



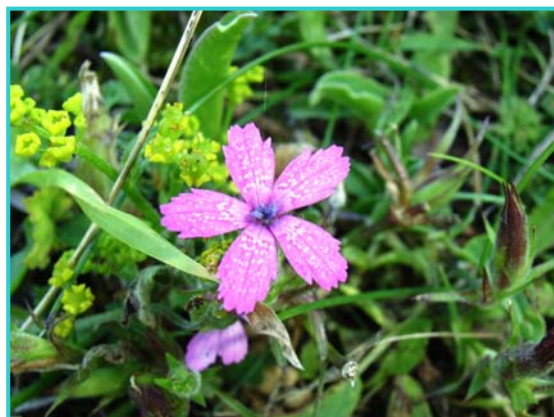
Llythyr Newyddion Mai 2009/May Newsletter 2009

Council undertakes conservation management

Key sites in Llanelli and Burry Port are to be managed specifically for the rare plant species found there. A small area near Old Castle pond in Llanelli will be managed for the rare Deptford pink, an endangered plant found only in two sites in Carmarthenshire. In Burry Port the harbour wall on the west dock is host to the small-flowered catchfly, the only site for this species in the county. Previous attempts to manage these sites have not been successful and so this year council conservation staff met directly with the machine operators and discussed management for the species. Guidelines were passed to the operators who will now liaise with conservation staff on management of these sites.

In addition discussions were held on the management of some of the grassland areas within the Millennium Coastal Park. Some of the grassland areas here are heavily managed, being mown regularly and whilst areas for recreation are important, there are areas that could be managed more for wildlife. Allowing some grassland areas (including areas around the ponds) to grow will provide valuable habitat for wildlife and visually more attractive areas for visitors. The grass in these areas will be cut at the end of July and removed – and could be used to help create compost to be used elsewhere in council parks. Not having to mow areas so regularly will also save fuel and money.

Finally, conservation staff met with the groundsman at the council offices at St David's in Carmarthen, the old hospital site that has now been largely converted into council offices. An active council staff 'Green Team' on the site suggested that areas within this site could be managed for biodiversity. Here again most of the grass is cut regularly but areas were identified that will be managed like a hay meadow, being left uncut until the end of July when they will be mown and the cut grass removed. This should help encourage a more species-rich grassland in a few years and provide more interesting habitat for staff working up at St David's to enjoy.



Deptford pink © Isabel Macho



Small-flowered catchfly © Richard Pryce



Be Nice to Nettles!

(text extracted from www.nettles.org.uk)

May 23rd marks the start of 'Be Nice to Nettles Week'. It aims to raise awareness of this well-known and important plant, which is normally regarded as a species to remove from our gardens. But before you do that consider the benefits of this plant and how it can help wildlife in your garden.

The nettle (*Urtica dioica*) is a highly successful plant found all over the temperate areas of the world. It spreads by means of seeds and underground rhizomes that creep around just under the surface of the soil. The plant itself can be found in a variety of habitats and soil types. It prefers rich soils and therefore does well around human settlements benefiting from the waste we produce – often indicating where old settlements have long since disappeared from the countryside.

The Latin name of the plant *dioica* means 'two houses' – this refers to the fact that the male and female flowers are normally carried on separate plants. It is possible that the English 'nettle' name is derived from *Noedl* meaning a needle – referring to the stinging mechanism in the nettle leaves. Others suggest that it comes from the Latin *nerere* and other similar old European verbs meaning to sew.

The stinging structure of the nettle is very similar to the hypodermic needle – each sting is actually a hollow hair stiffened by silica with a swollen base that contains the venom. The tip of this hair is very brittle and when brushed against, no matter how lightly, it breaks off exposing a sharp point that penetrates the skin and delivers its stinging payload.

Remember when stung a natural remedy will often be found close at hand. The leaves of the dock contain chemicals that neutralise the sting and also cool the skin.

The stinging hairs of the nettle developed as a defence against grazing animals. So effective are they that few grazers, with the exception of goats and hungry sheep, will touch nettles when the stings are active.

The sting of our native nettle is nothing compared to some of its tropical cousins! One species in Timor causes a burning sensation and symptoms like lockjaw which can last for days or weeks!



Nettle sting © Graham Matthews

Nettles and Wildlife

The stinging nettle is one of the most important native plants for wildlife in the UK, supporting over 40 species of insect including some of our most colourful butterflies.

The most notable nettle patch inhabitants are the small tortoiseshell and peacock butterfly larvae, which feed in large groups hidden in silken tents at the top of the nettle stems.

Many nettle patches hold overwintering aphids which swarm around the fresh spring growth and provide an early food source for ladybirds. These same aphids are eaten in large numbers by blue tits and other woodland birds agile enough to dart around the stems.

In late summer the huge quantity of seed produced provide a food source for many of our seed-eating birds.

It can be seen that the nettle plays a very important role for both rural and urban wildlife – indeed some of the insect species such as the nettle weevil live only in the nettle patch.



