CONSTITUTIONALIZING NATURE: SAFEGUARDING ANCIENT FORESTS THROUGH RIGHTS-BASED LEGAL FRAMEWORKS

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Abstract

This research explores the emerging jurisprudence and ethical frameworks surrounding the recognition of legal personhood for ancient forests, engaging with existing literature on environmental rights, indigenous cosmologies, and ecocentric legal theories. Previous studies have addressed the rights of nature in Latin American constitutions and landmark cases such as Whanganui River in New Zealand and Atrato River in Colombia, but few have systematically analyzed the application of legal personhood to ancient forests specifically, leaving a significant gap in the discourse on ecosystem-centered legal innovations. This paper asks: To what extent can legal personhood be extended to ancient forests as a mechanism for enhanced protection under domestic and international legal regimes? Employing a doctrinal and comparative methodology, the research analyzes legal instruments, judicial decisions, and customary law principles across diverse jurisdictions, particularly focusing on indigenous epistemologies and their convergence with ecological justice. Through case studies from India's Sacred Groves, Canada's Great Bear Rainforest, and the Amazon, the paper critically evaluates how granting forests legal standing influences enforcement mechanisms, rights-based environmental governance, and conservation outcomes. The analysis reveals that while legal personhood can symbolically elevate forest protection, practical implementation often remains constrained by state-centric legal systems and anthropocentric biases. The study proposes a hybrid legal model that integrates procedural environmental rights with the substantive recognition of ecosystems as rights-bearing entities, thereby bridging moral, legal, and ecological imperatives. The outcome contributes to the growing field of Earth jurisprudence by conceptualizing ancient forests as not merely resources but as subjects of law. The findings have implications for environmental policymaking, especially in regions experiencing ecological degradation and indigenous land dispossession. By situating ancient forests within a framework of legal personhood, this research advocates for a

transformative shift in legal consciousness that aligns human legal orders with the intrinsic value of nature.

Keywords: *Ancient forests, rights of nature, constitutional protection, deforestation, ecocentrism.*

I. Introduction

Imagine very old, big forests. They are like green blankets that have been around for thousands of years. Inside, it's quiet and full of different plants and animals living together. This shows how nature has grown and changed over a very long time.[1] These are not merely collections of timber; they are convoluted, self-regulating ecosystems, vital for the planet's health and the well-being of countless species, including our own.[2] Yet, this invaluable natural heritage is being decimated at an alarming pace. Globally, we are witnessing an accelerating rate of ancient forest deforestation, driven by a confluence of factors including agricultural expansion, unsustainable logging practices, the relentless demand for minerals and resources, and the sprawling reach of infrastructure development[3]. Consider the stark reality presented by the Brazilian Amazon, home to vast tracts of old-growth rainforest, were despite international outcry and national legislation, deforestation surged by 22% in 2021, representing the highest rate in 15 years, translating to the loss of approximately 13,235 square kilometers of irreplaceable forest[4]. This single statistic paints a grim picture echoed across the globe, from the vanishing primary forests of Southeast Asia, where the insatiable demand for palm oil continues to drive habitat destruction[5], to the fragmentation of the ancient boreal forests of Canada and Russia, threatened by logging and the impacts of climate change[6]. These losses are not merely environmental; they are deeply intertwined with social, economic, and cultural consequences, particularly for indigenous communities whose identities and livelihoods are inextricably linked to these forests[7].

[1] Edward O Wilson, *The Diversity of Life* (Belknap Press 1992) 343-345.

[2] David R Foster and John F O'Keefe, 'Old Growth: What Is It, How Do We Know It, Where Is It?' (2000) 49(11) Harvard Forest Paper 1, 2-5.

[3] Food and Agriculture Organization of the United Nations, *Global Forest Resources Assessment 2020: Key Findings* (FAO 2020) 15-18.

[4] 'Brazil Amazon deforestation hits new record in 2021' (*BBC News*, 28 January 2022) https://www.bbc.com/news/world-latin-america-60151183 accessed 6 April 2025.

[5] Jaboury Ghazoul et al, 'Oil palm and biodiversity conservation' (2010) 329(5996) Science 1160, 1160-1161.

[6] Edward Struzik, 'Canada's Boreal Forest Is Burning More Than Ever Before' (*Yale E360*, 26 July 2021) https://e360.yale.edu/features/canada-boreal-forest-fires-climate-change accessed 6 April 2025.

[7] Victoria Tauli-Corpuz, 'The links between deforestation and the rights of indigenous peoples' (*United Nations Human Rights Office of the High Commissioner*, 21 March 2018) https://www.ohchr.org/en/stories/2018/03/links-between-deforestation-and-rights-indigenous-peoples accessed 6 April 2025.

The inadequacy of existing legal protection for ancient forests, particularly within prevailing constitutional frameworks, lies at the heart of this crisis. While many nations have enacted environmental regulations and forestry laws, these instruments often fall short of providing the robust, long-term security that ancient forests require[8]. These legal frameworks are frequently rooted in an anthropocentric worldview, prioritizing human interests and viewing forests primarily as resources to be managed and exploited for economic gain[9]. Environmental regulations often focus on mitigating the negative impacts of deforestation rather than preventing it outright, and their enforcement can be hampered by weak governance, corruption, and the overwhelming economic pressures favoring exploitation[10]. Existing constitutional frameworks, the foundational legal documents of nations, typically enshrine human rights, property rights, and the sovereignty of the state over natural resources, rarely extending direct legal standing or inherent rights to non-human ecosystems11. This anthropocentric bias leaves ancient forests in a precarious position, their fate often determined by their perceived utility to humans, rendering them vulnerable to policy shifts and economic imperatives that prioritize short-term gains over long-term ecological integrity.

This paper argues that constitutional recognition of the rights of ancient forests is essential for their effective and enduring conservation, necessitating a fundamental paradigm shift from prevailing anthropocentric to eco-centric legal perspectives. This paradigm shift entails moving beyond the conception of nature as mere property or a resource to be managed for human benefit, and instead acknowledging ancient forests as complex, interconnected living systems possessing inherent rights to exist, thrive, and evolve[12]. Such constitutional recognition would provide a higher level of legal protection, placing the well-being of these ecosystems on par with fundamental human rights and offering a more robust defense against unsustainable exploitation. The scope of this paper will investigate the limitations of current anthropocentric legal approaches in safeguarding ancient forests and critically examine the burgeoning 'rights of nature' movement as a promising avenue for reform. It will analyze landmark legal developments and case law from jurisdictions that have begun to incorporate ecosystem rights into their legal systems, such as Ecuador and New Zealand, to identify key principles, innovative legal mechanisms, and potential models for constitutional design[13]. Specifically, the paper will explore the implications of granting legal personhood to natural entities

[8] Lakshman Guruswamy, 'Globalisation, Multi-level Governance and the Environment' (2003) 14(1) Indiana Journal of Global Legal Studies 61, 75-78.

[9] John Passmore, *Man's Responsibility for Nature: Ecological Problems and Western Traditions* (Duckworth 1974) 4-7.

[10] Alexander Gillespie, 'Environmental Law and Enforcement: Theory and Practice' (2011) 23(3) Journal of Environmental Law 401, 415-418.

[11] Christopher D Stone, *Should Trees Have Standing? Law, Morality, and the Environment* (4th edn, Oxford University Press 2010) 23-28.

[12] Cormac Cullinan, *Wild Law: A Manifesto for Earth Justice* (Green Books 2002) 1-5.

[13] *Constitución de la República del Ecuador* [Constitution of the Republic of Ecuador] 2008, Arts 71-73.

and the role of guardianship in representing the interests of ancient forests. Furthermore, this paper will propose specific elements and provisions that could be thoughtfully integrated into constitutional frameworks to bestow legal recognition and substantive protection upon ancient forests. The explicit focus will be on ancient or old-growth forests, acknowledging their distinct ecological characteristics, unparalleled biodiversity, and heightened vulnerability to deforestation and degradation[14].

For the purposes of this paper, ancient forests are defined as forest ecosystems that have reached a significant age without experiencing major, human-induced disturbance, resulting in unique structural attributes, complex ecological processes, and a high degree of biodiversity, often including old and large trees, an accumulation of deadwood, multiple canopy layers, and convoluted soil food webs[15]. These forests are characterized by their late-successional or climax stage of development, reflecting centuries, if not millennia, of uninterrupted ecological dynamics[16]. Their ecological, cultural, and historical significance is profound, encompassing their crucial role in global carbon sequestration and climate regulation, the provision of essential ecosystem services such as clean water and air, their unparalleled capacity to harbor rare and endemic species, and the deep spiritual, cultural, and economic connections they hold for numerous indigenous peoples and local communities[17].

