

C=EM² - With apologies to Albert Einstein

Malcolm Ward

&

Green Health and Green Prescriptions

Dr Ambra Burls



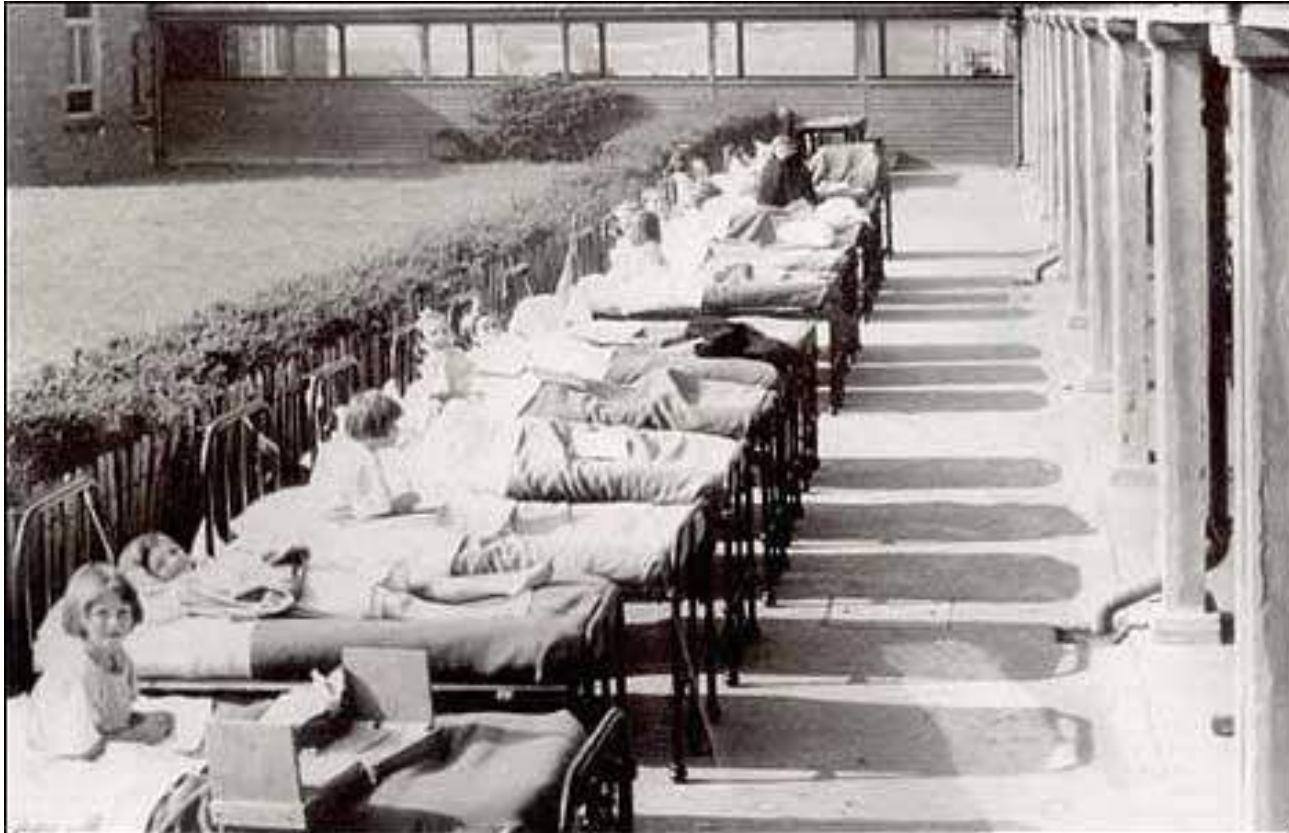
National Parks and
Wellbeing Forum



Health & the Outdoors – Nothing New

- “Walking is man’s best medicine.” (Hippocrates, 460 – 357 BC)
- “The art of healing comes from nature, not from the physician. Therefore the physician must start from nature, with an open mind.”
(Paracelsus, Swiss Scientist, 1493 – 1541)
- “Proper attention to air and cleanliness would tend more to preserve the health of mankind than all the prescriptions of the faculty.” (Dr William Buchan, 1729-1805)

