



Newsletter No 11 Spring 2014

Orkney Archaeology Society

Scottish Charity No SC030611 <http://orkneyarchaeologysociety.org.uk>

Editorial

*Helen K
Woodsford-Dean*
The Editor, OAS,
PO Box 6213, Kirkwall,
Orkney, KW15 1YD



Welcome to your Spring 2014 newsletter, which I am guest editing again.

As you read this newsletter you'll discover two themes: what a busy year we have coming up in 2014 plus OAS' fundraising activities .

One of the most important ways in which OAS raises money is by donation and we still have a number of pieces of James Thompson's stunning artwork for sale (pages 2-3). Also to this end, Nick Card introduces The American Friends of the Ness of Brodgar (pages 4-5). A large proportion of our funds come from membership subscriptions so please refer to our 'Membership Matters' pages (10-13). And the OAS shop at the Ness of Brodgar also brings in funds (page 21).

Now to our busy year: Gavin Lindsey describes the Legacies of Conflict project (pages 6-8) and Colin Richards provides an update on Smerquoy (page 9).

We have a full range of talks arranged by Anne Mitchell and Ingrid Mainland (see

page 23) to look forward to, including our AGM on 20 May. There is also a résumé of Peter Marshall's talk in case you missed it on 5 February (pages 14-15).

Andrew Appleby continues his fascinating experiments into prehistoric pottery (pages 16-18) and shares an interesting aerial photograph (page 20). Also find out what happens when the digging is over ... (page 19).

I do hope you enjoy reading this issue of the OAS newsletter. We've all put a lot of work into it and I have tried to increase the amount of images (I am a visual learner!) and make some of the content more informal. I would very much appreciate feedback from you, the members of OAS and readers of this newsletter, on whether you like the changes ... or not. What do you want to see in the newsletter in future? Do you want more competitions? Perhaps a letters page?

Any constructive criticism is welcomed. Please email "Editor" via enquiries @orkneyarchaeologysociety.org.uk

Would you like to save the OAS money AND help the environment? You can now opt to receive this newsletter by email in PDF format.

Thank you,

Helen-Dean

Gifted artwork to benefit Orkney's archaeology

Professor James B. Thompson, of Willamette University, Oregon, donated a set of 15 original one-off intaglio prints to the Orkney Archaeology Society after one of Nick Card's American lectures tours. The prints were given to help raise funds for the continuing support of archaeological research in the county.

Prof Thompson explains the story behind his generous gift: "Though I am not an historian, anthropologist or an archaeologist, I am a visual artist exploring mark-making, visual images, symbols, shapes, lines and patterns, so this emphasis on ancient landscape, culture and process in the creation of images and structures intrigues me personally, professionally and artistically.

"In the summer of 2009, I came over to Scotland to research Pictish symbol stones. On that trip, one of the things my wife and I decided to do was take a two-and-a-half day trip to Orkney to see some of the sites found here.

"So we came up in July for a couple of days and were driving around to see some of the sites such as Maeshowe, Skara Brae, Gurness and the Brough of Birsay and I got more and more intrigued by the landscape and how these sites were situated.

"As we were going to the Ring of Brodgar, we saw these people working on a site from the side of the road. Someone had told us there was a dig we might want to go see.

"We stopped and had a tour of the site and what was going on. Having seen some of the other sites it dawned on me this was fairly impressive - not just the archaeology but where it was situated, between the two rings, on this thin strip of land with lochs on both sides.

"My wife suggested we could get somebody

over to Willamette to talk about the excavation, so we introduced ourselves to Nick Card (chairman of the Orkney Archaeology Society and site director at the Ness of Brodgar excavation) and invited him over to the States to give some talks.

"It was then that I became aware of all the work that goes on behind the scenes of archaeological research, in particular the funding. It's not just this beautiful, wonderful world of practising. So I decided let's give them some sort of gift — my prints — and I hope that people will be intrigued and perhaps want one on their wall."

He added: "People here are so interested in archaeology, but it's outside the islands that it's really having an impact. Here, in Orkney, it's right there, right in front of you. The 'prehistory, the Neolithic, the Iron Age, signs of people living here for thousands of years. And it's fascinating.

"In my travels around Scotland, and up into Orkney, I noticed the visually arresting use of stone in the construction of walls, architectural structures, dwellings for the living and cairns, or burial chambers, for the dead, as well as the exquisitely dry stacked stone that has somehow remained watertight, intact and level through the ages. Stone was utilised to demarcate the landscape, emphasize seasonal and celestial events, create sacred spaces, designate areas for ritual, and signify other places of importance.

"Some of the stones were elaborately carved to depict battles, reflect objects or wildlife common to a given set of people in their time while others had been incised with images, patterns, messages or symbols that were understood visually as information in the time of prehistory. I realised that there were parallels between the way in which these ancient people from the Neolithic, Bronze Age, Iron Age and Pictish periods — of what is now known as Scotland — incised stone and the way in which I incised my metal plates in the

process of making marks that would become my intaglio prints.

“The more I noticed the treatment of these stones, and their inherent spatial relationships to the surrounding landscape, the more I realised that a kind of visual language was at work among the ancient people of prehistory who quarried, carved, dressed and decorated these stones seemingly as part of a larger process through time.

“The connection that these prehistoric peoples shared with their surrounding landscape and cyclical seasonal shifts seemed to me to be interrelated with the process of constructing and reconstructing with stone as well as the surface treatment or decoration of the stones. It appeared that, like me, these ancient peoples also had a relationship with each other in a larger cultural context through time as they overlapped, progressed and still engaged in rituals that revealed their connection to a kind of continuum.

