



Are Swedish stakeholders willing to protect nature?

Emelie Sabrie

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Swedish University of Agricultural Sciences, SLU
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Faculty of Natural Resources and Agricultural Sciences
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Emelie Sabrie

Supervisor: Guillaume Chapron, SLU, Department of Ecology

Examiner: Göran Hartman, SLU, Department of Ecology

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Abstract

Biodiversity is declining in an unprecedented speed due to the fact that member states in the EU have tried but failed to protect biodiversity. Efforts have been made through voluntary commitments which have proven to be insufficient as targets are not met. The EU Commission has therefore proposed a nature restoration law which contains legally binding targets with the hope that this will put Europe back on track. The aim of the regulation is, inter alia, to restore 20% of the EU's land and sea by 2030 and then all ecosystems in need by 2050. Only one country have official opposed the regulation, Sweden. This study provides an analysis of the responses made by a selection of stakeholders that the Swedish government consulted with before they made their decision. The aim of the study is to present a summary of who opposes or supports the regulation and the specific paragraphs. The results reveal that the majority of stakeholders are positive towards the regulation, however the same reservations that the Swedish government have can also be found among the stakeholders.

Keywords: biodiversity, politics, environmental law, nature restoration law

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Abbreviations

CAB	County Administration Board
Ei	The Swedish Energy Markets Inspectorate
FMV	The Swedish Defence Materiel Administration
JK	Chancellor of Justice
LRF	The Federation of Swedish Farmers
MiUn	Mid Sweden University
NGOs	Non governmental organisations
SEPA	Swedish Environmental Protection Agency
SwAM	Swedish Agency for Marine and Water Management
WWF	World Wide Fund for Nature

1. Introduction

Biodiversity loss continues at a rapid pace despite decades of work in the EU to try to reverse the biodiversity crisis through voluntary commitments e.g. the Marine Strategy Framework, the Birds and Habitats Directives (Hermoso et al 2022). Member states fail to implement agreed targets into national legislation, therefore they are not fulfilled. This occurs due to inadequate political priority and commitment, in addition to lack of financial resources and knowledge (Xu et al 2021, EU Commission 2022).

More than 60% of species within the EU have poor and bad status. The status of birds that have poor and bad status has increased to 39% from 32% since 2015 and 30% of them have a negative trend. The species listed in the Birds Directive, whom member states have pledge to protect as they are highly threatened and of most value, do not show a positive trend either. The proportion of species with poor and bad status has increased to 44% and the proportion with good status has decreased to 40%. These results can be linked to the fact that 81% of the habitats in the directives have poor or bad status (European Union 2020).

The biggest threats against biodiversity are habitat loss caused by land use change and exploitation e.g. intensified agriculture and forestry, livestock management, fishing and hunting (Jaureguiberry et al 2022). Human actions have altered 75% of the Earth's land surface and 66% of the oceans have been exploited. The intensification of land use have also had a negative impact on productivity, leading to a 23% decrease globally (IPBES 2019). There is an urgent need for restoration and site protection to give nature a chance to recover in order to reverse the negative trend in biodiversity and secure the ecosystem services on which we are highly dependent on (OPOCE 2022).

1.1 Biodiversity strategy 2030

The biodiversity strategy is part of the European Green Deal that the EU Commission announced in December 2019 to address the challenges we face. The Green Deal includes all sectors but focuses on making Europe climate neutral by 2050. The objectives are, inter alia, to reduce greenhouse gas emissions with at least 55% by 2030, secure clean water and fresh air as well as plant 3 billion trees (EU Commission 2021). The biodiversity strategy is a long-term plan that was adopted in May 2020. It contains over 100 measures and commitments with the aim of protecting and restoring nature by addressing the main drivers of biodiversity loss as well as improving the governance framework in place by correcting current shortcomings. This is to be achieved by restoring degraded ecosystems by means of nature-based solutions and legal instruments. The Natura 2000 areas will also expand to make a more cohesive network and more funds will be available, e.g. 25% of EU's climate budget will be invested in biodiversity as it is closely interconnected with climate (EU Commission 2023, UN n.d.)

1.2 Nature restoration law

Voluntary commitments have proved to be insufficient and there is a need for new environmental efforts to achieve the 2030 and 2050 climate and biodiversity targets. The European Commission has therefore proposed a regulation on nature restoration. It is an essential part of the EU's 2030 Biodiversity Strategy and consists of 23 legally binding articles which is the first legal initiative in 30 years.

Both the public and the European Parliament have requested legally binding targets because, unlike directives, it will allow for direct implementation of the targets in national legislation and will require that measures be completed within a certain timeframe. The regulation has strong links to current environmental policy and it will work to complement the directives and regulations that are in place. For example, the reporting in this regulation will be done in accordance with article 12 of the Birds Directive and article 17 of the Habitats Directive. However, this regulation goes beyond current instruments because, unlike the Directives, sites outside of Natura 2000 will also be restored and there will be higher requirements for monitoring and reporting on habitats and species.

The Commission considers the regulation to be compliant with the principles of proportionality and subsidiarity, as the problems we face are transnational and requires work at EU level, also the measures proposed are those that are necessary to achieve the already adopted 2030 targets.

The regulation focuses on the areas with the greatest potential to sequester carbon, with the aim of helping to prevent and mitigate the effects of climate change. The benefits of the proposed measures exceed the cost greatly as the benefits are estimated at around EUR 1 860 billion and the costs are estimated at around EUR 154 billion (European Commission 2022).

