

Iron Age Skeleton: Tarrant Man

KS3 Learning Pack



Stimulus for creative inspiration and discussion

Following are sheets with stimulus for creative inspiration and discussion for different Key Stages within the National Curriculum, as well as for adults and those in Higher Education. There are four different areas in each stage/age group, **CREATE, EXPLORE, CONTEMPLATE** and **EXPERIENCE**, to encourage everyone to consider Tarrant Man from a range of different perspectives, and through a variety of mediums. The Museum of East Dorset recognises that the way that human remains have traditionally been presented by museums is changing. This Learning Pack aims to celebrate and respect the life and death of the individual 'Tarrant Man' whose remains we are the care-takers of by ensuring that his bones continue to have meaning and significance as a local Dorset ancestor, a guide into the past, and a benefactor of creative, scientific and medical exploration and discovery in the present.

Any of the groups using this Learning Pack can draw on these **INSPIRATIONAL WORDS** below to help stimulate creativity and discussion about Tarrant Man and his life and death from different perspectives. **Why not get the group to think up some more of their own?**

Inspiration Words:

Healing sound

Compassion

Dorset sacred landscape

Pilgrimage

Caring for the ill

Healing

Gathering herbal medicines

Inner strength

Living with a serious disease

Physical experience

Will to live

Medical investigation

Bone Pathology

Causes of disease

Touch

Respiration

Burial position

The senses

Lived experience of illness

Valuing longevity

Social inclusion/isolation

Journey

Emotions

Community

Information for learning from Tarrant Man

It is easy to forget that Tarrant Man was a living human being, just like we are, with thoughts, feelings, family, happiness and sadness, dreams and daily tasks to do for himself and for others. When we see him now he appears as just some old bones that show signs of disease, but if we investigate a little more we can learn from him and bring this Iron Age man to life through using science or our creativity, or both together! We can also use our feeling for the sacred or spiritual to investigate and learn from Tarrant Man.



Focus point : *Tuberculosis*



Tuberculosis is an infection caused by bacteria which mainly affects the lungs and breathing, but can also affect other parts of the body. It is spread by coughs and sneezes from somebody who already has the infection.

Having this *tuberculosis* for a long time without treatment, means that bones can also begin to show signs of decay from the disease.

Tuberculosis was quite common in Britain in the past, however it is now very rare and can be treated with antibiotics.

In daily life, we use our own skeleton all the time, without it we wouldn't be able to move about! But we don't actually see them unless we accidentally break a bone or have a serious accident, and even then we only might see a little part. X-rays show us an image of what our skeleton looks like, but we are still not encountering an actual skeleton. Of course some of us who work as doctors, pathologists or archaeologists may see more skeletons than people generally do, but usually a display in a museum may be the only time in most peoples' lives that they will come across a real human skeleton. It is always interesting, and can be a powerful experience, which can bring about many different responses, thoughts and feelings for different people.

In some cultures, and in some time periods, encountering human skeletons is or was less unusual than it is today in Britain.

Can you think of some examples of this?

Who was Tarrant Man?

The skeleton of Tarrant Man was excavated by archaeologists close to Tarrant Hinton, a village to the north of Wimborne. We can tell from the vertebrae (the bones which make up his spine) that he had a disease called *tuberculosis* which had then caused Pott's Disease. What makes Tarrant Man particularly interesting to archaeologists and medical historians is that he is the earliest known prehistoric case of *tuberculosis* in Britain.

In Britain, the Iron Age was between 800 B.C. – A.D. 43 and Tarrant Man lived towards the end of this period. Families were larger during the Iron Age as food resources were more available than in earlier periods so people had more to eat. This is because areas for growing and producing food increased as iron tools made clearing the land of its native woodland and forest easier. Iron is much stronger than the bronze or stone tools which were made by people in the Palaeolithic, Mesolithic, Neolithic (Early, Middle and Later Stone Ages) and Bronze Age.

Tarrant Man was in his 30-40s when he died, which would have been considered a reasonably long life in the Iron Age. From scientific analysis on his teeth and bones, archaeologists have been able to discover that he lived most of his life in the region, but that he was not born here. The evidence suggests that when he was a child of about 8 years old, Tarrant Man had moved to Southern England, possibly from Ireland, the SW of France or Northern Spain.





How do we know?

