



NHS Wales and the Biodiversity Duty



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

What is the Biodiversity Duty?

Section 6 under Part 1 of the Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (the S6 duty) for public authorities in the exercise of functions in relation to Wales.

The S6 duty requires that public authorities (including all health boards and trusts) must seek to **maintain and enhance biodiversity** so far as consistent with the proper exercise of their functions and in so doing **promote the resilience of ecosystems**.

What do NHS Wales organisations have to do?

To comply with the S6 duty public authorities should **embed the consideration of biodiversity and ecosystems into their early thinking and business planning**, including any policies, plans, programmes and projects, as well as their day to day activities.

To comply with the S6 duty, most public authorities must **prepare and publish a plan** setting out what they propose to do to maintain and enhance biodiversity, and promote resilience.

This plan can and should be an integral part of any planning document as part of the Health Board or Trust business or corporate planning processes. **A standalone plan is not necessarily required.**

Case Study 1: Glanrhyd ‘Green Flag Award’

Glanrhyd in Bridgend is only the second hospital in the UK to receive the ‘Green Flag Award’, which recognises the finest parks and green spaces. The historic site has bird and bat boxes, insect-friendly “bug hotels” and interpretive signs explaining the flora and fauna that can be found there. “There is very clear evidence that being able to enjoy the natural environment has a positive impact on the wellbeing of patients, staff and visitors, and on recovery after illness.” said Health Board Chairman Andrew Davies.



Are there any documents we need to acknowledge when developing our plan?

A health board or trust in complying with the S6 duty, must have regard to:

- The section 7 list of [habitats](#) and [species](#) of principal importance for Wales
- The [State of Natural Resources Report](#), published by NRW
- Any [Area Statement](#) which covers all or part of the area in which the authority exercises its functions, once these are produced.
- The [Nature Recovery Action Plan](#) for Wales contains six objectives which should be used to help develop and guide actions to comply with the S6 duty, and further technical guidance will be produced.

What should the plan include?

A plan for the purposes of the S6 duty should include a **high level statement** that demonstrates commitment to and responsibility for complying with the duty at a corporate level. It should then include the **steps that will be taken to fulfil this commitment** across the functions of the organisation.

What kind of actions can a health board or trust take?

Each function of the health board or trust should consider where they can contribute to the [Nature Recovery Action Plan](#) objectives and to promoting resilience, through addressing its attributes as above. In some cases action across the organisation as a whole is more appropriate. Examples of actions include:

- **Raise awareness** across the organisation about how each and every role can impact and influence biodiversity and consider measures to enhance biodiversity and ecosystems in all policies, plans and projects. Embed this into your corporate business planning.
- Think about how enhancing biodiversity can help deliver across the organisation's activities e.g. to support **active recreation, education, flood prevention, and local food growing**. For example, **green roofs** help to provide wildlife habitats, **reduce energy consumption** and **improve drainage** systems.

- Use native, bio-diverse, nature based solutions wherever possible. **Reduce, re-use, recycle** materials, but where products such as paper are bought, ensure that **supplies come from sustainable sources** – i.e. paper from sustainable forests.
- Look for opportunities, whether they are big or small, to help encourage biodiversity – e.g. **plant native species, wildflower areas** for pollinators, leaving areas of **unmown grass**; and **improving connectivity** between valuable habitats.
- **Safeguard** protected species, habitats and areas.
- **Restore habitats** to as natural and resilient state as possible.
- Support the **creation of new habitats**, such as local orchards, native hedges, wildflower meadows or other areas of **wildlife-friendly green space** that is **accessible to local communities**.
- **Manage the land** over which you have control to be wildlife friendly, and involve staff in the planning and management of this.
- Take action to support pollinators and become a [Bee Friendly organisation](#)
- If you have responsibility for **road verge management**, manage these in a way which contributes to road safety and wildlife conservation.
- Making decisions and plans based on the best available evidence, and contributing to our body of knowledge where possible, for example by **supporting citizen-science initiatives**.
- Providing support, involvement and/or funding for **partnerships and collaboration** for local and **community-based biodiversity action**.

Case Study 2 - Ein Berllan Our Orchard, Llandough Hospital

Ein Berllan – Our Orchard will be a semi-natural planted area which has been set aside for the protection of plants and wildlife. It consists of 7 acres of semi-rural pasture land and woodland which makes up part of the UHL estate. It will be a unique space and it is hoped that it will be a legacy for generations to come. This long term project will be established in phases and we anticipate that the initial phase will commence with the planting of the orchards and a shelter belt which will be completed in around two years.



How do we demonstrate that we are “enhancing and maintaining biodiversity”?

