

GWELEDIGAETH/VISION Cynaliadwyedd/sustainability

Croeso i'r argraffiad nesaf 'Gweledigaeth'. Gobeithio y byddwch chi ffeindio y daflen newyddion yma yn diddorol iawn. Os dych chi eisiau cyfrannu, dweud stori neu sylw, plis anfon ebost ata i. clong@bridgend.ac.uk.

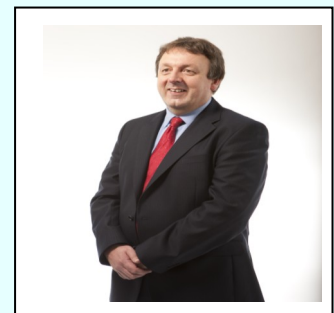
Welcome to our next edition of 'Vision' which we hope you enjoy. If you would like to contribute, tell a story or just comment, please drop me an email. clong@bridgend.ac.uk

BRIDGEND COLLEGE SENDS COMMITMENT TO THE RIO EARTH SUMMIT

As Principal of Bridgend College and as a signatory of the Welsh Sustainable Development Charter we acknowledge the responsibility that we bear in the international pursuit of sustainable development. On the occasion of the United Nations Conference on Sustainable Development, held in Rio de Janeiro from 20-22 June 2012, we agree to support the following actions:

- Teach sustainable development concepts, ensuring that they form a part of the core curriculum across all disciplines so that all students develop the skills necessary to enter sustainable development workforces and have an explicit understanding of how to achieve a society that values people, the planet and profits in a manner that respects the finite resource boundaries of the earth.
- Provide sustainability training to all members of staff at Bridgend College.
- Encourage the learning and sharing of best practice on sustainable development issues.
- Green our campuses by: i) reducing the environmental footprint through energy, water and material resource efficiencies in our buildings and facilities; ii) adopting sustainable procurement practices in our supply chains and catering services; iii) providing, sustainable mobility options for all; iv) adopting effective programmes for waste minimization, recycling and reuse, and v) encouraging more sustainable lifestyles.
- Conserve and enhance biodiversity and implement our biodiversity strategy.
- Implement 'accounting for sustainability' within the finance function.
- Support sustainability efforts in the communities in which we reside, working with local authorities and the local community to foster more liveable, resource-efficient communities that are socially inclusive and have small environmental footprints.
- Engage with and share results through public reporting, in order to exchange knowledge and experiences and to report regularly on progress and challenges.

Date: 3rd May 2012
Mark Jones, Principal



Wildlife Corner - A focus on pollination by insects

What is pollination?

Pollination is the process of transferring pollen grains, the male part of the plant's reproductive system, over to the carpel, the female part, of another flower so that a seed can be produced. Pollen can be transferred by wind, as in the grasses, but for broad-leaf crops an agent is needed to accomplish the transfer and this is where the insects come into their own. Honey bees are probably the best known pollinator, but any insect that moves from flower to flower can do the job because the pollen grains are very sticky attaching easily to any passing insect.



One out of three mouthfuls of food depend on pollination!!!

Why is pollination important ?



A plant that has not been pollinated cannot produce seed or fruit. Some plants can pollinate themselves but the yield is higher if pollination is carried out by insects. Plants attract insects by producing sweet nectar, bright coloured petals or scents, with some smelling like rotting meat to attract carrion feeding insects!

Many insects need plants because the nectar and pollen provide sugar for energy and nutrients for growth.

Bees are the best pollinators because they concentrate their feeding upon plants of the same species. However, many other insects also act as pollinators including butterflies, moths, beetles and flies.

Ecosystem services, such as pollination are often overlooked until they are damaged or lost. They are usually impossible to replace. Many plants rely on insects to pollinate their flowers and so complete their reproductive cycle. The contribution of wild pollinators and cultured Honeybees is difficult to separate, however we do know that large numbers of flowers are 'buzz-pollinated' such as tomatoes by bumblebees, and many flowers are only pollinated by particular types of wild pollinators.

