# Wales Biodiversity Partnership Conference Report: Delivering Nature Recovery in Wales

# Bangor University 7th-8th September 2016









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# **Day 1: Morning session**

# **Introduction - Chair: Matthew Quinn, Welsh Government**

Matthew Quinn welcomed all to the conference. We are in uncertain times, however this also brings opportunities to be creative. The first day of the conference will focus on the National Natural Resource policy and the Nature Recovery Plan. Day 2 will look at wider engagement and there will be the opportunity to talk and listen to the "other" players.

# Fresh Views on Nature Recovery: Andy Middleton, Natural Resources Wales Board Member

Andy opened his presentation with the controversial statement that nature doesn't



need our help to recover ...it will do it itself. The connection we haven't made is how we could do things in a different way. From an NRW perspective there is a huge desire to go in the right direction, but in a different way.

Nature should be at the heart of all decisionmaking, however the irony is that the people who care the most are not necessarily into marketing, sales or business. Next year it would be great to

bring people together with diverse motivations to achieve the same outcomes. Evidence by itself is not enough and action is what is needed. Changes in behaviour can be achieved if we have enough ambition, leading to improvements. We need to find the right people who have contact with lots of others to amplify the positive messages. There are 200,000 businesses in Wales - is it reasonable to contact 20,000 of them and get them to do ten things which should have a positive impact on biodiversity? What would that list be? We need collaboration and cooperation.

Funding is not necessarily the problem, it's imagination which is needed to close the gap. If you look at mental health costs these could be reduced by taking people to nature to fall in love with it.

Brexit - it is here, let's just make the best of it. Finally, Andy emphasised that we have to let go of the thought that "we don't have the resources". What we need is ambition, to sell our story, to find solutions and to take action.

Presentation link

Delivering for Biodiversity under the new legal framework in Wales: Matthew Quinn, Director, Environment and Sustainable Development, Welsh Government

We are at a critical and exciting time with the Well-Being of Future Generations Act and the Environment Act coming into force.



The new acts are challenging us to work differently, and of course we must consider the departure from the European Union. Certainties are no longer certain – it's quite frightening, risky, empowering, urgent and vibrant, but it's a huge opportunity if we're up for it.

Matthew invited us to focus on ways of working, with an emphasis on the public sector who are now responsible for the well-being goals.

Previous legislation has treated things separately, with a tendency to work in silos. Health, business and finance are out of kilter and they don't perform as we would like.

# **Principles within the Well-Being of Future Generations Act:**

Long-term and preventative

Currently we are pushed to mitigate at best. The concept of resilience is an attempt to counter that, and we should strive for the long term. How do we make this happen? It's about looking at the whole.

# Involvement/engagement

The political world is now thinking about this. We haven't really engaged people in any of these debates up to now. We need to create that space. That is why we have the Area Statements, to have dialogue where we don't have it now. One of the lessons from the area trials is to speak to people first.

#### Collaboration

We need to talk to the organisations we least feel like talking to.

# Integration

We need to understand systems and the full supply chain. This involves talking to people and different people. On Brexit, Welsh Government have consciously invited people across the sectors to have equal representation at workshops. If you take away the rules you find that you have a lot we can agree on. The risk of Brexit is if we do not have a common vision. It is vital that Wales has this discussion. For example, we are trying to change how Welsh government deals with grants. There is a bit of a grant scheme 'game', filling in the forms to see what Welsh Government want to hear. Welsh Government are now saying "you know better what you want to do, tell us what you want to do, and we will help you". This is what we are trying to do with core-funding and the Nature Fund. This creates a space for people to think about things they wouldn't ordinarily have thought of.

After the shock of Brexit we are really interested in how things will develop. Historically, perhaps we were not good at having a common vision for Wales. There are risks but these can now be seen as opportunities.

SoNaRR: Evidence base to inform the NNRP and Area Statements: Dr Sarah Williams, Natural Resources Wales and Emily Finney, Welsh Government

SoNaRR, the State of Natural Resources Report, is the first product coming out of the Environment Act. The report will be used for many purposes and is particularly



important for Welsh Government in informing policies and strategy, for example the National Natural Resource Policy (NNRP). Public Service Boards will need to use the report's evidence. It's an evidence base for us all to take and use to drive action. The NNRP will be published by March 2017, and from 2017-19 NRW will be developing Area Statements.

However, it is only by talking with people that we will redevelop the consensus to start new conversations about the relevance for well-being.



SoNaRR defines natural resources (excluding people). It is an assessment of biodiversity at all levels. The criteria for Environment Act Section 7 (list of the living organisms and types of habitat which in their opinion are of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales) are currently been thought through and will be consulted on later this year.

We are looking at the root causes of what prevents action. SoNaRR is NRW's assessment of the extent of how sustainable management of natural resources is being achieved. It recognises that there are gaps and uncertainties.

- Are we managing in a way that doesn't lead to long-term decline?
- Where should we focus action?
- Why?
- How are the ecosystem services which are being delivered contributing to our well-being?

This is the first SoNaRR. NRW have been challenged to demonstrate where the risks to well-being are. The next SoNaRR will have spatial nuances.

Every risk should be seen as an opportunity to shift, we are building the game changer to think differently. SoNaRR is iterative, we are at the start of the journey and the conversation.

# Presentation link – Sarah Williams

# Presentation link – Emily Finney

# The Nature Recovery Plan – bringing the players together: Dai Harris, Welsh Government

Dai set the context for the rest of the day, and particularly focused on 'next steps' and how we can organise ourselves more effectively.



Many stakeholders have been involved in the Nature Recovery Plan. It has been developed in the context of Welsh legislation emerging at the time, specifically the Well-Being Act and Environment Act. Work is ongoing to identify indicators that will allow us to judge the extent to which it has achieved its set goals. Pressure on land use is just one driver of change and awareness is a key challenge, especially a lack of

appreciation of the value of biodiversity and its importance to economics and broader well-being.

Dai reiterated the need to focus our efforts on those 'outside this room'. As well as meeting the Well-being Act's 'resilient Wales' goal, and EU targets of halting or reversing biodiversity decline, we need to communicate the value of biodiversity to the economy and wider well-being. Dai introduced the key objectives of the plan, which included:

- safeguarding species and habitats of principal importance and improving their management
- tackling key pressures
- improving evidence, understanding and monitoring.

After looking at the next steps and how he hoped they would help focus expertise and firm up future governance, Dai rounded off by highlighting some of the potential opportunities arising from recent Welsh legislation and Brexit, the importance of maintaining effective partnerships, and the role the NRP had in 'bringing the players together'.

# Presentation link

# Bee Friendly / Caru Gwenyn – Let's get the nation buzzing: Bleddyn Lake, Friends of the Earth Cymru



Bleddyn opened by announcing the Launch of a new initiative in Wales called Bee-Friendly which is aimed at encouraging people to help pollinators by getting communities and organisations to be pollinator-friendly. In 2013 the Action Plan for Pollinators in Wales was launched by the Welsh Government and aims to reverse the decline in pollinators, with the Pollinators Task Force set up to take the plan forward. Various groups working with the task force are concentrating on areas such as Roadside Verge Management, Glastir, Sustainable Bees, Wildlife Gardening, Evidence and Monitoring, COBWEB Project.

How to get communities active, engaged and inspired to help pollinators was explored by looking at the concept of how Fair Trade developed Fairtrade Towns, to see if the same could be achieved for Bee Friendly towns.

The Bee-Friendly initiative wants to get more people involved in doing more for pollinators, nature and biodiversity, with a simple scheme which is both achievable and fun whilst also helping pollinators. For example, a community group could become Bee-Friendly with an allocated Bee Champion to help the group, which would have to complete at least one task of their choosing task from four priority headings:

- Food providing pollinator-friendly food sources
- Five Star accommodation providing places for pollinators to live
- Fun involving all the community and telling people why they are helping pollinators
- Freedom from pesticide and herbicide committing to not using chemicals that harm pollinators

Once Bee Friendly status is achieved the group could promote themselves as such and, if enough areas want to take part, who knows Wales could become the first Bee-Friendly country in the world.

# Presentation link

# Panel discussion and open floor discussion

#### Panel members

Chair: Matthew Quinn (MQ), Welsh Government
Andy Middleton (AM), Natural Resources Wales Board Member
Sarah Williams (SW), Natural Resources Wales
Emily Finney (EF), Welsh Government
Dai Harris (DH), Welsh Government
Bleddyn Lake (BL), Friends of the Earth Cymru

Question 1: Clare Reed, Marine Conservation Society

You talked about SoNaRR being important for looking at gaps and uncertainty in data. Have NRW and Welsh Government had some thoughts about planning on how to fill those gaps?

(EF) SoNaRR is really explicit on setting out the gaps and the uncertainties in that evidence, we are really clear that we need to have conversations to collaborate and prioritise together which of those gaps we need to take forward and address. That's the next stage.

# Question 2: Paul Brazier, NRW

In SoNaRR the assessment of well-being versus ecosystem or habitat permitted the globally responsible Wales. How can we address the need to be able to influence legislation outside of Wales to bring on things like the controlling of pesticides?

(EF) We do explicitly address this in a section in SoNaRR.

(AM) The other thing which is key about pesticides is to recognise the power we have as consumers. If every time you go and buy any item of clothing which could be made organically, ask if they have an organic version, and if enough people start doing that, people who make things will start the drive for change. But unless there is pressure from consumers to shift the behaviour, government will not be motivated as well to try to do that. Believe in the power which we have: unless we become a part of that change, it is less likely to happen.

