



## Resilient Environment: Resilient Communities Mutual Support for the Future

### ECO Annual Conference 2011

**Friday 1 July:**  
**Parnell Community Centre, Parnell, Auckland**  
**Saturday 2 July and Sunday 3 July:**  
**Carey Park Camp, Henderson, Waitakere**

*Please note the change of venue between Friday and Saturday.*

How the environment and communities can reinforce and support each other is the central theme of this year's conference, Resilient Environment: Resilient Communities. The theme examines system boundaries, thresholds and the ability to keep going but also to transform: all essential for ourselves and our communities and underpinned by the environment.

The conference will hear first from climate change expert Professor Martin Manning, from ecologist Dr Simon Thrush and for the humanities, from Dr Bronwyn Hayward, herself an expert from quaking Christchurch.



*Attendees at the ECO Conference 2010 in Christchurch*

The conference will also explore urban resilience, and governance for resilience at local, iwi and national levels. This discussion will start with Auckland City Deputy Mayor, Penny Hulse.

We will hear from communities who have risen or are rising to the challenge and have gained both social and environmental resilience. We will explore energy, marine, forestry and community issues in the light of this theme. A community groups expo, our AGM, our Vote for the Environment campaign and much more follow, with vital planning for our future. Come along to gain and share insights: it will be fun.

Saturday evening will start a celebration of 40 year's of ECO's successes. We look forward to seeing plenty of our members and friends there as well as new faces.

### IN THIS ISSUE:

ECO Conference 2011	1
Government Budget has no new direction	2
Rebuilding a more sustainable Christchurch	3
Introducing ECO Working Groups	4
National Rules on Plantation Forestry Agreed	6
Pollution or healthcare and conservation?	7
Government should stop deep sea oil drilling	8
Ross Sea short film competition	9
Conservation needs 1080: PCE Report	10
Tropical timber	13
Progress needed on climate change	14

*Programme and  
registration online!*  
[www.eco.org.nz](http://www.eco.org.nz)

ECO Members and Friends  
receive discounted rates.



### Government Budget has no new direction

The recent budget had no new direction for New Zealand and was another wasted opportunity to develop a platform to decarbonise the economy and move to meet the clean green image. There was no mention of the environment or conservation or the constraints that climate change and ocean acidification are going to place on New Zealand.

The budget was not a transforming budget to start the transition to a low carbon economy and respond to the challenges of higher oil prices. Contrary to the need for change there was added investment in roading and no transforming investment in rail or public transport.

The Government's approach appears to be that any economic growth is good growth thus leaving the environmental costs to future governments and generations to sort out.

The Treasury acknowledged in the notes to the budget that there was a climate change liability of at least \$1.6 billion. This liability ignores future commitments to reduce greenhouse gas emissions after 2012 and the rorts introduced into the emission trading scheme which means that the tax liability in 2020 will be many billion dollars (see article on page 7).

There was no mention in the budget of the commitment made by developing countries at the last climate negotiations at Cancun to develop a low carbon development plan.

The budget will result in additional cuts in funding for the Department of Conservation as it has to cover increased operational costs and superannuation and associated costs which were previously centrally funded.

#### Green Growth and environmental taxes

The OECD at the end of May released a number of reports promoting "green growth" and the need for Governments to change direction from business as usual.

"A return to 'business as usual' would be unwise and ultimately unsustainable, involving risks that could impose human costs and constraints on economic growth and development. It could result in increased water scarcity, resource bottlenecks, air and water pollution,



climate change and biodiversity loss which would be irreversible thus the need for strategies to achieve green growth".

"A green growth strategy also recognises that focusing on GDP as a measure of economic progress overlooks the contribution of natural assets to wealth, health and well-being. It therefore targets a range of measures of progress."

The OECD Secretary-General Angel Gurría said, "With the right policies in place, we can create jobs, increase prosperity, preserve our environment and improve the quality of life. All at the same time."

At the same time the New Zealand Treasury is looking beyond dollars and cents towards measuring changes in happiness. Internationally there has been a move away from relying on GDP alone as a measure of a country's wellbeing and towards other measures. In the UK Prime Minister Cameron has been advocating the adoption of a "happiness" index.

The OECD released the results from its Better Life Index in May, based on 11 dimensions - housing, employment, community, income, education, environment, government, health, safety, life satisfaction, and work-life balance. New Zealand performed well on air pollution and the quality of the education system.

Last year the OECD found that environmental taxation can discourage polluting activities and boost innovative "green technologies". The OECD recommended that Governments integrate environmentally motivated

## Strong interest in community participation for rebuilding a better and more sustainable Christchurch

by Shane Orchard

reforms with broader fiscal reforms to ensure more effective environmental taxation.

The OCED Secretary-General Angel Gurría stated, “To achieve a greener future we need new technologies that can the costs of saving the planet. Shifting part of the tax burden onto pollution makes it more attractive to develop and adopt these clean technologies and promotes green growth.”

The OECD review found that environmental levies increased innovation, including an increase in patents.

New Zealand has the third lowest environmental taxes in the OECD according to a recent review published by the International Monetary Fund. This rate of taxation was half the OECD average. The level of excise tax on petrol (2010) was also the third lowest with nearly all other countries having double or treble the New Zealand rate. The emissions trading regime is unlikely to affect New Zealand’s position on low petrol excise tax.

The OECD also promoted the use of “green bonds” which could be used to favour investment in renewable energy such as wind and solar power, and in a range of other areas from public health to clean water.

Green bonds could raise hundreds of billions of dollars a year to spur a shift to cleaner economic growth, especially if governments set strong environmental goals.

The National Government has yet to respond to the OECD initiatives apart from earlier establishing a private sector advisory group on green growth. The absence of any changes in the Budget does not auger well for the future of greening the economy.

