

COST-Task force meeting and ICP, Firenze 20.-24. March 2007

WG3 – Subgroup work on „Forest Structure“



Forest structure is
one of the NFI core variables
to report on biodiversity

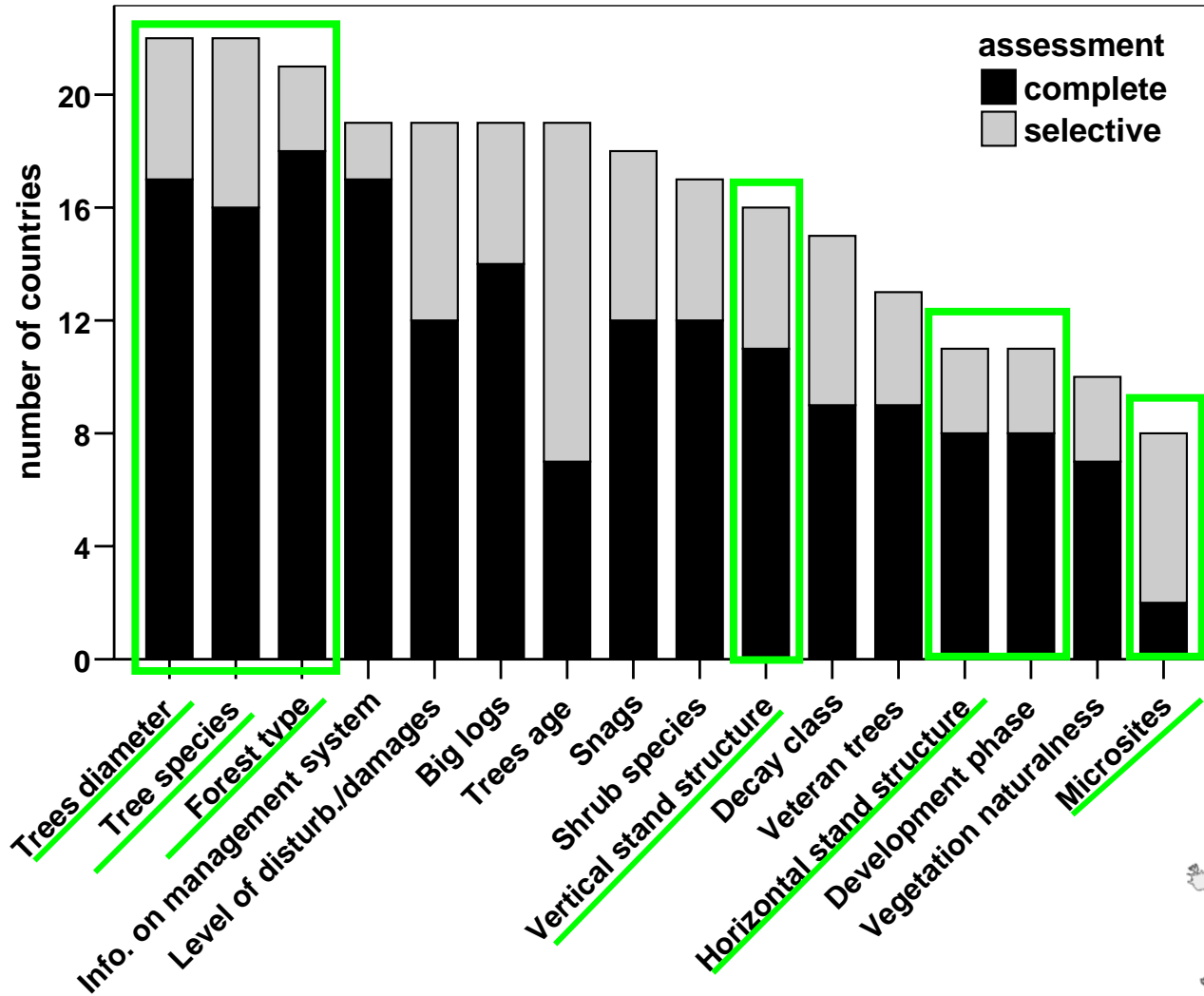


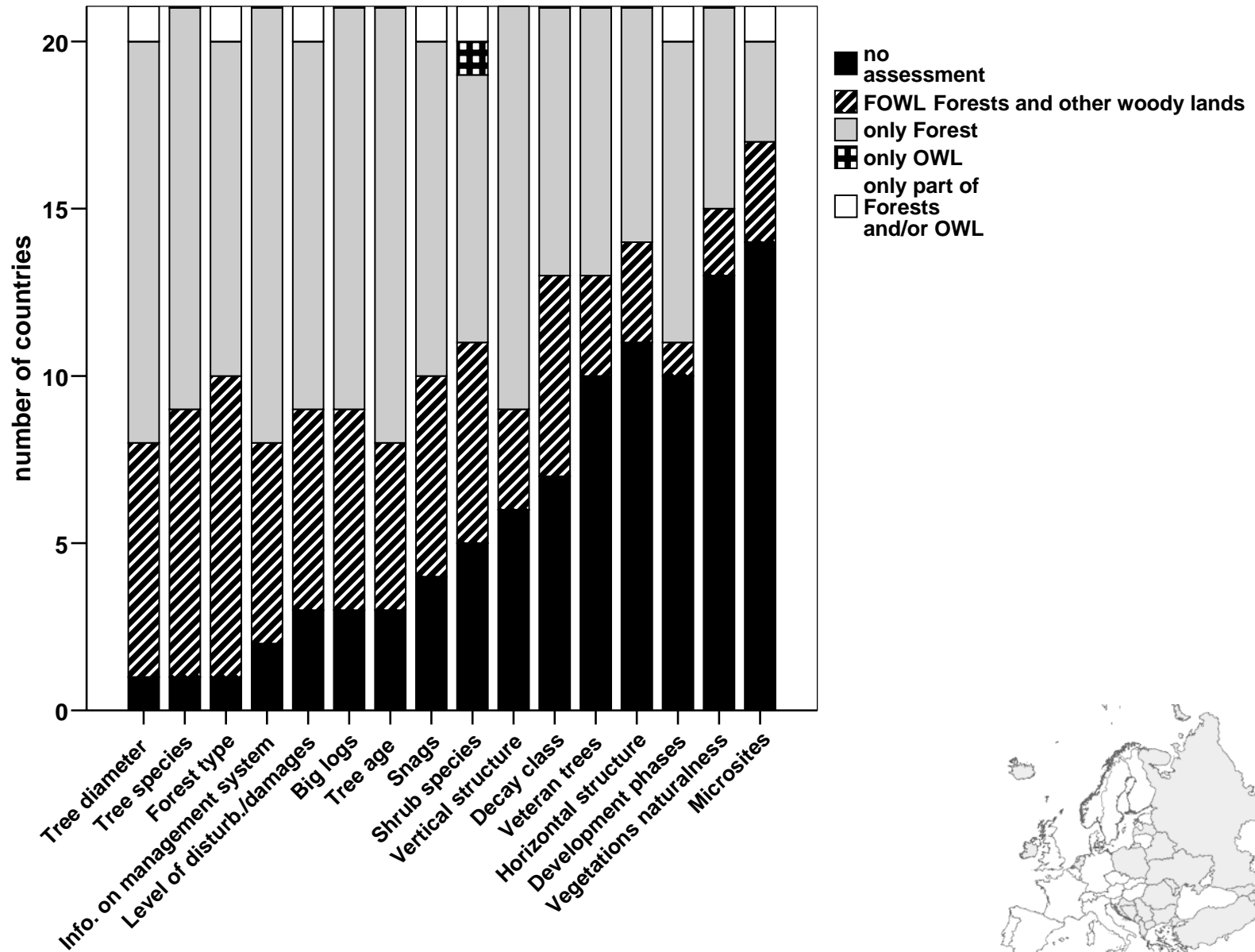
Susanne Winter
Elmar Hauk

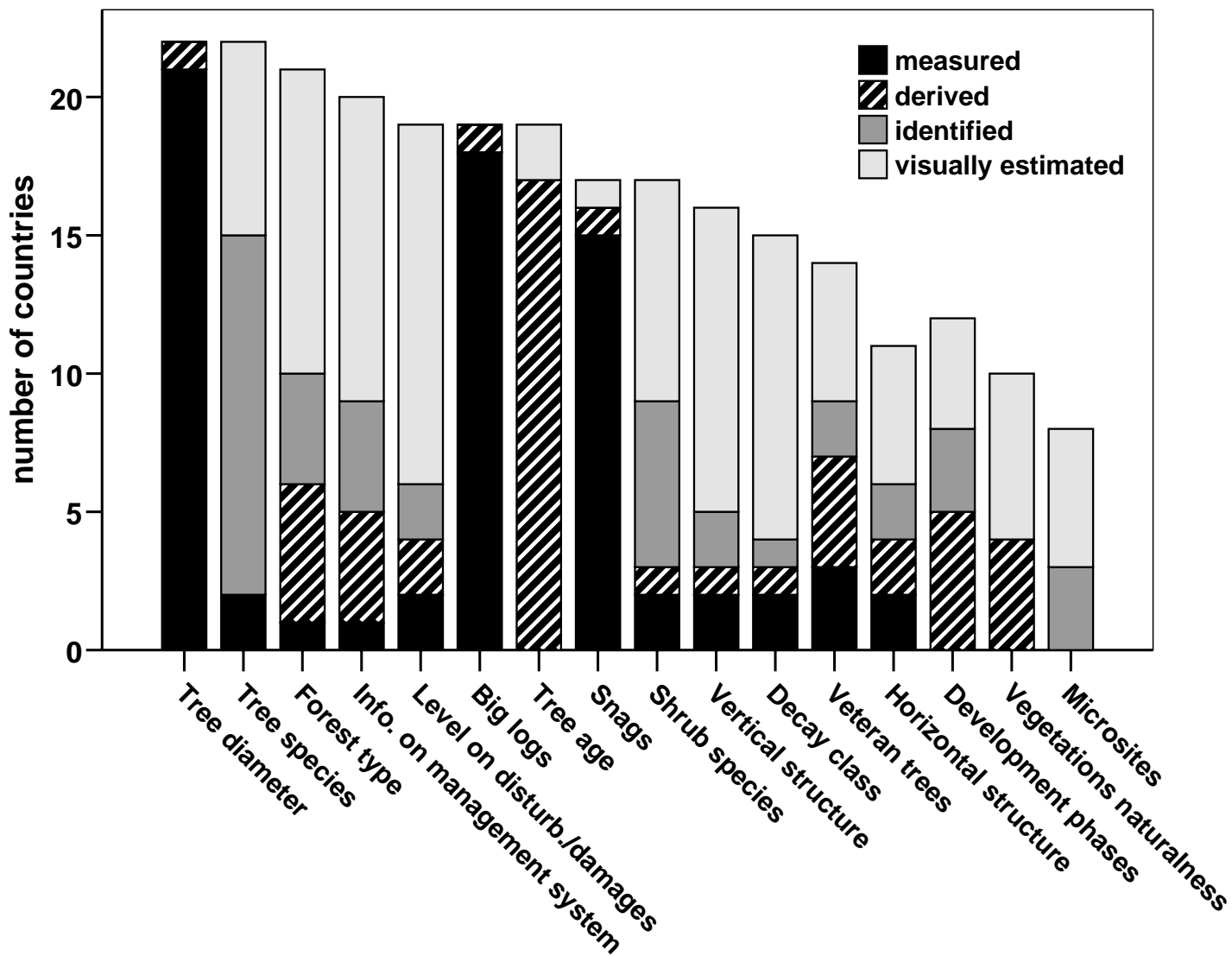
We refer to three forest structure components

- horizontal forest structure
(focus on living trees)
- vertical forest structure
(focus on living trees)
- forest dynamic
as combination of
vertical/horizontal structures











