Putting the rights of nature on the map. A quantitative analysis of rights of nature initiatives across the world

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ABSTRACT
The Rights of Nature (RoN) promote a new understanding of the human environment, where natural entities are conceived as subjects with intrinsic value independent of human interests. The implementation of this idea gained momentum in the United States in 2006. One decade and a half later, the idea has spread all over the world. Despite some efforts, a sophisticated geographic inventory of the movement is missing. Building on Kauffman (2020), we identified and analysed 409 initiatives in 39 countries, creating the most comprehensive database of RoN initiatives to date. We developed a taxonomy that may guide further research. We also present two detailed maps which can help policymakers, legislators, judges, researchers, and the public at large to evaluate and compare initiatives. The findings of this investigation directly help the UN Harmony with Nature Programme and have contributed to the launch of the Eco-Jurisprudence Monitor, an online database of RoN initiatives.

1. An understudied movement
Many solutions have been brought forward to address the world’s intensifying ecological crises. One of them are the so-called Rights of Nature (RoN) which are ‘calling for acknowledgement of the fact that [non-human Nature] has] rights that humans are morally obligated to respect and protect’ (Boyd, 2017, p. 219). 2 Through rights assigned to natural entities, they are being placed outside of instrumental considerations of use and necessity. Stone initiated the (Western) conceptualization of this idea with his seminal article Should Trees Have Standing (Stone, 1972). Substantial practical implementation began several decades later. Since then, RoN are increasingly considered a suitable addition to mainstream environmental protection efforts. Even though various organizations began to document legal initiatives, their compiled lists and maps provide mostly anecdotal and oftentimes incomplete overviews. While some serious ongoing efforts do exist, virtually none of them encourage deeper (academic) inquiries, as the data are either inaccessible or their collection too time-consuming to be operationalized. Considering the increasing heterogenization of the movement, 3 we assume that, without a conceptual toolbox based on solid empirical analysis, any serious academic study and advancement of RoN is unavoidably limited. Put simply, before anyone can effectively theorize about the ‘how’ and ‘why’, someone needs to provide the ‘what’ (Dubin, 1978).

With this paper, we set out to close this knowledge gap by creating an inventory of the movement. The main objectives of this project are (i) to collect, catalogue, compare, and process information concerning all available RoN initiatives, (ii) to develop and propose a tentative taxonomy for their geographic content and legal characteristics, and (iii) to design, among others, spatial charts which aim at increasing the understanding of the movement. Eventually, we would like to inform academics, policymakers, legislators, judges, researchers, as well as the public at large of this legal trend.

2. Target area
There were no geographical limitations to the scope of inquiry. Rather, theoretical elaborations designated the field of investigation. Whereas RoN are also used as a moral or normative idea, this paper’s target area is the movement’s legal implementation. 4 ‘Legal’ is to be seen broadly, similar to ‘institutional’, as it includes official legislation, court decisions, local ordinances, declarations and policies from international organizations and other institutions, as well as civil
society instruments or frameworks. It excludes ‘unofficial’ flyers or simple expressions of interest. We also only consider currently operative initiatives, thus disregarding parodies or pre-modern examples of the idea.

Besides that, the requirement for an initiative to be included in our database is rather straightforward, as it ‘only’ needed an accessible legal document containing a semantic expression referring to RoN (see ‘Legal Structure’ in Table 1). We identified these initiatives by analysing existing lists (see Section 5), consulting experts on the topic, as well as complementary keyword research. Upon completion, due to our focus on legality, we used a combination of the methodologies of legal doctrinal as well as content analysis. This meant that we analysed the textual details of each underlying document and carried out a comparison between them. We identified the various themes inductively, starting from a priori concepts provided by RoN scholarship. In order to double-check our findings, we subsequently sent relevant parts of the database to various initiating organizations and shared them with expert communities, asking for evaluation and commentary.

3. A taxonomy for the rights of nature

While compiling the dataset, we opted to lean towards an abundant collection of data for future use, thus agreeing with Whetten when he writes that ‘[i]t is generally easier to delete unnecessary or invalid elements than it is to justify additions’ (Whetten, 1989, p. 490). The main objective of the taxonomy is to locate the RoN movement within existing legal systems. We thus identified how legal tools are used to further the concept’s agenda. The specific categories and classes were inspired by the literature on the topic as well as previous databases. Some of them have been developed together with the United Nations (UN) Harmony with Nature Programme, which can be considered the RoN branch of the UN. With Table 1, we propose a taxonomy which consists of seven categories and 59 classes. The taxonomy is used pragmatically to identify and code the selected initiatives, with no intention to be final or exhaustive.

