

PEN-80812

## BSc thesis Forest and Nature Conservation

Academic Year 2016-2017

### Contact person

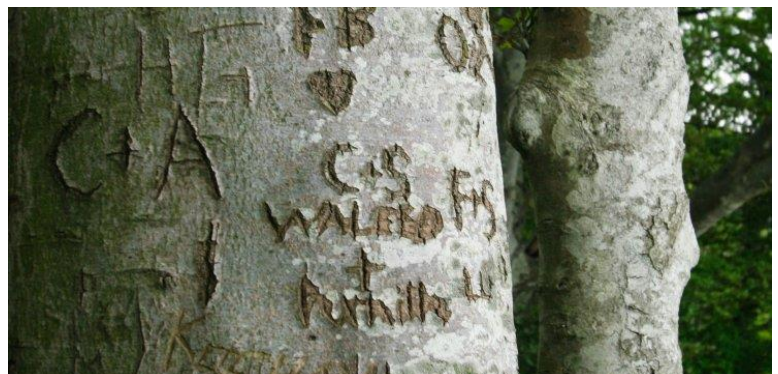
Monique Heijmans

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### Registration

To enrol in this course,  
send an e-mail to

[monique.heijmans@wur.nl](mailto:monique.heijmans@wur.nl)



## **BSc thesis Forest and Nature Conservation PEN-80812**

<b>Language</b>	Dutch or English
<b>Credits</b>	12
<b>Period</b>	2+3 or period 3-6
<b>Exam</b>	Final presentation sessions: Period 3: 2, 3 February 2017 Period 6: 6, 10, 11 July 2017
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<b>Examiner(s)</b>	Prof. dr. ir. D. Kleijn (PEN) Prof. dr. ir. G.M.J. Mohren (FEM) Prof. Dr. B.J.M. Arts (FNP) Prof. Dr. H.H.T. Prins (REG)
<b>Secretariat</b>	Petra Kloppenburg Petra.kloppenburg@wur.nl 0317-483174 Office: Lumen, building 100, room C.141

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# 1. General information on the BSc thesis

## Profile of the course

The BSc thesis offers the student the opportunity to carry out an individual scientific research in the field of Forest and Nature Conservation, thereby using the knowledge and skills acquired during the BSc programme. Under supervision of a lecturer you will write a research proposal, carry out the research, write the thesis and present and discuss the results at a plenary presentation session. The nature of the BSc thesis research varies widely from an experimental project, a data analysis project or a literature review project. Results will be reported by writing a scientific report or article, and by giving an oral presentation.

## Assumed prerequisite knowledge

Before you can start with your BSc thesis you should make sure that you have met the admission requirements. You should have passed 102 credits of the common part and major of your BSc programme, including all credits of BSc-1. The study adviser may deviate from this requirement in specific cases. For exceptions contact [neeltje.vanhulten@wur.nl](mailto:neeltje.vanhulten@wur.nl)

## Learning outcomes

After successful completion of this BSc thesis students are expected to be able to:

- Use advanced knowledge and understanding of the fundamental concepts and mechanisms of research in forest and nature conservation to answer research questions
- Analyse concepts, approaches and methods and reflect upon scientific literature
- Write a research proposal, including theoretical background, problem definition, design of research, project planning, in the field of Forest and Nature Conservation
- Manage a research project within the available time
- Apply common research techniques, such as experiments, collecting and analysing data and/or literature study
- Gather and interpret the most important findings
- Relate and evaluate these findings to conservation issues
- Prepare the contents and structure of a scientific report or article, under supervision
- Orally present the results of the research

## Course materials

The course materials, this course guide, BSc thesis contract form and assessment form, are available at the BBN portal: <https://portal2.wur.nl/sites/BBN> and website of Plant Ecology and Nature Conservation Group (PEN): [www.wageningenur.nl/ncp](http://www.wageningenur.nl/ncp), tab 'education'. A blackboard site is under construction.

