



Llangattock Green Valleys newsletter

Issue 110
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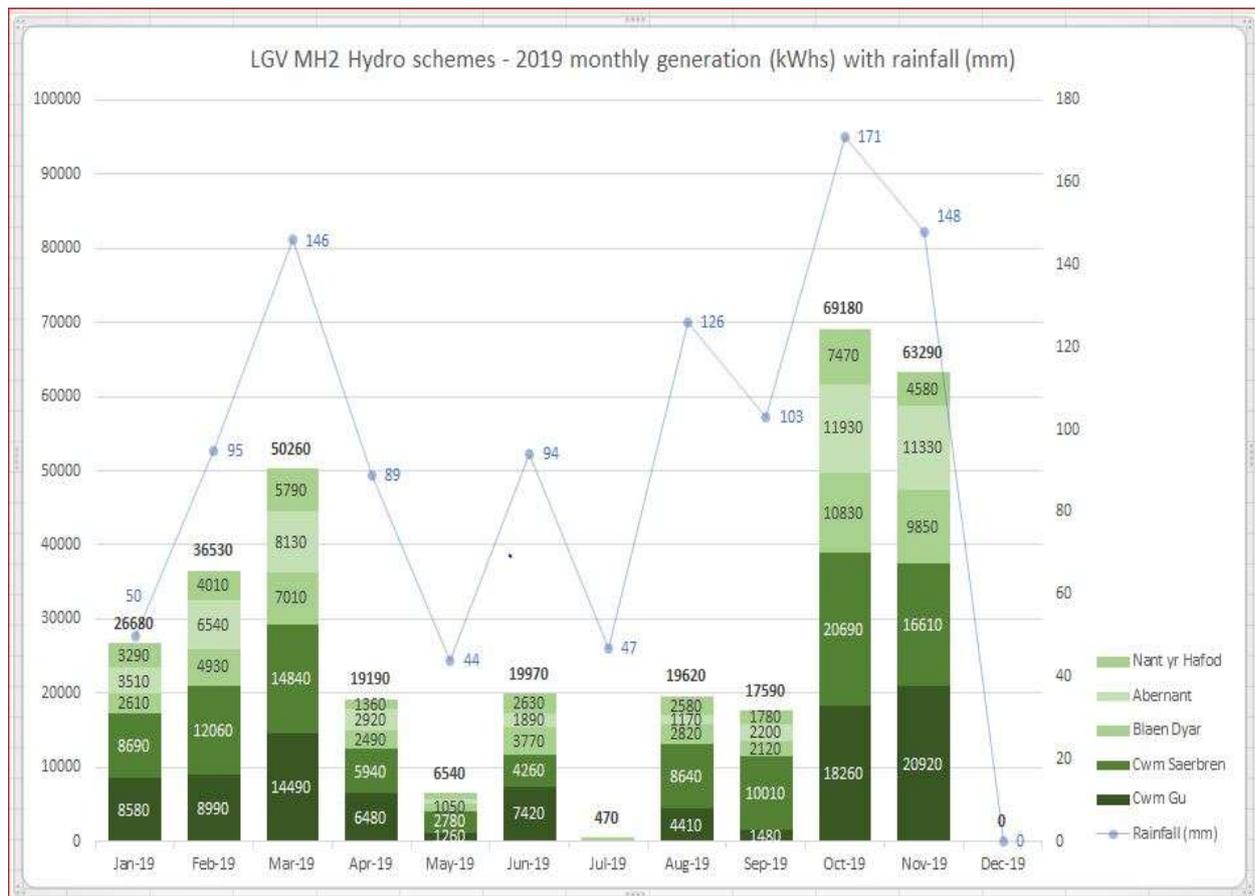
<http://www.llangattockgreenvalleys.org/>

ENERGY GENERATION PROJECTS

By Steve Sharp

Hydro scheme update

Since the beginning of October, as those of you living in Wales will know, we've had a lot of rain and this has resulted in consistently high amounts of electricity generation at our five hydro schemes. The first half of December has been wet as well, so we are on target for a record generation and income quarter. See below for a graphic depiction of generation and rainfall this year to date (thanks to my son-in-law-to-be Tom in NZ for his graphic wizardry!).



As is usually the case at times of high rainfall and therefore constant operation rather than lots of stops and starts, all the hydro schemes have been running smoothly this quarter and we have experienced few problems.

