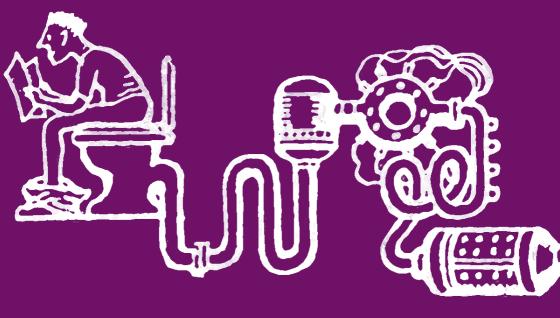
Jevon Community Recycling & Community Composting Network News







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This Junk Mail was written by Nicky Scott. Designed by Isolde Brampton-Greene with illustrations by Bob Gale Printing by MoorPrint on recycled paper.

Contact Details

Any contributions for articles and pictures are welcomed, please email to:

Nicky Scott

Devon Community Composting Network 8 Meldon Road, Chagford, Devon, TQ13 8BG Tel: 01647 433148 email: nicky@proper-job.org www.dccn.org.uk

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Editors rant

It seems incredible really that Devon is still so wasteful. The most recent figures show that Devon only just comes above the worst performing Authority; in terms of residual waste going for disposal. With so much effort that has gone into waste reduction, reuse, recycling, composting campaigns from all the waste and recycling officers in Devon and the community sector since the early 1990's why is this so? True we also have amongst the highest recycling rates so it is a bit of a puzzle to say the least. Officers from Devon have been talking to colleagues in Oxfordshire to see if they can help.

Hugh Fearnley-Whittingstall's latest TV series 'Hugh's War on Waste'

www.wastenotuk.com made really interesting viewing and not just for a waste 'anorak' like me I suspect or it wouldn't be on prime time viewing and some of the findings may shed some light on Devon's conundrum. See more on this inside.

Emma Croft our new Reuse officer has been busy swishing and organising great networking events for the community reuse sector: more on this inside

Researchers and pioneers globally are coming up with innovative solutions, from extracting useful materials, including gold in our sewage and working out how to use fungi and worms to eat plastic.

Finally we say goodbye to Richard Gomme who has been a stalwart of these pages since 2003 and has done the Lion's share of writing and editing Junk Mail all that time. So massive thanks go out to Richard for all his support for community groups in Devon over all this time and if you haven't see it do look at his Pinterest board which is full of great reuse and upcycling ideas. https://www.pinterest.com/richardgomme/upcycling/

This is going to be the last printed copy of the JUNK MAIL. We will still be writing copy online and you can also keep up with us on Facebook by visiting https://www.facebook.com/Devon-Community-Recycling-Composting-Networks-269455753105704/?fref=ts

Or send your e-mail details to Jan at **yourimnewsletter@hotmail.com** to ensure you get all Junk Mail articles emailed to you in future.

Farewell to Richard

I've been trawling the archives to find out when Richard and I went to a demonstration at the Houses of Parliament. It was in January 2003 and Richard had just taken over from Ralph Mackridge as co-ordinator of DCRN and has become the one with the longest staying power! Ken Orchard was the first, replaced by Carol Johnston, then Karen Evans and Ralph. I cannot find the original photo of that first trip we took, it was probably on a 'real' camera as there is a photo I took of Joan Ruddock and Tony Juniper as well and I'm sure I didn't have a digital camera in those days; we had only just started using computers. Richard had already been working in the community sector helping establish the Proper Job resource centre, largely thanks to him still thriving today due to his continuing support since that time. He also worked with Torridge and Devon County Council helping to implement garden 'waste' and cardboard collections for 5000 household in Torridge and waste minimisation and recycling efforts for Devon County Council having to don a suit and tie and work in an office at County Hall, hard to believe! Richard has been a great support for myself and David Banks especially helping Refurnish in setting up new premises in Crediton, Tavistock and Buckfastleigh to name a few as well as encouraging and supporting reuse and recycling projects throughout the County, he will be a very hard act to follow.

