

Conservation Biogeography as it relates to Ethics and the Anthropocene

Submitted to:

Dr. Erin McCance

By:

Chidera Bisong

(7772664)

Clayton H. Riddell Faculty of Environment, Earth and Resources

University of Manitoba

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Introduction:

To effectively critically evaluate Conservation Biogeography as it relates to Ethics and the Anthropocene, we will like to clearly understand our key terms to be able to make a connection. Key terms being; Conservation Biogeography, Anthropocene, and Ethics.

Conservation Biogeography according to Whittaker et al. is “*the application of biogeographical principles, theories, and analyses, being those concerned with the distributional dynamics of taxa individually and collectively, to problems concerning the conservation of biodiversity*” (Whittaker et al., 2005). Conservation Biogeography can be considered a sub-discipline of both ‘Biogeography’ and ‘Conservation Biology’ (Whittaker et al., 2005). Where Biogeography is the study of the distribution of life across space, and how it has changed through time in terms of distribution and dynamics of diversity, the numbers of species, or proportions of endemic species (Whittaker et al., 2005). Conservation Biology is a title given to an applied research in Conservation Biogeography that is designed to inform management decisions concerning the conservation of biodiversity (Whittaker et al., 2005).

The Anthropocene is regarded as the start of the period which sees large-scale human effects on the planet Earth (Ruddiman, 2013). The start of this period is however debated (Ruddiman, 2013). Some people hold the view that the most significant impacts of human beings on the environment occurred since the early industrial era (~1850), whereas others hold the view that recognizes the human-environment impacts to have occurred thousands of years earlier (Ruddiman, 2013).

Ethics is concerned with the way and way not to do things. It is a moral contract about right and wrong (Reiser, 2013). It maintains a specific order of the way we as humans relate to our

surrounding environment which includes animals (Reiser, 2013). The history of the relationship between humans and animals goes way back to many thousand years ago, of which during this time, the moral attitudes of humanity toward animals have gravitated to different degrees between two dichotomous positions: the atrocious disregard for the welfare of animals and the strong tendency for admirable sympathy (Reiser, 2013).

Conservation Biogeography and the Anthropocene:

Conservation Biogeography and the Anthropocene have everything to do with each other. Considering how much the Anthropocene has affected the environment, the impact has been truly tremendous; affecting the Earth's biodiversity and altering the biogeographic trend over time. The Anthropocene indeed provoked the need for conservation, without it, the Earth's self-sustaining natural processes would continue as normal. However, in present time, there is a great need for conservation measures as never before because man's activities are beyond unsustainable. The conservation community has emphasized what is called 'planetary stewardship', as well as the need for conservation to both recognize and effectively deal with the pervasiveness and irreversibility of Anthropocene impacts (Corlett, 2015). Two parallel realizations have birthed the most important changes in the way conservation biologists think and act, and these are;

- that conservation and all its practices can no longer just focus just only on preserving and restoring ecosystems of the past if this were to be the focus, it will be impossible in many places (Corlett, 2015).
- no longer can we keep on treating natural systems as separate from human systems (Corlett, 2015).

Some authors have seen these changed perceptions as a threat, reason being, they fear that they will cultivate an air of hopelessness in those dedicated to conservation, and undermine both conservation and restoration objectives (Corlett, 2015). However, most of them seem prepared to accept and take on the reality and focus on the inevitably dynamic future rather than the irretrievably lost past (Corlett, 2015). The often-heated debate on how this new conservation should be done has hidden a great deal of agreement among conservationists who operate in the field of saving species from extinction and maintaining resilient and functioning ecosystems are still worthwhile goals on a human-dominated planet (Corlett, 2015).

