Journal of Archaeological Science 45 (2014) 103–111

Contents lists available at ScienceDirect

Journal of Archaeological Science

journal homepage: http://www.elsevier.com/locate/jas

More evidence for cat taming at the Predynastic elite cemetery of Hierakonpolis (Upper Egypt)

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ARTICLE INFO

Article history:
Received 13 January 2014
Received in revised form
13 February 2014
Accepted 18 February 2014
Available online 27 February 2014

Keywords:
Burial
Cat
Felis silvestris
Domestication

ABSTRACT

Continued excavations at the Predynastic elite cemetery HK6 at Hierakonpolis have yielded new evidence for the cultural control of cats during the Naqada IC-IIB period (c. 3800–3600 BC). In the same burial ground where evidence was previously found for the keeping of jungle cat (*Felis chaus*), a small pit was discovered containing six cats. The animals that were buried simultaneously, are a male and a female, and four kittens belonging to two different litters. The long bone measurements of the adult individuals clearly fall in the range of *Felis silvestris* and outside those of *F. chaus* and *F. margarita*. Comparison of the measurements – through the log-ratio technique – with data from the literature, as well as morphological characteristics of the mandible, suggest that the animals are domestic. It is argued that these results should be used with caution, since the criteria established to distinguish wild and domestic cat in European sites may reflect differences at the subspecies level (wild *Felis silvestris silvestris* versus the domestic form derived from *Felis silvestris lybica*). In northern Africa only *F. s. lybica* (wild or domestic) occurs, thus the established criteria may not be adequate when applied to Egyptian material. However, possible circumstantial evidence for the cultural control of the cats buried at Hierakonpolis is provided by their ages at death which indicate a deviation from the birth pattern reported in Egyptian wild cats.

1. Introduction

In the traditional view, the domestication of *Felis silvestris* occurred in Egypt around 4000 years ago, during the Middle Kingdom (c. 1950 BC), or on circumstantial evidence perhaps 300 years earlier in the late Old Kingdom (c. 2310 BC) (Malek, 1993). This has been challenged by a much earlier find from Cyprus that demonstrates a close relationship between cats and humans around 9500 years ago (Vigne et al., 2004). The Cypriote evidence, a cat buried in close association with a human, suggests that the domestication process may have started when humans in the Levant became sedentary and their cereal storage attracted rodents, and in turn cats. Further, in a recent article (Hu et al., 2013), based on stable isotope evidence, it has been suggested that small felids lived in the vicinity of humans about 5300 years ago in an early agricultural village of Quanhucun in Shaanxi, China. In Egypt itself, indications for the taming of cats, prior to the traditionally accepted date, was limited to the report of a possible cat skeleton near the feet of a man in a grave dating to the Badarian period (5th millennium BC) (Brunton, 1937: 34; Flores, 2003: 82), but the remains are unavailable for examination and the identity of the animal is unconfirmed. More reliable evidence is provided by the skeleton of a jungle cat (*Felis chaus*) dated to 3700 BC (Linseele et al., 2007, 2008). This young adult, found in a group burial in the elite cemetery of the Predynastic period (HK6) at Hierakonpolis, exhibits a femur and a humerus with a healed fracture, indicating that the animal had been tended to for several weeks prior to its sacrifice. Continued excavation of the same graveyard has now yielded secure evidence for the presence of the wild cat (*F. silvestris*). Below the find circumstances are described and the status of the cats (wild, tamed, domestic?) is discussed on the basis of morphological, osteometric and demographic information.

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http://dx.doi.org/10.1016/j.jas.2014.02.014