Nicky Scott

Innovation fund

Applications are now welcome from new and innovative schemes which will reduce the amount of household waste that Devon councils manage.

This £3,000 fund is one of a series of projects which target the reduction, reuse and recycling of household waste in Devon administered by the Devon Authorities Waste Reduction & Recycling Committee.

The fund is open to all.

Applications for the fund must be received by **26th February 2016**. CLICK ON THE LINK BELOW FOR MORE INFO

http://www.recycledevon.org/innovation-fund

Reuse in Devon

Emma Croft has been working in Devon this year as a reuse officer in a post part funded by **WRAP** (Waste and Resources Action Programme). She certainly hit the ground running and has been involved in a range of great initiatives. I've been to two of her 'Forum' events where reuse projects from all over Devon have come together to share what we are up to and to see how we could work even more effectively together. Mark Hodgson from Co-Cars talked at the first forum held at Embercombe about the circular economy, linking together the cradle to cradle concept of zero waste with the need to recognise the gift economy especially putting the ECO in economy. After all the planet (ecosphere) is our home (home = eco) it has finite resources which we must manage with economy, within our means. To say that ecology plays no part in economy is like the ostrich burying its head in the sand (not that they really do that of course!) In Greece when the economic system went into meltdown people responded in Athens and other cities by coming together in public places to share and exchange whatever they had. This is a spontaneous and inclusive coming together regardless of age or class, people help each other out, skill sharing, produce sharing, singing and dancing together. The projects in Devon that have come to the forum days and to other events spring from this altruistic source, most of them inspired by the

massive amounts of waste our society produces. Emma's role has been to listen, help and support these projects. Have a look at the re-launched Recycle Devon Website; **www.recycledevon.org** and click on the big red Reuse It button. If your project is not on the map let them know!

It's areat to know so much is already going on and that these projects are now networking more effectively and coming up with new ways to work together with fresh project proposals. One thing which did emerge was the need for affordable spaces to run skill shares, workshops, pop up give and take shops and the like. Landlords are loath to give out spaces on any kind of long lease and often projects like scrapstores cannot move into spaces where they may have to move at a moment's notice. Emma's reuse post was only funded for a year but already has had some, albeit reduced extension, and the work she has started has been invaluable so we hope further funding can be found to continue with this important work. Emma has been producing event kits starting with 'Swishing' or clothes swapping. See page 10 for more on this.



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Hugh Fearnley-Whittingstall's latest TV offering bravely attempts to get to the heart of why we are so wasteful and covers an awful lot of ground in the process. Millions of birds being raised and slaughtered for fast food chicken outlets like KFC just to be battered deep fried thrown in a bin is one of the most horrible facts explored in the first programme. But Hugh is looking at waste everywhere, from farms to supermarkets and from our kitchens to our wheelie bins. So why is so much thrown into our residual waste bin there at all? Why is it not recycled or reused? Hugh found some cynical sceptics and asked them, and then he took them all out for a day trip.

It was fascinating to see these diehard recycling sceptics being shown

around the Materials Recycling Facility. Watching lasers identifying different plastics and airguns blasting them into different chutes, powerful magnets picking up steel cans and all the other jiggling and sorting technology that these places have, even after all that, some just thought that the bales of plastic would just go into neater holes in the ground! Until, that is, Hugh showed them a range of products made from the recycled materials.

Maybe this scepticism and the idea that the 'Council' is somehow against the people is the biggest mind set we have to try and somehow dispel. People have disputes with their local councils for all kinds of reasons and that can then get taken out with the attitude that. 'it's not my job, the council can sort it out.' In the programme they took all the residual waste from one street and sorted it all out into, recyclable items, bottles, cans, reusable items, loads of clothes, bric-a-brac, kitchen ware etc and food waste, much of which was still in its packaging so that you could see the use by dates, or obviously still



edible. So Hugh takes a multi pronged response to the community. Firstly all the reusable items are cleaned up, clothes washed and dried and offered back to the community and secondly he starts to show some of the food waste offenders how they can reduce their food waste and to be creative with the food they would normally throw away. This is all great stuff and is of course what local authorities up and down the country have been doing for a very long time. Maybe it takes a celebrity chef and prime time TV to help turn the tide.