“I hope to honour the significance of mark-making in both, the ancient world and my present, by creating contemporary works that engage in this ongoing visual dialogue and share the same emphasis on process, spatial relationships, landscape, patterning, symbol and line that visually connect us all as a culture through time.”

Nick Card says: “On behalf of the Orkney Archaeology Society, and Orcadian archaeology in general, I would like to thank James for his exceptionally generous donation. It couldn't happen at a more opportune time with the recent Art and Archaeology initiative.

“To be associated with such a prominent artist as James raises not only the profile of Orkney's archaeology but also Orkney as a whole to a new audience. This friendship with James has also been instrumental in

the development of ties between Orkney College and the archaeology dept at James's university in Oregon. James and his wife, Martha, should be hugely thanked for the time and effort they have put into their trip to Orkney and I'm sure that this will not be their last!”

There are several of these prints still available and as a special, unrepeatable offer to members of OAS they are being offered at the special price of £275 each including frames and postage and packing—although offers over this to include a donation to OAS would be very appreciated. Measuring 21x18 inches overall they normally retail for \$2,000 each. If you are interested in obtaining one of these unique prints by a world renown artist please contact Nick Card (nick.card@uhi.ac.uk) for more details.

Editor's note:- All of James' work can be viewed on his web-site at:

http://www.willamette.edu/~jthomps/The_Visual_Language_of_Ancient_Scotland/Index.html

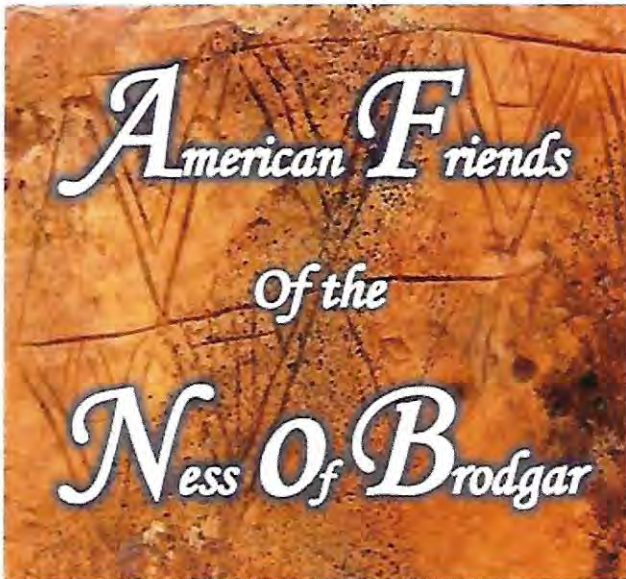
but I have scattered examples of some of the prints that are for sale around the newsletter in order to try and tempt you!



The American Friends of the Ness of Brodgar.

Nick Card

In December 2013 a new exciting venture was launched to help support the excavations at the Ness of Brodgar – the American Friends of the Ness of Brodgar (AFNoB).



Over the years the interest in the Ness from across the Atlantic has grown considerably. Not only with the extremely generous purchase of Lochview by an anonymous American benefactor; the participation of an ever increasing number of Americans at the Ness itself, such as the field-school from Willamette University, Salem, Oregon; but also a growing number of US visitors to the site.

This interest has also been very apparent during the mini lecture tours of the States I have undertaken. I must admit that prior to my first tour I was a little apprehensive whether Orkney, never mind the Ness, would be of interest. My fears proved totally unfounded as most venues were 'sell-outs', with even the Smithsonian Institute having to transfer the talk to their largest venue, the Baird Auditorium. Further tours are presently under discussion, with both east and west coasts and Texas as possible hosts and venues.



The American Friends of the Ness of Brodgar, Inc. is a new United States tax-exempt [501 (c)(3)] charity established to foster public awareness of, and provide financial support for, the on-going archaeological excavation and research being conducted at the internationally acclaimed 5,000 year old Neolithic temple complex, The Ness of Brodgar on the Orkney Islands of Scotland, U.K.

Because AFNoB is registered with the IRS it allows US tax-exempt donations to be made. With a site like the Ness we need as much support as we can raise. Even with the use of volunteers and students, the Ness still requires a large amount of financial assistance, not just with the day to run, but also the growing amount of post-excavation analysis. AFNoB will complement the admirable OAS fundraising in the UK.

Donations to AFNoB are being accepted through its accountant at the corporate address of:

American Friends of the Ness of Brodgar, Inc.

C/O Douglas L. Bowles, Treasurer
150 Boush Street, Suite 1100
Norfolk, VA 23510, USA.

The establishment of the American Friends owes a great deal to many individuals but particularly Martha Johnson, Helen and David Smith and Cort Morgan, without whom this would not have been possible – a huge thank you to you all. Our Oregon friends also need a special mention – James and Martha Thompson who brought

to fruition my first American lecturing venture, and Scott Pike who has helped to develop the growing relationship between Willamette University and the University of the Highlands and Islands.

Interest in AFNoB has already been extremely promising with its Facebook page not only attracting interest from the USA but within the first 5 days of its launch it attracted over 4,500 hits from 45 countries, as if to reaffirm the international attraction of the Ness. We can only hope that, with further international coverage planned for later this year in the *National Geographic*, Orkney and the Ness will retain this global interest.



Slabs—James Thompson

Another accolade for the Ness!

At the beginning of March 2014, Nick Card learnt that the Ness of Brodgar had been nominated by 'Archaeology Scotland' (www.archaeologyscotland.org.uk) for a British Archaeology Award (www.archaeologicalawards.com) in the category of Best Archaeology Project. The

winners will be announced at an event at the British Museum on the 14th July 2014 (the day the Ness excavations start this year) as part of the Council for British Archaeology's annual Festival of Archaeology – so cross those fingers!

