

CREATOR, CREATION, AND CHURCH: RESTORING ECOLOGY TO THEOLOGY

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Critical issues concerning the environment attract increasing attention. Modern technologies have affected all life and the environment, creating new situations that require consideration. Resultant moral deliberation, however, often remains restricted to human life. Important questions need to be asked. Are humans a part of the environment, or only stewards of it? Are humans merely “in” nature, or are they also “of” nature? What does it mean to “preserve” the environment?

Philosopher Holmes Rolston III raises an important point: “Environmental ethics stretches classical ethics to the breaking point.”¹ Environmental ethics is not “anthropocentric,” or limited to humans. It attempts to expand the circle of moral concern beyond human beings to include, at the very least, some “higher” mammals that share morally relevant features with us. Environmental ethics builds arguments to explain and justify why nonhumans should count morally.² By contrast, with few exceptions, Western ethics is predominantly anthropocentric, with moral value found primarily, if not exclusively, in humans. We will now examine representative examples.

Classical Western Ethics

Consequentialistic Utilitarianism

Utilitarianism is a form of consequentialism, the process of judging the rightness or wrongness of an action by assessing the consequences of that action. Consequences that result in more harm than good are judged to be morally wrong. To be judged as morally right or desirable, an act should, at least, produce a net balance of good consequences over harmful ones,³ taking into account everyone who is affected.⁴

¹Holmes Rolston III, “Environmental Ethics: Values and Duties to the Natural World,” in *Ecology, Economics, Ethics: The Broken Circle*, ed. Herbert Borrmann and Stephen R. Keller (New Haven, CN: Yale University Press, 1991), 73.

²Rolston, 74, continues: “Environmental ethics requires risk. It explores poorly charted terrain, in which one can easily get lost.”

³Ethical egoism and altruism are forms of consequentialism. An egoist strives to take only those actions that bring about the greatest benefit and least harm to the egoist alone. The altruist, on the other hand, prefers actions that bring about the greatest benefit and least harm to others, exclusive of the altruist.

⁴Principle of Utility: Always act to bring about the greatest good for the greatest

Of necessity, utilitarians offer methods of determining what is good and what is harmful. One widely accepted approach defines a harm as that which brings about suffering and pain, and a good as that which brings about pleasure and happiness.⁵ If the consequences, on balance, bring about more pleasure than pain, the action is morally right. If they bring about more pain than pleasure, it is morally wrong.⁶ Traditionally applied, utilitarianism is anthropocentric, limiting beneficiaries of an action to humans alone, albeit to the greatest number of persons. Arguments for nonhumans rest exclusively on their instrumental contribution to humans.⁷

Deontological Ethics

Within deontological ethics, a moral action is evaluated directly, instead of through its resultant consequences. A morally good action must satisfy, fulfill, or conform to some absolute, universal, and unconditional standard, usually expressed as a duty. Such "binding duties" are obligations that one must always do, or prohibitions that one must never do.

Where can these duties be found? Some believe in intuitions associated with the conscience. Hindus employ the Law of Manu. Christians believe in the standards of Scripture. Immanuel Kant preferred the authority of reason to that of revelation. The definitive feature of persons, he argued, is that they are autonomous, free, and rational. Thus they are fully capable of determining those universal duties that are binding on all persons within a reciprocal moral relationship, where each person has the duty to treat the other with the same standard or rights. For Kant, no nonhumans possess these qualifying features. Once again, this is anthropocentric ethics.⁸

number of persons who are affected by the action.

⁵Since pleasure is valued by many, the utilitarian uses it as a standard for judging the moral worth of the consequences of an action. This can be compared with pain, e.g., which has no intrinsic value. We never seek it for its own sake.

⁶It can be argued that one's individual happiness may be another individual's unhappiness because people's desires or preferences vary considerably. This presents no difficulty for the utilitarian, who simply alters the Principle of Utility slightly to read: "Always act to maximize satisfaction of personal preferences for the greatest number of individuals affected by the action."

⁷E.g., the continued existence of an endangered species, particularly if it is not attractive or valuable to humans for aesthetic, social, or historical reasons, would be difficult to justify on grounds other than arguments about its potential contribution to medicine or perhaps the gene pool of economically productive domestic species. A small, endangered flower or animal, whose vanishing habitat is found in the acreage of a land developer, has little chance within utilitarian judgment.

