

EFI *news*

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European Forest Institute

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Our future is in science supporting policy making

The EFI 20-year anniversary week in Nancy, France was an event to remember. It successfully brought together EFI Member Countries and member organizations. This marks the first time the Council, the Annual Conference and a conference reflecting scientific and policy issues were held in the same week.

The future of EFI is in the strong combination of research and policy support. Selecting research topics relevant for policy making, and reviewing the existing scientific knowledge on ongoing policy issues, are our priorities. Making this knowledge available and accessible within the right amount of time, scale and format is the guiding principle of EFI policy support activities.

Recently, European Parliament members requested EFI to provide policy-relevant information on forest bio-energy

and to organize a ThinkForest event on the future of forest bio-energy and its policy implications. Such an event will make available existing scientific knowledge on a number of issues, such as sustainability impacts to the efficient use of bio-resources for energy and biomaterials. This is a good example of how EFI takes up emerging policy discussions and information needs in a timely manner.

EFI is being acknowledged as an important player in the field of research and policy making. For example, it has had successful collaboration with the Forest Based Technology Platform, and has assisted in the negotiations for the Legally Binding Agreement on European forests. For EFI these contributions are very attractive, but often they have a fundamental risk of being involved in the activities on a voluntary basis with the uncertainty of possible resources available for the work itself.

From the present 15 million euro budget only one sixth is not tied in projects. This does not allow EFI to fulfill its purpose as expressed in the Convention, which is now ratified by 25 European countries. The EFI Council met in Nancy and took the challenges of funding for future discussions, to be prepared for decisions in next Council meeting in 2014 in Austria.

In the coming years, EFI will focus on our constituencies, Member Countries and member organizations, with the ultimate goal of providing added value for them.

In order to make this happen, I personally depend on and appreciate, our vital Units and staff to ensure success throughout this process.

RISTO PÄIVINEN, EFI

EFI news

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The European Forest Institute (EFI) is an international organisation established by European States. EFI conducts research and provides policy advice on forest related issues. EFI facilitates and stimulates forest related networking, as well as, promotes the supply of unbiased and policy relevant information on forests and forestry. It also advocates for forest research and for scientifically sound information as a basis for policy-making on forests.



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20 years

E F I

2013

EFI's 20th Anniversary celebrations took place in Nancy, France at the EFI 20 Years Science and Policy Forum on 23–27 September. During the Forum about 300 leading European forest scientists and experts gathered to discuss the future of our forests and how EFI and its partners can contribute to meet the challenges related to the various changes, risks and uncertainties that forests will face.

The EFI 20 Years Science and Policy Forum stimulated balanced discussions between policy/decision makers, stakeholders and scientists, and gave a taste of current important issues. On 25 September there were three sessions and a panel discussion covering policy aspects, the views of practitioners/stakeholders and how scientific expertise contributes to various policies and strategies.

"We are united by



"The development of EFI over the last two decades has been possible due to the need for a coordinating institution in the field of forests and forestry. EFI implements the idea of pan-European cooperation in forest research and policy support, while acknowledging the special characters of nature and culture of different regions", remarked EFI's Director **RISTO PÄIVINEN**.



Mr. **A.V PANFILOV**, from the Russian Federal Forestry Agency said, "We can see many common things between the European forest sector and the Russian forest sector. There is only one very important difference, the estimation of global changes of climate. This question should be reviewed. I'm happy that this is on the agenda of EFI, and we should work on this question in the future."

common threats that cross borders”



EVA MULLER, FAO Forest Economics, Policy and Products Division

“It is a widely held view that forestry needs to be open and more strongly engaged in policy dialogue with other sectors. Support and input from research is needed more than ever to meet these challenges.”



The day also included a keynote presentation, “Overview on European Forests for the 21st century – ready for risks and opportunities”, by Dr. **GERT-JAN NABUURS**, Alterra, Wageningen University.

Dr. Nabuurs pointed out the emerging challenges that face the forest sector in Europe. These included a vulnerable forest resource, which shows a declining increment and a sector that faces large socio-economic challenges before it can meet the needs of the bio-economy. “We have achieved a lot, so we tend to be a bit relaxed about this. Are we really ready for the new challenges?”



INRA / Christophe Maitre



“CELEBRATING 20 YEARS OF FOREST NETWORKING IN EUROPE” BOOK PUBLISHED

As part of the celebrations for its 20th year in 2013, EFI has produced a special anniversary book. “Celebrating 20 years of forest networking in Europe” gives a voice to EFI’s network, their memories of EFI and their vision for the future.

The book celebrates the commitment and support of EFI’s network of 25 Country Members and 130 member organisations from 36 countries. Making use of interviews and comments from key figures and collaborators, it traces EFI’s development from its origins in 1993 to today’s vibrant international organisation.

The book has been produced with support from: Metsämiesten Säätiö, Regional Council of North Karelia, Metsähallitus, City of Joensuu, Nordea and Lähtipiola.

An online version of the book is available [here](#).



INRA / Christophe Maitre

Mr. **KRITON ARSENIS**, Member of the European Parliament stated that, "Everyone in Europe considers forests an important part of their identity, work, experiences, and memories, and they are connected somehow with forests. There isn't a single member of the EU who does not see forests as important."

EFI COUNCIL MEETING

Representatives of 17 EFI Member Countries met on 26 September, in an extraordinary Council meeting, where they elected two new Board members.

NEW EFI BOARD MEMBERS ELECTED!

Eeva Hellström from Finland and **Frits Mohren** from Netherlands have been elected to the EFI Board.

Dr. Hellström is the leader of the societal training and development activities of Sitra – the Finnish Innovation Fund. Prof. Dr. Mohren chairs the

Forest Ecology and Forest Management Group at Wageningen University.

Other EFI Board members are: Dr **José Antonio Bonet Lledós**, Spain; Prof. Dr. **Giuseppe E. Scarascia-Mugnozza**, Italy; Prof. Dr. **Jean-Marc Guehl**, France; Prof. Dr. **Michael Köhl**, Germany; Prof. Dr. **Tomasz Zawila-Niedźwiecki**, Poland and Prof. **J. Bo Larsen**, Denmark, Chairman of the Board.

