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The future as imagined by Utrechtse Heuvelrug visitors

The future of sustainable tourism at Utrechtse Heuvelrug according to its visitors



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1. Introduction

Utrechtse Heuvelrug is a thirty kilometre wide national park located between Amsterdam and Utrecht (Netherlands Board of Tourism & Conventions, 2020). The park provides an important cultural and natural recreation area to the millions of surrounding residents and visitors (Oosterman & Dik, 2018). Its high environmental value stems from the range of recreation activities such as biking trails and visiting castles (Utrechtse Heuvelrug National Park, 2021). Moreover, the Utrechtse Heuvelrug is the second largest forest area in The Netherlands containing significant biodiversity, including rare plant species such as the sundew (Samenwerkingsverband Nationale Parken, n.d.).

1.2. Research questions and aim

This research aims to present future scenarios about policies to visitors surrounding sustainable tourism in Utrechtse Heuvelrug. The broader aim of this research is to involve visitors in the decision-making processes by inviting them to think about the future of the Utrechtse Heuvelrug. The research question this paper aims to answer is "Which policy options could mitigate the negative impacts of increased tourism and contribute to a sustainable future in the Utrechtse Heuvelrug according to its visitors?". To guide the research in a structural manner, the following sub-questions will be answered to support an overarching final conclusion to the research question:

- 1. What are the sustainability challenges connected to the increase in tourism in Utrechtse Heuvelrug?
- 2. What values social, economic, environmental and policies are most important to address to achieve a sustainable future according to Utrechtse Heuvelrug visitors?
- 3. Based on survey data, literature review and current governance trends, which policy will work best in practice in Utrechtse Heuvelrug and why?

1.3. The relevance of the research

This research is relevant because of the lack of existing studies on the effects of increased tourism on the Utrechtse Heuvelrug. Changes in seasonality and the COVID-19 lockdown have resulted in a spike in visitors at peak moments (Rice & Pan, 2021). This poses threats to the sustainability of the national park if left unmanaged. Negative environmental effects of increased tourism can include pollution, noise, changes in microclimate and damaged vegetation. However, multiple scenarios of how the future of Utrechtse Heuvelrug will look like are still possible, depending on what policies are now implemented.

1.4. The set-up of the research

This research report first reviews existing literature on the negative consequences of spiking tourism and various existing policies on how to manage the effects in a sustainable manner. This will highlight the research gap that currently exists surrounding sustainable tourism in Utrechtse Heuvelrug. Based on this, this research aims to develop different realistic policies that could manage the tourism in the Utrechtse Heuvelrug sustainably. These policies are integrated in the surveys, which in turn are conducted with visitors (n = 58) at the Utrechtse Heuvelrug to find out which policies are favoured. Based on the results, this paper will recommend certain policies that could achieve sustainable tourism to answer the research question.



2. Literature review

Tourism has become an indispensable part of economic and social phenomena globally (WTO, 2016). Recently, a new form of tourism has arisen, namely ecotourism (Riveros & Blanco, 2003; WTO, 2002). This is defined as "all forms of tourism based on nature and in which the tourist's main motivation is the observation and appraisal of nature or the traditional cultures predominant in the natural zones" (WTO, 2002). Ecosystems and their biodiversity are at the centre of this form of tourism. The extent of tourism in natural areas affects its quality and conservation status. Paradoxically, the more valuable and attractive the nature area, the more tourism it experiences, which increases its degradation and thus renders it less attractive to tourists (Widawski & Jary, 2019). Widawski and Jary (2019) argue that excessive tourism in national parks causes problems such as trampled wild paths, damaged root systems and changes in microclimate. This negatively impacts the aesthetic values of the park and the ecosystem (Widawski & Jary, 2019).

Tourism can be managed in various ways in order to protect the natural areas. Firstly, by focusing on patterns of peak tourism based on location and weather, mass crowding could be managed through redistribution. Studies such as those by Schechter and Lucas (2011) have used computer simulation models to measure the effectiveness of redistribution of space and time to decrease the contacts among different visitor stakeholders (Manning & Anderson, 2012). Another management method is by informing tourists. A study by Lime and Lucas (1977) showed that three quarters of visitors who had access to information about the times at which certain recreational areas were busiest planned their visit around this (Manning & Anderson, 2012). Utrechtse Heuvelrug uses a similar mechanism, the 'druktemonitor', which measures the level of visitors at a certain place in the park at any given time. Its aim is to prevent crowding whilst allowing people to visit new areas by using a simple colour coding system (Regionaal Bureau voor Toerisme, 2021).

Furthermore, visitors can also be educated on the potential negative environmental consequences of their behaviour and of mass tourism in general to encourage low-impact behaviour (Manning & Anderson, 2012). A study by Christenen and Cole (2000), conducted at eight wilderness areas, showed that between 51-69% of visitors would for example cook with a stove (instead of a campfire) at least 70 metres from the lake. Visitors' behaviour changed after wilderness managers reported ecological problems arising from certain behaviour (Manning & Anderson, 2012). Information can also be used to alter visitors' attitudes, and thus acceptance of certain tourism management policies. Studies such as the one conducted by Robertson (1982) showed that attitudes of visitors to Yellowstone Park were indeed altered after being exposed to information on certain ecological consequences (Manning & Anderson, 2012).

A more direct method to manage tourism can be through rules and policies. These could include group size limitations, specific time slots, limitations to length of stay etc. It is important that visitors are aware of the implementation of these rules (Ross & Moeller, 1974) and why they are necessary to be effective (Manning & Anderson, 2012). However, there has been limited research on the effectiveness of this method. The economic consequences also need to be taken into consideration. A final alternative method to managing tourism that is used is zoning, where different recreational activities are restricted to certain areas or time slots, to prevent crowding. Moreover, a survey conducted by Cole and Hall (2008) among visitors in twelve wilderness areas in the United States found that this management method was the most favoured compared to other suggested policies.



All of the above mentioned studies that are summarised in the book by Manning and Anderson (2012) are research conducted in national parks in the US. The preface of the book states that the management principles are not only applicable to US parks but also elsewhere. However, from a critical perspective, this is not always the case, especially compared to Utrechtse Heuvelrug, whose features and capacity significantly differ. Therefore, it must be noted that the literature used in this research is not all based on the Utrechtse Heuvelrug.

3. Methods

This research started by developing different policies on sustainable tourism on the Utrechtse Heuvelrug. These different policies were based on literature about mass tourism in parks. Hereafter, two interviews were conducted, where questions were asked about opinions on the proposed policies. The first interview was with Corien Koreman from Staatsbosbeheer, who works in the area as a forester. The interview was conducted with her because the aim was to get information from someone who works in the Utrechtse Heuvelrug and therefore has first-hand experience with tourists in the park. The second interview was with the former director of the Utrechtse Heuvelrug, Erwin Hollestelle. He was able to give the perspective of a broader point of view regarding the relationship between humans and nature.

