

generating capacity we shall need after closure of many of our ageing coal and nuclear power stations? Energy saving is where we must start, but will that be enough?

Tuesday 30<sup>th</sup> June

It is claimed that producing charcoal from biomass (known as 'biochar') and burying it in the soil can provide the cheapest and most effective solution to the urgent need to sequester atmospheric carbon permanently and at the same time to improve soil fertility. Biochar-based fertilisers can restore soil structure, reducing the need for fertiliser and water, while capturing CO<sup>2</sup> and permanently burying it in the ground. The UK Biochar Research Centre has published technical details at [www.geos.ed.ac.uk/sccs/biochar](http://www.geos.ed.ac.uk/sccs/biochar) and a field experiment is being

conducted on a farm near Hastings.

Website: [www.carbon-gold.com](http://www.carbon-gold.com)

Sources: The Transition Timeline - by Shaun Chamberlin (Green Books)

[www.edie.net](http://www.edie.net)  
[www.scidev.net](http://www.scidev.net)  
[www.wwf.org.uk](http://www.wwf.org.uk)  
[www.foe.org.uk](http://www.foe.org.uk)

If you would like to receive the prayer diary each month by [email](mailto:prayer-guide@christian-ecology.org.uk) (free), please email [prayer-guide@christian-ecology.org.uk](mailto:prayer-guide@christian-ecology.org.uk). For further information and requests for prayer, please write or email: Philip Clarkson Webb, 15 Valley View, Southborough, Tunbridge Wells TN4 0SY Email: [pcw@christian-ecology.org.uk](mailto:pcw@christian-ecology.org.uk)

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Picture on front cover: Common Spotted Orchid (*Dactylorhiza fuchsii*) by J.A.

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## Prayer guide for the care of creation

# June 2009



"He waters the mountains from his upper chambers,  
The earth is satisfied by the fruit of his work.  
He makes grass to grow for the cattle,  
And plants for man to cultivate  
Bringing forth food from the earth . . .  
How many are your works, O Lord!  
In wisdom you made them all,  
The earth is full of your creatures." (Psalm 104.13,14 & 24)

"Man talks of a battle with Nature, forgetting that if he won the battle, he would find himself on the losing side."  
(E.F. Schumacher)

"You do not inherit the earth from your ancestors,  
You borrow it from your children."  
(Anon)



## Monday 1<sup>st</sup> June

New York State has followed Illinois and some Canadian cities in banning the purchase of bottled water by state agencies.

Governor Paterson said: "Taxpayers have spent billions of dollars to ensure that we get clean drinking water. If we make such significant investments, we should reap the benefits and use that water. Our efforts will serve as an example for local governments, businesses and residents to follow."

The head of the National Environment Defense Council said: "This announcement not only makes sense when it comes to public health – it will save taxpayers' money and cut global warming emissions from the manufacture and transport of bottled water.

Mark H, a British blogger, asks: "Who in the UK will be the first

to follow the Governor of New York's commonsense initiative, I wonder?"

## Tuesday 2<sup>nd</sup> June

At the SustainabilityLive conference, David Strahan of the Oil Depletion Analysis Centre said that, of the world's 98 oil-producing countries, 64 had now passed their production peak.

"The consumption of oil in OECD countries has been receding since 2005 because the world cannot produce enough oil. I believe we would have been in recession even if there had been no global financial crisis. That crisis was catastrophic, but so was last year's oil price spike. . . We need to put a greater value on carbon to provide the necessary markets to stimulate the uptake of renewables. I believe that means we need to see the

## Sunday 28<sup>th</sup> June

Loving God, open our hearts that we may feel the breath and play of your Spirit.

Unclench our hands, that we may reach out to one another and touch and be healed.

Open our lips, that we may drink in the delight and wonder of life.

Unclog our ears, to hear your agony in our inhumanity.

Open our eyes, that we may see Christ in friend and stranger.

Breathe your Spirit into us, and touch our lives with the life of Christ.