## Educational activities

- Attend introduction lecture in September.
- Search for topic and supervisor
- Enrol in this course by sending an e-mail to [monique.heijmans@wur.nl](mailto:monique.heijmans@wur.nl)
- Sign a BSc thesis contract with your supervisor
- Start your thesis by writing your research plan, see chapter 2 for guidelines. This research plan has to be approved by your supervisor.
- Participate in the BBN BSc thesis ring. See chapter 3 for more details.
- Carry out your research plan

- Write a scientific report or article, see chapter 2 for additional guidelines
- Present the results to your fellow students and supervisor, see chapter 4

### Topics, supervisors, thesis contract and workplace

The BSc thesis Forest and Nature Conservation is supervised by four chair groups:

- Forest Ecology and Forest Management FEM
- Forest and Nature Conservation Policy FNP
- Plant Ecology and Nature Conservation PEN
- Resource Ecology REG

#### Supervisors

The thesis should be supervised by a staff member of one of these chair groups. Each chair group publishes topics on their websites and/or at the tip database: <http://tip.wur.nl/> Each chair group has a thesis contact person for additional information. When you have found a subject you can make an appointment with the supervisor or the thesis contact person, to discuss the details of the subject.

#### BSc thesis contract

If your topic and supervisor are known you have to sign a BSc thesis contract together, see appendix 1. Together with your supervisor you decide on the content of your thesis, structure, time frame & deadlines, language of your thesis, number of meetings, etc.

Please send a signed copy of your BSc thesis contract to [monique.heijmans@wur.nl](mailto:monique.heijmans@wur.nl) and [petra.kloppenburger@wur.nl](mailto:petra.kloppenburger@wur.nl) before the start of the thesis work.

#### Topics

If you would like to do a subject which is not mentioned on tip.wur.nl or on the websites of the chair groups, or if you want to do your thesis with another chair group you can come up with your own ideas. In this case you have to write a brief proposal (½ A4) about your subject, provisional research questions and methods. Submit this proposal to [monique.heijmans@wur.nl](mailto:monique.heijmans@wur.nl). This is to ensure that the topic of the BSc thesis is in the field of forest and nature conservation. After approval you can contact the thesis contact person of the chair group where you would like to do your BSc thesis.

#### Workplace

Each chairgroup has a thesis computer room. Ask your supervisor, or the secretary of the chairgroup, about this facility!

#### Assessment strategy

The final mark is based on:

- Research competence (30-40%):
- Thesis report (50-60%):
- Final presentation (10%):

The minimum partial grade for the three components of the thesis assessment form is 5.5.

In appendix 2 you can find the assessment form for the BSc thesis. After completion of the thesis this form should be signed by your supervisor and examiner/ 2<sup>nd</sup> supervisor. Completed assessment forms and a PDF version of your final report should be sent by e-mail to [monique.heijmans@wur.nl](mailto:monique.heijmans@wur.nl) and [petra.kloppenburger@wur.nl](mailto:petra.kloppenburger@wur.nl)

Take good note of the assessment form, it clearly shows which knowledge and skills will be assessed in the process of your thesis work! Check also the rubric which is used by supervisors and examiners to grade the research competences and thesis report.

## 2. Content BSc thesis

### Research proposal

You start with developing a research proposal. Different types of research can be distinguished:

- Literature study: you critically investigate and assess a relevant theme, or debate on the base of predominantly scientific articles and/ or books.
- Secondary data analysis: As a literature study, but additionally you use secondary data sources (e.g. analysis of an existing data base of your supervisor, or analysis of data mentioned in scientific articles or reports).
- Own research: As a literature study, but additionally you carry out your own research (e.g. small number of interviews, small survey, field measurements, lab analysis)
- Design: As a literature study, but additionally you develop, based on your literature study and possibly some experiments, a new tool, new research method or artistic impression (e.g. new set up for catching insects, monitoring animals, innovations in management)

Here are the main sections for a research proposal:

- Title page with title research project, name student + registration number, name supervisor, name chairgroup, date;
- Introduction/ Problem description  
Here you describe in a concise way the problem that is motivating your research. The purpose of the problem description is to make clear to the reader that the research is important and the research questions are (scientific and societal) relevant. Tailor the problem description to this purpose and do not include all kind of background information that is not really needed for understanding the relevance and importance of the research aim and questions. However, make sure that all the major elements of your research questions are introduced and, if necessary, explained.
- Research aim / objective, included in the introduction  
The research aim is a concise and precise formulation of the contribution that your research aims to make to the solution of the problem described in the previous section. The scope of the research aim should be realistic and proportional to the size of the research project.
- Research questions  
The research questions are the core of the proposal. These are the questions you want to give an answer to in the conclusions of your thesis report. Be modest in your objectives and subsequent research questions. Remember that you will gather and combine theoretical and empirical knowledge during your thesis work. You will not be implementing new (policy) strategies, let alone changing the world...  
Good research questions:
  - are precise (so not too general)
  - are focused on the key issues of the research (so their number is limited, and they do not address issues that are only indirectly related to the research aim)
  - can be answered within the proposed research (so they are not too broad, or beyond the reach of scientific research)
- Conceptual framework (optional, depending on topic)  
In the conceptual framework you introduce the main concepts and theories you intend to you use in your research. Although it is often difficult to elaborate on this in the beginning of the research, it is important to at least give some indication of the key concepts in your research and the theories that might be of interest. When describing your conceptual framework, give adequate references to literature.



