The Various Christian Ethics of Species Conservation

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We tend to take a connection between religion and ethics for granted; one's faith ought to help shape one's moral values. For much of human history, however, worship meant making the proper sacrifices and following the proper ritual; it might have very little to do with morality.

William Placher (1983, 22)

Typology does not make scriptural contents into metaphors for extra-scriptural realities, but the other way around. . . . It is the text, so to speak, which absorbs the world, rather than the world the text.

George Lindbeck (1984, 118)

TENSIONS AND BARRIERS

The setting is High Table at Balliol College, Oxford University, early in the twentieth century. The characters are the cleric and Master of the college, Benjamin Jowett, and renowned Darwinist and atheist J. B. S. Haldane. The set up is Jowett's question: "What could one conclude as to the nature of the Creator from a study of His creation?" "An inordinate fondness for beetles," is Haldane's reply. Since there are more kinds

of insects than anything else, and almost half of all insects are beetles, Haldane's quip is apt. As it turns out, however, this tale is a fabrication (May 1989; Williamson 1989). Nonetheless, it was a popular story at Oxford thirty-five years ago when one of us (Pimm) was an undergraduate there. To scientists who study biodiversity—the variety of life on Earth—and its evolution, the temptation to cock a snoot at Christians is sometimes hard to resist.

The story has the feel of gallows humor though for it reveals the sometimes strain between science and religion. While close historical and ideological ties existed between Christianity, ecology, and conservation (Stoll, chapter 2, this volume; Cittadino, chapter 3, this volume), the tension today in the United States between some scientists and conservative Christians is pronounced (Miller 1999; Eldredge 2000; Mooney 2005, 164–85). The threat of Christian-inspired litigation against the teaching of evolution is particularly significant here. In this battle, both sides expend considerable resources, resulting in a remarkable cultural stalemate. As an example, a recent USA TODAY/CNN/Gallup poll shows that 53 percent of Americans reject the Darwinian notion of evolution (USA Today 2005).

Maybe it is presumptuous in light of the current political climate to ask ecologists and Christians to find common ground in conservation. Yet, that is exactly what we propose. We recognize that some, mostly politically conservative, Christians in the United States likely put "environmentalism" and evolution in the same box. Of course, this association is legitimate. Evolution is an important aspect of ecology. Scientists studying extinction owe large debts to Wallace and Darwin—the founders of evolutionary theory. While the birth of species aids an understanding of the death of species, origins and demises are in many ways different topics. Yet some Christians may still view this affiliation suspiciously and therefore disregard ecologists and their science.

Even with different positions about evolution, common ground between ecologists and Christians seems possible, if not straightforward. If a biblical basis exists for environmental stewardship, and ecologists have shown ecological peril, then the two groups seem destined coworkers in conservation. However, this consensus is not as common as one may think. As we show in this chapter, for various reasons many Christians in the United States do not support environmental protection. In some ways this situation recalls the role the church played in the civil rights movement of the 1960's. Martin Luther King then observed that, "the contemporary church is a weak, ineffectual voice with an uncertain sound"

(King 1999, 359). King's remarks could also be said of the role Christians play in the United States today with environmental protection. Although disagreements between Christians and ecologists regarding evolution are common, tension also exists over the ethics of conservation.

For ecologists, there are three basic ways that biodiversity has value, namely, the three "e's": ethics, esthetics, and economics (Ehrlich and Ehrlich 1981; National Research Council 1999). That is, biodiversity has inherent value, is useful for science, and provides for our practical human needs, respectively. Although each criterion provides its own case for preserving biodiversity, economic arguments are the most common. This comes as little surprise, and the numbers are astronomic. In one estimate, the environment and the services it provides were valued at twice the global GNP, or US\$33 trillion (Constanza et al. 1997). This figure includes tangible goods (like food and medicines) but also "ecosystem services" such as crop pollination, clean water, and climate stability (Daily 1997). Despite their figures, however, Constanza et al. (1997) do not believe economic arguments are enough for environmental protection. If this is true, then the other forms of valuation—esthetic and ethical deserve further exploration.

For many Christians economic arguments, like those Constanza and his colleagues present, may miss the mark. A strictly logical approach to Church doctrine or ethics has received much insightful criticism from theological scholars in the past decades (MacIntyre 1981; Lindbeck 1984; Northcott 1996; Placher 1996). Logical reasoning plays a role in religious faith for certain, but it is a more complicated matter. Such scholars pay attention to the scriptures, the church, ritual practices, and the linguistic nature of thought—in addition to rationality. Along this line, Stanley Hauerwas (1983; 18) adds that, "if what is said theologically is but a confirmation of what can be known on other grounds or can be said more clearly in nontheological language, then why bother saying it theologically?" Here Hauerwas identifies that ethics in nontheological language will be worse than unattractive to Christians—such ethics will be incoherent. Theological language is what gives *Christian* ethics intelligibility. As a result, casually using "nature" or "biodiversity" in place of "creation" is incredibly significant when considering Christian environmental ethics.

On the other side of the aisle, ecologists are increasingly seeing conservation as an ethical issue (Wilson and Perlman 2000). Scientists are allowed moral convictions, too. At times this places ecologists in the ironic

position of expressing their ethical concerns to the church. "Scientists are bad enough when they promote science," one imagines some churchgoers thinking, "now they are trying to define our moral agendas!" Indeed, we believe that the conviction for environmental conservation ought to come from the church—through its inspiration and leadership.¹ As we mention, the problem seems that the church does not have a coherent vision of environmental ethics (Haught, chapter 8, this volume).

