

Reflections on nature experiences and knowledge shaping attitudes towards the rights of nature

Andreas Brutemark, Maria Brandt and Daniel Schrire*

Abstract

As the human population increases, more resources are needed to sustain human consumption and activities, often leading to unsustainable use of natural resources. Recognizing the rights of nature could result in a more sustainable use of and relationship with nature. In this article we argue that without the fundamental knowledge of how ecosystems function and how human activities disrupt these functions, combined with an empathy towards nature, endowing nature with rights has a low chance of effecting real change.

Introduction

As the human population increases, more resources are needed to sustain human consumption and activities.¹ This increased demand is not conducive to sustainable use of targeted natural resources. As a consequence, the Earth is facing a plethora of challenges including climate change, land use change, biodiversity, habitat loss and pollution to name a few. These challenges not only occur on a local level but are often global. However, conservation and management of the resources and challenges differs between countries as well as within countries, e.g. municipalities, due to societal and natural factors. Not only does our relationship with nature differ between countries but our, i.e. human, relationship with

nature can change over time.² For example, the Western cultures have developed a view of nature as a potential resource to be used for our own benefit.³

Nature is often viewed as the physical world and everything in it that is non-human and includes the inorganic as well as the organic, i.e. everything from animals and plants to bacteria and rocks.⁴ Alves and colleagues defined Rights of Nature as “*the idea that the whole biosphere, meant as the place in which life can happen, is endowed with natural rights.*”⁵ Thus, the rights of nature and our western view of nature as ours to use as we see fit sparks a potential conflict. In such conflicts nature tends to lose which is

* Biotopia, Uppsala Municipality, Uppsala, Sweden, andreas.brutemark@uppsala.se.

Thank you to Seth Epstein for constructive comments and suggestions on the manuscript.

¹ Johan Rockström, Will Steffen, Kevin Noone et al., “A safe operating space for humanity,” *Nature* 461 (Sept. 24 2009): 472–475, <https://doi.org/10.1038/461472a>; IPBES, *Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (Bonn, Germany: IPBES secretariat, 2019), doi: 10.5281/zenodo.3553458.

² Miles Richardson, Iain Hamlin, Lewis R. Elliott et al., “Country-level factors in a failing relationship with nature: Nature connectedness as a key metric for a sustainable future,” *Ambio* 51 (2022): 2201–2213, <http://doi.org/10.1007/s13280-022-01744-w>.

³ Richardson et al., “Country-level factors.”

⁴ Fátima Alves, Paulo Manual Costa, Luca Novelli et al., “The rights of nature and the human right to nature: an overview of the European legal system and challenges for the ecological transition,” *Frontiers in Environmental Science* 11 (2023): 1–10, <https://doi.org/10.3389/fenvs.2023.1175143>.

⁵ Alves et al., “The rights of nature and the human right to nature.”

evident from a continuous deterioration of the environment. Recognizing the rights of nature, i.e. shifting from viewing nature as a resource or a commodity towards a subject with rights of its own, could result in a more sustainable use of and relationship with nature and could therefore prevent further environmental degradation. In this article we reflect on the possible importance of having nature experiences and knowledge for recognizing nature's intrinsic value. This in turn can be of importance for the implementation and overall understanding of the rights of nature.

Connection to nature

Human contact with nature and its potential health benefits have received a lot of research interest.⁶ The effects of nature on human well-being includes both physical and mental health benefits. Nature connection has been defined as “a positive relationship between humans to the rest of the natural world.”⁷ Although contact with nature is associated with several benefits, research indicates that people's contact with nature is decreasing. Urbanization, whereby people move to urban areas that are developed and natural surroundings are cut off, is an often-used explanation.⁸ Although this may be part of the reason, changes in technology and changes in our recreational habits cannot be neglected. During the 1950s, television was established as a popular form of entertainment. Today, more and more time is spent on the internet and dif-

ferent kinds of video games. Have we reached a point where children are more likely to name fictional characters of a videogame rather than be able to name wildlife species?

Apart from health benefits, a connection to nature seems to support pro-environmental attitudes and behaviours.⁹ Indeed, studies have found that a lack of regular positive experiences in nature is associated with the development of fear, discomfort and dislike of the environment.¹⁰ We speculate that negative experiences in nature can also lead to lasting dislike or fear. How are we to make sound judgement on the behalf of nature if we dislike or fear it? Furthermore, how can we speak on the behalf of nature without having experienced it first hand? Thus, if people increasingly lack positive nature experiences, this may have a negative outcome for environmental attitudes and behaviours with consequences for the environment.