- **Scope and limitations (optional)**  
If you want to set restrictions to the way you will address the research questions, you may include a special section to describe them. This is the case if you will restrict the research to one region, one specific category of actors, one set of literature.
- **Methods: approach, analysis and presentation of results**  
Here you describe the methods you intend to use. This will depend on the type and topic of your research (i.e. literature, data analysis, experiment, design, social or ecological topic, etc.).

Depending on your thesis, research methods can include:

- interviews (structured, semi-structured, or open)
- surveys: based on a posted questionnaire or on oral interviews; qualitative or quantitative
- specification of materials, data, or literature to be studied (documents, newspapers, articles, datasets, etc.)
- description of (statistical, mathematical, experimental etc.) methods, techniques, apparatus(es) to be used (not always for literature research project)
- estimation of amount of data that can be collected in time available (only for experimental approach)
- participant observation, focus groups (e.g. workshops), site visits
- specification of materials
- description of how results will be presented.

Try to describe your methods as accurate as possible. Consult a methodology handbook if you feel uncertain about the methods.

- **Time schedule**  
The time schedule should preferably be presented as a table with rows consisting of all main research project activities and columns consisting of the weeks. Try to be as detailed and accurate as possible (keeping in mind that you may need to modify the schedule in a later stage).
- **Bibliography**  
Include a provisional bibliography in your proposal, comprising all the relevant titles that you have found so far. In the course of your research you can extend this bibliography, and so keep an up-to-date list of references.  
For your final thesis report you should use at least 15 scientific references (journals, reports).

## Outline thesis report

As the domain of forest and nature conservation is very diverse, thesis topics and report outline can be very diverse too. Below an example of an outline is given, but extensive literature is available on this topic. Sometimes it can be better to combine sections in one chapter, e.g. results and discussion or discussion and conclusion. This outline lists the main elements of a thesis report.

## Language

Reports may be written in Dutch or English.

## Report or paper?

It is also possible to write the thesis in the form of a scientific article. Please, discuss with your supervisor the details. And if you want to have a different organization of your thesis, discuss possibilities with your supervisor.

## Plagiarism

Each thesis is checked on plagiarism.

It is important to understand that plagiarism is considered as a very serious offence against academic norms and, hence subject to equally serious punishment. Therefore, read the Wageningen University plagiarism policy in the Student Charter and Appendices Student Charter. If in doubt when it is considered plagiarism, ask your supervisor.

## General outline thesis

A thesis is approximately 15 to 25 pages (excluding foreword, table of contents, title page, references and appendices) and the number of words in the core of your thesis should be max. 10,000

Below you can find a list of the main elements for a thesis report. If you want to have a different organization of your thesis, please discuss with your supervisor.

- Title page
- Title, name student, registration number student, course name, course code, name supervisor, chair group supervisor, date of publication
- Summary
- Table of contents
- Foreword, acknowledgement (optional)
- Introduction  
This chapter can to a large extent be based on the research proposal, and should contain at least sections on problem description, research aims, research questions, scope and limitations.
- Theory/ conceptual framework chapter  
Introducing and demarcating the main concepts used, presenting and discussing the main theoretical considerations of the research, and – if applicable – developing hypotheses or another sort of conceptual frame
- Methods  
This section should provide enough detail for reproduction of the findings. Protocols for new methods should be included, but well-established protocols may simply be referred to. Put detailed protocols for newer or less well-established methods in an appendix. The Methods chapter is written in the past tense; you report on a study that is done.
- Results  
The empirical findings will be presented. The results should provide details of all results that are required to support the conclusions of your report. There is no specific limit for this sections, but results that are outside the scope of your research questions or that detract from the focus of your report should not be included. Results are usually written in the past tense. Large datasets should be submitted as appendices.  
To visualise and summarise results try to use figures and tables. Refer to each figure or table in your text.

### Figures

The aim of the figure legend should be to describe the key messages of the figure, but the figure should also be discussed in the text. It should be possible for a reader to understand the figure without switching back and forth between the figure and the relevant parts of the text. Each legend should have a concise title of no more than 15 words. Put the title and legend below the figure. The legend itself should be succinct, while still explaining all symbols and abbreviations. Avoid lengthy descriptions of methods.



