

Submission to the House of Representatives Standing Committee on Agriculture, Resources, Fisheries and Forestry

Inquiry into the Australian Forestry Industry

My name is John Lord and I am pleased to be able to make a submission to the Committee's inquiry into the Australian forest industry.

My comments are made from a career spent largely in Tasmania and in particular from my family's involvement as private forest growers since the 1980's. My association with the forest industry goes back to the Ash Wednesday fires in the early 1980's when I was involved with the establishment and management of a salvage operation mounted by forest industry contractors from Tasmania to assist in recovering and placing into water storage in the Mt Gambier region, large volumes of fire damaged *Pinus radiata*.

I originally qualified as a solicitor and then as a Chartered Accountant. After working overseas for several years in the construction and light manufacturing industries I returned to Tasmania. I practiced as a Chartered Accountant and was a partner with KPMG for 25 years. During this period I was actively involved in forestry policy at a state and national level in a number of areas.

For ten years I was the Chairman of the state's electricity transmission and system control company. I am currently the Chairman of the State's Irrigation Development Board, the Chairman of the steel fabrication group Crisp Bros & Haywards, a Director of the listed rural supplies and services company Ruralco Holdings Limited and a director of Private Forests Tasmania.

Diana, my wife, and I conduct a farming business as well as our private forestry enterprise. We were awarded the Tasmanian Australian Forest Growers Treefarmer of the Year award for 2005 and the National AFG Treefarmer of the Year award for 2006.

I am pleased to offer you comment on a number of your Terms of Reference.

1. Opportunities for and constraints upon production

Our state of Tasmania is blessed with a lot more rain than is the case for most of the rest of Australia.

This water, together with the sunlight we receive, enables photosynthesis to occur over most of our state, enabling the sun's energy to be captured as food and fibre in our farming areas and as wood in our forested areas, both native forest and plantations and on our farms in our shelterbelts and woodlots.

Our natural opportunities are therefore our sunlight, rainfall, climate types and soils. Our complimentary opportunity is a diversified demographic comprising lots of country communities, home to innovative, hardworking people many of whom have considerable skills in the forest industry.

Our current constraints have in recent years been monopoly industries (originally created by the Commonwealth's Customs regulations), the imbalance and social concerns created by the MIS schemes and currently attempts by certain interest groups to strike a political deal that would see the cessation of the active management of Tasmania's public native forests.

Our greatest constraint would be the acceptance by our political masters of such a deal. I cannot think of a decision that would be more damaging to our state's environment, economy and people. The implications of such a deal would lead to national ramifications.

2.Opportunities for diversification, value adding and product innovation.

Please see my comments under the heading **6. Potential energy production from the forestry sector.**

3.Environmental impacts of forestry

3.1 Sustainability

The most sustainable products of all come from sustainably managed native forests. These products are more sustainable than those produced from plantations.

The management of our native forests, (in the drier forests such as our own, by careful selective harvesting,) occurs without the use of chemicals, either as fertilizers or sprays. The bark and leaves are left on the forest floor, allowing the elements needed for tree growth to remain as a slow release fertilizer, with only the barked logs being removed. These logs comprise cellulose and hemicellulose cells held together by glues called lignins, which are made up of the elements C, H and O, all products of photosynthesis.

3.2 Biodiversity

Whatever we do with our native forests must maintain and if possible, enhance, the biodiversity contained within them.

A scientific study of my family's native forest has shown that biodiversity is better where the native forest had been selectively harvested than where a similar forest had not been harvested.

My family are not surprised that active management appears to be beneficial to the maintenance and enhancement of biodiversity in these types of forests.

It is possible the regular burning practiced by the aboriginal tribes on their annual migrations caused the state's ecology to be altered to an environment that needs disturbance to thrive.

This research was published in a paper, "A case study of biodiversity protection and small scale production in Northern Tasmania" delivered at the International Conference, *Biodiversity and Production*, Tamar NRM, University of Tasmania Centre for Environment, Launceston, Tasmania, 26-28 June 2007.

3.3 Being able to afford to keep our native forests (balancing environmental costs with economic opportunities)

Given that human beings live in close proximity to most of our native forests and that we have introduced other species, including a number of noxious plants and vermin into our landscape, our native forests, to be maintained, must be valued by the community and actively managed. Anything that is no longer valued is ultimately lost and native forested areas are no exception to this rule.

