

Connecting People, Nature and Place – Final Report

Carmarthen Council

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Executive Summary

The Green Health Hub Cynefin project, a collaboration between Coed Lleol/Small Woods (CLSW) and University Wales Trinity St David (UWTSD), ran from January 2024 to January 2025 in Carmarthenshire. Its goal was to improve mental health, well-being, and community engagement through outdoor, nature-based activities, addressing barriers to participation and fostering connections between local and university communities. The project focused on four key objectives:

- 1. Enhancing health and wellbeing through outdoor activities
- 2. Removing financial barriers to participation
- 3. Expanding access to learning opportunities
- 4. Increasing engagement between local and university communities

Throughout the project, a wide range of activities was delivered, including bushcraft, nature walks, creative arts, accredited courses, and professional wellbeing days. These free sessions were designed to be inclusive, offering opportunities for people of all ages and abilities to engage with nature, learn new skills, and build connections. Over 150 participants took part, benefiting from a variety of hands-on learning experiences and outdoor engagement.

The project collected data on participants' well-being and while the average increase in well-being scores was modest they showed positive impact to some which indicated a positive shift in participants' mental and physical health. Other data, such as attendance figures and participant demographics, showed that over 44% of adults attended more than one session, demonstrating strong ongoing engagement. However, the qualitative feedback was overwhelmingly positive. Participants consistently shared that the project provided them with increased confidence, a sense of community, and a greater connection to nature. Many noted significant improvements in their mental health, citing reductions in anxiety, stress, and feelings of isolation. Several reported gaining practical and life skills, including cooking, foraging, and woodworking, which had direct applications in their everyday lives. Additionally, many participants expressed how the project had inspired them to seek further learning or volunteering opportunities related to outdoor activities and well-being.

The project met its core objectives by effectively removing financial barriers to participation, offering free activities in a welcoming, inclusive environment. By introducing learning opportunities and facilitating interaction between local residents and university students, the initiative successfully bridged gaps within the community, promoting mutual understanding and collaboration. Most importantly, it showcased the tangible benefits of nature-based activities for health and well-being, with participants reporting both immediate and lasting improvements in their lives.

The key improvements sought by participants tended to be to increase the number and continuation of projects through Coed Lleol/ Small woods in their area, demonstrating an ongoing want for these services across Wales.



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1. Introduction

1.1. The Green health Hub Cynefin

Coed Lleol / Small Woods (CLSW) and University Wales Trinity St David (UWTSD) collaborated to bring together local and university communities for outdoor, nature-based activities at the Cynefin site in Carmarthenshire. The initiative aimed to overcome barriers and provide opportunities for participants to develop new skills that would enhance both their academic studies and mental health.

The project focused on four key objectives:

- Enhancing health and wellbeing through outdoor activities
- Removing financial barriers to participation
- Expanding access to learning opportunities
- Increase engagement between local and university communities

By offering organised activities to local community groups, the project created a space for socialising in a woodland setting, allowing participants to engage with nature while benefiting from its positive effects. In addition, the initiative aimed to foster connections between local residents and university students, promoting shared activities and mutual understanding.

The project also addressed financial barriers by offering free activities during a time of rising living costs, ensuring that local residents could participate. The initiative aimed to create learning opportunities by introducing participants to skills offered by Coed Lleol, as well as showcasing pathways to further education at UWTSD.

To ensure the project's accessibility, the CLSW Project Officer worked closely with UWTSD and local partners to tailor activities to meet the specific needs of participants. The Cynefin site was accessible via footpaths from the town centre as well as on a bus route. UWTSD students also received Wellbeing in Nature Health Walk Leader training, enabling them to support local people in accessing the site.



1.2. UK Government's Shared Prosperity Fund

The UK Shared Prosperity Fund is a central pillar of the UK government's Levelling Up agenda and provides £2.6 billion of funding for local investment by March 2025. The Fund aims to improve pride in place and increase life chances across the UK investing in communities and place, supporting local business, and people and skills. The overarching objective of the UK Government Shared Prosperity Fund (UKSPF) is Building pride in place and increasing life chances.¹

The UKSPF aims to achieve this through three investment priorities:

- Community & Place.
- Supporting Local Business; and,
- People & Skills (including adult numeracy)

The UK Shared Prosperity Fund (UKSPF) is an initiative aimed at addressing inequalities and supporting local investment with £2.6 billion allocated by March 2025. The Fund focuses on domestic priorities, such as fostering pride in place, delivering high-quality skills training, and promoting pay, employment, and productivity growth to improve life chances nationwide.

The Fund encourages local places to build on their strengths and address specific needs, emphasising pride in place and improved life opportunities. It complements other funding streams and integrates with mainstream employment and skills programmes to enhance impact and streamline delivery. Councils and mayoral authorities in England, Scotland, and Wales lead the planning and implementation of the Fund's interventions, working collaboratively with local partners and the devolved governments of Scotland and Wales. This approach aims to ensure targeted investments that lead to visible, tangible improvements in both infrastructure and human capital, giving communities more reasons to take pride in their local areas.

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¹ For more information, visit https://www.gov.uk/government/publications/uk shared-prosperity-fund-prospectus.'



1.3. About Coed Lleol/Small Woods

Coed Lleol/Small Woods was established as Coed Lleol (Small Woods Wales) in 2002, the Welsh branch of the Small Woods Association, an organisation supporting woodland practitioners in sustainable woodland management since 1988 (originally as National Small Woods Association). In 2010, Coed Lleol/Small Woods launched a successful woodland health and wellbeing programme, known as Actif Woods Wales. The programme ran for a decade and established the charity's expertise in social forestry, connecting people with their local woodlands and natural spaces, whilst promoting healthy and sustainably managed woodlands. Since that time, Coed Lleol/Small Woods has expanded to deliver woodland wellbeing sessions in most counties of Wales. At time of writing, Coed Lleol/Small Woods is working on the Isle of Anglesey, and in Conwy, Pembrokeshire, Powys, Swansea, Carmarthenshire, Neath Port Talbot, Blaenau Gwent and Rhondda Cynon Taff. Small Woods also delivers social forestry work over the border, in Shropshire.

