

# CFA Newsletter



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### Around the World

## Canadian First Nations elect forestry representatives to advise FSC



*Inuu traditional welcome and luncheon for North American Regional meeting participants in Chapatawan (Île d'Orléans). Photo: Larry Joseph*

Thirty representatives of First Nations from across Canada were hosted by the Huron-Wendat Nation in Wendake, Québec City, from 30 May to 1 June 2012 to review the terms of reference of the Forest Stewardship Council's (FSC) proposed Permanent Indigenous Peoples Committee (PIPC), discuss and agree on critical issues to be included in its Work Plan and elect a representative to the PIPC.

The PIPC grew out of Policy Motion #19 proposed by members of FSC Canada at FSC's General Assembly, held in Sabah, Malaysia in July 2011, to strengthen indigenous involvement in FSC. Following approval of the Motion by the three FSC Chambers (Social, Economic and Environmental), FSC's International Centre in Bonn set up an Indigenous People Working Group (IPWG) to guide and

operationalize the PIPC. The Québec City meeting was the first of five planned regional meetings organized by the IPWG and local collaborators. The remaining four regional meetings (Africa, Asia-Pacific, Europe/Russia, Latin America) will be held later in 2012.

The PIPC will be an advisory committee that reports to the FSC International Board of Directors. The Wendake meeting proposed that the aims and objectives of the PIPC should include information on the potential for substantive rights and benefits, and not only procedural rights, for indigenous peoples in forest management.

About 39 per cent (or 46 million hectares) of Canada's commercial forestlands are FSC-certified, but very little of that area is held by First Nations. One presentation at the meeting outlined the opportunities arising from the 3-year

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The views expressed are not necessarily those of the CFA.

long revision of FSC's Principles and Criteria to bring about positive changes. FSC's 10 Principles and 56 Criteria (now expanded to 70 Criteria) extend the safeguards for indigenous rights and require FSC certificate holders and/or applicants to be proactive in engaging affected and interested indigenous peoples and local communities in benefit sharing, upskilling and identification and protection of customary rights and resources.

The meeting invoked the 'Wendake Action Plan' of September 2003 that had formed an Official Event of the XII World Forestry Congress. The National Aboriginal Forestry Association (NAFA) and the First Nations of Québec and Labrador Sustainable Development Institute (IDDPNQL) of Canada had brought together 200 indigenous representatives from 68 countries to draft the Wendake Action Plan which identified six issues critical to Indigenous Peoples, including what would be later formalized as Free, Prior and Informed Consent (FPIC), that is explicitly referenced in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007).



*George Desjarlais spoke about the outcomes of Caribou conservation litigation launched by the West Moberly First Nation. Photo: Larry Joseph.*

In the same way as the Wendake Action Plan was later referenced in several UN documents, including some of the United Nations Forum on Forests (UNFF), so the meeting hoped that future PIPC reports and FSC processes would be taken up in fora that focus on the issues affecting indigenous peoples globally. Presenters recounted the reasons why FSC is favoured by First Nations: performance-based Principles and Criteria,

safeguarding of the rights of affected and interested indigenous peoples and local communities, and explicit referencing of the most recent global human rights, labour and social standards.

The Wendake representatives repeatedly stressed the importance of indigenous networks and the referencing of international human rights norms, domestic and regional court decisions and processes like FSC's PIPC in advancing indigenous rights across the globe. The PIPC was seen as part of a tradition that included the 1992 decision of the High Court of Australia in *Mabo v. Queensland [No. 2]* which upheld the common law doctrine of aboriginal rights or native title and which set a precedent that would ripple through other Commonwealth and other countries. The Wendake meeting also referenced key court rulings in Canada, including *Delgamuukw v. British Columbia* in 1997 that upheld aboriginal title and *Haida Nation v. British Columbia* in 2004 which found that the Crown had a moral duty to consult with First Nations and accommodate their interests. Fifteen years later, the Supreme Court of Belize, another Commonwealth country, referenced UNDRIP in its 2007 ruling in favour of two Maya communities to occupation and use of their lands.

FSC's PIPC was described as another international forum that opens up a space in which indigenous peoples can engage with government, industry and other stakeholders on forestry and related matters. For more information on planned PIPC meetings in your region, please contact Larry Joseph ([larry.joseph@me.com](mailto:larry.joseph@me.com)).

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# Association news

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## UK members welcome CFA Vice-President



Bob Newman (5<sup>th</sup> from left) meets UK members in Oxford.

In June Bob Newman, CFA Vice-President, travelled to the UK from Australia to carry out research for his PhD but during a break in his busy schedule he took time to visit some CFA friends in Oxford. Professor Jeff Burley was kind

enough to arrange meeting facilities at Green Templeton College where Bob presented a talk on *Current concerns in Australian forestry*.

During his presentation Bob reported on the current areas of managed forests and plantations in the country and noted the beneficial effect of monetary inflation on the apparent financial profitability of *P. radiata* grown on a 20 year rotation. However, true economic analysis was much less favourable as currently there is no state-financed planting taking place.

After Bob's talk members discussed some general issues for forestry worldwide including the decline in formal academic professional teaching resources. They noted the changing status of forestry especially in training programmes where forestry *per se* is increasingly being combined with other disciplines. Bob's UK visit was all too short and we wish him well for the successful completion of his studies.

## The CFA in Nigeria



Associate Professor B.O. Agbeja  
*Chairman, Commonwealth Forestry Association Steering Committee, Nigeria*

- **Associate Professor B.O. Agbeja** (CFA Chairman/Coordinator in Nigeria): Department of Forest Resources Management, University of Ibadan
- **Dr. A.C. Adetogun** (CFA Anchor person at FUNAAB): Department of Forestry and Wildlife, Federal University of Agriculture, Abeokuta, Ogun State
- **Dr. O.V. Oyerinde** (CFA Anchor Person at FUTA): Affiliation: Department of Forestry and Wood Technology, Federal University of Technology, Akure, Ondo State
- **Dr. A.O. Omole** (CFA Anchor Person at UI): Affiliation: Department of Forest Resources Management, University of Ibadan
- **Dr. S. Udofia** (CFA Anchor Person at UniUyo): Affiliation: Department of Forestry and Wildlife, University of Uyo, Akwa Ibom State
- **Mr. I.O. Lawal** (CFA Secretary in Nigeria): Affiliation: Forestry Research Institute of Nigeria, Jericho, Ibadan, Oyo State
- **Mr. T.M. Daramola** (CFA Anchor Person for IFSA): Affiliation: Department of Forestry and Wood Technology, Federal University of Technology, Akure, Ondo State
- **Mr. Simon Shomkegh** (CFA Anchor Person at UAM): Affiliation: Department of Forest and Forest Products, University of Agriculture, Makurdi, Benue State

Following the success of last year's CFA-funded workshop *Hands across the Forest: Strengthening the contribution of stakeholders to forestry development across West Africa* a new CFA group was established with the following members comprising the Steering Committee:

The objectives of the group are:

- To strengthen the network of various Forestry Associations and other Forestry Related Associations
- To support the development of Sustainable Forest Management in Nigerian Forest Estate

The outputs planned in the near future are:

- Partnership among all forestry stakeholders and other related forestry stakeholders in Six Geo-Political Zones in Nigeria developed.
- Capacity of various forestry organizations to see to the tenet of good forest management in Nigeria improved.
- Effectiveness, speed and accuracy of forestry stakeholders' communication and information networks significantly improved.
- Capacity of Forestry Academic Staff to mentor the Forestry Students in Nigerian Universities and Forestry Institute strengthened.
- Advocacy of lobbyists to see to the passage of holistic National Forest Policy and National Forestry Act promoted.
- Public awareness of the value and importance of Sustainable Forest Management enhanced.
- National and International Forestry Policy and Practice influenced.
- Capacity of fringe forestry communities around forest reserves to implement community forestry initiatives developed.
- Critical mass of stakeholders with one consensus voice to air their views of forestry sector promoted.
- Forestry staff skills and capacity to deliver services required by main stakeholders increased.

#### Achievements so far

1. Successful completion of the workshop *Hands across the forest: Strengthening the contribution of stakeholders to forestry development across West Africa* in September 2011. All the participants thereafter were presented with the final resolutions on the position and roles of Forestry Associations in the forestry sector across West Africa.
2. The CFA Nigeria chapter was able to mobilize a total of thirty-five foresters to become CFA members.
3. The CFA chapter in Nigeria was invited to the Third Biennial Conference of Forests and Forest Products Society of Nigeria on a theme **'De-reservation, Encroachment and Deforestation: Implications for the Future of Nigerian Forest Estate and Carbon Emission Reduction'** from 03-05 April 2012 at University of Ibadan, Nigeria. CFA members attended and presented scientific papers and all participated in the communiqué of the conference which was considered as a verifiable indicator of networking.

#### Forthcoming actions

1. To mark the first year of CFA inauguration in Nigeria, the CFA Steering Committee will have a two-day-workshop on **'Proposal Writing, Accountability in Proposal Execution, Follow Up and Executive Report Writing'** for a teeming population of forestry employees of Forestry Research Institute of Nigeria from 8-9 September 2012. New members of CFA Nigeria will be welcome during the workshop.