Be Nice to Nettles! - *continued*

Nettles and People

Humans have used nettles for food, clothing and medicine. Nettle teas and cordial can be bought from the supermarket and in some parts of the country it is possible to buy nettle wine or beer. It is added to speciality foods, such as cheese and spaghetti, as a flavouring and colour. Health and wholefood shops sell nettle hair shampoos and conditioners.

The nettle has a long history as a medicinal herb. Some of the claims made in the past are now being scientifically tested and nettles are being prescribed to treat disorders such as diseases of the prostate, allergies and arthritic conditions. They are a valuable ingredient of herbal tonics, tinctures and homeopathic preparations.

Finally is the potential use of nettle fibre. Research projects in Europe are trying to find ways of cultivating nettles and processing them in an economical way so that the nettle fibre might be produced commercially, either for textiles or composite materials.

Nettles in the garden

Although just a weed to many gardeners, the nettle has a lot to offer the resourceful gardener. In the organic garden the nettle is host to ladybirds in the early part of the year, which prey on aphids attacking the crop plants later in the summer. Nettles leaves are also a great addition to the compost heap being rich in nitrogen they provide the fuel for the bacteria to break down the more woody material in the heap.

Perhaps the best use of nettles in the garden is as a nutritious plant food that can be easily brewed. As well as providing a rich supply of minerals to your garden plants if sprayed over the foliage it deters pest species and prevents fungal diseases.

So how about allowing a nettle patch or two in your garden?





Help our honey bees!

What would you think if you were told that dairy cows were producing 30% less milk each year, which could endanger future supplies? The implications of that story would be hugely significant and be front page news. Well for another vital resource this is actually happening. Bee numbers in the UK have fallen 15–30% in the last two years, mirroring steep declines and empty hives witnessed in the USA, mainland Europe and elsewhere. This is an extraordinary figure and the impact of their loss could be devastating for agriculture.

Defra and WAG have produced a plan (March 2009 – available on the WAG website) that aims to address the challenges facing beekeepers in the light of these dramatic declines in honey bees in the UK and rest of the world.

Honey bees contribute directly to local food production and make an important contribution, through pollination, to crop production. They are susceptible to a variety of threats, including pests and diseases such as varroa mites, foulbrood and viruses. Colony losses due to varroa infestation have increased since 2001. This is a result of the mites developing resistance to available pyrethroid varroacides and the limited alternative treatments. It is vital that effective pest management is carried out to reduce spread and manage disease. The increased use of powerful new pesticides on crops such as maize and rapeseed, and more intensive farming are also possible causes of their decline. Beekeeping is undertaken by 200–300 commercial bee farmers and some 33,000 amateur beekeepers. The economic value of honey bees as crop pollinators is much greater than their value as honey and wax producers. In the USA California's almond crop collapsed by 80% when the honey bee population crashed in that state. In Europe, at the current rate of mortality, Apimondia (an international beekeeping body) has said European beekeepers could only survive another 8–10 years.

At the moment many beekeepers are not members of any beekeeping associations and are not recorded on the National Bee Unit's voluntary database of beekeepers (BeeBase), making them difficult to reach and include in the disease surveillance programme operated by the NBU's Bee Inspectors.

The plan aims to address the challenges facing beekeepers. It aims to keep pests and diseases to the lowest levels achievable, promote good standards of husbandry, encourage effective biosecurity, ensure sound science underpins policy and encourage joint working. It also aims to encourage individual beekeepers to sign up to BeeBase and raise awareness about disease recognition and promotion of good beekeeping husbandry.

Publication of the plan marks the beginning of work on its implementation and the identification of further priorities and actions and identifies the roles and responsibilities of Government, beekeepers and other stakeholders in achieving the plan's aims. As well as the caring for bees in their hives, everyone can help them out in their gardens by planting nectar-rich plants and plants that flower early in the spring to provide that vital food source early on in the season – pulmonaria, foxgloves and comfrey are all great for bees.





Turtles in Carmarthen Bay

World Turtle Day takes place in May and although we may imagine turtles in clear tropical waters some species are also found in the less balmy waters of Carmarthen Bay.

Leatherback turtles appear in our waters to feed on dense jellyfish blooms. These are being studied by Swansea and Cork Universities who are trying to find out more about where they come from and why they come here.

Leatherback turtles are critically endangered with steep declines in populations in some parts of the world. Egg collection for human consumption and incidental mortality of adults and juveniles in various types of fishing gear have all contributed to this decline.

The leatherback is the largest of the marine turtles and gets its name from the black, leathery skin that covers its carapace (shell). They are unique amongst reptiles in that they have some internal control of their own body temperature, so can forage in temperatures lower than 5°C and can dive to depths of over 1 km.

They are usually about 2 m long and weigh around 600 kg. The biggest turtle ever recorded was a male leatherback known as the *Harlech Turtle* that washed up dead at Harlech, North Wales in the UK in 1988. It had drowned after entangling in fishing gear and it measured 2.91 m in length and weighed 916 kg!