- Article 1 describes the overall objective, which is that the regulation should contribute to the long-term, continuous and sustainable recovery of biodiversity and resilient nature both in the sea and on land. Member States have a joint target to carry out restoration measures covering at least 20% of the EU's land and sea area by 2030 and thereafter measures in all ecosystems in need by 2050.
- Article 2 sets out the geographical scope which is in the territories of the Member States; in the water, seabed and subsoil of the seabed.
- Article 3 sets out the definitions of the regulation.
- Article 4 sets out the targets for the restoration of terrestrial, coastal and freshwater ecosystems. In particular, Member States aim to carry out measures in at least 30% of the area of all habitat groups listed in Annex I that are not in good condition according to the national plan by 2030, at least 60% by 2040 and 90% by 2050.
- Article 5 sets out the objectives for the restoration of marine ecosystems where Member States have the objective of carrying out measures in at least 30% of the area of all habitat groups listed in Annex II that are not in good condition according to the national plan by 2030, at least 60% by 2040 and 90% by 2050.
- Article 6 sets out the targets for the restoration of urban green areas which, inter alia, states that there should be no net loss of green areas in the territory of the Member States compared to 2021 until 2030.
- Article 7 sets out the targets for the restoration of rivers and their natural connectivity as well as floodplains. The article's main aim is to remove barriers to ensure that at least 25,000 km of EU's waterways will flow freely.
- Article 8 sets out restoration targets for pollinators, which include that Member States shall ensure that pollinators will cease to decline by 2030 and show a positive trend thereafter.
- Article 9 sets out the targets for the restoration of agricultural ecosystems, including that measures covering at least 30% of organic soils in agriculture shall be restored by 2030, at least 50% by 2040 and 70% by 2050.
- Article 10 sets out the targets for the restoration of forest ecosystems, which include that Member States shall ensure an increasing trend in the selected indicators listed in Annex VI by 2030.
- Article 11 sets out how the national plan shall be developed.

- Article 12 sets out the content of the national plan.
- Article 13 states that the Commission shall receive a draft of the national plan.
- Article 14 sets out the process for the assessment of the national plan.
- Article 15 states that Member States need to review the national plan every ten years.
- Article 16 states, inter alia, for access to justice for the public concerned.
- Article 17 sets out how, when and where Member States should carry out the monitoring that is necessary to achieve the objectives of the regulation.
- Article 18 states, inter alia, that Member States have to provide the Commission with an annual report on the measures taken under articles 4 to 10 and on the barriers removed in article 7.
- Article 19 states that the Commission is empowered to make amendments, i.e. changes, to the Annexes in order to promote the objectives of the regulation.
- Article 20 sets out the conditions under which the Commission is empowered to adopt implementing and delegated acts.
- Article 21 sets out the comitology procedure.
- Article 22 sets out the review of the regulation by the Commission.
- Article 23 sets out the entry into force of the regulation (Regeringskansliet 2022).

1.2.1 Opposition from Sweden

Sweden is the only country who has submitted a reasoned opinion to the Commission on the regulation. They do not consider it to be in line with the principle of subsidiarity when it comes to agriculture and forestry, as the level of detail is considered to be unreasonable in regards to the objectives and purpose of the regulation. Forestry is considered to be best managed nationally (Sverige Riksdag 2021). Before the Swedish government made their decision, they consulted with a selection of stakeholders to give them an opportunity to comment on the proposal. The aim of this approach was to hear from those who would be affected by the proposal before making a decision (Regeringskansliet 2023).

The purpose of my study was to analyse the 120 referral responses to gain insight into what Swedish stakeholders think about the proposed regulation in order to make a summary of who opposes or supports the various paragraphs and highlight the most frequent and significant comments. The compilation also reveals whether the opinions of the stakeholders are consistent with the Swedish government.

2. Material and methods

The literature reviewed was based on referral responses from Swedish stakeholders that were collected from the Swedish government's website (Regeringskansliet 2022). A coding protocol in Excel was defined after reading four answers from different sectors, County Administration Board in Värmland, Stora Enso, Swedish Society for Nature Conservation and Swedish National Heritage Board. The purpose of this approach was to gain insight into the pattern of the responses in order to determine an appropriate way to compare the answers. Two Excel sheets were created, Sheet 1 contained data about their overall opinion regarding the regulation and the articles. The names of the stakeholders were in rows and the articles in columns. The first three columns contained the following data: whether they had responded to the government's letter or responded on their own initiative, whether they had an opinion on the regulation and what their overall opinion was. The rest of the coding was based on whether they mentioned the articles or not and if so what their opinion about it was. For each article, two columns were created, the first column contained data on whether or not the stakeholders mentioned the article, the second column contained data on what their opinion of it was. If they mentioned the articles, the cell on the row with their name was marked with a "1" in the first column, if not it got marked with a "0". If they did not have their own opinion but supported another stakeholder's answer, "N/A" was selected under the "Opinion" column and "0" under the "Overall opinion" column. If they had an opinion on the articles, the following options were chosen and marked in the second column; Positive and want more (3), Positive (2), Positive but want less (1), Neutral (0), Negative but says something positive (-1) and Negative (-2). "Positive and want more" was chosen when the stakeholder had a positive attitude towards the article and wanted e.g. more ambitious targets, more indicators and/or indices linked to biodiversity. "Positive" was chosen when they were fully satisfied and positive with the article. "Positive but want less" was chosen when their overall opinion was positive but they wanted e.g. lower targets, less deadlines, less indicators. "Neutral" was chosen when they did not mention the article or if they mentioned it but did not express an opinion about it. "Negative but says something positive" was chosen when their overall opinion of the article was negative but they expressed some positivity and/or agreed with parts of the article. For example, they could agree that