The woodland wellbeing programmes predominantly engage adults and children who live in areas with high health needs, low employment rates and poor access to services. Additionally, they encourage and support social prescribing by working in partnership with health services and general practice surgeries, which refer people to programmes. Coed Lleol/Small Woods has actively professionalised and promoted social prescribing to outdoor health activities through the development of outdoor health clusters in four areas in Wales: The Dyfi Valley; Pembrokeshire; Gwynedd; and Rhondda Cynon Taff. Coed Lleol/Small Woods also has an established and well-respected training programme for staff, leaders, providers and health professionals to up-skill and embed wellbeing in nature into their everyday practice.

Coed Lleol/Small Woods aims to protect and develop woodlands for current and future generations by encouraging the use of woodland resources for the long-term health and wellbeing of people and the environment – creating healthy woodlands and healthy people.



1.4. Wellbeing in nature and social prescribing

Evidence demonstrates that outdoor, nature-based activity can improve mental health, increase lifespan, and reduce the incidence of chronic disease^{2;3;4;5}. Even a view or suggestion of nature via another sense (e.g. hearing birdsong or other natural soundscapes, smelling natural oils secreted by plants) can have potent effects in indoor environments, reducing stress and anxiety and boosting immune function^{6;7;8;9}. The health and wellbeing benefits of time spent in – and connection with – nature is an area of research that has gained momentum in recent decades, reinforced by many studies in response to the COVID-19 pandemic.

People who live in greener neighbourhoods, or those close to the sea, report higher positive wellbeing, but only in response to recreational visits¹⁰. Frequency of visits to green spaces, inland waters and coastal areas has been shown to be associated with higher wellbeing and lower mental distress. During the COVID-19 pandemic, greater greenness within a 250m radius of a person's post code was a good predictor of higher levels of mental wellbeing¹¹, suggesting that proximity to nature is an important factor in accessing it.

A longitudinal study of 2.3 million adults in Wales showed that greater exposure to green spaces was associated with reduced risk of future common mental health disorders, especially for those living in deprived communities¹². While further research is needed into the causative pathways for the links between nature and wellbeing³, additional health benefits associated with undertaking nature-based activities include statistically significant reductions in diastolic

² Lovell, R., Depledge, M. and Maxwell, S., 2018, Health and the natural environment: A review of evidence, policy, practice and opportunities for the future, Defra Project Code BE0109.

³ Cervinka, R., Höltge, J., Pirgie, L., Schwab, M., Sudkamp, J., Haluza, D., Arnberger, A., Eder, R. and Ebenberger, M., 2014. Green public Health – Benefits of Woodlands on Human Health and Well-being. [Zur Gesundheitswirkung von Waldlandschaften]. Vienna, Austria: Bundesforschungszentrum für Wald (BFW).

⁴ Pretty, J., Peacock, J., Sellens, M. and Griffin, M., 2005. The mental and physical health outcomes of green exercise, International Journal of Environmental Health Research, 15 (5) 319-337.

⁵ Park, B., Tsunetsugu, Y., Kasetani, T., Kagawa, T and Miyazaki, Y., 2010. The physiological effects of Shinrin-yoku (taking in the forest atmosphere or forest bathing): evidence from field experiments in 24 forests across Japan, Environmental Health and Preventative Medicine, 15 (1) 18-26.

⁶ Ulrich, R. S., 1984. View through a window may influence recovery from surgery, Science, 224, 420-421.

⁷ Ratcliffe, E., Gatersleben, B. and Sowden, P. T., 2013. Bird sounds and their contributions to perceived attention restoration and stress recovery, Journal of Experimental Psychology, 36, 221-228.

⁸ Gould van Praag, C., Garfinkel, S., Sparasci, O., Mees, A., Philippides, A., Ware, M., Ottaviani, C., and Critchley, H., 2017. Mind-wandering and alterations to default mode network connectivity when listening to naturalistic versus artificial sounds, Scientific Reports, 7.

⁹ Li, Q., Kobayashi, M., Wakayama, Y., Inagaki, H., Katsumata, M., Hirata, Y., and Miyazaki, Y., 2009. Effect of phytoncide from trees on human natural killer cell function, International Journal of Immunopathology and Pharmacology, 951–959.

¹⁰ White et al., 2021, Associations between green/blue spaces and mental health across 18 countries, available at: https://www.nature.com/articles/s41598-021-87675-0

¹¹ Robinson et al., 2021, Nature's role in supporting health during the COVID-19 pandemic: a geospatial and socioecological study, available at: https://www.mdpi.com/1660-4601/18/5/2227

¹² Geary et al., 2023, Ambient greenness, access to local green spaces, and subsequent mental health: a 10-year longitudinal dynamic panel study of 2.3 million adults in Wales, The Lancet – Planetary Health, available at: https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(23)00212-7/fulltext



blood pressure, salivary cortisol and heart rate, and statistically significant reductions in the incidence of diabetes and cardiovascular mortality¹³.

Following a consultation period, where over 1,000 stakeholders were engaged, a National Framework for Social Prescribing was released by Welsh Government in December 2023¹⁴. In it, social prescribing is defined as being 'an umbrella term that describes a person-centred approach to connecting people to local community assets. Community assets include community groups, interventions and services which could be delivered online or in person, as well as buildings, land or even a person within a community'. The intention of social prescribing is to connect people with their community to improve their health and wellbeing.

