



## WWBIC Bulletin No. 21

May 2014

Welcome to WWBIC newsletter number 21. Thank you to everyone that has contributed.



## Interesting stuff

### ***Fungus recording on Skokholm - A spring excursion***

Skokholm Island recently hosted a weekend visit by mycologists who are developing techniques for the analysis of air and soil samples in order to determine the presence of fungi spores using DNA sequencing techniques. The research programme was developed by Dr. Gareth Griffith (Aberystwyth University) and field operations supervised by Dr. Lizzie Wilberforce (Wildlife Trust of South and West Wales). The field work and subsequent laboratory analysis were carried out by post-graduate researchers Hannah Metcalfe and Marta Zizek.

Nigel Stringer and I were invited to join the group to assist the researchers with collection and documentation of samples (and help convey the substantial amount of sampling equipment to and from the island on the Dale Princess).

Soil samples were collected from 12 sites across the island - each site providing 25 soil cores which were combined to provide a representative sample. Further samples were taken from rabbit and seabird burrows, along with specimens of goose and rabbit droppings.

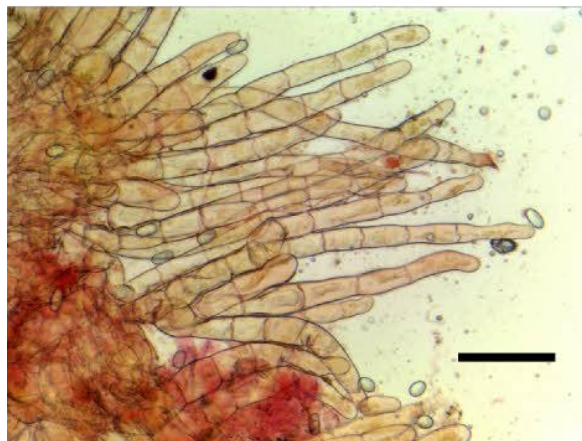
Airborne spores were collected using samplers equipped with battery operated vanes which rotated at high speed for periods of 12 or more hours. The vanes were coated with petroleum jelly to capture any airborne material including fungus spores.

All the samples were refrigerated after collection, then taken back to Aberystwyth for extraction of the fungal DNA and analysis. We look forward to learning more about the fungal species found on the island in due course.

Traditional field mycology was not neglected - though opportunities for finding grassland species in mid-April were inevitably somewhat limited. Fortunately we encountered several collections of a small orange cup-like fungus on soil. The specimens measured up to 10 mm. in diameter and were collected for examination under a microscope.



© David Harries *Cheilymenia fibrillosa*



© David Harries *Cheilymenia fibrillosa* marginal hairs  
(scale bar = 10 microns)

Subsequent inspection revealed the species as *Pseudaleuria fibrillosa* (previously known as *Cheilymenia fibrillosa*). Although fairly widely distributed in England, our find appears to be the first record for Wales. The dried voucher material will be deposited with the fungarium at the Royal Botanic Gardens, Kew.

Throughout the weekend we were made very welcome, and well catered for, by our island hosts. The weather was remarkably kind to us - particularly fortunate given the nature of work as it would otherwise have been rather uncomfortable if wet and windy. A memorable excursion and a great opportunity to support scientific research at first hand.

**David Harries**  
**Pembrokeshire Fungus Recording Network**



### ***Dryad's Saddle***

Clare Flynn spotted this fine example of Dryad's Saddle (*Polyporus squamosus*) in woodland near Llansteffan Castle on May 6<sup>th</sup>.  
(There is a 20p coin placed on the fungi to demonstrate scale.)

© Clare Flynn

## Albino tadpoles



Sally Hall photographed these albino tadpoles near Newcastle Emlyn in March. According to Froglife albinos have a reduced rate of survival at each growth stage.

© Sally Hall



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## Discovering Oil Beetles . . .

Well, I guess you know how it is – you don't see an oil beetle for years and then 3 come along at once. That's how it's been for me this year and these magnificent insects have really captured my imagination. In fact, having only recently developed a passion for invertebrates, I must confess that before this year I had NEVER seen an oil beetle and had lived in ignorance of this impressive insect and its truly amazing life cycle.

