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## MSc European Forestry (2006-2008)

University of Joensuu  
University of Freiburg, IFP

AP Presentation: ( 09 Oct -22 Dec 2006)

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# Outline

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- Host Institution
- Biodiversity of Forests
- Main Project



# IFP

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- To Develop Methodological tools
  - > to analyse the relationship between various actors of the environment and
  - > to apply them significantly to national, international forest and environmental fields
- Predominantly financed by 3<sup>rd</sup> parties
- Scientific consultancy
- curriculum

# Evaluation of IFP

- Team Spirit
- Leadership
- Network and collaboration

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- Scarcity of scientific Journals
- Uneven level of commitment

	Projects (Completed and Ongoing)	Publications		
		2004	2005	2006
Forest and Environment Policy	14	19	12	9
Markets and Marketing	2	5	1	7
Forest History	3	3	2	0

## Evaluation of my AP

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- Learned more about specific field of interest
- Explored organizational culture
- Future contact and network
- Improved written and oral skills
- Building resume
- Cultural exchange
- Bridge between study and work

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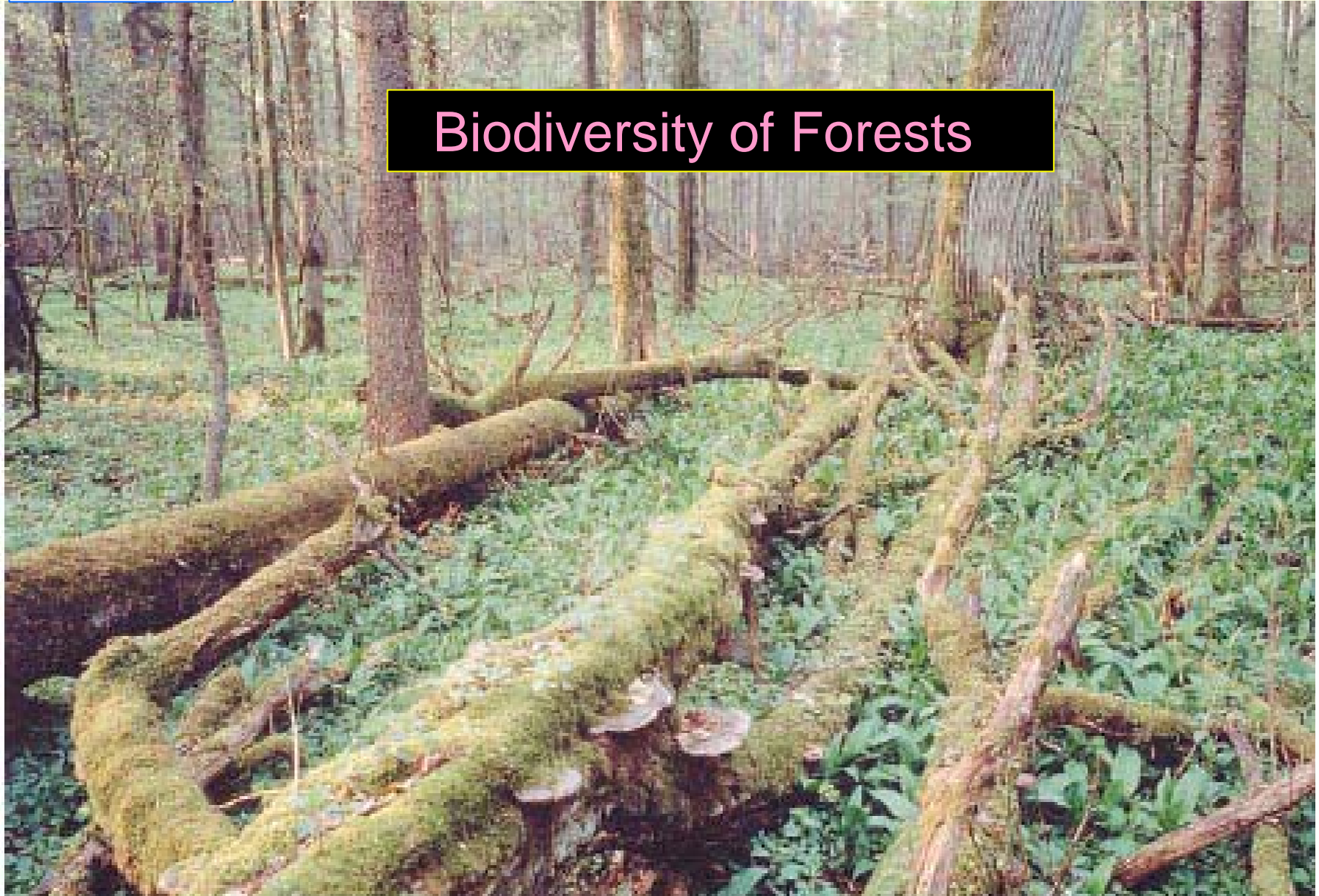
- Literature research
- Independent work
- The 'Guideline for AP'