The data collection began in June 2020 and ended in June 2021. We identified 409 initiatives that fit within this taxonomy. While we identified several relatively isolated pioneering initiatives, 2006 can be marked as the year when the practical implementation of RoN started to gain momentum. Chart 1 presents the historical evolution as well as the processing status of all initiatives between 2006 and 2021. The chart not only underlines the increasing use of the RoN concept in the past decade and a half. The large number of passed initiatives (65.3%) can provide some indications of RoN’s success rate. The high share (15.9%) of ongoing initiatives suggests a continuous relevance in the near future.

4. Results

The initiatives in the dataset are from 39 countries on all continents except Antarctica. The 409 initiatives refer to a total of 430 legal documents. The reason for the numerical difference between documents and initiatives is mostly ‘failed attempts’. Several US communities have repeatedly tried to establish RoN for the same natural entity, but, for various reasons, did not succeed. ‘Front-runner’ is the city of Youngstown in the US-state of Ohio. The municipality introduced nine ballot initiatives between 2013 and 2018, none of which was passed. We concluded that the city’s efforts represent one long-running initiative that, so far, has produced nine documents. At the same time, while 20 authorities worldwide issued more than one document, not all of those decisions automatically constitute the same initiative. Between 2006 and 2009, Blaine Township, a community in the US-state of Pennsylvania, has successfully adopted five separate yet very similar documents. Since they all went through a clearly separated process, we defined them as five different initiatives.

Map 1 shows the spatial distribution of RoN across the world. 39 countries are responsible for almost 90% of all initiatives. The remaining 10% go beyond the confines of a single country.

By incorporating three charts on the bottom of the map, i.e. ‘Global Distribution of Natural Entities’, ‘Historical Evolution and Implementation Status’, and ‘Historical Evolution and Distribution of Legal

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Table 1. Taxonomy for the rights of nature.

| Category               | Classes                                                                 |
|------------------------|-------------------------------------------------------------------------|
| Basics                 | (i) date, (ii) location, (iii) title, (iv) status                      |
| Legal Structure        | (i) earth jurisprudence, (ii) habeas corpus, (iii) harmony with nature, (iv) legal entity, (v) legal personhood, (vi) legal standing, (vii) living entity, (viii) multiple rights, (ix) rights (of nature), (x) rights to exist, flourish, and naturally evolve, (xi) subject of rights, (xii) other |
| ‘Meta’ Verb            | (i) acknowledge, (ii) declare, (iii) establish, (iv) grant, (v) guarantee, (vi) have, (vii) is, (viii) possess, (ix) promote, (x) protect, (xi) recognize, (xii) respect, (xiii) shall be considered, (xiv) other, (xv) n/a |
| Legal Type             | (i) constitution, (ii) national law, (iii) court decision, (iv) local regulation, (v) policy (governmental/civil society/institutional), (vi) indigenous law, (vii) other official document |
| Distinction            | (i) nature indistinctively, (ii) aquatic ecosystems [river/other], (iii) animals [collective/individual], (iv) plants [trees/other], (v) other |
| Governance             | (i) guardianship, (ii) right to petition, (iii) form of petition, (iv) redress, (v) n/a |
| Motivation             | (i) (inter)national treaties/documents, (ii) indigenous beliefs, (iii) religious/other beliefs, (iv) human right(s) to a healthy environment, (v) anti-corporate/capitalist sentiments, (vi) contamination, (vii) disaster relief, (viii) beneficiaries, (ix) urgency, (x) other, (xi) n/a |
Types’, we further visualize and emphasize the variety of RoN. Regarding ‘legal type’, we labeled 38 out of the 40 ‘beyond-one-country-initiatives’ as policy recommendations. This homogeneous tendency is contrasted at the country-level, where we see widely diverging legal types. Globally, with more than 38%, the overall dominant legal type is local regulations. This significant proportion is due to countries like the USA and Brazil, where close to three-quarters of all initiatives (74.8% and 70%, respectively) are situated in a local setting. Following a different path, the initiatives in Ecuador (79.0%) and Colombia (88.9%) are numerically dominated by court decisions, rather than (national or local) legislation.17

The ‘natural distinction’ category shows an overall preference for not further defining the RoN entity,
with ‘Nature Indistinctively’ accounting for 66.5% of all initiatives. The second-largest class can be categorized between river and other ‘Aquatic Ecosystems’. The two distinctions regarding animals refer to, among others, the difference between a collective and individualistic approach to Nature, as well as differing means of geolocation. While individual animals can be transported to other places, collectives, like species, are generally bound to a territory. The moveability or even replaceability of natural entities could consequently influence the rights provisions of a specific entity. When further advancing the idea, these peculiarities should be taken into account.

