

Closer-to-nature forestry

 mapping the views of forest stakeholders on the new EU Forest Strategy

Astrid Bygge



Closer-to-nature forestry - mapping the views of some stakeholders to the new EU Forest Strategy

Astrid Bygge

Supervisor: Annika Nordin, SLU, Department of Forest Genetics and Plant

Physiology

Assistant supervisor: Isabella Hallberg Sramek, SLU, Department of Forest Genetics

and Plant Physiology

Examiner: Nils Henriksson, Swedish University of Agricultural Science,

Department of forest Ecology and Management

Credits: 15 hp

Level: First cycle, G2E

Course title: Självständigt kandidatarbete i skogsvetenskap

Course code: EX0911

Programme/education: Jägmästarprogrammet

Course coordinating dept: Department of Forest Ecology and Management

Place of publication: Umeå Year of publication: 2022

Copyright: All featured images are used with permission from the copyright

owner

Title of series: Bachelor Thesis in Forest Science

Part number: 2022:13

Keywords: Closer-to-nature silviculture, forest management methods,

stakeholder preferences, policy instruments, forest governance

Swedish University of Agricultural Sciences

Faculty of Forest Sciences

Department of Forest Ecology and Management

Abstract

The European Commission adopted the European (EU) Forest Strategy in 2021, where forests and forest management practises such as closer-to-nature forestry (CNF) are identified as a key in solving the two crises of climate change and biodiversity loss. This interview study analyses the attitudes of different forest stakeholders towards CNF and their preferred regulation method of it. Seven stakeholders participated in the interviews, representing three stakeholder groups: forest owners, environmental organisations, and industry organisations. environmental organisations and one of the forest owners' organisations had their own definition of CNF, which entailed mainly natural regeneration and an avoidance of clear cuts. Their perceived purpose of CNF was the same as that of the EU Forest Strategy, as a forest management method aiming to promote climate change adaptation, biodiversity conservation and timber production. Those who did not have a definition, two of the forest owner's organisations and two industrial organisations, explained that the definitions of CNF varied depending on the purpose of using it. The three organisations that had a definition of CNF, were also in favour of an EU regulation of CNF. The four organisations that were opposed, argued that the conditions across Europe vary too much to have a common regulation. Instead, they preferred market solutions and other ways of reaching the same goals. The results might depend on a larger inclination of believing in legislation if you have a clear definition of it, but also on the attitudes towards legislation varying in general between stakeholder types. During the finalisation of this study, the European Forest Institute released a report with seven principles of CNF, which calls for further research.

Keywords: Closer-to-nature silviculture, forest management methods, policy framework, legislation preferences

Acknowledgements

Throughout the writing of this bachelor's thesis, I have received a lot of support and input. I want to thank my supervisor Annika Nordin and my assistant supervisor Isabella Hallberg Sramek for their time and feedback, which has proved invaluable.

I am also very grateful to the respondents for taking their time and being engaged in the interviews. All discussions gave new insights and perspectives, which became the foundation of this study. Thank you!

Table of contents

List	of tables	6	
Abb	reviations	6	
1.	Introduction		
2.	Method	9	
2.1	Interview method	9	
2.2	Classification and material analysis	11	
3.	Results	12	
3.1	Definition of closer-to-nature forestry	12	
3.2	Attitudes towards closer-to-nature forestry regulation	13	
4.	Discussion	16	
Refe	erences	18	

List of tables

Table 1. An overview of the respondents and the classification of organisations	10
Table 2. Example of classification of material	11
Table 3. The outcome from the analysis	12

Abbreviations

CNF	Closer-to-nature forestry
EFI	European Forest Institute
EO	Environmental organisation (used in the results, normally abbreviated
	ENGO)
EU	European Union
FO	Forest owners' organisation
IO	Forest industrial organisation
SWE	Sweden