Horizontal forest structure: *Tree diameter*

Vertical forest structure: *Layers*

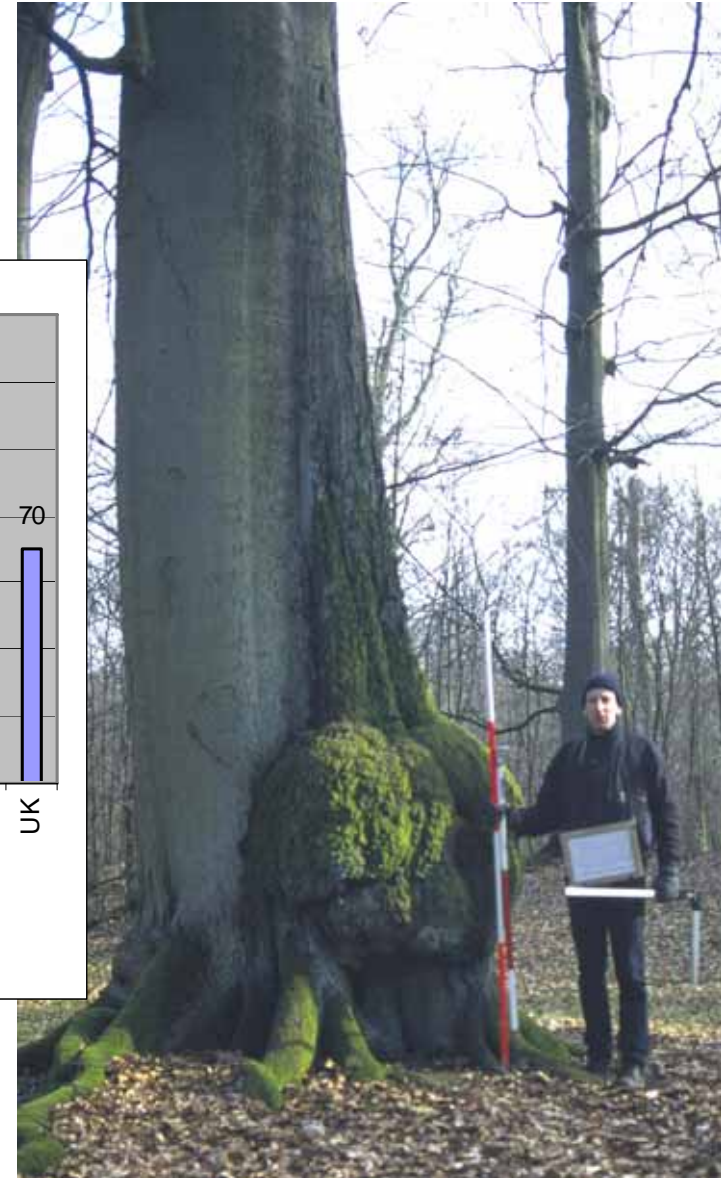
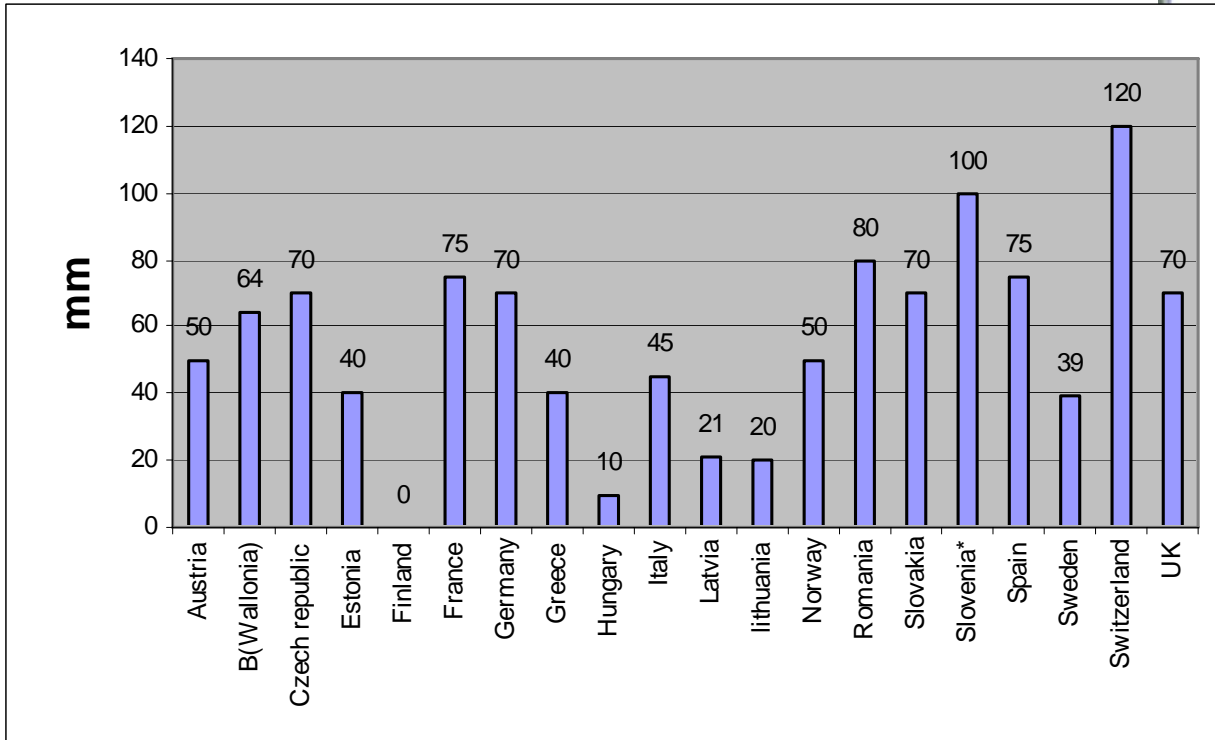
Social positions

