

BC	1398 Henry Sinclair visits America??	North Isles
c.10000 Ice retreats, sea level rising	1468 Impignoration to Scotland	1862 Maeshowe cleared out
c.6000 Grassland, hazel-scrub, ferns cover islands, first people arrive??	1471 Act of Annexation to Scotland	1865 Junction Road, Kirkwall, built
3900 First known settlers	1486 Kirkwall made a Royal Burgh	First steamship to North Isles
Vegetation becoming more open	Cathedral to Kirkwall Corporation	1867 First Stromness lifeboat <i>Saltaire</i>
3800 Climate deteriorates	1492 <i>Columbus reaches America</i>	1870 J&W Tait founded
3600 Knap of Howar oldest deposits	1513 Henry Sinclair II killed at Flodden	1874 First Longhope lifeboat
3200 Skara Brae oldest deposits	1528 Battle of Summerdale	1879 Kirkwall waterworks installed
3000 Chambered Tombs being used	1540 King James V visits Orkney	1887 Stromness Herring fishery starts
Ring of Brodgar, Standing Stones	1541 Bishop Reid extends Bishop's Palace	1890 Mermaid at Newark, Deerness
c.2750 Maeshowe built	1560 Noltland Castle started	1892 SS <i>St Ola I</i> starts her long service
2700 Start of Great Pyramid Age	1567 Norse laws ratified by Scots	1908 Stromness herring boom over
2600 Not many trees left	1574 Earl's Palace, Birsay, built	1913 Peak of Stronsay Herring boom
2500 Skara Brae last occupied	1581 Robert Stewart made Earl	1914 <i>Electric Theatre</i> opens
c.2000 Sandfield cist burial	1588 Spanish survivors settle in Westray	1915 First Great Skuas breed
Knowes o' Trotty	1590 First inn at Stromness	1916 HMS <i>Hampshire</i> sunk
1300 Peat bogs developing	1600s Stronsay Herring fishery becoming important	1917 HMS <i>Vanguard</i> blows up
1159 Hekla erupts	1607 Earl's Palace finished, Kirkwall	1919 German Fleet scuttles itself
700 Iron Age round houses	1614 Kirkwall Castle besieged	1920 N Zealand Wild White Clover
600 Oldest Broch deposits	1615 Patrick & Robert Stewart executed, Castle demolished, Cathedral saved	1937 End of Stronsay herring boom
c.325 Pyrheas circumnavigates Orkney	1633 Carrick House built	1939 World War II,
c.214 Great Wall of China constructed	1666 <i>Great Fire of London;</i>	sinking of "HMS Royal Oak"
c.400 Broch of Gurness in use	<i>Newton realises gravity of situation</i>	1940 Work starts on Churchill Barriers
AD	1679 Wreck of the <i>Crown</i> , Deerness	1943 Italian Chapel started
33 Death of Christ	1700 Hudson's Bay Company starts to recruit Orkneymen	1947 Albert Cinema burns down
43 Orkney said to submit to Claudius	1705 Earl's Palace ruinous	1951 MV <i>St Ola II</i> commissioned
83 Agricola's fleet said to visit Orkney	1721 Kelp-making introduced to isles	Costa Head windmill
c.500 Celtic monks arrive	1725 Pirate Gow captured at Calf Sound	1955 Phoenix Cinema opens
600 Norsemen start to appear in West	1730 <i>Archie Angel</i> survives shipwreck	1957 Lyness Base closes down
632 Death of Muhammad	1743 Stromness becomes free of Kirkwall taxes	1959 <i>Russia launches first satellite</i>
793 Major Viking raids begin	1763 Washington Irving's father arrives New York	1967 Loganair starts inter-island service
800s Norse migration	1770 Grass, clover and turnip seeds introduced, farming reforms	1969 <i>First landing on the Moon</i>
c.872 Harald Fairhair King of Norway	1776 <i>American Declaration of Independence</i>	Longhope Lifeboat disaster
Sigurd of Moere first Earl	1789 First lighthouse lit on North Ronaldsay	1972 Kirkwall lifeboat established
955 Earl Sigurd the Stout baptised	1794 Pentland Skerries lighthouses	1973 MV <i>St Ola III</i> start of ro-ro
1000 Leif Ericson discovers America	1798 Highland Park distillery established	1974 Orkney Islands Council formed
1014 Thorfinn becomes Earl	c.1800 Ba' game takes present form	1977 Flotta Oil Terminal starts up
c.1030 Earl Rognvald Brusison first Earl to live in Kirkwall	1809 First Kirkwall pier built	1978 Orkney Norway Friendship Assoc
c.1035 First St Olaf's Kirk built	1813 Martello Towers started	1983 Wind power starts Bargar Hill
1046 Thorfinn sole Earl	Last Great Auk killed on Papay	1987 <i>St Sanniva</i> starts link to Shetland
1065 Earl Thorfinn the Mighty dies	1814 Stone of Odin destroyed	850 <sup>th</sup> anniv of St Magnus Cathedral
1066 <i>William - a French Viking takes England</i>	1830 Collapse of Kelp Boom	1991 1st edition of this guide published
1098 Magnus Barelegs expedition	1832 North Ronaldsay dyke built	Scar boat burial revealed by storms
1117 Murder of Magnus	First steamship visits Kirkwall	Ro-ro services to North Isles
1137 Foundation of St Magnus Cathedral	1833 PS <i>Velocity</i> starts regular service to Kirkwall	1992 <i>St Ola IV</i> enters service
1151 Magnus reks transferred to Cathedral	1838 Kirkwall Gas Company formed	Orkney Ferries fully ro-ro to Isles
Earl Rognvald goes to Holy Land	1847 Balfour Castle built	1995 50 <sup>th</sup> anniversary of Barriers
1152 Maeshowe runes	1850 Skara Brae revealed after storm	1997 First Atlantic oil reaches Flotta
1171 Sweyn Asleifson killed at Dublin	1855 Steamer Stromness to Scrabster	2009 Pickaquooy Centre opens
1188 Bjarni Kolbeinson bishop	1857 Orkney Roads act	Pentland Ferries established
1194 Battle of Florvag	1858 Bridge at Ayre Mills closes	2002 NorthLink takes over
1231 Last Norse Earl dies (John Harraldson)	1857 Orkney Roads act	New pier at Hatston
1266 Treaty of Perth	1858 Bridge at Ayre Mills closes	EMEC established
1290 Margaret, Maid of Norway, dies	1857 Orkney Roads act	2004 Stromness & Kirkwall marinas
1300 Dutch already fishing Herring	1858 Bridge at Ayre Mills closes	ILS at Kirkwall Airport
1379 Earl Henry Sinclair I	1857 Orkney Roads act	New Kirkwall Library
1380 Kirkwall Castle rebuilt	1858 Bridge at Ayre Mills closes	Ness of Brodgar first trenches
	1859 First <i>Orcadia</i> steamship for	2005 3rd edition of Orkney Guide Book
		2009 MV <i>Pentalina</i> enters service
		Westray Wife found at Noltland
		2011 4 <sup>th</sup> edition of <i>Orkney Guide Book</i>
		2012 New Kirkwall Grammar School



Midsummer sunset at the Standing Stones of Stenness

**INTRODUCTION** In "*What is an Orcadian?*" George Mackay Brown concludes by calling him, A *fine mixer-maxter!* This is literally true, as Orkney, at the cross-roads of the Atlantic, North Britain and the North Sea, has been on the seafaring map ever since people started to go to sea in boats. Many visitors have come and gone over the millennia, some staying to settle, others leaving only their genes. The regular input of new blood and ideas has ensured that the Orcadians are the versatile and welcoming people of today.

After the end of the last Ice Age, about 13,000 years ago, Mesolithic nomadic hunters arrived in Scotland. By 4000BC, Neolithic farmers were well settled in Orkney. For over 1,500 years their culture flourished, leaving the villages, chambered cairns, stone circles and artefacts which we can see today. They are among the most spectacular Neolithic monuments in Europe.

The Bronze Age succeeded the Neolithic. From this period burnt mounds, middens, cist and barrow graves as well as ruins of small houses remain. This epoch was marked by a deterioration in climate and changes in society as well as the appearance of bronze tools and weapons.

About 700BC larger round houses started to appear and later the spectacular brochs, some with large settlements around them, were developed. The introduction of iron for tools and weapons would have been a revolution in itself. The Roman invasion of Britain in AD43 rippled as far as Orkney. The islands were starting to experience more outside influence, Pictish, Roman, Norse, Christian, Scots and English.

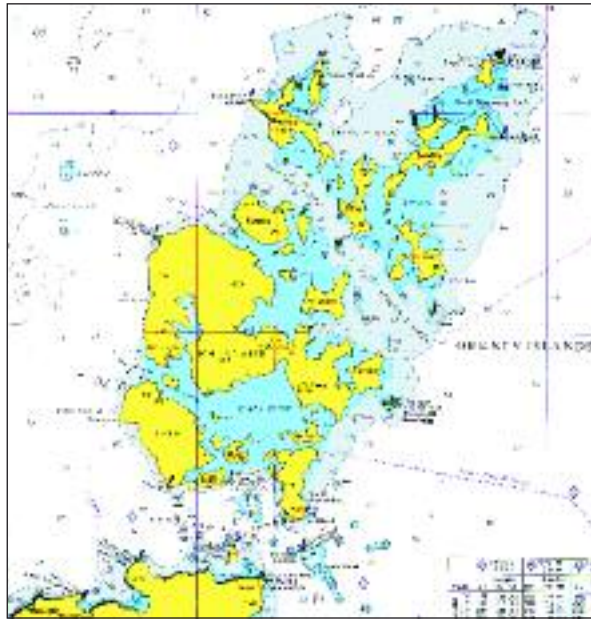
Beginning in the 8<sup>th</sup> century the Scandinavians began to appear, probably not in huge numbers at first. Large scale migration took place during the 9<sup>th</sup> century, followed by the "*Golden Age of the Vikings*".

