### Abstracts



Photo: Jenny Murray

### Alison Sheridan, National Museums Scotland Shetland's earliest farming communities, c.3700–1500 BC: an overview

Shetland's Neolithic, Chalcolithic and Early Bronze Age archaeology is a rich, relatively wellpreserved and invaluable resource whose potential has not fully been realised. Until the advent of the Nationalmuseet's Farming on the Edge project, there had been relatively little focused research on these periods since the survey and excavation work of the 1940s–1960s, and our understanding had largely been based on the conclusions of that work – tempered by the subsequent discoveries made at the Scord of Brouster, the Sumburgh cist, the felsite sources, the West Voe middens and, most recently, on and around the Hill of Crooksetter. The time is clearly ripe for a critical review of our current state of knowledge about the Neolithic of Shetland, and this is what this paper offers. Its narrative will extend beyond the conventional chronological cut-off point of 2500 BC to explore how developments continued until 1500 BC; this is important, since it is clear that many of the settlements that had previously been assumed to be of Neolithic date are in fact later. This paper will cover material culture, settlements, monuments and land use and subsistence issues and will attempt to present a broad-brush narrative. It will also suggest potentially fruitful lines of investigation. The story of Shetland's Neolithic (and succeeding centuries) is a fascinating tale featuring episodes of contact with the outside world (but not with Scandinavia!), punctuated by periods when a distinctively insular 'culture' and lifestyle evolved. Shetland's Neolithic will be compared and contrasted with that of the Orkney archipelago, where a very different story can be told.

# Val Turner, Shetland Amenity Trust & University of Stirling The Answer Lies in the Soil

The thin, acidic, peaty, soils of Shetland look fairly unpromising for agriculture today and yet, even 100 years ago they were cultivated more intensively. This paper uses micromorphology to explore the environment which the first Shetland farmers encountered and how they managed the soils in order to make them productive. In doing so, it also investigates whether soil management practices were universal across Shetland and if not, what factors may have influenced differences in both amendment and intensity. The paper will also looks at the sizes and shapes of the areas cultivated and assesses levels of productivity. This will provide an insight into the contribution which agriculture made to the "safe food bank" (Mahler, 2007) and challenges recent assertions that Neolithic farmers turned their backs on the sea as part of a taboo.

### Jenny Murray, Shetland Museum and Archives

# Agriculture in Shetland– a look at farming traditions in the Isles dating back to the prehistoric period.

Until the 19<sup>th</sup> century the Shetland Isles were completely self-sufficient; crops were sown, harvests gathered and animals grazed the hillsides. This annual cycle has sustained the island population over five millennia, and the ancient stone field boundaries seen all around these remote communities are a testament to the effective animal husbandry employed to keep the crops safe during the growing period.

The Shetland landmass offers limited areas of fertile ground, arable pockets of land lie close to the shoreline and palynological studies suggest some of these green patches have been farmed since the Neolithic period. These small fields have been ploughed or dug every spring and Shetland Museum has in its collection some of the implements used, including a group of rare wooden tools dating from the Iron Age. This paper will explore the islands farming history and its roots so firmly planted in the prehistoric period.

# Gabriel Cooney, University College Dublin The role of axes from island sources in the Neolithic of Ireland and Britain

The central question posed in the paper will be whether the quarrying and procurement of axes from special sources, specifically island, may have had a significant role in defining from what it was to be 'Neolithic' in Ireland and Britain. Three quite different island case studies (Lambay, Tathlin and Shetland) will be discussed. Study of the use of stone by island communities provides us with the opportunity to explore both its importance in island life and the interconnectivities created by the movement of objects. Objects of stone brought from or to islands literally carry their sense of place and history with them. The movement of material between locations and sources also provides us with the opportunity to think about exchange systems. The critical issue of the relationship between exchange networks involving material from these island sources and the establishment and development of the Neolithic will be a focus of discussion.

# Ditlev L. Mahler, The National Museum of Denmark Stanydale, an assembly area or just a large Neolithic house on Shetland?

After C.S.T. Calder's excavation during the summer 1949, Stanydale got a reputation as being a special site, and Calder uses words such as "temple" about the structure and compares Stanydale Hall with Mediterranean constructions. The paper will take a closer look at the surroundings trying to evaluate whether there are any indications of Stanydale being something special dated to Shetland's Late Neolithic or Beaker Period. This seems important as we could be talking of a parallel to other Neolithic assembly places both on the British Isles and in South Scandinavia. In the area we find at least ten cairns arranged on the surrounded hill tops as well as a border dyke at Lardie Hill Southeast of the hall. Four house sites presumable predate the hall, and there are traces of standing stones and a possible procession route when approaching the hall from the East. Or could it be just a large house?

# Lauren Doughton, University of Manchester Burnt Mounds: Transforming Spaces and Places in Bronze Age Shetland.

Despite being among the most numerous sites recorded for the period, burnt mounds are often missing from syntheses of the British Bronze Age. In locations such as Shetland, where typically 'Bronze Age' material appears to be absent, this approach can lead to the suggestion that these areas may have become stagnant, or isolated.

