An Ecologist’s Perspective of Creation Care and Restoration

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ABSTRACT

Beginning in the 1960s the gap between science and theology widened rapidly because of concerns on environmental protection, restoration, and what the theological community coined eco-theology. Part and parcel to this conflict has been finger-pointing and polarization where, because of loose interpretations of Scripture (e.g., Gen. 1:26-28), Christianity has been blamed for the ills and degradation of our environment. Three key science articles were the vanguard to heighten this divide and only have served to segregate theology (in particular Christianity) from the drivers of science that started during the Enlightenment period and Baconian ideals. This article addresses these three scientific works from two ecological and one genetics principle and compares it to the biblical narrative of Creation Care especially from a fall and redemption perspective. Included is a discussion on the semantic use of “restoration” versus “recovery” and their implications from a functional dialogue perspective. The final presentation also discusses that science (ecology in particular) and theology (Creation Care) are not incompatible and both look toward the day of creation restoration.

INTRODUCTION

Since the earliest history of man, be it the biblical account found in Genesis or in the archeological records of different civilizations, the interconnected relationship of humanity and nature (i.e., the ecological relationship) has been a cyclical journey of harmony and discord with the latter often suffering greatly at the hands of the former. History has also shown that as technology and population growth continues to increase the cycles of discordant to harmonious times have lengthened to the point that many question if balance will ever be restored. Incumbent to this concern is the perceived verses realized role of man as a creator, part of creation, or destroyer of creation.

Why is there this cycle of harmony and discord? Depending on one’s worldview, the answer could be discussed from an ecological or spiritual perspective, or both. Central to the
following discussion is the assumption that man (humanity) is an integral part of nature. As such, regardless whether one ascribes to the veracity of the *imago dei* teaching, humanity’s place in nature is as a part of creation, not as its creator. Therefore, this paper focuses on the centrality of man’s role as a part of creation. As important, included is a discussion on the merits that nature itself lacks self-restorative energy pointing to something beyond the material as an argument for the existence of God.

**The Ecological Perspective**

The growth of the human population in numbers is accelerating at an unprecedented rate. Even though the annual rate of growth has declined in the last half-century from a high of 2.1% to 1.1% in 2010, the actual numbers of individuals has continued to rise dramatically.\(^1\) For instance, in 1750, around the time of the industrial revolution, the population of the earth was less than 1 billion people. Since then, population growth has entered an exponential phase with about 2 billion in 1925, 2.5 billion in 1950, 5 billion in 1987, and is approaching 7 billion today.\(^2\) With that population growth is the obvious need for food, water, and other natural resources to survive, thrive, and reproduce.

Calvin DeWitt states that between the middle of the 19\(^{th}\) and beginning of the 21\(^{st}\) century, 2.2 billion acres (e.g., 8.9 million km\(^2\)) of natural lands have been converted for human


uses. Compared to the ~16 billion acres globally that support some kind of vegetation, and a current total cropland of 3.6 billion acres, this conversion of land for human use is significant.\(^3\) Land conversion and its associated practices result in loss of 18-40 tons/topsoil/hectare/year, or about 20 to 100 times its natural renewable rate.\(^4\) Similarly, in 1996 in the United States, one of the world’s largest consumers, we produced 202 million tons of garbage (~1500 pounds per person/year).\(^5\) We also produce globally over 70,000 different chemicals with approximately 1,000 added annually, which include biocides, pesticide, herbicides, plasticides, etc.\(^6\)

Such usages and abuses have been a part of humanity’s legacy since the dawn of time. Man’s intellect, ability to use tools, logic, reason, and complex social capacity has afforded him/her the ability to “conquer” nature for their own needs—a “Promethean fire” as such. Yet, even with this “superior” status and intellectual ability, man is still part of nature and subject to ecological principles. So instead of man’s intellect becoming the “Promethean fire” of nature leading to proper respect and use of the gift of our natural resources, man’s arrogance and misperceived attempts to control nature has resulted in “Prometheus’ punishment.”