Forest dynamic: *Forest stages / development phases*



Horizontal forest structure

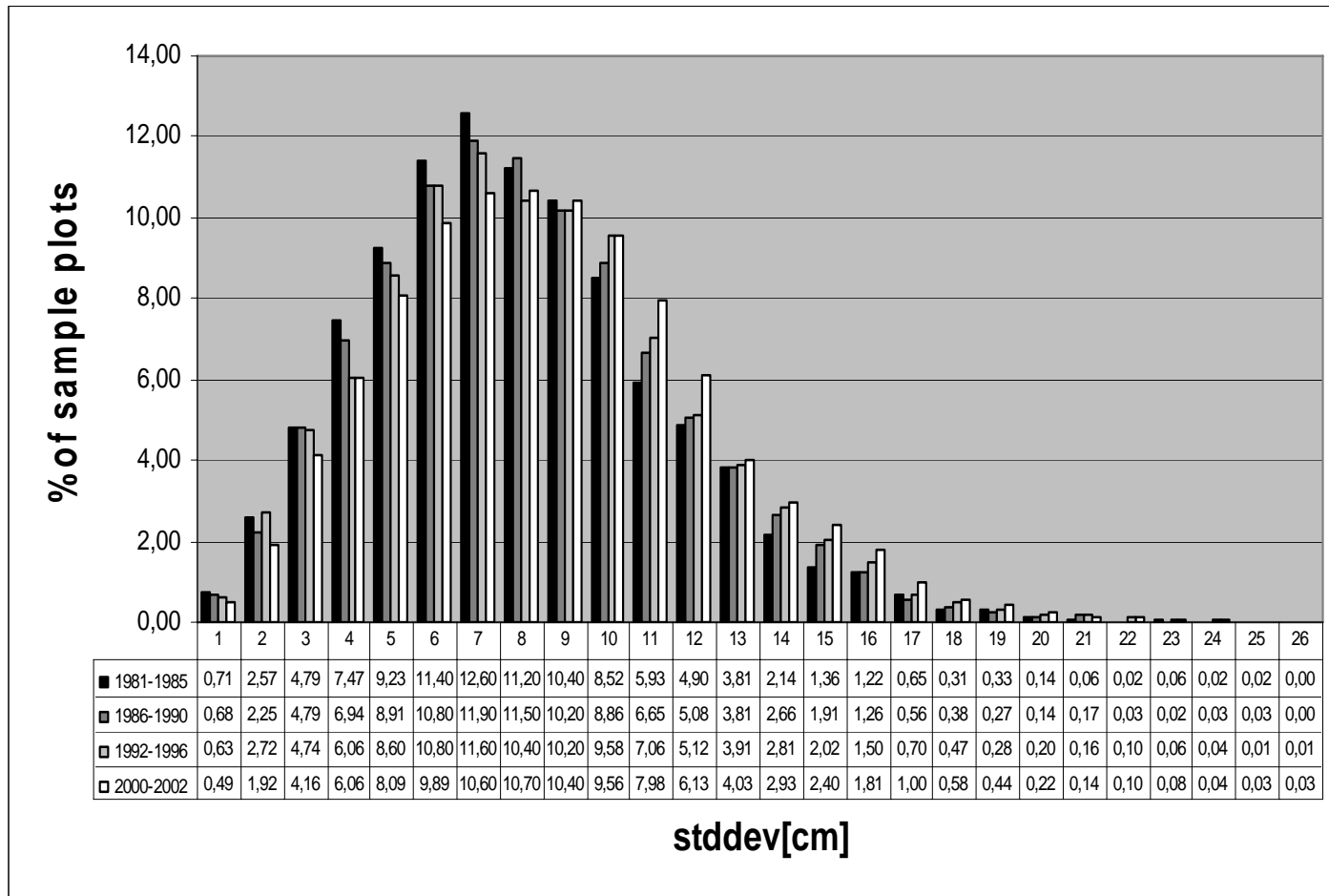
Minimum treshold of dbh measurement





Horizontal forest structure

Reference: Frequency distribution of standard deviation classes of DBH



Austrian's
NFI Data



Reference: % of one, two and multi-layered plots in a country/forest type/potential natural forest community