But for me the most telling part of the series is the underlining stranglehold the supermarkets have on food producers. Firstly why do we have such a crazy food system? And secondly why do farmers sign up to it? The parsnip farm in the programme actually closed down because they were just losing money. The amount of perfectly good parsnips being rejected because they would not fit the ridiculously strict parameters set by the supermarkets on straightness, size etc was staggering.

As Tristram Stuart (see www. tristramstuart.co.uk/#tristram) said in

the programme, in 2012 when harvests were poor, supermarkets relaxed their standards on potatoes and all kinds of knobbly and misshapen spuds were sold by all the supermarkets, nobody complained or even seemed to notice! This just highlights for me that the supermarkets use it as an excuse to make the producers carry the risks and the costs and, as in this case, ultimately force them out of business. Having wiped out so many small independent greengrocers and other food shops, and taken over the supply chains it's difficult for farms to adapt. Like a frog being lulled into water that only gradually is heating up, by the time they are being killed off by the heat it's too late to jump. The farming subsidies, the Common agricultural policy and the mistaken idea that bigger is better is wiping out farming, i.e mostly small family farms, and wildlife i.e the environment. The Curry report into Farming way back in 2002 highlighted the power supermarkets had on producers and the damage that was causing. It seems nothing that report advised on has been acted with any real political will.

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I watched a fascinating programme some time back about some Indians who went down in the filthy drains around the jewellery district of a large Indian city and filled up bags with black slimy goo in the dead of night. These bags were sold on weight and processed, under very unsavoury conditions, to yield, eventually, small nuggets of gold.Now US researchers are investigating ways to extract gold and precious metals from human faeces.

The group identified gold in waste from American sewage treatment plants at levels which if found in rock could be worth mining. Extracting metals from the waste could also help curb the release of toxic substances into the environment. "The gold we found was at the level of a minimal

mineral deposit," said Dr Kathleen Smith, from the US Geological Survey (USGS). In addition to gold and silver, human waste also contains amounts of rare earth metals such as palladium and vanadium.

"We're interested in collecting valuable metals that could be sold, including some of the more technologically important metals, such as vanadium and copper, that are in cell phones, computers and alloys," said Dr Smith. The team estimates that seven million tonnes of solid waste come out of US wastewater facilities each year. About half of that is used as fertiliser on fields and in forests, while the other half is incinerated or sent to landfills.

Incidentally John and Nancy Todd, who are Bio-engineers have shown with

their Living Machine sewage facilities how you can not only create a beautiful environment to process human waste but also concentrate metals in certain plants up to ore processing grade. See www.toddecological.com

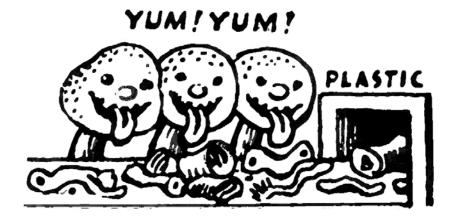
The scientists are experimenting with some of the same chemicals, called leachates, which industrial mining operations use to pull metals out of rock. While some of these leachates have a bad reputation for damaging ecosystems when they leak or spill into the environment, Smith says that in a controlled setting - they could safely be used to recover metals in treated solid waste. In a previous study, another team of scientists calculated that the waste from one million Americans could contain as much as \$13m (£8.6m) worth of metals

Precious metals are increasingly used in everyday products, such as shampoos, detergents and even clothes, where nanoparticles are sometimes used to limit body odour. Waste containing these metals all ends up being funnelled through sewage treatment plants, where many metals end up in the leftover solid waste. "There are metals everywhere," Smith noted.