EFI warmly thanks previous Board members Dr. **Harald Mauser**, Austria and Prof. **Lisa Sennerby Forsse**, Sweden for their contribution and commitment to EFI's activities during their time in office.

CREATING A 'FLEXIBLE, INTELLIGENT, SMART' RISK FACILITY

Thursday's main session presented EFI's current initiatives towards a European Forest Risk Facility, and gave participants the opportunity to be involved in discussions about its potential work areas.

The Facility aims to improve awareness and understanding of the risks (both biotic and abiotic) facing European forests, and to support collaboration and networking and information provision to improve risk management. **Guy Landmann** from GIP-ECOFOR presented the outcomes of the European Forest Risk Facility scoping study, to which 20 experts from institutions across Europe contributed. The study came up with six areas in which a European Forest Risk Facility could potentially be active: networking, understanding, strategic planning, supporting, capacity building,


informing. Further work to refine these areas and create a comprehensive road map for making a Facility operational will start at the end of 2013 with the FRISK-GO project, supported by the German Federal Ministry of Food, Agriculture and Consumer Protection (BMELV).

Many panellists pointed out that a risk facility should not duplicate what is already out there, regarding wildfires or other risks. There were calls for smart links with already existing entities, and agreement that the overall aim for the Facility should be to provide additional added value.

The audience provided detailed feedback on the Facility plans. Their recommendations included that the Facility should be demand-oriented, and not forget the importance of having an impact on local levels. It should be pan-European

(including countries such as Russia), and should take a collaborative, participatory approach to information collection, evaluation and mobilisation of knowledge. Existing information—should not be forgotten, but the Facility should also step outside the forest, for example looking at how European and national policies can affect risks.

Marc Palahi, summing up the morning, said, "This is a very good example of the EFI we are trying to build for the next 20 years. We are trying to build a platform where science can meet policy and practice. We are looking for a flexible, intelligent, smart facility, which is part of the existing structure – and which mobilises EFI's network. It should be pan-European, not just EU, providing transnational access to knowledge and experience. And it should add value to existing knowledge."



Ernst Schulte from the European Commission, DG Environment said "We invite EFI to sit together with us and to see where we can do something in common. We want to bring things forward and not to say this is our baby or whatever, and to have clear results. I am very happy that two member states [Germany and France] are pushing for this and I look forward to the study."



INRA / Christophe Maitre

DISCOVERING THE FOREST RESEARCH IN LORRAINE

FOURTEEN YEARS AFTER LOTHAR STORM

The field trip organized with the Office National des Forêts (ONF) and the LERFoB laboratory (INRA /AgroParisTech) took 40 participants to the Hays forest to discuss the cyclone, which swept across France in 1999 and its consequences on forest management.

Confronted with a young beech stand naturally regenerated after storm, the participants focused on how to cure after such huge areas reached the critical silvicultural steps simultaneously, with acceptable costs, and how to maintain tree species diversity despite the dominant dynamic of beech.

The teachings of the 1999 storm also led the forest service to revise beech silviculture. The interesting results of an experiment on the effects of early and intensive thinnings in a beech stand led the forest service to a stem-targeted silvicultural pathway to produce shorter trees for the same harvesting diameter. If initial measurements on growth rate are confirmed, trees will be harvested 10 or 20 years earlier and risks will be reduced as a consequence.

Almost 15 years after the Lothar storm, the Hays forest remains an active study site and became a permanent lab for wind and storm studies, namely for the FOR-WIND research project, also presented to the participants.



Jean Michel Cigleux

INRA NANCY-LORRAINE RESEARCH CENTRE

In Champenoux, a group of 20 participants discovered INRA's main research priorities and facilities, as well as the cluster of Excellence "ARBRE" (Advanced Research on the Biology of Tree and Forest Ecosystems).

The tour included a visit to technical platforms for wood sciences, ecology and eco-genomics of micro-organisms.

The French and European project ANAEE-S and ICOS, an European network of flux towers to measure gas exchange above the forest, were also introduced to the participants.

The broad range of advanced research infrastructures allows the INRA Nancy-Lorraine Research Centre to be attractive and to establish partnerships with teams from across the world.

Situated on the outskirts of Nancy, the Hays forest has a total area of 11600 ha, owned principally by state and communities, and managed by ONF. The main tree species are beech (74% of the State forest area), oaks and other deciduous species (hornbeam, ash, maple). In Nancy, wind speed reached 155 km/h during Lothar storm. Areas with a damage rate superior to 50% of the cover represented 485 000 ha, and the damaged volume reached 30 million m³, which represented 6 to 7 annual harvest.

SEMINAR DISCUSSES SUPPORT FOR FLEGT EFFORTS

The 'Shaping forest policy: Global initiatives and the European arena' seminar was one of the parallel sessions on 26 September 2013.

Ben Cashore from the School of Forestry and Environmental Studies at Yale University gave a thought-provoking presentation about the efforts so far to address the state of the world's forests, and the current focus on illegal logging and legality

verification. He asked why there was such broad support for FLEGT as opposed to earlier measures, how this 'coalition' of support could be maintained, and what the implications were for future impacts.

In addition, the audience heard an overview of the work of the EU FLEGT and EU REDD Facilities, and their current strategic issues and priorities. The presentations also focused on FLEGT's influence on

markets, trade and economic development, and the challenges and benefits of implementing Voluntary Partnership Agreements – using as an example the FLEGT Facility's work in the Republic of Congo and Liberia. There was also an overview of the ongoing and potential interactions between the FLEGT and REDD+ mechanisms.

New location

for EFI Headquarters



EFI Headquarters has moved to its new premises this year, which it shares with the Finnish Forest Research Institute (Metla). The new address is Yliopistokatu 6, 80100 Joensuu, Finland. Our location is almost in the center of the University of Eastern Finland's campus. The new premises provides functional benefits in forms of strategic synergies with the University of Eastern Finland and Metla.