it is important to restore agriculture but that the options or objectives in the article were not appropriate. “Negative” was chosen when they were opposed to the article. Sheet 2 contained all the comments that the stakeholders made in their responses. The comments were in rows and the names were in columns. When a stakeholder made a comment it was put in the rows with a “1” under their name, if another stakeholder made the same comment, a “1” was marked under their name on the same row.

The stakeholders were divided into groups according to type and sector. Examples of stakeholders according to sectors:

- Protect the Forest in the sector nature conservation.
- Bergvik skog öst in the sector forestry.
- Bergstaten in the sector natural resources.
- Borgholm’s municipality in the sector public.
- Swedenergy in the sector energy.
- FAM AB in the sector industry.
- Swedish Lake Fishermen’s Association in the sector fisheries.
- The Royal Swedish Agricultural Academy in the sector research.
- The Swedish Fortifications Agency in the sector defense.
- University of Gothenburg in the sector higher education.
- The Federation of Swedish Farmers (LRF) in the sector agriculture.
- Confederation of Swedish Enterprise in the sector private.
- The Swedish Bar Association in the sector professional.

The coded data was analysed using the R statistical software (RStudio 2022). The most frequent comments from Sheet 2 are in Table 1.

Among the stakeholders who did not respond to the consultation, 11 were contacted in order to find out why they did not respond as their organisation is of relevance to the proposal and will be directly or indirectly affected.

3. Results

3.1 Overall opinion

120 out of 206 stakeholders responded to the consultation (Appendix 1). Out of these, 108 were contacted by the government and 12 responded on their own initiative. Among those who responded, 48% were authorities, 20% non governmental organisations (NGOs), 14% municipalities and regions, 10% associations and 7% companies.

97 of these had an opinion, 19 did not, 4 supported and referred to another stakeholders answer (Figure 1).

11 stakeholders who did not reply were contacted, 9 responded. Most of them had the same answer; they did not have time to respond, they prioritized other issues that affect them more or they only reply when they believe that they have knowledge to contribute with. Hällefors Tierp skogar did not have time to answer but they agreed with another stakeholder that had an overall negative opinion. Södra skogsägarna choose not to prioritize this consultation due to lack of time and resources but they are active in their industry organisation, two of which responded to the consultation and both of them had an overall opinion that was negative but they said something positive. Jägarnas riksförbund did not know why they did not participate, their guess was that the request had been lost in their internal administration.

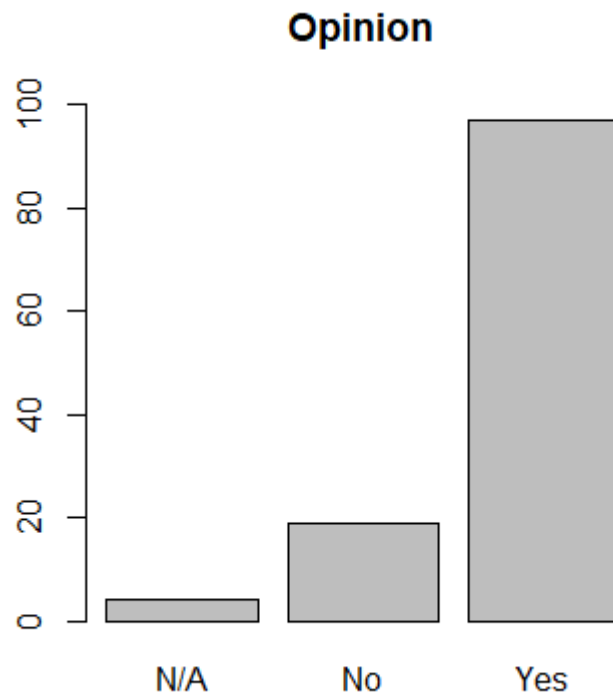


Figure 1: The frequency of stakeholders that had an opinion.

Among those that had an opinion, 49 were positive, 24 were neutral, 22 were negative but they said something positive, 10 were negative, 8 were positive and wanted more and 7 were positive but wanted less (Figure 2).

