

COST Action FP1301 EuroCoppice Training School: “Coppice Management, Biodiversity and Services”

17.07.2016 – 23.07.2016

Boppard, Germany



*Hosted by: Albert-Ludwigs
University of Freiburg*

*Supported by: Forestry District
Boppard, Rhineland-Palatinate*



Training School Report

Summary: The weather turned warm in mid-July 2016, just in time for the 4th Training School held by COST Action FP1301 EuroCoppice. Along with the sun came 19 enthusiastic post-graduate students and young researchers from across Europe to converge on Boppard, a town known as the „pearl“ of the Rhine Valley. The area, situated in the state of Rhineland-Palatinate, also happens to be a hot-spot of coppice forests in Germany, with many of the stands consisting of aged coppice on difficult to access slopes. To offer a new perspective on coppice forests in Europe, this particular Training School focussed on the characteristics and assessment of these forest’s biodiversity and ecosystem services, in combination with aspects of their management. Luckily, neither the coppice nor the students paid too much heed to the heat and humidity, so that all learning aims could be met and all participants could gain a new appreciation for both coppice and the local culture.

Participants

The 19 Trainees who participated in the Training School are affiliated to institutions in 12 different COST countries and formed a mix of 15 nationalities. There was variation in the backgrounds of Trainers as well, with international (England, Czech Republic and Slovakia), as well as local (German) representatives, who offered much support and expertise throughout the week (the distribution of Trainers between modules and presentations can be seen in the program in the Annex of this document).



Article on the Training School, published in the Boppard local newspaper

The participants are listed below:

Trainers

Gero Becker	Albert-Ludwigs-Universität Freiburg	DE	Coordinator
Peter Buckley	Consultant Ecologist	GB	Training Module 1 (Lead)
Radim Hédli	Czech Academy of Sciences	CZ	Training Module 1 & 2
Jörg Kunz	Albert-Ludwigs-Universität Freiburg	DE	Training Module 2

Gerd Loskant (& Team)	Forest District Boppard	DE	Local Support
Frantisek Malis	Technical University in Zvolen	SK	Training Module 1 & 2
Patrick Pyttel	Albert-Ludwigs-Universität Freiburg	DE	Training Module 2 (Lead)
Christian Suchomel	Albert-Ludwigs-Universität Freiburg	DE	Training Module 1 & 2
Alicia Unrau	Albert-Ludwigs-Universität Freiburg	DE	Assistant Coordinator

Further local/international experts who gave input and guidance:

Martin Grünebaum, Dr. Jens Jacob, Ralf Kerber, Martin Löschmann, Jennifer Mills, Johannes Nass and Georg Joseph Wilhelm.

Trainees

Michal Adamus	University of Agriculture in Krakow	PL
Matia Mulumba Agaba	Bern University of Applied Sciences	CH
Christopher Bates	Bangor University	GB
Ieva Bebre	Latvia University of Agriculture	LV
Svijetlana Borak	Croatian Forest Research Institute	HR
Irene Chrysafis	Democritus University of Thrace	EL
Most Jannatul Fardusi	University of Tuscia	IT
Milan Gazdic	University of Belgrade	RS
Eulalia Gomez Martin	University of Greenwich	UK
Marta Gonzalez-Garcia	CETEMAS	ES
Radosław Jagiełło	Polish Academy of Sciences	PL
Zhihai Luo	Camborne School of Mines	GB
Marius Manea	University of Agricultural Sciences	RO
Iryna Matsiakh	Ukrainian Forestry University	UA
Muhammad Muddasir	University of Tuscia	IT
Robert Popek	Polish Academy of Sciences	PL
Marko Stojanovic	Mendel University	CZ
Abhishek Mani Tripathi	Global Change Research Institute	CZ
Bogdan Marian Tofanica	Technical University of Moldova	RO

Acknowledgements

The Coordinators are very grateful to COST for funding the Training School, to Gerd Loskant and his Team from the Forest District Boppard for providing such welcoming and warm hospitality and assistance, as well as to the Eva Mayr-Stihl Stiftung for their substantial financial support towards the organisation of the Training School.