The 1960s were a pivotal decade in understanding man’s role in nature. Three seminal scientific publications revealed man was not respecting nature and there were dire consequences for such neglect. The first was *Silent Spring* by Rachel Carson.\(^7\) This book more than any other


\[^4\] Bouma-Prediger, *For the Beauty of the Earth*, 52.

\[^5\] Ibid., 54.

\[^6\] DeWitt, *Earth-wise*, 34.

publication caused the world to pause and take an account of the impact it was having on its environment. The truth of Ms. Carson’s book was that we were slowly poisoning ourselves and polluting our environment with pesticides and other chemicals. The “silence” was due to the fact that these pesticides, most notably DDT, were impacting the hatchability of bird eggs, and hence the birds, due to population declines, ceased to “sing in the spring” because they were gone.

The controversy of such information and the economic impact her thesis meant to the corporate-giant chemical industries resulted in her being viciously maligned and criticized on all fronts. Unfortunately, although she knew her book was making headway in the way society viewed our environment, she was never able to see the full import and impact of her publication as she died within two years after publication. Yet, this book became the rallying cry for global mobilization that led to the banning of DDT and, subsequently, CFCs (chlorinated fluorocarbons) that had been determined to deplete our ozone layer protecting us from harmful solar radiation. Her book also became the spark for the foundation of Earth Day. It was the impetus for the passage of the National Environmental Policy Act, which led to the foundation of the Environmental Protection Agency. Today, the thesis of her book is still used as an example of how inaction can be very harmful when it comes to arguing for global action on issues of environmental importance such as climate change.

The second article of significance, especially to Christian perspectives on environmental issues, was written by UCLA history professor Lynn White in 1967 entitled “The historical roots of our ecological crisis.” In this article, there is a statement that the root cause of our ecological crisis.

8. Lynn White, Jr., “The historical roots of our ecological crisis.” Science 155 (Mar 10, 1967): 1203-1207. Dr. White’s article has become a highly polarizing statement against the dominionist’s view of the biblical mandate of stewardship and is often taken as proof text against his more cogent cause and effect argument that it was necessity for limited food availability that drove technological development that led to environmental degradation.
environmental crisis is because of Christian teachings. Specifically he states:

The victory of Christianity over paganism was the greatest psychic revolution of our culture... [M]an named all the animals, thus establishing his dominance over them. God planned all of this explicitly for man’s benefit and rule. ... [E]specially in its Western form, Christianity is the most anthropocentric religion the world has seen. ... [B]y destroying pagan animism, Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects. ... [B]ut, as we now recognize, somewhat over a century ago science and technology—hitherto quite separate activities—joined to give mankind powers which, to judge by many of the ecologic effects, are out of control. If so, Christianity bears a huge burden of guilt. 9

White’s article has had a profound influence on religious perspectives globally, not only from a pejorative, finger-pointing perspective, but also from an opening of a renewal of spiritualism and neo-paganism (see below). In essence, he is inferring a theological (in this case Christological) land ethic is the bane of nature’s overall health. Yet, often lost in White’s article is his more fact-based discussion of the impact of changing technology as a contributing cause of land degradation and environmental abuse.10 This argument, from a technological perspective, is that while mankind was a subsistence farmer with technological limitations, it was imperceptible for him to abuse the land. When technology advanced to the level of producing more than a single family could consume, communal farming led to a new paradigm of man’s relationship with the land. In short, “Man’s relation to the soil was profoundly changed. Formerly man had been part of nature; now he was the exploiter of nature.”11 While he states that other than northern Europe nowhere else did such analogous technological farming practices advance

9. Ibid., 1205-2006.

10. Ibid. 1205

11. Ibid.
during medieval times, one can hardly say this is not true today on a global scale. In essence, one could effectively argue, using White’s own logic and words, this changing paradigm was effected by necessity of tilling the sticky and wet soils of northern Europe and changes in population and economic demographics;\(^{12}\) not by changes in Christian stewardship ideologies.

The third article that had a profound influence on the way humanity views its role and responsibility with nature was Garrett Hardin’s “The tragedy of the commons.”\(^{13}\) While not a direct reference to White’s paper mentioned above, it follows the same tenets from White’s discussion on the importance of technology on population growth and its impact on the environment. Tragedy, as he presents it, comes from philosopher Whitehead, and it “[R]esides in the solemnity of the remorseless working of things. . . (it) can only be illustrated in terms of human life by incidents which in fact involve unhappiness. For it is only by them that the futility of escape can be made evident in the drama.”\(^{14}\) Hardin presents his argument from the perspective of looking at the Commons wherein a farmer uses a pasture that is open to all and belongs to no one individual. In this pasture, all herdsmen are expected to keep as many cattle as possible within the Commons.