Federal Ministry for the  
Environment, Nature Conservation  
and Nuclear Safety

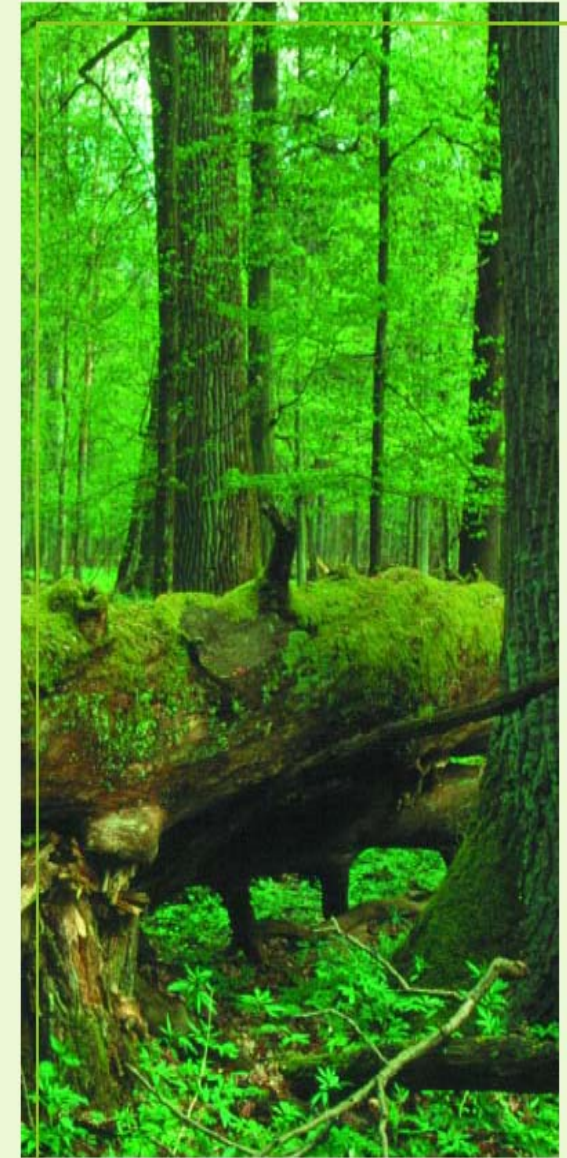


## Biodiversity of Forests



# Forest Protected areas: *The Case of Finland, Germany and Ethiopia*

- Protected areas (PA): critical role in conservation of biodiversity and maintaining genetic resources.
- PA protect important ecosystem functions & help to conserve fragile human communities & cultural landscapes
- App. 11.5% earth's land surface are PA, 10% of the world forest are in PA
- Objective of this case study: to compare the forest conservation activities of three different countries with major emphasis on protected forest areas.



# Questions & Methodology

## Queries addressed

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- Status of Forest PA in the selected countries?
- What types of forest protection are established?
- Do suitable policies & legislation for forest protection exist?