Content and learning activities

The following content and learning outcomes were attained prior to and during the Training School, which are equivalent to 3 ECTS:

- Complete preparatory tasks and readings on coppice forests
- Identify and classify different stages of coppice development
- Identify parameters and indicators relevant to the assessment of Ecosystem Services
- Apply adequate methods for the assessment
- Train the use of related data collection methods and tools
- Apply data processing and analysis
- Interpret and critically evaluate the results
- Learn about coppice forests and management in the Rhine Valley

The Trainees received a Certificate for their achievements.

Description of Activities

Prior to the Training School, Trainees were required to review literature on coppice forests, as well as produce “Mini-Posters” with information on coppice in their respective countries. The Mini-Posters included: definitions, statistics, coppice distribution, pictures and descriptions. This was not an easy task considering the general lack of information on coppice forests, but it was clear that much effort was put into the Posters and that it was of benefit for the preparation of the Training School.

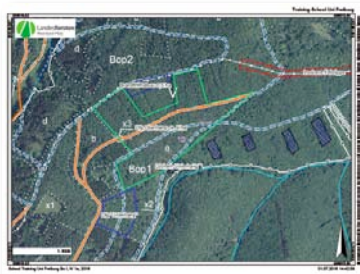
The following is a brief description of the scientific activities that took place on each day of the Training School:

Monday - Introduction

Participants met at the local Forest District Office in Boppard and were introduced to the content and aims of the Training School, as well as to coppice forests in the region. After voicing their own expectations of the Training School, Trainees learned about concepts and methods used in the assessment of ecosystem services, in terms of biodiversity, conservation and cultural heritage, as well as coppice in NATURA 2000. Finally, students received preparatory information on the fieldwork for the Module “Coppice forest vegetation composition and structure” to take place the following day.



Tuesday – Fieldwork on vegetation composition and structure



Participants travelled by train to a nearby coppice stand in “Fleckertshöhe”. There the Head of the hosting organisation “Landesforsten Rheinland-Pfalz”, Dr. Jens Jacob, welcomed the students upon their arrival and gave an introduction to the location. The fieldwork began with a



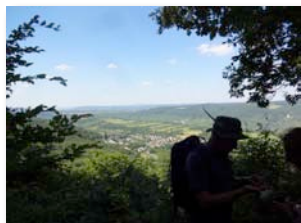
demonstration of the three methods to be used for the data collection: (1) identifying and estimating the abundance of species in the canopy, understory and ground vegetation, (2) plotless sampling using a point-centred quarter method, in which the nearest trees in each NE, NW, SE and SW

quadrant were measured at set intervals and (3) measuring dead wood along a line transect. These methods were then applied by 5 groups of 4 Trainees, assisted by the Trainers.

Each group assessed areas with different characteristics:

- 1A & 1B - Young coppice & burned area
- 2 - Abandoned coppice on rocky & dry ridge
- 3 - Converted coppice, upper slope
- 4 - Converted coppice, lower slope
- 5 - Nutrient-rich, dense-canopy, muflon-grazed

A local journalist also visited the fieldwork in the afternoon and promptly published an article the following day (see the first page of this report).



Despite the hard work and hot weather, all Trainees subsequently hiked back to Boppard through the surrounding forests before a well-earned break in the eve.



Wednesday – Fieldwork on rare tree species

The second Module of the Training School began with an introductory presentation on rare tree species in the region (*Sorbus torminalis*, *Sorbus domestica*, *Acer campestre* and *Prunus avium*) and the aims of the data collection work in the afternoon. The participants then took a bus to Weisel, approximately 1 hour south east of Boppard, to a coppice stand in which the Trainers from the University of Freiburg have been using for research since 2009.



