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MSc European Forestry
ERASMUS MUNDUS

GENERAL PROCEDURES AND GUIDELINES FOR MSC THESIS PROJECT

MSc thesis in the Master of Science in European Forestry programme

Table of Contents

1 Introduction

1.1 Objectives of these guidelines

These guidelines have been made to ensure equal treatment and procedures of the students regarding the organisation of the MSc thesis process in the MSc European Forestry programme. These guidelines are valid in all MSc European Forestry Full Partner universities. However, additional guidelines and specific regulations may be applied in some universities and in those cases, those should also be respected.

The Master thesis of the MSc European Forestry programme offers you the challenge of demonstrating your ability to set up and carry out a scientific research project in a self-responsible and independent manner. This challenge includes:

- to provide an adequate delineation and definition of the research topic,
- to build a sound theoretical framework for orientation of the research,
- to collect data in a systematic and verifiable manner,
- to analyse the data critically and correctly, and
- to present and discuss material, methods and results adequately and to draw appropriate conclusions.

1.2 Thesis supervision concept

The supervision process in MSc EF programme can be divided into following items:

- the start of thesis preparation,
- thesis work,
- evaluation of thesis, and
- problems in thesis process.

<u>The start of thesis preparation</u>

Thesis supervision process is started in the second-year university after discussing with your local coordinator of MSc EF programme. Preliminary brainstorming and search for the possible topics can be made with various teachers and researcher within MSc EF Consortium. Primary supervisor is defined in the second-year university according to the formal procedure of each university. The joint supervision concept needs to be considered when thesis is started (a recommendation: supervisors from two Full partner universities). All Full Partner universities are able to accept additional supervisors outside the hosting university.

Joint supervision is encouraged to promote collaboration between scientific communities. Typically, there is an intention to write scientific article jointly from the subject of thesis. You are supposed to take the initiative to start joint supervision by contacting potential supervisors. The local coordinators of each Full partner university are supporting you to find potential co-supervisors. The MSc EF programme organises an annual event to promote joint supervision opportunity during the annual consortium meeting and promotes profile of teacher pool of all participating universities.

<u>Thesis work</u>

The supervisors of MSc thesis project are recommended to have regular meetings (a recommendation twice a month) with you to ensure that the thesis work is going smoothly and the possible challenges and/or problems you may have, can be dealt with. Also, these regular meetings ensure that you are aware of the individual regulations and guidelines that each second-year university may have in addition to these guidelines and recommendations. Supervisor(s) should also take care that it is possible for you to finish your MSc thesis in time (the workload should be adjusted to 30–36* ECTS, one semester, *in WU).

<u>Evaluation of thesis</u>

Thesis will be graded according to practice defined in the hosting second-year university.

The following requirements related to the evaluation of MSc thesis work are jointly followed in each MSc EF Partner university:

- The evaluation by the second evaluator should be done independently and the second evaluator should generally not be participating in the supervision process.

- Plagiarism is controlled using software used in the partner University. Local coordinator of MSc EF programme will ensure that plagiarism is controlled.

University specific practices are described below and combined in **Table 1**.

UFR
Master thesis: The thesis can be started when in total 70 ECTS have been reached. The master thesis is evaluated by two teachers. At least one of the evaluators has to be permanently employed by the University. Presentation of the master thesis work in a seminar setting is not compulsory but recommended.

APT
The internship that leads to the master thesis takes place in a host institution (research lab, professionnal organisation) supervised by a supervisor in the host institution with an academic tutor in AgroParisTech. It includes the formalisation of an innovative question and a scientific method (data collection and analysis) to solve it. Its duration is at least 20 weeks. Master thesis is evaluated by a written appreciation from the supervisor (20%), a review of the written thesis by two reviewers (40%), an oral defence evaluated by a jury of at least 3 experts (researchers, teachers), among them the responsible of the curriculum in AgroParisTech (40%). Master thesis defence are organised in the very beginning of September.

BOKU
After the successful completion of all the courses and examinations required in the Master's Programme, the completed master's thesis, after it has been given a positive evaluation by the thesis supervisor, shall be publically presented by the student and defended in the form of an academic discussion (defensio). The committee shall consist of a committee chair and two additional university teachers with a venia docendi or equivalent qualification. The student's total performance (thesis and defensio) will be assigned a comprehensive grade. Both thesis and defensio must receive a passing grade for the student to complete the programme. The written evaluations stating the rationale for the thesis grade and the defensio grade are included in calculating the comprehensive grade and are documented separately.
The comprehensive grade is calculated as follows:
– Master's thesis: 70%
– Defensio (incl. presentation): 30%

UdL
Master thesis: No exact regulations for the timing of the thesis. The master thesis is evaluated by three external evaluators.

