



Recreation monitoring in European countries: results of COST Action E33 WG2

Jeffrey Dehez, Arne Arnberger,
Frank S. Jensen, Tuija Sievänen
and Hans Skov-Petersen



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Outline for the presentation

- Introduction
- Need and status of recreation monitoring in European countries
- National recreation demand inventories
- On-site visitor monitoring
- Recreation supply inventories
- Summary and evaluation
- Discussion and recommendations



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COST E33

Forests for recreation and nature tourism

- Working in 3 groups

WG1 Economic and social values of forests and nature tourism

WG2 Recreation and nature tourism demand and supply

WG3 Recreation planning and management



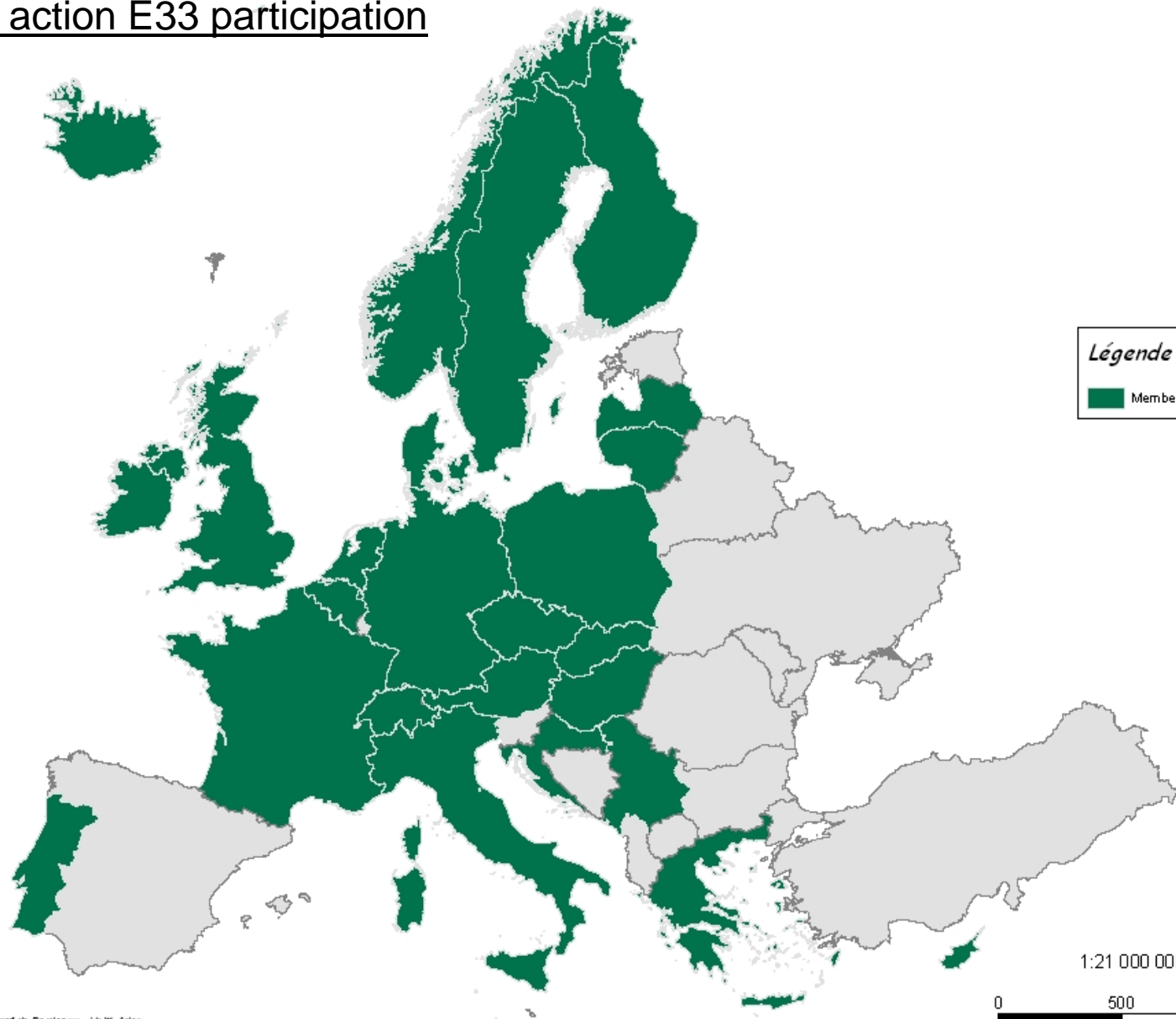
WG2 Recreation and nature tourism demand and supply