(MQ) One of the issues for the public sector is the power of procurement. We do not use procurement enough as an investment, which is a huge amount of power in purchasing.

Question 3: Anna Williams, North Wales Wildlife Trust
Directed to Andy Middleton. There are people doing what you are talking about. I am
inspiring and supporting schools to make gardens for wildlife. In these economic
times money is hard to find and I spend a lot of time seeking money. How do we
connect nationwide? Where is the support for projects or people as, in education,
there is always going to be a cost?

(AM) I don't think there is any chance of more money coming out of NRW. There is so much money in the system, it just falls in the wrong places. Our goal is to use an enterprise mindset to put the money for school gardens in the hands of schools. e.g if you can save money on energy, we will give you some of that money back to spend on what you want. The amount of money wasted by not lift-sharing to school would pay for a garden in a week, there is so much money but we don't look for it in the right places and enable people to use it. The second point is to somehow create a dictionary of things that work so that we can cut and paste and don't have to reinvent. How do we create that encyclopaedia of possibility, the equivalent of a supermarket of good ideas? In schools we should specifically give kids and parents access to the places where money is being wasted, to help them fund improvements and implement them.

(MQ) A couple of thoughts from me, having talked about the core fundings grant not everything can be project-funded and sustained. I am hopeful that we can make this connection with health. The amount of money in the health service in its different forms is enormous. A tiny fraction of the prescription budget for mental health and physical issues could be spent on helping people connect with nature. We need to understand what the NHS needs to make this work, some kind of process of validation or accreditation perhaps? Ruth Hall in WG is working in mid-Wales bringing together partners, making the connections across sectors, making the practical linkages, and making them come with cash.

(AM) If you get young kids appreciating nature and improve their immune systems and health and well-being, find a way of funding it. I know that WG is keen to make this work.

(Anna Williams) That's where the joined-up thinking does not exist between the departments?

(MQ) That discussion is happening.

Question 4: Howard Davies, Board Member NRW

Do we in Wales work closely enough with organisations like the New Economics Foundation? If we don't, are we missing opportunities, or in your view do you think we are?

- (BL) No. A Friends of the Earth person would like a different way of thinking around economics. I don't know what the opportunities are in Wales, how that dialogue would happen and what the outcome would be compared to what we would like it to be, but we need those conversations to happen. We need a different way of thinking about economics and the way forward.
- (MQ) In the context of Brexit we need to think hard about the economic model for Wales. We are effectively still thinking on the 1964 'Wales is the Way Forward' model! We intend to have a series of strategies underpinning the next programme of government around the themes that came through the manifesto. The whole sense of 'what do we mean by prosperity?' and 'what does that imply for the connections?' is a piece of work which we are going to be doing in WG, hopefully in a broad and inclusive way.
- (EF) From my perspective we have picked up the work done by New Economic Foundation on the green/blue economy and I have been pushing it at various marine colleagues, and externally, as it's an exciting and powerful way of looking at the contribution of the interface between marine and land.
- (DH) We as a sector have been poor at quantifying and articulating the economic value, and the value to society, that nature provides. We started talking and developing initiatives around payment for ecosystem services, and engaging businesses and getting beneficiaries to pay for this. We have to get a lot smarter about how we undertake that and sell ourselves.
- (AM) One thing the New Economic Foundation do not have is people on the ground in schools and communities, this is a huge opportunity for us to say "Does this work?" with the various groups and business organisations out there. My pitch to them is: let's use Wales as a prototype space for the world on how to do country-scale change.
- (BL) Deviating from nature to energy Friends of the Earth did basic figures about how much money leaves Wales by the Big Six energy firms. Based on average electricity and gas bills, this is around £2 billion. If we had a different system for energy and promoting community energy like they do in countries like Germany, a

significant proportion of that money could be circulating in Welsh economies. That would create lots of new jobs and there would be more money available for other things that we are all interested in. It comes down to how we look at energy and how much power we have over the different mechanism that we need. This is down to a political question about devolution and more powers.

(MQ) This can be linked to eco-schools. We need to use best practice and fund that, rather than just new things.

# Question 5: Elizabeth Mutch, Llais y Goedwig

My question is related to cross communication with other sectors. Is there communication with education, as there are people who want to work with education and establishments but they can only work with them if there is a clear benefit to the schools within a curriculum based policy, is that happening at a higher level?

(MQ) It is, but probably not to the extent it should be. We probably got locked into engaging with Eco-schools as our main responsibility, but there is engagement with the outside curriculum review work. One of the lessons is that we need to make it easier to package things that are relevant to the curriculum. This is a big job for an individual or small organisation to undertake and an area where we may be able to help. We have more Eco-schools that any other country.

(AM) The conversations we are having are part of a slow process, and it needs to happen faster. We need to find a couple of hundred schools to work with. In terms of taking good practice and sharing the experience of the eco-schools, teachers say that children who like to learn get better grades and get more engaged. We have projects with Cambridge University taking children to businesses to solve problems about resources, waste and impact, which is a really good opportunity. Let's create a shared direction, so there are not a lot of projects going on in different directions.

(BL) We have started to think about this in the pollinators taskforce. We are going down the road of developing a new bilingual educational resource for different educational levels in school, one for primary schools, one for GCSE and one for the Welsh Bac, which will be a new bilingual educational resource for pollinators – not just bees but all pollinators. We have started that conversation with the pollinators taskforce.

# Question 6: Roy Tapping, Cofnod

Directed to Matthew Quinn. We have talked about resilience at previous conferences. I see resilience as a replacement for sustainability in some respects. Resilience means different things to different people, as does sustainability. We want a resilient health service, a resilient economy, a resilient environment; you are always looking for compromises when it comes to resilience. Because we have all this new legislation with a lot of movement forward, how powerful do you feel you are, in your directorate, compared to all the other directorates which might be looking at resilience in their differing ways?

(MQ) I agree with you that that resilience is a very current term. If you look at academia, every discipline is looking at resilience and they are all talking about something different. In terms of the law, we have spelled out what it means in this particular context for nature. Resilience is a system, as opposed to the other phrases that we use. We are looking at systems and how they operate: we are not looking at compromise or trade-off, we are looking at how we optimise the system to get what we need. You do not trade off a system, you optimise it, and that's what we are trying to do with this set of new legislation.

(Roy Tapping) Do you have the legislative tools at your disposal to fight the fight in terms of resilience?

(EF) One of the opportunities we have with the Environment Act, Natural Resources Policy and SoNaRR is that resilience applies across all of government. Policies for natural resources are being put in place and applied across all the cabinets and different functions of government. The way that SoNaRR has been constructed helps the discussion about the different aspects of resilience and what they mean, and the actions we need to take so that all the services and benefits are there – not just focusing on, for example, food production at the expense of other services. But another way of articulating this is; what does social and economic resilience mean in that context? It's the contribution that natural resources can make across the well-being goals. That then starts to articulate what the opportunities are for different functions, for example education or health, to affect the economy and bring solutions. The SoNaRR document tries to articulate how you can bring the whole debate together.

(MQ) It's a challenge in the sense we have been conditioned to work in silos. This is challenging all of us to explore our wider contribution, which is not going to happen overnight, but the framework that we have created, and the space we have created, provide us with the opportunity to do that. Ultimately for those that do not do it, we must apply sanctions so we are not seen as toothless.

# **Day 1: Afternoon Session**

Discussion Forum: Towards a National Natural Resources Monitoring Framework. Dr Catherine Duigan, Natural Resources Wales

In partnership with James Skates, Welsh Government, and Prof. Bridget Emmett, Centre for Ecology and Hydrology

Catherine emphasised the close partnership approach being taken between NRW, Welsh Government and the Centre for Ecology and Hydrology. The Environment (Wales) Act defines 'natural resources' very broadly and, as such, the range of pressures to which it is subject is just as broad. Monitoring is key to reporting on extent, condition, and trends as well as to audit, develop better systems, modelling, developing adaptive management programmes, and learning. This was an opportunity to bring resources together to reflect joined-up Sustainable Management of Natural Resources (SMNR) policy by taking a landscape-scale approach, a partnership approach, and a phased approach. Catherine talked about some of the

activities to date and how the legislative and policy drivers (Welsh/UK / and international) and the available evidence bases are linked, before looking at some case studies; Citizen Science, Data and Informatics, and eDNA. To close, Catherine gave a description of how the framework may look and summed up with the anticipated benefits and outcomes. The final report was in production, with key recommendations expected to go to the Minister later this month.

Q-How easily and widely will information be made available? A-We will either develop a portal or build on what we have already (Lle for example).

Q-What happens if someone wants to challenge the data?

A-We haven't got to that level of detail yet but we recognise the need to accommodate challenge and will be open to discussions. As always, it will be important to understand the limitations of any dataset and take a risk-based approach to data confidence. The audience needs to be aware of limitations and particularly understand that 'absence of evidence is not evidence of absence'.

Q-Will you be using data from the Local Record Centres? A-Yes!

Q-What are the timescales for rolling the project out to marine data? A-We expect this to be more difficult to achieve so we anticipate spending at least another year concentrating on terrestrial data; although there is no reason why we cannot be thinking about it during this time.

Q-How will it feed into the Public Service Boards?

A-We will be considering this in the Area Statement workshop next week. We need Wales-wide data, but that needs to be subject to interpretation/modelling etc.

Q-To what extend is NRW dictating what is done, how and when? How much is fed in from the smaller NGOs?

