

UNESCO WORLD HERITAGE

Spain

A Roman lighthouse possibly originating 110CE: The Tower of Hercules.

- An idea of its size can be obtained by comparison with tourists.



It is on the coast of Spain near La Coruna.

- Location:



The tower and Breogán.

- The Tower of Hercules was restored in the 18th century in a manner which has protected the central core of the original Roman monument while restoring its technical functions.



Mythical character.

- Breogán is a character in the medieval Christian pseudo-history of Ireland and the Irish (or Gaels).



Lebor Gabála Érenn: a medieval Christian pseudo-history of Ireland.

Breogán was the Gaelic king who founded the city of Brigantia, Galicia (in northern Spain) and built a great tower.

The Gaels descended from Adam through the sons of Noah who spent 440 years wandering the Earth until they sailed to Iberia (Spain) and conquered it.



The Gaelic Brigantia likely refers to La Coruña which was then known as Brigantium.

- From the top of the tower, Breogán's son Íth glimpses Ireland.
- The Gaels—including some of Breogán's sons—sailed to Ireland from Brigantia and took it from the Tuatha Dé Danann, the Irish pagan gods.
- Three Celtic goddesses, depicted at Coventina's well.



CARRAWBROUGH : COVENTINA'S WELL.

Symbol of pagan gods of Ireland?

- A bronze disc from the pre-Christian era, found near Derry – the triple spiral symbol is often associated with Gaelic pagan holy sites



Back to the lighthouse.

- The tower was built, or perhaps rebuilt under Trajan, possibly on foundations following a design that was Phoenician in origin.
- Historians are uncertain about the purpose of the lighthouse i.e. from which direction ships using it would come.

Trajan's Column, Rome.



Some measurements.

- The Tower of Hercules went electric in 1926, increasing its light output to 32 nautical miles of visibility.
- The lighthouse stands 55 metres high, and is Spain's second tallest lighthouse.
- The structure was built atop a rock that is 57 metres high.
- The lighthouse is considered to be the oldest existing one in the world.



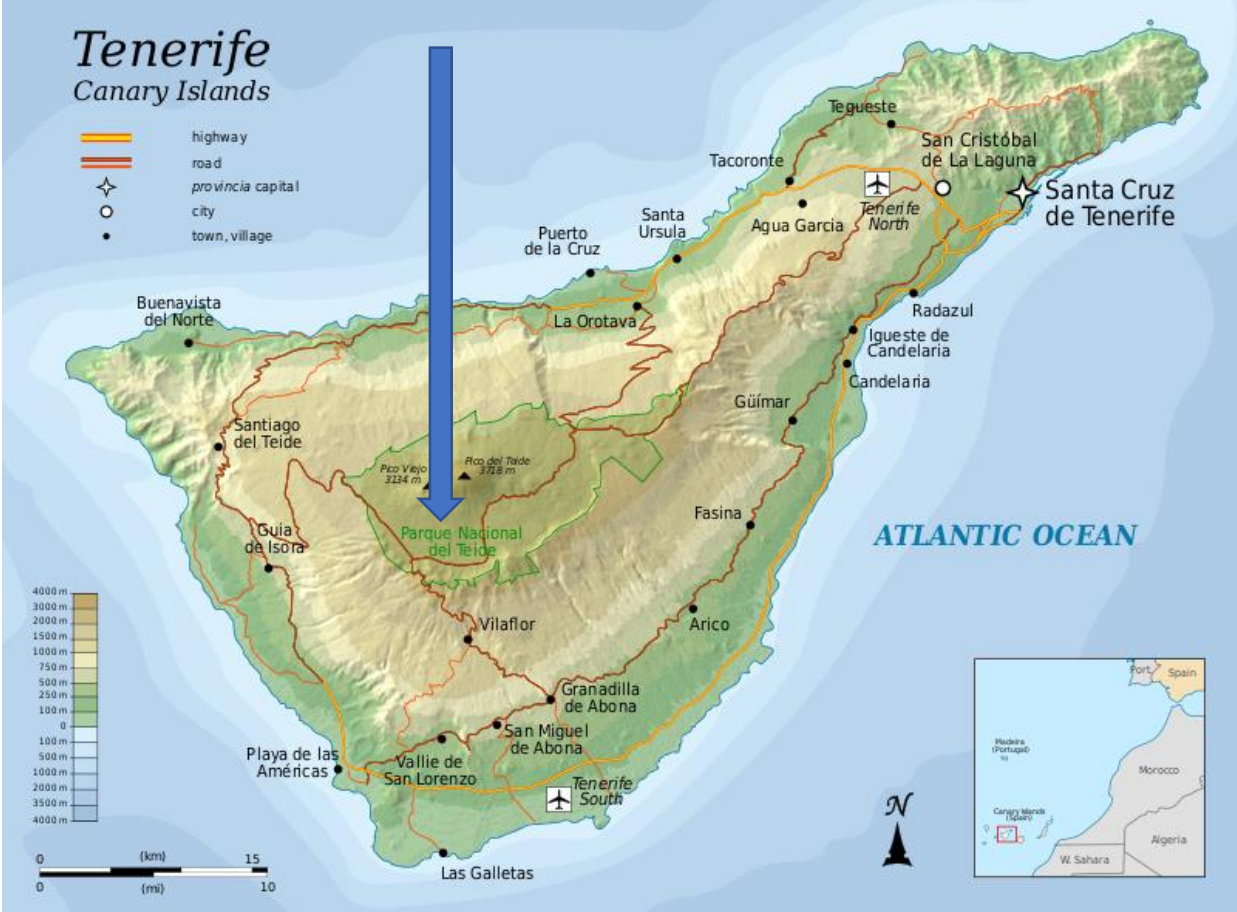
Tower of Hercules?