1. Introduction

The EU Forest Strategy for 2030 identifies European forests as key to face climate change and biodiversity loss in the European Union (EU) (European Commission 2021a). It was adopted by the Commission in 2021 as a part of the EU Green Deal and is built upon the EU Biodiversity strategy (DG Environment 2021). Both the biodiversity and the forest strategy defines a need for sustainable forestry that contributes to climate change adaptation, promotes biodiversity and produces timber and other goods for a circular bioeconomy (European Commission 2021a). To reach these goals, the Commission suggests closer-to-nature forestry as a forest management method (European Commission 2021a). There is no definition of closer-to-nature forestry in the forest strategy, apart from the general outline of producing both climate change adaptivity, biodiversity and timber (European Commission 2021a).

There is a public consultation and evidence base accompanying the forest strategy (European Commission 2021b). It states that it was non-governmental organisations who suggested establishing closer-to-nature forestry principles, but there is no information provided on which interests those organisations represents. Therefore, it is important to know the view on closer-to-nature forestry among different forest stakeholders.

EU forest policy stakeholders are groups or organisations with stakes in the area (Eising 2016). In Sweden there are many forest stakeholders who have a strong interest in EU forest policy (Bjärstig & Keskitalo 2013). There is also a relatively large share of private forest owners (Pulla et al. 2013). A previous stakeholder investigation, with four stakeholder groups, showed that several Swedish forest stakeholders believed that working on solely a national level was not enough and that a proactive approach towards EU regulation was needed (Bjärstig 2013). The participants in that study thought that it was important that Swedish stakeholders actively participated in the creation of EU regulation. Different ways of regulation can be classified into policy instruments. A widely-spread classification is carrots, sticks and sermons (Vedung 1998); but ways of regulation can also be defined by their flexibility and how binding they are (Treib et al. 2007). Previous research has shown that different types of stakeholders prefer different policy instruments (Stens et al. 2016). The stakeholder investigation by Bjärstig (2013) showed that forest

owners and industry organisations preferred a more flexible and non-binding EU legislation and environmental representatives welcomed a more binding legislation.

The purpose of this study is to examine the different views on closer-to-nature forestry among EU forest stakeholders. The research questions are:

- How do different forest stakeholders define closer-to-nature-forestry?
- Related to the implementation of closer-to-nature forestry, which policy instruments do the forest stakeholders prefer?

2. Method

2.1 Interview method

The goal was to have a natural flow in the interviews and to have the possibility of asking follow-up questions, leading to the method choice of qualitative, semi-structured interviews (Bryman 2018). The number of interviews was chosen to be at least six to represent the variety of stakeholders, while being under a time limitation (Alvehus 2019). Using the definitions of previous research (Bjärstig 2013), three stakeholder groups were identified: forest owners, industry organisations and environmental organisations. The goal was to get the perspectives from at least two stakeholders from each group, and interview requests were sent out to different organisations. Seven interviews were conducted, with respondents working on both an EU level and on a national, Swedish level. The time was set to be 30 minutes for each interview, but three continued longer. This led to some organisations having longer time to elaborate their points, but the main questions were answered within the time frame.

The respondents are presented in Table 1, with the stakeholder classification and a description of the organisations. In order to maintain good respondent ethics, all of respondents were anonymised (Rienecker 2018). The organisations were also anonymised to prevent identification of different individuals. Informed consent was obtained from all stakeholders to record the Zoom interview (Bryman 2018). No conflicts of interest was found between the author of this study and the respondents (Rienecker 2018).

Table 1. An overview of the respondents and the classification of organisations

Respondent	Organisation type	Description
1	Forest owners'	Forest owners' interest organisation working on
	organisation	the EU level, promoting alternative forest management methods
2	Forest owners' organisation	Forest owners' organisation working on the EU level
3	Forest owners' organisation	Regional forest owners' organisation in Sweden
4	Environmental organisation	Forest and environmental organisation working on the EU level
5	Environmental organisation	Global environmental organisation, Swedish office
6	Forest industry organisation	Wood industry organisation working on the EU level
7	Forest industry organisation	Swedish wood and paper industry

The interview questions were chosen to be broad enough to cover the topic, but still narrowed down enough to be of use in the report and were formulated so that they could be used with all respondents (Rienecker 2018). The purpose of the questions was to examine similarities and differences among the respondents and to give them the opportunity to elaborate their answers (Bryman 2018). Several times the respondents answered a question without it being asked. Sometimes their answer had directly answered the question, otherwise they were asked to elaborate using the formulation in the questionnaire (Bryman 2018).