A-This is not an NRW project; it is a real partnership.

# Presentation link

# Discussion Forum: The Vincent Wildlife Trust Pine Marten recovery Project. Henry Schofield, Vincent Wildlife Trust

Henry Schofield of the Vincent Wildlife Trust presented the results of The Pine Marten Recovery Project, which is attempting to restore viable pine marten populations in England and Wales via translocation of pine martens from Scotland. Formerly a common and widespread species in Wales, it is now restricted to Scotland, with very occasional records from England and Wales. Prior to embarking on any relocations it was very important to engage with local communities and stakeholders in the potential release areas to gain support and understanding. Detailed field surveys and risk assessments (including a disease-risk analysis) were also carried out. To date 40 martens have been translocated from Scotland, two tranches of 20 adults with a 1:1 sex ratio. The results will be evaluated before undertaking any further re-introductions. Radio-tracking shows the range of the

introduced individuals. There is evidence of kits being born (although these will have been conceived prior to the translocation).

# Presentation link

# Discussion Forum: Grazing is Amazing. Dick Squires and Emma Douglas, PONT Cymru

Pori Natur a Threftadaeth (PONT) is the not-for profit conservation grazing organisation for Wales. Conservation grazing is an invaluable tool in managing nature rich areas, but it has become more difficult to deliver due to agricultural and economic changes. PONT's role is to bridge the gap between agriculture and nature conservation, facilitating conservation grazing to deliver multiple benefits for wildlife, natural resources, agriculture, communities and the Nature Recovery Plan.

PONT provided a presentation about the importance of conservation grazing, the role of PONT, its activities and past projects. We invited suggestions for the future direction of PONT. Interesting questions regarding conservation grazing, monitoring and climate change were received along with valuable input from workshop participants. Suggestions included future funding sources (e.g. LEADER), the importance of maintaining hefted flocks, and grazing within forestry blocks. Important connections were made and members added to PONT's advisory group as a result of the workshop.

## Presentation link

YouTube video link https://www.youtube.com/watch?v=ZTXUa0nQky8

# Discussion Forum: Marine Conservationists in Partnership Projects. Sue Burton, Pembrokeshire Marine Special Area of Conservation

The session aimed to 'wave the flag' for marine conservation and look at how collaborative partnerships were benefitting the marine environment in Pembrokeshire.

Marine conservation is dealing with a world that is often 'out of sight, out of mind' so it is particularly important to start by telling people what is out there and why it is important. Pembrokeshire has many pressures, from the busy port in Milford Haven to the concentration of tourism around the coastal National Park and Coast Path. No single body has the necessary jurisdiction to manage those pressures single-handedly, so partnerships are particularly vital to managing the SAC. Sue talked about the importance of trust, neutrality and facilitation in stakeholder liaison, and the need for education and awareness-raising in demonstrating the benefits of appropriate management. Sue has been involved in a number of projects, including a native oyster regeneration project where the engagement of fishermen and volunteer divers has been important, and the Pembrokeshire Sustainable Shellfish

Initiative which promotes sustainable fishing methods and prevents 'ghost fishing'. She also talked about the Seagrass Improvements in Milford Haven waterway, where a partnership approach has been able to overcome poor relations between boat-users and the Port Authority and encouraged take-up of a voluntary code of conduct. Sue rounded up by stressing that partnerships worked, and that local advances informed national strategy. Dedicated officers were important, and neutrality was absolutely key to engaging with diverse interests. Whilst funding was tight, a partnership could apply for funding streams that the government bodies couldn't.

Q: Which partnerships are working along the north coast of Wales? A: None currently

Q: When applying for funding is it in the name of the partnership or the Port Authority?

A: It depends on the source and the specific criteria

Q: With concerns over long-term funding there must be ways of demonstrating value for money of this type of work?

A: The Well-Being Act should be key to this; it's particularly easy to tie in the recreational aspects with the goals. We don't have any big core-funding. We rely on smaller sums from a number of partners. NRW just withdrew its contribution which is worrying; it doesn't set a good example.

# Presentation link

# Workshop: Ancient Woodland Restoration – Theory and Practice. Nigel Douglas and Kylie Mattock Jones, The Woodland Trust

Twelve conference attendees participated in the 1.5-hour ancient woodland restoration workshop.

Entrance quiz – Spot the Ancient Woodland

As delegates entered the room, they were invited to look at six woodland photos, and to initial those photos which they believed showed ancient woodland. The numbers of delegates identifying each photo are shown below:













In fact all six photos showed ancient woodland. Photos of Ancient Semi-Natural Woodland (top left and middle) were mostly identified correctly, but area of PAWS woodland proved harder to recognize. The differences were explained at the beginning of the presentation, to demonstrate that ancient woodland sites take many different forms and may include different stages of restoration, from dense conifer plantations to natural woodlands.

Presentations - Ancient Woodland Restoration: Theory and Practice

The **first part** of the presentation (delivered by Nigel) was an introduction to ancient woodlands and restoration theory:

- Introduction to Coed Cadw/ Woodland Trust and the Ancient Woodland Restoration project
- Ancient woodlands in the UK, definitions and extent
- Identifying ancient woodlands
- Why restore?
- Principles of Ancient Woodland Restoration

The **second part** (delivered by Kylie) covered Restoration in practice: case studies from the Coed Cadw estate:

- Introduction Woodland Trust woods Plas Power and Felinrhyd
- Site assessments
- Identification of remnants
- Identification of threats
- First Aid
- Next steps
- Challenges



#### Exercise

Following the introductory presentations, delegates were split into three groups for a restoration exercise. Each group was handed a 'scenario' based on an existing case study from Plas Power Wood or Felinrhyd (delegates were informed that these were 'real life' scenarios). Each scenario included a stand description, photos and a map, and delegates were asked to consider the questions:

- What are your remnant features?
- What are the main threats?
- You want to restore it: what would be your first action and how urgent is it?



at

- What might you do next?
- What would be the challenges in achieving your aims?









In the middle of the exercise, each group was given a 'curveball': a change to the scenario that required them to rethink the situation in the light of new information.

At the end of the exercise, one delegate from each group was invited to discuss their

scenario, and their findings. Some excellent discussions took place during the exercise. The groups were quite varied; one group contained people with little woodland experience, while another included NRW staff responsible for woodland management, but all of them were given plenty of food for thought, and the 'curveballs' allowed them to react to scenarios which could realistically be expected to occur in the field.



Recognition of remnant features and threats was generally very good, so delegates either had existing knowledge or had been listening well during the presentations! Excellent discussions were held around the challenges of restoring ancient woodlands, with access and financial considerations, including lack of grant funding, being identified as significant issues.

# Wrapping up and Key Messages

- Generally, awareness of ancient woodland, and the restoration project, was good.
   Delegates included representatives from the Welsh government, NRW and Llais y Goedwig, who were able to share their knowledge with other group members during the exercises.
- Some delegates were surprised at how little ancient woodland remains in Wales, and how much of this has been affected by coniferisation.
- The Woodland Trust specifically manages its own reserves with the intention of restoring ancient woodlands. Other woodland owners will have their own motivations, including financial. Restoration is not necessarily a 'one size fits all' process, but can be adapted to suit owners' needs.
- Lack of funding was discussed at various times as a major obstacle to ancient woodland restoration.
- Under-management of all ancient woodlands (not just PAWS) was also recognised as an issue.

Presentation link (part 1)

Presentation link (part 2)

# Workshop: SoNaRR: Evidence base to inform the NNRP and Area Statements. Dr Sarah Williams, Natural Resources Wales and Emily Finney, Welsh Government

Following the workshop discussions, the final version of the State of Natural Resources Report (SoNaRR) has been published and can now be downloaded from Natural Resources Wales' website: www.naturalresources.wales/sonarr. The SoNaRR summary is available via this link or directly from: http://www.naturalresources.wales/media/679572/sonarr-summary-september-2016.pdf. If you have any queries, wish to provide feedback or have any ideas on how the SoNaRR process can be improved in future, please email: sonarr@naturalresourceswales.gov.uk.

No Presentation

# Workshop: Bee Friendly / Caru Gwenyn – Let's get the nation buzzing. Bleddyn Lake, Friends of the Earth Cymru

Questions asked of working groups: How do we best publicise Bee Friendly / Caru Gwenyn? How can we best use BF/CG

What other support do we need?

What should the role of BF/CG Champions be?

# How do we best publicise Bee Friendly / Caru Gwenyn?

- Share the new BF Facebook page details with all conference delegates
- Send the launch press release to conference delegates
- As many organisations as possible to have BF/CG links on their own websites and share FB posts on their own FB pages
- Contact TV programmes such as ITV's Coast and Country, Autumn Watch, Countryfile etc
- Would Iolo Williams be interested in doing a series on various participating schemes next year?
- Bob G to contact Iwan Edwards from S4C
- Allocate specific tasks to people (regarding contacting media)
- Everyone to mention BF/CG when talking to public and groups
- Use the National Botanical Gardens to help publicise
- Adverts in (eg) horticultural trade magazines
- Through National Trust
- RHS magazine
- Define some target audiences (eg Eco School to help this was mentioned a few times)
- Small land owners (eg Countryside Land Owners group, Unions etc)
- Landowners (local produce) maybe via Chambers of Commerce
- Local Authorities create 'race to the top' with public bodies wanting to be the best

- Local Health Boards
- Local Community Councils
- Businesses work on the 'you can be the first' angle (can we get help in kind from businesses?)
- Use a Thunderclap (lots of different organisations use FB and Twitter at the same time to publicise)
- Use local print media with press releases
- Target other bee-friendly businesses such as Cider and Perry Orchards

### How can we best use BF/CG?

- OPAL best results when working through communities
- Use as a management/promotional tool to encourage action e.g road verge management
- Use as a Kite Mark eg NRW could enter all its offices as Bee Friendly (same for Assembly offices?)
- Use BF/CG as a way in to encourage and inform entrants about other schemes such as Green Flag, Green Key, Biodiversity Benchmark. These entrants might also in turn be persuaded to sponsor BF/CG?

