

# European Forest Genetic Resources Programme (EUFORGEN) Phase IV (2010-2014)

## Technical report and financial summary for 2011

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### 1. Introduction

The European Forest Genetic Resources Programme (EUFORGEN) is a collaborative programme between European countries to promote the conservation and sustainable use of forest genetic resources. It was established in October 1994 as a pan-European implementation mechanism for Resolution S2 (Conservation of forest genetic resources) of the first Ministerial Conference on the Protection of Forests in Europe (MCPFE, now called FOREST EUROPE), held in Strasbourg in 1990. EUFORGEN also contributes to the implementation of Vienna Resolution 4 (Conserving and enhancing forest biological diversity in Europe) (2003). Furthermore, EUFORGEN is one of the international activities contributing to the follow-up of the sixth Ministerial Conference of FOREST EUROPE, held in Oslo (June 2011), and included in the new FOREST EUROPE Work Programme adopted in February 2012.

EUFORGEN is financed by its member countries and coordinated by Bioversity International in technical collaboration with the UN Food and Agriculture Organization (FAO). EUFORGEN activities are mainly carried out by experts from the member countries. The EUFORGEN Steering Committee is composed of National Coordinators from all member countries and it has overall responsibility for the Programme.

During Phase IV (2010-2014), the EUFORGEN objectives are as follows:

1. Promote appropriate use of forest genetic resources as part of sustainable forest management to facilitate adaptation of forests and forest management to climate change
2. Develop and promote pan-European gene conservation strategies and improve guidelines for management of gene conservation units and protected areas
3. Collate, maintain and disseminate reliable information on forest genetic resources in Europe.

EUFORGEN carries out its activities through working groups and workshops. The working groups, each consisting of approximately ten experts, are established by the Steering Committee to address specific issues under Objectives 1 and 2. The Steering Committee also defines the tasks, deadlines and expected outputs for the working groups, whose findings are reported back to the Steering Committee for further action. The results of the working groups are also discussed during workshops through which a broader group of experts and stakeholders are engaged in the EUFORGEN activities.

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<sup>1</sup> With effect from 1 December 2006, IPGRI and INIBAP operate under the name "Bioversity International", Bioversity for short.

Under Objective 3, EUFORGEN is maintaining the EUFGIS Portal and its network of National Focal Points that were created during the EC-supported project *Establishment of a European Information System on Forest Genetic Resources* (2007-2011). In addition, the National Coordinators and the EUFORGEN Secretariat contribute to international reporting efforts on forest genetic resources.

This document provides highlights of the EUFORGEN activities in 2011. It also includes a summary on expenditures and financial contributions in 2011. A detailed financial report for 2011 is available as a separate document and has been sent to the member countries.

## **2. Participation in EUFORGEN**

By the end of 2010, a total of 26 countries had officially joined Phase IV and returned a signed copy of the Letter of Agreement to the EUFORGEN Secretariat. These countries are Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Luxemburg, The Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

Of the Phase III member countries, Austria, Belgium, Cyprus, Iceland and Portugal have not yet renewed their membership for Phase IV. The Secretariat has continued the dialogue with these countries, as well as other potential new member countries (e.g. Belarus, Latvia, Ukraine and Russian Federation), and encouraged them to join the Programme. However, no new countries joined the Programme in 2011.

## **3. Pan-European collaboration on forest genetic resources**

### **3.1. EUFORGEN Working Groups**

In September 2010, the EUFORGEN Steering Committee decided to establish three working groups for 2011-2012 on the following topics:

1. Assessment of genetic conservation status of forest trees in Europe and development of pan-European genetic conservation strategies
2. Development of genetic monitoring methods for genetic conservation units of forest trees
3. Development of guidelines for the use and transfer of forest reproductive material in the context of climate change.

The Steering Committee further decided that a workshop on conservation of forest genetic resources should be organized in September 2012, and that the first and second working groups should present their results during this workshop for further discussion. All three working groups are expected to report their findings and recommendations to the Steering Committee at its next meeting in November 2012.

The members of the working groups were selected from the pool of national experts nominated by the National Coordinators (1-3 experts for both Objectives 1 and 2). Each member country has at least one expert in these working groups and the other nominated experts have the opportunity to

contribute their inputs by email and during the workshops. The selection of experts for the three working groups was finalized by the Steering Committee in April 2011. Subsequently, the Secretariat communicated the results of the selection to all experts and initiated preparations for the first meetings of the working groups. Due to several other events and meetings in Europe, only the first working group managed to meet in 2011 and the other two groups scheduled their first meetings to early 2012.