## Materials and Methods

- Countries progress reports
- CBD Country reports
- NFP
- Mail Exchange
- Expert Interview



# I. Finland

## 1. Background

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- Boreal vegetation zone
- Most Forested Country in Europe (> 70%)
- 4 ha forest area per capita
- Over 60 % private, 34 % state, the rest by industries and others
- Forestry contribution to socio-economics is relatively high

## 2. Forest Protected Areas

- Finnish Nature PA are 2.8 mill. ha (11% land area) and consists of 1.3 mill. ha of forest (6.5 %) of the total forest area
- Leading European countries in strictly protected forests

### 2.1. IUCN, 2003 categories:

- I & II.....3 %.
- III, IV & V.....0.2%
- VI & Unclassified.....5.7%

## 2.2. UNEP-WCMC, WDPA

National designation		International Convention and programs	
Grey seal protected area	7	Wetland of International importance (Ramsar)	49
Herb rich forest reserve	53	World heritage convention	11
National park	35	UNESCO-MAB Biosphere reserve	2
Old growth forest reserve	92	Helsinki convention	8
Private Nature reserve	3036	Birds directives	15
Protected Mire	173	European diploma Type 'B'	2
State Nature Reserve	58		
Wilderness Area	12		

## 2.3. Policy framework

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- Forest protection is assured by Forest Act (1093/1996)
- Nature conservation Act

## 2.4. Institutional framework

- State Owned protected areas are managed by [Metsähallitus](#)
- Finance from Government and EU
- Natura 2000 program

## 2.5. Design and Management

- Forests under strict protection are located in peripheral, less productive and sparsely populated areas.
- Deficiency (<1%) of strictly protected forests in the Southern part where most biodiversity and threatened species are located.
- 2/3 of forests are owned by private sectors

## 2.6. International comitment

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- Submitted 8 national and 1 voluntary report for the CBD
- Relatively adequate and free access of information for the audience at all levels (Internet)
- Completed Natura 2000 network
- NFP 2010 is prepared as a committment to stop the decline of species by the year 2010

# Summary I

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- Forest Protection practiced mainly in state owned lands
- Finland satisfies MCPFE criteria:
  - > Legal status
  - > Long term Commitment
  - > Explicit designation,
- However, landscape management and ecosystem approach overlooked

## II. Germany

### 1. Background

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- Semi-natural forest (conifers: 2/3 of the growing stock, hardwoods 1/3)
- Total forest coverage 11 mill ha (31%)
- 46% private, 34% state, 20% communal
- Average forest area per capita: 0.13 ha
- Forestry plays a minor role in the overall GDP

### 2. Forest protected Areas

- Total protected area 31.7% of the total land area.
- 9% of the woodlands are strictly protected under the Forest and nature conservation act
- Leading EU country in proportion of protected forests to the total forest cover

#### 2.1. IUCN 2003 Categories

- I & II..... 0.5 %
- III, IV & V.....28 %
- VI..... 3.5 %

## 2.2. UNEP-WCMC, WDPA

National designation		International Convention and programs	
Hunting reserves	2	Wetland of International importance (Ramsar)	32
Landscape protection area	951	World heritage convention	32
National park	14	UNESCO-MAB Biosphere reserve	14
Nature Park	78	Helsinki convention	8
Nature Reserve	6215	Birds directives	4
Other Area	3	European diploma Type 'A'	4
Wetland Zone of national importance	2	European diploma Type 'B'	2
		European diploma Type 'C'	2
		Council of Europe biogenic reserves	2

## 2.3. Policy Framework

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- Legislative power is shared between Bund and Bundeslaender
- The Federal Forest Act is formulated based on these two constitutional basics
- The Act emphasizes forest-conservation, sustainable management and multiple forest function

## 2.4. Institutional framework

- Forest management is mainly the tasks of individual Bundeslaender
- Competence shared between Federal and State level
- Financed by Federal and State governments and EU
- Europarc Germany
- Natura 2000



## 2.5. Design and Management

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- Detailed mapping of all forests are performed in 7 Laenders
- Formal NFP process launched in 1999, At Decision phase
- Action programs 'Save the forests' and 'Close to nature management'
- Ecosystem approach and landscape management

## 2.6. International commitments

- Submitted 8 national, 2 voluntary reports
- Achieving 2010 biodiversity targeted
- 11 priorities with 42 measures are defined and compiled in a strategy on which the Federal Go/state forest activities have been based on since 2000.
- Forest biological diversity assessment is underway
- Enhanced International cooperation on worldwide conservation of forests by its various development cooperation.