(A prayer from New Zealand)

## Monday 29<sup>th</sup> June

The proposed Severn Barrage continues to arouse controversy. The preferred option of a 16 km. barrage

running between Cardiff and Weston Super Mare would according the Department of Energy provide 5% of the UK electricity demand. At high spring tides this would hold an area of 500 sq. kms. (less at neap tides) and deliver on average 0.8 kWh per day per person. It would also provide flood protection valued at £120 million a year. The CO<sup>2</sup> emissions involved in the production, transportation and construction of the barrage are estimated at 5,436 kilotonnes and these figures suggest a payback period of 6.5 months after commissioning. Construction will take about nine years. Objections centre around the impacts on wildlife in the estuary, but it is notoriously difficult to assess these in advance. It is however reasonable to ask: if a Severn Barrage is turned down on environmental grounds, where do we turn for the extra

## Friday 26<sup>th</sup> June

The prospect of peak oil and climate change can lead to despair – particularly among people outside any faith.

The Buddhist scholar Joanna Macy writes: “It is good to realise that falling apart is not such a bad thing. Indeed, it is as essential to transformation as the cracking of outgrown shells. Anxieties and doubts can be healthy and creative, not only for the person, but for the society, because they permit new and original approaches to reality . . . Many of us fear that confrontation with despair will bring loneliness and isolation. On the contrary, in letting go of old defences, we find truer community. And in community, we learn to trust our inner responses to our world – and find our power.”

As events unfold, Christians can make a unique contribution through their faith in the ultimate

purposes of the God who created this wonderful universe.

## Saturday 27<sup>th</sup> June

As Shaun Chamberlin puts it: “We could waste all our time and energy analysing probabilities and debating them, but far better to spend that time in doing”. And (a Christian might add) in fulfilling the purposes for which God put us here on earth.

“When we stop distracting ourselves by trying to figure out the chances of success or failure, our minds and hearts are liberated into the present moment. This moment then becomes alive, charged with possibilities, as we realise how lucky we are to be alive now, to take part in this planetary adventure.”

(Joanna Macy)

value of carbon set at around £200 per tonne.”

## Wednesday 3<sup>rd</sup> June

Last month the 140-turbine 322 MW. Whitelee Wind Farm near Glasgow (Europe’s biggest onshore wind farm) was officially opened, generating clean, safe power for over 180,000 homes. At the same time, Britain’s only manufacturer of wind turbines is considering closing its two UK plants with the loss of over 600 jobs. FoE is calling on the Government to tackle urgently the barriers to green energy development, in particular:

- An industrial strategy that secures our renewable energy manufacturing base,
- Establishing a bank to provide finance for the renewable energy industry,
- Developing a new offshore supergrid to tap into our

vast resources of wind, wave and tidal energy and to connect with a bigger European low-carbon energy network,

- Investing in a new smart grid to balance the variable output of renewables and to make it easier for households that invest in renewables to become mini-power stations,
- Reforming the regulator OFGEM so that tackling climate change becomes its top priority.

## Thursday 4<sup>th</sup> June

Denmark’s wind industry will, by 2011, supply 20,000 battery charging points across the country with wind-generated electricity. Project Better Place (PBP), founded by Shai Agassi of Silicon Valley, has brought together manufacturers and suppliers to provide battery

exchange stations and charging points, enabling electric car users to make longer journeys in better performing vehicles. A similar scheme in Israel enables car owners to rent their car batteries. PBP reckons that, by 2020, fuelling a petrol-driven car for a single year will cost more than charging an electric car for its entire life.

#### Friday 5<sup>th</sup> June

Today is World Environment Day, operating this year under the banner "Easily Green Your Daily Routine." Costa Rica, New Zealand and Norway have already made a commitment to go carbon neutral, while the entire UN administration plans to follow suit. UN 'Climate Heroes' are raising awareness around the world. Roz Savage is rowing solo across the Pacific, Charles and Sho Scott are cycling 4,700 kms. across Japan's mainland and a

catamaran made of reclaimed plastic bottles and waste products will sail through the Great Eastern Pacific Garbage Patch (six times the size of England) to show that refuse can be used as a resource. The website [www.unep.org/wed/2009](http://www.unep.org/wed/2009) outlines ways we can all unite to combat climate change.