Ultimately there comes a point where each herdsman wants to maximize his personal gain and, after weighing the pros and cons, decides the only sensible action is to add another animal, and another, and another, etc. Before long, the carrying capacity of the pasture is exceeded because at the same time this one intrepid herdsman was making this decision for his

\(^{12}\) Ibid.


\(^{14}\) Ibid., 1224.
cattle on a communal pasture, so was every other herdsman. The tragedy then is:

Each man is locked into a system that compels him to increase his herd without limit—in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom of the commons brings ruin to all.¹⁵

Why these three articles are important to the thesis that nature is not ecologically self-restorative is that they relate to the fact that, first and foremost, man is part of nature and you cannot separate the two. Second, they relate to two ecological principles (Competitive Exclusion and Resource Partitioning) and one evolutionary principle (survival of the fittest).

In looking at the latter first, genetics has shown that, among other things, evolution (microevolution in this case) is a mathematical process wherein those organisms capable of successfully reproducing and passing their genes on to the next generation are the ones that will maintain a species in time. Over time that population then will resemble the parent types that were successful in reproduction. This “natural selection” may cause a population to completely look and act differently, may keep a wide range of diversity of phenotypes present, or may cause new species to evolve.¹⁶ These facts mean that fitness is a function of an organism’s ability to successfully produce offspring over long periods of time, not necessarily who is physically the strongest.

The Competitive Exclusion Principle essentially states that:

[I]f two noninterbreeding populations ‘do the same thing’—that is, occupy precisely the same ecological niche. . . they occupy the same geographic territory—and if population A multiples even the least bit faster than

¹⁵. Ibid.

population \( B \), then ultimately \( A \) will completely displace \( B \), which will become extinct.\(^{17}\)

In concept of this principle can only be established by theory and not by the facts as presented in nature because the experiments that developed this principle were in a small, closed-system and conducted with a rather innocuous beetle. Yet, examples of the apparent veracity of the principle abound in nature where two competitors for the same limited resources do not exist over time. In this light, one could argue that the biosphere itself is a closed finite resource system (the Commons).

If one concedes Hardin’s argument can be extended to the earth as a whole, it is apparent that, on a metascale, niche competition could be extended to geopolitical nations (people groups) as they battle for limited resources such as water. Because man can interbreed between individuals of differing nations, violating a premise of the principle, mankind, as such, is not the key. This dubious honor falls to the nations themselves as the construct that is the actual competitor. One can argue that nations can be viewed socially and anthropogenically as the ultimate competitor and thus do not obviate the premise since nations do not interbreed.

Similarly, the third principle connects with the concept of resource partitioning in nature. Under this principle coexistence with other organisms with similar needs and requirements necessitates that organisms living together must meet certain criteria; otherwise Competitive Exclusion takes precedence.\(^{18}\) In essence, for coexistence to occur, competition for limited


\(^{18}\) see Richard Levin, “Coexistence in a variable environment.” The American Naturalist 114 no. 2 (December 1979): 765-783. Levin outlines five points that an organism must adhere to in order to coexist with other species and four points where the theory has been challenged.
resources must be minimal and existing resources must be partitioned across all organisms. In other words, the number of species and species types cannot exceed the amount of resources.

The principle of resource partitioning is therefore linked to both the principle of Competitive Exclusion and the principle of Survival of the Fittest. If the organisms are too similar one will out-compete the other and only one of the two will be fit enough to reproduce because the energetic requirements for reproduction are high and are often only available to produce gametes when the energetic needs for survival is met first.

