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## Noah's Second Voyage: The Rights of Nature As Law

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In the late 1960s a French sailor named Moitessier was rounding the coast of New Zealand, where a perilous reef stuck out into the sea. Thinking himself in the clear he set his sails and went into his cabin for tea, when he was shaken by an extraordinary noise. Looking out he saw a group of porpoise beating the water with their fins and squawking agitatedly like crows. Sighting him on deck, they formed a line off his bow and forged ahead, then veered sharply to starboard, and disappeared. A few seconds later they were back again, forming the line, then veering away. Astonished, Moitessier checked his bearings. The wind had shifted, he was heading straight for the rocks. He made an immediate

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adjustment and this time the porpoise gathered around him, chirping, in apparent celebration. A huge adult executed a complete flip in the air and crashed forward, leading the pack away. Only two remained, one off each side of the bow, piloting Moitessier by.<sup>1</sup>

I ask my students what this passage says about the natural world, and what the law might do about it. For a long time, I'd no idea.

One of the most enduring stories of the Bible, mirrored in the stories of other faiths as well, is that of Noah loading his Ark, saving the creatures of the known world. Many of those mentioned were of little use to Noah, including "everything that creeps on the ground."<sup>2</sup> He certainly couldn't eat them all. Some were so tiny he could not even have known they were there. Yet he saved them, every one. Which raises the question, why would God have done this? And why would the story—whether read as fable, gospel, or the history of a great Mesopotamian flood—have remained so deeply embedded some two millennia after the time of Christ?<sup>3</sup>

These issues lay lurking in the rear guard of Western civilization, marginally relevant, until quite recently when they have come again to the fore. Noah is back, not just the notion of humans protecting nature, but the elusive reason why. And the answer emerging, one not even dared to be articulated at some points in the journey, is that these creatures, all creatures, not just the useful ones, not just handsome or sentient ones, including the habitats on which they depend, entire ecosystems, have their own right to board the Ark, as well, a protected right, to be.

To some, the proposition is ridiculous. To others it could save the planet.

#### I. THE HAPPENING

"Given that neither provincial regulation or national law contemplate a process for evaluating the condition of caged animals, I consider that a

<sup>1.</sup> BERNARD MOITESSIER, LA LONGUE ROUTE, 1971-99 (1971).

<sup>2.</sup> *Genesis* 6:20.

<sup>3.</sup> Still earlier versions of the great flood story date back to the Sumerians and the Epic of Gilgamesh, and perhaps yet before. For earlier "Great Flood Stories," see Ishann Tharoor, *Before Noah: Myths of the Flood Are Far Older than the Bible, Time* (Apr. 1, 2014), http://time.com/44631/noah-christians-flood-aronofsky/. What the *Book of Genesis* adds, *inter alia*, is a broader range of species in the boat, perhaps to explain the evident diversity of life that then abounded. Whatever the motive, the inclusion of creatures of no known service to man also evidences something more than awareness, and more than need, between humans and the rest of nature that was doubtless stronger then than today, but which endures. *See* E.O. WILSON & STEPHEN R. KELLERT, THE BIOPHILIA HYPOTHESIS (1993). Rights in nature rise from, and reflect, this bond.

petition of habeas corpus is appropriate for an animal deprived of his essential rights."

-Court of Mendoza, Argentina, 2015<sup>4</sup>

"We ... declare the [g]laciers, including Gangotri & Yamunotri, rivers, streams, rivulets, lakes, air, meadows, dates, jungles, forests, wetlands, grasslands, springs and waterfalls, legal entity/legal person/juridical person/moral person/artificial person having the status of a legal person, with all corresponding rights ... of a living person, in order to preserve and conserve them.

#### —High Court of Uttarakhand, India, 2017<sup>5</sup>

First come the creatures. A judge in Argentina, in the absence of applicable legislation, grants<sup>6</sup> a writ of habeas corpus to a chimpanzee held in captivity, ordering that it be released. The Supreme Court of Colombia grants the same writ for an Andean (Spectacled) Bear, finding it a "sentient being."<sup>7</sup> Similar cases are pending in the state of New York and they will not go away.<sup>8</sup> A Japanese court (reluctantly) denies standing to a rare species of rabbit but the government, responding to a strong public reaction, opts to codify the same protections anyway.<sup>9</sup> China does the same for a near-extinct deer.<sup>10</sup> The Supreme Court of Pakistan enjoins sport hunting of the Houbara Bustard, on the basis of

8. See Melissa Daniels, Chimps Can't Secure Habeas Corpus, NY Appeals Court Says, LAW 360 (June 8, 2017), https://www.law360.com/articles/932851/chimps-can-t-secure-habeas-corpus-ny-appeals-court-says. For a fuller litigation docket and a discussion of its rationale, see *Litigation, A Legal Team with the Power To Make History for Nonhuman Animals*, NONHUM. RTS. PROJECT, https://www.nonhumanrights.org/litigation/ (last visited Nov. 11, 2017), and STEVEN M. WISE, RATTLING THE CAGE: TOWARDS LEGAL RIGHTS FOR ANIMALS (2000) (making the case for legal personhood for primate species). For the most recent initiative, see Brigit Katz, *Lawsuit Seeks "Personhood" for Three Connecticut Elephants*, SMITHSONIAN.COM (Nov. 16, 2017), https://www.smithsonianmag.com/smart-news/lawsuit-contends-three-elephants-are-legal-persons-180967240/.

9. Taka'aki Kagohashi, *The Amami 'Rights of Nature' Lawsuit*, SOC. SCI. JAPAN (Inst. of Soc. Sci., Univ. of Tokyo, Tokto, Japan), Apr. 23, 2002, at 14, http://newslet.iss.u-tokyo.ac.jp/ssj23/ssj23.pdf; Meera Dolasia, *YAY! Japan's Rare Black Amami Rabbits No Longer Endangered*, DOGO NEWS (Jan. 12, 2013), https://www.dogonews.com/2013/1/13/yay-japans-rare-black-amami-rabbits-no-longer-endangered.

10. See Louise Watt, Associated Press, *China's Rare Milu Deer Return in Victory for Conservation*, CTV NEWS (Apr. 26, 2017), https://www.ctvnews.ca/sci-tech/china-s-rare-milu-deer-return-in-victory-for-conservation-1.3385583.

<sup>4.</sup> Tercer Juzgado de Garantias, case no. P-72.254/15, 44 (Mza.).

<sup>5.</sup> Lalit Miglani v. State of Uttarkhand, Writ Petition (PIL) No. 140 of 2015, 64 (India).

<sup>6.</sup> Tercer Juzgado de Garantias, case no. P-72.254/15, 44 (Mza.).

<sup>7.</sup> Case of Luis Domingo Gomez Maldonado, AHC4806-2017, Supreme Court of Justice, July 26, 2017 (Colom.). The Opinion cites animal rights literature going back to the mid-1800s, Opinion at 8, and recent developments in Germany, Switzerland, and Ecuador, Opinion at 15, among others. It further cites, and aligns itself with, the evolution of nature rights more broadly and the role of courts to vindicate them, Opinion at 26.

Koranic teachings that place all species in a sacred trust.<sup>11</sup> A U.S. federal court recognizes the endangered Okinawa Dugong as a cultural heritage, limiting the expansion of a military base into its habitat.<sup>12</sup> An Ecuadorian court imposes heavy sanctions against shark poachers in a marine reserve, declaring it the highest duty of the State to guarantee both human and nature rights.<sup>13</sup> Germany extends constitutional protections to all animals, domestic and wild, and to the life systems that support them.<sup>14</sup> We are back to Noah, phase two. These are decisions of law.

Then come the rivers. A New Zealand court ratifies a consent decree according the Whanganui River watershed its own entitlement to protection, in its own name.<sup>15</sup> A court in Ecuador orders the restoration of the Loja-Villacamba River, again in its own name.<sup>16</sup> In a case involving mining wastes, the Constitutional Court of Colombia grants relief to the Atrato River, recognizing its intrinsic right to exist, undefiled.<sup>17</sup> The Supreme Court of India, citing the Whanganui precedent and the tenets of Hinduism, accords the Ganges and Yamuna Rivers similar rights to protection and restoration, their right as legal persons to regain a natural state.<sup>18</sup> Human guardians are appointed in

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<sup>11.</sup> Aamir Maroof Akhtar v. Federation of Pakistan & Others, Constitutional Petition No.38 of 2015.

Stewards, as opposed to absolute owners, cannot use or exploit natural resources with abandon, nor hunt a species till its status becomes vulnerable or extinct. If any species for want of habitat or as a result of hunting or exploitation is endangered or becomes extinct the khalifah violates his/her trust.

<sup>12.</sup> *See* Okinawa Dugong v. Gates, 543 F. Supp. 2d 1082 (N.D. Cal 2008) (requiring consultation under the National Historic Preservation Act).

<sup>13.</sup> See Hugo Echevarria, When Sharks Have Lawyers, CNH TOURS (Sept. 13, 2017), https://www.cnhtours.com/news/2017/9/13/when-sharks-have-lawyers/; Email from Professor Echevarria to author (Oct. 16, 2017) (on file with author) (quoting from the opinion). The boat captain was sentenced to four years in prison, members of the crew to lesser terms. *Id.* 

<sup>14.</sup> GRUNDGESETZ [GG] [BASIC LAW] art. 20-A (Ger.), *translation at* https://www.gesetzeim-internet.de/englisch\_gg/.

<sup>15.</sup> Te Awa Tupua [Whanganui River Claims Settlement] Bill 2016 (N.Z.), http://www.legislation.govt.nz/bill/government/2016/0129/latest/DLM6830851.html?src=qs.

<sup>16.</sup> Provincial Court of Loja, case no. 11121-2011-0010 (Ecuador).

<sup>17.</sup> Constitutional Court of Colombia, EXPDT T-5.016.242. For a discussion of this case, see Hugo Echevarria, *The Case of the Atrato River: A Legal View of the Rights of Nature* (June 4, 2017) (unpublished article), http://ow.ly/d/6prI ("When reading—and rereading—the judgement, the notion of transition emerges. There is a sense of change in the legal approach from anthropocentric to biocentric, to ecocentric. There is a change in the interpretation of the norm. From this perspective, the ruling gives us an interesting look at the future of environmental law. In this future time, laws surrounding rights of Nature are closer to what we believe, because the damages done to Nature have not ceased, and have increased in intensity.").

<sup>18.</sup> Mohd Salim v. State of Uttarkhand & Others, Writ Petition (PIL) no. 26 of 2014 (India). In July of 2017, the Supreme Court of India stayed the opinion on procedural grounds, not questioning the right itself. *See SC Stays Uttarakhand HC Order on Ganga, Yaumuna Living* 

each of these cases, but the rights are those of the rivers. One month later the same rights are granted to India's Gangotri and Yamunotri glaciers, including their waterfalls, lakes, and meadows.<sup>19</sup> Each of these decisions within the last three years.<sup>20</sup>

Then comes all of nature, writ large. The Ecuadorian constitution is amended to vest rights in all of mother nature, or Pachamama;<sup>21</sup> subsequent court decisions cite these provisions with approval, even against challenges based on other constitutional values.<sup>22</sup> Neighboring Bolivia follows suit with legislation declaring the same,<sup>23</sup> and more, and both countries are now poised for steps toward their implementation. The new constitution of Mexico City includes a rights of nature provision, as does that of the state of Guerrero.<sup>24</sup> Similar laws are under development in Argentina, Brazil, Cameroon, Colombia, Nepal,

*Entity Status*, INDIAN EXPRESS (July 8, 2017, 12:53 AM), http://indianexpress.com/article/india/sc-stays-uttarakhand-hc-order-on-ganga-yamuna-living-entity-status-4740884/.

<sup>19.</sup> Tercer Juzgado de Garantias, case no. P-72.254/15, 44 (Mza.).

Similar interventions have been filed by Community Legal Environmental Defense 20. Fund (CELDF) on behalf of three river-ecosystems, Email from Thomas Linzey, CELDF, to author (Oct. 10, 2017) (on file with author), identifying cases in Pennsylvania and Oregon; see Seneca Res. Corp. v. Township of Highland, 863 F.3d 245 (3d Cir. 2017) (denying intervention); Julie Turkewitz, Corporations Have Rights. Why Shouldn't Rivers?, N.Y. TIMES (Sept. 26, https://www.nytimes.com/2017/09/26/us/does-the-colorado-river-have-rights-a-lawsuit-2017). seeks-to-declare-it-a-person.html. Perhaps the most intriguing response to date came on a motion to intervene by the Siletz River Ecosystem in Oregon, denied for lack of "personhood" but with an observation from the bench that she found the concept one which "needed to evolve," and encouraging CELDF to appeal. Email from Ann B. Kneeland, J.D., to Kai Huschke, CELDF (Sept. 12, 2017) (on file with author). Meanwhile, an unrelated case was filed on behalf of the Colorado River-see Amended Complaint for Declaratory Relief, Colo. River Ecosystem v. State of Colo., Case No. 1:17-cv-02316 (D. Colo. filed Nov. 3, 2017)-but subsequently withdrawn. More water lapping at the door.

<sup>21.</sup> CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION OF THE REPUBLIC OF ECUADOR], arts. 71-73.

<sup>22.</sup> For summaries of the earlier opinions, see Hugo Echevarria, Rights of Nature: The Ecuadorian Cases (unpublished article) (on file with author) (describing the "Biodigester" Case, 2009, Ecological Reserve Case, 2012, and Artisanal Mining Case, 2012); Daniel Norôna, L.L.M. Casenotes: Right of Nature in Ecuador (Oct. 27, 2017) (unpublished Tulane University Rights of Nature Seminar paper) (on file with author) (describing additional cases); Craig Kauffman & Pamela L. Martin, *Can Rights of Nature Make Development More Sustainable? Why Some Ecuadorian Lawsuits Succeed and Others Fail*, 92 WORLD DEV. 130, 130-47 (2016). For a yet more recent update, see *infra* note 221.

<sup>23.</sup> World People's Conference on Climate Change and the Rights of Mother Earth, *Universal Declaration of the Rights of Mother Earth* (Apr. 22, 2010), https://therightsofnature.org/wp-content/uploads/FINAL-UNIVERSAL-DECLARATION-OF-THE-RIGHTS-OF-MOTHER-EARTH-APRIL-22-2010.pdf.

<sup>24.</sup> CONSTITUCIÓN POLÍTICA DE LA CIUDDAD DE MÉXICO [POLITICAL CONSTITUTION OF THE CITY OF MEXICO] art. 18, A, paras. 2-3; CONSTITUCIÓN POLÍTICA DEL ESTADO LIBRE Y SOBERANO DE GUERRERP [CONSTITUTION OF THE STATE OF GUERRERO] art. 2.

Sweden,<sup>25</sup> and the European Union as a whole<sup>26</sup> . . . and the count keeps growing.

Meanwhile, at the community level, rights of nature ordinances have been enacted by more than thirty local governments across the United States ranging from Pittsburg to Santa Monica.<sup>27</sup> At the same time, Native American governments are adopting the same measures, beginning with the Ho-chunk Nation of Wisconsin and the Chippewa close behind.<sup>28</sup> Born, as in Ecuador and Bolivia, in defense of self-determination and natural environments, these ordinances provide both substantive rights (e.g., "Ecosystems and natural communities within [] possess the right to exist, flourish and evolve"), and local standing to enforce them.<sup>29</sup> This count, too, is rising.

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<sup>25.</sup> See Craig M Kauffman & Linda Sheehan, *The Rights of Nature: Guiding Our Responsibilities Through Standards, in* STEPHEN J. TURNER ET AL., ENVIRONMENTAL RIGHTS: THE DEVELOPMENT OF RIGHTS (Cambridge Press, forthcoming).

<sup>26.</sup> Ito Mumta, Draft Directive of the European Parliament and of the Council for Securing the Rights of Nature (on file with author); *see also Envisioning a World That Considers Nature's Rights: An Introductory Discussion in Europe*, IUCN (Mar. 31, 2017), https://www.iucn. org/news/europe/201703/envisioning-world-considers-nature%E2%80%99s-rights-introductory-discussion-europe.

<sup>27.</sup> See Kauffman & Sheehan, supra note 25, at 1. For a description of the legal skirmishing in Pennsylvania over these ordinances, see Craig Kauffman & Pamela Martin, Comparing Rights of Nature Laws in the US, Ecuador and New Zealand: Emerging Strategies in the Battle Between Environmental Protection and 'Development,' Presentation at the International Studies Assn Annual Conference (Feb. 23, 2017) (on file with author). See also Mari Margil, Los Derechos De La Naturaleza: Rights-Based Protection For Pachamama https://therightsofnature.org/wp-content/uploads/pdfs/Margil\_Rights-(unpublished article), Based%20Protection\_Pachamama.pdf; Justin Nobel, How a Small Town Is Standing Up to Fracking, ROLLING STONE (May 22, 2017), http://www.rollingstone.com/politics/news/how-asmall-town-is-standing-up-to-fracking-w482577; Jeremy Deaton & Mariano Surillo, Meet the Rural Pennsylvania Town at the Forefront of Environmental Law, ECOWATCH (July 24, 2017), https://www.ecowatch.com/grant-township-pennsylvania-2463074551.html. These local initiatives have been assisted by the CELDF, which was also instrumental in the constitutional amendments establishing the rights of nature in Ecuador, Margil supra. In addition, a Pennsylvania farmer has executed a "rights of nature" easement to protect his land from fracking and similar intrusions. See Press Release, Glob. All. for the Rights of Nature, Pennsylvania Farmer Protects Rights of Nature Through Conservation Easement (Apr. 10, 2013), https://the rightsofnature.org/rights-of-nature-laws/rights-of-nature-through-conservation-easement/.

<sup>28.</sup> Telephone Interview with Thomas A. Linzey, CELDF (Sept. 19, 2017); *see also* Bill Greendeer, Wo-Chunk Nation, Casey Camp-Horinek, Ponca Tribe of Oklahoma, & Deon Ben, Navajo Nation, Presentations at the Tulane University CELDF Symposium: The Rights of Nature (Oct. 27, 2017), https://www.youtube.com/watch?v=PO1eT-mmA8I. One of the reservations expressed to the concept of "rights" is the degree to which Western rights have been historically used to deprive Native Americans of their lives and lands, "the way they stole from us." Greendeer, *supra*.

<sup>29.</sup> Email from Thomas A. Linsey, CELDF, to author (Sept. 19, 2017) (on file with author). Damages, in cases of harm already occasioned, are to be measured by the costs of restoration and used exclusively for that purpose. *Id.* 

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And rises to international levels as well. As early as 1982, the world community, led by Zaire, adopted the United Nations Charter for the Rights of Nature declaring rights (and human responsibilities) for all living things and garnering the signatures of 111 countries.<sup>30</sup> The Charter received collateral support from the 1972 Stockholm Convention, which thrusts environmental obligations onto the world stage;<sup>31</sup> the Convention on International Trade and Endangered Species adopted the following year;<sup>32</sup> the United Nations (U.N.) Convention on Biodiversity of 1982 emphasizing the importance of all wild species;<sup>33</sup> the Rio Convention of 1992<sup>34</sup> and its focus on sustainability; and several less formal convocations since including the People's Conference on Human Rights and the Rights of Mother Earth held in Cochabamba, Bolivia, in 2010.<sup>35</sup> This same year the U.N. released its Experts' Summary Report on Harmony with Nature-Theme: Earth Jurisprudence, asserting the "fundamental legal rights of ecosystems and species to exist, thrive and regenerate."36 A people's Tribunal for the Rights of Nature was established in 2014 and has held well-attended field hearings in Paris, Ecuador, and Peru.<sup>37</sup> In 2016 the International Union for the Conservation of Nature's World Congress on the Environment endorsed nature rights as essential to the future of life on earth, followed by the International Union itself this year.<sup>38</sup> The 2017 U.N. celebration of Earth

<sup>30.</sup> G.A. Res. 37/7, World Charter on Nature (Oct. 28, 1982); *see also* Harold W. Wood Jr, *United Nations World Charter for Nature: The Developing Nations Initiative To Establish Protections for the Environment*, 12 ECOLOGY L.Q. 977 (1985). The United States participated in the negotiations but with a change in administration did not sign.

