# Prayer guide for the care of creation



## February 2010

"Where then does wisdom come from? Where does understanding dwell? God understands the way to it, and he knows its place.

For he looks to the ends of the earth, and sees everything under the heavens. And he said to humankind: Truly, the fear of the Lord – that is wisdom, and to shun evil is understanding."

(Job 28, 20 & 28)

"Turn back to him whom you have deeply betrayed, O people of Israel. For on that day you shall throw away your idols of silver and gold, which your hands have sinfully made for you."

(Isaiah 31.6)

"The cultivation and expansion of needs is the antithesis of wisdom. It is also the antithesis of freedom and justice. . . Only by a reduction of needs can one promote a genuine reduction in those tensions which are the ultimate causes of strife and war."

(E.F. Schumacher)



#### Monday 1st February

Canada's tar sands hold 176 billion barrels of oil - one of the world's largest deposits – but 2 tonnes of the sands produce just 1 barrel of oil. Forests covering an area half the size of England have been torn down. Extraction requires huge amounts of water which is then too toxic to return to nature, so it has to be stored in giant holding ponds. These have been blamed for a rise in cancers among local people. Alberta's oil mines are the biggest source of carbon emissions in North America – and the reason why, in 2006, Canada dropped its commitment to the Kyoto Protocol and now faces international condemnation and calls for it to be thrown out of the Commonwealth.

#### Tuesday 2nd February

According to the US Geological Survey, the Arctic might contain around 10% of the world's undiscovered oil reserves and up to 30% of its undiscovered gas. Gold mines have opened in the south and west of Greenland and diamonds. have been found at several locations north of Nuuk, including a 2.39 carat specimen. Rare earth elements, which are needed for missile quidance systems, flatscreen TVs, cigarette lighters and low-energy light bulbs, provide (in the words of prospectors) "a unique geological entity with extraordinary resource potential". especially since China controls 90% of global production and has imposed rationing on the international market in rare earths. In addition, Alcoa is to build the world's biggest aluminium plant in Greenland, though the alumina providing the raw material will come from distant regions such as the Caribbean. Abundant uranium also occurs in Greenland, but the Greenland government has so far banned its extraction.

#### Wednesday 3rd February

From the 12th to the 14th there will be a CEL weekend at Green Gables, Scarborough YO12 4DX titled "On the verge of chaos: Transition living in a time of collapse". The official prescription in this time of economic uncertainty is to redouble our assault on the natural world. "How can churches and individual Christians respond? By proclaiming a time of transition, a time of faith and doubt, grief and hope, as we discover how to live in a climate-changed world, without the oil on which our society has come to depend." Speakers include the Rev. Sam. Norton and CEL members involved in Transition Towns For more information email. info@christian-ecology.org.uk or visit www.christian-ecology.org.uk/scarborough-2010

#### Thursday 4th February

Recognising that consumerism is a major problem for ourselves and the planet, the Christian network Breathe declares that the Moloch of consumerism is not a great giant that must be fought, but a simple lie, a dream, a false promise. When it is named for what it is and exposed as a sham, its power over us vanishes. The promise is happiness, the reality is emptiness and a dissatisfaction that can only lead to the next purchase. Like a dangling carrot, contentment is always one purchase away. Yet nothing defuses the power of consumerism like generosity, which pops the over-inflated promises of consumerism. The orientation of our hearts changes from ourselves towards God, his people and his Creation. Generosity is Moloch's Achilles heel. www.makewealthhistory.org

#### Friday 5th February

Last year Chinese people bought 21 million electric bikes as compared with 9.4 million cars. Across the world, on-demand transport such as the Paris Velib system and city car clubs are increasingly popular. Smaller electric vehicles such as souped-up bikes, covered scooters. pod-cars etc. are better suited to urban travel than space-hungry, gas-guzzling cars. In future, we shall not own the vehicles we use. Instead we shall walk to the nearest rack, swipe our card to grab a vehicle, then drop it off near our destination. If the changes are handled well, and public transport improves also, we can cut pollution, free up space and improve access for all. However, the best and healthiest option is still Shanks's pony.