The Trainees split up into four groups and worked in the following areas, respectively:

- 1 - young coppice, unfenced
- 2 - young coppice, fenced
- 3 - aged coppice, upper slope
- 4 - aged coppice, lower slope

Each group was responsible for their own appropriate method of data collection. In the end, they were expected to have collected data on the number of the selected rare tree species and their vitality compared to surrounding (competing) tree species.

Thursday – Data analysis and presentations

In the morning, Trainees analysed their data on rare tree species that they had accumulated the previous day. Each group presented their findings and the leading Trainers summarised the main outcomes and take-home-messages. The Trainers of this module concluded with a presentation of recent related research they had carried out in Weisel on a similar subject.



Ludwig Simon and Werner Maurer had intended to present information on coppice forests and the hazel grouse to round off the morning session. Unfortunately, that presentation was cancelled, but they graciously made their presentation available to Trainees. Luckily, a valuable addition could be made to the program during that time slot, as the Department Head of Silviculture in RLP, Georg Joseph Wilhelm, was able to join for the student presentations and thereafter provided insight from his vast experience on the topic.



In the afternoon, the data collected in the first Module (fieldwork on Tuesday) was analysed by Trainees in a series of rather complex equations. The students presented their results and the Trainers provided feedback and a general overview of further methods of analysis and lessons to be learned from the exercise.

Friday – Excursion and wrap-up

On Friday, participants learned more about coppice forests in the region on an extensive excursion on the steep slopes of aged coppice, as well as management concepts for supporting rare tree species. The day concluded with a review of the Training School and evaluation by participants (see coming section for details).

The Training School were also accompanied by recreational activities, outside of the formal hours, for example, the Icebreaker BBQ, wine tasting, ferry ride, Thonet Museum, farewell dinner...



Evaluation & feedback

The organisers were very grateful for the positive and constructive comments from all participants, both Trainees and Trainers. Beyond the formal and informal opportunities given for feedback given throughout and at the end of the Training School, Trainees filled out an anonymous evaluation on the final day. The questions were based on those given to the Trainees in the 2nd EuroCoppice Training School in Vallombrosa, Italy (10 – 15 May, 2015).

All 19 Trainees completed the evaluation. The results are:

How did you hear about the Training School? (More than one answer possible)	
Responses	
7	Action Website
6	Email from the Action Coordinators
0	National COST Delegate
1	Mentor
4	Trainee from a previous EuroCoppice Training School
1	Friend or Colleague not mentioned above
0	IUFRO
3	Other ____ Responses: email from university of study; supervisor; facebook

What was your main reason for attending the Training School? (More than one answer possible)	
Responses	
13	Content
13	Networking
2	Recommended by supervisor
3	Other ____ Responses: New experience - develop forestry knowledge; learn about coppice forestry practice in the field; improving personal skills

Answer "yes" or "no" to the following questions:		
Responses		
Yes	No	
5	14	Have you attended a course on similar topics before?
7	12	Have you worked professionally on similar topics before?
3	16	Do you regularly conduct research on <u>coppice forests</u> ?
14	2	... do you plan to in the future? → <i>Note: 3 emitted when positive to previous Q</i>
9	10	Do you regularly conduct research on <u>biodiversity and/or services</u> ?
15	3	... do you plan to in the future? → <i>Note: 1 emitted when positive to previous Q</i>
19	0	Do you think the training will be useful for your professional career?

Level of satisfaction on a scale of 1 (not at all satisfied) to 5 (highly satisfied)

Average	
4.7	• Introduction to the Training School (Mon)
4.6	• <i>Training Module 1 “Coppice forest vegetation composition and structure”</i>
4.2	→ Introduction and field work (Mon / Tues)
	→ Analysis and results (Thurs)
4.6	• <i>Training Module 2 “Rare tree species in coppice forests”</i>
4.6	→ Introduction and field work (Wed)
	→ Analysis and results
4.5	• Guest Lectures (Mon, Thurs)
4.4	• Excursion (Fri)
4.5	• “Mini-poster” preparatory task
4.7	• Recreational program (Icebreaker, Ferry, Museum...)
3.9	• Accommodation (AWO Guesthouse)
4.6	• Venue (Forest District Office, Field, Boppard & region)
4.6	• Overall satisfaction

Comments

Trainees were also given space to include further comments. These comments were very positive in general; the main criticism was that there was no internet available at the Forest District Office and that the connection at the AWO Guesthouse was unreliable. Lack of internet at the Office was not seen by the organisers as necessarily negative as there was quite a ambitious program with little space for internet-related activities. However, it was unfortunate that the connection at the AWO guesthouse did not function adequately – the managers of the residence have been informed and are looking to find a solution.