### **3.1.1. Working Group on genetic conservation strategies**

The first meeting of this working group was organized at Bioversity on 2-4 November 2011. It is expected to:

- review the earlier work done by the EUFORGEN Networks
- carry out the assessment of genetic conservation status for model species based on the EUFGIS data
- carry out a review of the knowledge on the genetic diversity of the species
- select the most valuable genetic conservation units from the pan-European perspective
- identify gaps in the genetic conservation efforts
- develop genetic conservation strategies at the level of group of species
- prepare a draft report

The work builds on the EUFGIS project (*Establishment of a European Information System on Forest Genetic Resources, 2007-2011*) and the working group was briefed by the Secretariat on the status of the EUFGIS Portal and the results of the case studies carried out during that project.

The working group recognized that it is important to conserve both adaptive and neutral genetic diversity of forest trees but decided to give priority to adaptive diversity. It concluded that a pan-European conservation strategy should aim at conserving the adaptive diversity of forest trees throughout their distribution ranges. A climatic stratification of Europe will be used as a proxy for characterizing adaptive diversity conserved in the genetic conservation units across the continent. Gaps in conservation efforts will be identified based on country borders and the climatic zones within each country. Furthermore, the working group agreed to select the most valuable genetic conservation units at the pan-European level for the establishment of a core network of dynamic conservation units for model trees species. The selection will be done using the EUFGIS database and each core network should cover all countries and climatic zones within the distribution ranges of a given species. For this purpose, the working group identified 12 model tree species representing stand-forming and scattered species with wide and limited distribution ranges.

The members of the working group developed an outline of the report and allocated tasks for each of them to be done before the next meeting. They also exchanged information on other European projects and initiatives relevant to the tasks. The Italian representative offered to host the second meeting of the working group in Casale Monferrato in February 2012. The full report of the first meeting is available on the EUFORGEN website (<http://www.euforgen.org/meetings.html>).

### 3.2. Development of EUFORGEN Technical Guidelines

In 2011, national experts continued preparing the technical guidelines for genetic conservation of European tree species. These six-page, practical guidelines are targeted for forest managers summarizing the latest scientific knowledge on the species, including distribution maps. Two new guidelines were published for Mediterranean firs (*Abies* spp.) and Macedonian pine (*Pinus peuce*) in 2011 (see Annex 1). All the technical guidelines published so far (32 in total) and the distribution maps are available from the EUFORGEN website ([www.euforgen.org](http://www.euforgen.org)).

Several countries continued their efforts to translate selected guidelines into other languages. The EUFORGEN Secretariat facilitates the translation process by providing a publication template and instructions when requested. The translation and production work is done by national institutions and experts. As part of the translation process, several countries have also developed an additional factsheet providing national-level information for a given species.

The French versions of the technical guidelines for *Populus nigra* and *Quercus petraea/robur* were released in 2011. Table 1 shows a list of tree species for which translated guidelines are now available. Requests for the translated guidelines should be addressed to the National Coordinators.

**Table 1.** List of EUFORGEN Technical Guidelines translated into national languages by the countries (X denotes guidelines translated in 2011, X those translated earlier).

Species	Dutch	French	German	Italian	Slovenian	Spanish
<i>Abies alba</i>		X		X	X	X
<i>Acer campestre</i>				X		
<i>Acer pseudoplatanus</i>				X		
<i>Alnus glutinosa</i>				X		
<i>Castanea sativa</i>				X		X
<i>Fagus sylvatica</i>					X	
<i>Fraxinus excelsior</i>				X		
<i>Malus sylvestris</i>				X		
<i>Picea abies</i>				X	X	
<i>Pinus halepensis</i>				X		X
<i>Pinus nigra</i>		X	X	X		X
<i>Pinus pinaster</i>		X		X		
<i>Pinus pinea</i>				X		X
<i>Pinus sylvestris</i>					X	
<i>Populus nigra</i>	X	<b>X</b>		X	X	X
<i>Prunus avium</i>				X	X	
<i>Quercus petraea</i>		<b>X</b>		X	X	X
<i>Quercus robur</i>		<b>X</b>		X	X	X
<i>Sorbus domestica</i>				X		
<i>Sorbus torminalis</i>				X		
<i>Tilia</i> spp.				X		
<i>Ulmus laevis</i>		X				