Positive nature experiences during childhood are one main factor nurturing lifelong positive attitudes and values towards nature and is, as such, important for our view and engagement in nature as adults.¹¹ In order to prevent development of fear, discomfort or dislike of nature, positive nature experiences are needed. One way of working with children (and presumably adults as well) could be using the principles of the “nature triangle” (see figure 1). Overall, the idea is to develop a relationship with nature. Reading about nature cannot replace actual outdoor experiences in nature. In the long run, as people develop a relationship with nature, knowledge, appreciation and understanding of

⁶ Howard Frumkin, Gregory N. Bratman, Sara Jo Bresslow et al., “Nature contact and human health: A research agenda,” *Environmental Health Perspectives* 125, no. 7 (2017), 075001-1–075001-18, <https://doi.org/10.1289/EHP1663>.

⁷ Alexia Barrable and David Booth, “Disconnected: what can we learn from individuals with a very low nature connection?” *International Journal of Environmental Research and Public Health* 19, no. 8021 (2022) 1–9, <https://doi.org/10.3390/ijerph19138021>.

⁸ Richardson et al., “Country-level factors.”

⁹ Claudio D. Rosa and Silvia Collado, “Experiences in nature and environmental attitudes and behaviors: setting the ground for future research,” *Frontiers in Psychology* 10 no. 763 (April 2019): 1–9, <https://doi.org/10.3389/fpsyg.2019.00763>.

¹⁰ Rosa and Collado, “Experiences in nature.”

¹¹ Rosa and Collado, “Experiences in nature.”

nature increases, bringing with it insight, engagement, and concern for nature. According to Hedberg a good route to positively affect nature and the environment is to go through the five steps in the nature triangle (figure 1).¹² Firstly, one needs to be able to be in and enjoy nature. For instance, the right clothing can be essential to keeping one dry and warm. Once you manage to be comfortable in and enjoy nature, it is possible to see and discover the surrounding environment. Establishing this curiosity makes it possible to understand how things in nature are connected. This in turn is essential for understanding the impacts humans have on the environment. Finally, we can act deliberately and make a difference. Contact with nature and a better understanding of its importance and the threats against the environment are essential to raise public awareness, engage in conservation and monitor issues.

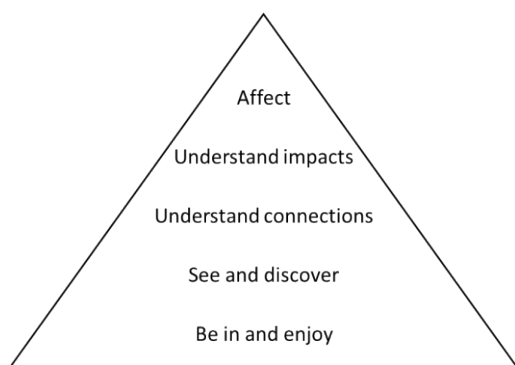


Figure 1. Pyramid representing a simple model illustrating how knowledge and experience transforms into values and potential willingness to make a difference (redrawn from Hedberg 2004).

However, since society has changed and most of the population currently resides in urban areas,

we tend toward a decreasing amount of contact with nature. Hence, we stress the importance that schools include biodiversity and ecosystem services into the education in the form of outdoor activities. Nature schools, biological museums, and nature visitor centers play an important role in supplementing people's nature experiences.

Biotopia is a biological museum founded in 1910 with the aim of exhibiting Swedish nature in a holistic way, visualizing different ecosystems in a condensed form. The exhibitions serve to inspire visitors to go out in nature and gain first-hand experiences. Nowadays, we also meet many groups of people outside in real natural environments, some of which are portrayed in the museum. Our goal is to facilitate contact with nature and inspire further exploration of nature in accordance with figure 1. All our activities, indoors as well as outdoors, offer first-hand experiences of nature, natural objects or species with one's own senses. Holding a rose chafer in one's hand, feeling it crawl around and watching the light play on its metallic carapace cannot be compared to simply looking at a picture. The same goes for following wolf tracks through the snow on a crisp winter day, listening to the silence of the winter forest for that silence to be broken by a pair of ravens flying by.