The objectives and focus of WG2 are

- to create a network of scientists
- to evaluate the actual state of art and expertise for starting a process which later has an aim
- to develop possibilities for a comparable and compatible information base of recreation and nature tourism demand and supply in all European countries
- to harmonize methodology for recreation inventories in European countries



Cost action E33 participation



Légende

Members of COST E33

1:21 000 000

0 500 1 000 km

Réalisation : Kevin PETT - Cemagref de Bordeaux - Unité Ader
Sources : données Esif



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Working Process

- Collection of data and information from membership countries:
 - Country reports and presentations
 - Surveys of state of art: national recreation demand inventories, on-site inventories and supply databases
 - Presentations from different countries with experience of different methodologies and status of existing information



Motives for recreation monitoring information – national/regional level

- Benefits for society: quality recreation experiences & human health and well-being
- Promotion of nature tourism development
- Sustainable use of natural resources;
 - indicators
 - estimating local and regional economic and social impacts
- Political argumentation for recreation supply provision
 - e.g. annual national and international reports
 - fulfilling legislative mandates
 - establishing new recreation opportunities & financing
- Efficient protection of nature and cultural heritage



Need for visitor/use information – local/site level

- **Resource management:**
 - planning resources
 - follow up and increasing the efficiency of management
 - development of infrastructure
 - comparisons between areas or locations
- **Maintenance operations**
 - planning of operations in nature areas, at Customer Service
- **Visitor management**
 - managing conflicts
 - providing satisfactory experiences
- **Visitor services and protection**
 - e.g. environmental interpretation material
 - estimating recreation demand
 - infrastructure
 - safety
- **Prognoses** of future development
- **Balancing between supply and demand**, increasing economic efficiency
- **Tourism planning and marketing**
- **Evaluating the impacts of actions and monitoring changes**
 - optimising ecological, social and economic impacts
 - monitoring changes and impacts
 - estimating sustainability of nature



European status

”Outdoor Recreation” mentioned in 11 out of 13 countries with National Forest Programmes implemented/in progress:

- Austria
- Croatia
- Cyprus
- Denmark
- Finland
- France
- Germany
- Latvia
- Slovakia
- Switzerland
- UK



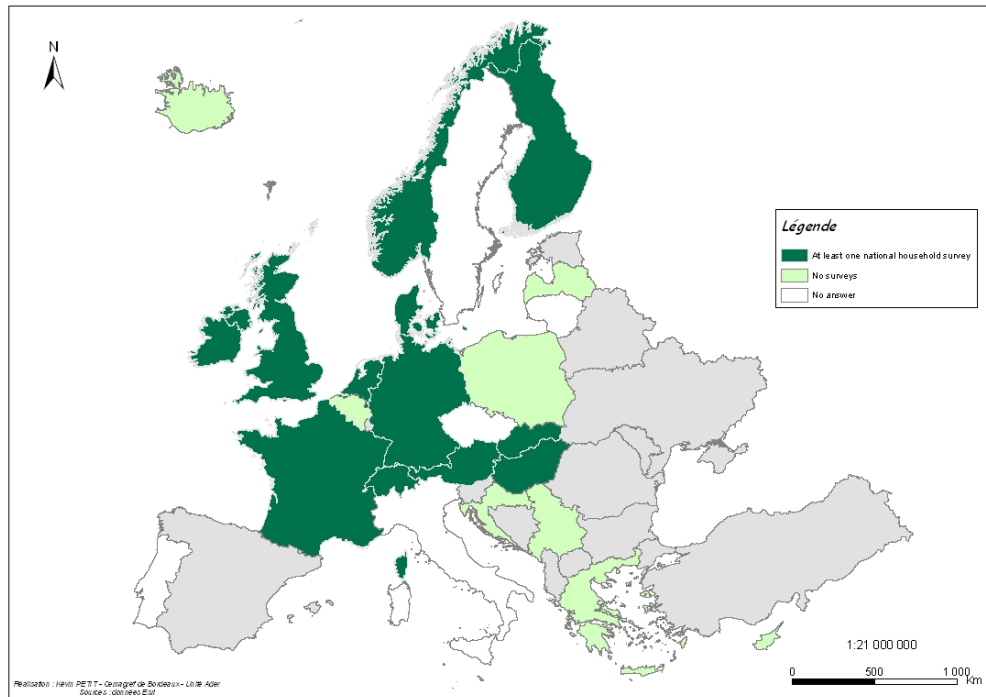
National recreation demand inventories

A review of national household surveys across Europe

- 12 countries have made at **least one national survey**
- 8 countries have declared **no national survey**
- 5 countries have **not answered yet**