## What other support do we need?

- A new dedicated website to help promote the scheme with case studies etc (this came up a few times)
- Twitter account
- A source of seeds and instructions on how to use them
- Specialist advice on things such as turf stripping versus use of Glyphosate
- Create a new Facebook page for things like Meadow Hay to put donors in touch with recipients
- Case studies what works best where (a role for Keep Wales Tidy?)

# What should the role of BF/CG Champions be?

- Provide advice and support
- How to get an award (eg answer the question 'will we get the award or not')
- Provide phone support
- Be the ones to bring case studies to life
- Have Champions from target groups eg a teacher could be a schools Champion
- Select Champions from early adopters
- There should be enough of them to stop people being inundated
- Local knowledge is essential
- We need Champions with a range of knowledge and skills to mix and match with various projects
- Use different Champions in a team or in sequence as needed by a project
- Training is needed for Champions
- Champions must be accessible where and when needed
- Approach different organisations such as Keep Wales Tidy who could provide or help identify Champions
- Can we get any well-known Champions? Or at least a well-known advocate for the scheme?

# Presentation link

# Workshop: Evidence for the Delivery of the Nature Recovery Plan. Helen Wilkinson and Barnaby Letheren, Natural Resources Wales

This workshop set out to understand what the WBP community needs to help improve the way that evidence is available for the Nature Recovery Plan;



Sustainable management of natural resources under the Environment Act (area statements) and Wellbeing of Future Generations Act (wellbeing plans for Public Services Boards)

In the context of the WBP vision drafted through the Wales Environmental Information Forum, this is: "Sharing Welsh environmental information to benefit the environment & people of Wales, the

*UK and globally".* The workshop set out to gather information under three topic areas:

- High level requirements (What does success look like? What do you need from evidence delivery systems?)
- 2. Stock take (What do you know is already available now?)
- 3. How close are we? (How do current systems meet our needs? Where are the overlaps? What are the gaps & current issues to resolve?)

# **High Level Requirements**

- Online
- Collaborative working where we can share information on activities (BARS plus).
   A place to share objectives and targets for biodiversity including spatial planning, targeting and priorities (e.g. Beelines)
- Want a one-stop-shop/portal to link or streamline what's already out there. Link or integration tools – e.g. actions database (improved version) & BARS database (improved version) & species licensing.
- Multiple tailored views for specific targeted stakeholders e.g Summary information for Local Authority officers who attend PSBs. Evidence for Environmental Impact Assessments. Evidence for University Students etc – incorporating different views
- We need a tool that can be interrogated from either end of the telescope
- Pokemon Go for biodiversity engaging 'biodiversity' games for all ages
- Link with planning portal Wales with easier reporting mechanisms such as Dashboard-style reporting e.g. How many planning applications have taken biodiversity into account.
- Link to consultants and businesses

- Links to health evidence
- Modelling tools/capability (e.g. modelling favourable conservation status)
- Temporal capability/functionality
- Qualitative ability to set records against outcome measures e.g. S6 Audit report how close we are to a target and a single point of contact for the target
- Ability to record negative or absence records need to show where there is no evidence, or where an area or species is under-recorded
- Spatial presentation of evidence and location view/search
- Include connectivity
- Habitat/Species view on all evidence/content
- Catalogue of datasets
- Metadata and quality measures with caveats/warnings as a pop-up, or data that is inappropriate disappears on zoom view

# Stock Take (summary of tools that stakeholders in the room currently use)

- Wales activity mapping took comments
- WWBIC Multimap Layer Tool
- Aderyn WWBIC Opportunities Mapping Tool
- Butterfly App equivalent to Pokemon go
- LERCs data entry tool and bespoke data reports
- Lle Geoportal
- BARS
- Raw datasets
- Marine Recorder MAGIC
- MapMate

## Issues

- We need the Terms & Conditions of public sector contracts/grants to require recipients of public sector funds to use the relevant database/system to share data or report biodiversity outcomes
- We want to know who uses the evidence, what for, and any resulting outcome
- We need Welsh Government to be able to use if for capturing decisions (e.g. details of a waste grant and its consideration for biodiversity)
- Actions database and BARS could be greatly improved and not all organisations/stakeholders use them – need to lead by example and link to T&Cs of funding to ensure any system is used (see above)
- More access to University and ecological consultants data/records please.
- Funding models for some contributors is based on selling data and may constrain our collective ability to openly share.
- Need to consider the audience who's using the data and do they understand it? (e.g. a highways engineer). A system does not replace expert advice. Need to ensure that any systems lead users to an expert.
- Want to engage all sectors of society and particularly the young Pokemon for biodiversity
- Any changes must maintain the integrity of that data if it transfers from one system//user to another
- Too many dropboxes in current systems

- Biodiversity actions and biodiversity records are not linked. Survey and monitoring is not linked to projects if the data is not publicised.
- NBN Gateway
- Soils BGS app
- Inns apps
- Research Gate & Cardiff University database of reports etc

# Who is it for – a quick stakeholder summary (and example tailored views)

## Influencers & decision makers

- Dashboard view of benefits and outcomes for Ministers & CX's in e.g. LAs,/WTs/NRW
   – e.g. value to local economy
- Link use of systems to budgets approval / commitments

# **Practitioners & decision makers**

- Approved data
- Link/route/signposts to experts
- Tools to embed data in own databases/systems
- Build into existing processes
- Include advice and guidance
- Share decisions and actions

# Businesses

- Corporate Social responsibility how can, or are, business contributing
- Value to business

# Gamers – gaming area

- Pokemon go for biodiversity
- Links to citizen science online tools

# **Voluntary Recorders**

- Online tolls
- Identifications guides etc

## Education

# **Next Steps**

The information gathered at the workshop will be shared with the Atlas of Living Wales project steering group to help develop a biodiversity portal for the biodiversity community in Wales.

It will also be used in NRW's ongoing work to review evidence requirements for SMNR.

Presentation link

# Field Trip: Cors Erddreiniog. Justin Hanson, Natural Resources Wales

Delegates enjoyed a trip to Anglesey to see Cors Erddreiniog, part of the Anglesey and LI n Fens LIFE+ project, which is the largest wetland restoration project in



Wales. They learned why the site is important for wildlife and people, and why it's important to invest time and resources to improve it and keep it that way.

These very rare fen habitats depend on a delicate water balance and limestone springs that flow into the peat, and to find such huge areas of plants like black bog rush is unknown anywhere else in the UK.

# **Day 2: Morning session**

Chair: Andy Middleton, Natural Resources Wales Board Member - "We're in this together"

Andy introduced the day's speakers as providing different perspectives on how to deliver biodiversity improvements in different ways.

Andy referred to a conversation he had with the chief regeneration officer in Monmouthshire, who had said that the biggest risk to Local Authority services was continuing with "business as usual". The current trajectory will see us spending 65% of the total Welsh budget on health and social services within ten years. If that continues then the type of work that we all do, and recreation and community work, will be the first to suffer when budgets are squeezed. We have an amazing opportunity here, but we need to find a new shared space to make things happen, and we need to recognise the importance of small steps. We also need to recognise the level of possibility we have in Wales right now: even if we are doing good things, we can always do them better, or more of them.

# Unusual Suspects and Useful Allies: Matthew Roberts, Director of Sustainability Strategy, Interserve plc

Matthew outlined what Interserve is – an international support services and construction group with 50% of its revenue coming from the government with a requirement to deliver in-addition public benefit. Interserve does this through its sustainability plan, which aims to reduce its carbon footprint by 50% by 2020.



Landmarc Support Services, who are part of the group, manage the MOD training estate of some 240,000ha across the UK. Its land in Wales includes all the various national and international conservation designations and contributes some £24 million to the Welsh economy. New roads and buildings were needed to restructure and repurpose the estate and Interserve were

required to mitigate for habitat loss. By bringing together public and business data, including biodiversity data, Interserve built a natural capital mapping tool bringing in as many factors as possible for informed decision making.

Business needs nature and nature need business, and in past they never came together. Now the business voice sits equally with the biodiversity community at the European Business and Biodiversity Platform and has a voice in other biodiversity platforms such as the Convention on Biological Diversity.

Nature provides some \$75 trillion to the world economy every year, yet it is in decline. The funding gap to reverse biodiversity decline is estimated to be \$200-300 billion, but governments have no more money, and do not engage with consumers

who love nature but do not want to pay for it. The audience was challenged to think in terms of My World, Our World and The World, that is, to begin at the personal and make it matter to individuals so that they will care more for the environment.

We have no overarching plan on how to reverse the decline and we have to work as one team as we *do* have time to do this.

Business is willing to invest in nature if it can find an income stream that goes with it. We must change our approach: business wants to be involved and barriers need to be broken down so that we can all work together.