<sup>31.</sup> U.N. Conference on the Human Environment, *Declaration of the United Nations Conference on the Human Environment*, U.N. Doc. A/CONF.48/14/Rev.1 (Ch. I) (June 5-16, 1972).

<sup>32.</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1807, T.I.A.S. No. 8249, 993 U.N.T.S. 243, ELR STAT. 40336.

<sup>33.</sup> Convention on Biological Diversity, June 5, 1992, U.N. Doc. DPI/1307, *reprinted in* 31 I.L.M. 818 (1992).

<sup>34.</sup> United Nations Conference on Environment and Development: Rio Declaration on Environment and Development, U.N. GAOR, 47th Sess., Agenda Item 9, at 1, UNCED Doc. A/CONF.151/5/Rev.1 (1992), *reprinted in* 31 I.L.M. 876 (1992).

<sup>35.</sup> See People's Conference on Climate Change and the Rights of Mother Earth, GLOBAL ALLIANCE FOR RTS. NATURE, http://therightsofnature.org/cochabama-rights/ (last visited Dec. 14, 2017).

<sup>36.</sup> Experts' Summary Rep. on Harmony with Nature—Theme: Earth Jurisprudence, U.N. Doc A/71/266 (Aug. 1, 2016).

<sup>37.</sup> International Rights of Nature Tribunal, GLOBAL ALLIANCE FOR RTS. NATURE, http://therightsofnature.org/rights-of-nature-tribunal/ (last visited Dec. 14, 2017).

<sup>38.</sup> Mike Gaworecki, *Nature's Right To Exist Gets a Boost from Key Organizations*, MONGABAY (Oct. 13, 2016), https://news.mongabay.com/2016/10/natures-right-to-exist-gets-a-boost-from-key-organizations/.

Day featured the rights of nature as its first order of business, front and center.<sup>39</sup> A circle is closing on the international stage.

Religious institutions, too, are taking note, and steps beyond. The 2015 Encyclical of Pope Francis, On Care for Our Common Home, expanding on declarations of his predecessors, condemned human treatment of nature as "an object," enabling us to "plunder" her at will.<sup>40</sup> "Because of us," he said on a follow-up occasion, "thousands of species will no longer give glory to God by their very existence," concluding: "We have no such right."41 Three years earlier, the High Council of Bishops of the Russian Orthodox Church had made a similar declaration of its own, finding an urgency to protect "the variety of life" and proclaiming the destruction of nature to be the "consequence of human sin."42 Islamic authorities have spoken likewise, finding a unity of all beings in the Quran ("Certainly the creation of the heavens and the earth is greater than the creation of humanity. . . there is no animal on land, nor a bird flying with its wings, but are communities like you.").<sup>43</sup> The Jewish faith, long torn (as with Christianity) between subjugating nature and respecting it, has also moved distinctly into the respect column.<sup>44</sup> A convergent evolution of religions, catching the train and now leading the way.45

<sup>39.</sup> Envisioning a World That Considers Nature's Rights: An Introductory Discussion in Europe, supra note 26.

<sup>40.</sup> Pope Francis, Encyclical Letter, '*Laudato Si': On Care For Our Common Home*, HOLY SEE FRANCIS para. 2 (May 24, 2015), http://w2.vatican.va/content/dam/francesco/pdf/ encyclicals/documents/papa-francesco\_20150524\_enciclica-laudato-si\_en.pdf.

<sup>41.</sup> See John Copeland Nagle, *Pope Francis, Environmental Anthropologist*, 28 REGENT U.L. REV. 7 (2015-2016).

<sup>42.</sup> *Statement on the Environment by the Russian Orthodox Church*, ORTHODOX FELLOWSHIP TRANSFIGURATION (Feb. 4, 2013), http://www.orth-transfiguration.org/statement-on-the-environment-by-the-russian-orthodox-church/.

<sup>43.</sup> QURAN 6:38, 40:57.

<sup>44.</sup> Hava Tirosh-Samuelson, *Introduction* to JUDAISM AND ECOLOGY: CREATED WORLD AND REVEALED WORD (Hava Tirosh-Samuelson ed., 2002), http://fore.yale.edu/publications/ books/cswr/judaism-introduction/. For a brief synopsis of Judaism's current perspective, see *Jewish Views on the Environment*, REFORMJUDIASM.ORG, https://reformjudaism.org/jewishviews-environment (last visited Dec. 20, 2017). Neither the views of Christianity nor Judaism were monolithic on this question (nor are they so today). St. Francis of Assisi was preaching love of all God's creatures in the early 1200s, as was the Jewish Philosopher Moses Maimonides in reference to the Great Chain of Being, writing: "It should *not* be believed that all things exist for the sake of the existence of man. On the contrary, all other beings, too, have been intended for their own sakes and not for the sake of something else." JOHN PASSERMORE, MAN'S RESPONSIBILITY FOR NATURE 12 (1974), *cited in* ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: NATURE, LAW AND SOCIETY (2016).

<sup>45.</sup> The religious movement rises from the grass roots as well. *See El Salvador; Catholic Church Wants Mining Ban*, E&E News: GREENWIRE (Feb. 7, 2017), https://www.eenews.net/greenwire/2017/02/07/stories/1060049658; Harriet Sherwood, *Pennsylvania Nuns Oppose Fracking Gas Pipeline Through 'Holy' Land*, GUARDIAN (July 19, 2017, 12:31 PM), https://www.

From local communities, indigenous peoples, and developing countries to international forums and the highest pulpits, an organizing principle is on the march, and it is elegantly basic: nature is no longer simply something for humans to exploit. It enjoys its own rights as well, from lowly insects to the great apes and entire landscapes, starting with the right to exist ... a right simply to be. Long the subject of moral philosophy and centuries of debates, these rights are now entering the legal world. Ethics is changing the law and the law is changing ethics, including our view of life around us ... and of ourselves. Therein lies both the great promise of nature rights and their inherent pitfall. By and large humans do not like to change, nor do they like limits, nor do they like to fall from grace.

II. THE AWAKENING ETHIC

"Man, if we look to final causes, may be regarded as the centre of the world; insomuch that if man were taken away from the world the rest would seem to be all astray, without aim or purpose."

—Sir Francis Bacon  $(1561-1626)^{46}$ 

"Man has been here 32,000 years .... If the Eiffel Tower were now representing the world's age, the skin of paint on the pinnacle-knob at its summit would represent man's share of that age; and anybody would perceive that skin was what the Tower was built for. I reckon they would, I dunno."

theguardian.com/environment/2017/jul/19/pennsylvania-nuns-oppose-fracking-gas-atlanticsunrise-pipeline; Andre Blumberg, *Buddhist Monks Ordain Trees To Protect the Environment*, HUFFINGTON POST (Mar. 9, 2015), https://www.huffingtonpost.com/2015/03/04/buddhist-monksordain-trees\_n\_6784568.html (adding that this practice has extended to other countries such as Laos and Sir Lanka).

<sup>46.</sup> FRANCIS BACON, OF THE WISDOM OF THE ANCIENTS, ch. XXVI, para. 3 (London, Longman 1857), *reprinted in* BARTLEBY.COM (2010), http://www.bartleby.com/82/.

<sup>47.</sup> J. Michael Pratt, *A Fossil Guide to Mark Twain's Essay "Was the World Made for Man?,*" 3 MARK TWAIN ANN. 81 (2005). By way of example, the American Alligator is 150 million years old, sharks over 400 million, jelly fish and sea sponges over 550 million. *See American Alligator*, NAT'L GEOGRAPHIC, http://www.nationalgeographic.com/animals/reptiles/a/american-alligator/ (last visited Dec. 20, 2017); *450 Million Years of Sharks*, SHARKSAVERS: WILDAID, http://www.sharksavers.org/en/education/biology/450-million-years-of-sharks1/ (last visited Dec. 20, 2017); *Jellyfish and Comb Jellies*, SMITHSONIAN INSTITUTION: OCEAN PORTAL FIND YOUR BLUE, http://ocean.si.edu/jellyfish-and-comb-jellies (last visited Dec. 20, 2017); Ben Harder, *Was the Humble Sponge Earth's First Animal?*, NAT'L GEOGRAPHIC NEWS (APR. 1, 2002), https://news.nationalgeographic.com/news/2002/04/0401\_0401\_shapeoflife1.html; *The Origin of Birds*, UNDERSTANDING EVOLUTION, http://evolution.berkeley.edu/evolibrary/article/evograms\_06 (last visited Dec. 20, 2017).

The known world was in order. Once upon a time, as in a millennia before Christ, the universe rotated conveniently around the earth, the center of all things.<sup>48</sup> Life on earth conformed to Aristotle's Great Chain of Being, with "Guess-Who" at the top.<sup>49</sup> Not all humans were at the top, basically men. And not all men either, basically white men. All other creatures in varying degrees lacked the ability to know things, to reason from what they knew, communicate, solve problems, invent things, have emotions, even to feel pain . . . i.e., to be us.<sup>50</sup>

Plato added a moral element—creatures "below" us lacked a soul,<sup>51</sup> which the early Christian church, backed by the *Book of Genesis* ("The fear of you and the dread of you shall be on every beast of the earth"), was quick to embrace.<sup>52</sup> Clerics from the second century forward ascribed "good" to the higher echelons and descending from there towards "evil."<sup>53</sup> Scions of the church, St. Augustine and St. Thomas Aquinas among them, shepherded the Great Chain through the Middle Ages, the Renaissance, and into the present day.<sup>54</sup> As the American comic Mel Brooks once wrote in a satirical history of the world, "It's great to be the King!"<sup>55</sup> It was indeed great, and terribly hard to shed.

It was not great for everyone, however, nor even logical. Intellectual leaders of Greece and Rome planted the seeds of another view that would lie dormant for over a thousand years.<sup>56</sup> Pythagoras, a vegetarian, believed that animals carried the souls of humans and should

<sup>48.</sup> NASH, *supra* note \*, at 21.

<sup>49.</sup> ARISTOTLE, HISTORY OF ANIMALS (D'Arcy Wentworth Thompson trans., 2009) (350 B.C.).

<sup>50.</sup> NASH, *supra* note \*, at 17-18.

<sup>51.</sup> Creatures below us lacked an immortal soul. WISE, *supra* note 8, at 12. For a detailed discussion of the Great Chain of Being, see *id.* at 10-22.

<sup>52.</sup> *Genesis* 9:2.

<sup>53.</sup> As a second century prelate explained, the lower a creature was on the Great Chain, the more it descended towards "evil." WISE, *supra* note 8, at 17 (quoting Catholic Church Father Clement).

<sup>54.</sup> *Id.* at 18, 19. Aquinas, to be fair, did find God's reflection in other creatures as well and saw them as essential parts of the Universe, as "His goodness could not be adequately represented by one species alone." JASON T. EBERL, THE ROUTLEDGE GUIDEBOOK TO AQUINAS' SUMMA THEOLOGIAE 289 (2015) (quoting St. Thomas Aquinas).

<sup>55.</sup> MEL BROOKS, HISTORY OF THE WORLD, PART I (Brooksfilms 1981).

<sup>56.</sup> Indeed, going yet farther back in time, the highly advanced civilization of Egypt believed in a fusion between human and nonhuman beings, featured in their gods, art, and temples. See H. te Velde, A Few Remarks upon the Religious Significance of Animals in Ancient Egypt, 27 Fasc. 1 NUMEN 76 (June 1980); Ana Recarte, Friends of Thoreau, The Animal Rights Movement in the United States: Some Thoughts About a New Ethics, UNIVERSIDAD DE ALCALÁ, https://www.institutofranklin.net/sites/default/files/fckeditor/CS%20Animal%20Rights. pdf (last visited Dec. 20, 2017).

not therefore be eaten.<sup>57</sup> Porphyry, in his book *On Abstinence from Killing Animals*, argued that animals had levels of rationality, emotions, and the same injuries experienced by humans, and therefore deserved just treatment of their own.<sup>58</sup> Plutarch agreed. "[W]e fancy," he wrote, "that the voices [an animal] utters and screams forth to us are nothing else but inarticulate sounds and noises, and not the several deprecations, entreaties and pleadings of each of them,"<sup>59</sup> which contradicted what he saw, heard, and knew. He went further to link cruelty toward animals with cruelty toward humans, the one bred the other . . . injuring both.<sup>60</sup> With few embellishments these arguments, both bio and anthropocentric, remain in play today. For the course of Western history, however, Aristotle and Pluto won the day.<sup>61</sup>

The break in the Great Chain of Being came on two fronts, one ecclesiastic and the other radically secular. Francis of Assisi was not the only Christian cleric of his time to embrace wild things and consider them equally deserving of God's mercy.<sup>62</sup> The New Testament and the Psalter praise (loudly) the lives of all living things.<sup>63</sup> Then, with the Age

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61. The Victory, however, was never complete. Both Goethe and Henry More were strong dissenters to the prevailing Aristotelean view. *See* PASSERMORE, *supra* note 44, at 16-23. Perhaps the most remarkable dissent came from 10th century Sufi scholar, Ikwhwan al-Safa, in an imagined trial of humanity, complete with testimony, cross examination, and verdict, by members of the animal kingdom for abuse and suffering at human hands; it is said to derive from a yet earlier text from India. For an English translation, see IKHWAN AL-SAFA ET AL., THE ANIMALS' LAWSUIT AGAINST HUMANITY: AN ILLUSTRATED 10TH CENTURY IRAQI ECOLOGICAL FABLE (2005). Clearly, for some at least, the Great Chain of being was neither commendable, nor real.

62. FRANCIS ASSISI, CANTICLE OF THE CREATURES (Paul Marshall Allen & Joan de Ris Allen eds., Continuum Int'l Publ'g 1996) (c. 1224). In addition, St. James of Venice is reported to have purchased, and then released, wild birds as creatures of the Lord; St. Catherine of Siena explained that "[we] love God's creatures we see that God loves them, supremely"; St. Bridget of Sweden explained God's position as follows: "People should therefore fear me, their God, above all things, and treat my creatures and animals more mildly, having mercy on them for the sake of me, their Creator." Kelch. *supra* note 57, at 43-44. This theological basis for animal welfare would extend in later centuries to all living creatures, see Pope Francis, *supra* note 40.

63. Job 12:7-10 ("But ask the animals, and they will teach you, or the birds in the sky, and they will tell you; or speak to the earth, and it will teach you, or let the fish in the sea inform you. Which of all these does not know that the hand of the Lord has done this? In his hand is the life of every creature and the breath of all mankind."); *see also Psalm* 148 ("Praise him, sun and moon; praise him, all you shining stars ... for at his command they were created, and he established them for ever and ever—he issued a decree that will never pass away .... Praise the

<sup>57.</sup> See Thomas G. Kelch, A Short History of (Mostly) Western Animal Law, Part 1, 19 ANIMAL L. REV. 23, 27-28, and sources cited therein.

<sup>58.</sup> *Id.* at 28.

<sup>59.</sup> *Id.* at 29 (quoting PLUTARCH, MORALS: OF EATING 5-7 (William W. Goodwin ed., Little, Brown, & Co. 1905) (40 A.D.-120 A.D.)).

<sup>60.</sup> *Id.* at 28, 29. Perception of this link, too, has endured. *See* Stevens v. State, 3 So. 458 (Miss. 1886) ("[H]uman beings should be kind and just to dumb brutes; if for no other reason than to learn how to be kind and just to each other . . . .").

of Enlightenment, science came banging on the same door. Indeed, science broke it down.

Copernicus first theorized from mathematical models that it was the earth doing the rotating out in space and not the rest of the universe,<sup>64</sup> which deflated earth's primacy enormously, and then Galileo proved it with his telescope, nearly losing his life in the bargain.<sup>65</sup> Leuwenhoek's microscope uncovered yet more galaxies, some within our own bodies,<sup>66</sup> and fossil hunters were showing that the earth was far older than the Bible knew.<sup>67</sup> Finally came the mortal blow, Darwin's voyage of the *Beagle* and the theory of evolution that largely leveled the playing field.<sup>68</sup> All species evolved, Darwin concluded, including our own, and "our differences" were, "in degree and not in kind."<sup>69</sup> The earth-centric universe and its homo-centric hierarchy were falling into disarray. Nature was rising to the fore.

Not without a fight. The Western Enlightenment may have brought astounding discoveries that advanced the causes of man, but those discoveries also brought an arrogance that cast off all vestiges of natural law for conquests and whatever laws were deemed useful to abet them. The Christian church, bent on a conquest of its own, played its own role here, per one historian, "destroying by whip, noose and fire" the bond between native peoples and their environment.<sup>70</sup> To non-secular philosophers such as Thomas Hobbes, life in nature ("nasty, brutish and short") was to be abhorred.<sup>71</sup> To Sir Francis Bacon, intellectual father of the British Royal Society, all things in the world were "going about man's business and not their own."<sup>72</sup> Once we had "penetrated" nature's

Lord from the earth, you great sea creatures and all ocean depths . . . you mountains and all hills, fruit trees and all cedars . . . wild animals and all cattle, small creatures and flying birds.").

<sup>64.</sup> NASH, *supra* note \* (citing NICHOLAS COPERNICUS, ON THE REVOLUTIONS OF THE HEAVENLY SPHERES (1543)).

<sup>65.</sup> DAVA SOBEL, GALILEO'S DAUGHTER (1999).

<sup>66.</sup> CLIFFORD DOBELL, ANTHONY VON LEEUWENHOECK AND HIS "LITTLE ANIMALS" (Hartcourt, Brace & Co. 1958) (1932).

<sup>67.</sup> MARTIN J.S. RUDWICK, THE MEANING OF FOSSILS (2d ed., 1985).

<sup>68.</sup> CHARLES DARWIN, ON THE ORIGIN OF SPECIES (150th Anniversary ed., Penguin Grp. (USA), Inc., 2003) (1859).

<sup>69.</sup> DARWIN, THE DESCENT OF MAN AND SELECTION IN RELATION TO SEX 85 (Princeton Univ. Press 1981) (1871).

<sup>70.</sup> Eduardo Galeano, *La naturaleza no es muda*, PÁGINA/12 (Apr. 27, 2008), https://www.pagina12.com.ar/diario/contratapa/13-103148-2008-04-27.html. He continues, "The communion between nature and the people was abolished in the name of God, and then in the name of civilization. In all the Americas, and the world, we continue to pay for the consequences of this obligatory divorce." *Id.* 

<sup>71.</sup> THOMAS HOBBES, LEVIATHAN ch. 13 (New York, P.F. Collier & Son Co. 1909-14) (1651), *reprinted in* BARTLEBY.COM (2001), http://www.bartleby.com/34/5/13.html.

<sup>72.</sup> BACON, supra note 46.

secrets, he enthused, man would be able to "break her to human service, to make her his slave."<sup>73</sup> The celebrated scientist and philosopher Rene Descartes ("I think, therefore I am"), whose experiments included nailing a dog's paws to a plank to test its reactions, took Bacon a step further: other species were incapable of thought or feelings, and therefore (rather conveniently for human exploitation) could not be harmed.<sup>74</sup> Determined men, defending their throne. Withal, one gets the impression that these savants were more than a little nervous about the morality and even the supporting principles of their cosmos.