An Introduction to The Legacies of Conflict: Hoy and Walls Wartime Heritage Project

Gavin J Lindsay

Orkney is world renowned for its prehistoric archaeological remains; however, the physical remains of the equally rich historical legacy from recent world conflicts remains largely under developed and underappreciated as an archaeological heritage resource. The Island of Hoy is host to one of the best preserved and least disturbed World War Two (WWII) defence landscapes in the United Kingdom and can comfortably claim to have the densest concentration of well-preserved wartime sites in Orkney.

The 20th century was a time of immense change for Orkney as a whole but the Island of Hoy in particular witnessed dramatic transformations as its landscape became increasingly militarised as a consequence of world conflict. The natural harbour of Scapa Flow served as a strategic naval anchorage for the Royal Navy during both wars however it was WWII where the greatest impact was felt on Hoy. The presence of over 20,000 service personnel and the construction of extensive air & sea defences, supply, training & administrative facilities as well as other associated infrastructure has left a vast material legacy on Hoy which continues to visually

dominate the landscape today. The stories, memories and material of WWII therefore form a potent archaeology of recent conflict across the length and breadth of Hoy.

The Legacies of Conflict Project is a 12 month initiative run by the Island of Hoy Development Trust (IoHDT) and supported by funding from the Highlands and Islands Enterprise Graduate Placement Programme, Orkney Islands Council Community Development Fund and the Heritage Lottery Fund Sharing Heritage Scheme. In October 2013 I was employed by the IoHDT as a Wartime Heritage Officer with the task of conducting a feasibility study. The study will evaluate the potential use of Hoy's wartime legacy in three areas namely as an all age educational device, as a visitor attraction and as a community enhancing resource.

Throughout the spring and summer of this year I will be embarking on a programme of community based archaeological research and interpretation which is part of a process of evaluating ways in which people engage with wartime heritage. Islanders, visitors and anyone who is interested is actively encouraged to get in touch and take part in identifying, recording, researching and interpreting WWII archaeological sites on Hoy. I'm also hoping to produce interpretive guides, trail maps and leaflets as part of the project and volunteers are welcomed to participate in this process of making Hoy's



The densely militarised landscape of Hoy in WWII – Lyness Naval Base



Hoy – An island of wartime stories, memories and well-preserved archaeology

rich wartime archaeology more accessible to the wider public. The Project also hopes to build upon the successful Fortress Orkney project through the collection of oral histories and anyone interested in sharing reminiscences of what life was like on Hoy during the 1940's is warmly encouraged to get in touch.

The younger generations of islanders represent the future custodians of Orkney's heritage and their education about the value of WWII archaeology is a key outcome to the Legacies of Conflict Project. An exciting project with North Walls School has just begun and will be running until May. Through an active programme of classroom and outdoor learning utilising archaeological skills (artefact analysis, archive research, oral history recording & field survey techniques), the children have been learning about the local impact of WWII on their island home. The Scapa Flow Visitor Centre & Museum and Orkney Islands

Council's Outdoor Education Programme will also be involved in events and activities throughout the year offering young people the opportunity to connect with the WWII heritage of Hoy in many different ways.

As well as the archaeological fieldwork programme, there are many other ways for people to get involved in the Legacies of Conflict Project. A series of informal evening talks will run from March until September with a regular daytime drop-in at the Hoy Kirk and evening drop-in at the Royal Hotel where people will be able to meet and share information or ask questions. The drop-ins will also offer the opportunity for anyone to access reference & research material and conduct their own investigations using these resources. Residents and visitors are also encouraged to bring along any WWII objects or artefacts they may have at home for an Antiques Roadshow-style show and tell with the Wartime Heritage Officer.



Recording the archaeology of WWII on Hoy – Scad Head Coast Artillery Battery – Ablutions block foundations (left) and a 2" UP rocket projector holdfast (right)



Recording the Wartime landscape using historical photographs to identify archaeological sites
– Camp of the 19th Battalion Royal Marines, Lyness

Tourists and visitors to Hoy also have the opportunity to get involved through a program of guided walks around the remains of the WWII naval base at Lyness. The 2 hour walks led by myself and staff from Orkney Arts, Museums & Heritage will set off from the Scapa Flow Visitor Centre & Museum every Thursday at 11am between April and September. Further details about any of the events can be found through the

IoHDT website and the online events calendar (www.orkneycommunities.co.uk/iohdt/calendar.asp). Regular updates and information are also posted in the Island of Hoy newsletter 'The Blether' and on various notice boards across the county. Anyone interested in participating in the Legacies of Conflict Project or finding out more can contact me directly on 01856 791211 or via email at g.j.lindsay@abdn.ac.uk.

	Location	When	Time	Audience	Details
Daytime Drop-In	Hoy Kirk	Monthly (Fridays) March - September	10:00-16:00	All ages	Access to Archives / Show & Tell
Evening Drop-In	The Royal Hotel	Monthly March - September	20:00-22:00	Adult island residents	Access to Archives / Show & Tell
Evening Talks	Gable End Theatre	Monthly (Wednesdays) February - September	20:00-21:00	All ages welcome but aimed at adults	
Guided Walks	Lyness from Scapa Flow Visitor Centre forecourt	Weekly (Thursdays) April - September	11:00 (arrival of the ferry) – 13:00	All ages	A guided walk exploring the archaeology of the WW2 Naval Base of Lyness - requires medium level of fitness to walk across mixed terrain

Smerquoy*Colin Richards*

After investigations in 2013, Smerquoy is already becoming well known for its pecked decoration occurring in an early Neolithic context. This year's (2013) investigation will go into the Cuween-Wideford monograph due for completion at Easter 2014. However, even more excitement emerged from the week-long investigation of the second trench (Trench 2), by Chris, Mairi and myself at the very end of our 2013 season.

