



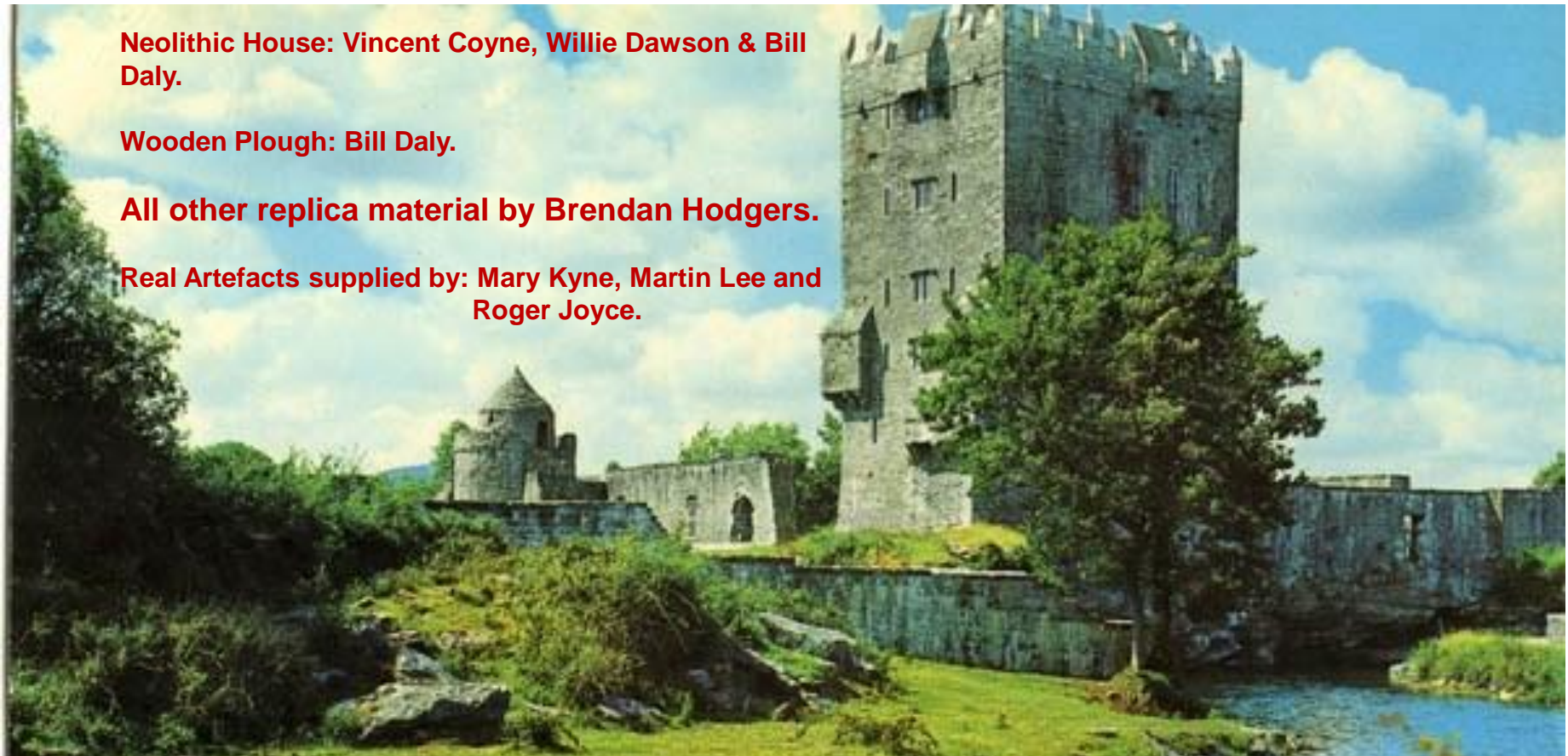
## Archaeological Replica Material from the Mesolithic, Neolithic and Bronze Ages.

