Scotland

THE BARE BONES TOOLKIT

Dig deeper into the Early Neolithic chambered cairns of the North Channel



Forestry and Land Scotland | Coilltearachd agus Fearann Alba

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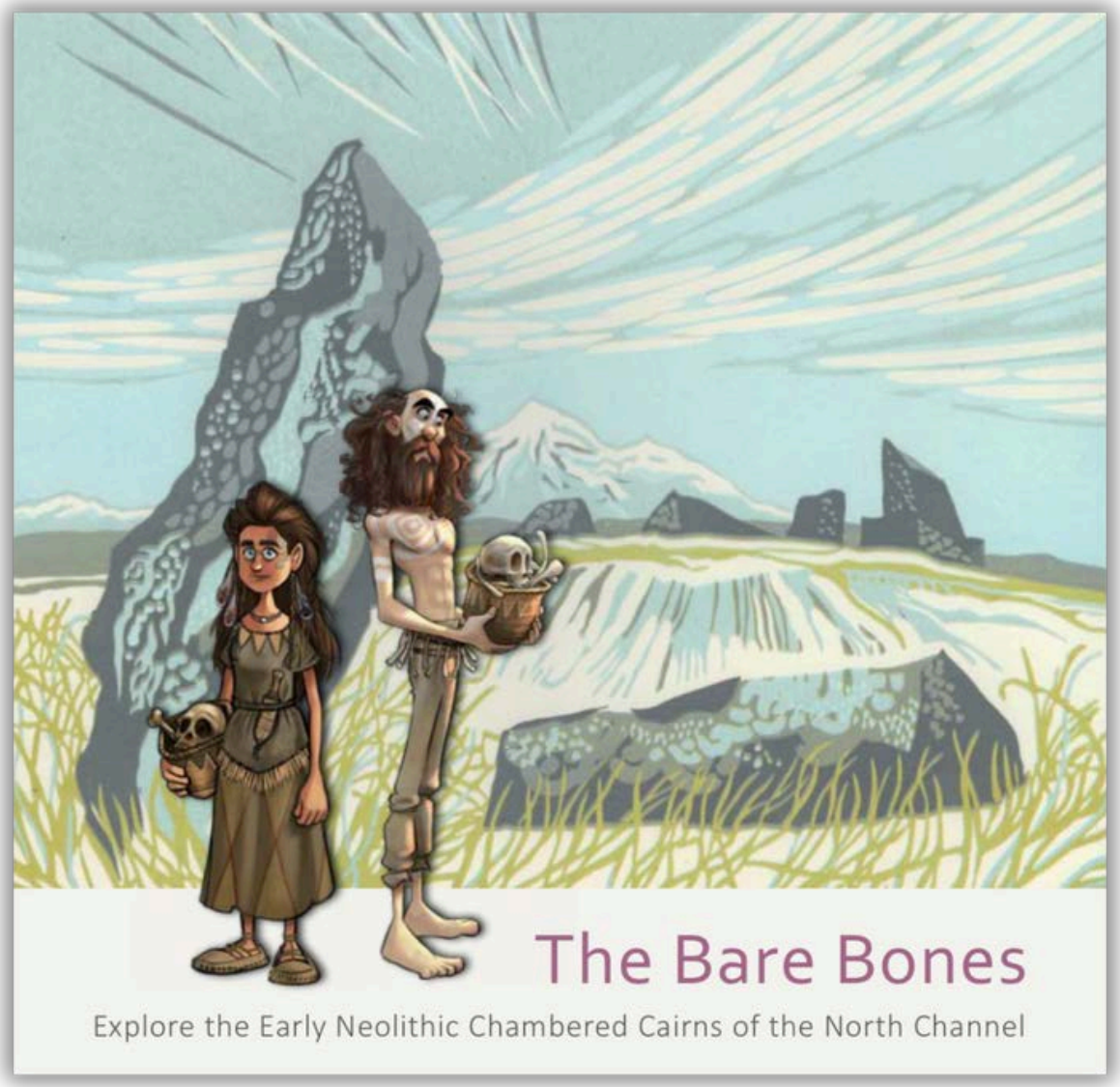


The Bare Bones Toolkit

This toolkit was inspired by The Bare Bones, a learning resource from Forestry and Land Scotland written by Gavin Lindsay, Matt Ritchie and Alison Sheridan.

