EDITORIAL

The costs for producing and dispatching the newsletter have increased, especially because a growing number of persons is interested in our newsletter and in the work of our group. Therefore from this issue onward a small voluntary contribution of US $ 2,-- will be asked for the newsletter. To avoid any bureaucracy, please send cash payment in an envelope.

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MEETINGS

Seventh Meeting of the Fish Remains Working Group

This meeting was held from 6th to 10th September 1993 in Leuven, Belgium. There came together around 50 archaeologists and zoologists from several European countries, Israel, and the Americas, who presented lectures and posters on various aspects of archaeoichthyology. Topics included site reports from all over the world, and also methodological problems, analyses of butchery techniques, and fishing
strategies illustrated by fish remains. Others described results of anatomical investigations as well as interpretations of historical sources.

The participants visited the Royal Museum of Central Africa in Tervuren to see the collections, especially that of fishes. The meeting ended with an excursion to the Belgian coast at Oostduinkerke, where we visited an early morning fish auction and later toured the fishery museum with the impressive exhibition "Archeologie en Vis" prepared by Wim Van Neer and Anton Ervynck.

During all these days there were many occasions for conversations. Some were more or less official like the opening dinner or the reception offered at the impressive Royal Museum of Central Africa by its director D. Thys van den Audenaerde. Other discussions occurred privately at lunch or in a coffee house. All in all these days again confirmed my own belief that the Fish Remains Working Group is not only scientifically productive, but is also characterized by an esprit de corps among colleagues which is not always common in the scientific community.

The meeting was well organized by Wim Van Neer and his staff, Bea de Cupere, An Lentacker, and Philippe Charlier, who were further assisted by Anton Ervynck. The participants thank all of them.

During the conference it was decided to hold the next meeting in 1995 in Madrid. It will be organized by Arturo Morales. Most papers to be presented at Madrid are to be related to the topics selected for the first, that is the general, part of a planned "Handbook of Archaeoichthyology" (see the letter of Arturo Morales below).

Dirk Heinrich
Eighth Meeting of the Fish Remains Working Group

A letter from Arturo Morales

Madrid, 28 September 1993

Dear friends:

As those of you who attended the Leuven meeting know, in 1995 the ICAZ Fish Remains Working Group will meet in Madrid (probably during the first half of October) and will introduce some changes from previous meetings.

For one thing, we have decided to publish, as a group, our "Handbook of Archaeoichthyology" (though not necessarily with that title) and to take the occasion of the Madrid meeting to present and discuss the chapters of the first volume on Methodology. A list of proposed topics follow on pp. 6-9 below. A second volume, due 1997, will survey archaeoichthyological research throughout the world.

A second difference from previous meetings is that we are going to ask for serious financial support (i.e. covering travel and lodging expenses for all who attend) from the NATO Scientific Program Committee. In order to do this, we will need your collaboration to comply with NATO's regulations.

1) When the application for support is made, NATO needs to know how many people will participate and the topics of the lectures each will give. This means that we can make a formal invitation to you only if you have chosen your lecture topic and made an explicit commitment to deliver it in 1995.

2) Obviously, people will know their subjects well in advance of the meeting, and can be expected to have them ready (i.e. as manuscripts) by the time the conference starts. The idea is to use the meeting for presentation and discussion of papers so that the reviewing will occur automatically then without the need to send papers to referees afterwards.
3) NATO will publish the Proceedings right after the meeting. This means we can have our research distributed worldwide but also will force us to finish final drafts 1-2 months after the conference.

4) Above all, the application to NATO will have the highest chance of succeeding if we are able to make a meaningful, coherent and pragmatic proposal which will catch the interest of the NATO committee.