Which would have ended the matter but for the rise of other voices, the stature of Michel de Montaigne, Leonardo da Vinci, and John Locke who brought the arguments of Pythagoras and others back from limbo.<sup>75</sup> To Jeremy Bentham, speaking in-depth on the rights of animals, "The question is not whether they can reason, nor can they talk, but, can they Suffer."<sup>76</sup> Margaret Cavendish, scientist, poet, and Duchess of Newcastle-on-Tyne, wrote on animal suffering as well and authored a popular satire called *The Blazing World*, in which the world was occupied by talking animals living as equals.<sup>77</sup> These impulses grew over time, leading ultimately to societies for the protection of animals in England (1824) and the United States (1866) and to one of the most enduring social movements in modern time.<sup>78</sup> Focused primarily on the treatment of individual animals (the endangerment of species and ecosystems not yet in the public eye) animal welfare drew from the

<sup>73.</sup> KATHRYN SHEVELOW, FOR THE LOVE OF ANIMALS: THE RISE OF THE ANIMAL PROTECTION MOVEMENT 23 (2008).

<sup>74.</sup> NASH, *supra* note \*, at 17-18 (citing RENE DESCARTES, THE METHOD, MEDITATIONS AND PHILOSOPHY OF DESCARTES 170ff (1901)).

<sup>75.</sup> *Id*; Kelch, *supra* note 57, at 55 (describing da Vinci's passion and that of Montaigne as "the first person since Roman times to condemn cruelty to animals as a wrong"; perhaps an overstatement, but an indicator of the authority behind the sea change in attitude toward other beings).

<sup>76.</sup> JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OR MORALS AND LEGISLATION (Laurence J. LaFleur ed., Hafner Pub. Co. 1948) (1789).

<sup>77.</sup> MARGARET CAVENDISH, THE DESCRIPTION OF A NEW WORLD, CALLED THE BLAZING-WORLD (Sara Mendelson ed., Penguin Classics 2016) (1668).

<sup>78.</sup> See Recarte, supra note 56 (describing growth and power of the Animal Rights movement today: "Ten million strong in the United States and among the fastest-growing progressive movements in America"). Recent achievements involving elephants and orcas include the closing of circuses and SeaWorld, Sandra Pedicini, As Ringling Circus Shuts Down, SeaWorld Faces Similar Challenges, ORLANDO SENTINEL (Jan. 17, 2017), http://www.orlando sentinel.com/business/tourism/os-ringling-closing-seaworld-20170117-story.html, and an increase in cage-free poultry, Karen Brulliard, How Eggs Became a Victory for the Animal Welfare Movement, WASH. POST (Aug. 6, 2016), https://www.washingtonpost.com/news/animalia/wp/2016/08/06/how-eggs-became-a-victory-for-the-animal-welfare-movement-if-not-necessarily-for-hens/?utm term=.649e2846b923.

immediate, visceral connection between humans and the life around them. Opening the door for the rights of nature to come.

The opening was inevitable. If, as Locke and others stated, *all* creatures of God were entitled to humane treatment,<sup>79</sup> then this would include, going back to St. Francis of Assisi, wild animals as well. What would the difference be? Animism, Taoism, Transcendentalism, and related philosophies began to posit, well in advance of the times, that a single force permeated everything on earth, making it in effect a single, living organism.<sup>80</sup> The scientist and philosopher Baruch Spinoza had drawn the same conclusion from simple observation. When living things die, he wrote, they go back to earth and become something else, the community of life knew no bounds.<sup>81</sup> The poet Alexander Pope captured this concept in a single phrase: "[We] [a]re all part of one stupendous whole, whose body Nature is, and God the soul."<sup>82</sup> It was, of course, (and remains) bitter news to swallow. The world was not all about humans after all.

Science, for its part, did not end with Darwin and evolution. It was only beginning to debunk the cherished tenets of anthropomorphism. In experiments ranging from plants and insects to wolves and primates we have since learned that many species, indeed entire genera, have cognitive faculties, learn quickly (coyotes), grieve (elephants), do math (primates), solve complex problems (crows), exhibit concern for other species (porpoise), play tricks on each other (cats), distinguish among human symbols (even bees), describe things to each other (even prairie dogs), teach each other (even fish), use tools (even ants), create art (even fish, again), and communicate with each other (even trees).<sup>83</sup>

<sup>79.</sup> JOHN LOCKE, THE EDUCATIONAL WRITINGS OF JOHN LOCKE 225-26 (James L. Axtell ed., Cambridge Univ. Press 1968).

<sup>80.</sup> For Animism, see ENCYCLOPEDIA OF RELIGION AND NATURE 78 (Bron Taylor ed., 2005); for Transcendentalism, see Russel Goodmand, *Transcendentalism, in* STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta et al. eds., Summer 2017 ed. 2017); for Taoism, see PASSERMORE, *supra* note 44, at 7-8 (quoting Chuang Tsu: "When humans interfere with the Tao, the sky becomes filthy, the equilibrium crumbles, creators become extinct."). These philosophies have since been incorporated into the Gaia movement, whose principles are remarkably similar. *See Gaia Hypothesis*, ENV'T & ECOLOGY, http://environment-ecology.com/gaia/70-gaia-hypothesis.html#Gaia\_hypothesis\_in\_ecology (last visited Dec. 15, 2017).

<sup>81.</sup> George Sessions, *Spinoza and Jeffers on Man in Nature*, 20 INQUIRY 481 *passim* (1977).

<sup>82.</sup> ALEXANDER POPE, AN ESSAY ON MAN: EPISTLE I (1733), *reprinted in* POETRY FOUNDATION (2018), https://www.poetryfoundation.org/poems/44899/an-essay-on-man-epistle-i.

<sup>83.</sup> For recent sources to some of the lesser-known "intelligences" on this list, most within the last year, see Ferris Jabr, *Can Prairie Dogs Talk*, N.Y. TIMES (May 12, 2017), https://www.nytimes.com/2017/05/12/magazine/can-prairie-dogs-talk.html; James Gould, *Can Honey Bees Create Cognitive Maps, in* THE COGNITIVE ANIMAL: EMPIRICAL AND THEORETICAL PERSPECTIVES ON ANIMAL COGNITION 41, 43-44 (Mark Bekoff et al. eds., 2002); JONATHAN

naturalist Enoch Mills once described a family of grizzly bears that came out of the woods each evening to sit and view the sunset.<sup>84</sup> We look at them and think, "That's so *human*!" Yet we do not pause to consider, "Is the reverse also true?" Nor do we consider that it is their very *differences* from humans that make them so vital to the world.<sup>85</sup>

Now what?

#### III. THE AWAKENING LAW

"We can scarcely be warranted in supposing that all the productive powers of [the earth's] surface can be made subservient to the use of man, in exclusion of all the plants and animals not entering into his stock of subsistence . . . it is difficult to believe that it lies with him, so to remodel the work of nature as it would be remodeled, by a destruction, not of individuals, but of entire species."

—James Madison (1751-1836)<sup>86</sup>

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BALCOMBE, WHAT A FISH KNOWS: THE INNER LIVES OF OUR UNDERWATER COUSINS (2016); SY MONTGOMERY, THE SOUL OF AN OCTOPUS: A SURPRISING EXPLORATION INTO THE WONDER OF CONSCIOUSNESS (2016); Kata Karath, Ants Craft Tiny Sponges To Dip into Honey and Carry It Home, NEW SCIENTIST (Dec. 30, 2016), https://www.newscientist.com/article/2116641-antscraft-tiny-sponges-to-dip-into-honey-and-carry-it-home/; Suzanne Simard, Presentation at the TEDSummit: How Trees Talk to Each Other (June 2016) (video and transcript available at https://www.ted.com/talks/suzanne simard how trees talk to each other/transcript?language= en); PETER WOHLLEBEN, THE HIDDEN LIFE OF TREES: WHAT THEY FEEL, HOW THEY COMMUNICATE-DISCOVERIES FROM A SECRET WORLD (2016); THOMAS G. KELCH, GLOBALIZATION AND ANIMAL LAW: COMPARATIVE LAW, INTERNATIONAL LAW AND INTERNATIONAL TRADE 38-64 (survey of the emerging science of animal sentience and emotional capacity). For late-breaking discoveries including "a sensitivity to inequity" (fairness) in wolves and dogs, see Sensitivity to Inequity Is in Wolves' and Dogs' Blood, SCIENCE DAILY (June 8, 2017), https://www.sciencedaily.com/releases/2017/06/170608123638.htm; and robust "numerical reasoning" in baboons, see Steven Tipadiosi & Jessica F. Cantman, True Numerical Cognition in the Wild, 28(4) PHYSIOLOGICAL Sci. 462 (2017).

<sup>84.</sup> ENOS A. MILLS, THE GRIZZLY: OUR GREATEST WILD ANIMAL (1919).

<sup>85.</sup> That these differences produce a steady stream of medicines, therapies, discoveries in genetics, advances in technology, and inspiration for the arts is, by now, a commonplace. *See* Tenn. Valley Authority (TVA) v. Hill, 437 U.S. 153, 178 (1978); Nat'l Assn. of Homebuilders v. Babbit, 130 F. 3d 1041, 1052-54 (D.C. Cir. 1997) (opinion of Judge Wald on biodiversity); *Nat'l Assn. of Homebuilders*, 130 F. 3d at 1058-59 (opinion of Judge Henderson on ecosystems). That they also produce a deep respect in those who study them, and simple wonder for things whose values are beyond calculation, is also a commonplace and captured in, among thousands of sources, D.H. Lawrence's classic *Fish Poem* ("Loveless, and so lively! Born before God was love, Or life knew love. Beautifully beforehand with it all."), and Henry Beston's *The Outermost House* ("They are not brethren, they are not underlings; they are other nations, caught with ourselves in the net of life and time, fellow prisoners of the splendor and travail of the earth."). A fusion of anthropocentric and ecocentric values down to their core.

<sup>86.</sup> James Madison, Address to Agricultural Society of Albermarle, Virginia (May 12, 1818), https://founders.archives.gov/documents/Madison/04-01-02-0244.

"The last word in ignorance is the man who says of an animal or plant, "What good is it?" If the land mechanism as a whole is good, then every part is good, whether we understand it or not."

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-Aldo Leopold (1887-1948)<sup>87</sup>

Meanwhile, another revolution was brewing with deep tap roots of its own. From earliest records cultures east and west found kinship in nature that demanded human observance and protection. Many still do. Brother wildlife, mother waters, sacred mountains, the trees of the Acropolis, the shrines of Shinto, the elevated creatures of Hinduism, the river of Siddhartha, the Russian forests consecrated outright in religious ceremonies, the more than 400 sacred sites of Ghana ... these phenomena were global and enforced by strict codes of their own.<sup>88</sup> Spirituality-based nature law.

Western conservation policy rose from more pragmatic roots, took seed well before the birth of Christ, and became a self-imposed restraint on empire. Early Hawaiian cultures managed coral reef fisheries on a sustained yield basis as did the Dutch for herring, limiting the take by seasons.<sup>89</sup> Spain guarded the forests of its widely flung empire in order to equip ships for its navy.<sup>90</sup> So did Peter the Great, who also preserved the great forests on his western border as a barrier to (recurring) invasion.<sup>91</sup> The Canadian Cree and other Native American cultures came to regulate the take of game and to prohibit wasteful practices altogether.<sup>92</sup> All of

<sup>87.</sup> ALDO LEOPOLD, ROUND RIVER: THE JOURNALS OF ALDO LEOPOLD 146 (1993).

<sup>88.</sup> See Oliver A. Houck, From Sacred Places: The Nikko Taro and the Taj Mahal, 31 HAW. L. REV. 369, 373-74 (2009) and sources cited therein (describing the sacred nature of natural areas in many cultures).

<sup>89.</sup> See Ancient Civilizations Reveal Ways To Manage Fisheries for Sustainability, SCIENCEDAILY (Mar. 23, 2012), https://www.sciencedaily.com/releases/2012/03/120323094004. htm; *The Netherlands from 1600 to the 1820s*, WORLD ECON., http://www.theworldeconomy.org/impact/The\_Netherlands\_from\_1600\_to\_the\_1820s.html (last visited Dec. 22, 2017).

<sup>90.</sup> MARITES DAÑGUILAN VITUG, POWER FROM THE FOREST: THE POLITICS OF LOGGING 11, 14 (1993) ("So enamored were the Spanish colonizers of the Philippines' lush tropical forests that one wrote, 'At least 210 ships can be built every year in these island, and by taking care of their many forests, even if a hundred ships were built now, there would be enough timber left to construct every year the 100 mentioned.").

<sup>91.</sup> V.K. TEPLYAKOV ET AL., A HISTORY OF RUSSIAN FORESTRY AND ITS LEADERS 1, 2 (1998) (quoting Peter the Great: "I know you think that I will not be alive to see these oaks mature. It is true, but you are a fool. I do it so that future generations will build ships from these trees."). At the same time, and in eras long before Peter the Great, Russians were protecting the forests as sacred. *Id.* at 1. A not unusual combination of the pragmatic and the spiritual, the anthropomorphic and the ecocentric, found throughout this Article and the entire field of conservation.

<sup>92.</sup> Harvey A. Feit, *Hunting and the Quest for Power: The Hames Bay Cree and Whiteman Development, in* NATIVE PEOPLES: THE CANADIAN EXPERIENCE 101-02 (2004).

this culminated in modern resource management schemes that are often challenged by the very users who benefit most from them, but are uniformly predicated on human use. We were not doing this for nature, we were doing it for ourselves.

Stage two came with a new revelation: we were not only at risk of consuming the natural world, but of contaminating it to death. Including ourselves. The evidence was everywhere-such as the Great Smog of London, the deaths of Lakes Erie and Baikal, rivers literally on fire, and the rise in airborne diseases, waterborne diseases, and cancers from substances with complex molecular structures and unpronounceable names,<sup>93</sup> the precursors to Rachel Carson's *Silent Spring*.<sup>94</sup> A flurry of pollution control laws followed in the United States and abroad seeking to limit discharges to acceptable levels and eliminate the worst of them altogether.<sup>95</sup> Where implemented, over long wars of resistance, these approaches have had positive results. Discharges are down, air is breathable, toxins go to waste dumps, and waters have fish in them again.<sup>96</sup> On the other hand, few discharges have been totally eliminated, even the most deleterious ones, and such intractable challenges as endocrine disruptors, pesticides, ocean pollution, and the enormity of climate change remain. However, one sees this glass, as half-empty or half-full, it has all come down to protecting homo sapiens.

Stage three arrived slowly with the addition of laws that targeted nature protection more directly, setting the table for legal rights *to* protection as that day arrives. As seen above, first of these concerned animal welfare and resulted in requirements for humane treatment of domestic and captive species.<sup>97</sup> Commercial harvest of wild species, long based on sustained yield principles, began to yield to a broader ethic as well. Perhaps the most signal example is whales, the object of a slaughter so rapacious that whaling nations agreed as early as 1931 to a

<sup>93.</sup> Oliver A. Houck, *The Water, the Trees, and the Land: Three Nearly Forgotten Cases That Changed the American Landscape,* 70 TUL. L. REV. 2279 (1996) and sources cited therein.

<sup>94.</sup> RACHEL CARSON, SILENT SPRING (1962). Astonishingly, this slender volume, factfilled and analytical, topped the New York Times best-seller list for thirty-one weeks in a row. *Power in the Pen*, POP HIST. DIG, http://www.pophistorydig.com/topics/tag/silent-spring-bestseller/ (last visited Dec. 15, 2017).

<sup>95.</sup> See, e.g., Clean Water Act, 33 U.S.C. § 1251 et seq. (1972); Clean Air Act, 42 U.S.C. § 7401 et seq. (1970); Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq. (1976); Toxic Substances Control Act, 15 U.S.C. § 2601 (1976).

<sup>96.</sup> See Lisa Jackson, Administrator, Envtl. Prot. Agency, Remarks at the 2011 Good Jobs Green Jobs Conference, As Prepared (Feb. 8, 2011), https://archive.epa.gov/epapages/newsroom\_archive/speeches/906ad6a150ffd01185257831005dc69a.html.

<sup>97.</sup> See supra note 78; see also Thomas A. Kelch, A Short History of (Mostly) Western Animal Law: Part II, 19 ANIMAL L. REV. 347 (2002).

convention imposing (limited) restraints in order to restore stocks.<sup>98</sup> From this humble origin, entirely homo-centric, new principles slowly emerged, including safeguarding these remarkable creatures for future generations as, in the words of a U.S. representative, "the common heritage of mankind."<sup>99</sup> In time, the convention began banning harvests even of healthy stocks (to the angst of some member states), and from there to a moratorium on *all* whaling that has been maintained since 1990 and upheld by the International Court of Justice as recently as this year.<sup>100</sup> A leap in a few decades from the convention's original purpose, the perpetuation of whaling, to the species' entitlement to *be*. Why else would we be doing this if not for the whales themselves?

U.S. law for marine mammals made this leap more quickly via a statute that—in contrast to the whaling convention—began with a moratorium on the take of any marine animal, including its "harassment" in any way.<sup>101</sup> "Take" waivers were available only if they could be accomplished humanely, with negligible impact on even small populations . . .<sup>102</sup> and without damage to the "health and stability of the ecosystem,"<sup>103</sup> a phrase that implicates nature as a whole. (U.S. fishery laws have since been modified to require the maintenance of "biodiversity," tantamount to the same thing.<sup>104</sup>) Although the rationales behind marine mammal protection included scientific study and (very) limited commercial use (e.g., aquariums), humane interests were dominant and have kept waivers to a minimum. Like whales, marine mammals are protected for themselves.

Broadening the lens, a seemingly random assortment of species including the African Elephant,<sup>105</sup> wild horses and burros,<sup>106</sup> and even predators<sup>107</sup> are directly protected by American laws responding to particular threats, each based on the welfare of the creatures at stake. The apex of this genre came with the Endangered Species Act (ESA), a

<sup>98.</sup> International Convention for the Regulation of Whaling, Dec. 2, 1946, 62 Stat. 1716, U.N.T.S. 72 (entered into force Nov. 10, 1948), https://www.asil.org/eisil/international-convention-regulation-whaling (last visited Dec. 15, 2017).

<sup>99.</sup> Anthony D'Amato and Sudhir K. Chopra, *Whales: Their Emerging Right to Life*, 85 AM. J. INT'L L. 21 (1991).

<sup>100.</sup> See id.; Whaling in the Antarctic (Australia v. Japan: New Zealand intervening), I.C.J. Reports 2014 at 226.

<sup>101.</sup> See Marine Mammal Protection Act, 16 U.S.C. § 1371 (1972).

<sup>102.</sup> See id. § 1373(1).

<sup>103.</sup> See id. § 1373(2), (3).

<sup>104.</sup> Sustainable Fisheries Act, 110 Stat. 3559 § 109(e)(4)(A)(i) (1996).

<sup>105.</sup> African Elephant Conservation Act, 16 U.S.C. § 4203 et seq. (1988).

<sup>106.</sup> Wild and Free-Roaming Horses and Burros Act, 16 U.S.C. § 1331 et seq. (1971).

<sup>107.</sup> Regulations of the Board of Game; Management Requirements; 16 A.S. 5 § 255

<sup>(2011);</sup> West v. State Bd. of Games, 248 P.3d 689, 691 (Alaska 2010).

statute so bold that when this author first described it to colleagues in Russia, the delegation burst out in laughter and disbelief. The Act began with a ban—no jeopardy to any species threatened with extinction—and ended the same way, with no space at all for exceptions.<sup>108</sup> That it meant what it said was affirmed by the U.S. Supreme Court in a case pitting a major federal water project against a tiny fish, only recently discovered and with no known role in its ecosystem.<sup>109</sup> The fish won. A decade later the Court approved the extension of species habitat protections to private actors as well,<sup>110</sup> another illustration of the pull of wildlife on the human mind, and including judicial mind.

