

## Information for Teachers

# The Science of Archaeology: Water Biology

### KS3/4 Session at Flag Fen



Flag Fen is an internationally important Bronze Age archaeological site; it houses many Bronze Age artefacts, found around a wooden causeway and platform, and is home to some recently discovered Bronze Age log boats which are currently being conserved.

Flag Fen is also an experimental archaeological site; it is a recreation of a Prehistoric landscape based on archaeological evidence gained from preserved ancient pollens and seeds. The survival of this evidence for over three thousand years is due to the distinct waterlogged anaerobic soil of the area. Rare and endangered species of native ancient plants are being re-introduced here.

The monitoring of the biodiversity on site is important both to know what organisms thrive in a pre-historic landscape and to monitor any invasive species, but also as a way of monitoring any pollution which could damage or even destroy the underlying archaeology.

In this hands-on session students will explore the water biology of the site: they will collect and examine water specimens from different areas and record the numbers and variety of organisms seen and examine some of them more closely.

Students will analyse their results, looking at whether the results vary between different water sources and work out the Biotic Index of each site. They will consider what might be the factors that cause any variation.

The day includes a guided tour of the site.

#### Learning objectives

At the end of the session students will be able to:

- Understand the application of scientific investigation to issues in the real world.
- Carry out appropriate and safe methods of sample collection and examination.
- Understand the importance of monitoring biodiversity
- Collect a body of results that can be quantitatively compared.
- Understand the effects of different environmental variables on the preservation of archaeology.
- Be aware of pollutants and their effect on biodiversity and archaeology.
- Through observation and evidence gathered, postulate what may cause these variables to change.



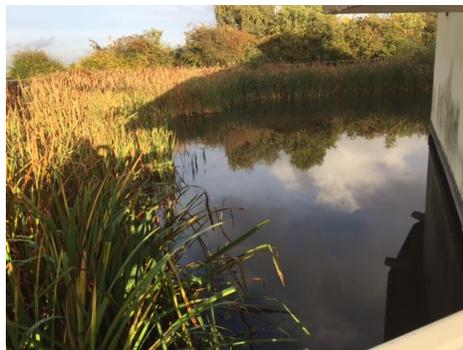
**National curriculum links:** Science (working scientifically, relationships in an ecosystem, biodiversity).

**Other information:**

<b>Duration:</b>	Full day (10am – 2pm).
<b>Cost:</b>	£220. Minimum charge for less than 20 pupils in £180.
<b>Maximum group size:</b>	Maximum number per group is 30.
<b>Recommended ratio:</b>	Minimum 1 adult to 10 students.
<b>Booking information:</b>	To book, please contact us by phone or email. When the activities and date are agreed, a booking form and risk assessment is emailed to you. To confirm the visit we ask that you complete the booking form and email it back to us.
<b>A note about behaviour:</b>	School teachers have overall responsibility for the behaviour of their pupils and we expect you to support Museum staff with this where necessary. As you know, pupils benefit significantly when school adults also get involved in the workshops, so please join in where appropriate.

*"A superb session, full of hands on, field based activity. Works well with the Water Chemistry session."  
(Teacher at Thomas Deacon Academy)*

*"I enjoyed collecting samples, I caught a little fish!"  
(Student at Thomas Deacon Academy)*



We are happy to adapt the session according to your needs.  
We welcome and encourage pre-visits.