## New Mauritius forestry blog

The screenshot shows a blog post on a website titled "Mauritius forest news". The post is dated Wednesday, 11 July 2012. The main headline is "CTA's web2.0 training workshop helps forest information dissemination". Below the headline, there is a sub-headline: "The Technical Centre for Rural and Agricultural Cooperation has been running the Web2.0 training program for field practitioners and managers involved in rural and agricultural sectors." The main text of the post reads: "Presently, one such workshop is being run in Mauritius by Mauritian trainers to help in efficient and effective information dissemination and networking among professionals and field practitioners alike. Some 25 motivated participants are discovering useful tools at the end of their fingertips and learning to use these." There is a photograph of a workshop in progress. To the right of the main text, there is a section titled "About Me" featuring a profile picture of Anoop Khurun Anoop and his bio: "Anoop Khurun has experience as Research assistant at the University of Mauritius, appointed Assistant Conservator of Forests and has experience as Lecturer at the University of Mauritius and University of Technology, Mauritius. Presently the Deputy Conservator of Forest of the Republic of Mauritius and National Correspondent on Science and Technology (CST) for UNCCD. Member of the African Forest Forum and member of the Governing Council of the Commonwealth Forestry Association." Below this is a link "View my complete profile". At the bottom right, there is a "Blog Archive" section showing "2012 (2)".

For all the latest news and views on forestry in the island nation of Mauritius visit <http://mauritiusforestnews.blogspot.co.uk/2012/07/ctas-web20-training-workshop-helps.html> The blog has been put together by Anoop Khurun who is presently the Deputy Conservator of

Forest of the Republic of Mauritius and National Correspondent on Science and Technology (CST) for UNCCD. He is also a Member of the African Forest Forum and member of the Governing Council of the Commonwealth Forestry Association.

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# Forest Scenes

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## Brazil's new forestry law

Under the heading “Compromise or deadlock?”, the UK *Economist* of 2<sup>nd</sup> June reports on Brazil's new Forest Code, which was recently published by the country's Congress. The original Code, which required landowners to keep native vegetation on at least part of their land – up to 80% in the Amazon – was passed in 1965, but was widely ignored. Harsher penalties and improved enforcement were introduced in the late 1990s and since then the *ruralistas*, as Brazil's powerful farming lobby in the Congress is known, have been trying to revise the Code – with some success, since the version passed to the President, Dilma Rousseff, was far from the text either she or the more eco-friendly Senate wanted.

She thus faced a difficult decision: either ditch the whole text sent to her for approval and start the lengthy process again, or accept it, veto parts and hope to modify the rest by separate executive decree. She chose the latter and the text was finally published on 28<sup>th</sup> May. It is a complex document, attempting to regulate land use and halt deforestation in the Amazon Basin while at the same time facilitating the agriculture businesses elsewhere; it seems to be attempting to please too many lobbies.

For example, the provisions of the original laws which compelled farmers to retain 80% forest cover in the Amazon, 35% in the *cerrado* (savannah woodlands) and 20% elsewhere have been amended so that Amazonian states with little overall deforestation can cut the cover retained to 50%, while small-holders need only reforest 20% of their land. At the same time an amnesty to write off all penalties for infractions before June 2008 has been introduced, with no penalties at all for farmers who sign up for a vague and leisurely compliance process. The legal provisions protecting river banks, which forbade clearing with 30 to 500 metres of the river's edge (depending on the width), have been much reduced, and the previous provision

which entirely protected mangrove forests now allows shrimp farming around the edges, which will inevitably lead to some “nibbling”.

The President's decision to allow the protected areas along river banks to be shrunk has frustrated the green NGOs; they were needed to prevent erosion and sedimentation and to provide wildlife corridors, they say. And the lengthy and tortuous process of the Code's development means that it is poorly drafted and in places ambiguous say other NGOs.

An opportunity to challenge the *ruralistas* may have been lost, since opinion polls suggested that voters were in favour of the government taking a hard line with them; but they represent the largest cross-party block in Congress which has limited the President's wiggle room. And the *Economist*, which strongly supports the use of market forces, notes that provisions to promote sustainable farming through tax rebates and cheap loans for those who reforested faster than the law requires, or conserved more forest than the bare minimum, were sadly removed by the Congress. To quote the paper: . . . *clever financial incentives can cut deforestation dramatically. A recent analysis by the Climate Policy Initiative (CPI), a green think-tank, concluded that only around half of the 75% drop in annual deforestation in Brazil since 2004 was caused by lower world prices for beef and soya and a stronger currency, both of which cut incentives to clear land. The rest it attributed to government action, including a decision in 2008 to withhold farm loans in the municipalities where deforestation was highest.*

Eventually the new Code will likely be approved in its current form, or close to it. Proof of its effectiveness will lie not only in its provisions, or lack of them, but in their enforcement, enfeebled as they may be.

**Jim Ball**  
President, CFA

## Country Report – Mauritius



**Background** Indigenous forests in Mauritius have been replaced by sugarcane plantations during the colonisation periods, and later urbanisation was another major cause for replacement of pristine forests with high levels of endemism. Presently forests lands occupy some 23% of the territory and 2% of which can be classified as good quality indigenous forests.

**Management objectives** Present management objectives of the forests are well defined and can be broadly stated as soil and water conservation, and biodiversity conservation. In 2006, a new forest policy was adopted by the Government and can be grouped in 10 clear-cut action areas, which are as follows:

- Protection and conservation of water catchment areas and other environmentally sensitive areas
- Increase the present tree cover
- Control of Invasive species in the forests
- Deer ranching
- Developing recreational and eco-tourism activities within forest areas
- Forest destruction due cyclones and other biotic and abiotic factors
- Conversion of abandoned sugarcane lands back into forest lands
- Land degradation in Rodrigues
- Development of small forest industries
- Enhancing the forestry service efficiency and effectiveness

**Economic importance of forests** The forests of Mauritius contribute to around 1 % of the GDP annually. The economic activities range from a variety of sources which can be grouped into the following:

- Sale of timber
- Lease of state lands for ranching
- Sale of ornamental plants from forest nurseries

**Major challenges** Though in monetary terms the contribution of the forestry sector seems to be very small, the environmental services provided by the forests in terms of soil and water conservation far outweighs the direct economic value of the forests. Mauritius being an island state is vulnerable to climate change and changing rainfall patterns and the island is already a water deficit country. The only source of fresh water is from rainfall accumulated in reservoirs and underground aquifers. The problem is further exacerbated by prolonged droughts and low water level in the country's largest reservoir. The present situation has however polarised more attention nationwide regarding the protection and increase of tree cover over the island than all the sensitization campaigns carried out by the different institutions.

Another major challenge has been the conservation of biodiversity and native ecosystems unique to the island. Efforts toward conservation have been through a multi-pronged approach, mixing from ex-situ and in-situ techniques via targeted conservation approaches, fire management and control of invasive species. Several areas have been declared as protected through the use of a series of legislative framework and various international conventions.

As regards the increase of forest cover in a land scarce country like Mauritius has always been a challenge. The Forestry service has launched a national tree planting campaign way back since 1986 and gives seedlings free of charge to schools, colleges, para-statal bodies, NGO's, owners of protected mountain reserves and river reserves. The basic idea being the development of trees outside forests and with the triple advantage of increasing indigenous flora population, increasing tree cover and enhancing micro climates and aesthetics of the country.



**The way forward** Mauritians are now realising the importance of maintaining a forest cover to ensure a supply of potable water. In this regard, the Government is looking into possibilities to control felling of trees in private lands, decreasing forest exploitation, and conversion of abandoned sugarcane lands into forest plantations.

Existing campaigns for increasing tree cover are being revamped through additional incentives of free seedling distribution to households and plant million tree campaign nationwide. Furthermore land degradation is being monitored through a forest land information system. Although efforts in this regard may seem to be minute at a global scale, for Mauritius it is indeed a major step ahead.

**Pojanraj Khurun**

CFA Governing Council

*(This is a summary of a Country Report published on our website at [www.cfa-international.org](http://www.cfa-international.org))*

## Forestry in the two Sudans

Professor Hassan Osman AbdelNour

Former Director, Forests National Corporation, Sudan<sup>1</sup>.

### INTRODUCTION

This article describes the forestry situation in the Republic of South Sudan which, following a referendum, seceded from the Republic of Sudan in July 2011. The aim is to contribute to knowledge of the world's

newest country. The author considers the common history of the two countries, and provides data on their areas, populations, vegetation types and ecological classification of their forests and

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woodlands. A short coda by Jim Ball, linked to the article, provides some conclusions.

In this article, the former country of Sudan is referred to as "Sudan" and the two new Republics as "Republic of Sudan" (RoS) and "Republic of South Sudan" (RoSS) respectively.

Before secession Sudan was a vast country with an area of 2.56 million square kilometres, bounded by the Red Sea and nine African nations: Eritrea, Ethiopia, Kenya, Uganda, Zaire, Central African Republic, Chad, Libya and Egypt. The most salient geographical features of the country were (and are) the Nile Valley and its southern swamps (the Sudd), and high ground in the north (the Ingessena Mountains), the west (Jebel Marra and Nuba Mountains), the east (the Red Sea Hills) and the south (the Imatong Mountains). The Sudd and the Imatongs lie in South Sudan with Mount Kinyeti the highest mountain of the range (3,187 m) and the highest in South Sudan.

The soil of about 60% of the country is predominantly sandy, particularly in the northeast, north and northwest. Heavy cracking clay soils form a triangular central eastern plain which makes up some 30% of the country. Red soils of different types are characteristic of the remaining south-western portion.