The main interview questions were:

- From your perspective, what is the aim with closer-to-nature forestry?
- Which practices are/should be included in closer-to-nature forestry?
- Do you think it (closer-to-nature forestry) should be implemented in the EU?
- If yes:
 - Which policy tools would you prefer to implement closer-to-nature forestry?
- If not:
 - o How can the same goals be reached?

2.2 Classification and material analysis

The results were divided into different categories. The information was separated into inputs, such as the respondent type and the location, and outputs from the analysis. Signal words (Bryman 2018) were marked and used to classify their answers, according to table 2. Table 2 also illustrates the broadness that appeared in the answers, something that is not visible in the classified results. The quotes are anonymized where needed to maintain respondent anonymisation (Rienecker 2018).

Table 2. Example of classification of material

Classification questions	Example quotes from different respondents to illustrate the	How the answer was classified	
questions	classifications	Classificu	
Do they have a	"It is hard to know what different	Signal words are marked.	
definition of closer- to-nature forestry?	organisations mean when they say closer- to-nature, it depends on the purpose "	Classified as no definition	
Which are the main practises within their definition?	"The key parts are natural regeneration, and more or less continuous cover forestry. It doesn't mean that you don't have any small gaps or clear cuts or something like that, but you don't use clear cuts as a leading principle."	Signal words are marked. The definition concluded is natural regeneration, and avoidance of clear cuts	
What do they think of having EU regulation of closer-to-nature forestry?	"Of course, there would be a problem if you would create demands from an EU level with a very high detail level. That is a reasonable counter argument. But that doesn't mean that EU cannot create a framework that allows [] being top down and allowing member states to dock into that, like with closer-to-nature."	Signal words are marked. In this quote the respondent lifts the counterargument first and concludes that it is possible to have broad parameters on an EU level. Classified as positive towards EU regulation.	

3. Results

3.1 Definition of closer-to-nature forestry

The definitions of closer-to-nature forestry vary between the respondents (table 3). The interviews took place in March 2022, with several respondents referring to upcoming research on a CNF definition.

Table 3. The outcome from the analysis.

Respondent	Main working level and location of head office	CNF definition, concluded	Should EU regulate CNF?
R1. Forest owners' organisation	EU, Brussels	Avoid clear cuts, natural regeneration	Yes
R2. Forest owners' organisation	EU, several countries	No definition	No
R3. Regional forest owners' organisation	National, SWE	No definition	No
R4. Environmental organisation	EU, Brussels	Avoid clear cuts, natural regeneration	Yes
R5. Environmental organisation	National, SWE	Avoid clear cuts, natural regeneration, larger environmental consideration	Yes
R6. Wood industry organisation	EU, Brussels	No definition	No
R7. Wood and paper industry organisation	National, SWE	No definition	No

To ease reading, the respondents are labelled with the corresponding abbreviation, for example R1FO.

- FO = Forest Owners' organisation
- EO =Environmental Organisation
- IO = Industry Organisation

Three respondents (R1FO, R4EO and R5EO) provided clear definitions of what closer-to-nature forestry entails. Their definitions resemble each other, and entails timber production in sync with the ecosystem, with the goal to improve the forests resistance towards future climate challenges. They continue with explaining that an important goal is maintaining long-term soil productivity, by limiting clear cuts and instead having a continuous cover forestry with natural regeneration. This way, according to the respondents, the ecosystem services are also protected. They all mention that clear cuts can be used to replace high-risk stands. The view on the use of non-native species varies, and both good and bad examples of the use of them are brought up by the respondents. They also believe that it is important with good examples of management and with the definition being science-based.