**Neolithic House: Vincent Coyne, Willie Dawson & Bill Daly.**

**Wooden Plough: Bill Daly.**

**All other replica material by Brendan Hodgers.**

**Real Artefacts supplied by: Mary Kyne, Martin Lee and Royce Joye.**



*When I was gathering the research for the Mesolithic Presentation in 2018, I was a little perplexed. The Mesolithic period is very hard to explain to people for the first time, as there is usually nothing to see above the ground. I needed some replica archaeological material for the period, but where would I get them? I then thought of my old friend of nearly forty years, Brendan Hodgers from Ballymacoda in Co. Cork. Hodgie (as I call him) started to turn out some ornaments on a hand-made lathe a few years previously, and the quality of the finished articles were superb.*

*I e-mailed Hodgie a few rough sketches to see if he could help me out. Nearly three years later he has given the Oughterard Culture & Heritage Group the best part of 70 pieces of replica material covering the Mesolithic, Neolithic and Bronze Ages, and we are currently sketching/designing for the Iron Age/Early Christian period in 2022. The artefacts are of a superb quality and we will always be forever in his debt for enabling us to bring our Presentations to life by demonstrating these replica materials.*

*This output is all the more remarkable when you consider that Hodgie has been courageously battling MS for the past 12 years, and he also refuses to take any money for the magnificent and professional work he has completed for us.*



**Brendan Hodgers**



# The Timeline

Palaeolithic	12,000 – 8,000 BC
Mesolithic	8,000 – 4,000 BC
Neolithic	4,000 – 2,500 BC
Bronze Age	2,500 – 500 BC
Iron Age	500 BC – 400 AD

Early Christian	400 AD - 800 AD
Viking	800 AD – 1100 AD
Norman	1100 - 1600
Plantation	1600 – 1922
Independence	1922 -





# Coracle

A small, round, lightweight boat, which was moved with a broad-bladed paddle.

Basketry interior, covered by animal skins and animal fat for buoyancy.

Designed to be carried on a person's back with a chest strap.

The origin of the western 'currach'.

Mesolithic/Neolithic



# Arrowheads

Arrowheads made from stone by Mesolithic craftsmen.

These would be mounted on timber shafts to make spears or arrows for hunting.

Mesolithic/Neolithic



# Stone Axes

Shaped from stone in different sizes for different functions.

Mounted on timber handles and used mainly for forest clearances, logboat manufacturing and cutting meat.

Mesolithic/Neolithic



# Log Boat

These boats were usually made from oak, a single tree, and could be up to 50 feet in length.

Hollowed out with axes, then a fire was lit inside the boat, the embers cleared out, followed by more axe work.

Mesolithic/Neolithic



# Mesolithic/Neolithic

## Bone Needles

These were sharpened from animal bones, and thread was made from the internal animal gut.

This meant that people could now have clothes made to fit and a necessity to keep out the winter cold.





# Mesolithic/Neolithic

## Bow & Arrow

The Bow & Arrow was a fantastic revolution for hunting birds and animals.

The prey could now be picked off at longer distances and domesticated dogs used in retrieving game and hunting.



# Mesolithic/Neolithic

## Drying Frame

Each homestead would have about 2 or 3 drying frames on the go.

The skins would usually be from wild pig (boar) and when dry, would be used to make clothes for the family.



## Mesolithic/Neolithic

### Timber Fish Hooks

These would have been the first type of hooks used in fishing the streams, rivers and lakes.

The fishing line would be made from internal animal gut or from the sinewy lines inside the bark of trees.



# Fish Trap

This was a major fishing development.

Made from basketry, the two components were the 'pot' and 'funnel'.

They were set in the rivers and lakes overnight and guaranteed them fish by early morning when they woke up.

This was the fore runner of the modern day lobster pot.

## Mesolithic/Neolithic





# Flint Tools

These flints were found in the old Parish Priest's house in Killannin in 1971.

The larger one (stone axe) has now been mounted on a handle.

The smaller ones were used as scrapers.

Mesolithic/Neolithic



Real

## Mesolithic/Neolithic

### Fish Harpoon

This would have been used in shallow rivers, like the Owenriff in Oughterard.

It meant standing in the river for long periods with the harpoon poised to strike and wait for trout and eels to come along.



# Mesolithic

## Mesolithic House

This would have been the first type of house in Oughterard.