66 surveys
since 1970

+ *Eurostat study*
(2002): 4 countries

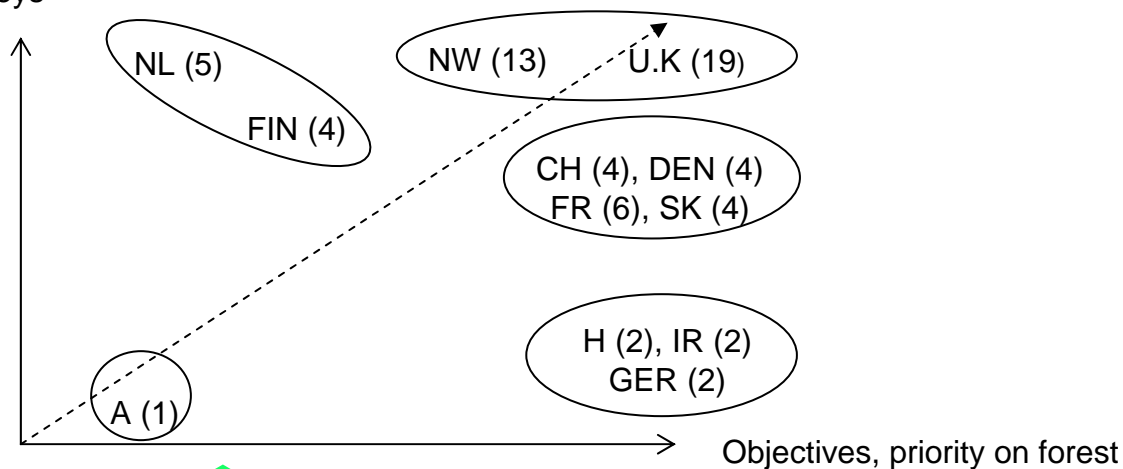


Main purpose of the surveys

<i>Objective</i>	Forest use	Recreation in general		Living conditions	Environment
		Outdoor recreation	Leisure in general		
<i>Country</i>	Denmark, France, Germany, Hungary, Ireland, Switzerland, U.K, Slovakia	Finland, Norway	Denmark, U.K., The Netherlands,	Norway	Austria

⇒ **Various levels of experiences**

Number of surveys



⇒ Practices also differ greatly !

**- example:
survey methods**

<i>Countries</i>	<i>Techniques</i>
Austria	Face to face interview
Denmark	Postal
Finland	Telephone and postal
France 1	Face to face interview
France 2,	Telephone
Germany 1	Telephone
Germany 2	Telephone
Hungary	Face to face interview
Ireland	Postal
The Netherlands	Telephone and postal
Norway	Postal
Slovakia	Postal
Switzerland	Telephone
UK	Face to face interview



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- Variables list...

<i>Variables</i>	<i>Countries</i>
Number of visitors / Frequency of visits	A, CH, DK, FIN, FR1, FR2, GER1, GER2, H, IR, NL, NW, SK, UK
Socio-demographics criteria	A, CH, DK, FIN, FR1, FR2, GER1, GER2, H, IR, NL, NW, SK, UK
Activities	CH, DK, FIN, *FR1, FR2, GER1, GER2, H, NL*, NW*, SK, UK
Travelling distance	CH, DK, FIN, FR2, GER1, H, NL, SK, UK
Means of travel	CH, DK, FR2, GER1, H, NL, SK, UK
Duration of the visit / of the stay	CH, DK, FR2, GER1, H, NL, SK, UK
Distance to closest home forest	DK, FIN, FR1, GER1, SK
Preferences (recreational infrastructure)	CH, DK, FR1, H, SK
Preferences (landscape/forest structure)	DK, FR1, GER2, SK
WTP (and other economically measurements)	DK, FR2, GER1, SK

- ... and definitions?

Number of visits: total number during a civil year or the last 12 months, frequency distribution

Activities: lists, multiple answers

Trip length: distance or time ?