This last point brings us to the list of topics. At the end of this letter you will find a series of potential titles for lectures. Please note:

a) The list is an initial orientation. You can (1) add, (2) delete, (3) fuse, (4) split, or (5) change this list as you like, but you must do a paper which is (a) methodological, (b) coherent, and (c) suitable to be developed in 20-30 pages. (Not all topics need to be taken).

b) Papers can be submitted by as many authors as desired so long as they are coordinated. Equally, a single author can contribute as many papers as she (he) wants.

c) Some of the proposed topics will probably need to be subdivided into more appropriate units (regional or otherwise) in order to be feasible. We will welcome any suggestions!

d) Finally, remember that the list of papers and assigned authors will form our presentation to the NATO committee. We need to make the subject as broadly interesting as possible and for this reason we have included topics such as over-fishing, new methods, etc., which should increase our chances of getting NATO support. For this same reason we might even invite scholars who are not members of the Fish Remains Working Group to present a paper we feel is important (shown with asterisks in the topic list) but which nobody in the "classical" group has chosen.
As you can see, the list and coverage of topics is big enough for everybody to get one single paper on his (her) own and still remains open to new proposals.

People are also welcome to submit other types of papers to the conference. However, since we do not want to make the conference too long or to have parallel sessions, we will probably need to group non-methodological papers as a unit, or to think of alternative ways to deal with them (i.e. present them as posters? Much depends on how many methodological papers we receive). These "traditional" papers can not be included in the application for funding, though if we manage to get enough money we will try to cover expenses of their authors much as we hope to do with authors of the methodological contributions. ARCHAEOFAUNA, our lab's periodical, can publish the "classical" papers within a year.

In any case, we need a prompt reply from all of you with your proposed lecture titles. The applications to NATO for 1995 must be forwarded no later than July 1st 1994! (We also need to coordinate authors where we detect overlapping proposals).

Some people have expressed concern that this is too formal a way of doing things, and some might even feel manipulated and will refuse to attend. Our idea to organize so many friends into a single project is, of course, very different, and we are looking forward to showing ICAZ just how efficient we are. If, however, you feel anxious about this for any reason, please let us know as soon as possible. We can abandon the whole idea if we find strong feelings against it, but we need a prompt response in order to do so without unnecessary troubles (Believe me, this project is a lot of work for the organizers!).

You should all know that with or without financial support, and whether or not "classical" papers are also presented, the Madrid meeting will try to prepare a collection of papers on archaeioichthyological methods. Because of this, the methodological section(s) will be monographic within the conference. But remember that most normal contributions can
be changed into broader (i.e. methodological) studies. In the long run, our ability to develop things this way will determine the success of our applications, meeting, and "Handbook". So please... think hard!

Asking you all for a prompt reply we only have to add:

Hasta la vista!

signed

Arturo Morales
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Handbook of Archaeoichthyology - List of topics

I. Historical methods

A. Historical records and the development of commercial fisheries.
B. Historical records and the evidence of fish trade and consumption.
C. Historical records and archaeozoological evidence: concordance of data.
D. Historical records and archaeozoological evidence: data discordance.
E. Account records of fish commerce as sources of archaeozoological evidence.
F. A historical account of fish farming in... (several possibilities).
G. Historical records and ethnographic evidence in archaeoichthyology.
H. Fish sauces and fish products in ancient times (several possibilities).
II. Biological methods

A. Osteological analysis

1. The retrieval of fish remains from archaeological sites.
2. A primer of fish osteology.
3. The nature of fish remains identification (problems, case studies, etc...).
4. Comparative collections and the identification of fish bones.
5. Fishes and the archaeological record (several possibilities).
6. The use of radiographs as an aid to fish identification: possibilities and problems, etc.

B. Non-macroscopic analysis

1. Isotope analysis in archaeoichthyology.*
2. Collagen analysis in archaeoichthyology.*
3. Trace element analysis in archaeoichthyology.*
5. Skelettochronological analysis in archaeoichthyology.
6. The chemistry of fish bone: Implications for archaeoichthyology.
7. Seasonality analysis in archaeoichthyological assemblages.

C. Conventional analytical techniques

1. The estimation of MNI on archaeoichthyological samples.
2. The measuring of fish bones from archaeoichthyological samples.
3. A catalogue of fish bone measurements for ichthyological purposes.
4. The analysis of fish pathologies in archaeoichthyological samples.
5. The analysis of diversity and abundance in archaeoichthyological assemblages.
6. The estimation of size and weight in archaeoichthyological analysis.
7. Seasonality analysis on archaeoichthyological samples (several possibilities), etc.