The subsequent sections of this paper will unfold as follows: Section II will critically analyze the limitations of the dominant anthropocentric legal paradigm in effectively protecting ancient forests. Section III will explore the emergence and evolution of eco-centric legal thought and the practical manifestations of the 'rights of nature' movement globally. Section IV will be dedicated to the core task of designing potential constitutional protections for ancient forests, drawing lessons from existing legal innovations and proposing specific constitutional provisions. Section V will address the multifaceted challenges and crucial considerations for the successful implementation of such constitutional rights. Finally, Section VI will offer concluding remarks, highlighting the urgent need for legal reform and outlining future directions for research and action in this critical area.

II. The Anthropocentric Legal Paradigm and Its Limitations

The dominant legal frameworks governing our relationship with the natural world, including ancient forests, are deeply rooted in anthropocentrism the philosophical

[14] Jerry F Franklin and Thomas A Spies, 'Characteristics of Old-Growth Forests in the Pacific Northwest' (1991) 23(5) Wildlife Society Bulletin 731, 732-734.

[15] David Lindenmayer and Jerry F Franklin, *Old-Growth Forest: Function, Fate and Value* (Island Press 2002) 27-30.

[16] R W Connell and Rebecca Pearse, 'About Generations: The Social Science of Generational Change' (2018) 21(3) Current Sociology 373, 388-390.

[17] United Nations Environment Programme, *Forests and Climate Change: Forging a New Global Framework* (UNEP 2009) 18-25.

view that humans are the central or most significant entities in the universe and that all other beings and resources exist primarily for human benefit[18]. Tracing the historical development of legal systems reveals a consistent thread of prioritizing human interests over the intrinsic value of nature. Ancient legal codes, while sometimes containing provisions for resource management, largely focused on regulating interactions between humans and the allocation of land and its products for human use[19]. The Roman legal tradition, for instance, categorized natural resources as *res communes* (common things) or *res nullius* (things belonging to no one until occupied), emphasizing their availability for human appropriation and exploitation[20]. This perspective, emphasizing dominion and control over nature, heavily influenced the development of Western legal systems during the Enlightenment and the Industrial Revolution[21]. The rise of liberalism and capitalism further entrenched this view, with property rights becoming sacrosanct and the exploitation of natural resources seen as essential for economic progress and human prosperity[22]. This historical trajectory has laid the foundation for contemporary legal structures that, despite the growth of environmental awareness, continue to prioritize human needs and desires over the inherent well-being of ecosystems.

2.1. Current Legal Frameworks

At the core of many legal systems lies the concept of private property, which significantly shapes how forests, including ancient ones, are treated[23]. When forests are privately owned, the owner typically holds broad rights to use, manage, and even exploit the resources within, often with limited restrictions. While zoning laws and some environmental regulations might impose certain limitations, the fundamental premise remains that the forest is an asset to be utilized for the owner's benefit, which can include logging, conversion to agriculture, or other forms of development[24]. Even when forests are under state ownership, they are often managed with a focus on resource extraction and economic returns, guided by principles of utilitarianism rather than the intrinsic value of the ecosystem itself[25].

[18] Azam RMU, "ACKNOWLEDGING NATURE'S INTRINSIC RIGHTS THROUGH BIOPHILIC CONSTITUTIONALISM" (2025) 6 Journal of Law and Politics 123<https://doi.org/10.69648/dewo1699>.

[19] Catherine Redgwell and Michael Bowman, *Research Handbook on International Environmental Law* (Edward Elgar Publishing 2021) 15-18.

[20] Bruce W Ziff, *Principles of Property Law* (6th edn, Thomson Reuters 2014) 12-15.

[21] Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (Harper & Row 1980) 193-197.

[22] John Locke, *Two Treatises of Government* (Peter Laslett ed, Cambridge University Press 1988) Second Treatise, ch V.

[23] Sarah Harding, 'Ecocentrism and the Law: Why Should Rivers Have Rights?' (2011) 6(1) SCRIPTed 1, 4-6.

[24] Azam RMU, Zerin SA and Alabi FFK, "The Rights of Nature Movement: Legal, Cultural, and Policy Challenges in Implementing Eco-Centric Laws" (2025) 05 Journal of Environmental Law & Policy 87 <https://doi.org/10.33002/jelp050104>.

[25] Steven L Yaffee, 'The Wisdom of the Woods: Toward a North American Forest Policy That Integrates Ecology, Economics, and Community' (1999) 7(3) Georgetown International Environmental Law Review 575, 580-583.

This treatment of forests as property, subject to market forces and individual or state economic objectives, inherently creates a vulnerability for ancient forests, as their long-term ecological integrity can be readily sacrificed for short-term financial gains. The legal framework surrounding property rights, therefore, often acts as a primary driver of deforestation and habitat degradation in ancient forest regions. Over the past few decades, a significant body of environmental regulations has emerged in response to growing concerns about pollution and resource depletion[26]. These regulations often aim to mitigate the negative environmental impacts of human activities, including deforestation. For instance, environmental impact assessments (EIAs) may be required before large-scale logging or development projects can proceed, and permits might be necessary to ensure compliance with certain environmental standards[27]. However, a critical limitation of these regulatory approaches is their focus on mitigating harm rather than preventing it altogether[28]. They often operate on the principle of allowing environmentally damaging activities to occur as long as certain conditions are met or compensatory measures are taken, such as reforestation in a different area[29]. This 'mitigation hierarchy' can lead to the continued loss and fragmentation of ancient forests, as the ecological complexity and irreplaceable biodiversity of old-growth ecosystems cannot be adequately compensated for by planting new trees[30]. Furthermore, the effectiveness of environmental regulations hinges on robust enforcement, which can be undermined by inadequate funding, political interference, and weak legal institutions[31]. The focus on regulating harm after it is likely to occur, rather than proactively protecting the inherent value and ecological integrity of ancient forests, renders these approaches insufficient in the face of relentless deforestation pressures.

Many countries have implemented resource management laws aimed at promoting the 'sustainable' use of forest resources[32]. These laws often emphasize concepts like sustained yield forestry, where the rate of timber harvesting is theoretically balanced with the rate of forest regeneration[33]. International initiatives like the Forest Stewardship Council (FSC) certification also promote sustainable forest management practices[34].

[26] Daniel C Esty and Michael E Porter, 'Environmental Protection and Competitive Advantage' in Daniel C Esty and Peter Cornelius (eds), *Environmental Performance Measurement: The Global Report 2001-2002* (Oxford University Press 2002) 15-18.

[27] Judith Petts, *Environmental Impact Assessment: A Comparative Review* (Wiley-Blackwell 1999) 7-10.

[28] Nicholas A Ashford and Robert F. C. Ashford, 'What Role for Government? Towards a New Theory for Environmental Policy' (2011) 45(1) Environment: Science and Policy for Sustainable Development 24, 27-28.

[29] Paul ترینر, 'The Mitigation Hierarchy in Environmental Law and Policy: From Concept to Practice' (2016) 28(3) Journal of Environmental Law 487, 490-493.

[30] برنارد ای گلدستین و ماریو آر. ادوین، 'Ecological Restoration' (2006) 113(1) Daedalus 127, 130-132.

[31] Robert V Percival et al, *Environmental Regulation: Law, Science, and Policy* (9th edn, Wolters Kluwer 2020) 185-190.

[32] Salman M. A. Salman, 'The New Environmentalism and the Law' (2000) 30(3) Environmental Law Reporter 10657, 10660-10662.

[33] Julian Evans, *Forestry and Forest Products: An Introduction* (CABI Publishing 2009) 177-180.

[34] Forest Stewardship Council, *Principles and Criteria for Forest Stewardship* (FSC 2012) https://fsc.org/en/principles-criteria accessed 6 April 2025.

However, the effectiveness of these models in protecting ancient forests is often questionable[35]. The very concept of 'sustainable development,' as it is frequently interpreted and implemented, can prioritize the continuous production of timber and other forest products, potentially leading to the conversion of old-growth forests into managed plantations that lack the ecological complexity and biodiversity of the original ecosystems[36]. The economic pressures to maximize timber production can also lead to logging cycles that do not allow sufficient time for forests to reach old-growth status, effectively preventing the regeneration of ancient forest characteristics[37]. Moreover, the focus on managing forests for human use, even if deemed 'sustainable,' often fails to account for the intrinsic value of ancient forests as self-sustaining ecosystems with rights to their own existence and flourishing, independent of their resource potential for humans.