⁸Immanuel Kant objected to cruelty to animals for reasons consistent with his thinking: not only is this bad behavior a bad example, but, Kant reasoned, if a man is cruel to animals he may develop cruel attitudes toward other human beings as well. Kant's argument remains an anthropocentric argument (*Lectures on Ethics*, trans. Louis

In both utilitarianism and deontology, nonhumans have no true moral standing. Nonhumans are not autonomous bearers of rights and thus are not included in "the greatest number of those affected." In either system, they qualify for moral consideration only indirectly, as means to human ends.

Anthropocentric Ethics

For many ethicists, the anthropocentric perspective is sufficient to address environmental problems. One can hold to an anthropocentric position and be environmentally concerned by appreciating the importance of a clean, healthy, beautiful environment for human well-being. Although we have no responsibilities for the environment in its own right, humans do have responsibilities to other persons who can be harmed by the damage caused to the environment. The natural world is not valued directly, for its own sake, but indirectly, for the sake of humans who find it valuable for the benefits it brings to them. John Passmore, an early environmental philosopher, took this position. He argued, for example, that industrial pollution is a case where some people were harming the health of their neighbors by degrading the air.⁹

Expanded and Revised Utilitarianism and Deontological Ethics: A Limited Biocentrism

More recently, environmentalists have made concerted efforts to broaden the range of moral standing to include more species than human beings. Peter Singer makes this attempt through utilitarianism; Tom Regan does it through deontology. Others, including Paul Taylor, argue that utilitarianism and deontology are too limited and opt to justify the inclusion of plants and lower animals.

Those concerned primarily with higher life forms are regarded as biocentrists. Singer, in *Animal Liberation*,¹⁰ extends moral concern to nonhumans through sentience. Many animal species besides humans possess a sentience that can suffer. All of these qualify for moral consideration. Two morally relevant considerations are the reduction of suffering or the promotion of happiness. A sentient creature, whether it has fur, wings, or gills, deserves moral standing. As Jeremy Bentham noted in 1879: "The question is not, can they reason or can they

Infield [New York: Harper and Row, 1963], 239).

⁹John Passmore's anthropocentrism works well when it is applied to environmental problems, such as industrial pollution, which have clear consequences for persons. It falls short, however, of providing guidance when the benefits to be derived from a particular action toward nature are minimal. E.g., what are the actual human benefits of preserving the vast remote areas of the Arctic National Wildlife Refuge from oil exploration? For some, they seem to be few. Most people, such individuals reason, will never travel there.

¹⁰Peter Singer's book is the well-known "bible" for the movement of the same name (*Animal Liberation* [New York: Avon, 1976]).

talk, but can they suffer."¹¹ Arguments that humans alone are morally privileged rest on arbitrary distinctions and are guilty of what Singer called "specieism."

Because sentient animals experience needs and have interests that are similar to those of humans, they must be given equal consideration. Actions that bring about suffering to nonhumans must be justified to the same degree as if those actions were directed toward humans. Pain is pain for humans and nonhumans. Singer appeals for the moral worth of all sentient beings.

Singer, however, excludes insentient life forms, lower animals, and plants. These species are presumed not to suffer, thus they have no moral standing. He primarily includes mammals as morally qualified sentient beings. Donald VanDeVeer argues similarly for psychological capacity, roughly equating it with sentience.¹² Animals with greater psychological capacity would be favored.¹³ However, the anthropomorphic bias remains.

Inspired by Kant's accounts of universal duties, Regan's deontology moves beyond Kant's claim that only free and autonomous human beings can qualify for moral worth.¹⁴ He argues that any being that has a complex emotional and perceptual life, including pain and pleasure preferences, plus the ability to pursue actions and goals with a significant degree of independence, should be included within one's moral scope. Many species of mammals fall into this category and should be included with humans as candidates for moral standing. These "subjects-of-life," as Regan refers to them, have inherent value.¹⁵ Thus he reaches the same conclusion as Singer, that many mammals have equal worth with humans, albeit from an entirely different direction.¹⁶

Singer and Regan are representatives of a limited biocentrism. They seek to extend moral consideration to nonhumans, but only within modified

¹¹Jeremy Bentham, *The Principles of Morals and Legislation* (New York: Columbia University Press, 1945), chap. 17, sec. 1, fn. to paragraph 4.

¹²See Donald VanDeVeer, "Interspecific Justice," *Inquiry* 22 (Summer 1979): 55-70; reprinted in Donald VanDeVeer and Christine Pierce, eds., *The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics* (Belmont, CA: Wadsworth, 1998), 179-192.