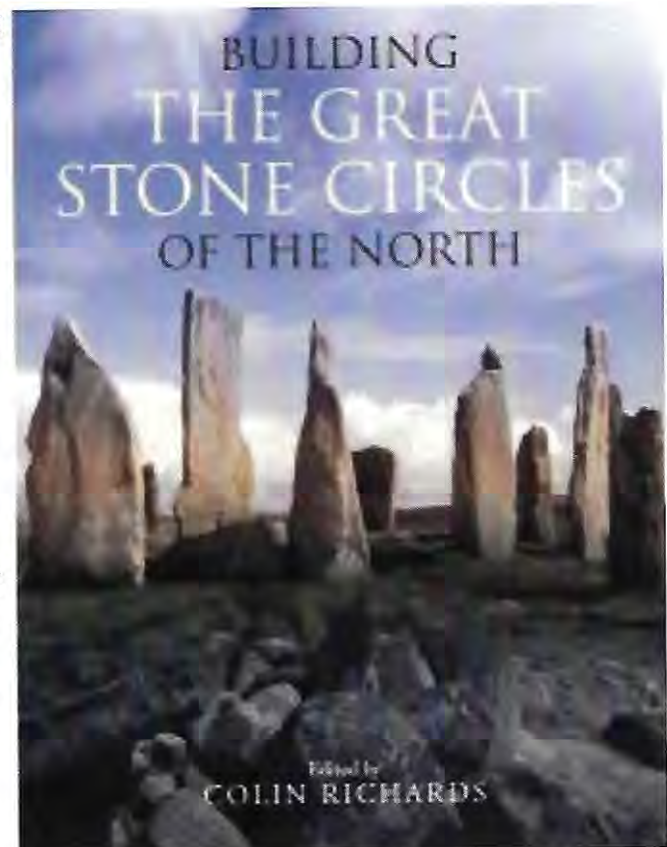
This trench is positioned further upslope and revealed something very interesting which makes Smerquoy an even more important and significant site (besides the early decoration in the stone house) than we thought. In the northern end of Trench 2 we uncovered a small area of a large circular wooden house. The house is clearly of early Neolithic date as the upper layer was full of round-based pottery. Fortunately, this house had been cut into the glacial till so has become covered and protected by soil running down-slope. This will be the first discrete early Neolithic timber house to have a well-preserved floor layer. Judging from the geophysical survey and surface collection undertaken by Chris, there could be several of these buildings distributed across the field and almost definitely another positioned between the two trenches. Here then we have an extensive early Neolithic complex on Mainland, probably bigger than Stonehenge, comprising a number of timber and stone houses.

The first batch of C14 dates are now back for Smerquoy. They indicate a construction of 3300-3200 cal BC and then some form of re-use in the late Neolithic c.2500-2400 cal BC. Secure dating has been made for the decoration at c. 3200BC. This just confirms my suspicion that stone house construction begins later than we suspected (around 3300BC) and before that it was timber houses. How the early Neolithic has

changed over the last few years!

This means a much larger 'stand-alone' project is required. The plan for next year is to return to Smerquoy between late June and early July (2014). We hope people from the Orkney Archaeology Society will come and join us.

Our work at the Ring of Brodgar, Staneyhill, Vestra Fiold and Calanais (Callanish) has recently been published in 'Building the great stone circles of the North', by Windgather Press - this book being available through Oxbow books. This includes a chapter on the folklore associated with stone circles written by Tom Muir. Price £39.95.





Orkney Archaeology Society

Andre Artymiuk
Emeritus Membership Secretary

The OAS subscription year ends on 31st May. Once again it is time to think about annual subscription renewals, please. Ordinary, Family, Concessionary or Joint Concessionary membership subscriptions should be renewed annually, renewal subscriptions being due on 1st June each year. Life members are not required to renew each year. Existing Standing Order renewals are automatically processed when we receive the payment from your bank.

Subscription rates remain unchanged at:

- Ordinary membership £15
- Family Membership £22
- Concessionary Membership £10
- Joint Concessionary Membership £18
- Life Membership £150

Your OAS Membership Statement is included with this Newsletter. Please review the information on the statement carefully and notify the membership secretary of any changes required either by post to the OAS PO Box, by using the contact page on the OAS website, or direct email to mbrsec@orkneyarchaeologysociety.org.uk. Note that for security the OAS does NOT store any details of member's bank accounts or plastic card numbers.

Some members are still paying the old 2008/09 subscription rates on their Standing Orders despite reminders on their statements each year since then. If your statement indicates you are paying the incorrect amount by standing order please

Membership Matters!

contact your bank directly to alter your standing order. **To be fair to those members who are paying the correct subscription the OAS committee has decided that members who have not amended their standing order to pay the correct subscription from 1st June 2014 will no longer receive the OAS Newsletter. If you need a new OAS Standing Order form please contact me by any of the above methods and I will be happy to send you one.**

You can renew your membership in person by cash or cheque at any OAS event, or at the OAS shop at the Ness of Brodgar excavation, or you can send a cheque payable to ORKNEY ARCHAEOLOGY SOCIETY to the OAS, PO Box 6213, Kirkwall, Orkney KW15 1YD. You can also renew your membership through the SUBSCRIPTION RENEWAL link on the top right of each page on the OAS website <http://orkneyarchaeologysociety.org.uk>. The website renewal page allows you to pay your subscription by PayPal, Credit Card or Internet Banking online transfer. The website will also allow you to download Membership Application forms and volunteering registration forms and Gift Aid Declaration forms.