### Sources:

*Environmental Taxation Can Spur Innovation. OECD, 13 October 2010.*

*I Parry, Reforming the Tax System to Promote Environmental Objectives. IMF Working Paper June 2011.*

*OECD Better Life Eompendium of OECD Well-being Indicators. May 2011*

*Towards Green Growth – A Summary for Policy Makers. OECD May 2011*

*Tools for Delivering Green Growth. OECD May 2011.*

The conversation around rebuilding Christchurch has seen many promising discussions taking place within the community and the test will now be whether Council and Canterbury Earthquake Recovery Authority (CERA) can actively incorporate that potential within the unenviable task of planning ahead.

Recently a number of high profile public forums have drawn in expertise and contributed good ideas to the discussion. These included a well attended Resilient Futures conference hosted by Lincoln University which featured speakers on post-disaster recovery, and a Science and Innovation workshop which discussed how the research community might contribute. Some of the common themes to come out were using lessons from the past and current exemplars, decision making and governance issues, attention to transition planning, planning for social cohesion and the incorporation of Maori values and principles.

Amongst these topics we are also seeing a strong level of support for long term planning considerations and the key role of community involvement in development of plans for the future, which arguably will be essential elements of the opportunity to improve on what we had. These very same ideas have been explored further at a number of other public meetings including a Visions of Christchurch public forum featuring presentations on resilience and sustainability topics. At the local community level there have been many such meetings and many new community initiatives are now operating right around the city.

ECO member group Sustainable Otautahi Christchurch (SOC) has also been active in promoting the opportunity that exists to rebuild Christchurch as a more sustainable city. Almost 100 people joined the recent SOC ‘Heart of the Matter’ workshop which explored questions on the future function and form of the city, and opportunities to move away from business as usual.

It remains to be seen how much of this momentum will be translated into future plans for the city. At present Council have initiated a “Share an Idea” exercise which is a good start but it will be the level of commitment to taking good ideas forward which will be all-important. There’s certainly been some great work done recently and there is every chance we’ll see some forward thinking results come out of these difficult times. Working towards that is both the challenge and the opportunity for Christchurch.

### Introducing ECO Working Groups

ECO has advanced its working group system to assist our work on environmental issues, to provide for more input by Members and Friends and for better collaboration with other groups.

Objectives common to all of the working groups include:

- Contributing to and at times coordinating analysis, discussion and responses to specific campaign areas and to on-going ('pot boiler') environmental issues.
- Improving the opportunities for member groups (and Friends of ECO and other individuals) to contribute to ECO's work.
- Developing and pursuing especially for international, national and regional scale issues, analysis and work on issues for which there may be no existing interest group with ECO's objectives in a position to investigate potential issues and solutions.

Each working group will function by preparing an action plan in consideration of current issues and the opportunities for 'making a difference', and the skills and time available to the working group.

A number of sub-projects will be identified and interested contributors identified for each of these, including from Member groups and other individuals. New project teams will be put together for each new idea. Some examples of previous working group projects include writing background and review papers, preparing resources to share with other NGOs, and preparing submissions.

Working groups will also pick up on current issues and developments within their subject scope as these arise to the extent that resources permit and in the light of their importance and opportunities presented.

Updates and news on working group activities will be distributed to Members via ECOLink and other publications, material posted on ECO Website, and e-discussion topics hosted on the ECO website forum.

Some activities might involve joint projects between or collaborative projects with other NGOs. We hope the working groups will function as a useful means for further collaboration in the sector and an effective way for smaller groups to contribute valuable ideas.

*ECOLink June 2011*

Here is a list of the working groups we have established, together with their key topics:

#### Catchment and Coastal Issues

- Land and water use and management, with particular emphasis on integration of these, and planning
- Coastal policy and management
- Whole catchment approaches
- Issues affecting aquatic environments
- Engagement with all industry sectors involved with land and water issues.



*Coromandel coastline. Photo courtesy of Bob Zuur*

#### Marine and Oceans

- New Zealand oceans policy, management and governance
- Fisheries and aquaculture issues in NZ and beyond
- International marine and fisheries issues including high seas governance and uses, international and regional fisheries or marine management organisations, global marine issues

- Ocean acidification (in association with the climate change group)
- Marine mining and minerals activity
- Ecosystem based management, including improved marine reserves legislation
- Engaging with DOC, Ministry of Fisheries, Maritime NZ, MFAT, and other relevant agencies.

### Conservation and Environmental Management

- Biodiversity and Biosecurity issues – including some shared projects with other working groups.
- Engagement with the Department of Conservation (DOC), the NZ Conservation Authority and Boards and conservation or biosecurity relevant agencies including MAF, MfE, Biosecurity NZ and the Environmental Protection Agency (EPA)
- Conservation management and associated planning topics and tools eg; NZ Biodiversity Strategy, game and pest issues
- Work on specific aspects of the RMA (which may overlap with the work of the Catchment and Coastal working group).

### International, Antarctica and Southern Ocean

- International bodies and agreements with implications for conservation and the environment, including the Convention on Biodiversity, pollution and dumping agreements, and other environmental or conservation agreements, but also including trade and economic agreements or protocols where these have implications for the environment
- International Union of Conservation of Nature (IUCN) matters (in association with relevant other working parties)
- Governance and management of human impacts in Antarctica and the Southern Ocean including Antarctic Treaty matters, invasive species, protected areas, species protection, marine management (in association with the Marine and Oceans group), and IUU fishing
- Key issue is marine protection in the Southern Oceans and Ross Sea and fisheries management.

### Open Society and Public Participation

- Promotion and defence of public participation and engagement
- Disclosure of information to the public.

- Protection of democratic and deliberative processes, containment of executive power.
- Maintenance of freedom of organisation and expression, protection of the open society and open government.

### Climate Change and Energy (including agriculture and forestry sector issues as they relate to global change)

- Working with Climate Defence Network, Members and other contacts who work in this area
- Working on solutions and submissions on climate change, energy and related land use including agriculture, forestry, biodiversity and soils
- Promoting policies and attitudes to reduce carbon emissions and foster carbon sinks and reservoirs.
- Communicating climate and energy policy and behaviour change
- Promotion of protection of native biodiversity and social justice in the pursuit of climate policies.
- Ocean acidification and a precautionary approach to geoengineering.