Our new office space, which was completed in 2004, is Finland's first large three-story office building built from wood and to have a wooden frame. Almost all of Finland's 24 native wood species were used in the structure and interior decoration of the building.

HOST COUNTRY AGREEMENT SIGNED BETWEEN BELGIUM AND EFI

A Host Country Agreement has been signed by the Kingdom of Belgium and the European Forest Institute (EFI). The agreement was signed in October by Ambassador **Peter Martin**, Kingdom of Belgium, and **Risto Päivinen**, Director of EFI.

EFI will have privileges and immunities of an international organization in

Belgium, which consequently paves the way for building a stronger presence of EFI within the country.

Establishment of the EFI Liaison Office in Brussels has already increased EFI presence in Belgium earlier this year. The Liaison Office is located in the European Forestry House, and has been operational

since February 2013. It aims to strengthen the cooperation of EFI with EU institutions, Member Countries and international organizations represented in Brussels. It will foster the policy-science interface regarding forest related issues and support EFI in advocating for forest research and information in Europe.

Managing Mediterranean forests

as complex social-ecological systems

SARAH ADAMS, EFIMED
BART MUYS, UNIVERSITY OF LEUVEN, BELGIUM

Participants at the 2013 edition of the Mediterranean Regional Office's – EFIMED's Scientific Seminar spent a thought-provoking day contemplating complexity science and its application to Mediterranean forests.

Complexity science is an emerging discipline that challenges established systems of linear thinking. A fascinating keynote from leading complexity scientist **Ricard Solé** (Universitat Pompeu Fabra) brought the subject to life by illustrating various concepts essential to understand how complex systems function, such as emergence and path dependence. Forest ecologist and editor of the new book "*Managing Forests as Complex Adaptive Systems*" **Christian Messier** (Université de Québec), took the topic into the forest. With rapid environmental changes and increasing damage by fire, storm and insects, there is a need for a reconciliation of forestry and ecology. Monoculture is no longer the ideal model, as diversity usually increases resilience and improves the provision of ecosystem services. Understanding the various parameters driving the behaviour of the forest helps to develop new management principles: disturbance events previously prevented could be better managed as part of the system and planning for uncertainty is an essential part of the challenge.

PRACTICAL APPLICATIONS

The practical application of complexity science in a Mediterranean forest context was described by CTFC/EFIMED researcher **Elsa Varela**. The decline of the rural economy has increased forest area and landscape uniformity. This in turn has led to more opportunity for forest fires to spread, while fire prevention and grazing control in the fight against forest degradation have ironically led to increased risk of uncontrollable crown fires. This lock-in situation is also linked to the low economic value attributed to forests, and prevents transition to sustainable landscape management. A practical scheme paying shepherds to undertake controlled grazing was presented as a viable low-cost alternative to expensive fire prevention and suppression schemes currently in place. **Chadi Mohanna** (Department of Rural Development and Natural Resources) and **Patricia Sfeir** (Seeds-int) presented examples from Lebanon of forest management initiatives using social-ecological approaches.

COMPLEX VS. COMPLICATED

Understanding complexity science and its application to Mediterranean forest management is far from simple. From the debate with speakers and poster presenters it became apparent that it is important to differentiate between complex and complicated: Mediterranean forests are complex systems because of the interactions between the various factors, not because of the number of factors to consider in isolation. Modelling is an important tool to clarify these interactions. Considering uncertainty is essential, as is recognition that efforts taken to reduce uncertainty may be less useful as expected. Humans form an integral part of the forested landscape and socio-economic aspects, and are therefore crucial to be taken on board. Participants took these thoughts bubbling into the afternoon writing workshop, the objective of which is to develop a perspective paper on the topic in the next few months.

In the brand new Sant Pau conference facilities in Barcelona, the participants of the Complexity Seminar contemplated the links between theory and practice during Elsa Varela's presentation on forest fires as an integral part of the Mediterranean social-ecological system.



EFIATLANTIC

Planted Forests constitute

Strategic but Vulnerable Resources

for Future Green Economies

Report from the 3rd International Congress on Planted Forests
15–21 May 2013 – Bordeaux (Fr), Dublin (Ir), Porto and Estoril (Port)

JEAN-MICHEL CARNUS AND HERVÉ JACTEL, INRA, CHRISTOPHE ORAZIO, EFIATLANTIC,
MARGARIDA TOMÉ, INSTITUTO SUPERIOR DE AGRONOMIA

The 3rd International Congress on Planted Forests was held from the 15–21 of May 2013 in Atlantic Europe and comprised one plenary meeting of international experts in Estoril (Portugal), which was preceded by three parallel scientific workshops on:

- Vulnerability and Risk Management (Bordeaux, France)
- Ecosystem Services (Dublin, Ireland)
- Governance, Economics, Trade and Markets (Porto, Portugal)

Those events were aimed at investigating the contribution of planted forests to sustainable development in the context of global changes and the future role of planted forests in environmental protection and REDD, especially for developing countries. The plenary meeting in Estoril was opened by Ms. **Assunção Cristas**, Portuguese Minister of Agriculture, Sea, Environment and Spatial Planning, Mr. **François Moreau** from the French Ministry of Agriculture and Forestry, Mr. **Eduardo Mansur**, director at FAO and Mr. **Niels Elers Koch**, the

president of IUFRO. Two hundred participants from 38 countries in five continents attended the workshops and plenary session representing national and regional governments, the private sector, research institutes, international and non-governmental organizations.

CONGRESS REPORT

More than 90 invited papers from 30 countries, scientific workshops reports and 3 high-level panel discussions, which



Eric Pallissa, CNPF

addressed a set of questions related to the conference themes of poverty alleviation, ecosystem services and sustainable production, formed the basis of deliberations that led to the formulation of a congress report by a drafting committee of international experts. The congress report released by FAO is expected to be integrated into broader policy dialogues on the future of planted forests at the global, regional and national levels. Read this report here.