## Summary II

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- Better distribution of Forest protected areas
- Close to nature silviculture
- Limited access for information (details in German)
- High overlap of protected areas
- Protected forest network is established in state owned lands
- Strict protection of forests relatively expensive
- Based on MCPFE, criteria:
  - > Lack explicit designation for biodiversity and other protective elements

## III. Ethiopia

### 1. Background

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- Broad leaved rain forests
- Forest area in 2000 as a percentage of total land area was 4.2%
- Forests are mainly state property
- Average forest area per capita was 0.25 in 1995
- Trees outside forests (10.2 mill rural households with 51 mill trees)
- Forestry plays a minor role in the overall GDP

### 2. Forest protected Areas

- Protected area as percentage of total land area, 2003 equals 16.4%
- Percentage of forest protected area 18.8% Tropical and 21.4% sparse trees and parklands.

#### 2.1. IUCN, 2003 categories:

- I & II..... 2.5 %.
- III, IV & V.....2.1 %
- VI & Unclassified..... 12 %

## 2.2. UNEP-WCMC, WDPA

<b>National designation</b>	
<b>Controlled Hunting area</b>	<b>18</b>
<b>National forest Priority area</b>	<b>58</b>
<b>National park</b>	<b>11</b>
<b>Sanctuary</b>	<b>4</b>
<b>Wildlife reserves</b>	<b>8</b>
<b>International Convention and Programs</b>	
<b>World Heritage convention</b>	<b>8</b>

## 2.3. Policy and Legal Framework

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- Lack of proper policy
- *Exclusionary PA policy*
- The currently forest and land use policy is at a draft stage

## 2.4. Institutional Setup

- Frequent organizational restructuring of the administration of the forestry sector is common
- Regional governments are responsible for management of natural resources, including forests...
  - **Little institutional linkage to the centre of regional governments**
  - **Low competence at all levels of management**
- Less community government partnerships in forest protection

## 2.5 Design and Management

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- Forestry suffers from lack of proper management systems
- Out of the 58 NFPA, management plans are prepared for the 8 and 2 are being implemented
- About half of the 58 NFPA are delineated and mapped, but not gazetted
- Inadequate finance for the sector,

## 2.6. International commitment

- Established EPA and IBC and enacted a national environment policy and national biodiversity strategies.
- Reported only 4 national reports
- Inadequate and less accessible information for audiences

## Summary III

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- Fragmented data base and Information system
- Forest protected areas located in marginalized areas
- Conflict of interest between actors
- Participatory Forest Management systems
- High need for capacity building
- If MCPFE, indicator is used as a criteria:
  - > No legal status and long term commitment,
  - > Explicitly designated

## General Summary

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- The challenges of addressing for forest conservation differs among countries
- There are discrepancies in statistics reported by different agencies within the same country
- No single and uniform universal model and internationally agreed target
- FPA are not dealt in depth
- Difficult to compare FPA situation between countries
  - Different conservation categories in use
  - Different conception and definition for forests
  - Different history of forest use and management principles
- Time constraint to verify some of the findings



