At the third Fish Osteo-archaeology Meeting in Groningen in 1985 I got the editor's job for the next few years. A long time has passed since then, and perhaps many of you are surprised until now. But it is not my osteo-archaeology News was not published until now. But it is not my newsletter, it is ours! I had expected more contributions from you all, but I got none. So, I had to ask for some, and eventually, like Knud Rosenlund, I had to write a short contribution (I don't like stockfish anymore).

I will remind you of some words written by Knud Rosenlund in Newsletter No. 1: "There is reason to hope that the publication of this first issue of the newsletter of the fishgroup is the beginning of a viable tradition facilitating the communication between members of the group together with anyone else interested in the subject. However, the viability is highly dependent on the contributions from the members, i.e. short papers, notices etc., hopefully to be received at even flow. I hope these words will be taken more seriously in the future."

Dirk Heinrich

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Vth International Conference of the ICAZ from the 25th to the 30th of August. The following papers dealing with fish bones were presented:
At Bordeaux a new important contribution to the comparative osteology
(papers of J. Deese and J. Coy).

...
Modern experimentation or observations related to taphonomy
ancient fishing techniques and fish culture
Fish exploitation in the past: the documentary evidence
Quantifying the importance of fishes in diet
Techniques for the estimation of size and age
Reconstructions in recovery techniques and identification
The reports set in their regional and chronological context

Contributions, in English, are invited on the following:

- of the world are welcome.
- in Europe and Africa. Contributions describing material from other parts
- of previous meetings of this group have concentrated on fish exploitation
- the 8th - 12th of September, 1987, at the University of York, England.
- the fourth meeting of archaeoologists, osteologists, and paleoanthropologists in
- Belgian sites.

IWIH Fish Osteo-Archaeology Meeting: Fish Remains from Archaeology
Belgium
3000 Leuven
Katholieke Universiteit Leuven
Laboratorium voor Prehistorie
Wim Van Neer

Termination osteologie et archéologie

De cooperation scientifique et technologique en archéologie. Ce travail, de cooperation scientifique et technologique de l'École des Hautes Études en Sciences Sociales, a été inclus dans les publications du P. D. C. - projet C.-projets. De ce fait, l'étude terminale de l'âge de l'homme et des techniques de détermination de l'âge ont été intégrées dans ce travail. De plus, des éléments de l'archéologie et des techniques de détermination de l'âge ont été intégrés dans ce travail. De plus, des éléments de l'archéologie et des techniques de détermination de l'âge ont été intégrés dans ce travail.

In this study, which ends with some conclusions on the value of the man- and descritped, moreover, osteometric data have been incorporated
- culture of the Iberian Peninsula (both marine and freshwater) is depicted
- in this so far unpublished thesis the morphology of the dentary and arti-
Further interested persons should contact:

Andrew K.G. Jones
University of York
Environmental Archaeology Unit

Further information will be provided to those who have enquired.

Up to the present day the response to this announcement is very encouraging. Further interested persons may be able to visit the Environmental Archaeology Unit to house accommodation is available.

The meeting will take place at the University of York: opportunity to display unusual or unidentified specimens. Poster presentations are also welcome. There will be ample consider presentations of no more than one hour longer than one hour. Please

Participants are asked to keep their contributions as short as possible.
mental and archaeological. This has lead to work on the taxonomy of
remains and how this can be integrated with other evidence, both
evolutionary, taphonomic, and physical reference.

In 1977 moved to work in EAU, developing new techniques suitable for
published in East Anglian Archaeological Reports No. 2.
produced large quantities of fish bone was subjected to an analysis of the site
1977 and has been working in Archaeology since 1980. Graduated in Zoology
in Norfolk and Bedfordshire (Eastern England) and Archaeology in Zoolaf, the
Begun digging on archaeological sites in 1966 during vacations at sites

PROFESSORSHIP AND AUTOBIOGRAPHIES

France
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C. R. A. / CNRS
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1. Deesse de N. Deesse-Deperse
Laboratoire d'Archeozoologie

relevant to one or more series, to the address below:
You can apply, for the questionnaires allowing reception of the sheets

Three series are being established: Series A: Plants; Series B: Mam-

nate, sex identification or size and weight reconstruction.
of osteometry or with scope osteoestimation helpful towards
do not appear. In general they will be concerned with applications
archaeologists, such documents, mainly consisting of drawings, tables or
Water and marine fish. A comparative collection of sea fish from the coast of Gabon and Guinea. The material contains species of brooksh...n the study of fish remains from shell heaps alone. A new project involves the study of fish remains from shell heaps alone.


