



**Annual Monitoring Report
For
Tir y Gafel Ecovillage**

August 2009 – January 2011



Pictures from the Tir y Gafel Ecovillage (spring 2011)

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1. Framework for this report

This is the first annual monitoring report for the Tir y Gafel ecovillage. The format is derived in part from the planning condition 3 (August 2009) and in part from the layout proposed in the settlement's Management Plan.

From the Lammas planning conditions:

- 3) No later than 1st April each year, commencing in the second year after development commences, the occupiers of the site shall submit to the local planning authority a written report giving details of the activities carried out during the previous twelve months, setting out performance against the management objectives included within the Management Plan, and the number of vehicle trips generated by the development. In the event that the report identifies that any objective has not been met, or that the number of vehicle trips exceeds the targets set in the Traffic Management Plan, a supplementary report setting out corrective or mitigating measures shall be submitted to the local planning authority no later than 1st July of that year. Those measures shall be implemented in accordance with the supplementary report.

From the Tir y Gafel Management Plan:

10. Monitoring Arrangements

The society will produce an Annual Monitoring report. A copy of this report will be sent to Pembrokeshire County Council. The report will give a general description of the projects activities over the preceding 12 months. It will then chart the project's progress against a well-defined set of performance indicators. It will conclude with a resolution for future targets and propose changes to management practices.

10.1. Performance Indicators

1. Annual

- Ecological Footprint Assessment (SEI)
- 75% Productivity target
- Traffic volume and density
- Management objectives evaluation
- Welsh language integration

2. Long term (4 year)

These performance indicators will be evaluated every 4 years due to the long term nature of their improvement program

- Soil health
- Biodiversity
- Number of new trees planted (accumulative)
- length of new hedgerow planted (accumulative)
- Number of new ponds installed (accumulative)

3. Variable

- Grey Water systems

2. Details of Activities carried out

As detailed in the Lammas annual accounts Jan 2010 – Jan 2011 (as registered with FSA):

1. Principal activity

The principal activity for the period under review was to continue to establish a low-impact settlement in Pembrokeshire (Tir y Gafel) and to continue to promote low-impact development as a model for sustainable rural regeneration.

2. Review of the period

a. Shares

Lammas continues to increase its membership and raise capital through the sale of shares. Lammas raised £1850 in share capital during this period.

b. Planning

Lammas is working with Pembrokeshire County Council Planning Authority to resolve minor planning issues arising from ongoing design alterations within the development.

Meanwhile Lammas has played an active role in lobbying for and influencing the Welsh Assembly government's TAN6 'One Planet Development' Policy (July 2010).

Lammas continues to support other low-impact development planning applications in Wales.

c. Infrastructure development at Tir y Gafel

Lammas has completed the trackway network, and is close to completing the electricity, water and telecoms networks.

d. Freelance posts

Lammas continues to issue part-time freelance contracts, including:

- Business Management
- Admin Worker
- Site Infrastructure Management
- Forestry management

e. Funding

Lammas has spent the grant (£346,935) from the Department of Energy and Climate Change (DECC), (Low Carbon Communities Challenge (LCCC)) and is on track to complete the building in May 2012 (with an overspend of approximately £40,000)

f. Leasehold Sales

Lammas has sold 7 of the 9 leaseholds. Payments for the remaining two leaseholds are underway.

g. Development of plots

Responsibility for the development (agricultural and residential) of the plots is with the leaseholders. Lammas continues to retain an overall management responsibility for the development, and continues to retain an interest in the plots (as detailed in the leaseholds).

h. Clamp

Lammas continues to lease a storage facility at the adjacent farm to enable both the organisation and residents to store goods securely.

i. Forestry

Lammas is working in the woodland in accordance with its woodland management plan.

j. Community Engagement

During the summer of 2010 Lammas organised a series of 9 open days for local people to view the development. Along with other community engagement exercises (newsletter, schools days, facilitated feedback session), Lammas has reached out to and engaged with local communities. Feedback from these events is very positive.

k. Further developments

Following an ecovillage conference (run by Lammas at Tir y Gafel), Lammas is working with a group of people (Tir Teg) to facilitate the development of a second ecovillage development.

3. Key Achievements

- Building the Community Hub
- Infrastructure development at Tir y Gafel

4. Looking Forwards

- Lammas will oversee the completion of its community hub building.
- Lammas will continue to support the emergence of other ecovillage projects.

3. Performance against Management Objectives

Note: Some of the Tir y Gafel residents requested confidentiality regarding lifestyle and financial information and so Lammas has concealed the identity of the plots in some areas of this report (re-labelling them in random order from A to I).

1. All building and infrastructure development will have a small ecological impact.

Any structure/building will need the approval of the Society as well as the local planning authority. The Society's planning procedure will be exclusively concerned with the low-impact nature of the development and as such will need a full set of plans/drawings/specifications for approval.

The Society will ensure that all development is in accordance with the aims and policies set out within this management plan.

The project as a whole will endeavour to aspire to a one planet ecological footprint, and therefore residents will need to be willing to have their dwellings and lifestyles analysed for research. The results of this will be fed back to inform household practice.

The Society considers that all buildings and structures built to date are low-impact.

All construction within the project has had a small ecological footprint, with decisions being carefully weighed up to strike a balance between function, embodied energy, lifespan, carbon footprint and regulatory requirements (for example building regulations).

- *All stone for the trackways has been quarried from the site, with the quarries being landscaped after use to provide beneficial micro-climates.*
- *The barn on plot 1 was constructed with local hay, local timber and recycled materials.*
- *The workshop on plot 2 was built using timber from the site and straw from within the County.*
- *The frame on plot 3 uses local timber on rammed stone foundations.*
- *The agricultural workshop on plot 6 uses local timber (sourced from the site or a nearby woodland -Ffynnone), fleece insulation from a neighbouring farm, recycled materials (such as windows, chicken wire) and environmentally low-impact products (such as Onduline roofing sheets).*
- *The chalet on plot 7 uses timber from the site, straw bales, recycled materials (including glazing, wall infill elements).*
- *The workshop on plot 8 uses local timber, straw bales and cob mixed from the site, as well as recycled materials.*

Lammas commissioned an ecological footprint assessment for each of the nine households.

The total ecological footprint for the development for 2010 was calculated as 2.55gha/cap.

This figure is calculated from the total footprint (84.28gha) divided by the number of residents (33). The amount of global resources available per person is currently

considered to be 1.88gha/cap. Wales' ecological footprint in 2006 was estimated at 4.41gha/cap. The Welsh Nation could be considered as having a 2.35 planet footprint in 2006.

The Tir y Gafel project could be considered as having a 1.36 planet footprint in 2010.