¹³ Twohig-Bennett & Jones, 2018, The health benefits of the great outdoors: a systematic review and metaanalysis of greenspace exposure and health outcomes, available at:

https://www.sciencedirect.com/science/article/pii/S0013935118303323

¹⁴ Welsh Government, 2023, National framework for social prescribing, available at: https://www.gov.wales/sites/default/files/publications/2024-02/national-framework-for-social-prescribing.pdf



2. Approach

Between January 2024 and January 2025, the Green Health Hub Cynefin project with Coed Lleol/Small Woods delivered a variety of programmes aimed at fostering a connection with nature and promoting health and wellbeing in Carmarthenshire (see Figure 1). These included; Monthly gatherings, multi-session programmes, formal training, health professional days, and family programmes, providing opportunities for people of all abilities and backgrounds to participate.



Figure 1 The project ran in Carmarthenshire, between July and January 2025.

The Cynefin Green Health Hub project offered a variety of initiatives throughout 2024 aimed at promoting community mental health, wellbeing, and connection with nature. In addition to two Health Professional Wellbeing Days in July 2024, the project provided two Agored Cymru Level 1 accredited courses on 24th January and 17th June 2024, focusing on helping participants set up short, accessible walks in their local communities and incorporating nature activities. The "Nature Ninja" family events, held between 25th July and 29th August, offered a range of activities including bushcraft, woodworking, nature art, and storytelling to foster a sense of community and connection with the natural world. Coed Lleol/Small Woods delivered seasonal programmes for over-16s throughout 2024, such as "Step into Spring," "A Summer Symphony," "Autumn Wonder," and "Winter Warmer," each focusing on different nature-based activities, creative skills, and seasonal rituals.

The Green Health Hub Cynefin project also hosted monthly drop-in activities from January to December 2024. These free sessions provided adults and families opportunities to engage in hands-on activities like leathercraft, bushcraft, whittling, foraging, campfire cooking, and more, with campfire refreshments provided. All sessions were designed to foster health, happiness, and mindfulness in a welcoming, nature-focused environment at The Green Health



Hub in Cynefin, Johnstown. The project also saw one volunteer, a University student from UWTSD, contribute over 40 hours across 14 sessions and gain skills through health walk leader training.

These programmes aimed to helped build skills, encourage outdoor engagement, and promote wellbeing through nature-based activities, enriching the local community and supporting mental and physical health. See below for a summary of activities that were run over the course of the project.

2.1. Stakeholder events

Two stakeholder events took place at the start and the middle of the project. The project launch took place on 18/01/2024 and the second event took place on 11/07/2024 which included sessions on what wellbeing meant to stakeholders, and feedback on sessions to date.

2.2. Monthly Gatherings

The Cynefin Green Health Hub project offered a variety of monthly drop-in activities from January to December 2024, designed to promote well-being and connection with nature. Each session ran from 11 am to 2 pm and was free of charge, providing an opportunity for adults and families to engage in hands-on activities such as leathercraft, bushcraft, whittling, natural dyeing, Welsh myths, green woodworking, vegetable growing, willow weaving, nature-inspired art, singing, foraging, campfire cooking, and storytelling. Campfire refreshments were provided, and the sessions were open to all in a welcoming, nature-focused environment at The Green Health Hub in Cynefin, Johnstown.

Table 1 Monthly gatherings schedule

Session name	Audience	Delivery date
Leathercraft	Open to all adults	27/01/2024
Bushcraft and whittling	Open to all adults	22/02/2024
Rock inks and natural dyes.	Open to all adults and family units.	23/03/2024
Welsh myth, foraging and some spoken Welsh.	Open to all adults	25/04/2024
Whittling and green woodworking.	Open to all adults	23/05/2024
Bushcraft, natural cordage and	Open to all adults	20/06/2024
weaving.		
Vegetable growing and nature	Open to adults and family units	27/07/2024
connection and mindfulness.		
Willow weaving.	Open to adults and family units	24/08/2024
Nature inspired lino printing and	Open to all adults	28/09/2024
wood carving / printing.		
Nature inspired singing	Open to adults and family units	26/10/2024
Festive Willow and whittling crafts	Open to all adults	21/11/2024



Festive party and project	Open to adults and family units	17/12/2024
celebration		

2.3. Multi-session programmes

Coed Lleol/Small Woods delivered weekly programmes aimed at over 16s throughout 2024. The seasonal program offered a variety of activities designed to deepen participants' connection with nature with a seasonal theme underpinning the activity focus. Step into Spring ran on Tuesdays during April and May 2024, and revolved around bush craft, eco printing and vegetable growing. In "A Summer Symphony" which took place on Wednesdays during June and July, participants explored foraging, plant medicine making, and nature connection practices to tune into the vibrant energy of the season. "Autumn Wonder" took place on Thursdays during September and October offering attendees the chance to learn creative skills like pewter casting, natural dyeing, and leathercraft while exploring the elements of Earth, Air, Water, Metal, Fire, and Spirit. In "Winter Warmer" during November and December, participants engaged in self-reflection, storytelling and seasonal rituals to support them through the colder months, alongside a shared campfire soup each week.

Table 2 Seasonal programme schedule

Seasonal Programme	Number of sessions	Delivery Dates
Step into Spring	6	Tuesdays 9 th April – 14 th May incl.
A Summer Symphony	6	Wed 19 th June – 24 th July incl.
Autumn Wonder (a.m. Session)	6	Thursdays 26 th September – 31st October incl.
Autumn Wonder (p.m. Session)	6	Thursdays 26 th September – 31st October incl.
Winter Warmer	6	Wednesdays 13 th November – 11 th December Friday 31 st January 2025 (18/12/24, week 6, was postponed due to storms).
Additional winter sessions	2	05/12/2024 Crafting Bullroarers 10/01/2025 Festive Willow weaving



2.4. Family Programmes

The "Nature Ninja" events were part of the family programmes as part of the Green Health Hub Cynefin project, aimed at promoting community mental health and wellbeing through access to local green spaces. It aimed to provide experiences for the whole family, including bushcraft, woodworking, nature art, games, and storytelling. These activities aimed to encourage participants to connect with the natural world, as well as foster a sense of community. The programme ran on Thursdays 11-2pm from 25th July- 29th August.

