Wet Organic Archaeological Materials Working Group
Triennial Program 2008-2011

The Working Group for Wet Organic Archaeological Materials (WOAM) will basically communicate through the WOAM Newsletter, published 3-4 times per year. The WOAM Newsletter is edited by the working group coordinator, supplied with information from an advisory group of members located in Sweden, France, Western Australia, and Canada. The WOAM newsletter provides information on conservation courses, seminars, and conferences, on recent literature, EU programmes, PhD dissertations, and news from the ICOM-CC Directory Board.

The WOAM group will arrange the next interim meeting in May 2010 in Greenville, North Carolina. The presentations (usually 35-40 papers and 10-15 posters) will be printed in WOAM proceedings. A selection of the papers will be peer-reviewed by a scientific committee.

The Wet Organic Archaeological Materials Working Group has decided to focus on the following subjects:

- In-situ preservation and reburial, including characterisation of waterlogged wood and archaeological environment
- Analytical techniques for organic materials
- Impregnation agents and drying methods, also including:
  - Reports on ongoing conservation projects
  - Conservation of very large timbers
- Post-conservation care and problems of wood re-treatment – practicalities, ethics, and risks, including:
  - Sulfur/iron acid formation in organic materials
  - Archaeological alum treated wood
- Degradation and conservation of leather and other organic materials

**Characterisation of waterlogged wood** and the surrounding environment are parameters closely related to the discussions related to in-situ preservation and reburial. There are several on-going and new projects. Some of them will be reported on in separate seminars, others at Wet Organic Archaeological Materials Working Group meetings. Separate seminars and publications will be announced in the WOAM Newsletter. Contributions are expected from colleagues in Western Australia, Sweden, the Netherlands, Italy, Greece, Japan, and Denmark.

A survey of conditions, applications and availability of the **new analytical techniques**, is in demand among the group members. This is, the only subject in the WG programme that is not presently being taken care of by an institution, group of colleagues, or individual person. By including the subject on the list, we hope to inspire any group member searching for a good WOAM project.

In waterlogged organic archaeological conservation, the overall items are **investigations of impregnation agents and drying methods**. Agents that are reported successful for treatment of some artefacts may be unsuitable for others. New analytical methods for diffusion properties of
impregnation agents, their durability, climate stability and affiliation to the organic materials have been developed. Although knowledge on crucial drying parameters and monitoring techniques have increased and new equipment has been presented, the methods are still not applicable for all kinds of archaeological waterlogged wooden finds. Thus, continuous investigations of drying techniques and impregnation agents and methods are run at various levels; as research projects (in France, Japan, England, Scotland, Germany, and Denmark) and included in practical conservation treatments.

On the one hand, our knowledge and possibilities in wet organic archaeological materials conservation have increased, on the other; this should be reflected in the actual conservation treatments. That is why reports on ongoing conservation projects (the Newport ship in Wales, the Roskilde ships in Denmark, the Yenikapi ships in Turkey) have to be communicated within the group. The conservation of very large timbers is given special attention as these objects possess challenges on several levels; the differentiation in degree of degradation, the handling of large volumes, the presence of inorganic salts in the material and the very long conservation time. Continuous discussions of the actual treatments of the Mary Rose ship, the Bremer cog in Germany and a Danish renaissance wreck are planned to be presented and discussed during the coming interim meeting as well as in future ICOM-CC triennial conferences.

Post conservation care; including problems of wood re-treatment and the discussion of practicalities, ethics and risks of these actions have recently been included in the working group programme. As a consequence of increased focus on the museum collections and their state of preservation, several laboratories (in Sweden, Norway, and Denmark) are facing new challenges with dry archaeological organic objects that require new treatments. Separate as well as coordinated programmes have been launched, in particular regarding treatment of objects that are impregnated with alum. The activities will be described in the WOAM newsletter and the results of their efforts will be presented either during the interim meeting in Greenville or the ICOM-CC triennial conference in 2011.

Over the last ten years, the problems related to the presence of inorganic materials and acid formation inside the wood has been included in several research programmes (Sweden, England, the Netherlands, France, Western Australia, and Denmark) as this is a severe threat to the long-term stability of waterlogged wooden finds. The major research in the field is in charge of the “Save the Vasa” project, but the WOAM group has followed the research from the start, several results have been published in the WOAM WG proceedings and it is expected this will also be the case in Greenville in 2010. The “Save the Vasa project” includes several PhD dissertations and the titles have been/will be announced in the WOAM Newsletter.

The group includes other waterlogged archaeological organic materials than wood, such as leather, bone, antler, amber, ropes, textiles, etc. The research, knowledge and technology regarding degradation and conservation of these materials keep pace with the field of waterlogged wood. Intensive work in the field is carried out in Canada, England, Virginia, Germany, and Denmark.

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