# VALE ROYAL ENVIRONMENT NETWORK

## June 2004/5

### Will We Get Wind?

Following consideration being given to 2 wind farms in Vale Royal, one at Oxheys Farm, Rushton, Tarporley for what appears to be 3, 1MW turbines; the other at Aston,

near Acton Bridge for 4, 3MW Vestas V90 turbines, we decided to gather some relevant

information...see page 9

#### **Grants!**

Northwich Community Woodland and VREN hosted a talk on Grants by Michelle Edwards of Cheshjre County Council's External Funding and European Unit on 14<sup>th</sup> April. Briefly:-

Your plans should be project driven, not funding led. The External Funding Unit subscribe to data bases of funders (Grants on Line, Grant Finder) that do not exclude local authorities, while CVS

(Community Voluntary Service, office on Navigation Road, Northwich) holds Funder Finder, which does exclude them.

Full Project Cost Funding is when the grants body include a relevant proportion for core costs as well as for the project – eg the Big Lottery Fund. More funders are realising this is necessary.

Ensure you give yourself plenty of time; use the correct and current form; read the guidance notes and form carefully; do a draft; avoid jargon and repetition; write clearly or type, keeping within the boxes; get it checked – the External Funding Unit are willing to help, whether it's a bid for UK funding or a long-winded European application form. Convince the Donor: consider all options to solve your problem; prove a need (talk to potential beneficiaries); estimate how many will benefit at what cost; ask for *detailed* letters of support; present a sound budget; have mutual help with other organisations; include how you work for equal opportunities. Donors' websites will give details of the types of projects they like.

If asked for a constitution, the CVS can help you draft one.

Ring the Donor if you've got queries – they are human, and the explanatory notes can never cover everything.

Michelle is moving on: contact Stephen Wright at the External Funding and European Unit, Room 203, County Hall, Chester CH1 1SF, tel 01244

603331, email stephen.wright@cheshire.gov.uk

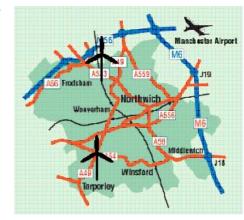
A full day course on First Aid (1st October) is planned – see dates pages.



Brian Lipscombe of Chester will be starting on 1<sup>st</sup> August, taking over from Laura Needham who left earlier in the year. Welcome!



thanks its many sponsors, supporters and volunteers.
Registered Charity Number 1101585. Offices at:
Yarwoods Arm, Navigation Road, Northwich, Cheshire CW8 1BE tel 01606 723160, email vren@groundwork.org.uk



NEW ZZ

#### Action

#### **Parish Council Contacts**

Want to contact your parish council on an environmental or other matter? For Vale Royal parishes, see the listing of parish clerks at www.valeroyal.gov.uk/thecouncil/parish\_councils.ht ml. For all Cheshire, see www.cheshire.gov.uk/Parish/AZParishList.htm. If you're not online, their phone numbers are 01606 862862 and 01244 602424 respectively.

#### The Peace Tax Seven

The Peace Tax Seven are a group of conscientious objectors who believe that by paying taxes, a proportion of which funds war, they are made implicit in killing. They hope to divert the military part of their taxes to peaceful conflict resolution, and are subject to court appearances because they have withheld part of their income tax. They all belong to conscience, the Peace Tax Campaign, a 25-year-old body that has support from MPs from all the major parties. The 2005 UK budget includes £30 billion on defence, £1.5bn on the Foreign Office, and £3.9bn on the Dept. for International Development. (www.hmtreasury.gov.uk/media/172/2F/pesa2005\_appen dices.pdf) Contact Conscience. Archway Resource Centre, 1B Waterlow Rd, London N19 5NJ; or see www.peacetaxseven.com or www.conscienceonline.org.uk.

#### **Environmental Protection**

You can campaign with the Wildlife Trusts to help our **marine habitats**. They, and other major environmental NGO's, are calling for a comprehensive package of legislation to ensure that our seas are better managed and that wildlife ranging from seals, basking sharks, jewel anemones, sponges and corals are better protected.

The Wildlife Trusts are also campaigning against **invasive water plants**. They include



Lagarosiphon major (Curly Waterweed), Myriophyllum aquaticum, (Parrot's feather), Hydrocotyle ranunculoides (Floating pennywort), Crassula helmsii (Australian

Swamp Stonecrop), Azolla filiculoides (Water fern), Ludwigia grandiflora (Water primrose.). Some others on are shown on our diary page. See www.wildlifetrusts.org Another route for aliens is on **Tree Ferns**: heavy demand means that suppliers, who have to at least partly cultivate the plants, often shortcut the fumigation process: flatworms, spiders, nematodes, mosses and liverworts can hitch rides. If you've got concerns, contact the Central Science Laboratory, 01904 462324, www.csldiagnostics.co.uk

#### The Harlequins are Coming!

Harlequin Ladybirds *Harmonia axyridis* originate in Eastern Asia, and have been introduced as biological controls in Europe and North America. However, they are extremely successful in the wild – they're displacing native American ladybirds. To date they have been found mainly in South East England. Their progress is being monitored, and sightings should be reported to **Harlequin Ladybird Survey** at www.harlequin-survey.org, or write to Peter Brown (Project Officer) Biological Records Centre, CEH Monks Wood, Abbots Ripton, Cambridgeshire, PE28 2LS.

The Harlequin is larger than most native species, about 6 - 8mm, can be red, orange or black, with 0 to 19 black spots of variable size, see picture. If



black it will usually have 4 orange or red spots.

With such a variable colouring how do you tell it's a Harlequin from over 40 types of native ladybird?

- ✓ If it's less than 5 mm in length, it is not a harlequin ladybird.
- If it's red with precisely 7 black spots, it is a 7spot ladybird.
- ✓ If it has white or cream spots, it is a striped ladybird,
- an orange ladybird or a cream-spot ladybird.
   ✓ If it is large, burgundy coloured and has 15 black spots, it is an eyed ladybird
- ✓ If it has an orange pronotum (bit between the head and the elytra), and fine hairs all over the elytra (wing covers), it is a **bryony** ladybird.
- ✓ If it is black with four or six red spots, two of which are right at the front of the outside margin of the elytra (wing cases), it is a melanic (black) form of the **2-spot** ladybird.