In order to motivate and accept the concept of endowing nature with rights of its own, one must first recognize nature as an entity on par with oneself. In other words, empathizing with a squirrel in the forest may lead to a subconscious recognition that the squirrel is also experiencing the world. Drawing these parallels between oneself and organisms in nature may, over time, lead to a recognition of entire ecosystems as living entities with rights of their own. However, it should also be stressed that implementing nature's rights runs the risk of unwanted consequences, potentially nullifying or even harming

¹² Per Hedberg, "Att lära in ute – Naturskola," in *Utomhusdidaktik*, eds. Iann Lundegård, Per-Olof Wickman, and Ammi Wohlin (Lund: Studentlitteratur, 2004), 63–80, here 68.

the ecosystems endowed with rights.¹³ These adverse consequences can be mitigated by the empathy gained from good nature experiences, as the ability to empathize and care for the environment brings with it a motivation to act in the interest of nature.

Concluding remarks

In a democratic society, the basis for implementing rights of nature lies in the citizen's acceptance of the concept. This in turn is based on the understanding of nature and its intrinsic values. In short, it seems as if spending time in nature as a part of childhood experiences can be key to development of environmentally friendly attitudes as adults. Seemingly, experiences in nature during especially childhood, but also adulthood are positively associated with pro-environmental perspectives. This in turn is dependent on several factors such as the type of nature and how nature is perceived. For example, would hiking in nature have the same positive effect as spending time in a city park? Throughout this article we have discussed the positive aspects of experiencing nature. One field that deserves attention is exploring the underlying factors behind people with fearful feelings towards nature or disinclination to outdoor life. Is it so simple that they did not experience nature as children, or did they have a bad experience of nature as a child? Experience and knowledge of nature, positive as well as negative, and how that transforms into engagement for the rights of nature should be explored. Since the children of today are the policymakers of tomorrow, we wish to stress the

¹³ Maria Refors Legge and Love Rönnelid each provide such critiques in this issue. See Maria Refors Legge, "The symbolic nature of legal rights," *Nordic Environmental Law Journal* (Special Issue 2024): 77–87; Love Rönnelid, "Rights critique and rights of nature – a guide for developing strategic awareness when attempting to protect nature through legal rights," *Nordic Environmental Law Journal* (Special Issue 2024): 61–76.

importance of a solid experience- and knowledge base with which to know what actions to take in the interest of nature's rights. Without the fundamental knowledge of how ecosystems function and how human activities disrupt these functions, combined with an empathy towards nature, endowing nature with rights has a low chance of affecting real change.

References

- Alves F, Costa PM, Novelli L, Vidal DG (2023) The rights of nature and the human right to nature: an overview of the European legal system and challenges for the ecological transition. *Frontiers in Environmental Science* 11: 1175143. doi: 10.3389/fenvs.2023.1175143.
- Barrable A, Booth D (2022) Disconnected: what can we learn from individuals with a very low nature connection? *International Journal of Environmental Research and Public Health* 19: 8021. doi: 10.3390/ijerph19138021.
- Frumkin H, Bratman GN, Breslow SJ, Cochran B, Kahn PH Jr, Lawler JJ, Levin PS, Tandon PS, Varanasi U, Wolf KL, Wood SA (2017) Nature contact and human health: A research agenda. *Environmental Health Perspectives* 2017, 125, 075001. doi: 10.1289/EHP1663.
- Hedberg P (2004) "Att lära in ute – Naturskola", in: Lundegård I, Wickman P-O, Wohlin A (eds.) *Utomhusdidaktik*. Lund: Studentlitteratur, pp. 63–80 (in Swedish).
- IPBES. 2019. Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. <https://ipbes.net/global-assessment> (lastly visited 27 March 2024).
- Legge MR (2024) The symbolic nature of legal rights. *Nordic Environmental Law Journal Special Issue 2024*: 77–87.
- Richardsson M, Hamlin I, Elliott LR, White MP (2022) Country-level factors in a failing relationship with nature: Nature connectedness as a key metric for a sustainable future. *Ambio* 51:2201–2213. doi: 10.1007/s 13280-022-01744-w.

Rockström J, Steffen W, Noone K, et al. (2009) A safe operating space for humanity. *Nature* 461: 472–475. doi: 10.1038/461472a.

Rosa CD, Collado S (2019) Experiences in nature and environmental attitudes and behaviours: setting the ground for future research. *Frontiers in Psychology* 10: 763. doi: 10.3389/fpsyg.2019.00763.

Rönnelid L (2024) Rights critique and rights of nature – a guide for developing strategic awareness when attempting to protect nature through legal rights. *Nordic Environmental Law Journal Special Issue 2024*: 61–76.