Selected Trainees quotes:

“First of all thank you very much to organizers for given me an opportunity to be part of a great training school. I am thankful to all trainers who taught a lot of things in and off the fields. I also thank my colleagues (friends) for a nice working environment and discussion. I really enjoyed your company and learned a lot of things including Coppice Forest and Management.”



“For me, the course was very well organized with a very well packaged program which included both theory but an equal amount of practical work. It was particularly interesting to work on the methodology, go to the field and collect data, analyze it and present it within one week. All the trainers were really enthusiastic and gave very good input at all stages of the training. Our local hosts were also very informative giving detailed information about their forest management and they were very



“attached” to and proud of Boppard. Another thing was the diversity of trainees. It was good to interact with everyone and learn some things about other countries as well. In addition, people were from all backgrounds, not only forestry but also areas like chemical engineering but with similar interests in forest management. Also important were the different stages of careers and education for the different students yet everyone was down to earth. For me, it was very interesting how we all

worked together even in the very hot weather and working until late in the evening and yet everyone persevered throughout. One last thing is that exercise to prepare the poster was a very good form of preparation.”



“The largest part of the training school was related to the practice and team work and this was the right combination for providing new knowledge to us.”

“I am very grateful to get a chance to participate to the Training School here in Boppard. For me this Training School was a great experience and I think that the knowledge and experience that I got on the Training School will help me in my future career.”



ANNEX – Detailed Program

Sunday July 17th – Arrival and Ice Breaker

- 17:00 **Departure** for Ice Breaker
Meeting point is the AWO Guesthouse
- 17:00 – 22:00 **Ice Breaker Event, BBQ @ Vierseenblick**
(Sponsored by organisers)

Monday July 18th – Introduction and conceptual framework

Led by Gero Becker (morning) and Peter Buckley (afternoon)
Location: Forest District Office (Forstamt)

- 8:30 – 9:00 **Welcome on behalf of EuroCoppice & introduction to the Training School**
Prof. Dr. Gero Becker, Action Chair FP1301 EuroCoppice, University of Freiburg
- 9:00 – 9:30 **Welcome on behalf of the Regional Authorities & introduction to the region**
Dr. Gerd Loskant, Forest District Director Boppard
- 9:30 – 9:45 **Organisational and technical details**
Alicia Unrau, Action Manager FP1301 EuroCoppice, University of Freiburg
- 9:45 – 10:30 *Coffee Break with introduction of participants*
- 10:30 – 11:00 **Expectations of participants**
- 11:00 – 12:15 **Overview of coppice forests in Rhineland-Palatinate (RLP)**
Presentation and discussion
Martin Löschmann, Lead Silviculture Expert in RLP
- 12:15 – 13:30 *Lunch in Boppard (responsibility of participants)*
- 13:30 – 15:00 **Overview of concepts and methods to assess ecosystem services related to biodiversity, conservation and cultural heritage**
Dr. Peter Buckley, Consultant Ecologist, UK
Dr. Radim Hédli, Institute of Botany, The Czech Academy of Sciences
- 15:00 – 15:30 *Break*
- 15:30 – 17:00 **Training Module 1 (TM1): “Coppice forest vegetation composition and structure”:
Introduction to concepts and methods**
Dr. Peter Buckley, Consultant Ecologist, UK
Dr. Radim Hédli, Institute of Botany, The Czech Academy of Sciences
Dr. Frantisek Malis, National Forest Centre, Slovak Republic
- 17:15 – 18:00 **Coppice and NATURA 2000**
Dr. Christian Suchomel, Chair of Forest Operations, University of Freiburg
- 19:30 – 22:00 *Wine tasting seminar incl. snacks (sponsored by organisers)*
Weingut Königshof, Rheinallee (www.weingut-koenigshof.de)