#### Saturday 6<sup>th</sup> June

Tomorrow is Environment Sunday. A Rocha UK has produced a DVD on the theme "Hope for Planet Earth" which includes service and sermon outlines, material for bible study and professionally-filmed 15-minute sections on Climate Change Science, the impacts on the poor and the planet, the biblical imperative for action and practical suggestions. It can be ordered online at [www.arocha.org](http://www.arocha.org) or by post with a cheque for £10 sent to A

#### Wednesday 24<sup>th</sup> June

According to the 2002 US Agricultural Census, small farms averaging 2 hectares produced crops worth \$15,104 per ha. while the largest farms averaging 15,581 has. each yielded crops worth only \$4249 per ha.

As Shaun Chamberlin points out in "The Transition Timeline", the reason small farms lose out in our economy is that, while they can produce substantially more food per hectare, the big farms can produce more of a given monoculture crop per hectare, which suits the large-scale centralised buyers. When oil prices again rise, it will be the gardeners, not the farmers, who will be the most skilled food growers since gardening has become a key repository of the skills which conventional farming has to some extent lost.

#### Thursday 25<sup>th</sup> June

Discovery of new oilfields peaked in 1965 and it has been a quarter of a century since we last discovered as much oil as we used. Production of conventional oil levelled off from mid-2005 to mid-2008 despite the massive incentive to produce more oil when the price reached \$140 a barrel last July. Oil companies increasingly turned to less accessible, lower quality sources of oil such as the Alberta tar sands. A 2005 report commissioned by the US Department of Energy concluded that:

"the peaking of world oil production presents the US and the world with an unprecedented risk management problem" and "without timely mitigation the economic, social and political impacts will be abrupt, revolutionary and not temporary."

Food & Agriculture Organisation has estimated that greenhouse gas emissions from meat production account for about 18% of the world's total. So I want to highlight the fact that among many options for mitigating climate change, changing diets is something one should consider."

#### Tuesday 23<sup>rd</sup> June

In 1975 Kenneth Mellanby asked the question "Can Britain feed itself?" and concluded that we could indeed if we ate less meat. Yet for non-meat-eaters a persistent question is: "What then would you do with the 9 million hectares of non-arable pasture?"

Simon Fairlie a year ago asked the same question as Kenneth Mellanby, comparing different land management systems, and concluded that organic livestock-based agriculture has

more difficulty in sustaining the UK population on the land available than orthodox chemical-based agriculture because of the need for extra land. However, organic livestock agriculture becomes more efficient and sustainable when combined with traditional and permacultural management practices such as:

Feeding livestock on food wastes and residues;

Returning human sewage to productive land;

Dispersing livestock among mixed farms & smallholdings rather than concentrating them in large farms;

Local slaughter and food distribution;

Optimum recuperation of manure;

Selecting & managing livestock to be nitrogen providers rather than nitrogen stealers.

Rocha UK, 13 Avenue Road, Southall, Middlesex UB1 3BL.

#### Sunday 7<sup>th</sup> June.

Lord, may we love all your creation, all the earth and every grain of sand in it. May we love every leaf, every ray of light. May we love the animals; you have given them the rudiments of thought and joy untroubled. Let us not trouble them, let us not harass them, let us not derive them of their happiness, let us not work against your intent. For we acknowledge that to withhold any measure of love from anything in your universe is to withhold the same measure from you.  
(Feodor Dostoievsky)

#### Monday 8<sup>th</sup> June

##### World Oceans Day

Our oceans have never deteriorated so much and so quickly as in the last years. They provide us with the air we

breathe, with food and they support our economy. Today scientists, policy-makers, managers, students and the public meet together to consider how we can protect them for our own survival. The film "The End of the Line", based on the book by Charles Clover will be launched today throughout the world. For UK venues, go to: [www.greenpeace.org.uk/blog/ocans/imagine-world-without-fish-20090513](http://www.greenpeace.org.uk/blog/ocans/imagine-world-without-fish-20090513)