The toolkit encourages learners of all ages to dig deeper into the story of the Early Neolithic Chambered Cairns of the North Channel.

Whether you're a primary school teacher, a youth group leader or a community archaeology group planning an event, this toolkit has objects and artefacts to engage participants of all ages.



The Bare Bones

The Bare Bones - what's it all about?

The descendants of the early Neolithic (New Stone Age) pioneers who arrived in the Atlantic-facing areas of south-west Scotland and the north of Ireland in the centuries after 4000 BC built megalithic monuments known as Clyde cairns and court tombs respectively.

Their architecture suggests their use both as a place for the dead, where people placed the deceased within the chambers inside the cairn; and as a place for the living, where people could pay their respects within the forecourt outside the cairn. They remain an important connection between people and land – places to remember, then and now.'

from The Bare Bones

Discover the full story in The Bare Bones Book, explore drone photography, modern laser scan survey, creative archaeological visualisation and the re-evaluation of several unpublished excavations.

Take a look at **The Bare Bones** on Forestry and Land Scotland's website **here**.

https://forestryandland.gov.scot/what-we-do/biodiversity-and-conservation/historic-environment-conservation/learning/the-bare-bones



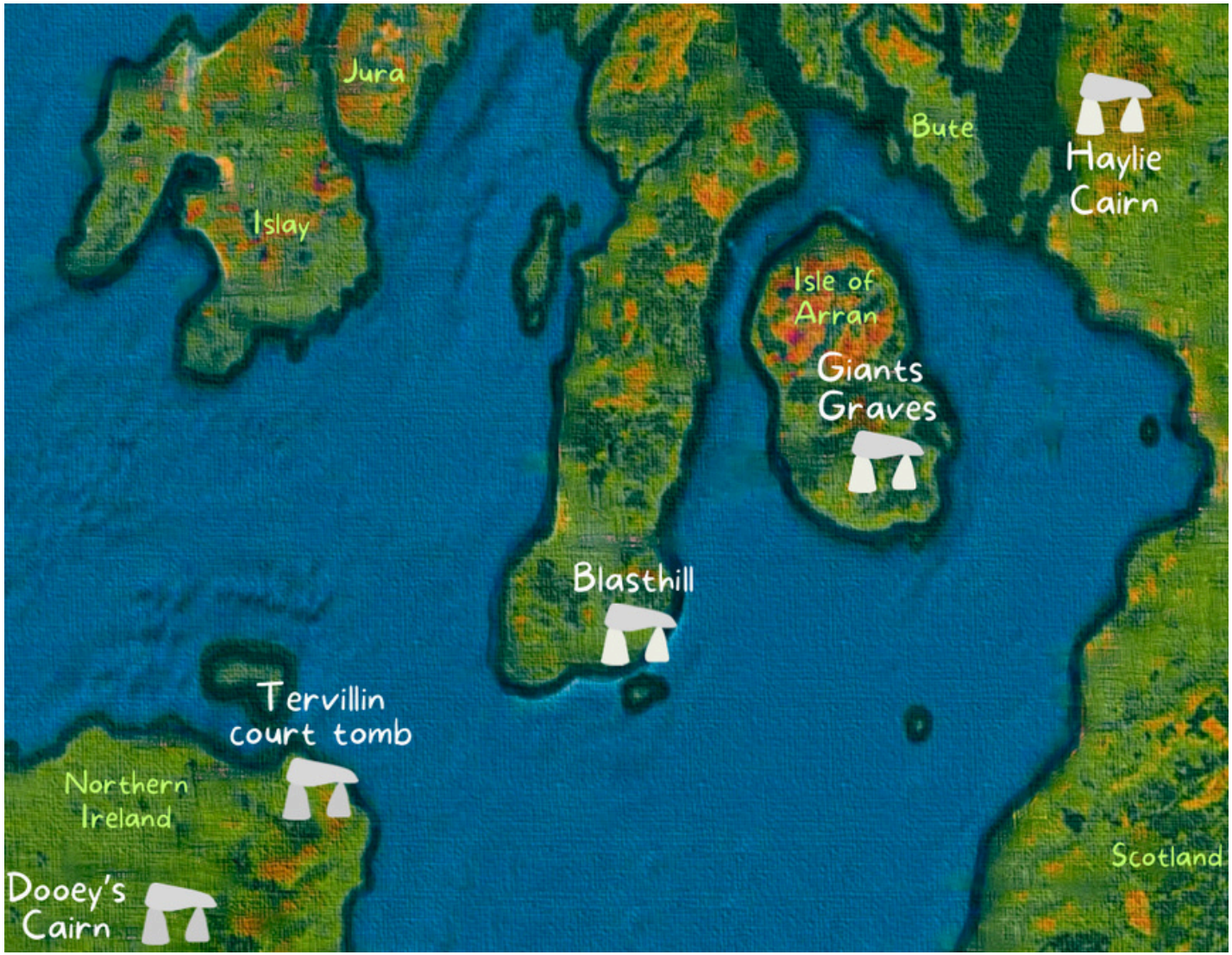
Creating the Toolkits

To create these intergenerational toolkits, Archaeology Scotland worked with school pupils on the Isle of Arran, North Ayrshire Junior Rangers in Largs and community archaeology and heritage groups in County Antrim.

Local Clyde cairns and court tombs were explored with the groups (see map).

Local museums in each location also contributed.

In total, 185 participants helped shape this toolkit.



Creating the Intergenerational Toolkits

with children

Pupils from Lamlash Primary School on the Isle of Arran participated in a Bare Bones co-design workshop.

Using visual materials and replica artefacts, we explored local Clyde cairns, the Giants Graves. The children also shared their own memories of visiting the site.

They trialled activities which helped them explore some of the themes and artefacts in more depth before giving their feedback and adding their own suggestions.

All participating pupils achieved Heritage Hero Awards.

Many thanks to Arran Heritage Museum who have allowed us to include some of the museum's artefacts in the toolkits.



Chambered Cairn models



Story Dice - Neolithic myth making



Making Neolithic bowls



Neolithic wildlife game

Creating the Intergenerational Toolkits

with young people



North Ayrshire Junior Rangers joined Archaeology Scotland's learning team in Largs to explore Haylie Cairn and investigate Neolithic artefacts found near the site with Richard from Largs and District Museum. The young people also took part in co-design activities which informed the contents of the toolkits. For their work on this project the Junior Rangers achieved Heritage Hero Awards. Watch a short film about the workshop **here**.