Leatherbacks often mistake litter, such as plastic bags and balloons, for jellyfish and eat them. Plastic can block a turtle's gut, causing death by starvation. Balloon releases well inland can still mean that balloons drift out to sea and cause a threat to marine life.

To understand leatherback turtle movements, satellite tags were attached to nesting females in the southern Caribbean in 2002 and 2003. The Universities followed nine turtles for up to 18 months and was surprised that turtles dispersed widely throughout the North Atlantic. Some remained in the tropics, but others rapidly travelled up to northern latitudes, approaching close to the UK and Ireland. Further research was carried out on jellyfish distribution, the leatherback's main source of food, by surveying them from the air. Their first aerial survey of the Welsh coast quite revealed more than 200 million jellyfish! The jellyfish were giant white jellyfish of the genus *Rhizostoma* - prime food for a leatherback turtle and which weigh up to 30 kg.

Aerial survey over thousands of miles of sea during 2003, 2004 and 2005 showed that the *Rhizostoma* jellyfish congregated in two hotspots on the Welsh coast – Carmarthen Bay in the south and Tremadog Bay in the north.



Rhizostoma jellyfish



Leatherback turtle © Mike Daines



Turtles in Carmarthen Bay – *continued*

These high concentrations of jellyfish might be expected to lead to localised residence of leatherback turtles in these bays. Aerial sightings and public records submitted confirmed this - that leatherback turtles come to the UK and Ireland to feed on dense jellyfish blooms. But why don't they stay here all year round?

Sightings of leatherback turtles occur mainly in August and September – when the water is warmest. The Universities satellite tag results painted a similar picture – tracked animals always turned south once they encountered water around 15 °C. While leatherbacks are seasonal visitors to our shores, limited by water temperature, data suggests that their range is expanding due to climate change. Tracing the position of the summer 15 °C isotherm (line connecting points of equal average temperature) over the last few decades, revealed that this isotherm, which essentially approximates the northerly limit of leatherbacks, has moved north by around 330 km in the last 20 years.

By learning about the movement of leatherback turtles high-risk areas for fishing may now be identified where fishing could be restricted or banned, helping to conserve this endangered species. So if you visit the coast in the summer, keep your eyes peeled for leatherback turtles, and if you out at sea, look out for jellyfish aggregations. If you see either leatherbacks or jellyfish, please let the project know via their online reporting form: www.turtle.ie/

Learning to live with sea buckhorn in Pembrey Burrows Local Nature Reserve – Simeon Jones

For any beach goer seeking the golden sands of Cefn Sidan, sea buckthorn has become as familiar as the sand dunes themselves. Whilst crossing the sand dunes to get to the beach you may do battle with the impressive thorns of individual plants that spring up here and there or be faced with an impenetrable barrier of mature sea buckthorn over 2 m tall.

Sea buckthorn has recently earned itself the reputation as a problem plant - it isn't native to the west coast and ends up covering the entire sand dune system whilst preventing access and destroying the species rich dune grassland habitat. And to a large extent this is what has happened not only at Pembrey Burrows but also along the whole Pembrey peninsula and across the water at Pendine and Laugharne Burrows.

Sea buckthorn was originally planted here to help stabilise the sand dunes when Pembrey Forest was planted in the 1920s. However, more recent thinking has found that sand dunes are better off as mobile systems, especially if they need to move to take into account a changing environment such as rising sea levels.

So it would seem that the solution to this thorny problem would be to remove the plant from the sand dunes and restore access and the species rich grassland. However, sea buckthorn now covers such large areas that removing all of it would be very expensive. Therefore learning to live with sea buckthorn and finding ways to protect the dune grassland and access may be the only option.



Sea buckthorn © Richard Pryce



Learning to live with sea buckhorn - *continued*

At Pembrey Burrows both options have been employed. In some areas sea buckthorn has been cleared completely and grazing re-introduced for the benefit of the species rich dune grassland. In other areas where large amounts of scrub occur, some of the scrub has been retained for its own value, including sea buckthorn. In addition, in some areas the sea buckthorn has been left more or less intact. In these areas the main priority is to prevent the sea buckthorn stands from joining-up completely and retaining existing pathways through the sea buckthorn for walkers and people going to the beach.

The Millennium Coastal Park has coordinated the sea buckthorn removal programme at Pembrey Burrows since 2005 with support from the Countryside Council for Wales. This has proceeded in conjunction with a project to introduce grazing to the sand dunes. So far around 10 ha has been cleared at a cost of £50 K. The sea buckthorn is left in large compost heaps which offer a home to amphibians, reptiles and small mammals. Over time the compost heaps are slowly cleared at an appropriate time of year.

The clearance programme will ensure that we retain the species rich dune habitat, whilst also learning to live with sea buckthorn. And in the future we may even learn to love it, as it happens to have many medicinal properties and edible nutrient-rich berries that are descended upon each year by fieldfare and redwing.



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