Four respondents (R2FO, R3FO, R6IO and R7IO) answered that there are different definitions being used in the debate and that they have no strict definition of what closer-to-nature forestry means to them. Instead, they point to that it depends on who you are speaking with and what the purpose of defining the concept is. They all refer to continuous cover forestry as a closely connected method, and that it is hard to understand the difference since continuous cover forestry has its own definitions. The need for practical experience is brought up, and that the definition must be science-based.

3.2 Attitudes towards closer-to-nature forestry regulation

Three respondents (R1FO, R4EO and R5EO) believe that it is possible to have the same broad principles of closer-to-nature forestry over the European Union (EU). All three answer that strict protection is needed for primary and old growth forest. Both environmental organisations R4EO, in Europe, and R5EO, in Sweden, bring up that the state of the European forests is severely degraded, and that legislation is needed to improve it. R4EO state that it is important not to have too tight parameters. R5EO is more inclined towards hard regulation and to have a percentage goal of the amount of CNF used in Sweden to really increase the biological values. R4EO says that you can't forbid anyone to use rotational forestry but that it is important to spread knowledge and to have economic incentives for those who wants to change their management practises. They also believe that there

is a need to separate good and bad practises through definitions so that it is easier for forest owners to choose. Respondent R1FO in Europe states that it important to identify good practise to achieve timber production together with the production of ecosystem services. They believe that both economic incentives and guidelines are needed, along with definitions.

Four respondents (R2FO, R3FO, R6IO and R7IO) are negative to having an EU regulation of CNF. The main objection is that conditions vary too much to be able to have the same practises over Europe. An expression that appears several times is that there is no *one-size-fits-all*. Instead, they have different ways of achieving the same goal.

Both the EU and the regional Swedish forest owners' organisations R2FO and R3FO identify that the purpose of having an EU definition comes from a desire to improve environmental values. However, they believe that it is better with national regulation, due to having very different conditions across both different countries and the whole of Europe. The EU forest owner's organisation R2FO do not agree on the forests being severely degraded. The regional Swedish forest owners' organisation R3FO do not discuss the current state of forests, but instead discuss the potential market solution of biodiversity certification and carbon storage credits and believe that they will be implemented in EU soon.

The wood industry organisation in Europe R6IO believes that the forest can be used to tackle the two crises, and that it is important to identify good local practises based on the local conditions. They believe that having a large-scale change towards more eco-friendly methods will decrease the productivity in some forests while maintaining it in others. One way to get maintained productivity in the whole EU is through afforestation, which they suggest to be focused mainly on unused old Soviet farmland. The wood and paper industry organisation in Sweden R7IO mentions Forest Europe¹ as a platform of reaching a common understanding of what sustainable forestry means while at the same time allowing a fit to national contexts. The respondent develops this by saying that there are several strategies and EU initiatives that strives for the same thing, and that an EU regulation would be bad. This respondent also discuss that the state of the forest is not as catastrophic as it is portrayed in the media.

One policy that unites all the respondents is that forbidding clear cuts is a bad idea. The respondents who have a definition of closer-to-nature forestry all mention a desired avoidance of clear cuts, but that they are needed in certain stands.

_

¹ Forest Europe is a multinational ministerial conference with the aim to find common strategies among the 46 signatories on how to protect and sustainably use forests (Forest Europe 2022). The European Union is one of the signatories.

Respondent R1FO, who have their own CNF definition and is positive to an EU regulation, specifically says that they believe forbidding clear cuts would lead to strong opposition. Instead, they mention a limit to the maximum size. Respondent R7IO discuss that rotational forestry is the normative silvicultural method in the most afforested EU countries Sweden and Finland. The respondent elaborates on this by saying that a large-scale change throughout the whole wood industry would be economically devastating for these countries.