Although we can debate how species are born for another century we do not have that long to contemplate extinctions. There is nothing normal with our current planet. The trends of ecological degradation that we discuss are singular in the Earth's history. They are the direct result of human mismanagement and negligence. For those who prefer using "creation" in the place of "biodiversity," perhaps the ethical position ought to be even clearer. Creation is God's gift to humanity; poor stewardship of this blessing is an explicit sin (Bartholomew I 1997). Unless we change our current actions, we will likely commit a third of all creation to an inevitable path to extinction during this century (Pimm 2002, 201– 16). Common ground between ecologists and Christians is urgent.

The rest of this chapter is divided into three sections. In the first, we report on the ecological state of the planet. Science is crucial to a proper conservation ethic; what we present is the consensus of ecologists. We focus on the evidence for massive ecological change to forests, drylands, and oceans, and discuss their impacts to biodiversity. In the section that follows, we propose a typology of Christian environmental ethics. Christian groups do not agree on what a "Christian" environmental ethic is: there are deep expressions of concern, certainly, but many doubt the problem exists, others deem the problem irrelevant, and some are even indifferent to the issue. The final section is an assessment of the four typologies we have identified.

SCIENCE'S WORLDVIEW: THE PLANETARY AUDIT

At the start of the new century, there are 6 billion humans. Some models predict this number to be 9 billion by 2050, but most projections consider that estimate optimistically low (United Nations 2003, 9). Currently, roughly 1.5 billion people live comfortable lives, while another billion are on the verge of starvation. Of the remaining 4 billion, a quarter will become major consumers (owning cars and refrigerators) within a few decades (Myers and Kent 2003). Population statistics are well known. Their environmental consequences are not.

Land covers roughly a third of the Earth's surface but generates 97 percent of our food (Pimm 2002). Our diverse uses of the land are easily visible where we convert natural systems to agriculture and cities. One all-encompassing single measure to summarize human impacts on the earth is to weigh the amount of material plants produce each year, and then ask how much of it we consume. The answer is "not much." About 4 percent of the annual plant production is used for our food; for our domestic animals; and by the wood we use for building, paper, cooking, and heating (Pimm 2002, 27–31). But that answer is misleading, because it does not include how much green stuff we waste while we directly consume the other parts. Add those numbers in and the total human use of plant production comes to about 40 percent of the global production (Vitousek et al. 1986; Rojstaczer et al. 2001). In other words, humans consume almost half of what plants produce every year, and 90 percent of what we consume is wasted.

Most of the stuff we use is from the warmer, wetter half of the planet where plants grow best. What remains in dry or cold areas is much less suitable for our use. The warm, wet places are where forests grow most easily. The warmest and wettest of those are the tropical forests. These forests once covered 15 percent of the Earth's land surface, yet they contain an astounding 80 percent of the world's tree species (Vitousek et al. 1986). Despite this great ecological importance, we do not use tropical forests sustainably. To the contrary, we are continuously harvesting them and reducing their total area. The result is that tropical forests shrink by 10 percent of their original area every decade (Myers 1992; Skole and Tucker 1993). Unlike temperate forests, tropical forests do not regenerate nearly as easily (Pimm and Askins 1995).

The drier half of the land surface offers less plant production. It is harder to grow crops there. Yet, paradoxically, we use these areas in less efficient ways. Drylands are harder to use, they provide less food, and they are easier to abuse. Because they contain few resources, those resources are easier to exhaust. Dryland misuse has led to wind and water erosion and has depleted the fertility of the soils on over half of these areas. As an example, massive plumes of eroded African soil stretch across the Atlantic Ocean. Not only does this demonstrate dryland

abuse, the effect to the oceans is significant. These dust plumes destroy corals throughout the Caribbean (Garrison et al. 2003). Grazing animals (mostly cows and sheep) are largely to blame for this mismanagement (Pimm 2002). Grazing has changed the vegetation of these areas often irreversibly (Dregne 1983, 1986; Dregne and Chou 1992). The effects of dryland abuse are serious and far-reaching.

Next to vegetation and soils, freshwater is another universal currency that we spend freely and without much consideration for the future. Of the rain that falls over land surfaces, the land soaks up two-thirds. The remaining third runs off the land into rivers, mostly in remote places, or as floodwater. We consume a remarkable 60 percent of the accessible runoff each year (Postel et al. 1996).

Shifting our attention from terrestrial ecosystems, we look at the marine environments. Despite its vastness, about 90 percent of the ocean is a biological desert. We use a third of the ocean's annual production in the remaining area—from which comes 99 percent of the global fish catch. Surprisingly, however, our increasing ability to harvest these fisheries is not yielding a larger catch. In spite of advances in harvesting technologies, overwhelming evidence points to the opposite: fisheries are declining, and dramatically so. Our activities are destroying the ocean's ability to supply even what we take today (Food and Agricultural Organization of the United Nations 1995; Pauly et al. 1998; National Marine Fisheries Service 1999).

Now, to our focus: biodiversity. Probably 10 million types of animals and plants inhabit this Earth. Their loss poses the greatest environmental concern, because species extinction is irreversible. The scientific position asks, is there anything special about the present loss of species, compared to half a billion years of change? Haven't species always gone extinct? Isn't nature always in flux? Isn't humanity a part of natural ecosystems? If so, are our impacts allowable? The overwhelming scientific consensus is that human impacts are driving species to extinction hundreds to thousands of times faster than is expected from the natural, or background, rate (Pimm, Russell, et al. 1995; Pimm 2002, 201–16).

A relevant question then is to ask how often life has disappeared at the rate we project? The answer is only five times in life's history. This is potentially the sixth great extinction. For a measuring stick, the last comparable event in the Earth's history (65 million years ago) eliminated the dinosaurs. We know from the last major extinction that it took about 5 million years to regain a comparable variety of species and an additional 15 million years to restore the variety of families to their previous value (Raup and Sepkoski 1984). To place these numbers in perspective, consider that 5 million years is twenty times longer than the entirety of human existence. Based on stable population growth, 500 *trillion* people will be affected during this period, which is 10,000 times all the humans that have ever lived (Myers and Knoll 2001)! Clearly, even if just for anthropocentric reasons, our present course of action deserves consideration.

