

Abstracts of the Conference „Life at the Dead Sea“

21st – 24th February 2018

SESSION 1 BIBLE, MYTHS AND ART

The Dead Sea and the Old Testament

Prof. Dr. Wolfgang Zwickel

The paper will give an overview about all relevant texts of the Old Testament, which refer to the Dead Sea and its immediate surroundings. On the one hand, the Old Testament knows different names for the Dead Sea (Salt Sea, Steppe Sea, Asphaltites, Sea of Sodom). On the other hand, surprisingly many central texts take place in this area (e. g. Sodom and Gomorra, Lot and his daughters, Conquest of Jericho, Temple spring).

The Dead Sea in the Art

Prof. Dr. Angelika Berlejung

The Dead Sea and the biblical stories - that are located there- have always inspired artists. The lecture gives an insight into central motif complexes that have been selected and play a role in the reception of this particular landscape.

SESSION 2 RESEARCH HISTORY AND THEORIE

PEF Research in the Dead Sea Region

Dr. Felicity Cobbing

The Palestine Exploration Fund was instrumental in establishing reliable geographical, archaeological and environmental data for the Dead Sea region in the late 19th and early 20th centuries. This paper will look at the most significant studies conducted on behalf of the PEF, or associated with it, from its foundation in 1865 up to the First World War in 1914.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

Jericho in Berlin

Dr. Lutz Martin

The Vorderasiatische Museum with its approximately 500,000 objects representing material legacies from around 7000 years, belongs to the most important collections of Near Eastern antiquities in the world. In 1908 about 1400 objects were brought from Jericho to the museum. In the lecture the acquisition history against the background of the Ottoman Antiquities Act and the role of the finds from Jericho in the museum's collection will be presented.

Ernst Sellin and Carl Watzinger and the German Exploration of Jericho

Prof. Dr. Hermann Niemann

After an unsuccessful (Ch. Warren, 1868) and a very short trial excavation (F.J. Bliss, 1894) E. Sellin and C. Watzinger 1907-1909 have laid the foundation for all further archaeological work in Jericho. It was one of the first excavations in Palestine coming close to modern standards. Sellin provided immediate and comprehensive publication (1913). For that time the quality of the documentation of the data (finds or objects as well as the find spot or site context) was very good. That was the merit of Watzinger and the architects involved. The interpretation of the data as well as the dating of the strata was, however, partly affected by the conservative Bible-centered position of Sellin. The original dating of the strata in the final report has been corrected by Watzinger in 1926. The excavation was so good and successful for the early period of Palestinian archaeology that the final report was reprinted in 1973.

Gender at Qumran: Between Text and Material Culture

Prof. Dr. Katharina Galor

Interest in gender and the role of women at Qumran and within the "Dead Sea community" has emerged slowly, most noticeably in the domain of the site and region's archaeological investigations. This paper lays out both the gains and limitations of gender based research on Qumran's architecture, artefacts, and the interaction between material culture and literary sources.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

SESSION 3: VEGETATION, CLIMATE AND WATER

The Holocene Vegetation and Climate History of the Dead Sea Region

Dr. Frank Neumann

In the southern Levant, climatic fluctuations and persistent anthropogenic overriding of the landscape have been observed since the beginning of the Holocene. The sea level fluctuations of the Dead Sea, as they are based on precipitation and evapotranspiration, are a reflection of the hydrological conditions in the southern Levant. At the Dead Sea, pollen profile of Ein Gedi on the western shore reaches back ca. 10.000 years and can be compared to other pollen profiles in northern Palestine.

Sinkholes Formation along the Dead Sea Shore: A Human Induced Environmental Problem

Dr. Eli Raz

Continuous human intervention in the Dead Sea and its water shed in the last five decades, led to an accelerating drop in the lake's water level, accompanied by extreme environmental changes. The most prominent of them are rapid sinkhole appearances, from zero (1980) up to 6.5 thousands today, resulting in severe economic loss, ecological and life hazards, abandonment projects and suspension of future development plans.

