FutMon

Training Course Aims:

Data collecting about different definitions of Assessable Crown and field positions

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MOTIVATION

It has to be checked if one of the main causes for differing results in defoliation estimations in various European countries is the different understanding of what constitutes assessable crown.

Three different definitions for assessable crown are used in the European Crown Assessment (Expert Panel Crown Condition and Assessment Damage Causes - Tree Vitality (D1) - FutMon Field Protocol V 1.0; last update 15th May 2009)

The following definitions are to be field-tested at the ICCs 2009 in Finland, the Czech Republic and Italy and used concurrently with the nationally differing definitions.
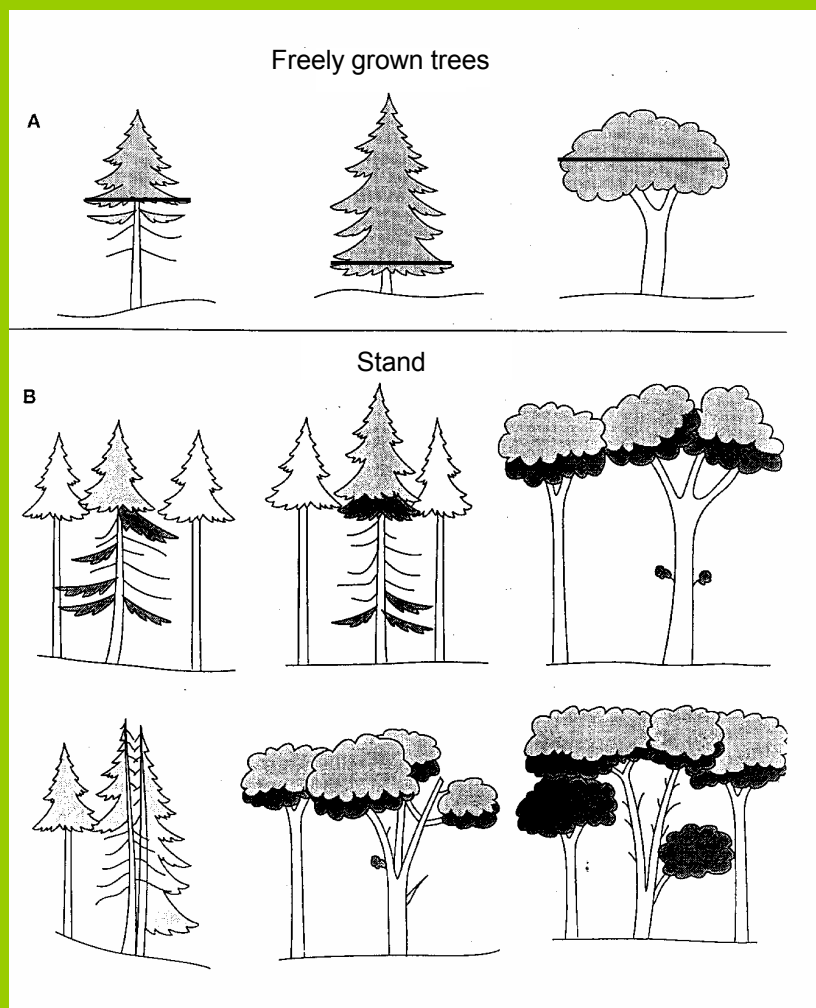
Definitions of assessable crown:

A. **Assessment of the tree crown ranges from the tip of the tree to the _widest span_ of the crown or to where the distance between stem axis and living branches is greatest.**

Fig. 1 shows good examples of this definition in the part "stand". For freely crown trees, a line indicates the lower limit of the assessable crown.

Freely grown trees

Stand

Fig. 1: Illustration of definition A: Assessment of the tree crown ranges from the tip of the tree to the *widest horizontal span* of the crown.
(stand (B): the lighter colour indicates assessable crown; freely grown trees (A): black line)

Definitions of assessable crown:

B.Assessment of a defined lower limit; the *upper third* of a trees living crown will be assessed.