UNITBV
Positive completion of the internship and master thesis worth a total of 30 ECTS credits. The internship that leads to the master thesis may take place in the research labs of the university or in a host institution (research institute, forest company) under the coordination of the supervisor of the MSc thesis. The internship lasts for at least 10 weeks. The MSc thesis is first evaluated by the supervisor, who decides on the approval and submission for the public defence. The oral defence is evaluated by a jury of three 3 experts (professors). The jury is nominated by the Faculty Council. Master thesis defence is organised in early July or early February next year.

WU
For the Wageningen University assessment, supervisors/examiners use the Wageningen University Thesis Assessment Form. The average grade for each category (performance, thesis project report, oral presentation (colloquium), oral defence) should be at least 5.5 for a pass.

The assessment strategy below shows the relation between the learning outcomes and the different parts of the assessment.

Weights	Description	Assessment categories: Performance	Research	Oral presentation	Oral defence
	% of grade	40%	50%	5%	5%
Learning outcomes	1 Develop a research plan, including: a description of the research topic in relation to the wider scientific context; an identification of the knowledge gap; formulation of research questions and/or a hypothesis, aims and objectives; an explanation of how you intend to conduct the research (e.g. in terms of a design for the project, data-collection and -analysis methods, research tools).	x	x		x
	2 Collect, select and process data, using the design for the project, methods and tools described in the research plan.	x	x		x
	3 Analyse and synthesise the data in order to answer the research questions and/or test the hypothesis.	x	x	x	x
	4 Formulate answers to the research questions that are supported by the research outcomes; pay attention to potential limitations; critically discuss the outcomes in relation to the wider scientific and societal context.	x	x	x	x
	5 Report on the research, both in writing and in oral presentation.	x	x	x	
	6 Work in compliance with academic codes of conduct, and with proper management of time and resources.	x	x		
	7 Make use of input and feedback for executing the research project and provide feedback to others.	x			
Assessor	Assessor 1	x	x	x	
	Assessor 2	optional	x	optional	
	WU Examiner (grade)*	x	x	x	x

* The examiner will determine the final grading after a discussion with the supervisor/second assessor.

A rubric is used for feedback and grading. Both assessors independently assess one or more aspects of your thesis work. Subsequently, the examiner, usually in consultation with both assessors will determine the final grade for the different criteria. Apart from that, you will generally have a final meeting in which your supervisor and/or examiner will provide you feedback on the overall project (beyond just the assessment). In some groups, the oral defence and the final meeting may be combined in a single meeting.

The assessment, the final grade, as well as an underpinning of the grade will be registerered in OSIRIS. After the examination, you will receive the reasoning behind your thesis grade, including specific feedback on all assessment categories.

Table 1. Thesis process and evaluation process at the second-year host universities.

University	Timing of the thesis and the special requirements	Possible/preferred format of the MSc thesis	Local Oral defense and/or seminar compulsory	Evaluation process and grading (number of evaluators etc.)	Deadline, payment
UFR	6 months, a min. of 70 ECTS is required before the thesis can be started	Scientific thesis	No/ Optional	2 evaluators. If grading difference >1 additional evaluator is nominated.	No deadline (after September new academic year)
APT	5-6 months Feb-August	Scientific thesis	Yes/ No	3 evaluators, 20% by supervisor, from university.	November, Thesis work is paid.
BOKU	6 months fulltime equivalent	Scientific thesis	Yes/ Yes	2 evaluators, thesis 70% + public defense 30%.	No
UdL	No exact timing requirements	Publication/Technical report/ Scientific thesis	Yes/ No	3 evaluators, all external evaluators.	September (extension in next academic year possible)
UNITBVv	4 months, Feb-June, a min, of 60 ECTS is required before the thesis can be started and a min. of 120 ECTS when thesis is submitted.	Scientific thesis	Yes/ No	3 evaluators, thesis + oral presentation combine the grade.	June (extension in January next year)
WU	6 months fulltime equal to 36 credits. Students need to have completed thesis preparation courses relevant for their thesis.	Scientific thesis	Yes/Yes	Supervisor(s) and examiner. Performance 40% Research report 50% Oral presentation 5% Oral defence 5%	Before September. Extension is possible.