Lammas was assisted in calculating the ecological footprints of the residents by 4th World Ecological Design, who advise that that the data gathering can produce outputs with a sensitivity/accuracy of +/- 15%.

It should be noted that data for one of the plots (plot f) could not be verified for accuracy due to the lack of information provided.

It is also worth noting that some of the plots were only occupied for part of this year, and that as a result some of the ecological footprint assessments are correspondingly skewed:

The residents of Plot 2 occupied their plot in April 2010

The residents of Plots 4 and 5 occupied their plots in June 2010

See Appendix 3 for the full results of the Ecological footprint assessments for Tir y Gafel households (2010).

2. The natural wealth and biodiversity of the land will be enhanced.

During site and building works care will be taken not to cause any environmental damage. Any areas of notable environmental value (e.g. broadleaf woodland, hedgerows, and wetland) will be acknowledged and incorporated into the site plan in such a way as to conserve and preserve their natural value. Any existing wildlife corridors will be noted and conserved. Lammas will in effect be creating a network of small fields/forestry plots that will each be managed individually. In time, many individual ecosystems will establish themselves on the site leading to what Lammas expects to be an impressive increase in biodiversity.

The Tir y Gafel site is undergoing a huge transition from overgrazed pasture to a mosaic of different ecosystems designed on permaculture principles:

- *Thousands of trees have been planted across the site.*
- *The millpond is being managed for biodiversity and wildlife through a policy of maintaining water levels, regulating algal blooms and cultivating an attitude of appreciation and conservation. It contains a healthy population of trout, as well as supporting a range of breeding waterfowl (including Canada Goose which, despite being considered a problem invasive species, are nonetheless accepted by virtue of their numbers being naturally limited by the small area of the millpond itself and by virtue of their benign effect on native flora and fauna). The millpond hosts a*

large population of breeding toads (toads are now listed as a UK Biodiversity Action Plan priority species). The millpond is also a valuable feeding ground for bats (a European protected species). Otters have also been sited using the millpond (another European protected species).

- *Six new ponds have been dug, with two up and running as wildlife ponds and one as a duck pond.*
- *Approximately 880 metres of new hedgerow has been planted:*
 - *Approx 150m mixed deciduous hedge on bank, plot 1*
 - *Approx 100m mixed deciduous hedge on bank, plot 2*
 - *Approx 150m mixed deciduous hedge on bank, plot 3*
 - *Approx 40m mixed deciduous hedge on bank, plot 5*
 - *Approx 100m beech hedge on bank, plot 6*
 - *Approx 100m mixed deciduous hedge on bank, plot 6*
 - *Approx 80m mixed deciduous hedge, plot 7*
 - *Approx 100m mixed deciduous hedge on bank, plot 8*
 - *Approx 50m mixed deciduous hedge on bank, plot 9*

An additional 200m of willow hedge has also been planted.

- *Lammas is currently working with the RSPB on a breeding bird survey.*
- *Tir y Gafel residents are spearheading a voluntary conservation effort to eradicate Japanese Knotweed from the woodland area, where it has taken a hold around the Fynnon Deg spring.*
- *The woodland is being managed in line with the Woodland Management Plan, increasing the woodlands biodiversity and conservation value.*

Comments from residents and visitors familiar with Pont y Gafel farm suggest there has been a remarkable increase in insect and bird life over the past 18 months.

There have been some instances when natural wealth and biodiversity were compromised:

- *Approximately 30 metres of hedge bank was moved to accommodate the new entranceway. Approximately 8 metres of hedge bank was removed to make way for the entrance track. Approximately 20 metres of hedge bank was removed to connect the Community Hub field to the Millpond. Care was taken in these instances to work around mature trees and to re-plant the younger trees. This loss of hedgerow/bank has been mitigated by the creation of approximately 880m of new hedgerow on the site.*
- *It should also be noted that one mature tree has been removed from the western hedgerow of the terrace field – this was a sycamore tree that was felled to allow the mature oak adjacent to it more room to grow. The loss of*

this tree has been mitigated by the planting of hundreds of deciduous trees across the site.

3. The settlement will become integrated into the local community and will be an asset to the local economy.

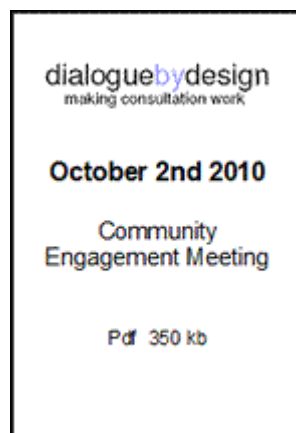
We recognise the importance of open negotiations and consultations with local people in order to foster the spirit of mutual understanding and respect. We hope that the low-impact nature of the development, coupled with the many local benefits, will lead to local people appreciating the advantages of the development.

Local benefits will include:

- A boost for local businesses - Owing to the project's low impact ethos, residents will naturally shop locally and make full use of local businesses, products and trades. Visitors to the settlement will also be encouraged to shop locally.
- Rights of way – The project will create a network of footpaths for public use through the site, opening up the land for walkers.
- Affordable housing – There will be a provision of affordable housing for people with low impact aspirations.
- Local economy - The settlement will add to the local economy by offering a range of skills, crafts and produce. The Society will encourage businesses developed within the settlement to consult locally in order to complement, rather than compete with, existing small businesses in neighbouring towns and villages.
- Public transport provision – The Lammas minibus will be available for local people to use.
- A part-time shop and café facility.

The Tir y Gafel residents are indeed, by virtue of human nature, weaving themselves into the local community. They play an active role in shopping locally, participating in local events (for example Glandwr duck race and Glandwr produce show), and local groups (including WI, local sports events, local craft groups etc).

During 2010, Lammas produced a community engagement plan (available on request). This culminated in a Community Meeting, the report of which is available from the link below:



<http://www.lammas.org.uk/ecovillage/community.htm>

Lammas also published a local newsletter (distributed to a 5 mile radius, included in

Appendix 1), and ran a series of workshops for local schools.

Whilst Lammas has made provision for additional permissive paths, these are yet to be signposted (and officially opened).

The part-time shop and café will begin to operate when the Community Hub opens.

4. The project will offer the opportunity of affordable housing.

The properties will be available in perpetuity. That is to say that when a resident leaves the project, they will sell their lease on the open market. The lease will contain the various conditions and regulations which will ensure the low-impact aims of the project will be maintained. Lammas fully expects that (due in part to these restrictive conditions and also due to the continuing availability of land on which low-impact developments can take place) the prices for such leases will fall well below market rates.

Lammas has sold 7 of the nine leaseholds for £35,000, and the remaining two are close to completion.