https://www.youtube.com/watch?v=S4urE1_0yCc

Following the workshop and visit to Haylie Cairn, Junior Ranger Emma was inspired to write about the experience. Read her beautiful and moving piece on the next page.







Artefacts by Emma Neil

Holding ancient artefacts in my hands is like holding a tangible link to the past, a bridge connecting me to the lives of those who came before. Each artefact tells a story, whispering secrets of the people who crafted it, cherished it, and eventually left it behind. As I run my fingers over the weathered surface of an arrowhead or trace the intricate patterns of the Towie Stone, I can't help but feel a sense of awe and reverence for the individuals who once held these same objects in their hands.



There's something profoundly humbling about the experience, a reminder of the vast expanse of time and the countless generations that have come and gone. It's easy to get caught up in the hustle and bustle of modern life, but holding these artefacts grounds me, reminding me of the enduring legacy of human civilization.

Each artefact is a window into the past, offering glimpses of the daily lives, beliefs, and aspirations of ancient peoples. A simple stone axe might speak volumes about the agricultural practices of a bygone era, while a delicate piece of clay pottery hints at the social status and cultural values of its earlier owner. Even the most mundane objects take on new significance when viewed through the lens of history, becoming portals through which, we can glimpse the rich tapestry of human experience.

But it's not just the artefacts themselves that captivate me; it's also the sense of connection that comes from holding them in my hands. As I marvel at the skill and craftsmanship of ancient artisans, I can't help but feel a kinship with those who came before. In that moment, I am not just a passive observer of history; I am a participant, linked to the past by the simple act of touch.

Of course, there's also an element of mystery to the experience. No matter how much we learn about ancient civilizations, there will always be gaps in our knowledge, questions that still are unanswered. Holding an artefact in my hands, I am acutely aware of the vastness of the unknown, the countless stories that have been lost to time.

But perhaps that's part of the allure. In a world where so much is fleeting and ephemeral, there's something comforting about the enduring presence of these ancient artefacts. They remind us that, no matter how much the world may change, the human spirit remains constant, bound by a shared heritage that stretches back to the dawn of time.

In the end, holding ancient artefacts in my hands is a humbling and profoundly moving experience. It's a reminder of the fragility of human existence, but also of its resilience and enduring beauty. And as I return these artefacts to their rightful place, I do so with a renewed sense of appreciation for the remarkable journey that has brought us to where we are today.

