



WWBIC Bulletin No. 25

May 2016

Hello to all and welcome to the 25th edition of the WWBIC Bulletin, for Spring 2016. Inside you'll find a variety of articles focused on recording activities in West Wales as well as what's been going on at WWBIC in recent months. Enjoy!



Razorbills (*Alca torda*) at Dinas Head ©Colin Russell

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WWBIC Data Holdings Update

WWBIC currently holds **1,862,857** records in our Recorder 6 Database and there are **1,765,900** records in the GIS reporting species layer. This is up from **1,839,871** and **1,592,475** respectively at our last newsletter.

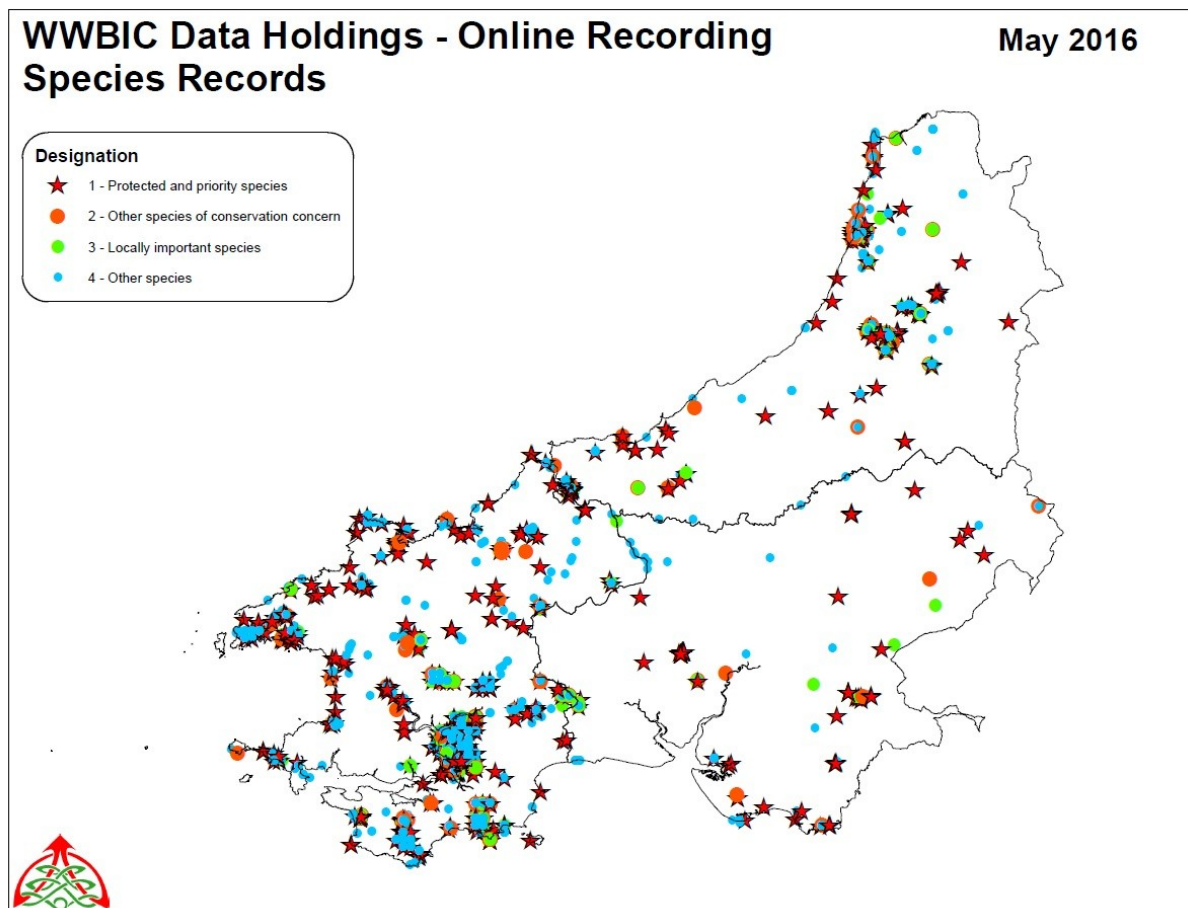
WWBIC would like to thank the following individuals and organisations who have provided data since the last newsletter:

Vaughn Matthews, Janet Buckles, Sian Musgrave, Linda Hickling, Martin Howe, Richard Gould, Mark Deane, Sam Langdon, Becky Hulme, David Rees, Matt Sutton, Emily Foot, Annie Haycock, Sam Bosanquet, Lynne Houlston, Kathryn Thorne, Bob Haycock, Jon Green, David Redhead, Chrispian Lee Snell, Clare Flynn, Richard Pryce, Lizzie Croose, Peter Sturgess, Anna Sutcliffe, Aline Denton, Josh Mitchell, David Harries, Henry Sturgess, Ina Smith, Tony Allenby, Jon Crum, David Morgan, Sarah Mellor, Ruth Harding, Jade Flear O'Rourke, Lin Gander, Robin Taylor, Steve Lucas, Deborah Sazer, Richard Williams

WWBIC Online Recording

We are delighted that we are receiving increasing numbers of records via our online recording system. As of the April 12th download we have 8,304 records that were submitted online in our database.