Scientists use the term "biodiversity" to represent the entire variety of life—ecosystems, species, populations, and genes. Human actions toward land, freshwater, and oceans have already caused biodiversity to decline. Even greater losses will occur if humanity continues its present unsustainable use of natural resources. In documenting this decline scientifically, there has been a focus on species extinctions. Species losses are also the aspect of biodiversity loss most often considered, for example, by the United Nations Convention on Biological Diversity. This chapter too focuses on species extinctions, as species are a proven and effective unit to measure conservation.²

Within our own species, we can apply language as a measure of biological diversity and distinctiveness. All totaled, there are roughly 6,500 distinct languages. An ecologist's first question might be to ask, "What is the minimum number of speakers required to ensure the survival of a language?" That is to say, how many speakers are required so that the language passes onto the next generation, in the face of challenges from the major international languages? History suggests that the cut off is somewhere between 100,000 and a million speakers (Pimm 2000). Above this threshold, languages are resilient to even determined efforts to eliminate them. Below it, and few languages survive. Only about 500 languages are spoken by more than a million people. This suggests that about 90 percent of the linguistic—and so likely cultural—diversity will disappear within a generation. While this is often narrated as the advancement of modern civilization, the reality of this loss is stark.

The greater part of biodiversity is in the world's tropical wilderness forests. These forests are distributed in three major regions: the Amazon, the Congo, and in and around New Guinea. When these forests disappear, the indigenous peoples inhabiting them do as well. This formula for genocide has culled languages and peoples throughout history. In recent history, the lessons from destroying the prairies and forests in North

America, South America, and Australia are clear. The fate of ecosystems and native peoples are linked. When the ecosystems disappear, so do the indigenous cultures.

Finally, there is the concomitant threat of global climate change. The planet has already warmed and done so at a geologically unprecedented rate. This is a direct result of increasing greenhouse gases from human activity. The projections are that the Earth will warm more, and perhaps much more, in the next fifty years. The ecological consequences of these changes are not easy to predict, but they are already frightening. Other things being equal, species with small geographical ranges will suffer proportionately greater than species with larger ranges (Thomas et al. 2004). Species with small ranges are already disproportionately vulnerable to extinction (Pimm and Lawton 1998). These species simply do not have as many places to survive.

THE CHRISTIAN WORLDVIEWS

An interesting tension arises when people sharing the same religion disagree on ethical issues. Even though common traditions unite Christian groups, theological unity is regrettably infrequent. This is certainly true in the case of environmental issues, especially those associated with biodiversity conservation. The remainder of this chapter asks how the major Christian groups in the United States approach the conservation of species. How do they respond to what scientists say about the state of biodiversity? What are the different positions and patterns of thinking? In addition, on what bases do these views disagree? For right now, we focus on dissecting the different positions, and not on adjudicating them.

To answer these questions, we conducted a survey of Christian ethics on the environment. We researched the official policies of different Christian groups toward biodiversity conservation and extinction. We investigated the resolutions, publications, and public statements of various Christian groups—and their leaders—to see how Christians are responding to this environmental issue. Having discovered several interesting paradigms at the organizational level, we recognize that a truly comprehensive survey is beyond this study. Certainly, the environment-religion connection has received much scholarly attention, even within the context of Judeo-Christian theology. But whereas previous works focus on

theological interpretation, we provide a typology of the most common Christian responses to the call for environmental conservation.

The attitudes that we discuss comprise powerfully held worldviews, offering insight to forging a more faithful and unified Christian ethic among Christians. Such worldviews are not unique to the Christian community (secular groups may hold such views), yet they reveal interesting disagreements between Christian groups. We recognize that the everyday practice of Christians may not correspond to the official teachings of their organizations. Such disagreements are not without historical precedent (the abolition of slavery and the civil rights movement are other examples).⁴ Nevertheless, we surveyed official statements and group leaders to gauge their views, acknowledging that churchgoers do not always do what their leaders teach.

Our first hypothesis was that there would be a clear acceptance or rejection of environmental concerns. We assumed that Christians would either support some sort of species conservation or simply dismiss it. Rather than finding a simple dichotomy of positions, we encountered a more nuanced scheme of worldviews. We document four unique worldviews that reflect the dominant teachings in the Christian Church toward biodiversity: Earthkeeping, Skeptic, Priority, and Indifferent (see appendix).

The Earthkeeping worldview engages biodiversity conservation and embraces it as an ethical issue with a biblical origin. The Skeptic worldview recognizes biodiversity issues, but disagrees with the scientific community that there is a biodiversity crisis. The reasons for this are several and we discuss them below. The Priority worldview focuses not on scientific credibility but on a sort of practical urgency. Simply put, other moral issues trump conservation. The *Indifferent* worldview does not address biodiversity, endangered species, or extinction whatsoever. Either consciously or unconsciously, the topic is unattended.

We limited our research to three different categories of Christian entities to provide a proper cross-section of Christianity. Our study focuses on official denominations, nonprofit organizations, and prominent individuals. We restricted our analyses to exclude smaller groups so this study would represent the major Christian groups in America. We only survey denominations with greater than one million members nationally, organizations with an annual budget of at least one million dollars, and individuals who play an important role in church polity, politics, or culture.⁵

Some may contend with our methodologies. Our decision to survey individuals may seem counterintuitive to accurately representing Christian

groups, for example. However, we thought it was important to recognize the significant role of group authority structures and the media in communicating and promoting beliefs. Those who lead their denominations, write books, host radio shows, and appear on television have a loud voice and reach a great audience. Additionally, we do not survey nondenominational churches. The many Church of Christ and "evangelical" congregations, for example, are not centrally organized. Although they are numerous and influential, these groups defy simple characterization, and therefore we cannot survey them as a whole. Additionally, some groups we surveyed may express opinions in more than one worldview. Where this is the case, we categorized the entities by their more dominant ethic. In other words, a worldview may represent a group without encompassing it.