Finally, If your membership statement indicates you are registered for Gift Aid but you are no longer a UK Tax Payer please contact me by any of the above methods to cancel your Gift Aid registration. If you do not do so HMRC may hold you liable for incorrectly Gift Aided amounts.

Save the



money!

Orkney Archaeology Society

Receive the OAS newsletter in PDF format by email

A large expenditure for the OAS, twice a year, is the printing and postage costs of distributing this newsletter. Although everyone donates their articles and time voluntarily, the production costs come out of OAS funds. YOU could help reduce these costs by opting to receive your copy of the newsletter in a PDF format which will be emailed to you.

We especially invite overseas members to choose this option as the postage costs to

addresses outside the UK are especially high.

Opting to receive your newsletter by email will free up OAS funds to pay for some of its vital archaeological work (such as those listed below), plus will benefit the environment!

Please email enquiries @orkneyarchaeologysociety.org.uk to make this request. Thank you!

OAS Grants:

The OAS is able to give small grants to assist the work of Orkney archaeological research. In the past six months confirmed OAS grants totalling £17,398.80 have been made to:

- Stephen Dockrill** for the Knowe of Swandro Project, Rousay—£200.00
- Colin Richards** for the Wideford Project, Smerquoy—£1,080.00
- ORCA** for the assessment of the ceramic assemblage from Ness of Brodgar—£1,100.40
- ORCA** for the cataloguing of finds and assemblage from Ness of Brodgar—£1,100.40
- ORCA** for the on-going excavation costs at Ness of Brodgar—£12,618.00
- ORCA** to investigate the prehistoric plank, Bay of Ireland—£300.00
- Lorraine Dunn**, bursary towards MSc Archaeological Practice—£1,000.00

OAS AGM

Our Annual General Meeting will be held on Tuesday 20th May at 7:30pm in the St Magnus Centre, Kirkwall.

All members are welcome.

The agenda for the AGM of 2014 and the minutes of the 2013 AGM will be available on the OAS website nearer the date of the AGM, along with copies of the Treasurer's report and Membership report.

In addition, Caroline Wickham Jones will give a talk on 'The Changing Landscape of Orkney in Early Prehistory'.

See you all there!

The



still needs you!

Orkney Archaeology Society

Committee Members & Volunteers sought

The Orkney Archaeology Society is **still** seeking a volunteer to join the OAS committee and take over the vital role of MEMBERSHIP SECRETARY. Andre Artymiuk did a brilliant job of this for the past 5 years but sadly the OAS constitution required him to retire at the 2013 AGM in June.

The job needs very basic computer skills (word processing and spreadsheets) for which a laptop will be provided, you will also be invited to attend monthly OAS committee meetings, and it would be an advantage if you enjoyed communicating with society members and the public.

Andre has promised a full and comprehensive handover.

The OAS always welcomes any offers of assistance from its members and with several committee members indicating that

they will be stepping down from the committee in April or at the AGM, your offers to help OAS are even more urgently required now. In particular, the OAS is now also seeking a new CHAIRPERSON, SECRETARY and TREASURER. Full training will be provided. The Secretary's role is to take minutes at committee meetings plus other duties. The Treasurer's role would ideally suit someone with an accountancy background or a flair with numbers.

Whether you wish to serve on the Committee, take over a key responsibility, or stuff envelopes, it all helps the OAS ...

The OAS committee looks forward to hearing from lots of members soon. Please contact us by email on enquiries @orkneyarchaeologysociety.org.uk

Don't be shy—come and volunteer!



Creech—James Thompson

The Orkney Archaeology Society joins the 21st Century!



The OAS now has a Facebook page featuring updates about OAS activities, useful links & information about archaeology in Orkney and beyond.

You can find us at: www.facebook.com/OrkneyArchaeologySociety

Please visit and 'Like' our page!



Settlement—James Thompson

The Times of their Lives: towards precise narratives of change in the European Neolithic through formal chronological modelling

Résumé of lecture by Peter Marshall on 5 February 1014

Appetiser - The Times of their Lives Project

The *Times of their Lives* Project is funded by the *European Research Council* through an *Advanced Investigator Grant* awarded to Prof Alasdair Whittle (Cardiff University) and Prof Alex Bayliss (English Heritage). The project runs from May 2012 – April 2017. The project aims to build on previous projects that have investigated timing, duration, and tempo in the Neolithic of England (e.g. southern English long barrows and causewayed enclosures). It will engage with both measurement and experience of time. The project is working in key areas and sites which illustrate important trends in European Neolithic archaeology, e.g. the tell at Vinca in Serbia, collective burials of the Paris basin (later fourth millennium cal BC), Brochtorff hypogeum on Malata. On Orkney the project is looking at Grooved Ware settlement and the whole phenomena of Grooved Ware pottery at the Ness of Brodgar, Pool (Sanday), Links of Noltland (Westray) and Barnhouse.

Starter – A brief history of radiocarbon dating

Radiocarbon dating is still perhaps the single scientific method that has had the most profound influence on the study of archaeology. The existence of radiocarbon in nature was predicted before it was detected and Willard Libby, an American chemist, used this to perceive the basis of a dating method.

The theoretical aspects were formulated in the mid-1940's when Libby was Professor of Chemistry at the University of Chicago.

In 1946 he published a paper suggesting that ^{14}C might exist in living matter. In 1947 a paper in *Science* showed that methane collected from a Baltimore sewage works had measurable radiocarbon activity whereas methane manufactured from petroleum did not. In 1949 the first two radiocarbon measurements on wood from Egyptian tombs, with historically documented dates were published. A remarkable vision had been turned into an invaluable tool and for his work on radiocarbon Libby was awarded the Nobel prize for chemistry in 1960.