The 6 objectives to maintain and enhance biodiversity are:

- **Objective 1:** Engage and support participation and understanding to embed biodiversity throughout decision making at all levels
- **Objective 2:** Safeguard species and habitats of principal importance and improve their management
- **Objective 3:** Increase the resilience of our natural environment by restoring degraded habitats and habitat creation
- **Objective 4:** Tackle key pressures on species and habitats
- **Objective 5:** Improve our evidence, understanding and monitoring
- **Objective 6:** Put in place a framework of governance and support for delivery

How do we “increase resilience of our natural environment”?

The Environment (Wales) Act sets out the following attributes of ecosystem resilience:

- **Diversity** - generally speaking, more diverse ecosystems are more resilient to external influences and their impacts. This includes biological, geological and physical diversity.
- **Connectivity** within and between ecosystems.
- **Scale and Extent** - the bigger the ecosystem extends, without fragmentation, the more resilient it is likely to be.
- **Condition** - ecosystems need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services.
- **Adaptability** – the ability of ecosystems to adapt to events, understanding that ecosystems are not static and will change over time.

Case Study 3: Woodland Walk, Bronllys Hospital



The Green Valleys has been working with Powys Teaching Health Board to improve access to woodland at the Bronllys Hospital site. Supported by the Powys Forces Covenant, the new access will allow patients, staff and visitors to the hospital to get away from it all by spending time in the small but mature woodland on the hospital site.

When do we have to publish our plan?

A report on what the public authority has done to comply with the duty must be published **by the end of 2019** and **then every three years** after this date.

How should the plan be reported?

For those public bodies subject to the Wellbeing of Future Generations (Wales) Act 2015 (the WFG Act) the S6 plan should be **integrated into their statement of the steps to be taken to meet their well-being objectives**, which in turn should be **in their corporate plan**.

What do we do if we don't own the land we operate from?

Health boards and trusts with no land will still need to consider each of the aspects of resilience, as their decisions and actions can influence ecosystems indirectly, for example through their **procurement policy**, or through **funding decisions and conditions**.

Case Study 4: Sensory Garden, Deeside Hospital



A new 'sensory' garden to benefit dementia patients at Deeside hospital is now open. "It's going to be such a lovely place for our patients to use, most of whom are rehabilitating and it's now a safe and really pleasant environment for them to be in." said Debbie Fogg, a dementia support worker. The garden has been fenced off giving patients privacy and the ability to explore the garden with more independence.

Who is responsible for complying with the duty?

The overarching responsibility for compliance lies with the final decision-making body, or the head of the organisation, e.g. the **CEO or the Board of Governance**.

Aren't we already meeting this duty?

It is very likely that many health boards and trusts in Wales are already providing biodiversity enhancement and resilience (at least in part) and examples of these initiatives can be seen in **Appendix B**. However, there is always potential to do more and the benefits extend beyond simply supporting the natural environment.

How does this help our already stretched services?

Many actions supporting the compliance with this duty may be either resource neutral or even increase efficiencies. e.g. Reducing grass cutting. In addition the actions can have significant evidence-based health and well-being benefits for staff, patients, visitors and local communities.

What are the health benefits from meeting the biodiversity duty?

Biodiversity has a wide range of health implications with nature providing a significant proportion of our most effective pharmaceuticals including quinine, aspirin, morphine, digitalis etc. To date, 35,000-70,000 plant species have been screened for their medicinal use¹. In addition biodiversity plays a critical role in air and water quality, healthy eating and infectious diseases. And then there are the direct impacts that a natural environment can have on our physical, mental and emotional health & well-being with a variety of research suggesting positive impacts of nature on mood², stress³, ADHD⁴, inflammation⁵, immunity⁶, recovery from surgery⁷ birthweight⁸ and reduced mortality⁸ amongst other things.

Is there any expert support to assist health boards and trusts?

Biodiversity is not something that health boards and trusts would normally have any expertise in or professional understanding of, although it is often worth checking within your organisation as the health service in Wales has a diverse and multi-talented workforce with a wide range of expertise and knowledge. There are however many local and national organisations that do have this knowledge and expertise and are happy and keen to share this with health boards and trusts. Key amongst these are the [Local Nature Partnerships](#), 24 locally based partnerships who provide a focus for delivering the Nature Recovery Plan objectives and Sustainable Management of Natural Resources at the local level. Many of these partnerships are already engaged with their local Health Boards and Trusts. These are in turn supported by the [Wales Biodiversity Partnership](#). A list of potential partners and collaborators can be found in [Appendix A](#).