- It is thought to be modelled after the Lighthouse of Alexandria.
- At its base is preserved the cornerstone with the inscription:
MARTI AUG.SACR C.SEVIVS LUPUS ARCHTECTUS AEMINIENSIS
LVSITANVS.EX.VO.
- This states that the original lighthouse tower is ascribed to the architect Gaius Sevius Lupus, from Aeminium (present-day Coimbra, Portugal) in the former province of Lusitania, and was built as an offering dedicated to **Mars**.
- To me this seems to be inconsistent with its name.

Divider slide.

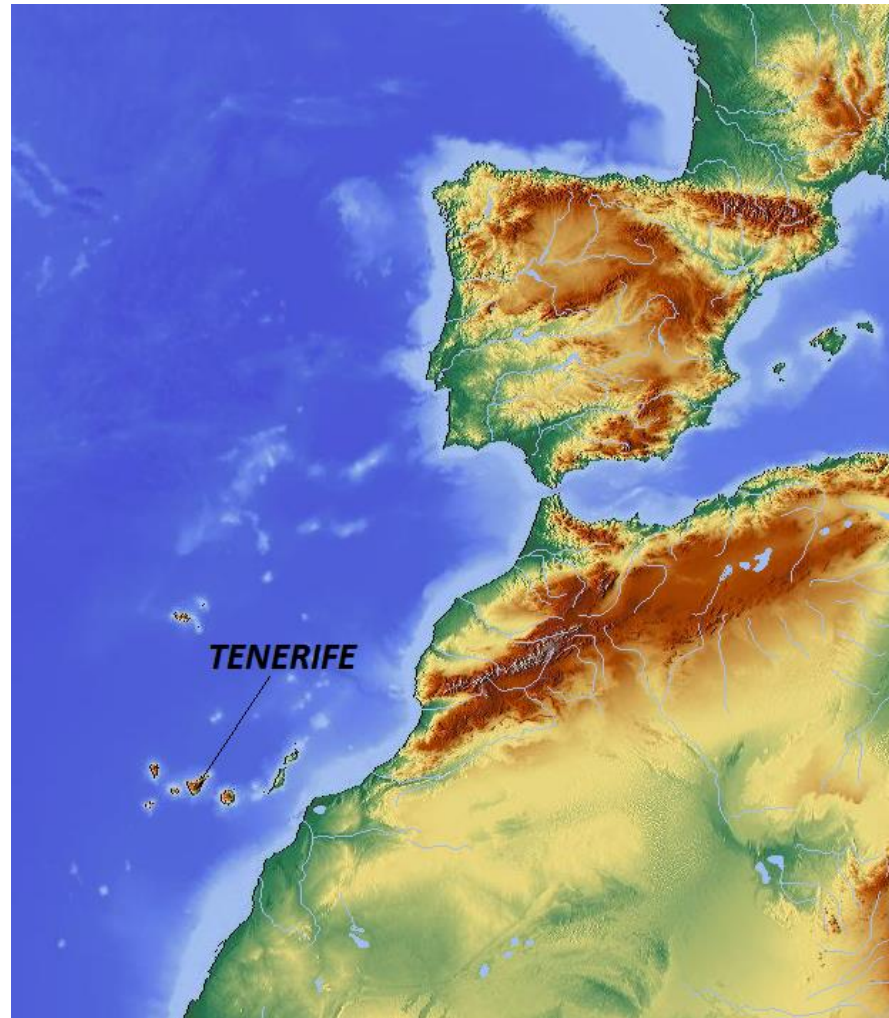


Teide National Park, Canary Islands, Spain.



Off the coast of Africa.

- Location:



Tenerife is the largest and most populous island of the seven Canary Islands.

- Panorama of national park.



Tough living things.

- Most of the park is an inhospitable, volcanic landscape that is too barren to support vertebrate life.
- Symbolic of the park are the blue-throated lizard and the Teide broom which produces a great honey.



Other life in the park.

- Wallflower, violet and Tenerife bugloss.



A natural laboratory.

- The similarities between the landscape on Mars and parts of Tenerife make the island the ideal place for testing instruments that will travel to Mars.
- In 2010 a research team tested the Raman instrument to be sent in the next expedition to Mars, from 2016-2018.



Tenerife and Nelson.

- On 25 July 1797, Admiral Horatio Nelson launched an attack at Santa Cruz de Tenerife, now the capital of the island.
- During ferocious fighting Nelson lost his right arm from cannon fire.



Canary Islands dragon tree.

- Elsewhere on Tenerife.



A familiar friend.