# Presentation link

# Biodiversity No Net Loss on the Greater West programme: Claire Sweeney, Network Rail

Claire shared a video to give an idea of the scale of the Network Rail (NR) project which is currently focussed on the railway line between Maidenhead and Cardiff but which will be extended from Cardiff to Swansea in 2019. There are a number of Local Authority areas and conservation partners along the route.



The NR project programme had a general commitment to demonstrate a measurable, net positive contribution to biodiversity but, due to the level of vegetation clearance involved, this project had a goal of no net loss.

It is the largest and most advanced of seven similar pilot projects in the UK, and Claire explained why there was a need to clear

vegetation – cost, safety and avoidance of delays. She outlined their vision to transfer woodland habitat to lowland scrub and grassland habitat. EIA and habitat assessments and species specific surveys have been undertaken, and found that the areas were dominated by common habitat types but with some small populations of protected species in places. The value of the lines as wildlife corridors would not be significantly affected. They used the Defra metric to measure biodiversity loss, which assessed habitat on distinctiveness, condition and area, to allocate a biodiversity-unit rating which could be used to assess their offsetting activities. They had a preference for in-kind offsetting, looking for like-for-better or like-for-like provision.

Claire explained some of their approaches to achieving this, including engagement workshops with stakeholders and one-to-one 'biodiversity summits' to shortlist potential offset projects. As NR do not hold land to do biodiversity work themselves, the project generally looked to hand over implementation to delivery partners following final selection, and would also fund the management of sites for the first three years.

They worked with an estimated cost of £2.5k per biodiversity unit, £1.25M overall (less in Wales) which was not very significant compared to the overall programme cost.

## Presentation link

# WaterSource: Protecting our drinking water now and for years to come: Phillippa Pearson, D r Cymru/Welsh Water

Phillippa introduced the scope of D r Cymru's challenges. D r Cymru take water for drinking from approximately 120 catchments covering more than 2.65 million acres and with a mix of land uses. D r Cymru is heavily regulated by OFWAT, DWI and NRW, and works to five-year business planning cycles. To ensure they deliver water of high quality the company could invest in extra manufacturing equipment and chemicals: however, they have started to look at catchment management (via their WaterSource programme) to address problems at source, ensure water entering water treatment works is of a consistent and manageable quality and ensure water supply remains affordable for customers.



One example of a new way of working is Talybont Reservoir in the Brecon Beacons. It is an upland catchment, with forestry, agriculture and common land. 113 ha had to be clear felled due *Phytophthora*. However, this was recognised as an opportunity to move away from pre-existing ways of working and think of other things that could be done.

Three scenarios were considered:

- 4. Business as usual (single species coniferous stands)
- 5. Change of species composition to broadleaf
- 6. Change of species composition & silviculture

Catchments have their own "personalities", we need to recognise this and plan accordingly to take account of their characteristics and behaviours (this can be better understood by undertaking risk mapping and this approach should be built into future design plans). TED (Total Ecosystem Delivery) analysis has been developed. Scenario 3 provided the most TED benefit – but it will take time to monitor the financial impact of this new approach.

# Next steps will be:

- monitoring / sampling to measure success
- assessment of the financial impact
- extension of environmental sustainability considerations
- encouraging other landowners to adopt the approach.

# Making the most of biodiversity's contribution to the well-being of Wales: Mike Palmer, Office of the Future Generations Commissioner

Mike outlined his experience when he worked in Local Government, third sector and Welsh Government, realising the limitations of what public services could achieve. Often those limitations were to do with the organisation culture and the way that they managed themselves. He also saw what community action and the third sector could achieve by working with people and empowering them, and he developed a strong belief that citizens should be at the centre of public services, with the power to



improve the quality of their communities. We need to take care not to compromise the ability of future generations to meet their needs.

A number of risks have been identified which could undermine the enormous potential of the Well-Being of Future Generations Act. A key risk is that public bodies align what they are currently doing to the goals and principles. If this happens it will be a missed opportunity to ensure that those public bodies are fit for the future, as this approach provides a short-term level of stability and ensures continuity – which is a problem, as all evidence

shows that 'business as usual' is no longer tenable.

The Living Planet Report from WWF highlighted that wildlife populations worldwide have declined by 52% since 1970. Biodiversity is in decline and our global ecological footprint is higher than it should be, with further pressure on natural resources. This year's update of the red list of endangered species includes 83,000 species of which 24,000 are threatened with extinction. In Wales the State Of Nature Report identified that more than one in six plant species is considered threatened, and a decrease in abundance of butterfly species, flowering plants and farmland bird species, much of which is due to the decline of the habitats on which they rely. We are now in the period where human activity is seen as the dominant influence on climate and the environment.

The Well-Being of Future Generations Act sets out the Wales we want to see for our future generations. It requires public bodies to maximise their contribution to each of the seven well-being goals for Wales:

- A resilient Wales
- A healthier Wales
- An equal Wales
- A Wales of cohesive communities
- A Wales of vibrant culture and thriving Welsh language
- A more globally responsible Wales
- A prosperous Wales

Public bodies are required to apply five ways of working:

- take preventative action
- work in an integrated way
- work with others
- assess the consequences of our decisions
- involve citizens

These goals and principles together form a framework for public sector decision making, and now that sustainable development is defined in law in Wales we need to act. All public bodies must produce their own well-being objectives, looking at both what is wrong and at what is strong.

There is a real risk that we describe the problems, set objectives, monitor, and produce plans and reports, when all our knowledge tells us that the natural world responds in an unpredictable way. The Office is keen to explore ways of assessment and tracking progress which enable and foster learning and innovation as a response to uncertainty. One such way is by collaborative working with the Wales centre for behaviour change at Bangor University, where it has been noted that excessive targeting is damaging services to citizens and creates distrust between people, politicians and government; when a measure becomes a target it ceases to become a good measure.

An alternative model for performance measurement for the public sector is the 'change agent' model – when the programme works well, you and your colleagues are 'change agents'. Citizen engagement is vital if we are to change our behaviour to ensure that we do not compromise the future generation's needs.

One of the initial areas the Office will be looking at is identifying positive practice for involving people meaningfully in decisions which affect them. Projects coming from the Nature Fund, and NRW area-based trials such as the Rhondda Hill Side, are good examples.

Another area for better connection is by 'green-prescribing' which is being used in New Zealand. For the Act to be successful the five ways of work must become the norm and we must look to harness the potential of biodiversity.

Link to full speech

# Panel and open floor discussion

Panel members

Chair: Andy Middleton (AM), Natural Resources Wales Board Member

Mat Roberts (MR), Interserve plc
Dai Harris (DH), Welsh Government
Phillippa Pearson (PP), D r Cymru/Welsh Water
Mike Palmer (MP), Office of the Future Generations Commissioner
Claire Sweeney (CS), Network Rail
Tim Jones (TJ), Natural Resources Wales

Question 1: Leanne Bird, Ceredigion County Council

How do you feel that this conference has met the well-being goals and the five ways of working? From the perspective of the Local Authorities or biodiversity partnerships, I would say it has failed on involvement, integration and collaboration. I would challenge you next year to put on a conference that speaks in a language that talks to the people? How do we get a conference that is inclusive?

(MP) The office's approach to this is that we are fortunate in Wales to have this challenging piece of legislation that is also very enabling and provides a great platform for us to do things differently. Alongside that we recognise that we are not going to get there overnight. There may be aspects of the conference that some of us feel are not bang on with the principles or goals. All public bodies are in that space and we are all learning how to make the best of this legislation. One of the things the office is keen to do is to open-source our learning, so that people can see how we learn to undertake our role in this legislation. This means that our mistakes will also be visible – that's quite important, we should feel comfortable with seeing this a work in progress, but also comfortable about being challenged and asked to do better. Going back a couple of decades, I found it a great frustration when I was working in the third sector that there are some fantastic public participation techniques going on in various countries around the world, and yet even then we were not making use of them effectively, and there has not been much progress in that respect. I'm talking about some really interesting stuff Robert Chamber did in the University of East Anglia, which is all about handing the stick over to make sure the people have control and ownership of their own engagement. To answer the question, you can improve this by looking at some of those techniques: one that springs to mind is 'open space'.

(AM) To the panel: One thing you have learnt to date that would help the organisers of this event next year?

- (CS) Early engagement.
- (PP) Simple clear messaging.
- (DH) There are two things we failed on with regard to participation at this conference. Within this sector we don't have enough people



on the ground doing the work, also the usual suspects being here. One suggestion is to challenge ourselves to bring one person from outside our sector along to the conference next year.

(MR) Set that as an objective. I suspect this conference has delivered what it set out to achieve, and if one of those objectives is that we want people in the room who are not normally here you have to write it down and do it – set that down as an objective, it's a good challenge for next year.

(AM) There is a Social Business Conference where we could talk to the organisers and run a parallel event on the same day with possible joint sessions.

## Question 2: Sue Burton, Pembrokeshire Marine SAC

Whilst I agree about the importance of speaking with other players, we have to be careful that businesses and stakeholders don't see the Government bodies as strapped for cash and trying to get them to pay for statutory responsibilities. The way that we communicate has to be: NRW, WG, Local Authorities are in this, this is what we need to do, we need to do it with you, and this is how we are making it personal and productive, and profitable for you as a different stakeholder. Can we get that message across in a careful way so that we do not turn off business and industry, without them thinking you have got no money and you're trying to get mine to do your job? How do we go about starting that new conversation?

(MR) Business know the government does not have any money, and that we need to work with a broad range of organisations in a different way, and we are quite happy to invest in that. If you want us to invest in the things you want us to do, tell us how it is beneficial to us.