With both the information gathered from the interviews and information from existing literature on the topic, a survey was created for visitors of the Utrechtse Heuvelrug. On the 1st and 2nd of May 2021, the surveys were conducted at two different parts of the park. On the first day, the surveys were conducted in the forest in Driebergen-Rijsenburg in front of a restaurant on the edge of the forest, where many bike and walking paths went past. The second day, surveys were conducted in the area of the Pyramid of Austerlitz. These areas are both part of the Utrechtse Heuvelrug. They were specifically chosen as they were easily reachable and popular spots in the park, which meant that there likely would be tourists present. Mainly real-life surveys were conducted instead of online surveys. This made the results more reliable, since it could be verified that it was indeed park visitors who completed the survey, and the visitors also had the possibility to ask questions of clarification and make direct comments while filling in the survey. Fifty physical surveys were printed and each of them were filled in. Moreover, a QR code (Appendix IV) was created for the online version of the survey, which was used during the fieldwork as well. Eventually, 58 people filled in the surveys: 50 real-life surveys and 8 via the QR code. As can be seen in Appendix II and III, the survey contains questions about the different types of policies. After conducting the surveys, the answers were counted per question and written down in a notebook. Then, the answers were put in an Excel-sheet to have a spruce and clear overview of the answers. The Excel graph functions were used to add up the outcomes, which indicated which policy is most preferred by the visitors. Inspired and advised by the survey outcomes, it became clear which policy should be implemented based on the collected data to achieve sustainable tourism. Excel was chosen because all of us are familiar with the program and it has the exact functions that were needed for visualising the results.

As has been mentioned previously in the introduction, the broader aim of this research is to involve visitors in the decision-making processes by inviting them to think about the future of the Utrechtse Heuvelrug. This is why using surveys is an important part of this research; it is a good way of involving visitors and making them think about the future of the Utrechtse Heuvelrug. The method to create policies ourselves and present them to visitors in a survey was preferred over coming up with policies together with the visitors in, for example, an interview, as it is a quicker and less strenuous method. Additionally, we anticipated that more people would be willing to participate if the time required was



as little as possible. Furthermore, it would have been very difficult for the visitors to come up with policies themselves, given that they most likely do not have all the necessary background information.

4. Results

4.1 Interview with Corien Koreman

An interview was conducted with Corien Koreman from Staatsbosbeheer. Koreman described her function as a forester as relating to "communication, marketing and participation". She explained that her role is multifaceted but her aim is "to maintain the balance between people and nature", including nature education for children.

The first question concerned the problems due to increased tourism. Koreman stated that "nature can handle a large stream of public, as long as people follow the rules. And that is precisely where the big problem lies." Some examples of this include littering, people walking outside paths and not keeping dogs on leashes. Loose running dogs through the forest is the largest cause of roe deer death. Koreman says this is because people "do not realize that we have rules in nature and that they have a reason. They are there to protect nature and to ensure that people do not experience any nuisance together."

Next, some policies were proposed and we asked Koreman's perspective on them. She was not in favor of entrance fees because she believes that "nature belongs to all of us" and wants to "keep it accessible". Moreover, she also opposed the idea of putting up fences as they could prevent animals from migrating. Koreman also thought that time slots would be an unrealistic policy to monitor. Her opinion on the new Druktemonitor tool to manage tourism is that it is "not a reliable tool as it is just an estimate". Also, the "monitor is mainly related to the corona period, not to pressure from nature."

Koreman concluded that "information campaigns, bringing it to people's attention and park rangers to fine people who don't follow the rules are the most important solutions for me".

4.2 Interview with Erwin Hollestelle

Another interview was conducted with Erwin Hollestelle, the former director of the Utrechtse Heuvelrug and a board member of the organization 'Goedvolk'. The interview started with an introduction to the roles and responsibilities of Hollestelle. He stated that he works as an organisational psychologist and that he is part of the foundation Goedvolk that focuses on how current decisions influence the future.

The next question addresses the changes in tourism and some of their consequences on the Utrechtse Heuvelrug. Hollestelle explains that during the lockdown, there was a clear increase in visitors and that this caused a lot of noise pollution in the area as well as mistreatment of nature. Hollestelle is very clear and passionate about what he views as the main problem. He mentions the film 'normal is over', which talks about the relationship between human behaviour and mother nature. "I think that's the gist of it-tell kids, 'Get on your knees and go and study a beetle.' Show your children through the garden what a leaf is. That sparks interest in what you're dealing with. And I think that's a problem I see".

Hollestelle sternly believes that rules would not be necessary if people had a connection with nature. In order to solve the problem of mistreatment of the environment, children must learn from a young age

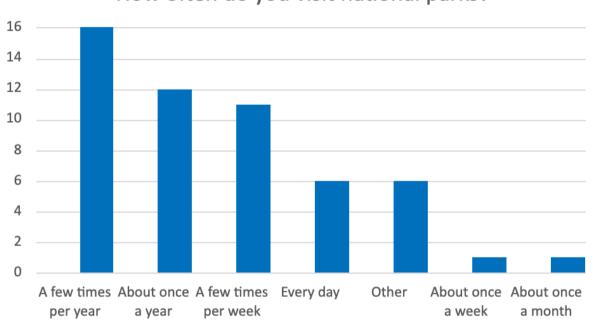


that humans are a part of nature. "Are we nature, are we above nature or are we part of it?." Hollestelle is asked for his opinion on stricter rules and policies. His response comes from the perspective of a psychologist. He explains that if one is constantly reprimanded, they will have feelings of resentment which consequently leads to disobedience. Instead, Hollestelle encourages people to ask themselves why it is important to protect nature.

The conclusion Hollestelle gives is that in order for there to be sustainability, people need to have a connection to nature. This has to be developed during childhood, because with a relationship and respect for nature, rules are not necessary.

4.3 Survey results

The following graphs show the data collected from the survey conducted in the Utrechtse Heuvelrug, where visitors respond to the different questions. A total of 58 responses were recorded.



How often do you visit national parks?

Figure 1: Visitors' responses to the question "How often do you visit national parks?"

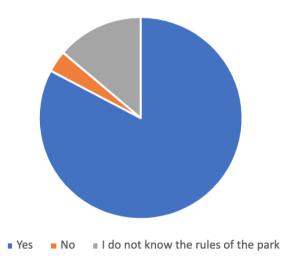
Figure 1 shows that the majority of visitors are split between visiting national parks relatively often, including 'everyday' or 'a few times per week'. Or relatively few, including 'a few times per year' or 'about once a year'. Most of the data lies at the two extreme frequencies rather than in the middle. However, most people (16 respondents) visit national parks a few times per year. Three of the visitors that selected 'other, please specify' stated that they visit during their holidays (approximately a few times a year). Another visitor that chose this answer wrote down 'twice a year' and the last two stated that it was their first visit.





Figure 2: Visitors' responses to the question "Is this your first visit to the Utrechtse Heuvelrug?"

Figure 2 shows that more than 60% of respondents (40 visitors) stated that this was not their first visit to the Utrechtse Heuvelrug. 18 visitors said that it was their first time in the park.

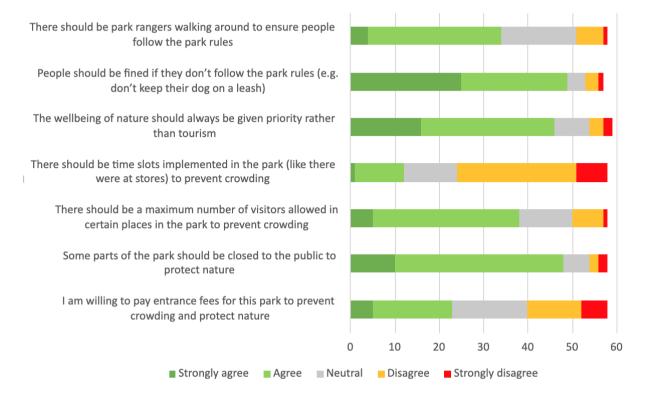


I always follow the park rules

Figure 3: Visitors' responses to the statement "I always follow the park rules"

The pie chart (Figure 3) shows that most (48) visitors said that they 'always follow the park rules'. 8 people stated that they 'do now know the rules of the park' and only 2 visitors do not follow the rules. When asked why they do not follow the rules, one thought that it should be allowed for children to go off paths and ride bikes there. Another noted that the rules negatively affect their experience in the park.