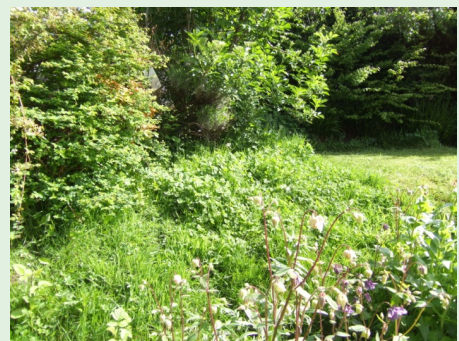
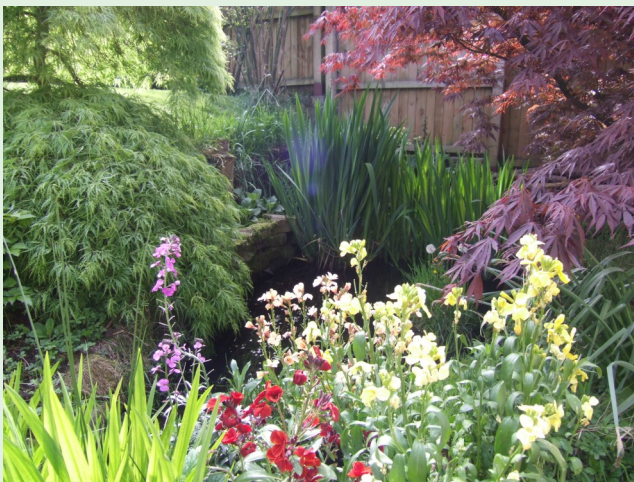


Wildlife Corner - A focus on pollination by insects



It is estimated that 84% of EU crops (valued at £12.6 billion) and 80% of wildflowers rely on insect pollination. Well-known wild pollinators include bumblebees and other bees (250 species), butterflies and moths (2200 species), flies (6700) and various other insects such as beetles and hoverflies.

Photos from my Wildlife Garden—Chris Long



Don't forget to take a look at our new Biodiversity Strategy and habitat management plan - you can find it on the portal:-)

Cornel Bywyd Gwyllt – Ffocws ar beillio gan bryfed

Beth yw peillio?

Peillio yw'r broses o drosglwyddo gronynnau paill, rhan wrywaidd system atgenhedlu'r planhigyn, i garpel, sef rhan fenywaidd, blodyn arall, fel y gall hadyn gael ei gynhyrchu. Gall paill gael ei drosglwyddo gan y gwynt, fel mewn glaswellt, ond ar gyfer cnydau llydanddail mae angen asiant i gyflawni'r trosglwyddiad a dyna lle mae pryfed yn rhagori. Mae'n debyg taw gwenyn yw'r peillwyr mwyaf adnabyddus ond gall unrhyw bryfyn sy'n symud o flodyn i flodyn wneud yr un swydd, gan bod y gronynnau paill yn ludiog ac yn glynu'n hawdd i unrhyw bryfyn aiff heibio.



Mae un o bob tri cegaid o fwyd yn dibynnu ar beillio!!!

Pam mae peillio'n bwysig?



Ni all planhigyn sydd heb gael ei beillio gynhyrchu had na ffrwyth. Gall rhai planhigion peillio eu hunain ond mae nifer y ffrwyth yn uwch pan beillir gan bryfed. Mae planhigion yn denu pryfed drwy gynhyrchu neithdar melys, petalau llachar neu aroglau da, gyda rhai yn arogl fel cig wedi pydru i ddenu pryfed sy'n bwydo ar anifeiliaid marw.

Mae angen planhigion ar nifer o bryfed achos bod y neithdar a'r paill yn darparu siwgr ar gyfer egni a maetholion ar gyfer tyfiant.

Gwenyn yw'r peillwyr gorau achos eu bod nhw'n crynodi eu bwyta ar blanhigion o'r un rhywogaeth. Fodd bynnag, mae nifer o bryfed eraill hefyd yn gweithredu fel peillwyr, yn cynnwys ieir bach yr hâf, gwyfod, chwilod a chlêr.