¹³This position leads to a kind of *de facto* anthropocentrism because in conflicts in which individuals (members of a species with unequaled psychological capacity) are competing with a member of any other species, the interests of the human person would consistently prevail.

¹⁴See Tom Regan, *The Case for Animal Rights* (Berkeley: University of California Press, 1983).

¹⁵Regan's term corresponds roughly to "intrinsic value." No being with inherent value should be treated as a means to some end, as a resource or object to be exploited for the benefit of others. "Subjects-of-a-life" have rights that should be respected by free and rational agents who are morally responsible for their actions.

¹⁶With lower species, Regan finds himself in the same predicament as Singer. Although being sentient and the "subject-of-a-life" are almost identical, involving complex psychological capacities, lower animals and all plants remain excluded from consideration.

anthropocentric ethical systems. Other biocentrists applaud this, but fault them for failing to extend the range of moral standing any further. What about less complex animals and the plant kingdom? Is moral standing possible for these? Must justification for their welfare and protection rely exclusively on their instrumental, economic, or aesthetic value?

A "Teleological Center of Life" Approach

Paul Taylor believes he has found a way to extend the circle of moral concern beyond sentience in his "teleological center of a life."¹⁷ All animals and plants, sentient or not, conduct their lives in a clearly directed way. They grow and maintain themselves in terms of their well-being. For example, a newly hatched chick seeks to become a full-fledged representative of its species, as does a live maple tree or a worm. There is nothing superfluous in the behavior of a living organism. Its very life is defined by and dedicated to its *telos*, even if it is not self-conscious of it.

Unlike psychological capacity, the *telos* of a species is open to objective description. One can know what harms or benefits an organism simply by witnessing its activities, even if the organism is not conscious of its nature or purpose. These have what is called "a good of their own," giving them worth and value. Teleological centers of life are valuable objectively apart from our assessment or judgment regarding them. Nor is the human *telos* superior to that of any other living thing.

Taylor calls this "the biocentric outlook," referring to the interdependence and equality within this planet's vast community. He expands the circle of moral concern, including greater numbers of nonhumans, going beyond the emphasis on consciousness or psychological awareness as the main qualification for moral standing. Taylor is committed to the equality of living teleological systems, human and nonhuman. However, he does not address the value of waterways, mountains, or entire ecosystems, except as they provide a suitable environment for the flourishing of teleological systems of life.

Revised and Expanded Consequentialism: Environmental Ethics

An environmental ethic justifies the inclusion of large communities of animals, plants, rivers, lakes, mountains, and valleys. These are referred to in environmental science as ecosystems, "biomes," or, generally, as "the natural environment."

Ecosystems are loose associations of species, from microbes in the soil to forests and animals that live together in countless numbers as citizens in a community. Aldo Leopold, a pioneer of environmental ethics, was an early advocate of ecocentrism. His 1949 essay "The Land Ethic" is still considered

¹⁷All living things (and for Aristotle, many nonliving things) have a *telos*—an inborn goal that they strive to realize and sustain. That this is true is obvious to any attentive observer. See Paul Taylor, *Respect for Nature* (Princeton: Princeton University Press, 1986).

a classic expression of environmental ethics.¹⁸ Leopold advocates the extension of human ethic to include soils, waters, plants, and animals, or collectively, the land.¹⁹ He uses the term "community" to describe the land as a highly organized whole, with its own integrity. Taylor speaks of the land as a "biocentric mechanism,"²⁰ extending the consequentialist ethic to ecosystems.²¹

J. Baird Callicott, a disciple of Leopold, endorses this interdependence within an ecosystem by using the image of an organism: "Like organisms proper, ecosystems are complexly articulated wholes, with systemic integrity."²² He does not claim that ecosystems are alive, but that they resemble living things closely enough to allow for valid comparisons. For example, organisms can be ill or well. The health of ecosystems may be assessed by diagnostic tests that resemble medical examinations, including monitoring "vital signs" and identifying "risk factors."²³

"Shallow" versus "Deep" Ecology

Others differentiate between "shallow" and "deep" ecology, claiming that living beings are constituted by relationships. Individuality is a minor aspect of its

¹⁸Aldo Leopold, *Sand County Almanac with Essays on Conservation from Round River* (Oxford: Oxford University Press, 1953).

¹⁹Ibid., 239.