The top 5 online recorders are: Annie Haycock, Chloe Griffiths, Bob Haycock, Scott Roe and Madeline Tasker. The map below shows the spread and category of species being recorded online.



Please go to our website and register if you wish to record online. <http://record.wwbic.org.uk/>

A big thank you to everyone that has shared records with us over the last 6 months .

Prolonged storms bring high numbers of turtles to our shores

On the 29th August 2015 a live Leatherback turtle (*Dermochelys coriacea*) was seen offshore of Little Haven, Pembrokeshire. On the 13th September 2015 a live Leatherback was seen by a lucky swimmer just off Penbryn Beach in Ceredigion. It is not unusual to see Leatherback turtles in British waters, they have the ability to cope with our colder seas. However, strong south-westerly winter storms occasionally bring to the UK hard-shell species of turtle that are unable to cope

with cold waters and should not be here. Generally, these are small specimens or turtles that are compromised with a limb missing. Our cold waters cause hypothermia preventing normal feeding processes causing them to become moribund and wash up on our beaches. Sometimes these stranded turtles can appear to be dead but are just hypothermic. Any hard-shell species found on a UK beach should not be returned to the cold water. Collection will be arranged by Marine Environ-

mental Monitoring and it will be taken into rehabilitation facilities where it can be very slowly warmed up, one degree a day, until the required temperature of 21 degrees is reached. Only then are its feeding and digestive processes restored. If the turtle survives it will then be returned to warmer climes. If dead, the turtle will be taken for post mortem examination within the Defra funded Cetacean Strandings Investigation Project, (CSIP).



© Rod Penrose MEM CSIP

When this seasons storms of Abigail and Barney caused strong south-westerly currents to batter our coastline they brought with them the first of many unfortunate sea turtles. On the 19th November a dead Leatherback turtle washed up near Dyffryn Ardudwy, Gwennydd.

During storms Clodagh and Desmond, turtles were stranded at various UK locations. In Wales the first ever Green turtle (*Chelonia mydas*) washed up at Black Rock Sands, Gwynedd on the 6th December. This was the first known since the database started in 1748. On the 12th a live Kemp's

Ridley turtle (*Lepidochelys kempii*) was rescued from rocks at Aberystwyth, Ceredigion. It was taken for rehabilitation at Bristol Aquarium where it survived for 13 days, had started to feed but died suddenly. On the 15th a dead Kemp's Ridley stranded near Harlech and on

18th a live Loggerhead turtle (*Caretta caretta*) stranded on Caldey Island, Pembrokeshire. The seas were too rough to carry out a rescue and the sick animal, already compromised by having both front limbs missing, died. Then came storms Eva and Frank which deposited a dead Loggerhead turtle on Penrhos Beach, Newborough on 27th December. This specimen disappeared and could not be recovered for a post-mortem examination. Where possible all dead sea turtles are collected and examined for cause of death within the CSIP.

A further 14 turtles stranded around the UK during storms Gertrude and Henry. Gertrude blew through in January 2016 and brought a freshly dead Kemp's Ridley turtle to Poppit Beach, Pembrokeshire on the 15th. Storm Henry delivered another dead Green turtle, this time to Hell's Mouth beach on the Llyn Peninsula; a dead Loggerhead at Freshwater West, Pembrokeshire on the 31st; a very decomposed Kemp's Ridley at Harlech on 3rd February; a freshly dead Loggerhead at Fairbourne, Gwynedd on the 10th and a dead Loggerhead

at Saundersfoot, Pembrokeshire on 17th.

So far this season 39 turtles have washed in around the UK and Republic of Ireland. 12 of these have been in Wales.

All marine turtles should be reported to Freephone **0800 6520333**.

Rod Penrose & Lin Gander
TURTLE database Administrators
Marine Environmental Monitoring
info@strandings.demon.co.uk

A new wildlife recording group for Pembrokeshire?

Calling enthusiastic naturalists and (tentative) wildlife recorders!