*Thank  
You !*

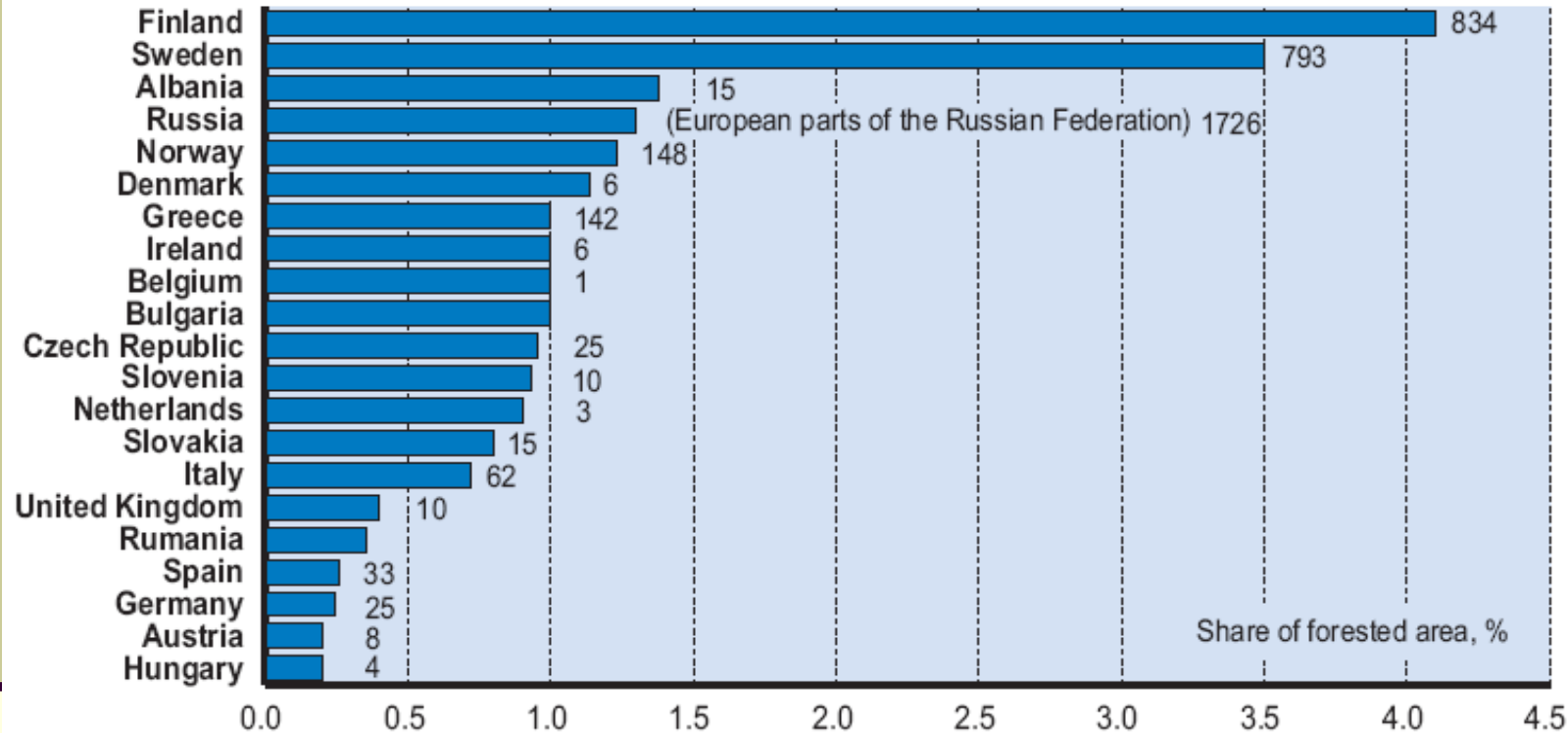


# IUCN Protected Area Categories

IUCN Category	Name	Primary Objective
<b>1a</b>	<b>Scientific reserve</b>	<b>Scientific Research</b>
<b>1b</b>	<b>Wilderness area</b>	<b>Wilderness Protection</b>
<b>II</b>	<b>National Park</b>	<b>Biodiversity conservation/tourism</b>
<b>III</b>	<b>National Monument</b>	<b>Protection of natural/cultural features</b>
<b>IV</b>	<b>Habitat/Species management</b>	<b>Rare species/habitat</b>
<b>V</b>	<b>Protected Landscape</b>	<b>Maintain Cultural/Traditional attributes</b>
<b>VI</b>	<b>Multiple Resource Use area</b>	<b>Sustainable use of natural resources/ecosystem</b>