#### Saturday 6th February

Road trains are common in Australia with its wide spaces. In Europe a project called Safe Roads for the Environment (SARTRE) foresees that road trains can cut CO2 emissions and fuel consumption on Europe's motorways. The idea is to join up to eight vehicles by wireless sensors with a professional lorry driver leading the train. Travelling in the slipstream of the vehicle in front leads to huge savings in fuel and CO2 emissions, and frees up motorway space. "If we don't do anything to reduce congestion, we'll need more roads – and concrete is a large emitter of CO2." Trials will begin in 2011.

#### Sunday 7th February

Father, we praise and thank you for your great gifts of freedom and inventiveness. We pray for the wisdom to use them aright in your service and in the service of all your creation.

#### Monday 8th February

A new report from WWF and the Food Climate Research Centre finds that the food we eat accounts for 30% of the UK carbon footprint when we include emissions caused by changes in land use to grow our food overseas. Clearance of forests to grow crops and rear animals affects an area half the size of England each year. The report "How Low Can We Go" explores various changes in our food system which could help to stop deforestation and reduce emissions linked to the food chain. A focus on technology is not enough. Patterns of food consumption need to change also. Possible solutions include:

- Increasing production by improving cop yields and changing animal feeds to reduce methane emissions;
- Switching to non-carbon fuels and better energy efficiency;
- Changing the types of food we consume.

Dietary changes will indeed ease the pressure to cultivate more land, but the report fails to indicate the part the public can play in bringing about these changes. A follow-up study will tackle these issues.

#### Tuesday 9th February

A Soil Association report "The role of livestock in sustainable food systems" quotes IPCC findings that storing carbon in soils could decrease agriculture's greenhouse gas emissions by nearly 90%. In the last 60 years most arable soils have lost over 30 tonnes of carbon per hectare (equivalent to 110 tonnes of CO2) through intensification of agriculture. Since 1945, UK agricultural policy has discouraged arable/livestock mixed farming and encouraged farmers to specialise in either livestock production or arable cropping. Yet the only proven method of storing carbon while

maintaining productivity is to incorporate a ley/arable rotation into all croplands, where half the land is under grass with legumes such as clover while the other half is under arable cropping. To achieve this requires a change of Government policy and better information for consumers that would enable them to make sound choices when buying food.

#### Wednesday 10th February

The report estimates the amount of carbon sequestrated under mixed organic farming would be 0.66 – 1 tonne per hectare per year over 20 years, i.e. 3.666 tonnes of CO2 equivalent each year. Adult beef cattle produce, as methane, an average of 2.283 tonnes of CO2 equivalent per year. So the likely CO2 'benefit' from conversion to mixed farming would be 1.383 tonnes of CO2 per hectare per year for 20 years. In addition, non-organic farms use nitrogenous fertilisers, each tonne of which causes the release of 6.7 tonnes of CO2 equivalent. If nitrogenous fertilisers were excluded (as they are on organic farms) there would be an additional reduction in CO2 emissions of 0.985 tonnes per hectare per year.

#### Thursday 11th February

Research in India finds that continuous cropping of high-yielding varieties of cereals leads to deficiencies in essential micronutrients such as zinc, iron, copper, manganese, magnesium, molybdenum and boron. Yet earthworm castings in organic soils contain 5 times more nitrogen, 7 times more phosphorus, 3 times more exchangeable magnesium, 11 times more potash and 1.5 times more calcium than soils without earthworms. Their presence promotes microbial activity. Soils rich in micro-organisms and earthworms are soils rich in nutrients.

#### Friday 12th February

Today begins the CEL weekend at Green Gables, Scarborough. Many Christians across the country are active in the Transition Movement which seeks ways of tackling climate change and reducing oil dependency in their local communities. The purpose of the weekend is to discover more about Transition groups such as the Scarborough group, to explore what church involvement means and how our faith fits in with the Transition ethos. For more details about Churches in Transition visit <a href="https://www.christian-ecology.org.uk/cit-leaflet.pdf">www.christian-ecology.org.uk/cit-leaflet.pdf</a>

#### Saturday 13th February

At the Oxford Farming conference last month, Professor John Beddington, the Government's Chief Scientific Adviser, outlined what he saw as research priorities towards improving crop yields. These included:

- Better nitrogen fixation
- Increased photosynthesis potential of crops
- New vaccines for key livestock diseases.

