



Abstract

The *Leedsichthys* project was a MA Esmée Fairburn grant funded project centred around a *Leedsichthys* specimen in Peterborough Museum. The specimen was excavated from the local brick pits in 2002 and is the most complete specimen of this giant Jurassic fish ever found. The project used this internationally important research specimen to deliver scientific outcomes in addition to a wide programme of public activity. We brought together all teams across the heritage service to produce a website, half term events, innovative marketing strategies, and even publish a children's book!

The Starting Point – getting hooked

Peterborough Museum and Art Gallery is home to the most complete specimen of the *Leedsichthys* fish ever found, from the Jurassic Oxford Clays, 150 million years ago. It was originally discovered in the Whittlesey brick pits in 2002, by students from Portsmouth University. Funding was secured to excavate the specimen over a two year period and the bones were then initially researched by Dr Jeff Liston (then at the Hunterian Museum) as part of his PhD thesis, before returning to their permanent home at Peterborough Museum. Although funding was secured for excavation, there was no funding for any detailed post excavation research, preparation of the bones, storage or interpretation for the public. Many of the 2,000 plus bones found were prepared by a group of geology volunteers supervised by staff at Peterborough Museum, however, this work had never been completed.

The project aimed to address the following:

- Over 2,000 unidentified and uncatalogued bones
- 5 large blocks that were unprepared and not conserved
- An internationally important specimen relatively inaccessible for research
- Bones that were too fragile to display in 3D
- A specimen too large to reconstruct in gallery
- Difficult for the public to interpret these individual bones as a fish

The Project – reeling it in

In 2015 Peterborough Museum was awarded a grant of £65,300 from the MA Esmée Fairburn Collections Fund to deliver the project.

This involved working with Dr Jeff Liston to identify and document the bones, training existing staff and volunteers to prepare, conserve and pack the remaining bones, and to deliver a website designed



Dr. Jeff Liston, world expert on Leedsichthys

to help interpret the specimen for the public. The website would also be a first stop for researchers, and act as a gateway to Peterborough Museum's wider important Jurassic marine reptile and fossil fish collection. Alongside this the project wanted to deliver some public engagement events, and a resource for schools.

Taking Shape

– a new way of working



Nigel Larkin, palaeontological conservator, training staff and volunteers

This project took a fresh approach to the management and delivery by bringing together a project board at the start, which included staff from marketing, front of house, events, education, collections and senior management. By engaging across the board and having a clear shared idea of the vision for the project, the whole service was able to support and feel personally invested in the project.

The project board then worked with Dr Jeff Liston alongside a dedicated set of geology volunteers, and the Heritage Collections Manager.

A professional palaeontological conservator, Nigel Larkin, was contacted to train volunteers and existing staff seconded from different areas in the service, to prepare the remaining fossil bones, and look at the best way to store them. This helped upskill staff and volunteers to improve sustainability in the future, in a way simply outsourcing the preparation of the bones would not have done.

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The vision was to interpret the *Leedsichthys* find through an online exhibition, to address the many difficulties of displaying the original specimen. The online exhibition shows where the bones were originally found, the story continues with the bones rising out from the map and into the skeleton of the *Leedsichthys* fish. The visitor can then find out more by selecting up to 20 individual bones to be able to see a 3D image with layers of information, before the skeleton then changes into an interpretation of what *Leedsichthys* might have looked like, as it swims away.

New Ways of Public Engagement



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To achieve this vision, the project used 3D photo telemetry for the first time, and had to produce the first ever full skeleton drawing of a *Leedsichthys*, as none existed.

The Big Jurassic Fish Hunt

Leedsichthys was used as the focal point for the delivery of Peterborough Museum's February half term activities, targeted at a family audience. To introduce and engage the audience with the subject 'Dr. Jurassic Jeff' became the face of the marketing for the event, challenging visitors to come and help him 'research' the *Leedsichthys* fish.

Visitors were encouraged to be a palaeontologist for a day, undertaking different science based tasks including: Palaeoart, studying microfossils, stratigraphic dating by identifying zone

fossils, and estimating size through comparative anatomy. In addition, visitors got to talk to the team of volunteers and experts preparing the *Leedsichthys* skull bones.

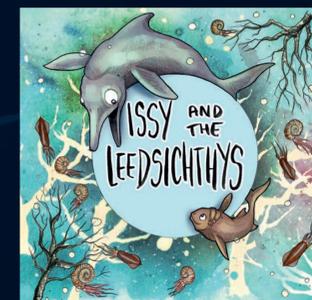
Over 2,600 visitors were reached over the week, with over 88% of those surveyed saying they learnt something new. This event demonstrated that collections at the core of an event can attract as great an audience as more popularist subjects!



The Big Jurassic Fish Hunt, featuring Dr. Jurassic Jeff

Issy and the Leedsichthys

Instead of developing an additional school session, the education team wanted to use the project to think about engaging and supporting school visits in a different way. They instead asked for online resources for pre and post school visits to support existing complementary school sessions, and to develop a 'story sack' to use in the Museum's Jurassic gallery. The focus of the new story sack was an original new story book based on the *Leedsichthys* and Jurassic collection at the Museum. Writing a fiction story book based on the collections is something the Museum had



never done before. The book 'Issy and the *Leedsichthys*' was produced working in conjunction with a graphic illustrator, and is aimed at younger children. The resulting publication has been a success and in addition to the story sack, has been the focal point for sessions with preschools, and also used in partnership with the Peterborough library service for Science week school sessions. Copies have gone to all Peterborough libraries in addition to neighbouring county libraries in Suffolk, Cambridgeshire, and Bedfordshire.



Story sack, featuring 'Issy and the Leedsichthys' original story book

Summary

The project was unique for Peterborough Museum in the way that it was delivered bringing in an expert to work with staff pulled from across all sectors of the service to engage and enthuse about this uniquely important specimen. The project successfully entwined scientific research and public engagement, demonstrating that putting the collection and research at the core of the offer can still deliver an exciting and successful public engagement offer, smashing visitor targets.

Acknowledgements

Thanks to Nigel Larkin for training the staff and volunteers in conservation and fossil preparation, SPEED for working with us to deliver the website, Jarrold Publishing and Charli Vince for her excellent illustration work.

Thanks also to Forterra for their continued support of the museum.

Collections project team: Dr. Jeff Liston, David Savory, Emma Turvey, Glenys Wass

Collections project volunteers: Ivor Crowson, Bill Leayrod, Pam Osbourne, Darren Withers, Naomi Stevenson

Project Board: Carol Law, Laura Hancock, Stephen Chalmers, Sandy Wardrop, Jack Allen, Richard Hunt, Sarah Wilson, Glenys Wass