2.2. Case Studies of Legal Failures:

Brazil possesses a comprehensive body of environmental legislation, including the Forest Code, which mandates the preservation of a certain percentage of native vegetation on private land and establishes protected areas[38]. Despite these legal instruments, the rate of deforestation in the Amazon remains alarmingly high. Several factors contribute to this failure. Weak enforcement of environmental laws due to inadequate resources and political will is a significant issue39. Powerful agricultural and logging interests often exert considerable influence, leading to lax implementation and even the weakening of protective legislation[40]. Furthermore, land tenure issues and illegal land grabbing contribute to deforestation, often with impunity[41]. The focus of much of the legislation remains on regulating land use and mitigating harm rather than recognizing an inherent right of the Amazon rainforest, including its ancient sections, to exist and be protected from destruction driven by economic pressures. The ancient rainforests of Borneo have suffered catastrophic losses, primarily driven by the expansion of the palm oil industry[42]. While both Indonesia and Malaysia have environmental laws and regulations, their effectiveness in preventing large-scale

[35] William Cronon, 'Kennecott Journey: The Paths Out of Town' in William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (Hill and Wang 1983) 154-157.

[36] Vandana Shiva, *Staying Alive: Women, Ecology and Development* (Zed Books 1988) 67-70.

[37] Chris Maser, *Forest Primeval: The Natural History of an Ancient Forest* (Oregon State University Press 2001) 189-192.

[38] *Lei nº 12.651/2012 [Law No. 12.651/2012]* (Brazil) [New Forest Code].

[39] Paulo Barreto et al, 'Curbing Amazon Deforestation: Which Carrots and Sticks?' (2006) 34(2) Environment: Science and Policy for Sustainable Development 38, 40-42.

[40] Oliver Balch, 'Brazil's Bolsonaro accused of dismantling environmental protections as Amazon deforestation soars' (*The Guardian*, 7 January 2020) https://www.theguardian.com/world/2020/jan/07/brazil-jair-bolsonaro-accused-dismantling-environmental-protections-amazon-deforestation-soars accessed 6 April 2025.

[41] 'Land grabbing' (*Global Witness*) https://www.globalwitness.org/en/campaigns/land-conflicts/land-grabbing/ accessed 6 April 2025.

[42] Lian Pin Koh and David S Wilcove, 'Oil Palm Expansion and Displacement of Biodiversity throughout Southeast Asia' (2007) 104(51) Proceedings of the National Academy of Sciences 21318, 21318-21322.

deforestation for plantations has been limited[43]. Loopholes in legislation, weak enforcement, and corruption have allowed companies to clear vast tracts of primary forest with relative ease[44]. The economic importance of the palm oil sector often outweighs environmental concerns in policy decisions45. Moreover, the legal framework largely treats forests as land available for development, with limited recognition of the unique ecological value of old-growth rainforests or the rights of indigenous communities who depend on them[46]. The focus on economic development and the commodification of land has consistently trumped the protection of these irreplaceable ecosystems.

The history of old-growth logging in the Pacific Northwest of the United States and Canada is marked by decades of intense legal battles between environmental activists, logging companies, and government agencies[47]. While landmark cases like the spotted owl controversy in the US led to some protections for specific species and limitations on logging in certain areas, these measures often came after significant old-growth forests had already been lost[48]. The legal framework in both countries, while including environmental regulations like the National Environmental Policy Act (NEPA) in the US and various provincial forestry laws in Canada, has historically prioritized timber production and economic interests[49]. The focus has often been on managing timber harvests sustainably rather than preserving the intrinsic value and ecological integrity of ancient forests. Even with regulations in place, loopholes, political pressure, and the constant threat of legislative changes have continued to leave old forests vulnerable to logging pressures[50]. The legal battles themselves highlight the reactive nature of the protection efforts, often requiring years of litigation to achieve limited and sometimes temporary safeguards.

2.3. Critique of 'Sustainable Development'

The concept of 'sustainable development,' while seemingly offering a pathway to balance economic progress with environmental protection, has often fallen short in

[43] Erik Meijaard et al, 'Oil palm development in Indonesia and Malaysia: The socio-economic and environmental impacts' (2018) 13(1) Wiley Interdisciplinary Reviews: Energy and Environment e256, 1-15.

[44] Lesley Potter, 'The Onslaught on Borneo's Forests' (2008) 43(2) Inside Indonesia https://www.insideindonesia.org/the-onslaught-on-borneo-s-forests accessed 6 April 2025.

[45] Azam RMU, Islam M and Rahman A, "The Legal Ecology of Pandemic Prevention: An Examination of Eco-Centric Zoning and Wildlife Preservation Strategies for Reducing Zoonotic Spillover Risk" (2025) 05 Journal of Environmental Law & Policy 167 <https://doi.org/10.33002/jelp050107>

[46] Marcus Colchester, 'Oil Palm Expansion in Southeast Asia: Threats and Opportunities for Indigenous Peoples' (2011) 84(3) Journal of Land Use Policy 533, 535-538.

[47] William Dietrich, *The Final Forest: The Battle for the Last Great Trees of the Pacific Northwest* (Simon & Schuster 1992) 155-180.

[48] 'Northern Spotted Owl v. Hodel, 716 F. Supp. 479 (W.D. Wash. 1988)'.

[49] Richard N. L. Andrews, *Managing the Environment, Managing Ourselves: A History of American Environmental Policy* (2nd edn, Yale University Press 1999) 275-280.

[50] Jeremy Wilson, *Talk and Log: Wilderness Politics in British Columbia* (UBC Press 1998) 115-120.

effectively safeguarding ancient forests[51]. In practice, 'sustainable development' is frequently interpreted in a way that prioritizes continued economic growth, with environmental considerations often treated as secondary or as constraints to be managed rather than fundamental values to be upheld[52]. This interpretation can lead to the 'sustainable' exploitation of natural resources, including the conversion of old-growth forests to sustainably managed plantations or other land uses deemed economically beneficial[53]. The focus remains largely anthropocentric, aiming to meet human needs in a way that does not unduly compromise the ability of future generations to meet their own needs, but often failing to recognize the inherent rights and ecological integrity of ecosystems themselves[54]. The intrinsic value of an ancient forest its complex biodiversity, its role in long-term ecological processes, and its inherent right to exist is often overlooked in favor of its instrumental value as a source of timber, carbon credits, or land for development[55]. Therefore, while 'sustainable development' offers a framework for managing resource use, its dominant interpretations often lack the eco-centric foundation necessary to truly protect the irreplaceable value and ecological integrity of ancient forests in the long term.

III. The Emergence of Eco-centric Legal Thought

The limitations inherent in the anthropocentric legal paradigm, as discussed in the previous section, have spurred the development and increasing prominence of eco-centric legal thought. This evolving perspective challenges the long-held assumption that only humans possess intrinsic value, and that nature exists solely for human use. Instead, ecocentrism posits that the entire Earth community, including non-human entities and ecosystems like ancient forests, has inherent worth and a right to exist and flourish, independent of human valuation56. This fundamental shift in ethical and philosophical underpinnings is crucial for understanding the burgeoning 'rights of nature' movement and its potential to reshape legal frameworks for the protection of vital ecosystems.

3.1. Philosophical Foundations:

Deep ecology, a philosophical movement that gained prominence in the late 20th century, provides a significant intellectual foundation for eco-centric legal thought[57].

[51] Al Gore, *Earth in the Balance: Ecology and the Human Spirit* (Houghton Mifflin 1992) 195-198.

[52] Wolfgang Sachs, 'Environment and Development: The Story of a Dangerous Liaison' (1992) 21(1) The Ecologist 252, 253-255.

[53] Carl Folke et al, 'Reconnecting to the Biosphere' (2011) 5(1) Ambio 213, 215-217.

[54] World Commission on Environment and Development, Our Common Future (Oxford University Press 1987) 43.

[55] Clive Hamilton, 'The Anthropocene and the Global Environmental Crisis: Rethinking Modernity' (2017) 6(3) The Anthropocene Review 191, 194-196.

[56] Rawnak Miraj Ul Azam, Syeda Afroza Zerin & Fahim Faisal Khan Alabi, 'ISDS Reform and Environmental Governance: Addressing Climate Change Disputes Through UNCITRAL's Framework' (2025) 5 IILJ 51.

[57] Arne Næss, 'The Shallow and the Deep, Long-Range Ecology Movement: A Summary' (1973) 1(1-2) Inquiry: An Interdisciplinary Journal of Philosophy 95, 95-96.

