

January 2019

For the latest news and more information, please see our website

If you would like your home to be thermal imaged in February, book it NOW!

Would you like a warmer home, lower heating bills, and a smaller carbon footprint? Or have you made some improvements and would like to check that they are effective?

Thermal imaging is a tool to find where heat is escaping from your home, and Sustainable Blewbury volunteers have been doing this every winter since 2009 – we have imaged well over 200 homes in Blewbury.

We are borrowing the VWHDC camera in February this year, and we have room for only a few more customers for our annual FREE thermal imaging programme.

We try to operate on a first booked, first done basis, so If you'd like your home thermally imaged in February, you should email us SOON at <u>info@sustainable-blewbury.org.uk</u> or phone Jo Lakeland (850490).

'Climate for electric cars?', by Anthony Simpson

A talk in Blewbury Manor Barn, on Monday 25th February at 8.00 pm



With concerns in our towns and cities about air quality, as well as the growing threat of climate change, the shift away from diesel and petrol towards electric vehicles has started. Are they really more environmentally friendly? Can our electricity system cope? Find out about the latest developments, and perhaps consider whether you are ready to go electric!

Tickets £6 (including a glass of wine) at the Post Office in January, or on the door (if not sold out).

Harwell Repair Cafe, Saturday 16th February 2–5 pm Harwell Church

Sustainable Didcot is working with Harwell and Chilton Churches, Harwell Scouts and Element Six to bring Repair Cafes to Harwell, and this is the first one. See below.

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Local sustainability news and events

By Jo Lakeland

Repair Cafes



Repair Cafes are not a new idea: they have been held in Europe and in the UK for years, and the idea is spreading rapidly.

Repair Cafes are community events which match people with broken household, electrical and electronic items with skilled volunteers who like fixing things. The purpose of the events is to bring about a shift in consumerism and the way we view normal household items like toasters and radios as throw-away, but there is also a normal cafe where you can sit and enjoy your hot drink and watch what is going on all around you.

I took a gentleman from Blewbury to a Repair Cafe run by <u>Sustainable Didcot</u>, and it was a real eye opener. An electronics enthusiast examined his good quality but old radio cassette player that he used to play the cassette tapes he had recorded himself, some of them in the 1960s. The electronics expert did not have the parts to repair it, but he found the fault and suggested where it could be taken to be fixed professionally. And the advice was all free.

At that repair cafe I saw favourite toys being mended, a queue for electrical safety testing and repairs to things like kettles, toasters, sewing machines and table lamps *and* a queue to have garden

No. 30



Repair Ca

tools repaired or sharpened. Advice on simple computer problems and help with sewing problems and upcycling was also available, as was help with woodwork. Obviously, what is being done depends on the skills of the volunteers at any particular event.

The focus is on skill-sharing and building community as people are invited to learn how to fix their broken item alongside the repairers instead of throwing them away. The increase in the number of electrical items being discarded is a growing issue, both in Oxfordshire and globally, and repair cafes are an important way of keeping electrical items safe, giving them a longer life, reducing carbon *and* the owners avoiding the cost of replacement. See <u>bit.ly/2j62xYL</u> for information about Repair Cafes worldwide and how they started.

Read about Sustainable Didcot Repair Cafes at <u>bit.ly/2G0QCJc</u>.

Local repair cafes – when and where?

Harwell Repair Cafe – Saturday 16th February, 2–5pm, Harwell Church

Sustainable Didcot is working with Harwell and Chilton Churches, Harwell Scouts and Element Six to bring Repair Cafes to Harwell!

Didcot Repair Cafe – Saturday 16th March, 2–5pm, Didcot Civic Hall

Bring your broken electricals, household items and clothes, blunt tools, and clocks, watches and mechanical items, and fix them with the help of expert volunteers! Tea, coffee and cake are available. *Didcot Repair Cafe runs every two months on the 3rd Saturday of the month.* Read more about Sustainable Didcot Repair Cafes here: <u>https://bit.ly/2WqktAD</u>

Sustainable Wallingford Repair Cafe – Saturday 6th April, 10 am–1 pm, Centre 70, Kinecroft, Wallingford, then more approximately every three months (6 July, 5 September).

