A BLACK VULTURE *Aegypius monachus* FROM ROMAN VALKENBURG, THE NETHERLANDS

MAAIKE VERHAGEN

ABSTRACT The former occurrence of *Aegypius monachus* in The Netherlands is attested by a bill fragment from the Roman period excavation at Valkenburg (South-Holland). The plausibility of the occurrence of this species in the Dutch prehistoric landscape and in the cultural context of the Roman settlement will be discussed.

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INTRODUCTION

Since 1985, extensive excavations have brought to light a complex Roman/military and native/civilian settlement at Valkenburg (province of South-Holland), along the banks of the Old Rhine, dating from the first to the third century AD. All manner of refuse dumped by civilians and soldiers in the tributary gulleys of the river was recovered. Animal bones were present in huge quantities. Among the remains of the most important domesticates (Cattle, Sheep, Pig and Horse) were also wild species, especially birds. Besides various bird species of water-rich environments, like geese and ducks, birds of prey were also encountered.

During the analysis of the bird remains one mandible fragment of a large bird of prey came to light (Fig. 1). No measurements of this fragment could be taken. However, comparison with the mandible of a White-tailed Eagle *Haliaeetus albicilla*, a relatively common bird in Roman times, showed this fragment to belong to a larger bird. On closer inspection, comparison with reference material, and verification with skeletons at Leiden and München the mandible fragment was identified as belonging to the Black Vulture *Aegypius monachus*. This represents a unique find for The Netherlands. Unfortunately no other bones of this species were recovered.

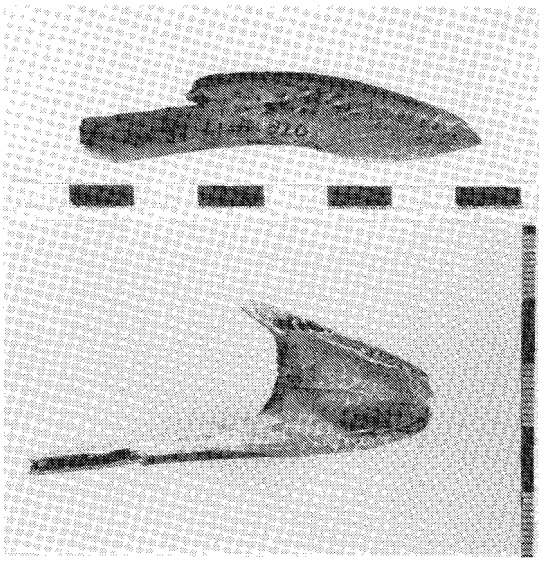

Fig. 1. The mandible fragment of the Black Vulture (*Aegypius monachus*) from Roman Valkenburg (South-Holland). Above: lateral view; below: dorsal view.

SOME CHARACTERISTICS OF THE BLACK VULTURE

The Black Vulture is the largest of the European vultures with a wingspan of 250-295 cm, short tail and massive bill. It is more heavily built than the Lammergeier *Gypaetus barbatus*. Until now, no Black Vulture has ever been identified with certainty in an archaeological context in The Netherlands. However, some of its characteristics, especially in

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relation to habitat and food requirements makes its former presence in the Dutch (prehistoric) landscape feasible.

Although the Black Vulture is at present mainly a montane bird, it usually occupies lower middle altitudes. It appears mainly in continental but also sporadically in warm oceanic climates. Vertically it ranges up to temperate and boreal zones. This vulture forages over many kinds of open, sometimes lowland terrain. Forest cover, specially of *Pinus* or *Juniperus* may be acceptable for nesting and foraging, particularly in regions with favourable food supply. Its foraging range can extend up to about 50 km. The other European vultures, like the Lammergeier and Griffon Vulture *Gyps fulvus*, are more confined to mountainous regions for foraging, nesting and perching sites. For this reason *Aegypius monachus* is the most likely vulture to have been present in the natural environment of the western part of The Netherlands, although no special preference for sea-coasts, inland waters and wetlands is shown.

Black Vultures feed mainly on carrion of medium to large carcasses (e.g. Red Deer, Horse, Cattle, Sheep, Goat, Wild Boar and Greylag Goose), and only takes slow, small or sick individuals alive. On account of its feeding habits this vulture can be classified at the top of the food chain. Most animals in this category, especially the bigger animals, like Brown Bear and Wolf, are nowadays absent from The Netherlands. This is mainly caused by extensive human interference, like agriculture and hunting and the corresponding decrease in natural habitat. The Black Vulture is also highly susceptible to human encroachments in its environment and can therefore nowadays only be found in rather inhospitable areas.

The ecological situation in prehistoric Holland meets the above mentioned habitat requirements. However, in our regions it is not very plausible to regard the Black Vulture as a breeding bird. It is far more likely that this species would be encountered as an occasional straggler in our latitudes. Since the beginning of the 19th century numerous observations of *Aegypius monachus* were made in Germany, as far north as Mecklenburg (Glutz von Blotzheim *et al.* 1971) and as far west as Oldenburg. These birds were all stray individuals.

In The Netherlands the Black Vulture has been reported only once, namely an individual shot in the vicinity of Wamel (province of Gelderland) in 1948. This was the first recorded specimen in The Netherlands in historical times, and has also been labeled a straggler, after establishing that this bird was not missing from a zoo (de Reuver 1955). In contrast we may note that the Griffon Vulture was reported four times in The Netherlands in the 40 years between 1904 and 1944, two of which are acknowledged (Commissie voor de Nederlandse Avifauna 1970; van den Berg 1987).