First Course – Rev Thomas Bayes



Revolutions with radiocarbon dating in calibration and the ability to date very small samples (Accelerator Mass Spectrometry) meant by the end of the 20th century archaeologists could accurately date a wide variety of samples. However, we needed some way of making use of the advances in radiocarbon science and it came from an unlikely source. Two and a half centuries ago Thomas Bayes discovered a way to apply mathematical reasoning to highly uncertain situations. Today Bayesian spam filters whisk fraudulent email to our computers junk bins. Bayes' rule helps trawl the web and sells songs and film. It has penetrated almost every aspect of life in the 21st century and it affects us all.

So what exactly is Bayes' theorem? It's actually a very simple one line equation that uses logic for reasoning about the broad spectrum of life that lies in the grey area between absolute truth and total uncertainty and is thus very useful to archaeology. We often have information about only a small part of what we wonder about, yet we all want to predict something based on our past experiences and we change our beliefs based on our past experiences; we change our beliefs as we acquire new information.

Side dish - The early Neolithic

We are beginning to see that prehistoric societies were much more dynamic than we previously appreciated with change happening more quickly. For example the different innovations that make up the early Neolithic – in southern Britain they began to appear a generation or two before 4000 cal BC probably in the Thames estuary. From there, over the next two or more centuries, they spread rapidly across Britain.

Main Course - The rise and fall of monumentality in third millennium cal BC Wessex

New dating programmes as a result of work undertaken as part of the Stonehenge Riverside Project, SPACES (Tim Darvill and Geoff Wainwright), EH work at Marden, Silbury Hill and the Marlborough Mound and a re-evaluation of existing dates from Stonehenge, Avebury, etc. have allowed the chronology of many of these sites to be assessed in greater detail and the relationship between them evaluated.

Avebury was the earliest of the large henge enclosures with dates from the ditch of around 2500BC and this marks an important horizon, for just over 25km to the south, the great sarsen settings were being established at Stonehenge. This was a very different kind of project and whether it took its cue from the stone circle at Avebury is not clear. Like Silbury Hill, however, there have been estimates in the past of the huge

amount of labour needed to construct it and this has greatly influenced our perception of the society that created it.

It is curious that having dug the principle henge enclosure at Avebury around either side of 2500 cal BC, similar large enclosures were not constructed at Durrington and Marden until later in the 25th century cal BC, perhaps two generations later. Marden in particular may have been constructed as Avebury was reaching completion.

Desert - Bradshaw

'It may seem reactionary and perverse to reaffirm, as I do, at the beginning of a book on archaeology in the field that mere dates are still of primary and ultimate and unrelenting importance. And by dates I mean not simply those nebulous phases and sequences, those date-substitutes, with which archaeologists often try to bluff us. I mean time in hard figures. I mean Bradshaw' (Mortimer Wheeler).



Wednesday 5 February 2014, 7.30pm
Lecture Theatre, Orkney College

Time, please!

A lecture from Peter Marshall of English Heritage and the Times of Their Lives project: tightening the dating of the European Neolithic

www.totl.eu

All welcome

Entry by Donation

Clay Structures

Andrew Appleby

Many times I have noticed odd areas and deposits of strangely formed clay on our archaeological sites. Looking at these remains, I have oft noticed that the clay has been well prepared: the matrix being uniform and looking very workable.

Sometimes I have wondered if these are collapsed furnishings within buildings? Orkney clay is VERY durable when dry, especially when tempered with cow hair. It becomes quite malleable when a minute percentage of duck fat is added. This also gives waterproofing qualities.

Neolithic ovens, though known about, are so far rare indeed. However, OPPRA decided to investigate further the possibilities of using our 'newly discovered' recipe for Orkney Clay to build with. (Editor's note, refer to Andrew's article on Volcanic Dyke Grooved Ware in Issue 10 of the OAS newsletter.) This was done in conjunction with a Papay Giro Nights Festival.



Building the sand-filled oven

A concrete block plinth was constructed to make bending easier. In days of yore, a stone one would be simple to construct. It could even have spaces for fuel in niches under the oven.

Around 100 kg of clay was prepared with duck fat and cow hair. First a base was slabbed out. This wasn't easy without the fat. The walls were built of 'sausages.' Orkney clay is incredibly difficult to dome in; it collapses, so easily being susceptible to the inconvenient laws of gravity!



Doming in with more sand

To solve this wee problem, shell sand was used to fill the inward inclining structure. This is a tip from Elian, a French Pizza oven builder. A slip from the same body of clay was used to glue the coils together. In two windy days the oven took shape. A hole was left at the top and a cow's head was made as an adornment to seal this vent but it sadly perished in a storm!



Smoothing



Marking the door



First coat of liquefied clay and duck fat emulsion

Then outer and inner surfaces were smoothed with the aid of a bullock femur and a ram's horn. The 'D' shaped door was cut then the surface decorated with applied clay strips, forming our Cow Goddess.

The oven was tested with fire for drafts. It worked very well. The oven dried out in a few days. The emulsion did resist water. We protected it under the shelter for a few months from constant rain ... The edifice was later re-painted by Kerriane Flett. We mixed iron oxide with sieved slip to create a red paint. The cow was rendered with this. Another colour was achieved by adding Manganese. Both of these elements would have been readily available to Orkney's Neolithic painters.



Duck fat emulsion

We created Neolithic emulsion paint by liquefying clay. To further waterproof it we added extra duck fat. This was painted all over the oven and allowed to dry. Due to a sudden rainstorm, we constructed a temporary shelter. Our inadequate construction failed to protect the cow's head and it fell apart. A better shelter was kindly erected by a skilled neighbour a few days later.



'Neolithic' paintwork

The great test, of course, was to actually cook in it!