4. Discussion

The three definitions of closer-to-nature forestry provided in the interviews (R1FO, R4EO and R5EO) entails the same elements - the avoidance of clear cuts and the promotion of natural regeneration. This is similar to various definitions of continuous cover forestry (Mason et al. 2021). The identified purposes among the respondents of using closer-to-nature forestry and continuous cover forestry are in line with previous research (Mason et al. 2021), with focus on climate adaptation and preservation of biodiversity. That is also in line with the forest strategy (European Commission 2021a). Several stakeholders with different attitudes towards legislation concluded that the environmental conditions differ throughout Europe, leading to different optimal management methods, something also shown in previous studies (Högberg et al 2021). Respondents of different approaches also answered that the main purpose with closer-to-nature forestry would be to create a larger climate change adaptivity. This claim is supported by a review study comparing different practises within closer-to-nature forestry (Brang et al. 2014).

The forest industry and forest owners' organisations tend to be negative towards EU legislation, while the environmental, and alternative forestry promoting organisations tend to be positive. There are several possible explanations for this. The views on land use and how it should be governed have differed throughout history (Sandström et al. 2011) and several respondents in this study have identified a recent shift in both political and public views on how the forestland should be used. Another explanation could be that different forest stakeholders prefer different legislation types in general (cf. Stens et al. 2016; Bjärstig 2013; Sandström et al. 2011).

The European Forest Institute (EFI) released their awaited report on closer-to-nature forestry during the finalisation of this paper (Larsen et al. 2022). It is a multinational working group of scientists who have concluded seven management principles for closer-to-nature forestry. Those principles are alike the definitions that appear in this study. Larsen et al. (2022) also state that the most important lesson for implementing the principles is that different regions need different management approaches, which connects to what the stakeholders in this study have said. While it looks like the EFI principles are in line with the results of this study, future research will need to address them in particular to examine what

different stakeholders think about the EFI principles and their value for future EU legislation.

The selection in this study was small but represented a diversity of stakeholders with different attitudes and perspectives towards the management and governance of forests. The number of interviews were enough for the analysis to be of use (Alvehus 2019). An interesting thing is the width of views that appeared within this small study, which would probably be even more nuanced if organisations had been included that represented, for example, tourism, bioenergy, or indigenous people. With more stakeholders included, future studies could get other perspectives on how to create a common definition and how to implement closer-to-nature forestry across the European Union.

The conclusion of this study is that different stakeholders have different definitions of closer-to-nature forestry (CNF), and that it seems connected to which type of interests they represent. Stakeholders tend to be more positive towards a European Union (EU) legislation if they have a practical definition of what closer-to-nature forestry entails. This might be connected to differing views on the state of the European forests giving different perspectives on the needed policy instruments. The approach towards EU legislation might also depend on the different organisation types preferring different policy instruments in general, which is supported by previous research. It is not possible to say whether the differing attitudes towards EU legislation is connected to whether a stakeholder has their own CNF definition or not; or if it depends on the stakeholders' attitude towards EU legislation in general. Since the interviews in this study, the European Forest Institute has released principles of closer-to-nature forestry, calling for more research.