## Tables

All tables should have a concise title, placed above the table. The legend and footnotes should be placed above the table. Footnotes can be used to explain abbreviations. Citations should be indicated using the same style as outlined above. Tables occupying more than one printed page should be avoided, if possible.

- **Discussion**  
The discussion includes the interpretations of your results and some explanation on the significance of your findings. Return in the Discussion to the initial research questions as stated in the Introduction. Use literature to put your research into the context of existing research. How do your results compare to findings from similar studies? Also reflect on the methods used. Indicate the added value of your research relative to existing theory/literature.
- **Conclusion**  
This chapter does not introduce new empirical evidence or theoretical debates, but summarizes the empirical findings and theoretical arguments of the preceding chapters. The conclusions should give concise answers to the initial ideas and research questions, and these answers should be underpinned by the arguments presented in the previous chapters. How do your conclusions affect existing assumptions and models in the field? How can future research build on these observations? Which research should be conducted in the future? The conclusion should be concise and tightly argued.  
As part of the conclusions, you can present recommendations for further research or for concrete measures to cope with the problems investigated.
- **References**  
References should be complete and consistent. Special attention should be paid to correct references in case of internet sites. Use of Endnote is recommended.
- **Appendices (optional)**  
Appendices should only be added if the information is not easily available elsewhere and is needed to fully understand the arguments of the thesis.

### 3. Meetings BSc thesis

#### Plenary meetings

##### Introduction meeting

An introductory lunch meeting is organised in September. During this meeting a brief explanation is given about the BSc thesis.

##### Pilot BSc thesis ring

In period 2 a pilot for a BBN BSc thesis ring will be started. BSc thesis students can participate on a voluntary basis. A thesis ring assists you in the writing process and acquiring skills to critically evaluate proposals and reports of fellow students. This will be done in weekly meetings of 6-8 students, which will take max. 1 h. These meetings are compulsory and will be chaired by a staff member. During each meeting two documents will be brought in and every student will give feedback on a particular aspect of each document. The feedback is given orally and can be used to improve the quality of the proposal or the report. It is important to give feedback in an appropriate manner. The chair of the meeting will interrupt when feedback is given in an inappropriate manner. More information will be given during the introduction meeting. It is expected that participation in the thesis ring will improve the quality of your writing and enable your supervisor to focus more on the content of the thesis research. You will receive an invitation to participate in the thesis ring when you have registered for the BSc thesis.

##### Final presentation sessions

Final presentations are scheduled twice a year, on 2 and 3 February 2017 in period 3 and at the end of period 6 on 6, 10 and 11 July (the first Monday and Tuesday of the summer holidays)! Presentations are scheduled after consultation with all students and supervisors. The student attends at least 8 presentations of other students.

#### Individual meetings

Besides plenary meetings you will have individual appointments with your supervisor. In your thesis contract you specify how often you meet your supervisor. Your supervisor has 20 hours to support you. Within this time contact hours for supervision as well as time for commenting your draft proposal, draft thesis, attending your presentation and grading the final thesis are included! Carefully plan your meetings and, if necessary, ask for additional support. Do not wait too long if you do not know how to proceed!

Proposed meetings :

1. Discussion on topic and planning and BSc thesis contract
2. Discussion draft thesis proposal
3. Discussion preliminary results
4. Discussion draft report
5. Discussion draft presentation and presence at thesis presentation
6. Final meeting on grading and feedback report

#### Problems?

If you encounter problems with your thesis or time schedule, your supervisor is your first contact. It is important to stay in touch with your supervisor.

If you have other problems or questions, please contact the BSc thesis coordinator.

## 4. Final presentation

You present your thesis research during a plenary session to your fellow students and supervisor(s) at the end of period 3 or 6.

The final presentation is 15 minutes followed by 10 minutes for questions and discussion. It is a challenge to present your results in such a short time, which means it is not possible to present everything you have done. The introduction of your presentation should raise the interest of the audience and make clear what your thesis is about. Explain what you have done and show interesting results as well as unexpected results. Be creative in presenting your results in a new graph, table or scheme. Come back to your research questions when you present the conclusions. It might not be necessary to discuss all research questions from your thesis.

You can discuss a draft presentation with your supervisor.

As a minimum requirement to present your thesis you should have submitted your draft thesis.

Deviation from the plenary presentation session is only possible after consultation with the BSc thesis coordinator.