Mae gwasanaethau ecosystem, fel peillio, yn cael eu hesgeuluso yn aml nes iddyn nhw gael eu difrodi neu eu colli. Mae hi'n amhosibl fel arfer i'w hailosod nhw. Mae nifer o blanhigion yn dibynnu ar bryfed i beillio'u blodau ac felly i gyflawni eu cylch atgenhedlu. Anodd yw gwanu cyfraniad peillwyr gwyllt a chyfraniad gwenyn, fodd bynnag rydyn ni'n gwybod y caiff nifer fawr o flodau, fel tomatos, eu peillio gan wenyn, ac y caiff nifer o flodau eu peillio gan fathau arbennig o beillwyr gwyllt.

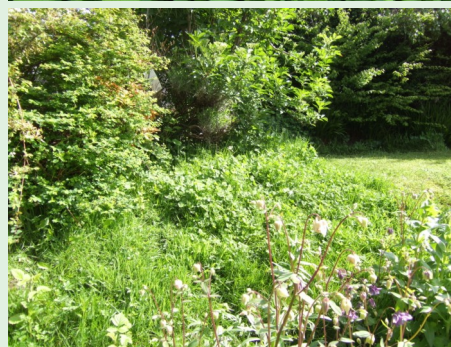
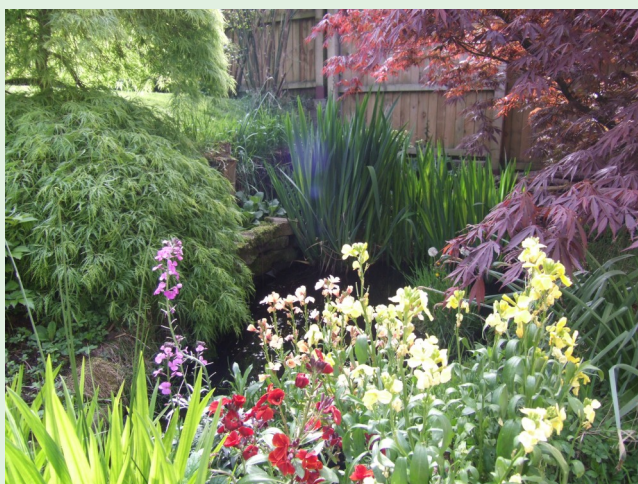


Cornel Bywyd Gwyllt – Ffocws ar beillio gan bryfed



Amcangyfrifir bod 84% o gnydau'r UE (wedi'u prasio yn £12.6 biliwn) a 80% o ffordau gwyllt yn dibynnu ar gael eu peillio gan bryfed. Mae peillwyr adnabyddus yn cynnwys 250 rhywogaeth o wenyn, ieir bach yr haf, gwyfod (2200 rhywogaeth), clêr (6700) a nifer o bryfed eraill fel chwilog a phryfed hofran.

Fy Nghardd Bywyd Gwyllt—Chris Long



Don't forget to take a look at our new Biodiversity Strategy and habitat management plan - you can find it on the portal:-)

Wildlife Corner - A focus on pollination by insects

Blooming marvellous.

Part time day and evening Horticulture students, under the support and guidance of Anthony Davies, Derek Cashmore, Abigail Figg and John Sullivan, have taken an area which was once an eyesore and transformed it into a flower-rich bed which is full of important pollinating flower species. The newly planted area will fill out and bloom over the coming weeks and we will return to let you see how it develops.



That gets our big tick ✓



STOP and think of biodiversity before you pave over green areas for a hard-standing/drive for your car or before installing too much decking. We are losing far too much land to hard surfaces....

Please help our biodiversity to thrive.

Want to know more about what is happening on a global—why not take a look at these fantastic newsletters and sign up for **FREE**.

<http://darwin.defra.gov.uk/newsletter/>



GREEN TRAVEL PLAN AWARD SUCCESS!!

Did you know that Bridgend College was recently awarded the bronze level of the **Welsh Green Travel Plan Awards**.

What is the award:

The Welsh Travel Plan Awards scheme recognises best practice and excellence in travel planning. The scheme is available to all organisations whether public, private or voluntary sector, and new developments where ongoing commitment to travel planning is clearly evidenced.

The plan also works alongside our Corporate Health Standard, Investors in People and the Green Dragon Environmental Standard. Now that's what we call integration.

What did we have to do?