### **3.3. European information system on forest genetic resources (EUFGIS)**

The EUFGIS Portal (<http://portal.eufgis.org>) was launched in September 2010 and the EU-supported project ended in March 2011. Since then the Portal has been maintained by EUFORGEN, as agreed by the Steering Committee. Throughout 2011, many national focal points continued their work and uploaded new data on dynamic conservation units of forest trees or revised the existing data in the EUFGIS database.

The dataset for each unit consists of 26 unit level and 18 population level data standards. Before entering the data into the database, the national focal points must check that a given unit meets the pan-European minimum requirements for these units. Both the data standards and the minimum requirements were developed as part of the EUFGIS project, and they have been endorsed by the EUFORGEN Steering Committee. The minimum requirements also explain how the units should be managed so that they contribute to the dynamic conservation of forest genetic resources.

As of December 2011, a total of 36 countries had nominated their national focal points to EUFGIS (Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Former Yugoslav Republic of Macedonia, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Turkey, Ukraine and United Kingdom). At the end of the same year, the portal contained data on 2,369 units, which are managed for the genetic conservation of 92 tree species, including introduced species. The units harbour a total of 3,154 tree populations (a unit may be managed for genetic conservation of one or more tree species).

The total number of tree species shown on the EUFGIS Portal under the Data section may still include subspecies or varieties as some countries have been reluctant to use only species level taxonomic information. Furthermore, there is an ongoing discussion on the taxonomic status of some species which have been entered into the database. Therefore, the number of units shown on the Portal may be different from that indicated above as the data entered is continuously screened and the national focal points may have been asked to correct or revise the data.

The EUFGIS project has improved not only the documentation of conserved genetic resources but also the management of the conservation units of forest trees in Europe. The pan-European minimum requirements for the units have been particularly useful for countries with limited budgets and human resources by focusing their efforts on key management issues. In other countries, the project has increased collaboration between forest owners and managers, forest geneticists and the broader biodiversity conservation community. In addition to conservation work at the national level, the countries have also used the EUFGIS Portal for international reporting efforts, such as the State of Europe's Forests 2011 report and the forthcoming State of the World's Forest Genetic Resources report (2013).

## **4. Activities of the EUFORGEN Steering Committee**

### **4.1. Nomination and selection of experts for the working groups**

After the seventh meeting of the Steering Committee held in Vienna, Austria on 16-17 September 2010, the National Coordinators were asked to nominate national experts to the EUFORGEN pool of experts (1-3 experts for both Objective 1 (FGR use) and 2 (FGR conservation)). The nomination and selection of experts for the three working groups were finalized in April 2011. As no Steering Committee meeting was organized in 2011, this process was done by email, which caused some delays. The National Coordinators nominated a total of 52 experts for Objective 1 and 50 for Objective 2. The names of the experts nominated are listed under each country on the EUFORGEN website.

### **4.2. Collection of information on forest genetic resources in Europe**

In 2010, the UN Economic Commission for Europe (UNECE) and the Liaison Unit Oslo of FOREST EUROPE contacted the EUFORGEN Secretariat and asked it to facilitate the collection of data for Indicator 4.6 (genetic resources) of the pan-European criteria and indicators (C&I) for sustainable forest management. The National Coordinators and focal points in non-member countries played a key role in providing the data requested and the process was finalized in early 2011. The data was published as part of the State of Europe's Forests 2011 report, which was released at the Oslo Ministerial Conference on 14-16 June 2011 (see Annex 1).

### **4.3. State of the World's Forest Genetic Resources report**

The FAO has recognized EUFORGEN as a valuable partner for the development of the State of the World's Forest Genetic Resources (SoW-FGR) report. The Steering Committee has recommended that all countries in Europe should contribute to the development of the SoW-FGR report. Earlier, both the Steering Committee and the Secretariat provided inputs to the planning of the reporting process. In 2011, most National Coordinators facilitated the preparation of country reports or were directly involved in this work. The SoW-FGR report will be presented to the FAO Commission on Genetic Resources for Food and Agriculture (CGRFA) on 15-19 April 2013.