Vertical forest structure

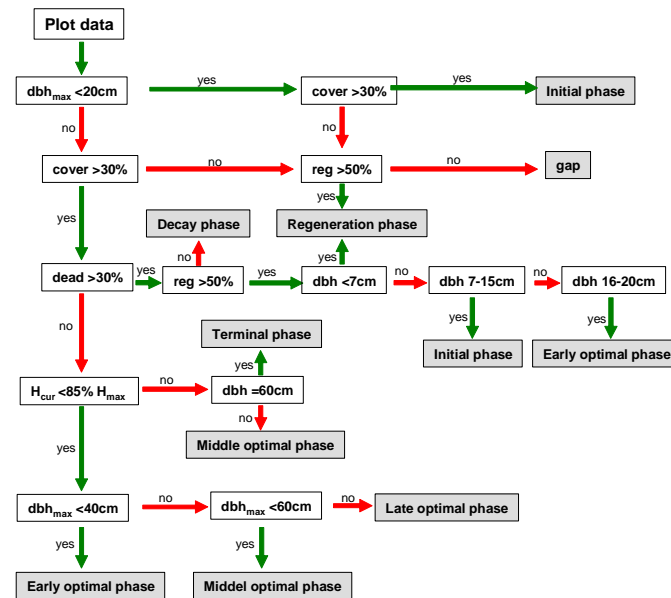
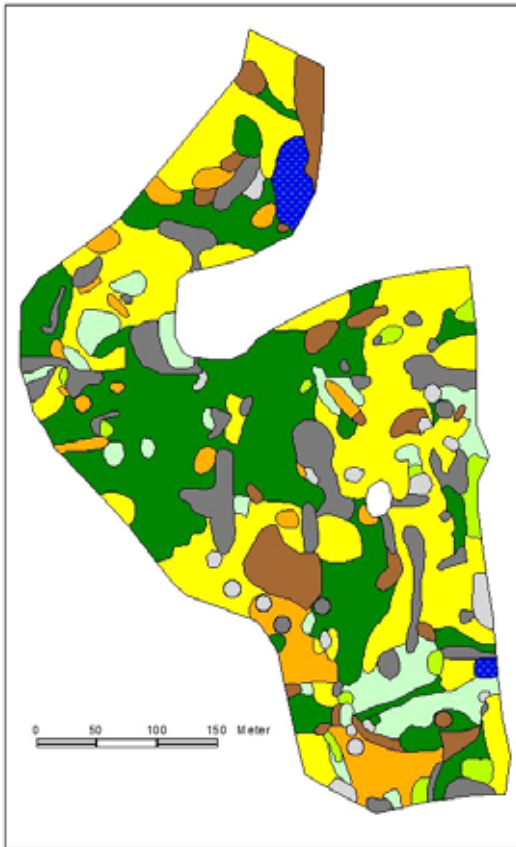
Country	Layer				Remarks
	one	two	three	multi, much, mixed	
Austria	x	x	x		
Belgium	x			x (two or more)	
Estonia	x	x	(x)	(x)	
Finland	x	x		x	
France	(x)	(x)			High forest, coppice, mixed
Germany	x	x		x	
Hungary	x	x	x	(x)	
Latvia	x	x	x		
Lithuania	(x)	(x)	(x)	(x)	visual estimation
Norway	x	x	x		
Romania					social classes (Kraft)
Slovakia	x	x		x	
Spain	x			x (two or more)	
Sweden	x	x	x		
Switzerland	x	x	x	x	
UK	x	x	x	x	
in total	13	12	9	10	





Forest dynamic

% of the different stages/phases in a forest type/country/potential natural forest community for each forest type



Development of an objective flow chart for development phases

Different development phases in >100 years unmanaged stand

Horizontal forest structure

Proposal of two references

Data test is needed

Vertical forest structure

Proposal of one or two references

In discussion not yet
decided

Forest dynamic

Proposal of one reference

Complex reference –
Feasibility has to find out
by a data test

Summary WG3 subgroup Forest structure