Uprights of birch posts with willow saplings wound around to keep the thatch/animal skins in place.

The usual size would be 18 feet in diameter and 22-27 feet high.

Small hearth on the inside to keep the family warm with the smoke escaping through an opening in the top.



# Mesolithic/Neolithic

## **Timber & Stone Spears**

Either made entirely from wood or with a stone point and a timber shaft.

These were used to engage wild animals at a close distance.





# Mesolithic

## Mesolithic Village

This is what a typical Mesolithic village would have looked like on the banks of the Owenriff or along the shores of Lough Corrib.

The country was covered in trees at this stage (8000 - 4000 BC) and rivers and lakes were the only navigation routes.



## Mesolithic/Neolithic

# Otter Board

This is an ancient fishing implement (now banned) which originated in the Mesolithic. Weighed down with stone it stood upright on the water.

A fishing line with timber hooks were attached and was used to carry the line out in the lake when the weather was too bad to take the log-boat or coracle out.



## Mesolithic/Neolithic

### **Paunching Knife**

This was a long sharp stone which was mounted on a short handle to paunch hare bellies and cut open the stomachs of salmon.



## Mesolithic/Neolithic

### Roasting Spit

Every household would have about two of these on the go.

A fire was lit underneath and the animal/fish was turned by means of a handle until the meat was cooked.





# Mesolithic

## Kitchen Midden

This was a fire that was lit outside the house, and while they were eating, they threw the bones of animals or the shells of fish into the fire.

The contents of kitchen middens are very valuable in relation to dating archaeological finds.



## Mesolithic/Neolithic

### Skinning Knife

A sharp stone which was mounted on a short handle, and used to remove the skin from wild animals after hunting.

The skins were then hung on a drying frame and turned into garments.



# Mesolithic

## Drinking Vessels

The main drink would have been water.

The garden weeds 'cleavers' and 'nettles' were also immersed in water and drank for refreshment and medicinal purposes.



# Bullroarer

This is a wind instrument that generates a sound similar to the roar of a bull.

They were used with timber drums and wooden reeds to generate noise at ceremonial occasions.

Neolithic



## Neolithic

### Digging Stick

A 'T' shaped pointed stick that was used to break up the ground in advance of planting seeds during the Neolithic (4000 -2500 BC).





# Neolithic

## Portal Dolmen

Usually a large flat capstone pointing upwards and resting on three boulders.

Mainly found in  
Northern Ireland,  
Waterford, Wexford,  
Wicklow and Galway.



# Neolithic

## Dr. Willis' Logboat

This is a model of a 30 foot Neolithic log-boat, made from a single tree, which was found where the Drimneen River enters Lough Corrib in the Bay beside Aughnacore Castle in 1865.

See letter from Dr. Robert Willis of Oughterard to Sir William Wilde (Oscar's father) announcing the find.



# Mesolithic/Neolithic

## Garment Fasteners

The animal skins were dried, cut , and then sewn with the bone needles to make garments.

These timber garment fasteners were then used to keep the garments in place, especially from the winds of winter.



# Neolithic

## Hand Plough

This would have been used before the introduction of the timber plough to open up a furrow in the ground prior to planting the grain seeds.

The heavier the stone head, the better, to go as deep as possible into the soil.



# Brachiopod

Found across from The Courthouse in Oughterard, these are fossilized brachiopods (sea shells) melted into limestone.

It is approximately 330 million years old.

At that time, Oughterard and Ireland was situated off the west coast of modern day Australia, and submerged beneath a warm, tropical and coral sea.



Real



# Neolithic

## Neolithic House

Neolithic houses were rectangular and were made from woven branches covered with mud (wattle & daub) or from timber poles placed upright that were dug slightly into the ground.

Roofs were made out of timber poles or beams that were covered with reed thatch.

The roofs had small holes to allow smoke through as the Neolithic had fires inside and cooked their meals indoors.



*You can lift off the roof to look inside!*

# Mesolithic

## Timber Plates

Hollowed out rectangular timber 'plates' would have been used to place the food on at meal times.

The ate wild pig, hare, salmon, trout, eel as well and sea and land birds. Shelled fish, plants, berries and fruit were also important in the diet.