80% of country initiatives are clustered on the American continents. Especially noteworthy is a high concentration within the USA, making it the leader of global RoN initiatives in absolute numbers. Map 2 shows the 26 US states in which 38% of worldwide initiatives are situated. Most initiatives are located in and around the New England area. This eastern RoN accumulation correlates with the location of the Pennsylvania headquarter of the Community Environmental Legal Defence Fund (CELDF). CELDF is a non-profit organization which assisted almost all US initiatives as well as many global efforts. Their vast network might be the reason for the almost identical phrasing of most US local ordinances. The included chart on historical evolution shows that US initiatives have remained largely stable over the years. Further research is needed to identify the causes for a possible domestic legal stall.

While not visually represented, we have included two additional categories in our database which we believe can advance an understanding of the movement that reaches beyond quantitative aspects. For once, ‘Governance’ describes the legal infrastructure pertinent to each RoN initiative, thus any established representative relationship between the natural entity and human beings. Only two-thirds (66%) of all initiatives specifically describe some conception of governance. They vary from some form of specific guardianship to the right to petition for all individuals within an area or beyond. It remains unclear what the governance conceptions in the remaining third of initiatives are.

The second category regards ‘Motivation’, which attempts to identify underlying mindsets. The various, oftentimes intertwined, references require careful interpretation and further investigation. However, two preliminary insights can be made. First, even though around one in five initiatives refer to indigenous beliefs (18.6%), specific indigenous RoN law is fairly rare (2.4%). This relatively low percentage is surprising since such beliefs are oftentimes cited as a crucial influence for RoN efforts (Boyd, 2017). The second point regards the two main reasons for enacting RoN, i.e. ‘anti-corporative/capitalist sentiments’ (41.1%) as well as the ‘human right(s) to a healthy environment’ (39.4%). These percentages might suggest that RoN, rather than implementing the intrinsic value of Nature, are used as yet another tool to protect arguably anthropocentric goals. Before
reaching any premature conclusions about such an ‘anthropocentrism in disguise’, however, further analyses are needed also here. We invite fellow scholars to interpret these findings in more detail and are looking forward to any future insights.24

5. Data and database

Before this paper, the most comprehensive academic RoN mapping effort was carried out by Kauffman (2020). We built upon, updated, and expanded his effort by consulting a variety of global and regional lists, as well as experts on the topic.25 Out of a total of ten languages,26 91.0% of encountered legal texts were written in either English or Spanish.

Even though most of the existing lists offer incomplete, outdated, or even wrong information, with some simply copying others, they were nevertheless useful to grasp the size of the movement. One of the most promising non-academic approaches, since its inception in 2009, is the aforementioned UN Harmony with Nature Programme. Its biggest flaw is that their data collection is very difficult to operationalize and serve little more than anecdotal overviews, at least not without considerable reviewing.27

Because of this, a large part of our work regarded the reviewing process, firstly, by analysing the underlying legal texts and, secondly, by performing extensive ‘counterchecks’, thus verifying the existence of initiatives through news articles, blog posts and interviews with experts. About three quarters of all initiatives were found online. Efforts without an online presence have been identified through a myriad of mostly email correspondences. Surprisingly, some US communities were unaware of having issued a RoN initiative. They appear to be ‘forgotten’, possibly suggesting an absence of practical implications. Nevertheless, such instances of neglect are by no means representative. The vast majority of authorities and organizations which produced or initiated an initiative were aware of them and very helpful with the provision of missing data. The aforementioned CELDF, for instance, helped to complement and verify virtually all US initiatives. Through this, we became aware that their total number, including mostly older initiatives, is likely double the count we identified for this paper. According to the organization, since 2006, Pennsylvania alone, the first US state to adopt legal RoN, has reportedly accumulated more than 100 initiatives before the idea started to spread to other states. However, due to a lack of distinct documentation of these early initiatives by the local communities, a complete recollection was not possible.28 All this shows that the exhaustive search for widely heterogeneous needles in a global legal haystack remains difficult. As such, we invite all readers that are aware of any mistakes or omissions to contact us.