Problems in the thesis process

When problems will occur during thesis supervision process, you are advised to contact the local coordinator of the second-year host university first and if no solution is found the programme coordinator of the MSc EF-programme at the University of Eastern Finland. The programme coordinator and the local coordinator will then discuss about subject. All informed problems as well as the general feedback related to the thesis process are analysed in the annual consortium meetings.

1.3 Ethics of preparing a scientific work

There are two main principles that you need to be kept in mind when preparing your thesis:

1. The thesis must be based on honesty and truth, for example you cannot falsify or fabricate data.
2. You should give credit where it is due for example for an idea or data, which includes not plagiarising other people's work.
   a) Every idea that is not your own must be credited. Otherwise you are taking credit for another person's idea.
   b) Every fact that you did not yourself establish must be credited. Otherwise you are claiming direct knowledge that you do not have. This includes field or laboratory work actually done by others which you are reporting. [Taken from Rossiter International Institute for Geo-information Science & Earth Observation (ITC) Enschede (NL)]

2 Elements of the thesis

2.1 Selection of a topic

You are advised to contact your local coordinator at your second-year host university and discuss with him/her about the different options and the topics you would be interested in well before starting the thesis project during the autumn semester of the second-academic year. You may also check by yourself the web pages of your second-year host university and contact directly the professor or other teaching staff for further information about the possible topics and projects that are going on. In case, the other co-supervisor comes will be from the other university/organisation, you should also discuss about the topic with him/her.

2.2 What is a research proposal?

The scientific standards that apply (and thus must be met) are the following:

- The thesis must be theory-based.
- The research must be verifiable.
- The research must be in principle replicable.

To make sure that your research is complying with these rules, you should start by making a research proposal attending to these standards. A proposal consists of the following parts:

- Problem statement: This gives the motivation for the selection of the topic and a clear description of the problem field, finally resulting in a concise problem statement. This part includes a review of the empirical literature, which is most relevant to the topic and ensures that the topic has not already been exhausted by other researchers and hypotheses.
- Research objective(s) and research questions: This clearly states the scientific objectives of the research and includes formulation of the underlying scientific hypotheses. It is important that the objectives of the research are strictly related to the research topic.

Subsequently, the research objective(s) should be translated into research questions. These are the questions that need to be answered in order to implement the research.

Methodology:

- In this part of the proposal it should be explained how the theory and research questions can be examined and answered. The function of the methodology part within the research proposal (and later in the thesis report) is to specify reliability, validity and replicability of the research.
- Identify the character of the thesis work. For instance: is it an explorative, or comparative, or experimental study?
- Design the data collection. This step requires arguing about, and providing an answer to, the following questions:

(1) What is seen as data and from which sources of information do you obtain these data?
(2) What are the criteria for determining and delineating the sources of information?

(3) What methods are employed to derive the data from the sources of information? In the case of experimental work: what is the experimental design, which factors do you explicitly test for, how many replicates do you have, etc.?

- Design the data analysis: It should be pointed out that the description of the methods is necessary for data collection as well as for data analysis. How can the data be processed? Which statistical tests can be applied given the employed data collection methods or experimental design? Note that it is important to think about data analysis before you start to collect data. Certain analyses require certain data formats and experimental set-up.
- Working plan and time schedule: The research proposal finally should be completed by a comprehensive working plan, indicating the necessary steps in carrying out the research, important milestones as well as their logical order in time.
- In some cases you need a financial plan. The general necessity of financial means to carry out the thesis work needs to be discussed and agreed between student, supervisor, and examiner before the actual thesis work starts.

2.3 Checklist for successful completion of MSc thesis work

Action	**Who?**
1. Preliminary brainstorming and search for possible topics for a Master thesis.	Student, local coordinator
2. Discuss about thesis topics and supervisors with the coordinator of your second-year host university.	Student, local coordinator, supervisor(s)
3. Consider potential of co-supervision concept (additional supervisor outside host-University).	Student, local coordinator, supervisor(s)
4. Discuss with the supervisor(s) (and local coordinator) about the specific requirements and guidelines for the thesis project.	Student, supervisor (and local coordinator)
5. Write a study plan.	Student, supervisor
6. Thesis work – regular meetings with the supervisor(s) are recommended.	Student (supervisor)
7. Submit your thesis for evaluation according to the guidelines of the second-year host university.	Student
8. Present final thesis (e.g. online thesis seminar)	Student

Note: Some of the partner universities stipulate that the thesis period lasts for a fixed length of time. You and the thesis supervisor should determine the deadline in accordance with the host university's guidelines.