Reference trip: last one, nearest one, most typical one, last few, all

Statistical unit: mean, distribution



Comparative overview of forest recreation across Europe

- Example: participation rate in forest recreation

<i>Country</i>	<i>Year</i>	<i>Participation rate</i>	<i>Visits/individual/year</i>	<i>Possible bias</i>	<i>Forest cover</i>
Denmark	1993-1994	91%	38**	+	10,7%
Finland	2000	80-90%	?	?	72%
France 1	2004	71,6%	11<<18*	?	27,9%
France 2	2001	56%***	18,6	-	27,9%
Germany	2001	66%	≈37	?	30%
Hungary	2005	100%?	x	++	20%
Ireland	2005	86%	24	-	9,6%
Norway	2004	76%	44	-	36%
Slovakia	2005	75%	27	?	40,8%
Switzerland	1997	96%	76	X	31%
U.K.	2002-2003	40%	5,4	X	11,6%

* *personal estimations*

** *not adjusted for exaggeration (Jensen & Koch 2004).*

*** *households*

- What is (surely) missing ?

- « mixed » spaces (coastal forests, mountain forests,...)
- tourism



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On-site studies: strategies applied across Europe

Approaches	Comparing recreation use:	Countries #
Standardized approaches	National level (UK, DK, Fin)	3
	Regional level (AUT, B, NW)	4
	Among several forest sites (F, G, EST, CR)	4
Non-standardized approaches*	Not possible For example CRO, SLO	21
No site specific studies	H, ISL, IR?	3

Strategies for data collection on on-site forest recreation use among European countries

*most countries in the standardized category are also in this category

⇒ **Various levels of experiences on standardized approaches**



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On-site studies: methods used across Europe - questionnaires

Methods applied	Number of countries
On-site face-to-face questionnaire	18
Self-filled questionnaire (on-site self-registration boxes etc.)	8
Mail-back questionnaire of on-site forest visitors	7
Face-to-face interview with forest visitors at their home	4
Telephone interview of local residents to forests	3
Questionnaire of forest managers	3
Postal survey of local residents to forests	2
Trip dairy	1

Overview of methods used for questionnaires

⇒ **Face-to-face interview used as basis for standardized inter-forest comparisons**



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On-site studies: methods used across Europe – visitor counting

Methods applied	Number of countries
Manual counts of visitors & visitor cars	18
Automatic people / bicycle counters	13
Tickets sold, permits	9
Parking lot counts	6
Automatic car traffic counters	5
Summit / guest books	4
Air photography	4
Number of people in alpine huts	4
Mechanical counters	2
Video monitoring	2

Overview of methods used for visitor counting.

⇒ **Most countries use a range of methods such as Austria, Denmark, Finland, Germany, Norway, Sweden, UK etc.; some countries have rich knowledge about specific monitoring methods**



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On-site studies: experiences with different forest types across Europe

Forest type	Countries (examples)
Urban / suburban forests	Austria, Denmark, Finland, France, Germany, The Netherlands, Norway, Sweden, Switzerland
Remote forests	Finland, UK
Coastal forests	France, The Netherlands
Alpine/mountainous forests	Germany, Italy, Sweden, Switzerland
Forests part of protected areas	Austria, Germany, Norway, Finland, Italy

Experience of countries with the monitoring of recreation use in various forest types; mainly public forests were monitored.

⇒ **Different experiences: different data collection strategies, different methods & different settings ⇒ inter-country comparisons are difficult**
⇒ **standards needed, using experiences from countries with standardized approaches**



Recreation Supply inventories (I)

‘Supply’ is regarded as both:

- the available nature resources and
- the facilities present on-site

The survey is based on:

- A questionnaire survey of WG2 member countries (only 11 out of 23 responses have been obtained which indicates that information can be hard to find)
- Analysis of international GIS-data (CORINE)
- Other types international statistics

The questionnaire was focused on both:

- The availability of relevant information (statistics, data bases, web-pages etc. exists)
- The actual amount of nature resources (areas) and facilities (number of trails, nature camping sites etc.)