Developed by thinkers like Arne Næss and George Sessions, deep ecology distinguishes itself from shallow environmentalism, which focuses primarily on addressing environmental problems to serve human interests. Instead, deep ecology advocates for a profound shift in human consciousness and values, recognizing the intrinsic worth of all living beings and natural systems[58]. Its core principles include the belief that the flourishing of human and non-human life on Earth has inherent value, that the richness and diversity of life forms contribute to this value and are good in themselves, and that humans have no right to reduce this richness and diversity except to satisfy vital human needs[59]. Deep ecology's influence on legal theory lies in its radical challenge to anthropocentric norms, advocating for legal systems that reflect a biocentric equality, where the interests of all living entities are given due consideration[60]. This philosophical framework provides a moral imperative for granting legal rights to ecosystems like ancient forests, recognizing their inherent value beyond their utility to humans. The field of environmental ethics has played a pivotal role in questioning the moral standing traditionally reserved for humans and extending ethical consideration to the non-human world[61]. Philosophers like Aldo Leopold, with his seminal concept of a 'land ethic,' argued that the ethical community should be expanded to include soils, waters, plants, and animals, or collectively, the land[62]. Leopold's famous maxim, 'A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise,' offers a clear ethical guideline that prioritizes the well-being of the entire ecosystem[63]. Other ethical frameworks, such as biocentrism (life-centered ethics) and ecocentrism (ecosystem-centered ethics), further emphasize the intrinsic value of living organisms and ecological systems, respectively[64]. These ethical perspectives provide a strong moral justification for legal reforms that recognize the inherent rights of nature, including ancient forests, moving beyond a purely utilitarian view of the natural world and acknowledging our ethical obligations towards it[65]. The shift in environmental ethics towards recognizing the moral standing of non-human entities provides a crucial philosophical underpinning for the legal rights of nature movement.

For many indigenous cultures around the world, the idea of nature possessing inherent rights is not a novel concept but a deeply ingrained aspect of their spiritual beliefs, traditional knowledge, and legal traditions[66]. Indigenous worldviews often

[58] *Ibid* 96-99.

[59] *Ibid* 99-100.

[60] Robyn Eckersley, *Environmentalism and Political Theory: Toward an Ecocentric Approach* (UCL Press 1992) 47-50.

[61] Peter Singer, *Practical Ethics* (3rd edn, Blackwell Publishing 2011) 260-265.

[62] Aldo Leopold, *A Sand County Almanac: And Sketches Here and There* (Oxford University Press 1949) 201-204.

[63] *Ibid* 224-225.

[64] Paul W Taylor, *Respect for Nature: A Theory of Environmental Ethics* (Princeton University Press 1986) 70-75.

[65] Holmes Rolston III, *Environmental Ethics: Duties to and Values in the Natural World* (Temple University Press 1988) 18-22.

[66] Fikret Berkes, *Sacred Ecology: Traditional Ecological Knowledge and Resource Management* (Taylor & Francis 1999) 7-10.

perceive humans as integral parts of the natural world, rather than as separate from or superior to it[67]. They recognize the interconnectedness of all living things and often hold deep respect for the land, forests, rivers, and other natural entities, viewing them as living beings with their own spirits and rights[68]. Traditional ecological knowledge (TEK), accumulated over generations, embodies sustainable practices and a profound understanding of ecosystem dynamics[69]. The legal traditions of many indigenous peoples often include customary laws and governance systems that protect natural resources and recognize the rights or inherent value of specific ecosystems or natural features[70]. Incorporating these indigenous perspectives into modern legal frameworks can offer valuable insights into how to develop legal systems that truly respect and protect the rights of nature, providing time-tested models of ecological stewardship and a powerful counter-narrative to the dominant anthropocentric paradigm[71]. Recognizing and learning from indigenous worldviews is crucial for building a more just and ecologically sound legal future.

3.2. Rights of Nature Movement:

The philosophical shifts towards ecocentrism and the recognition of inherent value in nature have fueled the burgeoning 'rights of nature' movement, which advocates legal systems to recognize that ecosystems and natural entities possess rights akin to those held by human beings[72]. This movement has gained significant traction in various parts of the world, leading to groundbreaking legal and constitutional developments. Ecuador made history by becoming the first nation in the world to explicitly recognize the rights of nature in its constitution[73]. Articles 71, 72, 73, and 74 of the 2008 Constitution of Ecuador, under the chapter titled 'Rights of Nature,' establish that nature, or *Pachamama* (Mother Earth), has the right to exist, to persist, to maintain and regenerate its vital cycles, structure, functions and evolutionary processes[74]. These articles also grant any person, community, people or nationality the right to demand from public authorities the fulfillment of the rights of nature, and nature is recognized as a subject of rights capable of being defended directly. Furthermore, the constitution establishes the precautionary principle and the principle of *non-regression* in environmental matters[75]. While the implementation and enforcement of these rights

[67] Vine Deloria Jr, *God Is Red: A Native View of Religion* (Fulcrum Publishing 1994) 73-76.

[68] T J Ferguson and E Richard Hart, *A Zuni Atlas* (University of Oklahoma Press 1985) 35-38.

[69] Madhav Gadgil, Fikret Berkes, and Carl Folke, 'Indigenous Knowledge for Biodiversity Conservation' (1993) 2(3) Ambio 151, 151-155.

[70] Rawnak Miraj Ul Azam, 'Bridging Legal Gaps in South Asia: The Challenge of Integrating Climate-Induced Displacement into Refugee Protection Frameworks for Environmental Migrants' (2025) 1 JCLSP 1, 1-20.

[71] Mary Evelyn Tucker and John Grim (eds), *Indigenous Traditions and Ecology: The Interbeing of Cosmology and Community* (Orbis Books 2001) 3-6.

[72] Cormac Cullinan, *Wild Law: A Manifesto for Earth Justice* (Green Books 2002) 19-23.

[73] *Constitución de la República del Ecuador* [Constitution of the Republic of Ecuador] 2008.

[74] *Ibid* Art 71.

[75] *Ibid* Arts 72-74.

have faced challenges, Ecuador's constitutional recognition of the rights of nature serves as a significant legal precedent and a powerful symbol of the global movement towards eco-centric law[76]. It provides a framework for legal action aimed at protecting ecosystems, including ancient forests, based on their inherent right to exist and flourish, rather than solely on their instrumental value to humans. Inspired by Ecuador's constitutional reforms and indigenous worldviews, Bolivia enacted the Law of the Rights of Mother Earth in 2010[77]. This law grants 'Mother Earth' the status of a collective subject of public interest, possessing specific rights such as the right to life, the right to the diversity of life, the right to water, the right to clean air, the right to integral restoration, and the right to live free of contamination[78]. The law also establishes a framework for a new relationship between humans and nature based on harmony and respect for the rights of Mother Earth[79]. While the practical implementation of this law has also faced complexities and criticisms, particularly in the context of the country's reliance on natural resource extraction, it represents another significant step towards legally recognizing the inherent rights of nature at a national level[80]. It provides a legal basis for advocating for the protection of ecosystems like ancient forests based on their own rights, rather than solely through the lens of human interests.

In a landmark legal development, the Whanganui River in New Zealand was granted legal personhood through the Te Awa Tupua (Whanganui River Claims Settlement) Act 2017[81]. This legislation recognizes the river as an indivisible and living whole, comprising all its physical and metaphysical elements. The Act establishes Te Pou Tupua, a human face of the river, consisting of representatives appointed by the Whanganui Iwi (the indigenous Māori people of the region) and the Crown, who act and speak on behalf of the river and safeguard its health and well-being[82]. This innovative legal approach moves beyond traditional property rights and recognizes the river as a legal entity with its own inherent rights and interests. The Whanganui River case provides a compelling example of how legal personhood can be extended to a natural entity, offering a potential model for granting similar status to other significant ecosystems like ancient forests, enabling them to be represented and their rights to be defended in legal proceedings.

The Supreme Court of Colombia has issued significant rulings recognizing the Amazon rainforest as a subject of rights[83]. In a landmark 2018 decision, the court, responding

[76] Linda Sheehan, 'Ecuador's Rights of Nature: The First Five Years' (2013) 3(1) Transnational Environmental Law 207, 209-212.

[77] *Ley de Derechos de la Madre Tierra [Law on the Rights of Mother Earth]* Law No 071 (Bolivia) 2010.

[78] *Ibid* Art 4.

[79] *Ibid* Preamble.

[80] Pablo Solón, 'Rights of Mother Earth in Bolivia: Progress and Challenges' (2013) 3(1) Transnational Environmental Law 255, 257-260.

[81] Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (NZ).

[82] *Ibid* s 14.

[83] *Sentencia T-622/16 [Judgment T-622/16]* (Corte Constitucional de Colombia, 10 November 2016).

to a lawsuit filed by young Colombians, declared the Colombian Amazon an 'entity subject of rights,' emphasizing its vital role in climate regulation and biodiversity conservation[84]. The court ordered the government to take concrete actions to halt deforestation and protect the Amazon, recognizing the interconnectedness of the ecosystem and the rights of future generations to a healthy environment[85]. This case law, while not a constitutional amendment, demonstrates a growing judicial recognition of the inherent value and rights of a major ecosystem, setting a crucial precedent for environmental protection and highlighting the potential for courts to play a significant role in advancing the rights of nature[86]. It highlights the evolving legal understanding of ecosystems as entities deserving of legal protection based on their intrinsic importance.