.....

If you are a Member or Friend of ECO, you're invited to participate in these working groups. Look out for updates on what each group is up to in the coming months, which will include opportunities to participate in projects under way or coming up.

We look forward to your input.

#### Implications of the NZ Coastal Policy Statement for NZ Communities

The Catchment & Coastal Issues working group has recently started work on a policy advisory paper to provide information on implications of the new NZCPS 2010. This will fill a gap in the information currently available to the public by reviewing the key changes of interest to New Zealand communities. We are interested in documenting a range of perspectives on coastal policy directions in this paper and to facilitate discussion we will be forwarding a final draft of the paper to an Advisory Group for comment. You are welcome to register your interest if you would like to participate as a member of the Advisory Group.

## National Rules on Plantation Forestry Agreed

by Gordon Jackman

After 10 years of negotiation the four chambers (Environmental, Economic, Maori and Social) of the NZ Forest Stewardship Council (FSC) have reached agreement on a FSC national standard for plantation forestry in NZ. The Environment Chamber included ECO and Greenpeace.

The FSC is an independent, non-governmental body established in 1993 to promote the responsible management of the world's forests. It is a multi-stakeholder organisation and is represented in over 50 countries. In New Zealand nearly 1.4 million hectares of plantation forests are certified by FSC. (see [www.FSC.org](http://www.FSC.org))

FSC is a membership-driven organisation and has developed forest management and chain of custody standards, delivered trademark assurance and provided accreditation services to a global network of committed businesses, organizations and communities. A National Standard adds to the international baseline requirements of FSC. All countries are required by FSC to develop national standards.

This newly-agreed New Zealand National Standard now needs to receive approval from FSC International, to ensure all national standards meet the guidelines established by FSC International.

In the standard we have finally resolved the sticking points that derailed the talks in 2004, namely that plantations must have 10% of the forest management area set aside in reserves to protect the indigenous biodiversity. In addition a National Pest Management Group to deal collectively with issues around pesticides has been set up. Other gains for the Environment Chamber were the establishment of 10 metre riparian strips as the norm for plantation forests, (though the ETS makes this difficult in some areas) and requiring companies to have their FSC audits available to the public online.

The draft for approval (5.2) is available online at <http://www.nzfoa.org.nz/certification/fscdownloads> While there are many good things in the new draft standard it is by no means perfect. Nevertheless it is much better than the proposed NES for forestry under the Resource Management Act and if adopted in a sincere way would benefit the environment, working conditions, human rights and the economy, especially in the long term.

The Environment Chamber needs to decide on how it will engage with FSC and the wider forestry industry



*Plantation forestry in the Marlborough Sounds  
Photo: Barry Weeber*

in the future. We could put all our eggs in one basket and fully engage in the FSC process by putting all our energy into the formation and functioning of the FSC National Initiative, the future governing body of FSC NZ. This body will perform several functions including running a National Pest Management Group which will oversee chemical pesticide issues and a local dispute resolution process, and overseeing a publicity and marketing arm to inform both the public and the market about all facets of FSC. This has happened in Australia (see [www.fscaustralia.org](http://www.fscaustralia.org) for details of how it works there).

In my opinion there is a problem in NZ because:

- a) a number of forestry companies appear to be paying lip service to FSC, while getting away with unacceptable practices to save money;
- b) some auditors seem to be lax in auditing some of the conditions of the standards; and
- c) dispute resolution processes can be very difficult for the public to engage with.

There is a need for a more organised approach from environment groups to scrutinise the industry because unless it feels it is under real scrutiny it will continue to cut corners unacceptably.

A second and parallel option for the environment movement is to fund a person or a group to build an effective independent coalition of people concerned about the effect of plantation forestry. By sharing knowledge, experience and resources we have the opportunity to steer New Zealand forestry in a more sustainable path.

*Gordon Jackman works with the Forest Stewardship Council Standard Development Group, Environment Chamber (Greenpeace NZ)*

## Pollution or healthcare and conservation?

by Cath Wallace

We've all got used to hearing the government speak of straitened times and the need for stringent controls on government spending. What many people don't know about is the huge amount of tax revenue that we are being made to spend to subsidise greenhouse gas polluters, instead of spending it on healthcare, conservation, family support and better public policies.

The Sustainability Council has issued its latest analysis of the nature of this drain on taxpayers, and we produce the essence of their work below. This is an update on the material produced by the Council in *The Carbon Challenge* (2010).

The Council estimates that taxpayers will have to pay for 49 mega tonnes of greenhouse gas emissions. Part of the reason for this is the issue of free emissions units to many large companies, the capped price of emissions and allowance of 2 emissions units for each credit issue, and the slow phasing out of free credits. These price and liability concessions mean that there is little incentive for greenhouse gas emitters to reduce their emissions, since they mostly don't have to pay for them and the ETS is not very effective. Thus, according to the Sustainability Council's analysis of the figures, the ETS polluters pay for only 20% of the liability. The government is borrowing forestry credits to cover the gap, estimated to be between \$1-5 billion depending on the price of carbon (see below). What else could we do with these funds?

The exact magnitude of the dollar figure that we taxpayers will have to fork out will not be known until the end of the 2008-2012 Kyoto Commitment Period and subsequent years because we will not know the prices of tonnes of carbon and of offsets. The Sustainability Council first examined the government's accounting of tonnages of CO<sub>2</sub>-equivalent, and then made dollar estimates based on various carbon prices.