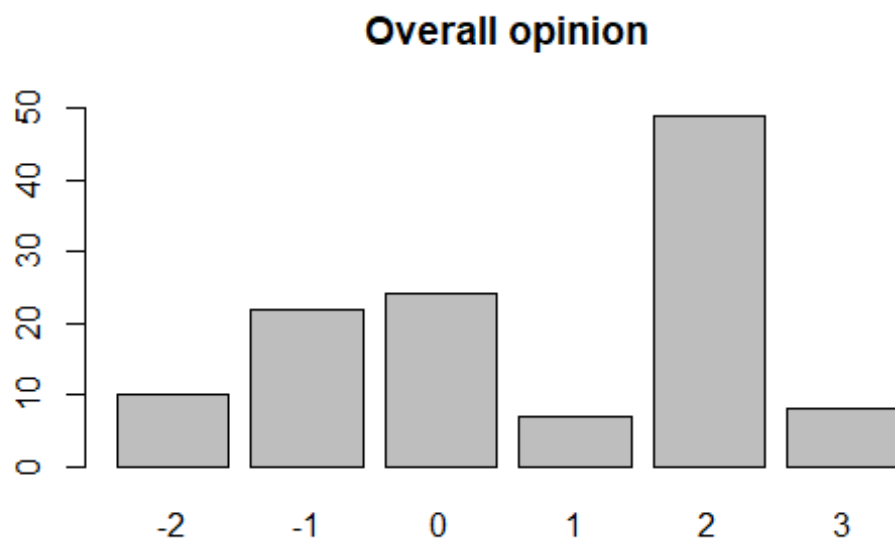


Figure 2: Distribution of stakeholders' opinions about the regulation.

3.2 Opinion according to type

58 out of 120 respondents were authorities.

- Of these, 56% were positive, 25% were neutral, 7% were positive but wanted less, 7% were negative, 4% were positive and wanted more, 2% were negative but they said something positive.

24 out of 120 respondents were NGOs.

- Of these, 3 out of 5 were negative but they said something positive, 2 out of 10 were positive, 1 out of 10 were positive and wanted more, 1 out of 10 were neutral and 1 out of 20 were negative.

17 out of 120 respondents were municipalities and regions.

- Of these, 2 out of 5 were neutral, 3 out of 10 were positive, 1 out of 5 were negative, 1 out of 10 were negative but they said something positive and 1 out of 20 were positive but wanted less.

12 out of 120 respondents were associations.

- Of these, 1 out of 3 were positive, 1 out of 4 were positive and wanted more, 1 out of 4 were negative but they said something positive and 1 out of 10 were negative.

8 out of 120 respondents were companies.

- Of these, 2 out of 5 were positive, 1 out of 4 were positive but wanted less, 1 out of 4 were negative but they said something positive and 1 out of 10 were negative (Figure 3).

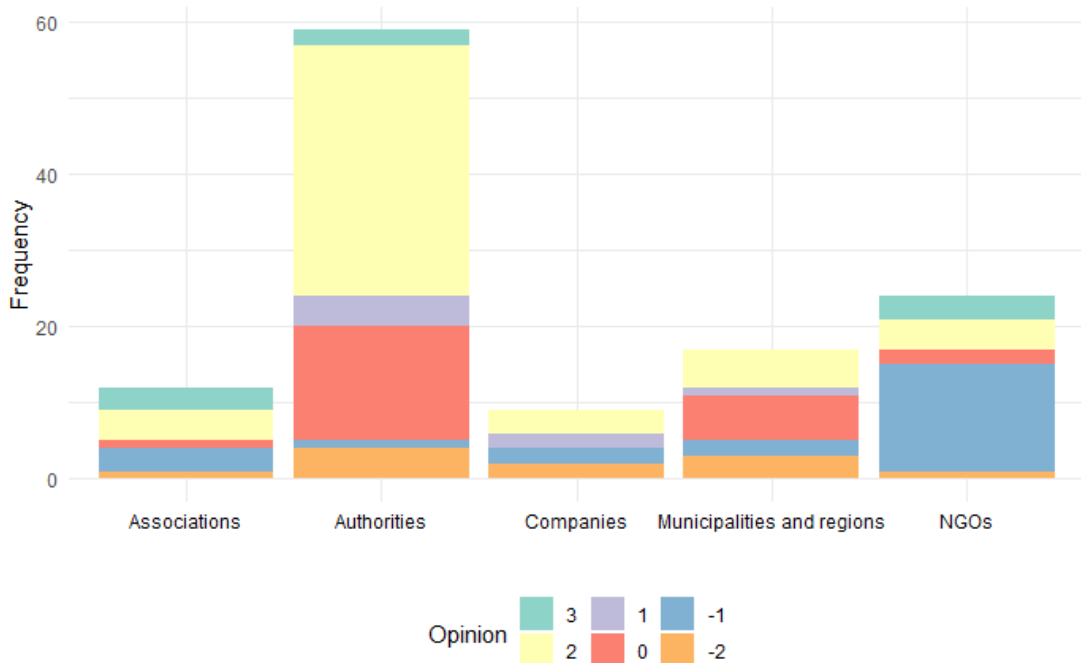


Figure 3: Breakdown of stakeholders' opinion in groups according to type.

3.3 Opinion according to sector

60 out of 120 respondents belonged to the public sector.

- Among these, 57% were positive, 22% were neutral, 8% were negative but they said something positive, 7% were negative and 7% were positive but they wanted less.

11 out of 120 respondents belonged to the nature conservation sector.

- Among these, 3 out of 5 were positive, 3 out of 10 were positive and wanted more, 1 out of 10 were positive but wanted less and 1 out of 10 were neutral

9 out of 120 respondents belonged to forestry.

- Among these, 4 out of 5 were negative but they said something positive, 1 out of 10 were negative and 1 out of 10 were positive.

5 out of 120 respondents belonged to the energy industry.

- Among these 2 out of 5 were neutral, 2 out of 10 were negative, 2 out of 10 were positive and 2 out of 10 were positive and wanted more.

2 out of 120 respondents belonged to the natural resources sector.