The rainfall varies from zero in the northern desert to more than 1500 mm in the southern tropical mixed deciduous rain forests and this has strongly influenced the vegetation, which can be divided into seven principal types, generally following the isohyets; they form consecutive series from north to south: 1. Desert; 2. Semi-Desert; 3. Acacia Short Grass Scrub; 4. Acacia Tall Grass Scrub; 5. Broad-leaved Woodlands and Forests; 6. Forests (Gallery, Bowl and Depression) and Cloud; 7. Swamps (permanent swamps, seasonally inundated land), Grassland and Mountain Meadow. The effect of the topography on vegetation is limited and confined to mountain massifs, hills, upland country and the Nile Valley and its tributaries.

### The history of forestry in the Sudan

Following the Battle of Omdurman and Karare between the Mahdist and the Anglo-Egyptian army, and the start of condominium rule in 1898, forestry activities began in the Sudan in 1901. The Government commissioned an Indian forester, Mr. C.E. Morell to tour the country and produce a report on the state of forests in the country. As a result of his report the 'Woods & Forests Ordinance' was promulgated in 1901 and the Department of Woodlands & Forests was established the same year. The Ordinance was replaced in 1908 by the First Forest Act. Adoption and implementation of administrative & legislative measures has continued ever since, with the endorsement of Sudan's Forest Policy in 1932, the Central & Provincial Forest Ordinances (1932), the Local Government Act of 1972, the Regional Government Act 1980, the amendment thereof in 1985, the revision of Forest Policy in 1986 and the creation of the Forests National Corporation (FNC) and Revision of Forest Act in 1989.

Legislative, institutional and technical forestry activities spanned the whole country. There were thriving afforestation

and utilization activities in South Sudan. Teak (*Tectona grandis*) which had been introduced from India and Burma, was first tried in Malakal between 1903 and 1909 with the first plantation in Kagalo in 1919. These were subsequently continued in Juba, Simsimi Turkaka, Ninakog, Grinti, Yei, Luka, Yambio and Katarie. Several sawmills were milling Mahogany (*Khaya senegalensis*) for construction and joinery and Vuba (*Isoperlinia doka*) for railway sleepers.

But civil war had erupted in South Sudan in August 1955, barely four months before independence in January 1956. The Addis Ababa Accord of 1973 stopped the civil strife in the South and created three ministries for agriculture: one in each of the three southern provinces, to each of which responsibility for forests and forestry was added and at the same time was removed from the Central Government and Director of Forests in Khartoum.

The Civil war was rekindled in 1983 but the Comprehensive Peace Agreement signed between the Government of Sudan and South Sudan Liberation Movement (SPLM) and Army (SPLA) in 2005, which ended a 50 year civil war embodied a self-determination referendum. This took place on January 9<sup>th</sup> 2011 when the majority of voters in Southern Sudan voted for cessation from Sudan Republic. Six months later, on July 9<sup>th</sup> the world, starting with the Government of the Republic of Sudan, recognised the Republic of South Sudan (RSS) as member n<sup>o</sup> 193 of the United Nations and member n<sup>o</sup> 54 of the African Union.

The RSS covers some 619,745 km<sup>2</sup> and has a population of 8.26 million, as well as around 50% of the forest and woodland area of the former Sudan. The Republic of Sudan covers an area of 1,886 km<sup>2</sup> and the remaining 50% of the forest and woodlands of its pre July 9<sup>th</sup> estate (Jackson 1956).

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# Some conclusions on forestry in South Sudan

By Jim Ball, CFA President

I served in Sudan from 1983-91, based in Khartoum but travelling widely, including the south of the country. Professor Abdel Nour's contribution therefore greatly interested me, and I have attempted to draw some conclusions, based on his article and my own recollections.

It is apparent from the description of soils, rainfall and vegetation types that the Republic of South Sudan has considerable forestry potential, not only in terms of planted and natural forest but also arising from the experience gained in species selection and forest management over a period of about one hundred years. Furthermore, South Sudan has large reserves of crude oil, which could bring welcome income to the new state. But there is a sad legacy of neglect and abuse from the years of war that will take a long time to put right, and following the peace agreement there will be many internally displaced people who will return, causing further environmental degradation. It has been estimated that South Sudan has lost 40 percent of its forests since 1956, and deforestation continues, especially around major towns where the population depends on wood fuel for domestic energy (UNEP, 2007). There are too some key issues such as oil revenues and debt which remain to be resolved with the Republic of Sudan (EIU, 2011). The reported absence of qualified forestry staff at professional and technical levels means, however, that despite income from oil exports, action in the forestry sector may be slow to implement.

One of the first actions required for the new state is an inventory of the forest resources, both natural and planted, on which to base new policies and programmes for forestry. Information is available from the FAO Global Forest Resources Assessments, the most recent of which was 2010 (FAO, 2010)

but the data are pre-referendum and do not distinguish Sudan from South Sudan. There is a FRA National Correspondent, and an alternate, but both are based in Khartoum. Also with FAO there is an active and successful National Forest Programme (NFP), but that too relates to the pre-referendum Sudan.

Following the inventory, the next steps will be to develop broad forest policies, Ministerial responsibilities, links to related policies in other forms of land use and more detailed programmes to implement the policies. The organisation of the new forest service will have to be decided, with plans for institutional reform, training and general capacity building. Budgets must be decided. In all of these processes it will be essential to learn from South Sudan's experience in forestry, as well as from Sudan itself and from the forest services of neighbouring countries such as Uganda, and Kenya.

The Government of South Sudan will also have to take the political decision whether to seek foreign aid in training or expertise, as well as seeking membership of international organizations such as FAO or UNEP. If foreign aid is sought then good donor coordination will be essential to ensure that international assistance not only "does no harm" to the environment, but "builds back better", to quote the UNEP report already cited.

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## News from Guyana



*Logs of wamara (Swartzia leiocalycina) containerised in Guyana for shipment to China.*

My contribution on Guyana to CFA Newsletter number 57, June 2011, page 8, concerned the export commission (levy) on unprocessed timber logs from Guyana which are sold almost exclusively to

Asian countries, especially China and India. The desultory consultations with trade associations appear to have been ignored in the final version of the revised export commission rates set for 2012–2014 and issued in June 2012. Like the previous set of rates issued in mid-2008 for 2009–2011, the rates are set as low percentages of the exporters' self-declared FOB prices for logs. They are likely to be as fiscally ineffective as the 2009–2011 rates in changing the behaviour of log exporters towards what national policies indicate: the processing of those logs in Guyana and addition of value in Guyana, together with benefits such as increased employment, skills and tax base.

However, the increased rates will further enlarge the income of the Guyana Forestry Commission (GFC) which is retained by the GFC and not turned over to the Consolidated Fund under the Ministry of Finance. In other words, the small increases represent a triumph of regulatory capture by Asian log producers and traders over improved forest governance. No apparent notice was taken of a proposal from the Guyana Manufacturers and Services Association (GMSA) for floor prices for exported logs to be set from internationally accessible and verifiable data by an independent agency, in accordance with conventional economics.



The new rates for log export commission are contrary to the agreed aim of improved governance which is prescribed in the Norway-Guyana MoU 2009. The GFC is legally required to present annual reports and audited accounts to the National Assembly (parliament) but has not done so for many years.

The charade of a public consultation process on the log export commission was not even replicated during the preparation for the second report on a monitoring, reporting and verification system (MRVS) for forest carbon in Guyana; although there are occasional terse minutes from a small steering committee. The first report was compiled initially by Poyry New Zealand with later contributions by Det Norske Veritas and the University of Durham in 2010–11. Discrepancies of 0.5 million hectares in estimates of Guyana's area of natural forest, and late adjustments of definitions of forest area categories and production volumes, were not resolved. The second report was compiled with no or minimal public consultation about methods, data sources or analytical methods to avoid the previous problems. Indufor Asia Pacific and the University of Durham produced the second report, which has been allowed only a three-week period in June-July 2012 for public comments on 285 technical pages; see [http://www.forestry.gov.gy/Downloads/Guyana's\\_MRVS\\_Interim\\_Measures\\_Report%20\\_Year%202012.pdf](http://www.forestry.gov.gy/Downloads/Guyana's_MRVS_Interim_Measures_Report%20_Year%202012.pdf). No summaries in culturally appropriate formats or languages have been issued to civil society, indigenous Amerindians, gold miners or loggers. This disregard of local stakeholders is also contrary to the Norway-Guyana MoU.

The acquisition of rights over more than ¾ million hectares of Guyana's natural tropical rainforests by an Indian high-street coffee retailer with no previous experience of tropical forest

management and logging in 2009–2010 was analysed through a series of newspaper articles in April-May 2012; see <http://www.redd-monitor.org/2012/05/16/through-a-glass-darkly-six-articles-by-janette-bulkan-about-vaitarna-holdings-operations-in-guyana/>. The coffee retailer is shipping logs out of Guyana, contrary to a promise to mill them in Guyana. The GFC has made almost no attempt to explain the shadowy (illegal and barely legal) processes for issuing the concessions nor the contraventions of national policies.

The GFC has made no apparent effort to address the problems in its legality verification system (GLAS) shown by the Efeca consultancy report in August 2011 or in its scheme for independent forest monitoring shown by the GFA Consulting Group scoping report in December 2011; see [http://www.forestry.gov.gy/Downloads/Independent\\_Forest\\_Monitoring\\_in\\_Guyana\\_Scoping\\_Report.pdf](http://www.forestry.gov.gy/Downloads/Independent_Forest_Monitoring_in_Guyana_Scoping_Report.pdf).

