

# Lake Mungo: Archaeological findings in the Willandra Lakes Region

Lesson Map: http://esriaustralia.com.au/education/SpatialActivity74

### Engage

#### Where is Lake Mungo and how did it dry up?

- Click on the lesson map URL above to open the StoryMap on Lake Mungo. Scroll down to get started.
- Before continuing, read the Viewer Advice. Aboriginal and Torres Strait Islander people are advised that this StoryMap contains images of the archaeological remains of Ancient Aboriginal peoples. It may also contain the voices of deceased Ancient Aboriginal peoples.
- Scroll down to the heading titled *Historical context*. Read the information and take notes if required.
- → Scroll down to the heading titled Where is Lake Mungo? Read the information and take notes if required. Stop to discuss as necessary.
- You can expand the map to enable the ability to zoom in and take a closer look at Lake Mungo.
- Scroll down to the heading titled *Changing climates and dried out lakes*. Read the information and take notes if required. Stop to discuss as necessary.
- You can expand the map to enable the ability to zoom in and explore the full extent of the Murray-Darling Basin.
- ? In your own words, explain how Lake Mungo dried up. [There are two significant factors that contributed to Lake Mungo drying up. Firstly, Lake Mungo is in a low-lying area referred to as a depositional environment, meaning that sediments from far away were transported to Lake Mungo via prevailing winds and bodies of water, like rivers. These sediments would come to rest at Lake Mungo and the surrounding region, slowly filling the lakes up with sand, clay and other materials. Secondly, a hotter and drier climate change also contributed to the drying up of the lake.]

# Download student worksheet <u>here</u>.

Time 40 minutes

#### Activity

Investigate archaeological findings at Lake Mungo.

### Learning Outcome

Students will be able to:

- Investigate the significance of archaeological findings at Lake Mungo
- Understand the significance Lake Mungo provided for Ancient Aboriginal peoples' way of life
- Identify different perspectives and explain why different stakeholders have varying perspectives

### ACARA Curriculum Link

#### Year 7 History – The ancient world

ACDSEH029 | ACDSEH031 | ACDSEH148 | ACHHS205 | ACHHS206 | ACHHS212

### Teacher Feedback:

To share your feedback on this, or any Spatial Activity, please contact education@esriaustralia.com.au



### Explore

#### What archaeological findings were discovered at Lake Mungo?

- Scroll down to the heading titled *Footprints in the sand*. Click anywhere on the map to interact with it. In the layers pane, turn on *Prevailing westerly winds* and *Footrprints* layers. Close the layers pane and take a closer look.
- → Read the information and take notes if required. Stop to discuss as necessary.
- → Scroll down to the heading titled *The discovery of Mungo Woman*. Click anywhere on the map to interact with it. In the layers pane, add the following layer: *Mungo Woman*.
- Close the layers pane. Zoom in on the location of Mungo Woman's remains. This is the approximate location where her remains were found.
- Read the information for this section and take notes if required. Stop to discuss as necessary.
- Scroll down to the heading titled *The discovery of Mungo Man*. Click anywhere on the map to interact with it. In the layers pane, add the following layer: *Mungo Man*.
- Close the layers pane. Zoom in on the location of Mungo Man's remains. They are just east of Mungo Woman's remains.
- Read the information for this section and take notes if required. Stop to discuss as necessary.
- ? Consider the position of Mungo Man's body and the use of red ochre in the burial. What tentative conclusions can archaeologists make about Ancient Aboriginal culture? [Mungo man's body was buried with his hands clasped one over the other. This may be indicative of a resting position that is of a formal nature and may suggest that Mungo Man was a respected member or elder in the community. Red ochre is used in Aboriginal ceremonies and the presence of red ochre sprinkled over the body may indicate that some form of cultural or spiritual ceremony took place at his burial.]
- ? What do you think archaeologists would be able to conclude about the age of Mungo Man? Why? [The presence of osteoarthritis in Mungo Man's joints allows archaeologists to conclude that Mungo Man was likely of an older or advanced age as his joints display wear and tear, suggesting that the cartilage had been worn away.]



? What possible reasons may exist for differences in the burials of Mungo Man and Mungo Woman? [Mungo Man was buried intact and in a formal manner but Mungo Woman was cremated and her bones were shattered into thousands of fragments. Although no conclusive answer exists, the difference in burials may be a result of age, sex and standing in the ancient Aboriginal community. Alternatively, Mungo Man's remains were dated at 42,000 years old whereas, the cremation fire – and likely the remains of Mungo Woman – were dated at 25,000 years old. It may be that cultural practices and spiritual beliefs evolved or changed over this period of time, resulting in different burial styles.]

### **Explain**

What was the significance of Lake Mungo to the way of life for Aboriginal

#### peoples in the past?

- → Scroll down to the heading titled Lake Mungo in the past. Click anywhere on the map to interact with it. In the layers pane, add the following layer: Shell Middens.
- Close the layers pane. Adjust the map extent by zooming out to find the locations of shell middens on the shores of Lake Mungo.
- Scroll down to the heading titled *Shell middens*. Read the information and take notes if required. Stop to discuss as necessary.
- Scroll down to the heading titled *Stone tools and artefacts*. Read the information and take notes if required. Stop to discuss as necessary.
- Click anywhere on the map to interact with it. In the layers pane, add the following layer: *Stone tools and artefacts*. Adjust the map extent by zooming in and out as necessary.
- ? Do the stone tools and shell middens suggest evidence of permanent Aboriginal life at Lake Mungo? Explain your response. [These tools and middens do suggest evidence of permanent Aboriginal life in the Lake Mungo region. The shell middens suggest that Aboriginal people settled at Lake Mungo for long periods of time as these midden piles acted like rubbish dump sites. Likewise, evidence of stone tool fragments support a theory of permanent life in the region as nomadic groups would likely take their tools with them as they moved from place to place.]



### Extend

### What should happen to the remains of Mungo Man?

- → Scroll down to the heading titled A debate over what to do next with Australia's oldest human remains. Read the information and take notes if required. Stop to discuss as necessary.
- ? Consider the information in the three paragraphs above? What is your view of the debate at hand? Remember to be sensitive of other cultures as you explain your perspective. [Answers will vary based on each student's perspective and cultural background.]

### **Next Steps:**

### Request a free ArcGIS Online Account for your school:

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Learn more about ArcGIS Online, and apply for your ArcGIS Online School subscription at <a href="http://esriaustralia.com.au/education">http://esriaustralia.com.au/education</a>