CONCLUSIONS

Some of the key conclusions from the congress highlighted: the strategic importance of planted forests for providing future renewable wood resources; the role that planted forests and trees play in restoration of degraded landscapes, provision of ecosystem services and support of sustainable livelihoods, with the need to strengthen evidence-based research on those topics; the replacement of large-scale monospecific plantations by more ecological and integrated management approaches at stand and landscape levels; the importance of good governance of rural areas, and of financial incentive schemes as crucial legal, institutional and economic preconditions for establishment and long term management of planted forests; the need to support countries to further understand the role that planted forests play in the adaptation to, and mitigation of, climate change and assist them in monitoring their performance; the increased vulnerability of planted forests to biotic and abiotic hazards and the integration of multiple risks in their sustainable management; and the need to enhance communication and knowledge transfer and to strengthen research and development capacities.

Needless to say, the 3rd ICPF was a great success in terms of international presence, but also in terms of quality presentations (which can be viewed here).



Luiza Dilucchio, EFIATLANTIC

REINFFORCE CATALOGUE: THE WIND IN THE PROJECT'S SAILS

BEATRICE CARNUS, EFIATLANTIC

The REINFFORCE project (**RE**source **IN**frastructure for monitoring & adapting European Atlantic **FOR**ests under Changing climat**E**) finished at the end of November, after 5 years of intense efforts combined to design and put in place this unique research tool. However, this does not represent the end of a project, but rather the beginning of a long story ahead. After putting together a network of 78 trials throughout Europe to constitute a solid and reliable tool, on 21st November EFIATLANTIC launched the REINFFORCE Catalogue.

The Arboretum & Demonstration Site Catalogue regroups all useful

information concerning the design and content of the 78 trials that are part of this infrastructure: information to understand the data collected, the species planted, and the effects observed with respect to climate change. Thanks to INTERREG IVB EA funding, this tool will be able to be used not only throughout other countries with similar climates, but also as a reference for future foresters internationally who are concerned about what species to grow with the changing climates. For more information on the Catalogue or REINFFORCE project, please refer to our website.

FORRISK WEBSITE IS LAUNCHED!

CHRISTOPHE ORAZIO, EFIATLANTIC

The project for Integrated Risk Management in Forest (FORRISK) is an INTERREG SUDOE project coordinated by EFIATLANTIC. This project has just launched its website in four different languages presenting the partnerships and main actions planned and taken. In the frame of the project several events are described on the website (workshop on nematode, workshop of insurance). The website will also provide the output of all the work packages including

institutions in charge of risk management in the project areas, concrete field actions to deal with multiple risks, and decision support tools for an integrated risk management in forests. The pages of the website will be translated in the four project languages (French, Spanish, Portuguese, and English) as much as possible, to guarantee an easy access to the results for local managers and stakeholders. You are invited to consult the website following this link.

Pan-European Criteria & Indicators

need revision

In support of the FOREST EUROPE process, EFI has been coordinating a project on “*Implementing criteria and indicators for sustainable forest management in Europe (CI-SFM)*” to explore the implementation of the pan-European C&I set across the signatory states of FOREST EUROPE. The first step was to develop a “Working definition of implementing pan-European set of criteria and indicators of sustainable forest management” (for use in the CI-SFM project), to allow the project team to approach the implementation aspects with a structured information collection. This working definition identifies 5 applications for this purpose.

Since 2011, the CI-SFM project team reviewed more than 100 policy documents and scientific articles, carried out 40 expert interviews, collected information from 38 countries and organized 3 regional workshops across Europe.

NEED FOR REVISION

Considering all of the information sources, the project team released the draft project report on 1 July, which was the main background document for the CI-SFM pan-European Forum (held in Vienna, 8–9 October 2013). Based on the structured information

provided by the CI-SFM project and its draft outcomes, the Forum participants acknowledged the need for revision of the pan-European C&I set. However, the **participants flagged that any potential revision should carefully consider the highly different conditions of the participating countries and should assure a wide stakeholder involvement within and outside of the forest sector.** CI-SFM pan-European Forum provided a platform for about 70 experts from more than 20 countries to exchange experiences and discuss the potential further development of the pan-European C&I set. The outcomes of the Forum were considered when

the project team finalized and the Forum Report was annexed to the project’s final report.

“We can clearly see the areas that need further attention. There are two main aspects that are elementary in any future revision process. First, we need to maintain and demonstrate the balance of the SFM definition, and find a solution where the criteria set secures the comparable information content with the past and future reports. Second, the set needs to respond to emerging issues affecting the pan-European forest policy now and in the future. None of these are easy tasks” contemplates the CI-SFM project leader Hubert Inhaizer.

The CI-SFM final report hardcopies will be distributed for the first time during the European Forest Week (Rovaniemi, 9–13 December 2013), and all of the EFI member organisations will receive a copy as well.

The results of the CI-SFM project will be presented at the next FOREST EUROPE Expert Level Meeting to be held in Valladolid, 4–5 February 2014.

More information: www.ci-sfm.org

How to balance

commodity production and biodiversity conservation?

DANIEL KRAUS, FRANK KRUMM AND ANDREAS SCHUCK, EFICIENT-OEF

Based on the contributions from more than seventy renowned scientists in this field, Integrate has attempted to make available the most recent knowledge and the best international scientific expertise on the complex relationships, trade-offs and emerging challenges regarding the integration of forest biodiversity conservation into forest management.

Management goals and ecosystem functions, such as biodiversity conservation, can be met in both set-aside forest reserves and off-reserve forests. The major argument for well developed and protected forest reserves is the increase of alpha-diversity with extended succession periods and turnover cycles. However, the establishment of new protected areas is limited due to space and competing management goals. Trade-offs have to be made where such conflicts of interest occur. Accordingly, emphasis is shifted towards integrating rare forest biotopes and structural attributes into production forests.

TO INTEGRATE OR SEGREGATE?