Sanitoriums



Abergele (1930's)

$C=EM^2$



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CYMRU
NHS
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The Nature of Health

Effects influenced by:

Type – Active / Passive (Sport/ Sunbathing)

Frequency – How Often & How Regular

Duration – How Long

Geography – Terrain/ Climate



$$C=EM^2$$



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Physical Health Impacts?

- CHD, stroke, hypertension, obesity, diabetes, falls prevention, cancer.....
- Reduced pain.
- Enhanced healing (50+ empirical studies)

Chronic diseases

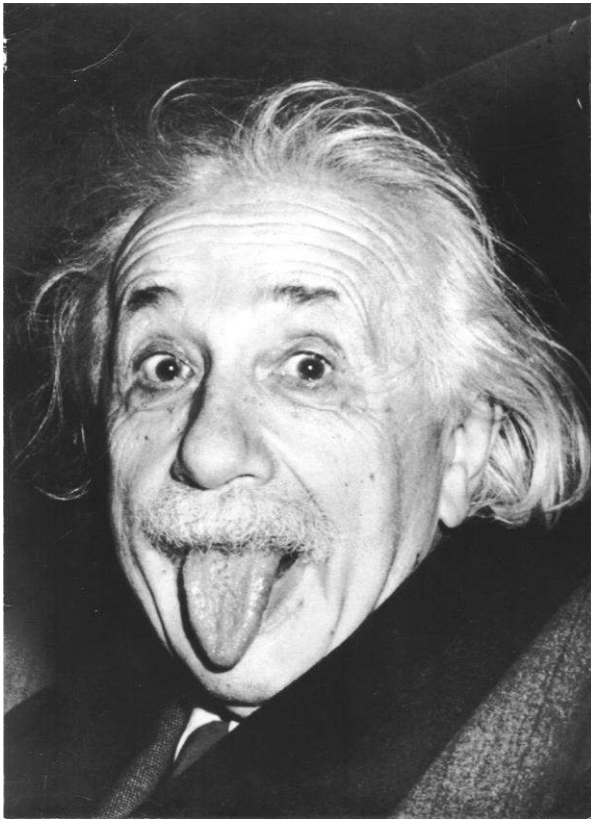
A **chronic disease** is a disease or human health condition that is or long-lasting in nature. The chronic is usually applied when the course of the disease lasts for three months. Common examples include asthma, cancer

Mental Health Impacts



- Prevention – Stress, Anxiety, Depression.
- Amelioration - Depression, Anxiety, Autism Spectrum Disorders, Post Traumatic Stress Disorders, Alzheimers & Dementia.

What about this Einstein geezer?



$$E = MC^2$$

Where E is
Energy, M is Mass
and C is Speed of
light in a vacuum!

$$C = EM^2$$



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$$C=EM^2$$



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But in Wales...

- Energy = 71% 'Inactive'
- Mass = 3m

Therefore $C =$
2,130,000 people 'Not'
at speed of light or
indeed at speed of
vacuuming!!



$$C=EM^2$$



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Alternative Theory

$$C = EM^2$$

E is Energy

M is Mass

C is **Synergy** (with or without a vacuum!)