The management of these forested areas requires economic resources. I believe it is most unlikely that our elected leaders will be able to afford on our behalf to provide money from the public purse for this purpose. At the very least, forested areas, provided they are able to be actively managed, have the ability to self fund themselves and hence ensure their own preservation.

3.4 Climate change opportunities

Whatever we do with our native forests must achieve the best outcome from a climate change perspective.

The very best outcome is to use wood (and wood residues) as a biomass fuel to replace fossil fuels. This gives an immediate, 100% effective, outcome. In this case the forests that have been harvested to provide the wood (biomass) will then be able to resequenter the carbon that has been released by the use of the wood as biomass fuel on a short time cycle, possibly as short as 20 years depending upon the tree species.

The next best use from a climate change perspective is for trees to be harvested for traditional uses such as sawn timber and paper products. A study by government agencies has found that most of these products end up in land fill and most importantly, that such waste in landfill degrades very slowly. The analysis shows that when a forest is selectively harvested on a regular basis, over 200 years twice the carbon is sequestered compared with simply locking that forest up. The authors say that placing the carbon in landfill is less risky than leaving the carbon in the forest and at risk of release by fire.

The paper setting this out is called “Forests, Wood and Australia’s Carbon Balance” and was published by the Cooperative Research Centre for Greenhouse Accounting and the Forests and Wood Products Research and Development Corporation, ISBN 0-9579597-5-3.

The Tasmanian Government last year received a report into the State’s carbon emissions, called locally, The Wedges Report. This report, prepared according to Kyoto rules, showed Tasmania, this year, is emitting 9.2 million tonnes of carbon dioxide equivalents (mtCO₂e). The Kyoto rules appear to be more political than scientific when considering forests such as our native forests.

Farmers in the north of Tasmania have for some time now been investigating the carbon balance of their farms. Tamar NRM has published a report showing that when 17 farms were assessed, including the carbon sequestered in trees growing on these farms (but not including any carbon sequestered in soils), in total these farms are carbon negative, meaning they are sequestering more carbon than they are emitting. This research has caused great interest around Australia because up until this time it was simply assumed that agriculture is one of the nations large carbon emitting sectors and that nothing much could be done about it.

The consultant’s report includes emissions of 2.2mt CO₂e by Tasmania’s farmers in their total of 9.2mt CO₂e emissions this year.

I have, based on the NRM research, (ie what is happening scientifically, not calculated according to the Kyoto rules,) assumed the farmers in total are carbon neutral and added back the 2.2mt CO₂e.

I have then, crudely, calculated the carbon that is currently being sequestered in the forests, both native forests and plantations, currently managed by the private forest growers and Forestry Tasmania (the Crown’s forests) in Tasmania.

My calculations show that as a state, when we take into account the sequestration of carbon currently occurring in our forests, Tasmania is currently carbon negative, that is, we are, overall, sequestering more carbon than we are emitting. This result is because of how we have been managing our forests over the past few decades. Should we be prevented from actively managing our native forests we will gradually lose this outcome and move back to being a

jurisdiction that is a net carbon emitter. I wonder if there are any other carbon negative jurisdictions in the world at present?

Being able to actively manage our native forests in this way provides a true win-win-win outcome: maintenance of the environment in terms of biodiversity and assisting with climate change outcomes, providing resource for industry and providing worthwhile careers for our people.

4. Creating a better business environment for forest industries

4.1 The need to keep what we already have

I believe we have a good business environment for our forest industries at present.

Our major forestry company, Gunns Ltd, has decided to change its business and exit the native forest sector to concentrate on its plantation estate. It is quite entitled to do this. This does not signal, as some have assumed, that there is a problem with the native forest sector. This sector is vibrant internationally with strong trade interest in our resource existing at present and with new enquiries emerging.

I comment on this further under the heading **6.2 Biomass**.

4.2 Where will our future quality sawlogs come from, really?

For the past 22 years our family has been conducting trials to see if we can grow plantation eucalypts into sawlogs. So far we've failed. As the plantation has been thinned to allow the trees to grow to the bigger size trees needed, where they are exposed or are in wet areas they have become susceptible to being blown over in the weather events such as we've experienced in the past two winters. Also, in the drier areas, quite a number of trees have been attacked and killed by grubs. These eucalypts are the plantation species *Eucalyptus nitens*. Nearby native forest has not suffered the same damage.