A year or two ago I worked with West Wales Biodiversity Information Centre (WWBIC), PLANED and Pembrokeshire Biodiversity Partnership to run a Biological recording and Community Project called the Square Challenge. The aim of this project was to support local wildlife interest groups to turn their wildlife sightings into biological records and we completed a successful pilot project with the Hayscastle Environment Group. It was an extremely enjoyable project to work on and I've been mulling over the possibility of using some of those ideas to set up a Pembrokeshire Wildlife Recording Group.

It would be great to encourage keen naturalists and wildlife spotters, who may not be actively involved in recording at the mo-

ment, to meet up and do some focussed wildlife spotting and identification in the beautiful Pembrokeshire Countryside (and possibly towns?!). Working with WWBIC we could target particular 1 km squares which are currently very under-recorded but could also set out to explore any sites of particular wildlife interest or appeal. As a group we would aim to accurately identify species seen (both common and not so common) and submit these sightings as biological records to WWBIC.

Anyone with a keen interest in natural history would be very welcome to come along and take part, regardless of experience or level of knowledge. I can provide support to the uninitiated in the process of biological recording and WWBIC will ensure records are properly verified and entered into their database. I have a particular interest in invertebrates

(particularly solitary bees and bumblebees) and plants, in which I am willing to lend support in identifying these taxonomic groups. Any County Recorders or other specialists who could provide info, advice and guidance on where to go and what to see would be greatly welcomed!

If we can get a few enthusiastic and hardy souls together, the focus will be on shared enjoyment of Pembrokeshire's natural heritage. Hopefully this will result in some good quality biological data, helping to fill in the gaps in the County's database of records. If you'd like to have a chat about coming along and getting the group going, please email Clare at fieryclearwing@gmail.com

You can also find me Tweeting about wildlife @wildaboutnature.

Clare Flynn

An update to the State of Wildlife in Pembrokeshire report, compiled by Ant Rogers, Biodiversity Implementation Officer, has recently been published by Pembrokeshire Biodiversity Partnership.

Executive Summary

Fourteen species (or species groups) and nine habitats (or habitat groups) are assessed for their current condition and likely trend over the last five years in P e m b r o k e s h i r e .

Whilst there have been some successes and some features are now improving, the majority of features assessed are in poor or moderate condition and the overall trend is still declining. Accurate assessment is hampered by a paucity of robust, long term data. If Pembrokeshire is going to play its part in fulfilling the UK's international commitments on halting biodiversity loss and reversing its decline, there will need to be even more sustained commitment to, and greater investment in,

long term conservation projects and monitoring programmes.

The features assessed as in good condition or with improving trend have all been the subject of sustained conservation effort.



Table 1: Summary of Condition and Trend Assessments

Feature	Condition	Trend
Heathland	Poor	Data Deficient
Southern Damselfly	Poor	Declining
Three Lobed Water Crowfoot	Moderate	Stable
Ponds and Lakes	Moderate	Improving
Rivers, Streams & Ditches	Moderate	Improving
Otters	Good	Stable
Hedgebanks	Data Deficient	Stable
Bats	Moderate	Stable
Oak Woodland	Moderate	Improving
Hazel Dormouse	Data Deficient	Data Deficient
Arable Field Margins	Data Deficient	Declining
Farmland Birds	Poor	Declining
Grassland	Data Deficient	Declining
Marsh Fritillary	Poor	Declining
Grassland Fungi	Good	Stable
Kestrel	Moderate	Data Deficient
Coastal Cliffs and Slopes	Moderate	Improving
Chough	Moderate	Stable
Wetland Birds	Moderate	Stable
Mudflats	Poor	Stable
Native Oyster	Poor	Declining
Pink Sea Fan	Moderate	Declining
Grey Seal	Good	Improving

Habitat Management in the Red Squirrel Focal Site

Red squirrels only exist in mid Wales due to the existence of non-native coniferous forest

On first glance, this statement may appear contradictory; native red squirrels have managed pretty well in Britain for over ten thousand years, happily inhabiting native broadleaved woodlands since the end of the last ice age, so why does their survival require management interventions?