Even though 409 initiatives seem like a lot, this number has continued to grow since the end of the data collection. However, the relevance of this dataset is not derived from its completeness, which is unachievable, but rather from a first structured analysis, accessible taxonomy, as well as summarizing visualization of the first 15 years of legal Rights of Nature. This investigation can consequently be used for additional inquiries. Indeed, it already serves as an intermediate step to a larger project. We are happy to announce that throughout the elaboration, our findings have substantially contributed to the creation of the so-called ‘Eco-Jurisprudence Monitor’, a website29 which is currently being developed by and organized through the Global Alliance for the Rights of Nature Academic Hub.30 Rather than RoN, the focus lies on the wider concept of ‘ecological jurisprudence’. The project aims at providing a carefully curated, regularly updated, and sufficiently redacted open-access database for academic and non-academic research. It is set to launch in fall 2022.31

6. Conclusions

The maps presented in this paper are built on a database containing all identifiable RoN initiatives around the world and serve two main purposes:

i As the RoN movement begins to enter legal mainstream processes, reliable documentation and visualization are key. The geographical overview acts as a reference and guide for policymakers, legislators, judges, researchers, and the public at large. The taxonomy provides a basis for further research and discussion. Open access to all the information is a crucial element for these goals.

ii Academics can use the dataset, the underlying documents, and its visualizations for their research. A variety of geographical features offer additional insights. It appears that regional peculiarities have a significant impact on the success rate of RoN. Evaluating such effectiveness will represent one of the most time- and capital-consuming yet rewarding tasks.

Likely our main conclusion is that RoN represent a substantial, global, and lasting trend towards a non-anthropocentric human relationship with Nature. Barely older than a decade and a half, it appears to reflect the next installment in the conceptualization of rights, offering a new form of interpreting nature-based solutions.
Notes

1. We follow the policy of various scholars and organizations, including the United Nations Harmony with Nature Programme, which writes Nature in uppercase to establish it also semantically as a subject (see, for instance, footnote 1 of the UN GA Resolution A/75/266). This policy also emphasizes the contrast to a lower-case, anthropocentric object vision of nature.

2. For recent introductions and alternative definitions see (Corrigan et al., 2021; Kaufman et al., 2021; Tănăsescu, 2022). Also (Lambooy et al., 2019).

3. See (Darpo, 2021; Tănăsescu, 2020).

4. RoN in a legal setting have been elaborated by Cullinan’s Wild Law (Cullinan, 2011) and Berry’s Earth Jurisprudence (Bell, 2003).

5. Among them are canine Mayors (Anonymous 2020), Sergeants (Kuroski, 2018) and Air Chief Marshals (Marshall, 2015), as well as ursine Corporals (Deron, 2021) or equine Consuls (Woods, 2014).

6. ‘Banais Ríghi’ describes a Celtic tradition where the King would marry the land he governs (Warmind, 1992).

7. For 95.8% of all initiatives, this definition could be upheld. The remaining 17 initiatives were nevertheless added, but only because the existence of a document was regarded as highly likely. For eleven of them, direct quotes in articles and videos still allowed for a complete analysis. Four of them are ongoing, pointing at possible future availability.

8. We used search engines to conduct keyword research by combining country or regional geospatial expressions with ‘Legal Structure’ classes (see Table 1) in various languages (see Section 5).

9. The methodology seems adequate as it “is centred on the reading and analysis of the primary sources of legal doctrine” (Hutchinson et al., 2012, p. 113).

10. See http://www.harmonywithnature.org.

11. The 1832 Tree That Owns Itself in Georgia as well as the 1936 Other Tree That Owns Itself in the neighbouring Alabama lie at the fringes of serious consideration. However, given that present-day politics continue to respect the implications of those traditions, we chose to include both initiatives. More recently, in the dissenting opinion of the 1972 US Supreme Court case, Sierra Club v. Morton, Justice Douglas was contemplating over “the conferral of standing upon environmental objects to sue for their own preservation”. In the 1979 Palila v. Hawaii Department of Land & Natural Resources, the Ninth Circuit court granted Palila, a Hawaiian indigenous bird, legal standing to sue on behalf of its survival. The same was granted to the Florida Loggerhead Turtle in the 2000 Loggerhead Turtle v. Volusia County. Finally, in the 2004 Cetacean Community vs. Bush, the idea of legal standing for cetacean animals was introduced but did not pass. Outside of the USA, a 1988 Court in the German city of Hamburg declined the legal standing of North Sea seals which was brought forward to fight the pollution of their habitat. Globally, the 2000 Earth Charter includes expressions implying RoN.