Recreation Supply inventories (II)

Information availability about on-site facilities

- According to responses

	Belgium	Cyprus	Denmark	Finland	Germany	Greece	Iceland	Norway	Switzerland	United Kingdom	Slovakia
Facilities											
Recreation and visitor service centre					n/a						
Camping sites					n/a						
Primitive camping/shelters					n/a						
Picnic sites					n/a						
Marked footpaths and trails					n/a						
Boating sites					n/a						
Services for hiking					n/a						
Skiing centres					n/a						
Sites for swimming in natural waters					n/a						
Sites for orienteering					n/a						
Sledging services					n/a						
Sites/centres for rock climbing/mountaineering					n/a						
Golf courses					n/a						
Sites for nature studying (e.g. bird watch towers)					n/a						

Fully available	
Partly available	
Not available	



Recreation Supply inventories (IV)

Generic applications of on-site facility information

- According to responses

	Belgium	Cyprus	Denmark	Finland	Germany	Greece	Iceland	Norway	Switzerland	United Kingdom	Slovakia
Applied to											
National assessments/statistics		Partly available	Partly available							Fully available	Fully available
Web-based information service		Fully available	Fully available			Fully available		Fully available		Fully available	Fully available

Fully available	
Partly available	
Not available	



Recreation Supply inventories (III)

Available nature resources

- According to survey responses

	Belgium	Cyprus	Denmark	Finland	Germany	Greece	Iceland	Norway	Switzerland	United Kingdom	Slovakia
Forest area (km²)	5,234	1,737	4,862	n/a	105,314	2,513	1,481	123,585	12,716	28,290	20,064
% of national area	16%	19%	11%		29%	2%	1%	32%	31%	12%	41%
% forest on public land	49%	62%	28%		54%	93%	30%	18%	72%	29%	80%
Open nature area (km²)	277	2,138	7,473		191,028	6,448	n/a	165,718	8,787	64,407	25,815
% of national area	1%	23%	17%		54%	5%		43%	21%	26%	53%
Wresh water area (km²)	24	14	5,673		8,085	273	n/a	19,522	1,740	2,259	92,931
% of national area	0%	0%	13%		2%	0%		5%	4%	1%	190%
National area (km²)	32,545	9,250	43,094	337,030	357,021	131,940	103,000	385,199	41,285	244,820	48,845

Further GIS-analysis will be carried out to determine the physical accessibility of the nature resources



Summary and evaluation

- Need for monitoring is rarely documented, nor a E.U priority
- Nevertheless, many information exist
 - only few countries have conducted systematic and long-lasting monitoring of recreation demand
 - many useful information come from "outside" of forest research and heterogeneity prevails
- Databases or national/regional level information of recreation supply are rare (at least, more difficult to find !)

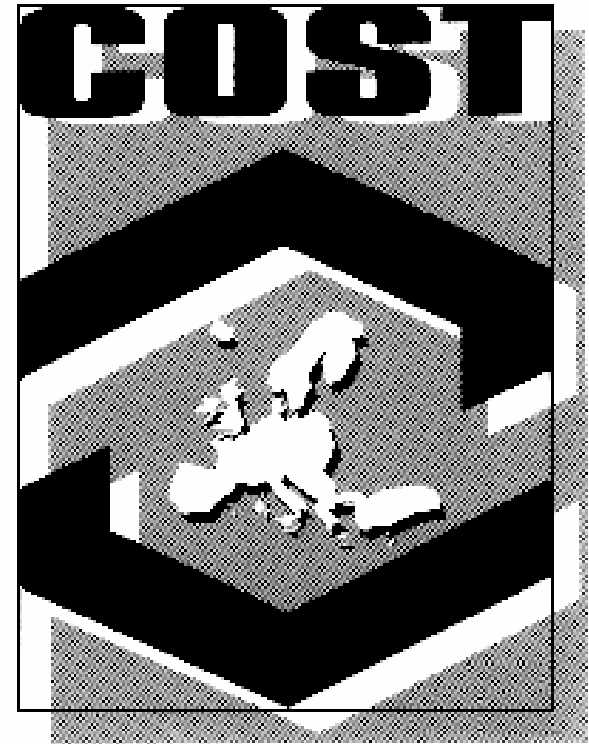


Discussion and recommendations

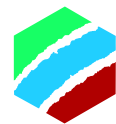
- Careful planning is necessary for sustainable and multifunctional forest use and updated information base is a key
 - information is actually available but international comparisons remain ambiguous (a first European overview may be possible)
- Harmonization is definitely required
 - an efficient strategy still have to be found
 - find connections with other E.U policies (MCPFE,CAP,Natura 2000)
 - extend forest limits and look toward outdoor in general ?
 - keep national boundaries or think of other "regional" patterns ?
 - include overnight stays ?
- COST E33 WG2 aim is to recommend a common basis of monitoring systems for European countries



Thank you !



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