Plot 6's agricultural workshop/ temporary accommodation cost an estimated £14,000.

Plot 7's dwelling cost an estimated £4,000.

Plot 8's barn/ temporary accommodation cost an estimated £8,000.

5. There will be an effective traffic reducing strategy in place.

The project has a well defined traffic management policy in place which takes into consideration all aspects of traffic generation. Essentially the project is an integrated residential and livelihood development which will by its nature allow residents to live a lifestyle less dependant on vehicle use. Most of the household needs will be met directly from the site. These include:

- Land-based employment
- Additional employment
- Social Networks (by the nature of community)
- Recreational provision (eg, playground for children, waking for adults)
- Services (Water, electricity, fuel)
- Livelihood support (skills and knowledge)

The regulatory mechanisms which will ensure that traffic will be minimised include:

- Residents will be required to share vehicles.
- A Society minibus will provide a link with local towns.
- The minibus will also be available for additional trips/ one-off opportunities.
- All deliveries to and from the site will be coordinated.
- Financial incentives will be used to encourage visitors to travel by public transport.
- All traffic will be monitored and reviewed on an annual basis.

During 2010 an average (mean) of 8 vehicles were operated from Tir y Gafel by residents.

Residents were charged £200 pa (£16.67pcm) for running vehicles from the site as a disincentive for vehicle use.

Any households with more than one vehicle were required to operate car-share schemes.

Two Lammas residents have trained with PRTA (Preseli Rural Transport Association) and have qualified as minibus drivers. For the volunteer weeks, Lammas hired 'green dragon' minibuses to ferry volunteers around.

Vehicle journeys to and from the project were counted by residents and Lammas staff. This data is included in Appendix 4.

- *Average vehicle trips per week made to and from the site (noting that a return journey is 2 trips) was 163*
- *Average vehicle trips per day made to and from the site (noting that a return journey is 2 trips) was 23*
- *Total number of vehicle trips in 12 months (from January 3rd 2010 til January 2nd 2011) was considered to be 9,212 (of which 300 were as a result of disability transport). The maximum vehicle count (as detailed in the Traffic Management Plan) is set at 25,278 per annum during the first three years (considered as the Building Phase) and 17,810 per annum thereafter.*

It is worth noting that whilst eight of the nine plots kept detailed records of their journey counts, the figures for one of the plots (plot f) was estimated by Lammas. See appendix 4 for detailed figures.

It is also worth noting that a vehicle traffic counter has now been installed on the entranceway track in part to liberate residents from the burdensome task of counting traffic and also to achieve more accurate traffic figures.

6. The settlement will welcome visitors and provide an educational experience.

It is likely that the project will, due to its innovative nature, attract visitors. Most of these will be attracted to the exploration of principles of sustainability. It is important that examples of low-impact development are available for people to experience. Low-impact development offers one potential solution to the challenges of addressing climate change, limiting fossil fuel consumption, affordable housing and the farming crisis.

It is equally important to balance the project's contribution to a wider sustainability transition with the need to ensure that visitors' travel arrangements are also low-impact.

Thus the Society has a policy that welcomes visitors within a clearly defined framework, designed to minimise visitor vehicle use.

The settlement will remain open to visitors at all times, though reserves the right to implement measures designed to control visitor numbers (for example parking fees), and will endeavor to encourage the clustering of visitors on certain days when residents of the project will give guided tours of the project.

A range of information resources will be available for visitors.

Access to the settlement will be from the Llanfyrnach to Glandwr road. At the entrance to the site will be a gateway featuring a sign which will clearly display when the settlement is open and closed.

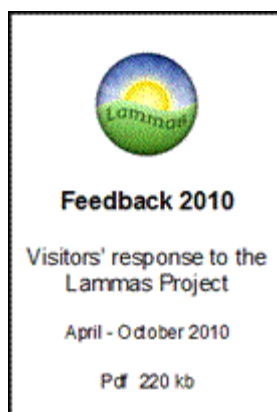
Adjacent to the car-parking area and Minibus stop will be a "Welcome Point" which will serve to inform visitors to the range of facilities available.

There will be a community hub building on the site. This will provide a meeting place for both community members and visitors. Indeed, it will be the starting point for guided walks and tours.

It will also house a part time café and a part-time shop (the trading post) from which visitors will be able to purchase produce from the locality.

An estimated 1100 people visited during 2010 and took part in guided tours of the project. There were 9 open days in 2010.

Feedback from these tours is available on the link below:



<http://www.lammas.org.uk/ecovillage/community.htm>

There were approximately 250 volunteers during 2010. Of these 29 gave feedback on a standardised form. These feedback forms gave opportunity for a range of quantitative and qualitative feedback which was used to inform volunteer frameworks. Of the 29 feedback forms collated, 23 rated their experience as 'excellent' (6/6), 4 rated their experience as very good (5/6), and 2 gave no clear indication of an overall rating. Copies of these forms are available to view on request.

The Community Hub and welcome point were under construction during 2010. The Camping area was not yet operational.

7. The project will provide a support infrastructure for land based sustainable livelihoods to develop.

Each household will be required to provide at least 75% of its household needs from land based activity. Each household will have access to the equivalent of approximately 8 acres on which to develop a land based livelihood. Residents will have exclusive use over some areas of this land, and will share other areas.

To create a sustainable land based lifestyle is enormously challenging. The farming community will affirm that in today's economic climate there is very little money to be made from the land. This coupled with the challenges of environmentally conscious living (for example, reducing one's travel needs) creates an adverse environment for low-impact smallholders. Only through establishing a sufficiently large group of low impact holdings can the potential of the project as a model for sustainable development be fully realised. Thus we are planning a settlement of 9 smallholdings.

With the momentum of the group helping to sustain the project in the long term, a local economy centered around land based productivity will flourish. A culture of low impact lifestyles will grow and provide support and inspiration both within the project and beyond.

The support services which Lammas will offer its residents include:

- The society will provide a health and safety certified kitchen for residents to process and thus add value to their food produce.
- There will be a part-time shop (trading post) and café from which residents can sell their produce.
- Residents will be able to advertise and sell produce through the Lammas website.
- If residents produce is of a sufficiently high standard, they will be able to use the Lammas logo as a marketing tool.
- Lammas will also offer each household timber from the community woodland so that the production of value-added craft can be explored.