12. The cumulative percentages are 65.3% (passed), 15.9% (ongoing), 9.8% (introduced), 3.2% (draft), 2.4% (overturned), as well as 1.7% (both other and unclear).

13. Only emerged after we finalized our data collection, in December 2021, a group initiated the drafting of the Declaration for the Rights of Antarctica. For more information see https://www.antarcticarights.org/.

14. Another reason regards two twin initiatives, where different authorities produced the same document.

15. The database also includes three ‘Rights of Nature Bans’, viz. documents that refer to RoN but are, in fact, detrimental to the movement as they attempt to hinder further development. We believe that such explicit opposition should also be documented. Together with rejected or blocked initiatives, they enter the ‘other’ or ‘overturned’ categories of the respective charts.

16. The initiatives of this category are mostly issued by multinational organisations but could theoretically also concern transnational natural entities, such as border rivers or mountain ranges. One initiative is literally out of this world: the Declaration of the Rights of the Moon. For more information see https://www.earthlaws.org.au/moon-declaration/.

17. Rather than representing independent initiatives, the Ecuadorian court decisions refer to, interpret, and implement the country’s constitutional RoN. While both Ecuador and Colombia have a large share of court decisions, the latter does not have any legislative precedent.

18. Differences persist. The legal personhood of the Whanganui River applies only to the riverbed. The Supreme Court of Bangladesh, on the other hand, did not use any specification when it declared all rivers of the country to be legal persons.

19. Sandra, an Orangutan who has been living in detrimental conditions in a zoo in Argentina, was recognized as a subject of rights. Following the verdict, she was transported to a sanctuary in the USA.

20. See https://celdf.org/.

21. During an e-mail exchange on said topic, a CELDF representative emphasized the importance of not only a legal but also a cultural shift. The constantly growing number of RoN initiatives is accompanied by a growing awareness of both proponents and opponents of the movement. To illustrate their point, the representative uses a quote commonly attributed to Gandhi: ‘First they ignore you, then they laugh at you, then they fight you, then you win’. Referring to the rise of legislative RoN opposition, the e-mail goes on to say that “In the US, we are definitely in the ‘then they fight you’ stage.”

22. Only 3.4% of all initiatives do not make an explicit reference to their motivation (n/a). It is unlikely that no motivation exists. Rather, we were unable to identify it using a legal doctrinal analysis.

23. Indigenous law refers to legal initiatives emerging from an Indigenous legal tradition. Such initiatives may be either part of pre-colonial Indigenous legal orders or be the result of post-colonial Indigenous legal structures.

24. Following the Economist’s Global Democracy Index 2020, most RoN countries are democratic. However, we do note that this index considers Bangladesh, Bolivia, Guatemala, Nigeria, and Uganda as having a ‘hybrid regime’. Put differently, so far, no clearly authoritarian country has established a RoN initiative.

25. Existing lists define initiatives mostly by geographical area, type of natural entity, or legal type. However, classification was at times arbitrary and incomplete. Very few of them provided a clear indication of the...
initiative’s status. The major lists consulted were http://www.harmonywithnatureun.org/rightsofNaturePolicies/, https://celdf.org/advancing-community-rights/rights-of-nature/rights-nature-timeline/, http://www.derechosdelanaturaleza.org.ec/casos-de-derechos-de-la-naturaleza-en-el-mundo/, https://droitsdelanature.com/la-reconnaissance-des-droits-de-la-nature, https://www.centerforenvironmentalrights.org/timeline, https://www.earthlaws.org.au/aelc/timeline/. Extensive regional databases can be found for Ecuador (https://www.derechosdelanaturaleza.org.ec/, http://files.harmonywithnatureun.org/uploads/upload471.pdf), Brazil (www.mapas.org.br/), and the USA (selected websites: https://communityrights.us/community-rights-ordinance-campaigns-across-the-us/ordinances-timeline/, https://cocrn.org/, https://www.nhcommunityrights.org/, https://www.nonhumanrights.org/). Two websites offer rudimentary spatial diagrams (https://boulderrightsofnature.org/global-rights-of-nature-map/ and https://therightsofnature.org/).