Over Easter I was strolling along the cliff path towards the old quarry from Porthgain – not on a botanical or entomological foray but rather a family wander with children and dog. It was the children that spotted the first 'huge black beetle' disappearing into the undergrowth. We soon spotted another and were wowed by their size, shape and stunning purple iridescence. My limited field experience with invertebrates led me to think it might be a type of rove beetle, superficially similar to devil's coach horse with those shortened wing cases and elongated abdomen but unlike rove beetles, the elytra overlapped and the abdomen was very swollen. One individual was burrowing with gusto into the cliff path and we wondered if these might be females digging nests. Back at home, a combination of field guides, iSpot and google told me that these critters were either violet or black oil beetles of the genus *Meloe*. It was the Buglife website, where I discovered that these charismatic beetles were really rather special.....



The name derives from the fact the beetles can exude an oily substance from their joints when disturbed. This liquid can cause irritation & blistering of the skin, which explains their alternative name, blister beetles. The females lay their eggs in burrows in open sandy sites. The resulting larvae, known as triungulins (yes really!), climb out and head for vegetation, climbing up to sit on flowers and wait for a passing lift. Not any old lift though – they are specially adapted to latch onto the hairs of mining solitary bees which then unwittingly carry the grubs to their burrows where they feed on the

pollen and larvae of the bees before emerging as adult beetles. It's probably no coincidence that I spotted a whole cluster of solitary bee burrows in the bank just a metre or so from my second oil beetle sighting at Swan Lake Bay, the week after Easter. As indicators of biodiversity these highly specialised beetles are very important and with the degradation of the countryside over past decades, oil beetles, along with their wild bee hosts and the plants on which they both depend, have suffered a dramatic decline.

There are five UK species – the violet oil beetle, the black oil beetle, both of which are nationally scarce though relatively widespread, the rugged oil beetle, the short necked oil beetle and the Mediterranean oil beetle, all of which are nationally rare and very localised. All five species are part of the UK Biodiversity Action Plan and are species of Principal importance in Wales. Dr Sarah Beynon, beetle recorder for Pembrokeshire has explained that these are a reasonably frequent sight on Pembrokeshire footpaths during the early summer and yet, as with so many species they are desperately under-recorded. WWBIC holds only a handful of records, most of which came from a Buglife Survey back in 2010. Buglife's focus on the Oil beetle is still continuing and a wealth of information and ID guides can be found at <http://www.buglife.org.uk/campaigns-and-our-work/oil-beetles>. They also are requesting records as part of their Oil Beetle monitoring project.



Female Oil Beetle showing shortened elytra, swollen abdomen and kinked antennae (the kink is even more pronounced in the smaller males)

© Clare Flynn

I would love to know more about *Meloe* and their distribution and abundance in Pembrokeshire. If anyone would like to join me in some oil beetle searching and recording or indeed if anyone has spotted these in SW Wales, please get in touch with myself [eco.edventures@yahoo.co.uk](mailto:eco.edventures@yahoo.co.uk) or Kate at WWBIC.

