

REPORT

OTTERS (*Lutra lutra*) IN SWEDISH PREHISTORY – WITH NOTES ON BEHAVIOUR

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Abstract: Three thousand year old engravings (petroglyphs) probably of otters *Lutra lutra* were found in a Bronze Age burial site in Kivik, southern Sweden. The postures of the animals in the very prominent, stylised images, sitting upright, suggests that they represent captive otters, which had an important place in Scandinavian bronze age society.

Keywords: otter, Bronze Age, petroglyphs, behaviour

INTRODUCTION

Many civilizations have a pictorial record of their involvement with animals from times before they used written evidence. Also in the present day there are peoples using rock art or cave painting, such as Australian aborigines, East African Masai and until recently South African Bushmen. These records provide information on the relationship between people and some of their surrounding fauna.

Animals in such prehistoric art tend to be species that have economic significance, either as livestock, or as objects of hunting, or in some other role. Contemporary Masai art in East Africa depicts mostly cattle, but also wild animals such as lion, elephant, wildebeest, and giraffe, which, according to the artists themselves, have important roles in people's daily lives (Kruuk, 1965). Probably this was true also for European cave art in France and Spain, with wild animals in e.g. Lascaux, Altamira.

In more northern areas of Europe far fewer examples of prehistoric art have been found. This note concerns some clear stone-engravings, or petroglyphs, of animals in southern Sweden. Amongst those animals, striking, stylized figures that appear to be otters are prominent, suggesting that these animals had an important significance in northern Bronze Age society.

The only species of otter known to occur in northern Europe in the present era (Holocene) is *Lutra lutra*.

DESCRIPTION

The petroglyphs are situated in a large burial mound in the Swedish province of Skåne, outside the village of Kivik on the east coast along the Baltic Sea (55°41'N, 14°14'E). The mound, some 75m in diameter and 3.5m high, consists of small rocks, and is locally known as the King's Grave. It has been extensively restored after damage by locals extracting stones, in the 19th century, and is now in the charge of the Swedish National Heritage Board. The grave is from the Northern Bronze age, and has been dated as 3000 years old, from about 1000 BC (http://en.wikipedia.org/wiki/The_King's_Grave).

An entrance passage leads into a central chamber with a burial cist, some 1.2m long and 0.65m wide, which contained some teeth, and small fragments of bronze when excavated. The cist is lined with large stone slabs, with many petroglyphs on the inner surface facing the burial.

The engravings have been recently clarified by some colour-restoration (Fig. 1-2). Both show human figures, some with swords, and some with musical instruments, one horse-drawn chariot, a fish and a couple of unknown animals. Most striking are, on each of the two slabs, eight stylised figures of some ten cm high, which strongly suggest that they are otters (and therefore *Lutra lutra*), sitting in upright position.



Figure 1. Petroglyphs of eight otters (and six people, horse-drawn chariot, fish and other animals) in Bronze Age grave in Kivik, southern Sweden (photograph Hans Kruuk).

DISCUSSION

The assumption is that the elegant, stylized figures in these pictures show otters, and are produced by someone who knew the animals and their behaviour well. The posture in the engravings is the one so often seen in photographs of the species (sitting upright, or in German 'Männchen machen'). The posture in this context is especially interesting, as it is associated with captivity. Unlike several other otter species, which I saw do this in the wild, for *Lutra lutra* one appears to see this posture only in captive animals. In hundreds of observations on behaviour of *Lutra lutra* in the wild over many years, I have never seen them sitting upright, whereas this is common in captivity, to the extent that if one sees a photograph of an otter in this posture, one can be confident that it concerns a captive animal.



Figure 2. Petroglyphs of eight otters (and 14 people, musical instruments, other symbols) in Bronze Age grave in Kivik, southern Sweden (photograph Hans Kruuk).

Obviously, sitting upright must be part of the behavioural repertoire of *Lutra lutra*, and very rarely they must do this also in the wild, but I have not seen this. Perhaps this behaviour is shown by animals when curious about something in the environment, at a time when possible escape behaviour is blocked.

The point is relevant to the Swedish engravings, which are therefore likely to refer to captive animals. Taking this further, I speculate that, as pre-historic art usually refers to animals with practical significance to the artist, three millennia ago otters were kept in captivity not just for companionship or decoration, but also for some practical purpose. Perhaps they were used for fishing, as is the custom in some present-day Asian countries with the smooth otter (Hendrichs, 1975; Feeroz 2004; Kruuk 2006). Unfortunately however, this will always remain no more than speculation.

Whatever the exact significance of these images, they do show otters to have had a prominent role in Scandinavian Bronze Age society, and to be part of European culture for at least three millennia.

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RÉSUMÉ

Les pétroglyphes suédois de Loutre (*Lutra lutra*) de l'Age de Bronze: indications sur leurs comportements.

Des gravures rupestres de plus de 3000 ans (appelées encore pétroglyphes), de Loutre, probablement de l'espèce *Lutra lutra*, ont été découvertes dans le site funéraire de l'âge de Bronze de Kivik, situé au sud de la Suède. Les postures de ces animaux, réalisées de façon stylisée en position dressée sur les pattes arrières, laissent suggérer qu'il s'agit d'animaux captifs qui avaient une place importante dans les sociétés scandinaves de l'âge de bronze.

RESUMEN

Nutrias (*Lutra lutra*) en la prehistoria sueca y notas sobre su comportamiento

Grabados (petroglifos) de 3000 años de antigüedad probablemente representando nutrias (*Lutra lutra*) han sido descubiertos en un enterramiento de la Edad de Bronce en Kivik, en el sur de Suecia. La posición sentada de los animales en las prominentes y estilizadas imágenes sugiere que representan nutrias cautivas con un importante papel en la sociedad escandinava de la Edad del Bronce.