The smallholding plots are in the early stages of set-up for this period. Nonetheless an appreciable proportion of household need has been derived from the land:

<i>PLOT</i>	<i>Household need</i>	<i>Needs met from site (including income)</i>	<i>Percentage of needs met</i>
<i>A</i>	12700.2	464.8	3.7
<i>B</i>	11010.6	1246.79	11.3
<i>C</i>	14591.21	455.6	3.1
<i>D</i>	9492	662	7.0
<i>E</i>	12921.2	2167.78	16.8
<i>F</i>	5854.8	72.8	1.2
<i>G</i>	10402	2635	25.3
<i>H</i>	3187.4	136.4	4.3
<i>I</i>	14384.6	625.6	4.3

Value placed on the total household needs for the settlement: £ 94544.01

Value placed on the needs met directly from the site: £ 8466.77

The settlement met 9% of its needs from land based activity during 2010.

It is important to note that some of the plots were only occupied for part of this year, and that as a result some of the household needs figures are correspondingly skewed:

Plot 2 only being occupied in April 2010

Plots 4 and 5 only becoming occupied in June 2010

It should be noted that the data for one of the plots (plot f) was in part estimated by Lammas.

See Appendix 2 for detailed breakdown of household need and land-based productivity.

8. The project will conduct and publish research about the development.

Lammas aims to promote low-impact development as a tool for realising Wales' sustainability goals. Lammas will facilitate a research team to conduct and evaluate the project's success. The research will primarily be concerned with:

1. The settlement's ecological footprint.
2. The settlement's impact on the land in terms of habitat, biodiversity and soil quality.
3. The impact of the settlement on the local economy and community.

Research will be published through a number of media to maximize accessibility and stimulate scrutiny lay, policy, planning and academic stakeholders. A monitoring report will be produced on an annual basis. In addition to this Lammas will conduct specific research projects so that the project can be used as a model for learning and

the on-going development of best practice.

Lammas actively supports research on the project. Please refer to the Lammas website for a list of research publications:

<http://www.lammas.org.uk/lowimpact/index.htm#campaign>

This report will be published online.

9. The development will embrace and support the Welsh language.

Lammas recognises the importance of the Welsh language and culture in North Pembrokeshire and sees low impact development as supporting this local language and culture, united by a common connection with the land and local rural knowledge and traditions. Lammas has a Welsh Language policy to ensure its support of the Welsh Language. Whilst several proposed residents already speak or are learning Welsh, most intend to learn once they move onto the site and Lammas aims, over time to become fully bi-lingual.

Signage around the Tir y Gafel site is bilingual.

Of the 17 adult residents, 9 attend Welsh classes.

Of the 15 children resident at Tir y Gafel, 7 attend Welsh- medium schools.

On open days all feedback forms are bilingual and leaflets are offered in English and Welsh

On the Lammas website, those pages considered to be 'key' are available in Welsh.

Appendix 1, local newsletter

Dear Neighbours.....

We'd like to take this opportunity to introduce ourselves and to update you on what's been happening at Tir-Y-gafel. There are currently four of the nine families living here. They are:

- Simon and Jasmine and their two children on plot 7. Their children attend the Steiner kindergarten at Nant-Y-Cym.
- Cassie, Nigel and their three children on plot 8. The younger children attend Ysgol Clyddau at Tegryn and Ted attends Dyffryn Taf in Whitland.
- Jane, Andy and their son Jake on plot 1. Jake has also joined Dyffryn Taff in the sixth form. He is delighted to have been chosen as one of six children to represent the school on an engineering project.
- Ayres, Marianne and their three children on plot 3. Their oldest daughter also attends the Steiner Kindergarten.

Two of the other families, the Wimbushes, plot 6 and Melissa and Matthew, plot 5, already lived locally so have been working on their plots but are not yet living here. Both families will be resident on their plots by June.

Kit and Saara, plot 9, have been studying in Finland and are due back any day now.

The Wostenholmes, plot 2, are joining us at Easter. Their three children will also attend Ysgol Clyddau.

We have a vacancy for Terrace plot 4 and are currently advertising for the ninth plot holder. We hope that now we have planning permission we may attract a local family.

Six of the adults are learning Welsh, most attending classes at Crymch. Jane and Jasmine attend most of the events for learners and are grateful to the locals in Crymch for their patience and support as they try and communicate in Welsh!

We are coordinating school runs and deliveries to minimise traffic. Cassie and Hoppi, whose children attend Ysgol Clyddau, are about to begin a gardening group with the children. We are keen to develop links with local schools further and a school visit to Tir-Y-Gafel is planned for June this year.

So, how have things changed at Tir-Y-Gafel?

Our entrance way and track is nearing completion and other hard standing for workshops and barns is in progress. We have been fortunate to source all the stone from site and to have had the expertise of Glynn Jones and Andrew and John Peregrine from Hermon to carry out this work.



So far about 5000 trees have been planted to create windbreaks, micro climates for growing, wildlife habitats and new coppice for firewood. During the winter we began restoring the hazel and ash coppice in the woodland. The thinning of the larch plantation is continuing to provide timber for building and the area will be regenerated with native, broadleaf species.

One small dwelling is nearly finished and two others are now on the way. Two of the plot holders now have poly tunnels and are busy sowing seeds for early crops.



On a smaller scale, everyone has been very busy on their individual plots. Most now have their own compost toilets. These are a great way of composting human solid waste. Adding carbon rich material such as, wood shavings, straw or wood ash neutralises any odours and helps with decomposition. Those of you who listen to Gardener's Question time will have heard Bob Flowerdew state that

human liquid waste is much better added to the compost heap!

Horticultural work done over the winter has included planting soft and top fruit, making vegetable beds and creating ponds and footpaths. We are very keen to tap into local expertise and knowledge of what will grow here. We are also grateful for the advice of local nurseries such as Ty Rhos trees and Dolau-Hirion Fruit trees, where hedging and fruit trees, suitable for the conditions here, have been purchased.



You may have heard that Lammas, along with the Cwm Arian Wind project in Llanfyrnach, has received generous funding from the Low Carbon Communities Challenge to pilot solutions to climate change and rural challenges.

We are seeking to promote an alternative lifestyle and approach to resource distribution by providing an on-the-ground example of a permaculture eco-hamlet. The model has been designed from the outset to be replicable at both a micro and a macro level. We understand that this way of life is not for everyone but hope that others will take some of the sustainable solutions we promote and adapt them to suit their individual situations.

As part of the project, within the area of Hermon, Glogue and Llanfyrnach, Cwm Arian is now able to distribute energy monitoring display units for free to each household (normally £25). We may be able to offer something similar to locals in Glandwr, Rhydowen and Hebron. We would welcome local views on this or anything else you feel we could do to benefit the local community. Please see contact details below. Of course, you are always welcome to come and speak to us in person at Tir-Y-Gafel!

Here, at Tir-Y-Gafel, works are underway, using local contractors to build a community centre. This will include a health and hygiene certified kitchen that local producers can use to process cheese, pickles, vegetables and so on. The centre, The Hub, will also have a small shop to sell local produce and crafts. There will also be a hall for community use.