Clare Flynn

## Projects

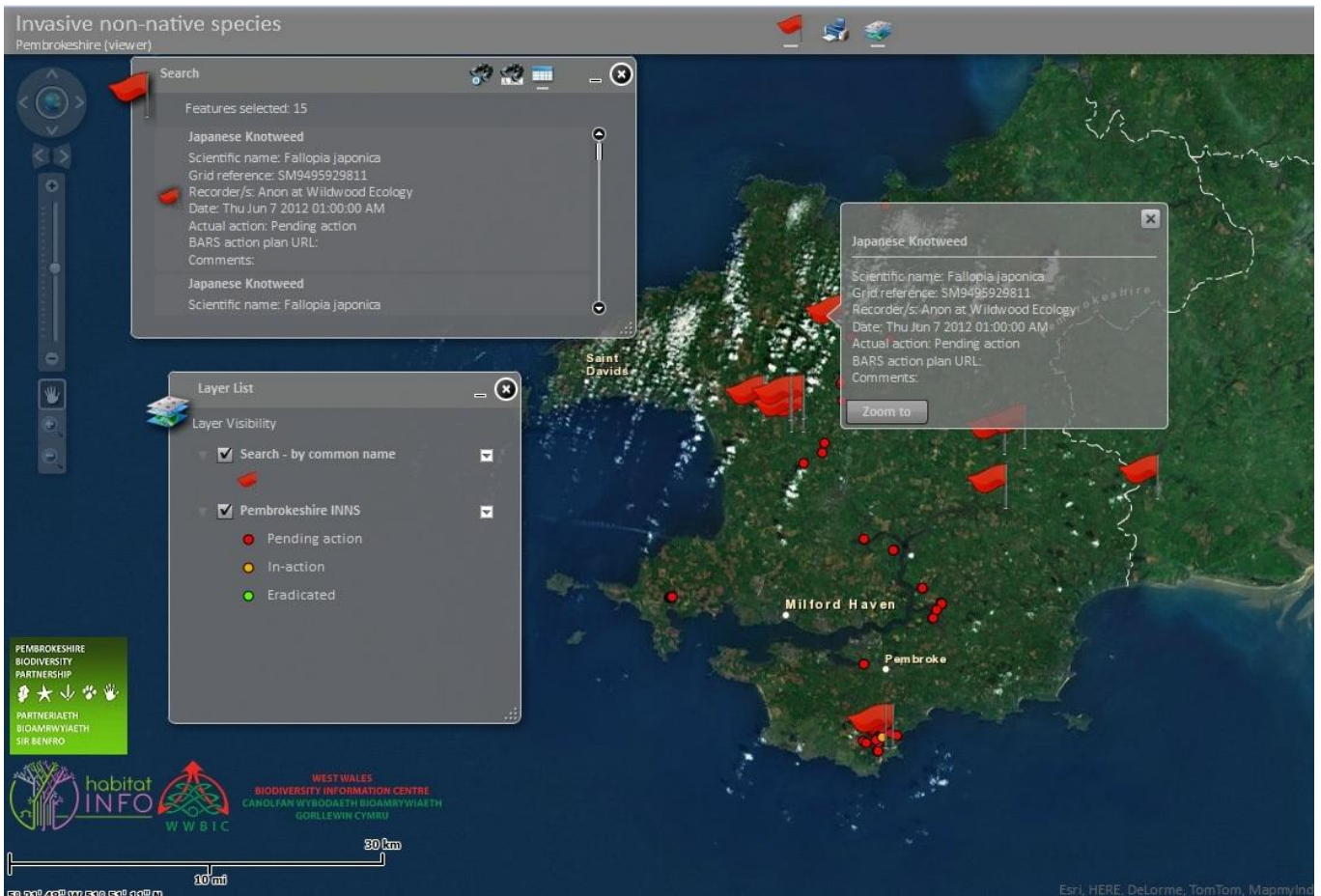
### ***Data Mobilisation of the WTSWW Reserves***

WWBIC was fortunate to receive funding from two sources to computerise the paper records held at the Wildlife Centre in Cilgerran. Pembrokeshire Biodiversity Partnership's financial contribution is supporting staff and volunteer time to enter the data from the Pembrokeshire reserves while the Wales Biodiversity Partnership funding will enable us to complete the region with the reserves in Ceredigion and Carmarthenshire. The files are a fascinating archive of citations, management plans, surveys and photographs mostly dating from the 1960's and of course there are lots of interesting records amongst all of this. Much of the survey work was part of national survey and monitoring projects and WWBIC already holds the data but there are records not on our database from many visits by other recorders. Familiar names from the recording community keep cropping up and it's wonderful that not only are we working with good quality records, it gives us here at WWBIC, a greater insight into the length of time our recorders have been active and the huge contribution they make.

## Invasive Non Native Species Action Plan for Pembrokeshire

WWBIC has been part of a task and finish group to draw up a species action plan for INNS in Pembrokeshire. The action plan has now been signed off and published and can be found together with other plans at <http://ukbars.defra.gov.uk/project/show/36376>

Part of the work has been to commission habitat INFO at Solva to create a website where INNS records can be viewed and actions recorded. The website draws its data from the WWBIC database and links to BARS, the Biodiversity Action Reporting System and Biodiversity Officer, Ant Rogers, urges people to record their actions. BARS might not press your buttons but it is increasingly used as a source of evidence by government and may impact on future allocation of funding for projects.