Visitors' opinions on proposed recreation management policies

Figure 4: Visitors' opinions on different proposed recreation management policies

The majority of policies proposed aim to tackle the problems of crowding and the protection of nature due to increased tourism. Figure 4 shows that the majority of visitors agreed with the first two policies. However, it should be noted that more people 'strongly agreed' with issuing fines to people who do not follow the rules compared to there being park rangers walking around to enforce the rules. Interestingly, more than 40 people agreed that nature should be prioritised over tourism. Implementing time slots in the park was clearly the least favoured, as the majority of visitors disagreed or even strongly disagreed. Furthermore, more than half of the respondents agreed or strongly agreed that there should be a maximum number of visitors allowed in certain places. Almost all respondents agreed that 'some parts of the park should be closed to the public to protect nature'. Finally, the entrance fees policy received a range of answers, with almost equal numbers of visitors agreeing, disagreeing or holding a neutral position.



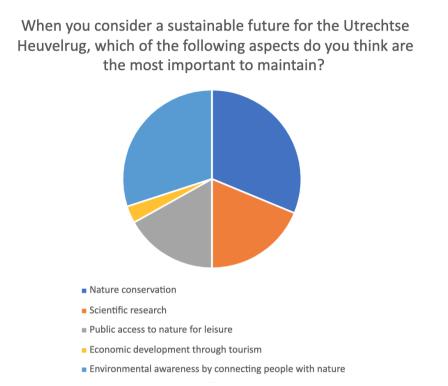


Figure 5: Chart displaying which aspects visitors find most important to maintain when considering a sustainable future for the Utrechtse Heuvelrug

Figure 5 shows that visitors found 'nature conservation' and 'environmental awareness by connecting people with nature' the most important aspects to maintain in a sustainable future for the Utrechtse Heuvelrug. Nature conservation was chosen by 50 of the 58 respondents. The option 'environmental awareness by connecting people with nature' was chosen 48 times. Following, 'public access to nature for leisure', was chosen 27 times and 'scientific research' 30 times. However, 'economic development through tourism' is seen by the visitors as the least important, and was only chosen 5 times. This makes sense when considering that in the previous question most respondents prioritised nature's wellbeing over tourism and the economic benefits it brings.

5. Discussion

The aim of this research was to investigate what policies, approved by Utrechtse Heuvelrug visitors, could be implemented to mitigate the negative ecological effects of the rapid increase in tourism in the national park. Based on the results from the survey, one line of policy supported by the respondents concerns stricter enforcement of the park rules. When visitors were asked whether people ought to be fined for not following the rules, 84% agreed. In addition, the proposition of deploying park rangers to enforce visitors' compliance with the park rules was met with 59% agreement.

Based on the information obtained in the first interview, rules also play an important role in how forester Corien Koreman views the sustainability problems the park faces. According to Koreman, the consequences that the increase in tourism has had on the environment are only there because visitors do not follow the park rules. Although the results of the survey contradict Koreman's statement, where 83% of respondents claim to always follow the park rules, Koreman argues that the strain on nature



does not come from the amount of people who visit the park; instead, it relates to the fact that visitors disregard the rules and behave in a way that is harmful to the natural environment. Therefore, Koreman thinks that it would be more efficient to focus on making sure that already existing rules are being followed by visitors instead of making new policies.

The conflicting information between Koreman's perception of the problem and the results from the survey could be explained by the respondents' self-preserving bias to not readily admit to breaking the rules. People may choose to present themselves in the most positive light, claiming to be well-behaving citizens who always comply with the park rules, although, based on what Koreman encounters in her work as a forester, that cannot be true for all visitors. 3% of the respondents did in fact admit to disobeying the park rules, and 14% answered that they do not know what the rules are. An important point that was noticed while conducting the surveys, was that many people checked the box 'Yes' regarding whether they follow the rules, but verbally mentioned that they did not know the rules, and just assumed that they did not break any. This means that the percentage of people who do not know the rules is likely higher than the 14% from the surveys. This is why it is important to educate people better about the rules. Corien Koreman also mentioned in the interview how she thinks that education is one of the most important things that should be focussed on.

When presenting Koreman the idea of having park rangers patrol the park to ensure that visitors follow the rules, her response was that such an implementation is unrealistic due to a lack of funding. However, Koreman did say that if the park had the financial resources, she would like the idea of park rangers patrolling and handing out fees to people not following the rules. This makes sense, since she believes that besides education, the best thing to do is to make sure the rules are being followed. Since Corien Koreman and the vast majority of visitors agree with park rangers walking around and issuing fines to those who do not follow the rules, this could be a good option for protecting the park. However, there are currently no financial means available for this policy.

Looking at possible solutions based on the results of the survey, funding for park rangers could be obtained by implementing entrance fees for park visitors. The survey question regarding this policy was met with slightly more agreement than disagreement; overall, 40% of the respondents appeared to be in favour of paying for their visits to the Heuvelrug. However, 29% remained neutral in this question, and the remaining 31% disagreed. Based on these results, one cannot with confidence say that the visitors of the national park are in favour of entrance fees. Regarding the respondents who gave a neutral answer to this question in the survey, it could be that their willingness to pay depends on the price, and that they would change into agreement or disagreement accordingly. Koreman was also not a fan of this idea, since she believes nature should be open and free to enjoy for everyone. She also mentioned that it excludes people who do not have the money for it from the park and that it is not doable since the entire park would have to be surrounded by gates. To be able to determine the cost of deploying park rangers in the Heuvelrug, how that would translate into entrance fees for visitors and whether this is a feasible and socially accepted solution, more research is needed.

During the second interview, Erwin Hollestelle raised the point that controlling and punishing visitors into complying with the park rules might not be the most effective way of protecting nature. According to Hollestelle, people will follow the rules of their own accord if only they are educated on why these rules exist in the first place. Hollestelle emphasised the importance of connecting people to their natural surroundings and to raise environmental and ecological awareness by bringing people closer to nature. Looking at the results from the survey, the visitors of the national park seem to agree that this connection is important to maintain. When visitors were asked to select what they deemed to be the most important



aspects of a sustainable future for the Utrechtse Heuvelrug, 83% answered in favour of connecting people with nature. These results portray the aspect of connectivity as the second most important one to the Heuvelrug visitors, preceded only by nature conservation, which was selected in 86% of the answers collected.

Education and connection to nature can go hand in hand, since people can be educated by visiting the forest. In the interview, Erwin Hollestelle emphasized the importance of connecting children to nature more, perhaps by schools organising more trips and excursions to the park. However, given Corien Koreman's remarks on visitors not following the rules, it appears it is not only children who need to be educated and develop a caring and connected relationship with nature. Educating adults on such matters is, however, not as easily prescribed onto already-existing educational institutions. More research must be put into what methods could be effective in creating awareness as well as connections between adults and nature.

One of the most significant limitations of our research relates to this lack of finding concrete solutions to the problems that were encountered throughout our data collection. From the interviews it was concluded that one cause of the sustainability challenges relating to tourism is that there is not enough education on the topic. However, as discussed above, developing plans for educating visitors about their role in the protection of nature requires additional research of its own. This is also the case for 'connecting people with nature', which Hollestelle, Koreman and many visitors wanted to see happen more of. In order to find concrete ways on how such a connection can be encouraged, future research is needed.