The Norse domination lasted six hundred years and this influence is still strong in the isles today. Orkney was of great strategic importance during Viking times, and the exploits of the Earls and their supporters are related colourfully in the *Orkneyinga Saga*.

Later medieval times saw a large influx of Lowland Scots due to the close proximity of and then annexation by Scotland. Orkney gradually became more of a backwater and suffered as a result of exploitation by Scottish Earls as well by the Merchant Lairds. Only in the 19<sup>th</sup> century were real farming improvements to arrive, when steam power finally made sea transport more regular.

During the later 19<sup>th</sup> and then the 20<sup>th</sup> century there have been the effects of the boom in Herring fishing, two World Wars, further great strides in agriculture, North Sea Oil and the influx of large numbers of mainly English immigrants, with the result that the population decline has now reversed. The generation of power from the wind, waves and tides is the latest in this series of developments.

Orkney now has a very diverse economy, mostly still based on its natural assets, but increasingly depending on the ability of the Orcadians to adapt to today's changing world, just as they have for at least the last 6,000 years.



UK Hydrographic Office

The huge weight of the ice depressed the land, which rose after the glaciers had melted, a process called isostatic rebound. Where the glaciation was thin, or non-existent the effect was for the land to sink, a process which is still happening in Orkney today. The result is that here sea level is several metres higher than it was 10,000 years ago.

Seismic events may also have destroyed evidence. Around 6000BC there was a major underwater event off Norway, the Storegga Slides. These unleashed tsunamis which may have been up to 25m (80ft) high which would have been devastating to groups living on or near the shore.

The probability is thus that many early coastal sites have been lost to the sea. Recently underwater surveys have been started to try to discover any such evidence. Shallow, sheltered bays such as the Bay of Firth and lochs such as the Loch of Stenness are prime candidates.

There are many early sites on the Scottish coast, especially on the west side and on the Inner Hebrides. The oldest so far found is from about 6000BC at Cramond near Edinburgh, while the nearest to Orkney are in Caithness.

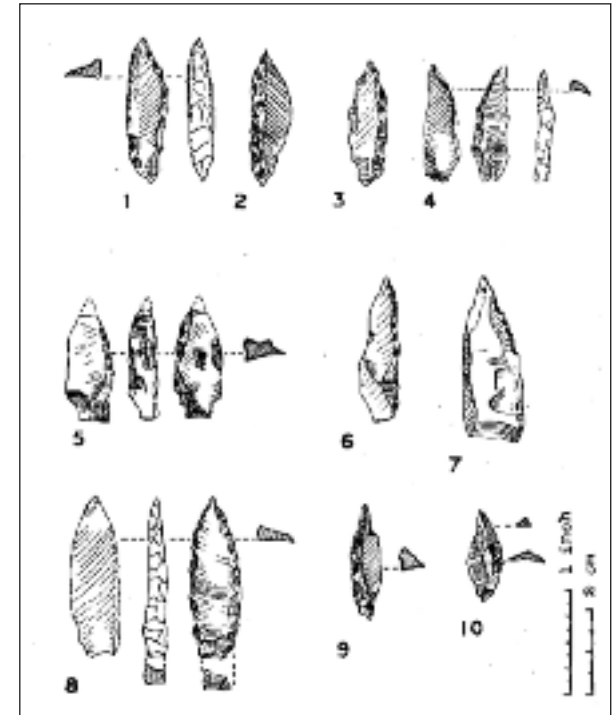
Getting around was obviously important to these people too, and it is clear that they had capable boats with which to move themselves and their

belongings and to go fishing in deep water. Most importantly all the materials needed for their construction had to be easily obtained locally.

**Microliths** Most evidence from Orkney of these Mesolithic people is in the form of small stone objects that have been found, particularly on ploughed fields. These are nearly all microliths, which are small but carefully made flint tools. Many would have been mounted on wood with resin to make knives, scrapers, arrowheads, harpoons and other useful things.

Mesolithic worked stone artefacts have been found in several locations in Orkney, but so far no settlement site has been excavated. The microliths so far found include styles similar to Scandinavian and Scottish finds. Much further investigation is needed to throw light on the situation, and it has even been suggested that perhaps our links with Scandinavia may be older than we have so far thought!

Possible Mesolithic tools and evidence of earlier occupation were found at the lowest levels at several Neolithic sites. It seems that human settlement in Orkney may extend back further than it was thought. For example a burnt Hazelnut shell was found near Minehowe in Tankerness in 2007, which dates from around 6700BC.



Microliths of worked flint

Recently an excavation on Stronsay revealed over 1,000 worked pieces of flint. It seems to date from around 7000BC and may be a seasonal basecamp. This site was revealed by field walking, when a scatter of flints was discovered on a ploughed field.

Further such sites may well be found in future. These may be coastal, underwater or underneath later settlements. So far most Orkney microliths have been found on farmland. No human burials from the Mesolithic Age have yet been found in Scotland, let alone Orkney.

Microliths of worked flint



Chart of Orkney showing 10m, 20m and 50m depth contours

**FIRST ARRIVALS** At the end of the last glaciation, the ice receded first from the northeast and northwest coasts of Scotland as well as the islands. It was less thick here and melting was aided by the sea and weather. It is not clear where the first people arrived from, but they may well have been sea-borne from Britain, Ireland, Denmark or even Norway.

Sea level was about 150m lower during the glaciation and rose rapidly as the ice melted. During Mesolithic times Orkney was not joined to Scotland, but virtually all of the islands were linked up. As sea level rose, the Outer North Isles became separated and eventually the present situation was achieved perhaps around 8000BC.

The Bush, Big o'Waithie and the Loch of Stenness







The Knap of Howar is the oldest stone-built house in Europe

**NEOLITHIC AGE** The strong similarities between tombs and various artefacts in the North of Scotland and Orkney suggests that farming arrived via Caithness. There were cultural links with the Highlands and Islands, Ireland and the south of England during the Neolithic Age. Farming was well established in Orkney at least 6,000 years ago.

**Houses** One of the oldest standing houses in Western Europe, the Knap of Howar, is on the island of Papay and

dates from about 3600BC. The buildings at Skara Brae in Sandwick, Rinyo on Rousay, Noltland on Westray, Pool on Sanday as well as Barnhouse and Ness of Brodgar in Stenness all date from slightly later, about 3100BC. These are established settlements, built by accomplished stone-masons and reflect the work of a settled people, rather than new arrivals.

The houses were quite sophisticated, being built with double-skinned drystone walls. Midden material was often

The houses at Skara Brae are joined by a central passage



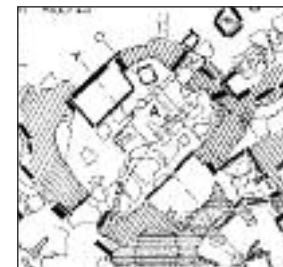
packed between these walls and surrounded them on the outside. No other similar stone houses remain in Britain, or indeed Europe, and their origin is thus obscure. However, the buildings at the Knap of Howar have two interesting features.

There is a strong resemblance in shape and internal features with some of the early chambered cairns, and the outline is distinctly boat-shaped. The later Neolithic houses such as at Skara Brae are much squarer, with built-in bed spaces, and resemble the later Maeshowe-type tombs. Whereas elsewhere in Britain plentiful timber would have been available for construction, its relative lack in Orkney was made up for by the excellent building stone.

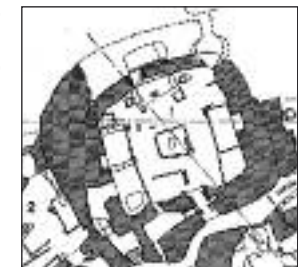
Since driftwood from North America was very likely available in quantity, they would have had wooden fittings, while whalebone may also have been used for rafters.



Knap of Howar



House at Rinyo, Rousay



House at Skara Brae

Roofs quite probably used some of the boat-building tradition with woven Willow or Hazel supporting a covering of leather and turf, parts of old boats or even flagstone slates. Heather, reed or straw thatch may also have been used.

Heather ropes were likely used to secure the structures. The only evidence of flagstone roofs so far is from the Ness o' Brodgar. A brief survey of more recent ruined houses shows that roof coverings and timbers are the first to be sal-

vaged. Thus the archaeological record is perhaps biased in favour of what was not salvaged after abandonment.

The houses may well have had wooden fittings and doors. Interior furniture only sur-



Expertly built interior doorway at the Knap of Howar

Skara Brae but 1 showing hearth, dresser, beds and stone furniture



**NEOLITHIC TIMELINE**

- BC
- c.11000 Orkney separated from Scotland
- c.8000 First hunter-gatherers?
- 3600 Knap of Howar oldest date  
Unstan Ware pottery
- 3200 Stalled cairns appear  
Isbister oldest date  
Maeshowe tombs appear  
Skara Brae oldest date
- 3100 Knap of Howar latest  
Quanterness Cairn  
Grooved Ware pottery
- 3000 Standing Stones  
Quoyness Cairn  
Skara Brae phase II
- 2800 Maeshowe built  
Ring of Brodgar built
- 2600 Woodland virtually gone
- 2500 Cairns latest date  
Skara Brae latest

**NEOLITHIC DOMESTIC SITES TO VISIT**

- Stenness Barnhouse
- Sandwick Skara Brae
- Rousay Rinyo
- Westray Noltland links
- Papay Knap of Howar
- Sanday Pool





High quality masonry work at the Ness o' Brodgar

vives as stone beds, dressers, cupboards, stone-lined tanks and hearths. Wood, leather, textiles and bone would all have made the houses comfortable. The recent finding of painting at the Ness o' Brodgar suggests that colour may have been a feature.

Fuel could have been dried dung, seaweed, turf, driftwood or whalebone, but not much peat as this only started to develop much later. The houses had good, lined, drains. At Skara Brae the houses are equipped with cells which were perhaps toilets, store rooms or pantries. In all

Rectangular side cell in one of the buildings at the Ness o' Brodgar



cases the quality of the stone work is very impressive. It is easy to imagine the domestic life of the inhabitants.