Up to the time of writing (early July 2012) the only monies released from the Norwegian-financed Guyana REDD+ Investment Fund (GRIF) have been for 'capacity building' to the Office of the President of Guyana and to the GFC, just before the national elections in November 2011. It is unclear if any audited accounts have been presented for those almost US\$ 6 million. It is unclear how much of the US\$ 70 million deposited in the World-Bank-administered GRIF by Norway is still on hold, because Guyana does not maintain a publicly-available current statement, as had been agreed with Norway. As at 31 December 2011, the World Bank reported that there were still US\$ 62.8 million in the GRIF.

**Janette Bulkan**  
CFA Governing Council

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## Publications

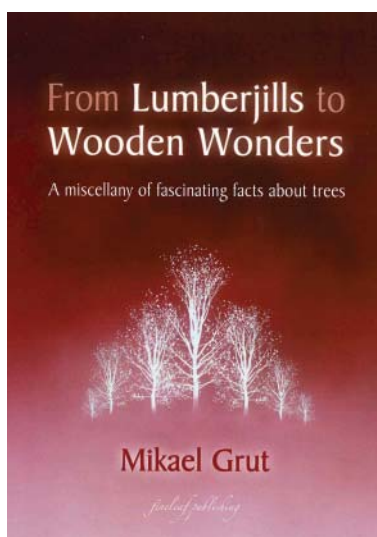
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### From Lumberjills to Wooden Wonders: A miscellany of fascinating facts about trees

**Mikael Grut**, Fineleaf Publishing, 2012. 117 pages. Paperback, ISBN 978-1-907741-10-4. £10.95

**M**iscellanies are always fun to browse through, ready at hand on the bookcase for a spare moment of enquiry, and this one is no exception. It's the sort of book that will make anyone realise how wonderfully all-encompassing is the subject of trees and forests – in other words, the profession of forestry.

Foresters can't help but be fascinated by the variety of facts they learn in the course of their work, and it's clear from Mikael Grut's book that he is no exception. In fact, forestry is such a fascinating subject that each



practitioner would probably come up with a different combination of their favourite "did you know that...?" after-dinner anecdotes.

In Mikael's case, he has ranged far and wide showing how trees and their products influence almost all areas of our lives. Just taking a random look at the topics he covers, would you guess that he would touch on de-icing of roads, Plato, and Nineveh, as well as more obvious subjects such as shade trees or the Chipko movement? Some of the topics Mikael has chosen reflect his particular interests and background, such as the Swedish, historical and biblical references – which makes it all the more interesting and personal.

The book is very attractively produced as a paper back with extended folded covers that serve as bookmarks, very useful for

something that is best read in short instalments. There are over five hundred entries, ranging in length from a paragraph (for 'Blockhead'), to nearly a page (for Pigs). There is no index, but entries are in alphabetical order. The preface by Prof. Burley does the author justice and I can only agree that the book reflects Mikael's dedication, professionalism, attention to detail, enquiring mind and wide ranging experience.

I was intrigued by two comments that the carpenter involved in constructing the Biblical Ark of the Covenant had taken liberties with the dimensions. Reference to Exodus 25 (not 24) did not reveal any discrepancy between divine instruction and human implementation, and Mikael and I are still to explain the liberties taken!

I would personally take issue with the statement that from an aesthetic point-of-view, coppicing has nothing to commend it. Once the reader knows how it works, the beauty comes with knowledge of its function, I think.

There were some topics that missed out a few interesting facts, such as the geoglyphs and *terra preta* soils of the Amazon, demonstrating ancient settlements in so-called virgin forests;

the way the presence of fire distinguishes savannah from high forest; and the issue of planting trees in the wrong places, such as *Eucalyptus* on Indian farms, or Leyland cypress in town gardens (we shy away from such conifers for good reason).

I somehow suspect that there are many other equally fascinating entries in Mikael's archives that did not find their way into this book, and which could well form part of a volume two. Or maybe there could be space on a website dedicated to fascinating facts where readers could submit their own? Such a format would make searching for these gold medal nuggets much easier in the absence of an index.

Having noted the above very minor issues, I hope that the mention of a few of the wide range of the fascinating factual topics will encourage readers of this review to immediately buy a copy of this miscellany – indeed, several – to give to any family and friends who are in any way interested in trees and forests, and keep in easy reach. Well worth it.

**Marcus Robbins**  
CFA Treasurer

## Beyond the Trees

### Ken Sargent

Ken Sargent has prepared a personal memoir which covers his 38 year career in forestry from 1945 to 1983 including his time with the British Colonial Service in Kenya and Nyasaland as it became Malawi and later with FAO in Malaysia, in Rome for a Global project on the pulp and paper industry and finally a project for the development of that industry in Portugal.

His descriptions of places and communities and forestry activities in each of these assignments provide glimpses of how things were and the historic changes reverberating through the countries and regions where he worked; changes in the social and political landscape. These changes were to lead on to the complete change in the way that forests and land have been governed and used in the past fifty years. More personally, they determined the transformation of his own career.

The chronological presentation follows the rights of passage of the forester from the early inspiration meetings in the Lake District with Jim Thom and others, through university, the adventure of the first job, the mandatory Oxford course and the fellowship in America, then rising through the ranks to high responsibility in national government and in international forestry.

He describes his years in Kenya from 1946 as pure adventure exploring the extraordinary diversity of its flora, wild life and topography. His descriptions of the many districts where he served catch the excitement and give a picture of the life of the forester and the people and places around it.

There were memorable events, particularly this one 60 years on.

In February 1952 the Forest Department gathered the right quantities and types of game for the visit of Princess Elisabeth to Tree Tops Hotel, the night she acceded to the throne on the death of George VI. "Up a tree in my Forest"

Six years in the Kenya highlands having close association with Kikuyu forest staff and labourers, excellent working relations, travelling to the office through the Kikuyu Tribal Reserve cultivated a feeling of rustic harmony and total safety in their company – "I returned from road building to my cabin to find agitated houseboy and an armed police escort, my household goods were thrown into the lorries and off we went. That evening in 1953 the cabin was burnt to the ground by a Mau Mau gang," – on the rough road toward independence.

With the Commonwealth Fund Fellowship in 1957 off to the Harkness Foundation in the USA, a period of intense study at the Harvard School of Public Administration, focussed on land use management, economics, legislation, public administration and policy with J.K. Galbraith as a tutor. This was followed by a study tour "of the people and landscapes of America", a nine month field trip through the United States with visits to US Forest Service Regions, State Forests, Research Institutes, National Parks, University forestry schools and to forest industry corporations. "The American experience was a significant factor throughout the remainder of my professional life"

1958 and back to the Colonial Office and on to Nyasaland. Having arrived in a country apparently at peace and at ease with itself, there was the emergency of May 1959, during which our author had the job of arresting certain dissidents including Dr Banda – the future president of Malawi. The inevitable and rapid movement to independence and Africanisation hastened the departure of expatriate staff.

The birth of Malawi was celebrated on July 6<sup>th</sup> 1964. A Cabinet crisis erupted in September with the dismissal of "dissident ministers".

From forestry in land use and seedlings to alleviate the fuelwood shortage of remote communities, the assistant to the Chief Conservator becomes, in 1962, the Under Secretary in the Department of Natural Resources with wide ranging responsibilities in relation to the rural economy extending to

chairmanship of the freedom from hunger campaign; then, in 1965, Permanent Secretary to the Ministry of Development and Planning with the task of inter-ministerial coordination in the compilation of the National Development Plan, but in April 1968 the Ministry was disbanded and the Permanent Secretary made redundant, the end of 21 years with the British Colonial Service.

Towards the end of the year Ken was invited to FAO. Discussion with Jack Westoby, Stan Pringle, Bob Potter and others was about integration of natural resources disciplines and the forest sector in balanced land use and in planning associated industrial activities. The outcome was an invitation to formulate a project in Malaysia.

The objectives were to prepare strategies to maximise the utilisation of forest resources in a manner designed to expand and modernise industrial capacity, based on sustainable potential of the resource to ensure economic and environmental stability. Eighty international experts and 160 field staff worked on forest inventories, management, logging, transport of logs and wood products and the potential for industry, together with analysis of international and domestic market demand. Central to the development of strategies was a computer based econometric model for analysis of the many interrelated data inputs. 38 strategy alternatives, discussed at technical and political levels, lead to selection of a final development strategy, accepted and implemented by the government.

In Sarawak the aim was intense inventory of economically accessible Dipterocarp forest for a sustained flow of industrial wood. Visits made to each long house as a gesture of respect were greeted with esteem – perhaps the Dyaks cherished memories of the benevolent rule of the White Rajahs, who did much to preserve their way of life. The project employed men from

the long house – they were hardworking, reliable and superb guides in the trackless forest. They were paid in cash, a step forward to the cash based economy and the drift of the younger generation to bright lights of the expanding towns on the coast.

From a national project to an international one. In 1975 the “Pulp and Paper Industries Development Programme” was set up as a joint venture of FAO, UNDP and the World Bank. This had emerged from the perception of a shortage of paper supplies to developing countries expressed at the UN General Assembly in 1974. The programme investigated the potential for groups of developing countries to establish tree plantations sufficient to support centrally located pulp and paper mills appropriate to the requirements of each region as a basis for investment in management expertise, plantations and industry.