At present, I don't believe another plantation species has even been identified, let alone trialled, as a species to potentially provide raw material for Tasmania's high value hardwood sawlog based industries.

I understand this is the situation being experienced in SE Queensland where the strategy to replace native forest sawlogs with plantation logs is not succeeding as planned.

My family is happy to show the results of our sawlog trials (and also how we manage native forest for triple bottom line outcomes) to the Committee if they would like to form their own opinion about these things.

4.3 Attracting investment for growing trees in Australia

There is an overall impediment to investment in forestry at present, which is the low return to the forest growers. We must remember that a large part of our nation's softwood estate was established with public assistance, in the earlier years to generate employment as was also the case in New Zealand; without this assistance it would not exist today.

Some years ago, I conducted a detailed evaluation of the then public offerings to invest in forestry. When the tax advantages and inflated likely selling prices were stripped back, the investments provided a common real IRR of a little over 5% pa. Whilst this will attract some private land owners who are prepared to receive such a return, it will, obviously, not attract professionally managed capital. If industry wishes to have a supply of domestically grown resource, work must be done to work out how the capital market, such as superannuation moneys can be accessed. I have a further comment on this in the section **6.1 Biofuels**.

5. Social and economic benefits of forestry production.

Forestry is our state's most sustainable economic sector. It is more sustainable than farming.

It currently underpins about one third of our state's real private sector, the private sector that generates the wealth that pays, one way or another, for all of the services, like health, education and police, that we enjoy.

Private Forests Tasmania recently commissioned an economic consultancy to advise on the role the private forestry sector in the state plays. The report also includes commentary on the whole of the sector and is called "Measuring the Economic Value of Private Forestry to the Tasmanian Economy" by IMC Link (Dr Bruce Felmingham), November 2008.

The forestry sector underpins the diversified social demographic of Tasmania and has done so successfully since white settlement. Without it a number of people whose skills and interest lie in working outside, working with their hands, working in maintaining our forest environment, will have to leave their country communities and seek work in our larger cities or leave the state.. We do not have alternative opportunities for them with a number of significant employers in other sectors downsizing or closing their businesses in Tasmania. Such population migration will impact adversely not only on the people concerned but also on the viability of their communities and ultimately upon the cost of our nation's welfare system.

I understand Dr Simon Grove, a Tasmanian based conservation biologist, has recently commented on the political changes made to the management of the forests in SE Queensland and in British Columbia. His conclusions are that the changes made in BC, whilst having a significant impact especially on industry, are now working and providing positive outcomes, socially, environmentally and for industry and contrast these with the changes made in SE

Queensland that are not working in these critical areas. Reference www.onlineopinion.com.au/view.asp?article=11763&page=0

6. Potential energy production from the forestry sector

This is the really exciting part.

Up until now, my comments are really saying, please don't prevent us from actively managing our native forests, for all of environmental, social and economic reasons.

Australia is 20 years behind the rest of the world in the development of renewable energy from biomass sources. There appears to be a political view, found only in Australia, that such action is bad. It is unlikely that Australia is right and the rest of the world is wrong!

Organisations such as the WWF have for years been lobbying governments elsewhere to adopt policies that would see some of the fossil fuels currently in use being replaced with fuels made from renewable sources such as wood.

6.1 Biofuels

Australia's transport needs are largely satisfied by liquid fuels and constitute about 30% of the nation's energy needs. When stationary engine and agricultural needs are added, liquid fuels constitute about one half of the nation's energy needs, electricity being, crudely, the other half.

If one had a unit of renewable energy, able to displace a unit of petroleum fuel or electricity generated from coal, which would be better from a climate change point of view? The answer, apparently, is to displace the unit of petroleum fuel, but not by much. When considered, however, from an economic point of view, the answer is overwhelming. A unit of renewable energy in a liquid form is far more valuable than that unit of energy as electricity.

Wood is solid sunlight. It just has structural and fibre properties, too, but really, it is solid energy.

Forest managers therefore, really, capture solar energy in a sustainable way without the risks associated with other energy sources, including the potential health risks that may be associated with wind energy. Trees, of course, store this energy as wood, which can be kept as long as the tree does not get burned in a bush fire or start to rot. So, when you want some energy, you just go and gather some wood. This is what humans have done when they needed heat for as long as human history is recorded.