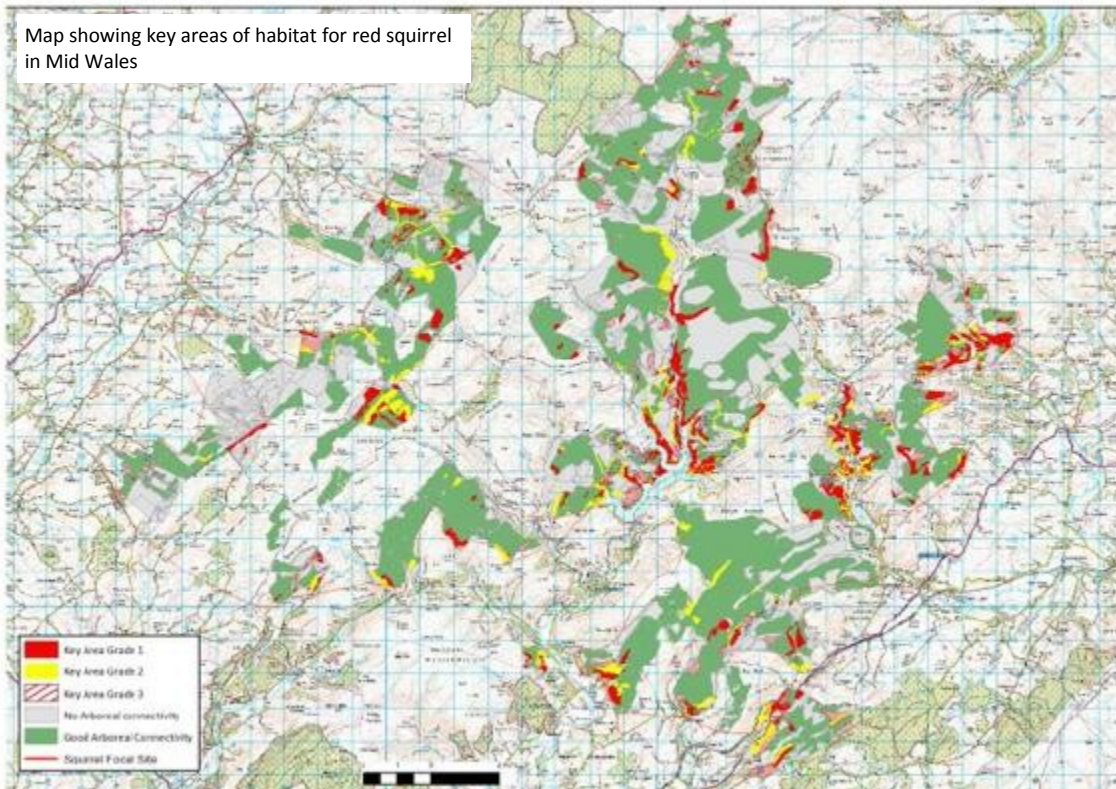
At the start of the nineteenth century, despite fluctuations in populations caused by habitat loss and persecution, red squirrels thrived in this island¹. Once the grey squirrel came into the equation in the late nineteenth century, the red was in retreat. Grey squirrels have now replaced red squirrel populations throughout much of their former range, outnumbering red squirrels by more than 21 - 1 in Britain, in Wales the figures are thought to be nearer 320 - 1.

Greys have a competitive advantage over red squirrels in broadleaved woodland, partly due to an ability to digest acorns better than our native species. Red squirrels are unable to utilise broadleaved habitats as efficiently as grey squirrels and therefore loose out; added to this is the impact of squirrelpox virus on red squirrels. It is thought that when grey squirrels arrive in woodland populated by red squirrels, the two species can co-exist for about 20 years before red squirrels disappear².

On the other hand, coniferous plantations, as we have in mid Wales, dominated by small-seeded species such as Sitka spruce, do not provide a good food supply for any squirrel. None-the-less, the red squirrel, with a smaller size and lower caloric requirement, can cling on in

these plantations, relying on small patches of larger-seeded conifers, such as lodgepole pine and Norway spruce. A diversity of coning tree species is beneficial to red squirrels, providing squirrels with alternative crops in poor seeding years³. Reds, which are hesitant to cross open ground, also benefit from the thick canopy cover provided by coniferous plantations. Although grey squirrels will 'invade' coniferous woodland periodically, generally at times of high population and/or low food availability in the wider environment, the relative absence of grey squirrels in these habitats relieves the pressure on red squirrels, allowing reds to survive, albeit at a low population density, in non-native conifer plantations.

Map showing key areas of habitat for red squirrel in Mid Wales



Unfortunately, red squirrels in mid Wales are now at risk from unsympathetic forest management. Much of the Tywi forest and surrounding plantations was planted 30-40 years ago and is now ready for harvesting. It is imperative that the felling of these plantations is carried out in a way which limits the risk to the vulnerable red squirrel. The report, 'Forest Management Requirements for Red Squirrels in Mid Wales' (Dr S. Cartmel and H. Denman) was published in 2012. The report maps woodland habitat in the mid Wales red squirrel focal site, grades the habitat according to its suitability for red squirrels, and offers recommendations for management in the interests of red squirrel conservation.