Furthermore, most visitors who were surveyed were mainly 60 years or older, leaving nearly all respondents in the same demographic age group. This could account for a one-sided and unrepresentative sample group, rendering warped results that do not accurately represent reality. Mitigating this problem could have been done by conducting research during times of the day where more, different types of people are able to visit the park. For example, younger people are likely to be at work or in school during weekdays, and it could thus have been helpful to also collect responses on the weekend, when they are free to visit the Heuvelrug. Furthermore, some questions were not well formulated, which could also have prevented the survey from portraying accurate results. Also, not all surveys were conducted in the exact same way as some visitors preferred for us to read the questions out loud and indicate their answer verbally. This might have caused some unaccounted bias.

6. Conclusion

The research question this paper aims to answer was "Which policy options could mitigate the negative impacts of increased tourism and contribute to a sustainable future in the Utrechtse Heuvelrug according to its visitors?". This research found that the main challenge of the increase in tourism is that many of the visitors do not follow the existing park rules. The policies that are most important to address to achieve a sustainable future according to Utrechtse Heuvelrug visitors are: hiring park rangers that can hand out fines, making sure there is more education on the topic and making people feel more connected to nature.

Based on the surveys and the interview with Corien Koreman, park rangers handing out fees could be a reasonable option to consider. According to Koreman, people not following the rules is the number one reason for ecological damage, so by hiring park rangers, the root of the problem would be tackled.



Surveys showed that many visitors would also accept this. However, it is important to mention that there is currently no money available for this policy. Another important point that should improve is nature education. This was supported by multiple visitors, saying that they are not aware of the park rules. The park should think of more ways to educate people, such as giving workshops, often visiting schools, clearly displaying the rules on their website and adding clearer information boards in the park. Connection to nature is an important aspect that should receive more attention, since Hollestelle, Koreman and a substantial number of visitors all saw this as important. The park should think of more ways to increase this connection between people and nature. It could be done by, for example, organising educational trips for school children. However, further research should be conducted in this field to obtain concrete ideas.

As mentioned in the discussion, there were certain limitations to our research. It was discussed that the scope of the research did not include suggestions for concrete solutions, and therefore more research is needed. Furthermore, most respondents were 60 or older, thus it would be interesting to interview younger people as well to see if this influences the answers of the surveys. Also, some survey questions were not well formulated. Therefore, future research should be conducted to address this bias, close the demographic gap and develop more concrete solutions to address the increase in tourism and create a sustainable future of the Utrechtse Heuvelrug.

In conclusion, this research found that the biggest threat to nature in the Utrechtse Heuvelrug is not necessarily the surge in tourism but people not following the park rules. One of the potential solutions discovered in this research would be to deploy park rangers to issue fines to visitors who do not comply with the rules. However, an underlying problem remains that people are not sufficiently connected with nature, which enforces the negative cycle of them not following the park rules because they might not understand their purpose. Thus, future research to suggest solutions on how to educate people in a way to make them more connected to nature is necessary.

7. Relevance and Integration

This research aims to address the concern regarding what increased tourism in the Utrechtse Heuvelrug will mean for the future of the landscape. Especially since the pandemic, tourism in the park has increased exponentially. The effects of such an increase must be carefully researched so that the negative consequences thereof can be counteracted.

When decision-makers form policies aimed towards achieving a sustainable future, the citizen perspective is one that is well worthy of consideration (Ende et al., 2021). In the end, it is the citizens whose lives will be affected by the policies, and they should thus have a say in what becomes of their future. In addition, policies that are developed with input from citizens tend to be more inclusive, as they take into account a broader perception of reality than what the policy-makers can discern on their own (Ende et al., 2021). Furthermore, such developed policies can also be more effective, as they directly engage the people capable of taking substantial action in the problem at hand, namely, the members of a community (Ende et al., 2021).

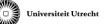
When considering how tourism in the national park could be managed sustainably in the future, it is relevant to investigate how present-day tourists view this problem. By developing policies and asking visitors' opinions, one can make sure that those policies are more likely to be followed and that they



comply with the concerns of those affected by it (Ende et al., 2021). The findings of this study can thus be used by decision-makers in developing effective policies for sustainable future tourism in the national park.

Inviting citizens to think critically about sustainability problems, and involving them in the process of creating policies to combat them, is in line with SDG 11, Sustainable Cities and Communities (UN, n.d.). If the policies that govern the future include the diversity of people's opinions and perceptions of the world, communities can become more resilient and more prepared to deal with the challenges presented by climate change and environmental degradation.

When imagining future scenarios for the Utrechtse Heuvelrug together with citizens, the visitor perspective is not the only one that ought to be considered. Although the views of visitors are relevant in determining how tourism in the Utrechtse Heuvelrug should be managed, the residents of the area around the Heuvelrug likely hold different perspectives that should also be taken into account when forming policies regarding the future governance of the national park. It is therefore recommended that additional studies are conducted in order to further investigate the thoughts and concerns of the local population. However, focusing solely on the citizen perspective will not render a truly sustainable future for the Utrechtse Heuvelrug. The Triple Bottom Line model shows that it is not just People but also Planet and Profit that come together to form sustainable communities (Mulligan, 2017). Therefore, an interdisciplinary perspective, paying attention also to natural sciences and the challenges presented by the changing climate, is crucial when it comes to defining the future for the Utrechtse Heuvelrug.



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Appendix

I. Survey - English version

Q1. Is this your first visit to the Utrechtse Heuvelrug?

- □ Yes
- 🛛 No
- Do not know

Q2. How often do you visit National Parks?

- □ Everyday
- \Box A few times per week
- □ About once a week
- □ A few times per month
- $\Box \quad \text{About once a month}$
- \Box A few times per year
- □ About once a year
- □ Other, please specify:___

Q3. Do you agree or disagree with the following statements about Utrechtse Heuvelrug?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
I am willing to pay entrance fees for this park to prevent crowding and protect nature					
Some parts of the park should be closed to the public to protect nature					
There should be a maximum number of visitors allowed in certain places in the park to prevent crowding					



There should be time slots implemented in the park (like there were at stores) to prevent crowding			
The wellbeing of nature should always be given priority rather than tourism			
People should be fined if they don't follow the park rules (e.g. don't keep their dog on a leash)			
There should be park rangers walking around to ensure people follow the park rules			

Q4. I always follow the park rules

- □ Yes
- 🛛 No
- $\hfill\square$ I do not know the rules of the park

If your answer is no, please continue to Q5. If not, skip to Q6.

Q5. Why do you not always follow the park rules? Please select all those that apply

- $\hfill\square$ I do not understand the purpose of the rules/why they are there
- □ I do not think the current rules are necessary/effective
- □ I think that there should be no rules in the park
- □ The rules negatively affect my experience in the park
- □ Other, please specify:____

Q6. When you consider a sustainable future for the Utrechtse Heuvelrug, which of the following aspects do you think are the *most important* to maintain? *Please select all those that apply*

- $\hfill\square$ Nature conservation
- □ Scientific research
- **D** Public access to nature for leisure



- **□** Economic development through tourism
- □ Environmental awareness by connecting people with nature
- Other, please specify: ______

II. Survey - Dutch version

Q1. Is dit uw eerste bezoek aan de Utrechtse Heuvelrug?