More than 7m tonnes of "biosolids" come out of US sewage treatment plants each year, about half of which is burned or sent to landfill and half used as fertiliser on fields and in forests. In the UK, about 500,000 tonnes of dry sewage solids are used as fertiliser each year. The amount of waste that can be converted into fertiliser is limited, in part, by the high levels of some metals

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Mealworms and fungi eating plastic



We are all too aware on these pages of the problems of plastic pollution, especially of the oceans. Rebecca Hosking's film 'Message in the waves' really brings to home the global accumulation of plastic pollution in our oceans. The huge piles of plastic on beaches in Hawaii with items clearly from the 50's showed how this stuff just will not go away, even worse when it breaks down into microscopic particles, it gets into the food chain from plankton upwards to end up in the seafood we then eat. So to have stories of mealworms and fungi that can actually metabolise plastic and transform it into something nutritious is quite extraordinary. Of course at the moment it is just a tiny drop in the ocean and the emphasis must be still on avoidance, reuse and recycling.

Funai are auite amazina and their capacity to metabolise pollutants is being used to clean up oil pollution for example see www.eyesofgaia.com and the work of Paul Stamets – his TED talk is really good. In 2012 Yale researchers found a rare mushroom in the Amazon, (Pestalotiopsis microspora) it's capable of breaking down polyurethane, the main ingredient in modern plastics. That led to a lot of scientists trying to figure out how to use the fungi to deal with the world's very real plastic waste problem. Austrian designer Katharina Unger has figured out how to recycle plastic into edible biomass. See http://www.livinstudio.

com/fungi-mutarium/ for more on this, it's a fascinating story.

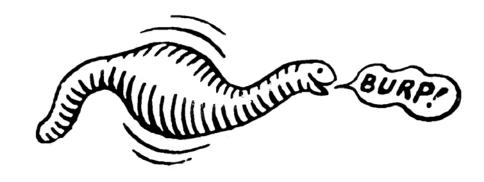
The Fungi Mutarium is comprised of egg-shaped pods made with agar, a seaweed-based gelatin substitute, that serve as a base for fungi cultivation. The designers call these cups "FUs." After loading them with plastic waste, fungi are introduced, and the mushrooms feed on the FUs' starch and sugar along with the plastic. After a few months the plastic is gone, and in its place is a puffy edible substance. At the moment this is more like a wonderful art project than an industrial scale solution to plastic pollution but it's very exciting.

Mealworms eating plastic

The other development that's come my way has been at Stanford University where researchers have found mealworms that can not only digest polystyrene, but can actually subsist on

a diet exclusively made up of it. Wei-Min Wu, a senior researcher found that mealworms, which are the larvae of the darkling beetle, (family Tenebrionidae) have microorganisms in their digestive tracts that allow them to break down the plastic. According to Wu, the waste is safe to use as soil on crops. The other by-product of the process is carbon dioxide, which is the case for anything the meal worms eat. And the plasticeating worms didn't appear to be less healthy than worms eating a more natural diet. Of course as with the fungi this is not going to mean we can carry on with one use plastic cups, far from it the worms can only eat a tiny amount every day but at least it is showing that the natural world does hold solutions to many of the disasters that humankind is capable of creating.

http://www.plasticoceans.net/



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Can we ever be zero waste?



I came across a great little film (see http://skr.cm/1P5Xkts) recently about Kamikatsu, a village of around 1,700 people in Japan that has decided to go zero waste to landfill. They started sorting everything into an amazing 34 categories, (now risen to 44!) I guess a lot of this is in the different plastics, different colours of glass, different metals, card, papers and boards. Everything has to be clean which has been a real struggle for the residents and it has been a difficult and a still ongoing process for them. Currently they have around 80% recycling with an aim to reach 100% by 2020. They also have a 'Kuru-kuru' shop which is all about reusing, remaking and repairing items; this is obviously the top of the 'waste' hierarchy. So no garbage trucks there anymore, no incineration, how can we replicate this across Devon? Existing community projects are well placed to diversify and expand and there is plenty of potential for new projects to emerge, just get in touch with us if you want help. When Proper Job (www.proper-job. org) in Chagford (about the same