2.5. Formal training provided

Four Agored Cymru Level 1 accredited course were offered to people living and / or working in Carmarthenshire. The courses were held on 24/01/2024, 20/02/2024, 17/06/2024 and 29/10/2024. The course focused on helping participants set up short, accessible walks in their local community, teaching the benefits of walking, and building confidence to start their own walking group. The training also included guidance on incorporating nature activities into walks, with lots of information, advice, and a short practice walk in the afternoon.

2.6. Health professional days

The Green Health Hub Cynefin project hosted two Health Professional Wellbeing Days in July 2024 targeting two teams from the local Health Boards Primary Mental Health Care department. These were designed to offer the staff much needed respite, and a boost to their wellbeing via our work. It also allowed them to experience first-hand what we deliver so they are in a more informed position to advocate internally for what we do, and more likely to refer their service users to us. (See **Error! Reference source not found.**).

Participants were encouraged to provide feedback on how these activities could be adapted for their service users and how we can improve accessibility and inclusivity. These sessions highlighted the role of nature-based health interventions in supporting long-term change, with a focus on how these activities could be used for social prescribing.

Table 3 Health professional schedule

Session scope	Session name	Delivery date
Health professional	Health Professional Taster Day,	09/07/2024
taster days	Cynefin Hub	
	Health Professional Taster Day	16/07/2024
	Cynefin Hub	

2.7. Volunteering

One volunteer committed to multiple events during 2024 as part of The Green Health Hub Cynefin project. The volunteer was a University student at UWTSD and volunteered in over 14 sessions, with a total of over 40 hours. The volunteer also attended the health walk leader



training. This involvement provided them with the additional skills necessary to assist with future sessions.

2.8. Publicity

Sessions were promoted, and various posters were designed to highlight all the planned sessions. All staff were informed about the necessary branding for the project. Regular email updates, including bilingual publicity, were planned for both new and existing partners.



Figure 2 Example of bilingual publicity for a forest bathing event in Carmarthenshire in both English (a) and Cymraeg (Welsh; b).

2.9. Welsh Language

All posters and promotional materials were created in both Welsh and English to ensure accessibility and inclusivity for a wider audience. Additionally some of the programmes incorporated Welsh language into the sessions.

2.10. Equalities

All programmes were designed to be inclusive, ensuring accessibility for everyone. Efforts were made to assess the accessibility of the sites, particularly for wheelchair users, with necessary adaptations planned to enable participation for all attendees. Collaboration with referral agencies was actively pursued to support individuals in accessing the programmes. The team worked to establish strong connections with these agencies, promoting inclusivity for all participants. Sites were carefully evaluated, and assessments were completed to review their accessibility, including provisions like accessible toilets, phone signal, and car parking facilities, to ensure they met the needs of all participants.



3. Evaluation Methodology

The majority of the registration forms were completed online, using Microsoft Forms, however a paper version was also available for those that requested it. All registrants agreed to collection and storing of their personal data via a General Data Protection Regulation statement. Where respondents did not want, or could not complete the questionnaire, a member of staff or carer was able to read and gain assent.

3.1. Demographics

The adult registration process included the collection of demographic data to ensure a clear understanding of participants' backgrounds. The data captured key details such as gender, age, and ethnicity, alongside information about employment status and socioeconomic circumstances. Additionally, health-related information was gathered to enable a risk assessment to be carried out, to help tailor the programme's delivery to meet the specific needs and challenges of participants and keep everyone safe. This approach ensured that the project could effectively support a diverse range of individuals while enabling accurate monitoring and evaluation of its impact. While health questions were mandatory, other elements, such as gender and ethnicity, included a 'prefer not to say' option.

3.2. Standardised tools for measuring health and wellbeing

A pre-and post-survey method was utilised to measure changes in adult participants' physical health and mental wellbeing. Surveys were completed with an online link, on paper or over the phone, during the registration process and upon completion of courses.

The three validated measures that were used in the pre-and post-surveys were:

- 1. the Short Warwick Edinburgh Mental Wellbeing Scale (SWEMWBS¹⁵), to measure the impact on wellbeing.
- 2. the International Physical Activity Questionnaire Short Form (IPAQ-SF¹⁶), to measure changes in physical activity; and
- 3. the EQ-5D-5L health thermometer¹⁷, to measure self-perceived changes in overall health.

3.3. Other measurement tools

A non-validated short measure on nature connection was used to collect pre- and post-course scores, as well as an evaluative questionnaire relating to the Five Ways to Wellbeing. A post-activity survey established the participants' views about the programme and gathered participant ideas on what improvements could be made.

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¹⁵ https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs

¹⁶ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3214824/

¹⁷ https://euroqol.org/



4. Results

In this section we present results from participants that registered on the courses. In addition, further sections use qualitative measures to describe the impact from participants and volunteers.

4.1. Referrals

In total, 12 adults were referred from seven different mental health practitices in Carmarthenshire. These included the Community Mental Health team (n=4), Early Intervention in Psychosis (EIP; n=5), NHS research or mental health team (n=2), Occupational therapy (n=1). In total these participants attended between 1 and 14 sessions each. The majority of these participants attended the monthly sessions which lasted between 2 to 4 hours. Half (n=6) of these participants attended the bush craft event at the monthly gatherings, and six attended one or more of the adult programmes throughout the year.

4.2. Practitioners

Of those that chose to record their occupation, Five individuals worked for the NHS or Hwyl Dda Health Board (HDHB) three worked in care projects or connection projects across Carmarthenshire, and one specifically with the community mental health team in Carmarthenshire. Of these, five attended the health professional days, and seven the stakeholder event.