2. The cat burial at Hierakonpolis

Hierakonpolis (25°06′N, 32°46′E) is located on the west bank of the Nile, 17 km north of the modern town of Edfu in Upper Egypt (Fig. 1). This large Predynastic site consisted of domestic quarters, industrial zones and ceremonial centres as well as cemeteries for the different strata of society. Excavations in the cemetery of the elite segment of the population called HK6 started in the late 1970s (Adams, 2000) and are still ongoing. The HK6 cemetery is unique in the Predynastic period for the number and variety of wild and domestic animal taxa it contains. Besides the traditional domestic species (cattle, sheep, goat, dog, donkey) a large number of wild species have been found: anubis baboon (*Papio anubis*), aurochs (*Bos primigenius*), hartebeest (*Alcelaphus buselaphus*), wild donkey (*Equus africanus*), hippopotamus (*Hippopotamus amphibius*), elephant (*Loxodonta africana*), jungle cat (*Felis chaus*), leopard (*Panthera pardus*), crocodile (*Crocodylus niloticus*) and ostrich (*Struthio camelus*). Recent excavations have shown that many of the animal graves are subsidiary to the large tombs of the human elite of the early Naqada II period (c. 3700–3600 BC), which were placed at the centre of mortuary complexes and surrounded by smaller graves not only of (presumably) family members and court officials, but also a variety of animals, both domestic and wild. These animals were deliberately and carefully buried whole in graves of their own, either singly or in groups usually of the same species. More rarely they accompany a human burial in the grave. Animals found in conjunction with humans include dogs, baboons, goats and hartebeest. Faunal remains representing butchered part of domestic animals offered as food are also present, but are not considered here as buried animals (Friedman et al., 2011; Linseele et al., 2007, 2008; Van Neer et al., 2004, 2014, in press). Animal graves also occur in association with architectural features in the cemetery, such as enclosure walls and funerary temples. Their sacrifice and burial seems to have marked the boundaries of certain precincts (Friedman, 2010).

During excavations carried out in March 2008 along the course of a wood-post wall (Wall B7) that runs for over 72 m at the eastern edge of the cemetery, three subsurface pit features were discovered (Fig. 2). These contained the articulated skeletons of a juvenile anubis baboon (Feature B), nine adult and subadult dogs of medium

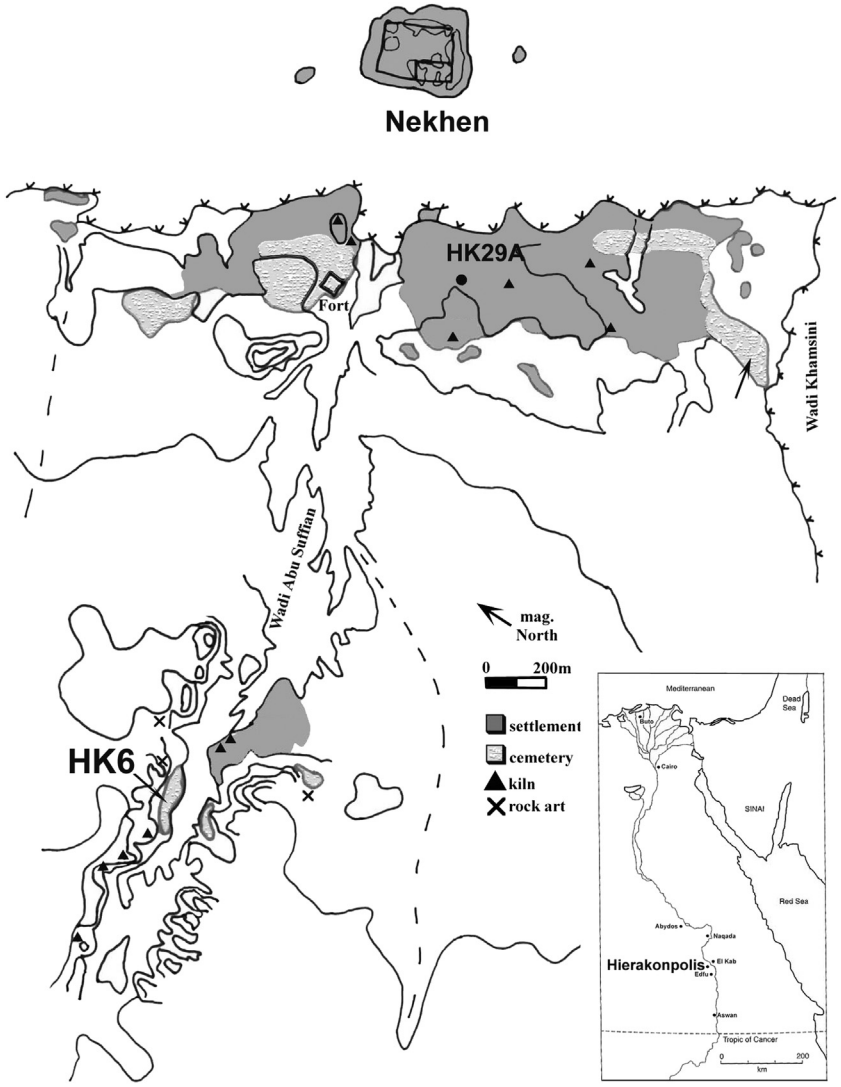

Fig. 1. Hierakonpolis and its localities mentioned in the text.