It has long been understood by scientists that cellulose and hemicellulose (in the form of lignocellulosic feedstocks) contain energy and that there are two ways of obtaining it: by enzymatic hydrolysis and by acid hydrolysis. The issue has been how to do this in an economic

and environmentally clean manner. The big money has for many years been on the enzymic process, but this research hasn't delivered. An Australian scientist, Dr Russell Reeves, has been pursuing the production of ethanol in a commercially and environmentally sound way by acid hydrolysis for over 20 years.

Russell has proven at laboratory level that this can occur. He is, via an unlisted public company, Ethanol Technologies Limited (Ethtec) now in the final stages of proving at a pilot plant that his process will work at industrial scale. His process needs only a small processing plant footprint and is water and energy positive.

Ethtec has been backed largely by sugar cane growers with \$10 million raised to prove the process. The final stages are now in progress with results due within a year.

This technology is Australian controlled and is world leading. The pilot plant is at the Harwood Sugar Mill, near Yamba in Northern NSW.

This process, given it is proven, will enable any lignocellulosic feedstock to be converted to ethanol. Current ethanol production in Australia uses wheat starch, a food, and in Brazil, uses sugar, also a food. Currently a significant part of the US corn and soy production is grown to feed ethanol plants.

Importantly, Russell's technology will enable what is grown as food to be used as food with the energy being made from the crop wastes. For example, it will allow farmers to harvest their grain to be used for food, with the straw being used to make ethanol.

Lignocellulosic feedstocks include waste paper and cardboard, council green wastes, other farm wastes such as cotton waste and crushed sugar cane stalks (bagasse) as well as wood wastes such as sawdust, wood offcuts and wood grown especially for the purpose.

Private forest growers from Tasmania have been working with Russell for over five years as they realized the paper making industry would prefer plantation eucalypts (which have a higher fibre yield than native forest species) as these became available, leading to an expected decline in the demand for fibre from the lower yielding native species for paper making. This change in preference has occurred on the part of the Japanese paper makers although there is still strong demand for the lower grade product by some markets, notably China and emerging markets seeking wood to be used as biomass (as set out in **6.2 Biomass**, below).

Russell's results show that one ton of cellulose will make in excess of 400 litres of ethanol. One ton of green wood will make in excess of 200 litres. An ordinary truck load of logs will make over 6000 litres, more than enough to power a family's cars for a year. The crushed stalks of the sugar cane plants, the bagasse, typically thrown away or now being used for heat production, contain almost as much energy as is contained in the juices extracted from it.

The economics, given present petroleum fuel prices, will mean providing feed stocks for the production of liquid fuels is a better business than providing fibre for paper makers, potentially providing forest growers with a better return.

In Tasmania's case, given Russell's final testing is successful, the state could produce all of its octane (petrol/spark ignition type) liquid fuels. Russell has also worked out how to blend ethanol as up to a 30% component of cetane (compression type) diesel fuels. Tasmania could provide all of its own octane fuel needs from such renewable sources (and never have to import petrol again) and have a significant renewable liquid fuel export industry.

Russell's process converts the cellulose and hemicellulose to sugars and then to ethanol. The sugars can be used for other uses and could, for example, be used to make plastics. So, we could also have a renewable feedstock based plastics industry.

These are just two examples of new industries that could play a role of national significance given the decline in Australia's fossil fuel reserves, quite apart from the climate change outcome.

Russell would be happy to show the Committee his company's pilot plant and explain the process. Minister Ludwig has recently visited the plant.

6.2 Biomass

Andrew Lang is a Victorian farmer and private forest grower, winning the AFG Treefarmer of the year award for Victoria in 2005 and the recipient of a Gottstein Fellowship in 2008. Andrew has for many years followed overseas trends in the use of biomass for heat and electricity generation, travelling when he can to Europe to learn what is being achieved there and on his return passing on what he has seen and learned.

Andrew recently returned from the Sustainable Energy Day and World Pellet Conference and Expo at Wels in Upper Austria.

Upper Austria is moving towards providing 100% renewable energy for electricity and space heating by 2030. At present it is approximately 34% with biomass providing about half of this. The Energy Minister for the state of Upper Austria who is the driver of this program, is the leader of the Green party in the state's coalition government.