3 Guidelines for writing your thesis

3.1 General

The research activities should finally result in a comprehensive, consistent and concise thesis report. There is no fixed limit to the size of the thesis. In general, a text is as long as is needed. As a rule of thumb, the size of the thesis should not exceed 60 pages, excluding annexes. Ideally, you should write your thesis as if it were a scientific article ready to be published.

A good thesis should have three fundamental characteristics:
(a) It should be clearly expressed and presented.
(b) It should be concise.
(c) It should be consistent in style.

3.2 Thesis structure

- **Cover page**: Use the template of your host university
- **Abstract**: The abstract is an independent overview of the contents of the thesis. It may not contain any references to the actual text or uncommon abbreviations explained in the thesis etc. By reading the abstract the reader should get a comprehensive idea about the study.
- **Foreword**: The eventual foreword explains the motivations for the study and its connections with a broader research. Additionally, the supervisors are mentioned in the foreword and the author may give acknowledgements to persons and organisations who have contributed to the thesis. It should be stated either in the foreword or in some other appropriate place where the empirical data used in the study is saved or stored.

  The abstract and foreword are not included in the table of contents, because they are placed before the table of contents. The unnumbered heading pages shall be regarded as page 1 (not the hard cover).

- **Introduction**: This part includes the problem statement, the scientific objectives as well as the research questions that you have formulated in your proposal. You can also give a characterisation of the type of work and a short outline of the structure of the subsequent chapters can complete it. Note that during your research work you may have come up with additional questions. These should also be mentioned here, but it should be clear that these questions were not part of the original set-up. The introduction includes the **Theoretical Framework** where you provide a review of the theoretical and empirical literature and the reconstruction of the used theoretical concepts. The theoretical framework may be completed by a conceptual model, in which the relations of the relevant concepts of the applied theories are presented. Note that this framework may also be part of the introduction instead of being presented as a separate chapter.
- **Material and methods**: This part reports on the information sources used, as well as the applied methods and materials used for data collection and data analysis. In contrast to the research proposal - where this section is presenting the ambitions/ plan- you must present the situation as it has actually worked (incl. problems that occurred) in the final thesis report. In the case of fieldwork, you should describe the area and sites in which the research was carried out. In the case of laboratory work, you should describe the applied laboratory analysis/measurement methods. When you have done experimental work, you should give all relevant details of the followed procedure (protocol). This enables others to evaluate your work, and to reproduce it if needed.
- **Results**: In this section the results should be presented in the most objective and comprehensive manner. Mixing results with subjective interpretation and discussion should be avoided. The challenge is to structure the results in such a way that the research questions are addressed as best. Where appropriate, the findings should be illustrated or summarised with tables and figures. In any case tables and figures must be drawn in such a way that they can be read on their own, independent from the surrounding text. Do not forget to include measurement units and an explanation of abbreviations.

References to tables and figures should be made in the text (e.g., see table 1; cf. figure 2). Note that table captions are given above the table, whereas figure captions are placed below the figure.

- **Discussion**: The discussion section links your own findings, as presented in the result section, with those of others. What do your results mean and imply? The challenge here is to argue for and against the findings and the related theoretical concepts. Literature references are therefore again a requisite in this section. Furthermore, you must discuss your findings in the background of the scientific objective(s) and the research question(s), as well as in the light of the chosen theoretical framework. Last but not least, it should also not be forgotten to discuss to what extent the findings might have been influenced by the chosen methods. A recommended practice could be to structure the discussion section into a critical acclaim of (i) the material, (ii) the field, (iii) laboratory and (iv) statistical analysis methods, and finally (v) of the results.
- **Conclusions**: This section brings together the most important consequences of your research. These conclusions normally touch on three aspects: a.) the scientific objective and the research questions (results); b.) hints for future research on this topic (theoretical framework and methods); c.) practical application of the results (consequences in management and policy).
- **References**: see below.
- **Annex/Appendix**: The annex should include information, which can be missed in the direct text body but is relevant for the understanding of the research or of important steps of it. This could mean for example: the inclusion of the original data, further detailed statistical analysis, etc. Note that also the annex pages should be numbered consistently with the general text.