These facilities are due to be open from May 2011 and we sincerely hope that they will be well used by people in the area. We will keep you updated as The Hub progresses.

WAG minister, Jane Davidson made an informal visit to both projects on 17th February. She came to see how Lammas is progressing for herself and discuss the new 'One Planet Development' planning initiative. This radical new planning initiative, due out this summer as part of the TAN6 document, will create a Wales-wide planning policy for low-impact development.



Jane Davidson talks with Simon Dale (Site Manager - Lammas), Dave Owen (Project Manager – Hub) and Graham Williams (Electrician – Hub)

From April, we are planning to hold an open day once a month. Visitors are asked, to walk, ride or use public transport where ever possible. The first events will be used to monitor where people are travelling from so that in the future we can plan a minibus service to minimise traffic. The visits will include a guided tour of the site and a chance to meet residents and see their individual plots.

The Guided tour dates are April 10th, May 5th and June 6th. We would be delighted to welcome families and friends from Glandwr and have discussed the possibility of holding a separate Open Day specifically for local people. Please let us know if this is something you would like us to do. We can be contacted by email:

Jane.wells@lammas.org.uk

Or phone: Jane 07773682688 or Jasmine 07773372280

Annwyl Gymdogion.....

Hoffem fanteisio ar y cyfle hwn i gyflwyno'n hunain ac i roi diweddariad i chi am yr hyn sydd wedi bod yn digwydd yn Nhir-Y-gafel. Ar hyn o bryd, mae naw teulu yn byw yma, sef:

- Simon a Jasmine a'u dau o blant ar lain 7. Mae eu plant yn mynychu ysgol feithrin Steiner yn Nant-Y-Cwm.
- Cassie, Nigel a'u tri o blant ar lain 8. Mae'r plant iau yn mynychu Ysgol Clyddau yn Nhegryn ac mae Ted yn mynychu Ysgol Dyffryn Taf yn Hendy-gwyn ar Daf.
- Jane, Andy a'u mab Jake ar lain 1. Mae Jake wedi dechrau mynychu chweched dosbarth Ysgol Dyffryn Taf hefyd. Mae wrth ei fodd gan ei fod wedi cael ei ddewis fel un o chwech disgybl a fydd yn cynrychioli'r ysgol mewn prosiect peirianeg.
- Ayres, Marianne a'u tri o blant ar lain 3. Mae eu merch hynaf yn mynychu Ysgol Feithrin Steiner hefyd.

Roedd dau o'r teuluoedd eraill, teulu Wimbush, llain 6 a Melissa a Matthew, llain 5, eisoes yn byw yn yr ardal, felly maent wedi bod yn gweithio ar eu lleiniau ond nid ydynt yn byw yno eto. Bydd y ddau deulu yn byw ar eu lleiniau erbyn mis Mehefin.

Mae Kit a Saara, llain 9, wedi bod yn astudio yn y Ffindir ac fe fyddant yn dychwelyd yn fuan iawn.

Bydd teulu Wostenholme, llain 2, yn ymuno gyda ni yn ystod y Pasg. Bydd eu tri o blant yn mynychu Ysgol Clyddau hefyd.

Mae gennym le gwag ar gyfer llain 4 Teras, ac ar hyn o bryd, rydym yn hysbysebu am y nawfed deiliad. Gan ein bod wedi sicrhau caniatâd cynllunio, mawr obeithiwn y byddwn yn gallu denu teulu lleol.

Mae chwech o'r oedolion yn dysgu Cymraeg, gyda'r rhan fwyaf ohonynt yn mynychu dosbarthiadau yng Nghrymmych. Mae Jane a Jasmine yn mynychu mwyafrif y digwyddiadau a drefnir ar gyfer dysgwyr ac maent yn ddiolchgar i'r bobl leol yng Nghrymmych am eu hamynedd a'u cymorth wrth iddynt geisio cyfathrebu yn Gymraeg!

Rydym yn cydlynu teithiau i'r ysgol a theithiau dosbarthu er mwyn lleihau'r traffig gymaint ag y bo modd. Mae Cassie a Hoppi, y mae eu plant yn mynychu Ysgol Clyddau, ar fin sefydlu grŵp garddio gyda'r plant. Rydym yn awyddus i feithrin

cysylltiadau pellach gydag ysgolion lleol a bwriedir trefnu ymweliad ysgol i Dir-Y-Gafel ym mis Mehefin eleni.

Felly, sut mae pethau wedi newid yn Nhir-Y-Gafel?

Mae'n mynedfa a'n llwybr ar fin cael eu cwblhau ac mae'r gwaith yn parhau i greu llawr caled ar gyfer gweithdai ac ysguboriau. Rydym wedi bod yn ffodus i sicrhau'r holl gerrig o'r safle, gan fanteisio ar arbenigedd Glynn Jones ac Andrew a John Peregrine o Hermon, a fu'n cyflawni'r gwaith hwn.

Hyd yn hyn, mae oddeutu 5000 o goed wedi cael eu plannu er mwyn greu atalfeydd gwynt, microhinsodau ar gyfer tyfu, cynefinoedd bywyd gwyllt a choedlan newydd ar gyfer coed tân. Yn ystod y gaeaf, gwnaethom ddechrau ar y gwaith o adfer y goedlan coed cyll ac ynn yn y coetir. Mae'r broses o deneuo'r blanhigfa larwydd yn parhau i ddarparu pren at ddibenion adeiladu, ac fe fydd yr ardal yn cael ei hadfywio gan ddefnyddio rhywogaethau llydanddail brodorol.

Mae un annedd bach ar fin cael ei gwblhau ac mae'r gwaith wedi cychwyn ar ddau arall. Mae gan ddau o'r deiliad lleiniau dwnelau polythen erbyn hyn, ac maent yn brysur yn tyfu hadau ar gyfer cnydau cynnar.



Ar raddfa lai, mae pawb wedi bod yn brysur iawn ar eu lleiniau unigol. Mae gan y rhan fwyaf eu toiledau compostio eu hunain erbyn hyn. Mae'r rhain yn ffordd wych o gompostio gwastraff dynol solet. Mae ychwanegu deunydd sy'n llawn carbon megis naddion pren, gwellt neu ludw ynn yn niwtraleiddio unrhyw arogleuon ac mae'n helpu'r broses bydr. Os ydych yn gwrando ar raglen *Gardener's Question Time*, byddwch wedi clywed Bob Flowerdew yn datgan ei bod yn llawer gwell ychwanegu gwastraff dynol hylifol i'r domen gompost!