One viewpoint we can draw out from the relationship between conservation and the Anthropocene is that the Anthropocene has hugely affected the environment and has led to the dire need for conservation, however, Conservation Biogeography must look very intently towards the future, in the process of this, the effects of the past could be repaired. The idea that conservation must happen only in human-altered landscapes is by no means a new thinking, particularly in Europe, where almost all its landscapes were altered many centuries ago (Corlett, 2015). It is a radical concept in many parts of the world where conservation has traditionally only focused on the protection of pristine landscapes from humans (Corlett, 2015). One aspect of this practice concerns the future of restoration ecology, which in turn will restore habitats for species (Corlett, 2015). When the restoration of historical ecosystems is not a practical target in a time of rapid environmental change, then there is an opening to multiple possible goals, including a greater emphasis on ecosystem services and other aspects of human well being (Corlett, 2015). Active intervention, adaptive management, and experimentation seem likely to become an increasingly standard practice in conservation management (Corlett, 2015). The concept of the Anthropocene has already been quite disruptive in conservation biology, and from its inception which dates

during the late 1970s had an essentially biocentric focus (Corlett, 2015). The new border lines are not far from several previous ones, but they are unusually deep, probably because they involve money and power, as well as deeply held differences in philosophies and ideologies, and it is of utmost importance that the field does not break up at a time when we need broader alliances (Corlett, 2015).

Conservation Biogeography and Ethics:

Sahotra Sarkar wrote a book titled; '*Environmental Philosophy*', in there, his clearly articulated position is particularly interesting because it runs counter to those in environmental ethics and traditional North American conservation biology (Odenbaugh, 2014). Firstly, the traditional conservation biology has often had its focus on the preservation of endangered species with tools like population viability analysis and reserve design using island biogeography (Odenbaugh, 2014). To Sarkar, Conservation Biology uses the contents of decision, game, and social choice theory, along with other analytic tools to consider social and environmental values (Odenbaugh, 2014). Therefore, it is as much of a social science as a natural science (Odenbaugh, 2014). Also, as a naturalist, Sarkar says that we as human beings are encultured animals (Odenbaugh, 2014). Many environmental ethicists debate whether humans are 'natural' in some sense or other. He simply notes that our actions, or what we do is not very different in kind from other species; nevertheless, our actions clearly differ in magnitude of effects from other animals (Odenbaugh, 2014). From Sarkar's rhetoric, he has little patience for environmental ethics as currently practiced. Most environmental ethicists spend the bulk of their time discussing the viability of non-anthropocentric holistic accounts of intrinsic value (Odenbaugh, 2014).

References

- Corlett, R. (2015). The Anthropocene concept in ecology and conservation. *Trends in Ecology & Evolution*, 30(1), 36-41. <http://dx.doi.org/10.1016/j.tree.2014.10.007>.
- McEwan, C., Hughes, A., & Bek, D. (2014). Futures, ethics and the politics of expectation in biodiversity conservation: A case study of South African sustainable wildflower harvesting. *Geoforum*, 52, 206-215. <http://dx.doi.org/10.1016/j.geoforum.2012.09.010>.
- Odenbaugh, J. (2014). Environmental philosophy 2.0: Ethics and conservation biology for the 21st century. *Studies in History And Philosophy Of Science Part C: Studies In History And Philosophy Of Biological And Biomedical Sciences*, 45, 92-96. <http://dx.doi.org/10.1016/j.shpsc.2013.11.002>.
- Reiser, D. (2013). Animal Ethics. *Cologne Business School (CBS), European University of Applied Sciences, Koeln, Nordrhein-Westfalen, Germany*.
- Ruddiman, W. (2013). The Anthropocene. *The Annual Review of Earth and Planetary Sciences*. <http://dx.doi.org/10.1146/annurev-earth-050212-123944>.
- Sarkar, S. (2005). Biodiversity and environmental philosophy: An introduction. Cambridge University Press.
- Whittaker, R., Araújo, M., Jepson, P., Ladle, R., Watson, J., & Willis, K. (2005). Conservation Biogeography: assessment and prospect. *Diversity And Distributions*, 11(1), 3-23. <http://dx.doi.org/10.1111/j.1366-9516.2005.00143.x>.
- Young, K. (2015). Biogeography of the Anthropocene. *Progress in Physical Geography*, 40(1), 161-174. <http://dx.doi.org/10.1177/0309133315598724>.