- Among these, 1 out of 2 were neutral and 1 out of 2 were negative but they said something positive.

1 out of 120 respondents belonged to the industrial sector.

- They were positive but wanted less (Figure 4).

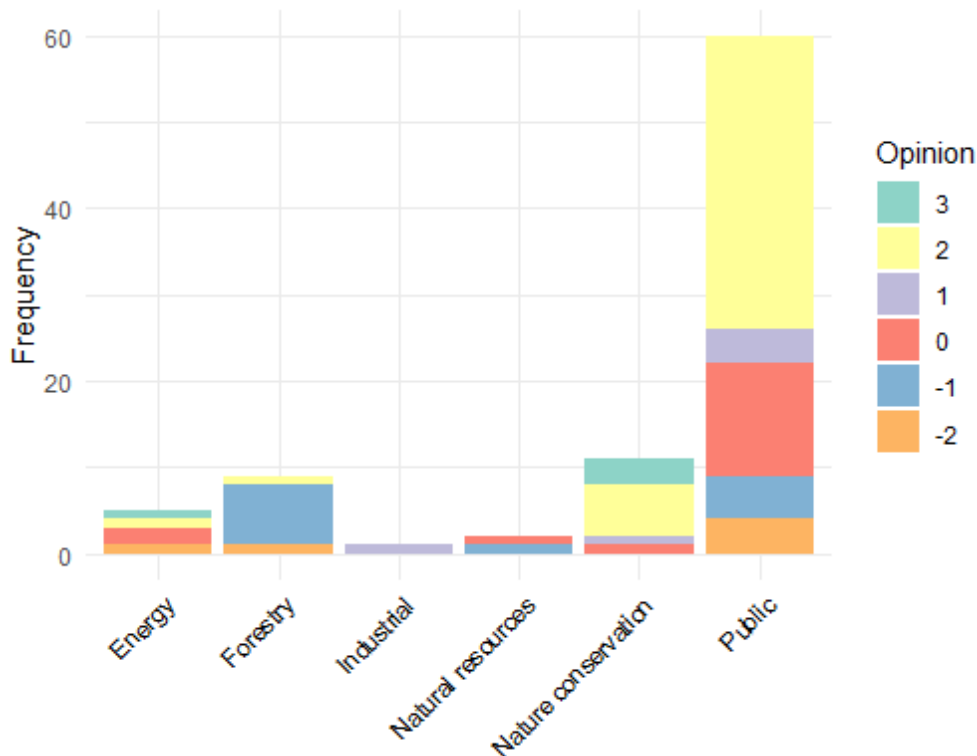


Figure 4: Compilation of opinions in groups according to the sector.

- 9 out of 120 respondents belonged to the higher education sector.
- Of which, 2 out of 5 were neutral, 1 out of 3 were positive, 2 out of 10 were positive and wanted more.
- 8 out of 120 respondents belonged to the private sector.
- Of which, 1 out of 2 were negative but they said something positive, 1 out of 4 were negative and 1 out of 4 were positive.
- 4 out of 120 respondents belonged to the fisheries sector.
- Of which, 3 out of 4 were negative but they said something positive and 1 out of 4 were positive and wanted more.
- 4 out of 120 respondents belonged to the research sector.
- Of which, 1 out of 2 were positive, 1 out of 4 were positive and wanted more and 1 out of 4 were neutral.
- 4 out of 120 respondents belonged to the defense sector.
- Of which, 1 out of 2 were negative and 1 out of 2 were neutral.
- 1 out of 120 respondents belonged to the agriculture sector.
- They were negative but they said something positive.
- 1 out of 120 respondents belonged to the professional sector.
- They were negative but they said something positive (Figure 5).

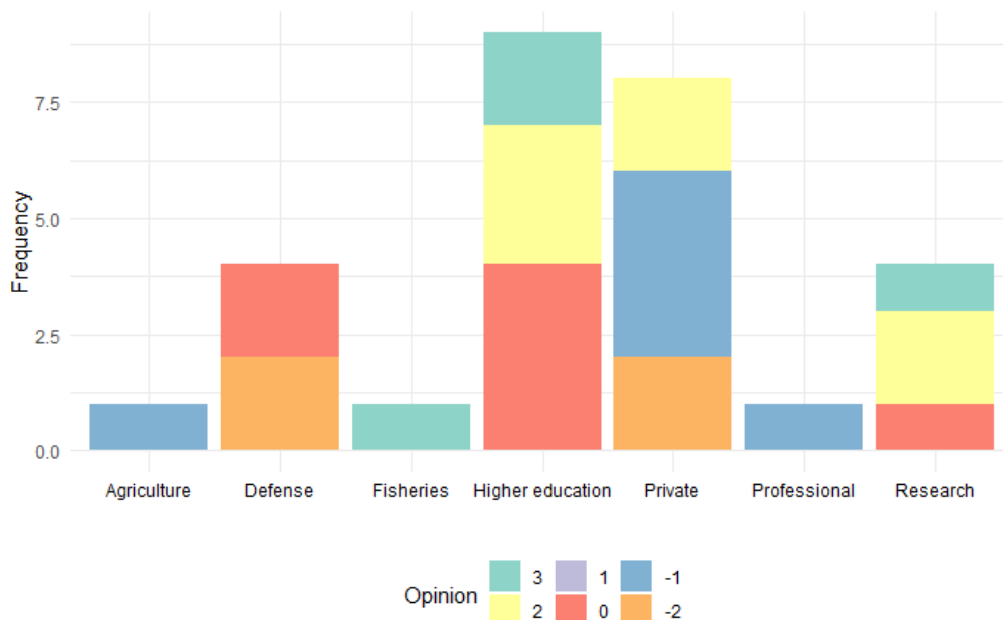


Figure 5: Continuation of stakeholders' opinions in groups according to the sector.