Abingdon Carbon Cutters – they have arranged several meetings about holding Repair Cafes, and have had enthusiastic response, so watch this space! If you want to help in any way (organising, finding a venue, advertising, setting up, - not to mention fixing things), contact Abingdon Carbon Cutters by emailing Sally Reynolds, ACC Secretary at <u>carbon.cutters@gmail.com</u>.

And in Oxford – Broken Spoke open bicycle workshops 4 times every week – learn to fix your bike!



"However big or small your bikerelated issues are, get yourself down to our open workshop.

"We've got a fully stocked community tool chest (so you don't have to spend a fortune on a tool you'll use twice), lots of lovely bike stands and friendly mechanics to give you a hand!

We keep a stock of all the parts that wear out regularly and we also sell second hand parts, so if you're looking for a deal (or something slightly rare), we might have just the thing!"

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Food Waste: the facts

All of the information below and much of the article that follows is taken from the autumn 2018 edition of Clean Slate, the quarterly magazine published by the Centre for Alternative Technology (CAT).

- The UN Food and Agriculture Organisation estimates that each year around *one third* of all food produced for human consumption worldwide is lost or wasted.
- This means that wasted food uses about 30% of the Earth's agricultural land area. Worldwide, the carbon footprint of uneaten food is estimated at *3.3 gigatonnes* (one thousand million

metric tonnes) of CO_2 equivalent, making food wastage the third worst emitter after the USA and China.

- In Europe and North America the average person wastes 95–115 kg food a year. In sub-Saharan Africa and southern Asia the figure is just 6–11 kg.
- Total annual food waste in the UK (households, shops, food manufacture, hotels, restaurants, etc.) is estimated at 10 million tonnes, costing the UK around £17 billion each year.
- The cost to an average UK household is £470 per year.



Seeing all these figures together is alarming, and it demonstrates that avoiding food waste also reduces the amount of carbon we get through in our everyday life.

Sources: global facts from FAO (2013) "Food Wastage Footprint: Impacts on Natural Resources" <u>bit.ly/1kMi2QN</u>, and FAO "Save Food: Global Initiative on Food Loss and Waste Reduction – key findings" <u>https://bit.ly/2gB6Ooj</u>. UK facts are from WRAP (2017):"Estimates of Food Surplus and Waste Arising in the UK" <u>https://bit.ly/2kAL6hW</u>.

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The following article is about reducing food waste, but in an unexpected way.

Stopping the rot: in defence of food packaging

By Jo Lakeland

We have become aware of the damage being caused to the environment, and particularly the marine environment, by discarded plastic packaging. And it is only two months since I wrote an article for this newsletter entitled "Plastics – what we can we do?", which is still valid. But in our quest to prevent the entanglement of wildlife in plastic, could we be creating a bigger problem?

Consider why fresh food is wrapped in plastic. Anyone who is able to grow their own vegetables knows that the sooner they can be eaten after they have been picked the better they are. If we can't

grow our own, the next best choice is to buy locally from a farm or a small shop. Local supply chains allow the food to be kept fresh without a lot of packaging. But many of us have to rely on supermarkets for at least some of our fruit and veg, which may have been shipped halfway around the world (a long international supply chain). This food has more opportunity to be damaged and has to be packed to kept fresh.



What's all the plastic for?

The two most important functions of food packaging are to prevent physical damage to the product, and *to slow the rate of biological decay*. Physical damage results in produce that is unsaleable and ends up as waste. Packaging slowing the rate of biological decay is more complicated – fruit and veg are living plants and biological activity continues after they have been harvested. The main processes are respiration (the breakdown of sugars to release energy) and transpiration (water loss). These two processes have a large influence on how best to store different fruit and veg, and the producers realise this. For example:

- A shrink-wrapped cucumber will last about four times as long as a loose one.
- Bananas in a perforated plastic bag last twice as long as a loose bunch.
- Pears will keep 14 days longer in a plastic bag in the fridge than they will loose in a fruit bowl.
- Shrink-wrapped broccoli lasts twice as long as unwrapped broccoli.

Respiration rate	Examples
Low	Onions, garlic, sweet potato, apples
Medium	Cabbage, carrots, lettuce, potatoes, peppers, nectarines, pears, plums
High	Broccoli, mushroom, sweetcorn, Brussels sprouts, mangetout

Transpiration rate	Examples
Low	Pears, apples, plums, tomatoes, grapes, citrus fruit, onions, potatoes
Medium	Peaches, cabbage leeks,
High	Broccoli, mushroom, sweetcorn, Brussels sprouts, mangetout

Broadly speaking, fruit and veg with a low rate of respiration store well. Warmth causes a higher respiration rate, so produce is best stored in a cooler place. Water loss is also important, because fruit and veg are between 65% and 95% water. When the plant is growing water lost through transpiration is replaced by water sucked up by its roots. After it has been picked the plant has no way to replace the lost water, so it wilts/shrivels.