Definitions of assessable crown:

C.Individual countries "*traditional*" procedure of the definition of assessable crown referring ICP Crown Manual (2006).

Field position of assessment

Another main cause of variation of defoliation scores is due to different positions of the participants during the assessment.

Method

The participants are asked to do *the first assessments from a fixed position* which has been prepared and marked in the field by the host country.

A *second group of assessments* will be done following the position or assessment procedure which is used during the field assessments in the participating countries.

So we have :

2 field positions (fixed and free)

X

3 different definitions of assessable crown

=

6 defoliation scores

Thus, each team is asked to give

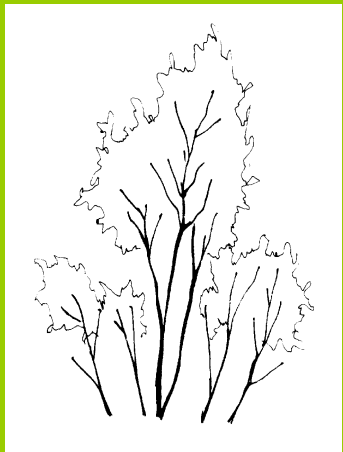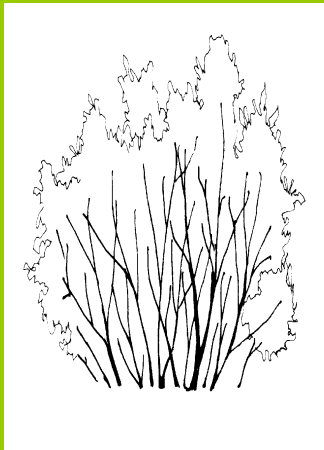***6 defoliation scores for each tree***

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Sheet to collect field data

Plot nr. [ ] **Country** [ ]

Species [ ] **Team** [ ]

Date [ ]

Tree n.	Defoliation fixed position %			Defoliation free position %			Discoloration class (0,1,2,3,4)	COMMENTS ON DAMAGE CAUSE
	A	B	C	A	B	C		
1								
2								

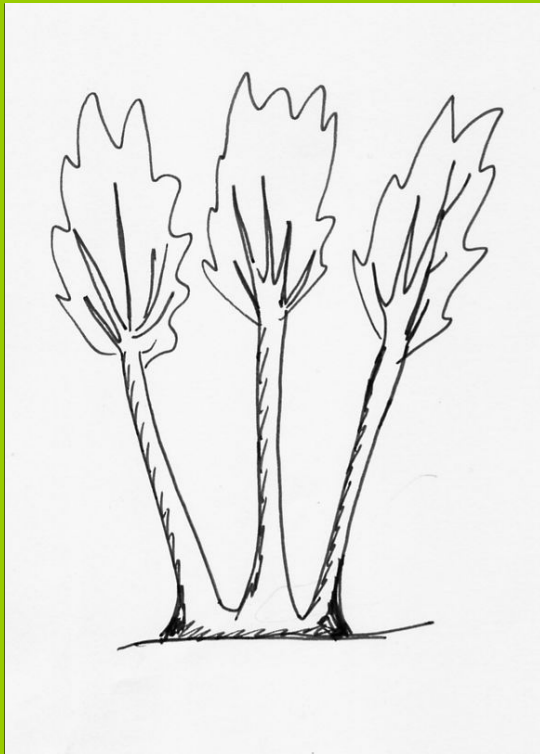# Further information about coppice assessment

B

A

In coppice (and macchia) stands it may be necessary to consider the assessable crown as a single unit consisting of crown parts from different stems. (A) (ICP Manual)

Otherwise, in case of evidence of a dominant part of crown from one or more stems, we have to assess only this one. **(B)** (Italian Manual)

In case of evidence of several parts of crown clearly distincted from each other, we have to assess them one by one and calculate the weighted average. **(C)**

C