Test fire

A wood fire was kindled and allowed to burn to embers. The top hole was blocked. An oven dish of scored pork cheeks with halved onions, cooking apples and water was placed within. The dish bubbled IMMEDIATELY! The crackling scorched. It was TOO HOT! The ingredients were removed and the oven cooled. I swept the embers to one side and placed a cold stone slab on the fired floor. The oven dish was replaced and the meat sizzled straight away. The door was closed after about half an hour and the dish roasted more gently. Within an hour and a quarter the meal was cooked and served. The crackling was a delight!



Roasting

This oven is very fuel-efficient. It could be used for many different styles of cooking. If anyone wants to try it out, please, be OPPRA's guest.

With thanks to Ivan, Tz Man, Kerriane Flett, Orkney Archaeology Society, ORCA, Helen and Mark Woodsford-Dean and Geraldine, the piggy.



Lintel—James Thompson

Megaliths—James Thompson



'Where do all these small finds go?'*Jeanne Bouza Rose*

'It was a dark and stormy night.....' so begins the famous best seller thriller never written but often started. 'Where do all these small finds go?' is the famous last question of most visitors and volunteers at their day's end out at the summer Dig at the Ness. Now, there might not be a best seller at the end, but surely, the popularity of the Ness will increase with its stupendous finds and expanding areas to excavate and so.....'What does happen to all those small finds?'

At the back end of Orkney College, at the bottom of the stairs, out beyond the end door of the archaeology department, there sits a small building. It is a building that may be small in stature, but it is large in world importance. This portakabin is the small finds storage hut. Inside where the temperature is warmed by the bodies of some volunteers, a photographing Antonia Thomas, and some active researchers, lies the treasure trove of intriguing objects. The less curious of us may see them as stones and bones, but we all know differently.

I have helped Anne Mitchell with the small finds for the past 3 summers and have poked holes in the small finds bags, painstakingly numbered up every winter by volunteers and OAS members Neil and Rosemary McCance. The summer I started helping, the small finds numbers were in the 1000s and now they go up to 9,000! Fragments of what first appears to be dried doggie pooh turns out to be cramp or pottery. Each and all has to be dried and now, over the winter, the inventory is checked and the proper brown cardboard storage boxes are carefully packed, individually inventoried, labelled and stacked on the shelves throughout this magical portakabin.

Annabel Eltome (the stalwart manager of

the OAS Ness of Brodgar Dig Shop) and Linda MacIntyre are also working to order what might appear to others, to be chaos. We chat, we giggle, we shiver, as we wrap, pack and label. One of us recites numbers off the bags. You can't imagine how much one can change inflection and cadence when confronted with number after number! We sing this 'Broken Stone, Incised Stone, Hidden Bone, Oh Pot Not Again Numbers Come Along' song with great enthusiasm.

But not one of us is complaining. Where else on the planet would we want to be? When we stop for a tea break, see the stones amassed, the boxes stacked, and know that inside them is a history of a time and a life so extraordinary that its interpretation and translation evades the experts at this point...well, wouldn't you sigh with the wonder of it? Which one of those boxes holds the stone that will appear in the National Geographic, the Scientific American article or the next Neil Oliver documentary or Time Team episode? We, yes, ALL the OAS members are helping the experts to write the treasure map while we sit amongst the treasure...the stones, the pottery, the bones, the pebbles that carry the evidence of an older life. We are giving a bit of our lives to link the past with the present. Anyone interested in volunteering during the winter or the summer needs to contact enquiries

@orkneyarchaeologysociety.org.uk



Beneath The Ripples

Andrew Appleby

Occasionally I take a flight in a light aircraft, kindly and expertly piloted by John Adams. It is a wonderful way to see Orkney and I'm always on the lookout for ancient remains.

On one occasion, I photographed into Stenness Loch and caught a dark line looming from behind Unstan Cairn. This looked remarkably like an earthwork of early date. Caroline Wickham Jones followed this up with further researches showing interesting results.

Following this success, I flew over Harray Loch and flashed my camera. This photograph shows just one area of probably important archaeology beneath the ripples.

Within the black circle I believe lies a round, tumbled structure. Although I have no real idea of scale, I judge it to be over a dozen

meters across. What could it be? Looking down on the rubble, one would imagine that this feature could well have been several meters tall. Some form of tower, perhaps?

You can see it clearly situated on a submerged promontory with probably standing water or marshlands either side. It looks too as if a burn might have flowed from above right. There is an obvious scatter of large glacial erratics on slightly higher 'ground' too.

However, if you peer to the right, across the 'marsh' you can see what was an island. Studying the edges of this, I saw the raised stone boarder running round the inside of its perimeter. Could this be an enclosing wall? This is only one glance into Harray Loch.

What else lies in wait for us?



OAS Shop

Annabel Eltome

From humble beginnings in a little garden shed, the OAS shop at the Ness of Brodgar has become one of our main fundraising activities. In 2013 we raised £13,000 (gross), a fantastic sum only made possible by our kind sponsors and volunteers.

We have been very lucky that Willie Beedie has supported us with premises over the years and in the last couple of years we have benefitted from the lovely garden room with veranda and garden furniture. This year also saw the addition of a big bright red butter barrel for donations, and some lovely big postcards of the site. Both of these were donated by Caz Manwell for the Ness Funds.



The 'Sponsor A Square' has been very successful (£1950) and also raises money directly for the Ness. Button, the chocolate labrador, has been a regular on-site for the past two summers and has even been seen sporting red dots when people have decided to sponsor her, instead of a square! Last summer a little boy ran up, looked at Button and the shop sign, and shouted excitedly to his parents 'Can we buy a dog?' quickly followed by a very disappointed 'Aww it says "Dig Shop"'.