26. Bengali, Danish, Dutch, German, English, French, Italian, Portuguese, Romanian, and Spanish. The languages were either understood by us or by our academic partners. In exceptional cases, online translators (Deepl and Google Translate) were consulted.

27. The development of the database and the taxonomy was helped by the Programme, which in turn has indicated interest to adopt the system.

28. The underlying investigation was able to identify 31 Pennsylvania initiatives. The rest are, as of now, unavailable.

29. It will be accessible under https://ecojurisprudence.org/. The development and maintenance for the first two years are provided by a grant from the Rockefeller Brothers Fund. Unlike our database, which depends on links to external websites, the ‘EJM’ will be fully autonomous as it hosts a copy of each initiative’s documents on the project’s own servers.

30. This article’s lead author is a member of this collective of academics. For more information see https://www.garn.org/hubs/.

31. The need for such a research tool has shown to be growing and pressing. Based on an earlier version of our database, two custom maps were presented at the (ultimately unsuccessful) negotiations over the 2020 Global Framework on Biodiversity.

32. ‘Basics’ provides four classes which help the unequivocal identification of each initiative.

33. Includes the most recent institutional dates for both completed and ongoing initiatives.

34. We distinguish between completed and incomplete initiatives. All incomplete ones are marked together (ongoing), the completed ones can be halted before (draft) or during official deliberations (introduced); they can be currently implemented (passed), as well as subsequently denied (overturned). All remaining statuses are either miscellaneous (other) or unidentifiable (unclear).

35. ‘Legal Structure’ contains twelve classes which reflect an abstraction of a pool of close to 200 unique semantic expressions. Different legal concepts imply different legal implications and/or social perceptions. Some news outlets reporting on RoN suggest that Nature or rivers ‘have the same rights as human beings’ (Roy, 2017; Taylor, 2017). While this is true for exactly one instance, every other initiative stops short of such an equation, using a more nuanced approach instead. The one instance can be found in Direction 5 of the (halted) 2017 Indian Gangotri and Yamunotri glacier High Court judgment which states that “[t]he rights of these legal entities shall be equivalent to the rights of human beings and the injury/harm caused to these bodies shall be treated as harm/injury caused to the human beings”.

36. ‘Meta’ Verb’ is comprised of 15 classes which reflect an abstraction of a pool of close to 100 unique verb combinations. These verbs offer a preliminary indication of the anthropocentric or non-anthropocentric mindset underlying the initiative. Future investigations could compare the legal semantics with the verb choices in other fields, such as, for instance, human rights litigation.

37. ‘Legal Type’ answers an administrative legal question. The classes concern both the issuing authority and geographical distribution of an initiative. While the former investigates the legal power that created RoN, the latter explores the spatial dissemination. As such, local regulations refer to a relatively small area, whereas constitutions and national law regard an entire nation. The issuing authority for court decisions should be deduced cautiously, as they range from the lowest to the highest courts in a country (we added (HC) to the respective titles of the former).

38. ‘Distinction’ identifies the scope of RoN, i.e. which part of Nature is represented as a rights holder. While occasionally discussed in theory (and arguably also indirectly implemented), rights are exclusively established for natural entities, rather than for natural processes or other more abstract phenomena.

39. ‘Governance’ identifies the legal relation to and representation of Nature.

40. ‘Motivation’ indicates why the specific initiative was implemented. Future research could investigate the diachronic correlation between dominating crisis narratives and RoN motivations.

Acknowledgments

We would like to thank Prof. Craig Kauffman for sharing his mapping effort. Ongoing support was also given by Maria Mercedes Sanchez from the United Nations Harmony with Nature Programme, as well as members from the Community Environmental Defense Fund (CELF). Thanks are also due to all officials that helped us by providing missing information and documents. As for the data analysis, we want to thank Ebba Hooft Toomey who helped with the US initiatives, and Setara Begum for translating the Bangladesh Supreme Court case. With regard to the data editing, thanks to Hannes Putzer for various visualizations as well as to Katja Schechtner and Eric Ziese for highly valuable comments.

Open Scholarship

This article has earned the Center for Open Science badge for Open Data. The data are openly accessible at https://doi.org/10.5281/zenodo.5815399.
Software

The database has been compiled using Microsoft Office Excel, the paper was written with Word. Chart 1 was created with Tableau, Map 1 and Map 2 were created using QGIS and Adobe Illustrator.