- 🛛 Ja
- □ Nee
- Dat weet ik niet

Q2. Hoe vaak bezoekt u Nationale Parken?

- Dagelijks
- Een paar keer per week
- □ Ongeveer 1 keer per week
- Een paar keer per maand
- □ Ongeveer 1 keer per maand
- Een paar keer per jaar
- □ Ongeveer 1 keer per jaar
- □ Anders:___

Q3. Bent u het eens of oneens met de volgende stellingen over de Utrechtse Heuvelrug?

	Zeer mee eens	Mee eens	Neutraal	Mee oneens	Zeer mee oneens
Ik ben bereid entree voor het park te betalen om drukte te voorkomen en de natuur te beschermen					
Sommige delen van het park moeten afgesloten worden van de bezoekers om de natuur te beschermen					
Er moet een					



maximumaantal bezoekers worden vastgesteld dat op bepaalde plaatsen in het park wordt toegelaten, om drukte te voorkomen			
Er zouden tijdslots in het park moeten komen (zoals in de winkels) om drukte te voorkomen			
Het milieu moet altijd voorrang krijgen boven het toerisme			
Mensen moeten een boete krijgen als ze zich niet aan de parkregels houden (bv. hun hond niet aan de lijn houden)			
Er moeten boa's rondlopen om ervoor te zorgen dat mensen de parkregels volgen			

Q4. Ik volg altijd de parkregels

- 🛛 Ja
- □ Nee
- □ Ik ken de regels van het park niet

Indien uw antwoord nee is, ga dan verder met Q5. Zo niet, ga dan naar Q6.

Q5. Waarom houdt u zich niet altijd aan de parkregels? Selecteer alle antwoorden die van toepassing zijn

- □ Ik begrijp het doel van de regels niet/waarom ze er zijn
- □ Ik vind niet dat de huidige regels nodig of effectief zijn
- □ Ik vind dat er geen regels in het park zouden moeten zijn
- □ Ik vind dat de regels een negatieve impact hebben op mijn ervaring in het park
- □ Overig:_





Q6. Wanneer u nadenkt over een duurzame toekomst voor de Utrechtse Heuvelrug, welke aspecten vindt u dan het belangrijkste om in gedachten te houden? Selecteer alle antwoorden die van toepassing zijn, meerdere opties zijn mogelijk

- □ Natuurbehoud
- U Wetenschappelijk onderzoek
- **D** Toegang voor het publiek tot het park voor vrijetijdsactiviteiten
- □ Economische groei door toerisme
- □ Aandacht voor het milieu door mensen in contact te brengen met de natuur (bv. door toerisme)
- Overig:

III. QR-codes



IV. Interview with Corien Koreman

00:00:01

Floor: Hello.

00:00:04

Corien: Hello with Corien Koreman from the Forestry Commission, I was going to call you back.

00:00:09

Floor: Yes, there are four of us here now. Yes, I'm calling and you're on speaker and we also wanted to ask for a start. Do you think it's okay if we record it?

00:00:21

Corien: Yes no problem, no problem.

00:00:23



Floor: yes, that was actually our first question: can you introduce and maybe tell something about the daily tasks that you do as a forester?

00:00:32

Corien: You start right away with a very difficult one, if I have to summarize it very briefly. I am a forester, public, I don't know if you are aware that there are different types of positions for foresters.

00:00:59

Floor: No, not really.

00:01:11

Corien: Well I can try to explain that to you later. I'm a public forester and my main task is to connect people and nature.

00:01:11

Floor: Oh well that's great because that's exactly what our research is about!

00:01:11

Corien: Yes and trying to maintain the balance between people and nature. That's it summarized in one sentence but I can't say exactly what I have to do all because it's very multifaceted. On the one hand I deal with all the reasonably relative facilities in the terrains so hiking trails, mountain biking and so on. But also all terrain furniture, signage, regulatory signs, information panels, say all the facilities that are in the areas, that's what I deal with and I'm ultimately responsible for. But I am also the first point of contact for Utrechtse Heuvelrug, for example local residents, or companies or organizations. I am also responsible for press and publicity, so I do a lot of interviews for newspapers, television and radio and that kind of thing about various subjects. Education for children, so also organizing things for children, that is one of the spearheads of Staatsbosbeheer, nature education especially for elementary school children. To connect children with nature, so that they also find it important. I also do a lot of participation, and you should see it this way: cooperation at political and administrative levels with the municipality and province. But also with entrepreneurs from the area.

00:02:31

Floor: yes.

00:02:34

Corien: Working relationships with all for example landal greenparks or that you seek cooperation with them. So it's actually very broad, I'm actually more of a forester in communication marketing and participation, so you should actually see it.

00:02:44

Floor: Yes, well, super handy, because our research is also about tourism and people in nature in Utrechtse heuvelrug. Maybe handy to just explain with more precision, we are now looking at possible, because covid there is of course a very big increase in tourism in Utrechtse heuvelrug. So we actually want to look at what the problems are that this increase might entail for nature there. And then for example policies, which could be introduced to counteract this.



00:03:14

Corien: What can be introduced? I didn't understand you for a moment.

00:03:15

Floor: Yes, policies, so rules can be introduced, for example, by the municipality or by the State Forestry Service, which would allow for better, so that tourism in nature could be better handled. And that's why our first question was: what do you think are the biggest problems at the moment, that the large flow of tourism brings with it for nature in the Utrechtse heuvelrug.

00:03:39

Corien: The main problem we experience, look in itself nature can quite well handle a large stream of public, as long as people follow the rules. And that is precisely where the big problem lies. Many people do not follow the rules that are set in the terrain.

00:03:59

Floor: And what rules do they for example not follow?

00:04:01

Corien: They walk outside the paths, straight through nature, and that disturbs a lot of things, especially now that we are in the most vulnerable period of the year. The biggest problem we encounter are stray dogs. Straight through the forest, causing the death of many deer. The biggest cause of death of roe deer, that's dogs running loose. Waste in nature, and that is partly noticeable that, for example, the new recreational users who have started to discover nature because of the pandemic, they do not yet realize that we also have rules in nature and that you can not just do anything. And that these rules also have a reason, and that on the one hand we do this to ensure that people do not experience any nuisance together. For example, a screaming child walking on a mountain bike route, well that's not convenient of course. And on the other hand, those rules are also there to protect nature. So the biggest problem is that we see that a lot of people don't keep to the rules.

00:05:27

Floor: We did our research on rules that other parks have implemented, because they saw for example also an increase in tourism. So we looked at the park, for example poles in America, and there saw for example that there was also talk about for example what was also in stores here. Times slots so for example that then you actually have to enter in advance what time you come to the park. The groups would be smaller that may come at one time or for example have to pay money when you go in. What do you think about those kinds of policies? Would that work, do you think, or not.

00:06:00

Corien: I am absolutely not in favor of making people pay for that. First of all, you'd have to put fences around all your nature areas, because how else can you control that people don't come into your area. The Utrechtse Heuvelrug is a large area so you have to put fences around it. I have also seen it abroad, for example in Costa Rica. There, for example, they have national parks all surrounded by large fences and you have to buy a ticket, and then they are not allowed more than a hundred people at a time.