Water Management around the Dead Sea – Present and Past

Dr. Jutta Häser

Jordan is situated in an area of different geographical zones with a semi-arid to arid climate. Water management was therefore always a challenge for the inhabitants of the country. Due to global warming and rapid increasing population, it is even more difficult providing enough water for industrial, domestic and agricultural needs.

The lecture will present the current water situation of Jordan with a focus on the Dead Sea. Further on, it will show exemplary how people managed to meet the demands on water supply in the settlement areas around the Dead Sea in former times.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

Irrigation in the Zerqa Triangle, Jordan Valley. Crafting Resilience in an Arid Environment.

Dr. Eva Kaptijn

In the Zerqa Triangle (central Jordan Valley) an irrigation system was discovered that can be traced back to at least the Iron Age II, c. 1000 BC. During several episodes of the region's history the irrigation canals were used to increase crop yields and overcome the frequent dry years that characterize this region. In this presentation the history of this irrigation system and the way in which the irrigation system allowed communities in the region to create a sustainable society in this arid environment will be discussed.

SESSION 4: SUBSISTENCE AND RESOURCES

Genome Sequences of 6000-Year Old Barley Provide New Insights into the History of Crop Domestication

Prof. Dr. Dr. Verena Schünemann

Barley, one of the founder crops of the Neolithic, was domesticated around 10,000 years ago in the Fertile Crescent. To address questions of its origin we sequenced ancient DNA from five directly dated 6,000-year-old barley grains excavated at Masada Fortress in the Judean Desert, Israel, and compared the ancient genome sequences to contemporary wild and domesticated barley varieties. Our results point to a continuity in contemporary landraces in Israel in the past 6,000 years and support the suggested origin of domesticated barley in the Upper Jordan Valley.

Development and Importance of Agrarian Resources in the Dead Sea Region during the Bronze and Iron Ages

Andrea Orendi M. A.

The habitat of the Dead Sea region is not very favourable for extensive agricultural activities. Extreme aridity as well as saline conditions impeded the cultivation of crops. Nonetheless, archaeobotanical remains from different sites show that arable farming was of course a major factor of subsistence. Especially sites dating to the Early and Middle Bronze Age offered interesting results in regards of agrarian resources and their importance to ancient societies, which might also be connected to more preferable climate conditions especially during the Early Bronze Age.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

Georessources in the Land of the Dead Sea: Copper through the Ages

Prof. Dr. Andreas Hauptmann

The population around the Dead Sea was intimately connected with the mining and smelting of copper ores from the ore deposits in the nearby located Rift Valley. Faynan and Timna played a major role as sources for green pigments since the Pre-Pottery Neolithic period. Through the ages, the metal copper was a valuable material used for any local needs especially in Palestine in the 4th and 3rd millennium BC, and a commodity traded all over the eastern Mediterranean in the Iron Age. It will be shown that georessources basically are a solid part during any settling a landscape.

SESSION 5: FROM PREHISTORY TO EARLY ISLAM

The Late Chalcolithic (LC) in the Southern Levant

Dr. Susanne Kerner

The LC in the Southern Levant is a period characterized by a socio-political complexity that is based on elaborate metal production, specialized pottery and a rich cultic inventory. The local differences are large, as different patterns in material distribution, burial habits and access to metal illustrate. But there are several elements connecting the entire region in a shared symbolic language. The area around the Dead Sea with Tuleilat Ghassul and Nahal Mishmar is particularly interesting.

Technical Innovations in the Prehistory and Early History of the Dead Sea Region

Dr. Florian Klimscha

The paper will examine the origin and impact of key-innovations in the southern Levant with special reference to the Dead Sea region.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

Human Activity in the Dead Sea Region in the Early and Middle Bronze Ages

Dr. Eliot Braun

The Dead Sea region was home to significant numbers of humans in the Early Bronze (EB) Age, primarily in the last half of the fourth and the first half of the third millennia BCE. Evidence for activity of those people is mainly found in three large cemeteries, three fortified sites, and numerous rock-built structures, dolmens, cairns and tumuli. Some evidence for continued, albeit less intensive activity is found for the latter part of the third millennium, while by the Middle Bronze Age in the earlier centuries of the second millennium, archaeological evidence is sparse, suggesting a population decline.