4.3. Registration and attendance

In total 156 adults and 15 children attended one or more events or sessions as part of the The Green Health Hub Cynefin project, with a total of 965 adult engagements across all the events (see



). Over 44% of the registered adult participants attended two or more events or sessions held by Coed Lleol/Small Woods over the project timeline. Non-attendance included 75 adults and 6 children who were registered for The Green Health Hub Cynefin project but did not attend.



Table 4 Summary of all adult courses and events, dates and number of registered adult participants

Course Name	Number of Sessions	Dates (From - To)	Total number of individual attendees over the programme
Monthly Drop-in Sessions	12	27/01/2024 – 12/12/2024	31
Adult Seasonal Programmes and additional sessions	34	09/04/2024 – 10/01/2025	51
Family sessions	6	25/07/2024 – 29/08/2024	9
Health Walk Leader training (Agored Level 1)	4	24/01/2024 – 29/10/2024	43
Health Professional days	2	09/07/2024 - 16/07/2024	12
Stakeholder event	2	18/01/2024 and 11/7/2024	22
Total Adult Sessions	58	January 2024- January 2025	156 individual adults

Table 5 Summary of all child courses and events, dates and number of registered child participants

Course Name	Number of Sessions	Dates (From - To)	Total number of individual attendees over the programme
Monthly Drop-in Sessions open to adults and family units	4	23/03/2024 – 26/10/2024	8
Family Sessions	6	25/07/2024 – 29/08/2024	11
Total Children's Sessions	10		15 individual children

Table 6 Number of different events addended by adult participants

Total number of different events attended by individual adults	Count of participants
1	88
2	21
3	4
4	7
5	18
6	4
9	3
10 +	11
Grand Total	156



4.4. Demographics

4.4.1. Gender, age, ethnicity

The statistics below are given for those who attended at least one session of any adult course (n=156); those who registered but did not attend are not included. The majority of participants were female 58% (n=91) and 39% (n=61) identified as male and as 1 % non-binary, with 2% of participants preferring not to disclose (Error! Reference source not found.a). Age of participants ranged from the under 19 category to the 70-79 category. The largest age category was 20-69 (27%, n=42), followed by 30-39 (19%, n=29) (Error! Reference source not found.b). The ethnicity of the project attendees was as follows: 84% (n=131) identified as White British/Welsh, while 7% (n=12) preferred not to disclose their ethnicity (see

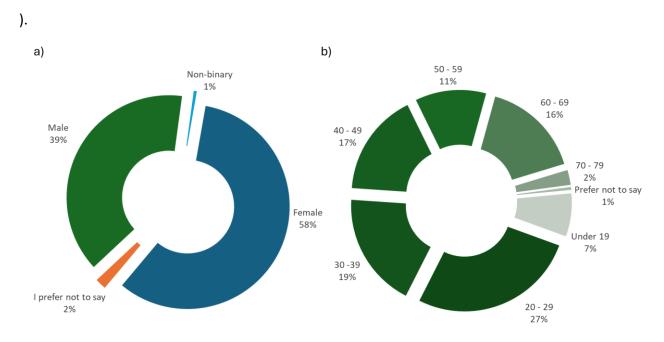


Figure 3 Pie charts showing the a) gender and b) age groups of registered participants

Table 7 Ethnicity of registered participants

Ethnicity	Number of registered participants
Asian or British/Welsh Asian	1
Australian	1
Black/African/Caribbean/Black British/Welsh	1
I prefer not to say	12
Mixed ethnic origin	4
South American	1
White British/Welsh	131
White European	5



4.4.2. Socio economics

The largest group among participants stated that they were in paid employment or self-employment (39%, n= 61, See Error! Reference source not found.). The attendees that provided postcodes (n=149) lived in both urban and rural areas, with the majority of post codes falling into rural classifications (62%, n=92), according to the UK Government Rural Urban Classification system¹⁸. Over 20% lived in D1 - Rural: Town and Fringe (24%; n=36); E2 - Rural: Village in a Sparse Setting (21%; n=31); C1 - Urban: City and Town (20%; n=30). Attendees' post codes were situated within areas between the first and the tenth deciles of the Welsh Index of Multiple Deprivation¹⁹. Lower numbers score higher in terms of deprivation; thus, the first five deciles represent the most deprived areas in Wales. Over 60% of attendees were in the sixth to tenth deciles, least deprived, while 39% of participants lived in the most deprived areas (See Figure 5b).

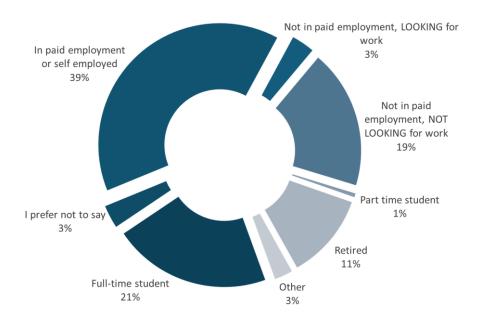


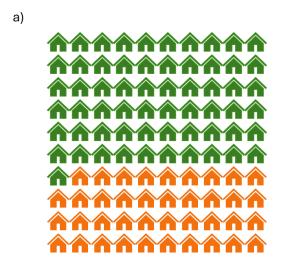
Figure 4. Employment status of registered participants as part of the Cynefin Green Health Hub Project

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¹⁸ https://www.gov.uk/government/statistics/2011-rural-urban-classification

¹⁹ https://www.gov.wales/welsh-index-multiple-deprivation





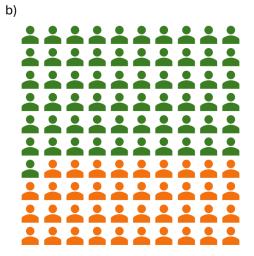


Figure 5 Showing a) Proportion of participants from both urban (red; 39%) and rural areas (green 61%), according to the UK Government Rural Urban Classification system and b) Showing proportion of participants living in the most deprived areas of the UK (red, 39%) based on the Welsh Index of Multiple Deprivation (first to fifth deciles).