size as Kamikatsu) grew out of the

Chagford composting project, which was launched in 1993, we were inspired by Dan Knapp, who founded Urban Ore, (see www.urbanore.com) in the early 1990's in Berkeley, California, a pretty sizeable catchment. Dan sorted all materials going to landfill into 12 broad categories, if my memory serves (doubtful) large reuse – furniture etc. small reuse - bric a brac, electrical, metals, wood, plastics, paper, cardboard, compostables, textiles, rubble, obviously you can subdivide and create other reuse areas such as books. DVD's, and with dozens of different plastics keep on and on. Of course the 'waste anoraks' like myself aet a bit anal about this stuff and with me it's particularly anything compostable which I cannot stand to deny my soil. The challenge is; how do we get others as excited and committed? Yokohama. a pretty sizeable city in Japan, recently doubled its recycling categories to 10 and issued a 27 page booklet on how to sort out everything, detailing 518 different items. Public bins in parks started filling up mysteriously and have now been removed. Residents who transgress have their bags picked over for any incriminating evidence of ownership such as a discarded utility bill and are followed up by a visit and are shamed into toeing the line. So it can be attempted in very large communities, it just takes a lot of engagement, involvement and understanding from the individual right up to the municipal level.

If you want to reduce your own landfill arisings get some ideas from www.trashisfortossers.com and look at Nicola Peel's excellent site Eyes of Gaia especially this page www.eyesofgaia.com/pb/wp_51075571.html

I'm just having a great sort out and attempt to declutter, and that's possibly why our residual bin is so light, because if I'm not sure what to do with something it gets shoved in a drawer! So I was pleased to be shown this site, **www.** cashinyourgadgets.co.uk it gives you cash for unwanted 'gadgets' mobiles, tablets, digital cameras, laptops, (that's

the list on the site there may be more). They will buy from you and you can get an estimated price from their website, or if it's not worth anything they can still take it to break down for recycling. They will remove date securely and completely and claim less hassle than e-bay or private sale.

Ultimately we all have to realise that there is no such place as 'away' and we all have to change our habits. Primarily buying the stuff in the first place of course! Then composting all we can and sorting the rest for reuse and recycling.

Contaminated compost

The trouble with 'Green Waste' collections is the use of the 'waste' word. As soon as you label something with the 'W' word it can become just that, rather than a 'clean streamed' resource. I well remember years ago when the community composting sector was just starting a group having put up a sign saying 'green waste only here', were dismayed when they found green lawnmowers and green plastic furniture deposited! A recent BBC Countryfile programme shows that the six million tonnes of Green waste compost produced every year is far from green. The mechanical screening methods can pull out large bits and plastic bags guite well, but small pieces of non compostable plastics and metals particularly, go through the holes in the riddling process. The problem has been largely brought to light through archaeological surveys that use metal detectors and magnetic resonance rendering using these techniques useless. It's vital to educate people that their garden 'waste' collection only applies to compostable materials and there needs to be far more rigorous screening of contaminants by the composters themselves to stop them entering the composting system. Stop referring to it as waste, would be my suggestion, and instead, start talking about valuable resources. Community composters generally have the least contamination in their end product, for one thing they have a good relationship with the people that use their sites and they realise that these operations are not about 'waste' but rather creating compost. Secondly any bits of old plastic plant pot, the odd piece of glass or stones etc will get screened out either when the materials are deposited or through sieving at the end of the process.

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DIY Clothes Swaps!



Interested in running your own clothes swap? We'd like to help. Recycle Devon has put together a clothes swap event toolkit to enable members of the public to put on their own clothes swap a.k.a. a Swish. The kit includes a complete 'How To...' guide for each of the events and all of the equipment and materials that you might need such as coat hangers, hanging rails and a poster template. Additionally, Recycle Devon's Re-Use Project Co-ordinator, Emma Croft, will be available to support and advise you throughout the process of setting up and running your event.

"Swishing is a great way to pass on clothes that we no longer need or want to someone else that can give them a new lease of life. Lots of communities around Devon are holding their own events already and we want to encourage more towns and villages to swap not shop! Around 30% of clothes in our wardrobes haven't been worn for more than a year which equates to about £1000 worth of clothes that could happily find a new home." said Emma.

