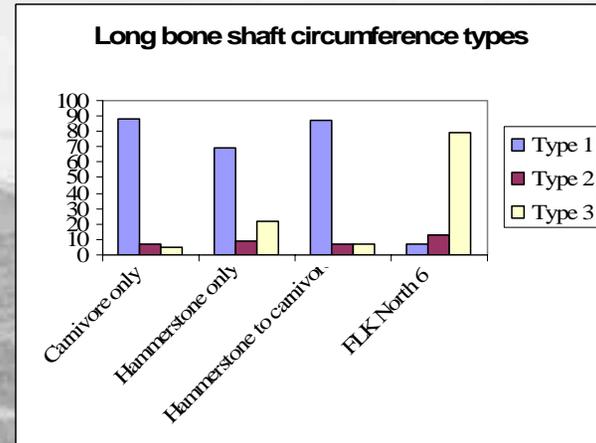
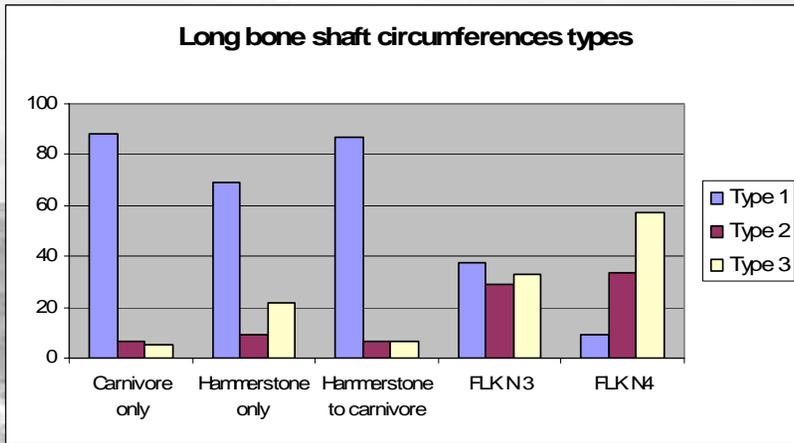
FLK N 1-2: 2747 bones  
 FLK N 3-4: 1530 bones



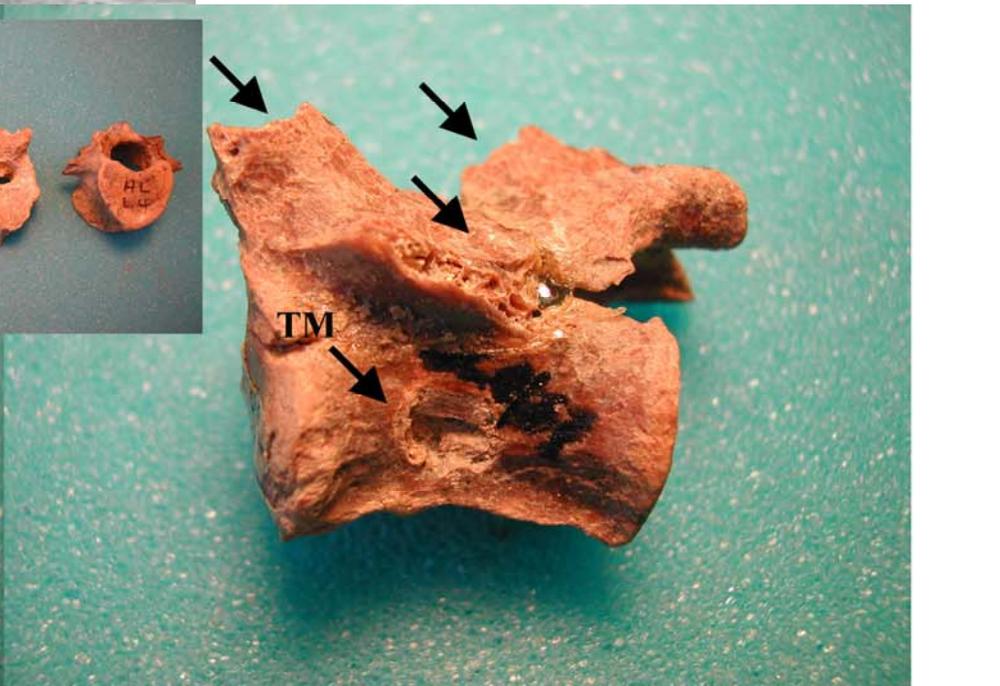
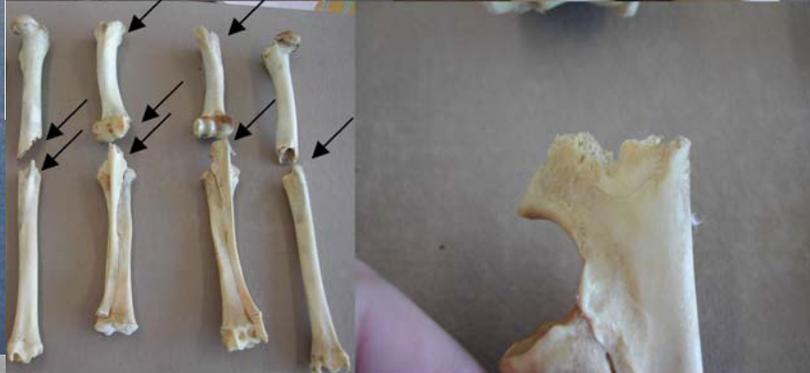
Tooth marks: FLKN1-4  
 Tooth marks: FLKN1-4