Perhaps the ESA's most important achievement has not been in staving off the extinction of particular species (which it has in many cases accomplished), but in moving beyond to the land and waterscapes they occupy through permit conditions, habitat conservation plans, and candidate conservation agreements that avoid endangerment in the first place, which is of course the point.<sup>111</sup> Large swaths of California, Washington, and other states are now part of these programs, open to development but with a strong bottom-line.<sup>112</sup> In both its language and

<sup>108.</sup> Endangered Species Act, 87 Stat. 884 (1973); Tenn. Valley Authority (TVA) v. Hill, 437 U.S. 153, 175-76 (1978). While the Act was subsequently amended to allow a narrow exception to its prohibitions, this exception has been exercised but once in the last forty years and rescinded by the following administration. *See* Oliver A. Houck, *The Endangered Species Act and Its Implementation by the U.S. Departments of Interior and Commerce*, 64 U. COLO. L. REV. 229 (1993).

<sup>109.</sup> *TVA*, 437 U.S. at 210-11. For the saga of this case, see Zygmunt J.B. Plater, The SNAIL DARTER AND THE DAM: HOW PORK-BARREL POLITICS ENDANGERED A LITTLE FISH AND KILLED A RIVER (2013).

<sup>110.</sup> Babbit v. Sweet Home Chap. Comm. for Ore., 515 U.S. 687, 735 (1996) (approving application of the Act's "take" protections to habitat modification by state and private actors).

<sup>111. 16</sup> U.S.C. § 1536(h)(1)(a)(2)(A)(i) (1978) (habitat conservation plans); Robert Bonnie, *Endangered Species Mitigation Banking: Promoting Recovery Through Habitat Conservation Planning Under the Endangered Species Act*, 240 SCI. TOTAL ENV'T 11-19 (1999); Martha F. Phelps, *Candidate Conservation Agreements Under the Endangered Species Act: Prospects and Perils of an Administrative Experiment*, 25 B.C. ENVTL. AFF. L. REV. 175 (1997), http://lawdigitalcommons.bc.edu/ealr/vol25/iss1/5. For a description of a plan incorporating each of these mechanisms, see Jodi Peterson, *The Endangered Species Act's Biggest Experiment*, HIGH COUNTRY NEWS (Aug. 17, 2015), http://www.hcn.org/issues/47.14/biggest-experiment-endangered-species-act-sage-grouse (multiagency and multistate Sage Grouse conservation plan). *But see* Scott Streater, *Sage Grouse: Interior Panel Echoed Industry Wish List in Revising Plans, the Roller-Coaster of Contemporary Environmental Law*, E&E NEWS PM (Aug. 17, 2017), https://www.eenews.net/eenewspm/2017/08/17/stories/1060058915 (recent relaxation of plan).

<sup>112.</sup> See Natural Community Conservation Planning (NCCP), CAL. DEP'T FISH & WILDLIFE, https://www.wildlife.ca.gov/conservation/planning/nccp (last visited Dec. 22, 2017) (describing 14 approved, multi-species habitat plans covering more than 7 million acres, and another 400 "special status" plans pending); WASH. DEP'T OF NAT. RES., FOREST PRACTICES HABITAT CONSERVATION PLAN (2005), https://www.dnr.wa.gov/programs-and-services/forest-practices/habitat-conservation-plan (describing watershed plan covering 60,000

effect, the Act is about saving species and "the habitats on which they depend."<sup>113</sup> Nature, for nature's sake.

U.S. law also moved toward ecosystems more directly, starting national parks and wildlife refuges that, in the face of pressing demands for human use, are to be managed for protection on the resources themselves.<sup>114</sup> Yet larger swaths of the public estate (e.g., forests, grazing lands) are under multiple-use regimes embracing mining, oil drilling, and all manner of human activity, but with limits imposed through "indicator species" whose numbers reflect the health of the landscape as a whole.<sup>115</sup> The summit of U.S. landscape systems is the Wilderness Act, which, after a 20-year struggle, imposed an unprecedented "hands-off" approach to areas "where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."<sup>116</sup> The pure poetry of this language reflects an ecocentric, humans as strangers who do not occupy, even linger.<sup>117</sup> The running gun-

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miles of stream habitat over 9.3 million acres of public and private lands). Originally driven by the requirements of the Endangered Species Act, each of these state initiatives has received considerable support from both affected commodity industries and environmental organizations.

<sup>113.</sup> Endangered Species Act, 16 U.S.C. § 1532(19); 50 C.F.R § 17.3 (2006).

<sup>114.</sup> *See* Fund for Animals v. Norton, 294 F. Supp. 2d 92 (D.D.C. 2003) ("NPS [the National Park Service] is bound by a conservation mandate, and that mandate trumps all other considerations."); National Wildlife Refuge System Improvement Act, 111 Stat. 1252, § 4.2 (1997) (prioritizing waterfowl conservation over other competing uses).

<sup>115.</sup> The use of sensitive species as a baseline for the management of ecosystems rose from the diversity provisions of the National Forest Management Act (NMFA), 16 U.S.C. § 1604,  $\S$  6(g)(e)(1), and led to regulations requiring the maintenance of "viable populations" of these species "well distributed across the planning area. 36 C.F.R § 219.19 (2017). This approach was later adopted by the Bureau of Land Management requiring districts to "sustain native populations and communities," 43 CFR § 4180.2(3)(10)(1995), in effect a vegetative species bottom line. The experience of these two agencies, which together manage over one fifth of the continental United States, is described in Oliver Houck, On the Law of Biodiversity and Ecosystem Management, 81 MINN. L. REV. 869 (1998). For a view of "indicator" species in action, see id. at 899-909, and A. ROSS KIESTER & CAROL ECKHARDT, PAC. NW. RESEARCH STATION, REVIEW OF WILDLIFE MANAGEMENT AND CONSERVATION BIOLOGY ON THE TONGASS NATIONAL FOREST: A SYNTHESIS WITH RECOMMENDATIONS 70-71 (1994) (safeguarding habitat for selected Tongass species before determining allowable cut). In a word, the indicator species approach has been effective. Additional layers of protection for public lands are provided in an "area of critical environmental concern" designations under the Federal Land Policy and Management Act, 43 U.S.C §§ 1701, 1711(a), and unsuitability [for commodity uses] identifications under NFMA, 16 U.S.C. § 1604(g)(6)(k). While neither has been used extensively, the subsequent Forest Service Roadless Rule, predicated overtly on protecting "biodiversity and the long-term survival of at-risk species" placed 58.4 million acres outside the reach of commodity development. See also U.S. Fish and Wildlife Service, Special Areas; Roadless Area Conservation, 66 Fed. Reg. 3244, 3245 (Jan. 12, 2001) (to be codified at 36 C.F.R. pt. 294); Kootenai Tribe of Idaho v. Veneman, 313 F.3d 1094 (9th Cir. 2002) (approving the Rule). All of which mirrors the rights of ecosystems themselves.

<sup>116.</sup> Wilderness Act, 16 U.S.C. § 1131 2(c) (2008).

<sup>117.</sup> Id.

battles today in America over these laws, and above all, over wilderness and endangered species, indicate, paradoxically, both the grip of nature on the human psyche and the antithetical difficulty that Americans have in giving it more than an inch.

Surrounding these laws, one finds a penumbra of others targeted to the protection of particular environments (e.g., wetlands)<sup>118</sup> and to their restoration if damaged by, *inter alia*, oil spills, toxic wastes, and coal mining.<sup>119</sup> Both the purposes and the remedies of these laws are openly ecocentric: put nature back. U.S. water programs follow suit with pollution controls and instream-flow requirements gauged to preserve all aquatic life.<sup>120</sup> Many of these programs work proactively, avoiding harm, while others come after the fact, requiring reclamation. From here it is but a small conceptual step to apply this duty to restore to all disturbed environments and to all actors, public and private, as the logical and concomitant price of development.<sup>121</sup> From nature's point of view it is repairing the harm that matters.

Summing up the U.S. experience, it has been quintessentially American: ad hoc, unplanned (planning at any level meets fear and loathing), and the product of resource-specific initiatives that have taken on lives of their own. Proposals to protect biodiversity more broadly via

<sup>118. 33</sup> U.S.C. § 1344; 33 C.F.R. § 332.1 (2008) (aquatic environments).

<sup>119.</sup> *See* Oil Pollution Act, 33 U.S.C. § 2706(d)(1)(A), Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9607(a)(4)(A) (2002), Surface Mining Control and Reclamation Act, 30 U.S.C. §§ 1257(d), 1258 (1977).

<sup>120. 33</sup> U.S.C. § 1314(a)(1)&(2) (2002); see Oliver A. Houck, *The Regulation of Toxic Pollutants Under the Clean Water Act*, 21 ELR 10528 (1991) (water pollution standards to protect aquatic life); UNIV. OF COLO. BOULDER. NAT. RES. LAW CTR., INSTREAM FLOW PROTECTION IN THE WEST (Lawrence J. MacDonnell, Teresa A. Rice & Steven J. Shupe eds., 1993), http://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1069&context=books\_reports\_ studies (water quality standards to protect aquatic life); Scott W. Reed, *Should Rivers Have Running? Toward Extension of the Reserved Rights Doctrine To Include Minimum Stream Flows*, 12 IDAHO L. REV. 153 (1975-1976).

<sup>121.</sup> For one such proposal, see Oliver A Houck, Opinion Editorial, *From Fields to Fieldstone; It's Time to Tax Real Estate Developers*, WASH. POST, Dec. 24, 1989 (pointing out the anomaly of demanding compensation for industrial accidents but not for intentional destruction) ("all the hazardous waste sites known and yet to be found, all the oil and gas sites developed and yet to be explored, will not destroy a fraction of the natural resources that we will consume by in an ever-widening assault of building sites west from River road, north toward Fredrick, to Front Royal and beyond"). Brazil has already moved forward on this front. *See* Michael Kepp, *Brazil Issues New Rule on Compensation Firms Must Pay for Environmental Impact*, 29 BNA INT'L. ENV. REP. 201, 201 (2006); *see also* similar proposal by Obama Administration as mitigation, Corbin Huir, *Obama Overhauls Process for Offsetting Environmental Harm*, E&E NEWS: GREENWIRE (Nov. 3, 2015), https://www.eenews.net/stories/1060027374.

constitutional amendment or legislation have foundered,<sup>122</sup> however, and the mere mention of an endangered ecosystems act draws scornful responses (including, quite recently, "back to the Stone Age" and "Hell no!").<sup>123</sup> We are stuck on piecemeal. We are also stuck on a Great Chain of Being of our own, favoring those species we think most resemble us and downgrading the rest. While this approach makes political sense, it risks losing life systems that support everything else on earth. (Where, one may recall, does oxygen come from?) The ineluctable fact is that the earth could more easily dispense with humans than anything else in the chain.<sup>124</sup>

All of this said, one may fairly conclude from this that the United States, nevertheless, is farther along toward legal rights in nature that it knows. Without mentioning the name, it already recognizes and enforces the entitlement of all living things to exist and has pioneered significant instruments toward this end including impact assessment, citizen suits, and judicial review. In the meantime, it has also launched major restoration projects for mid-western prairies, southern pine forests, and ecosystems as large as the Everglades, Gulf Coast wetlands, and the Chesapeake Bay.<sup>125</sup> These are all elements of the rights of nature and in a

<sup>122.</sup> Rodger Schlickheisen, *Protecting Biodiversity For Future Generations: An Argument for a Constitutional Amendment*, 8 TUL. ENVTL. L.J. 181 *passim* (1994). For proposed legislation, see National Biodiversity Conservation and Environmental Research Act, H.R. 585, 102d Cong., 1st Sess. (1991) (bill reported out from committee but not taken up by the full House). *See also* Julie B. Block, *Preserving Biological Diversity in the United States; The Case for Moving to an Ecosystems Approach To Protect the Nation's Wealth*, 10 PACE ENVTL. L. REV. 175, 204 n.152 (1992). Creation of a Biological Survey simply to assess these resources met with resistance from landowners and development agencies, then outright hostility from Congress, and was abandoned several years later. *See* Frederic H. Wagner, *Whatever Happened to the National Biological Survey*, 49 BIOSCIENCE 3 *passim* (Mar. 1999).

<sup>123.</sup> Mike Houck, Letter to the Editor, *Environment: How About an 'Endangered Ecosystems Act'?*, OREGONIAN (Dec. 27, 2014), http://www.oregonlive.com/opinion/index.ssf/2014/12/environment\_how\_about\_an\_endan.html, and comments in response.

<sup>124.</sup> See M. Lynne Corn, *The Listing of a Species: Legal Definitions and Biological Realities, reprinted in* NATURAL RESOURCES: ISSUES AND OUTLOOK 127, 127-32 (A.M. Babkina ed., 2001) (noting the slighted protections for plants and invertebrates that drive the planet). For a humorous treatment of this phenomenon, see Diane Brooks Pleninger, *Interview with a Fungus,* ECONOMIST (Nov. 20, 2003), http://www.economist.com/node/2187789 (humans as a failed experiment from a fungal point of view).

<sup>125.</sup> See Comprehensive Everglades Restoration Plan, NAT'L PARK SERV., https://www. nps.gov/ever/learn/nature/cerp.htm (last visited Dec. 22, 2017); LA. COASTAL PROT. & RESTORATION AUTH., LOUISIANA'S COMPREHENSIVE MASTER PLAN FOR A SUSTAINABLE COAST (June 2, 2017), http://coastal.la.gov/wp-content/uploads/2017/04/2017-Coastal-Master-Plan\_ Web-Single-Page\_CFinal-with-Effective-Date-06092017.pdf; *Who We* Are, CHESAPEAKE BAY PROGRAM, https://www.chesapeakebay.net/who (last visited Dec. 22, 2017); Oliver A. Houck, *The Clean Water Act Returns (Again): Part 1, TMDLs and the Chesapeake Bay*, 41 ELR 10208 (2011).

bottom-up fashion, by deed if not in word, the United States is coming on board.

Other countries are following suit, indeed have led the way. As early as 1917 the Russian Federation began the creation of *zapavedniki*, nature preserves in which humans themselves are not allowed to enter save as scientific purposes, creating in effect the largest and most protective wilderness system in the world.<sup>126</sup> For its part, Brazil, hosting one of the largest inventories of rare species on earth, has pledged that all of them will be under conservation management by 2020, and 20% on their way to recovery.<sup>127</sup> Taking a different tack, Germany's constitution has made protection of "the foundations of nature and animals" a national priority, applicable to government agencies, the legislature and the judiciary alike.<sup>128</sup> In so doing, it eschewed language focused on the foundations of "human" life in favor of "nature and animals," an explicit embrace of the ecocentric point of view.<sup>129</sup> This provision has been cited in over 700 cases (including one protecting a rare plant from a major dredging project on the River Elbe),<sup>130</sup> which of course does not include the more numerous acts of compliance that drew no litigation at all.

The European Union, spurred forward by its Wild Birds and Habitat Directives,<sup>131</sup> has approached the same task yet more comprehensively with Natura 2000.<sup>132</sup> Despite the differences of its twenty-eight member countries and the relative paucity of public lands, a network of more than

<sup>126.</sup> DOUGLAS R. WEINER, A LITTLE CORNER OF FREEDOM: RUSSIAN NATURE PROTECTION FROM STALIN TO GORBACHEV (1999).

<sup>127.</sup> See Chris Arsenault, Brazil To Restore Huge Tract of Degraded Land in Largest Pledge of Its Kind, REUTERS (Dec. 5, 2016, 11:45 AM), https://www.reuters.com/article/us-brazil-environment-landrights/brazil-to-restore-huge-tract-of-degraded-land-in-largest-pledge-ofits-kind-idUSKBN13U2B0. But for more recent pullback, see Kepp, *supra* note 121, and then its reversal, *Brazil To Reinstate Protection for Amazon Reserve*, REUTERS (Sept. 25, 2017, 3:55 PM), https://www.reuters.com/article/us-brazil-amazon-mining/brazil-to-reinstate-protection-for-amazon-reserve-idUSKCN1C02VT. The roller-coaster continues.

<sup>128.</sup> GRUNDGESETZ [GG] [BASIC LAW] art. 20-A (Ger.), *translation at* https://www.gesetzeim-internet.de/englisch\_gg/.

<sup>129.</sup> *See* Mauritius Nagelmueller, L.L.M. Article 20a Basic Law—the Right Step on the Way to the Rights of Nature (Oct. 27, 2017) (unpublished Tulane University Rights of Nature Seminar paper) (on file with author) (describing legislative history).

<sup>130.</sup> Id.

<sup>131.</sup> Council Directive 92/43/EEC, of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora, 1992 O.J. (L 206) (EC), http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&rid=1.

<sup>132.</sup> *Natura 2000*, EUR. COMMISSION: ENV'T, http://ec.europa.eu/environment/nature/natura 2000/index\_en.htm (last visited Dec. 22, 2017); *Nature and Biodiversity*, EUR. COMMISSION: ENV'T, http://ec.europa.eu/environment/nature/index\_en.htm (last visited Dec. 22, 2017).

200 protected areas spanning eighty-four "bio-regions" has emerged.<sup>133</sup> They are not wilderness. For the most part they are dotted with towns, roads, and a range of compatible development but managed by member states with a single bottom line: the viability of species and the habitats on which they and humans alike depend.<sup>134</sup> Decisions of the European Court of Justice on challenges to Natura 2000 have been broadly supportive, some obviously written to boost it forward.<sup>135</sup> In a recently completed, two-year "fitness check" (prompted by development interests), the European Commission wound up endorsing the program as well, perhaps influenced by overwhelming support from the public at large (more than 550,000 comments in favor).<sup>136</sup> The pulses of nature in Europe, too, find strong receptors in the human mind.

All of this progress noted, one would be remiss not to recognize that the situation today is precarious. No country on earth has done a more dramatic turnabout on environmental protection than the United States, whose relevant agencies are now both led and staffed by individuals who have spent their professional lives opposing them,<sup>137</sup> even their right to

<sup>133.</sup> The Natura 2000 Biogeographical Regions, EUR. COMMISSION: ENV'T, http://ec. europa.eu/environment/nature/natura2000/biogeog\_regions/ (last visited Dec. 22, 2017); Natura 2000, supra note 132; Nature and Biodiversity, supra note 132.

<sup>134.</sup> This requirement is subject to exception only for overriding national priorities, and even here, only with the approval of the Commission. Council Directive 92/43/EEC, 1992 O.J. (L 206) 92, 94 (EC).

<sup>135.</sup> *See* Commission v. France, Case C-374/98, [2000], E.C.R I-10799. *See generally* Gjenerali Albi, Analytical View of EU Habitat Directive (May 1, 2015) (unpublished article) (on file with author) (analyzing six habitat directives decisions by the European Court of Justice, each affirming the directive).

<sup>136.</sup> *Fitness Check of the Birds and Habitats Directives*, EUR. COMMISSION: ENV'T, http://ec.europa.eu/environment/nature/legislation/fitness\_check/index\_en.htm (last visited Dec. 22, 2017).