3.4 Summary of all of the stakeholders' opinion on all the articles

The proposed measures and goals about restoration of agricultural ecosystems (article 9) received the most positive response, meanwhile restoration of forest ecosystems (article 10) received the most negative response. No one had an opinion on article 22 and 23 which is about the review of the regulation and the entry into force, WWF did mention both of the articles but remained neutral (Table 1).

Table 1: Specific opinion on all the articles.

	Very positive	Positive	Partly positive	Neutral	Partly negative	Negative
Article 1	6	9	0	101	2	0
Article 2	0	1	0	119	0	0
Article 3	0	1	0	115	0	3
Article 4	0	13	7	84	5	7
Article 5	6	8	4	96	5	1
Article 6	5	14	3	92	3	3
Article 7	6	12	2	92	2	6
Article 8	5	15	0	98	0	2
Article 9	11	9	8	81	2	9
Article 10	12	12	1	77	5	8
Article 11	5	12	6	93	2	2
Article 12	5	8	1	102	2	1
Article 13	0	3	1	111	1	4
Article 14	1	4	1	109	0	5
Article 15	4	4	0	112	0	0
Article 16	3	5	1	110	1	0
Article 17	2	6	2	107	0	3
Article 18	1	4	3	112	0	0
Article 19	0	1	0	110	0	8
Article 20	0	1	0	113	0	6
Article 21	0	0	0	116	0	4
Article 22	0	0	0	120	0	0
Article 23	0	0	0	120	0	0

3.5 Selection of the longest and shortest answers

The Swedish Agency for Water and Marine Management’s answer was the longest with 17 108 words. It contained, inter alia, an environmental impact statement that were requested by the Swedish government. Kungsörn Sverige’s answer was the shortest with 83 words, they were clear and consise with their message about supporting the regulation (Table 2, Figure 6).

Table 2: Compliation of stakeholders’ who wrote the most and least.

Top 10	Words	Bottom 10	Words
SwAM	17108	Kungsörn Sverige	83
WWF	5750	Bergsstaten	89
CAB of Skåne	5618	Östersunds municipality	89
LRF	4939	Swedish church	89
FMV	4523	University of Gothenburg	93
SEPA	4389	MiUn	105
CAB of Jönköping	4387	Ei	107
CAB of Blekinge	4328	JK	108
Gothenburg municipality	4264	Vindelns municipality	126
CAB of Västra Götaland	4175	Salem municipality	134

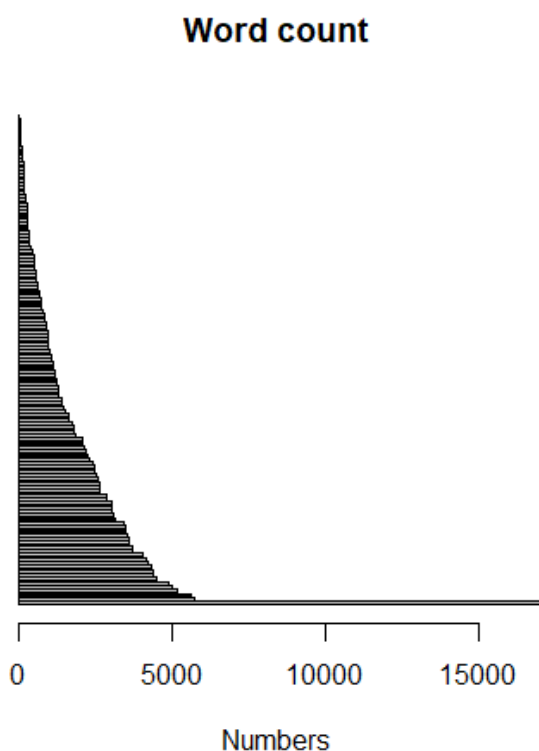


Figure 6: The distribution of number of words per response.

3.6 Collection of comments

Insufficient clarity was mentioned the most. These stakeholders thought that there were too much uncertainties in the regulation, it was e.g. not clear how and if some of the measures could be achieved and by whom and when. It was also not clear where the measures were going to take place and where not. The comment about more resources and development were referring to financial and personnel resources, the existing resources are believed to be insufficient to reach the goals and targets in the regulation (Table 3).

Table 3. The most frequent comments made by stakeholders.

Comments	Frequency
Insufficient clarity	30
More resources and development are needed	28
Inadequate definitions and/or wording	26
Risk of goal conflicts and conflicts of interest	25
The time frame is tight	24
Compatibility with other processes and legislation	23
Close cooperation with stakeholders (e.g. landowners) is important	23
Regulation contributes to achieving other goals and commitments	23
Important with trade-offs against other goals/interests	23
Financial compensation to those affected in the event of loss of income	22
Thorough impact assessment	21
The regulation may have a negative impact on agriculture and forestry	19
More weight to local context (e.g. nordic forests growing more slowly)	18
Consideration of ownership and right of use	17

4. Discussion

This study sets out to get a better understanding of Sweden's opposition towards the nature restoration law by analysing the responses from Swedish stakeholders, who were consulted during the decision-making, to determine if they share their disapproval.