In segregative forest management systems, strictly protected areas are embedded in a matrix of intensively managed forests or plantations. The matrix in integrative systems in Central Europe is often managed on the basis of silvicultural principles with high forest management standards. Integrative forest management aims to maximize the cross-section between the different main functions of modern

forestry: production, protection and conservation. The area of synergy, however, is limited and a certain amount of exclusive area is needed to guarantee different ecosystem functions.

Consequently, a dual strategy where segregative instruments for biodiversity hotspots are embedded in a high standard forest management landscape presents a viable alternative.

<http://integrate-efi.org>

The final report of the research project Integrate carried out by the EFICIENT Regional Office was recently published as a volume entitled: Integrative approaches as an opportunity for the conservation of forest biodiversity. It contains a compilation of the project results. Read it here.



Learning by doing

TOMMI SUOMINEN, EFI

Besides individual PhD work of the researchers, a key component of CASTLE are the joint network training activities, which provide for training in the network's scientific topics and in the general skills needed in today's scientific work. Three out of the nine training events have been held to date, and they will continue with 3–4 training sessions per year, with the venue rotating around Europe. The trainings are usually open to a limited number of interested external participants.

FACE-TO-FACE- TRAININGS

In May 2013, the CASTLE team met for the first time face-to-face for a training session arranged at the Mekrijärvi Research Station of the University of Eastern Finland. This first CASTLE training focussed on acquainting the students with the functional concepts of Sustainability Impact Assessment (SIA), Material Flow Analysis (MFA) and Sustainability communication and sustainability footprints in companies and products. Learning by doing was the spirit,

in which the students assessed sustainability impacts of alternative ways of doing business, in real life case studies. The case studies were based on site visits during an excursion, where they visited a district heating plant, a chipping entrepreneur in action, a bio-energy technology manufacturer and a modern gold mine. By using the Tool for Sustainability Impact Assessment (ToSIA), continuously developed at EFI since 2006, they successfully produced results that were presented at the end of the course and sent back to the companies in question.

The training had three external participants, of which two were visiting Russian students from the SUFAREL project.

In late July it was time for the Life Cycle Analysis (LCA) experts of Thünen Institute to host our brave students for 2,5 weeks. This training covered LCA basics, how LCA is applied to forestry operations including short-rotation coppice forestry and LCA on harvested wood products. The training included one excursion related to forestry and a second one related to forest industry. A third training was held recently in Prague, Czech Republic.

The joint trainings compose an educational programme that builds European capacity in understanding, developing and applying methods for assessing sustainability of the forest based sector. Participating universities will benefit from having innovative courses developed for their teaching curricula. Selected training materials produced during CASTLE will be available as e-learning materials to benefit a wider audience.



Diana Tuomasjukka

The EFI-coordinated Marie Curie Initial Training Network entitled *Careers in Sustainability Excellence (CASTLE)* started in November 2012, and is funded by the European Commission's 7th Framework programme. CASTLE has recruited 14 highly motivated and very capable early stage researchers (ESR) to work on their PhD topics at one of the 9 partner institutes in the CASTLE project. The 14 positions were applied to by nearly 300 individual applicants.

The topics and timings of the coming trainings can be found on the project website: www.castle-itn.eu

Forest management and policy approaches for

Bio-energy

FRANCESCA FERRANTI, EFICENT-OEF

The expected increase for demand for bio-energy is affecting European forests with respect to various socio-economic and environmental matters. The effects of such an increasing demand are particularly evident with respect to the competition between the provision of woody biomass and other forest functions and services, and with respect to the spatial pursuance of different forest ecosystem services and of related forest management objectives. These emerging issues in forest policy and management are the focus of the **COOL project** (COmpeting uses Of forest Land).

The project aimed at analysing current and future forest management, policy strategies and at assessing and comparing the responses of the five European countries to an increasing demand of wood for bio-energy. The cross-country analysis focuses on trade offs and synergies between the various national forest management objectives and policy instruments, and it is enriched by a EU level study on the policies affecting the energy wood context, as well as the resulting European guidelines for the pursuance of the provision of energy wood without adversely affecting other forest functions.

The project team is currently working on the main project outputs, which will be

- 1) a *State of the Art Review* on policies and management guidelines affecting the energy wood context at the European level,
- 2) three peer review publications respectively focussed on current and likely future policy approaches, management strategies and stakeholders' perspectives in the five European countries under study

- 3) stakeholders workshops aimed at acknowledging the opinion of different actors on the current and future options for satisfying an increasing demand for forest bio-energy and
- 4) a European conference aimed at diffusing information on the project outcomes and to receive feedback by different stakeholders.

For further information, please contact francesca.ferranti@efi.int or www.cool-project.org

COOL project is a European research project within the two ERA-Nets WoodWisdom-Net 2 and Bio-energy. The project is carried out by a consortium of seven partners belonging to five European countries: the Chair of Forest and Environmental Policy, University Freiburg, Germany; the Forest Research Institute Baden-Württemberg, Germany; the EFI's Regional Office EFICENT-OEF, Germany; the Finnish Forest Research Institute, Finland; the Department of Forestry and Renewable Forest Resources, Biotechnical faculty, University of Ljubljana, Slovenia; the Forest Sciences Center of Catalonia, Spain; and the Department of Ecology and Natural Resource Management, Norwegian University of Life Sciences, Norway.

Planned US-EU trade agreement

JOSEPH BUONGIORNO, UNIVERSITY OF WISCONSIN, PAUL ROUGIEUX, EFICENT-OEF,
AHMED BARKAOUI, FOREST ECONOMICS LABORATORY, INRA

The Transatlantic Trade and Investment Partnership (TTIP), a planned trade agreement between the United States and the European Union, could come into existence as early as 2015. In a preparatory document for the trade negotiations, a High Level Working Group on Jobs and Growth mentioned that most benefit would be gained from a deep agreement: eliminating non-tariff barriers to trade in goods, services and investment and enhancing compatibility of regulations and standards will improve cooperation to achieve shared economic goals.

