













August 2024 edition



Welcome to the latest edition of the Moors at Arne project newsletter. As the summer continues, the team here at Arne are making the most of the warmer weather and making great strides to progress the project. The new embankments are coming along nicely and there have been several exciting new archaeological finds this month.

Thank you for your interest in the scheme we are delivering in your local area and we hope you enjoy this update.

What's happening on site?

The new western freshwater habitat area continues to take shape. 500m of the realigned Furzebrook stream has now been constructed and nine ponds have been dug. This area will be protected by the new western embankment before three controlled breaches are made in the existing Frome embankment to create the intertidal area.

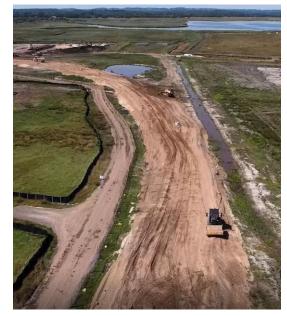








Once complete, the new Furzebrook stream will provide ideal habitat for a variety of species including water voles along its banks and a wide variety of fish and invertebrates in its waters.



Construction of the new western embankment continues with some sections now up to full height. The engineers are carefully monitoring settlement of the material as we go along and to date all material has been sourced from within the site.

Work has now started on the first of three new flow control structures which will be situated in the eastern embankment. It is still early days, but access paths have been built and trial holes have been dug. Pre-cast concrete units will arrive in a few weeks time.

Progress has continued on the Furzebrook outfall structure. The reinforced concrete work is complete and the pipes have now been installed. The next stage will be to remove the cofferdam surrounding the structure.

The finished outfall structure will discharge water from the Furzebrook stream into the intertidal area at low tide and special flap valves will close to prevent the high tide from flowing back in.







Working with nature





With the warm weather we have seem more reptiles out on site. Pictured here is a striking male sand lizard. During the breeding season their colours are brighter and they are instantly recognisable by their vivid green flanks.

This chap was carefully moved under licence to a safer receptor habitat away from the works area.

The ecology team have been busy carrying out bat surveys ahead of some tree works which will be carried out next year. The surveys consist of three careful stages to ensure no active roosts are disturbed. Ahead of any trees being removed, compensatory habitat will be created nearby to ensure no net loss of suitable bat habitat in the area.

Some of the team took part in Butterfly Conservation's Big Butterfly Count during July. This is a UK wide initiative which helps build a picture of the health of the environment simply by recording butterfly and moth sightings over a fifteen minute period. Our team spotted a total of 38 butterflies consisting of four different species. To find out more and participate next time visit Butterfly Conservation's website.











More Romano-British artefacts found



What a month it has been for historical discoveries! A third kiln has been discovered and the the team are now excavating a Roman well nearby.

Some incredibly well preserved items have been retrieved from the lower reaches of the well including worked timber objects, bunches of leaves and roman pots like the stunning example shown to the left.

In addition to the Roman pottery workshop which the team have been excavating over the past few months, a second building has now been discovered.

At this stage it is unclear what the building may have been used for but evidence of timber posts suggest it would have had a roof structure and finds of Roman glass and pottery inside hint that it may have been a domestic building of some sort.

Pictured below is the first kiln which has now been fully excavated and one of the archaeology team recording finds at the site of the second













Gathering greenhouse gas storage data at Arne



A flux tower system is being installed on site this week. Flux towers measure the exchanges of carbon dioxide, water vapor, and energy between plants and the atmosphere.

It will be part of a network of towers throughout the UK which measure how much greenhouse gas is captured from the atmosphere and stored within ecosystems. This data is important to help tackle climate change by better understanding how well different ecosystems capture and store carbon.

Most flux towers capture information for habitats such as peatland, forest and farm land but the tower at Arne will be one of just six which will record data for a saltmarsh environment.

This initiative is being implemented in order to capture some baseline data to show how proficiently coastal ecosystems, in this case saltmarsh, are also able to capture greenhouse gases. Once enough data is gathered it is hoped that saltmarsh habitats will be formally recognised by the Greenhouse Gas Inventory (GHGI) which could lead to further protection and restoration opportunities for this type of habitat. The tower will remain in situ for an initial 6 years and will be reviewed after this period.









Community updates

Over the next month a small number of HGVs will need to travel along Barnhill Road to deliver some materials up to Ridge Wharf Yacht Centre for a small package of works we are carrying out in this area. Disruption should be minimal but as this is an exception to the usual traffic route we wanted to share this update with local residents in advance.









About the project

The Moors at Arne project is adapting over 150 hectares of land into a diverse wetland habitat. This type of habitat is being lost in other areas of Poole Harbour due to 'coastal squeeze'. This is a term used to describe the effect of rising sea levels pressing against man-made structures such as flood defences resulting in a loss of intertidal habitat such as mud flats and salt marsh.

Kier is the contractor delivering this project on behalf of the Environment Agency and their project partners, RSPB and Natural England.



Keeping in touch

We welcome your feedback and are here to answer any questions you may have about the project. Please email arne@kier.co.uk

For more information about the project please visit our web pages https://www.dorsetcoast.com/project/moors-at-arne-coastal-change-project/