Different types of research (e.g. historical research, a literature review) might require a slightly different chapter structure. Also, in case the thesis will be submitted to a specific scientific journal, those guidelines should be followed.

3.3 Other recommended format points

Some universities have different formats for referencing, please check with your thesis supervisor.

The following instructions related to the formatting and settings of written works come from the university's (UEF) accessibility guidelines, and apply to all mentioned written presentations. If the tradition of the scientific field requires it (e.g. master's degrees with a focus on forest law), these instructions can be deviated from by agreement together with the supervisors, however, taking accessibility into account.

Language
English is the only language used in the international Master's degree programmes.

MS Word settings
Microsoft Word has certain auto-correct features that will lead to errors in the written work. The most disturbing error is replacing a hyphen with a dash, which is a spelling mistake. A hyphen (-) is a punctuation mark that's used to join words or parts of words. It's not interchangeable with other types of dashes. A dash is longer than a hyphen and is commonly used to indicate a range or a pause. The most common types of dashes are the en dash (–) and the em dash (—).
Here is how to insert hyphens and dashes:

- Hyphen (-) Num- (Merriam-Webster's Dictionary)
- En dash (–) Ctrl+Num- (1–5, 1999–2002)
- Em dash (—) Alt+Ctrl+Num- (Rarely needed, but can be used, for example, when the same author appears repeatedly in the literature cited list.)

Non-breaking hyphens (Ctrl+Shift+-) prevent words or parts of words from shifting to a new line after a hyphen, if hyphenation is not preferred. To keep parts of a compound word together, the hyphen is bound to the latter part of the compound word, meaning it will move with the word to a new line. Non-breaking spaces (Ctrl+Shift+Space) are recommended to be used between a numerical value and a unit to prevent them from printing on different lines.

Text
The official text type of the university is Open Sans, and it is also used in theses and templates of the School of Forest Sciences. The size of the letters is 11 points. The line spacing is 1.5 in the entire text, including figure and table texts, the summary and the bibliography. The same typeface as the body text is used in the figure and table descriptions and tables. The Open Sans font is also recommended for the texts in the images, but they can also use the so-called sans serif type fonts (for example Arial).

Page layout
The page size of written works is always A4. Margins are 2 cm on the left, 1.5 cm on the right, 2 cm at the top and bottom.

Headings
Headings are in bold. All headings are written in lowercase letters. The main headings and subheadings are numbered. The subheadings are numbered according to the standard 1.2 (not 12 and not 1.2.). Blank lines are not left before and after the main headings, but MS Word's paragraph-specific formatting styles are used instead.
The headings are marked from the style menu Heading 1–3 (Heading 1–3). The headings are in the same font as the body text. Heading 1 is point size 14, bold. Title 1 is started on its own page. Title 2 is point size 12, turquoise (RGB 7,125,158 and #077D9E). Heading 3 is point size 11, bold. An empty space (space) is defined after all headings.
Headings should be used from 1 onwards. A chapter can have subheadings if there are at least two chapters. Don't use the fourth subheading level anymore.

Text alignment and paragraphs
The text is aligned only from the left. The first line of a paragraph is not indented. Paragraphs are separated by an extra line break. The text uses hyphenation. Bolding is used to enhance the text. Italics are used only in the case of scientific names, CAPITALS only in a special situation. The text should not be positioned using a table or text boxes.
If you copy text from another document, paste the text unformatted: Paste > Paste text only.

Page numbers
The page number is placed in the middle of the top header of the page. The font of the page number is the same as the rest of the text. The cover page is page 1, but the page number is not displayed. The bibliography and table of contents pages and the introductory words page have page numbers. The page numbering continues for the attached pages as well.

Figures, tables and formulas
Figures, tables and formulas are used to supplement and clarify the text, but their descriptions need to be detailed enough for them to be examined and understood individually. Every table and figure must be referred to in the text. Figures and tables are placed in the body of text – rather than presenting them under a separate section at the end of the work. The numbering follows the order in which the figures and tables are referred to in the text. Example: "The difference between juniper and bird cherry was notable and statistically significant (P=0,006; Figure 4), but no differences were detected between juniper and pine (Figure 5)." and "Linear optimisation led to better results than non-linear optimisation (Table 7)." Whenever possible, figures and tables should be placed at the top or bottom of the page.
When creating diagrams, you must strive for a simple and illustrative way of presentation and take into account how the diagram is printed in black and white.
Unnecessary lines should be avoided in figures and tables. Picture frames in a word processor are usually useless and can be removed. Vertical lines are avoided in tables. The figure caption is placed below the figure and the table caption is placed above the table. Texts "Figure 1." or “Table 1.” is bolded, but the text itself is not bolded. The official style of the university has its own style, which is used to format figure and table captions (see the template). Don't use Word's Caption feature.