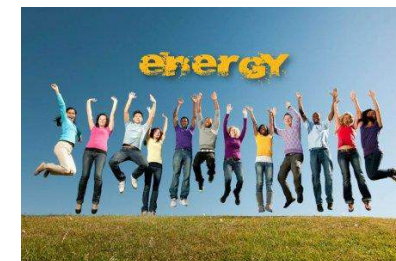
$$C=EM^2$$



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Energy



- **Sport Wales – Projects, programmes, grants.**
- **Environment – Projects, programmes (e.g. Actif Woods, Lets Walk Cymru, Come Outside)**
- **Communities – Projects (Walking groups, community gardens, tea dances etc.)**
- **Education – Programmes (Healthy Schools Network, EcoSchools, PE etc.)**
- **Play – Programmes & projects (Playgroups, Project Wild Thing, Street Games etc.)**
- **Health – Programmes & Projects (NERS, Falls prevention, cardiac rehab, MEND)**
- **Local Government – Projects, services, grants (Leisure, play groups, cycle routes, footpaths, social services etc.)**
- **Workplaces/ Private Sector/ Voluntary Sector**

Mass (participation)

NERS – 28,000pa



Lets Walk Cymru – 30 projects



Communities First – 52 clusters with £75m

$C=EM^2$

EM

**E – Loads of activity x M – Loads of people
= Loads of people doing loads of stuff (**in
isolation**).**

=

**Duplication, confusion, inefficiency and
Waste (energy, resources and opportunity!).**

$$C=EM^2$$



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EM²

**E – Loads of activity x M – Loads of people
= Loads of people doing loads of stuff.**

**2 – Loads of people doing loads of stuff
(**working together**)**

=



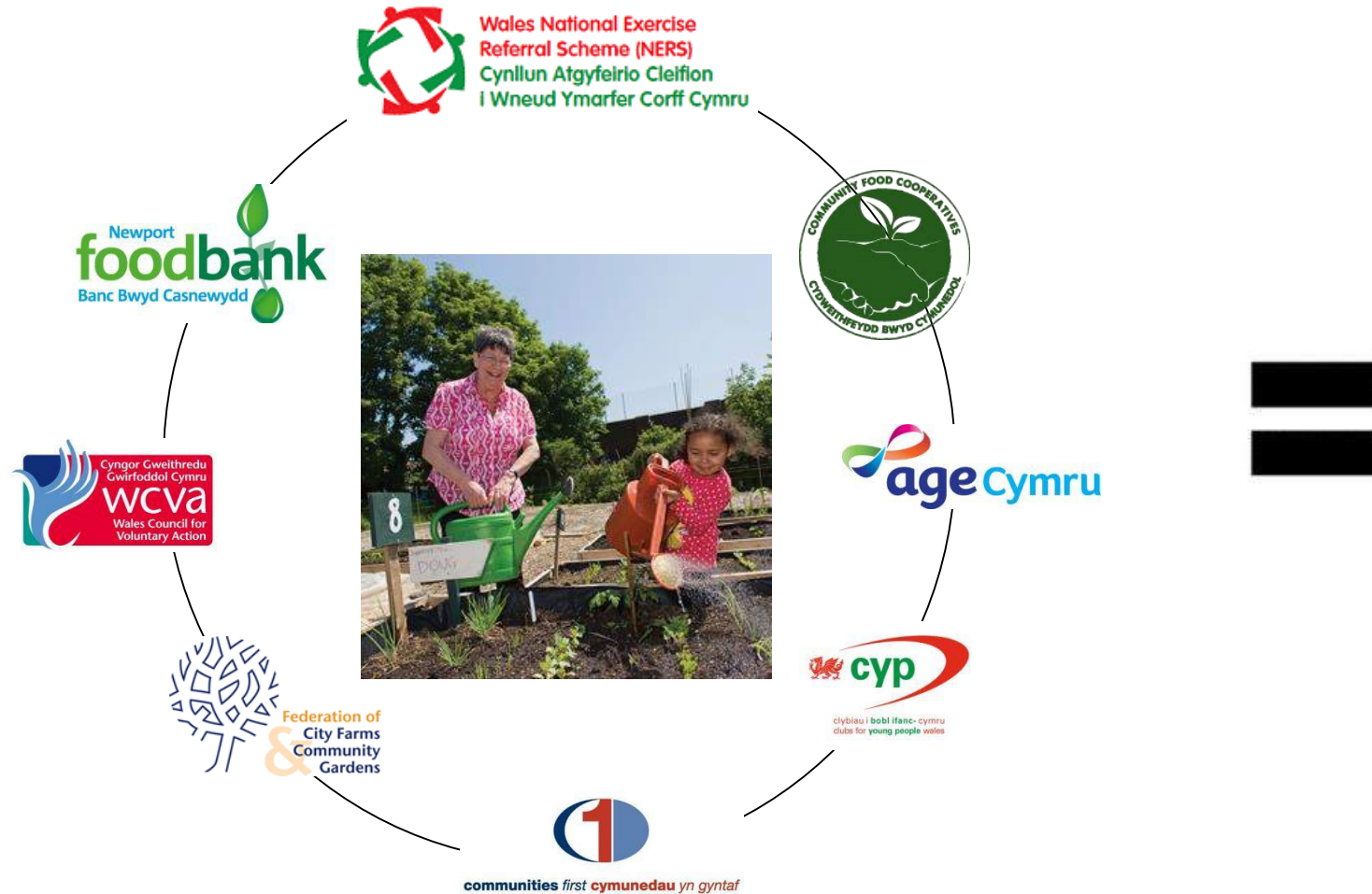
$$C = EM^2$$



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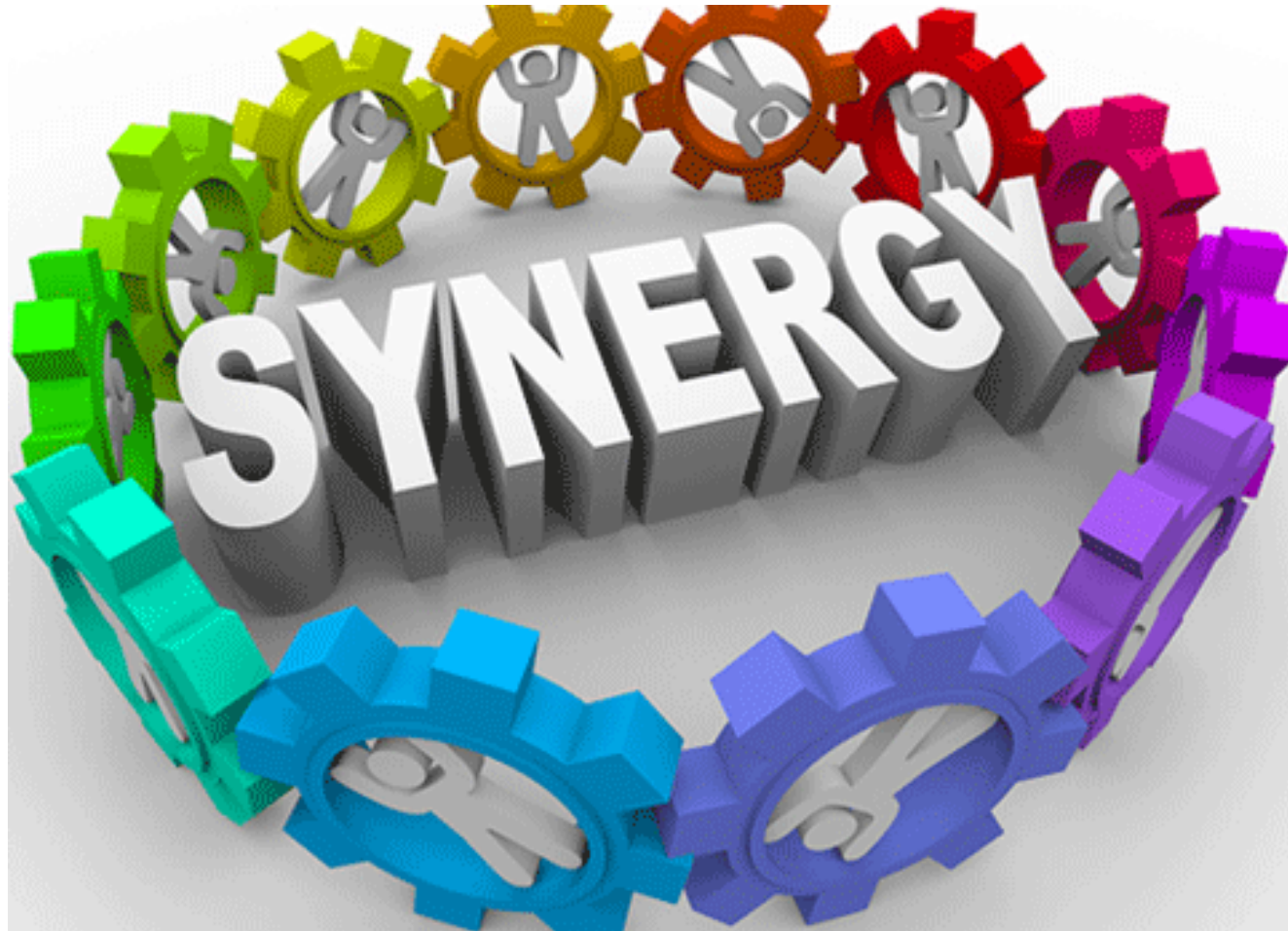
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Squaring the Circle