We have produced a travel plan (you can find it on the portal) which is a set of measures to improve travel choices, and provide more sustainable access for all. It contains a mixture of initiatives for success which are tailored to the college and includes, for example, promoting public transport, cycling, walking and support of alternative work practices.



Do you drive—do you want to save fuel costs and reduce your carbon footprint....you'll save on maintenance costs too. Then please try out the interactive travel-check game from the energy-saving trust; just follow the link below.

<http://www.energysavingtrust.org.uk/Transport/Travel-energy-check>

Looking for alternative means of transport? Here are a few pointers...

<http://www.livingstreets.org.uk/walk-with-us/walking-and-work>

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

<http://www.sewtacarshare.com/Default.asp?uxi=&cr=check>

<http://www.gettravelwise.com/>

<http://www.traveline-cymru.info/>



Llywodraeth Cymru
Welsh Government

Rhaid i Gymru gael ei chlywed yn Rio+20 meddai'r Gweinidog

Mae Gweinidog yr Amgylchedd, John Griffiths, wedi cadarnhau y bydd yn cynrychioli Cymru yn Uwch-gynhadledd Datblygu Cynaliadwy Rio+20 y mis nesaf.

Bydd y Gweinidog yn mynd i'r uwch-gynhadledd fel rhan o ddirprwyaeth o'r DU ac mae'n benderfynol o ddangos i'r byd bod Cymru'n gallu gwneud cyfraniad gwerthfawr at yr ymdrechion byd-eang i fod yn fwy cynaliadwy.

Pwysleisiodd y canlynol:

Mae biliwn o bobl ledled y byd yn dal i fynd i'r gwely'n llwglyd bob nos

Y bobl oedd dlotaf 20 mlynedd yn ôl yw'r tlotaf o hyd

Mae 20% o boblogaeth y byd yn dal i ddefnyddio 80% o adnoddau'r byd.

Disgwylir y bydd biliwn yn fwy o bobl ar ein planed erbyn 2025, a bydd y Gweinidog yn amlygu'r anawsterau o ran atal tlodi a chodi safonau byw heb wastraffu adnoddau naturiol y Ddaear.

Wrth siarad cyn y digwyddiad, dywedodd y Gweinidog:

"Mae angen inni ddechrau mesur yr hyn sy'n cyfri ar raddfa fyd-eang – oni wnawn hynny ni fyddwn yn gallu rhoi gwir werth ar hyn na defnyddio adnoddau'r byd yn fwy cynaliadwy. Rhaid i Rio+20 gyflawni'r ymrwymiad i ddatblygu dangosyddion cymdeithasol ac amgylcheddol i'w defnyddio ochr yn ochr â CMC. Yng Nghymru rydym eisoes yn defnyddio pum prif ddangosydd i'n helpu ni i fesur ein cynnydd ym maes datblygu cynaliadwy. Mae Gwerth Ychwanegol Crynswth yn un ohonynt ond rydymhefyd yn mesur ein ôl troed ecolegol a'n lles cyffredinol."



Y Siarter Datblygu Cynaliadwy
Sustainable Development Charter



Llywodraeth Cymru
Welsh Government

Wales must be at the heart of Rio+20 says Minister

Environment Minister, John Griffiths has confirmed he will be representing Wales at the Rio+20 Sustainable Development summit next month.

The Minister will attend the summit as part of the UK delegation and is determined to show the world how Wales can proactively contribute to global efforts to drive up sustainability.

He emphasised that:

1 billion people around the world still go to bed hungry every night
Those people who were poorest 20 years ago are still the poorest now
20% of the world's population still consumes 80% of the world's resources.

With the world's population expected to grow by a billion by 2025, the Minister highlighted the difficulties of eradicating poverty and driving up living standards whilst living within the finite natural resources of the Earth.

Speaking ahead of the event, the Minister said:

"We need to start measuring what matters on a world wide scale— because only then can we truly value it, and use the world's resources more sustainably. Rio+20 must deliver a commitment to develop social and environmental indicators to use alongside GDP. In Wales we already use five headline indicators to help measure our progress on sustainable development. Gross Value Added is one but we also measure our ecological footprint and general wellbeing."