At the Erasmus University in Rotterdam, Fabien Cousteau (grandson of Jacques), Captain Paul Watson of Sea Shepherd, David Doubilet, underwater photographer for National Geographic, and Professor Michael Braungart of Cradle-to-Cradle, will share their visions regarding the oceans and the opportunities they afford for humanity and the entire planetary ecosystem.  
[www.worldoceansday.org](http://www.worldoceansday.org)

## Tuesday 9<sup>th</sup> June

Beginning today at Hilfield Friary,

Dorset, two days of discussion with Bishop George Browning, a leading Anglican spokesman on environmental issues, will address the politics of climate change, recognising that the present economic crisis is an opportunity to re-invent capitalism on a more humane, compassionate and just foundation. This is decision time for us all on the ethics and politics of climate change. Booking forms can be downloaded from [www.hilfieldproject.co.uk](http://www.hilfieldproject.co.uk) or email Sarah Hargreaves at [hilfieldproject@franciscans.org.uk](mailto:hilfieldproject@franciscans.org.uk) or ring 01300 341741.

## Wednesday 10<sup>th</sup> June

Studies from Oxford University and the Potsdam Institute for Climate Impacts Research

published in *Nature* have concluded that rises in global temperatures are unlikely to be below the so-called 'safe' level of 2° C. above pre-industrial levels. Rises above that are expected to lead to deforestation, flooding and droughts across the world. "For every 10 years that we delay action, another 0.5° C. will be added to the likely rise in temperatures." Another study from the UK Energy Research Centre found that meeting the cost of an 80% cut in greenhouse gas emissions by 2050 will cost around £17 billion a year or £700 on the average electricity bill. If objections to wind farms and nuclear power stations continue, the cost will rise to £20 billion a year as more expensive technologies will be required.

## Thursday 11<sup>th</sup> June

The evacuation of the Carteret Islands east of Papua New

wholly man-made methane sources and potentially one of the best chances for humans to control methane emissions."

## Saturday 20<sup>th</sup> June

Today a Green Fair at Lindley Methodist Church, Huddersfield, from 10 am to 4 pm features speakers from A Rocha, Water Enterprises and the Environment Agency. There are information stalls from local environmental groups, food stalls from local food producers, children's arts and crafts facilities, ploughman's lunches and cream teas. For more information email: [office@ojop.org.uk](mailto:office@ojop.org.uk)

## Sunday 21<sup>st</sup> June

As tools come to be sharpened by the blacksmith, so may we come, Lord.

As sharpened tools go back to their owner, so may we go back to our everyday life

To be used by Thee.

(A prayer from Africa)

## Monday 22<sup>nd</sup> June

According to the UK Statistics Authority, the population of Britain will rise from 61.4 million in 2008 to 69.6 million in 2027. The extra 8.2 million is more than the present population of London and will increase the pressure on land for food, water, housing and basic infrastructure.

Meat production, especially beef, has a huge impact on land availability. It takes 8 kg. of grain to produce 1 kg. of beef. Globally, one-third of arable land is devoted to producing food for animals. Rajendra Pachauri, chairman of the IPCC, commented: "The UN

refurbishments of their homes, in particular:

- To offer householders new ways to pay for green refurbishment that would significantly reduce upfront costs and spread them over a longer period
- Provide better incentives to make homes more energy efficient through government grants, subsidies and tax rebates
- Ensure installers are qualified and approved to undertake the work.

Colin Butfield of WWF said:

If the Government is looking for solutions to reduce our emissions and stimulate the 'green economy', there is really no place like home. Research has shown that householders are willing to play their part in tackling climate change, so it is now up to the government to set out a range of incentives that

are of sufficient scale, ambition and urgency to ensure greener, more energy-efficient homes."