In 1979-82 Ken got the opportunity to apply the international experience in Portugal where his brief was the identification of the potential development of the forestry sector for long-term investment. The strategy that emerged proposed establishment of fast growing plantations and industry to supply pulp and wood based products to meet demand in Europe. (Twenty years later he got to see an ultra modern integrated pulp and paper mill that had emerged from this strategy.) Retirement in 1983 was turning down John Spears invitation to do another World Bank project.

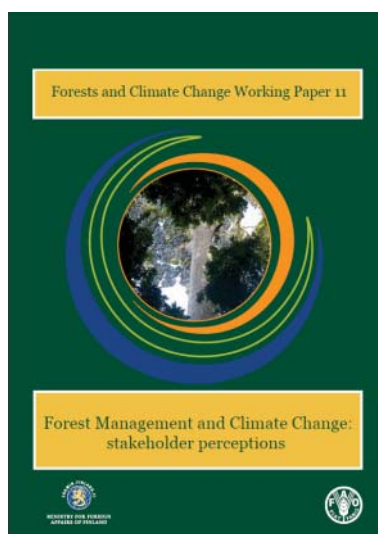
This is a delightful family memoir intertwined with a fascinating story of forty years in forestry of great interest to those concerned with countries and organisations involved and the developments in those years. It is supported by many very good photographs.

**Philip Wardle**

## Forest Management and Climate Change: Stakeholder perceptions

### FAO

**F**AO, in collaboration with forest management, climate change experts and relevant stakeholders, is developing guidelines to assist forest managers to effectively respond to climate change challenges and opportunities. These guidelines will include actions related to both climate change adaptation and mitigation and will be relevant to all types of forests, all management objectives and all types of



managers. To facilitate the development of the guidelines, a survey was conducted through which forest stakeholders provided their views and perceptions on factors that influence the ability of forest managers to respond to climate change. This publication presents the results of the survey

Forests and Climate Change Working Paper 11. Forest Management and Climate Change: Stakeholder perceptions

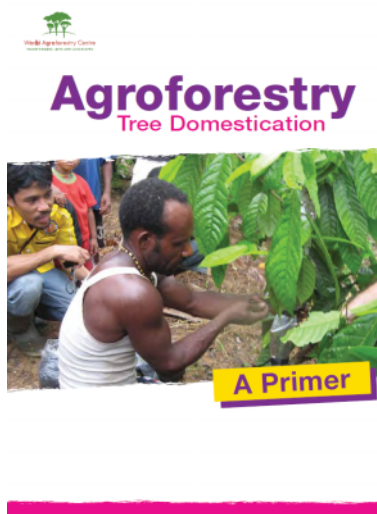
To download the publication: <http://www.fao.org/docrep/015/md510e/md510e00.pdf>

# Agroforestry Tree Domestication: a Primer

## The World Agroforestry Centre (ICRAF)

The purpose of this new publication from the World Agroforestry Centre (ICRAF), **Agroforestry Tree Domestication: a Primer**, is two-fold. First, it provides an opportunity to synthesize basic information about important tree domestication issues, using recent research results from scientists of ICRAF and collaborating institutes. Second, it provides a resource for learners and teachers to use and contextualize for their own purposes.

This manual is based on a “tree domestication course” that was organized regularly



by the ICRAF training unit. The modular format of the manual allows for regular updates and inclusion of new units in forthcoming years. We hope that the readers of this manual, once suitably ‘primed’ on the meaning of domestication and the activities involved of selecting, propagating and bringing into cultivation superior types, will further explore and undertake research and development work on this topic. Our intention is that smallholders’ livelihoods will benefit through a ‘second wave’ of plant domestication that is focused on optimizing the products and services that are provided by currently underutilized tree species. Download at <http://www.worldagroforestry.org/downloads/publications/PDFs/TM17346.PDF>

## CIFOR in Vietnam + Integrating forests into the global agenda on sustainable development

### CIFOR



CIFOR has recently produced two collections of publications. The first, entitled **CIFOR in Vietnam – selected publications from CIFOR** is a CD which contains selected research publications from CIFOR conducted

in Vietnam. The collection falls into two categories:

1. Strategic research with knowledge and syntheses
2. Methodological innovations related to the themes explored in the CIFOR research theme.

The second, is **Integrating forests into the global agenda on sustainable development** is a DVD which presents findings in different formats, such as publications, photos, videos and blog stories, to showcase the variety of ways that forests contribute to the rural diets and cash incomes of the world’s poorest, supply clean water for human use, slow the pace of climate change through carbon storage, help countries adapt to climate change, and act as a source of biomass for energy supplies.

To request a copy of either or a print copy of any of CIFOR’s publications contact [cifor-publications@cgiar.org](mailto:cifor-publications@cgiar.org)

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# Around the World

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## Australia: Govt declares forest wars over

**T**he Tasmanian Government is declaring the state's forest wars are over, despite no peace deal being reached. Environmental and industry groups have struck an interim agreement to end the forestry conflict but are yet to agree on how much native forest to protect from logging. The groups released the agreement yesterday, calling it significant but say they need another four to six weeks to reach a final deal.

The Deputy Premier, Bryan Green, is confident a final deal is imminent.

"The war is over. There's always going to be the odd fringe person that is never satisfied, but at the end of the day, as we work through this process, they've called a truce," he said. The Premier is not worried about the time the process is taking. Lara Giddings says it shows the groups are now closer than ever to a final deal on crucial points. "That includes pursuing FFC certification of native forests and supporting the sale of Tasmanian products in overseas markets. This is a crucial step," she said.

The Opposition's Peter Gutwein says the extension merely creates further uncertainty and the process is a joke. "We all know that peace will never be delivered," he said.

"We've had two years, we've lost thousands of jobs and the best the Premier can deliver is this load of bullshit. It's a joke."

Greens leader Nick McKim says Mr Gutwein is trying to distract from his lack of forest policy. "I'm really disappointed to hear that Mr Gutwein's done that," he said. He disagrees people are getting sick of delays. No-one ever said this was going to be easy."

The peace deal negotiators have been unable to agree on how much native forest to protect from logging, but say they are close. They have arrived at a preferred amount of forest to be protected. Terry Edwards from the Forest Industries Association says Forestry Tasmania will now model how the reservation plan affects wood supply.

"We're pretty confident that we know roughly where it will land but that will inform our ongoing negotiations, it will not be the final outcome," he said.

The negotiators want the Government to fast track a \$15 million sawmill exit package, but many say it is not enough. The program will be open to sawmillers who want to give up some or all of their contracts.

[www.abc.net.au](http://www.abc.net.au)

## Global: Vast cosmic event leaves record in ancient trees

**S**ecret cosmic messages hidden in the rings *Image: Visuals Unlimited/naturepl.com*

The wooden hearts of two cedar trees hold a 1200-year-old cosmic mystery – evidence of an unexplained event that rocked our planet in the 8th century. Cosmic rays are subatomic particles that tear through space. When they reach Earth they react with the oxygen and nitrogen in the atmosphere, producing new particles. One of these – carbon-14 – is taken up by trees during photosynthesis and is "fixed" in the tree's annual growth ring.

Fusa Miyake at Nagoya University, Japan, and his colleagues examined the carbon-14 content of two Japanese cedar trees and were surprised to find that there was a 1.2 per cent increase in the amount of the isotope between AD 774 and 775. The typical annual variation is just 0.05 per cent. Miyake also found an increase in the carbon-14 record of North American and European trees around that time, as well as an increase in the isotope beryllium-10 in Antarctic ice cores – another isotope produced by cosmic rays.

What cosmic event led to the ray boost? A supernova would do it, but Miyake points out that such an event would have left

a visible trace in today's sky. It could have been a solar flare – but only if the flare was more energetic than any discovered so far. "I cannot imagine a single flare which would be so bright," says Igor Moskalenko, an astrophysicist at Stanford University, California, who was not involved in the work. "Rather, it may be a series of weaker flares over the period of one to three years."

This is not the first time that tree records have suggested a cosmic event occurred in the mid 770s. Researchers from Queen's University Belfast, UK, also recently found an increase in carbon-14 in tree rings at that time but their work has yet to be published.

Mike Baillie, a tree ring researcher at Queen's, has found evidence in the historical record that suggests something unusual did indeed happen at that time. The 13th-century English chronicler Roger of Wendover is quoted as saying: "In the Year of our Lord 776, fiery and fearful signs were seen in the heavens after sunset; and serpents appeared in Sussex, as if they were sprung out of the ground, to the astonishment of all."

[www.newscientist.com](http://www.newscientist.com)

## Zambia: Zaffico studying how to grow trees faster

The Zambia Forest and Forestry Industries Corporation (ZAFFICO) is undertaking a research that will help the firm to invest in early maturing plants to ensure sustainable supply of quality wood. ZAFFICO plantation manager Nil Addo said the corporation was currently undertaking a research that would assist it invest in early maturing plants. This would help the corporation to ensure there was sustainable supply of quality wood to meet the rising demand through effective management of exotic plantation for the benefit of the present and future generation.

“We are currently doing research because we are trying to see how we can actually raise the trees in the shortest period of time because our trees take 25 years to mature so we are looking at a possibility of trees maturing within seven years instead of 25 years,” he said. In an interview at the just-ended 86th Zambia Agricultural and Commercial Show in Lusaka, Mr Addo said the company was currently looking at developing new planting

methods that support early maturing. Mr Addo said the company employs more than 2,000 seasonal workers and 200 permanent staff.

Mr Addo also said the company would soon create more timber plantations outside the Copperbelt as part of its expansion programme. He said the firm would expand the industry outside Copperbelt Province to other parts of the province, saying that there was growing demand for timber products by the local construction industry.