<sup>137.</sup> See, for example, EPA Administrator Pruitt who, throughout his six-year tenure as Oklahoma's Attorney General, sued the Agency repeatedly for attempting to regulate mercury, smog, and other forms of pollution. Brady Dennis, Scott Pruitt, Longtime Adversary of EPA, Confirmed To Lead the Agency, WASH. POST (Feb. 17, 2017), https://www.washingtonpost.com/ news/energy-environment/wp/2017/02/17/scott-pruitt-long-time-adversary-of-epa-confirmed-tolead-the-agency/?utm\_term=.69ccb83a3568. The Interior Department fared little better. See Editorial, Trump's Latest Interior Department Pick Is Bursting with Conflicts of Interest and Alternative Facts, L.A. TIMES (May 25, 2017), http://www.latimes.com/opinion/editorials/la-edbernhardt-20170525-story.html; Elizabeth Shogren, Trump's Interior Pick Confounds Conservationists, HIGH COUNTRY NEWS (Dec. 20, 2016), http://www.hcn.org/articles/how-muchof-roosevelt-can-conservationists-expect-of-trumps-new-interior-secretary. For rhetoric. however, the newly nominated Chair of the President's Council on Environmental Quality may take the prize, claiming, inter alia, that carbon dioxide is not a "pollutant," that coal helped end slavery, and describing renewable energy as "unreliable and parasitic." Koch-Funded Texas Denier Tapped for CEQ, CLIMATE NEXUS HOT NEWS, Oct. 16, 2017, at 1. For the industry ties of related and subordinate appointments, see Emily Benson, Meet the Latest Trump Administration Nominees, HIGH COUNTRY NEWS (July 14, 2017), http://www.hcn.org/articles/whos-up-fortrump-administration-positions-this-week, and Elizabeth Bomberg, Environmental Politics in the

exist.<sup>138</sup> Protective regulations are falling like ten-pins, and this is only the beginning.<sup>139</sup> Nowhere in the world can one be confident that nature as we know it today, even in its diminished state, can endure. All of which has fostered proposals to recognize nature's own rights more directly and raised legal questions in turn that we can no longer ignore.

#### IV. NATURE STANDING

"This suit would be more properly labeled as Mineral King v. Morton."

—Justice William O. Douglas, 1972<sup>140</sup>

"If Justice Douglas has his way— O Come not that dreadful day— We'll be sued by lakes and hills Seeking a redress of ills . . . ."

-John Nash, 1972<sup>141</sup>

The legal rights of nature first dawned in America through a case that was not predicated on them at all. In the 1960s, the Sierra Club filed suit against a proposed Disney resort in a high mountain valley called Mineral King, managed by the U.S. Forest Service.<sup>142</sup> The Club claimed several statutory violations, each of them straightforward, but the key question in the case was the Club's standing to sue in the first place, even though the Club was an organization historically dedicated to the protection of the very mountains at issue. In the end, a narrowly divided Supreme Court reasoned its way to deny the Club standing as an organization (an unfortunate mistake) but opened the courthouse door to any individual "adversely affected," even aesthetically, by a government proposal, and this was a bombshell.<sup>143</sup> From here on, the Sierra Club and

*Trump Era: An Early Assessment*, 26 ENVTL. POL. 956 *passim* (2017). Science fared no better. *See* Michael Greshko, *A Running List of How Trump Is Changing the Environment*, NAT'L GEOGRAPHIC (Aug. 7, 2017), http://news.nationalgeographic.com/2017/03/how-trump-is-changing-science-environment/. Few U.S. environmental programs will emerge unscathed.

<sup>138.</sup> See U.S. Department of Energy Administrator, Rick Perry, whose unsuccessful presidential campaign promised to eliminate the Energy Department. *See* James Conca, *Rick Perry's Vow To Destroy the Energy Department Will Now Collide with Reality*, FORBES (Dec. 14, 2016), https://www.forbes.com/sites/jamesconca/2016/12/14/oops-rick-perry-chosen-to-head-energy-department/#6033930e5be3.

<sup>139.</sup> Greshko, supra note 137.

<sup>140.</sup> Sierra Club v. Morton, 405 U.S. 727, 742 (1972) (Douglas, J., dissenting).

<sup>141.</sup> Molly McDonough, *Earth Day 'Reflections' from 1972 ABA Journal Archives*, ABA J. (Apr. 22 2015), http://www.abajournal.com/news/article/earth\_day\_reflections\_from\_1972\_aba\_journal\_archives.

<sup>142.</sup> *Morton*, 405 U.S. at 730. The description that follows is taken from this case. 143. *Id*, at 740.

like groups could sue if they had but a single affected member,<sup>144</sup> leading one observer to call the opinion "a victory disguised as a defeat."<sup>145</sup> Citizen-driven environmental enforcement was off to the races.

This would have ended the matter without mention of nature rights but for two dissenting opinions that embraced the Club's standing.<sup>146</sup> In making his case, Justice Douglas went further to say that nature should be recognized in its own right, the plaintiff on its own.<sup>147</sup> This was new ground. The Sierra Club would not be representing itself, but the threatened valley. The Douglas dissent in turn cited, and was indeed largely motivated by, an equally seminal article by Professor Christopher Stone entitled *Should Trees Have Standing?*, which has become the touchstone in America for all discussion on this issue whether pro, skeptical, or outraged.<sup>148</sup>

Stone's treatise, unsurpassed in the grace of its expression, rested on three legs. He noted, first, that standing and other personal rights had been accorded to corporations, trusts, marine vessels, and a great range of institutions, none of them even biologically alive.<sup>149</sup> He went on to point out that law had evolved to recognize rights in slaves, Jews, women, Native Americans, and others hitherto regarded legally as "objects," if regarded at all, each one over fierce resistance entrenched in the past.<sup>150</sup> He added, last, that the alternative to recognizing these rights placed environmental interests in a conceptual hole,<sup>151</sup> having to defend natural areas like Mineral King against highly lucrative developments because a lone hiker some weekend would dislike seeing it on the horizon. Not a very compelling posture. Perceived as a conflict between two (often-imbalanced) human interests, the most fundamental interest is missing.

Time has solidified Stone's thesis. The range of rights accorded to U.S. corporations and similar business interests now include, *inter alia*, speech, religion, freedom from government searches, and unlimited

<sup>144.</sup> *Id.* at 740-42.

<sup>145.</sup> TOM TURNER, WILD BY LAW (1990) (describing seminal cases of the Sierra Club including Mineral King).

<sup>146.</sup> *Morton*, 405 U.S. at 742-60. The majority rejected organizational standing by the wafer-thin margin of 4-3. *Id.* 

<sup>147.</sup> Id. at 742-55.

<sup>148.</sup> Christopher D. Stone, *Should Trees Have Standing?—Toward Legal Rights For Natural Objects*, 45 S. CAL. L. REV. 450 *passim* (1972).

<sup>149.</sup> *Id.* at 452.

<sup>150.</sup> Id. at 454.

<sup>151.</sup> See id. at 468-73.

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campaign contributions as "persons" under the law.<sup>152</sup> Indeed, the very characterization of these artificial entities as "persons" paves the way for the privileges. At the same time, however, rights-holding has been extended in U.S. law to the mentally disabled, immigrants, and lesbian, gay, and transgender individuals<sup>153</sup> who, in recent centuries, were persecuted for these same proclivities and remain so in many countries today. "The arc of the moral universe is long," Martin Luther King once famously predicted, "but it bends towards justice."<sup>154</sup> Assuming this to be true, or at least that we want it to be true, and given our increased understanding of the interconnection of all life on earth, it would not seem difficult to allow this life, too, its day in court. The threshold barrier is its standing, and it elicits a chorus of criticism that, in the interest of fairness, deserves its moment in the sun.

Perhaps the most primitive reaction is that trees cannot talk, they can't even be *brought* to court, so they will need a human after all, which leads us back to homocentric litigation. Actually, it leads us instead to the conflation of lawyer and client. Lawyers represent ships, estates, and other non-people every day. As they could, just as easily, Mineral King. For these purposes trees don't need tongues, or an IQ of one, for that matter.

A second objection is that trees do not *need* standing either, at least after Sierra v. Morton. How difficult, one might ask, can it be to find a person "adversely affected" by an assault on nature who is eligible to sue? It turns out that on occasion it can be quite difficult.<sup>155</sup> and these occasions can be consequential. The Supreme Court split almost evenly on standing in the seminal climate change case of *Massachusetts v. EPA*. largely over how "affected" the plaintiff must be, how "imminent" the impact must be, and whether the judgment can "redress" the harm.<sup>156</sup> These mini-wars are waged almost daily, in U.S. courtrooms, and lead to inherently subjective judgments; the judges who reject environmentalist

<sup>152.</sup> See First Nat'l Bank of Boston v. Bellotti, 435 U.S. 765 (1978) (corporate advertising); Marshall v. Barlow's Inc., 436 U.S. 307 (1978) (search and seizure); Citizen's United v. FEC, 558 U.S. 310, 356 (2009) (political contributions); Burwell v. Hobby Lobby, 345 S. Ct. 2751 (2014) (religious beliefs).

<sup>153.</sup> See Bowers v. Hardwick, 478 U.S. 186 (1986); Obergefell v. Hodges, 135 S. Ct. 2584 (2015).

<sup>154.</sup> Martin Luther King, Jr., Full Text of "Gospel Messenger, The (1958)", ARCHIVES.ORG, https://archive.org/stream/gospelmessengerv107mors/gospelmessengerv107mors/ \_djvu.txt (last visited Dec. 22, 2017) (quoting Theodore Parker from a sermon in 1853).

<sup>155.</sup> New England Anti-Vivisection Soc'y v. U.S. Fish & Wildlife Serv., 208 F. Supp. 3d 142, 176-77 (D.D.C. Sept. 14, 2016) (denying standing to an animal welfare organization challenging government "sale" of endangered species in violation of the ESA).

<sup>156.</sup> Massachusetts v. EPA, 549 U.S. 497, 536-47 (2007).

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standing are almost invariably the ones who reject their cases on the merits as well.<sup>157</sup> While it must be acknowledged that, with careful pleading and (often) hard argument nature usually does get in the door, but as the ward of a group that has managed to dig up a member sufficiently "affected." Second-class all the way.

This leads to a related argument that Mineral King-as-plaintiff doesn't *add* anything. In practice, of course, such a right would provide this ecosystem automatic standing to challenge activities degrading it, bypassing the obstacles just discussed. But it matters for another reason as well. Sierra v. Morton was about the very existence of a high mountain valley that even the majority characterized as "pristine."<sup>158</sup> What legal recognition also adds is honesty. Yes, weekend hikers may be offended, but this is the real injured party-long after the hikers have gone-this special place and its many interlocking components. Much litigation of this type is driven at bottom by the desire to protect a resource for its own sake, its own right to be. When the Sierra Club brought two later suits on behalf of the Palila and the Northern Spotted Owl (two endangered birds), it placed them first on the plaintiff list and brought stuffed specimens to counsel table, every day.<sup>159</sup> Coincidently, it won both cases. With recognition, minds begin to change.<sup>160</sup>

A more technical objection contends that nothing in U.S. law *permits* nature standing, and this is currently true. Nothing supporting it is found in the Constitution nor the Administrative Procedure Act, which restricts rights to sue to "persons" adversely affected.<sup>161</sup> On the other hand, nothing in the Constitution precludes it either, and the limitation of federal jurisdiction to "cases and controversies" simply requires that

<sup>157.</sup> See Oliver Houck, Standing on the Wrong Foot: A Case for Equal Protection, 58 SYRACUSE L. REV. 1 passim (2007) (tallying Supreme Court voting records on standing); Richard J. Lazarus, Restoring What's Environmental About Environmental Law in the Supreme Court, 47 UCLA L. REV. 703, 726-36 (2000) (tallying the same for opinions on the merits). The coincidence between the two is striking and not surprising. See also Richard L Revesz, Environmental Regulation, Ideology and the D.C. Circuit, 83 VA. L. REV. 1717, 1739, 1739 tbl.2, 1743 (1997) (similar findings).

<sup>158.</sup> See Sierra Club v. Morton, 405 U.S. 727, 728 (1972).

<sup>159.</sup> N. Spotted Owl v. Hodel, 716 F. Supp. 479 (W.D. Wash. 1988); Palila v. Haw. Dep't of Land & Nat. Res., 471 F. Supp. 985 (D. Haw. 1979). *See generally* TURNER, *supra* note 145, at 84-89, 93-97; Telephone Interview with Michael Sherwood, Earth Justice Legal Def. Fund, *cited in* Oliver Houck, *Unfinished Stories*, 73 U. COLO. L. REV. 917 n.309 (2004) (describing stuffed plaintiffs at table).

<sup>160.</sup> Consider the relative persuasiveness of suing for one's right to speak, and one's mother suing because she enjoys the sound of your voice. So it is with the rights of the other living things.

<sup>161.</sup> Administrative Procedure Act, 5 U.S.C. § 702 (2012).

there be a genuine contest here, not a hypothetical.<sup>162</sup> No one can deny that the Mineral King litigation involved real and competing interests. As courts have pointed out, while denying standing (reluctantly) for primates and whales, nothing prevents Congress (or even the courts, when one considers what they have done to enfranchise corporations) from allowing nature, like Disney, to seek redress for its own injuries, in its own name.<sup>163</sup> We are bounded more by our perceptions than by law.

A final fear is that nature standing would "flood the courts" with litigation. It has little foundation. After *Sierra v. Morton*, "person"-based environmental litigation rose in America in direct proportion to the rise of environmental laws themselves,<sup>164</sup> many of which encouraged citizen enforcement as a means of keeping the government on task.<sup>165</sup> The lawsuits (many of which have to be brought by industry and others opposed to environmental requirements) are already here.<sup>166</sup> In practice, the similarly worded environmental rights provisions in the constitutions of other countries—some of which accord standing without restraint—have not produced a flood of any kind. The practical realities of this litigation—lengthy, costly, legally complex, scientifically complex, politically and socially risky, and in some places physically dangerous to those who undertake it—are quite sufficient to keep the traffic down.

Which brings us to a final question: if nature has standing, then who may speak for it and will carry its case in court? Perhaps the best answer is to leave this decision to the countries involved. Whoever has standing in an environmental case of any kind, be it the government or a private party, would be eligible to represent nature as well. U.S. litigants would

<sup>162.</sup> See Muskrat v. United States, 219 U.S. 346, 362 (1911).

<sup>163.</sup> Cetacean Cmty. v. Bush, 386 F.3d 1169 (2004). For one (of many) critiques of the "case and controversy" basis for standing, see Houck, *supra* note 157, also making the case for environmental standing on the basis of equal protection. Under this theory, representation of nature rights could be constitutionally compelled. *See also* Cass Sunstein, *Standing for Animals (with Notes on Animal Rights)*, 47 UCLA L. REV. 1333 *passim* (2000) (concluding "Congress has the authority to grant animals standing to protect their interests in the sense that injured persons might be counted as juridical persons to be protected by human plaintiffs in proceedings on behalf of animals). For a discussion of this opportunity in the law, even existing law, see *Hawksbill Sea Turtle et al. v. FEMA*, 126 F.3d 461 (3d Cir. 2010). For the constitutionality of extending standing to inanimate elements of nature, see Hope Babcock, *A Brook with Legal Rights*, 43 ECOLOGY L.Q. 1 *passim* (2016).

<sup>164.</sup> Environmental litigation rose precipitously with the first major environmental legislation, the National Environmental Policy Act of 1969. National Environmental Policy Act (NEPA) of 1969, Pub. L. No. 91-190, 83 Stat. 852 (1970). *See* RICHARD A. LIROFF, A NATIONAL POLICY FOR THE ENVIRONMENT: NEPA AND ITS AFTERMATH (1976).

<sup>165.</sup> See, e.g., Clean Water Act, 33 U.S.C. § 1365 (2012); Clean Air Act, 42 U.S.C. § 7604 (2012); Endangered Species Act, 16 U.S.C. § 1540(g) (2012).

<sup>166.</sup> Patrick Parenteau, *Citizen Suits Under the Endangered Species Act: Survival of the Fittest*, 10 WIDENER L. REV. 321 *passim* (2004).

have to meet at least the "adversely affected" standard. Stone and Douglas both suggested instead the appointment of guardians with a demonstrated track record in the subject, in effect the "organizational" standing rejected by the Sierra v. Morton majority. The notion makes sense: one would want an entity capable of representing native's interests in full, and seeing it through.<sup>167</sup> Italy follows this model, with eligible organizations certified by longevity, expertise, and geography.<sup>168</sup> England does the same on a more ad hoc basis,<sup>169</sup> and even China is moving to recognize environmental litigation by at least a few state-approved NGOs.<sup>170</sup> Brazil and other countries have independent prosecutors who already undertake environmental litigation against government actions and could assume this portfolio as well.<sup>171</sup> At the far end of the spectrum are those nations that have abandoned standing requirements altogether.<sup>172</sup> Here is a matter in which diversity can be the laboratory for evolution. It seems clear, however, that the "who represents" question is no more an insuperable obstacle than the others. It can be done.

In sum, the legal rights of nature begin by recognizing it as a party in interest. One suspects that opposition to it bottoms on the fear that it necessarily implies a right in nature to *exist*, which has been the bone of contention all along. And to which we must now turn.

#### V. NATURE RIGHTS

"Other animals which, on account of their interests having been neglected by the insensibility of the ancient jurists, stand degraded into the class of things .... The day may come when the rest of animal creation may acquire those rights which never could have been withholden from them but for the hand of tyranny."

—Jeremy Bentham (1748-1842)<sup>173</sup>

<sup>167.</sup> Sierra Club v. Morton, 405 U.S. 727, 752 (1972).

<sup>168.</sup> See Douglas L. Parker, Standing To Litigate "Abstract Social Interests" in the United States and Italy Reexamining "Injury in Fact, "33 COLUM. J. TRANSNAT'L L. 259 passim (1995).

<sup>169.</sup> J. Otton, *R v Inspectorate of Pollution and Another, ex parte Greenpeace Ltd.*, 4 ALL ER 329 *passim* (1994).

<sup>170.</sup> See Chinese Court Allows NGO's Oil-Spill Lawsuit Amid Pollution Fight, BLOOMBERG (July 27, 2015), https://www.bloomberg.com/news/articles/2015-07-27/china-court-allows-ngo-s-oil-spill-lawsuit-amid-pollution-fight.

<sup>171.</sup> ENVIRONMENTAL ISSUES IN LATIN AMERICA AND THE CARIBBEAN, ch. 9 (Romero Aldemaro & Sarah E. West eds., 2005).

<sup>172.</sup> See CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION OF THE REPUBLIC OF ECUADOR], art. 71.

<sup>173.</sup> BENTHAM, supra note 76.

"Would it be so hard to do?"

-Christopher Stone, 1972<sup>174</sup>

Taken literally, Stone's argument simply enabled nature to be represented as a party in court, which, in the case of Mineral King, meant to have claims of various statutory violations raised in its own name. In making this argument, however, Stone based his thesis on the expansion of rights to slaves, women, and other entities not human at all. Their rights, however, were not merely procedural. They were as substantive as the right to be free. What, then, would the rights of nature be?

In the field of environmental ethics, they are essentially three: the right to *exist*, the right to *continue* to exist, and the right, if degraded, to be *restored*.<sup>175</sup> How such rights are vindicated is another matter, but these three seem incontrovertible for nature to have rights at all. But do they constitute law? For some, the concept is beyond the pale, and their arguments, too, are several.

They begin by observing that laws are uniquely human constructs and are therefore ineluctably homo-centric and subject to our continuing preferences. The observation, while true on its face, claims too much. Nothing has impeded humans from recognizing rights in non-human things, and in an increasingly complex world, we do it with some frequency. (The EU Parliament has even begun discussing "personhood" for robots.<sup>176</sup>) The argument also gives short-shrift to the ethical underpinnings of law, often characterized as natural law.<sup>177</sup> International law condemns slavery, genocide, and similar conduct, although widely practiced, as beyond the pale.<sup>178</sup> The American colonies invoked natural law itself in their Declaration of Independence to justify, of all things,

<sup>174.</sup> See Stone, supra note 148, at 501.

<sup>175.</sup> Thomas Berry, *The Origin, Differentiation, and Role of Rights*, INST. FOR EDUC. STUD. (2001), http://www.ties-edu.org/gaia/articles/Thomas%20Berry%20rights.pdf.

<sup>176.</sup> Alex Hern, *Give Robots 'Personhood' Status, EU Committee Argues,* GUARDIAN (Jan. 12, 2017), https://www.theguardian.com/technology/2017/jan/12/give-robots-personhood-status-eu-committee-argues.