THE BLACK VULTURE IN A ROMAN/DUTCH SETTING

The mandible fragment of Black Vulture was found among the food refuse discarded in one of the gulleys that bisects the native and Roman settlements at Valkenburg. It was found at a depth of about 2 m below surface. This material can probably be dated to the end of the first century AD on pottery evidence. The question arises whether this fragment belongs to material discarded by man or to a bird of the contemporaneous natural fauna, which died a natural death. The latter possibility does not seem feasible, however. The bill of a Black Vulture is very heavy and strong, and is not susceptible to easy fragmentation. We therefore would expect to find a complete mandible instead of only a fragment. For this reason we may conclude that the occurrence of this mandible fragment in the excavated material is probably the product of cultural behaviour.

Is there any special reason why or how a Black Vulture should end up as waste in a Roman/native settlement? According to Plinius the Romans were acquainted with black vultures, which are the strongest of all vultures (Plinius Nat. hist. 3 X, vii-16). He does not mention, however, any features or characteristics that makes this bird of prey of special interest to the Romans, e.g. in relation to religion. The general appearance of the Black Vulture is in any case reason enough to make it a prized

object for any hunting party, be it native or Roman. The White-tailed Eagle was certainly hunted by the Romans, especially for its beautiful white tail feathers (Clark 1948). This bird symbolises the power of the Roman Empire and was possibly captured (by soldiers?) to act as a mascot or charm for the army. The plumage of the Black Vulture is almost uniform and in adults entirely sooty-black, which invites confusion with all dark eagles, especially with the immature White-tailed Eagle (Cramp & Simmons 1980). Also during the excavation at Valkenburg numerous finds of White-tailed Eagle where encountered.

The feeding habits of both Black Vulture and White-tailed Eagle includes eating carrion. While feeding, the birds are engaged on the ground and can be captured with a net, which was a common hunting method during Roman times. As the Black Vulture may be confused with a juvenile White-tailed Eagle it is possible that the specimen from Valkenburg was captured in this way together with White-tailed Eagles.

Another possibility is that adult examples of this species were imported by the Romans. This seems, however, rather unlikely. The lack of information in the literature about vultures suggests that these birds were of no special interest to the Romans. They certainly knew the difference between vultures and eagles and it may be doubted whether they deliberately took the one for the other to act as a mascot.

DISCUSSION

The only other known find of vultures from the Roman period are two ulnae made into flutes found in a Roman grave in Nijmegen (Noviomagus) (Oomen 1968). According to Oomen these bones can be identified as either *Gyps fulvus*, *Gypaetus barbatus* or *Aegypius monachus* and were probably imported by the Romans from eastern or southern Europe. Although it can not be proven, the possibility that the bones belonged to an individual of a local population of Black Vultures can no longer be disregarded.

In North-Western Europe there are no other known fragments of *Aegypius monachus* from the Roman period. However, excavated finds of Black Vulture are known from the medieval period onward in Germany, e.g. in the early medieval settlement of Haithabu (Reichstein & Pieper 1986) and in the settlement of Gielde north of the Harz mountains (Schaal 1968). According to Reichstein & Pieper the Black Vulture was probably more numerous in the past, but they consider it highly unlikely that it was ever a breeding bird in Schleswig-Holstein. From France there is a reference of Black Vulture in the medieval monastic site of La Charité-sur-Loire (Audoin 1985).

The mandible fragment of *Aegypius monachus* from the Roman site at Valkenburg (province of South-Holland) is therefore not only a unique find for The Netherlands, but also for North-Western Europe in Roman times. Although specimens of Black Vulture in our regions will probably always have been stray individuals, the prehistoric environment of North-Western Europe could have formed a reasonably suitable habitat for this large bird of prey. Thus this specimen might be taken as an indication for the presence of Black Vulture in the Dutch landscape in former ages.

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SAMENVATTING

Tijdens de opgraving van de Romeins/inheemse Nederzetting te Valkenburg is een onderkaak fragment aangetroffen van een Monniksgier (*Aegypius monachus*). Deze vogel is slechts eenmaal levend in Nederland aangetroffen, in 1948 te Wamel. Uit archeologische context was deze soort nog niet met zekerheid bekend. Meldingen uit het noorden van Duitsland geven evenwel aan dat de Monniksgier zo nu en dan ook in onze streken als dwaalgast kan worden aangetroffen. In het verleden kan het prehistorische landschap voor de Monniksgier in voldoende mate voedsel en nestgelegenheden hebben geboden om hier te broeden.

Het voorkomen van een fragment van een onderkaak doet vermoeden dat we hier te maken hebben met cultureel afval, aangezien de onderkaak van een Monniksgier zeer sterk is en niet snel vatbaar voor breuk door natuurlijke omstandigheden. Volwassen Monniksgieren lijken in kleur sterk op juveniele Zeearenden (*Haliaeetus albicilla*). Jonge Zeearenden zijn waarschijnlijk door de Romeinen gevangen om als volwassen exemplaar in het leger als mascotte gebruikt te worden. Zij symboliseerden de macht en kracht van het Romeinse Rijk. Bovendien waren de witte staartveren van de volwassen exemplaren zeer gewild bij de Romeinen. Het is dus goed mogelijk dat de Monniksgier door de Romeinen tijdens de jacht op Zeearenden verward werd met een juveniele Zeearend en zo in het afvalmateriaal van de Romeins/inheemse nederzetting terecht is gekomen.