These people had a good and stable standard of living, with time and energy to build elaborate monuments like Maeshowe, the Ring of Brodgar and the impressive buildings on the nearby Ness. Nothing is known of their language or culture, except that which can be gleaned from their buildings, artefacts and the landscape. Barley and some Wheat were grown, while cattle and sheep plus some pigs and goats were

kept. Seabirds and fish were important in their diet and deer were hunted.

**Boats** To reach Orkney and the other Scottish islands good boats, seamanship and a working knowledge of the dangerous waters was required. These vessels had to carry substantial numbers of people, animals, seedcorn, tools and other goods. They journeyed far down the coasts of Britain, and had done so since the end of the Ice Age.

Offshore fishing for large Cod and Ling was practised. Excellent hooks have been found in middens, fashioned from heated cartilage which are extremely strong, yet flexible. None of this was possible without a good knowledge of the tides, skerries and weather patterns in these waters.

Their boats were probably built with a stout wooden frame, most likely with Oak timbers and a framework of Willow or Hazel. Although leather, perhaps tanned with Oak bark could have been used as a skin, this would have been heavy and easily damaged when wet. Much more likely is a woven fabric covering made from Flax or Nettle fibres.

Both are very resistant to rotting, immensely strong and easily grown in quantity. Finally the skin would have been tarred with copious amounts of pitch. Such boats would have been easy to con-



Bed and cupboards in hut 1 at Skara Brae

struct and maintain as well as being light to haul out.

**Clothing** The old idea of the Skara Brae people was that they dressed in undressed leather skins but this is highly unlikely. Hunter gatherers would have used light, protective and hard wearing materials to make their clothes. The Neolithic people had a wide range of options besides animal skins. These include woven vegetable fibres as already mentioned, felted or woven wool as well as woven grass or straw. Bone pins would have been used in place of clasps.

**Food & Drink** Remains of pots varied from tiny to over 60cm in diameter. Two different styles of pottery artefacts have been found in these Neolithic sites. Round flagstone pot lids are common. Saddle querns were in widespread use to grind the Wheat and Barley, though probably the latter was mostly eaten after malting which makes the grain much more digestible, as well as sweet to the taste. Large quantities of malt was also used to make ale, which

was preserved and flavoured with Meadowsweet, a very common Orkney wild flower.

There was plenty of milk, fish, sea birds as well as domestic beef and lamb. Many edible wild plants which are mostly ignored today would have been gathered to be used med-

icinally, as flavouring or as vegetables. Sea Plantain, Silverweed, Marsh Marigold, Scurvygrass, Sorrel, Lyme Grass and Bullrush are all edible and locally common. Poisonous plants such as Henbane, which occurs in Orkney, may have been used as hallucinogen.



The large house at Barnhouse is 7m by 7m internally

Excavation at the Links o' Noltland







Unstan is a typical stalled cairn with one side cell

**BURIAL OF THE DEAD** was clearly taken very seriously, and at least in some cases, excarnation was practised. Bodies were left in the open for some time to allow the flesh to decay, and only some of the bones were placed in the tombs. Some oste-

ological studies suggest that the people had short and unhealthy lives, but there is no evidence that this was universal.

The Neolithic people were able to construct these elaborate monuments for their dead as

well as impressive stone circles and very large buildings such as at the Ness of Brodgar. This suggests that their society was prosperous and well-organised.

There are similarities between pottery and other artefacts found in Portugal, southern England, Ireland and Orkney, suggesting that there were contacts with people in these areas. Little is known about the boats of the time, but vessels able to transport people and their animals across the Pentland Firth or to fish offshore would have been more than adequate to undertake longer journeys as well.

Climate and climatic change may well have had a lot to do with early settlement. Analysis of pollen shows that by about 5900BC the land was covered with grassland, birch-hazel scrub and ferns. After the arrival of man in about 4000BC this was replaced by more open vegetation, probably due to their grazing animals and clearing for cultivation. While there is no direct evidence of manuring, it is hard to believe that these people did not notice the beneficial effects of dung and

seaweed on the land, especially given the evident importance of the midding to them.

The vegetation changes started about 3800BC continued for some time and by 2600BC there were few trees left. Recent tree-ring studies of old Irish Oaks suggest that there was a sudden deterioration of climate about 2350BC, which is about the time of the latest Neolithic dates. One theory is that a large comet or asteroid struck Earth at this time, causing a nine-year winter.

By 1300BC extensive peat bogs were developing, making much marginal land unworkable, and overwhelming remaining woodland. By this time the landscape would have been very similar to that of the early 20<sup>th</sup> century.

**Chambered Cairns** are tombs which are characteristic of Neolithic times. They are stone-built and typically have a central chamber with an entry passage and sometimes one or more cells off the main chamber.

Orkney has a large number of these *houses for the dead*, many



Upper floor of Taversoe Tuick

of which are well preserved, and well-built. These tombs were built by the Neolithic farmers, the oldest date in Orkney being from about 3200BC, and many continued in use for up to 800 years before final sealing.

Although there is a range of sizes and design, there are basically two types: which have been dubbed the *Orkney-Cromarty Group (OC)* and the *Maeshowe Group (MH)*. The former type is related to similar cairns in Caithness, while



Knoe of Yarso on Rousay is a typical small stalled cairn



The Tomb of the Eagles at Isbister is also stalled, but has three side cells

Unstan Ware pots - largest two from Unstan, small bowl from Taversoe Tuick



NMS

Decorative stone-work resembling Unstan Ware pottery



Midhowe on Rousay is very large







Cuween cairn near Finstown is built with extreme care

the latter type is unique to Orkney. In many ways these tombs are similar to the contemporary houses at Skara Brae and Knap of Howar.

The OC type, of which there are about 60 in Orkney, is characterised by having

upright stalls set into the side walls, shelves at one or both ends as well as sometimes along the sides and rounded corbelling for the roofs. Low-roofed cells occasionally lead off the main chamber. The pottery type found in these cairns was Unstan Ware.

Side cell at Wideford Hill cairn



These are wide, round bottomed pots, which may or may not be decorated, and are also associated with the Knap of Howar in Papay, as well as Stonehall in Firth.

The MH type have rectangular chambers with high corbelled roofs, and cells which may also have high roofs, but they lack the upright stalls of the OC type. They also tend to be built of larger stones, often very massive and normally very well cut and fitted together. There are only 12 examples of these unique structures. Where pottery was present it was always Grooved Ware, which are flat-bottomed pots, and quite distinct from the Unstan type. This association is also unique.

Unfortunately most sites were cleared out in the past without the benefit of modern techniques. However, several cairns were excavated recently and produced much data. The Maeshowe-type cairns at Quanterness (St Ola) and Howe (Stromness) and the Orkney-Cromarty type cairn at Isbister (South Ronaldsay) yielded large quantities of human and animal bones, artefacts and other material from which much has been deduced about the lives of the people buried there.

At Pierowall on Westray, a probable Maeshowe-type cairn was discovered during quarrying. This yielded an intricately carved stone, now

in the Westray Heritage Centre. It has spiral markings very like the one found at Church on Eday, now in NMS. Similar designs at Newgrange in Ireland and elsewhere suggest cultural connections.

**Osteology** The picture gained from studies of bones recovered at Quanterness and Isbister is of a hard life. Few people lived longer than 30 years, and most died before 25. Arthritis was common in adults, while mortality in childhood was high. Usage of the tombs lasted for several



Exterior of Wideford Hill cairn looking towards Finstown and Cuween cairn

The interior of Maeshowe is monumental and incorporates standing stones



The reconstructed exterior of Quoyness on Sanday showing entrance passage

centuries. In the two recent excavations partial remains of large numbers of individuals were buried, with up to 400 at

**CHAMBERED CAIRNS TO VISIT**

This is only a selection of the most accessible and best-preserved cairns. Others are mentioned in the sections for each parish or island.

**Bookan type**

- Sandwick Bookan
- Rousay Taversoe Tuick
- Eday Huntersquoy

**Orkney-Cromarty type**

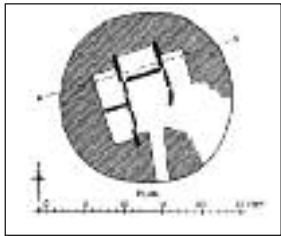
- St Ola Head of Work
- Stenness Unstan
- Rousay Blackhammar
- Taversoe Tuick
- Midhowe
- Knowe of Yarso
- Bigland Long

- Westray Cott
- Eday Braeside
- Stronsay Kelsburgh
- SRonaldsay Isbister
- Hoy Dwarfie Stone

**Maeshowe-type**

- St Ola Wideford Hill
- Stenness Maeshowe
- Firth Cuween Hill
- Egilsay Onziebust
- Papay/Holm Long Cairn
- Sanday Mount Maesry
- Quoyness
- Eday Vinquoy Hill

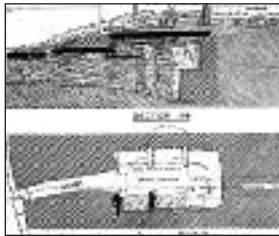




Bookan, Sandwick

each of Isbister and Quanterness.

Some cairns, such as Maeshowe, contained no bones on excavation. Most earlier excavations failed to yield the detail of the recent



Huntersquoy Upper level, Eday

work. The lack of bones and other artefacts in many instances may simply mean that the cairns were cleared out at some unknown time in the past.