<sup>177.</sup> Disputes over natural law, bottomed on overarching moral principles, and legal positivism, based on whatever humans prescribe, have been raging for centuries. For its role in American history, see Sam Kalen, *An Aspirational Right to a Healthy Environment?*, 34 UCLA J. ENVTL. L. 156, 164-67 (2016). Whichever one's preference, natural law principles have survived in many forms, and underlay Lord Mansfield's famous decision in the Somerset case that sounded the death knell for slavery in England . . . and nearly a century later, America. *See* STEVEN M. WISE, THOUGH THE HEAVENS MAY FALL (2005).

<sup>178.</sup> See Kamrul Hossain, The Concept of Jus Cogens and the Obligation Under the U.N. Charter, 3 SANTA CLARA J. INT'L. L. 72 passim (2005).

armed insurrection ("when in the course of human events"),<sup>179</sup> and have *de facto* captured it in the Due Process clause of the Constitution.<sup>180</sup> Even staunchly conservative commentators have endorsed it as a check on the political establishment of the day.<sup>181</sup> Contrary to the view of King Louis XIV ("l'etat, c'est moi!"), the law is not simply what one has the power to do. It is also about what it is right, or wrong, to do.<sup>182</sup>

A more theoretical claim is that rights necessarily imply reciprocal duties,<sup>183</sup> and it would be foolish to say that nature had to return the favor. This assertion seems misplaced from the start. Rights are not contracts. Protections for the mentally retarded are considered rights in order to assure their needs, not because they owe us something in return. Nor do

<sup>179.</sup> The Final Text of the Declaration of Independence (July 4, 1776), AM. HIST. FROM REVOLUTION & RECONSTRUCTION & BEYOND, http://www.let.rug.nl/usa/documents/1776-1785/ the-final-text-of-the-declaration-of-independence-july-4-1776.php (last visited Dec. 22, 2017).

<sup>180.</sup> U.S. CONST. amend. XIV, § 1. Due Process in America forms a red line where even duly constituted government may not go, including body invasion, Rochin v. California, 342 U.S. 165 (1952), and entrapment, United States v. Russel, 411 U.S. 423 (1973). *See also* Ryan C. Williams, *The One and Only Substantive Due Process Clause*, 120 YALE L.J. 408 *passim* (2010).

<sup>181.</sup> See George F. Will, Opinion, Gorsuch's Chance To Correct Scalia on the Constitution, WASH. POST (Feb. 1 2017), https://www.washingtonpost.com/opinions/gorsuchs-chance-to-correct-scalia-on-the-constitution/2017/02/01/765d2980-e8b6-11e6-bf6f-301b6b4436 24\_story.html?utm\_term=.50cb9d1f7823.

<sup>182.</sup> Granted, views of right and wrong evolve over time, to the consternation of constitutional "originalists" and others who seem to object as much to the direction of the shift than the fact of it. *Compare* ANTONIN SCALIA & BRYAN A. GARNER, READING LAW: THE INTERPRETATION OF LEGAL TEXTS (2012) (defending originalism), *with* STEPHEN BREYER, THE COURT AND THE WORLD: AMERICAN LAW AND NEW GLOBAL REALITIES (2016) (defending a living Constitution). One who does not object is Justice Kennedy, who wrote in a recent opinion that "the nature of injustice is that we may not always see it in our times" and continuing: "[h]istory and tradition guide and discipline this inquiry but do not set its outer boundaries." Obergefell v. Hodges, 135 S. Ct. 2584, 2598 (2015) (establishing a right to same-sex marriage). The course of 20th century jurisprudence in criminal justice reflects a similar trend—*see* Roper v. Simmons, 543 U.S. 551, 551 (2005) (abolishing the death penalty in juvenile offenders)— "evolving standards of decent that mark the progress of a maturing society." Given the unprecedented pace of our destruction of the natural world—*see* text *infra* note 248—it seems decreasingly far-fetched that a "maturing society" would recognize similar injustice in our treatment of life around us.

<sup>183.</sup> Without losing ourselves in the labyrinth of Rights Theory, Mathew Kramer's *Rights Without Trimmings* summarizes its two camps, Interest Theory and Will or Choice Theory, which divide on the need for reciprocity. Matthew Kramer, *Rights Without Trimmings, in* MATTHEW KRAMER ET AL., A DEBATE OVER RIGHTS: PHILOSOPHICAL TRIMMINGS 7 (1998). The Will/Choice camp requires a right-holder to have competence to understand, demand, or waive enforcement of its rights ... a point of view that fails to include *inter alia* infants, senile adults, and the mentally incompetent. *Id.* at 69. By contrast, the Interest Theory requires only that the right-holder have a protected stake, which has become the trend in U.S. law. *Id.* at 62. The recognition of corporate rights only accentuates the divide, allowing an entirely fictitious "person" to trump the perpetuation of actual living things. No small triumph for entities that may exist only on paper, have only a fugitive physical presence, and are sliced and diced freely into subsidiaries and similar arrangements to avoid liability, taxation, and other social responsibilities.

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rights-holders need to be aware of their status, any more than a ship is, or an infant, or an adult in the throes of dementia. One might go further to recognize that nature indeed does reciprocate, in myriad ways that benefit us in our interconnected worlds. There is no signed contract, but the providing of "consideration" (if such is required) is clear to anyone, and if anything an order of magnitude more forthcoming from the nature side.

A more conceptual objection is that nature rights cannot exist because humans would have to declare them, making them anthropocentric from the start, confusing process with substance. Of course, humans would have to recognize them (or recognize them as natural law) but this makes them no less real, nor does it make them perforce human-centered. If we acknowledge that other living things have rights to be, to continue to be, then it is simply false to claim to say that these rights as ours; they are theirs and focused on their needs, which is the definition of ecocentricity. In many instances, of course, anthropomorphic and ecocentric interests marry—a healthy river curves to mind—but this is a far cry from contending that only one is valid. Neither logic nor law renders us incapable of recognizing, and dealing with, the other.

Another objection to ecocentricity, although it is hard to take seriously, is that offered by the philosopher Mark Sagoff: how does any human "purport to know the interests of a voiceless object?"<sup>184</sup> It may be, he goes on, Mineral King valley *wants* a Disney resort. The question, although in one sense facetious, can be met by simple observation. All living things on earth struggle against dying and to reproduce their own, which if nothing else demonstrates a primordial urge to *exist* and *continue* existing. And, as evidenced by green shoots poking up through the sidewalk each spring, an urge to *restore* itself when it can. These are basic tenets of environmental ethics *anno dominium* 2000. Anomalously, almost every child knows them.<sup>185</sup> It is the adults who have the problem.

Others reject nature rights because, in their view, nature no longer exists. We are in the Anthropocene, human impacts are everywhere, and there is no natural baseline.<sup>186</sup> This claim is echoed by those who insist

<sup>184.</sup> Mark Sagoff, *On Preserving the Natural Environment*, 84 YALE L.J. 205, 221-22 (1974).

<sup>185.</sup> For a light-hearted-but-accurate depiction of a child's perspective, see Brian Doyle, *21 Laws of Nature as Interpreted by My Children*, ORION MAG. (Sept./Oct. 2014), https://orion magazine.org/article/21-laws-of-nature-as-interpreted-by-my-children/.

<sup>186.</sup> See Peter Kareiva, Michelle Marvier & Robert Lalasz, Conservation in the Anthropocene, BREAKTHROUGH J. (Winter 2012), https://thebreakthrough.org/index.php/journal/

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that humans, too, are part of nature and thus whatever humans do is, by definition, natural as well.<sup>187</sup> America's national parks, one skeptic claims, are "as much human constructions as Disneyland."<sup>188</sup> One might respond, as to Sagoff, that one visit to Disneyland should suffice to show the difference. More particularly, though, while undoubtedly altered and massively threatened by climate change, nature and natural systems are all around us, struggling, even morphing, but surviving. Humans, like all other living elements of nature, will die too someday, but we still have laws against homicide. Rights of nature are simply laws against ecocide as well.

Yet others have found nature rights intrinsically antihuman, and a particular threat to improvements necessary for indigenous peoples and the underdeveloped countries.<sup>189</sup> They are rather out of date. The impetus for this movement, from as far back as the U.N. Declaration of 1982 to the recent laws of Ecuador and Bolivia, arose from poor nations and indigenous peoples attempting to protect themselves from exploitation by mega-corporations of the developed world.<sup>190</sup> The same is true of small towns and communities in the United States.<sup>191</sup> This is *their* response, and they are hardly antihuman.

Vocal opposition comes as well from those who see a threat to private property and freedom itself, one advocate declaring that "there would be nothing left of human society if we treated animals not as [our] property but independent holders of rights."<sup>192</sup> Granting the utility of property rights—and overlooking the fact that the same was said of rights for blacks and women—nothing in the rights of nature demands that private ownership be abridged any more than it is by zoning regulations, pollution controls, and other measures that we accept routinely for the common weal. Indeed, in many settings these measures tend to *enhance* 

past-issues/issue-2/conservation-in-the-anthropocene; *see also* DANIEL BOTKIN, DISCORDANT HARMONIES (1990).

<sup>187.</sup> Robert Lackey, *Ecosystem Management: Paradigms, and Prattle, Peoples, and Prizes,* 16(1) RENEWABLE RESOURCE J. 1 (1996).

<sup>188.</sup> Kareiva, *supra* note 186. The statement claims too much. Disneyland was constructed by humans from start to finish, who have every right to alter or destroy it. Humans had nothing to do with the eons over which national parks were created except to be stunned by their beauty and moved to protect them.

<sup>189.</sup> *Id.* This has been the position of international mining corporations as well, some of whose practices have brought significant controversy and human rights complaints.

<sup>190.</sup> See Wood, supra note 30.

<sup>191.</sup> See Nobel, supra note 27.

<sup>192.</sup> William Glaberson, *Legal Pioneers Seek To Raise Lowly Status of Animals*, N.Y. TIMES (Aug. 18, 1999), http://www.nytimes.com/1999/08/18/us/legal-pioneers-seek-to-raise-lowly-status-of-animals.html (quoting Richard Epstein of the University of Chicago, a leader in the American property rights movement).

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the values of private property, as does the protection of nature itself, a local park, a stand of trees. Property interests, can be accommodated through such time-tested devices as development credits, impact fees, tax relief, land swaps, and mitigation banks that allow activities to go forward while maintaining the base. Rights in nature do not end property as we know it. They simply ask it to meet the rest of the world half-way.

Skeptics also pose what they believe to be a clinching question: given that nearly every nation on earth has environmental laws by now, what difference would rights of nature make? Implying, of course, no difference. The record to date is otherwise. For one, they reinforce and expand the interpretation of those same laws, adding restoration requirements to some, enforcement to others.<sup>193</sup> They also provide a safety net where existing programs have been overwhelmed by other interests, or because they fail to address the injury at all.<sup>194</sup> More proactively, they provide a seat at the table, in advance of development decisions, for nature rights to appear through the lens of its own needs and not simply the cacophony of competing human interests.<sup>195</sup> As proactively, they provide a vantage point to demand restoration for past injury and to insist on compensation going forward.<sup>196</sup> Lastly, and perhaps most enduringly, they catalyze a new awareness of our relationship with the natural world, which, in turn, could play a larger role in human survival than many now admit.<sup>197</sup> Whether these advantages are realized is still conjectural, we are in the early stages of the game. Their potential, however, seems well worth the try.<sup>198</sup>

There are also those who, while sympathetic to the concept of nature rights, opine that it goes too far, the changes required are too great, they shoot for the moon.<sup>199</sup> This of course is almost always said of change, even that long-overdue. Indeed, a quite opposite critique claims that they do not go far enough, distracting from a felt urgency to stop the

<sup>193.</sup> See Echevarria, supra note 17; Echevarria, supra note 13.

<sup>194.</sup> See Mohd Salim v. State of Uttarkhand & Others, Writ Petition (PIL) no. 26 of 2014 (India).

<sup>195.</sup> As for representation at the table, see text at supra note 158.

<sup>196.</sup> See Provincial Court of Loja, case no. 11121-2011-0010 (Ecuador). For the failure of existing American laws to require restoration of badly damaged resources, see Oliver A. Houck, *The Reckoning: Oil and Gas Development in the Louisiana Coastal Zone*, 18 TUL ENVTL. L.J. 187 *passim* (2015).

<sup>197.</sup> Ethics breed law, but law breeds ethics as well. See the advance of gay and LBGT rights in America, *supra* note 153, awareness and legal action leap-frogging each other forward.

<sup>198.</sup> For further discussion of the relationship of rights of nature to existing law, see discussion *supra* note 111.

<sup>199.</sup> See Peter Burdon & Claire William, *Rights of Nature: A Constructive Analysis, in* RESEARCH HANDBOOK ON FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL LAW (Douglas Fisher ed., 2016).

pace of earth-consumption, more rapid each year.<sup>200</sup> Granting this urgency, nature rights could help leverage the transition that an increasing number of people see as necessary, if only they could find the way. Here is a way.

A final concern is perhaps the most obvious, and seemingly the most challenging to answer even for those most open-minded to nature's claim. How, in practice, would legal rights in nature be articulated, and what would they entail?<sup>201</sup> We might sensibly start by examining what has already taken place. While some see nature rights as Mission Impossible, others have been making it happen.

The first stab at the architecture of legal rights came in 1984 with the U.N. World Charter for Nature, earlier mentioned.<sup>202</sup> A process of legislation that spanned nine years, three drafts, and the comments of over fifty countries produced a final document announcing bold principles (number one: "nature shall be respected and its essential processes shall not be impaired"), followed by over thirty "functions" and steps for implementation.<sup>203</sup> Perhaps the most relevant of these were that (1) actions causing "irreversible" damage be avoided; (2) those posing "significant risk" not proceed until impacts were "fully

<sup>200.</sup> Id.

<sup>201.</sup> Id. This question has tripped up many a commentator, including Christopher Stone. In a second article on the question entitled Should Trees Have Standing, Revisited: How Far Will Law and Morals Reach?: A Pluralist Perspective, 59 S. CAL. L. REV. 1 passim (1985), Stone goes beyond environmental policy (which he believes largely solved by liberalized standing requirements and compensation for certain environmental harms), to propose mechanisms to resolve all such human-to-human and human-to-nonhuman conflicts. His analysis is dense going. A "monistic," rights-based theory, he contends, should yield to a more anthropocentric "duty-based" regime, those duties we are willing to impose upon ourselves for things that qualify, case-by-case for human "considerateness." Id. To the execution of these duties he then applies principles of logic, algebraic formulae, and a matrix of tables that might, perhaps, given the resources to apply them, aid decision-making, but largely boil down to the weighing of value choices that we all knew going in, and that most decision-makers make on a daily basis. Id. Unfortunately, however, in his nod to pragmatism, Stone surrenders the primary values of his original piece, that (1) in the legal world rights matter, they set a high bar, and (2) that in the human heart we respond more powerfully to rights-e.g., the rights of living things to be-than we do to the more fungible concept of duties-e.g., feed the dog. In a world torn between competing interests, some of them almost irresistibly powerful, Stone was correct the first time: rights for the less powerful do matter.

<sup>202.</sup> G.A. Res. 37/7, *supra* note 30. The Charter was stimulated, *inter alia*, by the widespread impacts of multinational corporations on underdeveloped countries, their indigenous populations and ecosystems. *See* Wood, *supra* note 30.

<sup>203.</sup> See Brad Plumer, Ecuador Asked the World To Pay It Not To Drill for Oil. The World Said No, WASH. POST (Aug. 16, 2013), https://www.washingtonpost.com/news/wonk/wp/2013/08/16/ecuador-asked-the-world-to-pay-it-not-to-drill-for-oil-the-world-said-no/?utm\_term=.431babaf60ca; see also Wood, supra note 30; John Vidal, Ecuador Drills for Oil on Edge of Pristine Rainforest in Yasuni, GUARDIAN (Apr. 4, 2017, 12:40 PM), https://www.theguardian.com/environment/2016/apr/04/ecuador-drills-for-oil-on-edge-of-pristine-rainforest-in-yasuni.

understood"; (3) that damaged areas be "restored"; and (4) that nonrenewable resources (e.g., minerals, the principal source of conflict) be developed compatibly with "the functioning of natural systems"... a nature bottom line.<sup>204</sup>

To be sure, as a Declaration none of this language was enforceable, but its level of detail, its use of the word "shall," and the supporting statements of its drafters indicates the expectation that at least some of the signing members would, as with the U.N. Declaration on Human Rights, convert these principles into law. Twenty-five years later, two of them did.

Ecuador rising largely from Andean roots led the way. The impacts of mining and oil exploration had brought massive protests, some of them violent, from indigenous communities across the region.<sup>205</sup> Nature rights were inextricably entwined with their daily lives, a symbiosis captured in the word "Pachamama," not simply a belief but a way of relating to everything else around them.<sup>206</sup> Upon his election in 2007, President Correa—a Ph.D. economist (University of Illinois) and former Minister of the Economy—made two overtures that startled the world.<sup>207</sup>

The first was an offer to forego oil development in Yasuni National Park, a World Heritage Site and one of the most biologically important environments on earth, at the sacrifice of billions of dollars in revenues . . . if nations of the world reimburse 50% of these losses in compensation.<sup>208</sup> Supervised by an international trust, much of the monies would be used to protect and improve the lot of indigenous peoples in the region. Although Ecuador itself, minerals-dependent and by no means a wealthy country, would be absorbing 50% of the hit, the world turned him down. No U.S. official even acknowledged it. In 2013

<sup>204.</sup> G.A. Res. 37/7, *supra* note 30, arts. 10(d), 11(a)-(b), 23.

<sup>205.</sup> See Ecuador Indigenous Protesters March Against Mining, BBC NEWS (Mar. 09, 2012), http://www.bbc.com/news/world-latin-america-17306228; Terry Wade, Peru Protesters Shut Airport After Deadly Clash, REUTERS (June 25, 2011, 1:55 PM), https://www.reuters.com/article/us-peru-protests/peru-protesters-shut-airport-after-deadly-clash-idUSTRE7501XJ201106 25. They were not alone. See 25 Mindoro Hunger Strikers Not Going Home Yet, INTEX RESOURCES & MINDORO OPPOSITION (Nov. 18, 2009, 20:52), http://earthjedi.blogspot.com/2009/11/25-mindoro-hunger-strikers-not-going.html (Philippine tribal protests against mining project).

<sup>206.</sup> Pachamama: Mother Earth, CASERITA.INFO, http://info.handicraft-bolivia.com/ Pachamama-Mother-Earth-a346 (last visited Dec. 22, 2017).

<sup>207.</sup> See Rafael Correa: President of Ecuador, ENCYCLOPEDIA BRITANNICA, https://www.britannica.com/biography/Rafael-Correa (last visited Jan. 3, 2018).

<sup>208.</sup> See Ecuador Offers To Leave Rainforest Oil in the Ground for \$3.6 Billion, ECOLOGIST (Aug. 5, 2010), http://www.theecologist.org/News/news\_round\_up/555831/ecuador \_offers\_to\_leave\_rainforest\_oil\_in\_the\_ground\_for\_36\_billion.html; Matt Finer et al., Commentary, Leaving the Oil Under the Amazon: Ecuador's Yasuni-ITT Initiative, 42 BIOTROPICA 63 (2010).

Correa announced defeat and opened a small area of the Yasuni Park to oil exploration.<sup>209</sup> Saving Pachamama in one large coup was not going to work.

The other initiative moved from the ground up. Also in 2007, Correa called a constitutional convention, which the following year produced three new articles conferring rights on nature itself.<sup>210</sup> Promoted strongly by a coalition of indigenous groups called the Pachamama Alliance (in turn supported by scientists, state legislatures, and several international NGOs),<sup>211</sup> the articles were at first blush breathtaking, even unimaginable . . . and they remain so in some quarters today.