Mae'r gwaith garddwriaethol a wnaethpwyd dros y gaeaf wedi cynnwys plannu ffrwythau coed a meddal, creu gwelyau llysiau a chreu pyllau a llwybrau troed. Rydym yn awyddus iawn i fanteisio ar wybodaeth ac arbenigedd lleol am yr hyn a fydd yn tyfu yma. Yn ogystal, rydym yn ddiolchgar iawn am gyngor meithrinfeydd lleol megis Coed Tŷ Rhos a Choed Ffrwythau

Dolau-Hirion, lle'r ydym wedi prynu coed ffrwythau a phlanhigion gwrychoedd sy'n addas ar gyfer yr amodau fan hyn.



Efallai eich bod wedi clywed bod Lammas, ynghyd â phrosiect Gwynt Cwm Arian yn Llanfyrnach, wedi cael cyllid hael gan yr Her Cymunedau Carbon Isel er mwyn peilota datrysiadau ar gyfer y newid yn yr hinsawdd a sialensiau gwledig.

Rydym yn ceisio hyrwyddo ymagwedd a ffordd o fyw amgen wrth ddosbarthu adnoddau, trwy ddarparu enghraifft go iawn o eco-bentref permaddiwylliant. O'r cychwyn cyntaf, cynlluniwyd y model fel model y bydd modd ei gopio ar lefel ficro a macro. Deallwn nad yw'r ffordd yma o fyw at ddant pawb, ond mawr obeithiwn y bydd eraill yn manteisio ar rai o'r atebion cynaliadwy y byddwn yn eu hyrwyddo, ac yn eu haddasu i'w sefyllfaoedd unigol nhw.

Fel rhan o'r prosiect, yn ardal Hermon, Glog a Llanfyrnach, mae Cwm Arian yn gallu dosbarthu unedau arddangos sy'n monitro ynni yn rhad ac am ddim i bob cartref (£25 fel arfer). Efallai y byddwn yn gallu cynnig rhywbeth tebyg i drigolion lleol yng Nglandŵr, Rhydowen a Hebron. Byddem yn croesawu safbwyntiau lleol am hyn neu am unrhyw beth arall y gallem ei wneud er budd y gymuned leol yn eich barn chi. Gweler y manylion cyswllt isod. Wrth gwrs, mae croeso i chi ddod i siarad gyda ni wyneb yn wyneb yn Nhir-Y-Gafel unrhyw adeg!

Yma yn Nhir-Y-Gafel, mae'r gwaith wedi cychwyn i adeiladu canolfan gymunedol, gan fanteisio ar gcontractwyr lleol. Bydd hon yn cynnwys cegin a fydd yn meddu ar dystysgrif iechyd a hylendid, y bydd modd i gynhyrchwyr lleol ei defnyddio er mwyn prosesu caws, picls, llysiau ac ati. Yn ogystal, bydd Y Ganolfan yn cynnwys siop fach a fydd yn gwerthu cynnyrch a chrefftau lleol. Bydd yn cynnwys neuadd at ddefnydd y gymuned hefyd. Bydd y cyfleusterau hyn yn barod erbyn Mai 2011 a mawr obeithiwn y bydd pobl leol yn eu defnyddio. Byddwn yn rhoi'r wybodaeth ddiweddaraf i chi am y cynnydd o ran Y Ganolfan.

Ar 17 Chwefror, bu gweinidog LICC, Jane Davidson, yma ar ymweliad anffurfiol i weld y ddau brosiect. Daeth i weld sut y mae Lammas yn symud yn ei flaen ac i drafod y fenter gynllunio 'Datblygiad Un Planed' newydd. Bydd y fenter gynllunio radical a newydd hon, a fydd ar gael o'r haf eleni fel rhan o ddogfen TAN6, yn creu polisi cynllunio ar gyfer Cymru gyfan ynghylch datblygiadau bach eu heffaith.



Jane Davidson yn siarad gyda Simon Dale (Rheolwr Safle - Lammas), Dave Owen (Rheolwr Prosiect - Y Ganolfan) a Graham Williams (Trydanwr - Y Ganolfan)

O fis Ebrill, rydym yn bwriadu cynnal diwrnod agored unwaith y mis. Gofynnir i ymwelwyr gerdded, beicio neu ddefnyddio trafndiaeth gyhoeddus pryd bynnag y bo modd er mwyn cyrraedd yma. Defnyddir y digwyddiadau cyntaf er mwyn monitro o ble y bydd pobl yn teithio yma, er mwyn i ni allu trefnu gwasanaeth bws mini yn y dyfodol er mwyn lleihau'r traffig gymaint ag y bo modd. Bydd yr ymweliadau yn cynnwys taith o gwmpas y safle a chyfle i gyfarfod y trigolion ac i weld eu lleiniau unigol.

Cynhelir y teithiau ar 10 Ebrill, 5 Mai a 6 Mehefin. Byddem yn falch iawn o groesawu teuluoedd a ffrindiau sy'n byw yng Nglandŵr ac rydym wedi trafod y posibilrwydd o gynnal Diwrnod Agored ar wahân ar gyfer pobl leol yn benodol. A fydddech gystal â rhoi gwybod i ni os yw hyn yn rhywbeth yr hoffech i ni ei wneud. Mae modd cysylltu â ni trwy anfon e-bost at:

Jane.wells@lammas.org.uk

Neu ffoniwch: Jane 07773682688 neu Jasmine 07773372280

Appendix 2: Household need and 75% calculation

		plot a	plot b	plot c	plot d	plot e	plot f	plot g	plot h	plot i
Water spend	water use	145.6	145.6	145.6	182	109.2	72.8	182	36.4	145.6
Services	Tobacco	0.00	250.00	0.00	30.00	1040.00	0	0.00	0.00	0.00
	purchase of essential goods (phones, clothes, computers stationary etc)	650.00	750.00	1204.00	500.00	1275.00	200	800.00	150.00	1200.00
	Purchase and maintenance of vehicles	550.00	900.00	600.00	550.00	1500.00	200	600.00	140.00	1233.00
	Essential services (bank charges, phone charges, private health etc)	317.00	580.00	2897.00	390.00	507	100	600.00	170.00	1440.00
Food spend	Meat and meat products (excl. poultry)	664	156	0	0.00	1040	380	780	0	166
	Poultry meat and poultry meat products inc eggs	115.6	72	62.4	60	60	160	260	10	40
	Wild fish and fish products from catch	208	48	94.8	100	0	150	260	8	93
	Fruit and vegetables	1144	700	1137.48	1040	350	1200	520	300	1565
	Dairy products	748	529	805.68	480	350	500	1040	136	728
	Other food products (incl. sugar)	3360	2520	2960.44	2000	1720	600	2080	550	2664
	wood for heating/cooking	225	360	270	180	360		180	90	315
Travel spend	Vehicle fuel costs	2052	1200	1760	1200	1560	50	1000	100	2105
	Gas / oil / coal / electricity costs	1200	345	520	300	270	42	120	160	530
	Train + Plane + ferry + bus costs	103	320	100	700	780	1200	180	550	160
Tax	Council tax costs	300	535	603.81	600	600	0	600	300	600
	Lammas service charge	500	1000	1000	1000	1000	1000	1000	440	1000