# Neolithic

## Neolithic Pottery

Pottery was a very important development, as food like grain and dairy products could now be stored and kept fresh in large pottery vessels.

Smaller vessels were used for cooking and replaced timber as drinking vessels.

Pottery in Neolithic Ireland was generally made by coiling clay. Made into coils or long rolls, and then placing the coils on top of each other to create the pot.



# Neolithic

## Neolithic Village

A model of a Neolithic village with two families living in close proximity.

Cattle and sheep are penned in , and dry-stone walls make their first appearance.

Arable farming (wheat & barley) is also taking place and the ground has been ploughed in advance of setting the seeds.

Fishing was also continued as a safety net to compensate for bad weather and poor harvests.





# Neolithic

## Passage Tomb

Found mainly in Eastern and Northern Ireland and built by later Neolithic settlers, probably from western France.

Newgrange, Knowth and Dowth are examples in the Boyne valley in Co. Meath and also Carrowmore in Co. Sligo. They are renowned for megalithic art.



*You can lift off the top to see inside!*



# Neolithic

## Polished Stone Axe

This polished stone axe was found in Killannin in 1971.

In the Mesolithic (8000 – 4000 BC) flint was used as the sharpest material. In the Neolithic (4000 – 2500 BC) another piece of new technology was introduced to Ireland by the Neolithic settlers called 'porcellanite'. This rock is tougher than flint and more effective for making axes and digging tools.

Flint and porcellanite is only mined in Northern Ireland but is found all over Ireland and Britain, showing the extent of the export trade and connections during this period.

*New handle, first in about 4,000 years  
by Brendan Hodgers.*



# Mesolithic/Neolithic

## Pooka Board

This is an ancient fishing implement (now banned) which originated in the Mesolithic. It had a flat wooden surface and a sail fashioned from reed material

A fishing line with timber hooks were attached and was used to carry the line out in the lake when the weather was too bad to take the log-boat or coracle out.



# Neolithic

## Quern Stone

Once harvested, the wheat and barley was crushed between a flat hollow stone (quern stone) and a round stone. There may have been a series of Querns on the ground and people would have to work them for a few hours every day, This was hard on the lower back, and skeletons have been found during archaeological digs exhibiting lower back disk problems.



*Have a go at making some flour if you like!*

# Bronze Age

## Standing Stone

Possibly used as ancient field markers or part of an astronomy network to capture the sun and the moon.

They can be found as a single upright stone or as a row of stones.



# Stone Circle

Found mostly in Northern Ireland and in the Cork-Kerry region.

Mainly linked to astronomy in reverence to the power of the sun, moon and stars.

## Bronze Age





## Stone Hoes

A triangular and pointed heavy stone was mounted on to a handle and used to break up the ground.

Even when the timber plough was introduced, the hoes were still used to break up the ground as much as possible in advance of the timber plough being used.



## Neolithic

# Timber Flail

Once the grain stalk was cut below the ear, a flail made out of two pieces of wood, that could rotate independently, was used to remove the grain heads from the stalks.



# Mesolithic/Neolithic

## Timber Mallet

This mallet, made out of a single piece of wood, had a dual purpose.

It was used while out hunting if a wild animal had to be subdued.

It also had another use as a tenderizer to soften the meat prior to roasting.



# Neolithic

## Timber Rake

This was used as a harvesting tool to rake up surplus stalks and straw.

Timber rakes would have been used in certain parts of Ireland, especially the west, up to the 1960's.



# Neolithic

## Timber Sickle

Sickles were used to cut the corn from the stalk.

The Neolithic timber sickle was made by inserting small sharp stones into the underneath curved side of the timber handle.





# Neolithic/Bronze Age

## Wedge Tomb

Wedge Tombs are the primary type of megalithic tombs found in Ireland.

They are generally found in the West, the North and the South-West.

We have an example of a wedge tomb in Oughterard, directly behind the fish hatchery on the N59.



# Neolithic

## Wooden Plough (Ard)

The introduction of the timber plough was a major revolution. Initially 2 people pulled the plough with another person behind putting weight down on the share and steering.

As time progressed, the two people pulling the plough were replaced by trained oxen.