Given these statements and principles what do they that have to do with a conflict between science and theology with respect to Creation Care. As previously mentioned, the central assumption for this argument is that man is part of, not divorced from, nature. If, according to Lynn White, not only technology, but also, and probably more so, Christianity is to blame for our environmental ills, one would have to wonder why a renown ecologist and evolutionary biologist of the caliber of E.O. Wilson made an appeal for religion and secularism to join forces to restore our nature. In his book *Creation: An Appeal to Save Life on Earth* Wilson, a retired Harvard professor, ecologist, and secular humanist makes a plea to a Baptist pastor to join forces to save “living nature.” 19 Creation is in deep trouble and unless something is done to stem the tide by the end of the 21st century, scientists project half the species of plants and animals will be extinct or soon to be gone because of destructive human activities. 20

19. E.O. Wilson, *Creation: An Appeal to Save Life on Earth* (New York: W.W. Norton, 2006), Wilson writes his book from an evolutionary biologist’s perspective but makes the appeal to Christians to find a common ground of saving God’s creation. While his intent is to be “bipartisan” he clearly has a scientific bias in which he frames his argument with the idea that the centrality of this issue is so important to evangelicals and biologists that no one would question joining forces.

20. Ibid, 3-5.
Although Wilson is “hedging his bets” by proposing to join forces with faith-based organizations, he fully believes it is within man’s intellect and ability to stem the tide of environmental degradation and destruction.\(^2\)

In contrast to an appeal for faith and science to join forces, White’s polemic against Christianity as being the underlying cause of the ills of our environment was based on an interpretation that mankind is to dominate nature and thus has no responsibility in Creation Care, much less want to see it recovered. Interestingly, toward the end of his paper he states:

> What we do about ecology depends on our ideas of the man-nature relationship. More science and more technology are not going to get us out of the present ecological crisis until we find a new religion, or rethink our old one.\(^3\)

White is saying religious ideals got us into this problem maybe only religious ideals are going to get us out.\(^3\) Does this synopsis mean Christianity or some other form of “religion?” Does this mean that in order to reconcile the perceived “restorative capacity” of nature mankind needs some form of spiritual connection to something perceived as greater than oneself? Other considerations of the implications of White’s points and a renewal of natural religions follow.

**The Biblical Perspective**

Robin Attfield points out that White’s argument looked at the Bible as the belief that human dominion over nature was allied to the Stoic perspective that the irrational existed for the

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21. Ibid., there is a recurring theme throughout the entire book that relegates God to a secondary if not irrelevant role while elevating mankind to the level of being able to resolve the problem posed in the book. Given his appeal to faith-based organizations one has to wonder if he really understands the eschatological implications of his premise.


sake of the rational and that humans could do with nonhumans as they pleased without any regard for moral constraint. David Horrell states in his book *The Bible and The Environment* that others have a similar attitude of White in that Gen. 1:26-28 is an imperative for humanity to dominate creation and Ps. 8:5-8 provides a similar apologetic – both verses are “implicated in causing the ecological problems that have stemmed from aggressive human exploitation of the earth.” Horrell goes further to state:

The Baconian interpretation of Gen. 1:26-28 as a mandate for the active implementation of a programme of human dominion arose within the context of new discovery and immense optimism about the possibilities of science. The evangelical interpretation of Gen. 1:26-28 as a call for responsible stewardship of nature arises within a context of growing awareness of the negative impact of human activity on the planet’s ecosystems, and a more chastened sense of the limits and dangers – a well as the positive benefits – of science. Neither interpretation can simply be declared a false reading of this text. Or, put differently, both interpretations are, in a sense, “distortions” of the text since both make of it something rather different from what its own content and context imply.

Clearly this attitude expressed by White, Horrell, and others is contradictory to Scripture. In

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25. see David G. Horrell, *The Bible and the Environment: Towards a Critical Ecological Biblical Theology* (London: Equinox, 2010), 32-33, Horrell’s chapter on “Human Dominion over Creation” frames the more progressive and “scientific” arguments against Gen. 1:26-28 concerning the ideas of human dominion (*radah*) over the living creatures and the command subdue (*kabash*) the earth.

26. Ibid., 35. Horrell bases his conclusion that proper interpretation of the text is dependent on critical exegesis and historical study coupled with theological and ethical grounds for interpretation. All of this effort is then conveyed within a contemporary context that we inhabit. He further frames his point that “[I]n an age dominated by ecological concerns and problems, other texts might offer fruitful resources and might have a claim to be brought to the centre of biblical theology."