The idea for this section is not to judge the merit of Christian groups based on their ecological theology or their political views. Although we hold strong convictions that the Bible calls for environmental stewardship, we impose no blanket judgments based on our findings. Rather, we discuss the rationale and the theology behind the different environmental ethics. If the ecological evidence is correct, this is both necessary and pressing.

Earthkeeping Worldview

The Earthkeeping worldview recognizes the biodiversity crisis and responds to it from a biblically based ethical conviction. Patriarch Bartholomew I, the spiritual leader of the Orthodox Church, summarizes this worldview well. In compelling tones, he declared, "For humans to cause species to become extinct and to destroy the biological diversity of God's creation... to degrade the integrity of the Earth by causing changes in its climate, stripping the earth of its natural forests, or destroying its wetlands... to contaminate the earth's waters, its land, its air, and its life with poisonous substances—these are sins" (Bartholomew I 1997).

The United Methodist Church (UMC) expresses similar sentiments, clearly articulating their doctrine in several official statements. Beginning with a reference to Psalm 24, one UMC statement reads, "All creation is the Lord's, and we are responsible for the ways we use and abuse it. Water, air, soil, minerals, energy resources, plants, animal life, and space are to be valued and conserved because they are God's creation

and not solely because they are useful to human beings.... Therefore, let us recognize the responsibility of the church and its members to place a high priority on changes in economic, political, social, and technological lifestyles to support a more ecologically equitable and sustainable world leading to a higher quality of life for all of God's creation."

From the Jewish tradition, Rabbi David Saperstein offers us insight from the book of Genesis. In a lecture to the National Press Club in May 2001, Saperstein equated our current situation with that of the Old Testament patriarch, Noah. He cited Noah's faithfulness as what saved species on the verge of extinction from the Great Flood. This resulted in a covenant that God gave *all* of creation. Saperstein declared, "[W]e are experiencing an extinction crisis. During the time of this press conference, at least three plant and animal species will be lost forever—species that might have produced medicines to save lives, or species that work to purify our air and water, creatures that are links in the food chain—all parts of God's interconnected creation. . . . So now we must ask ourselves: will we, at this moment when so many species are vulnerable, be partners in God's covenant with creation?" (Saperstein 2001).

The Christian conservation writer Wendell Berry captures this world-view well when he wrote, "to live we must daily break the body and shed the blood of Creation. When we do this lovingly, knowingly, skillfully, reverently, it is a sacrament. When we do it greedily, clumsily, ignorantly, destructively, it is a desecration" (Berry 1982, 272). Paraphrasing Berry: a proper Christian environmental stewardship is the biblically informed interaction of man's authority and creation's worth. Here the intent of creation is realized through humility, protection, and use. This intricate balance forms a responsibility that comes together in the biblical teachings of environmental stewardship. To those in the Earthkeeping world-view preserving biodiversity may have several rationales, but all are from the Bible.

Skeptic Worldview

The Skeptic worldview enters the dialogue by disagreeing with the scientists who claim that serious environmental problems exist. This worldview may acknowledge that extinction is occurring, but it asserts that it is not at rates that warrant alarm. Attention here is primarily on the validity of conservation science. By this worldview, we mean something far

more pointed than the guarded language of the United States Conference of Catholic Bishops (the italics are ours): "Opinions vary about the causes and seriousness of environmental problems. Still, we can experience their effects in polluted air and water; in oil and wastes on our beaches; in the loss of farmland, wetlands, and forests; and in the decline of rivers and lakes. Scientists identify several other less visible but particularly urgent problems currently being debated by the scientific community, including depletion of the ozone layer, deforestation, the extinction of species, the generation and disposal of toxic and nuclear waste, and global warming" (1991, section 1).

The Catholic bishops are not themselves skeptics, they merely point to the disunity on the nature and extent of threats to the environment. The Skeptic worldview emphasizes such observations and uses them to deny the need for environmental protection. It is clear from many Vatican publications affirming ecology—from both the Roman Catholic leadership and the Pontifical Academy of Sciences (e.g., Raven 2001)—that the Roman Catholic Church does not doubt that ecological problems exist. We use this quotation merely to articulate the Skeptic view.

The Southern Baptist Convention (SBC) gives a prominent example of skepticism in environmental science. One of the most visible denominations on contemporary political issues, the SBC has historically approved denominational resolutions favoring environmental stewardship. In these particular resolutions, Southern Baptists agreed that (a) God has called humans to be environmental stewards, (b) environmental crises abound, and (c) action to abate these crises is ethical (Southern Baptist Convention 1970, 1974, 1990). Recent actions have strayed from this message, however. The Ethics and Religious Liberty Commission (ERLC)—the public policy arm for Southern Baptists—claims that environmentalists often mount "unfounded" campaigns of gloom and doom (2004b). In a message disseminated nationally to Southern Baptists as church bulletin inserts, the ERLC emphasized that "The challenge is separating reality from myth when it comes to determining a proper response to environmental issues" (ERLC 2004b, 1). In another ERLC tract, the scientific status of several endangered species and their inherent value was disputed (2004a). In the view of the ERLC, environmental regulations such as the Endangered Species Act "have been allowed to spiral out of control" (2004a, 4).