# Straparollus

Found in the townland of Rusheeney this is a fossilized straparollus (sea snail) melted into limestone.

It is approximately 359 to 330 million years old.

At that time, Oughterard and Ireland was situated off the west coast of modern day Australia, and submerged beneath a warm, tropical and coral sea.



Real

# Brachiopod 2

Found across from The Courthouse in Oughterard, these are fossilized brachiopods (sea shells) melted into limestone.

It is approximately 330 million years old.

At that time, Oughterard and Ireland was situated off the west coast of modern day Australia, and submerged beneath a warm, tropical and coral sea.



***This is an example of a double fossil. If you look at where I have the red marker, you will see a wood louse fossilized onto a brachiopod.***

***Wood lice originally lived in the seas and are closely related to the crab and lobster families.***



## Neolithic Ploughing

This is an example of Neolithic land being used for the dual purpose of arable and pastoral farming.

The timber plough (Ard) is being pulled by a team of oxen that has been trained for this purpose.







# Neolithic Drum

The drum would have been the most important 'noise maker' at Neolithic ceremonies. There could be as many as 20 people playing the drums simultaneously. The external shell was made of pottery, and the skin, pulled very tight, was more than likely from goat. Played underneath the arm or between the legs, and similar enough to modern day bongo drums.

# Neolithic Bone Flute



The Bone Flute would have complimented the 'noise making' along with the drum and bullroarer.

Usually made from the long bone of birds like the Crane and Swan.

# Cist Grave (Bronze Age)



Cover can be removed!

Burial practices changed in the Bronze age to what is called a 'Cist Grave' where a rectangular hole was dug in the ground, and then lined on the bottom and sides with stone slabs.

The inhumated (burial) remains were placed in a crouched position, and if cremated were placed upside down in a burial urn.

A small food vessel was also placed in the Cist to provide food for the afterlife journey.

A flat capstone was then put over the top and covered with soil.



# Cist Grave (Aerial View) (Bronze Age)



Burial practices changed in the Bronze age to what is called a 'Cist Grave' where a rectangular hole was dug in the ground, and then lined on the bottom and sides with stone slabs.

The inhumated (burial) remains were placed in a crouched position, and if cremated were placed upside down in a burial urn.

A small food vessel was also placed in the Cist to provide food for the afterlife journey.

A flat capstone was then put over the top and covered with soil.

# Constructing a Dolmen – (Neolithic)

The 3 upright stones were put into position using wooden poles.



A sloping bank of sand/soil was then placed around the upright stones.

The capstone was then dragged up with ropes on circular wooden poles and placed on top of the 3 upright stones.

The bank of sand/stone was then removed and a palisade of timber poles built around the monument. This was then covered on the sides and top with earth and sods.

After an amount of time the internal poles would have rotted away. And then, over thousands of years, the earthen bank would have been destroyed by the elements to give us the bare rock monuments we see today.



# Gold Jewellery – (Bronze Age)



There were no Gold Mines in Ireland during the Bronze age that we know of. However, there was an amount of what we call 'alluvial gold' found by panning in rivers and then turned into the type of fashionable items we see displayed here. During the Bronze Age period, Ireland was famed throughout Britain and Western Europe for exporting gold in the raw state or finished as intricate items of jewellery and status. The Lunula (half-moon shaped) piece became the most famous.

# Deer –Trap (Bronze Age)



This is an ingenious little trap and some examples have been uncovered in the East of the Country.

A small hole was dug in the ground, and the trap placed into it , with the top slightly below the level of the ground. This was then covered with leaves and grass and secured to a nearby tree with ropes.



Sprung!

The Hunters, knowing the deer trackways, would be hiding nearby and would move in when the unlucky deer sprung the trap.

# Bronze Age House



Houses in the Irish Bronze Age were usually circular with a wattle & daub (a mixture of twigs and mud) wall.

The wall could also be dry stone with a thatch or turfed roof at about 45 degrees with a single entrance.

The round shape may have been preferred to deflect wind as storms would have been prevalent during these times.

# URN (Bronze Age)



A pottery vessel used to preserve the ashes of the cremated dead.