To ensure accessibility, add alternative text, alt text, to figures by activating the figure and selecting Image formatting > Alternative description from Word's ribbon. Write the description as if you were telling the content of the figure to another person. If the figure is an example figure, you can say "Example figure, explained in more detail in the text" as an alternative description. If the figure is just a figure that is not recommended to be used in

theses, it can be marked as decorative. If the caption says the same thing as the alternative description, you can mark the image as decorative.

The texts in the tables and figures are made in the same font type and size as the actual text, but in large tables the font size can be slightly reduced if necessary. In the texts in the figures, e.g. the explanatory texts of the axes, Arial type fonts can be used.

Formulas are created using a specific tool in the word-processing programme. The SI base or derived quantities are used in formulas. The placement of formulas is based on the left-hand alignment of the body of text, and the numbering follows the order in which the formulas are referred to in the text. Example: The exact concentration of the sodium hydroxide solution must be determined prior to titration (formula 1). Name all the quantities and the corresponding units used in the formulas.

Hyperlinks
Hyperlinks to different websites can be used in the text: for example, "Finnish Forest Centre offers forest owners free information on forest resources on the metsään.fi website". If a formal source reference is made to the website, it is made according to the example of electronic sources in section 1.3.11.
Possible links should be written descriptively. Add a link as link text by painting the text and specifying Insert > Hyperlink. The hyperlink is underlined, so the underline should not be used for any other purpose.

Binomial nomenclature
The scientific name of a species must be given when a species is mentioned for the first time in the text. Binomial names composed of two parts, the genus and species, are written in Italics (the authority is not), except in the literature cited section. For example, *Pinus sylvestris* L.; the family of pine, Pinaceae, is not written in Italics (and neither are the order, class and division).

In-text citations
Various reporting guidelines define when the scope of an in-text citation at the end of a sentence covers only that last sentence, a few preceding sentences, or the whole paragraph. In scientific writing, however, the common practice is to indicate the scope of the citation through the sentence structure. Referring to a whole paragraph is not desirable, but if the text of a paragraph nonetheless refers to a single source, the recommended citation style from the options presented below is number 2. Direct quotations are normally avoided, but if they are used, they need to be separated from the body of text by using quotation marks. The use of source literature means analysing information obtained from various sources in one's head and then using that information to independently produce content for one's own written work. *It is not about piecing together other people's ideas and presenting them as one's own.* The reader must be able to differentiate the author's original text from the cited parts of the written work. As a rule, the publication guidelines of scientific series favour in-text citations.

There are two styles for citing original sources, of which the first one below is the recommended option (note the placement of the period in example 1):

1. Based on the travelling speed of a camel caravan, Eratosthenes estimated that the distance between Aswan and Alexandria was 5,000 stades (Watson 2012).
2. According to Kamppila (1980), the occurrence of *Pinus kesiyan* in the mountains of North Vietnam has not been fully established.

If there are two authors, the citation in example 1 is formed as follows: (Smith & Watson 2012). If there are more than two authors, the form of the citation is (Watson et al. 2012). If a citation covers more than one publication by more than one author, the literature cited is presented in chronological order. This practice is based on the assumption that the authors of more recent sources are familiar with the earlier literature. For example, “This has been noted in several studies (Smith 1996, Watson 2008, Haapala 2015)”.

If a citation covers more than one publication by the same author, the placement of the citation is determined on the basis of the author's oldest publication. It is cited first, followed by the year of the more recent publications, separated with a comma (Harstela 1985, 1999). Citations covering more than one author are placed on the basis of the name of the first author, and are therefore separate from single-author publications by the same author (Waters 2012, Waters & Sandgren 2015). Citations to more than one publication by the same author(s) published in the same year are distinguished by using lowercase letters (a, b, c, etc.). If the author or editor of a publication

is not known, the citation is formed by using the first 2–3 words of the title of the publication and its year of publication as follows: ”…and pine is grown in barren lands (Guidance letter to forest… 2013)”.