### Friday 19<sup>th</sup> June

Methane from rice paddies is a significant contributor to global warming. A study published in *Global Biogeochemical Cycles* has found that draining the paddies after harvesting allows organic material to decompose aerobically. If draining is combined with the application of rice straw, methane emissions could be reduced by 7.6 million tonnes a year – about 30% of global emissions from rice fields. If the rice straw is left to decompose in the open air of a drained field in the fallow season, methane emissions could be reduced while the straw could still add nutrients to the soil. Stanley Tyler of the University of California said: "Flooded and rain-fed rice paddies are one of the few

Guinea began last month as storm surges and higher tides were washing away houses and gardens and contaminating the soil with salt. The 1500 inhabitants are moving to a remote part of Bougainville 53 miles away. Ursula Rakora, a former Carteret islander now working for an aid charity, said: "If I had a miracle to perform, I wouldn't bring my people here. They will need to adapt. It's not going to be easy, but what choice do they have? It's not just us. It's going to happen to others right through the Pacific. The pollution has to stop. The big nations have to do something very, very urgently. We aren't imagining any of this."

### Friday 12<sup>th</sup> June

A WWF report launched at the world Ocean Conference in Indonesia predicts that climate change will destroy coral reefs across the Philippines, Malaysia, Papua New Guinea,

the Solomon Islands and Timor. The region has 30% of the world's coral reefs and more than 35% of coral reef fish species, as well as providing vital spawning grounds for economically important fish such as tuna. The report predicts that, owing to climate change and over-fishing, the capacity of the region's coasts to feed its 100 million people will decline by 80%. "WWF calls on world leaders to agree a strong and fair Global climate Deal at the UN Climate Conference in Copenhagen next December to reduce greenhouse gas emissions by 80% below 1990 levels by 2050."

### Saturday 13<sup>th</sup> June

International shipping, now responsible for more greenhouse gas emissions than the UK or Canada, could cut its emissions by between 25% and

75% at negative cost according to a report from the International Maritime Organisation. A range of measures including towing kites, speed reductions, upgrades to hulls, engines and propellers could all be introduced which, combined with Emissions Trading and Bunker Fuel Levy, could tackle shipping emissions in an efficient and cost-effective way. WWF comments: "The industry has nothing to fear from joining the global climate regime, and could actually make financial gains if it gets serious about addressing its carbon emissions."

### Sunday 14<sup>th</sup> June

God the Holy Spirit

Come as the wind and cleanse us;

Come as the fire and burn;

Come as the dew and refresh;

Convict, convert and concentrate many hearts and lives to our greater good and your greater glory.

This we ask for Jesus Christ's sake. Amen.

### Monday 15<sup>th</sup> June

A month ago Susan Wheeldon, Jamie Vining and Iain Henderson set off on a 9-month round-the-world bicycle ride to demonstrate the potential of solar energy, taking with them a set of thin-film PV solar panels on their panniers. Susie said on their departure: "All the money raised will go to SolarAid, a charity that trains poor communities in rural Africa to build and sell small solar devices."

### Tuesday 16<sup>th</sup> June

The use of Australia's vast coal resources has led to the country recording the highest per capita

carbon emissions in the world. Now Kevin Rudd, the Prime Minister, has announced plans to build a 1000 MW. PV solar power station with about three times the generating capacity of California's biggest. The scheme is backed with \$A 1.4 billion of Government money and successful bidders will be announced early next year.

### Wednesday 17<sup>th</sup> June

Energos, the Isle of Wight-based, energy technology firm, has won a 2009 Environment & Energy Award at the SustainabilityLive conference in Birmingham for the UK's first energy-to-waste gasification plant using advanced thermal conversion technology to convert waste into electricity. Now they have planning permission for a new £40 million energy-to-waste facility at Knowsley on Merseyside using gasification technology to turn

non-recyclable waste into electricity and gas. Building will start next year and by 2012 the electricity generated will be used to power 10,000 homes. Energos managing director said: "This is a community-sized solution for local waste that would otherwise fill up landfill sites and emit damaging greenhouse gases. We offer a proven and world-class gasification technology with a 12-year track record of safe operation in Norway. This can help the UK build a much-needed sustainable waste infrastructure."

### Thursday 18<sup>th</sup> June

Our homes are responsible for 27% of the UK's CO<sub>2</sub> emissions. An alliance of WWF, the Energy Saving Trust, the UK Green Building Council and Grand Designs Magazine is calling on the Government to help homeowners to undertake