Camera trap near Llanddewi Brefi

The Mid Wales Red Squirrel Partnership (MWRSP) is now working closely with forest managers, such as Tilhill, and Natural Resources Wales (NRW), to come up with innovative solutions to reduce the impact of clearfelling on red squirrels. The general advice is to keep key areas of red squirrel habitat in long term retention, to retain sufficient canopy cover to connect these key areas and to minimise the size of clearfells and the rate of clearfelling. Restocking decisions will also impact on red squirrels; a diversity of coniferous species is required to maintain food supplies, but too many large-seeded conifers would run the risk of attracting grey squirrels. We advise forest managers to include 10% – 15% large-seeded conifers, and when restocking with broadleaves, to select small seeded species such as rowan, birch and alder. Report co-author, Huw Denman remarked: "Since 2012, much clearfelling has occurred and the forests of mid Wales have become

much more fragmented in nature, causing isolation of stands of trees suitable for red squirrels. The highly vulnerable state of red squirrel habitat means that we now face a critical need to protect the remaining Key Areas, and retain arboreal connectivity between these Key Areas. It is my view that the current intensity of clearfelling in many woodlands in the Tywi Forest is highly likely to cause the extinction of red squirrels in these habitat networks. To prevent the red squirrels in mid Wales becoming extinct, future plans will have to mitigate this risk more carefully." Throughout Britain, the red squirrel remains under threat from potential grey squirrel incursion and disease transmission and it is predicted that, without specific habitat management, numbers will continue to decline. As Huw commented: "We need to ensure that we are all working together for the benefit of our red squirrels and that we collectively help to prevent the extinction of this native

species in mid Wales." In collaboration with forest managers, The MWRSP is aiming to produce a 10 year red squirrel forest management plan for the mid Wales forests within the focal site. We'll keep you posted on progress.

1. Gurnell, J. (1991). Grey squirrel. The Handbook of British Mammals.
2. Gurnell, J., Wauters, L.A., Lurz, P.W.W. and Tosi, G. (2004) Alien species and interspecific competition: effects of introduced eastern grey squirrels on red squirrel population dynamics. *Journal of Animal Ecology* 73: 26-35.
3. Pepper, H. and Patterson, G. (1998). Red squirrel conservation. Forestry Commission Practice Note 5. Forestry Commission, Edinburgh.

Becky Hulme

Red Squirrel Officer, WTSWW

WWBIC Annual Recorders Forum

On Saturday 5th March we once again filled the Harlow room at the Welsh Wildlife Centre, Cilgerran for our annual Recorders Forum.

Dr Lizzie Wilberforce stepped in at short notice to chair the day. Colin Russell (WWBIC manager) summarised events at WWBIC since the last Forum which included staff changes, changes to data holdings and project work.

The main speaker, Matthew Cock, Chief Scientist at CABI gave a talk on the research CABI is doing into the biological control of invasive non-native plant species. Matthew talked in detail about the process involved in finding a natural predator for Japanese Knotweed (*Fallopia japonica*) in it's native Japan. The biology of the predator, a jumping plant lice (*Aphalara itadori*), was then studied and it was rigorously tested in order for it to be deemed safe for release in the UK. Matthew talked in less detail about the same process for Himilayan Balsalm (*Impatiens glandulifera*) and other plant species from around the world.



A brief discussion period followed. Colin asked attendees to think about how to mark WWBIC's 10th anniversary in 2017. The verification of iRecord records was raised and also the relationship between WWBIC and the NBN Gateway.

A delicious lunch provided by the cafe staff provided the opportunity for recorders to mingle and catch up.

Tony Allenby (VC46 macro-moth recorder) spoke first after lunch. 'The state of moths in Ceredigion' referred to species discussed in

Butterfly Conservation's "State of Britain's Larger Moths 2013" and compared this to how the same species are faring in Ceredigion. Tony highlighted some interesting trends in the data.

Phil Newman (Senior Marine Conservation Officer, Skomer) talked about 'Skomer Underwater' and gave an insight into the fascinating marine environment. He showed colourful photos of marine species off the Pembrokeshire coast and talked about underwater monitoring techniques and the use of volunteers.

Nigel Stringer's (Leading UK expert on rusts on native plants) talk, 'Rust recording in Carmarthenshire', summarised the life cycle complexity of some rusts species and amused the audience with tales of specimen collection. Not many speakers could have delivered a talk on rusts in such a humorous manner!



We'd like to express our thanks to the speakers who made the day so varied and interesting, to Lizzie for chairing the day and to the cafe staff. We hope that everyone that attended enjoyed the day and look forward to seeing you all next year when WWBIC will be celebrating our 10th anniversary.