D. Taphonomical analysis

1. Taphonomy and archaeoichthyology.
2. Taphonomical groups in archaeoichthyological research.
3. The calibration of taphonomic loss in fish samples.
4. Biasing agents on fish bone assemblages.
5. The interpretation of skeletal abundance profiles (cultural/taphonomic implications of skeletal distributions) (several possibilities).

E. Fishery analysis

1. Fish population dynamics.*
2. Overfishing as a biological and cultural phenomenon.
3. Evidence of overfishing in archaeoichthyological assemblages (theoretical).
4. Archaeoichthyological data for overfishing in... (many possibilities (i.e. countries, regions, periods, etc...)).

F. Other biological analyses

1. Biogeographical changes in fish populations from the recent past (several possibilities (i.e. an overview, bibliographical review, geographical subdivisions, etc...)).
2. Biogeographical changes in fish distributions and the archaeoichthyological record (several possibilities).
3. Fish meat as a guide to fish processing: a combined bromatological, ethnographical and archaeoichthyological analysis (several possibilities).*
4. Ichthyological data as an inferential basis for archaeoichthyology (several possibilities).
5. Fish assemblages as indicators of environmental change in... (many possibilities).*
6. Unusual occurrences of fishes as indicators of changing environmental conditions (several possibilities).*
7. Archaeoichthyological data as an aid to ichthyology and fishing strategies, etc.

III. Ethnological methods

A. Ethnology/ethnography as a source of data for archaeoichthyology (general).
B. (The ethnological analysis of) artificial vs. natural fish middens.
C. Ethnological/ethnographic data on fish catching methods as an aid to interpret archaeoichthyological assemblages (many possibilities to subdivide the topic (i.e. geographical, temporal, etc...)).
D. Ethnological/ethnographic data on fish processing methods as an aid to interpret archaeoichthyological assemblages (as in point II.E.3).
E. Fish management and pisciculture in natural populations (several possibilities).*
F. Fish chopping strategies in different cultural settings (several possibilities), etc.
IV. Other methods

A. Database management programs for archaeoichthyology.
B. Landmark analysis as an aid to fish bone identification.*
C. The making of a comparative collection.
D. Staining techniques for archaeoichthyological purposes, etc.*

PUBLICATIONS

Proceedings of the 4th to 7th meetings of the Fish Remains Working Group

All available information indicates that the proceedings of the 4th meeting in York, for which Andrew K.G. Jones is responsible, will never appear. Therefore during the meeting in Leuven a letter was written to Andrew Jones asking him to return the manuscripts to the authors.

Proceedings of the 5th meeting in Stora Kornö should be prepared by Leif Jonsson. But he lacks staff and other assistance. Therefore, the contributors present in Leuven decided to accept the offer of Arturo Morales to publish the papers of the 5th meeting in the journal "Archaeofauna".

Proceedings of the 6th meeting in Schleswig are fully prepared for the press. In August 1992 they were accepted by the journal "Offa" which is edited by the Institut für Ur- und Frühgeschichte and the Archäologisches Landesmuseum of the University of Kiel. They will appear in Volume 50, 1993, for which, alas, the real date of publication will be during autumn 1994 to spring 1995.

Proceedings of the 7th meeting in Leuven will be prepared by Wim Van Neer. They are already accepted by "Annales du Musée Royal de l’Afrique centrale". Deadline for the delivery of manuscripts is December 15th, 1993.

Dirk Heinrich
CATALOGUE OF FISH SKELETAL MATERIAL

At previous meetings of the Fish Remains Working Group (York 1987, Stora Kornö 1989) it was decided to produce a catalogue of fish skeletons available in the different museums and osteological laboratories all over the world. Preparation of this catalogue by Elizabeth S. Wing is not yet finished. In August this year E. Wing wrote a letter to Wim Van Neer on behalf of the meeting in Leuven in which she reports on this proposal. Please contact Elizabeth as she proposes in her letter; see below:

Dear Wim:

I am sorry to miss the Fish Remains Working Group again. It is always the most enjoyable meeting but unfortunately it is impossible for me to get away at this time. Please pass on my greetings to all of the participants at the meeting.