About the History of the Region in Prehellenistic Time

Gunnar Lehmann

The Dead Sea was (and still is) one of the peripheral regions of Israel. But there were important roads connecting the West- and Eastbank. In addition, different raw materials were obtained and specialised farming was conducted. In this way the extreme dry and hostile region became one of particularly economic and strategic importance, which will be discussed in this lecture.

Excavations at Ein Gedi

Dr. Gideon Hadas

Ein Gedi is an oasis on the western shore of the Dead Sea, where people made their living of growing date trees and perfume plants as well as natural resources. Excavations revealed that the permanent settlement in Ein Gedi existed from the Iron Age until the Byzantine period, and renewed only after several centuries in the Mamluk period for a short time. After its destruction there was no permanent settlement until the 20th century. People of the region, including Ein Gedi, used both land and sea transport routes over the Dead Sea to market their products.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

Farms and Fortresses. Exploring the Diversity of Life around the Dead Sea in the Hellenistic and Roman

Prof. Dr. Jürgen Zangenberg

The Dead Sea Region was not dead during the Hellenistic and Roman periods. To the contrary: Due to the eastern and southern expansion of the Hasmonean kingdom, the Dead Sea region gained a strategic role as geographic link between Judea and Perea and became home of a specialized economy based on profitable „crops“ like dates, balsam and asphalt. At the same time, political influence remained strong on the region, but harbours and economy/trade brought Jews and Nabateans in contact. The presentation will explore settlement patterns and their political and economic contexts.

Guarding around the Dead Sea: Military Concepts and Sites between Herod and Justinian

PD Dr. habil. Hans-Peter Kuhnen

The area around the Dead Sea was of considerable economic importance to the ruling powers of the late Hellenistic and the Roman-Byzantine periods. To control the land military operations took place and fortifications were erected at various sites. Some of them became famous for their impressive archaeological remains. After an introductory survey of the sites concerned, the lecture will analyse the underlying security concepts and their implications on the settlement history of the Dead Sea and its surroundings.

Machaerus: The Herodian Fortified Royal Palace and City Overlooking the Dead Sea in Transjordan

Dr. Gyözö Vörös

Pliny the Elder wrote down the following words in 77 AD: “Machaerus, next to Jerusalem, was once the most strongly fortified place in Judea” (Historia Naturalis V 15, 16). It means that in Antiquity, from the point of view of military defence, the fortified city of Machaerus was more important for the Hasmonean and Herodian kingdoms of Jerusalem, than the fortifications of Masada, Herodium, Hyrcania and Alexandreion. Professor Vörös will present the latest excavation results, together with the architectural and archaeological legacy of this beautiful Herodian royal city.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

Kallirrhoe: Herod's Hot Springs Resort - the German Excavations by August Strobel 1986-89

Prof. Dr. Stefan Wimmer

At the Jordanian, eastern shore of the Dead Sea, an area abundant of thermal springs and lush vegetation is known as ‚Ayn az-Zâra. Excavations in the 1980s by the German Protestant Institute of Archaeology, Jerusalem, were able to firmly establish the identification of this site with Kallirrhoe from the writings of Josephus. The architectural remains can be interpreted as a Herodian palatial complex. A later phase dates to the Byzantine period and is reflected in the Madaba mosaic map. The speaker was co-directing the 3rd (and last) season under August Strobel in 1989.

Hermitages, Caves, En ez-Zata and the Circumvallation of Machaerus - August Strobel's Research in the Region of the Dead Sea

Prof. Dr. Dr. Dr. h.c Dieter Vieweger

August Strobel held the office as head of the Deutsche Evangelische Institut from 1983 to 1992. He explored many regions in the surroundings of the Dead Sea. His long forgotten but interesting research approaches will be presented and acknowledged.