Case Study 5: Llanfrechfa Grange Walled Garden Community



We are a group of volunteers which includes a number of staff and ex staff of Aneurin Bevan University Health Board, who are working with the Health Board on a project to restore and redesign the old Victorian walled garden at Llanfrechfa Grange. The stated purpose of the charity is "to create and maintain an uplifting multi-purpose garden for the benefit of the public and healthcare staff through the redesign and restoration of the Walled Garden at Llanfrechfa Grange."

Appendix A

Supporting Organisations

Organisation	Role/Initiatives	Website
Natural Resources Wales	<p>We make sure that the environment and natural resources of Wales are sustainably maintained, sustainably enhanced and sustainably used, now and in the future</p> <ul style="list-style-type: none"> • <u>Introducing sustainable management of natural resources</u> • Public Service Board members 	https://naturalresources.wales/?lang=en
Wales Biodiversity Partnership	The Wales Biodiversity Partnership (WBP) brings together key players from the public, private and voluntary sectors to promote and monitor biodiversity and ecosystem action in Wales. WBP provides a leadership role and an expert steer on priorities for action on biodiversity and ecosystems in Wales	https://www.biodiversitywales.org.uk/
Local Nature Partnerships	Local partnerships for nature operate in all areas of Wales and provide a focus for delivering the Nature Recovery Plan objectives and Sustainable Management of Natural Resources at the local level as well as contributing to many of the Well-being of Future Generations goals.	https://www.biodiversitywales.org.uk/Local-to-You
Keep Wales Tidy	<p>Deliver practical action, environmental education, training, business services and environmental solutions across Wales.</p> <ul style="list-style-type: none"> • Green Health Coalition 	https://www.keepwalestidy.cymru/
Friends of the Earth	<p>Friends of the Earth Cymru is dedicated to promoting the environment and promoting a sustainable future for Wales.</p> <ul style="list-style-type: none"> • Bee Friendly Wales 	https://www.foe.cymru/bee-friendly-wales
National Trust Wales	<p>We take care of coastline, forests, woods, fens, beaches, farmland, moorland, islands, archaeological remains, nature reserves, villages, historic houses, gardens, mills and pubs and one of the world's largest art collections.</p> <ul style="list-style-type: none"> • Green Health Coalition 	https://www.nationaltrust.org.uk/days-out/regionwales/wales

Organisation	Role/Initiatives	Website
Wildlife Trusts Wales	<p>Each of the six Wildlife Trusts in Wales is an independent, autonomous charity with its own trustees, whose primary concern is the conservation of nature within its own geographical area.</p> <ul style="list-style-type: none"> • Green Health Coalition • Wild Health (GwenT) 	https://www.wtwales.org/
RSPB	<p>The RSPB is the country's largest nature conservation charity, inspiring everyone to give nature a home.</p> <ul style="list-style-type: none"> • Green Health Coalition 	https://www.rspb.org.uk/about-the-rspb/at-home-and-abroad/wales/
Canal & River Trust in Wales	<p>We firmly believe that the waterways of Wales have a role to play in improving people's lives, prosperity and health. Only by working side by side with individuals, organisations and Government at all its levels, can this potential be fulfilled.</p>	https://canalrivertrust.org.uk/wales
Wales Environment Link	<p>Wales Environment Link (WEL) is a network of environmental, countryside and heritage non-governmental organisations with an all-Wales remit</p>	http://www.waleslink.org/
Snowdonia National Park	<p>The National Park Authority's aims are to conserve and enhance the natural beauty, wildlife and cultural heritage of the area; promote opportunities to understand and enjoy its special qualities; and to foster the economic and social wellbeing of its communities.</p> <ul style="list-style-type: none"> • Eryri Walking Club for blind and visually impaired people. 	http://www.snowdonia.gov.wales/
Brecon Beacons National Park	<p>The remit of our work is to protect the natural beauty of the Park; to help visitors enjoy and understand it; and to foster the wellbeing of local people.</p> <ul style="list-style-type: none"> • Together for Health and Well-being 	http://www.beacons-npa.gov.uk/
Pembrokeshire National Park	<p>The park authority has a duty to foster the economic and social well-being of communities living within the Park.</p> <ul style="list-style-type: none"> • Walking with Wheels • Stackpole Mencap Gardens 	https://www.pembrokeshirecoast-wales/default.asp?PID=4