Y Siarter Datblygu Cynaliadwy
Sustainable Development Charter

Sustainability do you know what it means
If you knew what it was do you think you'd be keen?

All in Finance are trying hard
To buy local with their WPC card
Before we buy we try and remember the words below

Reduce
Reuse
Recycle

Please give it a go

We all turn off lights and PC's too
Just think what the College could do
Here in Finance we would like to know
If you would give Sustainability a go

Reduce
Reuse
Recycle

Paper and cardboard we all recycle
It's all part of our working day cycle
Finance have become such great fans
And now recycle plastic bottles, food and cans

Reduce
Reuse
Recycle

We in finance collect the data
Of all the college waste accumulator
Energy, waste and green house gases
Travel data for all the masses
H.S.S.D.M or Chris for short
Is the man who has all the reports

Reduce
Reuse
Recycle

The Payroll Dept. is very keen
Do you know about the cycle to work scheme
You pay a little and as you pedal along
Having a new bike for quite a song

Reduce
Reuse
Recycle

The paper bill is becoming the thing of the past
If we email post it's very fast
For every piece of paper you don't see
When in the countryside it's one more tree

Reduce
Reuse
Recycle

If we all could start and save a small percent
Mother Nature would pay less rent
So come on all let's make a stand
And give Planet Earth a helping hand

Here in Finance

That gets our big tick ✓

CACHE Foundation Level 1 students raise much needed charity funds

14 child care students from the CACHE Foundation Level 1 course have carried out a fantastic initiative to raise money for a charity called **Pont** which helps support people in underdeveloped countries such as Uganda.

The event was carried out as part of their Enterprise activities for the Welsh Bacc but also evidences Education for Sustainable Development and Global Citizenship (ESDGC) - an excellent student-driven sustainability awareness event which clearly demonstrates how individual action can have a very positive benefit for others facing difficult living condition around the world and, in this instance, the third world.



The student set up a craft stall in the Refectory to sell the crafts that they had made by turning old comics, newspaper and wallpaper into fantastic gifts such as gift bags, cards and mouse mats—brilliant!!



Students raised £45 and have chosen to buy a goat for an orphaned child; an excellent use of this resource—very well done to all.

More on the purchase of goats:

A female goat is supplied to the individual/family along with training on breeding and rearing goats. By selling some of the goats they have reared the family will be able to have money to support the needs of the children. In addition the goats milk is a valuable source of protein.

For more information on PONT, follow the link below:

<http://pont-mbale.org.uk/main/>

That gets our big tick ✓



Working Wonders— Fantastic ‘Supporting Sustainability in Business’ Project

Following months of hard work, Level 3 and Level 4 Business and Administration students under the guidance of Aprile Orders, came together for a sustainability design competition held in the Sony Theatre. Five teams battled it out as they presented their project to a panel of judges.



Judges viewing one of the excellent models produced by each team. The judges were presented with copies of team project portfolios.

Each team had a virtual budget of £500,000 to re-design Working Wonders with the aim of making it a more sustainable workplace. The project included:

- Furniture
- Health and safety
- Energy technologies
- Resource efficiency
- Management of waste and recycling
- Building design
- Workplace environment
- Detailed project costing
- Procurement and research
- Power-point presentation and,
- A scale-model!!



All students should be very proud of themselves as they all gave excellent, informative and confident presentations.

The winning team were Gemma Fernie, Lisa Cox, Rebecca Reilly, Jay Howells, Alex Withey, Amber Knight, Ashley Bell, Natasha Gentle and Kate Beechey.

The winning team were presented with a trophy and, a voucher for each team member.

The winners were announced in the awards ceremony that was held the same evening for all Business Administration and Business Studies' students.

That gets our big tick ✓

Rowan Davies - A Personal Approach to Sustainability

Rowan Davies (National Diploma in Travel and Tourism Year 2) has embraced sustainability in her personal life as well as in college. As part of the National Diploma she is in the process of completing a research project on the sustainability issues of reducing energy, food waste and water consumption in the accommodation sector in Wales. She has completed a range of primary research through sending questionnaires to hotels and conducting focus groups. From this research she believes she has changed the way she behaves and has even changed wasteful practises in her part time employment. She says “I have a new role in life – to be more sustainable!”