Personally, I don't like that at all. It's not feasible, and I don't think it's realistic to make people pay for this, because I'm convinced, look, nature doesn't belong to the Forestry Commission, nature belongs to all of us, and the Forestry Commission manages these nature areas, and makes sure that everything is on the right track. And every taxpayer in the Netherlands already contributes part of that by paying taxes, we are a government organization, so I don't think paying for nature is an idea. I also want to keep it accessible. I don't want people to be able to buy tickets for a family with children, for example, because then they can't go into nature. So I don't think that's a good idea and I don't think fences on the terrain are a good idea either because you're going to prevent animals from migrating.

00:07:32

Floor: But apart from paying, what do you think of what was for example also in clothing stores and such timeslot so that you fill in in advance at what time you come, so that there is never an unexpected large amount of people there at the same time there.

00:07:49

Corien: How are you going to control that?

00:07:58

Floor: But if it could be properly monitored, would you therefore possibly think that it could be a good idea? If it did get monitored, would you think that there's something in there or something that could be done with it?

00:08:09

Corien: Well I don't know, look that may be very personal but the whole of the Netherlands is already regulated down to the last detail, it makes me really sick sometimes. Look, I am more in favor of saying: why do you want to organize all that? Suppose even if we have enough money and enough people for it what we never get but suppose that could be an option. But I think there's more to be gained in teaching people a bit of awareness, people need to be aware of it. People should be aware that there are animals here and that you are a guest here, so behave accordingly. If you visit someone who asks you to take off your shoes, you do that out of politeness because you are a guest there.

00:09:04

Floor: Do you think, for example, that that's the way to educate people, how to do it better? Because apparently a lot goes wrong with people who let their dogs loose and go outside the paths. Should there be more signs or should there be more money for lessons in the neighborhood? Or how do you see that?

00:09:23

Corien: There are plenty of signs and I prefer to have as few signs as possible in nature areas, I always find that distracting and polluting and people don't take any notice of it. And there's a very large group of people there as well, people who don't care and think, yes, that rule applies to someone else but not to me and oh well, I don't see a forester anyway, well that happens a lot too. Look, if we hypothetically got a lot of money, I would like to invest in boas. We have far too few of those and the only thing that helps is giving people hefty fines when they break rules. We recently launched a campaign on the Utrechtse Heuvelrug, "Welcome to Mother Nature's Nursery," and that campaign focuses primarily on making people aware that they are guests and that they are in the nursery. I'm more of a person who



goes for awareness, good education, and for the people who then don't respect the rules, there should just be enough boas to fine. That sounds nasty but that's the only thing that helps well.

00:10:46

Floor: Yes, then we also had, because so if there was more money, then so that boa is what we also saw in other studies was, that so they want, for example, paths to be made harder against erosion and more fences along paths so that people don't walk there, would you also be in favor of that?

00:11:04

Corien: We don't put fences anywhere and I don't think they belong in a nature reserve. It makes you experience nature a little less. Unless there is a very demonstrable reason, such as people's safety. We do have fences, but we do not necessarily install all kinds of fences to prevent people from walking outside the paths. First of all, it's incredibly expensive to put up and maintain fences. And besides, that doesn't prevent people from going outside because they just climb over it so I think that's useless, and it also doesn't look like it if all the paths are surrounded by fences, then you're not in a nature reserve anymore. In the end it's about getting it into people's heads that they have to be considerate of each other and that they have to follow the rules and that they have to read a board for example before they go hiking. Reading a border has to become a habit and you have to stick to it.

00:12:37

Floor: And what you're saying is that the only way to make sure that people stick to it is either more money for boa is that there's more control of it, or is that more education occurs.

00:12:45

Corien: You have to do it on two sides. On the one hand, you have to provide good information, constantly make people aware, with this kind of campaign that we recently conducted, that they are of course very welcome in nature but that they have to read on a board what the rules are and why those rules are there, I think that's very important. And on the other hand, we really need to have boas for people who really repeatedly don't follow that rule, that they just get a fine. That's where the most important solution is for me. We don't have enough people at the moment to be able to do something on both sides and that's a shame.

00:13:32

Floor: Did we also have clear by the way and then, we still had questions about the crowd monitor, because I think that was also created. When, there was an increase in tourism, and did all that crowd manager help. And do you think that maybe this monitor could be used better, because we have the idea that maybe a lot of people don't know anything about it right now at all.

00:13:52

Corien: I'll tell you honestly what I think of the crowd monitor, I don't understand why it was set. The idea behind it is very good to see from home which places to avoid. I wonder how the people who keep the busy monitor, how they find out where it's busy and where it's not busy because they really don't go and look at those locations. It's a little critical what I'm saying, but they don't check the location to see if it's busy and then put it on the busy monitor. No, they just make an estimate. It's not a reliable tool from which you can assume that what it says is correct, despite the fact that I don't want to discredit the idea of it at all, because I do understand the intention, but then you also have to monitor all those places



at the time to see whether they are indeed busy or not. The people who operate the crowd monitor do not work here and have never been here before.

00:15:40

Floor: Do you know what they base those estimates on then? Do they look at, they don't call so apparently not you to say sees.

00:15:47

Corien: look they make the real estimation based on the weather and vacations. So yes I have a bit of a problem with the busy monitor although I like the goal in principle, just I miss a bit of proper monitoring.

00:16:41

Floor: So, for example, how do you think they could adjust that the busy monitor would be successful?

00:16:47

Corien: Yes then there would have to be enough staff to regularly check that it is indeed crowded there. So you should maybe have some kind of mobile app that someone could just adjust while driving down those spots on the spot.

00:17:02

Floor: Because there it would then be more convenient than what we were talking about earlier those time slots that you say in advance whether you're coming or not, which was so also and in stores during corona. That would be very handy for that then, because then you do know how many people are in the park approximately.

00:17:13

Corien: For a store that's very convenient but I don't see that happening in nature and I totally understand those time slots even though it's not fun walking at all, but good. But that's not necessary either as far as I'm concerned. You know what it is, usually where the most crowds arise are at starting places of hiking trails, so on parking lots, there people accumulate. Most people who go hiking, they all go for a short walk. I think 70% don't do longer than half an hour, three quarters of an hour, because otherwise it gets too far. The further you get into the area, the quieter it gets, even with those mega crowds. I think the reason they use time slots in other countries has more to do with the fact that they are afraid of losing the overview, people doing things that are not allowed. I understand it for biodiversity to do that but I think it is not such a good idea. Then you get more like a zoo. Nature must be able to remain nature.

00:18:41

Floor: Yes, so you would then, for example, that crowding monitor, so yeah or more staff before that would work better, or just, it doesn't make a lot of sense actually.

00:18:59

Corien: Look the crowd monitors are mainly related to the corona period, not to pressure from nature, because that is actually separate from that crowd monitor. That actually has to do with the fact that they wanted to prevent too much parking in a parking lot. So that's really been corona related, so not with



the pressure on nature. Nature can handle that influx of the public, as crazy as it sounds, if people follow the rules. And a crowd monitor can't do anything about that either.

00:19:44

Floor: So you think precisely, because we were so for our research very much looking at new rules that can be put in place to cope, if you think that no new rules are needed, but that people feel so that there is just a need to control.

00:20:00

Corien: Yes that's it, you hit the nail on the head. Of the rules that we have in our natural areas, they are really sufficient, there is no need for more rules. The point is to make sure that people stick to the rules. And you do that on the one hand by conducting good information campaigns in order to bring this to people's attention as much as possible. And that's why I often stand in front of a camera and try to generate publicity everywhere. Precisely to spread the message as widely as possible. And on the other hand boas that are going to control it that circulate. Those are the main points for me: information campaigns, bringing it to people's attention and boas to fine people to make sure people follow the rules.