large carcasses



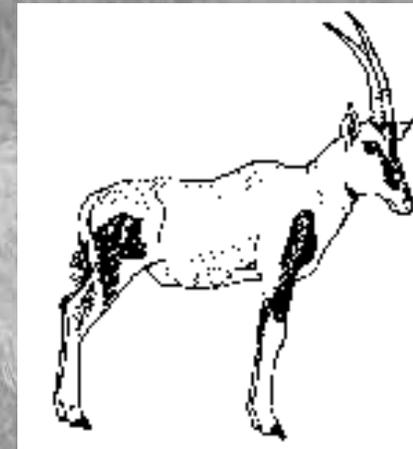


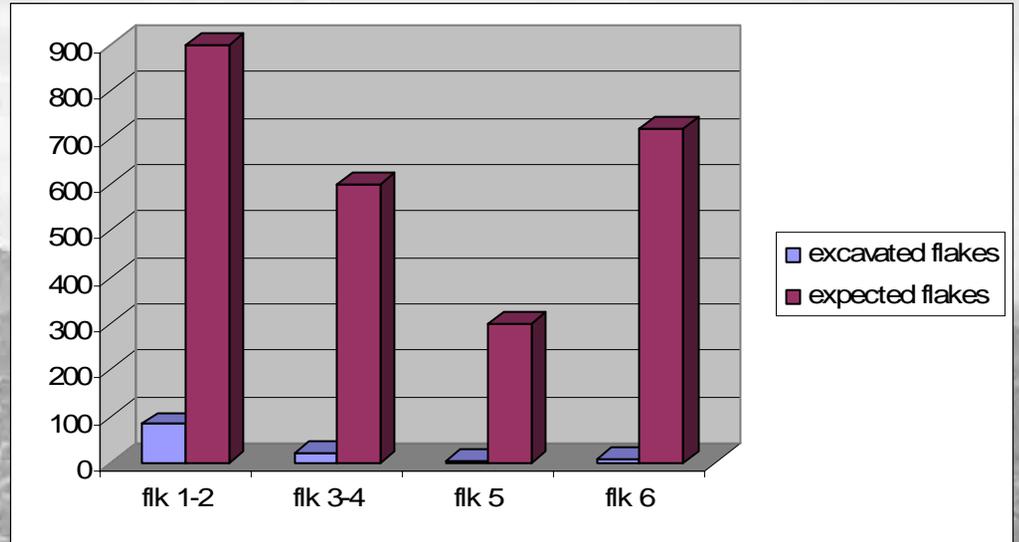
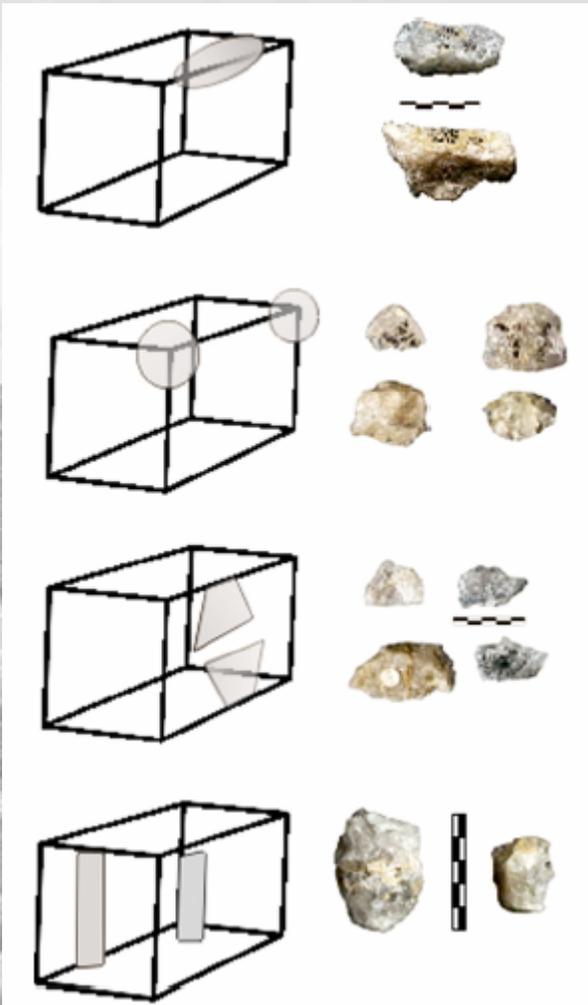




FLKN 1-2 = 45 bovid carcasses: 13 *Antidorcas recki*, 29 *Parmularius altidens* and 2 size 3 bovids.