Creating the Intergenerational Toolkits

with adults

For the next workshop we crossed the North Channel to Northern Ireland to explore the Neolithic court tombs of County Antrim with Causeway Coast and Glens Heritage Trust, Ballintoy Archaeological & Historical Society, Glens of Antrim Historical Society, Friends of Ballycastle Museum and members of the local community.

The day began in a packed Ballintoy Parish Hall with informative talks from Dr Alison Sheridan, Dr Harry Welsh and Dr Gavin MacGregor.

Following the talks participants embarked on a Neolithic field trip led by Grace McAllister from Causeway Coast and Glens Heritage Trust.

First stop on the fieldtrip was The Druid's Stone, not a court tomb but an iconic local passage tomb, located above Ballintoy looking out over White Park Bay. The group then moved on to Murlough Bay, the site of Tervillin Court Tomb. Ulster Archaeological Society, led by Harry Welsh, carried out a survey of this site in 2008.

A final gathering in the hall offered everyone an opportunity to discuss the sites, share ideas and give feedback on the proposed Bare Bones Toolkits.

In the following days, 101 pupils from Ballycastle Integrated Primary School took part in four workshops, exploring court tombs and trialling activities from the toolkit.



Talks in Ballintoy Parish Hall



The Druid's Stone



Tervillin Court Tomb

What's in the Toolkit?

The toolkit contains artefacts (real Neolithic objects), replicas (copies of Neolithic objects) and lots of games and activities.
The Neolithic (New Stone Age): 4,100BC - 2,500BC

- Story dice
- Wildlife in Neolithic Scotland game
- Mystery Objects: carved stone ball and bead
- Haylie Cairn: building blocks
- Geology: flint, pitchstone, porcellanite and quartz
- Equipment: artefact recording
- Bone Detectives activity
- Pottery: Blasthill bowl replica, cord making kit, quartz
- Neolithic Replicas
- Neolithic Artefacts
- Chambered cairn model



Story Dice

Activity



What you need

- story dice
- a partner or an audience
- lots of imagination!



To make your myth

Roll the **who? where?** and **what?** dice.
The character(s), place, animal, food and artefacts are the building blocks for your Neolithic story or myth.

Take a moment to think about the story you'll create using the pictures on the dice as inspiration. Tell your story to your partner.

Now it's your partner's turn to roll the dice and create a story.

Myths and stories can then be expanded on, written out or drawn as comic strips.

Find out more about some of the Neolithic characters in **The First Foresters learning resource**.
https://forestryandland.gov.scot/what-we-do/biodiversity-and-conservation/historic-environment-conservation/learning/the-first-foresters

Wildlife in Neolithic Scotland

Game

What animals lived in Neolithic Scotland?
Find out when you play this fun, noisy game!



How to play

Suitable for ages 5+

- each player takes a colour pack
- shuffle your pack
- hold your pack face down

Start

Turn your pack over

Shout the phrase on the card

Find another player with the same card and complete the action

Throw that card away (onto the table)

Repeat until one player has no cards.

If that's you, you're the winner!

Mystery Objects

Towie Ball

Reproduction



This is a copy of the Towie Ball, a beautiful Neolithic carved stone sphere that dates back over 5000 years. The original was made of a black, fine-grained stone, It has four discs or knobs, three are intricately carved, the fourth is blank. More than 430 examples of similar objects are known, the majority of which were found in Aberdeenshire, where the Towie ball was found. The carvings on the Towie Ball have been compared to designs on stones in Newgrange Neolithic passage tomb in Ireland.

Archaeologists don't know what carved stone balls were used for. What do you think?

How was a carved stone ball was made? **watch here**

Knowth Bead

Reproduction

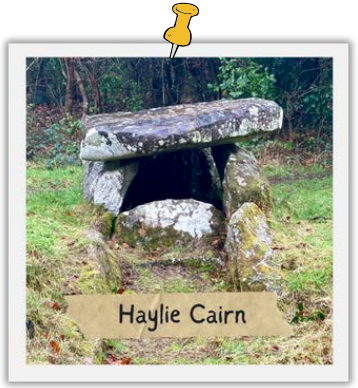


This is a copy of a small bead found in the passage tomb at Knowth in Ireland. The bead looks like a miniature version of a carved stone ball.