Fishes and fish bones are available. Durning, C. (1984). So far, some 250 specimens of 50 species of African fishes were obtained thanks to A. Boesl. (Irenak) and an important number of deep-frozen fish were obtained thanks to A. Boesl. (Irenak) and an important number of Pisces were obtained thanks to A. Boesl. (Irenak) and an important number of Pisces were obtained thanks to A. Boesl. (Irenak). This was done during two visits to Egypt (Aswan, Giza) and one trip to Oued N'aima). From Khorum (Iraq),...lsoon it became necessary to build up a reference collection myself. Fish bones were carried out in the British Museum (Nat. Hist.), but fish bones were carried out in the British Museum (Nat. Hist.), but fish bones were carried out in the British Museum (Nat. Hist.), but fish bones were carried out in the British Museum (Nat. Hist.), but fish bones were carried out in the British Museum (Nat. Hist.), but fish bones were carried out in the British Museum (Nat. Hist.), but fish bones were carried out in the British Museum (Nat. Hist.), but fish bones were carried out in the British Museum (Nat. Hist.). My work comprises the study of faunal remains mainly from African archaeological sites. Besides the investigation of mammal bones, I number short notes on fish bone finds mainly from English towns. My work comprises the study of faunal remains mainly from African archaeological sites. Besides the investigation of mammal bones, I number short notes on fish bone finds mainly from English towns.

Environmental Archaeology Unit

Andrew C. Jones

York 01 3DD
University of York
England
West, Archaeozoologist.

Terms in late prehistoric fishing practices in the North American Mid-
Journal of Archaeology 6 (2): 207-218. - in preparation, seasonal pat-
Potential for fish utilization in riverine environments, Mid-continental
son, 1980, Archaeological investigations of prehistoric fishing prac-
town in the central Illinois Valley, A. A. Indian, Univ. Wisconsin-Mad-
Major Publications: 1977, An analysis of the fish bone and scale remains
Valley over the past 10 years.
from some 20 late prehistoric sites in the Great Lakes and Mississippi.
Project Descriptions: The study of collections of fish bone and scales

for growth marks.

In North America, the analyses of fish scales and skeletal elements
Research Interests: Seasonal patterns in prehistoric fishing practices

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Katholieke Universiteit Leuven
Laboratorium voor Prehistorie

West African coast should be made in the near future.
means made possible the performance of research studies (growth and sexual dimorphism, etc.).

I was interested in the performances. I was interested in the performances. Were clear, defined, and the paper was presented.

In the performances, the subject of her dissertation. These are the performances in which the physical education.

In my dissertation, the subject of Marine biology, I studied the study. Localities are:

- Study on creteaceous marine ichthyofauna. The study.

**Merrieille Gayet is a Researcher at the CNRS (National Center of Scientific Research), working at the Museum National d'Histoire Naturelle of France.**

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**Address after March 1987:**  
Jenny Stewart

**Address until March 1987:**

manifested on the bone. The fish were collected from Lake Turkana. I am studying the age and growth patterns of these fish, and their life histories over a decade. Fish - Osteochromis niloticus - is the date I have been collecting.

In addition to my work with the archaeological fish material, I have also collected sites will be presented.

- Analysis of the lumbar remains with knowledge of the technology from these remains. From these sites will also be conducted, and a synthesis of the lumbar remains of the site.

- Adaptation in early Holocene East Africa and the local research involves change in early Holocene East Africa and the local research involves human.
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Unité d'Anthropologie
Institut de Paléontologie
Muséum National d'Histoire Naturelle
M. R. C. A.

(14th century) - Ichthyosaurs (Celtis) (11th century)

- Ichtyosaurs of Holocene of Meli - Ichthyosaurs of the Comedero Formation
- Ichthyosaurs - Osteichthyes: Three punctual studies have been realized:

3. Ichthyosaurus osteo-archaeology: Three punctual studies have been realized:

define their palaeo-archaeological and palaeo-archaeological history.