00:20:56

Floor: Yes, very interesting though, that actually not really looked at from this perspective, we thought, maybe we need to come up with new rules. This also goes our research in the other direction then I think. I think we've said everything. Well really thank you very much, you have given us a lot of information that we didn't know yet, very nice.

00:22:12

Corien: I am glad I was able to help you and again if there is anything else I can do for you please let me know.

00:22:18

Floor: Yes, thank you, have a nice day!



V. Interview with Erwin Hollestelle

00:00:00

Roos: Hello, thank you for your time and for making time for us. We would like to ask you a few questions about your perspective on policy around the Utrechtse Heuvelrug, but first we would like to ask you if you would like to introduce yourself.

00:00:01

Erwin: From the Utrechtse heuvelrug I used to have an office. I am an organizational psychologist and work a lot in business, but I also have a thing for nature. I've always grown up in nature, in Drenthe, mainly in the woods. Actually with an intermediate step we first lived in The Hague and at a certain point we missed the woods and moved more to the center, but not completely because for work and business it is convenient to stay in the Randstad. And then we ended up in Doorn, after some time I set up a foundation together with someone I know and that foundation is called Goedvolk, which is an ambi foundation, a general benefit-providing institution. That means that we are concerned about the decisions that are made now, but affect the future. And that was actually a bit overblown. I once worked with native Americans in North America and they all work from the seventh generation principle that: may appeal to you, that sustainability is about the effects of now on behavior or on the situation in the future. So actually, what we decide now affects you, your generation, but also the children you will have later and maybe even your grandchildren and the Indians go very far in this, because they reason seven generations so they actually say: if you take important decisions in the here and now then. You will have to take into account the consequences that may happen seven generations later. And I thought that was a very nice line of thought, because, yes, they are things in perspective and I've also noticed that if you bring the long term forward in that way, you get a whole different kind of conversation. So our foundation is working on that and then an important credo is if you are not planning yourself, you are part of another's plan. So you have at a certain point observed that if we have to get things done here in the region through politics, it's so slow and viscous and it's also frustrating, so then just do it yourself, then we have to organize it on our own. That's what the foundation has become. And within that foundation we do all kinds of things, lol, so one of the first assignments was for projects, I should say, was let's do something about pollution in the region. The Utrechtse Heuvelrug plastic free 2026 became the foundation and from there, the different working groups came into being. A working group that deals with local food. How do you bring consumers and buyers closer together? How do you ensure that locals also buy? With locals, food does not have to travel all over the world, which is good for CO2. And on the other hand we are busy: biodiversity and climate, a small initiative, which is a bit of a genesis, and specifically around biodiversity you had made contact with the visitor flow on the Utrechtse heuvelrug, particularly in the national park.

00:03:18

Roos: Yes, interesting, thank you very much and can you also share a little bit your day-to-day roles and a little bit what your specific role in the organization is.



00:03:31

Erwin: I am currently a board member of a two-member board. But yeah, that's all in and around the actual work anyway. Normally I have another job, in the evenings, in, on the weekends and in between. So of course that takes time and that's different from working 40 hours at clients or a client. So that it's all around me and in addition . So that is my role and I also content things, so for example we have an opening of a plastic free zone soon. We're going to work with the conference center in the region. Are we going to open a new zone where certain rules of the game are going to when it comes to pollution we are trying to get a bit of a flying wind. And um well, I'm involved in organizations of a field dinner. Then we're going to have local buyers and producers. Connecting with each other, so local farmers and growers are going to make nice dinner with the community that will be in September. So that's the kind of thing we do then.

00:04:52

Roos: Interesting, then we go right deep into the content of the interview, because the next question is: are you noticing an increase in tourism by covid in the Utrecht Ridge and what do you see the problems of this and what are some of the consequences you see from your perspective?

00:05:16

Erwin: Yes, yes, exactly that for sure and especially on nice days and on days off. Then it's very busy. Of course, we had the period during the corona time, so then you see that it's suddenly much quieter in the woods. We also noticed during the time that people were expected to stay at home during the hard phase of the lockdown, that on days off there are relatively many people walking in the woods who are naturally looking for space, understandably. And what you notice immediately is that there is a different crowd than usual on the ridge. You notice that it is less connected to nature. So people come, I make more noise and are often in larger groups, dropping easier.

00:06:06

Roos: And that's specifically since covid, so that wasn't really there before?

00:06:09

Erwin: Yes, so are always those specific days and of course you have around Pentecost Easter and days like that, then you always have a lot more crowds. We've had a lot of rain lately, it's natural, logical that there's not as much of an audience. Only when the weather gets nicer and especially when you have less space at home, then you see that people look for a way out and then it just gets busier. Those are all examples that you see that the pressure on the area just increases.

00:06:44

Roos: And what are the negative consequences of this? Or real problems that you see? That makes you think, something really needs to be done about it, it can't continue that way that a lot of people are flowing through without measures in the park.

00:07:05

Erwin: Look, when you talk about the national park and nature, you always talk to people who have an interest in it in one way or another. Normally you would say: hey, talk to nature itself, because ultimately it's about nature, but of course it doesn't have a voice. The best thing would be if you could ask nature



what it's like. For example, I know of residents in the region who told me that when a bike path was built, from west to east a bike path was built across the Utrecht Ridge, which in itself is very beautiful. But these people reported more images in their gardens. For example, they saw more deer suddenly in the garden, even at times when they are not normally there. If you really want to know what the consequences are for nature, there you need to speak with some specialists, ecologists or so or biologists who have a little more insight into that. I see it as a resident/interested person and then I see that there is just a lot more public walking around and the public is noisier. Especially if: groups of kids are, they go off the trails more and they start building huts and of course that's all good in itself, up to a certain degree. Then it just gets too crowded. But that's intuitive and by the way you quickly have a discussion about that, because of course there are also hi pieces in the forest and there is nobody there. Of course that's also true: the deeper you go into the forest the fewer visitors you find.

00:09:19

Roos: Yes, because indeed we also had a conversation with a forester. Then we came up with measures that we could adjust or introduce to manage the crowds and her conclusion was that the rules that are already there in the park are enough, but people just don't follow the rules. And we actually want to ask you if you have any other ideas of policies that you think should be introduced, so that the area can handle tourism a bit. And it doesn't have to be from an ecological perspective, just from your perspective.

00:10:08

Erwin: I have a network with Renée scheltema and she is the filmmaker of the film: normal is over. I watched her film with the group of financials and economists in an i bank building and it was dead quiet after the film. The film is about everything we do to mother earth with our human behavior and what the consequences are. And then the time remained silent and then someone in the room asked: what is the best thing you can do to turn this around? And then she said -and I think that's the crux of it- tell children, "Get down on your knees and go and study beetles. Show your children through the garden what a leaf is. That generates an interest in what you're dealing with. And I think that's a problem that I do see. When you see people from the big cities moving to the countryside and then in our case to the national park, the forest in particular, you do see a kind of, you visit the forest, but the forest is so much more than a path and trees It's also about a certain connection that you are with where you are. People who live in this area, they have that that's why they live here. But you have to have something of a connection with nature that you've received from home and then you don't need rules at all. Then you also understand that you don't leave your waste here in nature or if you change your child's diaper in the middle of the forest, you don't hide that diaper behind a tree with all those chemicals.

00:12:23

Roos: So you are actually saying that an important way we can solve this is education.

00:12:31

Erwin: I think education is a solution to basically every world problem anyway and here too. If you bring people to a certain level of awareness, then you don't really need rules anymore.