Although these objects are thought to be later in date than the Bare Bones burial monuments, they highlight the ongoing connections across the North Channel throughout the Neolithic.

Build Haylie Cairn

Activity



Block Play

Suitable for ages 2+

Create Neolithic monuments using these organic, natural wooden 'stones' inspired by prehistoric building materials.

- Block play encourages sorting, stacking and the development of fine motor skills.
- Different sizes help children understand weight, gravity and relationships.

Can you build Haylie Cairn? Find out more about Haylie Cairn on Canmore.

https://canmore.org.uk/site/41155/margarets-law-haylie



Artefact Recording

Activity





equipment drawer

What you need:

- tape measure or ruler
- pencil
- folding magnifier (for smaller objects)
- photo scale
- camera
- artefact recording forms



Record the objects and create a museum display

Using the equipment and the artefact recording form, create an accurate record of the replicas and artefacts.

Make a mini museum display using the objects and pictures in the toolkit. You can use the information from your forms to create museum labels.

ARTEFACT RECORDING FORM

Draw your object here

What material is the object made from?

What size is the object? (measure in cm)

What colour is the object?

What might the object be used for?

What does the object tell you about the person who once owned or used it?

Is there anything else you noticed?

Materials

geology drawer

The links across the North Channel are reflected in the objects that people used. Axeheads made from the distinctive, bluish-grey speckled porcellanite quarried in County Antrim were taken to south-west Scotland and beyond. Good quality flint from around the Antrim coast, and artefacts made from this flint, were taken to south-west Scotland, while pitchstone – a volcanic glass – from the Isle of Arran was taken in the opposite direction to Ireland.

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porcellanite



Porcellanite is a very hard, dense rock.

Where? Porcellanite can only be found in two locations in Ireland; at Tievebulliagh Mountain in County Antrim and on Rathlin Island.

What? Mostly used to make axeheads. Polished porcellanite axes may have been ceremonial objects rather than practical tools.

flint



Flint is a type of quartz that is formed within sedimentary rocks like chalk and limestone.

Where? In Scotland, flint is usually only found as beach pebbles. The main inland deposits are in Aberdeenshire. Good quality flint is found in County Antrim.

What? Used to make axeheads, arrowheads, scrapers, blades and other artefacts.



Antrim flint arrowhead (replica)

pitchstone



Pitchstone is a dark, glassy, volcanic rock.

Where? Isle of Arran.

What? Used to make axeheads, scrapers, arrowheads and other artefacts.



pitchstone arrowhead (replica)

quartz



Quartz is one of the most common minerals in the Earth's crust.

Where? Commonly found in many areas.

What? Used to make axeheads, scrapers, arrowheads and other artefacts.



worked quartz (artefact)

Bone Detectives

Activity

bone detectives drawer





What you need:

- bone detective cards
- bone recording form
- knowledge toolkit
- skeleton model

Have you got what it takes to be an Osteoarchaeologist?

Osteoarchaeologists study human skeletons from archaeological excavations. Skeletons can tell us a lot about the size, health, diet and lifestyle of people in the past. Osteoarchaeologists gather evidence using a number of scientific techniques including chemical analysis and by measuring the bones and teeth.

Find out more in ***The Bare Bones pages 85-107***

Download the **Bone Detectives** resources **here**

Neolithic Pottery

Replica

Blasthill bowl fragment





The Blasthill Bowl (left), Argyll and Bute Council/Campbeltown Museum collections. Replica made by Graham Taylor

Neolithic Bowl

Date: Copy of an Early Neolithic bowl

Where: This pot fragment is a replica of a small pottery bowl found during the excavation of an Early Neolithic chambered cairn at Blasthill on the southern tip of Kintyre in 2009.

How: The decoration on this pot was created by pressing cord into the soft clay. The motifs around the pot look like rainbows.

This small pot can tell us a lot about migration and shared ideas in the Early Neolithic. Find out more: ***The Bare Bones page 71***

Neolithic Pottery

Activity

What you need:



- clay
- rock crystal quartz
- string or cord making kit





Take a closer look at the pattern on the replica Blasthill Bowl. A similar early Neolithic bowl was found in the chambered cairn at Achnacreeebeag in Argyll and Bute.

3D models of the **Balsthill Bowl** and **Achnacreebeag Bowl** can be found on the Sketchfab website.