Other groups express similar stances. Several articles from the Focus on the Family media group are revealing. In one, catastrophic global warming is referred to as "a grotesque distortion of science" (Shepard 2004). In another, we are warned that, "Too many environmental decisions and practices are based on incomplete or faulty science" (Howden 2001). George Wiegel, a senior fellow at the Ethics and Public Policy Center (a think tank dedicated to Judeo-Christian moral values) added that, "Fears of chemicals poisoning the land are vastly exaggerated. Species aren't disappearing at a precipitous rate. . . . Cooking the books so that Chicken Little always wins is, in a word, sinful" (2002). Another example comes from the Institute on Religion and Democracy (IRD). Criticizing the National Council of Churches' advocacy of energy policy reform, the IRD casts doubts on the link between fossil fuels and global warming (Nelson 2002). In another article, the IRD labeled climate change science as "silly," "offensive," and "one more left-wing cause du jour," (Tooley 2002). To Skeptics, ecologists are either wrong in their calculations, or far worse, they are deliberately passing off junk science.

Priority Worldview

The Priority worldview maintains that biodiversity conservation takes the focus away from issues with greater moral importance. John Howard Yoder portrayed this worldview as affirming that "man's true need is the initial commitment of faith, so that the church should limit herself to this priority concern and not confuse things by speaking to society at large about all sorts of moral issues" (2002, 21). Whatever ecology research shows, preserving *our* species and our activities has greater relevance. Even if extinction is happening, it does not warrant the church's attention. This is a subtle, but likely prevalent, anti-conservation paradigm.

The Assemblies of God (AOG) church illustrates the Priority position. On their website, the AOG presents their beliefs on several popular contemporary issues (a practice becoming common with many denominations). In this case, they present a seemingly contradictory stance on biodiversity preservation. While the AOG acknowledges biblical environmental stewardship, their position seems more concerned with combating New Age spirituality, paganism, and other forms of earth worship. The AOG states, "A major concern for Christians is the overemphasis of the environment at the expense of spiritual issues effecting life and eternity. The Bible's message declares that spiritual matters (those affecting the hearts of humankind) are the priority issues with God. These and *not*

the environment are the reason He sent His own Son Jesus as a sacrifice to save people. For God did not send His Son to save the earth in a physical sense but to save the people who inhabit it. We believe this must be the main focus and concern for all Christians today" (Assemblies of God 2004; italics ours). According to the AOG, because the Earth will be destroyed in the end times, environmental stewardship takes a back seat to concerns directly related to human welfare.

A separate, although prevalent, attitude in the Priority worldview is that environmental protection stymies economic progress and is overly suspicious of technology. For some in this worldview, human ingenuity will evolve and overcome any environmental problems we encounter, and technology will outpace our ability to create environmental hazards. In short, every environmental problem has, or will have, a technological solution. This worldview has become so widespread that theologians began using the phrases "Christian humanism" and "techno-messianism" to describe the attitude (Ehrenfeld 1978; Derr 1997; Wingfield 1999).

Gary Bauer, in his unsuccessful runs for the presidency in 1996 and 2000 also championed the Priority worldview. Outlining his environmental platform, Bauer wrote, "The generation that produced the environmental movement and the anti-technology Unabomber is attempting to indoctrinate the next generation in its anti-technological and antiprogressive creed" (1996, 120). For Bauer, economic freedom and individual property rights have been eroded by federal environmental regulations. "What's missing in today's radical environmentalism is balance. Book after book and tract after tract [on the environment] ignores the benefits derived from expanding human dominion over nature" (123). This argument sets up a conflict between human dominion and ecological stewardship.

The Acton Institute for the Study of Religion and Liberty is a strong force on this specific position. This group boasts an impressive collection of academic and religious figures promoting economic and political issues. To summarize a consistent argument: economic growth generates clean environments, environmental regulations stymie growth, and property rights promote conservation voluntarily, obviating government interference (Beisner et al. 2000). Much of what the Acton Institute produces advocates that "richer is cleaner." In other words, properly implemented free market economics produces wealth and stewards creation. Akin to this reasoning, the Acton Institute also implores human subjugation of nature as a moral imperative. "When man does not exercise dominion

over nature, nature will exercise dominion over man and cause tremendous suffering for the human family" (Beers et al. 2000). Beers and colleagues argue the Puritanical environmental position that human "creativity can bring nature to a higher degree of perfection."8

Taken wholly, the value of nature is determined through human use. Prioritizing environmental ethics ahead of economics is avoiding our God-given responsibilities. At the core, however, this worldview emphasizes humanity's place above all other species. Our concerns should not be pointed at creation, but at concerns directly affecting human beings. Any impediment of economic activity prevents this because it "ignores the full scale of human values that a free economy otherwise allows" (Beisner et al. 2000).

Indifferent Worldview

For various reasons, the *Indifferent* worldview does not address biodiversity, endangered species, or extinction whatsoever. Biodiversity is simply not a topic that registers in these groups' resolutions, policies, or publications.

Several groups in this worldview have a self-identified "pro-family" agenda. Pro-family Christian political action groups are common in Washington DC. Their purpose is to remind legislators of the issues that are important to Christian families. The Family Research Council (FRC) is among the most active and notable of these lobbying groups. According to their mission, the "FRC shapes public debate and formulates public policy that values human life and . . . promotes the Judeo-Christian worldview as the basis for a just, free, and stable society."9 Not surprisingly therefore, the FRC focuses on legislative issues related to abortion, marriage, pornography, and education. In addition, engaging issues less directly related to families—gambling, foreign affairs, or even tattoos (Parshall 2002)—the FRC does not address environmental policies whatsoever. This is curious considering the clear remarks from the FRC's former president who said, "conservation and stewardship of the environment are profoundly pro-family concepts" (Bauer 1996).