4.4.3. Health and wellbeing

Registrants were asked if they felt that their health and wellbeing was limiting their lives, and to list their issues or concerns. Of the 156 participants that responded to that question, over 30 % stated their health was either limited a little or a lot day to day because of health concerns. Sixt percent of participants said their health was not limiting, with 6% choosing not to disclose (Figure 6a).

Over three quarters of attendees (78%) listed health and wellbeing issues or concerns during registration; in some cases more than one concern was mentioned (Figure 6b). Key health concerns were broadly categorised into: mental health conditions and symptoms (including anxiety, depression, and loneliness/isolation) – 31%; conditions and symptoms relating to activity levels, mobility, coordination and joints (including back and hip problems, dyspraxia and hypermobility) – 6%; airway- or fatigue-related conditions and symptoms (including asthma, long COVID-19, fibromyalgia, breathlessness and fatigue) – 4%; and long-term or chronic conditions (including those associated with the heart, kidneys, thyroid, as well as neurological and other conditions, high blood pressure and cancer) – 21% . Twenty eight percent expressed no health or wellbeing issues. Notably, 4% (n=6) specifically mentioned social isolation.



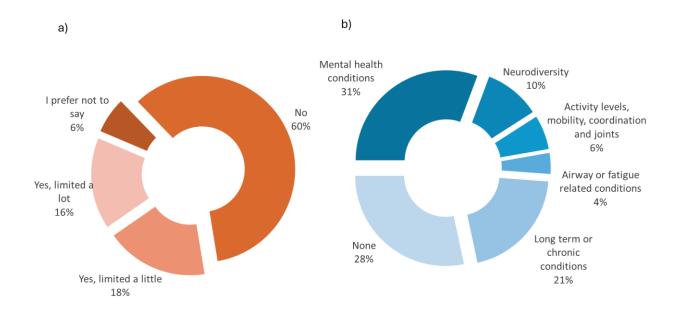


Figure 6 Showing a) How much participants felt their lives were limited because of health concerns, and b) What conditions were their key health concerns.

4.5. Evaluation responses

Of the 156 participants, 21% (n=33) completed the both the pre- and post-questionnaires online with a further 21 completing the specific Agored course feedback forms. The pre- and post-questionnaires included non-compulsory questions, which may result in fewer scores that could be compared across the time frames.

4.5.1. Short Warwick Edinburgh Mental Wellbeing Scale (SWEBWMS)

Across the group that completed the pre-scores, (n=127), the mean SWEMWBS score was 23.5 while across the group the post scores, (n=20), the mean SWEMWBS score was 25.4, showing an no significant increase in wellbeing across the groups (which requires an average of greater than a three-point rise).

At the individual level, 16 participants completed all 14 questions (7 before and 7 after). All questions are required to be answered to give a SWEMWBS score at the individual level. We found that a similar number of participants showed a decrease in wellbeing (n=5), no significant difference (n=5) and six individuals showing significant positive wellbeing scores (greater than a three-point change). Those that showed a positive increase, had an average increase of six points of wellbeing scores difference. See Figure 7 for an illustration of the change in wellbeing scores across the participants.





Figure 7 At the individual level, the Short Warwick Edinburgh Mental Wellbeing Scale (SWEMWBS) was used to calculate the percentage reduction or increase in personal wellbeing, based on a sample size of 16 respondents that reported both before and after scores.

4.5.2. EQ-5D-5L Health Thermometer

The Health Thermometer responses were gathered from 114 participants in the preprogramme questionnaire and 19 in the post-programme questionnaire, with 1 participants completing both pre- and post-course assessments. This allowed for a direct comparison of health perceptions before and after participation in the programme. The analysis of these scores is essential to evaluate the impact of the course on participants' health and well-being.

Ten individuals noted a negative change in overall health, two noted no change, and 7 noted a positive improvement after engaging in the course activities. On the other hand, 11% of participants indicated no change, maintaining the same health score from the beginning to the end of the course. This mixed response underscores the fact that many programmes don't have a physical health feature. Variability in how individuals respond to the course also suggests that while the programme had a generally positive impact on health for many, others may have faced challenges that affected their overall health perception during this time.

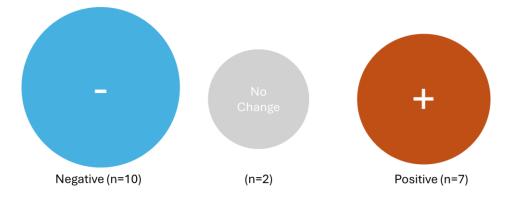


Figure 8 Showing changes in the Health Thermometer Scores across participants.



4.5.3. Nature Connection

In total 20 responses were collected to the nature connection questionnaire with both a preand post- response from the same participant (See Figure 9) Participants were asked how much contact they had with woodlands before the course, and how much contact afterwards.

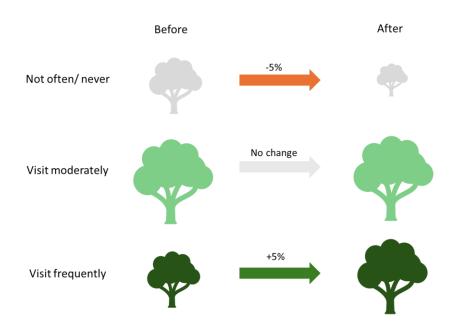


Figure 9 Showing frequency of visits to woodland before and after the green Health Hub, Cynefin project, as a percentage.