The dollars to be diverted from more valuable public uses to pollution subsidisation are as follows for the estimated overall liability on taxpayers to pay for 49 mega tonnes (million tonnes) of CO<sub>2</sub>-equivalent (see table at side):

- \$1 billion at the price of \$20.33 used in the 2011 government Budget;
- \$2.45 billion at the \$50 per tonne price the government uses for its modelling for the period after 2012, when we are likely to have to buy emissions

offset credits when many forest plantations are due to be felled;

- \$5 billion if carbon prices rise to \$100 per tonne, a figure used by various analysts.

The Sustainability Council has provided this table:

NZ Taxpayers' Position Under Kyoto - 2011 Accounts		
	Line Item	Amount (Mt)
Government's "Net Position Report" – that of NZ overall.	Emissions over and above Kyoto target	- 55
	Other liabilities	- 6
	<b>Total Liability</b>	<b>- 61</b>
	Emission credits from crop forestry	- 83
	Government's declared Kyoto position	- 22
Emissions Trading Scheme (ETS):		
	ETS net 'income'	- 12
Forest Credits Payback:		
	Contingent liability for repayment of forest credits	-83
<b>Overall Position</b>		<b>-49 Mt</b>
Note: the -49 is obtained by adding -61, 83,12 and -83		

Taxpayers, under the Emissions Trading Scheme, are being made to pay massive subsidies to companies and industries that produce greenhouse gas emissions. This is either paying for them to receive free allocations of valuable rights to emit, or paying others for offsets from forestry and other sources to make up for the emissions by polluters.

The government typically provides the public with the net position of New Zealand, rather than the figures on what the tonnages of greenhouse gases that taxpayers are being asked to fork out for: money that could otherwise be deployed for more conservation work to protect the environment, for people with rare diseases to be treated, for more support for struggling families, and for better policy work.

*For more detail on the analysis by the Sustainability Council's Simon Terry and Dr Geoff Bertram, see [http://www.sustainabilitynz.org/news\\_item.asp?SID=219](http://www.sustainabilitynz.org/news_item.asp?SID=219) and *The Carbon Challenge*.*

## Government should stop deep sea oil drilling

The Government should stop deep sea oil drilling. New Zealand does not have the environmental laws and regulations to control oil and gas or other development on the continental shelf.

The Minister for the Environment, Nick Smith, has announced that some measures will be introduced this year but deep water oil drilling could still proceed without any new rules especially in Canterbury. There is currently no equivalent of the Resource Management Act to control oil and gas activity outside of the territorial sea (12 nautical miles offshore).

ECO supported the Te Whanau a Apanui call to stop Petrobras drilling in the deepwater Raukumara Basin. The Petrobras permit is in water up to 3000m deep which is much deeper than current operating fields, so it would be challenging to deal with any spill.

This was further evidence that the Government needs to rethink its approach to deep sea oil exploration and development. The Government has failed to consider the risk to the marine environment from further exploration and oil drilling. Integral to the oil and gas industry are the emissions of greenhouse gases. The Government is promoting this industry without considering the risks to future generations and the planet of climate change and ocean acidification.

Successive governments have recognised for over 10 years gaps in environmental law and as part of the Ocean's policy process had proposed in 2007 to fill "key gaps in EEZ environmental regulation and promote a consistent approach to environmental management across different statutes".

The Government is now proposing to give the administration of these functions to the new Environmental "Protection" Agency. Currently the agency lacks a protection mandate and the National Government refused to deal with this gap when the legislation was passed in May. It is also unclear whether it will have a will or the mandate to keep the oil and gas industry under control. The Establishment Board is dominated by vested interests with no legal or environmental science expertise.

When compared to Australia, Brazil, Canada, US, and the UK, NZ is the only country without a formal consent, referral, permit or environmental assessment process for offshore seismic operations.



© Greenpeace / Malcolm Pullman

*Protest flotilla in front of the Petrobras oil survey ship*

The measures announced by the Minister did not include the voluntary guidelines for marine mammal interaction, which are not sufficient for the management of the environmental aspects of oil and gas exploration and development. A recent review has shown that other countries considered (Australia, Brazil, Canada, US, and the UK) have mandatory requirements.

The Convention on Migratory Species (CMS) recognised at its last meeting that "anthropogenic ocean noise, depending on source and intensity, is a form of pollution, comprised of energy, that may degrade habitat and have adverse effects on marine life ranging from disturbance of communication or group cohesion to injury and mortality". The CMS urged Governments "to control the impact of emissions of [human]-made noise pollution in habitat of vulnerable species". (Resolution 9.19, Ninth Meeting of the Conference of the Parties to CMS (COP 9), 1-5 December 2008, Rome, Italy). New Zealand is a member of the Convention.

Spanish research into mass deaths of squid, cuttlefish and octopus has shown that the low frequency sound from seismic testing destroys the organs of these key-stone species. The research followed death events of giant squid washed up on Spanish beaches in 2001 and 2003 caused by nearby oil and gas seismic surveys.

The research by Michel Andre of the Technical University of Catalonia in Barcelona, and colleagues in Spain and France showed damage in these creatures after just two hours exposure to low frequency noise from 50-400 hertz, noise described as an "acoustic smog" typical of oil and gas exploration and shipping.

The scientists found that the organ that allows squid, octopus and cuttlefish to regulate their positions, to

balance and direct how and where they swim, was damaged leaving the animals unable to move or to feed, and vulnerable to predators.

The Minister is currently proposing to make seismic surveys a permitted activity where there will be no chance for public input.

Legislation is to be introduced before the election for Parliamentary review.

Source:

*André M et al (2011) Low-frequency sounds induce acoustic trauma in cephalopods  
Published in Frontiers in Ecology and the Environment, DOI 10.1890/100124*

#### Elements needed in Oceans legislation

1. The Precautionary Principle must be applied.
2. Biodiversity protection should be an integral consideration in the permitting and regulation of all activities and effects in the EEZ. Marine protection is an obligation under UNCLOS and under the Convention on Biodiversity.
3. There must be public disclosure, statutory time frames, public consultation obligations and public input into applications.
4. Policy and planning should apply ecosystem based management.
5. There must be clear environmental assessment procedures and auditing. The approach could be based on the Initial Environmental Evaluation as done in the Antarctic, followed by a Comprehensive Environmental Evaluation.
6. Ratification of international oceans agreements including all the provisions of Marpol.
7. The Environmental Protection Agency must have a clear protection mandate and enable appeals to the specialist Environment Court.
8. Fishing needs to be better managed and should not be left out of EEZ changes as ecosystem-based and spatial approach to management is needed and cumulative impacts management must include all the activities and impacts.