A small rock crystal fragment was also found in the Achnacreebeag chambered cairn. Rock crystal is a type of clear, colourless quartz.

On a sunny day, hold the rock crystal up to the window and let the sun shine through it. The crystal refracts the light creating a rainbow on the other side of the room.

Make your own pinch or coil pot and try to create rainbow patterns by pressing string or cord into the soft clay.

You can make your own plant fibre cordage using the kit in this Bare Bones toolkit. Experimental Archaeologist Sally Pointer created this kit and has also produced a short film explaining how to make 'prehistoric' cordage. Watch **here**
https://www.youtube.com/watch?v=62PvfIROxDg

Finds from the Giants' Graves, Arran

Replicas

Neolithic replicas

Flint knife and leaf shaped arrowheads

Date: Copies of Neolithic artefacts

Where: These flint tools and weapons are replicas of artefacts found at the Giants' Graves - Clyde cairns - on the Isle of Arran. They are made from Antrim flint from Northern Ireland.

Find out more about the Giants' Graves on **Canmore**

A drawing illustrating what the Giants' Graves might have looked like can be seen in ***The Bare Bones page 23***



Axehead

Replica



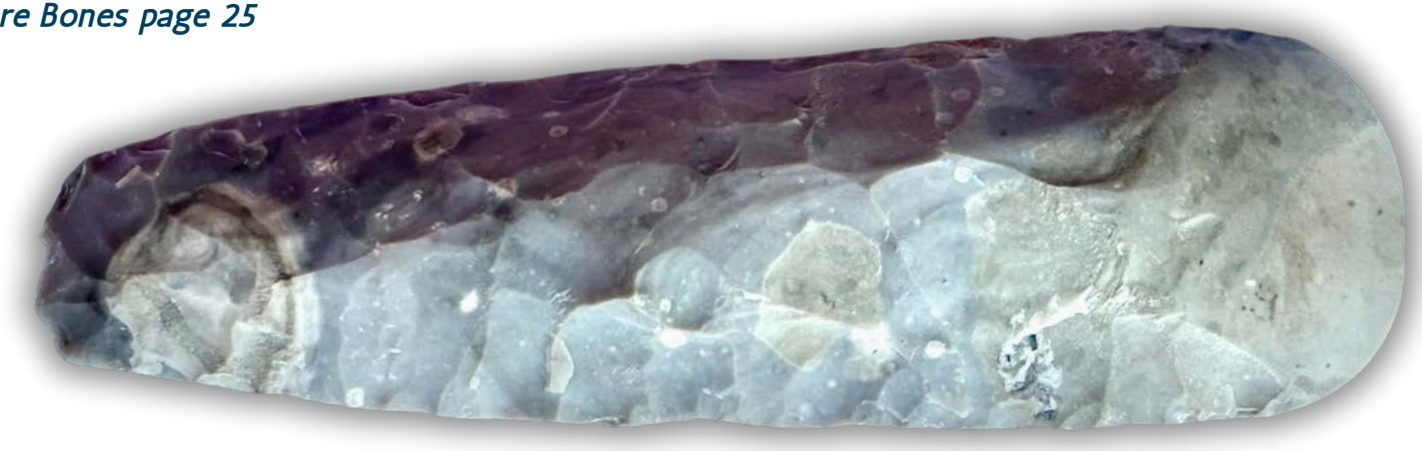
Neolithic replicas

Date: Copy of a Neolithic axehead.

What: This Antrim flint axehead is a replica of one from the Achinhoan hoard. The axehead was found with many other artefacts made from Antrim flint, including 4 other axeheads, 3 end scrapers, 9 retouched flakes and 159 unretouched flakes.

Where: The hoard was found on Kintyre in 1989 by a local schoolboy. The artefacts are made from Antrim flint from Northern Ireland

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Replica made by Dr James Dilley

Axehead

Replica



Neolithic replicas

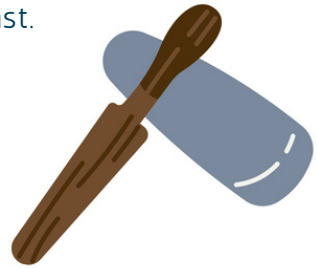
Date: Copy of a Neolithic axehead.