What are the benefits to business? What is the return on the investment? Business needs a clear return, especially if it is measurable, but it does not necessarily have to be financial.

- (PP) I agree. We have to think more widely about the benefits. We get a large number of organisations coming to Welsh Water expecting support. They want us to invest in something, and often it's in general terms such as: we are doing this work and it's in one of your catchments and it would benefit water quality. We want to know how, and by when, and how much is the benefit. When I go back and ask those questions, the response we get is 'that's for you to work out' as you're the expert. Yes, I can work it out but many in my organisation would not work that out for you. We are now more forward thinking, with a 25-year vision with built in resilience, and it's about making our catchment healthy, robust and resilient for the future. But it has to mean something to me and not expect me to do the work.
- (AM) From a sales perspective, we need to be trained in techniques to get someone into the position where their natural response is to say "Yes". We need to make it very easy for them to say yes.
- (CS) We are a government agency and we are looking for the benefit to the organisation of doing biodiversity work. One of those things is working with communities along the route, to engage with them and to give them something back long-term because we are going through their community. Clearing vegetation causes complaints so for us doing something good and giving back to the community has a business benefit or organisation benefit because we want to improve relations with our neighbours.
- (TJ) Early engagement is important. We have a large number of people coming to us late, with a development proposal which we may have issues with. One example of where we worked well with a developer was on a heavily contaminated site, where they came to us wanting to create a surfing venue. We spent a long time with them working out how they could decontaminate the site safely, and safeguarding the species and habitats on the site and increasing the biodiversity interest there and on the adjacent protected site. It is 'wins' all round. This is primarily due to early

engagement. They benefited from reduced costs by working with us at an early stage rather than having to retrofit the environment into their plans.

(DH) The Environment Act, a new piece of legislation, and the development of the Area Statements will provide a platform to address any issues which might be specific to those areas. It's not just about money, it's about bringing the right skill set and people together to come up with solutions to address any scenario found in the statements.

(AM) I'm hopeful that a platform like Neighbourly <a href="https://www.neighbourly.com/">https://www.neighbourly.com/</a> can create that community-based space to say what is our total volunteering and resource capacity for each of our areas, and how does that fit with our biodiversity needs, and social justice.

Question 3: Pete Frost, Natural Resources Wales What is the greatest barrier for making green prescriptions work in Wales?

(MP) We have just started to look at this and my answer is going to be fairly anecdotal. It's a whole range of things - it's partly risk. If GPs are referring people to something which is outside their normal sphere of operation, they need to have confidence that it is going to be dealt with professionally and that they can rely on the referral. Where there has been some social prescribing its success has been helped by intermediaries working with the GPs – a kind of 'honest broker' relationship where the GP has confidence that the intermediary can deal with the person referred and find something suitable for them from a range of opportunities that is going to be of benefit, and not do harm. There are other problems around systems and processes and tradition in a sense. The key thing is the doctor-patient relationship and how you expand that.

# Question 4: Tim Orrell, City and County of Swansea

We want a better world, and there could be a better world, but the only way that is going to happen is by behaviour change, at an individual level, at cooperate level, at business level and at government level. What is the plan? There is no plan at Government level for changing behaviour at an individual level. Where is the 'cunning plan' for leading people to change by desire rather than forcing them? What is being done at a National level?

(Diana Reynolds, Sustainable Development Change Manager, Welsh Government, from the audience) I have only have a small part to play in this, changing the behaviour and culture of the civil servants who work for the Welsh Government. Yes we are looking at desire lines, we are working at: how do you have a conversation with somebody to have the best chance of them saying yes when you ask them that important question? I have and will be running workshops before every conference that we do until I get it right.

(AM) There are conversations we need to have about balancing behaviour changes, and about what you can do to create the space to make people want to change.

(PP) We will be working on a pan-Wales pesticide campaign next year. When we set up the campaign we decided to turn it on its head a bit. If you are going to use a

pesticide and it has an impact on the water, change your behaviour and do something differently. If you turn it on its head and say you are using a chemical that can affect your health and you are potentially using it on food that you are growing in your garden, or that your pets may come into contact with, that's an entirely different message. Make things mean something to people. It's selling it in a different way, not necessarily having a stick or having to have a carrot, but telling people what this means to them: using a pesticide could be causing harm to you. If that does not work, then I do not know where we go. If people do not realise what they are handling is dangerous to them, then there is not much more that you can do.

(MR) Tim Hayward is our chief financial officer. When his daughter went to Copenhagen as a school ambassador, she was depressed when she came back as she had had high hopes, but nothing happened, it seemed government can't fix this, and massive NGOs can't make things happen. As Tim is influential in a relatively large company he decided to do what he could to change it. He went to the office and said I have looked at what we are doing about sustainability and it's poor, we are losing business as a result of it, we are not changing the organisation, and we are not going to be here in a few years' time if we don't change. He took on the responsibility for sustainability. He had to convert the sales team – who were convinced that the model that they were working to was that the customers always buys the cheapest option – by saying we have won £1.6billon worth of work, and the thing that made us different was our sustainability.

(AM) So a child telling a story to the chief financial officer of a company catalysed the change that has allowed the company to increase business and moved things forward in the way that we want. We don't necessarily have to make those changes ourselves.

(MP) We need to root where we are going with the Well-Being of Future Generations Act, and root the opportunities we are trying to seize with it in citizen experience by addressing their issues. We need to demonstrate that positive change can come about, and focus on being change agents rather than just delivering service. That's the kind of change we have to see in the public sector to help deliver this.

# Question 5: Paul Kay, Marine Conservation Society

A recent paper came out suggesting that all UK governments are already failing to meet public expectations on how the marine environment is being managed. Given that scenario, is aspirational legislation going to address that problem or is it likely to raise those expectations to even more untenable levels? Do over stretched targets decrease the chances of the right things happening?

(MP) There are no targets associated with the Well-Being of Future Generations Act. We worked to ensure there were none as there is a great deal of academic and real life evidence that the way we measure targets in the public sector drives us away from where we need to be. As an aspirational piece of legislation, is it going to extend the credibility gap of where government say it wants to be and where the public perceive it to be? Because it is a very different piece of legislation, being an enabling framework rather than a prescription. It provides the opportunity to rise to the challenge and be innovative, and experiment, and take risks, which is not the

normal way of doing things in the public sector because people are usually working to a piece of prescription legislation.

(TJ) We have done things in the way that we have, with the legislation and the powers that we have, for the last 50-60 years. The new legislation gives us a different framework in Wales, a different way of doing things. If we grasp that challenge, if we work with the new legislation which enables us to work together, then it gives us an opportunity to something different and in better ways. We have to change those words into action on the ground to make this work so that we truly have a sustainable Wales.

(AM) We are starting our conversations on the Natural Resources Wales Board on how we might get to zero pollution.

# **Day 2: Afternoon Session**

## **Announcements:**

Several delegates took advantage of this session to flag upcoming events and messages:

- Green Infrastructure Valuing Nature Annual Conference, 18 October <a href="http://www.gip-uk.org/#calendar">http://www.gip-uk.org/#calendar</a>
- Buglife Cymru want to venture into mid and North Wales, contact them if you'd like to get involved https://www.buglife.org.uk/what-we-do/buglife-cymru
- Joint PONT / CIEEM conference Building Bridges between Farming and Nature: Grazing is Amazing, 8-9 February 2017
   <a href="http://www.cieem.net/events/1287/welsh-conference-2017">http://www.cieem.net/events/1287/welsh-conference-2017</a>
- Cofnod conference 5 October 2016 and numerous other events http://www.cofnod.org.uk/Calendar

# Green infrastructure contribution to the well-being of Wales: James Byrne, Wildlife Trusts Wales

James opened by describing the range of diverse reserves and designated sites in Wales, with the Wildlife Trust alone managing 260 reserves, and the value of nature to people – nature is good for us! He introduced Wildlife Trusts Wales' new report Green Infrastructure - A Catalyst for the Well-being of Future Generations in Wales and how it fit with recent Welsh legislation, particularly the Well-Being for Future Generations Act.

James shared examples of green infrastructure in urban areas, particularly in Mexico where a project to 'green' the concrete pillars supporting raised highways were improving the urban environment, creating oxygen, absorbing pollution, and even reducing traffic noise.

Working through each of the seven well-being goals, James enthused about the potential for green infrastructure in shared spaces and



places of work to be a catalyst for economic development in Wales, from changing peoples' spending patterns to reducing sickness absence, with examples from the UK, and further afield, of businesses adopting this approach. Green infrastructure shows measurable benefits to:

- mental and physical well-being
- community cohesion
- demonstrable improvements in test scores where children were exposed to green spaces when learning
- links between biodiversity and linguistic diversity so greening also has potential to contribute towards supporting a vibrant Welsh language!

James closed with a call to action - "plant more trees!"

# Presentation link

# Closing address: Andy Middleton

The evidence is so clear. We need to walk nature into the room with these decision makers. There are no endless buckets of money to do this. But we can find the money by addressing the problems in smart and imaginative ways. We must apply the principles of the Well-Being for Future Generations Act.

How do we bring extra voices in? How do we take voices out to them?

Hundreds of businesses care. There are 12-15,000 farmers we need to talk to. We need to create a space in the middle of these different voices and let go of the need to be right about how we do this. We must listen.