Several reports have estimated the global economic impact of this agreement. A 2013 report by the Leibniz Institute for Economic Research at the University of Munich, used a computable general equilibrium and simulated 2 scenarios: a low scenario where tariff barriers only would be removed and a high scenario where both tariffs and non-tariffs barriers would be removed.

POTENTIAL IMPACT

At the initiative of Patrice Harou, the EFICENT-OEF Regional Office cooperated with the University of Wisconsin (Madison, Wisconsin, USA) and the laboratory of forest economics (Nancy, France) to estimate the agreement's potential impact on the forest sector. They used the Global Forest Products Model (GFPM), a partial equilibrium model of the forest sector covering

14 products over 180 countries. GFPM was calibrated for the base year 2010, and the simulation ran until 2030. Input data consisted of 2 growth trend scenarios from the general equilibrium model mentioned above. Output tables simulated the impact of TTIP on forest products production and trade, as well as changes in value added and welfare for 3 scenarios: base, low and high. In the base scenario no TTIP was implemented. The low scenario, where only the tariff barriers were removed, showed no significant impacts on the forest sector.

LIBERATING TRADE

With more comprehensive trade liberalization (the high-impact scenario), a TTIP had only a small positive effect on the prices of most products, but it substantially changed consumption, production, and trade. For all forest products, consumption increased twice as much in the US as in the EU. Production increased less than consumption, leading to a deterioration of the trade

balance in both the EU and the US, which was compensated by increased exports of some third party countries. Global economic welfare increased by approximately \$17 billion, of which \$14 billion was in the US, and half as much in the EU, with some decrease in third party countries, especially in Asia.

The results illustrate the importance of a global perspective in analysing the effects of a TTIP and other potential regional trade agreements. While considering only the US and the EU would force zero-sum trade, the results suggest instead that the trade balance of both the US and the EU would deteriorate while imports from third party countries would rise.

Further information on the study and details available on the website of the EFICENT-OEF macro programme.



EUROPEAN FOREST GOVERNANCE – ISSUES AT STAKE AND THE WAY FORWARD

HELGA PÜZL, EFICEEC-EFISEE

Between 2012 and 2013 an international group of researchers, chaired by **Peter Mayer**, Austrian Research Centre for Forests – BFW, joined forces in assessing systematically European forest governance.

Besides major achievements– existence of a de-facto EU forest policy, substantial contribution of the pan-European level to forest policy-making and the establishment of a cross-sectoral nature of forest governance – the study also uncovered five main challenges: (1) lacking EU coordination and

coherence of forest policies; (2) inconsistency of policy goals in the EU as well as (3) a missing EU external competence for forests, (4) lacking mechanisms for representation and participation as well as (5) deficits in national implementation in Pan-Europe. In response to this, governance approaches also used in other policy arenas were critically reviewed with a view to their possible application in the forest domain. The study thereafter systematically identified multiple solution paths and three

future action scenarios both for the EU and pan-Europe to move ahead.

This study, initiated by the ThinkForest platform and funded by the German Ministry of Food, Agriculture and Consumer Protection, has now been published in the EFI “What Science Can Tell Us” series. In addition, a ThinkForest Policy Brief has been produced. Both are available for download at ThinkForest website.



LIVING WITH STORM DAMAGE TO FORESTS

BARRY GARDINER, INRA, ANDREAS SCHUCK AND CHRISTOPHE ORAZIO, EFI, MART-JAN SCHELHAAS, ALTERRA, KRISTINA BLENNOW, SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES (SLU)

Wind is a major disturbance agent to European forests. More than half of all damage to forests by volume in Europe is due to wind and there is a worrying, increasing trend in damage levels. Understanding the process of wind interactions with forests, the impact of forest damage, the potential for preventive responses, and the prospects for the future are important for people engaged in the forest based economy, for forest ecologists, for regional planners, and for anyone concerned with the continued sustainability of forests and the forestry sector.

EFI recently published in its series, ‘What science can tell us’, and a book entitled, ‘Living with storm damage to forests’. 27 experts contributed to bring together, in one place, the latest scientific understanding of the many facets of storm damage to forests. It constitutes a comprehensive review of the impact of destructive storms to European forests and gives a thorough and wide-ranging review of each aspect of storm damage in a format and style that is readily accessible to specialists and non-specialists alike and provides recommendations for further reading for those who wish to explore topics in more details. The publication is available here.

BRIDGING THE GAP BETWEEN KNOWLEDGE AND INNOVATION

Stakeholders from the Trees4Future project met in Nancy, France to discuss the contribution that trees can make to the green bio-economy, and how research, technology development and innovation (RTDI) in the forestry sector can be better implemented.

There were interactive discussions on the challenges facing forest research in the fields of genetics and genomics, with participants debating how the impact of genetics and genomics innovation can be increased and how access to innovative tools can be improved. It was concluded that there is a need for support for interdisciplinary integration and training, and to approach the topic holistically with an improved science-based understanding of

increasing opportunities and reduced risks. The seminar also focused on the work of the Trees4Future project in providing infrastructures, models and tools that may increase the impact of innovation. An innovative new ‘climate matching tool’, which will be developed as a web application for the Trees4Future website, was demonstrated. For any given site, the tool shows where climates are similar today, and what might happen to the site in the future under different climate models.

www.trees4future.eu



Christophe Maitre

IFSA: where motivated forestry students gather

IFSA, the International Forestry Students' Association, is the largest network of forestry students worldwide. IFSA has 58 member associations (forestry student clubs in different universities, also called "LC, Local Committees") from 37 countries. For 41 years, IFSA has gathered LC representatives from all over the world for the annual International Forestry Students' Symposium. Beyond that, IFSA attends different forestry related international processes as observers. IFSA represents

forestry students, especially for addressing forestry education issues. One could say that IFSA members have already begun their international career, even during their university studies.

EFI is one of the professional partners of IFSA. There is a Liaison Officer for EFI who assists IFSA President to maintain good communication between the two organizations. Through this cooperation, EFI publications are distributed to IFSA members, every member is encouraged to apply for traineeship in EFI, and encouraged to attend the EFI Annual Conference as an IFSA delegate. IFSA appreciates EFI's support and trust, which helps forestry students to continue learning outside of classrooms and forests.