Before the programme, 10% of respondents visited woodlands only 2-3 times a year or less, while 45% visited often (every two weeks to every month), and 45% visited regularly (weekly or more). After the programme, the percentage of participants who visited often or weekly increased, with 50% now saying they visit regularly, and no participants said they "never visit". This highlights a shift to more frequent visits to woodlands, showing lasting impact of the project in Carmarthenshire.

Additionally, the evaluative questionnaire included three questions about connection to woodlands:

- 1. Do you think that you will continue to use woodlands or green spaces to improve your health and well-being in the future?
- 2. Do you feel that green spaces and woodlands are more accessible to you than they were before you started this programme?
- 3. Please tell us how the green spaces or woodlands are more accessible to you than they were before?

Eighty eight percent of respondents indicated that they plan to continue using woodlands and green spaces to improve their health and well-being in the future (See Figure 10). Additionally, 73% of respondents reported that green spaces and woodlands are more accessible to them than before they started the programme. Sixteen participants provided open-text responses, detailing how these spaces have become more accessible, offering insights into their personal experiences and increased engagement with nature (see Figure 11).



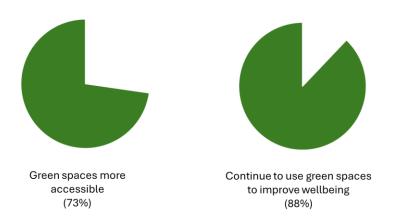


Figure 10 Percentage of respondents that felt green spaces were more accessible after the course, and percentage of those continuing to use green spaces to improve wellbeing.



Figure 11 Showing quotes from participants in response to whether they will continue to use woodlands or green spaces to improve their health and well-being in the future

4.5.4. Five Ways to Wellbeing

In total, 33 responses were collected to the post-programme evaluation questionnaire, which included eight questions related to the NHS's Five Ways to Wellbeing. These questions asked respondents to agree or disagree about how much the course had: been enjoyable; improved [their] confidence; helped [them] make new friends; taught [them] new skills and knowledge; connected [them] to local nature; helped [them] to feel part of the local community; helped [them] to do more exercise than [they] did before; and motivated [them] to get involved in volunteering (See Figure 12).



In terms of social connections, 29 out of 33 (88%) agreed or strongly agreed that the programme helped them make new friends, while only 4 participants, said there was no change, or disagreed with the statement. The course also motivated some participants to exercise more (66%) agreeing that they were more active since the course. Participants also agreed that they had gained new skills (91%) and 57% were motivated to volunteer more since participating. Regarding enjoyment, 29 out of 33 participants (96%) agreed or strongly agreed that the course was enjoyable. For connection to local nature, 32 out of 33 participants (97%) agreed or strongly agreed, showing a positive impact in this area. Thirty one out of 33 (94%) agreed and or strongly agreed that their confidence was improved. Similarly, 27 out of 33 (81%) agreed or strongly agreed that the course helped them feel part of the local community.

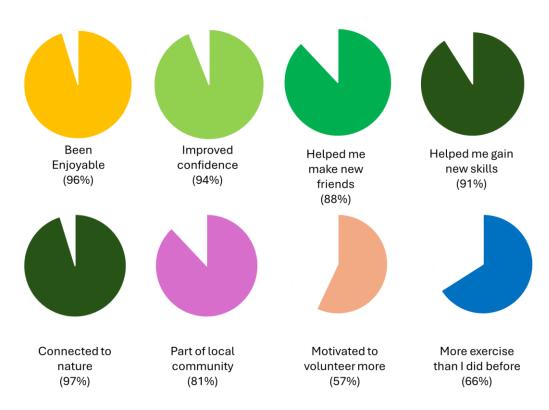


Figure 12 Percentage of responses to the Five Ways to Wellbeing-based questions, showing participants that either "Agreed" or "strongly Agreed" to the series of statements about the programme.

4.6. Post-activity survey

As part of the evaluation form, participants were asked to feedback in five ways:

- If the project has helped you to gain new life skills or practical skills, how have these skills improved or been used in your everyday life? (think about both practical and life skills)
- 2. How are you going to use the skills and knowledge you learnt to progress to further learning, courses, volunteering or employment?



- 3. Overall, please tell us if, or how, being part of this programme has inspired any changes in you (for your physical or your mental well-being, or anything else!)
- 4. Tell us what we could improve on
- 5. Overall, how would you rate your Coed Lleol/Small Woods experience? (1 star = poor, 5 stars = excellent)

4.6.1. Life skills

Out of 28 responses to this question, in open text form, participants shared a variety of practical and life skills gained through the project, many of which they have integrated into their daily lives (Error! Reference source not found.). Participants gained a variety of practical and life skills through the project, including vegetarian cooking, plant identification, and an understanding of plants' medicinal properties. Many found joy in connecting with nature, from foraging and learning about edible plants to practicing woodworking and fire lighting. The social aspect was also a significant benefit, with participants building new friendships, gaining confidence, and improving communication skills. Several shared how engaging in grounding sessions, mindfulness, and relaxation techniques helped them manage stress, anxiety, and depression, while others embraced creative pursuits like poetry, arts, and crafts inspired by nature. The project encouraged participants to be more open and vulnerable in social situations, leading to more authentic connections with others. Many also gained practical skills they could share with family, friends, and even in future career pursuits, such as gardening, creating nature-based items, and improving their outdoor confidence. Overall, the experience offered a blend of personal growth, social connection, and a deeper appreciation for the healing power of nature, contributing positively to both mental and physical wellbeing.





Figure 13 Quotes from participants on the Cynefin Green Health Hub Project responding to the open-ended question: "If the project has helped you to gain new life skills or practical skills, how have these skills improved or been used in your everyday life?"

