

APPENDIX 1

FAUNAL REMAINS FROM THE NEOLITHIC SITE OF EL-SADDA 28

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Archaeological testing at the site of el-Sadda 28 (trenches 28 and 28A) brought an assemblage of 564 osteological animal remains. Practically the entire material was fossilized. The presence of all elements of the skeleton, meaning bones of different density, indicates that the remains were not moved by water. The state of preservation and the presence of diagnostic features lead to the assumption that they were buried fairly quickly in a depositional setting. The black and brown surface of the fossils was proof of iron and manganese being present in the environment and of oxygenic conditions of deposition (Denys 2002: 469–484). Despite the relatively good condition of the bones, only 32% of all the remains could be identified by taxon, species and anatomy. In many cases, only the class or order could be determined.

The majority of the remains (96%) belonged to mammals (*Mammalia*). Other identified remains included birds (*Aves*), reptiles (*Reptilia*), fish (*Pisces*) and mollusks (*Molusca*). Most of the unidentified bones of mammals are fragments of long bones and parts of the spongy matter. All the bird remains are ostrich eggshell fragments. The one identified remnant of a reptile is a piece of the skin of a Nile crocodile (*Crocodylus niloticus*). One vertebra of fish from the catfish family (*Siluriformes* sp.) was recorded. The mollusk shells include 16 shell fragments of Nile oyster (*Ethetaria*

nilothica) and three fragments of shells of an unidentified snail.

The remains recorded in trench 28 represented mostly cattle (*Bos primigenius* f. *domestica*). These were fragments of premolars, molars, mandible, vertebrae, tibia, digits and metapodium. Unidentified bones comprised mainly parts of the dense matter of long bones. Also recorded were six ostrich eggshell fragments, most probably raw material for making beads, and fragments of oyster shell.

The catalogue of remains from trench 28A was slightly more varied. The species distribution permitted two levels to be distinguished. The upper layers 0–10 contained mainly the bones of ruminants: cattle and the small ruminants, including one sheep bone. In anatomical terms, the remains were quite varied. Fragments of teeth, ribs, vertebrae and long limb bones were all recorded. Whole digits were also noted, permitting measurements to be taken [Table 1]. Two of the cattle bones from this level bore traces of damages — one femoral epiphysis fragment was burned, another epiphysis fragment from a distal long bone had a hole in it about 1.5 cm deep. The symmetrical position and relatively large diameter of this hole suggests its intentional nature; it may have been prepared for use as a handle for a sharp tool, an awl or chisel.

Two bones of predators, foxes in this case, were recorded, but they appeared to be

modern. Also a fragment of ostrich eggshell was noted in the upper layers, as well as an oyster shell fragment and the piece of crocodile skin. Ostrich eggshell was present as a raw material for making beads, as proved by the presence of unfinished products, a considerable number of ready beads and a stone for polishing the beads (see above, *Fig. 1* on XXX]. The beads should be connected with the functioning of a Neolithic community, this indicated by the way in which the holes were made. They are relatively large and have a conical irregular shape which is achieved by drilling with a tool of triangular shape, most probably a flint tool in this case.

The lower layers in trench 28A yielded no remains of domesticated species. Mammalian remains were in predominance, including artiodactyls (*Artiodactyla*). The bones of a large ruminant (*Bovidae*) could not be precisely identified by species. It could have been wild cattle (*Bos primigenius*), African buffalo (*Syncerus caffer*) or giraffe (*Giraffa camelopardalis*). A large number of dorcas gazelle remains (*Gazella dorcas*) was also noted. In anatomical terms, the assemblage

from the lower layers of the trench included fragments of pelvis, metatarsus, metapodium, talus and teeth. The unidentified remains include fragments of long bone shafts. Shells of snails, a fragment of an oyster shell and a fish vertebra was also recorded.

Two phases of the site can be distinguished based on an analysis of the faunal assemblage. The older phase in the lower layers of trench 28A represents most probably a more humid ecosystem, resembling a forest savannah. No domesticates were recorded among the bones from this level. Instead there were the remains of two species of artiodactyls. One was a large species, a buffalo or giraffe, and the other a small ruminant — dorcas gazelle. This set is also distinguished by the presence of snails and fish.

The principal group in the osteological material from trench 28 and from the upper layers of trench 28A was made up of cattle bones representing practically all parts of the skeleton. Beside them there were large quantities of ostrich eggshell pieces used for making beads. No snails or fish remains were recorded in this assemblage, and no bones of wild game either.

Table 1. Measurements of fossilized animal bones from site El-Sadda 28A

CONTEXT	BONE	OSTEOMETRY
	Cattle (<i>Bos primigenius</i> f. <i>domestica</i>)	
28A/Layers 0–10	<i>Phalanx media</i>	GL-39 Bp-24 Bd-20 SD-18
28A/Layers 0–10	<i>Phalanx distalis</i>	Ld-44 DLS-47
	Sheep (<i>Ovis orientalis</i> f. <i>domestica</i>)	
28A/Layers 0–10	<i>Talus</i>	GLI-29 GLm-28 Bd-16

REFERENCES

- Denys, C.
2002 Taphonomy and experimentation, *Archeometry* 44, 469–484