27. see article on Creation Care by Bruce Ashford in this journal.
her discussion of this issue, Attfield further argues on the basis of her and other’s work that human dominion can be taken as a stewardship role for God’s creation where mankind had a mandated responsibility.  

28 In the Garden of Eden Adam had the responsibility to tend it, preserve its beauty, and protect it from harm all the while obtaining his food from it (Gen. 2:15).  

29 In fact, the antithesis of White’s argument of mankind dominating and subduing the earth is the evidence of environmental conservation and stewardship, not despotism over nature.  

30 Therefore, the Genesis account provides us with the foundational aspect of a proper Christian environmental ethic – the Creator/creature distinction and the doctrine of *imago dei* and the authority to rule over and care for His creation (Gen. 1:26-30).  

31 By endowing mankind with His image and placing them in authority (Pss. 8:6; 115:16), He inherently gave mankind responsibility for Creation Care as well.  

32 Our stewardship means that we are morally accountable to Him for keeping His creation in the care and well-being that brings honor to Him and best serves His kingdom.  

33 In the final analysis, Jeanne Kay’s article on human dominion in the Hebrew Bible is a good review of the verses germane to this issue. She does a good job discussing her thesis that the biblical viewpoint is very different from that of a 20th century ecologist. As such, her view

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29. Ibid., 374.  


32. Ibid., 70.  

33. Ibid., 69
can be summarized as a belief in nature as a tool of divine justice wherein a beneficent nature is a reward for religious observance and a deteriorating environment is God’s punishment for idolatry or immorality.\textsuperscript{34} Unfortunately this interpretation does not match with the biblical narrative of the creation, fall, redemption, and restoration. In accord with ecologist’s arguments, the cause of the Fall on creation was man’s selfish desires (Gen. 3:17-19). In contrast, its only means of restoration (Isa. 65:17; 2 Pet. 3:13) is by Christ Himself (Rom. 8:18-23; Rev. 21:1-4, see below). Biblically the point is that mankind’s efforts at restoration will not be successful because of his conflicting integral role in nature. Only God through Christ can restore creation.

Supporting this conclusion are two arguments as to why man’s efforts at restoration will not work. The first centers on the revitalization of neo-paganism and a liberal Christian interpretation that leads to “eco-theology.” The second relates to the doctrine of the Fall of man. Regarding the first aspect, one could look at the recent breakdown of traditional Christian perspectives and see that liberal interpretations have started to become more mainstream.

Laurel Kearns outlines the differences between three groups espousing Christian theological teachings of biblical stewardship.\textsuperscript{35} The first model, “Christian Stewardship Ethic,” uses the Bible as a mandate and considers itself evangelical with God being transcendent and authoritative. The environmental issues are resource depletion and degradation. Its intellectual tools are the Bible and biology.\textsuperscript{36} The second model, “Eco-justice Ethic,” has a starting point of

\textsuperscript{34} Kay, “Human domination over nature in the Hebrew Bible,” 215. The rest of her article gives excellent scriptural references for the differences in obedience to God and His blessing versus disobedience and the impact it has on our environment.


\textsuperscript{36} Ibid., 56, Table 1.
social justice with the theological appeal being mainline Christian social justice supporters. God is transcendent but the God of liberation. The environmental issues are toxic wastes, pollution, and agriculture. Its intellectual tools are liberation theology and social sciences.\textsuperscript{37} The third group is “Creation Spirituality Ethic.” It has a starting point of cosmolological physics and looks at God as being immanent and pantheistic. The environmental issues are wilderness preservation and species extinction. The intellectual tools are medieval mysticism, evolution, and physics.\textsuperscript{38} It is this last group that Lynn White seems to appeal to with his reference to “new religions.”\textsuperscript{39}

For non-conservative Christians, environmentalists, and unbelievers the realm of spirituality is appealing as it is a means to connect some form of higher authority with nature. Recognizing that nature in itself does not have the energy necessary for self-restoration, they seek higher authorities; but in a non-Judeo-Christian god or entity. In fact, in 2001 the American Academy of Arts and Sciences dedicated an entire issue of its journal \textit{Daedalus} to the discussion of religion and ecology, specifically for the issue of climate change. Yet, it was heavily weighted toward the “spiritual” side of religious faiths and not the theological side.\textsuperscript{40}