We could see some really big shifts. It is not, eg, the Wildlife Trusts or Oxfam alone who will be able to define this. But these entities are made up of thousands of members, who have the power to make big changes.

Together we could change the educational experience of children in Wales. Give every child the opportunity to light fires in woods (safely!). So in a year's time we can say "No, we don't have a plan yet but..."

Andy invited everyone to approach him, as a Board Member of NRW, with any suggestions, and asked for any comments from the audience about the direction of future conferences.

# Comments

- Glenda Thomas (FWAG Cymru) If you compare Glastir to the Nature Fund, there is a complete contrast in terms of trusting people to put the package together.
- Rhodri Asby (Welsh Government) asked to hear from anyone who comes across perverse incentives.

Andy closed the conference by thanking Sean McHugh and WBP for hosting it and Sarah Wood and NRW teams for organising it.



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# Speakers' Biographies

# **Andy Middleton**

Andy Middleton is Executive Director of the TYF Group, an employee-owned social enterprise in St.David's, Pembrokeshire. TYF's mission is to help adults and children, business teams and community groups grow the confidence, skills and reason to transform the way they play, think and work. He's a Founding Partner of the Do Lectures and, through the Do Collective, orchestrates the impact of a virtual team of hundreds of the world's best thinkers and doers and, through the Innovation Advisory Council for Wales, advises Welsh Government on innovation strategy.

Andy is a strategic advisor, facilitator and speaker to business and government, working with organisations to accelerate speed and scale of change to build resilience, drawing on 25 years' experience in risk, action learning, biomimicry and sustainability.

Andy works internationally and from his home city, balancing desk and delivery time with surfing, sea kayaking and growing. He blogs at <a href="https://www.tyf.com">www.tyf.com</a> and tweets as @gringreen; his talks from the Do Lectures and TEDx are online here <a href="find-your own luck">find-your own luck</a> and here Radical change

# **Barnaby Letheren**

Barnaby is the Enterprise Data Management Specialist Advisor to Natural Resources Wales. After gaining a degree in Environmental Conservation and a masters in Conservation and Land Management from Bangor University he started working in the environmental data sector. My current interests are in open data, partnership working, combining data and how data can be used to inform wide scale questions around managing natural resources.

# **Bleddyn Lake**

Bleddyn Lake has been with Friends of the Earth Cymru since 2000. He studied Marine Biology and Oceanography at Bangor University (BSc) and Environmental Conservation Management at the University of Glamorgan (MSc). He works as a campaigner and community development officer around Wales and has worked on successful campaigns such as the Welsh Government's Action Plan for Pollinators, UK Climate Change Act, GM crops, fracking and the plastic bag charge. He is also on the steering group of Stop Climate Chaos Cymru

Bleddyn has 2 daughters and is a die hard Scarlets fan and self-confessed rugby anorak!

# **Catherine Duigan**

Dr Catherine Duigan is currently leading the Evidence Analysis Group at Natural Resources Wales (NRW). This group of over twenty technical specialists (spanning terrestrial and aquatic environments) provides the evidence to underpin operations, and to inform advice and policy development. She has played a major role in the development of NRW's corporate strategy for evidence and has also provided strategic advice on research priorities to the Natural Environment Research Council, government and others.

In general Catherine has built a career on the provision of evidence using her in-depth knowledge of environmental management. She has a keen understanding of communicating across the science-policy interface in Wales/UK/EU and an extensive network of colleagues in the academic, governmental, conservation and regulatory community.

She has published several scientific papers on aspects of the Welsh environment, including writing and editing *The Rivers of Wales* book. She serves on the editorial board of *The Biologist*, the magazine of The Royal Society of Biology. In a personal capacity she is researching the lives of some early Welsh women scientists and is an advisor to The Mary Gillham Archives.

## **Claire Sweeney**

Claire Sweeney is Environment Consents Manager on the Greater West Programme since 2012. Claire is responsible for the achievement of environmental consents, the issue of Environmental Statements and the Procurement Strategy for the Biodiversity No Net Loss commitment.

#### **Dai Harris**

Dai Harris is Head of the Biodiversity and Nature Conservation Branch in Welsh Government

# **Dick Squires**

Dick Squires was Mid Wales area manager at RSPB before joining PONT as part time regional development officer for Mid Wales, a job that he shares with Angie Polkey. He learnt to speak Welsh after moving to Wales in 1979 to begin work at RSPB's Ynys Hir Reserve. Dick has a vast knowledge of conservation grazing, he has managed the conservation grazing at Ynys Hir Reserve for fifteen years and keeps horses at his home in the Dyfi Valley.

# **Emma Douglas**

Emma Douglas grew up on the Gower Peninsula and continues to assist with the running of a small herd of Welsh Black cattle and horses at the family farm. She worked for the Bat Conservation Trust on their Tir Gofal Agri Environment Monitoring Project before joining PONT in 2012. Emma was the project officer for a Biffa Award Funded project on Coity Wallia Commons, Bridgend, South Wales. Emma is now PONT's Regional Development Officer for South Wales.

# **Emmanuel Deschamps**

Emmanuel has been Environmental Manager for Network Rail on The Greater West Programme since 2014. He oversees the implementation and compliance of the Environmental Management System by working closely with Contractors and the Projects Teams to identify environmental aspects and minimise impacts.

# **Emily Finney**

## Helen Wilkinson

Helen leads on knowledge and information management in Natural Resources Wales. Her background is in ecology and countryside management. She is also a DAMA Certified Data Management Professional and a member of the Institute of Leadership and Management.

Helen has worked in the environment sector for over 25 years, gaining experience in practical land management, nature conservation, biodiversity assessment and reporting, pollution control, environmental education, data management and knowledge management. She has worked in public, private and voluntary sectors.

For the last decade, Helen has focussed on evidence, reporting, GIS and data management. Helen's interest (and motivation) is in the application of environmental evidence to help solve real life environmental challenges and to help raise awareness and enjoyment of our natural world.

# **Henry Schofield**

Dr Henry Schofield is the Conservation and Science Manager of The Vincent Wildlife Trust. A bat specialist by training, Henry has undertaken research on horseshoe bats and some of the rare tree bat species. His work on the predation of hibernating bats by martens in Poland grew his interest in small carnivores. In recent years he has been involved in the Trust's work on stoat, weasel and polecat. He has oversight of the Pine Marten Recovery Project, working closely with the team carrying out the translocations and radio-tracking studies.

# **James Byrne**

James Byrne is the Living Landscape Manager with Wildlife Trust Wales. He is a Chartered member of, and Assessor for, the Chartered Institute of Ecology and Environmental Management (CIEEM). In this role he works with all the Welsh Trusts to develop their Living Landscapes as well gaining support for Living Landscapes with Welsh Government and Assembly Members. He was the Wales Environment Link (WEL) representative on the Welsh Climate Change Commission, UK NEA Steering Group, and former Chair of the WEL Advocacy Group. He also previously be on the Welsh Biodiversity Funding Panel for both SITA and WREN Landfill Tax as well as the Welsh Governments Small Environmental Grants panel. He was a member of both Visit Wales Wildlife Tourism and Sustainable Development Working Groups, working alongside Visit Wales to promote Wildlife Tourism.

Prior to working Wildlife Trust Wales, James was a Senior Conservation Officer for RSPB Cymru, County Ecologist at both Herefordshire County and Bristol City Councils, a Senior Ecologist with Cresswell Associates and a LBAP Officer with Gloucestershire Wildlife Trust.

# **Kylie Jones Mattock**

With thirteen years' varied experience of working and volunteering in the countryside and conservation sector, since 2010 Kylie has been a Site Manager for the Woodland Trust, responsible for all aspects of the management of the Trust's estate in North West Wales.

## **Matthew Quinn**

Matthew Quinn is Director, Environment and Sustainable Development in the Department for Environment and Rural Affairs of Welsh Government. His responsibilities include environmental protection, nature, resource efficiency, water, flood and sustainable development. He led on the establishment of Natural Resources Wales and the Environment (Wales) Act 2016.

Matthew started his civil service career in 1986 in the Department of the Environment in London and in 1990 led part of the team that produced the first UK Environment White Paper, This Common Inheritance. Before coming to Wales in 1998, he was a Director in the Government Office for the South West.

Mat Roberts is Interserve PLC Group Director of Sustainability Strategy. He leads on the development of the Interserve SustainAbilities Plan with

**Matthew Roberts** 

a specific focus on the social and natural capital. Before joining Interserve he was Head of Sustainability at Landmarc Support Services, an Interserve joint venture.

Mat is an advisor to the EU Business @ Biodiversity Platform, a Trustee of The Princes Countryside Fund, a Non Executive Director of Cynnal Cymru Sustain Wales and the National Association of AONBs and a fellow of the RSA.

When not working or being a father and husband he enjoys cycling, sailing and hill walking.

#### **About Interserve**

Interserve is one of the world's foremost support services and construction companies. Our vision is to redefine the future for people and places. Everything we do is shaped by our core values. We are a successful, growing, international business: a leader in innovative and sustainable outcomes for our clients and a great place to work for our people. We offer advice, design, construction, equipment, facilities management and frontline public services. We are headquartered in the UK and listed in the FTSE 250 index. We have gross revenues of £3.4 billion and a workforce of over 80,000 people worldwide. Website: www.interserve.com.