He clearly saw GM crops as having a part to play. Yet the 2008 UN International Assessment of Agriculture carried out by 400 scientists and endorsed by 60 countries found no conclusive evidence that GM crops increase crop yields. FoE comments: "The majority of GM crops are grown for animal feeds, many on massive plantations that have replaced Amazonian rainforests. GM crops don't feed the world: they simply make record profits for the big businesses that sell the patented seeds and the chemicals needed to grow them."

#### Sunday 14th February

Give us, loving Father, the wisdom so to deal with the things we possess that they may never possess us. Deliver us from reliance on our own cleverness in science and technology. Banish our fears as we face unprecedented challenges, both spiritual and technological, and keep our feet always on the path of justice and peace, for the sake of your Son, who died to save us from our sins.

#### Monday 15th February

The world's soils store more carbon than all the world's forests. New research from the Soil Association finds that, if all UK farmland was converted to organic farming, at least 3.2 million tonnes of carbon would be taken up by the soil each year – the equivalent of taking one million cars off the road. The report "Soil Carbon and Organic Farming" also finds that a worldwide switch to organic farming could offset 11% of all global greenhouse gas emissions. Raising soil carbon levels would also make farming more resilient to droughts and floods, leading to greater food security. In the UK, storing soil carbon could go a long way towards offsetting the methane emissions of grass-fed cattle and sheep.

#### Tuesday 16th February

Since 2007, when James Jones Bishop of Liverpool inaugurated the first Carbon Fast, many churches and individuals have adopted the programme of prayer and activity throughout Lent in order to change the way our lives impact on poor communities. The programme provides prayers and daily practical actions to help people reduce their emissions and to focus on poor people round the world who are hit hardest by the changing climate. For information, visit www.tearfund.org.carbonfast

### Wednesday 17<sup>th</sup> February Ash Wednesday

Among this year's Lent course is "Love for the Future" – a 6-week course written, scripted and filmed by the Bath & Wells Diocesan Environmental Group and covering topics such as respect, compassion, simplicity, active justice, repentance and hope. Each weekly session includes a 15-minute DVD suitable for house groups, with discussion material and pointers to other resources. For more information ring David Maggs on 01749 670777 or David Osborne on 01749 890423 or email david.maggs@bathwells.anglican.org

#### Thursday 18th February

The Crown Estate has announced the award of licences to develop thousands of offshore wind turbines which could generate 32 gigawatts of electricity – enough to power 24 million homes. FoE is calling for a comprehensive strategy to make this happen. In particular:

- Currently jobs are going abroad because UK firms cannot supply the components. Government intervention is needed to encourage UK businesses to make the most of this huge opportunity. Wind developers Npower currently have to import the steel foundation for turbines from China for the Great Gabbard windfarm, while UK steelmaker Corus is closing down plant and shedding jobs.
- Delivering 32 GW. of offshore wind may require investment of £100 billion. A Government-backed financial institution could provide the investment, loans and guarantees to drive forward renewable energy to ensure that the UK is in the van of efforts to tackle climate change.

 Plans for North Sea nations to establish an electricity supergrid must be fast-tracked, allowing these countries to share green energy from wave and wind power – and eventually to allow access to the solar power resources of the Mediterranean

#### Friday 19th February

The Government has announced a boiler scrappage scheme to encourage replacement of old, inefficient boilers with energy-efficient models. According to FoE, the UK has over 4 million inefficient G-rated boilers, but the scrappage scheme will only reach 125,000 households. "Our homes are responsible for a quarter of UK carbon emissions. A comprehensive programme to slash energy waste and fit renewable energy systems is desperately needed to tackle climate change, end fuel poverty and create thousands of green jobs."

#### Saturday 20th February

Groundwork UK offers free energy advice to households under its Green Doctor scheme. backed so far by local authorities in Leeds. Leicester. North London and Slough. The service targets the most vulnerable, the elderly. the disabled and those in low-income households. For many of these, the value of saving carbon emissions is hard to grasp. But when they see the money coming off their fuel bills, the benefit of energy efficiency is clear. "Like any other 'doctor' we offer advice on staying fit and healthy, and point them to other local community agencies." Groundwork hopes to train others to become Green Doctors and so to extend the service to other parts of the UK. www.aroundwork.ora.uk

#### Sunday 21st February

Loving Father, give us a deeper understanding of your purposes, that we may be steadfast amid the turmoil of our times. May our faith never fail, nor our love grow cold, nor our hope become faint. Help us to fix our eyes on Jesus, who for our sakes became poor and willingly went to the Cross for our redemption. Amen.