The American Center for Law and Justice (ALCJ) and the influential James Dobson also represent this view. Dedicated to preserving religious and constitutional freedoms.¹⁰ the ALCJ is a frequent litigator of high profile cases in the federal courts. In these activities, the ALCI argues a definitive political philosophy on specific issues. To date, however, the ALCI has not taken any stance on issues or cases related to the environment. Dobson, director of the Christian media giant Focus on the Family—and founding board member of the FRC—represents this worldview. While the organization Dobson now runs is associated with statements we classify elsewhere, Dobson himself avoids issues directly related to the environment. In spite of making daily radio broadcasts that address national political issues, Dobson does not consider biodiversity.¹¹

Several historically African-American denominations also maintain this worldview. The African Methodist Episcopal Church, the African Methodist Episcopal Zion Church, the National Baptist Convention U.S.A., Inc., and the National Baptist Convention of America, Inc. all do not engage environmental issues. The lack of official policies, teachings, or published material addressing environmental stewardship here reveals broader organizational and doctrinal issues that go beyond the scope of this essay (Washington 1986; Lincoln and Mamiya 1990).

Assessing the Scientific and Christian Positions

The Earthkeeping Hermeneutic

Experience teaches that, when participants in two different fields of knowledge meet, they will have symmetrical views. For example, when economists meet ecologists, the former have a detailed drawing of the economy and a single, simple box for "ecology," whereas ecologists have a detailed drawing of environmental processes and a single, simple box for "the economy." This seems the case for religion and the environment. Those concerned with the practical issues of protecting the environment are likely to see the multifaceted problems of their trade, but view religion, ethics, and the church as single and monolithic. The reverse is also common.

Lynn White, Jr. illustrated this in a Science article, citing Christians and their theology as "bearing a great burden" of responsibility for the current ecological crisis (1967). Because White linked Christianity with negative environmental attitudes, his paper had a significant impact with ecologists. Many ecologists—and the scientific community in general received White's thesis with open arms, and the Ecological Society of America responded by awarding him their prestigious Mercer prize. Not everyone was as enthusiastic, however. His ideas raised concern with many Christians who saw the Bible as advocating a distinct environmental ethic (Whitney, chapter 2, this volume).

The select ecologists who dig deeper than White may read eco-theology or inspirational writers like Wendell Berry. They might feel reassured that Christians view extinction as an ethical problem. More often, it seems, they will summarily dismiss Christians, either pointing to White's thesis or citing Genesis as a charter for dominion. As our chapter documents, White's position is a simplistic abstraction. Christian environmental worldviews cannot be placed in one simple box. Rather, they represent a multitude of sometimes conflicting ideas. As Christians may have different opinions on the environment, we ask, what does the Bible say? As ecologists, we recognize the work of theologians who interpret Genesis as a guide to protect the Earth.

A central issue in the theology of ecology is the relative position of humanity within the rest of creation. This has been a flashpoint for disagreement. In the Priority worldview, opinions often stem from a theology that humans, as a species, have a unique relationship with God. This privileged relationship leads to a belief that only humans are redeemable. This view focuses on humanity being set apart from the rest of creation, having a special likeness and future with God. The first chapter of Genesis supports this: "Let us make man in our image, in our likeness. . . . So God created man in his own image, in the image of God he created him" (Genesis 1:26–27). Significant portions of Christians have taken this passage as the basis to subjugate creation. However, as Richard Hays reminds us regarding the slogan "God said it, I believe it, that settles it," "bumper-sticker hermeneutics will not do" (Hays 1996, 3).

Calvin DeWitt (1998) sheds light on the dominion issue. In *Caring for Creation: Responsible Stewardship of God's Handiwork*, DeWitt recognizes three essential biblical principles for conservation. Paradoxically, it is Genesis—the same text often used to confront ecologists—that provides DeWitt inspiration. He outlines a biblical concept for stewardship in three ways: (a) earthkeeping, (b) fruitfulness, and (c) the Sabbath.¹²

The concept of earthkeeping comes from Genesis 2:15, where God instructs Adam about what he is to do with the garden of Eden. Looking at the Genesis text in its original Hebrew language, DeWitt discusses two crucial words, referencing how they are used elsewhere in the Old Testament. He reads the important Hebrew words *abad* and *shamar* to mean,

"to serve and keep nature in dynamic integrity." Expanding the notion of environmental stewardship, DeWitt derives the fruitfulness principle from Genesis 1. Here God speaks to Adam—as well as to all the birds and fish—instructing them to "be fruitful, increase in number and fill [the earth]." DeWitt points out that God gives this charge to both humanity *and* creation. Humans are not alone with the inherent right to be bountiful and fill his habitat.

Lastly, DeWitt points to the Sabbath principle as a significant "means of assuring fruitfulness." As it is generically known, the Sabbath is where people rest from their work one day each week. However, it is a profound rule with deep spiritual implications. As a Hebrew tradition in the Old Testament scriptures, the Sabbath informed agriculture practices (e.g., Exodus 23, Leviticus 25-26). At all times one-seventh of all the farmed land was kept fallow, and every seven years all the land was to rest from cultivation. Every seventh Sabbath year, or the 50th year, was the Jubilee. During the Jubilee, monetary debts were forgiven and all slaves were freed (Lev 25). From the New Testament scriptures, the Christian tradition teaches that Jesus Christ, Himself, embodies the Sabbath and the Jubilee. The fourth chapter of Luke chronicles Iesus recitation of the prophet Isaiah: "The Spirit of the Lord is on me, because he has anointed me to bring good news to the poor. He has sent me to proclaim release to the captives and recovery of sight to the blind, to the oppressed go free, to proclaim the year of the Lord's favor" (Luke 4:18–19, NRSV). Therefore, in both the Hebrew and Christian traditions, the Sabbath represents the rejuvenation and restoration of life. As DeWitt mentions, this is integral to earthkeeping.

Earthkeeping, fruitfulness, and Sabbath form a rich theological tapestry that defines biblical environmental stewardship. Those few scientists who got past Lynn White might well ask where such Christian teachings of stewardship today are. Those Christians who consider DeWitt' perspectives might ask, how does the Christian understanding of Sabbath inform an environmental ethic today? Answers are not always easy to find.