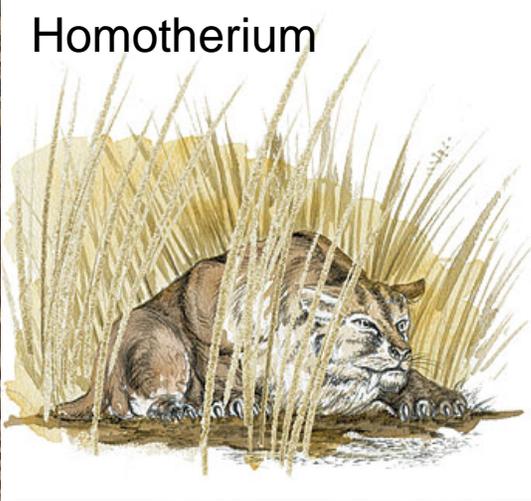
FLK N 3-4 = 10 *Antidorcas recki* and 16 *Parmularius altidens*.



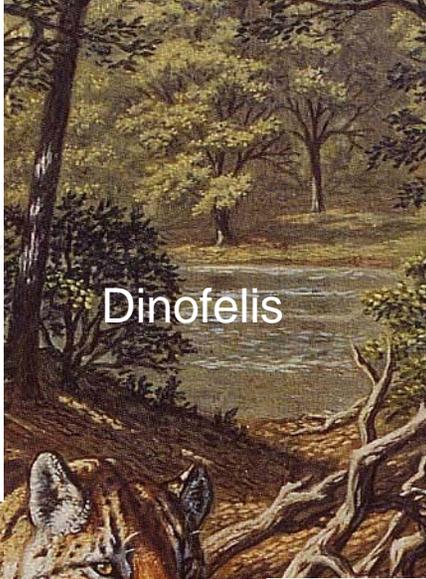


From Mora & de la Torre, 2004

Homotherium



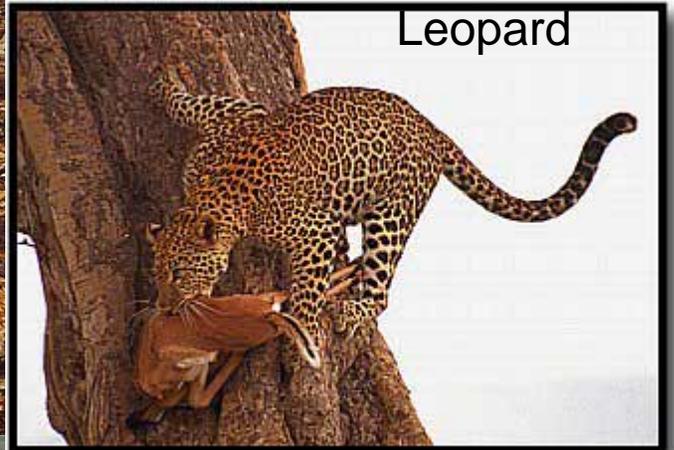
Dinofelis



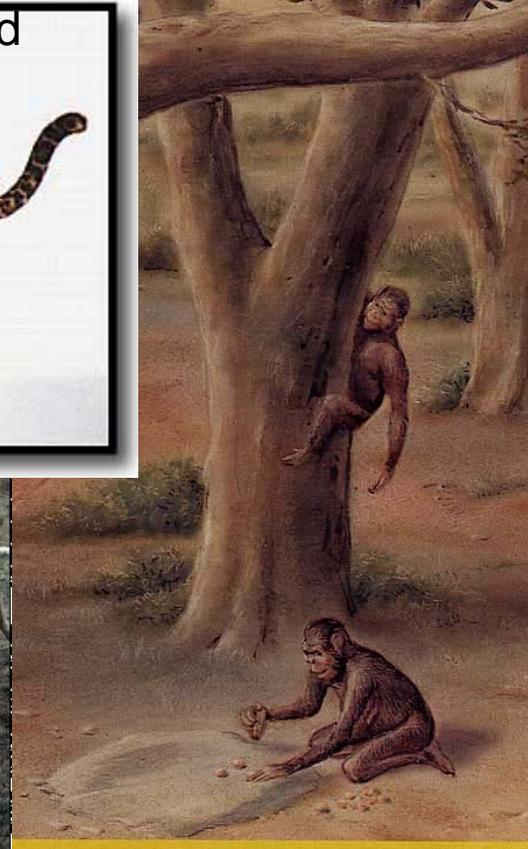
Megantereon



Leopard



Lion



**L a s u r p r i s e s e t r o u v e à F L K Z i n j ...  
m a i s ç a a p p a r t i e n t à u n e a u t r e  
c o n f e r e n c e . . . .**

**M e r c i d e v ô t r e a t t e n t i o n**