#### Monday 22nd February

The Government has accepted the Competition Commission's recommendation of a new body to enforce the Groceries Supply Code of Practice to protect the interests of consumers, suppliers and farmers. The Commission found that big retailers can exercise their enormous buying power to transfer excessive risk and costs to suppliers, and that these practices "could damage investment and innovation in the supply chain, to the ultimate detriment of consumers." Mike Gidney of the Fairtrade Foundation said: "The establishment of a strong, independent groceries ombudsman will be great news for small producers in developing countries as well as in the UK as it will help to level the playing field between suppliers and the supermarkets."

Questions however remain whether the new body will have sufficient teeth to protect suppliers and consumers. Fairtrade Fortnight begins today.

#### Tuesday 23rd February

According to the Committee on Climate Change and the Government, we could meet our emissions reduction targets and still keep flying. How? By allowing aviation emissions to rise by 60% by 2050 and cutting by 90% carbon emissions from everything else we do. Already the aviation industry benefits from its exemption from taxes on aviation fuel. Yet a fuel tax on domestic flights that increased the price

of air travel by 50% would be enough to finance a new high-speed rail line from London to Birmingham and cut UK carbon emissions by 1 million tonnes a year.

#### Wednesday 24th February

According to the Head of Sustainability at Virgin Atlantic, growing algae in large ponds could provide the aviation fuel of the future. "An algal pond the size of Belgium could meet all of aviation's current fuel needs." But at least half of the greenhouse gas emissions of aircraft come from water vapour (contrails) emitted at high altitude and from nitrogen oxides, and would be largely unaffected by the use of biofuels. So, in the absence of any breakthroughs in technology, we have these alternatives:

- Other sectors will have to make deeper cuts to compensate for rising aviation emissions
- We will have to place our faith in carbon offsets on a huge scale
- We will somehow have to learn to fly less and travel more slowly.

#### Thursday 25th February

Lithium ion batteries are likely to be the best choice for a new generation of electric cars, but they are expensive and have a limited life. Nissan has initiated a scheme for leasing the batteries for its new LEAF 2EV (zero emission vehicle) and taking them back eventually for further use has load-levellers for the grid. They can afford to keep the monthly lease at a low rate, knowing that the batteries will have a high residual value in the renewable energy sector.

#### Friday 26th February

London's draft waste strategy was launched last month. London produces 4 million tonnes of waste a year, but its recycling rate is the lowest in the UK. The Mayor's target is to recycle at least 45% of municipal waste by 2015 and sending none of it to landfill by 2025. The costs of landfill will rise from £245 million now to £307 million by 2013. Mayor Boris Johnson said: "It is not only detrimental to our environment, but economically a backwards step to be sending our rubbish to landfill. I am writing to all the borough leaders to urge them to pull out the stops to boost our recycling efforts. We must also seek to unblock the remaining barriers to recycling, making it easier to take this option rather than simply chuck unwanted stuff in the bin, for example, providing better collection facilities in flats and multi-occupancy dwellings."

#### Saturday 27th February

As Lord Stern has repeatedly stressed, forest protection is key to stabilising greenhouse gas emissions. Guyana's Low Carbon Development Strategy, developed in partnership with the Norwegian government, aims to make it more economically viable to leave its rainforests standing than to cut them down.Components of the strategy include:

- Hydro-electric generation that doesn't entail significant forest disturbance
- Growth in ecotourism by partnering local companies that place a high value on protecting natural assets
- Producing biofuels from bamboo and sugarcane without impacting on food security
- Developing sustainable forestry products.

For more details, go to www.lcds.gov.gy

#### Sunday 28th February

Dear Father, we thank you for this lovely world in which we live. May we do nothing to spoil your wonderful handiwork. Help us to make our surroundings worthy of the love you have shown us in sending your Son to be our Redeemer and Saviour. Amen.

Sources: Eureka (The Times)
Green Futures
Resurgence
www.edie.net

**Additional Prayers** 

If you would like to receive the prayer diary each month by <a href="mailto:emailto:month-by-emailto:emailto:month-by-emailto:emailto:month-by-emailto:emailto:emailto:month-by-

Website: www.christian-ecology.org.uk

Picture on front cover Winter Cyclamen by Poppy Pickard..

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