Of course, WWBIC is urging people to record INNS species. Although several INNS species are, regrettably, very common, we hold relatively few records for the region. It will be important as the work develops that we can flag up locations on the website for the partnership to make decisions and prioritise actions. To this end, we used our training funding from the Wales Biodiversity Partnership to support a workshop in Cilgerran to raise awareness and encourage recording. This was held in conjunction with Afonydd Cymru and Pembrokeshire Biodiversity Partnership and was well attended by over 40 Rivers Trust and Wildlife Trust volunteers and officers.

**Colin Russell**

## Data

There are **1,184,108** species records in our Recorder 6 database.

The number of records in the GIS reporting species layer is: **1,093,339**

Since the last newsletter we have received datasets from: Ron Elliott; John Steer; Robin Taylor; Vaughn Matthews; Wildwood Ecology; Sturgess Ecology; Just Mammals and Soltys Brewster amongst others.

## Feedback

### *WWBIC Recorders Forum*

It was fantastic to see so many recorders at this year's Forum. It was our best turn-out to date and probably the maximum number for the Harlow room at the Welsh Wildlife Centre, Cilgerran. Thanks to those of you that attended, we had lots of positive feedback and were pleased with how the day went.



Jane Hodges chaired the event and Colin Russell gave his annual WWBIC update. The first guest speaker was Dr Helen Roy with her talk titled, 'The Landscape of Citizen Science'. Helen and family had a horrendous journey to west Wales from Oxfordshire; we were grateful that they persevered through the heavy rain and strong winds. Helen defined citizen science and reviewed projects going on throughout the UK. She spoke more specifically about the UK ladybird survey, a subject close to her heart and one she is heavily involved with. Helen spoke for an hour, yet it was over in no time and her talk stimulated several questions from the audience. Another fabulous lunch served up by the cafe staff at the Welsh Wildlife Centre followed and allowed time for attendees to mingle and chat.

After lunch, John Clark from RSPB talked about 'The Three Rivers Landscape Scale Conservation Project' in Carmarthenshire. He was followed by Sinead Lynch, Bumblebee Conservation Trust, who talked us through the various bumblebee species and their distribution in west Wales. Pat O'Reilly then provided us with a humorous talk through the 'Fungal Treasure Chest of West Wales' which was illustrated by many lovely photographs. Jane then summed up and closed the event.

## WWBIC Free Training Days



Two training events were held in March. The first, on the 15<sup>th</sup> was titled, 'Create your own insect collection: Pinning, mounting, labelling and curation techniques' led by Dr Sarah Beynon. During the day Sarah advised on killing and preserving specimens as well as cleaning, pinning, card-mounting and labelling. Attendees had the opportunity to practice pinning and card-mounting a selection of insect specimens and were provided with a display box to keep. Eight people attended and found the day informative and enjoyable.

The second, on March 19<sup>th</sup>, was an Invasive Non Native Species (INNS) workshop mentioned previously under 'Projects'.

We have funding once again this year from Wales Biodiversity Partnership and plan to put on some free training events over the summer months. This year, as well as holding some introductory level training we also plan to put on training at a more expert level.

The following days have been provisionally booked:

'Beetles as pollinators' led by Dr Sarah Beynon

'Introduction to Dragonflies & Damselflies: Identification and Habitat Management' led by Deborah Sazer

Kate Smith

## Forthcoming events

### WWBIC Recording Days

Pembrokeshire: Greenhill Farm, Thursday 22<sup>nd</sup> May 2014

Carmarthenshire: Dyfed Permaculture Farm Trust, Tuesday 1<sup>st</sup> July 2014

Ceredigion: tbc

### Wales Biodiversity Week, 7th – 15th June 2014

[Events in Pembrokeshire](#)

[Events in Carmarthenshire](#)

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If you have any comments or feedback regarding this newsletter please email: [kate@westwalesbiodiversity.org.uk](mailto:kate@westwalesbiodiversity.org.uk) or phone the WWBIC office on 01994 241468



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West Wales Biodiversity Information Centre