#### Manchester Harvest – a Homegrown Festival

An allotment is being transferred to Albert Square, Manchester for a week commencing 8<sup>th</sup> August, to promote environmental issues – composting, recycling, biodiversity, sustainability etc., with talks, displays and interactive activities. Volunteers to man and tend the plot, stallholders, displays, plants, are all welcome. Contact Andy Farmer, 8 Cranlington Drive, Cheetham, Manchester M8 0EF, tel 0770 843 4130, email farmallot@yahoo.co.uk

#### **Consulting the North West**

Development of a new Regional Economic Strategy (RES) is underway by the Northwest Development Agency. As the document that guides the distribution of the agency's three year £1.5 billion budget, the RES is a weighty tome. A consultation process runs from July until September, and the final draft will be presented to the government in December before its launch in January 2006. More information in July from www.nwda.co.uk, select Strategic Vision, or contact Brenda Buckley on 01925 400279

#### **Schools**

The BBC **Teachers' Channel** is a newly set-up station. It's a digital station, at Freeview 47 and others. Examples of teaching 'at work', and themes for programmes are welcome (on website www.teachers.tv, click on

"about us" then "contact us"). See news item http://news.bbc.co.uk/1/hi/education/4243481.stm.

#### **Soil Association School Meals Campaign**

A recent Government white paper committed the Government to improve the standard of school meals and make sure they provide children with the nutrients they need. The Channel 4 TV series featuring Jamie Oliver helped to promote the issue. Research has shown that schools giving healthy food have better academic results.

If anyone is interested in school meals as a result of the programmes, there's an updated version of the Soil Association Food for Life action plan, aimed at school governors, teachers, parents and cooks. In brief, at least 50% of the ingredients should be local, 30% organic, 75% unprocessed; lunches should meet the nutrition targets or the Caroline Walker Trust (see www.cwt.org.uk); and there should be better classroom education on food and sustainability issues. For a hard copy of the Soil Association school meals action pack call 0117 914

2424 (£6 donation appreciated), or visit www.soilassociation.org/foodforlife to download.

#### **Sustainable Development Activities**

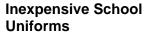
The Globe Programme contains free-to-use worksheets for use with Science, Geography, Mathematics, ICT and Citizenship at KS2 and KS3, and include GPS, Atmosphere, Hydrology, Soil Investigations, Land Cover, Phenology, Sustainable Development. Data can be fed in, and some projects are international. See www.globe.org.uk/activities/activities.htm

#### **Public Interactors Wanted**

Michele Burrow is trying to put together a list of people or organisations (other than local government) who will provide talks, presentations, activities or shows to schools or community groups on any sort of theme relating to the environment. She requires: a name, contact tel/email/website and a brief description of what they do.

If you are interested in receiving a copy of the final list - please let her know and she'll send you it once

created. Contact Michele on 01244 603125, Email: michele.burrow@cheshire. gov.uk



It's car boot sale time – and amongst the bric-a-

brac comes an opportunity for some recycling, raising money for school funds, and saving money for the less well-off parents. At Weaverham High School (WHS), the Parent-Teachers Association (PTA) runs a stall, receiving and selling WHS uniform. Occasional adverts appear in the school newsletter, and clothes can be delivered to the school office, who arrange collection for storage by the PTA, or brought to the stall.

#### **Green Energy Machine**

The National Energy Foundation has kits and worksheets on renewable energy for school use – from primary to KS4 level. You can also book the "Green Energy Machine", presentations and teacher work shops. The activities are "hands on" and fun. The Green Energy Machine incorporates a wind turbine, solar water heater and PV panel. See www.nef.org.uk/powered



**New Website for Cheshire Development Education Centre**, the people to help with third-world topics, fair trade, etc., is www.cheshiredec.org

#### Lifestyles

#### **Eco-Homes in Warrington**

Bellway Homes have been selected to develop Butts Green, 149 houses on the former Burtonwood airbase. Environmental requirements are that all properties should reach BREEAM (The Building Research Establishment's Environmental Assessment Method) Eco Homes rating standard of 'very good' and NHER (National Homes Energy Rating) of

Issues addressed by BREEAM are energy; water; pollution; materials; transport; ecology and land use; health and well-being. NHER ratings run from 0 (poor) to 10 (excellent). The development of assorted homes will achieve 39 homes/hectare density - well inside the 30 homes/ha planning requirements, and, crucially, it's handy for junction 8 of the M62! See www.bellway.co.uk/manc/ButtsGreen/home.htm Other eco-friendly homes are listed on the Sustainable Homes website,

www.sustaina blehomes.co. uk: select Ecodatabase, then Search. then Region to choose North West England. This gives an idea of the types of eco-homes going up, though none are local.



#### **Shoddy Workmanship**

A survey has indicated that almost half of all new houses in England fail to even meet minimum Building Regulations requirements. The Building Research Establishment visited 100 homes built under the 2002 Building Regulations, examining boiler installations, loft & pipe insulation, lighting and

glazing. The more expensive the home, the more corners had been cut. Energy World

#### **How Long to Recharge Batteries?**

Most battery chargers have unsophisticated electronics, unable to tell when your batteries are charged. So for how long should you charge a battery? You'll need a basic ammeter/avometer and a piece of cardboard or plastic. Insert a discharged battery into the charger, slip the plastic/card between one end of the battery and the charger

terminal. Then switch on and check the current: if the plastic/card is at the battery's positive end, then the positive of the meter goes to the charger. The current may be of the order of 100 milliamps (that's 0.1amps). Then look at the battery for its rating in mAh or Ah (1000 mAh (milliamperehours) = 1Ah (ampere-hours)). It may

say 1800mAh, which means it can supply 1.8 amps for an hour, or 100mA for 18 hours. It'll want charging similarly, if a full charge is what it needs, except that some of the charge turns into heat - so you'll need perhaps another couple of hours. Now is the battery partly, or fully discharged? Electronic goods stop before the batteries are discharged, while torches can be used to finish them. NiCads are best charged from full discharge. and with all types you'll know where you're up to if

you discharge completely. NiCads also seem to charge better in the sort of chargers where they're not organised end-to-end. And when they're incapable of holding a charge - it's time to take them to the yellow bin at the recycling depot.

#### **Ask Your LSP!**

At a recent workshop on sustainability run by PixelFOUNTAIN, organised by Vale Royal Borough Council, members of the Local Strategic Partnership scored a creditable 6.7 joint top with St Helens, with only 3 or 4 more

LSPs out of 44 in the North West to go. The workshop comprised a 'game', whereby participants spent a fixed budget, within their appointed economic sphere, and saw the towns sustainability index rise or fall. Ask Fiona Dunning of Vale Royal BC: tel 01606 862862; for PixelFOUNTAIN tel 01625 610650 or see

www.pixelfountain.co.uk/planit-nw/

#### **Babygroe**

A website for young parents and parents-to-be with a non-toxic inclinations is to be found at www.babygroe.co.uk. BabyGROE stands for Baby Green, Recycled, Organic and Ethical. There's a host of relevant information, wit, and a forum; also a directory is planned, from the website or hard copy from (send an SAE) BabyGROE, PO box 28808,

Portobello, Edinburgh, EH15 1EA. Donations welcome – it's a not-forprofit organisation.

### **Transport** Ticket to Ride?

There is a long list of rail promotions, including a £6 (£3 half fare) train/bus/admission to Quarry Bank Mill available from all staffed stations in the Greater Manchester area; Virgin's offer for charities (tel 0845 30 50 350),

the Dublin Duo (2 for 1 to Dublin, from Virgin - £62 from Cheshire); Eden Project – inclusive ticket from your local station; and more. See http://nrekb.nationalrail.c o.uk/promotions/

### Beware Skidding Vehicles

A BBC investigation, reported on File on 4 (22<sup>nd</sup> & 27<sup>th</sup> Feb 2005),

found that a popular road surface material, stone mastic asphalt (SMA) is liable to lead to skids. It's used because it's said to be long lasting, quick to lay, and leads to a smooth, quiet ride. However, in dry summer weather, emergency braking from high speed leads to melting of the asphalt – and the vehicle skids on liquid. In Ireland, such surfaces are now restricted to 30mph zones, and those existing in other areas are being top-dressed. It takes up to 2 years for the surface to bed in, but meanwhile beware of motor vehicles on the 1 in 5 miles of roads so treated.

Cheshire County Council say they are moving away from SMA and will warn users of slippery surfaces where appropriate; this won't be necessary (for normal users) on low speed roads. They're to use alternatives to SMA, similar but which don't seem to cause the same problems.

#### **Traveline**

We reported a new website, www.traveline.co.uk in our last newsletter. At the time or writing it was functioning as described. Unfortunately, now it is not (and it's just changed yet again!). IT HAS IN FACT MOVED SIDEWAYS TO: www.pti.org.uk. If you want multi-modal travel information, you can also ring them (0870 608 2 608). We apologise for any inconvenience caused.

For local travel and overland journeys to UK cities, try Cheshire County Council's www2.cheshire.gov.uk/scripts/webtriplanner.dll/jour neys. This covers the various local bus operators. Beware – it might give you a lengthy wait for buses while a walk would be faster.

#### **Low Carbon Vehicle Partnership**

The LowCVP is a partnership of the automotive and fuel industries, Government, academia, NGOs and other stakeholders to promote the shift to clean low

carbon vehicles and fuels in the UK. They have working groups in buses, passenger and commercial vehicles, fuels, R&D, and the supply chain – with downloadable reports etc.

Contact them via the website (www.lowcvp.org.uk) or the Secretariat at Low Carbon Vehicle Partnership, 17 Queen Anne's Gate, London SW1H 9BU, tel 020 7222 8000

#### Vale Royal Locks Repair

This is a top, but expensive, priority for British Waterways. £0.75m will pay for a coffer dam, inspections, design and site preparation, with actual repair in summer 2006. It's believed continuous sluicing through the old small lock chamber helped undermine the lock island; in the long term, automatic upstream sluices are desirable, but power would have to come from the Blue Bridge. VREN has figures indicating 92kW of hydropower is available at the site.

Moorings and a new facilities block are planned for Acton Bridge, to key in with the improvement the cycle ways in the area: National route 5 along the Weaver and Route 60, the Cheshire Circular. Consultants are looking at Frodsham's waterfront; there are hopes it can ultimately be transformed from ugly to attractive. (*River Weaver Navigation Society, www.rwns.co.uk*)



#### Resources

#### **Government Publications**

Securing the Future – a new sustainable development strategy was launched by the Government on 7<sup>th</sup> March. It has commitments to help people through community action, use a forum to develop sustainable lifestyles, innovative decision making, education, and

environmental taxes. It's available from www.sustainable-

development.gov.uk/publications/uk-strategy/uk-strategy-2005.htm. For a paper copy, tel The Stationery Office, Norwich, 0870 600 5522: price £26.

DEFRA have published (22/3/05) the first **UK Soil** Action Plan 2004-2006 on their website. www.defra.gov.uk/environment/land/soil/actionplan. htm. It addresses all soils, with chapters on agriculture, mineral extraction, biodiversity, and cultural heritage. It's also available free from Defra Publications, Admail 6000, London SW1A 2XX. Tel: 08459 556000: quote document No. PB9441. DEFRA's Sustainable Consumption and Production Indicators document shows how relevant human activities are to environmental problems. Ideally, they'd like Gross Domestic Product to rise without impacts on our fellow creatures - how much is this not the case? Air traffic is rising fast (89% from 1990 to 2003) currently emitting 5% of UK CO2 emissions (but worth 2 to 4 times more, according to the International Panel on Climate Change); farm fertilizer use is down but birds haven't yet recovered; there's more recycling but the same amount landfilled... see www.defra.gov.uk/environment/statistics/scp/index.h tm. For a paper copy, try Defra Publications, Admail 6000, London, SW1A 2XX, tel 08459 556000

#### Vacancies? Jobs? Part/Full Time?

www.sustainable-

4a4.pdf

www.environmentjob.co.uk could be for you. It's searchable by region, sector and commitment level. Charities and not-for-profit organisations advertise free, volunteer positions are also free; otherwise the standard charge is £50 per ad. www.acre-resources.co.uk is another site. www.field-studies-

For Sustainable development indicators in your

pocket 2004 - A selection of the UK Government's

development.gov.uk/documents/publications/sdiyp0

indicators of sustainable development, see:

council.org/appointments has a small number of vacancies. Try also www.peopleandplanet.org/ethicalcareers/links.php?viewpage=1 - for links to all sorts potential sources of vacancies and courses.

Alternatively, www.charityjob.co.uk/ offers jobs in the charity sector, searchable by job, sector or location. Single jobs cost £70 to advertise, free for voluntary positions.

#### **CAT Facts to Download**

The Centre for Alternative Technology's mail order



catalogue, as ever, is brimming with books and equipment to help a low-impact lifestyle. There are books on buildings (earth, cob, straw, wood, underground, fabric, recycled, renovated); energy (prospects, DIY); water; wood; lifestyles; agriculture, horticulture and wildlife; food; crafts; education and children's. Equipment includes a folding cycle trailer, wind turbines, retrofit variable toilet flush, materials for teaching renewable energy in schools, and more. New this time is the option to download their factsheet, tipsheets, resource guides and educational titles from their website:

www.cat.org.uk. For a paper copy catalogue, tel 0845 330 4592 for details. CAT also run a host of courses, from timber frame to cob building, blacksmithing and foundry, heating with wood and how to make a wind turbine. Prices from £150 - £295 depending on financial status. Through the summer you can stay in hostel or self-catering accommodation. For the courses and holidays, tel 01654 705981 or see their website

The **Low Impact Living Initiative** (LILI) is an environmental organisation based at Redfield Community in



Buckinghamshire. They run courses and produce newsletters, leaflets (downloadable, from food, energy, building, water/sewage, transport fuels, intentional communities and cleaning agents) and how-to books.

Coming courses: Jul 22-24 -how to make biodiesel; Aug 5-7-beekeeping *or* roofing; Aug 19-21-rammed earth building; Sep 2-4 -straw bale building; Sep 16-18 -DIY for beginners; Oct 7-9-wind & solar electricity; Oct 14-16 -living in communities; Nov 11-13-how to make biodiesel; Nov 25-27 –recycling clothes and textiles; Dec 2-4-build your own geodesic dome; Prices typically £120 to £180: see www.lowimpact.org

VREN Directory
It's 5 years since
our last directory
was published,
listing our member
organisations with
their abilities and
contact details. We
propose to update
it and include any
new organisations:
if you do not
receive either an
email or paper form



your present details, please let us know.

#### See the Night Lights

on which to enter

See where the clouds are: www.west-cheshire.ac.uk/weather/meteosat/d2b.jpg , or http://oiswww.eumetsat.org/IDDS-cgi/listImages?a=1,m=7,f=1,c=2,o=0,s=2,n=12,d=1,v=400,p=0 ,

Or others from www.metbrief.com/ Also www.fourmilab.ch/cgi-bin/uncgi/Earth - ask

for the night side to get the light show (without clouds), as on this image of the British Isles And www.metoffice.gov.uk/satp ics/latest\_uk\_vis. html



#### Mersey Basin Week

If you want to organise an event to help celebrate our waterways between 30<sup>th</sup> Sept. and 9<sup>th</sup> Oct., there's help in planning and running it on offer from the Mersey Basin Campaign, and grants of up to £100. Contact Bev Mitchell, 0161 242 8212 or email b.mitchell@merseybasin.org.uk

#### **Funny Looking E-News**

If our E-News letter appears to have lots of strange and unnecessary letters, try clicking View>Encoding, and select Unicode. If this makes other emails strange, switch back.

#### Waste & Recycling

#### A Rotten Solution to Incineration

An east Manchester anti-incineration campaign spawned composters Fairfield Materials Management Limited and solid waste experts EMERGE, Fairfield compost vegetable waste and its cardboard packaging from the 100+ wholesale fruit, veg and flower units at Manchester's New Smithfield Market, along with greenwaste from Manchester City Council, in a vertical composting unit located at the market (saving on transport). The VCU Technology vertical composting units produce innocuous immature compost in 7 days with no pong or leachate; maturation in piles takes 4-6 weeks. Noise is restricted to loading and removing compost. They supply the council, householders and allotments. They're working towards PAS 100 certification. Their current contract is to process 6 tons per day, 6 days a week in the 3 modules. A further 3 modules are planned. VCU Technology also offer a small, half ton per day, unit. Some compost users say it deters slugs. See www.gmcomposting.co.uk & www.vcutechnology.com

Other suppliers on the Composting Association's certification scheme (see

www.wrap.org.uk/document.rm?id=1020) include PAS 100 certified Gowy Composting Facility, run by Cheshire County Council, Gander Soil Conditioners and Russell Halfpenny, tel 01244 603632); George Whittaker & Sons, Hapsford, tel 01565 654866; and, working towards certification, White Moss Amenities, Radway Green (wholesale, tel 01270 886266).

#### **Computer Recycling?**

Remember to erase your hard drives of any personal, confidential and unnecessary files, including from your Recycle Bin. If your machine has a Recovery Genius, seek help: we've known it to reinstate viruses! Remember that deleting files only deletes their file references – they can exist without. Reformatting the hard drive will get rid of most things, but to be sure, if you've got sensitive information on your hard drive, a power drill works wonders.

#### **Recycled Bricks**

Ideal for renovation/instant aging effects: used bricks have been seen for sale at TG Builders' Merchants, Manchester Road, Lostock (01606 49301). Cheshire Brick and Slate Company (01829 740883), on the A54 east of Tarvin, have been known to supply locally sourced old bricks, along with other rescued materials. Making bricks requires both clay and, more significantly, lots of energy.

#### **Recycle Fluorescent Tubes**

These, and other electrical and electronic waste, are now being accepted at Northwich, Winsford and Frodsham Household Waste Sites.

How do you **recycle floppy discs**? Answers to Kit Strange at Residua, kit@residua.com, tel 01756 709800.

#### Countryside & Food

### Genome Scrambling – Myth or Reality?

is the title of a report published by Econexus relating to the chromosomal changes that happen in genetic engineering, and querying the safety of the resulting food crops. The techniques for the insertion of a new gene can result in damage to many neighbouring genes, and the processes of tissue culture can also lead to faults. The report and summary can be downloaded from www.econexus.info. They also publish a range of other reports on GM. For details, email info@econexus.info, write to EcoNexus, P.O.Box 3279, Brighton BN1 1TL, or tel 01273 625 173

#### Little Budworth's Mill Pool Saved

Due to a risk to public health, Cheshire County Council asked the owners of the Mill Pool to carry out modifications, under the Reservoirs Act. It was proposed to drop the level by 400mm (16"). A survey was conducted: the water only needed to be dropped 50mm (2") to take it outside the requirements of the Reservoirs Act. This has been done, and the Council for the Protection of Rural England report that the visual appearance is unaffected.

www.cprecheshire.org.uk/Local%20to%20You.htm

#### **Money-Saving Meadows**

The Borough of Telford and Wrekin have been doing some alternative municipal bedding schemes.

Traditional beds are costly of maintenance and materials, so they've been trying wildflower meadows.

Public reaction is often positive, with praise for both the flowering areas and the seed heads left in over autumn and winter to feed birds. Insect life is also encouraged. The traditional beds require much more weeding. Bottom

line: traditional £8.15 per sq metre per year, annual meadow £1.15. *The Organic Way, HDRA*.

#### **CAP Reform**

The Common Agricultural Policy, the subject of much criticism, is being replaced by the Single Farm Payment (SFP). Previous schemes either paid farmers a fixed price, or made up the difference

between the market price and the assumed cost price. The SFP, which farmers have to apply for now if not already done, gives a set amount per hectare of land, depending on which of 3 classes of land they hold. Most of Cheshire falls in the top band - £210 - £230/ha (taxable). Farmers get this just for

keeping their land in good order, capable of producing food, so it exerts no pressure to overstock or not rotate crops. This represents a reduction in grants for good land, an increase in grants for moorland (bottom band, £20 - £40/ha). Expected results include bigger dairy farms doing best, specialising, adding value and cooperating; a challenge to livestock producers currently totally dependent on subsidies, and the development of agri-environment schemes.

These are a few notes taken at a meeting of the Sustainable Cheshire Forum with Adam Briggs, of NFU North West region. Further dates are being planned – if you'd like to hear the talk, tel Michele Burrow, 01244 603125, email michele.burrow@cheshire.gov.uk

#### Roadkill

There's a 1997 report by Friends of the Earth that includes the dangers of traffic to wildlife. It believes 1 million animals die each year on our roads — mainly rabbits and foxes, but also 100,000 hedgehogs and 47,000 badgers. Also millions of birds including many barn owls, and 20-40% of our amphibians. See

www.foe.co.uk/resource/consultation\_responses/int

egrated\_transport\_policy\_f
oe.pdf



## Energy Free Renewable Energy Software

A Canadian group has produced downloadable software for assessing the potential of various renewable energy technologies, to assist feasibility studies. See

www.retscreen.net/fichier.php/198/RETScreen\_Imp act.pdf

#### From the Chip Pan to the Fire?

Ebony Solutions, maker of e-diesel, the motor fuel made from used cooking oils, is bringing out a new product: Greenflame, a 35sec heating oil. This follows their new contract with Cheshire County Council to supply all their suitable vehicles, e-diesel is priced at 65p/litre exc VAT according to their website, subject to a minimum order of 2000 litres. Both e-diesel and Greenflame are produced by hydrolysing the vegetable oils, resulting in a product containing some oxygen, which helps achieve a cleaner combustion. Engine or burner modification is unnecessary. Some of the by-product, glycerol, can be used as fuel in the process, some is surplus. As ever, they're keen to hear from more suppliers of used vegetable oil. See www.ebony-solutions.co.uk, tel 01606 301222, email info@ebonysolutions.co.uk

#### The Arguments for and against Wind Power

The debate regarding the two proposed windfarms in Vale Royal required some information gathering. We have attempted to be even handed and factual. **Visibility** – "100m high turbines would be as high as Beeston Castle, and visible over the Cheshire Plain" – Geoff Baker<sup>1</sup>, a power industry engineer who spoke to a CPRE meeting recently. While conspicuous, people surveys indicate a generally favourable reaction to these further man-made additions to the landscape. Amongst locals, this can happen after installation. The BWEA finds that tourism is enhanced – people want visitor centres, etc.<sup>2</sup>

Noise: there are various elements of noise. While Geoff Baker<sup>1</sup> argued there is a noise problem, along with stroboscopic effects (see below), modern design results in a noise level at 40 metres equivalent to normal conversation<sup>7</sup>. Homes in valleys may have low background noise, and residents are therefore more likely to hear turbines upwind, as in Llandinam<sup>4</sup>. The current standard is to have the turbine upwind of the tower, virtually eliminating other noises, such as infrasound (noise too low to hear) 7. Dr Geoff Leventhall, Consultant in Noise Vibration and Acoustics, writes "I do agree that low frequency noise can be a background stressor, leading to typical stress symptoms. However, the low frequency noise levels must be above threshold, which is unlikely to occur for wind turbine noise, especially indoors."3 There's an international conference on the subject in Berlin in October 2005 - see

www.windturbinenoise2005.org. Research continues.

On **stroboscopic** effects, the flicker is of the order of 1Hz and therefore too low to have neurological effects other than annoyance. The blades rotate at 15 to 50 rpm.<sup>5</sup>

Birds and bats: a few wind farms cause a lot of bird mortality due to poor siting. The RSPB is generally in favour of wind farms, as a relatively inexpensive way of avoiding the far more devastating effects of climate change. They say "Wind farms must be located away from narrow bird migration routes and concentrated feeding, breeding and roosting areas." They have disapproved of a number of plans, and have made some perhaps difficult recommendations regarding the second round of offshore wind farms. See www.rspb.org.uk, or tel 01767 680551. According to NATTA, "Birds tend to avoid moving windturbine blades: indeed they seem much more at risk from the large national grid cables. Windturbines are more like bird scarers." 17 Bats are more likely to collide with larger machines, but the main victims are migratory species, of which the UK has few. Pylons also cause bird deaths. 22

A Lasting Legacy: A 3MW turbine would use 350 m³ of concrete (say 800 tonnes each) which would remain after decommissioning the turbine after perhaps 20 years. The bases could be removed, but are normally buried. Using ready-mixed concrete would require 50 lorry (6-8 m³) trips each. The CO<sub>2</sub> emissions resulting from the base and turbine manufacture are reclaimed by 6.6 months of operation of a Vestas V90-3MW onshore, 6.8 months offshore (higher output but bigger foundations and electrical connections) for the DTI look forward to a large potential export market.

#### Costs:

Present<sup>8</sup> (and expected future costs, about 20 years' time<sup>6</sup>) electricity prices into the grid are: 3 (or 3.2<sup>7</sup>) p/kWh (1.5-2.5) onshore wind, 5.5 (2-3) offshore wind, 4.5 (2.5-4) energy crops, 2.0 waste, 5.9 (3-6) marine, 2.7 landfill gas, 1.0 co-firing<sup>8</sup>. Other expected future costs are 10-16p/kWh photovoltaics, 3-4 nuclear, 2-2.3 modern gas, 3-3.5 modern coal, 3-4.5 gas or coal with carbon sequestration. End-use efficiency is the cheapest option.

Power from the most recent nuclear power station, Sizewell B costs 6p/kWh. The nuclear industry proposes AP-1000 designs generating at 3p/kWh for the first, 2.5p/kWh for subsequent plants.<sup>11</sup> However, the DTI notes "It is...clear that past

nuclear designs have not delivered to the costs that were initially projected for them."

Onshore wind is the least expensive renewables investment option - the capital, £/kW (and running costs, £/kW/y) for onshore wind are 795(31), offshore wind 985(27), new hydro 1215(27), refurbished hydro 1305(39), biomass 1220(49), landfill gas 730(135), municipal solid waste 4140(325), photovoltaics 3545(4)<sup>9</sup>.

The costs of incorporating wind into the UK network have been assessed<sup>7</sup>. With wind supplying all 20% of intended 2020 renewable generation, this amounted to 0.17p/kWh with the current gas 'beach' price of 30p/therm. At 40p/therm it diminishes to 0.04p/kWh. This includes back up, network strengthening and benefits of distributed generation. The Aston turbines will produce about 30 GWh/year; at 3p/kWh they will return £900,000 pa on an investment of £9m. (Calculated from figures given in <sup>18</sup>) Renewable Obligation Certificates (ROCs) improve the economics – they may add about 5p/kWh.

#### Wind isn't the Answer?

It's known that overall, we in the UK generate around 10 tonnes of CO<sub>2</sub> each per year: government targets are to reduce that by 60%, while others suggest to 1 tonne each per year, by 2050. For the International Panel on Climate Change (IPCC), a speedy and drastic cut in emissions is required.<sup>21</sup> A stiff challenge! Of the 10 tonnes, about 3 tonnes is from electricity generation. A mix of 10% renewables would reduce that by 0.3 tonnes per person per year.

In 2001, 26% of UK energy went into transport – mostly road and air in a ratio of about 3:1. To feed this with hydrogen would require 100,000 3MW wind turbines – enough to cover Wales, or 100 1.4GW nuclear power stations. The capital cost would just favour the nuclear option. To fuel them with biodiesel would require 100 billion litres per year, requiring 200,000 km² of arable land – the UK land area is 240,000 km². <sup>10,12</sup> In contrast, a Tyndall Centre report based on scenarios from Royal Commission on Environmental Pollution, whereby, in 2050, CO<sub>2</sub> emissions are reduced by 60% in each case.

 Demand unchanged, lots of renewables and nuclear power/fossil stations with carbon sequestration. 10,000 1.5MW onshore turbines, 18,000 offshore, 15 million 4kW photovoltaic (PV) systems, a tidal barrage, other renewables and 46 1200MW power stations

- Demand reductions, all power from renewables. 5000 onshore, 18,000 offshore, 7.5 million PV systems, a tidal barrage
- Demand reductions, mix or renewables nuclear/fossil with sequestration. They suggest 360 onshore turbines, but still 18,000 offshore; 0.75 million PV systems, no tidal barrage, and 19 power stations.
- Big demand reductions, all power from renewables. 5020 onshore turbines, 8800 offshore, 0.75 million PV systems, a tidal barrage. 14

There are already 7000 turbines installed in Germany, and there were 90,000 British windmills in the 17<sup>th</sup> century. <sup>16</sup> For more on the options for land transport, see "How can we reduce carbon emissions from transport?" from the Tyndall Centre, June 2004.

http://www.tyndall.ac.uk/research/theme2/final\_reports/it1\_7.pdf. As for air travel, one jumbo on daily returns between London and Miami produces emissions equivalent to the amount of CO<sub>2</sub> being saved by 65 3MW wind turbines each year. <sup>15</sup> Unanimous advice from a PV expert and a wind expert sharing a stage, on the best option for a domestic system – for minimum cost, cut your energy use down, then invest in appropriate renewables to match. Michael Meacher, on the Westminster Hour, 12/6/05, on meeting the Government's 2010 CO<sub>2</sub> reduction target, said we'll have to cut down on transport (cars and aviation), and improve energy efficiency.

Investment does not have to be by large corporations: Triodos Renewables (tel 0800 056 2761, www.triodosrenewables.co.uk) are issuing shares (min £980 – enough investment to produce an average household's worth of electricity), and the Renewable Energy Investment Club (www.reic.co.uk) are two possibilities.

**House prices**: a Royal Institute of Chartered Surveyors report suggests that wind farms have no lasting impact on house prices; within 2 years prices they recover. (DTI)

At leisure, see the UK energy flowchart at http://www.dti.gov.uk/energy/inform/energyflowchart .pdf and work out what the future should be! Production of this heady bit of research delayed newsletter production somewhat. We hope it was worthwhile.

#### References:

- 1. Geoff Baker,
- www.cprecheshire.org.uk/News%20and%20Events.htm
- 2. www.bwea.com/pdf/SERA-briefing.pdf

- Dr Geoff Leventhall, www.windenergy.org.nz/documents/2004/040604-LeventhallReport-LowFrequency.pdf
- 4. www.dti.gov.uk/renew/condoc/support.pdf
- 5. www.yes2wind.org/17\_faq.html
- 6. www.dti.gov.uk/energy/whitepaper/ourenergyfuture.pdf
- www.sdcommission.org.uk/news/download\_pdf.php?attach\_id=ENI LFIX-SEUWJ78-N9277OA-BE2Y669
- Results of Renewables Market Modelling, OXERA, February 2004 (note: This includes an appendix on energy from waste) – was at www.dti.gov.uk/renewables/policy/oxeraresults.pdf
- Table E1, page 245, of www.dti.gov.uk/renew/condoc/support.pdf
- 10. www.oswald.co.uk/ocl/Hydrogen\_transport\_talk\_final.pdf
- The Energy Review, www.number-10.gov.uk/su/energy/1.html - sections 6 & 7
- www.dti.gov.uk/energy/inform/energy\_indicators/indicators 2004.pdf, page 113, gives 27.529+13.966 million tonnes oil equivalent for road transport, 11.252 for air, 1.101 for rail and 0.688 for water, in 2002. These figures are used by Jim Oswald in

http://www.oswald.co.uk/ocl/windaccountancy04.pdf to

#### **Diary Dates**

Fri 15th July

Cheshire Water Forum: recreation and tourism, water quality, waterside regeneration and biodiversity in Cheshire.

Crewe Alexandra football ground. Bev Mitchell 0161 242 8212, b.mitchell@merseybasin.org.uk

Sun 17th July

Only One Earth XII. A free family event and great day out! Have a go at mask-making, t-shirt printing, willow weaving and more. Grosvenor Park, Chester. 11 am-5pm. Cheshire Wildlife Trust, 01270 610180

Sun 17th July

Wildflowers of salt lime and ash clinker, Anderton Nature Park, 1 – 3pm. See the difference since May. . Tel Dave James 01606 77741

Tues 19<sup>th</sup> July

### A creative approach to environmental interpretation,

BTCV/ETN in Manchester, voluntary organisations £105, others £155+VAT. Tel 0121 507 8390, http://www.btcv.org/etn/

Wed 20th July

Guided **Geology Walk** around Runcorn Hill. 7pm. Tony Parker 01925 726986.

 $20^{th} - 24^{th}$  July

RHS Flower Show, Tatton Park. Tel 0870 906 3811

stations would be required to fuel our transport needs of 54 million tons (and rising) oil equivalent.

13. DTI Economics Paper No. 4, Options for a Low Carbon

reason that 100,000 wind turbines or 100 nuclear power

 DTI Economics Paper No. 4, Options for a Low Carbon Future June 2003, at

www.dti.gov.uk/economics/opt\_lowcarbonfut\_rep41.pdf

- UK Electricity Scenarios for 2050, by Jim Watson, Nov 2003, www.tyndall.ac.uk/publications/working\_papers/wp41.pdf
- 15. derived from George Monbiot, Viewpoint, Energy World,
  June 2005
- 16. www.guardian.co.uk/renewable/Story/0,2763,1211314,00.h
- 17. eeru.open.ac.uk/natta/natta-guide.html#wind.
- 18. www.actonbridge.org/
- 19. www.vestas.com/uk/environment/2005/life\_cycle\_assessment/life\_cycle\_assessment.asp, and follow link
- 20. www.dti.gov.uk/renew/condoc/support.pdf
- 21. IPCC report at www.ipcc.ch/pub/spm22-01d.pdf
- www.energy.ca.gov/2005publications/CEC-700-2005-015/CEC-700-2005-015.PDF
- 23. www.batcon.org/wind/BWEC2004finalreport.pdf See also www.countryguardian.net

Sun 22<sup>nd</sup> July

**Pond Dipping**, Weaver Parkway. Tel Tony Blackledge 01606 593133

23rd July – 7th Aug

Forest Fever Fortnight. Contact Jo Sayers,

01925 816217 for info to support your event.

30th July, 11am-3pm

Wildlife Watch and Forest Fever: Water World, crafts and activities with a watery theme at Marshall's Arm. Tel Virginia, 01606 42667 Sat 30th July

**Moth Night**: learn to identify moths in the field. Plus basic biology, ecology and habitat requirements. Holcroft Moss (SJ685934), 8pm.

£5 (£3 CWT members). Booking required: Lee Greenhough or Kat Walsh, Grebe House, 01270 610180.

Sat 6<sup>th</sup> August

**Hiroshima Day:** Bandstand, the Groves, Chester, 8pm. Readings, floating flowers, more.

Tues 9th Aug

Nagasaki Day: Open Forum re nuclear weapons, following NNPT failure. 7.30pm Quaker Meeting House, Frodsham St. Chester. Email general@chesterstopwar.org.uk

Sun 14th Aug

#### Photographic Workshop. Wildlife

photography basics (am).
Outdoor practical session (pm),
Swettenham Meadows.
Goostrey Village Hall,
(SJ775701). 10.30am-4pm. £5
(£3 CWT members). Bring
lunch. Booking required: Lee
Greenhough or Kat Walsh,
Grebe House, 01270 610180

Thurs 18<sup>th</sup> Aug

**Getting Local People Active & Involved**, BTCV/ETN – details as 19<sup>th</sup> July

Wed 24th Aug

**Bat and moth night** at Sandymoore, 7pm. Tony Parker 01925 726986.

26th - 29th Aug

BTCV improving access: see article.

27th Aug, 8pm

**Bats at Marbury** Park. Contact Chris, 01606 77741

28<sup>th</sup> – 29<sup>th</sup> Aug

**Tatton Park Country Show** – music, dance, stalls, crafts. Normal park entry charges. 01625 534400/534435

3rd & 4th Sept

The Elegant Art of **side Saddle Riding**, in period costume. 3pm & 4pm. Marbury Country Park. . Tel Peter Schofield 01606 77741



10th Sept Wildlife Watch **Bats at Marshall's Arm**. Meet 7.30 Heron Gate. Contact Stuart, 07788 570628

17th - 25th Sept

Step into Cheshire events in italics: tel 0845 1110656, www.stepintochesh ire.org.uk

Sat 17th Sept, 10-12am Wildlife Watch:

Pool to Pool.
Pettypool and
others. Meet at
Sherratt's Rough,
Daleford's Lane,
GR 615692.

Contact 01606 76473

Sun 18<sup>th</sup> Sept

Northwich Community Woodlands Walk, 5 miles/half day with the Ramblers. Meet Witton Mill Bridge car park, SJ663747, 10am. Field paths, some stiles, dogs on leads. Eric Povall, 01606 882371

Sun 18<sup>th</sup> Sept

Little Budworth Walk, 5 miles/half day with the Ramblers. Meet Oulton Mill car park, SJ578650, 10am. Field paths, some stiles, dogs on leads. Eric Povall, 01606 882371

Sun 18<sup>th</sup> Sept

Acton Bridge to Dutton Walk, 4.5 miles along Trent & Mersey Canal; 1 stile, possible mud, stout shoes/boots. 10.30am British Waterways hardstanding by A49 Acton Bridge, SJ601761. Neil Collie, Groundwork: 01606 723166, neil.collie@groundwork.org.uk

Sun 18<sup>th</sup> Sept

Memory Walk, Marbury/Anderton Parks, 5 miles/to 3 hours in aid of Alzheimers. 1.30pm, Marbury; refreshments at finish. Tel Sarah Sharp, 01606 351112 for sponsor forms etc

Sun 18<sup>th</sup> Sept

Frodsham Pond Trail, ancient tracks, field paths, 9 ponds, 6 miles/2-3 hours, moderate gradients, stiles. 2pm, Community Centre, Fluin Lane, Frodsham. Tel Frodsham Town

Council, 01928 735150, email council@frodsham.gov.uk

19<sup>th</sup> - 20<sup>th</sup> Sept

Transport and Sustainable Mobility Conference – the EU in Brussels.

From €595.

www.euconferences.com

Wed 21st Sept

Delamere Forest Walk from Linmere Visitor Centre car park, SJ545704, 10.30am. 8 miles/all day – some stiles, steps, steep slopes & uneveness. Eric Povall, 01606 882371

Wed 21<sup>st</sup> Sept

**Delamere Toddlers & Pushchairs** from Linmere
Visitor Centre, SJ545703 to
lower slopes of Old Pale &

back, 1.5 miles mostly flat, some gentle slopes. 12.30 – 1.30pm. Please ring 01606 889792 10am-4pm.

Wed 21<sup>st</sup> Sept

Biking through Northwich Community Woodlands, from Marbury Country Park rangers office SJ652764, 2pm. 5 miles/1½ hours, mostly flat, some gentle slopes, OK for families,

bike+helmet, no dogs. Pete Schofield, 01606 77741

Fri 23rd Sept

Work in Wildlife Photography. Talk by Ron Thomas. Willaston Memorial Hall, The Green, Willaston, Wirral (SJ329777). 7.30pm. Contact Wirral Group, 0151 648 4371 / 3884, email wirralrangers@wirral.g ov.uk.

23<sup>rd</sup> - 25<sup>th</sup> Sept

Nantwich Food & Drink Festival – fine food, farmers' market, real ale, kids' kitchen... 01270 610983 or www.nantwichfoodfestival.co.uk

Sat 24<sup>th</sup> Sept

**Deserts & Icecaps Walk**, exploring Frodsham's geological past. Forest Hills Hotel car park, 2 – 5pm, 3 miles, stiles, rock steps & uneveness. Alan Bowring, 01606 541825

Sun 25<sup>th</sup> Sept

Whitegate Walk with Marton & Newchurch. Meet Kennel Lane, Sandiway, SJ602704, 10am. 5 miles/½ day, field paths, some stiles, dogs on leads. Eric Povall 01606 882371

Sun 25<sup>th</sup> Sept

Mobberley Walk, from Mobberley Church lay-by SJ791802, 2pm. Field paths, some stiles, dogs on leads, 5 miles/½ day. Eric Povall, 01606 882371.

Sun 25<sup>th</sup> Sept

Warmingham Treasure Hunt Walk from Church House Farm (opposite Bear's Paw) Warmingham SJ708612, 10.30am on, field paths, quiet roads, some rough ground, 4-5 miles, boots advised, bring food, marquee if wet. Naomi Higson, 01270 526231 30<sup>th</sup> Sept – 9<sup>th</sup> Oct

Mersey Basin Festival: see article

Sat 1st Oct

First Aid, a VREN/Northwich Community Woodlands training event, 10am-4pm, Groundwork Offices, Navigation Road, Northwich. £10

deposit, refundable for any community/environmental interest groups. Tel Abi or Helen, 01606 723160, email abi.johnson@groundwork.org.uk

Tues 11th October

Hopyards and Uplands Woods, by Duncan McNaughton of Forest Enterprise about the new woodlands lying between Marbury and Anderton. £1.50 to non-members. 7.30pm Comberbach Memorial Hall. Brian Jaques 01606-891242 or Duncan McNaughton 01606-882167

Wed 12<sup>th</sup> Oct

Ecohomes Support

Programme Training, by Sustainable Homes in Liverpool. Free to qualifying participants. Tel 020 8973 0429, info@sustainablehomes.co.uk

Sat 15th Oct, 11am – 1pm Wildlife Watch: **Oh Deer!** The Red Deer of Tatton Park. Bring binoculars. Contact 01606 76473



#### 17<sup>th</sup>/18<sup>th</sup> Oct

The Future of Nuclear Energy in Europe – the EU in Brussels. From €595 www.euconferences.com

Thurs 10th Nov

Lion Salt Works: Andrew Fielding, of Lion Salt Works, about the site and plans for its restoration and return to salt making. £1.50 to non-members. 7.30pm Comberbach Memorial Hall. Brian Jaques 01606-891242 or Lion Salt Works 01606-41823

Sat 19th Nov

**Hedge laying for Beginners**, All tools will be provided. 10am – 3pm. . Book your place: tel Peter Schofield 01606 77741

Sun 20th Nov, 10am – 1pm Winter Birds: A walk around Gowy Meadows in search of wintering birds. Meet at Thorton-le-Moors Church. SJ435740. £5 (£3 CWT members). Bring lunch. Booking required: Len Greenhough/Kat Walsh, 01270

610180

Sat 26th Nov Wildife Watch, trip to **Martin Mere**, Burscough. Tel Bev, 01606 882770 23<sup>rd</sup> Nov – 4<sup>th</sup> Dec National Tree Week. Further details from Cheshire Landscape Trust on 01244 376333

Sun 18th Dec

Christmas Gifts: A family event. Make gifts for free using natural materials from Marbury Park 10.am – 3.pm Rangers cabins at Marbury. Yvonne Singh 01606-871795 or Brian Jaques 01606-891242