Mr Addo said the corporation would expand into Muchinga and Luapula provinces before moving to other areas because it was one way of creating jobs for the local people. “We have embarked on an expansion project that will see us move outside the Copperbelt to other provinces such as Muchinga and Luapula,” Mr Addo said. He said ZAFFICO had this year alone planted 3,000 hectares of land due to the demand of timber in the country which has more than doubled.

[allafrica.com](http://allafrica.com)

## Canada: Resolute celebrates planting of one billion trees in Ontario

Resolute Forest Products Inc. today celebrated the planting of one billion trees at its forestry operations in northern Ontario. This achievement is the result of collective efforts made over the past 30 years by the Company, its employees, numerous contractors and suppliers, and the Ontario Ministry of Natural Resources.

To mark the occasion, two-meter tall white spruce trees were planted simultaneously near three of the Company’s mill sites in the province – at Fort Frances, Iroquois Falls, and Thunder Bay. Ontario’s Minister of Natural Resources, the Honourable Michael Gravelle, as well as Member of Provincial Parliament Bill Mauro were present at the Thunder Bay site. Many community and Aboriginal leaders also attended each of the ceremonies.

“This planting ceremony speaks to our long, successful and proud Company history in northern Ontario and our unwavering commitment to forest renewal and sustainable forestry,” said Richard Garneau, President and Chief Executive Officer of Resolute. “Forests are among the world’s only renewable resources. We are fortunate to be involved in an industry that is truly sustainable.”

The planting of one billion trees represents more than five million hours of actual planting, and does not include the countless hours spent by cone collectors, nursery workers, transportation companies, site preparation operators, and resource professionals, all of whose skills are invaluable throughout the process.

Resolute manages approximately 4.5 million hectares of Crown and private lands in Ontario. One hundred percent of the lands managed by Resolute in Canada are certified to internationally-recognized sustainable forest management (SFM) standards, with 51% also now certified under Forest Stewardship Council® (FSC) standards.

In June of this year, Resolute became the largest manager of FSC-certified forests in the world. “For Resolute, attaining this level of certification to the rigorous FSC standards is an integral part of both our commitment to sustainable forestry and to meeting the commercial needs of our customers who are increasingly requesting such certification,” added Mr. Garneau.

[uspolitics.einnews.com](http://uspolitics.einnews.com)

## Global: Disasters can improve forest health

Forests hit by fires, although they may appear severely blighted, can actually thrive and increase an area’s biological diversity, U.S. researchers say. And it’s not just fires; disturbances such as windstorms, avalanches and even volcanic eruptions can create a forest environment that enhances diversity, landscape and ecology Professor Mark Swanson of Washington State University said.

“The 1980 eruption of Mount St. Helens, for example, has created very diverse post-eruption conditions, and has some of

the highest plant and animal diversity in the western Cascades range,” he said. That runs counter to a widely held perception that most if not all rare species tend to require older forests, not younger, a WSU release reported Tuesday.

In fact, Swanson said, a substantial proportion of Washington’s state-protected forest plants and animals spend some or all of their life cycle in areas rebounding from a major disturbance. Such habitats often include woody debris, varied landscape patterns and a rich diversity of plants that can be exploited for

food and shelter, he said. For example, Swanson said, "Severe fire in the northern Rockies creates conditions for some rare birds that depend on abundant dead trees, like the black-backed woodpecker. It can benefit a host of other organisms, too, like elk, deer, bighorn sheep, some frog species, and many more."

The findings suggest land managers can alter their practices to enhance such diversity, creating areas with a wide variety of species including rare and endangered plants and animals, he said.

[www.upi.com](http://www.upi.com)

## Global: Forests fare poorly in outcomes of Rio+20, say CIFOR scientists

**F**orests have been largely ignored or ambiguously mentioned in the Rio+20 outcome document, yet again postponing progress on integrating forests into sustainable development objectives, said CIFOR scientists at the conclusion of the Rio+20 summit last week. "If you look at this document as providing some sort of guidepost for making decisions or taking actions in the future, the positions that are taken do not actually provide any specificity," said Peter Cronkleton, Senior Scientist at the Center for International Forestry Research's Peru office.

Louis Verchot, Principal Scientist at CIFOR agrees but added: "When you look who attended Rio+20, it is ministers of environment and foreign affairs, not ministers of finance, and these are the people who you need to make the national commitments."

The outcome document's section on Forests specifically calls for urgent implementation of the Non-Legally Binding Instrument on All Types of Forests (NLBI) adopted by the UN General Assembly in 2007. The purpose of the instrument to strengthen political commitment and action to implement sustainable forest management to achieve internationally agreed development goals. "The plan to move forward with NLBI was something that was decided on many years ago and it still has not given the expected results," Verchot said. "There was some progress in the early stages of the agreement, but because of lack of long term commitment by countries, the progress has slowed."

While the level of frustration and cynicism about the Rio+20 process is abound, this frustration may actually lead to civil society efforts to define actions at the regional and national level, Cronkleton said. "I see hope in local and national processes. I think that is where there is clarity in the decisions that need to be made because the debates are more grounded in reality," he said.

Verchot agrees: "I think that future action is going to be led by civil society. Civil society has a great power to influence the national and subnational level whereas the international coordination is where the multilateral process should be important. Unfortunately it is just not living up to what people need and many have lost confidence in the processes."

One area where there could be clear commitments is in the clarification of commercial and community rights over forest, Cronkleton suggested. In many countries around the world, deforestation and forest degradation occurs in open-access forests that are often under state control. However state agencies usually lack sufficient resources and personnel for effective governance of these areas, says Cronkleton, creating a 'free-for-all' situation. At the same time there are people who live in and depend on those forests who don't have rights over the basic resources that support their livelihoods.

"There is a need for forest industries to have clear rules that allow them to access resources in a sustainable way and have access to resources in a way that is equitable within a country so that all forest resources are not simply allocated to certain industries that do not provide local benefits," he said. "Without mandating what people do, you could easily establish clear guidelines in terms of steps that could be taken to clarify forest property rights."

In the case of Africa, countries with the same programs and the same type of governance structure are already working together to influence national and regional decision-making on forest management through south-south exchange, explained Richard Eba'a-Atyi, CIFOR's Regional Coordinator for Central Africa.

"African countries usually, at least for natural resources, agree on doing things together. You have efforts to ensure trans-border protection areas, for example the Commission for the Forests of Central Africa (COMIFAC) endeavours to harmonise forest management policies in ten African countries with the involvement of all stakeholder groups."

However we need to promote greater efforts to really allow people to learn from what has worked in other countries, Cronkleton said. "People can learn from experiences where forest governance has improved, where more equitable access to forest resources has taken place, where more efficient and effective technologies have been developed. I see this taking place in a piecemeal fashion without any coordination."

[blog.cifor.org](http://blog.cifor.org)

## India: Forests off limits for all mining?

If the environment ministry's draft proposal for 'inviolate forest areas' is accepted, large swathes of healthy forests, including national parks, wildlife sanctuaries, tiger reserves and wildlife corridors, would be out of bounds for all mining activities, and not just coal excavation. The ministry's draft lists criteria for identifying forest patches where mining should be banned following the GoM on coal's decision to junk the no-go policy of the environment ministry. The GoM instead asked the ministry to delineate 'inviolate forest areas' based on a new set of norms.

A committee, under environment secretary Tishyarakshit Chatterjee, has submitted its draft report that looks to give the demarcation legal teeth by notifying inviolate patches under the Environment Protection Act, 1986. Although initially promoted by the coal ministry and Coal India Limited, the no-go policy was attacked later by mining lobbies for lacking a legal mandate.

The norms proposed include forest cover, forestry type, biological richness and wildlife value of areas under review, hydrological and socio-economic benefits. These are tough criteria that can be difficult to overlook in grant of mining rights.

The formula and criteria recommended by the Chatterjee panel will mean that areas within 1 km of parks and sanctuaries and critical migratory corridors linking wildlife habitats would almost by default be regarded as inviolate. The strong pro-environment criteria recommended by the committee takes more into consideration hydrological values of forests like whether green patches are catchment areas for rivers or feed wetlands. This will also command weight in demarcating the area not to be mined.

Areas located within direct draining catchment of streams utilized as water sources for projects would automatically be excluded. Boundary areas of important wetlands bigger than 10 hectares and storage reservoirs for irrigation, water supply or power projects too would be off limits.

The committee has recommended that in the first phase, the Forest Survey of India (FSI) mark areas on the basis of wildlife and forestry-related criteria. Then, state and central agencies along with the FSI collect and generate data on the three other parameters – hydrological, socio-economic and aesthetic values.

articles.timesofindia.indiatimes.com

## Indonesia: APP's latest promise no more than protecting already protected forest

The "sustainability roadmap" issued recently by controversial Indonesia deforester Asia Pulp & Paper (APP) dramatically backtracks on a series of promises it has made – and broken – previously, an analysis by the Riau NGO coalition Eyes on the Forest has found. "We were abundantly justified in not trusting their 2004 Sustainability Action Plan promise to cease native forest pulping by 2007 and responsible paper buyers or consumers should be dismayed that nearly a decade later, APP's latest Sustainability Roadmap doesn't even promise to go that far by 2015," said Muslim Radyid, coordinator of Eyes on the Forest member Jikalahari (Forest Rescue Network, Riau).