What: Porcellanite axehead. replica..
Neolithic farmers needed to clear forests to create agricultural land. The old flint implements were not ideal for cutting trees as they were prone to shattering. They were replaced by axes made of porcellanite, a hard volcanic stone found on Rathlin and at Tievebulliagh, County Antrim. The rock was knapped into shape before being carefully ground - a process which would have taken many days. It is also thought that polished stone axeheads had a ceremonial purpose as polishing did not significantly improve their effectiveness as tools. A number of polished stone axeheads were found at the entrance to Dooey's Cairn (Ballymacaldrack Court Tomb) in County Antrim and a hoard of Neolithic polished porcellanite axes were found on the Malone Road in Belfast.

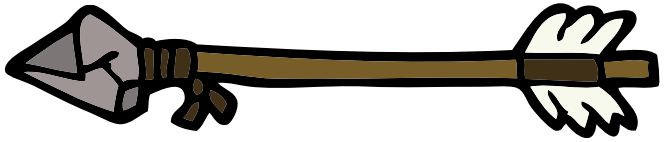
Where: Made from porcellanite from County Antrim in Northern Ireland.
Porcellanite axeheads have also been found in many parts of Scotland including in Argyll and Bute and on the Isle of Arran.

Find out more about porcellanite axeheads and how they were made. **Watch here**.

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Replica made by Dr James Dilley



Leaf-shaped arrowheads

ZY13, ZY178, ZY16, ARNM 4456.4

Artefact

Neolithic artefacts



Arrowheads like this were fixed to the end of a wooden shaft and fired from a bow or thrown like a javelin.

Date: Neolithic



Where: the large brown, small creamy coloured and small black examples are from Culbin Sands in Morayshire. The black arrowhead with the broken tip is from the Isle of Arran.

How were the arrowheads made? They would be flaked from a core and the edges sharpened by chipping with a stone, antler or bone tool. They were 'glued' into the wooden arrow shaft using sticky resin from trees.



How do you think the Arran arrowhead lost its tip?

Flint Scraper

ZY 179e

Artefact

Neolithic artefacts



Scrapers like this would have been used to scrape the fat from animal skins so they could be used to make clothing, covers or shelters.



Date: Possibly Neolithic

Where: Scotland, unknown location.

How was it made? Scrapers would be flaked from a flint core and the edges sharpened by chipping with a stone, antler or bone tool. This technique is called flint knapping.



Flint knife

ZY 23a

Artefact

Neolithic artefacts

Neolithic flint blade/knife and reproduction flint knife

Date: Neolithic

Where: This blade was found in Aberdeenshire.

What was it used for? The flint knife could have had many uses - from chopping up food to cutting animal skins.



Neolithic Pottery

ZY216a

Artefact

Sherd (piece) from a decorated Neolithic pot

Date: Neolithic

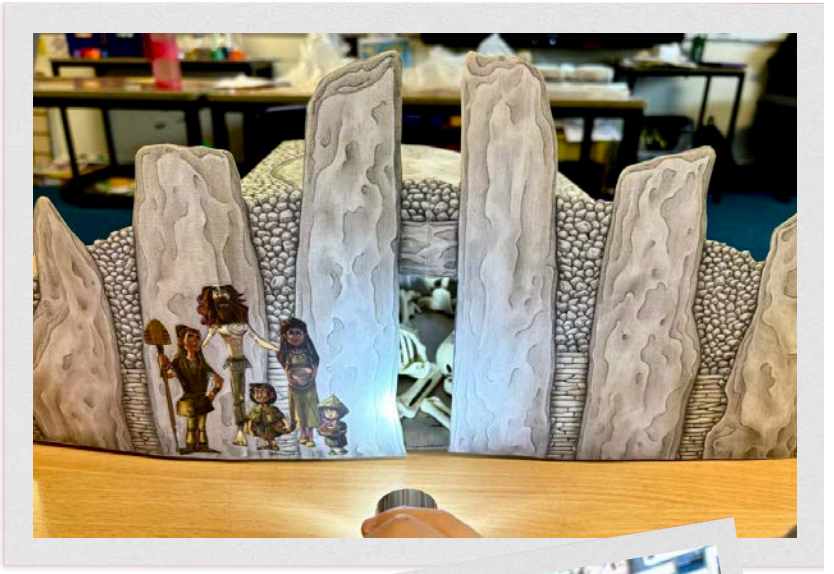
Where: This sherd of Neolithic pottery was found at Luce Sands, Dumfries and Galloway.