All other profit raised goes into the General OAS Fund.

We also had the benefit of a till this year which made life so much simpler for all volunteers, no more scraped knuckles getting money out of the big tea pot, no more adding up with a calculator.



The shop would not be the success it has been without the help of volunteers. A special mention should go to Doreen Sinclair, Linda Macintyre, Jeannie Rose, Mary Doyle, Margaret Rinder and Sue Casely.

Helping out in the shop is a great way to be involved in the dig, without getting wet, dirty, cold or sun burnt, whilst enjoying the atmosphere of the dig and meeting lots of interesting people. If you would like to volunteer please contact Annabel Eltome through the OAS web site.

The dates for the Ness of Brodgar Dig and shop for 2014 season are July 14 to August 22. Site tours will commence on July 16, two days after excavations resume, and continue until August 20. As in previous years, the daily illustrated online excavation diary will be hosted on Orkneyjar.com.

Caption Competition

The lucky winner of Newsletter 10's Caption Competition was Jennifer Hewitt. Well done, Jennifer, everyone on the OAS Committee hopes you are enjoying your prize of a copy of British Archaeology magazine. The issue you won features

articles on the Ness of Brodgar and was kindly signed by Nick Card himself.

Jennifer suggests that this should be sung to the tune of 'We three kings of orient are ...'



"Here for the archaeology are Francis and Tony and Orkney's Nick Card
Just finished filming at the Ness of Brodgar
So we're off to the pub and a well-earned jar!"



Lucky 13 - OAS Lottery

In the previous issue of this newsletter, we printed Andrew Appleby's article about Orkney Archaeology Society's 'Lucky Thirteen' Lottery held at Kirkwall Town Hall on Friday the 13th of September 2013. 13 prizes were drawn including a Mystery Prize. In keeping with the theme of our regular raffles at lectures, at which a pineapple is always one of the prizes, the Mystery Prize was a grand ceramic pineapple, within which was a pottery lemon, which in turn contained a fine piece of jewellery from Malcolm Appleby.

Here is a photograph of the rather splendid ceramic pineapple:



Orkney Archaeology Society Upcoming Events for 2014

In addition to these events, OAS have various other exciting irons in the fire, so keep an eye on the OAS website: www.orkneyarchaeologysociety.org.uk, OAS Facebook page and The Orcadian newspaper for other speakers and events.

Date	Event	Venue
17 April	Scott Timpany, ORCA: 'Looking for Orkney's past woodland: investigating submerged forest sites across Orkney'	TBC
20 May 7:30pm	AGM & talk: 'The Changing Landscape of Orkney in Early Prehistory' Caroline Wickham Jones	St Magnus Centre
19 June	Nick Card & Ness of Brodgar 2014 update	Orkney Theatre, Kirkwall Grammar School
5 August	Professor Richard Bradley: 'The use and reuse of stone circles: recent fieldwork on the Scottish mainland' http://www.reading.ac.uk/archaeology/about/staff/r-j-bradley.aspx	TBC
October	Professor Jane Downes & Alison Keir: Easter Island	TBC
November	Martin Carruthers: Cairns update	TBC
December	Professor Mark Edmonds & Hugo Anderson Whymark	TBC

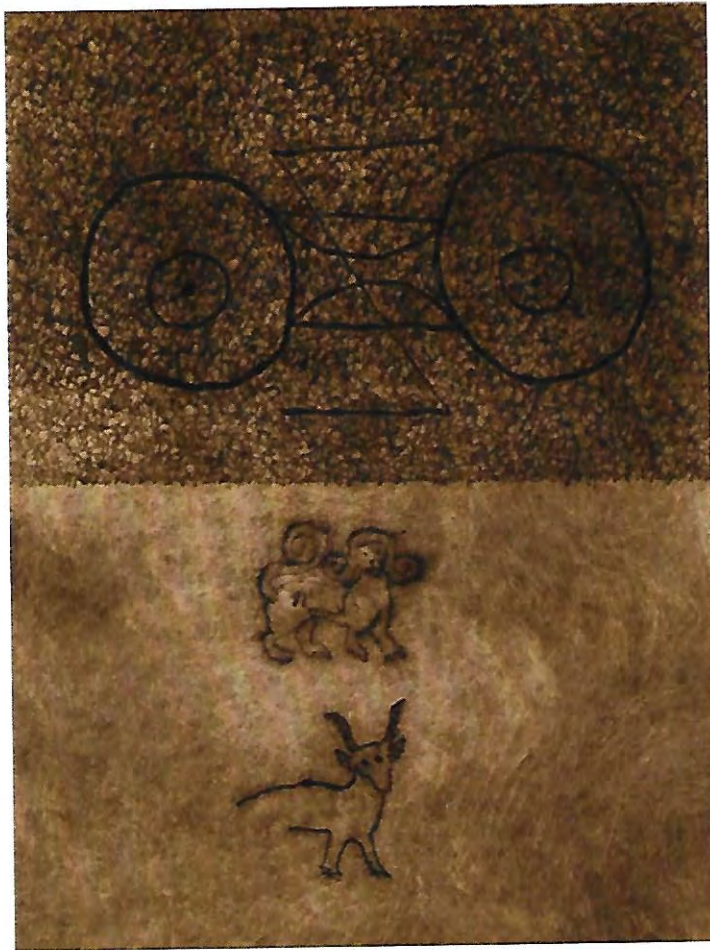
Please note that OAS committee are still in the process of rescheduling the OAS Christmas event which was cancelled due to bad weather. Details of the new date will be issued shortly.



Symbols—James Thompson



Solstice—James Thompson



James Thompson—Hunt

James Thompson—Monolith