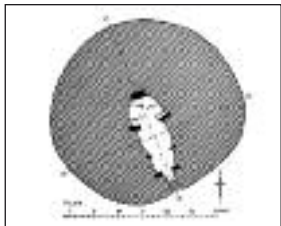
In some cairns there appears to have been an association

*Bookan-type cairns are characterised by having internal divisions made of upright flagstones. Pottery if present was Unstan Ware. This type is the least common to have survived intact.*

with animals, Sea Eagles at Isbister, dogs at Burray and Cuween and sheep, cattle or deer at others. Whether these, together with the many pot sherds also found, are the remains of funeral feasts or offerings to the dead is an

*Orkney-Cromarty type cairns are characterised by upright flagstones set like stalls in a byre and end compartments made from large flagstones. A few have one or more side cells. Pottery, if present, was always Unstan Ware.*

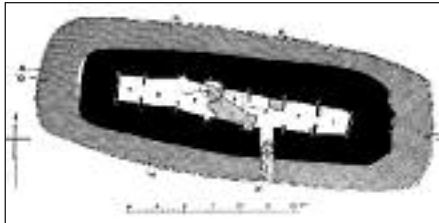
Midhowe, Rousay



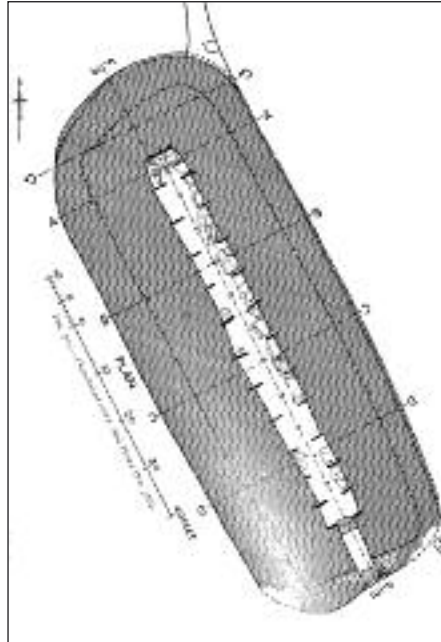
Bigland Round, Rousay



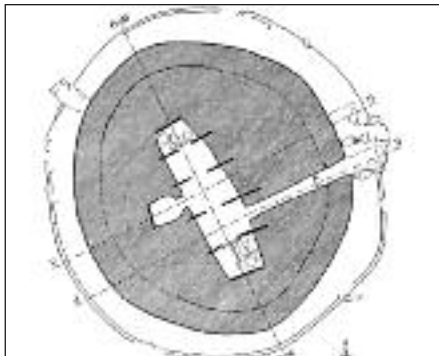
Yarso, Rousay



Blackhammar, Rousay



Unstan, Stenness



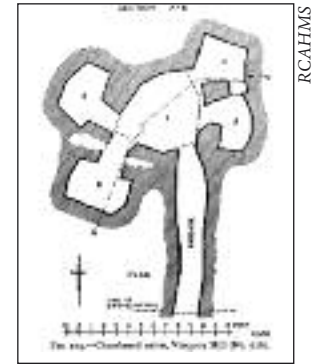
open question. It is interesting to note that nicknames for people from particular parishes and islands are still in common use. Some of these may be very ancient.

That the Neolithic people went to such lengths in housing their dead, in contrast to later times, suggests that ancestors were very important to them. While much has been discovered about the material aspects of these people's lives, little has been revealed about their rituals and social organisation. The very large effort implied in the construction of these monuments suggests that the society was well organised and had resources beyond mere subsistence farming.



Skull from the Tomb of the Eagles

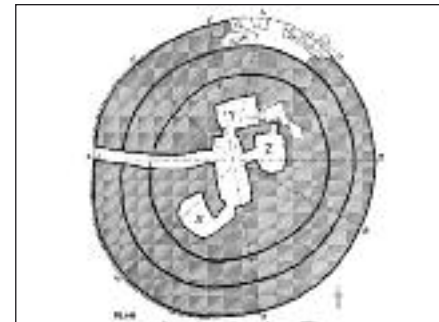
The diagrams on this page show the development progression of chambered cairns. Starting with the apparently simple, and early, Bookan type, through the various increasingly elaborate stalled cairns to the Maeshowe type. The last type is unique to Orkney and culminated in the eponymous impressive structure.



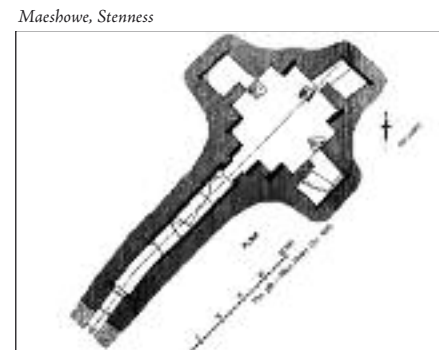
Vinquoy, Eday

*Maeshowe-type cairns have long entrance passages, no internal divisions and several side cells leading off a large and high corbelled chamber. The chambers are often also corbelled and can number from three to fourteen. Pottery where present was always Grooved Ware*

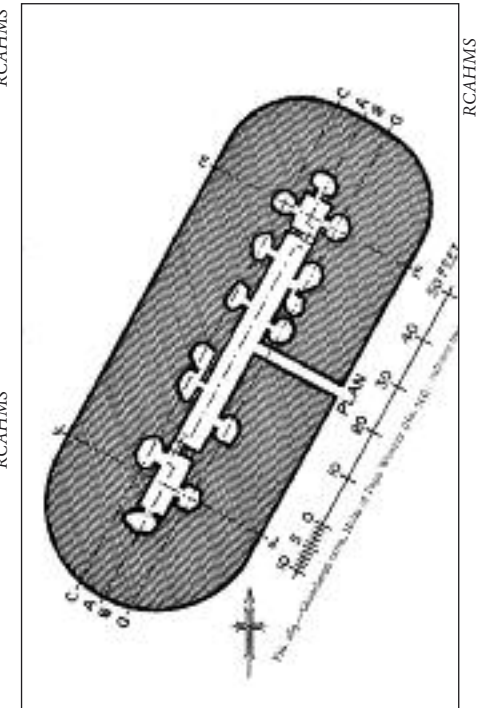
Holm of Papay South



Wideford Hill, St Ola



Maeshowe, Stenness





The Ring of Brodgar originally comprised 60 stones, of which 27 remain intact

**STANDING STONES**

Apart from houses and chambered cairns, the Neolithic people also erected standing stones, stone circles and henges. These are some of the most impressive monuments from this time, especially the collection of megaliths between the Stenness and Harray Lochs.

The henges include the Ring of Brodgar, the Standing Stones of Stenness and Bookan. Isolated standing

stones include the Watchstone and those at Barnhouse, Deepdale and Hinatuin. The impressive rock cut ditches at the three henges represent a massive construction project. Selection, quarrying, transport and erection of the monoliths seems like very hard work in the absence of metal and power tools

Many visitors, illustrious or not, have proposed reasons for the erection of these monuments. They have usually sug-

gested rituals which is archaeological shorthand for don't know and often divined all sorts of other things. What is clear is that the Neolithic people were very much in tune with their environment which obviously included the cycles of the Sun and the Moon.

The sites selected for these monuments are not accidental. They are situated in the heart of the West Mainland amid a low lying landscape of farmland, moorland and water

Midwinter sunset at the Watchstone



Sunset from Bookan Ring in early November



and surrounded by a bowl of hills. Although there may be slightly more farming activity now than in Neolithic times, these are timeless places.

Traditionally it has been assumed that an ancient quarry near Vestrafjold in Sandwick (HY239218) is the source of stone for the Standing Stones, Brodgar and Maeshowe. A number of large stone slabs still lie where they were they were quarried, a number even still resting flat on small stones awaiting transport. The largest is over 5.5m long.

Recent geological examinations at Brodgar suggest that this is true for some, but perhaps not all of the stones. It has been suggested that some of the monoliths may have originated elsewhere in the West Mainland, perhaps from a number of different quarries.. They were could have been delivered from different parishes as part of a grand community enterprise.

Regardless of the reasons for and the logistics of their construction, the three henges represent a considerable design challenge for a time when it is claimed that there was no form of writing or notation. The circles are near perfect, the ditches symmetrically cut and the standing stones are accurately set.

Whatever the source of the megaliths, they had to fit an overall concept. Powerful



Snowy midwinter sunset at the Standing Stones of Stenness

forces in Neolithic society drove the building of stone circles all over Britain and Northern Europe. The Orkney henges seem to date from the late 3<sup>rd</sup> millennium BC and are thus some of the oldest in UK.

What archaeologists like to call rituals probably did involve the sun and moon, perhaps to decide on specific dates for festivals. The main activities were probably fertili-

ty rites including dancing, music, song, drinking, use of drugs and a good deal of sexual activity.

These people were established farmers, accomplished fishermen and had at least occasional connections with distant communities. But they also depended on the return of the sun, the fertility of the soil, the fecundity of their animals and crops and their own successful reproduction.

The Barnhouse Stone



**STONE CIRCLES & HENGES TO VISIT**

Stenness Standing Stones  
Sandwick Ring of Brodgar  
Bookan

**STANDING STONES TO VISIT**

Stenness Watchstone  
Barnhouse  
Odin Stone (site of)  
Comet Stone  
Harray Hinatuin Stone  
Birsay Quoybune  
Stromness Deepdale  
Rousay Yetnasteen  
NRonaldsay Holland  
Eday Setter Stone  
Shapinsay Mor Stein





*The setting sun reappearing on the north side of the Ward Hill of Hoy from the Watchstone on 12<sup>th</sup> December*

**ALIGNMENTS** It is almost impossible to visit many of the Orkney Neolithic sites around the solstices without noticing obvious alignments to the rising and setting sun. The best known event is the setting midwinter sun illuminating the chamber of Maeshowe. However local people have long said that the Watchstone is the most significant observation position.

**Sun** The winter solstice was clearly an important event as it is marked from multiple places on several dates between early December and the end of January. Thus the precise date can be accurately known despite many cloudy days. Of particular interest are the flashing events. The

sun disappears behind a hill and then momentarily reappears on the other side, as for example in Stenness.. The movements of the Sun are reflected in alignments at Bookan, Brodgar, the Standing Stones, Barnhouse and quite possibly also at the Ness of Brodgar. Things are complicated by the fact that an unknown number of standing stones have been destroyed or toppled. In recent times some were then been re-erected.

