NCP-80812

# **BSc thesis Forest and Nature Conservation**

Period 2+3 or 2<sup>nd</sup> half academic year 2014-2015

## **Contact person**

Name: Neeltje van Hulten E-mail: <u>neeltje.vanHulten@wur.nl</u>

## Registration

To enrol in this course, send a mail to <u>neeltje.vanhulten@wur.nl</u>









# BSc thesis Forest and Nature Conservation NCP-80812

Language	Dutch or English
Credits	12
Period	2+3 or period 3-6
Time and venue	Plenary sessions and individual appointments
Exam	Final presentations: 29 and 30 January 2015 or 2, 3, 6 and 7 July 2015
Contact person	Neeltje van Hulten Neeltje.vanhulten@wur.nl Location: Gaia, building 101, room C101 0317 - 482796
Lecturer(s)	Teachers and staff from: Nature Conservation and Plant Ecology Group (NCP) Forest Ecology and Forest Management Group (FEM) Forest and Nature Conservation Policy Group (FNP) Resource Ecology Group (REG)
Examiner(s)	Prof. dr. F. Berendse (NCP) Prof. dr. ir. G.M.J. Mohren (FEM) Prof. Dr. B.J.M. Arts (FNP) Prof. Dr. H.H.T. Prins (REG)
Secretariat	Petra Kloppenburg Petra.kloppenburg@wur.nl Location: Lumen, building 100, room C141 0317-483174

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# 1. General information on the BSc thesis

## **Profile of the course**

You have to investigate a question in the field of Forest and Nature Conservation, preferably in your major. Under supervision you will execute a scientific research and use your knowledge and skill acquired during your BSc programme. You can choose from an experimental project, a data analysis project or a literature research project. Results will be reported by writing a scientific report or article, and by doing an oral presentation.

# **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 his or her major within the BSc Forest and Nature Conservation
- Carry out the research plan within the available time
- Apply common research techniques, such as experiments, collecting and analysing data and/ or literature
- Gather and interpret the most important findings
- Relate and evaluate these findings to other conservation issues
- Prepare the contents and structure of a scientific report or article, under supervision
- Orally present the results of the research

# 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.

For approval to start and exceptions contact Neeltje.vanhulten@wur.nl

## **Course materials**

This course manual is available at the website of Nature Conservation and Plant Ecology Group (NCP). See: <a href="https://www.wageningenur.nl/ncp">www.wageningenur.nl/ncp</a>, tab 'education'. On the website you can also find a BSc thesis contract and assessment form.

# **Educational activities**

- Attend introduction lecture in September.
- Search for topic and supervisor
- Enrol in this course by sending a mail to <u>neeltje.vanhulten@wur.nl</u>
- 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.
- Attend a peer review meeting in period 2, 4, 5 or 6, depending on the starting date of your thesis. See chapter 3 for more details.
- Carry out your research plan, consequently and under supervision
- Write a scientific report or article, see chapter 2 for additional guidelines
- Present the results to your fellow students and supervisor, see chapter 4
- After completion you have a final meeting with your thesis supervisor. You receive feedback on your performance

# Topics, supervisors, thesis contract and workplace

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

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

#### **Supervisors**

The thesis should be supervised by a staff member of one of these chairgroups. Each chairgroup publishes topics on their websites or at the tip database: <u>http://tip.wur.nl/</u>

Each chairgroup 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.

A signed copy of your BSc thesis contract should be sent to <u>neeltje.vanhulten@wur.nl</u> and <u>petra.kloppenburg@wur.nl</u>

#### **Topics!**

If you would like to do a subject which is not mentioned on tip.wur.nl or on the websites of the chairgroups you can come up with your own ideas. In this case you have to write a brief proposal (1/2 A4) about your subject, provisional research questions and methods. Submit this proposal to <u>Neeltje.vanhulten@wur.nl</u>. 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%):
- Thesis report (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. The original assessment form (Excel file) can be found on the website of NCP: <u>www.ncp.wur.nl</u>, look at 'education'. 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 mail) to <u>neeltje.vanhulten@wur.nl</u> and <u>petra.kloppenburg@wur.nl</u>

Take good note of the assessment form, it clearly shows which knowledge and skills will be assessed in the process of your thesis work!

If you have grade 8 or higher you could opt to participate in the yearly Student Research Conference, organised by the VSNU: <u>http://www.vsnu.nl/home-english.html</u>

# 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. But see to it 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 e.g.:

- $\circ$  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)
- o participant observation, focus groups (e.g. workshops), site visits
- specification of materials
- $\circ$  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.

#### Language

Reports may be written in Dutch or English. This outline lists the main elements of a thesis report. Please note that most of the headings in this outline are describing the contents of chapters, and are not meant as suggestions for actual chapter titles.

#### **Report or paper?**

It is also possible to write 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

- summary max. 300 words
- introductory chapter max. 700 words
- theory/conceptual framework chapter max 2000 words
- methods max. 1000 words
- empirical chapters max. 3000 words
- discussion and conclusion max. 1000 word

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, course code, name student, registration number student, name supervisor, chairgroup supervisor, date of publication
- Summary
- Table of contents
- Foreword, acknowledgement (optional)
- Introductory chapter

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, See also you research plan.
   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.
- Empirical chapters/ 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 findings will be discussed:

- o results will be compared with similar studies,
- $\circ$  ~ evaluation of used theoretical framework, and
- $\circ$  ~ evaluation of used methods.

#### 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 answers to the initial ideas and research questions, and these answers should be underpinned by the arguments presented in the previous chapters. Use literature to put your research into the context of existing research. 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

During your BSc thesis you have several plenary and individual meetings.