In 2009, CGRFA established a new Intergovernmental Technical Working Group on Forest Genetic Resources (ITWG-FGR) to oversee the development of the SoW-FGR report. This working group has a total of 27 countries as its members and the European region was represented by Finland, France, Italy, Norway and Spain (until July 2011). The first meeting of the ITWG-FGR was held in Rome on 4-6 April 2011. During the next two-year period, the European region will be represented in the ITWG-FGR by Finland, France, Italy, Poland and the Russian Federation.

#### **4.4. Stakeholder consultation on the Community Programme on genetic resources in agriculture**

The European Commission (Directorate-General for Agriculture and Rural Development) carried out a stakeholder consultation on genetic resources in agriculture (including forestry). This consultation, implemented in the form of an online survey, was designed to identify current and future needs, and to explore measures to meet them. The survey was also used for evaluating the previous Community Programme on genetic resources in agriculture (Council Regulation (EC) No 870/2004) that ended in 2011.

In November 2011, the EC sent out an invitation to major stakeholders dealing with genetic resources in agriculture: national administrations; international and European organisations, including farmer and breeder organisations; agricultural and environmental NGOs; and organisations in the seeds sector and food/feed processing and retailing. EUFORGEN was identified as one of the major stakeholders and it was also invited to provide its feedback to the survey. The EUFORGEN Secretariat contacted all National Coordinators and asked them to provide inputs to the survey and to highlight any specific needs of FGR conservation in Europe. Based on the comments received, the Secretariat then completed the online survey in January 2012. EUFORGEN is expected to provide further inputs to the discussion on a possible new Community Programme during 2012.

More information on the Community Programme is available on the website of the DG Agriculture and Rural Development ([http://ec.europa.eu/agriculture/genetic-resources/index\\_en.htm](http://ec.europa.eu/agriculture/genetic-resources/index_en.htm)). The results of the survey will be released on the same website.

### **5. Activities of the EUFORGEN Secretariat**

#### **5.1. Inputs to the FOREST EUROPE process**

The EUFORGEN Coordinator attended two Expert Level meetings of the FOREST EUROPE process in Oslo (15-16 February 2011 and 30-31 March 2011) and provided inputs to the preparations of the sixth Ministerial Conference which was held in Oslo on 14-16 June 2011. Furthermore, the Coordinator provided inputs to preparations of a joint statement of the scientific community that was delivered during the conference. The scientific community of the FOREST EUROPE process consists of Bioversity International, the European Forest Institute (EFI), the International Institute for Applied Systems Analysis (IIASA), and the International Union of Forest Research Organizations (IUFRO). The Coordinator attended the Oslo Conference and organized a public awareness booth to disseminate the results of the EUFORGEN and EUFGIS work to conference participants.

The Conference made two major decisions. Firstly, the ministers decided to launch negotiations for a Legally Binding Agreement (LBA) on Forests in Europe. The ministers consider the LBA as a necessary instrument for balancing the economic, environmental and social functions of European forests. Secondly, the ministers adopted a new strategy for FOREST EUROPE (European Forests 2020). This second decision comprises strategic goals, measurable targets and priority actions at national and international level to enhance sustainable forest management. The negotiations, which started in early 2012, are based on the existing FOREST EUROPE resolutions and declarations as

well as relevant international commitments relating to forests, such as the Convention on Biological Diversity and the UN Framework Convention on Climate Change. The new agreement is expected to be finalized by 2013.

Before the Oslo Conference, the Secretariat also contributed to preparations of two reports on sustainable forest management in Europe. Based on the data collected for Indicator 4.6 (forest genetic resources) through the National Coordinators, the Secretariat prepared a chapter for the State of Europe's Forests 2011 report. The second report was the implementation report of the FOREST EUROPE Commitments (2008-2011) for which the Secretariat prepared a summary of the implementation of Strasbourg Resolution 2 (Conservation of forest genetic resources) based on EUFORGEN and EUFGIS work. Both reports are available on the FOREST EUROPE website ([www.foresteuropa.org](http://www.foresteuropa.org)).