Archaeologists from the University of Southampton recently did scientific analysis of the teeth from Tarrant Man which was able to show what type of diet he had eaten. His teeth show phases of:

- breastfeeding as a baby
- early childhood (up to age 8) of eating foods and drinking water rich in the minerals which are more common in Ireland and the Atlantic Coast (SW France; Northern Spain)
- later childhood (ages 8-14) of having food and water sources with mineral levels common in Southern England

His teeth also show that his diet included more cattle (cow) and sheep protein and less pig and fish protein than other Late Iron Age people known from Dorset.

Investigate:

Consider why his diet might have been different? Thinking about healthy diets, might it have been a cause or an effect of his health problems...what do you think and why?

Discovery:

You might like to do a short written or verbal exercise with your group to find out the different responses upon first seeing the Tarrant Man skeleton in the museum or looking at the image on the screen.

Approach the skeleton in silence and take a minute to notice what thoughts and feelings appear then write them down for later discussion or use as creative stimulus, or discuss them there and then.

These only need to be a snapshot, for example you might ask the group to just write down a couple of phrases, thoughts, questions or feelings that come to them.

It might be surprising the range of different responses to be discussed, and how these can link to a range of subjects in the curriculum, from science, religion, pastoral, arts or history.

Creative inspiration, investigation and discussion

KS3 (ages 11-14)

Create

Can you see the bones in a different way than usual? When archaeologists draw bones, they use a very technical form of anatomical drawing, to try and show all of the detail of:

- morphology - biological shape
- pathology – evidence of disease state or injury
- taphonomy - the physical impact of what has happened to the bone after it was buried

This type of drawing is done so that the bone can be investigated in a scientific way and help with interpreting the evidence.

Leonardo da Vinci did detailed anatomical sketches of the human skeleton, and this is one of the things which helped him to draw people with such grace and beauty, as he understood the human form and how it moved so well.

However, this is not the only artistic technique that can be used for working with human bone. Using paper and pencil (either graphite or coloured) try to use the shapes, textures, light and shade and negative space made by Tarrant Man's bones as the basis for an abstract drawing.

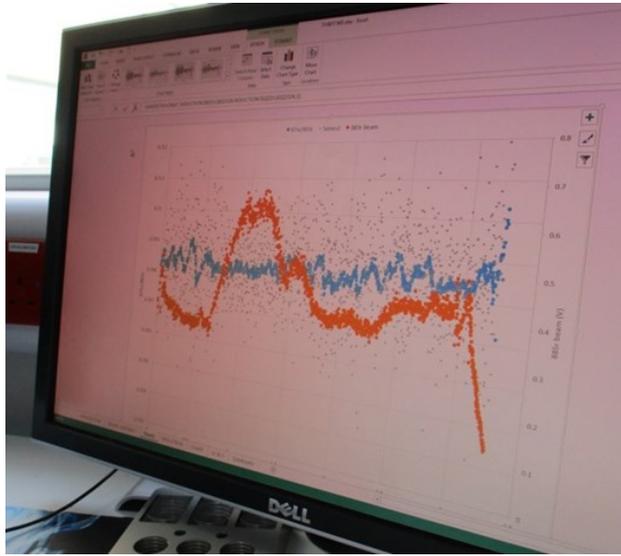


Tarrant Man's vertebrae

Explore

Tarrant Man lived for a long time with *tuberculosis*, and with another form of the disease called Pott's disease which effects the spine. Pott's disease is usually caused by a *tuberculosis* infection spreading from the lungs. In modern populations, it is more common in males than females and can cause symptoms such as back pain, degeneration of the spinal column through compression and may result in paraplegia (loss of movement and sensation in the lower body). He would have needed a lot of care and would have been physically impaired by his disease.

- How do you think other people would have responded when they met Tarrant Man, and why do you think/feel what you do?
- Would he have needed to be socially isolated to prevent others from catching the disease and how might people have cared for him if this was the case?
- Do you think that people would have understood the spread of infectious disease in the Iron Age? How might they have thought about it without the medical understanding of bacteria and infection that we have today?



Isotope analysis

Contemplate

For archaeologists, working with human bone can provide helpful insights into how people lived in the past; from what they ate, what illnesses and diseases they suffered and population mortality rates (i.e. how long people lived in particular populations), to what kind of jobs they did.