Article 71 announced the "right of Pachamama to be respected," including "the maintenance and regeneration of its vital cycles, structure, functions and evolutionary processes," and the right of standing for every "individual, community, people, or nationality" to demand that public authorities comply.<sup>212</sup> Article 72 added a right to restoration, over and above indemnification for damages under other laws.<sup>213</sup> Article 73

213. Id. art. 72:

<sup>209.</sup> See Juan Falconi Puig, *The World Failed Ecuador on Its Yasuni Initiative*, GUARDIAN (Sept. 19, 2013, 9:08 AM), https://www.theguardian.com/global-development/poverty-matters/2013/sep/19/world-failed-ecuador-yasuni-initiative; Vidal, *supra* note 203.

<sup>210.</sup> See supra note 207. For a detailed history of these amendments and their significance, see Prieto Mendez, supra note \*.

<sup>211.</sup> See Rights of Nature, PACHAMAMA ALLIANCE, https://www.pachamama.org/advocacy/rights-of-nature (last visited Dec. 22, 2017).

<sup>212.</sup> CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION OF THE REPUBLIC OF ECUADOR], art. 71:

Nature, or Pacha Mama, where life is reproduced and occurs, has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes.

All persons, communities, peoples and nations can call upon public authorities to enforce the rights of nature. To enforce and interpret these rights, the principles set forth in the Constitution shall be observed, as appropriate.

The State shall give incentives to natural persons and legal entities and to communities to protect nature and to promote respect for all the elements comprising an ecosystem.

Nature has the right to be restored. This restoration shall be apart from the obligation of the State and natural persons or legal entities to compensate individuals and communities that depend on affected natural systems.

In those cases of severe or permanent environmental impact, including those caused by the exploitation of nonrenewable natural resources, the State shall establish the most effective mechanisms to achieve the restoration and shall adopt adequate measures to eliminate or mitigate harmful environmental consequences.

This article was fortified by yet another amendment inverting the burden of proof in claims of environmental damage. *Id.* art. 397.1; Email from Francisco Bustamante to author (July 20, 2017) (on file with author) (explaining amendment).

provided special protections for endangered species and ecosystems.<sup>214</sup> As written, these obligations are absolute.<sup>215</sup> They were yet reinforced by a later amendment inverting the burden of proof in cases of real or potential damage to nature.<sup>216</sup> Until recently only one exception to them, for the Yasuni exploration, had been made.<sup>217</sup>

In 2017, nine years after enactment, Ecuador's articles were reexamined in a legislative process leading to a rights of nature code. The first draft of the code contained little language on them and met considerable opposition.<sup>218</sup> After debate, a second draft reinserted the rights of nature, but with few specifics.<sup>219</sup> After more debate, a final bill went to the President with each of the above articles restored, and some yet strengthened.<sup>220</sup> At last count, fourteen judicial decisions have cited these rights with approval.<sup>221</sup>

Pausing to reflect on the Ecuador experience, three aspects are particularly instructive. The first is that they include each element of the ethical framework: existence, perpetuation, and restoration. The second is their orientation, which, aside from safeguards for endangered species, is explicitly ecosystem-focused. To be sure, wildlife and other species are protected within ecosystem function, but as with the U.N. Declaration earlier, Ecuador kept its eye on the larger prize. The third is that Ecuador was not alone.

<sup>214.</sup> CONSTITUCIÓN DE LA REPÚBLICA DEL ECUADOR [CONSTITUTION OF THE REPUBLIC OF ECUADOR], art. 73. "The State shall apply preventive and restrictive measures on activities that might lead to the extinction of species, the destruction of ecosystems and the permanent alteration of natural cycles. The introduction of organisms and organic and inorganic material that might definitively alter the nation's genetic assets is forbidden."

<sup>215.</sup> The only possible ambiguity is the relationship of the restoration requirements of article 72 for activities with "severe impacts," with article 71's baseline requirement that no activity disrupt the right of natural systems to exist and flourish. *Id.* arts. 71, 72. Reading them together, however, it appears that article 71 comes first in time and first in right: no activity can go that far; article 72 goes on to require restoration for, *inter alia*, past activities and those not threatening the article 71 functions. *Id.* 

<sup>216.</sup> See *id.* art. 397.1; Email from Hugo Echevarria to author (Oct. 17, 2017) (on file with author) (describing the amendment and its subsequent history).

<sup>217.</sup> For the recent exception, see discussion supra note 209.

<sup>218.</sup> See CóDIGO ORGÁNICO DEL AMBIENTE [ORGANIC CODE OF THE ENVIRONMENT] (Ecuador), http://www.asambleanacional.gob.ec/sites/default/files/private/asambleanacional/files asambleanacionalnameuid-29/Leyes%202013-2017/102-ambiente/ro-cod-ambiente-ro-s-983-12-04-2017.pdf.

<sup>219.</sup> Id.

<sup>220.</sup> Id.

<sup>221.</sup> See Kauffman & Martin, *supra* note 22. For a most recent score, see Natalia Greene, Pachamama Alliance, Ecuador, Presentation at the Tulane University CELDF Symposium: The Rights of Nature (Oct. 27, 2017) (identifying in twenty-four cases to date: fifteen with "positive" outcomes, four with "negative" outcomes, and four then in process).

Bolivia followed closely and went on to up the ante. In 2015, driven by the same impulses as its neighbor (it is also part of the Andean universe) and after elections, it came under the direction of Latin America's first indigenous President, Evo Morales.<sup>222</sup> In April 2010, on the heels of a failed climate change convention in Copenhagen, Bolivia hosted a World People's Conference on Climate Change and the Rights of Mother Earth, which, with more than 32,000 participants from fiftyfour countries, produced a Declaration of its own, presented to the G-7 nations and the U.N. Secretary General later that year.<sup>223</sup> Importantly, it was also presented to the national legislature, which then adopted ten principles, the most relevant of which were the right of nature to its own existence, to its diversity in a natural state, and to restoration.<sup>224</sup> Environmental ethics *anno dominium* 2000 made law.

In 2012, Bolivia enacted a more detailed version, Framework Law of the Mother Earth and Integral Development for Living Well, which affirmed the legal rights of Pachamama and rejected material production and consumption as national goals.<sup>225</sup> In addition to specific prescriptions for, *inter alia*, renewable energy, organic agriculture, and corporate conduct,<sup>226</sup> the legislature created a new Ministry of Mother Earth and an ombudsman to receive and respond to citizen complaints.<sup>227</sup> Citizens and organizations were, as in Ecuador, given standing to defend nature's rights wherever they might arise.<sup>228</sup> On paper, at least, Bolivia too was going to make it happen.

From these roots, legal principles of nature rights emerge: (1) to avoid disruption of basic ecosystem functions; (2) to avoid harm to all natural areas where alternatives are available; (3) to avoid critical areas

<sup>222.</sup> See MARTIN SIVAK, EVO MORALES: THE EXTRAORDINARY RISE OF THE FIRST INDIGENOUS PRESIDENT OF BOLIVIA (2010); see also Michael Miller, The Rise of Evo Morales, BROWN U. LIBR.: MOD. LATIN AM. WEB SUPPLEMENT FOR 8TH EDITION, https://library.brown. edu/create/modernlatinamerica/chapters/chapter-6-the-andes/moments-in-andean-history/the-rise-of-evo-morales/ (last visited Dec. 16, 2017).

<sup>223.</sup> *Partners*, WORLD PEOPLE'S CONF. ON CLIMATE CHANGE & RTS. MOTHER EARTH, http://pwccc.wordpress.com/partners (last visited Dec. 22, 2017).

<sup>224.</sup> Ley de Derechos de la Madre Tierra [Law of the Rights of Mother Earth] No. 71 (2010) (Bol.).

<sup>225.</sup> LA LEY MARCO DE LA MADRE TIERRA Y DESARROLLO INTEGRAL PARA VIVIR BIEN [FRAMEWORK LAW OF MOTHER EARTH AND INTEGRAL DEVELOPMENT FOR LIVING WELL] No. 300 (2012) (Bol.); see also Law 300, Framework Law of Mother Earth and Holistic Development for Living Well, REDD DESK, http://theredddesk.org/countries/laws/law-300-framework-law-motherearth-and-holistic-development-living-well (last visited Oct. 19, 2017).

<sup>226.</sup> LA LEY MARCO DE LA MADRE TIERRA Y DESARROLLO INTEGRAL PARA VIVIR BIEN arts. 24, 30.

<sup>227.</sup> Id. art. 53.

<sup>228.</sup> Id. art. 31(II).

altogether; (4) to mitigate prospective damage fully and in kind; and (5) to restore damage already incurred. None of these principles are rocket-science; several are found in existing (if limited in scope) national More detailed prescriptions are contained in the earlier programs. European Directive,<sup>229</sup> with referenced Draft structures for implementation and enforcement (including criminal law, a daunting provision).<sup>230</sup> A similar structure was presented to the Ecuadorian Assembly in 2008, complete with decision-making matrix and flow chart, but has not yet been adopted.<sup>231</sup> With which, thirty-five years after its adoption, the U.N. Declaration of 1982 has born its first offspring, more mature, more considered, and ready for take-off. What remains is to let it go forward and evolve.<sup>232</sup>

This evolution will demand respect for existing environmental programs that have their own, often more-targeted missions and some significant accomplishments to their name. They also have significant handicaps, however, some shackled by their authorizing statutes,<sup>233</sup> more still by the lack of budget and personnel (nowhere abundant), and nearly all by political challenges that may leave them vulnerable, where functioning at all. Which is where rights of nature, properly perceived, kick in.

Properly viewed, rights of nature need not be a separate regulatory system, raising obvious difficulties with redundancy and conflicts. It

<sup>229.</sup> Mumta, *supra* note 26.

<sup>230.</sup> Law 300, Framework Law of Mother Earth and Holistic Development for Living Well, supra note 225, arts. 7, 11:3(c).

<sup>231.</sup> See CELDF, A Statutory Framework To Implement the Ecuadorian Constitution's Rights of Nature Provisions (unpublished report) (on file with author).

<sup>232.</sup> Evolution in law, despite those who resist it, is as natural as evolution in every other aspect of life on earth. It is with environmental law, the judiciary interpreting not only the meaning of statutory language but also of such non self-defining constructs as the precautionary principle, sustainability, and the public trust. They are all works in progress. As for the potential for evolution in rights of nature principals, see Kauffman & Martin, *supra* note 22.

<sup>233.</sup> One critical gap in U.S. law is its failure to require air quality standards for hydrocarbons and related precursors of climate change, leading to decades-long litigation over whether and how to regulate them—see Lawrence Tribe, *The Clean Power Plan Is Unconstitutional*, WALL ST. J., Dec. 23, 2014, at A 13—now proposed for repeal by the Trump Administration. See Lisa Friedman, *Trump Wants To Repeal Obama's Clean Power Plan. The Next Fight: It's Replacement*, N.Y. TIMES (Sept. 28, 2017), https://www.nytimes.com/2017/09/28/climate/clean-power-plan.html. Turning to water, the Clean Water Act fails to mandate controls for nonpoint sources, now the largest cause of water impairment in the United States and the subject of largely ineffective state and voluntary programs. *See* David Zaring, *Agriculture, Nonpoint Source Pollution and Regulatory Control: The Clean Water Act's Bleak Present and Future*, 20 HARV. ENVTL. L. REV. 151 *passim* (1996); Oliver A. Houck, *Cooperative Federalism, Nutrients, and the Clean Water Act*, 44 ELR 10426 *passim* (2014) (describing the problem and state responses). Every U.S. environmental program, as detailed as it may be, has similar limits and lacuna.

need not be a system at all, but rather a pulse-check in the nature of due process that ensures decisions from line agencies also meet standards fundamental to the earth as a whole. This has been the approach of several U.S. states and many courts abroad in the interpretation of similarly broad mandates.<sup>234</sup> Most resource development does not put species of ecosystems at serious risk, but for those that do, nature rights can be a significant partner to existing programs, reinforcing them against the same pressures that led to their creation in the first place. Their next best friend.

There are some of course who would argue that nature rights cannot, and should not, play so fundamental a role. We have met several arguments earlier in this Article.<sup>235</sup> Taking them singly or in concert, it is hard not to conclude that, whatever science and ethics tell us about humans and the natural world, these people simply do not *want* them to be fundamental. According to a recent contributor to the *National Review*:

I keep writing about [nature rights] because—like cancer, early detection and eradication surgery is the key to stopping this madness.... [A] malevolently malignant attack on human thriving that, if allowed to take hold, presents an existential threat to human exceptionalism and the moral values of Western civilization.<sup>236</sup>

<sup>234.</sup> See Save Ourselves v. La. Envtl. Control Comm'n, 452 So. 2d 1152 (1984), in which the Louisiana Supreme Court applied a constitutional natural resources trust provision to a hazardous waste disposal facility along the Mississippi River. While the facility had been properly permitted under state standards, the court found the trust to impose independent and supplementary requirements, including avoidance, harm minimization, and others familiar to readers of this piece. Id. at 1160 ("From our review it appears that the agency may have erred by assuming that its duty was to adhere only to its own regulations rather than to the constitutional and statutory mandates."). It also reserved an ace-in-the-hole authority to review decisions on the merits, *id.* at 159, and properly so: the trust provision at issue was itself substantive, more than a procedural drill. Other U.S. state high courts have rejected state decisions on the basis of environmental constitutional provisions. See Mont. Envtl. Info. Ctr. v. Dep't of Envtl. Quality, 988 P.2d (1999) (invalidating mining license); Robinson Twp. V. Commonwealth, 623 Pa. 564 (2013) (invalidating legislation governing oil and gas leasing); Pa. Envtl. Def. Found. v. Commonwealth, 161 A.3d 921 (2017) (invalidating legislative budget decisions for lease sales). As for similar decisions abroad, see OLIVER A. HOUCK, TAKING BACK EDEN (2010) (describing cases in seven countries invalidating state decisions based on overarching environmental principles). These are all safety-net cases, an overlay on established state programs that did not meet the mark. Failure to perceive rights of nature (or for that matter constitutional provisions guaranteeing a healthy environment) as an overarching principle of law leads, in effect, to their nullification by existing state programs.

<sup>235.</sup> *See* discussion *supra* notes 187-189. But, we have seen the Supreme Court has found the concept of "fundamental" to be one that inevitably grows with the times, *supra* note 182.

<sup>236.</sup> Wesley J. Smith, '*River Rights' Movement in USA*, NAT'L REV. (May 30, 2017, 2:12 PM), http://www.nationalreview.com/corner/448105/river-rights-movement-usa; *see also* George Will, *Pondering History's "Might Have Been*," TIMES PICAYUNE, Feb. 23, 1998, at B-7

Whether humanity can loosen the shackles of this view sufficiently to appreciate, and accept, the exceptionalism of other life may be the ultimate question of this field.

There are some who have done just this, including the former Chief Justice of the Supreme Court of the Philippines, Hilario Davide.<sup>237</sup> In a case of first impression invalidating large sales of virgin timber previously authorized by the government, Davide wrote:

As a matter of fact these basic rights [preserving the rhythm and harmony of nature] need not even be written in the Constitution for they are assumed to exist from the inception of humankind. If they are now explicitly mentioned ... it is because of the well-founded fear of its framers that unless the rights to a balanced and healthful ecology are mandated ... the day would not be too far when all else would be lost not only for the present generation but for also for those to come – generations which stand to inherit nothing but parched earth incapable of sustaining life.<sup>238</sup>

The Court agreed, by a margin of ten justices to one.<sup>239</sup> The remaining justice concurred.<sup>240</sup>

VI. THE VOYAGE

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"A human being is part of the whole, called by us the "[u]niverse," a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest—a kind of optical delusion of his consciousness.... The striving to free oneself from this delusion is the one issue of true religion. Not to nourish the delusion but to try to overcome it is the way to reach the attainable measure of peace of mind.

-Albert Einstein (1879-1955)<sup>241</sup>

What has been happening is real, with its own force and language. Nature rights are already boarding the Ark. They are coming from many

238. Minors Oposa v. Factoran, G.R. No. 101083, 69 S.C.R.A. 181 (July 30, 1993) (Phil.). Lead plaintiffs in the case were minor children and generations yet unborn. *Id.* 

240. *Id.* at 203-07.

<sup>(</sup>castigating science for "presenting the human species as continuous with the slime from which the species has only recently crept, seemed to embed mankind in the necessities of nature." In essence, they are arguing with evolution.).

<sup>237.</sup> Justice Hilario Davide was a figure of George Washington stature in the post-Marcos Philippines world, a leader in national reconciliation, who went on to become Chief Justice of the Supreme Court and the Philippines Ambassador to the United Nations. *See* HILARIO G. DAVIDE, THE DAVIDIC HERITAGE OF WISDOM AND JUSTICE: SELECTED DECISIONS & SEPARATE OPINIONS OF CHIEF JUSTICE HILARIO G. DAVIDE, JR. (2005).

<sup>239.</sup> *Id.* at 203.

<sup>241.</sup> To R.M., New York, Letter from Feb. 12, 1950, in ALBERT EINSTEIN, DEAR PROFESSOR EINSTEIN: ALBERT EINSTEIN'S LETTERS TO AND FROM CHILDREN 184 (Alice Calaprice ed., 2002).

points on the globe and in forms as diverse as international declarations, national legislation, local ordinances, and judicial decisions that, in a common law fashion unusual for civil law countries, are moved to adopt them on their own. They are promoted by ethicists, clerics, biologists, anthropologists, indigenous peoples, city councils, NGOs on every continent, a rising number of academics, another rise of communities wired to their surroundings and individuals simply wired to the natural world. They have their critics and are by no means a majority, but they have tapped into something larger than themselves that has been in the air for centuries and seems to have, at least for the moment, made landfall. Their strength may lie in the very fact of their diversity, and their tap into the human psyche developed from a time when we were all indisputably part of nature, and indisputably formed by those ties. They are not an accident.

But are they law? No convincing reason (at least of those offered) appears to the contrary. Nature and natural things can be recognized as a party in interest, even the principal party, if and as we say so, which would by itself add an element of candor to many proceedings and help to balance the scales. Nor is there a problem of practicability; lawyers represent nonhuman interests every day, including corporations that we have simply *declared* to be persons. As for more substantive rights, why not these too if their principles can be reasonably determined? Similar rights for selected species and ecosystems already exist. Legal principles for nature rights more broadly are being developed as we speak—indeed anticipated by some courts in advance of them—and they mirror commonly accepted standards for selected resources. As a matter of law, rights of nature can be done.

This said, stiff challenges in science and ethics await in applying them to landscape changes, gene manipulation, and even the resurrection of extinct species (now actively underway)<sup>242</sup> ... to say nothing of the colossus of climate change. Drilling further down we find glacial challenges in the political will to take this journey, in the resistance to change that accompanies all new ideas, and most acutely in our belief, our apparent *need* to believe, that we are lords and masters of the planet, to do with what we will.<sup>243</sup> People have lost their lives for these kinds of challenges, and still do.<sup>244</sup> No one gives up supremacy without a fight.

<sup>242.</sup> Carl Zimmer, *Bringing Them Back to Life*, NAT'L GEOGRAPHIC (Apr. 2013), http://www.nationalgeographic.com/magazine/2013/04/species-revival-bringing-back-extinct-animals/.