The state of ecosystems and species are deteriorating and if no changes are being made to current systems, it will continue. Future generations will experience a different world than present and will suffer from the problems we created and let be (Johnson et al 2017).

The regulation is ambitious but necessary because restoration and site protection are vital tools for protecting biodiversity and the inability to reach targets with voluntary commitments as well as the shortage of time have caused the need for stronger actions.

The public share the concern for biodiversity and the environment as 96% of EU citizens believe that we have a responsibility to preserve biodiversity and that the current loss is highly serious. During the Conference on the Future of Europe, the same was expressed, biodiversity needs to be protected and fossil fuels have to be phased out faster (EU Commission 2019; 2022).

The majority of stakeholders were positive towards the regulation and article 9 (agriculture) received the most positive response with 28 out of 120 of them being positive. The proposed measures were considered to have a positive effect on biodiversity and also climate change. For example, rewetting drained peatlands were viewed as a cost-effective measure that will reduce greenhouse gases immensely. The indicators listed for agriculture were also well received, they were considered useful and highly beneficial for biodiversity. However, there were divided opinions towards article 9 regarding food security. Some said that restoration will have a positive effect on food security in the long-term, as agriculture in good conditions will secure the ecosystem services we depend on. Others said that it is not appropriate to take out so much productive agricultural land as it will affect food security negatively.

Article 10 received the most negative response, there seemed to be a lot of conflict of interest regarding forest ecosystems. Some argued that the article will have a negative impact on forestry which is seen as a concern for economic and climate reasons. It is believed that Sweden needs to have an active forestry to enable the

climate transition from fossil fuels and to reach other agreed targets. Furthermore, it is also expected that restoration will have to be carried out on privately owned land which may violate the owner's right to use land. There may also be an issue regarding the mandatory nature of measures as the current system in place relies on voluntary provisions. The indicators listed for forest ecosystems were not as appreciated as for agriculture, it was said that it is not appropriate to have indicators for all forests in the EU as more weight to local context needs to be taken into consideration. Some even argued that connectivity is not always a good thing, it was stated that "a green corridor for some can be a barrier for others".

More weight to local context was also mentioned regarding article 6 which was about restoration of urban ecosystems. It was stated that the targets and definitions need to take Sweden's conditions more into consideration because currently some of the goals are seen as impossible to reach. The main definitions in question are local administrative unit, cities, towns and suburbs, which were considered unclear and difficult in the Swedish context. In addition, the requirement to increase at least 3% of urban green space by 2030 and 5% by 2050 is also viewed as a concern due to the fact that many municipalities already have a lot of urban green areas and to increase them by 3-5% will be a great challenge. It would also come at a great cost, as it is stated that the cost for Sweden will be more than double then for other member states; 0,13% of GDP for Sweden, compared to the EU average of 0,06% GDP.

25 stakeholders mentioned that the regulation may lead to goal conflicts, mostly regarding other environmental goals such as production of energy, biofuels and food. The conflicts of interest arises as the establishment of renewable energy requires land to be set aside which leads to habitat loss, moreover biodiversity can be harmed by its use e.g. fish by hydro power and birds by wind farms. Restoration and site protection leads to more carbon sequestration and benefits biodiversity but it consequently leads to less timber production for biofuels. Rewetting of agricultural land reduces greenhouse gas emissions but can have a negative effect on food production. To overcome these issues, it has been proposed to introduce a follow-up system to report and evaluate goal conflicts between different fields and ensure that financial resources are available to resolve these conflicts.

The opposition from the Swedish government's could be found among the stakeholders in certain aspects. 11 stakeholders claim that the regulation is not in line with the principle of subsidiarity and nine of them expressed concern regarding the principle of proportionality. Their reasoning is similar as the government, some argue that the regulation is not necessary to reach established goals and that forestry is way overregulated. Forestry is perceived to be best managed nationally for various reasons. For example, five stakeholders said that the Commission lacks competence regarding forestry and it is believed that the most knowledge about

boreal forests exist in Sweden, therefore the Commission is not eligible to handle these questions.

Another comment that have been raised by both the government and stakeholders is that the regulation comes with great challenges as it is extensive and the ambition level is high. The time frame is viewed as too narrow and more time have been requested, especially regarding the establishment of the national plan within two years from entry into force of the regulation. Some have raised concern that there is a risk for sanctions as early as 2031 because certain goals are too hard to reach given that there are large areas listed and recovery of nature sometimes take a long time, this needs to be taking in consideration. Moreover, it has been noted that Sweden is in great need of inventory as the current state of knowledge is not at the level required by the regulation and it is expected to take some time to accomplish this.

14 stakeholders highlighted that Sweden reports differently than other member states which could make it harder for them to reach the proposed goals. Sweden's reporting is based on a pre-industrial reference level, meanwhile other member states have based their reporting on when they entered the EU. The stakeholders believe that this will put an unnecessary burden on Sweden and it is not fair nor reasonable. It has therefore been requested that the reporting according to article 17 in the Habitats directive become more comparable.