Car tax etc	418	600	430	180	400	0	200	47	400
TOTAL HOUSEHOLD NEED (£/annum)	12700.2	11010.6	14591.21	9492	12921.2	5854.8	10402	3187.4	14384.6
Needs met from site									
Meat and meat products (excl. poultry)	0	0	0	0	0	0	0	0	0
Poultry meat and poultry meat products inc eggs	187.2	0	0	0	165	0	400	0	220
fish and fish products from catch	0	0	0	0	0	0	0	0	0
Fruit and vegetables	132	600	10	200	960	0	1200	0	100
Dairy products	0	0	0	0	0	0	0	0	0
water from site	145.6	145.6	145.6	182	109.2	72.8	182	36.4	145.6
wood value from site	0	360	0	180	360	0	180	0	160

Income from land based livelihood		141.19	300	100	573.58		673	100	
description of livelihood		plant sales	wild food foraging	hay	salad and veg		willow sales	hay	
description of livelihood		green manure seeds	hay		hay		veg sales		
description of livelihood		willow sales					egg sales		
TOTAL LAND BASED PRODUCE (£/ annum)	464.8	1246.79	455.6	662	2167.78	72.8	2635	136.4	625.6
% of needs met from land based activity	3.65	11.32	3.12	6.97	16.77	1.24	25.33	4.27	4.34

Note: Some figures for plot f have been estimated by Lammas (highlighted)

Appendix 3: Ecological Footprint calculations

	plot a 2010	Plot b 2010	plot c 2010	plot d 2010	plot e 2010	plot f* 2010	plot g 2010	plot h 2010	plot i 2010
Personal Transport	0.112	0.044	0.047	0.028	0.059	0.034	0.045	0.010	0.080
Domestic Fuel and Land Use	0.168	0.168	0.168	0.168	0.168	0.168	0.168	0.168	0.168
Meat and meat products (excl. poultry)	0.127	0.029	0.000	0.000	0.262	0.144	0.118	0.000	0.028
Poultry meat and poultry meat products	0.019	0.012	0.008	0.008	0.013	0.053	0.034	0.008	0.006
Wild fish and fish products from catch	0.042	0.010	0.015	0.015	0.000	0.060	0.042	0.006	0.017
Fruit and vegetables	0.533	0.325	0.423	0.387	0.217	1.114	0.193	0.557	0.646
Dairy products	0.131	0.093	0.113	0.067	0.082	0.175	0.146	0.095	0.113
Other food products (incl. sugar)	0.296	0.222	0.208	0.141	0.202	0.106	0.146	0.194	0.208
Tobacco	0.000	0.017	0.000	0.002	0.092	0.000	0.000	0.000	0.000
Furniture; furnishings; carpets etc.	0.059	0.068	0.087	0.036	0.154	0.036	0.058	0.054	0.097
Purchase of vehicles	0.018	0.030	0.016	0.015	0.066	0.013	0.016	0.018	0.036
Operation of personal transport equipment	0.045	0.053	0.019	0.011	0.024	0.014	0.018	0.004	0.032
Railway transport	0.003	0.016	0.006	0.027	0.139	0.027	0.011	0.189	0.008
Road transport	0.000	0.000	0.001	0.001	0.193	0.013	0.000	0.077	0.000
Air transport	0.000	0.000	0.000	0.000	0.000	0.120	0.000	0.000	0.000
Water transport	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Education	0.048	0.072	0.000	0.096	0.000	0.000	0.002	0.022	0.001
Catering services	0.007	0.036	0.018	0.006	0.010	0.000	0.032	0.024	0.047
Water supply and miscellaneous dwelling services	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040
Insurance	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033

other services from lammas charge	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027
Accommodation services	0.000	0.004	0.008	0.000	0.000	0.000	0.000	0.014	0.018
Electricity; gas & other fuels	0.008	0.008	0.012	0.011	0.016	0.013	0.011	0.010	0.006
Maintenance and repair of the dwelling	0.083	0.188	0.100	0.166	0.360	0.000	0.067	0.012	0.318
Social protection	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Other services nec	0.011	0.020	0.081	0.011	0.024	0.007	0.017	0.024	0.045
Government	0.444	0.444	0.444	0.444	0.444	0.444	0.444	0.444	0.444
Capital investment	0.474	0.474	0.474	0.474	0.474	0.474	0.474	0.474	0.474
Other final demand	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
	2.74	2.45	2.36	2.23	3.12	3.13	2.16	2.52	2.91
Number of people:	4	4	5	5	3	2	5	1	4
Footprint of household	10.97839	9.794241	11.81886	11.14584	9.346205	6.260762	10.78508	2.521829	11.6314

* Disclaimer: The data for plot f cannot be verified for accuracy due to the lack of information provided

Note: The highlighted figures (plot f) are based on Lammas estimates rather than from data provided by the residents.

Indicator: Total Footprint

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Appendix 4: Traffic data

Lammas		Plot a		Plot b		Plot c		Plot d		Plot e		Plot f		Plot g		Plot h		Plot i		TOTALS		
Week ending	Lammas	Postman	Residents	Visitors	Residents	Visitors	Residents	Visitors	Residents	Visitors	Residents	Visitors	Residents	Visitors	Residents	disability	Visitors	Residents	Visitors		Residents	Visitors
13/09/2009	4	12	0		5	4	2		10	2	13	2	4	4	22					8	4	96
20/09/2009		12	0		10	8	2		8	4	18		4	4	24					14	4	112
27/09/2009	4	12	0		6	23			18	3	22		4	4	24		4			2		126
04/10/2009		12	0		14	14	2		11	1	18	2	4	4	28		2			11	4	127
11/10/2009	2	12	0		4	17			8	2	16	2	4	4	28					14	10	123
18/10/2009	2	12	0		8	14	4	4	12	0	19		4	4	34		8			4		129
25/10/2009		12	0		6	18	6		9	4	1		4	4	14		10			22	2	112
01/11/2009	4	12	0		7	16			15	4	16	2	4	4	28		4			23	4	143
08/11/2009		12	0		8	8			8	4	28		4	4	26					19		121
15/11/2009	2	12	0		10	20			10	2	28	2	4	4	32		5			38	8	177
22/11/2009	4	12	0		8	14			10	2	19		4	4	28					20	6	131
29/11/2009	2	12	0		8	4			6	0	20		4	4	24		1			18	2	105
06/12/2009		12	0		6	0			10	1	22		4	4	28					26	2	115
13/12/2009	8	12	0		8	4			8	4	22	2	4	4	28		22			26		152
20/12/2009	4	12	2		2	0			3	0	20		4	4	24					20		95