Part of the giant Sinar Mas Group (SMG), APP announced in early June that it would temporarily halt clearing of natural forest in only its "own" concessions while it conducts assessments for forests of high conservation values, an industry practice that conservation groups have long called for APP to do. "Our analysis found there is no natural forest left to apply their new policies to in Riau Province, since all natural forest in their 'own' concessions had either already been cleared or protected under Indonesian law or APP showcase commitments which are also mostly nothing more than confirmation that the company would obey the law," said Radyid. "We believe that APP's new policies offer no conservation benefit for any forest outside Riau either."

The Eyes on the Forest analysis *APP/SMG: The pulping continues* finds "the fate of up to 1.2 million hectares, more than half of Riau's remaining forest, remains in danger of being cleared by APP/SMG's so-called "independent suppliers" who can continue to deliver natural forest wood to the company's mills unaffected by the new forest policies." These forests

include some of the last refuges of the critically endangered Sumatran tiger and elephant, as well as forests on carbon-rich deep peat, whose clearing will lead to very high carbon emissions for decades to come.

"This so-called roadmap to sustainability is just another element of APP's investment in greenwashing, rather than greening," said Rod Taylor, Director of the WWF International Forests Programme. "This is not a roadmap to sustainability, but a roadmap to pulp more of Indonesia's forests." Not only is APP backtracking from the broken sustainability commitments of 2004 and 2007, it also appears to be moving back from commitments made just a year ago in its "Vision 2020, a roadmap to guide sustainability principles, goals and program." In this announcement, APP said it would "source 100 percent of its pulpwood supply from sustainable plantation stock by the end of 2015". The 2012 roadmap switches terminology from "100 per cent sourcing" to "100 per cent capability" with the introduction of a new loophole for "Mixed Tropical Hardwood (MTH) waste & residues".

"*APP/SMG: The pulping continues*" includes photographic evidence of clearfelled rainforest areas APP calls "waste and residues. Eyes on the Forest members including WWF and Walhi Riau are calling on APP and SMG to immediately stop natural forest wood from forest conversion entering any of its pulp mills. "Until APP makes this commitment and finds a way to demonstrate it is not just yet another empty promise, its financiers, paper buyers and paper consumers need to maintain and extend their own growing moratorium on dealing with APP," said Hariansyah Usman, Executive Director of Walhi Riau.

WWF



## Global: Why wood pulp is world's new wonder material

**T**HE hottest new material in town is light, strong and conducts electricity. What's more, it's been around a long, long time.

Nanocrystalline cellulose (NCC), which is produced by processing wood pulp, is being hailed as the latest wonder material. Japan-based Pioneer Electronics is applying it to the next generation of flexible electronic displays. IBM is using it to create components for computers. Even the US army is getting in on the act, using it to make lightweight body armour and ballistic glass. To ramp up production, the US opened its first NCC factory in Madison, Wisconsin, on 26 July, marking the rise of what the US National Science Foundation predicts will become a \$600 billion industry by 2020.

So why all the fuss? Well, not only is NCC transparent but it also has eight times the tensile strength of stainless steel due to its tightly packed array of microscopic needle-like crystals. Even better, it's incredibly cheap. "It is the natural, renewable version of a carbon nanotube at a fraction of the price," says Jeff Youngblood of Purdue University's NanoForestry Institute in West Lafayette, Indiana. The \$1.7 million factory, which is owned by the US Forest Service, will produce two types of NCC: crystals and fibrils.

Production of NCC starts with "purified" wood, which has had compounds such as lignin and hemicellulose removed. It is then milled into a pulp and hydrolysed in acid to remove impurities before being separated and concentrated as crystals into a thick paste that can be applied to surfaces as a laminate or processed into strands, forming nanofibrils. These are hard, dense and tough, and can be forced into different shapes and sizes. When freeze-dried, the material is lightweight, absorbent and good at insulating.

"The beauty of this material is that it is so abundant we don't have to make it," says Youngblood. "We don't even have to use entire trees; nanocellulose is only 2 nanometres long. If we wanted we could use twigs and branches or even sawdust. We are turning waste into gold."

NCC will replace metal and plastic car parts and could make nonorganic plastics obsolete in the not-too-distant future, says Phil Jones, director of new ventures and disruptive technologies at the French mineral processing company IMERYS. "Anyone who makes a car or a plastic bag will want to get in on this," he says.

[newscientist.com](http://www.newscientist.com)

## UK: Tree rings suggest Roman world was warmer than thought

**H**ow did the Romans manage to grow grapes in northern England when most climate studies suggest the weather was much cooler then? We may now have an answer: it wasn't that cold at all. Long-term temperature reconstructions often rely on the width of tree rings: they assume that warmer summers make for wider rings. Using this measure, it seems that global temperatures changed very little over the past two millennia. Such studies are behind the famous "hockey stick" graph, created by Michael Mann of Pennsylvania State University in University Park, which shows stable temperatures for a millennium before the 20th century.

Jan Esper of Johannes Gutenberg University in Mainz, Germany, thinks that at least some of those tree rings actually show something else: a long-term cooling trend that lasted right up until the Industrial Revolution. The trend came about because of reduced solar heating caused by changes to the Earth's orbit known as Milankovitch wobbles, says Esper. His results suggest the Roman world was 0.6 °C warmer than previously thought – enough to make grape vines in northern England a possibility.

Esper and his colleagues say that warmer summers do not necessarily make tree rings wider – but they often make them denser. He studied the density of tree rings in hundreds of northern Scandinavian trees and found that they showed evidence of a gradual cooling trend that began around 2000

years ago. The finding fits with other proxies for temperature – such as the chemical make-up of air trapped in glaciers and the organic remains in ancient lake sediments – which have also suggested a cooling trend.

Esper's study is the latest to indicate that temperatures were less stable than originally thought. In 2009, Darrell Kaufman of Northern Arizona University at Flagstaff published evidence, using a range of proxies, that indicated a cooling in the Arctic for most of the past 2000 years (*Science*, DOI: 10.1126/science.1173983). Esper's findings suggest that the cooling trend was even stronger than Kaufman concluded.

The finding does not change our understanding of the warming power of carbon dioxide. In fact, it shows that human CO<sub>2</sub> emissions have interrupted a long cooling period that would ultimately have delivered the next ice age.

Esper says temperature reconstructions will have to be redone because past studies probably underestimated temperatures during the medieval warm period and other warm periods going back to Roman times. The further back in time, the greater the underestimate would be. But others have doubts. Mann argues that Esper's tree-ring measurements come from high latitudes and reflect only summer temperatures. "The implications of this study are vastly overstated by the authors," he says.

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## Namibia: Mbunza chief bans tree felling

The Mbunza Traditional Authority has temporarily banned the harvesting of timber following the discovery of large consignments of illegally harvested timber in its area. About 600 poles and 90 planks were confiscated at the villages of Mile 20, Mile 30, Mbeyo and Epingiro within the Mbunza Traditional Authority area yesterday. All four villages are situated south of Rundu.

The illegal harvesting of timber appears to be on the increase in the region. The Mbunza Traditional Authority leader, Chief Alfons Kaundu, said three trucks en route to Oshikango in the Ohangwena Region were spotted transporting planks. Kaundu said this illegal timber was discovered after he had received several complaints from community members about people who were cutting down trees without permits.

A man and a woman who were questioned by the traditional authority over the weekend admitted to having cut down trees without permission. The illegal forest products were then displayed and sold along the Trans-Caprivi Highway at N\$10 per pole. Most of the illegally harvested timber is transported to places such as Oshikango, South Africa and Calai village in Angola, where it is then sold at exorbitant fees.

The Mbunza chief said he is worried because some trees from which the community gather wild fruits have also been cut down. Kaundu laid the blame for the illegal harvesting on some officials within the Directorate of Forestry in the region, who are allegedly collaborating with those engaged in illegal timber harvesting. He said the traditional authority has on several occasions confiscated forest products and taken the culprits to the directorate, but no one accused of harvesting timber illegally in his area of jurisdiction has ever been prosecuted.

The Mbunza chief has now banned the transportation and harvesting of timber in the communal area under his jurisdiction until further notice in an effort to prevent deforestation. "The forest is now becoming a desert, so no more harvesting and transportation of timber until further notice," he said. Kaundu said the confiscated poles and timber will now be taken to the Mbunza Traditional Authority's headquarters, where a decision will be taken on what to do with it.

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## Tanzania: Deforestation fuels temperature hikes around Mt. Kilimanjaro

A logging boom has hit Tanzania's tourist-drawing Kilimanjaro region, reducing the region's native forests, hitting rainfall and leading to unusually high temperatures. The increasingly extreme weather has come as a surprise to people who live a stone's throw from one of the world's heritage sites, and who had been used to a cold, misty climate. Joshua Meena, 72, a resident of Machame, told AlertNet that the annual rainfall in the region has been dwindling from year to year over the past decade, affecting farmers who depend on growing coffee and bananas for a living. "Our livelihood is affected because these crops thrive under a cool climate and also need enough water," he said.

And in Moshi municipality, eyebrows are raised at the region's rising temperatures, which now sometimes surpass 30 degrees Celsius (86 degrees Fahrenheit) – on occasion higher than the country's normal hottest places, Dar es Salaam and Tanga. "I have not seen a situation like this before, the heat is just too much. We virtually do not need sweaters and jackets," said Onesmo Masawe, a resident of Moshi.