4.6.2. Further development

Participants shared various ways they plan to use the skills and knowledge gained to progress in further learning, volunteering, or employment. Many expressed interest in pursuing courses in bushcraft, outdoor facilitation, or related fields, with some looking to build careers or volunteer in the outdoor sector, particularly for mental and physical health. Several participants mentioned teaching others, whether through family activities, local workshops, or wellbeing walks. Others plan to continue using their skills in personal projects, like cooking with plants or creating nature-based crafts. Overall, the responses reflect a strong desire to apply their learning in meaningful ways, whether through further education, community involvement, or future career paths.





Figure 14 Quotes from participants in response to the question: "How are you going to use the skills and knowledge you learnt to progress to further learning, courses, volunteering or employment?"

4.6.3. Inspired changes

The programme has inspired various positive changes in participants, particularly in their mental and physical well-being. Many reported feeling more connected to nature, with some noting that spending time outdoors has improved their mental health, reduced anxiety, and increased confidence. For others, the programme helped to foster creativity, provided a sense of achievement, and encouraged mindfulness practices such as the daily "sit-spot" exercise, which grounded them and eased anxiety. Some participants mentioned that the programme motivated them to make healthier lifestyle choices, like quitting smoking or spending more time in nature. Others felt more open-minded, socially confident, and inspired to explore volunteering or career opportunities related to outdoor activities. Overall, the experience reinforced the importance of nature for well-being, built stronger connections to the environment, and encouraged a more mindful, balanced approach to life.





Figure 15 Quotes from participants in response to "Overall, please tell us if, or how, being part of this programme has inspired any changes in you (for your physical or your mental well-being, or anything else)

4.6.4. Delivery improvements

Participants provided several suggestions for improvement, most of which focused on increasing accessibility and resources. There were requests for more funding to continue the sessions and for additional events or groups to be created. Some participants highlighted the need for more staff or volunteers to support the growing demand. A few suggested specific partnerships with disability organizations or more research-based initiatives. Additionally, some expressed a desire for more flexible scheduling, such as after-school options for children, and even car sharing options for convenience. Overall, the main request was for more sessions, continued funding, and more opportunities for involvement.

These responses highlight the value of maintaining the programme while considering small refinements to enhance accessibility. In total, out of five stars, respondents gave on average 4.76 stars.



Figure 16. Participants gave the Cynefin Green Health Hub Project an average of 4.8 stars out of five.



4.1. Volunteering

One volunteer committed to multiple events during 2024 as part of The Green Health Hub Cynefin project. The volunteer was a University student at UWTSD and volunteered in over 14 sessions, with a total of over 40 hours. The volunteer also attended the health walk leader training. Feedback from the volunteer in January 2025 highlighted the benefits of volunteering with the project.

"I have thoroughly enjoyed volunteering with Coed Lleol as its allowed me to become more confident in my physical outdoor skills and knowledge as well as allowing me to become more connected to nature and those in my local community. It's been great meeting so many new people who all have a shared passion & for the outdoors and it's been great being able to witness the wellbeing benefits this can have".

Volunteer with the Green Hub Cynefin Project, Carmarthenshire

4.2. Agored Feedback

In total, 21 participants provided feedback as part of their Agored Level 1 Nature Health Walk Leader Course with Coed Lleol in Carmarthenshire. Overall, students showed overwhelmingly positive responses, with some suggestions to increase the accessibility of the terminology.



Figure 17. Agored accredited Nature Health Walk Leader Course feedback from Carmarthenshire.



4.3. Photos from the project



Figure 18 Photos from the Cynefin Green Health Hub Project including; a) Exploring the riverside part of the side; b) Fingi finds with the family programme; c) Crafting in the yurt; d) Strawcrafts business; e) Willow crafters



5. Conclusions

The Green Health Hub Cynefin project, a collaboration between Coed Lleol/Small Woods (CLSW) and University Wales Trinity St David (UWTSD), ran from January 2024 to January 2025 in Carmarthenshire. Its goal was to improve mental health, well-being, and community engagement through outdoor, nature-based activities. The project focused on enhancing health through outdoor activities, removing financial barriers, expanding access to learning, and fostering connections between local and university communities.

Over the course of the project, 156 adults and 15 children engaged in a range of free activities such as bushcraft, nature walks, creative arts, and accredited courses. These activities were designed to be inclusive and accessible to people of all ages and abilities, helping participants build new skills and deepen their connection to nature. Over 44% of adult participants attended multiple sessions, demonstrating strong ongoing engagement.

The project reached a diverse demographic, with participants from both urban and rural areas, and individuals with varying socio-economic backgrounds. Many participants reported significant improvements in their mental health, including reduced anxiety, stress, and feelings of isolation. For some, the project provided an opportunity to gain new practical skills, such as foraging and woodworking, with many expressing an interest in further learning or volunteering opportunities in outdoor activities.

Feedback from participants was overwhelmingly positive, with 96% agreeing that the programme was enjoyable and 97% reporting a stronger connection to local nature. Most participants also indicated improvements in confidence (94%) and a greater sense of community (81%). While the average increase in individual well-being scores was modest, qualitative feedback confirmed that the project had a lasting, positive impact on mental and physical health.

By offering free activities and removing financial barriers, the Green Health Hub Cynefin project successfully made nature-based health interventions accessible to those who needed it most. The initiative also helped build stronger links between local communities and university students, fostering collaboration and mutual understanding.

Participants expressed a clear desire for more such initiatives, showing that there is significant demand for nature-based health programmes across Wales. In conclusion, the Green Health Hub Cynefin project successfully achieved its objectives, improving well-being, fostering community connections, and promoting the benefits of nature for mental and physical health. The project has created a lasting impact and lays a solid foundation for future development and expansion.



6. Acknowledgements

This project was possible through the Cynefin Green health Hub grant. We would like to acknowledge the volunteers and participants who gave their time to respond to questionnaires so we could evaluate the impact this project has had on their lives.

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