Her present studies deal with anatomy and palaeo-archaeological relationships
- Osteichthyes. These discoveries in marine levels have contrated the
Osteichthyes. These discoveries in marine levels have contrated the
sound and presssure variation between swimbladder and internal ear) has
modification of the anteromost vertebrae for better transmission of
and characters appear points to the idea that the Weberian apparatus (special
forms of study of the Osteichthyes, compound of Ichthyosaurs, Chordates.

2. Study of continental cretaceous - tertiary ichthyosaurs: The cretaceous

Furthermore, local palaeoecology and palaeomontal studies have explained
Fish remains of Gotljuden are characteristic of an urban settlement. Fish must have been imported, but they could not get enough fish from the nearer north because they could not get enough fish from the near-by sea. The cod and haddock and also plaice were fished in the North Sea or further north. The remains of the cod fish were also probably derived from fish caught in the near-by sea. The haddock remains were also probably derived from fish caught in the near-by sea.

During the Middle Ages there was a large demand for Leuven beer and marine fish must have been imported for Gotljuden as an inland town.

Most of the fish bones (n = 44) were derived from cod and haddock. Of these, 13% of the bones (n = 4) were represented by 4 bones. There are only 17 remains of haddock, 22 of the bones were determined to species or species groups (Table 1).

Dirk Hermans

By

21-25, 1270-1345 A.D.
Fish remains from Gotljuden/Neaderbachsen, excavation Johannistate

SHORT COMMUNICATION
Germany
2300 Kiel
Ostsee-Institut für Kiel
Deutsche Akademie der Wissenschaften
Leibniz-Institut für Kiel

Kopenhagen.

Physis 1981.


Herningen. D. in press. Untersuchungen an mittelalterlichen Fundstätten

Leewarden (red.). Planter. Vis-en-Verdast. Geologische Studiekundige
Domain. In: Commissie Arkeologische Studiekundige

Bibliography

1983) and Aarhus/Denmark (Rosenlund 1976).

This is not only true for Gottingen, Liebeck, and Schleswig, but also for
haddock remains to become more abundant in archaeological deposits.
These sites, as other towns, for example Teunswarden, The Netherlands (Brinkhuizen
and the over-representation of skeletal elements of the trunk and
presses). From these sites fish remains were also mainly from eels,
Schleswig and Liebeck, which are mentioned elsewhere (Heinrichich,
the Hanseatic League). The same is true for other medieval towns:

is clear that medieval Gottingen was involved in the trade activities of
Table 2: Cadathae, Absolute and Relative Representation of different skeletal regions in the material of three terrestrial sites (comparative).

| Skeletal Region | 100.0 | 1.09 | 1.0 | 1.20 | 1.00 | 0.44
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Shoulder Girdle</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>2</td>
<td>5</td>
<td>121</td>
<td>100</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Vertebrae</td>
<td>29</td>
<td>97.7</td>
<td>167</td>
<td>95.6</td>
<td>91.7</td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Skeletal Region**
- 120-1345
- Shoulder Girdle
- Skull
- Thoracic Vertebrae
- Cauda Equina
- Pelvis
- Femur
- Tibia
- Carpus
- Metatarsus
- Phalanges
- Ear

Table 1: The fish remains from Gotlithagen; marine fishes: n = 48, fresh-water fishes: n = 7.

<table>
<thead>
<tr>
<th>Skeletal Region</th>
<th>3</th>
<th>6</th>
<th>4</th>
<th>1</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical, Cauda</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Vertical, Precaudal</td>
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<td></td>
<td>1</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Costa</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Os nuchale</td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Posttemporale</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Superoccipitale</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Os pharyngeal</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Premaxillare</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dentale</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Skeletal Region**
- 12
- Mammae
- Cranial
- Posterior
- Premaxillary
- Premaxillary
- Dentale
- Vertebrae
- Cauda Equina
- Pelvis
- Femur
- Tibia
- Carpus
- Metatarsus
- Phalanges
- Ear

**Proposed Terminology**
- Prop. Cauda Equina
- Prop. Cauda Equina
- Prop. Cauda Equina
- Prop. Cauda Equina