This paper will examine the relationship between burnt mounds and other activities of the period, and explore how the activities which took place at these sites can be related to wider Bronze Age cosmologies. Focussing on votive deposits, monument construction, and the prevalence of

cremation practises it will argue that burnt mounds form a suite of wider practises which reflect how Bronze Age people understood and related to their landscapes. Finally, it will explore what the implications of these relationships are for our understanding of life in Bronze Age Shetland.

# Joakim Goldhahn, Linné University in Kalmar Variation on a theme - heaps of fire-cracked stones and its history of interpretation

Heaps of fire-cracked stones has been recognised as a prehistoric features for about 100 years. Various interpretations have been put forward, ranging from the mundane to ritual ones. During the last couple of years, several large-scale contract led archaeological excavation has broaden our knowledge about this enigmatic features. My presentation will paint a picture of the history research of heap of fire-cracked stones and highlighted some ways to deepen our understanding of this prehistoric remain.

# Inga Merkyte, University of Copenhagen From Option to Practice: Remarks on the Neolitisation of the Eastern Baltics

Conventionally, the beginning of "Neolithic" in the Eastern Baltics is falling in the middle of the 5th millennium BC, as defined by the introduction of ceramics. A sustainable Neolithic economy is probably not in place before the Bronze Age at the end of a long and so-called availability phase sensu Zvelebil & Rowley-Conwy.

Traditionally, the region has been studied in terms of a few large cultural complexes such as the Narva, Neman, Combed Ware, Rzucewo, etc., while in fact there is growing evidence that it was highly fragmented, with groups subscribing to different cultural traditions co-existing within even minor areas. At the same time, it is now possible to establish regular flows of material evidence for internal and external contacts, bringing even wider regions together. Recent C14 dates are also challenging the traditional cultural scenarios.

An attempt is made to recapitulate the accumulated evidence and re-insert the Eastern Baltics into the comparative theoretical discussions on the nature, origin, and development of Neolithisation.

## Torben Bjarke Ballin, University of Bradford The Mesolithic / Neolithic transition in southern Norway

The topic of this presentation is when and how Neolithic economy was introduced in southern Norway and how this took place. Traditionally, the Norwegian Mesolithic/Neolithic transition is dated as in southern Scandinavia, partly due to the recovery of small numbers of Neolithic type implements and dramatic occurrences like the replacement in SW Norway of flint with rhyolite. However, artefactual evidence, settlement patterns and monuments indicate that this was a gradual process which may have started at the formal Meso/Neo transition (availability phase), but where proper substitution did not begin until the second half of the Middle Neolithic, with the Late Neolithic probably representing economical consolidation (cf. Zvelebil & Rowley-Conwy 1984). In this paper, material culture evidence is presented, and the process is discussed.

artefactual (eg, pottery and polished flint) and other evidence is presented, and the process is discussed.

## Lasse Sørensen, The National Museum of Denmark Hunters farming or farmers hunting and fishing – archaeological evidences from the second agrarian expansion towards the northern parts of Scandinavia

The agrarian expansion during the Early Neolithic in Scandinavia reached its limits along a line between Stockholm and Oslo. It was not until the third millennium during the later part of the Neolithic that the next agrarian advance began to move further north. Gaining a deeper understanding of when, how and why these processes began is going to be discussed in this paper.

# Matti Leino, Swedish museum of Cultural History Patterns of agricultural spread in Nordic landrace crops

To understand agricultural spread in history and prehistory the study of landrace crops has lately become a research strategy. By population genetic approaches phylogeographical structures can be revealed that reflect how seed has been exchanged and spread in historical times. Landraces have been kept in genebanks as extant material, but for some areas only very few accessions or accessions with poor passport data can be obtained. In this case, historical specimens such as the 19th century seed collection stored by Nordiska museet, can be valuable complements by the study of remaining DNA in the samples.

We have studied population structure in Nordic barley, field pea and rye landraces. The results imply different introduction routes of crops into Fennoscandia. We can also see how 20th century agriculture have changed the composition of 'on farm' preserved landraces and how different material types could result in different historical interpretations.

## Olle Hartvig Hemdorff, Archaeological Museum University of Stavanger Late Neolithic and Bronze Age Houses in SW-Norway – evidence of strong relations between Southern Parts of Norway and Northern Jutland (Thy Region)

At the beginning of 1980-ies the Archaeological museum, University of Stavanger started to use mechanical top soil stripping. Since then a large number of settlements with more than 300 houses/buildings from prehistoric times have been excavated.

The majority of these houses are from Iron Age but a surprisingly large number of houses (farmsteads) can be dated to Late Neolithic and Bronze Age.

From Late Neolithic and Bronze Age per. I. (app. 2100 B.C. – 1500 B.C.) we have excavated 12 sites with a total of more than 27 houses (two aisled) and from Bronze Age period II-VI the amount of settlements are 12 with a total of more than 53 houses (three aisled).

The striking similarity in the development of the house together with finds of flint artifacts made from flint originating from mines in Jutland, pottery from Late Neolithic and Bronze Age similar to pottery from Thy (Danish pottery brought to Norway??) clearly shows the close bonds between the two areas.