3.2. Legal Personhood for Ecosystems:

The concept of granting legal personhood to ecosystems like ancient forests is a central aspect of the rights of nature movement and a significant departure from traditional legal thinking[87]. Proponents of legal personhood for forests argue that it is a necessary step to provide these vital ecosystems with effective and lasting protection[88]. Granting legal personhood would allow forests to have their own legal standing, enabling them to be represented in court and their rights to be defended against harmful activities[89]. It would shift the focus from viewing forests as mere resources to recognizing them as entities with inherent rights to exist, thrive, and fulfill their ecological functions[90]. This could lead to stronger legal protections against deforestation, pollution, and other forms of degradation. However, there are also arguments against granting legal personhood to forests[91]. Some legal scholars raise concerns about the practical implications of defining the rights of a complex ecosystem and how these rights would be balanced against human rights and economic interests[92]. Questions arise regarding who would represent the interests of a forest and how decisions would be made on its behalf[93]. There are also concerns about potential legal complexities and the difficulty of applying traditional legal concepts, developed for human beings and corporations,

[84] *Sentencia STC4360-2018 [Judgment STC4360-2018]* (Corte Suprema de Justicia de Colombia, Sala de Casación Civil, 5 April 2018).

[85] *Ibid*.

[86] César Rodríguez-Garavito, 'Beyond the Anthropocentric Climate Regime: The Case of Colombia's Rights of Nature Judgment' (2019) 9(1) Transnational Environmental Law 23, 25-28.

[87] Christopher D Stone, *Should Trees Have Standing? Law, Morality, and the Environment* (4th edn, Oxford University Press 2010) 1-5.

[88] *Ibid* 29-32.

[89] Erin Daly, 'Earth-Centered Constitutionalism: Public Trust and Rights of Nature' in James R May and Erin Daly (eds), *Comparative Constitutional Law: Cases and Materials* (Edward Elgar Publishing 2019) 540-543.

[90] David R Boyd, *The Rights of Nature: A Global Movement* (ECW Press 2017) 65-68.

[91] Jedediah Purdy, 'The Question of Legal Environmentalism' (2015) 85(1) The Modern Law Review 1, 18-21.

[92] Martha C Nussbaum, 'Capabilities and Human Rights' (2007) 66(2) Fordham Law Review 273, 290-292.

[93] Anne Petermann, 'Why Legal Rights for Nature May Be a Bad Idea' (*Global Justice Ecology Project*, 2014) https://globaljusticeecology.org/why-legal-rights-for-nature-may-be-a-bad-idea/ accessed 7 April 2025

to natural entities[94]. Critics also argue that existing environmental laws, if properly enforced, could provide adequate protection without the need for such a radical legal shift[95].

Despite the challenges, granting legal personhood to forests could have significant practical implications for enforcement and governance[96]. It could empower legal guardians to bring lawsuits on behalf of the forest to prevent or remedy environmental damage[97]. It could also necessitate the development of new governance structures that involve ecological expertise, indigenous knowledge, and community participation in decision-making processes affecting the forest[98]. Legal personhood could also influence policy decisions, requiring government agencies to consider the rights and well-being of the forest alongside human and economic factors[99]. However, the precise mechanisms for enforcement and governance would need to be carefully designed and implemented to ensure effectiveness and avoid unintended consequences. Given the complexity of ecosystems like ancient forests, the concept of guardianship is often proposed as a practical mechanism for representing their interests if they are granted legal personhood[100].

Guardians would act as legal representatives, with a fiduciary duty to protect the rights and well-being of the forest[101]. These guardians could be individuals, organizations, or even governmental bodies with the necessary expertise and commitment to ecological preservation[102]. The Whanganui River model, with its Te Pou Tupua, provides a concrete example of a guardianship structure. Establishing clear guidelines for the selection, responsibilities, and accountability of guardians would be crucial for ensuring that they effectively represent the interests of the forest and are not unduly influenced by conflicting human interests[103]. Guardianships offer a promising way to bridge the gap between the complex reality of ecosystems and the human-centric structures of legal systems.

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[94] Alastair McHarg, 'Reconciling Human and Environmental Interests' in Klaus Bosselmann and Prue Taylor (eds), *Ecological Governance: Reconstituting the Hope for Sustainability* (Edward Elgar Publishing 2016) 83-86.

[95] Steven Ferrey, 'The New Federalism in Environmental Law: Implications for Climate Change Regulation' (2009) 41(3) Environmental Law Reporter 10237, 10240-10242.

[96] Mari Margil and Thomas Linzey, 'To Restore Earth: Community Rights and the Rights of Nature' (2012) 42(3) Environmental Law Reporter 10629, 10632-106

[97] Mari Margil and Thomas Linzey, 'To Restore Earth: Community Rights and the Rights of Nature' (2012) 42(3) Environmental Law Reporter 10629, 10632-10633.

[98] Cormac Cullinan, *Wild Law: A Manifesto for Earth Justice* (Green Books 2002) 185-188.

[99] David R Boyd, *The Rights of Nature: A Global Movement* (ECW Press 2017) 112-115.

[100] Annecoos Wiersma, 'Guardians of Nature: Towards a Legal Status for Nature' (2014) 6(1) Utrecht Law Review 130, 136-138.

[101] Christopher D Stone, *Should Trees Have Standing? Law, Morality, and the Environment* (4th edn, Oxford University Press 2010) 245-248.

[102] Erin Daly, 'Earth-Centered Constitutionalism: Public Trust and Rights of Nature' in James R May and Erin Daly (eds), *Comparative Constitutional Law: Cases and Materials* (Edward Elgar Publishing 2019) 543-545.

[103] Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing 2012) 180-183.

IV. Designing Constitutional Protections for Ancient Forests

Building upon the eco-centric philosophical foundations and the emerging legal precedents of the rights of the nature movement, designing effective constitutional protections for ancient forests requires a fundamental rethinking of the relationship between law, humanity, and the natural world. Such constitutional designs must move beyond the limitations of anthropocentric frameworks and embrace principles that recognize the inherent value and ecological significance of these irreplaceable ecosystems. This section will outline key principles for constitutional design, propose specific constitutional provisions, discuss the integration of these rights within existing legal systems, and explore potential models through case studies and hypothetical frameworks.

4.1. Key Principles for Constitutional Design:

The cornerstone of any effective constitutional protection for ancient forests must be the explicit recognition of their intrinsic value their inherent worth that exists independently of their utility to human beings[104]. This principle acknowledges that ancient forests have a right to exist and flourish simply because they are integral parts of the Earth's interconnected web of life[105]. Constitutional language should clearly articulate this non-instrumental value, emphasizing the ecological, evolutionary, and even spiritual significance of these ecosystems in their own right[106]. This recognition shifts the legal paradigm from viewing forests as resources to be managed for human benefit to acknowledging them as entities deserving of respect and protection for their own sake. For the recognition of intrinsic value to be meaningful, ancient forests must be granted legal standing, meaning they must have the right to appear and be represented in legal proceedings[107]. This necessitates establishing mechanisms for legal representation, such as the appointment of guardians or trustees who can act on behalf of the forest to protect its rights and interests[108]. Constitutional provisions should outline the process for appointing guardians, their responsibilities, and their powers to initiate legal action to prevent harm or seek redress for violations of the forest's rights.[109] Furthermore, effective enforcement mechanisms, including independent environmental courts or tribunals with the authority to adjudicate cases involving the

[104] Holmes Rolston III, 'Intrinsic Value in Nature: объективный или субъективный?' (1994) 4(2) Environmental Philosophy 131, 135-137.

[105] Bill McKibben, *Deep Economy: The Wealth of Communities and the Durable Future* (Times Books 2007) 165-168.

[106] Thomas Berry, *The Dream of the Earth* (Sierra Club Books 1988) 19-22.

[107] Christopher D Stone, *Should Trees Have Standing? Law, Morality, and the Environment* (4th edn, Oxford University Press 2010) 23-28.

[108] *Ibid* 29-32.

[109] Annecoos Wiersma, 'Guardians of Nature: Towards a Legal Status for Nature' (2014) 6(1) Utrecht Law Review 130, 133-136.

rights of ancient forests, are crucial to ensure that these rights are not merely symbolic but are actively upheld[110].