$$C=EM^2$$

C



$$C=EM^2$$



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Malcolm's Theory of Relative Activity

$$C = EM^2$$



$$C=EM^2$$



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M= MAINSTREAM



National Parks and Wellbeing Forum



A lush green forest scene with children playing in a tree. The text is overlaid on the image.

How can we bring
everyone together
in synergy?

A 'joined-up' approach = **ECOHEALTH**

+

the concept of the
'ECOLOGICAL SELF' Arne Næss (1986)

'ECOLOGICAL SELF'

“Traditionally, the ‘**maturity of the self**’ has been considered to develop through three stages: **ego, social self, metaphysical self...**

in this concept **Nature is largely left out...** yet **we may be said to be in, and of, Nature from the very beginning of our selves.”**

Behaviour change?

From “*Nature deficit*” to *Ecohealth*



**A CHRONIC LACK OF TIME TO REFLECT,
EXPLORE AND SHARE OUR DEEPEST
FEELINGSthis may well
CONTRIBUTE TO OUR ECOLOGICALLY
UNSUSTAINABLE LIFESTYLES**



think deeper

The more you know about
nature
the more you appreciate it
the more you respect it

Small social miracles



**We respond to incentives = HEALTH
and environmental cues =
QUALITY LOCAL GREEN SPACES & PARKS**



GREEN HEALTH LITERACY

**A set of behaviours and processes in individuals
and community members
leading to health beliefs and decisions
which also create and maintain
inclusive and healthy ecosystems =
*ecohealth***

GREEN HEALTH LITERACY =

BEING HEALTHY AS A CHOICE

not just a necessity

PERSON CENTRED

+

Ecohealth = COPRODUCTION

Equity: everybody's business

Participation: everyone's involved

Transdisciplinarity: no silos

'green prescriptions'

prescribing a range of activities in outdoor settings

with strong natural environment components (e.g. parks, nature reserves and countryside)