On behalf of the directors, I'd like to wish all Members, volunteers and supporters of our LGV MH-2 Co-operative a peaceful and enjoyable Christmas and a Happy New Year.



WE DID IT - THE BIG TREE PLANTING EVENT!!

By Jackie Charlton



Well, we did it, planted over 100 trees in less than an hour. It was our biggest community event yet and great to see so many different faces. The weather was great, perfect for planting. We



Planting started

shall see the results in about 5 years' time! But during that time these little trees will capture carbon far more effectively than the much older and mature trees on site. Young trees are 25% better at absorbing carbon dioxide, so planting 100 trees where there were none is going to contribute

to a better environment. This was repeated hundreds of times across the UK on 30th November as part of the Tree Charter Champions community engagement for the Woodland Trust. We had over 30 visitors on the day of all ages and many had never been to the site before. LCW was delighted to participate in the BIG CLIMATE FIGHTBACK with the Woodland Trust.



You can't plant trees without tea and cake

Water Logged - but not flooded!

We often find it difficult to allocate jobs this time of year, especially when the ground is so water logged, but here is one of our volunteers cleaning out a water course which runs from an underground stream. We have several of these streams across the woodland, which is why it gets the name Alder Carr, i.e. a wet woodland of Alder. The small streams make this an important environmental site for biodiversity and enable Alders to keep their roots wet, which they thrive on. The unique fabric of the Alder means it can absorb moisture at an amazing rate, which is why it was used to make clogs for workers to wear in cotton mills, because the factory floor had to be kept wet. It is important to make sure these streams don't get clogged up and become stagnant.



Bob's Bee Notes ~ December 2019

In the past I have mentioned about using the monitoring board at the base of the hive to get an idea of what is happening inside the brood nest. Waste falls onto the white monitoring board and you measure the number of Varroa, Wax Moth and other debris. One of the colonies I have access to still had immature Varroa mites falling through the mesh floor along with dead adult mites. When the Queen bee was still in lay, at least three weeks before I examined the floor debris, Varroa were hatching and maturing within that timeframe. To take accurate readings of infestation, the monitoring board has to be cleaned one day and examined the next, as the cell that the mites have come from will have been cleaned out as soon as the new young bee emerges from its cell. Only worker bee eggs would have been laid at this time of year (no Virgin Queens or drones about) and the cell would be capped over for pupation about eight days after a worker egg is laid. This is when the pregnant Varroa mite hides under the pupae and starts its own life cycle over the following two weeks, until the new bee emerges along with some of the new Varroa family. As we are at the time of year



when Queen Bees have ceased laying, the Varroa mite also will have to stop its reproduction cycle but can survive for months by crawling under a bee's scales, where it can feed off the adult bee's blood known as haemolymph. For several years I have been examining the dead mites found on the monitoring board during the bees' dormant winter months, using a low powered microscope. I can see if the mites have any signs of damage caused by a bee's mandibles which will scratch and damage the mites. This damage could be caused by bees attacking the mites when they are thought to be an invader or possibly just good housekeeping bees finding debris and cleaning it out of the hive. Drones raised from bees that attack Varroa mite in an infested colony will then be responsible for spreading strong genes throughout the area when they mate with virgin Queens. Some beekeepers that have expertise with instrumental insemination can take the chance mating out of the equation by collecting mature drones from the mite attacking colony and use the semen to impregnate a Virgin Queen. As it is hibernation time of year for the bees and we don't open the hives, I thought some technical background in defeating the Varroa mite using intervention would be of interest this month, when the evenings are dark and the end of year break looms.

Happy Christmas to all

Bee Bob



LCW Trustees are justly proud of the commitment and enthusiasm of all our volunteers. We meet regularly every Tuesday and you can find information on where and when we meet on our website www.lcwg.btck.co.uk. If you are interested in environmental management, green wood crafts or bee keeping, then please do get in touch. Please email Eric Gower eric.gower@gmail.com for a membership form.



LGV VOLUNTEERS NEEDED PLEASE! CAN YOU HELP?

We are looking for a number of people who would like to get involved at Director and non-Director level. Please get in touch with Andrew Fryer if you would like to explore the ways in which you can help: andrewfryer70@gmail.com. You can meet our Board of Directors [here](#).

We'd also like to get a few more volunteers involved in monitoring the hydro schemes and taking readings. This would only take around an hour or so once every 6-9 weeks. If you are interested in helping, please contact Simon Walter admin@llangattockgreenvalleys.org.



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