## **5.2. EUFGIS project**

The EUFGIS project (*Establishment of a European Information System on Forest Genetic Resources*) ended officially in March 2011 but the finalization of various project outputs continued until the end of the year. The four-year project was coordinated by the EUFORGEN Secretariat at Bioversity International. The other project partners were the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW) (Austria), the Danish Nature Agency (Denmark), Institut National de la Recherche Agronomique (INRA) (France), the National Forest Centre (NLC) (Slovakia), the Slovenian Forestry Institute (SFI) (Slovenia) and Forest Research (UK). It was co-funded by the EC (€553,860, 50% of the total budget) under Council Regulation No 870/2004 on genetic resources in agriculture and implemented in close collaboration with all EUFORGEN member countries and several associated countries.

In 2011, the closure of the EUFGIS project increased considerably both the administrative and technical workload of the Secretariat. The fourth-year financial report was submitted to the EC in June 2011, and the fourth-year and the overall final technical reports in September 2011. Furthermore, the EC requested an additional executive summary for its own dissemination purposes. The Secretariat and project partners also made numerous dissemination efforts in 2011. These were targeted at policy makers, forest managers, conservation specialists and the scientific community, as well as the general public and students. The final technical report and the list of dissemination efforts are on the project website ([www.eufgis.org](http://www.eufgis.org)).

The outputs of the technical work carried out by the Secretariat include providing helpdesk support to the EUFGIS National Focal Points, screening the quality of the data entered into the database, and contributing to the preparation of case studies. The case studies focused on assessing the dynamic conservation of forest genetic resources in Europe and analyzing the impact of climate change on the dynamic conservation units of forest trees in Europe.

The first case study analysed the geographical coverage of the pan-European network of the dynamic conservation units. More detailed analyses were then carried out using a sample of 11 taxa representing the diversity of situations in terms of species biology and distribution range. The specific objectives of the first case study were to:



1. characterize the pan-European network of the dynamic conservation units and assess the conservation network at the continental scale
2. compare qualitatively different national strategies for FGR conservation
3. identify ecogeographic and genetic gaps in the conservation efforts of the selected tree species
4. use the data available to assess the efficiency and robustness of the dynamic conservation efforts, and propose improvements to the information system for better monitoring.

The second case study focused on quantifying the impact of climate change on the dynamic conservation units and identifying those units which are at the climatic limit of the species' distribution range and most susceptible to climate change. This information is needed for more intensive monitoring and management of units threatened by climate change. It would also help to initiate complementary conservation measures, such as assisted migration or *ex situ* conservation if needed. The specific objectives of the second case study were to:

1. characterize the current climate conditions of the dynamic conservation units of forest trees in Europe and assess the impact of climate change on them
2. analyze how the distribution ranges of selected tree species are expected to shift as a result of climate change and to identify most threatened conservation units
3. provide recommendations for improving the design and management of the conservation network at the pan-European level.

The study was conducted by analyzing the EUFGIS data combined with current climate data from the WorldClim database and predicted climate data based on the MPI-Echam5 model. Furthermore, data sets provided by the ICP Forest Programme were used for modelling the current climate envelopes of the selected tree species.

The first case study was finalized in collaboration with all EUFGIS partners and National Focal Points in December 2011 and submitted to a peer-reviewed journal in January 2012. The second study is being finalized by the EUFGIS partners and it will be submitted in 2012. Additionally, the Secretariat also contributed to the development of a review paper based on the pan-European minimum requirements for the units. This was done to disseminate the results of the EUFGIS project to the broader conservation community at the global level and to raise awareness of the need for active management of FGR as part of biodiversity conservation and forest management. This review paper was prepared in collaboration with the EUFGIS partners and expert group, and the Chairs of previous EUFORGEN Networks. It was also submitted to a journal in January 2012. Details of the papers submitted are listed in Annex 1.

Furthermore, the Secretariat contributed to the preparation of an oral presentation which was delivered by one of the EUFGIS partners at an international conference on forest biodiversity and climate change in Freiburg, Germany on 22-23 Sep 2011. After the conference, a paper was developed based on the presentation for a journal (see Annex 1).

### **5.3. Collaboration with the European Union**

Interactions between the EUFORGEN Secretariat and the EC (DG Agriculture and Rural Development) continued throughout 2011 mainly in the context of the EUFGIS project. The Coordinator also discussed topics relevant to the conservation and use of forest genetic resources with EC officers from the DG Environment and the DG Research and Innovation during various events.

