



## The predated scavenging birds. Example of "les loups du Gévaudan" park.

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# Les oiseaux charognards prédatés. L'exemple du parc « les loups du Gévaudan » The predated scavenging birds. Example of “les loups du Gévaudan” park

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## INTRODUCTION

Birds are among the most frequent scavengers<sup>1,2</sup>. This study aims to illustrate how wolves can prey on carrion birds, and describe the modifications they could produce.

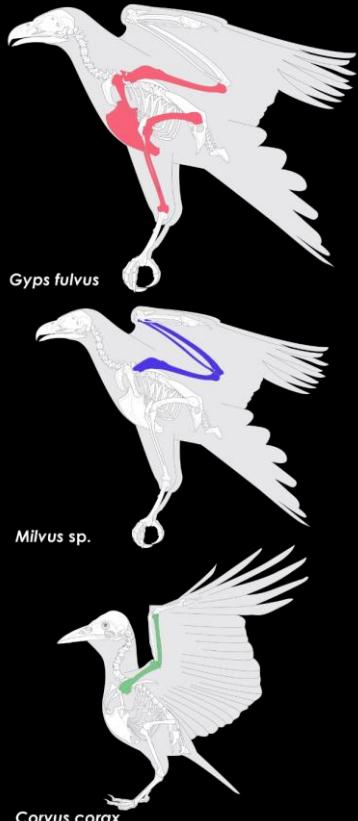


Fig.1 Skeletal representation of the assemblage.  
Drawings by M. Coutureau (Inrap, ArcheoZoo.org).

## MATERIAL AND METHOD

**Origin of the assemblage:** park “les Loups du Gévaudan”

**Period/reason of bone recollection:** March 2018

- Hand picked in one of the enclosures of the scientific park
- Wolves are the only carnivores in the park that are able to hunt large-sized birds

**Methodology applied:** Taphonomy

## RESULTS

NISP: 15 (Fig. 1)

MNI: 5

Taxa: Griffon vulture (*Gyps fulvus*)

Kite (*Milvus sp.*)

Common raven (*Corvus corax*)

**Completeness:** 40%

- Long bones present fresh fractures with jagged and/or oblique edges

**Carnivore modifications:** 80% (Fig. 2)

- 53% with pits, punctures and notches (multiple and bilateral)
- Presence of furrowing and crenulated edges
- Two vulture bones show scores
- No digestive alterations

## DISCUSSION AND CONCLUSION

There may be situations in which scavenging birds and wolves interact during the consumption of carcasses. This interaction leads to conflicts between both agents looking for the same resources. These circumstances could be lethal for the carrion bird<sup>3-7</sup>. Wolves could take advantage of the bird carcasses, consuming them and producing modifications on bones.

Despite the small sample size, the present study provides a starting point for better understanding and identifying interactions between wolf and scavenging birds in the archaeological record.

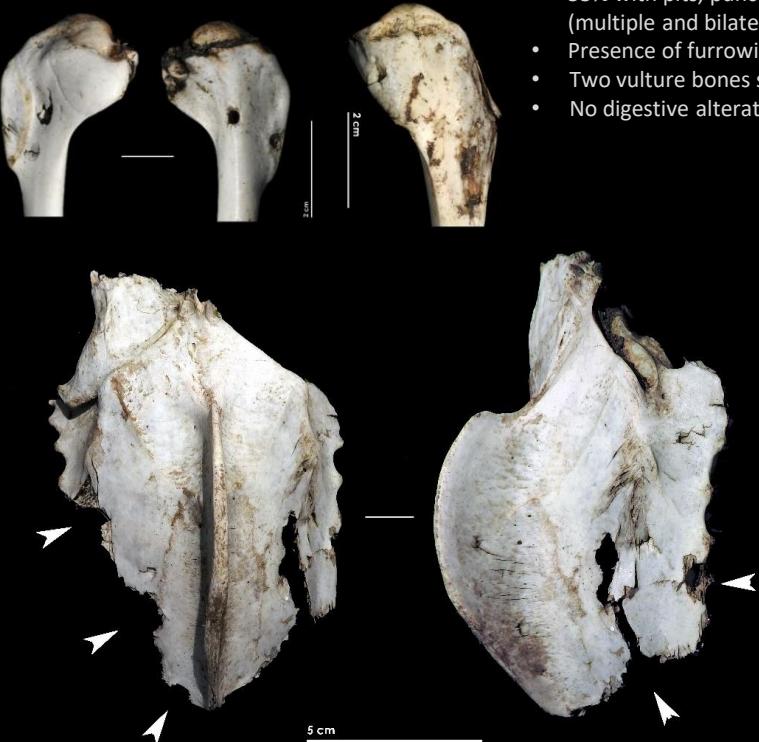


Fig. 2 Mechanical modifications observed on a raven (upper left) and a kite (upper right) humeri, and griffon vulture sternum (lower left) and humerus (lower right).



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**REFERENCES:** <sup>1</sup>SELVA, N. & FORTUNA, M.A. (2007). The nested structure of a scavenger community. *Proc. Royal Soc. B-Biol. Sci.*, 274: 1101–1108. / <sup>2</sup>SELVA, N. et al. (2005). Factors affecting carcass use by a guild of scavengers in European temperate woodland. *Can. J. Zool.*, 83: 1590–1601. / <sup>3</sup>ALLEN, D. (1979). *Wolves of Minong: Their vital role in a wild community*. Houghton Mifflin, Boston. / <sup>4</sup>HUNTER, J.S. et al. (2007). Patterns of scavenger arrival at cheetah kills in Serengeti National Park Tanzania. *Afr. J. of Ecol.*, 45: 275–281. / <sup>5</sup>PAQUET, P.C. (1992). Prey use strategies of sympatric wolves and coyotes in Riding Mountain National Park, Manitoba. *J. Mammal.*, 73: 337–343. / <sup>6</sup>PETERSON, R.O. (1977). *Wolf Ecology and Prey Relationships on Isle Royale*. Government Printing Office, Washington. / <sup>7</sup>STAHLER, D. et al. (2002). Common ravens, *Corvus corax*, preferentially associate with grey wolves, *Canis lupus*, as a foraging strategy in winter. *Anim. Behav.*, 64: 283–290.