## **Plenary meetings**

Introduction meeting

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

#### Peer to peer meetings

In period 2, 4, 5, 6 peer meetings are organised. During these meetings you discuss your thesis work and related questions and answers with fellow students. If you encounter problems in your thesis work, this meeting offers you the opportunity to discuss your problems with others that might encounter similar problems. Together you try to find solutions. You will receive an invitation to attend this meeting when you have started your thesis.

Be sure that you have send your BSc thesis contract to the BSc thesis coordinator <u>neeltje.vanhulten@wur.nl</u> or informed her about the start of your thesis.

#### Presentations

Final presentations are schedules twice a year, on 29 and 30 January 2015 in period 3 or at the end of period 6 on 2, 3, 6 or 7 July (the first Monday and Tuesday of holidays)! Presentations are scheduled according to the dates specified in your thesis contract.

# **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 consultation hours as well as reading time for your proposal, draft thesis, final thesis, attending your presentation and grading the final result are included! Carefully plan your meetings and, if necessary, ask for additional support. If you need more support, this might result in a lower mark for 'working independently', but do not wait too long if you do not know how to proceed!

Proposed meetings :

- 1. Discussion on topic and demarcation/ elaboration of topic:  $\frac{1}{2}$  hour
- 2. Discussion draft thesis proposal and BSc thesis contract:  $^{1\!\!/}_2$  to 1 hour
- 3. In-between meeting: 1/2 to 1 hour
- 4. Discussion draft report and draft presentation: 1 hour
- 5. Presence at thesis presentation: 1/2 hour
- 6. Final meeting on grading and feedback report: 15 20 minutes

Meeting 3 and 6 are not obligatory. Decide with your supervisor and schedule appointment in your thesis contract.

## **Problems & questions?**

If you have difficulties in getting started with your thesis, encounter problems to systematically organise the materials, or if you just want to discuss your writing strategy, you can contact the Wageningen Writing Lab!

Check their website for more information and contact details:

http://www.wageningenur.nl/nl/artikel/Wat-doet-het-Wageningen-Writing-Lab-voorstudenten.htm

If you encounter problems with your thesis or time schedule, your supervisor is your first contact. It is important and 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 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 and 10 minutes for questions and feedback. It is a challenge to present your results in such a short time, as it is not possible to present everything you have done. You have to choose and show highlights such as interesting results as well as unexpected results. Show the most important results to support your research questions. Be creative in presenting your results in a new graph, table or schema.

It might not be necessary to discuss al 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**

# Thesis contract NCP-80812, BSc thesis Forest and Nature Conservation

### Student

Name: Click here to enter text. Registration number: Click here to enter text. Address: Click here to enter text. Tel.: Click here to enter text.

#### Supervisor

Name: Click here to enter text. Chairgroup: Click here to enter text. Tel.: Click here to enter text.

### **Agreements thesis**

# Student meets assumed knowledge (102 ects, incl. all BSc-1 courses): $\Box$ Check box

For advice: contact Neeltje van Hulten Subject/ provisional title: Click here to enter text. Type of thesis (e.g. literature, data analysis): Click here to enter text.

#### Timetable

Start BSc thesis	Click here to enter text.
Hand-in concept research plan	Click here to enter text.
Discuss research plan	Click here to enter text.
Hand-in concept BSc thesis	Click here to enter text.
Discuss concept BSc thesis	Click here to enter text.
Discuss presentation	Click here to enter text.
Date of presentation	Click here to enter text.
Hand-in final report BSc thesis	Click here to enter text.
Final meeting and assessment	Click here to enter text.

### Other agreements

(e.g.: additional meetings, assistance lab work, language thesis, workplace, report or article)

Click here to enter text.

## Signatures Supervisor:

#### Student:

Date: Click here to enter a date.

**Date:** Click here to enter a date.

# A soft copy of a completed and signed form should be sent to the thesis coordinator forest and nature conservation, Neeltje van Hulten

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

Assessment BSc thesis BBN, Wageningen University							
Fill out the single lined fields. Use a comma or a	point as decimal sign, depending on th	e language cho	sen.				
Name chair group							
Name student							
Registration number							
Study programme							
Major							
Code thesis							
Short title thesis							
Date examination		Signa	tures				
Supervisor chair group							
Supervisor outside chair group (if so)							
Second reviewer/ examiner							
		grading		relative			
		mark 1-10		weight *			
Research competence (20-40%) *				30%			
1 Commitment and perseverance							
2 Initiative and creativity							
3 Independence				0.00			
4 Efficiency in working with data							
5 Handling supervisor's comments and develo	pment of research skills						
6 Keeping to the time schedule			Í l				
			. r				
Thesis report (50-80%) *				60%			
1 Relevance research, clearness goals, deline	eation research						
2 Theoretical underpinning, use of literature							
3 Use of methods and data				0.00			
4 Critical reflection on the research performed							
5 Clarity of conclusions and recommendation	S		/				
6 Writing skills							
				400/			
Colloquium (10%) *				10%			
1 Graphical presentation			$\searrow$	0.00			
2 Verbal presentation and defence				0.00			
* Relative weights may be adjusted, provided this is agreed upon and recorded in the	TOTAL			0.00			
thesis contract.							
	FINAL GRADE			0.0			
Comment by supervisor							
Comment by 2nd reviewer/examiner							
Send a signed (soft) copy to neeltje.vanhulten@wur.nl and petra.kloppenburg@wur.nl							
Send a signed (Son) copy to neeltje.vanhulten	www.ni and petra.kioppenburg@wur.	.111					

# Appendix 2: BSc thesis assessment form

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