The ashes/bone would be placed inside the urn after the cremation ceremony and then turned upside-down inside the Cist Grave.



# Cairn (Bronze Age)



A Cairn is a man made pile of stones.

They may have been used for a variety of purposes, including Burial Mounds, Ceremonial Centres or Land Markers.

Cist Graves have been found within some excavated Cairns.



# Sickles (Bronze Age)



Sickles, usually made of wood or bone, would have been used in the previous Neolithic age.

In the Bronze Age , the cutting edge would have been made of bronze, mounted on a timber handle.

These bronze implements would now be much more durable than the previous ones made of stone and bone.

This new and enhanced design increased the productivity of the wheat and barley harvesting, and the tools would have lasted far longer.

# Baby's Feeding Bottle - Neolithic



Breast feeding would have been the norm during the prehistoric periods and beyond.

However, there were circumstances when the babies had to be fed through a bottle.

This is an example of such a feeding bottle, where the milk from the goat or cow would be fed through the top and the bottom exit would be placed in the baby's mouth.

# Gold Jewellery – Bronze Age



There were no Gold Mines in Ireland during the Bronze age that we know of. However, there was an amount of what we call 'alluvial gold' found by panning in rivers and then turned into the type of fashionable items we see displayed here. During the Bronze Age period, Ireland was famed throughout Britain and Western Europe for exporting gold in the raw state or finished as intricate items of jewellery and status.

# Bronze Age Weapons



Copper was the first to be used in the transition to metal, and then they found by adding about 20% tin to 80% copper they were able to get a material called bronze which was much harder and durable. There were plentiful supplies of copper in Ireland, but we had no tin, and the nearest place we could get this was in Cornwall. Weapons and farm implements (axes) made of bronze became valued and prized which eventually led to the emergence of a ruling class the stratification of society.

# Cairn – modelled on Cairn Seefin



A Cairn is a man made pile of stones.

They may have been used for a variety of purposes, including Burial Mounds, Ceremonial Centres or Land Markers.

Cist Graves have been found within some excavated Cairns.

**Cairn Seefin** is 6 miles outside Oughterard in the woods of Derroura on the Clifden road. From its lofty position, it keeps a watchful eye over Lough Corrib and the surrounding landscape.



# Smelting – Bronze Age



Smelting is the process whereby lumps of copper and tin are subjected to very high degrees of heat in a Furnace and converted into an extremely hot liquid.

Casts made of stone or timber for the item that is to be manufactured are made in advance. The molten material is poured (carefully) into the casts and allowed to cool.

High degrees of heat in the Furnace are maintained by pumping air through a bellows, which can be seen on the top right-hand corner of the image. These bellows were usually made from cow hide.

# Spear Head – Bronze Age



Bronze was made by heating roughly 80% copper and 20% tin together. As the two metals melted they combined to form liquid bronze. Spears would have been used for hunting and also for protection. These new and improved weapons gave rise to a Warrior class, and the beginnings of Irish Folklore.

# Fulacht Fiadh (Bronze Age)



When they needed a change from roasting to boiling meat, the Fulacht Fiadh came into use.

A rectangular pit was dug in the ground and lined with timber or stone slabs, and then filled with water.

Stones were heated in a nearby fire, and then dropped into the water in the pit to bring it to the boil.

The meat was wrapped in straw and dropped into the boiling water.

Fulacht Fiadh may also have been used for beer making and bathing.

# Cloosh Polished Stone Axe (Neolithic)



This is a beautiful example of a Neolithic Polished Stone Axe. It was found by Martin Lee from Cloosh, and the Oughterard Heritage Group was made aware of it in November 2019.

It is a real artefact and was used by Neolithic people around this locality over 4,000 years ago. It has taken on a brownish colour by having been immersed in bog water over many thousands of years.

Polished Axes were prized, and the polish was achieved by a constant rubbing of the axe with stones until the shine was achieved.

The Axe itself is either made from flint or porcellanite, which is only found in the North of Ireland.

Real



# Bronze Age House (On Stilts)



Houses in the Irish Bronze Age were usually circular with a wattle & daub (a mixture of twigs and mud) wall.