In December 2011, the EUFORGEN Coordinator was invited by the DG Agriculture and Rural Development to contribute to an additional survey which was sent to all coordinators of the 17 projects co-funded by the AGRI GEN RES Programme in 2007-2011. The survey focused on collecting feedback on the work done as part of the projects and how the administration of future AGRI GEN RES projects could be improved. It also identified needs for further action on different types of genetic resources in Europe. The survey results were used for the external evaluation of the AGRI GEN RES Programme that was conducted in early 2012. The EC is expected to make decisions on a possible new AGRI GEN RES Programme by the end of 2012.

### **5.4. Publications and public awareness efforts**

The Secretariat continued supporting national experts in their efforts to prepare the new technical guidelines for genetic conservation and use of European tree species. In 2011, two new technical guidelines were published for Mediterranean firs (*Abies* spp.) and Macedonian pine (*Pinus peuce*) (see Annex 1). In addition to coordinating the editorial process, the Secretariat also further improved existing distribution maps and compiled new ones.

Brief news updates on forest genetic resources in Europe were released on the EUFORGEN and EUFGIS websites. National Coordinators were asked to develop content for the country pages of the EUFORGEN website, which provide a brief overview of how forest genetic resources are managed in their respective countries. Publications and other relevant national information are also displayed on the country pages.

In 2011, EUFORGEN activities were also reported in several articles published in Bioversity's Regional Newsletter for Europe. The Newsletter serves as an informal forum for the exchange of news and views within the genetic resources community in Europe.

### **5.5. Other activities**

The EUFORGEN Secretariat contributed to the development of a successful project proposal for a call (KBBE.2011.1.1-04: Sustaining and managing forest tree genetic resources) under the EC's Knowledge Based Bio-economy (KBBE) Programme. The proposal development was coordinated by Alterra (The Netherlands) and the consortium includes BFW (Austria), Metla (Finland), INRA (France), vTI (Germany), EMK (Hungary), CNR (Italy) and UKW (Poland) in addition to Bioversity. The proposal, entitled *Towards the Sustainable Management of Forest Genetic Resources in Europe* (FORGER), was submitted to the EC in January 2011 and it was accepted in May 2011. The grant

agreement with the EC was then signed in December 2011 and the project was started in March 2012 for a period of four years.

The project has five objectives:

1. to improve inventories on forest genetic resources in Europe by linking the EUFGIS and GD<sup>2</sup> databases
2. to assess the current distribution of genetic diversity and how forest genetic resources are conserved in selected tree species at pan-European level
3. to assess both the future distribution of genetic diversity of selected tree species at pan-European level under climate change and the adaptation options by forest management
4. to develop a common protocol for measuring and monitoring genetic diversity of tree populations at pan-European level
5. to improve guidelines and recommendations for transfer of forest reproductive material and management of forest genetic resources in gene conservation units and production forests.

Bioversity is leading the work package on dissemination, communication and knowledge transfer. The project provides additional funding for the maintenance and further development of the EUFGIS Portal as well as organizing EUFORGEN meetings. In 2012, the project will organize expert consultations with the three EUFORGEN Working Groups. The EUFORGEN Steering Committee is also recognized as a key stakeholder and it was invited to nominate two representatives to the External Advisory Board of the FORGER project.

In April 2011, the Secretariat was invited by FAO to deliver two presentations during a Special Seminar of the 1<sup>st</sup> Session of the Intergovernmental Technical Working Group on Forest Genetic Resources (ITWG-FGR). The Secretariat staff also attended the ITWG-FGR meeting as observers. The presentations were based on the EUFORGEN and EUFGIS work and they are available on the EUFGIS website (<http://www.eufgis.org/dissemination/presentations.html>).

## **6. Wider influences of EUFORGEN**

### **6.1. EVOLTREE Network**

Since January 2011, the EVOLTREE Network (Evolution of Trees as Drivers of Terrestrial Biodiversity) has been operating under the framework of the European Forest Institute (EFI). EVOLTREE brings together four major disciplines (ecology, genetics, genomics and evolution) to facilitate research on climate change and forest biodiversity. EVOLTREE activities now focus on maintaining the common research infrastructures which were established during the EC-funded project in 2006-2010 (databases and intensive study sites) and providing training (short courses and summer schools). Currently EVOLTREE has 23 member institutes (including Bioversity International) and all interested institutes are welcome to join it.