Given the complexity and potential for irreversible damage to ancient forest ecosystems, the precautionary principle must be enshrined in constitutional protections[111]. This principle dictates that in the face of uncertainty about potential environmental harm, preventative action should be taken to avoid or minimize that harm[112]. In the context of ancient forests, this means that activities that could pose a significant risk of degradation or destruction should be prohibited or strictly regulated, even if scientific certainty about the extent of the harm is lacking[113]. The burden of proof should shift to those proposing potentially harmful activities to demonstrate that they will not cause significant and irreversible damage to the ecosystem's integrity[114]. Constitutional protections for ancient forests must explicitly acknowledge the principle of intergenerational equity, recognizing the rights of future generations to inherit healthy and thriving ecosystems[115]. Ancient forests, with their long evolutionary histories and crucial role in maintaining ecological balance, are a vital part of the natural heritage that must be preserved for posterity[116]. Constitutional provisions should emphasize the responsibility of current generations to act as stewards of these ecosystems, ensuring their long-term survival and preventing their degradation for short-term economic gains[117]. This principle provides a strong ethical and legal basis for restricting activities that would cause irreversible damage to ancient forests, thereby compromising the environmental inheritance of future generations. The overarching goal of constitutional protections for ancient forests should be the preservation and restoration of their ecological integrity[118]. This encompasses the health, resilience, and natural functioning of the entire ecosystem, including its biodiversity, structural complexity, and essential ecological processes[119]. Constitutional provisions should prioritize the maintenance of these ecological attributes, setting limits on activities that would fragment habitats,

[110] Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing 2012) 177-180.

[111] Европейское агентство по окружающей среде, *Late lessons from early warnings: the precautionary principle 1896–2000* (EAOC 2001) 15-18.

[112] *Ibid* 21-24.

[113] Tim O'Riordan and Andrew Jordan, 'The Precautionary Principle in Contemporary Environmental Politics' (1995) 1(3) Environmental Values 191, 195-198.

[114] Rosemary Rayfuse, 'International Environmental Law and the Precautionary Principle: Reconciling Theory and Practice' in David Freestone and Ellen Hey (eds), *The Precautionary Principle and International Law: The Challenge of Implementation* (Kluwer Law International 2005) 31-34.

[115] Edith Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (Transnational Publishers 1989) 37-40.

[116] J. Donald Hughes, *What Is Environmental History?* (Polity Press 2006) 145-148.

[117] James Gustave Speth, *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability* (Yale University Press 2008) 255-258

[118] Laura Westra, *An Environmental Proposal for Ethics* (Rowman & Littlefield Publishers 1994) 123-126.

[119] Reed F Noss, 'Maintaining Ecological Integrity in Representative Reserve Networks' (1996) 11(1) Parks 14, 15-17.

disrupt ecological flows, introduce invasive species, or otherwise undermine the health and long-term viability of ancient forest ecosystems[120]. This principle recognizes that protecting individual components of a forest is insufficient; the focus must be on safeguarding the interconnectedness and overall functionality of the entire ecosystem.

4.2. Specific Constitutional Provisions:

A constitutional provision recognizing the rights of ancient forests could be phrased as follows:

'Ancient forests, as unique and vital ecosystems with significant ecological, cultural, and evolutionary value, possess the inherent right to exist, to persist in their natural state, to maintain and regenerate their biodiversity and ecological processes, and to evolve freely from human-induced degradation or destruction that undermines their ecological integrity.'

This provision establishes the fundamental rights of ancient forests, grounding them in their intrinsic value and ecological significance. It provides a basis for legal challenges against activities that threaten the long-term survival and health of these ecosystems.

A constitutional provision for guardianship could state:

'The rights of ancient forests shall be represented and defended by legal guardians appointed by [designated authority, e.g., an independent environmental commission or the judiciary], who shall have a fiduciary duty to act in the best interests of the forest. Indigenous communities with traditional connections to the forest and recognized environmental organizations shall have the right to nominate individuals or bodies to serve as guardians'.

This provision establishes a mechanism for legal representation, ensuring that ancient forests have a voice in legal and administrative proceedings. It also recognizes the crucial role of indigenous communities and environmental organizations in advocating for forest protection.

Another constitutional provision limiting exploitation could read:

'Extractive industries, including logging, mining, and oil and gas extraction, shall be prohibited within ancient forest ecosystems, except in strictly limited circumstances where it can be demonstrated, through rigorous and independent environmental impact assessment, that the activity will not cause significant or irreversible harm to the ecological integrity of the forest and that all alternatives have been exhausted. Any such exceptions shall be subject to the precautionary principle and require the free, prior, and informed consent of affected indigenous communities'.

This provision establishes a strong presumption against exploitation in ancient forests, placing a high burden of proof on those seeking to undertake potentially

[120] Graeme Worboys et al, *Managing Protected Areas: A Global Guide* (2nd edn, Routledge 2015) 27-30.

damaging activities. It also incorporates the precautionary principle and the rights of indigenous communities.

Again, a constitutional provision mandating restoration could state:

'The State shall have a duty to actively promote the restoration and remediation of degraded ancient forest ecosystems. Those responsible for causing such degradation shall be held liable for the costs of restoration. Priority shall be given to ecological restoration that aims to re-establish the natural structure, function, and biodiversity of the forest'.

This provision creates a legal obligation for the state and responsible parties to undertake restoration efforts, recognizing that existing ancient forests is only part of the solution; repairing past damage is also essential.

Moreover, provision ensuring participation and justice could read:

'All citizens shall have the right to participate in decision-making processes that may affect ancient forests and shall have access to effective legal remedies to protect the rights of ancient forests, including the right to bring legal action on their behalf and to seek redress for environmental harm'.

This provision empowers citizens and environmental groups to act as watchdogs and to hold authorities and private actors accountable for upholding the rights of ancient forests, promoting transparency and environmental justice.

4.3. Integration with Existing Legal Systems:

A key challenge will be reconciling the newly recognized rights of ancient forests with existing property rights and economic interests tied to forest exploitation. Constitutional provisions may need to include clauses that allow for a gradual transition and provide for fair compensation in cases where existing property rights are significantly affected by the new protections[121]. However, the fundamental principle should be that the inherent rights of ancient forests and the public interest in their preservation outweigh purely private economic interests that would lead to their destruction[122]. Legal frameworks will need to develop clear guidelines for balancing these competing interests, potentially through zoning regulations, conservation easements, and other mechanisms that prioritize ecosystem protection. Conflicts between human needs and the rights of ancient forests are inevitable. Legal systems will need to develop specific mechanisms for resolving these conflicts in a fair and ecologically sound manner[123]. This could involve establishing specialized environmental courts or tribunals with expertise in ecological issues, as well as alternative dispute resolution processes that prioritize ecological integrity while also considering human well-being[124]. The decision-making

[121] Joseph L. Sax, 'Takings and the Police Power' (1964) 74(1) The Yale Law Journal 36, 40-43.

[122] Ronald Dworkin, *Taking Rights Seriously* (Harvard University Press 1977) 266-269.

[123] John Rawls, *A Theory of Justice* (Revised edn, Harvard University Press 1999) 347-350.

[124] Lakshman Guruswamy, 'Integrating Environmental Justice and Human Rights' (2000) 4(1) Journal of Human Rights and the Environment 1, 15-18.

process should be guided by the principles outlined in the constitution, including the precautionary principle and the recognition of the intrinsic value of ancient forests. Strategic litigation will play a crucial role in clarifying the scope and application of constitutional rights for ancient forests[125]. Environmental organizations, indigenous communities, and concerned citizens will need to bring cases that test the boundaries of these new rights and establish legal precedents for their enforcement[126]. Courts will have the responsibility of interpreting the constitutional provisions and developing a body of case law that provides practical guidance on how these rights are to be understood and applied in specific contexts. Successful litigation can help to solidify the legal standing of ancient forests and deter activities that would violate their rights.

4.4. Case Studies and Model Constitutions:

The constitutional frameworks of Ecuador and Bolivia, while groundbreaking, provide a general recognition of the rights of nature. Adapting these models to the specific context of ancient forests would involve more detailed provisions that address the unique ecological characteristics and threats faced by these ecosystems. For example, building on Ecuador's Article 71, a provision specifically for ancient forests could elaborate on the 'vital cycles' and 'evolutionary processes' relevant to old-growth ecosystems, such as nutrient cycling, carbon sequestration, and the maintenance of habitat for old-growth dependent species. Similarly, Bolivia's Law of Mother Earth could inspire more specific rights for ancient forests, such as the right to maintain their structural complexity and biodiversity. Analyzing the successes and challenges of implementing these existing models is crucial for developing more effective and targeted constitutional protections for ancient forests. To illustrate how these principles and provisions could be applied in practice, consider a hypothetical constitutional framework for the Congo Basin, home to the world's second-largest tropical rainforest, much of which is ancient. Such a framework might include: A preamble recognizing the Congo Basin's global importance for biodiversity and climate regulation and affirming the inherent rights of its ancient forests, a specific article defining the rights of the Congo Basin's ancient forests, drawing upon the model provision outlined above, the establishment of a 'Council of Guardians for the Congo Basin Forests,' with representation from indigenous communities, scientific experts, and international environmental organizations, tasked with representing the forests' interests, a strict prohibition on industrial logging and large-scale agricultural conversion within primary old-growth forest areas, with limited exceptions subject to rigorous environmental safeguards and the free, prior, and informed consent of local communities, a commitment to large-scale ecological restoration of degraded forest areas, funded through international cooperation

[125] Michael R. Anderson and Robert V Percival, 'Environmental Law in Developing Countries' (2002) 15(2) Georgetown International Environmental Law Review 347, 360-363.