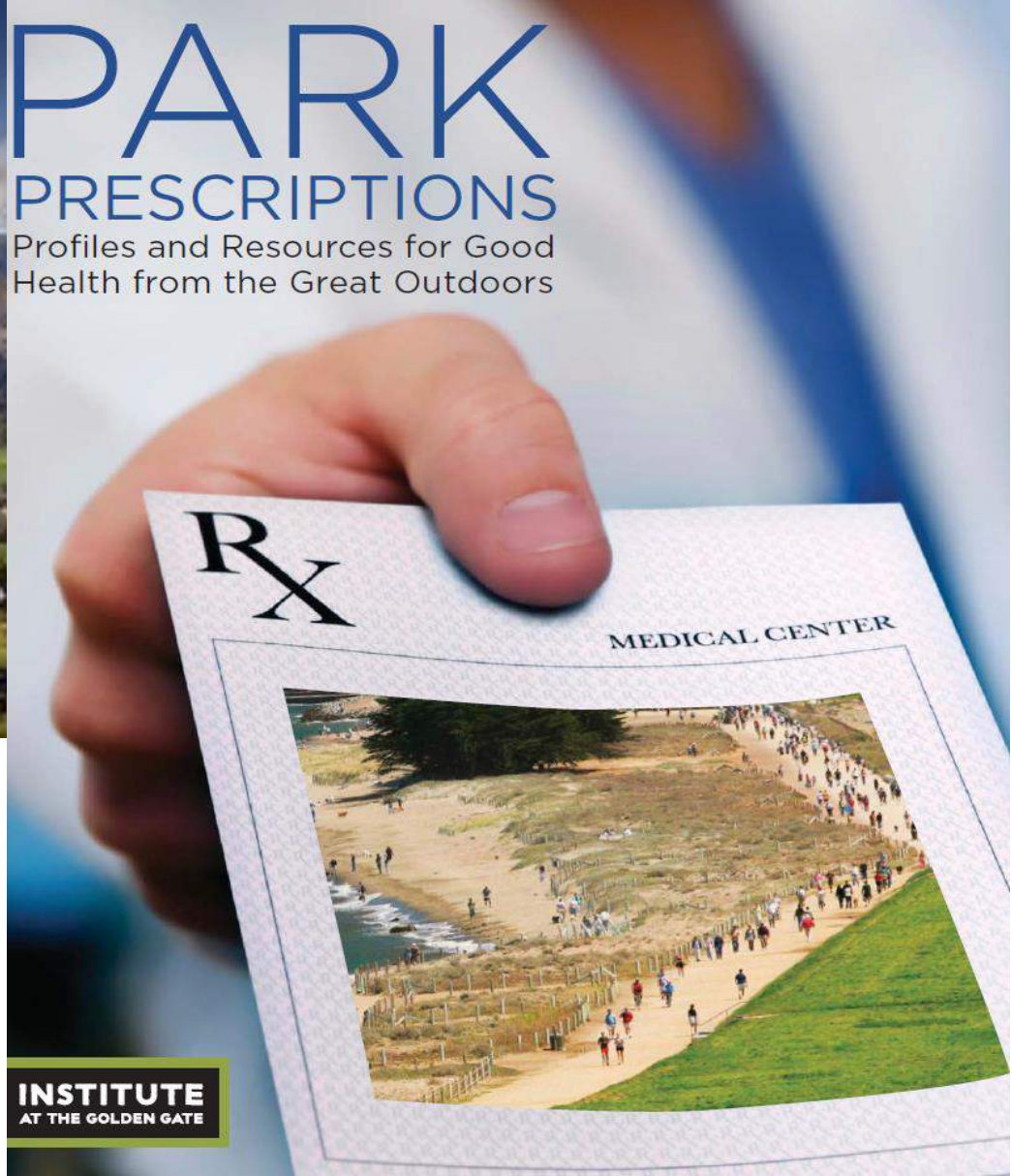
as a referral mechanism from health care practitioners

RECIPROCITY: people improving their health whilst tending to Nature around them

coproduction of green health/ecohealth



Park programs can easily be converted to health programs.



Park-based activities and initiatives normally geared toward improving access and increasing awareness of park resources—translate well to **health prescriptions programs**. Many park agencies should be able to **repurpose and adapt existing programs** to meet the needs of healthcare practitioners .