<sup>243.</sup> See Nina Heikknen, Scott Pruitt, Christ Follower, E&E NEWS: CLIMATEWIRE (July 14, 2017), https://www.eenews.net/climatewire/2017/07/14/stories/1060057367 (quoting the

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But in the unsettled climate of today, does it need to come forward now? Is this its time? One hundred years ago, the American John Muir, whose works on nature were steeped in religion (*God's First Temples, How Shall We Preserve Our Forests?*),<sup>245</sup> proposed leaving one-seventh of the earth free from development.<sup>246</sup> Even the Almighty, he noted, rested on the seventh day. This past year, E.O. Wilson, America's leading voice on biodiversity, published a book entitled *Half-Earth* arguing that saving nothing less than that could stop the mass extinctions now underway.<sup>247</sup> Whether based on ethical or pragmatic grounds, the demand has clearly gone up, as has the relevance.

One need not be a Cassandra to note that the forests of the world are rapidly vanishing, as are wetlands to development, mangroves to fish farms, and grasslands to desert; small continents of plastics now rotate in all five oceans, growing larger each year, fragments leaching into the stomachs of pelagic turtles, fish, and birds; heavy toxins now contaminate the Arctic and do not degrade; glaciers from the Andes to the Himalayas are melting, as are the ice sheets of the North and South Poles; Australia's Great Barrier Reef is bleached white and disintegrating, and with it some of the most astonishing life forms on earth; fresh water amphibians are plummeting, as are avian migrations, pollinators, and butterflies; two thirds of the breeding birds of Britain, a country noted for its attention to them, are in decline, some species already extinct; the tiger, the orangutan, and mega-vertebrates on every continent are living on borrowed time and may find their final refuge in zoos; forms of life that developed over eons, entire complexes of life, are winking out like birthday candles, up to three species an hour, an estimated 15% to 40%

EPA Administrator's spiritual advisor and Bible study leader: "God placed man in a superior position over the remainder. This is fundamentally important because it forecasts God's intention that the rest of creation serve man.") Master-servant dies hard and, as with women and African slaves, for some it will never die. On the other hand, the gap here may be generational. *See* Greene, *supra* note 221 (rooting much stronger support for the rights of nature among younger Ecudaorians than their elders). This phenomenon may also be global, which argues well for the future.

<sup>244.</sup> See Kauffman & Sheehan, *supra* note 25 (several hundred individuals in sixteen countries assassinated in 2015-2016 for defending nature and community rights).

<sup>245.</sup> See WILLIAM FREDERIC BADÈ, THE LIFE AND LETTERS OF JOHN MUIR ch. 12 (1923) (citing Muir's letter Gods First Temples, How Shall We Preserve Our Forests? Sacramento Record Union, Feb. 5, 1876).

<sup>246.</sup> Terry Gifford, *Introduction* to JOHN MUIR, JOHN MUIR: THE EIGHT WILDERNESS DISCOVERY BOOKS (1992).

<sup>247.</sup> EDWARD O. WILSON, HALF-EARTH: OUR PLANET'S FIGHT FOR LIFE (2016).

of all species by 2050, not to malice, not necessarily by design, but all by human hands.<sup>248</sup>

At the same time, national programs designed to arrest these declines, have at best slowed them instead. Those intending to "eliminate" discharges end up authorizing them at lower levels;<sup>249</sup> others

<sup>248.</sup> For deforestation, see Ann M. Simmons, Status of Forests Is 'Dire' as World Marks 2017 Earth Day, L.A. TIMES (Apr. 21, 2017, 6:00 AM), http://www.latimes.com/world/globaldevelopment/la-fg-global-earth-day-20170421-story.html; see also Deforestation Facts, CONSERVE ENERGY FUTURE, http://www.conserve-energy-future.com/various-deforestation-facts.php (last visited Dec. 22, 2017); for threats to wetlands, see Overview, WWF, https://www.world wildlife.org/habitats/wetlands (last visited Dec. 22, 2017); for ocean plastics, see Sarah Kaplan, By 2050 There Will Be More Plastic than Fish in the World's Oceans, Study Says, WASH. POST (Jan. 20, 2016), https://www.washingtonpost.com/news/morning-mix/wp/2016/01/20/by-2050there-will-be-more-plastic-than-fish-in-the-worlds-oceans-study-says/?utm\_term=.caefb2cd9717, and Lisa Kaas Boyle, Introduction: Tulane Law School Gents Into Plastics, 27 Tul. ENVTL. L.J. 149 passim (2015); for arctic toxins, see Arctic Tundra Filled with Toxins-Study, E&E News: GREENWIRE (July 13, 2017), https://www.eenews.net/greenwire/2017/07/13/stories/1060057318; for glacial melting, see Early Warning Signs of Global Warning: Glaciers Melting, UNION CONCERNED SCIENTISTS, http://www.ucsusa.org/global\_warming/science\_and\_impacts/impacts/ early-warning-signs-of-global-5.html#.WVgfPITyvIU (last visited Dec. 22, 2017); for Great Barrier Reef, see Damien Cave & Justin Gillis, Large Sections of Australia's Great Barrier Reef Are Now Dead, Scientists Find, N.Y. TIMES (Mar. 15, 2017), https://www.nytimes.com/ 2017/03/15/science/great-barrier-reef-coral-climate-change-dieoff.html, and for coral bleaching more widely, see Coral Bleaching: What You Need To Know, NATURE CONSERVANCY: OCEANS & COASTS, https://www.nature.org/ourinitiatives/habitats/coralreefs/coral-reefs-coral-bleachingwhat-you-need-to-know.xml (last visited Dec. 22, 2017); for amphibians and pollinators, see Camila Ruz, Amphibians Facing 'Terrifying' Rate of Extinction, GUARDIAN (Nov. 16, 2011, 13:56), https://www.theguardian.com/environment/2011/nov/16/amphibians-terrifying-extinctionthreat; Death of a Dynasty: West North America Lost Over 95% of Its Monarch Butterflies in 35 Years, ZME Sci. (Sept. 11, 2017, 8:45 PM) https://www.zmescience.com/science/monarchbutterflies-death-america/; and Christina Procopiou, 40 Percent of Invertebrate Pollinators Face Extinction Across the Globe, NEWSWEEK (Feb. 27, 2016, 11:19 AM), http://www.newsweek. com/40-percent-bees-and-butterflies-face-extinction-431047; for birds of Great Britain, see BILL BRYSON, THE ROAD TO LITTLE DRIBBLING (2016) (describing recent science survey); for megavertebrates, see James Gorman, Cheetahs in Danger of Extinction, Researchers Say, N.Y. TIMES (Dec. 30, 2016), https://www.nytimes.com/2016/12/30/science/cheetahs-endangeredspecies.html, and Dominique Mosbergen, Orangutans Are Now One Step Closer to Extinction, HUFFINGTON POST (Feb. 15, 2017), https://www.huffingtonpost.com/entry/orangutans-endangeredextinction\_us\_577f401be4b0344d514ebf8b; for extinction rates more generally, see ELIZABETH KOLBERT, THE SIXTH EXTINCTION: AN UNNATURAL HISTORY (2014), and extinction rates, see Alister Doyle, U.N. Urges World To Slow Extinctions: 3 Each Hour, REUTERS (June 22, 2007), https://www.reuters.com/article/us-climate-extinctions/u-n-urges-world-to-slow-extinctions-3each-hour-idUSL2253331920070522.

<sup>249.</sup> See the Clean Water Act National Pollution Discharge Elimination System, which has become an authorization process instead, Houck, *supra* note 120, and the "land ban" provisions of the Resource Conservation and Recovery Act, which have become an elaborate permit program of their own, see Randolph L. Hill, *An Overview of RCRA: The 'Mind Numbing' Provisions of the Most Complicated Environmental Statute*, 21 ELR 10254 *passim* (1991).

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managed under "multiple use" yield to the highest bidders,<sup>250</sup> yet others prescribe but do not require,<sup>251</sup> or mitigate but do not avoid,<sup>252</sup> or mitigate only part of the harm and declare victory.<sup>253</sup> On the natural resources side, landscape-level issues are rarely addressed,<sup>254</sup> and recent attempts to do so are now up for repeal.<sup>255</sup> Recovery plans for endangered species nature most at risk—lie unenforceable and unimplemented, more aspirational than the term "plan" would imply.<sup>256</sup> Even the most ironclad statutes yield to the unceasing demands of politicians, lobbyists, and litigation that may stall them for decades,<sup>257</sup> leading to a kind of stasis in

<sup>250.</sup> See Sierra Club v. Hardin, 325 F. Supp. 99 (D. Alaska 1971) ("According to commenters, there is no law to actually apply."); Nat'l Wildlife Fed'n v. U.S. Forest Serv., 592 F. Supp. 931 (D. Or. 1984) (multiple use claim similarly dismissed); see also Michael C. Blumm, *Public Choice Theory and the Public Lands: Why Multiple Use Failed*, 18 HARV. ENVTL. L. REV. 405 passim (2005).

<sup>251.</sup> See the Federal Land Policy and Management Act, which, per the Supreme Court, breathes discretion at every pore (even its most stringent language), Norton v. S. Utah Wilderness All., 124 S. Ct. 2373 (2004). *See also* Ohio Forestry Assoc. v. Sierra Club, 523 U.S. 726 (1998) (finding U.S. Forest Service planning subject to unreviewable discretion).

<sup>252.</sup> See 33 U.S.C. § 1344 (2017) (whose stated emphasis on "avoidance" of wetlands in the first place has also become a large permit system based on mitigating impacts instead); Oliver A Houck, More Net Loss of Wetlands: The Army-EPA Agreement on Mitigation, 20 ELR 10212 (1990); Oliver A. Houck, Hard Choices: The Analysis of Alternatives Under Section 404 of the Clean Water Act and Similar Environmental Laws, 60 U. COLO. L. REV. 773 passim (1989).

<sup>253.</sup> For the dubious track record of wetland mitigation, see R. Eugene Turner et al., *Count It by Acre or Function: Mitigation Ends Up to Net Loss of Wetlands*, 23 NAT'L WETLANDS NEWSL. (Envtl. Law Inst., Washington, D.C.), Nov./Dec. 2001, at 5-7, http://files.alicle.org/files/coursebooks/pdf/Ck081-ch18.pdf. Performance failures have plagued this program, leading to mitigation banking the success of which remains spotty. *See Mitigation Banking*, NCSU WATER QUALITY GROUP: WATERSHEDSS, http://www.water.ncsu.edu/watershedss/info/ wetlands/mitbank.html (last visited Dec. 22, 2017). When it comes to *creating* nature we are not yet God.

<sup>254.</sup> See Houck, supra note 120 and accompanying text.

<sup>255.</sup> See Press Release, U.S. Dep't of the Interior, Secretary Jewell Releases Landscape-Scale Mitigation Strategy To Encourage Dual Objectives of Smart Development and Conservation, (Apr. 10, 2014), https://www.doi.gov/news/pressreleases/secretary-jewell-releaseslandscape-scale-mitigation-strategy-to-encourage-dual-objectives-of-smart-development-and-

conservation (U.S. Department of Interior's landscape initiative, now targeted for appeal); Jim Lyons, *Could Trump Dismantle the American West? How the President's 'Deconstruction' Doctrine Threatens Public Lands*, HIGH COUNTRY NEWS (May 9, 2017), http://www.hcn.org/ articles/how-trumps-policies-erode-public-lands-in-the-west-zinke-gorsuch-trump.

<sup>256.</sup> See Fund for Animals v. Babbitt, 903 F. Supp. 96 (D.D.C. 1995) (approving patently inadequate recovery plan); Timothy H Tear et al., *Status and Prospects for Success of the Endangered Species Act: A Look at Recovery Plans*, 252 SCIENCE, Nov. 12, 1993, at 976 (grossly inadequate implementation). While attempts have been made to improve the program, chronic difficulties remain, including that plan elements are held to be non-enforceable. *See* Michael Deiulis, *Time for Judicial Enforcement of ESA Recovery Plans? . . . "When [Squirrels] Fly*,"40 B.C. ENVTL. AFF. L. REV. E. SUPP. 29 (2013).

<sup>257.</sup> See Houck, supra note 120 (citing industry lawsuits against every EPA Clean Water Act best available technology standard, postponing reductions in such major polluting categories

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which nature is simply lucky to hang on. At this pivotal juncture, America, long a world leader in environmental protection, has gone into a freefall with no end in sight.<sup>258</sup> All of which has prompted searches for new approaches, a countervailing right of its own.

Nature rights are not the only response on the table. Fusing environmental rights with human rights has gained considerable traction in countries with significant indigenous populations, opening their own front on natural resource preservation.<sup>259</sup> The U.S. public trust doctrine has experienced a revival of its own,<sup>260</sup> and a recent trust case in Oregon (by and on behalf of children) has dared to challenge climate change head on.<sup>261</sup> The broadest of these approaches yet, launched in the early 1970s, has been to incorporate environmental provisions (e.g., "each person has the right to a healthy environment") into half the constitutions of the world,<sup>262</sup> building their own precedent, leading to surprisingly

as pulp and paper and oil and gas for a decade or more, a pattern that has not abated; for the regulated community the costs of compliance outweigh the costs of attorneys).

<sup>258.</sup> See JAY AUSTIN ET AL., ENVTL. LAW INST., REGULATORY REFORM IN THE TRUMP ERA (Mar. 2017) (elimination of existing requirements and across the board, new constraints of implementation and enforcement).

<sup>259.</sup> See SVITLANA KRAVCHENKO & JOHN E. BONINE, HUMAN RIGHTS AND THE ENVIRONMENT 147-219 (2008); see also Confirming Rights: Inter-American Court Ruling Marks Key Victory for Sarayaku People in Ecuador, CULTURAL SURVIVAL (Sept. 2012), https://www.culturalsurvival.org/publications/cultural-survival-quarterly/confirming-rights-inter-american-

court-ruling-marks-key (requiring Ecuador to pay USD \$1.4 million for unconsented oil development on tribal land). Indeed, the recognition of property title has become an important strategy in conservation of the Amazon region. *See* Email from Amazon Conservation Team to author (July 14, 2017) (on file with author). Native Americans of the Pacific Northwest have led the struggle to save the Pacific Salmon for over a century, *see* JOSEPH C. DUPRIS, KATHLEEN SHAYE HILL & WILLIAM H. RODGERS, JR., THE SI'LAILO WAY: SALMON, INDIANS, AND THE COLUMBIA RIVER (2006), and have obtained injunctive relief for treaty violations blocking fish passage threatening the Pacific Salmon, *see* United States v. Washington (Phase II, Culverts), 2007 WL 2437166 (W.D. Wash. 2007). *See also supra* notes 205-207 describing indigenous roots of the U.N. Declaration and rights of nature in Ecuador and Bolivia. Indigenous environmental rights have come to the fore.

<sup>260.</sup> See Chelan Basin Conservancy v. GBI Holding Co., 378 P.3d 222 (Sup. Ct. Wash. 2017) (rejecting legislative disposal of public trust interests); Josephine Marcotty, *White Bear Lake Court Ruling Could Ripple Across All of Minnesota*, STARTRIBUNE (Sept. 24, 2017, 9:16 AM), http://www.startribune.com/white-bear-lake-court-ruling-could-ripple-across-all-of-minnesota/ 447208023/ (Minnesota Department of Natural Resources violated its public trust duties by failing to protect a lake and groundwater from excessive groundwater pumping). For extrapolation of the trust to all of nature, see MARY CHRISTINA WOOD, NATURE'S TRUST: ENVIRONMENTAL LAW FOR A NEW ECOLOGICAL AGE (2013).

<sup>261.</sup> Juliana v. United States, 217 F. Supp. 3d 1224 (D. Ore. 2017); *see also Juliana v. U.S.—Climate Lawsuit*, OUR CHILD. TR., https://www.ourchildrenstrust.org/us/federal-lawsuit/ (last visited Dec. 20, 2017).

<sup>262.</sup> See ERIN DALY & JAMES R. MAY, GLOBAL ENVIRONMENTAL CONSTITUTIONALISM (2014); Joshua Gellers, *Explaining the Emergence of Global Constitutional Environmental Rights: A Global Comparative Analysis*, 6 J. HUM. RTS. & ENV'T 75 passim (Mar. 2015).

favorable judicial decisions on every continent<sup>263</sup> and to such related initiatives as France's right of non-regression (an idea of genius).<sup>264</sup> Given the success of these patently open-ended doctrines, one is tempted to simply declare "rights of nature" as well and let the courts figure them out . . . as they have with such basic concepts as "due process," "privacy," and "equal protection" in other areas of law. To an extent this has already begun, but considerable work has also been done on standards as well. There is room for both processes to move forward, which is the way evolution works. And succeeds.

Each of these approaches seeks a redline for human development while there is still time. Each remains, however, essentially anthropocentric, our entitlement to nature for our use and enjoyment, and this approach has its attractions not only for its reliance on tangible benefits but also its comforting notion that the environment is "ours" to begin with. Their drawback is that they are also "ours" to *end* with, and what humans claim for themselves they can also unclaim, often quite easily. Programs disappear. Entire institutions disappear. Protections that depend on humans staying the course are inherently fragile, and when lost can be lost forever. It is the terrible dynamic of this field.

Which takes us back to rights in nature. Their very ecocentricity, anathema to their critics, is their first value-added, an extrinsic trigger new to the game.<sup>265</sup> The decision is no longer simply mano-a-mano among competing human preferences, and its measuring sticks are more objective than those found in other schemes: risks to living things we can calculate, avoid, and restore. They are the missing party with its own bottom line. These rights may take decades to mature (what rights do not?), but as rights, they will be difficult to remove. In the meantime, they open the door. More than that, they open the mind.

A second value-added by nature rights is deeply rooted in the human genome. We grew up together, producing linkages that E.O. Wilson calls "biophilia,"<sup>266</sup> and they are all around us, found in the

<sup>263.</sup> See HOUCK, supra note 234.

<sup>264.</sup> See Constitutional Council of France, Decision No. 2016-737 DC, Aug. 4, 2016, para. 7; see also Michel Prieur, Non-Regression in Environmental Law, 5 SAPIENS 2 (Mar. 19, 2013). For the adoption of this principle in Spain, see Fernando López Ramón, El principio de no-regressión en la descalificación de los espacios naturales protegidos por el Derecho Español, 20 REVISTA ARANZADI DE DERECHO AMBIENTAL13 (2011).

<sup>265.</sup> Indeed, as the Supreme Court of Colombia recently recognized, this is the very function of nature rights, "to recognize and assign rights and legal personhood" in order to arrest destruction of the planet under current regimes. *See* Maldonado, *supra* note 7. For a similar approach, see JAN G. LAITOS, THE RIGHT OF NONUSE (2012) (inclining toward rights of nature but, in the end, retaining the anthropocentric view).

<sup>266.</sup> Edward O. Wilson, The Diversity of Life 350 (1992).

simplest things: in nursery rhymes, stuffed bears, and trips to the zoo, in birdfeeders, whale watches and animal rescue leagues, in fishing rods, hunting licenses and the (astonishing) popularity of the National Park System, in the Eagle Bar, the Chicago Bears and the Year of the Snake and the Rabbit, in corporate logos, real estate prices and the names of SUVs, in the place we seek out for honeymoons, vacations or the briefest moment to exhale . . . a still pond, the shade of a tree, the sight of a white bird rising, with gratitude for their being out there, for the simple fact of their *being*.

Rights of nature tap into a place that anthropomorphism and its pragmatism, for all their importance, cannot touch: a powerful link to the human heart. They provide a baseline not easy for humans to manipulate, backed by this undeniable bond. Their contribution to the world at large could be yet greater, not limited to changing outcomes in particular cases, nor to empowering local communities, nor to creating new protected areas and restoring old ones before they too disappear, nor even to finding a place in corporate sustainability codes, gross domestic product, and other instruments of the prevailing economic order. Through each of these means and more, in framing a new way to perceive the world, an old way really, a world we will continue to dominate but may come to acknowledge as entitled to life, liberty, and a pursuit of happiness all its own.

A great deal may ride on this happening.