Forests play an important role in maintaining natural water cycles around Mt. Kilimanjaro, but the region's forests are disappearing as a result of growing demand for timber across and country and unmanaged logging of trees for timber and charcoal making, residents in the region say. The government has accused unscrupulous timber dealers, who collude with corrupt officials, for driving the destruction. But forests also have come under pressure as people in the area struggle to meet their energy needs by making charcoal. Particularly hard hit are the region's "Erica" trees, which thrive above 2,700 meters (8,850 feet) above sea level and that local people believe are crucial to

helping collect cloud moisture. The trees, now on the verge of extinction, according to people in the village of Machame, also provide traditional medicine used to treat fever and diarrhoea.

Growing rainfall shortages in Machame have led some farmers to set up irrigation systems for their fields, while others have moved to cities to find other work. In Marangu district, a visiting AlertNet reporter could hardly find people working in the fields during the day. Many Marangu residents have moved to Arusha and Dar es Salaam because their farms are not coping well with the drier conditions. They only convene back in the villages during Christmas and New Year celebrations.

According to the United Nations Environment Programme (UNEP), reduced rainfall and increasing temperatures in Kilimanjaro have increased the vulnerability to fire and cutting of the region's forests. Statistics obtained from UNEP website estimate that between 1976 and 2012, over 15,445 hectares (38,000 acres) of rainforests in the region have been destroyed. Local authorities interviewed by JET estimated that that Lake Jipe has receded by 100 meters in just three years while Nyumba ya mungu Dam has lost almost two-thirds of its water, affecting hydro-electricity production.

The regional government is taking measures to combat illegal logging and to sensitize local people about the importance of conserving their environment, said Kilimanjaro Regional Commissioner Leonidas Gama. A Tanzanian member of the Intergovernmental Panel on Climate Change (IPCC), Pius Yanda, concurs that the rise in temperature in Kilimanjaro region is a result of global warming.

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## Tanzania: Norway and Finland dish out \$5m to curb illegal logging

The governments of Norway and Finland have dished out USD5m which would be used in the campaign to improve transparency and accountability and reduce illegal logging in the forestry sector. Speaking at the launch of the five years campaign dubbed 'Mama Mitsu', the Finish Ambassador to Tanzania, Sinikka Antila, said the campaign is expected to result in tangible changes in behaviour, increased transparency by government and private sector officials.

"The ultimate goal is to reduce the illegal harvesting of timber in Tanzania and thus the rate of deforestation," she said.

According to a report by the Controller and Auditor General, only 4 percent of the forest reserves have management plans, the remaining 96 percent are not managed in accordance with the national legislation. "Forest and land are important resources

for lives and livelihoods of Tanzanians. In order to manage them well there is a need to work together with the public, private and non governmental actors to strengthen the resources," she said. She said Finland and Norway are Tanzania's long term partners in the management of natural resources, especially the forestry sector.

She noted that forests are recognized for their importance in addressing climate change and Tanzania's successes is part of the international efforts to reward countries that reduce emission from deforestation and forest degradation (REDD). The campaign will also contribute towards Tanzania's efforts to prepare for REDD, she added.

[www.ippmedia.com](http://www.ippmedia.com)

## Kenya: KWS Receives Sh80 Million for climate change projects

The Kenya Wildlife Service has received Sh80 million for climate change adaptation programmes in national parks. The money from the Canadian government will help mitigate the effects of climate change and degradation of natural resources in the protected areas. According to a statement by KWS, the ecological integrity of many conservation areas is diminishing as a result of the rising human-wildlife conflict.

"The one year grant will involve adaptation and mitigation activities in national parks in Kenya and enhance ecosystem services around conservation areas," said KWS. The first phase of the programme will be implemented in Amboseli, Mount Kenya, Lake Nakuru national parks, Tsavo conservation area and Aberdare forest.

The initiative, which will involve communities and schools around the park will support conservation efforts on climate change and enhance visitor experience in the parks. "The

support by Parks Canada goes along way to address some of these challenges which have adverse impacts on the Kenyan economy and livelihoods of the population which largely depends on natural resources such as water, land, plants and animals. Wildlife and tourism sectors, which support a large proportion of the Gross Domestic Product, are particularly vulnerable to the impacts of climate change," the statement stated.

Lake Nakuru National Park, a World Heritage Site and Amboseli-Tsavo ecosystems are Kenya's tourism flagship and support a wide ecological diversity. KWS and Parks Canada signed a memorandum of understanding to share information on the management of national parks, monitoring and assessment of ecosystem condition, stakeholder involvement and conflict management, policy development and implementation and governance and accountability structures among others.

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## USA: Western evergreen forests could face century of drought

Western forests could be facing a 100-year drought, turning to scrubland by the end of the century – and taking their ability to soak up carbon with them, according to a new study. The new research, published in Nature Geoscience, suggests the western evergreen forests, which cover an area from southern Canada to northern Mexico, took up a lot less carbon from the atmosphere during the drought that lasted from 2000-2004. That's normal, and expected. The question is what happens after that.

Christopher Schwalm and his colleagues at Northern Arizona University's School of Earth Science and Environmental Sustainability think that there is a good chance the drought could be the new normal. If that happens, a big carbon sink will be lost.

The group calculated that during the drought of 2000-2004, the amount of carbon the western forests took up dropped by between 30 million and 298 million metric tons per year. Ordinarily they would take up between 177 million and 623 million

metric tons. By comparison, a 2011 study from the U.S. Forest Service estimated the global sink from forests is between 2 billion and 2.8 billion metric tons per year. There's a lot of uncertainty in those measurements, but even assuming the smallest loss and the highest carbon uptake — which is unlikely — it still means a non-trivial dent in the amount of CO2 removed from the atmosphere.

A lengthy drought will cause a big dieback of the evergreen forests that are familiar to hikers and skiers, bringing in vegetation that will likely more resemble a desert scrubland. Those kinds of plants take up carbon, but not as well as forests do.

Climate change is the likely culprit for such a long drought, or “megadrought” that lasts decades, say the researchers. As the climate warms, many areas that were dry become drier, and some that were wet become wetter. Not only have the last three decades contained some of the hottest years on record, the amount of rainfall in western North America might drop — a lot.

The result is that where mountainous forests previously recovered from long drought events — such as the one in the 12th century that may have resulted in the abandonment of the ancient towns of the southwest — that might not happen again in the future. Or at least, not on a time scale that's helpful to humans. If people don't cut back emissions or mitigate the die-off somehow, the result will probably be an increase in the rate of carbon-dioxide accumulation in the atmosphere, leading to greater warming, Schwalm told LiveScience.

There are several mitigation strategies, such as “industrial forestry” — using specially bred trees, for instance, to re-forest the areas where diebacks occur. And there will be some adaptation on the part of the plants. But there are limits in terms of how “plastic” or amenable to changing these plants will be. “A lot of species are a lot more plastic than we give them credit for,” Schwalm said. “But at a certain point the plasticity fails.”

[www.huffingtonpost.com](http://www.huffingtonpost.com)

## USA: Benefit of thinning forests for spotted owls is not so clear-cut

The July 26 editorial “Logging for spotted owls” dismisses decades of scientific research by touting one new study that suggests “heavy thinning” (aka, clear-cut lite) of forests could benefit spotted owls. Based on a single computer simulation, the new study suggests that intensive logging will magically prevent “catastrophic fires” such as the Biscuit that “wiped out” owls and other wildlife. This is unfounded.

The Biscuit fire did not destroy spotted owl territories, nor did it “consume” half a million acres of forests. More than half of the fire area actually burned with no, low or moderate fire severity, while a third was deliberately torched in what are called back burns set by firefighters trying to “control” the blaze. This fire was weather-driven, not fuel-driven, and occurred during a severe drought with gusting winds that created fire plumes up to 30,000 feet. Thinned areas burned as hot as those not thinned.

Klamath-Siskiyou country is no stranger to large fires. In fact, a Biscuit-like fire burned through the area in the late 1800s, and since then, fires of mixed severities (low, moderate, high) have repeatedly visited the landscape every 15 to 75 years. The renewal of plant communities — many of which are rare and fire-dependent — from repeat fires is part of the region's globally distinct plant and wildlife richness. Mature evergreen forests with madrone and oak understories also have been shown to burn less severely than open forests, presumably because over time understory trees in these closed-canopy forests shade out flammable shrubs.

Ten years following the Biscuit fire, the landscape is a vibrant snag forest full of wildflowers, conifer seedlings, woodpeckers, songbirds and butterflies that began populating the fire area as the embers cooled (from nature's rain, not fire-fighting). It was certainly not an ecological catastrophe. And while the fire influenced owl territories, its patchiness created a beneficial mixture of shrubby owl foraging areas with large dead and live trees left standing for nesting. Such snag forests are richer in plants and wildlife than even old-growth forests, and unlogged areas are rare because salvage logging, the true catastrophe in burned forests, typically damages them.

Decades of research on spotted owls and prey shows that logging is not as short-lived an impact as some might hope. This is because the owls roost and nest in closed-canopy, dense forests and so do many of the species' prey. Opening up forests may encourage barred owls, a more aggressive competitor of spotted owls, thereby negating efforts by the U.S. Fish and Wildlife Service to contain this invading owl.

We agree with social reasons for thinning forests to reduce fuels, especially near buildings, and ecological reasons in highly flammable tree plantations. A recent report released by conservation groups and forestry experts, in fact, recommended a 44 percent annual increase in log volume as a byproduct of ecologically restorative actions in primarily tree plantations west of the Cascades. Until scientists have more definitive information on thinning effects on owls and prey, land managers would do best to stick with less ecologically risky and more scientifically supportable actions.

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