Similarly, since the publication of the three aforementioned seminal papers in the 1960s, one other spiritual movement has evolved. It looks at the earth as a breathing, self-sustaining,

\begin{itemize}
  \item \textsuperscript{37} Ibid.
  \item \textsuperscript{38} Ibid.
  \item \textsuperscript{39} White, “The historical roots of our ecologic crisis,” 1206.
  \item \textsuperscript{40} The journal in particular was edited by Mary Evelyn Tucker and John A. Grim. “Religion and ecology: can climate change,” \textit{Daedalus} 130 no. 4 (Fall 2001); the volume contained specific articles on multicultural ethics, nature in Judaism, Islam, Hinduism, Jainism, Buddhism, Confucianism, Daoism, and indigenous American beliefs; obviously lacking was a Christian perspective. Space does not allow for me to cover the depth of each of these different faiths and belief systems in the context of this paper.
\end{itemize}
self-regulating form of life that continuously adjusts to its environment and, as such, maintains the bound for all life on earth to survive. This living being is known as Gaia.\textsuperscript{41} The followers of this teaching lean on the belief that as a stabilizing force nature can restore itself. Again followers of this “religion” disregard the fact that man is an integral part of nature and, because of the aforementioned ecological principles it is in conflict with itself, and, as such, are subjected to non-altruistic tendencies. Further, since Lovelock first proposed Gaia in the 1970s, no self-restoration has been demonstrated, and, in fact, the condition of the earth is deteriorating to the point that among followers there is concern that the earth’s living status is threatened.

The second, and more important, reason why a non-biblical approach to Creation Care will not work is because of the original sin of man in the Garden of Eden. Genesis 3:14-19 tells of the original sin where man put his desires ahead of God’s commands and design resulting in his, and all of mankind’s, Fall (Rom. 5:12-14). Man was condemned to punishment of toil, conflict with nature, and death. The sin of man therefore is the desire for self-interest (e.g., Tragedy of the Commons) and selfish purposes (e.g., Competitive Exclusion and Resource Partitioning) that is contrary to God’s plan for man and his role in relationship to the Father. Because of man’s selfish nature, part of God’s punishment is that nature itself suffers by being cursed (Gen. 3:17-18) not as an ongoing retributiv e justice for immorality as posited by Kay.\textsuperscript{42}


\textsuperscript{42} Kay, “Human domination over nature in the Hebrew Bible,” 215.
This fact alone shows that if man is the underlying cause of the “groaning of the earth” (Rom. 8:18-25) he cannot be the solution.

That man is the cause and not the solution stands in opposition to one of the basic tenets the environmentalist’s call to restoration – an inherent faith in man’s directed ability to correct the ills of the environment. Similarly, if one considers that man is part of nature, and is a sinful individual whose focus is on self, then even though man is made in the image of God (imago dei), with his fallen, sinful nature it could be argued, under certain conditions, he is no different than any other animal in nature. By this statement, I mean that, at times, when confronted with limited resources necessary for survival or even personal gain, man’s sinful, selfish desires result in instinctive responses and actions without forethought instead of responding with conscious and responsible actions that may result in altruism. In such cases, logically, if he is not different than any other animal, then the three principles outlined above apply to man as well.

Consider the two ecological principles (Competitive Exclusion and Resource Partitioning). If there is a limited resource such as water on a global basis it could easily be seen, according to these principles, that different people groups (aka nations) would do whatever they needed to procure this resource; even if it meant going to war to take the resource (i.e., outcompeting other people groups). The needs of “lesser organisms” of nature would not be considered nor would the environment as a whole. For coexistence to occur it has been established it would require sharing resources or partitioning them below excess and possibly below optimal. To my knowledge, never in the history of mankind has humanity, as a whole, undertaken such an effort of sharing limited resources on a global basis. In fact, such limited resources, whether it was water, food, land, or even fuel, have more than once been the

43. see Wilson Creation: An Appeal to Save Life on Earth 3-8.
underlying cause for wars that have led to further degradation of our environment. If nature does not have the necessary energy or capacity for self-restoration, and man, as a self-centered and sinful being cannot be counted on to focus on the environment’s needs as a whole, then where will true restoration lie? Contrary to the revivalism of animism called for by White, spiritualistic “gods” and entities never have been shown to have the ability to correct the ills of nature.