00:12:43

Roos: Yes, so it's not about strengthening rules or putting new rules in so that people follow the rules, but focusing more on why people don't follow the rules, and that's just education.

00:12:57



Erwin: Yes, in our foundation we call it primary and secondary and tertiary interventions. You can do something about the consequences by, for example, walking through the woods with the forester and then if someone lets his dog run loose in the birth season of young deer, then you speak to someone. But then you sit there a beetje behind and it is of course much better that everyone understands it simply that you do not let your dog loose this way round and not because of the rules, but because you understand that young image with it in the problems comes. So you can do something about the consequences and try to keep those in check a little bit and we call that tertiary intervention. You can do something in the secondary sense, and that you try to reduce the consequences a little bit. And yes, ideally, of course, you're at the source at the front end, that it doesn't actually happen at all.

00:15:01

Roos: Yes, that's very interesting, because the forest ranger obviously got a very different perspective and much more about what should be done in terms of rules. But this is much more from a distance, they are very helpful for us further.

00:15:28

Ann: I find it very interesting what you talk about education at the source and especially that in I think parents should have conversations with their children about the connection of people and nature. But most of the problems that there are in the Utrecht Ridge are because of the adults who already don't have the connection with nature. What do you think is a good way to strengthen that connection between people and nature? What can be done now for the future? Because if adults don't really have a connection with nature now, they won't teach it to their children either.

00:16:31

Erwin: A good question. I think it's right. Well, what we're trying to do with our foundation is to just bring that back into the public eye. We try to do a lot of communication through the newspaper, newspaper reports by bringing people together to talk about it. We organize film screenings, so that film I just mentioned, Normal is Over, 120 people watched it and it did make an impression, And then you then it makes sense to go talk to people. I've always noticed that if people aren't open to the story, you can talk to them, but it will go in one ear and out the other. Then it starts with education through the children address the parents at the table in the evening and start a conversation about it, or through the parents themselves.

00:17:46

Erwin: But yes, it's obviously different from, let's say that say 300 years, 400 years ago, where people just lived in nature. We have changed in time, of course. We started living in houses with heating, we have running water. With a broken shower you suddenly notice how inconvenient it is. Then it is also interesting to talk with your children about the fact that 300 years ago there were no water pipes at all. There is almost a spiritual connection that we have. We are nature. Are we now, are we rising above nature or are we part of it? That's quite a difference and it very much depends on what glasses someone is looking from. So I agree with you. Sometimes when I watch television or read in newspapers about how people think about nature, there's not really a whole lot of connection there. Even the state forestry department is into timber harvesting because it has to make money. There has to be a revenue model in it and then goes and cuts down trees to have fuel for biomass plants. You see a balance between on the one hand financial, economic and on the other hand nature. That also applies to sun foresters. Look, if you have the whole area and have to keep order and peace there, then of course you're like a school



teacher all the time, putting people on the spot because you have to address people. Which forester did you talk to?

00:20:12

Ann: We spoke to Corien.

00:20:15

Erwin: She does know a lot about it. She's always on the field.

00:20:20

Roos: Yeah, she just said that the forest can handle people, but people don't follow the rules. So she came up with things like hiring boa's if there was money for it, so that people will follow the rules, and then nature can handle it.

00:20:38

Erwin: Yes, she's right about that, I think, too, but at the same time I know as a psychologist-just look at yourself. If you hear all the time: "No, you're not doing that right Rose." At some point think yes, bye.

00:20:57

Roos: So that's why we're also going to ask the visitors themselves of which policies do you disagree with and which do you see yourself really sticking to? And so to get a little insight what, the different perspectives are of different people. think this. If people are not going to abide by it, then there is no point, so we are going to do fieldwork next week to ask this.

00:21:25

Erwin: But the best thing is when you know, because you obviously made the choice to study this subject, you have something to do with that subject. It's important to ask yourself the question: why do I think it's important? Because I think if you can bring a realization to your audience that people feel away from all the rules I feel what it's about, Then you already make a big step forward. I don't know if it's possible, but that's what the emphasis should really be.

00:21:57

Roos: Yes,. Do you have any questions?

00:22:13

Ann: I don't, but so I also think it would be interesting to ask some larger questions about how people see themselves in nature and their relationship to it. So asking some bigger questions, not specifically about certain policies and measures that can be implemented.

00:22:39

Erwin: Yes, very good, and what I myself learned with the foundation we did a constellation. And a constellation is that you give a function to random people. And you set them up in a room. So then you say, for example, one person represents the people, someone else represents the municipal government, someone else represents the national government, the business community, the youth, and so we put in the room all the parties who are doing something around our issues. There I learned that the moment we focused very much on the problems, we got a lot of tension in the system. Instead of working with



the parties in the setup there, you get more friction and discussions. And that changed when we started to position nature as a 'stakeholder' and it changed even more when we started to link the future to it. Then all of a sudden we got all kinds of conversations and movements that were relevant. So that might also be interesting for you to relate the topic you're working on, not only to nature and how people feel about it, but also to the future.

00:24:13

Roos: Yes, that's what it's all about. Perhaps we did not make it clear but our study is also about the sustainability of the future of the Utrecht Hill Ridge. And what will it look like later if we don't do anything about it now, or if we do start doing certain things about it now.

00:24:33

Erwin: So why I actually meant to say Roos is, I get that. But when you talk to people in the field and you ask them what they think is important and you ask them, why they come here in the here and now, and you also ask a few questions about: what is needed for a good future? Or what do you wish for your children or your grandchildren? And how would you like to pass on the earth? These are very different questions. It's more about: what is important in the future for people who are dear to me?

00:25:11

Roos: Yes, indeed, because we now have a bit of a mixture of questions like: "what practical things would you be okay with and not okay with?" But we also have a few questions of: "what do you think is important for the future of?" "Do you think it's important for the economy to do well because of tourism? Or do you think it's important to protect nature?" Based on that, maybe we can think of new ways how nature can be protected.

00:25:56

Erwin: Yeah, nice.

00:26:10

Roos: Thank you so much for your time and your input and ideas. I found it very interesting and it is going to help us tremendously with our study and coming up with the questions.

00:26:24

Erwin: Yeah, yeah, that's nice. So I well, I wish you the best of luck if you've made some beautiful things and you like to share, you are welcome to.

00:26:35

Roos: Yes, we may indeed be able to share the study. Thank you very much.

00:26:39

Erwin: Okay, good luck.

VI. Data Management Plan

The aim of this research project is to present future scenarios about policies to the visitors around the theme of transforming mass tourism in Utrechtse heuvelrug to sustainable tourism in the future.



This proposed research will involve approximately 100 subjects. This number may change depending on factors like weather. The subjects will fill out a survey including questions regarding their opinions associated with the Utrechtse Heuvelrug and its tourism.

In order to ask for consent from the participants in regards to the paper survey, we will verbally ask them if they are willing to participate as well as give them the reassurance that the information strictly will be used for the research. In relation to the electronic survey, we will include the following statement with a checkbox so the participants can decide whether they want to take part in our research:

□ I agree that any information given in this survey can be used for the purpose of this research.

The format of the survey will be in a printed file format. The dataset will not include information on physical characteristics and personal information. Therefore, we are not planning to share the data and the data will remain internal. We will maintain the obtained research for as long as the information is necessary to use. Subsequently, we will get rid of the physical paper surveys by shredding them and we will delete all the personal information in the electronic surveys.