Archaeology at the Lowest Place on Earth: Ghor as-Safi, Jordan

Konstantinos Politis

The south-eastern shores of the Dead Sea and its precursor, the Lake Lisan, were inhabited for over 12,000 years. Human occupation was enabled by numerous freshwater springs, which created wadis with rich alluvial soils. These formed the basis for successful agricultural settlements from prehistory to modern times. The largest is the Wadi al-Hasa on whose alluvial fan the Ghor as-Safi was formed and where successive ancient sites were found. Biblical Zoara and the Sanctuary of Lot have been recently excavated here, as well as sugar and indigo industries at medieval-Islamic Zughar.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

The Byzantine-Early Islamic Transition in the Dead Sea Region

Dr. Itamar Taxel

This lecture will overview the settlement history around the Dead Sea in the Byzantine-Early Islamic transition period (7th-early 8th c. CE). The archaeological and historical evidence shows that some settlements and habitation forms (such as monasteries) have dwindled already before or shortly after the Muslim conquest, while other continued to exist more or less on the same scale. These were accompanied by a few new establishments, mainly associated with elite residence.

SESSION 6: CAVE STUDIES AND QUMRAN

What Can We Learn from the Archaeology of Qumran Cave 11Q?

Prof. Dr. Marcello Fidanzio

The paper will draw up a balance of the different excavations at Cave 11Q (1956 - 2017) reconsidered in view of the publication of the final report. Attention will be given to both natural and human factors that have marked the history of the cave, which became famous due to the discovery of the remains of about 30 Dead Sea Scrolls.

Qumran as a Link between East and West of the Dead Sea

Dr. Jean-Baptiste Humbert

The archaeology of the Dead Sea Basin has developed in favour of the West Bank. This resulted in an overvaluation in West Bank research. Investigations in Transjordan came later and the benefit is not exploited enough. Despite both banks having specific cultural characteristics, it is necessary to upgrade the basin unity and trace the archaeological and historical links between the two shores. Recent research on Qumran can help us to restore an example of the exchanges between the Essenian site and Calirrhoé - ez - Zara - Machaerus.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN

Ancient Textiles from the Neolithic PPNB Period till the Medieval Period around the Dead Sea

Dr. Orit Shamir

The domestication of flax was an essential prerequisite for textiles in the Southern Levant. Linen fabrics from the Pre-Pottery Neolithic period, were preserved only at the cave deposits of Nahal Hemar. They were not woven, but made in other techniques such as looping and knotted netting; that is, without the use of a loom. By the Chalcolithic period, flax was continued to be used. Wool was not yet a favoured fiber and wool textiles are found for the first time at Jericho in the Middle Bronze Age.

The Roman period yielded thousands textiles, 75% are made of wool, excluding Qumran caves where the textiles are made solely of linen.

Medieval textiles were also found at sites such as Qasr el-Yahud and caves around the Dead Sea, some of them are made of imported cotton or silk.

Cave 53: A Newly Discovered Dead Sea Scroll Cave

Ahaid Ovadia/Dr. Oren Gutfeld

Cave 53 is located less than a mile south from Qumran. Renewed excavations revealed occupation starting in the Pottery Neolithic through Chalcolithic and Bronze Ages. The main use of the cave was in the Early Roman period, when it was used mainly as a concealing place for scrolls. This was revealed by the unearthing of several scroll-related artefacts and a small rolled fragment of worked hide, that was found in a jar behind a stone blockage. These extraordinary finds prove that there are more than only 11 scroll caves and cave 53 is the latest addition.

In cooperation with:



DEUTSCHES
ARCHÄOLOGISCHES INSTITUT



UNIVERSITÄT
LEIPZIG

freunde
des smac e.V.
smac

The **smac** is an institution of:

LANDESAMT
FÜR ARCHÄOLOGIE



Freistaat
SACHSEN