There has to be a balance: if packaging is completely sealed the transpired water will condense, providing ideal conditions for mould growth. But if the produce is stored unwrapped it will lose water very quickly and shrivel. The best compromise has to be reached, and the compromise can be quite complicated. For soft fruit the compromise is packaging with breather holes, so that some of the water will dissipate, but not so much that the produce wilts.

- So, if you buy fruit and vegetables in plastic or cellophane packaging, do not automatically remove it when you get home, because you may well reduce the time it is usable.
- If you remove shrink wrapping from produce, it will allow much more transpiration and an even bigger reduction in usability period.
- Respiration is reduced at a lower temperature, so keep fruit and veg with high respiration rates in the fridge.
- If you open a packet of fruit or veg, close it firmly before you put it back into the fridge.
- If you buy root vegetables with leaves, remove them because they provide an enormous surface area for transpiration.
- If there is condensation on the inside of packaging, remove it to avoid mould forming.

Fast and loose

If you prefer to buy unwrapped fruit and veg you must expect it to last a shorter time, and the same applies if you remove the packaging – reduce your expectations of how long it will last.

To go right back to the beginning of this pair of articles, "wasted food uses about 30% of the Earth's agricultural land area" and "worldwide, the carbon footprint of uneaten food is estimated at 3.3 gigatonnes of CO₂ equivalent". So it is suggested (by the author of the CAT article*) that while single-use plastic has its problems, it is far preferable to food waste: using plastic to wrap food is entirely appropriate if it extends the life of the food and prevents waste.

What follows here is my opinion: I am sure that in future there will be an alternative to single-use plastic packaging, but for now the most important thing we can do to avoid *the plastic used to wrap food* polluting our oceans is to be certain that we dispose of it in a manner that ensures it will never end up in the sea. And I suggest that if we see plastic at the side of the road or in a tree, we (a) pick it up and dispose of it properly, and (b) lobby politicians to get littering fines both increased and imposed.

From the internet: BBC News reported on 1 April 2018 that "People dropping litter, including from vehicles, face increased on-the-spot fines of *up to £150* as new penalties come into effect. Councils

across England are being given the power to raise fines from the previous ceiling of £80. Authorities can also use the penalties to target vehicle owners if it is possible to prove rubbish has been thrown from their car ... Councils are free to set the level of on-the-spot fines up to £150 per incident." Read more at <u>bbc.in/2SgwPMw</u>. The SODC website reported on 26 August 2018 that "The council has given the power to all PCSOs working in the district to issue fixed penalty notices (FPNs) for the following environmental crimes ... the fixed penalty cost (for littering) is £100, but it is reduced to £60 if it is paid within 10 days." <u>bit.ly/2HBap4m</u>

Background information

The author of this article is Dr. Judith Thornton, Low Carbon Manager in the Department of Biological, Environmental and Rural Sciences at Aberystwyth University and a regular guest lecturer at the Centre for Alternative Technology (CAT).

Her personal Blog is "A collection of thoughts about a low carbon future" <u>bit.ly/2sS5Fxa</u>.

She writes "This includes 'The Great Plastic Debate', which started with a post on the biology of food decay and how to prevent it. The answer is (mostly) to wrap food in plastic. This is not a popular thing to say given the 'Blue Planet effect', but people were interested, so I carried on looking into it. All my blog posts on plastic are linked at <u>bit.ly/2HyOKK5</u>."

The UN Food and Agriculture Organisation(FAO) report on "Food wastage footprint: Impacts on natural resources" referred to is at <u>bit.ly/1kMi2QN</u>.

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The Sustainable Blewbury newsletter is edited by Jo Lakeland and Eric Eisenhandler

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We have a substantial programme of activities in and around the village. Getting involved is fun and can make a very positive contribution to village life and local environment. If you'd like to get involved in what we do, or to receive our free Newsletter, email us at info@sustainable-blewbury.org.uk or phone Eric Eisenhandler at 01235 850558.