Tuesday July 19th – Fieldwork for TM1 “Coppice forest vegetation composition and structure”

Led by Peter Buckley and Co-Trainers

Location: Forest District Fleckertshöhe

- 8:45 **Briefing for Fieldwork** (at AWO Guesthouse)
- 9:15 **Departure to Train Station**
Train departs at 9:33
- 9:45 – 16:15 **Fieldwork** (picnic lunch brought by participants; drinks provided by organisers)
- 16:15 – 17:15 **Return to Boppard** (hike to Buchenau, public bus to Boppard @ 17:37)
- Evening Dinner in Boppard (responsibility of participants)*

Wednesday July 20th – Training Module 2 (TM2): “Rare tree species in coppice forests”

Led by Patrick Pyttel and Co-Trainers

Location: Forest District Office (Forstamt), Forest District Weisel

- 8:30 – 10:00 **TM2: “Rare tree species in coppice forests”:**
Introduction to concepts and methods
Dr. Patrick Pyttel, Chair of Silviculture, University of Freiburg
Jörg Kunz, Chair of Silviculture, University of Freiburg
- 10:30 **Departure** for field work via Loreley (bus)
- 11:30 – 17:00 **Fieldwork** (picnic lunch brought by participants; drinks provided by organisers)
- 17:00 **Return to Boppard:** Walk to Kaub, train to Filsen and ferry to Boppard
- Evening Dinner in Boppard (responsibility of participants)*

Thursday July 21st – Analysis and interpretation of field data

Led by Patrick Pyttel (morning) and Peter Buckley (afternoon)

Supported by Co-Trainers & moderated by Gero Becker

Location: Forest District Office (Forstamt)

- 8:30 – 10:00 **TM2 (Rare tree species): Analysis and interpretation of field data**
By Trainees, supported by Trainers
- 10:00 – 11:00 **TM2: Presentation of results and discussion** (Trainees)
Feedback and outlook (Trainers)
- 11:15 – 12:15 **Strategies of Silviculture in overaged coppice forests in Rheinland-Pfalz**
Presentation and discussion
Georg Joseph Wilhelm, Department Head of Silviculture in RLP
(Hasel Grouse Presentation by Ludwig Simon & Dr. Werner Maurer was cancelled)
- 12:15 – 13:30 Lunch in Boppard (responsibility of participants)*
- 13:30 – 16:30 **TM1 (Vegetation): Analysis and interpretation of field data**
By Trainees, supported by Trainers

16:30 – 17:00 *Break*

17:00 – 18:30 **TM2: Presentation of results and discussion** (Trainees)
Feedback and outlook (Trainers)

Evening Dinner in Boppard (responsibility of participants)

Friday July 22nd – Excursion: Coppice and cultural heritage in the Rhine Valley

Led by Gero Becker & Gerd Loskant

8:30 – 13:00 **Excursion:** Oak stands from coppice origin: landscape, management & utilisation
Return trip on the ferry

13:00 – 14:00 *Lunch in Boppard (responsibility of participants)*

14:00 – 15:00 **Thonet Museum**, Alte Burg, Boppard
Mr. Treichel, Tour Guide

15:30 – 16:30 **Feedback on the Training School**
Trainees and Trainers

16:30 – 17:00 **Organisation and finances**
Alicia Unrau, Action Manager FP1301 EuroCoppice, University of Freiburg

Closing remarks

Prof. Dr. Gero Becker, Action Chair FP1301 EuroCoppice, University of Freiburg

18:30 *Farewell dinner (meal sponsored by organisers; drinks covered by participants)*

Saturday July 23rd – Departure

11:00 Departure