Andrew advises that about one quarter of the pellet and chip heaters sold across the EU are being made in Upper Austria, a state with 1.4 million people. He says that due to its long term coherent renewable energy policies the state has developed a thriving industrial manufacturing sector in these and other renewable energy fields, exporting worldwide including to Australia and New Zealand.

Andrew spoke at the conference and was afterwards approached by three major international biomass user organizations, wanting to learn about sourcing eucalypt woodchips from Australia,

in the order of 3 million tonnes per year. He advises the demand in the EU for biomass is growing fast and major energy companies are struggling to meet their commitments.

Andrew visited an old technology (1996 vintage) plant in Denmark that provides all of the heat and electricity needs for a town of 20,000 people and its industry from 55,000 tonnes of straw and 5,000 tonnes of woodchips a year. He says that in his region of SW Victoria, within a 10 km radius, he and his fellow farmers have just free-burned 50,000 tonnes of straw. They do this every year....

Andrew Lang and Russell Reeves are both very engaging and knowledgeable men, in my view the best in their fields you will find in Australia. Both would be well worth asking to present to your Committee.

Man has used wood as a source of domestic heating forever. Wood burned in traditional open fires and particularly in modern wood heaters when they are not operated properly, emit particulates into the atmosphere. These particulates can cause serious adverse health consequences with people who suffer from conditions such as asthma being particularly affected.

This matter is an issue in basins such as the one in which the city of Launceston is situated where in the winter, wood smoke (particulate emissions) gather. In recent years the Launceston City Council has embarked on a program of subsidized woodheater removals, with replacement heating being primarily from electricity.

When this was well under way, Bishop Chris Jones, the CEO of Anglicare in Tasmania, wrote a gentle letter to the local newspaper pointing out to the City Fathers that such a program may well cause socio-economic problems for some of Launceston's residents who would not be able to afford the electricity. Last winter, in Launceston, the removal of woodheaters from public housing was stopped because the tenants said they would not be able to pay the electricity bills.

It will be a ridiculous outcome in regional centres such as Launceston, located in a state that has a significant forest industry, if domestic heating cannot be provided from a renewable source such as wood.

Private forest growers in the state have for some years been investigating how wood may be used for such domestic heating without the air pollution health issues.

Heaters can now be purchased that burn wood in the form of pellets. The relevant industry association claims that, because of the quality of the fuel and the heater controls, the levels of particulate emissions are the same as those produced by gas heaters. Calculations show that the capital and operating costs may be similar to electric heating, meaning that with the projected increases in electricity costs, this form of heating may become the more affordable.

6.3 Carbon sequestration

I am quite alarmed at the current proposals to plant trees to simply be left as carbon sinks and to pay forest growers to leave existing forests standing as carbon stores.

We have seen inappropriate tree plantings as a result of the MIS schemes' activities. By inappropriate I mean trees planted in places where they are not growing well. And these trees are not yet many years old.

Trees are living organisms and I expect the scientists will tell us that planting them and expecting they will be there in 100 years in many cases is not a reasonable expectation. Trees need to be actively managed. Trees are susceptible to being burned in bush fires and killed by other natural causes.

Notwithstanding these risks, there are not many tree species that will actively grow and stay healthy (such that they won't otherwise start to rot and so emit carbon) over a 100 year period.

Such proposed activities only address environmental outcomes (and may not even do this very well). What we do, to be sustainable, must address environmental, social and economic outcomes at the same time.

In my view it is far better to plant trees, actively manage them on an appropriate regime (thus providing employment), harvest from them as appropriate (thus providing the economic return to pay for their management) with the products harvested being used to replace fossil fuels (thus providing a potentially better environmental return than was first envisaged, as set out in **3.4 Climate change opportunities**, above).

Such plantings and retained stands of trees may be appropriate for areas required under Forest Practices Codes and suchlike to be kept as reserves, but I think our society in the years ahead will find it needs to be able to actively manage all our nation's forested areas on a regime of minimal impact management, rather than a regime of high impact management on part and no active management on the balance.

(I note the recent government funded programs whereby in return for a once off capital sum, a landowner will place a perpetual covenant on land, the aim being to preserve important plant and forest communities. I am concerned that this is not a good design for any of the Government, the landowners or the communities of plants and trees and believe it will have to be revisited. I understand in some cases problems are even now emerging, in particular the growth of noxious weeds such as gorse and an increasing risk of fire through the buildup of litter.