Nearly all chambered cairns have a day when the rising or setting sun will shine through its passage. This may or may not be of significance, but both Wideford and Cuween are illuminated at the equinox, while Tomb of the Eagles

bathes in the May Day sunrise. The destroyed cairn at Pierowall may well have had a southwest orientation, with its impressive lintel stone facing the sunset.

**Solar Calendar** Midwinter and midsummer are obvious set points in the calendar. A number of festivals seem to be very ancient, including those now called St Brigit's (Imbolc), May Day (Beltane), Lammas Lughnasa) and Halloween (Samain). They were all taken over by the Christians with a varying degree of success.

Detailed surveying of many Neolithic monuments have produced conflicting evidence for a calendar, thought by



*The Moon low over the Orphir Hill from the Ring of Brodgar*

some to be the precursor of the so-called Celtic Calendar. Most likely many of the alignments which are so obvious to the observer today are intended, not with a high degree of geometrical accuracy.

**Moon** The Moon was also clearly important in the Neolithic, as now. Predicting the tides would have been essential, but these people also knew about the more long term movements of the Moon, which are generally not understood by today's urban dwellers.

Apart from its monthly cycle, the Moon has a complex behaviour due to the nature of its orbit around the Earth and gravitational interactions between it, the Earth and the Sun. As a result there are a series of cyclical effects, the main one being the *Major Lunar Standstills*, which occur every 18.6 years.

At these times, at Orkney's latitude of 0, the Moon only rises a few degrees into the sky, and skims the horizon. Seen from the Ring of Brodgar and



*Midwinter Moonrise over Maeshowe*

from the Standing Stones it only just clears the Orphir Hills before setting into Hoy. This very dramatic event would doubtless have formed part of the Neolithic calendar

**Megalithic Geometry** Surveys of many of the 1,300 or so stone circles and settings in Britain have revealed that most were accurately laid out as circles, ellipses or flattened ellipses. Ropes and pegs would have been sufficient in many cases, but some form of measurement essential to

mark out where stones were to be erected and ditches to be dug.

Alexander Thom and others have postulated Megalithic Feet, Yards, Rods and so on which in many cases seem to fit the actual measurements on the ground. Knowledge of triangles, especially the 3,4,5 would have been very helpful in laying out circles, cairns and houses. It is hard to imagine how a structure like Maeshowe was not designed using units and angles.

**SUNRISES AND SUNSETS**

The most unequivocal dates for solar alignments are midsummer and midwinter sunsets and sunrises. The main sites are all in Stenness and are defined by the surrounding arc of hills. Sunset over the Hoy Hills from the Watchstone is the most accurate indicator for other days. The midwinter sunset down the passage at Maeshowe gives precise days for the solstice and the flashing days of 1 December and 29 January.

Midwinter sunrise	North Ronaldsay
Midwinter sunset	Maeshowe, Watchstone, Brodgar, Standing Stones, Bookan
Early Feb/ Nov sunset	Maeshowe, Watchstone
Equinox March sunrise	Cuween
sunset	Watchstone
Equinox Sept sunrise	Wideford Hill
sunset	Watchstone
Early May/ Aug sunrise	Tomb of the Eagles
sunset	Brodgar
Midsummer sunrise	Brodgar, Unstan, Bookan
Midsummer sunset	Brodgar, Standing Stones, Barnhouse

*Midwinter sunrise at Barnhouse, Stenness*



*Midwinter sunset at the Watchstone*







Pierowall chambered cairn lintel stone

**NEOLITHIC ART** Until recently the subject of Neolithic Art in Orkney was not taken very seriously. Certainly there were chevron and lozenge incisions at Skara Brae and elsewhere. Cup marks, eyebrow motifs and whorls similar to those from other areas were also found, as were many exquisite carved stone and bone objects.

The range of artifacts which are found depends on the environment in which they have been since deposition. Apart from bone, very few organic items have been discovered. This means that almost nothing is known about Neolithic wooden tools and fittings, boats, textiles, clothing or furnishings.

**Skara Brae** yielded a huge number of carved stone objects, jewellery made from bone and teeth, as well as symbols carved on stones. Many artifacts were carved from bone, ivory and whale's teeth. Perhaps the most impressive are two whalebone pins which are 25cm long.

**Westray** The Links of Noltland is a large area of sand dunes above Grobust on Westray is constantly changing. recent excavations there have revealed a Neolithic settlement. In 2009 the Westray Wife (or Orkney Venus) was found. This 3cm female figurine is by far the oldest carving of a person so far found in Scotland.

There is no evidence that these people used any kind of writing or notation. Equally their language is unknown. There are clear similarities with designs used in Ireland and southern England on pottery and on carved stones. Objects made from stone and jet which originated hundreds of miles away confirm trading links.



The Westray Wife

Mace head from the Tomb of the Eagles

Stone axe blade from the Knap of Howar



Two further interesting objects were found here. In 2010 a second figurine was found, this time in clay and about 34mm high, though without its head. A much larger decorated stone 45cm high was also found here in 2008. It has incised chevrons and an S-shaped carving.



Incised stone from Skara Brae with chevrons and lozenges

In nearby Pierowall a carved stone was found during quarrying work in 1981. It closely resembles a similar stone found on Eday. The carving is very similar to those at Newgrange in Ireland and was probably part of the lintel over the entrance of this Maeshowe-type tomb. The structure was destroyed sometime before 2,000BC.

**Tomb of the Eagles** The first find at the chambered cairn at Isbister on South Ronaldsay was a cache of carved stone objects, including a mace head an small axe and knives. Carved bone and shell jewellery was found as well as a jet button and ring. The high quality workmanship can be admired at the site museum.

**Knap of Howar** The oldest standing stonebuilt house in Orkney was the site of some interesting finds, including a fine carved stone axe blade and a huge variety of bone and stone tools. Many of these are beautifully made and are more than merely utilitarian. The construction of the buildings is also very skilled.

Incised stone from the Links of Noltland



Incised stone from near but 10, Skara Brae

Tomb of the Eagles stone knife







NMS

of the larger artifacts found during excavations. They frequently survive in remarkably good condition. Doubtless there were fashions in pots and perhaps rivalry between different potters.

A probable pottery kiln was discovered at the Knowes of Trotty in 2006 but so far this is the only Neolithic example in Orkney. Recently, potter Andrew Appleby and archaeologist Stephen Harrison have conducted some experiments with making and firing Grooved Ware type pottery.

Temperatures of over 1,000°C were reached and a high yield of very usable variety vessels resulted. It seems that Orkney clays need a high temperature to be properly fired. The kilns were built of turf and have used mixtures of peat, dung, wood and seaweed as fuel. When peat was used the kiln burnt for a long time but reached over 1,100°C.

**Adornment** Large numbers of artifacts which can only be interpreted as jewellery have been found, especially when conditions have been good for survival of bone, as at Skara

Carved stone objects from Skara Brae

**Pottery** As already mentioned pottery was a major feature of the Neolithic Age in Orkney. It ranges from small bowls and drinking cups to very large containers capable of holding up to 100 litres. In many cases the pots are beautifully made.

tion similar to other forms of Neolithic artwork. The former tend to be finer, round bottomed bowls and beakers, while the latter are more utilitarian and usually are bucket shaped. The different styles seem to be associated with particular sites.

Both *Unstan Ware* and *Grooved Ware* used decora-

*Grooved Ware* pottery sherds often make up a large fraction



Grooved Ware pottery from Links o'Noltland, Westray

Grooved Ware pottery sherds in Orkney Museum



Unstan Ware pottery from Isbister

Brae and the Knap of Howar. Necklaces, bracelets and fine bone pins are most common. The latter were most likely used to secure garments. Shells, whalebone, whales' teeth and Walrus ivory were also used.

Haematite was found at Skara Brae and other sites. Some of the lumps were polished, suggesting that they may have been used to polish leather. Small pots which contained red ochre which may have been for personal adornment.

At Ness of Brodgar stones painted in red and yellow were found in 2010, suggesting that the use of colour may have been far more widespread than previously known. This raises all sorts of questions about the appearance of buildings in the Neolithic Age.



Skara Brae necklace made with bone and teeth



Bone tools from Skara Brae



Bone jewellery from Skara Brae

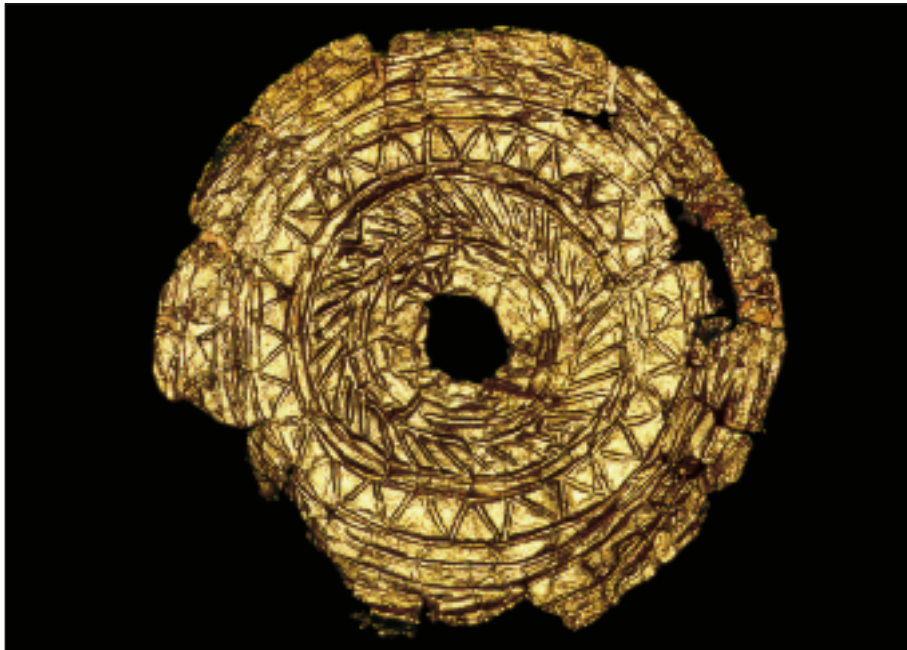


Tomb of the Eagles jewellery



Large whalebone pins found at Skara Brae





NMS

Decorated gold disk found at the Knowes o' Trotty in 1858 - probably a decoration for a large button

In contrast to the spectacular monuments of the Neolithic, the Bronze Age has not left many such remains to visit. Metalworking reached Britain about 2700BC, but none of the few bronze artefacts found in Orkney date to earlier than 2000BC. Copper ore does occur locally there is no evidence that it was exploited at this time.