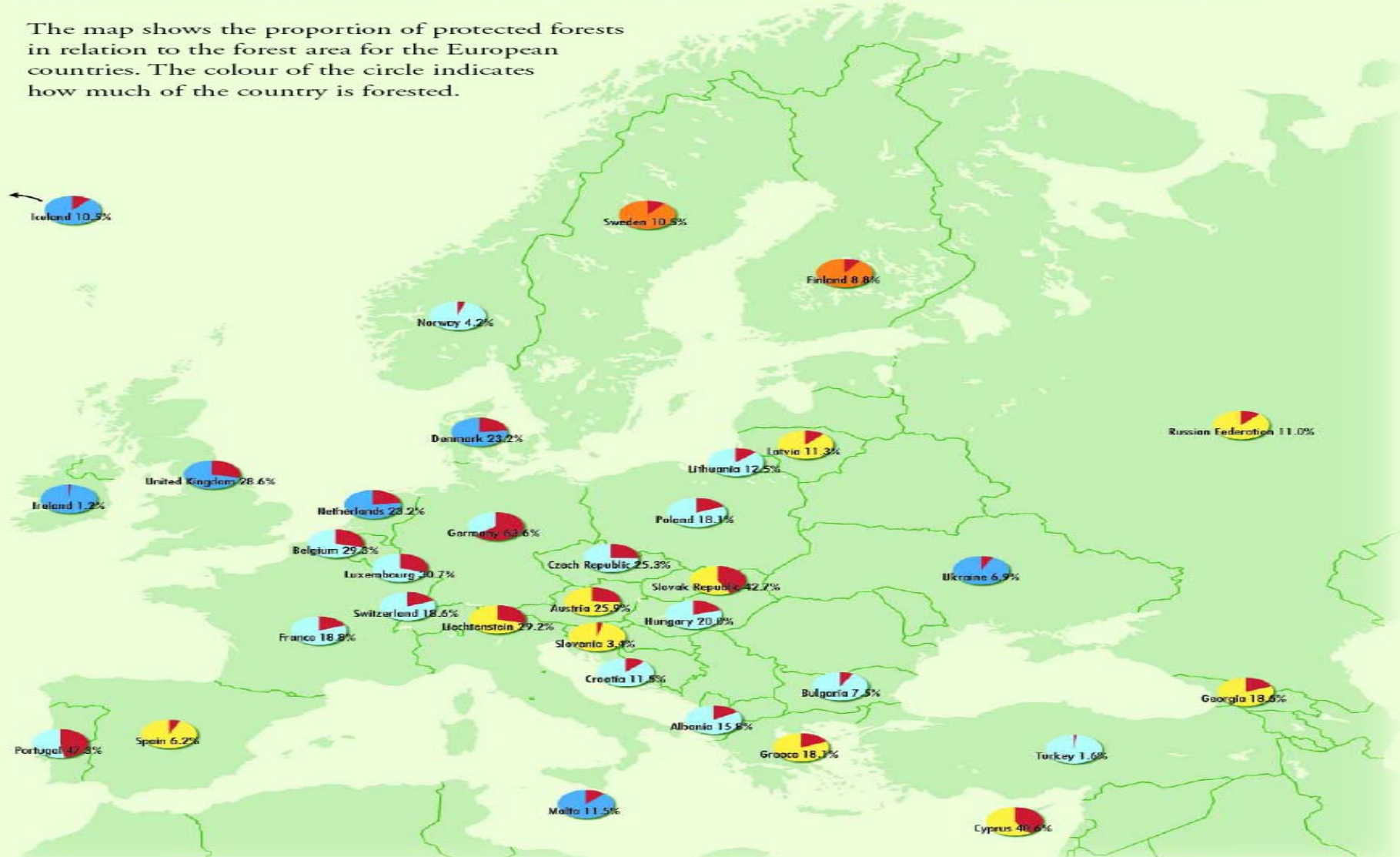
## Share and area of strictly protected forests in certain European countries in 2000, percent and 1,000 ha



- The definition of forests in this table corresponds to what is defined as productive forest land in Finland. Only strictly protected forests are included.
- No information of protected areas is available for Rumania and Bulgaria.
- Figures are mainly from year 1999; Finland's and Sweden's figures are from 2002.
- Source: COST E4-study, Ministry of Environment 2002.

## Protected forest areas in the European countries

The map shows the proportion of protected forests in relation to the forest area for the European countries. The colour of the circle indicates how much of the country is forested.



The map displays data submitted by 34 European countries. Forests in relation to the land area:

- 0% – < 20%
- 20% – < 40%
- 40% – < 60%
- ≥ 60%
- ▶ Protected forest area