The wall could also be dry stone with a thatch or turfed roof at about 45 degrees with a single entrance.

The round shape may have been preferred to deflect wind as storms would have been prevalent during these times.

Houses may have been constructed on stilts to combat difficult climatic conditions such as incessant rainfall. They were also possibly constructed on wet and boggy areas to offer a measure of protection against raiding.



# Hay Field (Neolithic)



The Neolithic people would have realised very early on that grass would have to be grown and harvested in the summer and kept to feed the cattle, sheep and goats in the winter. Hay was a very important source of winter feed when there was little else available during the long hard Irish winters.

# Vessel for heating water - Neolithic



Much of the decoration of Bronze Age Pottery for Northern Europe is based on a basket-work prototype from the Neolithic.

A basket to carry water was originally made from wicker, which leaked.

Early types had a coating of moss on the inside and then also daubed with clay on the inside.

The basket was put on the fire to heat the water, the fire burned away the wood and burned the clay to produce a pottery vessel.

They now had a revolutionary storage vessel for grain and liquids.

# Food Vessel – Bronze Age



Food Vessels are small pottery containers which were used for everyday food preparation and dining.

However, they also had another use.

They are usually found in Cist Graves accompanying the Cinerary Urns.

The original school of thought was that food was put into these at the Burial Ceremony to accompany the dead person on the journey to the afterlife.

However, traces of food are rarely found in them during excavation, which leads some Archaeologists to think it might have been burned off during the ceremony and prior to the sealing of the Cist Grave.

# Large Harpoon (Mesolithic)



This would have been used in shallow rivers, like the Owenriff in Oughterard.

It meant standing in the river for long periods with the harpoon poised to strike and wait for trout and eels to come along.

This larger type harpoon was probably used for bigger fish like salmon and pike when they were swimming in shallow waters.



# Copper Mining (Bronze Age)



*The first major Copper Mine in the British Isles emerged at Ross Island in South-West Ireland around 4,400 years ago.*

Ireland was rich in copper deposits in the Bronze Age period. The main areas of mining were coastal areas in Waterford, West Cork, Kerry and the western shores of Lough Corrib.

The copper, usually a greenish malachite, was contained inside the stones and had to be broken out.

If the deposits were on the outside, a fire was lit to heat the rock and then cold water thrown on it to shatter.

Within the mines, the passages were narrow and constricted and it looks like children were sent into the Mines to hammer away at the internal walls.



# Crannóg – Bronze Age



A Crannóg is typically a partially or entirely artificial island, usually built in lakes and estuarine waters.

Underwater zig-zag passageways were usually constructed under the water surface, connecting the Crannóg to the mainland.

There is an example of a Crannóg on Lough Naneevin near Roscahill, which was excavated in the 1860's.

# Stone Maul



For the breaking of rocks in Mining Operations, massive Stone Mauls were used. These are egg shaped blocks of grit stone (beach pebbles) with a groove circled out of the stone.

A flexible sapling (willow) is bent in the groove around the stone and bound at the end. A wooden rod can be inserted between the willow saplings to provide a degree of strength in the handle.

# Cured Deer Skin Neolithic



Animal skins were very important to our ancestors And served a variety of purposes such as house covering and clothing. This replica skin was prepared as follows by Vincent Coyne.

Skin and remove excess meat.

Soak in salt water for a week

Dry in the outdoors for three weeks.

Place in sawdust/wood shavings for a week.

Dry in the outdoors for a further two weeks.

Real

# Thanks for your time.

*'Before I did the Mesolithic Oughterard Presentation for the local Primary Schools during May and June 2018, I wasn't quite sure what to expect. I thought, maybe, with the advent of gaming, mobile phone and tablet technology that the schoolchildren would not have much of an interest in this sort of thing.*

*How wrong I was!*

*The children were highly attentive during the Presentations, asked me an amount of interesting questions, and could not wait to get a feel of the replicated material at the end, especially on the fine days when we were able to go outside. It screams out to me now that we still have a captive audience for Heritage in the Primary Schools if we present the material in a simple and straightforward way, and also have the physical replicated material on hand to make it come alive for them'.*

**Bill Daly, Oughterard Culture and Heritage Group.**