Open Scholarship

Yes.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Data Availability

https://doi.org/10.5281/zenodo.5815399

Funding

This work was supported by the Dutch NGO Stand Up For Your Rights, the Nyenrode Business University, as well as Sant’Anna School of Advanced Studies. The organizations had no influence in study design; in the collection, analysis, and interpretation of data; in the writing of the report; and in the decision to submit the article for publication.

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References

Anonymous. (2020). 4th Mayor - Brynn. Rabbit Hash. Available at: http://www.rabbithashhistoc.org/the-mayor/buy-votes/. Each website’s last access: 07.07.2021.
Bell, M. (2003). Thomas berry and an earth jurisprudence: An exploratory essay. The Trumpeter, 19(1), 69–96.
Boyd, D. (2017). The rights of nature: A legal revolution that could save the world. ECW Press.
Corrigan, D. P., & Oksanen M. (2021). Rights of nature: A re-examination. Routledge.
Cullinan, C. (2011). Wild law. A manifesto for earth justice. Chelsea Green Publishing.
Darpö, J. (2021). Can nature get it right? A study on the rights of nature in the European context. European parliament.
Deron, B. (2021). How wojtek the bear became a world war II hero. All that is interesting. Available at: https://allthatsinteresting.com/wojtek-the-bear?utm_campaign=fbpdpsh&utm_source=facebook&utm_medium=social
Dubin, R. (1978). Theory development. Free Press.
Hutchinson, T., & Duncan, N. (2012). Defining and describing what we do: Doctrinal legal research. Deakin Law Review, 17, 83–119. https://doi.org/10.21153/dlr2012vol17no1art170
Kaufman, C. M. (2020). Mapping transnational rights of nature networks & laws: New global governance structures for more sustainable development [Unpublished]. Harmony with Nature. Available at: http://files.harmonywithnatureun.org/uploads/upload924.pdf
Kaufman, C. M., & Martin, P. (2021). The politics of rights of nature: Strategies for building a more sustainable Future. MIT Press.
Kuroski, J. (2018). Meet sergeant stubby, the canine hero of world war I. All that is interesting. Available at: https://allthatsinteresting.com/sergeant-stubby
Lambooy, T., et al. (2019). A case for granting legal personality to the Dutch part of the Wadden Sea. Water International, 44(6-7), 786–803. https://doi.org/10.1080/02508060.2019.1679925
Marshall, A. M. (2015). Thai crown prince’s poodle, air chief marshal foo, has been cremated. The guardian. Available at: https://www.theguardian.com/world/2015/feb/05/thai-crown-prince-pet-poodle-air-chief-marshall-foo-foo-cremated
Roy, E. A. (2017). New Zealand river granted same legal rights as human being. The guardian. Available at: https://www.theguardian.com/world/2017/mar/16/new-zealand-river-granted-same-legal-rights-as-human-being
Stone, C. D. (1972). Should trees have standing? Towards legal rights for natural objects. Southern California Law Review, (45), 450–501.
Tănăsescu, M. (2020). Rights of nature, legal personality, and indigenous philosophies. Transnational Environmental Law, 9(3), 429–453.
Tănăsescu, M. (2022). Understanding the rights of nature. Transcript.
Taylor, A. (2017). There are now 3 rivers that legally have the same rights as humans. Washington Post. Available at: https://www.washingtonpost.com/news/worldviews/wp/2017/03/21/there-are-now-3-rivers-that-legally-have-same-rights-as-humans/
Warmin, M. (1992). Sacred kingship among the celts. In B. Hillers & J. Hunter (Eds.), Proceedings of the harvard celtic colloquium 12 (pp. 96–206). Harvard University Press.
Whetten, D. A. (1989). What constitutes a theoretical contribution? Academy of Management Review, 14(4), 490–495. https://doi.org/10.5465/amr.1989.4308371
Williams, M., et al. (2021). New governance ways aimed at protecting nature for future generations: The cases of Bangladesh, India and New Zealand: Granting legal personhood to rivers. In IOP conf. series: earth and environmental science 690 (pp. 1–15).
Woods, D. (2014). Caligula, incitatus, and the consulship. The Classical Quarterly, 64(2), 772–777. https://doi.org/10.1017/S0009838814000470.