You might also relay the information that I now at last have a computer with a much larger memory and can continue with the project of preparing lists of fish species in different collections. We have entered the data I had on the new computer but still need to format the lists. What I have is probably out of date. If people are interested in such listings, I could send what I have to each of the curators of a fish collection, get an update, and perhaps by the next meeting have a listing prepared. I will need to know whether people are interested in such catalogue of fish comparative collections.

Again my very best regards to all,
Greetings,

signed

Elizabeth S. Wing
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OBITUARY

István Takács, the leading archaeoichthyologist in Hungary died on March 14 1993 at the age of forty years.

Following high school graduation, István learned animal bone identification the hard way: sorting, inventorying and packing quantities of animal bones as an assistant in the renowned reference collection of the Hungarian Agricultural Museum. Meanwhile, his mentor, János Matolcsi, taught him comparative osteology and fundamentals of archaeozoological method. István's skills, manual dexterity and practical way of thinking were of great help in the planning and construction of several exhibitions all around Hungary. Of these, the Agricultural Museum's permanent exhibits on horse breeding and the history of domestication are largely his work.

In 1976, István pursued formal training at a restorers' course in Budapest. Within the same year, he was admitted to the Szarvas Agricultural College of the Debrecen Agricultural University as well. He graduated in 1979.

Like many "second generation" post-war archaeozoologists, István was advised to study fish remains from archaeological sites. His engineering degree in hydrology and fisheries management provided a firm basis for scientific research in this field. Even István's dissertation was devoted to the growth and development of catfish. Subsequently, this study served as a starting point for the size reconstruction of catfish using its subfossil bone remains, a work first carried out by him.

This specialization in archaeoichthyology opened a new window of research opportunities within the Fish Remains Working Group of the ICAZ. István's presentations at our group meetings in York, U.K. (1987), Stora Kornö, Sweden (1989), and Schleswig, Germany (1991), earned him professional recognition. At these conferences his kind personality, keen professional interest and ever improving language skills won many friends among fellow archaeozoologists.
As a truely community oriented man, he had been active in the Museum's trade union movement, providing assistance and advice to colleagues. When János Matolcsi died ten years ago István, the obvious and most able candidate, became the curator of the osteological collection at the Agricultural Museum.

István taught at the Agricultural University of Kaposvár and also gave smaller, occasional lectures. At the same time, one of his long time ambitions was also fulfilled: he now had the means to employ and train an assistant and thus could directly contribute to the education of a new generation of archaeozoologists. His clear and direct way of speaking as well as his open personality made István an equally good museum guide for laypeople, including small schoolchildren.

After twenty years of invaluable hands-on experience at all stages of the museum hierarchy István was appointed Deputy Director-in-Chief late last year, at a time of change and immense strain in Hungarian social and cultural life. As a politically neutral and popular person he stood as a symbol of stability. This position seems to have marked the zenith of his administrative career. His major aims included cooperating in the computerization of the Museum's vast and rich collections of which the osteological department is one of the largest.

István Takács was a conscientious and straightforward person. These positive human qualities have for years made him prone to a variety of challenges. Ultimately, however, he was left with no means to alleviate the mounting pressure of often conflicting responsibilities. In spite of the fact that he was generally loved and hard working, a feeling of inadequacy increasingly haunted him. When trouble reached his private life he felt he could not cope any longer.

His unexpected death is not only a private tragedy for his family, friends and closest colleagues. The broader commu-
nity of archaeozoologists lost an energetic and dedicated expert as well.

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This list of addresses of all members of the I.C.A.Z. Fish Remains Working Group and of interested persons is the update of the list given in Newsletter No. 8. Corrections and notices referring to further updates are welcome. If you also want to receive further issues of the newsletter, please return the enclosed reply form (together with your payment, see Editorial) to

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