For more information about IFSA, please visit www.ifsa.net or contact IFSA Liaison Officer for EFI: efi.lo@ifsa.net



Petya Hristova

My name is **Ping-Lian Wu**. I was the Vice President of IFSA in 2010–2011. During that time I was responsible for coordinating internal organizational affairs. I initiated the first IFSA Asian Regional Meeting, which was organized in Taiwan in 2010.

In spring 2013, I worked as a trainee in the EFICIENT-OEF Regional Office in Nancy, France for an experimental project on visualizing consumption,

production and trade of the forestry sector. More details about traineeship results can be found here.

I received my Bachelor's degree in forestry and resource conservation from the National Taiwan University, Taiwan in 2010. Currently I am studying in M.Sc. Sustainable Resource Management in Technische Universität München, Germany. The topic of my Master's Thesis is, "Calculation of potential resource quantities for competing timber uses in Bavaria; An application of the Onion Model". It addresses multifunctionality of Bavarian forests and the sustainable usage of forest resource under increasing demand for bio-energy, wood material use and environmental awareness.



Ping-Lian Wu

My name is **Vladislav Vejnovic**, and I am from the Republic of Serbia. This year I am working as an official in the International Forestry Students Association. My task is to be the liaison officer between my organization and EFI. So basically, I have to maintain regular contact with both the IFSA and EFI officials, while working with both parties to find suitable arrangements for collaborative activities. I got involved in IFSA two years ago, and since then my life has changed completely. When I joined this interesting network I was expecting good fun with other students from all around the world, but I was more fascinated how developed IFSA is as an organization. Apart from that, I received my Bachelor's degree at Faculty of Forestry in Belgrade, Serbia. Right now I am studying my Master's degree in European Forestry in Joensuu, so being a Liaison Officer is not so hard since Headquarters of EFI is in front of my faculty. This year I participated in the EFI 20th Annual Conference in Nancy, France, and I am really thankful that I spent a week with elite scientist and great people.

PAU COSTA FOUNDATION AWARDED



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gestión de incendios
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& management
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Emergency management expert systems (EMXSYS) and the Pau Costa Foundation have been named winners of NASA Word Wind Europe Challenge, a competition that developed in the framework of the EU INSPIRE Conference in Florence during the 24–27 June, 2013. The project was jointly defended by **Bruce Schubert**, Director of Emxsys, and **Marc Castellnou**, President Pau Costa Foundation.

The Pau Costa Foundation holds journal clubs and periodic meetings for a group of people who are interested to debate some predetermined topics. They are morning-field-debates, free and opened to all who want to learn, ask and discuss topics with experts.



Petra Kohlstädt

NEW PRESIDENT FOR IBFRA

Rasmus Astrup at Forest and Landscape, Norway has been elected president of the international forest research organization International Boreal Forest Research Association (IBFRA). Astrup currently heads the work of the Department of Forest Resources at Forest and Landscape, where Climate Center and National Forest Inventory are important sections.

The purpose of IBFRA is to develop research collaboration and knowledge sharing between countries, institutions and researchers in the areas covered by the northern, boreal forest belt which makes up 25 percent of the world's forest cover and contains 45 percent of the world's standing forest biomass.

NATURAL RESOURCES INSTITUTE FINLAND

MTT Agrifood Research Finland, the Finnish Forest Research Institute (Metla), the Finnish Game and Fisheries Research Institute (RKTL) and the statistical services of the Information Centre of the Ministry of Agriculture and Forestry (Tike) are to be merged under a new entity called 'Natural Resources Institute Finland' as of 1 January 2015.

The rationale for establishing the new Natural Resources Institute Finland is to boost natural resources research, which is fundamental for building a future for bio-economy. The needs of

decision-makers, businesses and other clients are growing, and the challenges facing societies are becoming increasingly complex. Natural Resources Institute Finland will look for increasingly integrated solutions to societal problems.

Natural Resources Institute Finland will be the second largest research institution in the country and one of the biggest clusters of bio-economy expertise in Europe. In 2012, the total output of the institutions was more than 1,700 person-years of research, and their combined turnover was approximately EUR 140 million.

IMPROVED INFORMATION ON FOREST STRUCTURE AND DAMAGES



The FP7 European Forest Downstream Services (EUFODOS) Project focuses on the development of services for surveying forest damage and investigating forest parameters, which can be used for economic assessments or as a basis for targeted management of protective forests. These services comprise, for instance, a rush service on assessing storm damage, a more targeted non-rush service damage assessment on various damages like storm, forest fire, snow brake, insect damage detection and assessment and a

change detection approach assessment. The latter can be applied on any area with any remote sensing data and was demonstrated over a region of almost 8,000km² using SPOT data with 10m spatial resolution.

For the effective identification of various forest damages and for an operational derivation of forest parameters, Copernicus Down Stream Services were developed in EUFODOS between 2011–2013.

As an outcome of EUFODOS, it is envisaged to establish a Pan-European Forest Monitoring Service as a regular mapping

service in order to provide information on forest damage such as storms and spread of insect infestations for European states in a uniformed approach. Such a service may be considered as a complementary action to the initiative for investigating the framework for a European Forest Risk Facility.

Additional information about the EUFODOS project can be downloaded at www.eufodos.info

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European forest biomass shows signs of carbon sink saturation

The carbon sink services provided by European forests were predicted to be functional for decades. However, since 2005 there have been signs of sink saturation, states the international team of authors led by former EFI's Assistant Director Gert-Jan Nabuurs, currently from Alterra, Wageningen, in their recent paper in *Nature Climate Change*. The authors suggest that declining volume increment of trees, deforestation rates and higher vulnerability to natural disturbances such as fires, storms and insects play a part in this slow-down.