## Ross Sea short film competition



*Adélie Penguin on ice. Photo © John Weller*

The Last Ocean Charitable Trust in association with Fisheye Films is launching a nationwide short film competition that will put focus on the last near intact marine ecosystem on Earth, the Ross Sea, Antarctica.

The Last Ocean Online Short Film Competition invites individuals or teams to produce a short film (30 sec - 5min) that explores: Why the Ross Sea, Antarctica is special.

Key ideas you might like to consider:

- The Ross Sea's unique wildlife
- The pristine qualities of the marine ecosystem
- Antarctic Treaty – a place for peace and science
- State of the world's oceans
- Benefits of marine protection
- New Zealand's link with Antarctica

The Last Ocean Trust has obtained permission for free access to film footage shot in the Ross Sea by award-winning cameraman Peter Young and a selection of underwater shots from NHNZ Moving Images. Last Ocean has also supplied music.

The competition is divided into two categories:

1. Open - individuals residing in New Zealand
2. New Zealand Secondary School Students (Y9-13)

For further information see:

[http://www.lastocean.co.nz/Film-Competition/New-Zealand-film-competition\\_\\_1.9268](http://www.lastocean.co.nz/Film-Competition/New-Zealand-film-competition__1.9268)

**theLASTOCEAN**  
CHARITABLE TRUST

## Conservation needs 1080; PCE Investigation Report

by Cath Wallace

The Parliamentary Commissioner for the Environment (PCE), Dr Jan Wright, has concluded after an independent review of the evidence that to protect our native terrestrial ecosystems and species, we should use more, not less, 1080 to poison possums, rats and stoats. She recommended against a mooted ban on the use of 1080 and warned that if such were implemented, we would lose forest species on the mainland within a generation.

The investigation gave the PCE surprises: for instance that the Department of Conservation controls the predators on only 12.5% of DoC land, and that 1080 was more effective and more safe than she had expected, albeit with some drawbacks.

Discussing the problem, the PCE's report says: *"Pest mammals are now found almost everywhere in New Zealand, from the coast to well above the treeline. Possums browse among tree tops feeding on leaves and fruits, and also prey on invertebrates and the eggs and young of native birds. At least 19 species of native forest birds, including kiwi, whio (blue duck), kererū, kākāpō, kākā, kākārīki, mōhua (yellowhead), hihi (stitchbird), tīeke (saddleback) and kōkako are under attack from introduced mammals. Predation by rats and mice has been responsible for declines or extinctions of many of our insects and lizards, including wētā, beetles, skinks and geckos. Rats and mice may also alter or stop forest regeneration through eating seeds and seedlings."*

*"Introduced predatory mammals do not only threaten the survival of individual species. Their actions can also disrupt or destroy the functioning of whole systems. For example, tūi and korimako (bellbirds) are major pollinators of native mistletoes, while native trees like tawa, miro and pūriri rely on kererū and other native birds for the dispersal and germination of their fruit. Therefore, lower numbers of these birds will affect how well the forest functions as a whole, with the potential to place forests at risk of collapse."*

The PCE discusses the fearsome efficiency of stoats as predators of birds, and the dynamic between populations of mast years of abundant seeds in the forest, mice and rat population explosions, and the consequent explosions of mustelid, particularly stoat populations and the damage that they do.



1080  
warning  
sign

*"Possums, rats, and stoats all eat eggs and young birds. All are widespread and well established throughout New Zealand and difficult to control. Stoats are carnivores so do not browse on plants, but rats and possums have a huge effect on plant life. And the combination of all three together at the same time is particularly devastating. Between them, they damage not only plants and animals, but affect all aspects of forest functions, from birdlife to seed propagation."*

The Report canvasses the various control techniques, from traps to poisons, and examines each type, means of deploying these, and the evidence and argument about them.

On the effectiveness and costs of using 1080, the PCE examines the research and effectiveness records and concludes:

*"The case for the use of 1080 is very strong. 1080:*

- *can kill possums, rats and stoats in one operation;*
- *can knock back predators for a time allowing populations of native species to increase;*
- *can be used quickly to protect birds and other animals at vulnerable times, including during the particularly destructive beech masts;*
- *can be used aurally so it can be applied over large remote rugged areas;*
- *is more cost-effective than ground methods in the majority of the conservation estate."* (p42)

Turning to the downsides of the use of 1080, the PCE examines the evidence for a variety of concerns including contamination of water or soil, impacts on native species, dogs and human health. In the interests of saving space in *ECOLink* we have removed the footnotes here, but the report is closely documented and those who wish to know the sources can turn to the original.

On Water the PCE records this (p43-44):

*“Water:*

*1080 baits can enter waterways during aerial application. Once in water, 1080 is biodegraded into non-toxic by-products within two to six days, although the breakdown rate is slower in colder conditions. However, under field conditions, dilution will usually reduce 1080 quickly to very low concentrations in water. A field trial looking at leaching rates of 1080 from baits placed in streams found that 50 percent of the 1080 was leached from cereal baits within 2 hours, and 90 percent was leached within 24 hours. Unlike the biological breakdown process, the leaching and dilution rate does not depend on the temperature of the water.”*

*“After aerial 1080 operations, water samples from both drinking water supplies and natural waterways are tested by Landcare Research for the presence of 1080. Most sampling takes place within 24 hours of the aerial drops. From September 1990 to February 2011, 2,537 water samples have been tested, with traces of 1080 found in 86 of the samples. None of these 86 samples had been taken from a drinking water supply.”*

*“Concentrations of 1080 in the 86 samples ranged from 0.1 to 9 parts per billion, with only six of these at or above the Ministry of Health trigger value of 2 parts per billion. None of the six had been taken from human or stock drinking water supplies, and four were likely to be ‘false positives’ due to accidental contamination.”*

The report goes on to discuss the fairly rapid breakdown of 1080 in soils and in leaf litter, the minor uptake of 1080 in some plants.