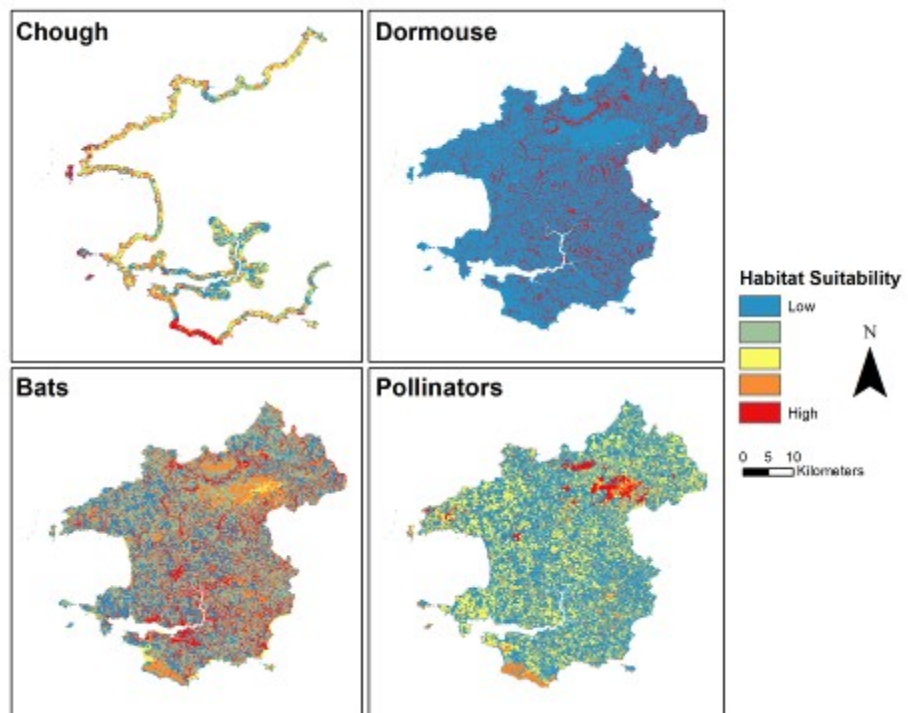
Kate Smith

Conservation Opportunities Planning Tool

In the first few months of 2016 WWBIC completed work on the Conservation Opportunities Planning Tool. This tool built on the interactive website developed by WWBIC for the Castlemartin Peninsula in 2014. This extended web tool included the addition of several new habitat suitability maps, records of species groups in Pembrokeshire and other GIS layers.

New phase 1 habitat data is used in this tool and the watershed layer represents the same river catchments managed by NRW as part of the EU Water Framework Directive. Land held by partners of the Pembrokeshire Biodiversity Partnership was included in this tool along with land held privately.

The only addition in terms of species to the new website were records and a layer representing habitat suitability for dormice. Upon creation of the habitat suitability layers for the entire county the difference between specialist and more generalist species groups becomes apparent. These maps showed that the broader habitat preferences of pollinators and bats resulted in a greater distribution of suitable habitat across the county. In comparison to choughs and dormice which are restricted in their range due to habitat availability within the county.



In April this work was presented to the Pembrokeshire Biodiversity Partnership at their annual conference in Dinas. This renewed interest following presentation of the website for Castlemartin and generated discussion around what marine data could be added to represent Pembrokeshire's important marine reserves.

Josh Jones

B-Lines

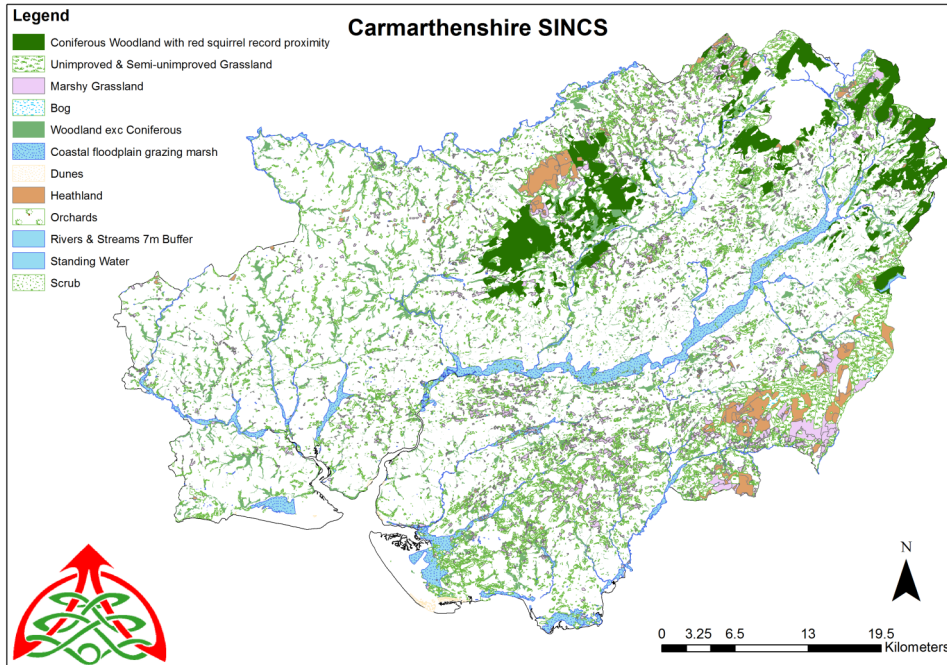
WWBIC are involved in the B-Lines habitat mapping for all of South and West Wales in partnership with buglife, NRW and the local authorities for South and West Wales. The B-Lines are a series of 'insect pathways' along which buglife are restoring and creating a series of wildflower-rich habitat stepping stones. They link existing wildlife areas together and create an additional network of large areas of brand new habitat benefiting bees, butterflies and a host of other wildlife.