The small number of artefacts found have seemingly all been imported. Beaker pottery, a finer and more decorated type characteristic of the period elsewhere, is also rare in Orkney. This lack of artefacts may suggest that Orkney became relatively isolated from Scotland about this time, perhaps due to climate changes making life much

harder. However, intriguing finds in several graves suggest that this is not the whole picture.

**Burial Mounds** It appears that there was a change from communal burials in chambered cairns to individual interments in stone-lined cists, often then topped with a barrow of earth or a cairn of stones. There was also a change from inhumation burials to cremation.

The Knowes o' Trotty are a group of mounds at Huntisarth on the Lyde Road, Harray (HY343177), which form a large Bronze Age cemetery. There are two rows of eight or more mounds each. In 1858 excavation of the largest mound revealed a

Excavation at the Knowes o' Trotty



At least eight Bronze Age tumuli surround the ring of Brodgar

stone cist burial with cremated bones, four gold discs and 21 pieces of amber from a necklace.

The gold is Scottish in origin, but the amber is probably from the Baltic, and may have been fashioned into a necklace in England as the beads closely resemble others found in Wessex.

The gold disks were likely used as decorative button covers, most likely on the dress of an important woman. Excavations in 2002 proved that the site is an extensive cemetery, with a Bronze Age building, cremation fire sites and pits and the remains of a kerbed cairn.

During 2005 the largest

Large pot with cremated remains



mound was excavated to reveal a large and very well-built burial cist. Fragments of gold and amber which were missed in 1858 were also found as well as cremated bone which should allow accurate dating of the cairn.

At Sandfield near the Bay of Skail a large flagstone cist was recently excavated. Inside were

several burials, some cremated, others not, and a large urn, dating from about 2000BC. This unique tomb is much larger than other cist graves and the stones had been very carefully cut. It seems that it was designed to be repeatedly opened and reused.

There are well over 200 barrows and cairns in Orkney dating from the Bronze Age.



The cist was used in the period 2750BC to 2500BC and later about 2000BC

Archaeologists reveal the Sandfield cist for the first time in 4000 years







Bronze Age house with associated burnt mound at Liddel, South Ronaldsay

In particular several large mounds which date from this time in the Brodgar area suggest that the people had elaborate funerary rites, and perhaps continued to use the Ring of Brodgar.

There are at least eight such barrows here, in some of which cists with cremation burials were found. Recent geophysical investigations in this area have shown a series of structures, some of which

may date from the Bronze Age, including a likely figure-of-eight house.

**Burnt Mounds** Although only a few Bronze Age houses have so far been excavated in Orkney, there are a large number of Burnt Mounds all over the islands, always near a fresh water source. These resulted from the use of heated stones to boil water, and first appear about 1200BC.

Typical burnt mound on the shore of the Loch of Stenness below Redland



The structure at Liddel in South Ronaldsay gives a clear picture of the design of such sites. With a lack of large pots or metal containers, stone tanks were filled with water, which was heated using stones from the nearby hearth. After use the charred and cracked stones were thrown onto a pile - the burnt mound.

The mounds are usually crescent-shaped and are probably the accumulation of "pot-boilers" built up around houses. Some of these mounds are quite large and have substantial buildings next to them. These may have been used for special occasions rather than everyday things. Generally it has been thought that the sites were used for cooking of large joints of meat for communal feasting, but it is also argued that they may have been Bronze Age bathhouses or saunas.

**Houses** The substantial house at Liddel has double-skinned walls and a flagstone floor with a large hearth and huge flagstone water trough. There are slabs set into the walls which are too small for beds, but just right for use as seats. Undecorated pots with flat bases were found as well as stone ploughshares and traces of cereal pollen. It seems this site was abandoned about 1000BC.

Another Bronze Age house was excavated at Tofts Ness on Sanday. This large round-house also had double-

skinned walls but, like later houses, had radial walls inside. It had a central hearth and well-made stone drains. Next to it a smaller building had a large stone tank. There are many mounds on Sanday, some of which may be Bronze Age barrows.

Recent excavations at the Links of Noltland on Westray have also exposed a Bronze Age house and outbuildings. These structures have been exposed by erosion of sand dunes.

**Dykes** Also probably dating from this period are the many *treb dykes* or *gairsties* which seem to divide up the land on several islands, including North Ronaldsay, Sanday and Westray. Although North Hoy is short on archaeological sites there is a fascinating collection of walls and structures under the peat in the Whaness area below the Ward Hill. Such sub-peat structures suggest that much remains to be discovered.

During this period there is

Liddel burnt mound, South Ronaldsay



Small burnt mound at Herston, South Ronaldsay

evidence from pollen and isotopic studies that the climate became cooler and wetter, making farming much harder in Orkney. The eruption of Hekla in Iceland in 1159BC may have caused a sudden change for the worse in the weather, and further encouraged the development of peat in areas previously available for farming, causing crop failure and a sudden decline in the population.

In such circumstances a hot bath would have been most welcome! Burnt mounds are very common in Orkney and may well have been a fashion of the time.

**BRONZE AGE TIME-LINE**

- BC
- c2000 Bronze Age in Orkney
- Sandfield Cist reused
- Climatic deterioration
- Beakers start to appear
- Peat starting to develop
- Knowes o' Trotty in use
- c.1200 Burnt Mounds appear
- 1159 Hekla erupts
- Sharp change in climate
- c.1000 Liddle house abandoned
- Tofts Ness house in use

**BRONZE AGE SITES TO VISIT**

- Stenness Tumuli at Brodgar
- Possible settlement
- Harray Knowes of Trotty
- Birsay Kirbuster Hill
- Ravie Hill
- Sandwick Sandfield cist
- Rousay Quandale burnt mound
- Holm of Faray Houses
- Westray Links of Noltland
- Papay Badcastle burnt mound
- N Ronaldsay Muckle Gairstay
- Sanday Elsness Barrows
- Tofts Ness house
- Treb Dykes
- Eday Heritage walk
- Whaness burnt Mound
- Auskerry burnt mound & houses
- S Ronaldsay Liddle house
- Hoy Whaness enclosures





*Aerial view of the Broch of Gurness showing the surrounding settlement, banks and ditches*

**BROCHS** (ON *Borg*, stronghold) are a type of building unique to Scotland, especially the north, and of which there are over 100 examples in Orkney. Most of the brochs which have been excavated were cleared out in the 19<sup>th</sup> century. There have been recent excavations of roundhouses at Quanterness (St Ola), Pierowall (Westray), Tofts Ness (Sanday) and the

Bu of Cairston (Stromness). major investigations and of the brochs at Howe (Stromness) and Old Scatness (Shetland), combined with a reappraisal of sites such as Gurness (Evie) and Midhowe (Rousay), have thrown much new light on the subject.

About 700BC a new type of house appeared, typified by those at Jarlshof and Old

Scatness in Shetland and in the Western Isles, but also now shown to have been built in Orkney. These were large and well-built, with occupation continuing for at least 500 years. They represent a sharp contrast to the preceding millennium, from which domestic building remains are sparse.

Unfortunately none of these interesting Orkney ruins is able to be viewed, as they were all back-filled after excavation. It may be that the appearance of the roundhouses reflects changes elsewhere in Scotland, which had reached Orkney. In particular the destruction excavation at Howe revealed much about the development of these interesting structures.

*Excavations at the Bu of Cairston revealed a large roundhouse*



Brochs were developed in the late Iron Age as the ultimate version of the roundhouse. The two Stromness excavations clearly show how there was a progressive evolution in design until the final massive round tower, with surrounding settlement, was developed. These towers were up to 20m in diameter, with walls up to 5m thick at the base. If Mousa in Shetland is typical, which it may not be, they may have been up to 14m high, the walls being hollow with an interior stairway.

The single entrance is usually guarded by cells, and would no doubt have had a substantial door. There is evidence of one or more floors in several, but whether these were galleries or not is not clear. Most brochs are situated in good defensive positions on the coast, and in Orkney usually amid prime agricultural land. This may be coincidence, as not only are there many inland brochs, but others probably occupied sites which are now modern farms.

That they were primarily defensive structures seems clear - the massive construction, ditches and ramparts were not just for show. However the presence of contemporary houses suggests that they were often the centre of a whole community. In cases where no domestic buildings surrounded them, as at The Bu, they must have been very imposing farmsteads.



*Aerial view of Howe Broch during excavation with surrounding settlement*



*Neolithic chambered cairn with a very finely-built passage under Howe Broch*

The radiocarbon dates from Bu of Cairston imply an early date of about 600BC, suggesting that roundhouses were already being developing into protobrochs by this time. One theory is that brochs are a

local product, which developed quickly from roundhouses, in themselves perhaps the true architectural innovation of the early Iron Age.

*The souterrain under the Howe Broch*







Borwick Broch is north of Yesnaby

Similarly the Howe excavation, during which the broch was totally destroyed, revealed a whole unexpected sequence of occupation from an early Iron Age roundhouse, itself built on the remains of a Neolithic tomb, through to the final broch at about 200BC or earlier.

