

**HERPTILES FROM THE TYPE HOXNIAN
(MIDDLE PLEISTOCENE INTERGLACIAL STAGE)
AT HOXNE, SUFFOLK**

J. ALAN HOLMAN

*Michigan State University Museum,
East Lansing, Michigan 48824-1045 U.S.A.*

INTRODUCTION

The type site for the Middle Pleistocene Hoxnian Interglacial Stage occurs at Hoxne (pronounced "Hoxen"), Suffolk. The site consists of organic lake deposits overlain by a series of stream, lake and solifluction deposits, all of which occupy a basin in the older Anglian Glacial Stage Chalky Boulder Clay (Stuart, 1982).

Hoxnian Interglacial Stage herpetofaunas are of considerable interest, in general, because they may be made up of as many as 50% exotic continental species (Holman, Stuart and Clayden, 1990). Stuart (1982) has listed "... frog and/or toad bones ..." from the type site at Hoxne, but other than this notation, no other herptiles have been reported from this locality.

In the summer of 1990, I was able to study the herpetological material from the site at Hoxne at the Natural History Museum, London, and this short paper is the result of this work. Aside from a small number of herptile bones, the Hoxne site contains fossil fishes, birds and extinct and extant mammalian species; as well as flint blades, cores, flakes, scrapers and Acheulian hand axes. The Hoxne site contains fossil evidence of vegetational changes from oak forest to more open herbaceous communities, as well as changes from warmer to somewhat cooler climates.

SYSTEMATIC PALAEOLOGY

Numbers are of the Natural History Museum, London.

Class Amphibia

Order Anura

Family Bufonidae

Bufo bufo (Linnaeus)

Material. — R-12269, right ilium (Fig. 1a); R-12270, right ilium (Fig. 1b) and distal portion of left humerus.

Remarks. — Characters for distinguishing the ilia of European species of *Bufo* species have been given by Holman (1989). The two above ilia come from different individuals. Ilium R-12269 has a low, rounded dorsal prominence and a number of perforations around the acetabular area (Fig. 1a). These characters are typical of young individuals. Ilium R-12270 has a higher, more well-developed dorsal prominence and fewer perforations around the acetabular area (Fig. 1b). This is typical of somewhat older individuals. The humerus represents a male, as it has the dorsal tendinal flange well-developed.

Bufo sp. indet.

Material. — R-12271, right scapula.

Remarks. — The scapulae of *Bufo* may be separated from those of *Rana* on the basis that *Bufo* lacks the ridge on the dorsomedial side of the bone that occurs in *Rana* (see Hallock et al., 1990, Fig. 4). I was unable to identify this element to the specific level.

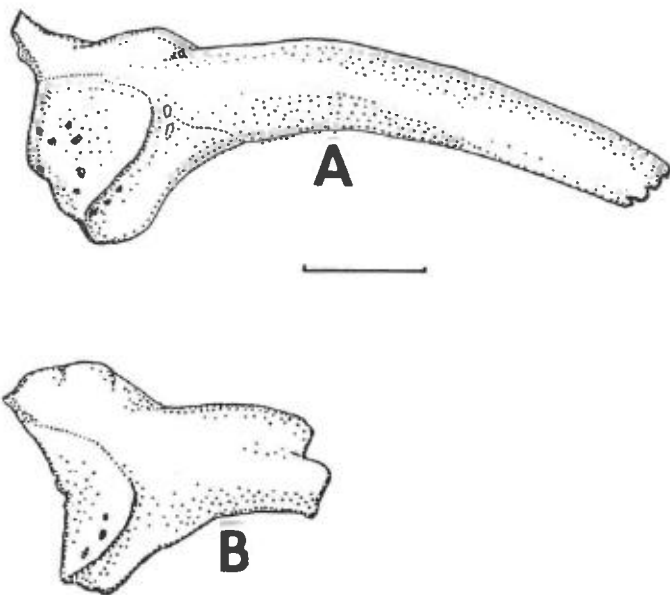


Fig. 1. Right ilia of *Bufo bufo* from the Hoxonian type site at Hoxne, Suffolk. A, R-12269; B, R-12270.
The line equals 2 mm and applies to both figures

Class Reptilia
 Order Squamata
 Family Colubridae
Natrix natrix (Linnaeus)

Material. — R-12272, trunk vertebra.

Remarks. — The vertebra has the end of the hypapophysis blunt rather than acute as in *Natrix maura* and *Natrix tessellata* (Szyndlar, 1984).

Natrix sp. indet.

Material. — R-12273, two small, fragmentary trunk vertebrae; R-12274, one fragmentary caudal vertebra.

Remarks. — These fragmentary vertebrae represent *Natrix*, but do not have specifically diagnostic parts.

COMMENT

The small sample of amphibian and reptile bones found at the type Hoxnian site at Hoxne is surprising in the light of the large assemblage of amphibians and reptiles that was recovered from the Cudmore Grove Hoxnian Site, Mersea Island, Essex (Holman, Stuart and Clayden, 1990). The Cudmore Grove Site yielded 14 herpetological species, half of which were exotic continental forms. The lack of exotic species at Hoxne is also somewhat surprising, as collectively, previously studied Hoxnian sites in Britain have yielded 46.5% exotic species (Holman, 1993).

The two common herptiles, *Bufo bufo* and *Natrix natrix*, do not tell us much about the climate or environment of the type Hoxnian site, as both species occur in interglacial as well as some glacial sites in Britain (Holman, 1993). Both animals, however, could have existed near the lakes or slow-moving streams indicated by the sediments at the site, utilizing these aquatic situations for breeding purposes (*Bufo bufo*), or for hunting prey (*Natrix natrix*).

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