WWBIC has completed the initial stages of mapping the core habitat areas which are key and beneficial to pollinators. These maps; supporting GIS layers for meadows, reedbeds, brownfield and more detailed habitat maps will be taken to a steering group consultation meeting in June. At this meeting partners will provide additional information on local initiatives and groups working to conserve and create pollinator habitat. This information will support the GIS analysis in providing information on areas with high connectivity value for pollinators. This work will draw from the pollinator habitat suitability work already undertaken for the Pembrokeshire Biodiversity Partnership.

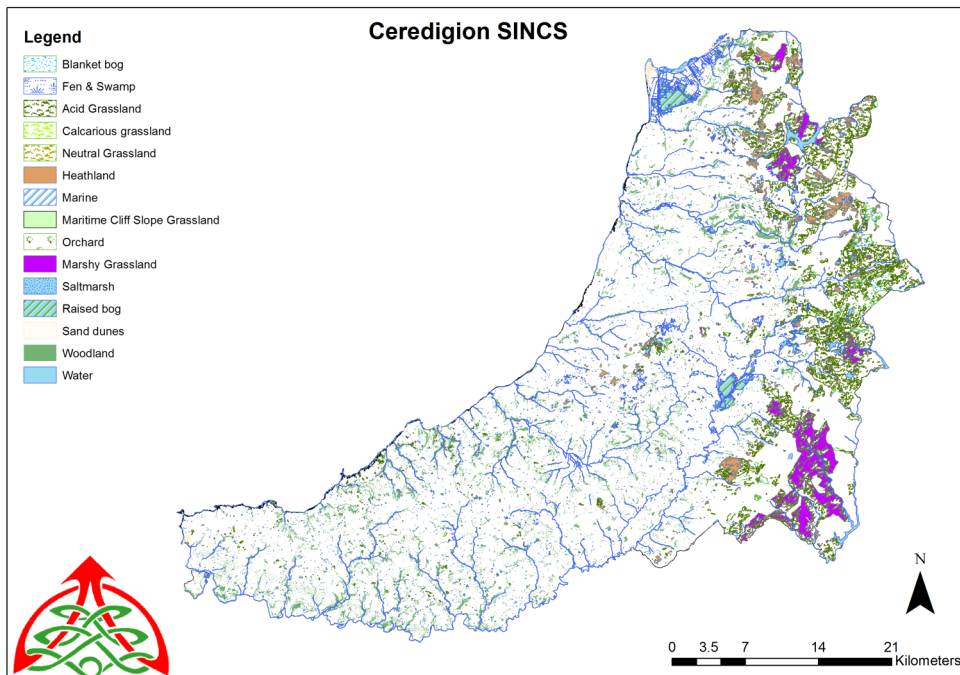
Josh Jones

SINCS in West Wales

Over the last year and more WWBIC has been working with, first, Carmarthenshire and then Ceredigion to identify Sites of Importance for Nature Conservation (SINCS) in these counties. This is a welcome move for us and it fits with the requirements for reporting and the aims of the recent legislation enacted in Wales, the Well Being and Future Generations Act (Wales) 2015 and the Environment (Wales) Act 2016.



Whilst the approach has been somewhat different in both counties, the resulting maps of habitat networks are similar in that they are detailed and identify potential wildlife corridors. Both used relevant criteria from Wildlife Site Guidance Wales, from which key habitat types were selected and mapped for each county. The detailed methods would be too lengthy an article for this newsletter however if anyone is interested to know more we will be happy to provide more information.