Organisation	Role/Initiatives	Website
NHS Forest (Centre for Sustainable Healthcare)	<p>The NHS Forest is a project coordinated by the Centre for Sustainable Healthcare. Funded by charitable trusts, corporate and individual sponsorship, the project's central aims are to:</p> <ul style="list-style-type: none"> Improve the health and wellbeing of staff, patients and communities through increasing access to green space on or near to NHS land; Encourage greater social cohesion between NHS sites and the local communities around them; Spark projects that bring together professionals and volunteers to use new and existing woodland for art, food crops, reflective or exercise spaces and to encourage biodiversity; Highlight innovative ideas to encourage the use of green space for therapeutic purposes. 	https://nhsforest.org/
Coed Lleol	<p>Coed Lleol connects people and nature the woodland way. We help individuals and woodlands in Wales to flourish and grow through woodland activities, events and training in their local areas. Since 2010, we have successfully run health and wellbeing activities in woodlands through our Actif Woods Wales programme.</p>	https://www.coedlleol.org.uk/
Ramblers Cymru	<p>Ramblers Cymru is the guardian of the path network in Wales. Ramblers Cymru helps the people of Wales and visitors to enjoy walking and protects the places we all love to walk. We are the only charity dedicated to looking after paths and green spaces, leading walks, opening up new places to explore and encouraging everyone to get outside and discover how walking boosts your health and increases your happiness.</p> <ul style="list-style-type: none"> Let's Walk Cymru 	https://www.ramblers.org.uk/wales.aspx
Social Farms & Gardens	<p>Social Farms & Gardens in Wales currently runs three programmes, covering a wide area of work to support and promote community growing in Wales:</p> <ul style="list-style-type: none"> Amelia Trust Care Farm West Wales Care Farm (Clynnfyw) Growing Together 	https://www.farmgarden.org.uk/your-area/wales

Appendix B

EXAMPLES OF NHS WALES GREEN HEALTH INITIATIVES

Organisation	Initiatives
Glanrhod Hospital, Bridgend (ABMUHB)	Green Flag Award
Llandough Hospital, Cardiff (CVUHB)	Our Orchard Bee Friendly Wales Therapy Garden
University Hospital of Wales, Cardiff (CVUHB)	The Grapevine Fruit & Veg Stall
Princess of Wales Hospital, Bridgend (ABMUHB)	Sensory Garden Good to Grow Gardening Group
Aneurin Bevan UHB	Llanfrechfa Grange Walled Garden Community
Nevill Hall Hospital (ABUHB)	Woodland Walk & Memorial Gardens
Wrexham Maelor Hospital (BCUHB)	Shooting Star Garden Renal Unit Garden
Deeside Hospital (BCUHB)	Sensory Garden
BCUHB (Lymphoedema Service)	"Walk with us" scheme for Lymphoedema patients
CwmTaf UHB	Sensory Walk in Cyfathfa Park 70 trees for 70 yrs Macmillan Garden (PCH) Valleys Steps
Forest View GP Practice (CTUHB)	Grow Rhondda
Hywel Dda UHB	The Penparcau Organ Donor Memorial Garden Aberystwyth
Powys THB	'At Ease' Veterans' Garden at Bronllys Hospital Woodland Walk at Bronllys Hospital Breconshire War Memorial Hospital Greenhouse
Velindre Cancer Centre	Chemotherapy Inpatient Unit (CIU) - sensory garden
Lansdowne Surgery (CVUHB)	'Grow Well' project
Royal Glamorgan Hospital (CTUHB)	Psychiatric Intensive Care Garden

These represent just a few examples of green health activities presently being delivered by the NHS in Wales and are not a comprehensive or exhaustive list of activity.

References

1. Prof. (Dr.) Ciddi Veeresham, J Adv Pharm Technol Res., 2012 Oct-Dec; 3(4): 200–201
2. Berman M, Kross E, Krpan K, et al. Interacting with nature improves cognition and affect for individuals with depression. J Affective Disorders 2012;140(3):300-305.
3. Berto R. Exposure to restorative environments helps restore attentional capacity. J Environ Psychol 2005;25:249-259.
4. Miyazaki Y, Lee J, Park BJ, et al. [Preventive medical effects of nature therapy]. [Article in Japanese] Nihon Eiseigaku Zasshi 2011;66(4):651-656.
5. Mao GX, Lan XG, Cao YB, et al. Effects of short-term forest bathing on human health in a broad-leaved evergreen forest in Zhejiang Province, China. Biomed Environ Sci 2012;25(3):317-324.
6. Li Q. Effect of forest bathing trips on human immune function. Environ Health Prev Med 2009;15(1):9-17.
7. Ulrich RS. View through a window may influence recovery from surgery. Science 1984;224:420-421.
8. Maxwell S & Lovell R (2017) - Evidence Statement on the links between natural environments and human health. Pub: Department for Environment, Food & Rural Affairs, London, March 2017. Available at: <https://beyondgreenspace.files.wordpress.com/2017/03/evidence-statement-on-the-links-between-natural-environments-and-human-health1.pdf> (Last accessed 17/1/2019)