



# Newborough News

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## Agreeing the Science at Newborough

Newborough Forest and the Warren is a wonderful place that we all love to spend time in.

However, we shouldn't forget that this is an unusual environment whose geology and landforms support a huge diversity of life, which is underlined by its designation as a Special Area of Conservation (SAC) – Europe's highest environmental level of protection.

SACs are strictly protected by legislation and both Forestry Commission Wales, which manages Newborough Forest, and Countryside Council for Wales, which looks after the warren, must take care that their actions are in keeping with the needs of this special area.

The designation was based on a complex and fascinating scientific rationale, and CCW agreed to review the science when requested by members of the community worried about the implications for the forest.

The aim of the Science Review was to clarify the scientific basis for the designation and the conservation objectives at Newborough.

The review is being carried out during winter 2009/10 and takes the form of meetings between CCW and



local scientists, with FCW attending as observers.

"By sharing all the relevant scientific data, the aim is to seek agreement on matters which will inform the forthcoming management plan for the area," said Jonathan Levell, FC Wales Planning Officer.

There were a number of areas covered by the science review. SAC sites are designated under the EC Habitats Directive, which sets out certain obligations on member states.

Therefore, the first step was to agree those requirements. For example, is it to maintain these rare and threatened features at the extent or abundance found at the time of designation, or to maintain or restore features to a sustainable "favourable conservation status" even if this involves increasing the habitat area or species numbers?

The next subject to consider was the specific features (dunes, slacks, species) for which the SAC was designated and the methodology used to monitor them

and to report on their condition. This included all the dune habitats and the population of Petalwort and Shore Dock.

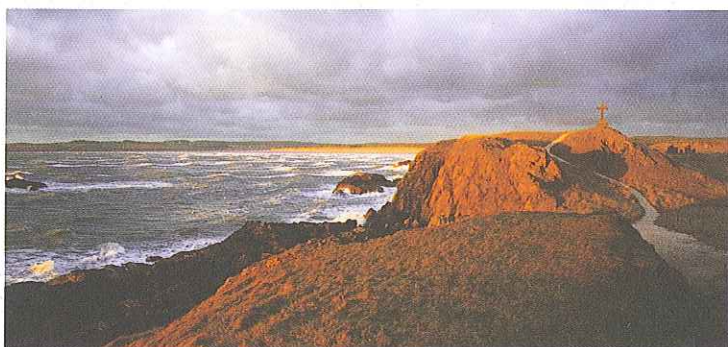
Finally, we looked at the hydrological processes acting on the site which are important as they determine the level of the water table, critical to the condition of the dune habitats, for example, whether the slacks are flooded or not at certain times of the year.

"We have hoped that the findings of the review would have been available in early 2010, however such a complex process takes time and rather than rush it through we have decided to accept a suggestion of the Newborough Liaison Partnership and develop a First Stage Management Plan over the next few months. This plan will identify management of the forest which could be made without reliance on controversial aspects of the science covering operations like thinning, recreation management, plant health etc. This First Stage Management Plan will then be reviewed once the Science review has been concluded and the remaining issues of management will be incorporated in accordance with the scientific advice." said Jonathan.

## FILMING

To all who have visited or read about her, Ynys Llanddwyn is one of the most iconic islands in Wales; her landscape, form and colour stimulate the imagination and stir emotions. It comes as no surprise that a few film location managers have also fallen under her spell and used the island as a location in a number of Hollywood blockbusters!

Graham Williams, Senior Reserve Manager for CCW said "As you can imagine, we get several enquiries a year regarding filming on Ynys Llanddwyn, the biggest this year was for the filming of the Warner Brothers epic "Clash of the Titans" during late summer which brought £1.6 million in to the North Wales economy! We hope that we can continue to attract filmmakers to the area with the help of the Wales screen commission".



## Hydrology and Dune Condition

Two much debated aspects of Newborough Forest and its relationship to the Special Area of Conservation are Hydrology and Dune Condition, but exactly what do we mean by this? The hydrology debate centres around the effect, or not, that the forest has on the groundwater which effects SAC features specifically the slacks (areas between the dunes which at certain times of the year should be flooded) and particularly in the area where the Forest abuts The Warren. Trees intercept and transpire more water than grassland and conifers,

surprisingly, do so much more than broadleaves. Variation in the water table could impact on the slacks and their capacity to support certain species. Dune Condition is also about allowing natural coastal processes to occur, driving the formation of natural zones (from strandline, mobile dunes, fixed dunes and slacks and dune woodland) behind the beach front. In its simplest terms it is argued that some of the forest impedes these natural processes. These are important issues to be debated and ones on which the Science Review will inform."