In 2011, the EUFORGEN Secretariat continued its collaboration with the EVOLTREE Network. The EUFORGEN Coordinator attended the annual EFI Scientific Seminar and the EVOLTREE Governing Board meeting in Uppsala, Sweden on 29-30 September 2011. After the departure in 2010 of Bioversity's Regional Director for Europe, the EUFORGEN Coordinator was requested by Bioversity

to represent Bioversity in the Governing Board. Further information on EVOLTREE activities is available from its website ([www.evoltree.eu](http://www.evoltree.eu)).

## **6.2. FORESTTRAC project**

In 2011, the EUFORGEN Secretariat collaborated with the FORESTTRAC project (Forest Ecosystem Genomics Research: Supporting Transatlantic Cooperation), which is a coordination and support action (2010-2011) funded by the EC's seventh framework programme for research. The main aim of the project is to prepare a strategic research roadmap between Europe and North America on the adaptation of forest trees to climate changes. The project is coordinated by INRA (France) and has a total of 11 partners from Europe, Canada and the USA, including Bioversity.

The Secretariat provided some inputs to a review on relevant projects, programmes and research infrastructures in Europe and North America, as well as to the development of the research roadmap. Furthermore, the EUFORGEN Coordinator participated in the stakeholder event organized by the project in Brussels on 26 October 2011. The purpose of the event was to present the draft research road map for further discussion with invited stakeholders and EC officers from different units. More information on FORESTTRAC is available on the project website ([www.foresttract.eu](http://www.foresttract.eu)).

## **7. Financial summary for 2011**

In January 2011, the opening balance of the EUFORGEN trust fund was US\$ 188,801. During 2011, Bioversity International received a total of US\$ 307,125 as financial contributions from member countries (this included US\$ 6,875 as outstanding contributions for 2009). In December 2011, the outstanding contributions for Phase IV were US\$ 54,250 (Denmark, Greece, Hungary, Romania and Spain) and US\$ 33,700 for Phase III (2005-2009) (Georgia, Iceland, the Former Yugoslav Republic of Macedonia, Moldova and Portugal). The Secretariat has reminded these countries regarding their outstanding financial contributions.

The Secretariat continued prudent management of the financial resources in 2011. As the number of Phase IV member countries (26) is lower than expected (31), spending cuts were also implemented. Additional savings were created by the European projects (EUFGIS, EVOLTREE and FORESTTRAC) which covered some Secretariat staff time in 2011.

The planned budget for 2011 was US\$ 392,110 but the actual total expenditure in 2011 was only US\$ 300,636. The closing balance of the trust fund was US\$ 195,290 on 31 December 2011 and it was carried forward for 2012. A detailed financial report for 2011 is available as a separate document and has been sent to the member countries.

## **Annex 1: Publications and reports in 2011**

### **EUFORGEN publications**

Alexandrov, A.H. and Andonovski, V. 2011. EUFORGEN Technical Guidelines for genetic conservation and use of Macedonian pine (*Pinus peuce*). Bioversity International, Rome, Italy. 6 p.

Alizoti, P.G., Fady, B., Prada, M.A. and Vendramin, G.G. 2011. EUFORGEN Technical Guidelines for genetic conservation and use of Mediterranean firs (*Abies* spp.). Bioversity International, Rome, Italy. 6 p.

### **Publications resulting from EUFORGEN/EUFGIS work**

FOREST EUROPE, UNECE and FAO 2011. State of Europe's Forests 2011. Status and Trends in Sustainable Forest Management in Europe. FOREST EUROPE Liaison Unit Oslo, Norway [chapter "Indicator 4.6. Genetic resources", pp. 81-83].

Forest Europe 2011. Implementation of the FOREST EUROPE Commitments. National and Pan-European Commitments 2008-2011. FOREST EUROPE Liaison Unit Oslo, Norway [chapter "Strasbourg Resolution 2: Conservation of Forest Genetic Resources", pp. 69-70].

Schueler, S., Kapeller, S., Konrad, H., Geburek, T., Mengl, M., Bozzano, M., Koskela, J., Lefèvre, F., Hubert, J., Kraigher, H., Longauer, R. and Olrik, D.C. Adaptive genetic diversity of trees for forest conservation in a future climate: a case study on Norway spruce in Austria (manuscript).

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