There are a number of things which can be investigated using bone in an archaeological context. You can discuss one or more of the following questions in your group:

- What information do you think we might be able to discover from how and where a person who died was buried and the way their body was placed at the burial? Take a look at the photograph of Tarrant Man from the excavation and consider his body position.
- Making an analysis of the teeth of Tarrant Man has been able to give us amazing new information about where he might have been born, and that he travelled to the UK as a young boy. This is possible using a scientific method called *laser ablation multi-collector mass spectrometry*, which can measure variation in strontium isotopes in teeth. The strontium isotopes are indicators of diet and water composition at different times in a person's lifetime. All kinds of bone can be preserved on archaeological sites; can you think of other ways that we might investigate the diet people had from archaeological bone and tooth evidence? Consider what we eat, how we eat, and the kind of things that might have been eaten in the Later Iron Age.
- Injury and illness can also affect our bones, as you can see from Tarrant Man's skeleton. When we look at bone from archaeological sites, we also want to know about what a person did when they were alive. What jobs they did, and what role they had in society. Can you think of any ways that injuries which are still visible on bone, or evidence of illness that altered the bone, might tell us about these things? Consider how we use our bodies for different activities, and what sort of activities in the Late Iron Age might have had more injury or illness/disease risks?

Experience

Working with skeletons has many different aspects to it, but it's always useful to remember that skeletons are not something that are separate from being human. Amazingly, we think about bone as being something which is very hard matter, but in reality, bone has a great deal of plasticity (flexibility) to its nature, especially over time. Bone can heal when it breaks, it can grow extra bits on it where it has had trauma (damage due to injury) which are known as osteophytes, and it can become stronger or weaker depending on the diet we have (nutrients).

Think about the way that before you were born, when your skeleton was developing inside your mother, it was actually very flexible indeed. Once you were born, your skeleton had already begun to become more solid, but even after birth there are areas in a baby's body where the bone is still quite 'plastic'. The top of your skull (cranium) is one of these areas, and the bones which make up the crown, or top part of the cranium don't actually begin to join together (fuse) until the age of around 2 years. This helps the skull to move with the rapid development of a baby's brain – our bodies work in amazing ways!

Tarrant Man's bone also experienced this plasticity as an adult, not because of development, but because of disease. The *tuberculosis* virus caused some of his spinal bones (vertebrae) to fuse and to decay, making his back less flexible and his skeleton become weaker. Understanding our skeletons is a really important part of looking after our bodies, and keeping ourselves healthy and well – we would be a bit lost without them!

As you are looking at the skeleton of Tarrant Man, your own skeleton is keeping your body upright. For a moment, close your eyes and try to sense your skeleton inside your own body:

- Begin to move different joints to see if you can feel the movement of your bone, with the help of your muscles. Move knees, elbows, wrists, fingers and really take notice of how the bones are working.
- Now bend your spine back and forwards...make sure to put your hands on your lower back to give it a bit of support while you do this. How flexible does it feel? What might it feel like to not be able to move this part of your body? If you were very still or immobile here, what would it stop you from being able to do that you enjoy?

We don't often get to see real human skeletons in the UK, but in other cultures, skeletons are not just something for Doctors, surgeons, archaeologists, artists and Halloween! For example, in some parts of South America and the Caribbean human bones are seen more often in ordinary life, and not considered to be out of the ordinary. In Tibet, human bone is turned into sacred objects which are used in rituals, such as a drum called a *damaru* which is traditionally made using two human crania, or a flute made from a human thighbone called a *kangling*.

There is some evidence that ancient peoples in Britain also conserved, visited and moved parts of human skeletons at different times within sacred sites. Do these different ways of thinking about and caring for skeletons surprise you? How does it make you feel or think about the bones of Tarrant Man differently? Skeletons are often depicted in art in different parts of the world as 'dancing', even here in Britain we think of the dancing skeleton at Halloween. Do a bit of a dance where you are now, however you like, and say thank you to your skeleton for helping you to do it! Tarrant Man helps us to remember and value our own flexibility and movement - and all the things we can do because of our skeletons and our bodies...so although he now rests on display at the Museum of East Dorset, he is still able to be our teacher.



Osteoarchaeologist Martin Smith after laying out Tarrant Man's skeleton in the museum.

Content written by Dr. Wendelin Morrison

Acknowledgements: With thanks to Nick Truch and Danny James Lowman for their creative discussions while creating this Learning Pack, and to Dr Alastair Morrison for editorial assistance.

Tarrant Man Creativity Sheet/Notes: