



Fracking Heck

We will be the "greenest government ever" said the Conservatives a year or so ago – Oh yeah? Now comes news about a new move to meet the UK's need for cheaper energy which is likely to have devastating effects. Never heard of "fracking"? It is a new way of accessing an energy source with untold potential for turning green into red! There is a lot of natural gas trapped under sedimentary rock and the current method of releasing it in the USA is to use a method frowned upon until recently. What you do is blast the rock on a huge scale with millions of gallons of water to fracture the rock. This is called "hydraulic fracturing" (hence 'fracking' for short). This subterranean earthquake allows the trapped gas to rise to the surface to be tapped. So what's all the fuss about? The water used has to be mixed with up to 596 rock-dissolving chemicals before it can do its job. This potent mix is alleged to cause three types of contamination - of water supply, of the air and of the climate. Fracking is already happening to some of the shale rocks of Lancashire. A British company called Cadrilla Resources has been drilling two wells since August 2010 in the Fylde area of Lancashire and one is already 7,500 ft down. Whitehall plans to initiate a fresh round of licensing talks for further development next year. When this was tried in Pennsylvania, film maker, Josh Fox, investigated and found alarming effects outlined in his film, Gasland. Tap water smelled of gas, actually caught fire and looked brown; many people became sick. Much of the fracking water was rising back up to the surface. A USA report this April found that this waste water contained 29 non-biodegradable, cancer-causing chemicals and glycol ethers whose toxicity cause testicular problems, malformation of embryos, bone marrow depression and red blood cell destruction. France has already banned the production of this shale gas. Another study by Cornell University published in the journal, Climate Change, showed that fracking produces up to 43% more methane than coal. Before the Government goes any further with this, it would seem that a big debate is required with wind, wave and sun renewables pitted against shale gas. Just because the method of extraction is cheaper does not mean it is desirable.

**Since this was written two minor earthquakes have been reported close to the drilling points north of Blackpool and work has been suspended by the Cuadrilla company pending "investigations" with the help of outside experts. But it still plans to start drilling near Preston in a month's time. ■*



Bee Trouble Global

Unless the near seven billion humans in this world make extensive changes to the way we mismanage the planet, the decline of pollinators, needed to feed ever-increasing numbers of humans, is likely to continue. So says research outlined in a report from the United Nations Environment Dept (UNEP). The collapse of bees in Europe is now being detected on a global scale from China and Japan to recent first signs in Egypt. A number of factors combine to produce this disappearance - a decline in flowering plants as farming methods destroy their habitats; the use of harmful 'systemic' insecticides; increased numbers of pests; air pollution reducing the distance that flower scent can travel. Of the 100 crop species that provide 90% of the world's food, over 70 depend on bees to pollinate them. More needs to be done to care for our bees globally. ■

Bees & New Pernicious Pesticide

A Government senior scientific advisor has ordered a review of a possible link between the new type of pesticide, neonicotinoids, used on 2.5m acres of UK farmland and the decline of honey bees. The pesticide is supposedly safe 'when used correctly' but uncertainties require investigation. Neonicotinoids represent a £500m-a-year business for the German chemical giant, Bayer. Its use has already been forbidden or restricted in France, Germany, Italy and Slovenia. So what is the problem exactly? Neonicotinoids are 'systemic' pesticides, aimed specifically at termites. The chemicals do not simply lie on a plant but are absorbed by every part of it including its pollen and nectar which make it impossible for unintended targets like bees and other pollinators to avoid ingesting it. Two years ago in laboratory experiments, a US Govt researcher, Dr. Jeffrey Pettis, of the US Dept of Agriculture, found that the neonicotinoid, imidacloprid, increased bees' susceptibility to disease, from a parasite called nosema, even at doses so tiny they could not be detected in dead bee tissue. This discovery remained unpublished two years on for some reason. A £10m review initiative funded by DEFRA and research councils, the Wellcome Trust and the Scottish Government, is underway. Bayer maintains that German research which shows no effect on bees, contradicts the laboratory work. ■



Ticks & Dogs and all the Jazz

Over the Christmas bitter cold spell Research by Bristol University published in the journal, Medical and Veterinary Entomology, found from a study of 3,500 dogs that at any one time 14.9% of dogs are infested with blood sucking ticks - yikes! This is compounded by