Some years ago, when I was last in New Zealand, a number of farmers told me the Department of Conservation (DOC) had, in accordance with a new Government directive, resumed some of their higher grazing leases and ordered these areas be destocked. Some advised me that the DOC officers who had the responsibility for this land had, after a while, come back to them seeking advice as to how it should be managed.

I make mention of these as examples that one cannot simply plant or reserve something and then leave it unmanaged.)

7. Land use competition between the forestry and agriculture sectors

7.1 Opportunities for farm forestry

It is well recognized in farming districts such as ours, that at least 10% of the farm land can be planted with trees with the balance land producing the same amount of food and fibre as before. This means that we can plant these trees on our farms with the land being effectively “free”.

Such plantings add to the capital value of the farms as well as providing a measure of financial protection in times of financial hardship and physical protection for livestock and crops.

Dr Jacki Schirmer and her students from the Australian National University conducted research that showed that well placed plantings of trees on farms around Canberra added 30% to the capital values of the farms investigated. They found this increase in value had nothing to do with any change in the farms’ productive capacity: it was due to the aesthetics.

This (at least)10% is available “for free” because of the non wood benefits, notably the shelter effect the trees provide. These benefits become apparent from when the trees are only a few years old. A farm with shelter belts is a much nicer environment in which to work on a bad weather day. The livestock and grass and crops behave as though they appreciate it too.

Farm forestry is of great assistance to farming families.

In Tasmania we have examples of banks deciding against foreclosing during difficult farm trading periods, because of the farms’ forestry assets. I cannot think of a better social example than this: the farm’s forestry assets enabling the family to stay on the farm. One example I know of is of a family who got through their tough period this way and now conduct one of the leading farming businesses in the state.

Farm forestry returns are lumpy. Farm budgets do not usually contain cash receipts from the sale of wood. The families do not get used to having a regular income from this source, so when it comes it is particularly useful: getting the bank off your back, buying an irrigator or tractor, helping with education or succession with a non farming child.

In Tasmania legislation exists that allows a farmer to leave an interest in growing trees separately from the land on which the trees are growing. This is most useful in planning for succession in a farming family. The non farming child receives his or her inheritance when the trees are harvested, whatever that is and the farming sibling does not have the burden of raising debt to pay out the non-farmer.

Importantly, unlike other crops, trees can be “kept on the stump” until needed, within reason providing the farmer with flexibility in accessing this reserve.

Farm forestry often provides the opportunity to manage plantings intensively.

On our home farm, which is away from where we conduct our main private forestry enterprise and where the rainfall is much less, we planted a 2ha block of *Pinus radiata* on our southern boundary. Our elder son, James, has managed these pines NZ style, thinning to waste at an early age on a wider than normal spacing, high pruned, growing high quality veneer logs. James’ experiment, conducted when he was a schoolboy, shows we can grow this top quality product in the low rainfall area where we live, with the trees growing well even through the recent 5 year drought. Our expected return in 15 years from now, when the trees are aged 30 years, is in today’s dollars, at least \$25,000 per hectare.

The Midlands of Tasmania has suffered significant tree decline over the last century. The results of James’ and other trials by farm foresters, experimenting with growing trees outside the traditionally accepted treegrowing parameters, in these cases growing trees in drier than normal areas, is enabling Private Forests Tasmania to be able to offer, with confidence, practical advice about the way trees can be reintroduced into these landscapes.

Private forest growers, often farmers who manage trees as part of their enterprise, are special, or at least different from industrial forestry companies.

The biggest cost to industrial foresters is time, so they manage wood production on as short a rotation as possible.

Rowan Reid, a lecturer in Forestry at the University of Melbourne has researched this and found that private forest growers are a little different. He found that they “grow capital rather than income” meaning they grow trees and then hold many of them, fully grown, as a capital reserve, selling only part of their mature trees at a time. He found they do this to keep a reserve of capital against hard times, because of the shelter and aesthetic benefits the trees provide and generally, simply, because they want to do this. He found they tend to disregard the time cost of money and so grow larger trees and often different species than the industrial companies.

These benefits are usually also enjoyed by the wider community, because of the landscape and climate effects these plantings contribute towards.

It is therefore critical that government policies retain and enhance the ability, encouragement and recognition of people who in effect manage the landscape in this way for the public benefit, without payment from the public purse.

Thank you for the opportunity to provide the above comments.

John Lord

25th March 2011