Minutes

International Cross-Calibration Course on Crown Condition (Central Europe)
July 7-10, 2009, Milovy, Czech Republic

ICC 09 CR was held in the same region as the course in 2005. Same plots/same trees have been evaluated (with one exception – the plot "Devet skal" was cut and the new plot installed nearby, in similar stand conditions - locality "Lisovska skala").
Thus the comparison of the recent results and results of the previous course was possible.

In total 17 participants of 11 countries took part in the meeting (Annex1, list of participants)

The course has started in July 7 evening (Annex2, programme).

In the introductory meeting the plots to be assessed have been briefly introduced and the method of assessment explained. Explanation of the changes in the method to be tested was given by Johannes Eichhorn in short presentation..
According to the FutMon Field Protocols, the new definition of "assessable crown" was tested to see, whether the different understanding is the main cause of differing results in the ICCs.
Also the variation of defoliation scores which is due to different position of the participants was tested. The point is to find a new routine for arrangement of ICCs in the future.

Due to extremely wet and rainy weather before and during the course the organizers were not able to prepare photos for the photo-test. The photos were distributed latter, via e-mail, and the results, sent back by most of the participants, are presented in the final evaluation of the ICC.

In the field assessment, after detailed information on the stand and plot, all participants, gave six different scoring to each tree in each plot. First three scorings (upper 1/3 of the crown, widest part of the crown, whole crown national) from the fixed position, the last three, of the same parts of the crown, done by the national method. In total 25 trees were assessed in each plot, all trees were numbered, relevant fixed position for each tree was marked and labelled with same number.

In total 6 plot were assessed, 3 in the spruce stand and 3 in the beech. Two of the plots assessed are standard plots of the systematic network in CR.

- Mature spruce stand Pohledec – standard level I plot J 180,
- Mature spruce stand - Lisovská skála
- Mature spruce stand Františky – standard level I plot

- Mature beech stand - Žákova hora

- Mature beech stand Vysoký kopec
- Mature beech stand - Čtyři palice

In two of the plots also biotic damage was assessed. Coding by the ICP Forest Manual was used. In the field some space was devoted to discussion about coding.

All the participants did correct assessment of defoliation. Some problems were revealed in biotic damage assessment (some participants were not familiar with the coding and gave only verbal description etc.). The results have been elaborated and the first, short version was presented in the closing meeting.

Closing evaluation and discussion were focused to point the differences in defoliation scoring, using different method, i.e. assessing different part of the crown. It was aimed to find the best way how to come to more comparable results.

From the results obtained we can draw general conclusions:

- Comparing to the results of ICC 2005 was done in 4 plots for the 5 selected representatives, who ensure continuity of assessment (same people). The national method was compared. Similar trend of defoliation development was find in the two beech plots for BE-F, CR, SK and SE, in the spruce plot „Františky“ for AT, BE-F, CZ, SK and in the spruce plot „Pohledec“ AT, BE-F, SK, SE. Comparing of the results in2005 and 2009 was affected also by the fact that the courses were not held in the same period (September 05, July 09)
- Standard deviation shows similar differences in all the methods of assessment used. Differences among individual parameters are more significant in spruce than in beech. Relative the lowest variability among the methods tested was in the beech plot„Čtyři palice“. The reason for high differences in the scoring are, most probably, not only due to insufficient calibration of the assessors, but also due to unclear definition of the crown evaluated.
- Defoliation assessment from the fixed position did not prove higher similarities than assessment without this marked point. The crown is ussually well visible from the fixed position, however, this does not mean that you can also see well the defoliation in many cases. Fixed position can be of importance when evaluating consistency of the field and photo assessment. However, when assessing only the photos, defoliation can be underestimated, as in the photograph the space view of the crown, important when assessing defoliation, is not available
- When assesing the photos what is the poit? to test stability of scoring of individual persons or to test differences of scoring given to individual trees or years, or by individual countries? Photo/assessment cannot be applied in normal commertial stands of close canopy - most of the monitoring plots.
- Precisely and unabiguously defined „assessed crown“ is the basic pre-condition for calibrating individual assessors or countries respective. Only than some statistical evaluation would be possible Only than also possible statistical leveling of assessment among the countries and stating of conversion coefficient is posssible. This is valid only under other conditions, ensuring sufficient homogenity of the result data for statistical evaluation.

Damage assessment of selected trees has shown big differences and discrepances in evaluation of different type and extent of damage., and their coding according to the Manual ICP. In some cases even non-existing codes were used, or used in incorrect columns. For the same trees different number od damage was described, or the same damage described using different coding.

Recommendation

- Precise definition of the object of assessment „Assessable crown“ should be the main goal of the ICCs, to reach maximal possible objective comparability.
- Each participant represets the country and guaraties stability and comparability of the the assessment. Same person would be ideal.
- Repeated training courses should be held under same conditions: same plots/trees, same stage of the vegetation period etc..
- Evaluation of the courses should be done in the same way, to get optimal comparability in the time series. Individual vegetation zones in Europe should be respected (Northern, Central, Southern).
- It would be very useful to have chance to discuss directly in the stand the problem trees of very different scoring.

It is recommended to make more precise assessment of some types of damage (discoloration, resin flow, bark beetle etc). At the start of the course it would be useful to calibrate the participants – to assess few trees together and to fill the forms using correct coding, and only than to start individual assessment.