27/12/2 009		12	0		0	0			0	0	3		4	4	14					12		49
03/01/2 010	8	12	0		0	2			1	0	3		4	4	14					16		64
10/01/2 010		12	0		0	2			0	2	7		4	4	14					20		65
17/01/2 010	2	12	8		2	0			2	0	19		4	4	14					15		82
24/01/2 010		12	0		7	4			6	2	24		4	4	14					17		94
31/01/2 010	2	12	10		10	4	2		10	2	32		4	4	14					24	2	132
07/02/2 010		12	7		7	4			9	4	30	2	4	4	14		2			36	2	137
14/02/2 010	4	12	8		5	4			7	8	24	4	4	4	14					30		128
21/02/2 010	2	12	6		6	6	6		10	0	10	10	4	4	14					20		110
28/02/2 010	2	12	4		7	6			6	4	28		4	4	14		2			20		113
07/03/2 010	10	12	10		9	8			16	4	28	2	4	4	28					24	4	163
14/03/2 010	8	12	8		16	1			14	10	22	2	4	4	28					18	2	149
21/03/2 010	2	12	18		18	3			9	4	32	2	4	4	28		2			20		158
28/03/2 010	2	12	12		8	9			13	2	23	2	4	4	28					16		135
04/04/2 010	4	12	12		8	14			6	10	15	8	4	4	24					20	2	143
11/04/2 010	64	12	10		4	4	4		12	4	22	4	4	4	28					37	10	223
18/04/2 010	8	12	16		10	4	20	2	6	0	14		4	4	28					34	4	166
25/04/2 010	2	12	6		10	2	18	2	12	2	24	2	4	4	28					20	4	152
02/05/2 010	56	12	8		8	16	30	4	14	6	15	4	4	4	28					26	2	237

09/05/2010	4	12	6		8	7	22	2	14	0	29		4	4	24					26	6	168
16/05/2010	8	12	10		10	3	26	2	12	0	26		4	4	28					30	2	177
23/05/2010	10	12	10		8	4	26	2	5	0	26		4	4	24		2			28		165
30/05/2010	20	12	16		6	6	26	4	13	1	28	5	4	4	28		4			24	6	207
06/06/2010	130	12	14		8	6	12		4	3	17	4	4	4	28		4			30	2	282
13/06/2010	30	12	16		8	4	26	4	14	6	24	4	4	4	28		4	0	4	24	4	220
20/06/2010	18	12	20		6	10	24	2	16	0	24	6	4	4	24		4	2	0	26	3	205
27/06/2010	17	12	32	6	2	8	23	2	18	4	28		4	4	28		2	1	0	24	8	223
04/07/2010	18	12	36	4	4	9	20	2	14	0	30		4	4	28			0	0	26	4	215
11/07/2010	2	12	22	8	3	2	20	2	16	4	28		4	4	28			2	0	22	4	183
18/07/2010	30	12	24	2	4	13	26	2	9	0	28		4	4	28			0	6	24	4	220
25/07/2010	10	12	18	6	0	13	12		7	2	12		4	4	10			0	0	20	6	136
01/08/2010	12	12	12	4	2	6	16	2	10	3	8	2	4	4	10			0	0	12	14	133
08/08/2010	134	12	14		2	10	8		4	6	10	4	4	4	10			7	6	10	6	251
15/08/2010	10	12	8		2	8	14		11	10	8	2	4	4	10			7	4	14	10	138
22/08/2010	18	12	12	10	2	13	14		5	10	16	8	4	4	10		4	7	2	16	12	179
29/08/2010	14	12	18	2	2	6	10		6	18	12		4	4	10		4	7	6	18		153
05/09/2010	20	12	30	8	2	9	8		8	10	8	2	4	4	14	20		4	0	8		171
12/09/2010	78	12	30	6	6	4	12		14	18	10	2	4	4	14	20	2	5	2	29		272

19/09/2 010	40	12	28	2	5	2	28	4	16	12	26		4	4	14	20	2	3	0	40		262
26/09/2 010	28	12	26	8	12	8	12		18	10	26		4	4	14	20		3	0	18		223
03/10/2 010	30	12	28	6	12	10	22		16	12	22	6	4	4	14	20		4	2	26		250
10/10/2 010	20	12	28	6	12	8	24	4	20	6	26	4	4	4	14	20	4	4	2	30	6	258
17/10/2 010	18	12	22	4	5	8	26	4	18	3	26	2	4	4	14	20	4	4	0	38	7	243
24/10/2 010	18	12	24	28	6	10	20		3	10	20	6	4	4	14	20	12	4	0	21	7	243
31/10/2 010	14	12	28	4	8	13	6		5	10	8	4	4	4	8		4	0	0	12	2	146
07/11/2 010	22	12	26	6	11	5	26	2	12	4	22	4	4	4	14	20		4	2	30	6	236
14/11/2 010	18	12	26	4	16	6	26	2	13	12	28	2	4	4	14	20	2	4	0	20	13	246
21/11/2 010	10	12	12	2	10	2	22	2	17	15	20	4	4	4	14	20	2	3	0	18	4	197
28/11/2 010	4	12	14	2	14	2	26	4	10	8	20	2	4	4	14	20	2	4	0	14	13	193
05/12/2 010	10	12	12	4	6	7	20	2	10	10	6	2	4	4	14	20	4	6	0	17	10	180
12/12/2 010	6	12	8		16	4	22	2	11	2	24	4	4	4	14	20	4	5	0	17	8	187
19/12/2 010		8	10		10	6	24	2	9	0	24	1	4	4	14	20		0	0	4		140
26/12/2 010	2	12	6		2	0	1		0	0	6		4	4	6			4	0	10	2	59
02/01/2 011		12	24		5	4	1		3	0	6		4	4	8			0	0	12		83
09/01/2 011	2	12	24	4	6	18	22		6	2	16		4	4	14	20		6	2	6	2	148
16/01/2 011	2	12	16		16	0	22		12	2	26		4	4	14	20		7	0	10	2	147
23/01/2 011	10	12	18		15	6	20		16	0	24	2	4	4	40	20	10	4	0	8	2	195

30/01/2011	12	12	26	4	14	6	20		16	1	28	2	4	4	14	20		6	0	12	4	185
Weekly Average																						162.
																						781

Note: The figures for plot f have been estimated by Lammas