On by-kill, the report says: *“By-kill is almost inevitable with any pest control method. 1080 is a broad spectrum poison and can kill native animals including birds, reptiles, frogs, fish and insects. It can also kill dogs, deer, pigs and other introduced animals.”*

The by-kill is of course a strength of the use of 1080 when it comes to the conservation outcomes on the control of mustelids (particularly stoats), rats, mice deer and pigs. It is often those who want to hunt pigs and deer who oppose the use of 1080 and organise the opposition to it. Some objectors worry though that native animals may be killed as by-kill. The report ac-

knowledges this concern and says it will never be possible to avoid this entirely but concludes that much of the by-kill can be controlled by being careful how the poison is applied (as well as giving notice to humans to remove dogs). Eight dogs have been reported killed by 1080 since 2007, and dogs are far more susceptible to 1080 than humans. Though most conservationists would prefer to see deer and pigs controlled too, hunters often want deer repellent included in baits and the PCE concludes that this is often done in designated recreational hunting areas.

The PCE notes the establishment of the Game Animal Council, a body which she says may have a conflict of interest over predator and other mammalian pest control. For this reason, she advises that the Game Animal Council not have a role that allows it to dictate to the Department of Conservation where and when pest control be used, and that it have an advisory role only.

### **But is it safe for people?**

The PCE observes: *“1080 will kill people if they consume enough of it, either by eating 1080 baits directly or by consuming contaminated food or water that contains 1080. At the highest concentrations of 1080 in baits, eating about seven baits could kill an adult and one bait could seriously harm a child. However, in the 60 years of use of 1080 in New Zealand, there are no known records of any deaths from people consuming baits from the field use of 1080.”* (p49).

The PCE records that one person died from cyanide laced jam in the 1960s but that bait is no longer used. Modern baits have much lower levels of poison and density of distribution over land, and 1080 breaks down fast in water. The PCE concludes that improvements in practice, training and controls on deployment mean there is a very low risk to human health (p 49).

If humans and other species were to eat huge quantities over a very long time, then there may be sub-lethal impacts, but not cancer or mutations, and she concludes this is very unlikely.

### **Is it humane?**

The report concludes that this varies with the species and that two strategies are needed: to have a dose in the bait high enough to kill quickly and potentially to

include pain killers in the bait since some animals can suffer for hours as their systems shut down or they go into fits and respiratory failure. She also concludes many other control mechanisms are less humane, though cyanide for instance, is quicker – but also dangerous to people if deployed badly (p52 & ff).

### Other options

Trapping is labour intensive, and tends to be specific to each predator, and so requires a mix of kinds of traps and other poisons (eg for rats). Labour intensity means extra costs, and animal welfare requirements require frequent checking of traps. Kill traps rather than leg hold traps are more humane.

The PCE concludes, *“Trapping can be a safe and effective method to control possums and stoats in forest edges, along rivers, and in intensively managed patches of forest, but it can only ever play a supplementary role on the great majority of the conservation estate”* (p56).

The PCE canvasses the other poisons, looking at their strengths and weaknesses.

For example, *“Brodifacoum is a second generation anticoagulant, so is powerful enough to kill pests after taking one bait. Its effectiveness, however, comes with a cost – long term persistence in the environment and very high risk of by-kill.”* It is also inhumane, often taking days to kill the animals that eat it.

Cyanide is quick and effective but cannot be used to knock down rat and mouse populations by aerial application. It is hazardous to human health, though vitamin K is an effective antidote, if it can be accessed in time. It can only be applied by trained operators and is favoured by the possum fur industry because the kill is highly localised because of its immediacy.

A number of other poisons is considered, and each seems to have its niche for use, but many do not kill all three of the target species groups, or have limitations on how they can be deployed, and cannot be used for aerial application. Cholecalciferol can only be used in bait stations and does not kill stoats, nor can it deal with mast events. Para-aminopropiophenone (PAPP) is a new poison for cats, stoats and weasels but is not suitable for other species.

Zinc phosphide seems likely to be licenced by ERMA for wider use than its traditional use for mice and rats to include ground control of possums but it is highly toxic and may have by-kill of fish and birds though it breaks down within weeks (p62).

Sodium nitrite is in the process of being approved for wider application than currently but though effective at killing possums and pigs it does not kill rats and mice so well because they do not ingest enough to be killed by it.

Turning from the poisons, the PCE considers other measures such as hormone disrupters, contraceptives and biological controls. These are considered either unpromising, underdeveloped or dangerous and not viable alternatives at the moment.

Recommendations by the PCE are that:

1. Parliament does not support a moratorium on 1080.
2. The Minister for the Environment investigate ways to simplify and standardise the way 1080 and other poisons for pest mammal control are managed under the Resource Management Act and other relevant legislation.
3. The Minister of Conservation establishes the Game Animal Council as an advisory body that works collaboratively with the Department of Conservation, but ensures that responsibility for all pest control remains with the Department.
4. The Minister of Justice introduces an amendment to the Ombudsmen Act 1975 to add the Animal Health Board to Part 2 of Schedule 1 of the Act, and thereby make the Animal Health Board also subject to the Official Information Act 1982.
5. The Minister of Conservation asks the Department of Conservation to prioritise the development of national policy and operational procedures on possum fur harvesting.
6. The Minister of Conservation improve information about pest control on the conservation estate by providing consistent and accessible information on the Department of Conservation website, including the purposes and results of different pest control operations.

