

TH1-20

## REGIONAL AND CHRONOLOGICAL DEVELOPMENT OF FISHING: ITS SIGNIFICANCE IN PAST ECONOMIES AND THEIR SOCIOECONOMIC DYNAMICS

Friday, 2 September 2016, 09:00-13:00

Faculty of Philology, Room SP2

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**Presentation Preference** - Regular session

Fishing was one of the simplest sources of livelihood in prehistory. Where available, fish constitutes an important food resource. Apart from the nutritional value, all parts of the fish have been utilised for various purposes. Humans' adaptive and innovative ability to conquer new ecological niches and to respond to environmental stress led to the invention of new fishing technologies and e.g., mass-harvesting facilities and highly organised procurement strategies.

Sometimes fisheries are labour-intensive and collective effort may have been required. Hence, fishing techniques may be closely related to the socioeconomic, cultural, and sociopolitical systems in fishing communities, as well as to population dynamics. Cultural constraints, behavioural interactions, and social norms might have regulated fishing and the consumption of aquatic resources. Exploitation technologies might express group identity, and provide insights into contacts and communication between different fishing societies. Still, aquatic resources and procurement technologies are often poorly visible in the archaeological record. Therefore, knowledge about the importance of fish in prehistoric subsistence is often quite uncertain.

This session aims to deepen current knowledge within the framework of local, supra-regional, and diachronic development and application of active and passive fishing techniques in the harvesting of aquatic resources as well as other linked activities. Where direct evidence of fish utilisation is insufficient, various forms of indirect evidence are employed. Settlement patterns, site location, fishing technology, and resource specialisation reflect the utilisation of fish as a food source, or as a source of raw materials. Therefore, apart from studies utilising archaeological fishing-related materials, we would also like to encourage researchers contributing studies applying analogous data, from the viewpoint of, e.g., ethnography, anthropology, and ethnohistory to help build the frames of reference and further our understanding about fishing as a phenomenon and its longterm dynamics.

### TH1-20 Abstract 01

#### Introduction. Regional and chronological development of fishing

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**Keywords:** Ancient fishery, Human diet

**Presentation Preference** - Oral

Fishing has been one of the simplest sources of livelihood since the early days of human prehistory and therefore fish constitutes an important food resource for human societies in water rich areas with access to lakes, rivers and coasts. Fish is a significant source of protein, an element vital to human nutrition. Apart from the nutritional value, all parts of the fish have been commonly utilised for various purposes. Fish are relatively easy to catch even with the simplest equipment and therefore this wild food resource was exploited with varying intensity through time employing different technologies in a wide range of aquatic landscapes. The humans' adaptive and innovative ability to conquer new ecological niches and to respond to environmental stress has led to the invention of new fishing technologies and developing, e.g., mass-harvesting facilities and highly organised procurement strategies. Sometimes fisheries are time-consuming and collective labour may have been required to make the most of the seasonally abundant resources. Hence, fishing techniques may be seen as closely related to the socioeconomic, cultural, and socio-political systems affecting the fishing communities, as well as the population dynamics.

Fishing may have had a substantial role among many agrarian societies, specific social groups, at special occasions (feasting) and during times of distress (famine). In addition, cultural constraints, behavioural interactions, and social norms might have regulated fishing and the consumption of aquatic resources. Exploitation technologies might express group identity, and provide insights into contacts and communication between different fishing societies. Still, aquatic resources and procurement technologies are often poorly visible in the archaeological record. Therefore, knowledge about proportion and importance of fish in prehistoric diet is often still quite uncertain. Fishing tackle, either passive gear like nets, basket traps and weirs or active gear such as hooks, line sinkers, spears, leisters and tridents are relatively simple constructions, which change little over time and are widely distributed. In other cases equipment is made from prestigious material (e.g. bronze fish hooks), and large amounts of building materials are required (e.g. for fish weirs). This session aims to deepen current knowledge within the framework of local, supra-regional, and diachronic development and application of active and passive fishing techniques in the harvesting of aquatic resources as well as other linked activities. In locations where direct evidence of the utilisation of fish is insufficient (e.g., because of the poor preservation of fish remains and fishing-related artefacts), various forms of indirect evidence are employed. Settlement patterns, site location, fishing technology, and resource specialisation may be seen as forms of indirect evidence of the utilisation of fish as a food source either for immediate or delayed consumption, or as a source of raw materials. Therefore, apart from the studies utilising archaeological fishing-related materials, we would also like to encourage researchers contributing with studies applying analogous data, from the viewpoint of, e.g., ethnography, anthropology, and ethnohistory to help build the frames of reference and further our understanding about fishing as a phenomenon and its dynamics in the long term.

### TH1-20 Abstract 02

#### (Dis)continuities in fishing practices at the onset of Neolithic: a case study from Starcevo

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**Keywords:** Early Neolithic, Fishing, Starcevo

**Presentation Preference** - Oral

Whereas the significance of fishing is well documented at a number of Mesolithic and Early Neolithic (c. 9500 - 5500 cal BC) sites in the Danube Gorges (the Danube stretch between present-day Serbia and Romania) and is corroborated by archaeozoological, isotopic and archaeological evidence, this important activity has received less attention in the study of surrounding areas. The issue of determining the role of fishing is particularly relevant for the understanding of transitions from foraging to first food producing economies in the North-Central Balkans, the latter commonly associated with the Starčevo-Körös-Criş cultural complex (c. 6200 - 5500 cal BC). Existing data on isotopic dietary signatures of human remains from Early Neolithic Starčevo-Körös-Criş sites signal a more terrestrial diet (Whittle et al. 2002; 2005), however archaeozoological data from several Körös sites in Hungary (Bartosiewicz 2012) suggest that the role of fishing, in addition to being obscured by inadequate recovery techniques, would have varied greatly depending on site location and other socio-economic factors. In this paper, we present and discuss the results of the analysis of fish remains from the eponymous, Early Neolithic site of Starčevo-Grad in Serbia. The site is situated on the former bank of the Danube at the edge of its floodplain, little over a 100 km upstream from the Danube Gorges as the crow flies. The faunal remains collected over the course of 1932 and 1969-1970 excavation campaigns (originating from both domestic and wild animals, waterfowl and fishes) were previously published by Clason (1980), and are indicative of a both stock-breeding and a hunting/fishing economy. The fish remains, albeit few, were collected mostly by hand; and the role of fishing was probably more substantial. The occurrence of large fish hooks and fishing net weights speak in favour of such hypothesis, as well as the environment of the site, which was located in the very proximity of the river. In addition to the re-analysis of the remains from older excavations of Starčevo-Grad, our study also included the analysis of fish remains collected during 2003-2008 excavation campaigns. The aim of this paper, as well as future analyses of Early Neolithic faunal assemblages is to problematize the presumed dichotomy between Mesolithic and Early Neolithic subsistence strategies and to assess the role of fishing at the advent of food producing economies in the Central Balkans.

### TH1-20 Abstract 03

#### Comfortable fishers in Mesolithic western Norway

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**Keywords:** Fishbones, Fishing gear, Settlement patterns

**Presentation Preference** - Oral

In late Mesolithic western Norway fishing stood for a major factor in the subsistence. The large majority of the residential sites are situated close to the shoreline, near good fishing grounds. Line-sinkers of soapstone occur frequently at these sites, and at some of them - where conditions for preservation for faunal materials are favourable - fishhooks of bone are found, and also