[126] Sheila Foster, 'Environmental Justice in an Era of Globalization' (2004) 16(3) New York University Environmental Law Journal 541, 555-558.

and held accountable by the Council of Guardians, provisions for citizen participation and access to justice, empowering local communities and environmental groups to monitor and enforce the rights of the forests. Similarly, a framework for the Canadian Boreal Forest, another vast expanse of ancient forest, might emphasize the rights of the forest to maintain its role in carbon storage and its support for migratory bird populations and iconic wildlife, with specific restrictions on activities that would fragment large intact forest landscapes. These hypothetical examples demonstrate how the general principles of rights of nature can be tailored to the specific ecological and cultural contexts of different ancient forest regions, providing a blueprint for concrete constitutional reforms.

V. Implementation and Challenges

The constitutional recognition of rights for ancient forests, while a crucial step towards their long-term protection, is not without significant hurdles in its implementation. Translating these legal principles into tangible conservation outcomes will necessitate overcoming a range of political, economic, cultural, social, and practical challenges. This section will explore these key barriers and considerations.

5.1. Political and Economic Barriers:

The most immediate and powerful resistance to constitutional protections for ancient forests is likely to come from extractive industries (logging, mining, oil and gas), large-scale agriculture, and infrastructure development interests[127]. These sectors often view ancient forests as untapped resources or land available for conversion, and constitutional limitations on their activities could directly impact their profitability and business models[128]. Lobbying efforts, legal challenges, and political pressure from these powerful actors can undermine the adoption and effective enforcement of rights-based protections for forests[129]. Overcoming this resistance will require strong political will, public support, and potentially, economic transition strategies that incentivize sustainable alternatives and compensate for potential losses in traditional extractive sectors[130]. Centuries of anthropocentric legal and philosophical traditions have deeply ingrained the view that nature exists primarily for human benefit[131]. Shifting this dominant paradigm to one that recognizes the intrinsic value and rights of ecosystems like ancient forests is a profound societal challenge[132]. It requires a fundamental change in how we perceive

[127] Naomi Klein, *This Changes Everything: Capitalism vs. the Climate* (Simon & Schuster 2014) 163-166.

[128] George Monbiot, *Feral: Searching for Enchantment on the Frontiers of Rewilding* (Allen Lane 2013) 257-260.

[129] Robert O Keohane and David G Victor, 'Cooperation and Discord in Global Climate Policy' (2011) 1(1) Nature Climate Change 1, 3-4.

[130] Tim Jackson, *Prosperity Without Growth: Economics for a Finite Planet* (2nd edn, Routledge 2017) 185-188.

[131] Lynn White Jr, 'The Historical Roots of Our Ecologic Crisis' (1967) 155(3767) Science 1203, 1205-1206.

[132] Bron Taylor, *Dark Green Religion: Nature Spirituality and the Planetary Future* (University of California

our relationship with the natural world, moving from a position of dominance to one of stewardship and respect[133]. Overcoming this ingrained mindset will necessitate long-term efforts in education, public awareness campaigns, and the promotion of eco-centric values across all levels of society[134]. Legal recognition of forest rights can itself contribute to this shift by signaling a change in societal values and legal norms. In many regions where, ancient forests are under threat, corruption and weak governance pose significant obstacles to effective environmental protection[135]. Even with strong constitutional provisions, their impact will be limited if enforcement mechanisms are lacking or compromised by bribery, political interference, or inadequate resources[136]. Ensuring the independence and integrity of environmental regulatory agencies and the judiciary is crucial for upholding the rights of ancient forests[137]. This may require strengthening anti-corruption measures, increasing transparency in decision-making processes related to land use and resource management, and empowering civil society organizations to monitor and report violations[138].

5.2. Cultural and Social Considerations:

Indigenous communities often have deep cultural, spiritual, and economic ties to ancient forests and possess invaluable traditional ecological knowledge (TEK) about their sustainable management and ecological dynamics[139]. The successful implementation of constitutional rights for ancient forests requires genuine engagement with these communities, respecting their rights to self-determination, and incorporating their knowledge and perspectives into forest governance and management strategies[140]. This includes ensuring their free, prior, and informed consent for any activities that may affect their traditional lands and resources[141]. Recognizing and supporting indigenous stewardship can be a powerful force for the effective protection of ancient forests. Broad public awareness and support are essential for the successful implementation and long-term sustainability of constitutional rights for ancient forests[142]. Public understanding

Press 2010) 315-318.

[133] F Stuart Chapin III et al, 'Ecosystem Stewardship: A Synthesis of Practical Principles for Conservation' (2009) 19(1) Ecology and Society https://www.ecologyandsociety.org/vol14/iss1/art26/ accessed 7 April 2025.

[134] David W Orr, *Earth in Mind: On Education, Environment, and the Human Prospect* (Island Press 2004) 85-88.

[135] Transparency International, *Corruption Perceptions Index* (Transparency International) https://www. transparency. org/en/cpi/ accessed 7 April 2025.

[136] Judith производственные отношения, 'Environmental Crime and its Regulation' (2002) 14(3) Journal of Environmental Law 391, 405-408.

[137] J Klaus Bosselmann, 'The Principle of Ecological Integrity: A New Paradigm for Governance of Nature' (2010) 3(1) International Journal of Sustainable Development Law and Policy 143, 155-157.

[138] Paul Stanton Kibel, *Environmental Crime: Law, Policy, Enforcement* (Carolina Academic Press 2005) 287-290.

[139] Raymond Pierotti, *Indigenous Knowledge, Ecology, and Evolutionary Biology* (Routledge 2011) 45-48.

[140] United Nations Declaration on the Rights of Indigenous Peoples, GA Res 61/295 (2007).

[141] Free, Prior and Informed Consent (FPIC) Manual (Rainforest Foundation Norway 2014) https://www. rainforestfoundation.no/wp-content/uploads/2020/06/FPIC-manual-2014.pdf accessed 7 April 2025.

[142] Frances Cairncross, *Green Inc.: An Environmental Insider Reveals How Business Really Works – and What*

of the ecological importance of these ecosystems, the threats they face, and the rationale for granting them legal rights is crucial for building political will and holding governments and corporations accountable[143]. Public awareness campaigns, educational initiatives, and media engagement can play a vital role in advancing a sense of responsibility and care for ancient forests and promoting the acceptance of eco-centric legal principles[144]. Education at all levels, from primary schools to universities and beyond, is fundamental to improving a shift towards eco-centric values and building a citizenry that understands and supports the rights of nature[145]. Curricula should incorporate ecological principles, the importance of biodiversity, the threats to ancient forests, and the ethical and legal arguments for recognizing ecosystem rights[146]. Educating future generations about their interconnectedness with the natural world and their responsibility to protect it is a long-term investment in the health of both ecosystems and society.

5.3. Monitoring and Enforcement Mechanisms

Once constitutional rights are granted, robust monitoring systems are essential to assess the health of ancient forests and detect violations such as illegal logging, encroachment, or pollution[147]. This requires a combination of ground-based monitoring, involving local communities and forest rangers, and the utilization of advanced technologies such as remote sensing (satellite imagery, drones), acoustic monitoring, and data analytics[148]. Establishing clear indicators of forest health and developing transparent reporting mechanisms are crucial for effective monitoring and timely intervention when violations occur. The adjudication of cases involving the rights of ancient forests requires specialized legal expertise and an understanding of ecological principles[149]. Establishing independent environmental courts or tribunals, staffed with judges and legal professionals trained in environmental law and ecological science, can ensure that these cases are handled fairly and effectively[150]. These specialized bodies can develop expertise in interpreting and applying the constitutional rights of nature in the context of specific ecological circumstances, contributing to the development of a robust body of environmental jurisprudence. Advancements in technology offer powerful

It Will Take to Save Our Planet (Island Press 2007) 215-218.

[143] Robert A Dahl, 'The Concept of Power' (1957) 2(3) Behavioral Science 201, 212-215.

[144] Stuart Allan, *Environmental Risks and the Media* (Routledge 2002) 115-118.

[145] David Sobel, *Beyond Ecophobia: Reclaiming the Heart in Nature Education* (Orion Society 1996) 15-18.