Each recommendation is accompanied by a discussion of the rationale for it. The full report can be accessed at: <http://www.pce.parliament.nz/assets/Uploads/PCE-1080.pdf>

## Timber Importers and Retailers take a step to sustainability

by Grant Rosoman

From September 2011 members of the NZ Imported Tropical Timber Group (NZITTG) have agreed to import or sell only timber from Indonesia that has credible verification of legality, as a first step towards sustainability.

The NZITTG has a goal of sourcing timber from certified sustainably managed forests such as FSC. Members of the NZ Imported Tropical Timber Group are: BBi, BBS Timbers, Bunnings; Carters; Furniture Association of NZ, Greenpeace NZ, Gunnersen, Harco, Herman Pacific, ITM, JSC Timber, Mitre 10, Moxon, Placemakers, Rosenfeld Kidson, Simmonds Lumber, Smith City, Timspec. The ITTG members account for over 80% of the importation and sale of tropical timber products in New Zealand.

Greenpeace has been urging the timber importers and retailers to be proactive in not importing illegally logged timber.

With the NZ government refusing to stop illegal imports as the EU, USA and Australia are doing, most of the NZ timber trade decided act voluntarily and do their bit to stop the trade. The problem is the other 20% of the trade that continue to trade in illegal and destructive timber and is the reason why the government must regulate to 'level the playing field'.

The move came about due to concerns that some of the timber imported into New Zealand is from illegally harvested sources, meaning that logging is carried out in violation of national laws (or international agreements such as CITES), including that the loggers are extracting more timber than authorised, from areas outside of their permitted areas, or have obtained their logging concessions illegally.

Illegal logging causes billions of dollars of losses to national governments such as Indonesia, and has been estimated to suppress global wood prices by 17%. It has negative impacts on indigenous peoples and local communities and huge environmental impacts including loss of biodiversity and habitat of endangered species. It is a leading cause of tropical forest degradation globally and in a climate change world this spells disaster for the Earth. Furthermore, illegal logging undermines moves by governments, companies and local communities to protect and responsibly manage forests.

Kwila, a timber commonly used for decking and outdoor furniture in NZ, is the major species from allegedly illegal sources. The main source of kwila is Indonesia. Imports of kwila timber in the 2009 calendar year were worth \$18.3 million with 94% of this timber coming from Indonesia, and thus the focus of the ITTG on Indonesian imports. While some of this product comes with proof of its legality, some of it does not. In recent times the major retail members of the NZITTG have been changing their procurement policies to eliminate stocking kwila without proof of its legality status. The ITTG is also due to decide on a timeline for all imported tropical timber being from a minimum of legal sources. This will include timber from Africa, the Pacific and Latin America.

The NZITTG said that none of the importers and retailers in the group want to buy and sell illegal property or stolen timber - it simply isn't good business.

The ITTG initiative covers only solid wood products, including plywood but not wood fibre products such as MDF, cardboard, paper and tissue products. New Zealand still imports considerable volumes of tissue which is made from the illegal destruction of Indonesian rainforests, habitat of Sumatran tigers and orang-utans. A guide to products produced from illegal logging will be published shortly.

Draft Australian legislation covers all wood products including paper and tissue products from Indonesia. However, the NZ Ministry of Agriculture and Forestry (MAF) has made a submission arguing against strong regulations in Australia claiming that it will hurt NZ exports of wood products to Australia. So not only is MAF blocking regulations in NZ on illegal imports but it is trying to weaken proposals from Australia – a very short-sighted position to take when the NZ forestry industry will be one of the key beneficiaries from reining in illegal logging globally.

For more information on the NZITTG and for a provisional list of the agreed credible verification schemes for legality see <http://nzittg.org.nz/>

*Grant Rosoman is a forests campaigner for Greenpeace International. Grant has extensive experience working for rainforest conservation and has been the Chair of the Forest Stewardship Council International Board.*

### Progress needed on climate change

The recent visit by internationally respected US Climate scientist James Hansen to New Zealand highlighted the need for greater action on climate change.

Dr Hansen heads the NASA Goddard Institute for Space Studies in New York City. He has widely published on climate science and climatology. In 2009 he published his first book, *Storms of My Grandchildren*.

His public talks were well attended throughout the country with over 500 people in Auckland and Wellington hearing Dr Hansen's talk "Climate Change: a scientific, moral and legal issue".

Dr Hansen advocates the need "to reduce atmospheric carbon dioxide to at most 350 ppm in order to avoid disasters for coming generations." The levels in the atmosphere are already higher than this so urgent measures are needed to decarbonise the economy and create negative emissions. Dr Hansen supports a rising carbon tax as the main financial mechanism with the revenue being returned to all citizens thus moving the world towards a carbon-free energy future.

Coal was a major big focus of his visit, and he attended a symposium in Wellington on coal in New Zealand. He also visited Southland, and the site of the proposed initial Solid Energy lignite developments. Dr Hansen promoted the phase-out of coal based carbon emissions.

After his talks, Dr Hansen sent an open letter to the Prime Minister stating that, "New Zealand actions affecting climate change are important. Your leadership in helping the public understand the facts and the merits of actions to ameliorate climate change will be important, as will New Zealand's voice in support of effective international actions.

"The bottom line is that that the Earth is out of energy balance, more energy coming in than going out. Thus more climate change is 'in the pipeline'."

"Failure to address emissions of carbon dioxide, the main cause of human-made climate change, will produce increased regional climate extremes, as seen in Australia during the past few years."

"Shifting of climate zones accompanying business-as-usual emissions are expected to commit at least 20



*James Hansen addressing the public meeting in Wellington.*

percent of the species of our planet to extermination – possibly 40 percent or more. Extermination of species would be irreversible, leaving a more desolate planet for young people. They will also have large effects on New Zealand's principal export industry, agriculture."