**→ GOOD LUCK WITH YOUR BSC THESIS!**

## Appendix 1: BSc thesis contract

### Contract BSc thesis Forest and Nature Conservation (PEN-80812)

E-mail the completed and signed form to BSc thesis coordinator: [monique.heijmans@wur.nl](mailto:monique.heijmans@wur.nl)

#### Student:

Name: [Click here to enter text.](#) Registration nr.: [Click here to enter text.](#)

Address: [Click here to enter text.](#) Telephone: [Click here to enter text.](#)

#### Supervisor(s) and examiner:

Name supervisor: [Click here to enter text.](#) Function: [Click here to enter text.](#)

Chair group: [Click here to enter text.](#) Telephone: [Click here to enter text.](#)

Name 2<sup>nd</sup> supervisor/examiner: [Click here to enter text.](#) Function: [Click here to enter text.](#)

Chair group: [Click here to enter text.](#) Telephone: [Click here to enter text.](#)

*In case of supervisors from 2 chair groups, indicate % of supervision*

**Title thesis:** [Click here to enter text.](#)

**Language thesis** (Dutch or English): [Click here to enter text.](#)

**Type of thesis** (e.g. literature, data analysis): [Click here to enter text.](#)

#### Qualified to start?

Student meets prerequisite knowledge (102 ects, incl. all BSc-1 courses):  **Check box**

For advice: contact Neeltje van Hulten

#### Planning

Start BSc thesis	<a href="#">Click here to enter text.</a>
Submit draft research proposal to supervisor(s)	<a href="#">Click here to enter text.</a>
Discuss draft research proposal	<a href="#">Click here to enter text.</a>
Submit draft thesis to supervisor(s)	<a href="#">Click here to enter text.</a>
Discuss draft thesis	<a href="#">Click here to enter text.</a>
Discuss draft presentation	<a href="#">Click here to enter text.</a>
Date of presentation	<a href="#">Click here to enter text.</a>
Submit final thesis to supervisor(s) and examiner	<a href="#">Click here to enter text.</a>
Final meeting and assessment	<a href="#">Click here to enter text.</a>

#### Agreements

(e.g. frequency meetings, laboratory assistance, workplace, report or article, data storage)

[Click here to enter text.](#)

#### Signatures

Supervisor(s): \_\_\_\_\_ Student: \_\_\_\_\_

Date: [Click here to enter text.](#) Date: [Click here to enter text.](#)

This form (word-file) can also be found at the NCP website: [www.wageningenur.nl/ncp](http://www.wageningenur.nl/ncp)  
See tab 'education. Or at the BBN-portal: <https://portal2.wur.nl/sites/BBN/default.aspx>

## Appendix 2: BSc thesis assessment form

Assessment BSc thesis BBN, Wageningen University			
Fill out the single lined fields. Use a comma or a point as decimal sign, depending on the language chosen.			
Name chair group			
Name student			
Registration number			
Study programme			
Major			
Code thesis			
Short title thesis			
Date examination	<b>Signatures</b>		
Supervisor chair group			
Supervisor outside chair group (if so)			
Second reviewer/ examiner			
	<b>grading mark 1-10</b>		<b>relative weight *</b>
<b>Research competence (30-40%) *</b>			40%
1 Commitment and perseverance			0.00
2 Initiative and creativity			
3 Independence			
4 Efficiency in working with data			
5 Handling supervisor's comments and development of research skills			
6 Keeping to the time schedule			
<b>Thesis report (50-60%) *</b>			50%
1 Relevance research, clearness goals, delineation research			0.00
2 Theoretical underpinning, use of literature			
3 Use of methods and data			
4 Critical reflection on the research performed (discussion)			
5 Clarity of conclusions and recommendations			
6 Writing skills			
<b>Colloquium (10%) *</b>			10%
1 Graphical presentation			0.00
2 Verbal presentation and defence			
* Relative weights may be adjusted, provided this is agreed upon and recorded in the thesis contract.	<b>TOTAL</b>		0.00
	<b>FINAL GRADE</b>		<b>0.0</b>
<b>Comment by supervisor</b>			
<b>Comment by 2nd reviewer/examiner</b>			

E-mail the signed evaluation form (pdf) to [monique.heijmans@wur.nl](mailto:monique.heijmans@wur.nl) and [petra.kloppenburg@wur.nl](mailto:petra.kloppenburg@wur.nl)

This form (Excel-file) can be downloaded from the NCP website: [www.wageningenur.nl/ncp](http://www.wageningenur.nl/ncp)  
See tab `education. Or at the BBN-portal: <https://portal2.wur.nl/sites/BBN/default.aspx>