Colin Russell

Changes at WWBIC

Welcome Josh Jones

Josh is the latest member of our team, joining us in February 2016 as GIS Technical Support Officer for a fixed term of three years. In this role Josh will be responsible for developing and managing GIS and other spatial data products and services, such as data enquiries, provided by the centre. In addition to these duties Josh is involved in delivering geospatial products derived from a range of data sources in collaboration with Local Authorities and other partners.

Josh has a degree in Environmental Science and is in the process of completing his PhD in the use of remote sensing and modelling of assessing regeneration in tropical rainforests. His hobbies centre around being outside and include cycling, open water swimming, surfing, photography and playing guitar.

Since joining WWBIC in February Josh has helped to complete the Pembrokeshire land use planning tool in partnership with members of Pembrokeshire County Council and Habitat Info. In the coming months Josh will be learning more about web mapping and developing the record centres capabilities in this field. Josh will be involved in developing GIS layers for the Ferryside village forum. This work will eventually become part of an interactive web mapping tool to

assist the forum in managing their local environment.

The B-Lines project, developed by buglife, restores and creates high quality wildflower rich habitat to help conserve population of a wide range of insect pollinators. Josh is currently in the process of mapping corridors which will link small fragments of habitat to assist species movement and dispersal in the South East Wales counties, Carmarthenshire and Pembrokeshire.

Farewell Rob Shaw

Sadly, we said goodbye to Rob Shaw at the end of February. Rob was with us for 19 months. Initially taken on to cover Kate's maternity leave as species data officer he then moved into a more I.T./GIS role. He worked on the Carmarthenshire and Ceredigion SINC projects and wrote some time saving scripts in SQL. Those of you who met Rob will know what a keen recorder he is and while living in the area he generated just over 14,000 records for our region!

Volunteers

A big thank you to our volunteers Gareth Morgan and Emma Jones. Emma comes in weekly and is making great progress inputting Ceredigion bird records. Gareth volunteered weekly between September and January and comput-

erised a number of bat records for us.

WWBIC directors

It is with regret that founder Board member, Mike Howe, felt the need to offer his resignation last year as work commitments meant that he could no longer attend meetings. Mike has, in his ten years with WWBIC, made a significant contribution and been a strong advocate for records centres in Wales. We wish him well in his job with the National Trust. Mike's resignation meant that there were three spaces on our Board which happily have now been filled with three new Directors. Chloe Griffiths is an ecologist and keen recorder living in Aberystwyth, Fiona Lanc runs the ecological consultancy, Habitat Matters, from her home near St Clears and Adrian Pugh, who has a general interest in recording, has recently retired from the commercial sector where he worked with BT. All three had previously been involved with WWBIC in different ways and we welcome their contribution. Not only does this mean that we have full Board membership, new skills and experience, but we also have new members joining from each of the three counties in our region.

Atlas of Living Wales

Many of you will have already seen from the April NBN Newsletter that an Atlas of Living Wales is currently being developed. There is a link to its content at the end of this article.

The Wales Atlas will use a platform originally created for the Atlas of Living Australia. The database will ultimately be UK wide and the Wales Atlas, together with its counterparts from the rest of the UK, could be reasonably expected to replace the NBN Gateway in the course of time. The Scottish Atlas is already live although it is still under development and can be viewed at www.als.scot The functionality of the atlas website is greater than the NBN Gateway has been able to achieve to date and its deployment will no doubt change how environmental data can be viewed and reported on.

A stakeholder workshop was held in Aberystwyth recently with around 30 present including myself and two other LERC managers. We all felt that there is great potential for this new website, however we did express serious concerns about the impact it might have on the LERC business model which has been working well in Wales since BIS was set up 15 years ago. Foremost of these concerns was that existing Atlas sites have the facility to search and download species records without the access controls which currently exist on the Gateway.

The LERC managers have a meeting with NRW, WG and the NBN in May and we will be represented on an ALW Steering Group which will move the Atlas development forward. There is also to be a further wider stakeholder group workshop to be arranged.

Colin Russell

http://nbn.org.uk/news/atlas-living-wales-update/?utm_source=eshot&utm_medium=email&utm_campaign=NBNeNewsApril2016

And finally. .

We would like to wish everyone a great recording season. Let's hope the weather is kind to recorders and the recorded! We hope to see many of you in the field over the summer.

Thanks to everyone who has contributed to this newsletter. If you have any feedback or comments please email kate@westwalesbiodiversity.org.uk



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WestWalesBiodiversityInformationCentre

Web: wwbic.org.uk

Record species online: record.wwbic.org.uk

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Allium triquetrum (Three-cornered garlic)