Three stakeholders said that the regulation lacked credibility, two of those who expressed this concern had copied each others answers but signed off with different names that represented their organisation. These stakeholders were LRF Skogsägarna and Norra skog. Both of them were contacted regarding this issue, only the author of the response answered. They confirmed that LRF Skogsägarna had written both of the answers. The reason for this was that they have a close collaboration with each other and to get their message across, they sometimes coordinate their answers on occasions like this. In the future, for more transparency and to increase their own credibility, they should consider referring to each other answer like other stakeholders in this consultation process did.

Of those who wrote the longest answers, the majority of the top 10 were authorities and all but two were positive towards the regulation. Of those who wrote the shortest answers, the majority of the top 10 were also authorities and all but one were neutral. The result show that those who had a positive attitude put the most effort into their answers and argued well for their opinion, those who were negative ended up in the middle of the distribution while those who were neutral wrote the least, which was expected as a longer answer can be considered unnecessary when you do not stand for anything.

Sweden is currently chairing the presidency of the European Council and their priorities are security, green and energy transitions, competitiveness and democracy (European Union 2022). Biodiversity does not seem to be on their agenda which

might not come as a surprise as they do not support the regulation but also because it is not a national priority either. For example, the budget for protecting valuable nature was reduced by 33% in 2023 and the funding for measures regarding valuable nature was reduced by 45% (SEPA 2023). Sweden can therefore be expected to diminish the regulation's chance of being accepted.

The study is subject to limitations, mainly due to lack of time. The referral responses were only read once, however it would have been of value to read them multiple times for various reasons. It would have enabled for an evaluation of previously chosen coding to compare if the former match the latter. It is worth noting that the coding is based on how I perceived the responses with the guidance of my supervisor, the stakeholders may or may not agree. Therefore it would have been interesting to contact all the stakeholders to see if they agree with the coding. Regarding the specific comments, some comments were probably raised more than counted. I noticed throughout the process that I might have missed some comments. The reason for this is because I choose the main comments made by the stakeholders which means that not every point made were included. Therefore a "less important" comment from one stakeholder could have been the main comment from another. It is evident that the study would have been more accurate and inclusive if more time was available to correct these flaws.

References

Christopher N. Johnson et al., Biodiversity losses and conservation responses in the Anthropocene. *Science* 356, 270-275 (2017).

<https://doi.org/10.1126/science.aam9317>

European Commission. (2019). An overwhelming majority of Europeans are concerned about the loss of biodiversity and support stronger EU action to protect nature.

https://ec.europa.eu/commission/presscorner/detail/en/IP_19_2360

European Commission. (2022). Conference on the Future of Europe: report on the final outcome.

<https://consilium-europa.libguides.com/futureEurope/EU-publications>

European Commission. (2022). Proposal of a Nature Restoration Law.

https://environment.ec.europa.eu/publications/nature-restoration-law_en

European Union. (2020). The state of nature in the European Union: Report on the status and trends in 2013-2018 of species and habitat types protected by the Birds and Habitats Directive

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0635>

European Union. (2022). Prioriteringar.

<https://swedish-presidency.consilium.europa.eu/sv/om-webbplatsen/>

Hermoso, V., Carvalho, S. B., Giakoumi, S., Goldsborough, D., Katsanevakis, S., Leontiou, S., ... & Yates, K. L. (2022). The EU Biodiversity Strategy for 2030: Opportunities and challenges on the path towards biodiversity recovery. *Environmental Science & Policy*, 127, 263-271.

<https://doi.org/10.1016/j.envsci.2021.10.028>

Jaureguiberry, P., Titeux, N., Wiemers, M., Bowler, D. E., Coscieme, L., Golden, A. S.,... & Purvis, A. (2022). The direct drivers of recent global anthropogenic biodiversity loss. *Science advances*, 8(45).
<https://doi.org/10.1126/sciadv.abm9982>

Publications Office of the European Union. (2022). Restoring nature for the benefit of people, nature and the climate.
<https://op.europa.eu/en/publication-detail/-/publication/95311c9d-f07b-11ec-a534-01aa75ed71a1>

Regeringskansliet. (2022) Nature restoration law.
<https://www.regeringen.se/contentassets/d5414b47c46d4c05a4bb112bf5b7e736/eu-kommissionens-forslag-till-forordning-om-restaurering-av-natur.pdf>

R Core Team (2022). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria.
<https://www.R-project.org>

Swedish Environmental Protection Agency. (2023). Årets fördelning för värdefull natur klar.
<https://www.naturvardsverket.se/om-oss/aktuellt/nyheter-och-pressmeddelanden/2023/januari/arets-fordelning-for-vardefull-natur-klar/>

Sveriges Riksdag. (2021). Förordning om restaurering av natur.
https://www.riksdagen.se/sv/dokument-lagar/dokument/fakta-pm-om-eu-forslag/forordning-om-restaurering-av-natur_H906FPM114#totop

UN. (n.d.). EU Biodiversity Strategy for 2030 Bringing nature back into our lives.
<https://sdgs.un.org/partnerships/eu-biodiversity-strategy-2030-bringing-nature-back-our-lives>

Xu, H., Cao, Y., Yu, D. et al. Ensuring effective implementation of the post-2020 global biodiversity targets. *Nat Ecol Evol* 5, 411–418 (2021).
<https://doi.org/10.1038/s41559-020-01375-y>

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Appendix 1

The raw data can be accessed here:

<https://github.com/eese002/Remissvar/blob/main/Remissvar.xlsx>