References

- Alvehus, J. (2019). Skriva uppsats med kvalitativ metod: en handbok.
- Bjärstig, T. (2013). The Swedish forest sector's approach to a formalized forest policy within the EU. Forest Policy and Economics, 26, 131–137. https://doi.org/10.1016/j.forpol.2012.08.005
- Bjärstig, T. & Keskitalo, E.C.H. (2013). How to Influence Forest-Related Issues in the European Union? Preferred Strategies among Swedish Forest Industry. Forests, 4 (3), 693–709. https://doi.org/10.3390/f4030693
- Brang, P., Spathelf, P., Larsen, J.B., Bauhus, J., Boncina, A. & Mohren, G.M.J. (2014). Suitability of close-to-nature silviculture for adapting temperate European forests to climate change. Forestry (London), 87 (4), 492–503. https://doi.org/10.1093/forestry/cpu018
- Bryman, A. (2018). Samhällsvetenskapliga metoder. Tredje upplagan. Stockholm: Liber.
- DG Environment (2021). Forests Environment European Commission. https://ec.europa.eu/environment/forests/policy_en.htm [2022-04-07]
- Eising, R. (2016). Interest Groups and the European Union. European Union Politics. Oxford University Press
- European Commission (2021a). New EU Forest Strategy for 2030. https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0572&qid=1648817637136 [2022-04-01]
- European Commission (2021b). The Commission staff working document Stakeholder consultation and evidence base. Accompanying the document New EU Forest Strategy for 2030.
- Forest Europe (2022). Forest Europe | About. https://foresteurope.org/about/ [2022-04-27]
- Högberg et al (2021). Sustainable boreal forest management challenges and opportunities for climate change mitigation. Skogsstyrelsen. https://www.skogsstyrelsen.se/globalassets/om-oss/rapporter/rapporter-2021202020192018/rapport-2021-11-sustainable-boreal-forest-management-challenges-and-opportunities-for-climate-change-mitigation-002.pdf
- Larsen, J.B., Angelstam, P., Bauhus, J., Carvalho, J.F., Diaci, J., Dobrowolska, D., Gazda, A., Gustafsson, L., Krumm, F., Knoke, T., Konczal, A., Kuuluvainen, T., Mason, B., Motta, R., Pötzelsberger, E., Rigling, A. & Schuck, A. (2022). Closer-to-Nature Forest Management. (From Science to Policy). European Forest Institute. https://doi.org/10.36333/fs12
- Mason, W.L., Diaci, J., Carvalho, J. & Valkonen, S. (2021). Continuous cover forestry in Europe: usage and the knowledge gaps and challenges to wider

- adoption. Forestry: An International Journal of Forest Research, 95 (1), 1–12. https://doi.org/10.1093/forestry/cpab038
- Pulla, P., Schuck, A., Verkerk, P.J., Lasserre, B., Marchetti, M. & Green, T. (2013). Mapping the distribution of forest ownership in Europe. EFI Technical Report 88. European Forest Institute. https://efi.int/publications-bank/mapping-distribution-forest-ownership-europe [2022-04-06]
- Rienecker, L. (2018). Att skriva en bra uppsats. Stockholm: Liber.
- Sandström, C., Lindkvist, A., Öhman, K. & Nordström, E.-M. (2011). Governing Competing Demands for Forest Resources in Sweden. Forests, 2 (1), 218–242. https://doi.org/10.3390/f2010218
- Stens, A., Bjärstig, T., Nordström, E.-M., Sandström, C., Fries, C. & Johansson, J. (2016). In the eye of the stakeholder: The challenges of governing social forest values. Ambio, 45, S87–S99. https://doi.org/10.1007/s13280-015-0745-6
- Treib, O., Bähr, H. & Falkner, G. (2007). Modes of governance: towards a conceptual clarification. Journal of European Public Policy, 14 (1), 1–20. https://doi.org/10.1080/135017606061071406
- Vedung, E. (1998). Carrots, Sticks & Sermons. Policy Instruments & Their Evaluation. Policy Instruments: Typologies and Theories. New Brunswick and London

Publishing and archiving

Approved students' theses at SLU are published electronically. As a student, you have the copyright to your own work and need to approve the electronic publishing. If you check the box for **YES**, the full text (pdf file) and metadata will be visible and searchable online. If you check the box for **NO**, only the metadata and the abstract will be visible and searchable online. Nevertheless, when the document is uploaded it will still be archived as a digital file. If you are more than one author, the checked box will be applied to all authors. Read about SLU's publishing agreement here:

• https://www.slu.se/en/subweb/library/publish-and-analyse/register-and-publish/agreement-for-publishing/.

⊠ YES, I/we hereby give permission to publish the present thesis in accordance
with the SLU agreement regarding the transfer of the right to publish a work.
\square NO, I/we do not give permission to publish the present work. The work will still
be archived and its metadata and abstract will be visible and searchable.