COST ACTION FP1301

"Innovative management and multifunctional utilization of traditional coppice forests - an answer to future ecological, economic and social challenges in the European Forestry sector (Eurocoppice)"

Minutes of the WG 4 Meeting: Services, protection, nature conservation

Antwerp, (BE), June 15th, 2016

Minutes Summary

WG 4 Participants: Florian Borlea (RO), Peter Buckley (UK), Luc De Keersmaeker (BE), Alexander Feher (SK), Katrin Heinsoo (EE), Paola Mairota (IT), Jana Müllerová (CZ), Victor Pacurar (RO), Christian Suchomel (DE), Kris Verheyen (BE), Alina-Maria Tenche-Constantinescu

WG Leader: Peter Buckley, co-leader Florian Borlea

Rapporteur: Jennifer Mills

Morning session

Welcome: Peter Buckley welcomed all participants to the meeting and, in particular, new members Jana Müllerová, Luc De Keersmaeker and Kris Verheyen. Another new member, Radm Hedl, was unable to attend.

Agenda:

Minutes from the Bucharest meeting

The minutes of the WG4 meeting held on October 19th, 2015, had been circulated to group members. There were no matters arising which were not covered in the agenda for the current meeting.

Review of WG4 remit and progress – papers published and in preparation

1. Carry out a literature review on the mechanics of tree stability and rooting on steep terrain, with special reference to coppicing practices.

At the following day's conference Chiara Vergani was to present a review on 'Root reinforcement dynamics in coppice woodlands and their effect on shallow landslides'. It is expected that a multi-author paper arising from this will be submitted to the journal Earth Science.

Victor Pacurar was due to present a paper on 'A comparative review of coppice and high forest protective functions in a Romanian and European prospective' at the following day's conference.

There was a discussion about the use of Black locust, its benefits and problems. Jana Müllerová is preparing a paper on its management. Florian Borlea, Alexander Feher and Victor Pacurar may also be able to produce a short publication.

2. Collect information on the protection functions of coppice forests* (protecting infrastructures such as roads, railways and buildings), particularly in relation to maintained or abandoned coppices. Compare this framework with the technical issues arising in deliverable 1, and make recommendations for best practice.

*The wording of this topic was changed as a consequence of the budget cut; it previously referred to legislative framework for safe practices in relation to protection forests.

Another review of literature, on the resilience of coppice to avalanches, rockfalls, landslides, torrents and debris flows had been written by Peter Buckley and Christian Suchomel at the end of last year, which also included some material on tree rooting. Now that the latter aspect has been taken up as the main theme in the above review, it is proposed to develop the rockfall theme as a separate paper within this work plan. It is expected that scientists from the Swiss Federal Research Institute will be involved with this as well.

3. Compiling and evaluating critically existing literature and knowledge about the specific services of coppice forests to nature conservation (e.g. biodiversity, endangered species).

A number of initiatives on this theme had been produced:

- P. Mairota, P. Buckley, C. Suchomel, K.Heinsoo, K. Verheyen, R. Hédl, P. G. Terzuolo, R. Sindaco, A. Carpanelli (2016) Integrating conservation objectives into forest management: coppice management and forest habitats in Natura 2000 sites. *i-Forest*, doi: 10.3832/ifor1867-009
- R. Venanzi, R. Picchio, G. Piovesan (2016) Silvicultural and logging impact on soil characteristics in Chestnut(Castanea sativa Mill.) Mediterranean coppice. *Ecological Engineering* 92: 82–89
- P. Mairota, M.C. Manetti, E. Amorini, F. Pelleri, M. Terradura, M. Frattegiani, P. Savini, F. Grohmann, P. Mori, P. Terzuolo, P. Piussi (2016). Opportunities for coppice management at the landscape level: the Italian experience. *i-Forest*, in press
- P. Buckley & J. Mills: Conservation of coppice in relation in Natura 2000: hierarchies of rarity and protection (conference presentation)
- I. Tsvetkov, S. Bratanova-Doncheva, Y. Dodev & M. Zhiyanski: Ecosystem services in coppice importance and prospects as a strategic basis for effective forest management and human well-being (conference [presentation)
- C. Suchomel, P. Pyttel & A. Carneiro: Microhabitats in thinned aged oak coppiced forests in Luxembourg (conference presentation)
- M. P. Perring, L. Depauw, S. Maes, H. Blondeel, E. De Lombaerde, D. Landuyt, K. Verheyen: Ecosystem services from coppiced forests: the need to understand functional trait distributions in an era of environmental change and in the light of land-use legacies (conference presentation)
- J. Müllerová, J. Altman, J. Doležal, P. Dörner, R. Hédl, V. Pejcha & P. Szabó: The legacy of coppicing: the present reflects the past (conference presentation)
- A. Feher, D. Halmova, L. Koncekova & G. F. Borlea: Coppice forest and invasive species: the case of *Ailanthus altissima*, a successful survivor in Eastern and Central Europe (conference presentation)
- T. Danut, G. F. Borlea & A.-M. Tenche-Constantinescu: Willow short rotation coppice local natural populations versus selected commercial clones in various site conditions in Western Romania (poster presentation)
- A. Feher: Dynamics of oak coppice in SW Slovakia: past, present and future (poster presentation)
- P. Szabó, J. Müllerová, M. Macek, S. Suchánková & M. Kotačka: Patterns of change in the extent of coppicing at the landscape scale (poster presentation)
- R. Hédl, P. Szabó, M. Macek, J. Šipoš, J. Müllerová, M. Kopecký, J. Houška, S. Suchánková, M. Chudomelová & O. Vild. Forgotten but present: The legacy of historical coppicing in the forest herbaceous vegetation of central Europe. Presentation to IAVS conference, Brazil, June 2016

Rules and regulations relating to coppice forests

The overall objective was to compile and evaluate legal documents about specific rules and legislation related to coppice forests and conservation and biodiversity issues.

Progress is being made on a broad review of legislation and regulation with special reference to coppice, where possible, including felling restrictions, restocking/regeneration requirements, legal requirements for management plans and criteria for sustainable management.

Italian colleagues, Paola and Rudolpho, are preparing a comprehensive review to include every region of Italy, some in depth. Information has also been gathered for nine other countries, some of which has been vetted and amended where necessary by other COST members. Some still need to be further researched. The output may be in booklet form. Tentative title: *Coppices in forest regulations in Europe*.

Countries not covered so far: **Bulgaria**, Croatia, **Czech Republic**, **Germany**, **Greece**, Hungary, Latvia, Lithuania, Poland, **Romania**, **Slovakia**, Slovenia, Spain, Cyprus, Luxembourg, Malta. Contributions from the highlighted countries would be gratefully received – deadline **1**st **December 2016**.

There is also discussion with Group 5 on suitable outputs. As referred to in the Maintz minutes, some information on coppice is also to be collected by a Masters student.

Further WG4 initiatives for completion before Oct 2017

1. Boppard Training School, July 18th - 22nd 2016

The overall aim of the Training School is to study the concepts and methods to assess ecosystem services related to biodiversity, conservation and cultural heritage for coppice forest stands in different stages of development. 20 trainees out of 36 applicants have been selected; the TS will be organised in cooperation with the Forestry District of Rhineland-Palatinate. Trainers include: Peter Buckley, Radim Hedl, Patrick Pyttel, Christian Suchomel, Frantisek Malis (SK) together with Gero Becker, Alicia Unrau and District Officers.

2. Forest certification

It was agreed that all members should examine the rules and regulations regarding FSC and PEFC certification in their respective countries, particularly with a view to biodiversity and coppice aspects. Accounts from this exercise could be added to the *Coppices in forest regulations in Europe* booklet, for the same deadline of **1**st **December 2016**.

- 3. WG2 and 4 collaboration: Noro Nicolescu and his group (WG2) are planning to produce an article on 'the consequences of abandonment of traditional coppice forests in Europe in terms of ecosystems services delivery' in collaboration with several other group members. WG4 have agreed to participate and a paper on content will be disseminated.
- 4. Action output(s): Policy Paper and Final Action Dissemination (FAD)

To be discussed, following SG and MC meetings.

Afternoon session

Jana Müllerová, Kris Verheyen, Katrin Heinsoo and Luc De Keersmaeker gave interesting presentations on their research and the work of their institutes.