- Ten species of bird nest in the park.
- These include the Blue Chaffinch, Berthelot's Pipit, the Atlantic Canary and a subspecies of kestrel.



Divider slide.



Las Médulas, Spain.

- Roman destructive mining.



Approximate location.

- Las Médulas is an historical site near the town of Ponferrada in the region of El Bierzo (province of León, Castile and León, Spain).



Panoramic view of Las Médulas.

- The spectacular landscape of Las Médulas resulted from the ruina montium, a Roman mining technique described by Pliny the Elder in 77CE.
- The technique employed was a type of hydraulic mining which involved undermining a mountain with large quantities of water.



Engineering skills put to use.

- At least seven long aqueducts tapped the streams of the La Cabrera district (where the rainfall in the mountains is relatively high) at a range of altitudes.
- The same aqueducts were used to wash the extensive gold deposits.
- Rock-cut aqueduct in La Cabrera.



The indigenous inhabitants 'panned' for gold prior to Roman occupation.

- The area Hispania Tarraconensis had been invaded in 25 BCE by the emperor Augustus.
- Prior to the Roman conquest the indigenous inhabitants obtained gold from alluvial deposits (found in river beds and other places that water has washed through).
- Large-scale production did not begin until the second half of the 1st century CE.
- Ruins from pre-Roman times.



Tunnel and road in the Heritage site.

- Pliny also stated that 20,000 Roman pounds (6,600kg) of gold were extracted each year.
- The exploitation, involving 60,000 labourers, brought 5,000,000 Roman pounds (1,650,000 kg) in 250 years.

