



# AgroBiodiversity Ireland 2012

## ‘Conservation and sustainable use of forest genetic resources in Ireland’

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Department of  
**Agriculture,  
Food and the Marine**  
An Roinn  
**Talmhaíochta,  
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# Overview of Presentation

- (1) General introduction to forest genetic resources with particular reference to Ireland.
- (2) Historical and recent developments in the Irish forest genetic resources sector.
- (3) European Perspective - European Forest Genetic Resources Network (EUFORGEN).
- (4) Report on the first “State of the Worlds Forest Genetic Resources – Recent FAO Report”.



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# Introduction to forest genetic resources

First question to ask ourselves

What are Forest Genetic Resources? – They constitute the genetic resources of both native and introduced forest tree species and encompasses the following elements:

- The genetic material (tree itself and its component parts - seed, cones, fruit etc.).
- Stands of trees - national gene conservation areas - safeguard and protect that resource on a continuous and at a sustainable level.



## Introduction to forest genetic resources (continued)

- National tree improvement programme/s to fully develop and utilize that resource on a sustainable basis.
- National research and development programme to support the continuance and future development of forest genetic resources in the country - FORGEN.
- The implementation of national and EU regulation governing use of such material resources.

# Historical Development of forestry in Ireland

- In earlier times Ireland covered in mixed forest
- For centuries suffered from over-exploitation of our forest resource (approx. 1.5% in 1900).
- A revival in early 1900s - but mainly with exotic coniferous species - several reasons.
- Predominantly State - to develop a sufficiency in supply of timber and to displace imports.
- More recent – a rapid rise in broadleaf species particularly native species.
- Mainly by private owners = farmers (18,500).
- Almost 11% of land area now under forests.
- Current planting levels are at an annual rate of around 7,500 ha/annum (2010).



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## Recent development of forestry in Ireland

- A very vibrant forest industry now in Ireland with an estimated output of €1.89 billion.
- Approximately 16,500 employed in sector.
- Not only a national timber resource but also provide several other additional services (recreational facilities, employment opportunities in rural areas, aesthetic values, shelter for people, crops and animals, an important carbon store, also reduces pollution, prevents flooding as it reduces water run-off, re-establishing lost woodland biodiversity and lost woodland culture).



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# Development of forestry (recent milestones)

- ‘Growing for the Future – A Strategic Plan for the Development of the Forestry Sector in Ireland’ (1996)
- Expand the developing forestry sector – a large area of marginal agricultural land – (ideally suited forestry and ideal climate)
- Planting targets set at 25,000ha per annum up to year 2000 and 20,000ha to year 2030.
- Envisaged a critical mass of 10 million M<sup>3</sup> (from 2.2 million M<sup>3</sup>)
- Increase in broadleaf planting (20% - 30%)
- Reduction of area of Sitka spruce (from 60%)



## Development of forestry (recent milestones continued)

- Millennium Woodland Scheme.
- Native Woodland Scheme (2001).  
Helping secure a future for Ireland's native woodlands.  
To encourage the proactive protection and expansion of Ireland's native woodland resource and associated biodiversity using appropriate 'close-to-nature' silviculture.
- Riparian woodland guidelines
- National Forest Inventory (2004/2006)
- National Survey of Native Woodlands (2003/2008)





## Forest Genetic Resources in Ireland

- Limited work in earlier period on conservation of forest genetic resources.
  - Membership of EUFORGEN in 1989
  - COFORD Discussion paper in (2000) – A North/South initiative (COFORD, Coillte.) Genetic conservation of indigenous species with proposed ‘actions’
  - Led to establishment of COFORD ‘Working Group’
  - Published ‘Sustaining and Developing Ireland’s Forest Genetic Resources – An Outline Strategy’ in 2007
- Issued a list of key findings and recommendations



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## European perspective

- European Forest Genetic Resources Network. (EUFORGEN – Established in 1994)
- EUFORGEN is coordinated by International Plant Genetic Resources Institute (IPGRI), now Bioversity, in collaboration with the FAO Forestry Department.
- IPGRI's mandate is to advance the conservation and use of genetic diversity for the well-being of present and future generations
- Many geographical regions of Europe are ecologically diverse.
- Ministerial Conference for the Protection of Forests in Europe (MCPFE) - Oslo 2011

## European perspective

“The European Forest Genetic Resources Programme (EUFORGEN) is a collaborative programme among European countries aimed at ensuring the effective conservation and the sustainable utilization of forest genetic resources in Europe”

Currently about 30 member countries including Ireland

Each country appoints a national co-ordinator



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# European perspective (Forest Europe) A number of Ministerial Conferences on Protection of Forests in Europe (MCPFE)

Strasbourg(1990) Resolution 2: To facilitate and extend the efforts at national and international levels, a functional but voluntary instrument of international cooperation should be found without delay from among the existing relevant organisations to promote and coordinate:

- 1.1 in situ and ex situ methods to conserve the genetic diversity of European forests;
- 1.2 exchange of reproductive material;
- 1.3 the monitoring of progress in these fields.



## European perspective

- Temperate, boreal and Mediterranean types  
However, many tree species have wide distribution across several countries.
- European foresters share similar traditions
- European forests and native tree species also subjected to major human impact
- Forest decline, introduction of exotics more recently climate change.
- All issues of concern to EUFORGEN.



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# European perspective

- Geographic regions Europe are ecologically diverse.
- Temperate, boreal and Mediterranean types  
However, many tree species have wide distribution across several countries.
- European foresters share similar traditions
- European forests and native tree species also subjected to major human impact
- Forest decline, introduction of exotics and more recently climate change.
- EUFORGEN is working at addressing all these issues



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# The State of the World's Forest Genetic Resources - Ireland

- As EUFORGEN National Co-ordinator nominated to facilitate the preparation of national Country Report.

- Re-activated the National Consultative Committee on Forest Genetic Resources

Report contains:

- Executive summary.

- Introduction to Ireland and its forests.

- Also provides background information on Irish forestry.

- It quantifies the current state of Ireland's forest genetic resources (useful reference).



# The State of the World's Forest Genetic Resources - Ireland

Also contains information on:

- The state of *in-situ* forest gene conservation in Ireland.
- The state of *ex-situ* forest gene conservation in Ireland.
- The state of use and sustainable management of forest genetic resources in Ireland.
- The state of Irish national programmes, research, education, training and legislation.
- The state of regional and international collaboration



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# The State of the World's Forest Genetic Resources - Ireland

Report (continued):

- Access to forest genetic resources in Ireland and sharing of benefits arising from their use.
- The contribution of forest genetic resources to food security, poverty alleviation and sustainable development.



# The State of the World's Forest Genetic Resources - Ireland

The Report has been submitted to FAO but is also being published by COFORD and it will be available to download from:

[www.coford.ie](http://www.coford.ie)

or

To purchase when available through the same website



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## The Future

### Call for Forestry Research Proposals on Forest Genetic Resources in 2010

In December 2011 the successful consortium's new programme – ForGen - was accepted by Department of Agriculture, Food and the Marine to the value of €1.6million over four years.

This programme guarantees the continuance of Work on forest genetic resources into the future



In conclusion

Thank you for your attention

Questions

[www.coford.ie](http://www.coford.ie)



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