The UK National Parks and Wellbeing Forum



Healthy Parks,
Healthy People
Best Practice
Guidelines



ENCOURAGING GOOD PRACTICE



<http://www.npwf.org.uk/>

ECOHEALTH

A photograph of four children in a field of yellow flowers. The children are wearing jackets and are engaged in an activity, possibly a game or a lesson. The background shows a line of trees and a fence.

becomes everyone's business

= MAINSTREAM

if we foster

ecological self mentality

A photograph of a globe of Earth resting on a stretcher inside an ambulance. The globe is the central focus, showing the Americas. The ambulance interior is visible, with red emergency lights on the ceiling and a green stretcher with white reflective stripes. The text is overlaid on the image.
$$C + E = M$$

Developing Synergy and
collaborative responsibility +
energy

for OUR *ecohealth to become
mainstream*

National Parks and Wellbeing 2nd International Conference

21-23 April 2015
Plas Tan y Bwlch
North Wales

THANK YOU



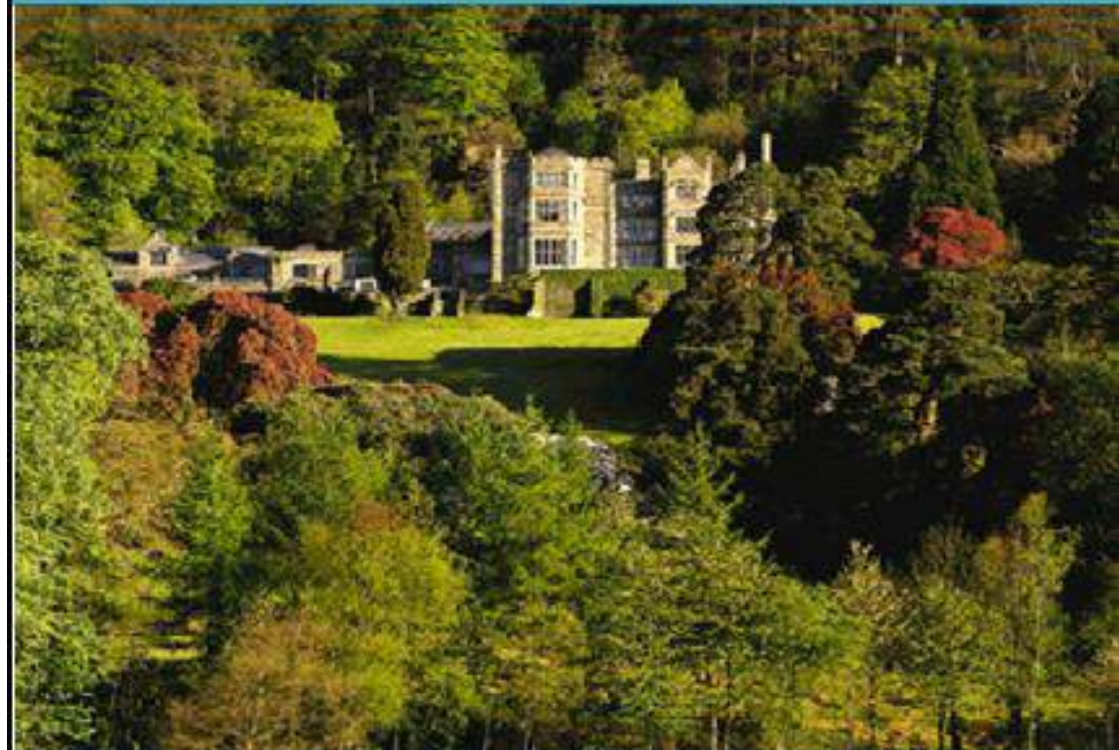
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Snowdonia National Park Centre*

PLAS TAN Y BWLCH

Parciau Cenedlaethol,
Iechyd a Lles
*National Parks,
Health and Wellbeing*

21 – 23 Ebrill / April 2015

Cynhadledd 2015 Conference



Canolfan Parc Cenedlaethol Eryri ● Snowdonia National Park Centre

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