How: The decoration on this sherd was probably created by pressing cord into the wet clay. The cord could have been made using plant fibres e.g. flax fibres.



Build a Chambered Cairn

Activity





What you need:

- chambered cairn model
- skeleton and Bone Detective cards (optional)
- torch

To make:

Remove the Neolithic Artefacts drawer to access the Chambered Cairn model.

Match up the numbers on the model to build the Cairn.

The Bones Detective resources can be added to the tomb.

Learners can create their own models using the downloadable **Tomb Activity Sheet**. ***The Bare Bones page 88***

https://forestryandland.gov.scot/what-we-do/biodiversity-and-conservation/historic-environment-conservation/learning/the-bare-bones

The Bare Bones

Enrich your Learning

Is there a Clyde cairn or court tomb near you? Why not visit? Some sites are listed in ***The Bare Bones page 27***

You can also enrich learning around this topic by watching some of these short films.

Background to The Bare Bones

Matt Ritchie, Forestry and Land Scotland's archaeologist and one of the authors of The Bare Bones learning resource, talks about the resource **here**
https://www.youtube.com/watch?v=NW-n1pczagA



Porcellanite Axeheads: Neolithic Tools in Northern Ireland

Experimental archaeologist and flintknapper, Dr James Dilley explores the coast of Northern Ireland in search of suitable prehistoric axehead materials. Watch **here**
https://www.youtube.com/watch?v=oTnuOn11JKY

How To Make A Carved Stone Ball | Stone Age Technology

In this English Heritage film, Dr James Dilley recreates a Carved Stone Ball using the same techniques and methods as stone workers from the Neolithic. Watch **here**
https://www.youtube.com/watch?v=-xIqHk52K4Y&list=PLQGtP8ONvy5v--Dp2ZfJtDPWC8HMRJhos&index=1

Arran Geopark: People of Sea and Stone

A collaboration facilitated by Arran Geopark, and supported by The Arran Trust, HIE and others, that highlights Arran's archeological, geological and social history. Watch **here**
https://www.youtube.com/watch?v=J5KAyvIBYSk

HERITAGE HERO AWARDS

The Heritage Hero Awards are Archaeology Scotland's wider achievement award, designed exclusively for history, heritage, and archaeology projects. Breaking down barriers to participation in cultural heritage is something we're really proud of at Archaeology Scotland, so the Awards are free and are designed to be accessible to all, regardless of age, academic ability, or background.

Name	Description	Time
Heritage Explorer	For **discovering** heritage	3+ hrs
Heritage Detective	For **finding out about** heritage	8+ hrs
Heritage Hero - Bronze	For **getting involved with** heritage	15+ hrs
Heritage Hero - Silver	For **developing your own skills and interests in** heritage	30+ hrs
Heritage Hero - Gold	For **leading and inspiring through** heritage	60+ hrs

If you'd like your learners to get a Heritage Hero Award for their Bare Bones investigations, please get in touch: Awards@archaeologyscotland.org.uk

Get creative

To achieve their Heritage Hero Awards, learners must share their findings with others; fellow learners, family members or the wider community.

This is a great opportunity for young people to get creative. They can create anything from exhibitions and leaflets to raps, animations and models.



Comic



Poster



Artwork



Song

Hazard Information

- The Bare Bones Toolkit is a heavy wooden box, please take care when lifting and handling.
- The Toolkit lid could form a trapping hazard. Please ensure that younger learners are supervised when engaging with the Toolkit.
- Smaller items including those in the skeleton kit could be a choking hazard for younger children.
- The led torch is very bright and the beam should not be directed into eyes.
- Some of the replicas and artefacts may have sharp edges, please check before sharing with learners.

Contact Us

For more information contact the Archaeology Scotland Learning Team:
education@archaeologyscotland.org.uk

Acknowledgments

- Matt Ritchie, Forestry and Land Scotland
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Thanks to workshop partners and participants

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- Richard Topping
- Largs & District Museum and Historical Society
- Douglas Park Bowling Club, Largs
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- Dr Alison Sheridan
- Dr Harry and June Welsh
- Dr Gavin MacGregor
- Robert Corbett, Ballintoy Archaeological & Historical Society
- Glens of Antrim Historical Society
- Friends of Ballycastle Museum
- Ballintoy Archaeological & Historical Society
- Ballintoy Parish Hall
- Ballycastle Integrated Primary School
- Lamlash Primary School
- The Arran Heritage Museum

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