Rowan started with Thomas Cook as a holiday representative in Italy and has already used her understanding of sustainability (she completed a research project on the sustainability issues of reducing energy, food waste and water consumption in the accommodation sector in Wales as part of the National Diploma in Travel and Tourism) to make an impact on a global travel and tourism organisation. It was encouraging to have an email from her recently where she said that “Thomas Cook has a sustainability section so I was able to share my ideas on how to help for making the company more environmentally friendly”

That gets our big tick ✓

Jeff Roberts, HND/HNC Environmental Conservation Management Lecturer, took this great photo of a female Broad Bodied Chaser *Libellula depressa*, at the conservation area at Pencoed.

The chaser is a medium-sized, broad-bodied dragonfly which is on the wing from the end of May to August and is common to ponds and small lakes where hunts for insects. Mating occurs on the wing, after which the female will dip the tip of her abdomen in the water and drop her eggs on to vegetation below the surface. Human activity, including the drainage of land for agriculture and the loss of ponds through development, has resulted in the disappearance of many wetlands. The Wildlife Trusts are working closely with



partners to ensure our wetlands are protected. You can help too: encourage dragonflies and damselflies into your garden by having a wildlife-friendly pond. In partnership with the RHS, The Wildlife Trusts' Wild About Gardens initiative can help you plan your wildlife garden with plenty of facts and tips to get you started. **[Watch out for a special report on the conservation areas in our next edition of Gweledigaeth/Vision.](#)**

Animal Studies students, with the support of the Course Co-ordinator for the Extended Diploma Animal Management, Julie Walters, held a swap shop and sustainability coffee morning on Friday 25th May 2012 for Wales Sustainability week in the boardroom, foyer and outside The Old House at Pencoed Campus. The swap shop comprised stalls such as jewellery, computer games and clothes. Students who brought in items were issued with tokens which were surrendered for “Swapped” items.



Student work completed for their WKS was displayed to reiterate the importance of sustainability; participation in the event also counted towards the students' Welsh Bacc.

A fair trade coffee and home-made cake stall (incl Wesh milk) provided refreshments, raising a grand total of £72.71- proceeds to go to the Woodland Trust.

The swap shop was a roaring success with 115 swaps taking place (and items saved from landfill!), with any items that were not swapped or sold going to RSPCA charity shops.

Recognising the value of this event as a learning experience for her students Julie Walters said “The event has tried to encompass as many different sustainability issues as possible such as “re-use – recycle” and our “throw-away” culture.



That gets our big tick ✓



Jane Wattleworth Works with WRAP on Food Waste

Jane Wattleworth, Head of School for Services to People, has worked alongside the WRAP (the UK organisation working to reduce waste and increase recycling) regarding food waste. WRAP are currently looking at UK Food and Hospitality and approached Jane regarding a project to calculate food waste within the kitchens.



WRAP define **avoidable** food waste as 'food that was, at some point prior to disposal, edible (e.g. slice of bread, apples, meat) and could have been eaten if it had been better portioned, managed stored and/or prepared. Avoidable food waste also includes some food items that may or may not be eaten as a matter of consumer preference; such as bread crusts and jacket potato skins'

The project culminated in a report which identified opportunities for reducing food and packaging waste and making cost savings; both of which contribute greatly to sustainable food use.

That gets our big tick ✓

Why not visit the website below for great recipes to get the most out of your food.

<http://www.lovefoodhatewaste.com/>

The other side of the coin:

Whilst the affluent nations are looking at ways to reduce food waste and tackle obesity, perhaps the facts below can give reason to pause for thought...

7 Facts of malnutrition and starvation:

- 1 in 10 Infants die within the first 12 months of life
- 1 in 5 children suffer from chronic malnutrition
- More than 12 cases a month of Marasmus or Kwashiorkor are seen in one clinic in Alexander, Africa
- 1 in 10 children suffers from severe malnutrition
- 50% of children have a calcium, iron and zinc deficiency
- 75% of South Africans, have inadequate access to food
- More than 1 in 5 children are physically stunted due to malnutrition.



Why not visit, <http://food4africa.org/> for more information about a number of