"Sea level rise is a second irreversible consequence of global warming. Some sea level rise is now inevitable, but with phase down of fossil fuel use it may be kept to a level measured in a few tens of centimetres. Business-as-usual is expected to cause sea level rise exceeding a metre this century and to set ice sheet disintegration in motion guaranteeing multi-metre sea level rise."

"Prompt actions are needed to avoid these large effects. Phase-out coal emissions by 2030 is the principal requirement."

"New Zealand should leave the massive deposits of lignite coal in the ground, instead developing its natural bounty of renewable energies and energy efficiency."

"Secondly, New Zealand should lend its voice to the cause of moving the global community into a path leading to a healthy, natural, prosperous future. That path requires a flat rising carbon fee."



**ENVIRONMENT AND CONSERVATION  
ORGANISATIONS OF NEW ZEALAND**  
ECO • PO Box 11-057 • Wellington

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

City \_\_\_\_\_ Postcode \_\_\_\_\_

Phone \_\_\_\_\_

E-mail \_\_\_\_\_

- Please place me on your e-mail list for notices and information or contact us by e-mail [eco@eco.org.nz](mailto:eco@eco.org.nz)

**Groups - Join ECO:**

- Please send information on becoming a member of ECO. Membership is by application for groups involved in the protection of the environment. Subscriptions for member organisations are determined by the size of the organisation:
- 1 - 100 members: \$85 p.a.
  - 101 - 1000 members: \$130 p.a.
  - 1001 - 4999 members: \$440 p.a.
  - 5000 + members: \$1000 p.a.
  - Student Groups: \$35 p.a. (all GST inclusive)

**Individuals - support ECO by:**

- subscribing as a 'Friend of ECO'  
-\$45 P.A. (GST inc.) 'Friends of ECO' receive this quarterly newsletter, mailings and invitations to ECO gatherings.
- subscribing as a sustaining 'Friend of ECO'  
-\$120 P.A. (GST inclusive).
- subscribing as a corporate 'Friend of ECO'  
-\$500 P.A. (GST inclusive).
- subscribing as unwaged 'Friend of ECO'  
-\$25 P.A. (GST inclusive).
- making a regular automatic payment  
-send me a form and details today.
- contributing services or goods:

- \_\_\_\_\_
- making a donation (*donations over \$5 are tax deductible*)

- \$20     \$50     \$100     \$200

- Other amount \$ \_\_\_\_\_

TOTAL ENCLOSED: \$ \_\_\_\_\_

**VISA PAYMENT**

Cardholder name: \_\_\_\_\_

Expiry date: \_\_\_\_\_

VISA card number: \_\_\_\_\_

**Join us for our annual conference:  
Resilient Environment: Resilient Communities  
- Mutual Support for the Future**

**Location:**

**Friday 1 July: Parnell Community Centre, Parnell, Auckland**

**Saturday 2 July and Sunday 3 July: Carey Park Camp, Henderson, Waitakere**

**SEE YOU THERE!**

**Disclaimer:** While every effort is made to ensure the accuracy of information contained in this publication, ECO, its executive and editorial staff accept no liability for any errors or omissions. Views and opinions expressed in this publication do not necessarily represent the policy options and views of ECO, its executive or its member organisations.

**PUBLISHED BY ENVIRONMENT  
AND CONSERVATION  
ORGANISATIONS OF NEW ZEALAND**

ECO, PO Box 11-057, Wellington  
Phone/fax 04 385-7545  
e-mail: [eco@eco.org.nz](mailto:eco@eco.org.nz)  
2nd floor, 126 Vivian Street, Wellington  
Website: [www.eco.org.nz](http://www.eco.org.nz)  
ISSN: 1174-0671  
Printed on 100% Recycled Paper

Editing: Elizabeth Lee  
Layout: Debby Rosin

## ECO MEMBER ORGANISATIONS

Action for the Environment  
Appropriate Technology for Living Association  
Auckland Civic Trust  
Bay of Islands Coastal Watchdog  
Bay of Islands Maritime Park Inc.  
Baywatch Hawkes Bay Environment Group  
Buller Conservation Group  
Clean Stream Waiheke  
Coromandel Watchdog of Hauraki  
Cycling Advocates Network  
Dunedin Environment Centre  
East Harbour Environmental Association  
Eastern Bay of Islands Preservation Society  
Engineers for Social Responsibility  
Environmental Futures  
Friends of Golden Bay  
Friends of Lewis Pass and Hurunui Catchment  
Friends of Nelson Haven and Tasman Bay  
Friends of the Earth - NZ  
Gecko, Victoria University Environment Group  
GE-Free New Zealand  
Greenpeace NZ  
Guardians of Pauatahanui Inlet  
Initial Volco Trust  
Island Bay Marine Education Centre  
Kaipatiki Project  
Kakariki - Canterbury University Environment Group

Lincoln Environment Group  
Massey Environmental Group  
Monarch Butterfly New Zealand Trust  
National Council of Women of NZ  
Nelson Environment Centre  
New Zealand Institute of Landscape Architects  
Nga Uruora - Kapiti Project Charitable Trust  
North Canterbury Branch Forest & Bird  
Orari River Protection Group  
Organics Aotearoa New Zealand  
RESPONSE Trust  
Save the Otago Peninsula  
Soil and Health Association of NZ  
South Coast Environment Society  
Students for Environmental Action  
Surfbreak Protection Society  
Sustainable Otago Christchurch  
Sustainable Whanganui Trust  
Sustaining Hawke's Bay Environment Centre  
Te Aroha Earthwatch  
Thames Coast Preservation and Protection Society  
The Sandy Walker Group  
Wellington Botanical Society  
Wellington Tramping and Mountaineering Club  
Whaingaroa Environment Centre  
Wildlife Society, NZVA  
Yellow Eyed Penguin Trust

# JOIN US!!!



Sent by ECO  
PO Box 11-057  
Wellington  
Aotearoa/New Zealand

New Zealand  
Permit No. 221318