There is no need to add 'see' in front of the citation. Nor is the use of the abbreviation 'cf.' recommended. In principle, it can only be used if the source contains information or ideas that conflict with what is presented in the written work. The preferred solution is to describe the conflict in the written work rather than use the cf. abbreviation and oblige the reader to compare several sources. It can be arduous, and frankly, it is the author's job.

Literature cited

This literature cited section serves as an example on how a literature cited section should be formed. In the literature cited section, all source publications are listed in alphabetical order according to the name of the author(s). Publications by the same author(s) are listed in chronological order. Single-author publications take precedence over group publications in which the same name comes first in the list of authors; such works are listed according to the number of authors. If the author or editor of a publication is not known, the publication is listed according to its title. When citing a single article included in a collection of articles, the name of the author and the title of the article are followed by the editor(s) (abbreviated 'toim.' in Finnish and 'ed./eds.' in English) and the title of the whole publication. The number of pages in the article, not the whole publication, is in- cluded in the citation entry. Below are some examples of how to list different source publications in a literature cited section.

If an article in electronic form has a doi address (document object identifier), the publication is permanent and there is no need to record the date of the reference when referring to it. When referring to other web sites, the date and url address must be displayed. If the articles are published only electronically, both the possible Article number and the doi number (which is presented as a hyperlink) are displayed. If the article has been published in print and has traditional page numbers, it is not necessary to display the doi number.

An article published in a series or a periodical

Mannerkoski, H. & Möttönen, V. 1990. Maan vesitalous ja ilmatila metsäaurausalueilla. [In Finnish] Summary: Soil water conditions and air-filled porosity on ploughed reforestation areas. Silva Fennica 24(3): 279-301.

Martikainen, P. & Kouki, J. 2003. Sampling the rarest: threatened beetles in boreal forest biodiversity inventories. Biodiversity and Conservation 12: 1815-1831.

Tienaho, N., Saarinen, N., Yrttimaa, T., Kankare, V., & Vastaranta, M. 2024. Quantifying fire-induced changes in ground vegetation using bitemporal terrestrial laser scanning. Silva Fennica 58(3), artikkeli 23061. https://doi.org/10.14214/sf.23061

A single article included in a collection of articles

Hänninen, H. 1990. Modelling the annual growth rhythm of trees: conceptual, experimental, and applied aspects. In: Jozefek, H. (ed.). Modelling to understand forest functions. Silva Carelica 15: 35- 45.

A monograph included in a volume of a series or in the form of a book

Harstela, P. 1993. Forest work science and technology, Part I. Silva Carelica 25. 113 p.

Kärkkäinen, M. 1985. Puutiede. Sallisen Kustannus Oy, Sotkamo. 415 p. [In Finnish]

Presentation at a conference

Saastamoinen, O. 1987. Multiple use and Forest 2000 programme. In: Hänninen, R. & Selby, J.A. (eds.). Proceedings of the Biennial Meetings of the Scandinavian Society of Forest Economics, Porvoo, Finland, May 1987. Scandinavian Forest Economics 29: 39–47.

Webpages

Seasons in Finland. Online document. Finnish Meteorological Institute. Available at: https://en.ilmatieteenlaitos.fi/seasons-in-finland [Cited on 11 October 2024].

Theses

Lake, H. 2024. Motivations for Alternative Silviculture - Interviews with forestry professionals on historic partial harvesting practices to support reshaping the status quo in British Columbia. University of Eastern Finland. 47 p.

4 MSc online thesis seminar

The Thesis Seminar deals with the different forestry topics that the MSc European Forestry students have chosen as subjects for their master's theses. The aims of the seminar are:

- to increase awareness of different master's theses carried out by the students of the MSc European Forestry programme
- to provide a platform for online viewing of the students' theses presentations
- to provide a forum for discussions on each of the topics
- to facilitate the distance interaction of students, graduates and staff of the MSc European Forestry programme

How does it work?
You prepare a presentation about your master theses (10–15 minutes, about 7 slides) with the main focus on the results. The presentations include videos of the speakers narrating the different slides, creating a virtual environment where the viewer can play the presentation, or parts of it, as many times as needed.

You will participate in the discussion forum by commenting and asking questions on the Moodle course site where you can log in with your UEF username and password within a week after the presentation is made available online. The presenter will have an additional week to give feedback to the participants and answer their questions. After this period, the discussion on the Thesis presentation will be closed.

Further information and detailed instructions are available at: https://sites.uef.fi/europeanforestry/thesis/