Sarah McDonald organises the Exeter Clothes Swap and her advice for anyone looking to organise something similar is "Just do it! If all of the organisation involved is what's putting you off, then just rope in a few friends to help you. Either that or organise a small-scale swap in your front room with just your friends and family to make it simple. Clothes swapping is brilliant!"

For further information, please contact:

Emma Croft, Reuse Project Co-ordinator at Devon County Council: emma.croft@devon.gov.uk or 07966 566435

or visit

http://www.recycledevon.org/content/clothes-swaps

Exeter Clothes Swap Events

https://www.facebook.com/ groups/280855638719312/?fref=ts

Plastic bag tax



What a lot of fuss over the plastic bag tax! England has really been dragging its feet behind the rest of the UK and comes up with all kinds of rather pathetic exemptions in my mind too. I heard advice being given on

how to beat the punitive 5p tax, 'take a bag or two with you to put the shopping in.' That's the whole point; always have some bags with you. I nearly always have a plastic or cloth bag stuffed in my pocket. You never know when you will need one. So why do we need a tax? Here are some statistics (also see www.wrap.org.uk/2015_carrier_bag

www.wrap.org.uk/2015_carrier_bag figures)

In 2014 over 7.6 billion single-use plastic bags were given to customers by major supermarkets in England. That's something like 140 bags per person, the equivalent of about 61,000 tonnes in total.

They take longer than other bags to degrade in the environment, can damage wildlife, and are extremely visible when littered in our towns, parks and the countryside.

Despite research showing that the average household already has forty plastic bags around the home, the number of plastic bags taken from supermarkets increased for the fifth year running in 2014.

Similar 5p charges are already in place across Scotland, Wales and Northern Ireland. The scheme in Wales saw a reduction in plastic bag consumption of 79% in its first three years.

It is estimated that over the next ten years the benefits of the scheme will include:

- an expected overall benefit of over £780 million to the UK economy
- up to £730 million raised for good causes
- £60 million savings in litter clean-up costs
- carbon savings of £13 million



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YOUR PLASTICS RECYCLING GUIDE

PLASTICS ACCEPTED AT DCC RECYCLING CENTRES

RIGID MIXED PLASTICS - PLEASE MAKE SURE EVERYTHING IS CLEAN

All plastic drink bottles (squash and put lid back on)

Plastic milk bottles (squash and put lid back on)

All plastic household cleaning bottles

Pre formed biscuit or chocolate box travs

Plastic sandwich containers

Yogurt pots, margarine tubs, Ready meal containers etc

Plastic fruit containers (unless made from expanded polystyrene)

Plastic flower pots (must be clean)

Containers for hand and other skin creams (must be clean)

Shampoo bottles (must be rinsed clean)

Plastic bags are acceptable if several are bagged into one bag (except Deepmoor and Macklins Quarry)

Not acceptable: cling film type material, contaminated plastic, any other type of plastic

BULKY PLASTIC ITEMS NOW ACCEPTED AT RECYCLING CENTRES,

(PLEASE MAKE SURE EVERYTHING IS CLEAN)

Buckets, Bowls, Bins, Water Butts, Plastic Garden Furniture, Plant Pots, General Housewares, Plastic Children's Toys (some metal inclusions are acceptable, Collapsible Crates, Clean Paint Pots

NOT ACCEPTED IN THE BULKY PLASTICS CONTAINER

Items not listed above are not accepted – such as:

Plastic Film, Plastic Bags, Builder Bags, PVC Doors, PVC Window Frames,

PVC Pipes and Guttering, Flexible Plastic (e.g. vinyl flooring and hosepipes),

Video Tapes, Fibreglass (e.g. Bathtub)

www.devon.gov.uk/bulky_plastics_acceptable_list_web.pdf

SOFT PLASTIC WRAP, FILM, BAGS etc SUITABLE FOR SUPERMARKET SHOP FRONT PLASTIC RECYCLING BINS

Plastic baas

Cereal packet plastic inners,

Frozen veaetable baas

CREDITON AND UFFCULME AREAS - contact local group directly

Uffculme Compost Magic - Contact email: compostmagic@hotmail.co.uk)

For Crediton area information see: www.sustainablecrediton.org.uk