For all news follow: @interservenews

# Mike Palmer

Mike currently works in the Office of the Future Generations Commissioner, a new role in a new department, but he began his career as a trainee forester in Scotland. Following University he became a librarian responsible for a number of community libraries and in 1990 he became involved in the rescue and recovery phase of the North Wales Floods. These experiences have shaped his thinking on public services and what they can achieve, and their limitations. He then spent a decade in the third sector, working with people, developing and promoting public participation, and convened a third sector forum to inform the Sustainable Development Scheme of the 1st Assembly. This was followed by a stint with the Audit Commission's Best Value Inspection Service, which eventually became part of the Wales Audit Office. Whilst there he led a review of sustainable development in all of Wales' unitary authorities and later a review of sustainable development and Business Decision Making in the Welsh Government.

# **Nigel Douglas**

Nigel has worked as the Woodland Trust's Ancient Woodland Restoration Officer for Clwyd since January 2015. Prior to that he worked in Canada for 12 years, working for the Alberta Wilderness Association, where the woods are bigger, more uniform and more full of things that might want to eat you. He also worked for seven years managing nature reserves for the RSPB.

## Phillippa Pearson

Dr Phillippa Pearson is Catchment Manager at D r Cymru Welsh Water and is responsible for developing and delivering the *WaterSource* Catchment Programme. Phillippa joined the water industry in 2003 after completing her PhD in Fluvial Geomorphology at Aberystwyth University. She originally worked for Severn Trent Water before moving to D r Cymru in 2006 and has held operational roles within Water Production and Distribution before moving into her current role to establish the Catchment Team for D r Cymru in 2011. Phillippa is an industry representative on the NERC and BBSRC 'Sustainable Agriculture

Research and Innovation Club' (SARIC) and is a Chartered Scientist and Chartered Environmentalist.

## Sarah Williams

Dr Sarah Williams, Manager, Natural Resources and Ecosystems Group, Natural Resources Wales.

A geographer with 25 years experience of working in the environment in the public sector,



consultancy and academia Sarah currently leads the SMNR Transformation Programme in NRW. Sarah has extensive experience in natural resource management particularly in the water and agriculture sectors and developing practical approaches to environmental policy problems. Based in the Evidence Policy and Permitting Directorate, Sarah leads a programme which draws together staff from across NRW to develop practical approaches to implementation of SMNR and the

new duties on NRW in the Well-being and Future Generations Act and Environment (Wales) Act 2016.

## Sue Burton

Sue Burton has worked for the relevant authorities group for the Pembrokeshire Marine SAC for 16 years. Before that she spent more time out of the office and under the sea including dive surveys across the UK and working for the Skomer MNR. A Bangor University marine biology graduate with an MSc in Marine Resource Development & Protection, Sue enjoys the variety and challenges associated with marine conservation work.

# **List of Registered Delegates**

First Name	Surname	Company
		Company Wildlife Trust for South and West Wales
Nigel Nick	Ajax-Lewis	Natural Resources Wales
Simon	Bialynicki-Birula	Welsh Government
	Bilsborough	
Leanne	Bird	Ceredigion County Council
Sarah	Bird	Chester Zoo
Stephen	Bladwell	RSPB Cymru
Sion	Brackenbury	Commons Vision
Paul	Brazier	Natural Resources Wales
Emma	Broad	Wrexham Council
Sue	Burton	Pembrokeshire Marine SAC RAG
Anne	Butler	Conwy County Borough Council
Jennifer	Butler	Promar International
James	Byrne	Wildlife Trusts Wales
Mandy	Cartwright	Amphibian and Reptile Conservation Trust
Imogen	Cavadino	TCV / National Museum Wales
Jas	Chanay	Retired
Colin	Cheesman	Plantlife Cymru
Keith	Cowieson	SongBird Survival
David	Cowley	Isle of Anglesey CC
Dan	Crook	Natural Resources Wales
Amanda	Davies	Flintshire County Council
Ceirios	Davies	Natural Resources Wales
Howard	Davies	Natural Resources Wales
Keith	Davies	Natural Resources Wales
Nerys	Davies	Cyngor Gwynedd Council
Emmanuel	Deschamps	Network Rail
Clare	Dinham .	Buglife
Emma	Douglas	PONT
Nigel	Douglas	Woodland Trust
Catherine	Duigan	Natural Resources Wales
Christine	Edwards	Natural Resources Wales
Anna	Egerton	Bangor University
Chloe	Elding	Wildlife Trust Wales
Russell	Elliott	Natural Resources Wales
Matt	Ellis	Natural Resources Wales
Sue	Evans	Am Gymru Ltd / Game & Wildlife
		Conservation Trust
Leasa	Fielding	Welsh Government
Emily	Finney	Welsh Government
Peter	Frost	Natural Resources Wales
Paul	Furnborough	North East Wales Wildlife
Mark	Gahan	Well-Being and Future Generations
Heather	Galliford	RSPB Cymru
Jonathan	Garratt	National Bee Unit
Daniel	Griffith	Y Dref Werdd
Bernard	Griffiths	FUW
Bob	Griffiths	OPAL
Elinor	Gwynn	National Trust
LIIIIOI	Owymin	National Hust

Justin Hanson Natural Resources Wales

John Harold Cymdeithas Eryri the Snowdonia Society

Dai Harris Welsh Government John Healey Bangor University

Zoe Henderson Natural Resources Wales

Hannah Henshaw NatureSpy

Deb Hill City and County of Swansea

Sifan Hu Xishuangbanna Tropical Botanical Garden Catherine Hughes Am Gymru / Game & Wildlife Conservation

Trust

IanHughesNatural Resources WalesJayneHuntWelsh Perry & Cider SocietyJulietHynesCardiff University Otter Project

Jill Jackson NMWTRA

Rhian Jardine Natural Resources Wales

Alison Jones Caerphilly County Borough Council

Huw Jones Natural Resources Wales Liz Jones Natural Resources Wales

Rhianne Jones CLA Cymru Rhys Jones Gwynedd Council

Sarah Jones Natural Resources Wales Tim Jones Natural Resources Wales

Kylie Jones Mattock Woodland Trust

Paul Kay Marine Conservation Society
Jennifer Kelly Natural Resources Wales

Julia Korn PONT

Bleddyn Lake Friends of the Earth Cymru

Sam Langdon SWWARG

Jim Latham Natural Resources Wales
Barnaby Letheren Natural Resources Wales

Rachel Lewis-Davies NFU Cymru

SHAN Li Fairylake Botanical Garden Twinkle LIANG Fairylake Botanical Garden

Chen Lin WWF

Iolo Lloyd Natural Resources Wales

Tracey Lovering Plantlife Cymru

Andrew Lucas Natural Resources Wales Hayley MacDonald-Jones Natural Resources Wales

Lars Markesteijn Bangor University

Mandy Marsh Natural Resources Wales

James McConnell NatureSpy

Fiona McFarlane Welsh Government

Morag McGrath Retired

Sean McHugh Wales Biodiversity Partnership

Emily Meilleur Gwynedd Council

Andy Middleton Natural Resources Wales
Jan Miller North Wales Wildlife Trust
Clare Morgan Coed Cadw/Woodland Trust

Elizabeth Mutch Llais y Goedwig

Liam Olds Rhondda Cynon Taf C.B.C / National

Museum of Wales

Lee Oliver Keep Wales Tidy

Phil Oliver Natural Resources Wales
Tim Orrell City and County of Swansea
Barbara Owsianka County Borough Council

Laura Palmer Neath Port Talbot County Borough Council

Mike Palmer Welsh Government

Phillippa Pearson D r Cymru / Welsh Water

Kirthana Pillay Bangor University Matthew Quinn Welsh Government

Geoff Radford North Wales Wildlife Trust / Cofnod

Clare Reed Marine Conservation Society

IvorReesNoneJaneReesNone

Diana Reynolds Welsh Government

Dafydd Roberts Snowdonia National Park Authority
Mari Roberts Self-employed Pollinator Surveyor and

**Ecologist** 

Mat Roberts Interserve PLC

Ant Rogers Pembrokeshire Biodiversity Partnership

Colin Russell WWBIC

Henry Schofield The Vincent Wildlife Trust

Hannah Serna RSPB Cymru

Emma Sharp Ceredigion County Council

Rebecca Sharp NPT CBC Elwyn Sharps RSPB

Jenny Shaw Welsh Beekeepers' Association

James Skates Welsh Government
Sarah Slater Flintshire County Council

Dick Squires PONT

Mathew Stephens Natural Resources Wales

Katrina Sutherland Student Claire Sweeney Network Rail

Ray Tangney National Museum Wales

Roy Tapping Cofnod

Rachel Taylor BTO (British Trust for Ornithology)

Glenda Thomas FWAG

Ian Thomas Wildlife Trust South & West Wales

Nick Thomas Natural Resources Wales
David Thorpe Natural Resources Wales

Amy Vanstone RSPB

Andrew Whitfield Whitfield Ecological Services
Helen Wilkinson Natural Resources Wales
Anna Williams North Wales Wildlife Trust

Arwel Williams Welsh Government

Linda Williams Natural Resources Wales Sarah Williams Natural Resources Wales

Tomos Williams NatureSpy

Michael Wilson National Museum of Wales
Sarah Wood Natural Resources Wales
Holly York Wales Biodiversity Partnership

# **List of Exhibitors**

The following organisations had display stands in the Exhibition Hall:

Action for Pollinators
Buglife
Cardiff University Otter project ('Colin the Otter!')
Cofnod
Marine Conservation Society UK
Natural Resources Wales
Network Rail
OPAL
Plantlife Cymru
PONT Cymru
The Woodland Trust
Wildlife Trusts Wales