The discussion to this point has focused on the concept of restoration of nature under the rubric of Creation Care. Restoration by an ecologist and restoration by a Christian have two semantically, but important, different meanings. Restoration to an ecologist means to return an environment, habitat, or ecosystem back to a point before some environmental or anthropogenic perturbation changed it. There now exists a sub-discipline within ecology known as Restoration Ecology.

An example of an ecologist’s good faith effort at restoration is the April 2010 Deep Water Horizon oil rig explosion that had, as yet to be fully determined, ecological effects in the Gulf of Mexico. Clarion calls for ecological restoration were immediate, and restoration ecologists have marshaled their resources to answer the call. The semantic problem comes about in defining to what state should the Gulf of Mexico be restored? Does it mean pre-explosion? Does it mean pre-drilling of this particular rig or any other rig? What about the impact of the outfall of the Mississippi River with its associated anthropogenic pollution into the Gulf of Mexico? Also, what metrics are to be used and what is the standard by which one evaluates whether achievement of the metrics are met?

To the Christian use the term restoration is simple and has as its standard the biblical, pre-Edenic state of the earth before the Fall of Genesis 3. To the ecologist there is no such universal determined baseline or goal. To the ecologist restoration is technology and science
driven. To the Christian restoration is only achieved by God in the form of Christ’s Second Coming (Rom. 8:18-23).

Therefore, from the Christian perspective a better term for man’s effort to rectify his impact on nature is “recovery” and not “restoration.” Using a concept of recovery verses restoration science and technology, working within God’s directed natural regenerative capacity of nature, we can define specific time periods and metrics to evaluate if the effort is successful. Using a “restoration” mindset causes functional and ideological conflict between faith and science. However, the “recovery” approach is completely compatible with Christian stewardship. Clearly using recovery terminology avoids any semantic conflict that may preclude the importance of bridging science and Christian faith toward the common goal of Creation Care.

**Concluding Thoughts**

Given the above discussion it seems appropriate then to ask the questions how can we recover nature to a sustainable and healthy state and what is our role? Consider the latter part of the question first. One of the old-time, idiomatic expressions I grew up with states that if you find yourself in a hole, the first thing to do is to quit digging. While man’s fallen, selfish nature may prevent him from being the solution to recovery it does not preclude him from slowing down the bleeding. Because humanity is part of nature we will constantly be consumers, which, in turn, means that competition and resource partitioning will be inevitable. Likewise, the tension to perpetuate ourselves even in times of limited resources only magnifies the issue. Still, we are the only species in nature that has the full cognitive ability of reason and logic. While it might seem pedestrian, we must come to the point logically and reasonably to recognize on a global scale if we are going to survive we must become responsible stewards of our environment. As vice-regents (Ps. 115:16) God has given us the mandate to care for His creation and in that role we must exercise virtue, deontological prudence, and leadership.
Yet, when non-biblical efforts designed or “created” by man fails to repair nature, where then does one turn for the answer? As previously mentioned, Scripture gives us what we seek in Romans 8:18-30 and Revelation 21:1-8 in the form of Jesus Christ, the Son of God. As “nature’s groaning” came through the actions on one man, Adam, so the “restoration” of nature will come through the actions of one man, Jesus Christ. The Apostle John tells us the ultimate fulfillment of earth’s restoration with the coming of the new heaven and new earth (Rev. 21:1-8). When Christ returns He will restore the earth to its pre-Fall, Edenic state and no longer will the earth anthropomorphically groan (no more pain, no more sorrows). We also know this because John tells us in Revelation that eternity will be in this new heaven and new earth—one that is fully restored and in harmony with man and nature (Rev. 21:1, 4-5).

Given all the scientific evidence, all the historical documentation, all the socio-economic efforts to recover nature, the only way restoration will occur is through the actions of a loving, forgiving, and all powerful God; the original Creator and LORD of the universe. The truth of this statement, however, does not obviate our responsibility of being stewards for His creation.