Baptizing Secular Conservatism

Despite well-reasoned arguments like DeWitt's, a strong and organized force interprets the Bible towards a decidedly different environmental ethic. A prominent example is *The Cornwall Declaration* published

by the Interfaith Council for Environmental Stewardship and signed by a broad selection of Christian and Jewish figures (Interfaith Council for Environmental Stewardship 1999). Underlying *The Cornwall Declaration* is an acute optimism in human reason and economic progress, complemented by pessimism in government-mediated science. Oddly, *The Cornwall Declaration* resembles conservative political rhetoric more than it does biblical language.

The signers of The Cornwall Declaration believe that God calls humankind to a "serious commitment" to free-market capitalism, where individual liberty is valued above government interference. Wary of government, the document hails private property rights and widespread economic freedom as the means to "sound environmental stewardship." As a result, science becomes the path to realize economic prosperity, not a way to assay economic activity itself. Consider three key common environmental issues: human population growth, resource exploitation, and biodiversity extinction. In The Cornwall Declaration, each of these predicaments has a technological solution. For example, overpopulation is not a serious problem because agricultural engineering continues to generate greater crop yields. Overexploitation is not a concern because the ability to extract natural resources increases with technological advances. One assumes that even biodiversity loss can be mitigated through biotechnology. If species drift close to extinction, surely their populations can be bolstered through Jurassic Park-like efforts (Taggart 2002). Are we to believe these arguments? More important, is there a biblical cause to do so?

Aside from *The Cornwall Declaration*, the collusion of the political right and the religious right is more than linguistic. For Christians who are skeptical that environmental problems exist, Michael Sanera and Jane Shaw's *Facts*, *Not Fear* (1999) is a frequent reference (Ethics and Religious Liberty Commission 2004b). Sanera is neither a theologian nor a scientist of any repute but the former Director of Environmental Education Research of the politically conservative Claremont Institute. However, Sanera is not the only secular conservative cited by anti-environmental Christians. The Southern Baptist church quoted a writer for The Brookings Institution to dismiss ecological science as a false and "assiduous" liberal campaign (Ethics and Religious Liberty Commission 2004a). In another example, a recent article published by Focus on the Family cites a senior fellow at the reactionary Lexington Institute to debunk climate change science (Howden 2001). Probably, one expects some liaison be-

tween such groups, but how much is too much? Where do we draw the line between theology and secular politics?

An examination of the financial reports of several of the groups we surveyed revealed deeper connections between Christian and politically conservative think-tanks. In many cases, the ties were financial as well as ideological. Such nominally distinct groups were not merely promoting similar environmental agendas; the same politically conservative foundations funded them. Some religious organizations we surveyed—the Ethics and Public Policy Center, the Acton Institute for Study of Religion and Liberty, the Institute on Religion and Democracy, and the Institute on Religion and Public Life, for example—all received major contributions from powerful right-wing political foundations, such as the Lynde and Harry Bradley, the John M. Olin, and the Sarah Scaife foundations, (Goodstein and Kirkpatrick 2004; Philanthropic Research Inc. 2005). This finding is revealing in itself, but even more so given that these same foundations also funded extremely conservative political organizations such as the American Enterprise Institute for Public Policy Research, the Claremont Institute, the Heritage Foundation, and the Pacific Research Institute for Public Policy, among others (Philanthropic Research Inc. 2005). Liaisons of this nature are the rule and not the exception.

Although one expects some cooperation between faith-based and political think tanks, these relationships should not transform the meaning of the biblical scriptures. As George Lindbeck reminds us, the Bible does not present us with a "figurative representation" of how life should be, subject to our own political leanings or preferred interpretations (1984, 118). Rather, a faithful theology is "intratextual" as it redescribes the world to fit the scriptural story. Applying Lindbeck to our situation, an environmental ethic that is faithful to the scriptures does not consist of a secular political ideology baptized with certain biblical passages. Rather, it is an inherently biblical ethic, of course, having political ramifications—not the reverse. The collusion of the political and religious conservatism casts doubt on the ethics these partnerships produce.

A Better Way

Tertullian observed that, in the first centuries of the Roman Empire, conventional wisdom blamed early Christians for society's perils. He wrote, "If the Tiber floods or the Nile fails to flood, if the skies darken,

if the earth trembles, if famine, war or plague occurs, then immediately the shout goes up: 'The Christians to the lions'" (Bainton 1964, 44). Although accusing Christianity for our ecological crisis may have appealed to Roman senators, or Lynn White, the view that the Christian faith is summarily anti-environmental is a misconception.

As this chapter has demonstrated, Christian worldviews differ greatly in reference to the value of biodiversity and its conservation. Here we noted four distinct worldviews that encompass typical Christian responses to biodiversity preservation. The patterns we observed were more complex than a straightforward acceptance or rejection of environmental stewardship. Indeed, expressions of support for species preservation were the most enduring worldview we surveyed. This worldview had a strong tradition that frequently employed biblical teachings for its justification. Also represented in our study was a strong attitude of distrust toward the scientific community that sounds the alarm for conservation. Largely separate from debates over scriptural meaning, this view calls scientific research into question and recommends conservation efforts be postponed until there is more convincing evidence. Another response we discovered was a prioritization of other issues ahead of environmental concerns. This worldview provided a sort of conservation "lip service" without any demonstrated effect. Amidst passionate beliefs, there was still ample room for indifference. The remaining worldview we identified did not give significant attention to biodiversity issues or conservation whatsoever.