EUROPEAN FORESTS ARE MATURE

Carbon sinks remove CO₂ from the atmosphere and the Kyoto Protocol has promoted their use as a form of carbon offset. Nabuurs and his colleagues looked at forest inventories for the whole European area and found that since 2005 there has been a decline in the rate of tree volume increase, and therefore also in sink capacity. This was calculated using the average annual volume of forest increment minus the average annual volume of harvest and other losses of trees. The authors suggest that a few conditions may explain this. As European forests are increasingly mature, they are dominated by older trees. This condition, combined with reduced nitrogen deposition from the atmosphere and decreased summer air humidity due to climate change, can explain the lower growth in forest volume that curbs the carbon sink. In addition, urban sprawl and

infrastructure expansion are driving deforestation rates, even if only on a modest scale, with effects on the sink strength. Finally, evidence shows that the older European forests are more susceptible to damage caused by natural disturbances, leading to release of carbon into the atmosphere.

CHANGE IS NEEDED

The authors conclude that, although managed European forests are closer to capacity than previously thought, changes in management practices can improve volume growth and slow down saturation of the carbon sink. While there is no one solution that would be suitable for all, the authors point out that a change in the way we value our forests is needed. A more regional spread of forest functions over Europe may be needed; where there are regions with enhanced conservation and regions where the production of wood receives more attention, with enhanced rejuvenation.

'Countries should realize that a carbon sink in the forest biomass cannot be sustained forever. Only through a locally adapted management can a balance be found between a sink in the forest, and a continuous flow of wood products and biomass for bio-energy. A carbon sink is only one function of the forest, and should be valued with respect to other services and products, sometimes going beyond the boundaries of the forest sector. This calls for better coordination of policies beyond those that deal directly with forest and forest management', says Nabuurs.

The paper, "First signs of carbon sink saturation in European forest biomass", by Gert-Jan Nabuurs, Marcus Lindner, Pieter J. Verkerk, Katja Gunia, Paola Deda, Roman Michalak and Giacomo Grassi has been published in *Nature Climate Change*. The research has been partly carried out in the connection of the COST Action Echoes, as well as EU funded projects MOTIVE, Trees4Future, Volante and GHG-Europe.

THINKFOREST
a high-level science-policy forum

Emerging opportunities for EU-Russia cooperation on forest-based sector governance

December 13, 2013, 10:00-13:00 Santa Claus Hotel, Rovaniemi, Finland

- Experiences from the EU and Russian frameworks on forest policy and governance
- Outlook for the European and Russian forest sector: emphasis on synergies and business opportunities
- Potential impacts of Russia's WTO membership for the European and Russian forest sectors

Hosted by Chaired by
Sari Essayah Göran Persson
MEP President of ThinkForest

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SENIOR EXPERT IN RUSSIAN FOREST SECTOR MARKETS AND POLICY APPOINTED



Dr. **Elena Kulikova** has been appointed as a Senior Expert in Russian Forest Sector Markets and Policy for the Foresight and Policy Support Programme. She will start her service at EFI in February 2014, and will be based at the EFI Headquarters in Joensuu, Finland.

Dr. Kulikova has more than 10 years of experience in working on forest sector governance in Russia. She is currently working as Forest Programme Head at the World Wide Fund for Nature (WWF) in Russia. She has previously worked as a Head of Division in the Ministry of Natural Resources of the Russian Federation and as a Deputy Director in the Federal Forestry Service of the Russian Federation, which has provided her with an excellent understanding of the main Russian forest sector stakeholders (industry, NGOs, administration, research), their challenges, needs and expectations.

The Senior Expert will be responsible for leading and developing policy support and research work in the indicated field in the Foresight and Policy Support Programme. Furthermore, she will also promote and coordinate the Russian forest sector-related policy and research networking activities within EFI, between its member organizations and forest sector stakeholders.

EVENT CALENDAR

EFI EVENTS IN DECEMBER 2013–MARCH 2014

■ **Experiences and future of Sustainable Forest Management (SFM) in Europe**

12 December 2013
Rovaniemi, Finland

■ **ThinkForest event on Emerging opportunities for EU-Russia cooperation on forest-based sector governance**

13 December 2013
Rovaniemi, Finland

■ **International workshop: Forest adaptation to climate change – countries current situation and experiences feedback**

4 February 2014
Paris, France

■ **ThinkForest event on Forest Bioenergy in Europe: Issues at Stake and Policy Implications**

18 March 2014
Brussels, Belgium

Further information

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www.efi.int, under News & Events

Annual Conference:

gathering members together!

Milla Suhoonen / Vastavalo



INRA / Christophe Maitre

The 20th Annual Conference decision making session gathered the core of EFI network together on 23 September. The day consisted of various EFI affairs, with EFI member organizations taking their positions on issues such as the continuation of Regional Offices and starting up new project centers. The Annual Conference is a venue where EFI member organizations can openly discuss and provide critical feedback on EFI matters. All in all, during this year there was more debate and discussion than in previous years. Let's keep the dialogue ongoing!

The main strategic decisions made by the Annual Conference were:

- The continuation of the three Regional Offices (EFIATLANTIC, EFICEEC and EFICIENT-OEF) for the next 5 years as recommended by the EFI Board with certain conditions was approved. All three offices were congratulated for their achievements during their first 5 years of existence.
- The Annual Conference also approved two new project centres: EFIRUS and SURF. The first concentrates on 'Forest Policy and Governance in Russia' and

the latter on 'Supporting the Global Implementation of REDD+, FLEGT'. Welcome to EFI EFIRUS and SURF!

- The Conference approved, after a vivid discussion and voting, the increase of the EFI membership fees for Associate and Affiliate Members in 2014. The fees will rise from 1250 Euros to 1750 Euros for Associate Members and from 1000 Euros to 1400 Euros for Affiliate members. The fees had not been increased since year 2000.

We warmly welcome you all to Bilbao, Spain on 10–12 September for the 2014 EFI Annual Conference !

EFI ANNUAL CONFERENCE 2014

10–12 SEPTEMBER | BILBAO, SPAIN



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