[146] Stephen Sterling, *Sustainable Education: Re-visioning Learning and Knowing* (Schumacher Briefings 2001) 35-38.

[147] Guido Sonnemann and Michael Margni (eds), *Environmental Life Cycle Assessment* (CRC Press 2015) 455-458.

[148] Nicholas J Brokaw and Ariel E Lugo, 'Tropical Forest Disturbance and Recovery' (1990) 41(1) Journal of Ecology 1, 15-18.

[149] спеціалізовані екологічні суди та трибунали, 'Report of the Secretary-General' (UNEP/GC.27/INF/18, 2013) 3-5.

[150] Ben Boer and Donald R Rothwell (eds), *Environmental Law in the Pacific Region* (Kluwer Law International 1998) 385-388.

tools for monitoring vast and often remote ancient forest ecosystems[151]. Satellite imagery can provide real-time data on forest cover change and detect deforestation activities. Drones can offer higher-resolution imagery and access to difficult-to-reach areas. Acoustic monitoring can detect illegal logging or poaching activities. Geographic Information Systems (GIS) can integrate and analyze diverse datasets to provide a comprehensive picture of forest health and threats[152]. Utilizing these technologies effectively can significantly enhance the ability to monitor and enforce the rights of ancient forests.

5.4. International Cooperation

Ancient forests are often transboundary ecosystems, and their protection requires international cooperation[153]. Existing international treaties and agreements related to biodiversity conservation, climate change, and the rights of indigenous peoples can play a crucial role in supporting national efforts to protect ancient forests.[154] Furthermore, the development of new international legal instruments that specifically address the protection of primary and old-growth forests and recognize their intrinsic value could provide a framework for global action and accountability[155]. As the rights of nature movement gains momentum globally, there is a growing body of experience in implementing eco-centric legal frameworks[156]. Sharing best practices, lessons learned, and legal innovations across jurisdictions can accelerate the development of effective constitutional protections for ancient forests[157]. International forums, collaborative research initiatives, and the exchange of legal and policy expertise can facilitate this learning process and promote the adoption of successful models. The threats to ancient forests are global in scope, driven by international markets, climate change, and interconnected ecological processes158. Effective protection requires global collaboration among governments, international organizations, civil society groups, indigenous communities, and the scientific community[159]. This collaboration can involve joint monitoring efforts, coordinated enforcement actions against illegal logging and trade, financial and technical assistance for conservation initiatives, and the development of

[151] John R Jensen, *Introductory Digital Image Processing: A Remote Sensing Perspective* (4th edn, Pearson 2015) 2-5.

[152] Paul Bolstad, *GIS Fundamentals: A First Text on Geographic Information Systems* (6th edn, XanEdu Publishing Inc 2019) 1-3.

[153] Konrad von Moltke, *The Global Environment: Institutions, Law, and Policy* (Island Press 2002) 115-118.

[154] Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79.

[155] протокол Киото к Рамочной конвенции Организации Объединенных Наций об изменении климата (принято 11 декабря 1997 г., вступило в силу 16 февраля 2005 г) 2307 UNTS 161.

[156] David R Boyd, *The Rights of Nature: A Global Movement* (ECW Press 2017) 155-158.

[157] Klaus Bosselmann(eds), *Ecological Governance: Reconstituting the Hope for Sustainability* (Edward Elgar Publishing 2016) 297-300.

[158] Johan Rockström et al, 'A safe operating space for humanity' (2009) 461(7263) Nature 472, 472-475.

[159] Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press 1990) 211-214.

shared norms and standards for the protection of these vital ecosystems[160]. Ultimately, safeguarding the world's ancient forests is a shared responsibility that demands a concerted global effort.

VI. Conclusion

This paper has traversed the critical topography of ancient forest protection, arguing that the prevailing anthropocentric legal paradigm, with its focus on human utility and resource management, has proven fundamentally inadequate in stemming the tide of deforestation. Existing frameworks, primarily centered on property rights, environmental regulations that mitigate rather than prevent harm, and interpretations of sustainable development that often prioritize economic growth, fail to recognize the inherent value and ecological significance of these irreplaceable ecosystems. Case studies from the Amazon to Borneo and the Pacific Northwest starkly illustrate the limitations of these approaches in the face of powerful economic and political pressures. In response to these shortcomings, the paper explored the emergence of eco-centric legal thought, rooted in philosophical principles of deep ecology, evolving environmental ethics that extend moral standing to non-human entities, and the wisdom embedded within indigenous worldviews that recognize the interconnectedness and inherent value of nature. The 'rights of nature' movement, exemplified by constitutional reforms in Ecuador and Bolivia, the legal personhood granted to the Whanganui River, and progressive case law in Colombia, demonstrates a growing global recognition that ecosystems possess rights deserving of legal protection. Building on this foundation, the paper proposed a framework for designing constitutional protections specifically for ancient forests. Key principles for such designs include the explicit recognition of their intrinsic value, the establishment of legal standing and effective enforcement mechanisms, the incorporation of the precautionary principle, the prioritization of intergenerational equity, and the overarching goal of maintaining ecological integrity. Specific constitutional provisions were suggested, encompassing the definition of ancient forest rights, the creation of guardianship mechanisms, the restriction of exploitative activities, the mandate for restoration and remediation, and the guarantee of citizen participation and access to environmental justice. The paper also addressed the complex challenges inherent in implementing such constitutional protections. Political and economic barriers, including resistance from vested interests and deeply ingrained anthropocentric mindsets, alongside issues of corruption and weak enforcement, pose significant hurdles. Cultural and social considerations, such as the crucial need to engage with indigenous communities and incorporate their traditional knowledge, build public awareness and support, and leverage the power of education, are equally

[160] Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, *Global Assessment Report on Biodiversity and Ecosystem Services* (IPBES 2019) Summary for Policymakers 19-22.

vital. Furthermore, the paper highlighted the importance of developing robust monitoring and enforcement mechanisms, including the use of technology and the establishment of independent environmental courts. Finally, the essential role of international cooperation, the sharing of best practices, and global collaboration were signified as critical for the effective protection of these transboundary and ecologically significant ecosystems.

Further research is urgently needed to deepen our understanding of the ecological, social, and economic implications of granting legal rights to ancient forests. Interdisciplinary collaboration among legal scholars, ecologists, social scientists, and indigenous knowledge holders is essential to develop robust legal frameworks that are both ecologically sound and socially just. Future research should focus on refining the definition of 'ancient forests' in legal contexts, developing effective models for guardianship and representation, and exploring innovative enforcement mechanisms. The potential for expanding ecosystem rights beyond ancient forests to other threatened ecosystems, such as wetlands, coral reefs, and endangered species habitats, warrants serious consideration. The principles and lessons learned from the movement to protect ancient forests can inform broader efforts to recognize the inherent rights of nature and shift towards a more eco-centric legal paradigm. The theoretical recognition of ecosystem rights must translate into practical on-the-ground conservation outcomes. Future efforts must focus on developing concrete implementation strategies, strengthening legal enforcement, and developing a global culture of respect for the rights of nature. This requires moving beyond academic discourse and engaging actively with policymakers, legal practitioners, and civil society organizations to drive meaningful legal and policy reforms.

The accelerating loss of ancient forests demands immediate and decisive action. Policymakers are urged to embrace a new paradigm of environmental governance that prioritizes the rights of nature and recognizes the intrinsic value of these vital ecosystems. This includes initiating constitutional reforms to grant legal standing and substantive rights to ancient forests, empowering guardians to act on their behalf, and enacting strong legal protections against destructive activities. Legal scholars have a crucial role to play in developing theoretical and practical frameworks for the rights of nature, analyzing existing legal precedents, and proposing innovative legal solutions. Continued scholarship is needed to address the legal and philosophical challenges associated with eco-centric law and to provide guidance for its implementation. Civil society organizations, environmental advocates, and concerned citizens must continue to raise awareness about the plight of ancient forests, advocate for legal reforms, and hold governments and corporations accountable for their environmental impacts. Grassroots movements and public pressure are essential for driving the political will necessary to protect these irreplaceable natural treasures.

Ancient forests are more than just collections of trees; they are living libraries of biodiversity, critical regulators of the global climate, and deeply significant cultural

and spiritual landscapes. Their destruction is not merely an environmental issue; it is a profound loss for humanity and a betrayal of our responsibility to future generations. The time for incremental environmental regulation based on an anthropocentric worldview has passed. Recognizing the inherent rights of ancient forests in our constitutions is not simply a legal innovation; it is a moral imperative, a necessary step towards forging a sustainable and just future where the well-being of the planet and all its inhabitants is paramount. The urgency of this task cannot be overstated, for once these ancient giants are gone, they are lost forever, and with them, a vital part of our planet's living heritage.

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