Søren Diinhoff, The University Museum of Bergen

# The Early farming of Western Norway – a discussion of evolutionism and the myth of primitiveness in pioneering farming

Until recently archaeological finds of the early agriculture of the Late Stone Age and Early Bronze Age in Western Norway were sparse and this was true for the rest of the country as well. The pronounced lack of finds left the research of the period in a vacuum in between the better founded studies of the predating hunter – gatherer societies and the peasants of the later Iron Age. The early farming would be explained as the link in between the two and as an evolutionistic necessity the period was presented as a primitive pioneering phase. Following, as the later Iron Age farms were known to be sedentary dwellings with evolved social structures and a high technological level of intensive farming in an infield – outfield system, the Late Stone Age farming had to be explained as a semi nomadic economy, where traditional hunter gathering and fishing were combined with animal husbandry and some extensive corn growing. However, archaeological excavations of the last ten to fifteen years have produced a number of early agricultural settlements and field systems from the period in question. The knowledge we have today clearly challenges the traditional myth of evolutionistic primitiveness and call for a renewed discussion.

### Preben Rønne, Vitenskapsmuseet, NTNU, Trondheim The northernmost signs of South Scandinavian influence

Hjemmeluft I is situated in Alta County in Finnmark about 700 north. The site was excavated by Anders Nummedal during 1925, and the excavation showed that the flint artefacts and the raw material were dominated by import from South Scandinavia. Unfortunately Nummedal never published this part of the material.

101 artefacts were of South Scandinavian flint and resembled South Scandinavian types, and the excavation indicated that the settlement was not of local origin. Only 49 pieces were made of local slate. The site is situated near the coast, where many hunter/gatherer types of rock carvings are concentrated. Very few of the rock carvings are of South Scandinavian type, among which are some late Bronze Age boat carvings.

A strike a light from Early Bronze Age per. II - III was found a few km away from Hjemmeluft. This nice and rare type of strike a light is normally found in rich male graves, which could indicate the presence of Bronze Age graves in the vicinity.

Near Harstad, more than 550 km to the south, the northernmost bronzes of South Scandinavian type have been found. At Engeløya both rock carvings in the form of cup-marks and a period IV grave have been uncovered together with a cultural layer from the same period, and this very likely indicates the presence of South Scandinavian settlements as far as Lofoten, and the sites around Alta Fjord show that this expansion continued all the way to Alta.

#### Johan E. Arntzen, Tromsø University Museum

# The significance of farming in northern Norway 1200 BC – 0 AD: An assessment of the empirical situation

Palynological investigations show that farming became a considerable part of the subsistence economy amongst coastal settlements in northern Norway around 1200-1100 BC. Through a relatively small number of stray finds of Nordic Bronze Age character it is clear that these settlements have had connections to the South. Until recently these findings have not been backed up by settlement data. Two large-scale CRM-excavations have however changed this picture, and it is now clear that farming settlements with longhouses and fields have been present at least in parts of the region during the late Bronze Age and the Pre-Roman Iron Age. To assess the extent of these settlements additional data are however sorely needed. This presentation will provide a reinterpretation of other site-types and sources of data that may shed new light on these early farming settlements. The main focus will be on find localities for stray finds of Nordic Bronze Age character, drift sand localities with finds of asbestos tempered ceramics, as well as small-scale CRM-registrations where cooking-pits, postholes and relict fields have been uncovered.

Flemming Kaul, The National Museum of Denmark The one-edged razor - northernmost and southernmost The one-edged razor is a peculiarity of the Nordic Bronze Age culture. During per. II and III of the Bronze Age the one-edged razor with the handle in the shape of a horse' head became one of the emblems of the Nordic Bronze Age. Some of the northernmost razors of this type will be highlighted, as well as such examples of Late Bronze Age razors with decorated blades. It is proposed that the emergence of the Nordic one-edged razor around 1400 BC was due to influences from the Mycenaean--Minoic world. Southern worlds and northern worlds became connected in the use of the one-edged razor. In the South, in the sacred Dictean Cave on the island of Crete, a votive razor with a horse headed handle has come to light. In the North, close to the Arctic Circle, at Skjeggesnes, Nordland, Norway, the northernmost razor with the handle in the shape of a horse's head has been found. Some figures of horses from the Nordic rock carvings will be included.

Palle Østergaard Sørensen, Roskilde Museum Abstract missing

#### Karen Margrethe Hornstrup, University of Aarhus

#### Communication and cultural interaction between Norway and Denmark in the Early Bronze Age.

For many years it has been assumed that there were close contacts between the Danish region, Thy in North-West Jutland and Rogaland in Norway, even a center-periphery relation has been suggested. The argument is, that the contacts, mainly justified by similarities in bronze objects, may be traced back to the Late Neolithic, and furthermore, the distance between Rogaland and Thy, was short.

For the first time, these relations have been examined from a Danish perspective by using selected object forms and their decoration. The preliminary result is that very few contacts between these regions can be proved. Rogaland had relations to more parts of South Scandinavia including Zeeland, and probably, it was an autonomous region corresponding to other Nordic regions. The character of the communication and cultural interaction at the macro level and to a certain degree, the micro level will be discussed.