Work at Old Scatness suggests that the broch there may date from 400BC, a much earlier date than previously envisaged for such structures. It appears that the brochs were in existence well before the Romans reached Scotland.

By AD100 the Bu roundhouse had fallen out of use,

Interior of Midhowe Broch, Rousay



perhaps after a disastrous fire, and the later houses were of much poorer quality. Although the Greek explorer, Pytheas is said to have circumnavigated Orkney about 325BC, no Mediterranean artefacts have been found from this early.

Roman objects were only present from about the 1<sup>st</sup> century AD, suggesting that the statement that Orkney was subdued by Agricola in AD83 may not be just legend. The discovery of fragments of Roman amphorae at Gurness and pottery at Midhowe could strengthen this view. These artefacts could just as easily have come to Orkney by way

of trade, perhaps after passing through several hands on the way.

The Broch of Gurness conveys a strong sense of grandeur, with its still-impressive tower, ramparts and house ruins. The site is one of the most impressive of all brochs. With possibly continuous occupation over nearly 1,000 years, it has Iron Age, Pictish and early Norse connections.

Little is known of the people who inhabited the brochs. They may have been descendants of the first settlers, who developed the society themselves, or they may have outside (Celtic?) ideas or incomers. Their boats would certainly have been very seaworthy, and they made contact with the Roman world according both to classical authors and artefacts found at the Brochs of Gurness and Howe.

**Earthhouses** Another interesting development starting about 600BC, is the Earthhouse, or *souterrain*. Typical examples are at Rennibister (Firth) and Grain (Hatston). These underground structures are thought to have been used for storage, and probably formed cellars to long-disappeared roundhouses. There was a similar structure under the broch at Howe. The superficial resemblance to chambered cairns is probably more to do with common materials than anything else.



Insect brooch from Howe Broch



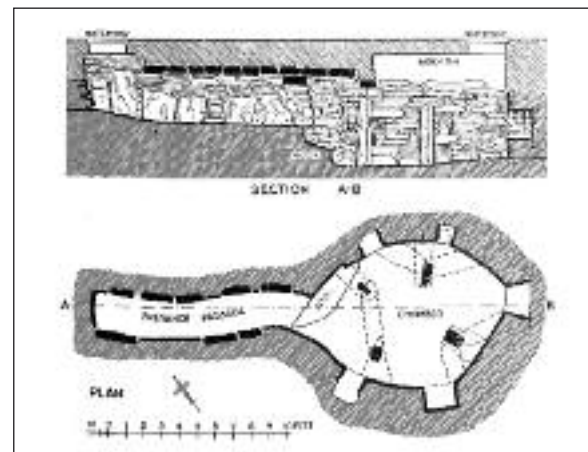
Tweezers from Howe Broch



Headed pin from Howe Broch

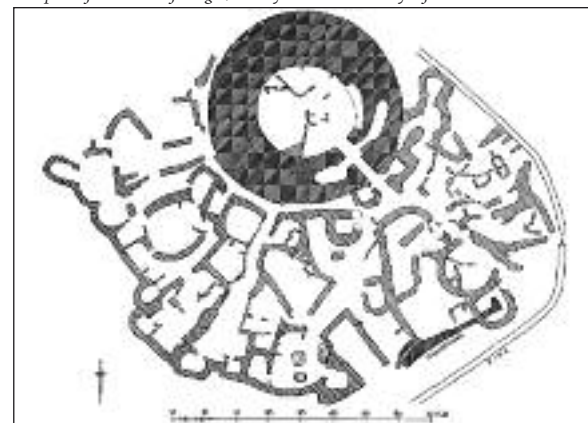


Woven heather from Howe Broch



Grain Earth House, a souterrain at Rennibister, Firth

Site plan of the Broch of Lingro, destroyed in the 1980s by a farmer



**IRON AGE TIMELINE**

- c.700 Iron Age begins
- Roundhouses appear
- Quanterness roundhouse
- Earliest dates at Howe
- c.600 Pierowall roundhouse
- Earth-houses appear
- Bu roundhouse earliest
- c.325 Pytheas' voyage
- c.300 Howe pre-broch
- c.200 Brochs fully developed
- Howe, Gurness, Midhowe
- early AD Roman artefacts in brochs
- c.100 Brochs in decline

**BROCHS TO VISIT**

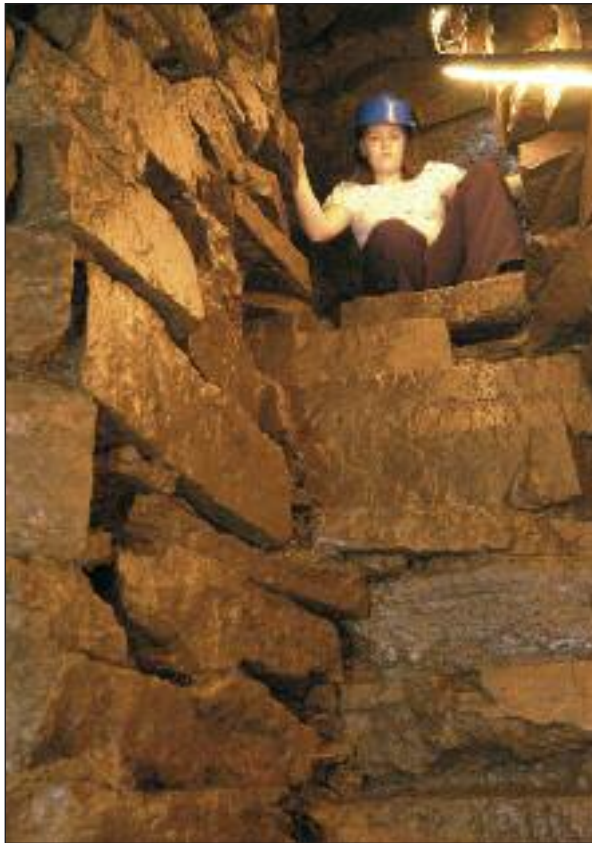
These are a small selection of the many broch sites in Orkney. Others are mentioned in the sections for each parish or island.

St Ola	Lingro (remains)
	Berstane
Firth	Finstown
	Ingashowe
Rendall	Tingwall
Evie	Gurness
	Burgar
Birsay	Oxtro
Sandwick	Borwick
	Stackrue
Stromness	Breckness
Deerness	Dingieshowe
	Eves Howe
Rousay	Midhowe
Westray	Queenahowe
	Burristae
N Ronaldsay	Burrian
Stronsay	Lamb Ness
	Baywest
Shapinsay	Burroughstone
Burray	Northfield
S Ronaldsay	Howe of Hoxa
Hoy	Braebuster
	Quoyness
S Walls	Hestigoe

**OTHER IRON AGE SITES TO VISIT**

St Ola	Grain Earth House
Harray	Russland
Firth	Rennibister Earth House
Sandwick	Brough of Bigging
Tankerness	Minehowe
Westray	Knowe of Skea
Eday	Linkataing roundhouse
Sanday	Taft's Ness
Shapinsay	Burroughston
S Ronaldsay	Castle of Burwick





Minehowe interior looking up lowers stairs from bottom

**Minehowe** The mound now known as Minehowe was first cleared out in 1946, but was reopened in 1999. It is a well-like stone structure with 29 steps, which was built into the

mound in Iron Age times. During the earlier excavations stone objects and bones were found, but they have not been preserved. Minehowe echoes similar stairways and wells in

some of the brochs, as well as souterrains but its purpose remains obscure.

The mound is covered by a deep ditch, with stone revetting and an entrance causeway on the west side. Major excavation work over the last few years have revealed that the area was important during the late Iron Age as a metalworking site. A furnace, kilns and crucibles associated with copper or bronze working as well as a steatite ingot mould have been found. The substantial furnace is high up on the mound perhaps to aid draught.

There were two burials, one of a young baby and another of a woman in her 20s. The woman was buried under the floor of the "metalworking workshop" while the building was still in use. The body was buried on its back with a piece of deer skull drilled with six holes and bronze rings on the feet. Iron Age burials are rare in Orkney, making this discovery particularly interesting.

Corbelled roof of lower chamber



Excavations in progress at Minehowe



**The Knowe of Skea** is situated on a small headland off Berstness, Westray and is in danger from coastal erosion. It contains a large round building with a rectangular interior and very thick walls. There were stone box beds and a central hearth but little pottery or refuse, suggesting that the place may have regularly been cleared out.

There are several associated small buildings, in which were buried over 100 individuals, including a large number of infants. Two of these structures were metalworking workshops similar to the one at Minehowe. A mould found in one matches a pin found with one of the skeletons, suggesting that the metalworking was in some way related to use of the place as a cemetery.

There may be a Neolithic chambered cairn under the large building, while Bronze Age burials were also present, suggesting that the site may have been used as a cemetery for a long time. The headland overlooks the Westray Firth with its strong tides and good



One of the many Iron Age burials at the Knowe of Skea, Westray



Knowe of Skea excavations, Westray

fishing, while the associated settlement is thought to lie behind the nearby farm of Langskaill. There is another probable chambered cairn on the top of nearby Berstness.

Iron Age burials have until now been almost unknown,

but work at these two sites has already shown that this may be due to lack of discovery rather than sites. Hitherto the period has been all about brochs and roundhouses, but now it may soon be possible to add more details to these people.

Minehowe Iron Age furnace



Sigurd Towrie

Sigurd Towrie

Metalworking workshop at Minehowe





Pictish stone, Brough of Birsay (replica)

in Orkney, to be followed by Norse domination by the end of the millennium.

The people of Orkney probably continued with their pastoral agriculture and fishing as previously, but much improved ships allowed more contact with the outside world, and certainly by the 8<sup>th</sup> century many families were living in remarkably good houses with a reasonable standard of life.