While the majority of Christian groups officially support conservation, Christians ought not to gloat on their group's environmental theology. A large confusion remains in churches on how to mesh theology and ecology. Concerns over economic prosperity, New Age spirituality, scientism, and liberal ideologies abound. As a result, many Christians may believe the Bible commands some sort of environmental protection, they just will never do anything about it. A 2004 survey by *Christianity Today* is revealing. According to their poll, over half of those "uncomfortable with environmentalism" are so because there are concerns that are more important. Among these concerns, a strong economy and preventing earth-worship were prominent. Of the remaining, a quarter did not think there were any environmental problems; the rest doubted the Bible's call for stewardship.

Certainly, there are paths of environmental ethics that are secular, some of which are certainly unfaithful to both the Hebrew and Christian

portions of the Bible. For those of faith though the primary concern is not nature itself nor humanity, but obedience to the scriptures. The remaining challenge then, requires theologians to teach the scriptures, ecologists to measure the state of the environment, and both to work in concert.

This sort of vision requires both the work of ecologists and the work of the Church—the secular and the Christian. We conclude with another remark for the Conference of Catholic Bishops: "These important issues are being explored by scientists, and they require urgent attention and action." They continue: "We are not scientists, but as pastors we call on experts, citizens, and policy makers to continue to explore the serious environmental, ethical, and human dimensions of these ecological challenges" (1992). We do not call for a baptizing of secular agendas—either liberal or conservative—but rather obedience to God's word.

APPENDIX

Dominant Christian Teachings toward Biodiversity

Sources

The following lists the sources from which we have drawn information in order to classify the worldviews of denominations, organizations, and individuals in the table above. The references are self-authored and published unless otherwise noted. All URLs current as of September 2005.

Denominations

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- American Baptist Churches U.S.A.: "Policy Statement on Ecology: An Ecological Situational Analysis," res. 7040 (1989, available at http://www.abc-usa. org/resources/resol/ecology.htm).

Table 4.1 Worldviews of Major Denominations, Organizations, and Individuals

	Earthkeeping	Skeptic	Priority	Indifferent
Denomination (106 members)	Roman Catholic Church (59.2) United Methodist Church (8.7) Evangelical Lutheran Church in America (5.2) Presbyterian Church, U.S.A. (3.2) Lutheran Church, The Missouri Synod (2.6) Greek Orthodox Archdiocese of America (2.5) Episcopal Church (2.5) United Church of Christ (1.6) American Baptist Churches U.S.A. (1.6) Russian Orthodox Church (1.1) Christian Church, Disciples of Christ (1.0)	Southern Baptist Convention (15.4)	Assemblies of God (2.3)	National Baptist Convention U.S.A., Inc. (7.5) National Baptist Convention of America, Inc. (3.5) African Methodist Episcopal Church (3.3) African Methodist Episcopal Zion Church (1.2)
Organizations	Au Sable Institute Christianity Today International National Council of Churches of Christ in the U.S.A. National Religious Partnership for the Environment Sojourners Target Earth International	Ethics and Public Policy Center Focus on the Family Institute on Religion and Democracy Institute on Religion and Public Life Toward Tradition	Acton Institute for Study of Religion and Liberty	American Center for Law and Justice Christian Coalition of America Family Research Council
Individuals	Patriarch Bartholomew I Tony Campolo Cal DeWitt Ted Haggard Pope John Paul II Francis Schaeffer Ron Sider Archbishop Rowan Williams	Richard Baer, Jr. Charles Colson Thomas Sieger Derr Richard Land Richard John Neuhaus Pat Robertson	Gary Bauer Jerry Falwell Robert A. Sirico	James Dobson

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American Center for Law and Justice: http://www.aclj.org/Issues/Default. aspx.

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Notes

- 1. As both Chappell (2004) and Marsh (2005) argue, led by Martin Luther King, Jr., an explicit vision from the Christian church is what propelled the civil rights movement to success in overthrowing Jim Crow.
- 2. Naturally, the subject is broader and more complex than our simplification. For example, a species may survive in a given area yet lose much of its genetic diversity (Hughes, Daily, and Ehrlich 1997, 1998). Furthermore, an ecosystem may survive yet shrink enough in area and thus lose its historical function, or even most of its constituent species.

- 3. National Research Council (2001). Additionally, a good and succinct summary of the causes and effects of global warming is available at http:// vosemite.epa.gov/oar/global warming.nsf/content/Climate.html.
- 4. Comparing the current discussion with the role Christianity played in the abolition of slavery and Civil rights movement in the United States is illuminating. Dew (2002) provides a worthy account of pro-slavery, secessionist dialogue among white Christians before the Civil War. Chappell (2004) gives a particularly thoughtful counterexample of the role of prophetic Christianity with southern black activists against Jim Crow.
- 5. Accounting information for all not-for-profit organizations is available on the Internet through the research database, GuideStar, available at www. guidestar.org. Membership statistics for denominations were taken from Mead et al. (2001).
- 6. See the UMC's www.umc.org, for policy statements regarding the environment and the natural world.
 - 7. See the AOG web site for statements on their environmenatal beliefs.
- 8. Full text of this book chapter is available online at http://www.acton. org/ppolicy/environment/theology/m_catholic.html.
 - 9. See the FRC's web site, www.frc.org, to view their legislative concerns.
 - 10. The ALCI's full mission statement is available at http://www.acli.org
- 11. Dr. Dobson's radio broadcasts are archived and available on his organization's web site, at www.family.org/fmedia/broadcast
- 12. De Witt's description of biblical environmental stewardship—earthkeeping, fruitfulness, Sabbath—bears remarkable similarity to Henri Nouwen's description of the Christian life. Citing a passage in the epistle of John, Nouwen argues that intimacy, fecundity, and ecstasy are vital elements of the Christian who takes the Gospel seriously (1986). A Roman Catholic priest, Nouwen wrote his book from the experiences he had during a Sabbatical year he spent in a community of handicapped Christians.

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