Green Govt Has Been

The Sustainable Development Commission (SDC) was abolished in March, and Jonathan Porritt, its former chairman, is alerting us to the fact that there is now no official body keeping tabs on the Government's record regarding the environment. So policies to deliver its "greener than green" promises are now either being delayed, diluted or abandoned. Of 78 'green' policies, Mr. Porritt found no progress on 59 and felt that 30 were 'moribund'. ■

the recent discovery in the UK of a tick, *Dermacentor reticulatus*, normally found in continental Europe which is thought to have arrived here because of climate change. There is no escape! Watch out in areas with high populations of wild goats and/or red deer too. ■



Mega-Dairy Plan Goes Sour

Plans for the £34m massive dairy factory farm in Lincolnshire of 3,770 cows have been shelved. The original mega plan was for 8,100 cows but 14,000 protests by animal welfare groups and the Environment Agency's concern about groundwater contamination of a nearby aquifer seem to have persuaded the two dairy farmers to back off. ■



Conkers Conquered

One of the finest UK avenues of 68 magnificent horse chestnut trees in Ilminster, Somerset, was felled in February because it had succumbed to a bleeding canker infection (rusty coloured ooze) caused by a bacterium, *Pseudomonas syringae*. A nation-wide survey by the Forestry Commission in 2007 found that nearly a half of all chestnut trees examined were showing symptoms of infection caused by this bacterium and not by 'sudden oak death' as previously thought. Of the estimated half million trees in the UK, thousands have already been felled. To add to the catastrophe, the remaining trees are now under a different attack from an insect, the horse chestnut leaf miner moth, which somehow got here from the Balkans around 2001. It was recorded as a new species in NW Greece in the late 1970s. Millions of the moth larvae burrow into the leaves turning them brown in summertime. It was first noticed on Wimbledon Common, SW London, in 2002 and now affects most of the UK below a Lancs-Yorks line. ■



If you go out in the Streets Today

Bristol University's Mammal Research Centre is studying the urban invasion of foxes. There may be as many as 35,000 of them out of a total of around 250,000 now living in our towns and cities, suburban gardens and neglected railway embankments. It is thought that there could be up to 10,000 in London. Apparently, the influx began fifty years ago then accelerated in the 1970s. They are not the only species to sit on our doorsteps or shed roofs. Grey squirrels and muntjac deer, magpies and sparrowhawks have also increased in urban areas. And there has always seemed to have been loads of other birds around, wood pigeons, gulls, rooks etc. Research is showing that the foxes do not take cats, or live solely out of dustbins or spread disease as was once believed. So it would appear there are at least a few species with which humans can live in relative peace and harmony. I suppose that when we humans push them out of their own habitats, we should not be surprised or angry when they encroach on our own home patches. ■



Otters Stopped by Doo Doo

If you are the provider of a commercial fishery, life is becoming increasingly difficult as the rise in otter numbers becomes a greater threat to your business. If otters invade your lake or river you are not allowed to shoot or harm them as laid down by the 1981 Wildlife and Countryside Act. You may only protect your asset with 'passive' defences such as otter-proof fencing (expensive) which the Environment Agency will now help with a 50% grant. Most fishermen enjoy catching a glimpse of this captivating creature. So....what to do? A recent ingenious innovation was the use of a pungent spray made from lion dung obtained from a zoo. It had been found successful in keeping cats away from herbaceous borders but the jury is still out on this one. Lion dung anyone? Only £12 per 10Kg sack from London Zoo! ■

Can't Watch the Birdie Rachael

A new type of deadlier insecticide called neon-icotinoids arrived in the 1990s. It replaced the banned DDT whose devastating effects on wildlife Rachael Carson warned us about in her book, *Silent Spring* way back in 1962. In his book, *The Systemic Insecticides: A Disaster in the Making*, Henk Tennekes, now warns how this new class of insecticide is having such a devastating effect on insect life which he maintains is having a consequent knock-on effect on many bird species whose numbers have shrunk dramatically over the past few decades without reliable explanation. Maybe he should have called the book, *Silent Skies*. Read it. It has also been discovered recently that neon-icotinoids, even in minute quantities are lethal to bees. This may be the explanation for colony collapses (CCD - colony collapse disorder) world wide. ■

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Who'd be a Youngster these Days

A recent survey of 1,399 children by travel company, Sunshine, found that 1 in 5 children between the ages of 8-15 in the UK have never paddled in the sea or built sand castles. The reasons are likely to be either poverty or modern electronic styles of play located indoors punching buttons and watching screens. The Save The Children charity reckons that about 13% of children (1.7m) live in severe poverty. The survey also found that 52% had never been on a boat and 40% still had not flown in an aeroplane; 61% had never been camping and 71% had yet to experience life in a caravan. ■