# Thinning

Forestry Commission Wales is currently developing plans to thin approximately 110ha of Newborough Forest in the winter of 2010/2011 as part of our ongoing forest management to deliver a number of public benefits.

The objectives include improving structural and species diversity, habitat improvements, timber production, landscape improvements, improving accessibility among the trees for recreation and features such as the rock outcrops and tree health reasons. Further information on this can be found on the Forestry Commission Web Site [www.forestry.gov.uk/website/forestry.nsf/byunique/infd-7umeg8](http://www.forestry.gov.uk/website/forestry.nsf/byunique/infd-7umeg8)

In the last issue of Newborough News, we highlighted the threat to the forest from Red Band Needle Blight and

mentioned how the thinning of trees helps to reduce humidity levels. This is important as moisture is required for natural dispersal of the fungus, and long-distance dispersal is thought to occur in moist winds and mists.

Another developing situation where we need to be vigilant is Phytophthora ramorum. This is often referred to in the press as Sudden Oak Death and was first found in the UK in 2002.

In the wider environment, it has largely been associated with Rhododendron, which acts as a host from which spores are produced. In sufficient quantity, these spores can infect trees and other plants in the vicinity.

In late 2009 an outbreak was discovered in south-west England on

Japanese larch trees. Symptoms have also been found on Western Hemlock and a selection of broadleaf trees (beech, birch, and some oaks) growing in the same area. On some sites there is little or no Rhododendron present.

These findings, and those made on the Japanese larch, highlight a significant change in the dynamics of the disease. Previously, tree infection has only taken place in the proximity of infected Rhododendron.

While this isn't yet an issue for Newborough, it is important that we remain vigilant and report any concerns. Further information can be found at the Forestry Commissions website

[www.forestry.gov.uk/pramorun](http://www.forestry.gov.uk/pramorun)

## NNR Wildlife update

The tidal flats and saltmarshes of Aber Cefni and Traeth Melynog have enormous value for wildlife and waders, especially between autumn and spring. That's when thousands of over-wintering shorebirds such as redshank, curlew and dunlin migrate south from the harsh conditions in Siberia, Scandinavia and the Arctic. A tip - the best time to see these birds is when they fly in to feed on the exposed flats following a receding tide!

Amongst one of our most attractive winter visitors is the pintail duck. Large flocks of pintail can be regularly seen feeding and loafing on cob pools at the upper end of Aber Cefni, look out for them on the edge of the pools with their distinctive long tails and attractive plumage.

Thanks to the tireless work of invertebrate expert Dr Dick Loxton we now have a large number of new species recorded for the site, many of them rare species associated with areas of bare sand and disturbed ground. Many thanks to Dick for undertaking this important piece of work.



## NNR Management - Hardy grazers

Newborough Warren is one of the largest and most diverse sand dune systems in Europe, and represents one of our rarest and richest habitats, supporting a specialised range of plants and animals which have evolved to living in an ever-changing environment.

To maintain this rich and varied habitat requires ongoing management, in particular grazing. To help with the task CCW, in partnership with Anglesey Grazing Animal Project has introduced native hardy cattle to the open Warren.

Graham Williams, Senior Reserve Manager for CCW said "The open warren has been grazed by our Welsh Mountain ponies for some years, which has really opened up the site. Now, the diminutive Dexter and belted Galloway cattle will help tackle the rougher vegetation and maintain areas of short flower rich turf. It will also have many benefits for species such as rare mining bees, fungi and chough. We are already seeing the benefits on the reserve and look forward to extending it to other areas of the site".



Have you noticed the growing suite of garden plants invading the forest in recent years? The now ubiquitous orange flowered Montbretia is forming ever expanding banks, smothering the native flora. Himalayan cotoneaster, Cotoneaster simonsii, a popular garden shrub, is also popular with birds who enjoy the orange berries and spread the seed. This has spread Cotoneasters into the wild, where they can be difficult to eradicate. It now forms dense stands in some of the more established parts of the forest, making access difficult and out-competing the natural components of the shrub layer.

If we are to create a more natural

forest environment for the future, in line with the recommendations of the Newborough Liaison Partnership, control of this invasive alien will be necessary. Early trials by the Forestry Commission have shown the need to both cut and herbicide the stumps to ensure proper eradication.

Aliens will be an increasing theme of conservation over the coming decades. Though we have almost removed grey squirrels from the island, there are many more inadvertently introduced species, such as Japanese knotweed, Himalayan balsam, American mink and Australian swamp stoncrop, that threaten to compromise our native flora and fauna.

## Contact us

For all the latest information on Newborough, visit the FC Wales website on [www.forestry.gov.uk](http://www.forestry.gov.uk) or call us on 0300 068 0300, or contact CCW on [enquires@ccw.gov.uk](mailto:enquires@ccw.gov.uk) Tel 0845 1306 229



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