The Picts were first mentioned by Eumenius in AD 297, as *Picti*. Their ancestors were also earlier referred to by Pytheas as *Pretani*. He also called the headland facing Orkney *Cape Orcas*. The *Pretani* are said to be one of the first Celtic tribes to arrive in Britain and seem to be connected with the Picts. Celtic people thus seem to have been living in the north of Scotland at least as early as the fourth century BC.

Irish legend refers to the Picts as *Cruithni* - descendants of a king called Cruithne and his seven sons. They were a Celtic people who inhabited Northern and Eastern Scotland, who spoke a form of Brittonic Celtic, and who left numerous sculptured symbol stones, some houses and forts, but virtually no language apart from some place names. A form of Irish Ogam script was used, but most of the inscriptions have so far proved indecipherable, although this may soon change.

**THE PICTS** Although often called the Dark Ages, the first millennium AD was in fact a time of great change and development, with not

least the Roman invasion, the forceful spread of Christianity, the emergence of local, regional, and finally national power. The Pictish influence was felt

In AD43 Orkney leaders submitted to Claudius, perhaps at Colchester, and reference is made to *Islands of the Picts*. The Romans returned again in AD83 when Agricola specifically sent his fleet northwards after the Battle of Mons Graupius to subdue Orkney. The implication is that it was a regionally important centre of power, as the Romans would be very unlikely to waste their resources unless some threat was posed.

It is interesting that the decline of the brochs occurs at about the same time. This of course may all be Roman propaganda. The Romans wanted everyone else to believe that they had conquered everything. Without hard evidence these Classical references must be in doubt.

It is likely that the origins of the Picts in Orkney go at least as far back as the early Iron Age and perhaps further still, with continuity of settlement the main theme. The sea would have been very impor-

tant both for food and raw materials, as well as for communications. No doubt there were accomplished seamen and good boats. The incursions of the Romans at the height of the development of the Brochs culture may well have stimulated a common purpose between the various tribes, who then became what the Romans called the *Picti*, causing the tribal groupings of the 1<sup>st</sup> century to become the Picts of the 4<sup>th</sup> century.

Orkney has long been held to be *The Cradle of the Picts*, and there have been suggestions that Orkneymen were involved in slave trading and head hunting from early times. However the main Pictish centres of power were in the Inverness area, where they had a large fort at Burghead, and in Angus. The Picts in Orkney were probably descendants of the earlier population, enriched by immigrant blood.

The Pictish Kingdom gradually developed and became



Cross-incised stone, Brough of Birsay

more centralised, with a probable loss of power and prestige on the part of the Orkney chiefs. By St Columba's time the northern Picts were becoming Christian, but Orkney continued to be the subject of attacks from both Scots and Picts, suggesting that considerable local power remained. By the mid 8<sup>th</sup> century the Picts and Scots had

Cross-slab from St Boniface, Papay



Orkney Museum

Stone with carved feet, St Mary's Kirk, Burwick, South Ronaldsay







Reconstructed Pictish house from the entrance, Broch of Gurness

been unified under Kenneth mac Alpin and the Northern Isles were already under Norse threat.

There has been speculation that Christianity might have caused much of the downfall of Pictish power. Inheritance may have followed the female line, at least for the kings. Many of the beliefs of Pictish society as deduced from the symbol stones, may have been different to Christian thinking, implying that Christianity might have been quite alien to the Picts. Finally the increasing numbers of pagan Norse raiders and settlers could have exploited the disintegrating society, and taken over easily. Although the *Orkneyinga Saga*

makes no mention of the Picts, it nevertheless refers to the Pentland Firth as *Peetalands Fjordur*, Fjord of Pictland. In addition such names as *Pickiequoy* and *Quoypettie* suggest Picts. The vast majority of place names in Orkney are derived from Old Norse, but there remain several which may come from the Pictish language. These include *Airy*, *Knucker Hill*, *Kili Holm*, *Egilsay*, *Cantick Head*, and perhaps even the *Old Man* (of Hoy).

Old dialect words such as *dis* (small stack), *kro* (small enclosure), *keero* (native sheep), *rental* (as in riggarental) and *treb* (as in treb dyke) might come from the old Pictish lan-

guage. In addition the Moon was masculine in the Norn - the Old Norse language spoken in Orkney until a few hundred years ago. This is most unusual, and perhaps reflects the Pictish form. However equally well these forms may derive from later Scots Gaelic.

There are several *Papa* names (Papdale, Papa Westray, Papa Stronsay, Paplay), indicating sites where Christian *Papae* were living when the Norse arrived. No doubt there were so dubbed by the Vikings because of the presence of these monks. Many chapel sites predate the Viking settlement, including St Boniface and the Brough of Birsay, as well as a good number dedi-



Bone pins from Buckquoy

Quartz pebble with painted black spots



Razor found at Howe Broch, Stromness



Carding combs from Buckquoy



Spindle whorl from Buckquoy

cated to St Peter, suggesting that they may have been in use by the general population as well as by priests. Earlier Christian sites have also frequently been built over with new churches.

Recent excavations have revealed much about Pictish buildings. In particular at Buckquoy (Birsay) and at Skailll (Deerness) houses from the 7<sup>th</sup> & early 8<sup>th</sup> centuries show that some of the Picts lived in substantial dwellings, grew oats and bere, raised cattle, sheep and pigs. They also fished extensively offshore, showing that they had seaworthy boats. There was some communication with the outside world as shown by artefacts. The Brough of Birsay



Reconstructed Pictish house interior, Broch of Gurness

has considerable pre-Norse structures also, and is the only place where Pictish structures are now visible, apart from the Pictish houses at the Broch of Gurness.

The suggestion is that the Brough was both a monastic and secular site, where the *Papae* ministered to the spiri-

tual needs of the people, while skilled craftsmen dealt with the more material aspects. Evidence that the site was monastic is limited to a few artefacts, such as a Celtic bell fragment, but there is proof of considerable bronze casting operations during the 8<sup>th</sup> century in the area of the Pictish well. Many intricate moulds

Iron Age comb



Orkney Museum

Pictish-style comb from Buckquoy



Orkney Museum





Orkney Museum

Pictish Eagle found at the Knowe of Burrian, Harray in 1936



Pictish symbols on bone, Burray

Symbol stone removed from St Peter's Kirk, South Ronaldsay



were found, suggesting that Birsay may have been an important centre for craftsmen at that time. On the other hand the moulds may be nothing more than the products of an itinerant artisan.

Several symbol stones have been found in Orkney. The replica of the Birsay stone at the Brough is the most spectacular, but at least another eight have been found here. The spectacular Flotta alter cross is in Edinburgh, but some others have been lost. The Burrian Cross is in Edinburgh, but the Burrian Eagle may be seen in the Orkney Museum.

Several Ogam inscriptions have been found in Orkney. These enigmatic rune-like messages have so far defeated linguist's attempts at translation, but recently persuasive work suggests that many are in fact in Old Norse and can be logically transliterated.



RCAHMS

Carved bone from N Ronaldsay

**PICTISH SYMBOL STONES IN ORKNEY**

Kirkwall Orkney Museum  
Edinburgh National Museum

**ORIGINAL SOURCES**

Firth Redland  
Evie Aikerness Beach  
Birsay Brough of Birsay  
Harray Knowe of Burrian  
Holm Graemeshall  
Deerness Skaill  
Papay St Boniface  
N Ronaldsay Burrian Broch  
Papa Stronsay Old Church  
Burray Broch  
S Ronaldsay St Peter's Kirk  
Flotta Altar front  
South Walls Osmondwall



Excavations in progress at Skaill, Deerness on a Pictish farm

Ogam-inscribed stone from Pool in Sanday, transliterates to "RV AV ORC" which can be expanded to "HROLVR AV ORCNEIUM" or "Hrolf from the Orkneys"



**PICTISH SITES TO VISIT**

Kirkwall Orkney Museum  
Birsay Brough of Birsay  
Point of Buckquoy  
Burgar Broch  
Evie Broch of Gurness  
Sandwick Knowe of Verron  
Deerness Skaill  
Papay St Boniface  
St Tredwells  
Papa Stronsay St Nicholas Chapel  
N Ronaldsay Burrian Broch  
S Ronaldsay Old St Mary s  
St Peter's, East Side

**TIMELINE - PICTS**

- AD
- 43 Orkney said to submit to Claudius, *Islands of the Picts*
- 79 Agricola invades Scotland
- 83 Mons Graupius campaign
- 84 Roman fleet subdues Orkney
- c.100 Start of decline of brochs
- 122 Hadrian's Wall begun
- 142 Antonine Wall begun
- c.150 Ptolemy's map compiled from Agricola's campaign
- 208-211 Severus campaigns in Scotland
- 297 Eumenius mentions two tribes of *Picti* in North Britain
- Southern British pacified
- 306 Constantius campaigns
- 313 Romanized Britons in lowlands becoming Christian
- 367 Picts breach Hadrian's Wall
- c.400 Hadrian's Wall abandoned
- c.561 King Bridei receives Columba near Inverness, Orkney Pictish king present
- 564 Orkney hostages in Inverness to guarantee safe passage to missionaries
- 580 Dalriada expedition by sea against Orkney
- 600s First Orkney Pictish house sites known
- c.680 Symbol stones erected now till end of Pictish Kingdom
- 682 Pictish king Bridei mac Bile lays Orkney waste
- 685 Northumbrians defeated
- 715 Nechtan transfers bishopric from Iona to Northumbria
- St Boniface leads mission to his court, story of St Tredwell
- Establishment of St Peter churches, often near old brochs
- 741 Dalriada defeats Picts under King Oengus
- 742 Norsemen attack Pictish fort at Burghead
- late 700s Pictish hoards at Burgar Broch & St Ninian s Isle
- Norse raids increasing, settlement begun
- 800 Norse settlement in Orkney complete
- 839 Norsemen defeat King of Picts, Uuen, son of Oengus
- 843 Unification of Picts & Scots under Kenneth mac Alpin
- End of Pictish Kingdom