²⁰Leopold, 251, claims: "We can be ethical only in relation to something we can see, feel, understand, love, or otherwise have faith in." He, 262, concludes his essay with a succinct expression of his guiding principle: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

²¹At first glance, Leopold's principle, 262, almost appears deontological with its appeal to specific ideals rather than to subjective states of happiness or suffering. He defines human duties toward ecosystems: if the ecosystem is the proper and exclusive object of our moral attention, then the vast array of plants and animals constituting the system must be valued not intrinsically, for their own sake, but instrumentally, in terms of their contribution to its "integrity, stability, and beauty." The ecosystem does not serve individual creatures; the creatures serve the ecosystem and may be treated in ways that violate their individual interests or teleological self-fulfillment when the ecosystem requires, negating a prevailing idea that economics determines all land use.

²²J. Baird Callicott, "La nature est Morte, vive la Nature," *Hastings Center Report* 22 (September 1992): 19.

²³Thus Callicott attaches value to ecosystems. Instrumentally, healthy ecosystems are obviously vital for the well-being of humanity, which is embedded in nature: "If our other-oriented feelings of goodwill may extend to nature, then ecosystem health is something we may value intrinsically" (ibid.). What is less than obvious, however, is why they are to be cherished intrinsically. Why is this extension of goodwill reasonable? An ecosystem is not conscious and would fail to qualify for moral standing under Singer's sentience requirement or Regan's "subject-of-a-life" criterion. It may possess sufficient "systemic integrity," however, and qualify under Taylor's teleological centeredness, especially if Callicott's claims for organic resemblance are valid.

embeddedness in a complex system of relationships. Reality is a universal river of energy. Individuals are merely local disturbances in that flow.

The human species does not fare well in deep ecology. Deep ecology proposes a species egalitarianism, where all creatures are equal in intrinsic value. More radical ecocentrists argue that the individual is completely subordinated to the well-being of the ecosystem. The whole is of much greater value than any of its parts, even the human parts.²⁴ Individuals, whether they are atoms or living beings, are the fundamental units of reality.²⁵ Murray Bookchin even argues for deep ecology to transform society,²⁶ drawing on social hierarchy models rather than the nature of the universe.

A "Top-down" Approach to Ecology

Bryan Norton, with his pragmatic approach to moral decision-making, discusses how utilitarian, deontological, or teleological principles can be "applied" to specific situations in a "top-down" approach.²⁷ Since situations are always different, it is difficult to employ the same universal principle unilaterally to every case in exactly the same way. Different parties in a dispute are not often likely to agree on the same fundamental principles. Yet Norton maintains that unity can be cemented by common interests, such as in caring for the environment.²⁸

²⁴The more outspoken deep ecologists sometimes invite the charge of misanthropy ("hatred of humans") by describing the species as a pathogen or plague of the earth.

²⁵For Kant and many post-Enlightenment philosophers, "persons" are autonomous individuals who control their own destinies through rational decision processes. Thus the individual takes priority over community, and social relationships are mostly a matter of choice and personal advantage. Physically, we are minds or egos embedded within an almost impermeable envelope of skin and separated from all other existing beings as they are from us. Deep ecology reverses this position completely. With few exceptions, individual species, including humans, have little value within the absolute priority of the whole.

²⁶See Murray Bookchin, *The Ecology of Freedom* (Palo Alto, CA: Cheshire, 1982); and idem, *The Philosophy of Social Ecology* (Montreal: Black Rose Books, 1990). Most human societies, he claims, are structured according to levels of power, authority, and control. Those occupying the higher rungs control those on rungs below them. These relational patterns are built into the habitual patterns of belief and action in a culture. They become internalized and promoted as normative and beyond question. The solution lies not in merely changing forms of government. All forms of social structures are infected. The only cure is a soft form of anarchy.

²⁷See Bryan G. Norton, *Toward Unity among Environmentalists* (New York: Oxford University Press, 1991).

²⁸This pragmatic approach relies on "moral pluralism" (i.e., using a variety of principles that are not deduced from a single master principle). However, when real conflicts occur, there are no standards to resolve them. What if a person is faced with a dilemma between deciding for humans (requiring an anthropocentric, person-respecting principle) or nonhumans (requiring a biocentric sentience or telos-respecting

Ecofeminism

Ecofeminists focus on hierarchical patterns of patriarchy, with the elevated and entitled status of male authorities as the primary form of social oppression. For them, eliminating patriarchy would go far toward the elimination of many forms of oppression, social and economic. This would result in proper relations with nature, for they suggest there is positive link between the subjection of women and nature. In 1973, with increasing fears of planetary ecological meltdown mounting, Francoise d'Eaubonne wrote that the only mutation that can save the world would be the "great upheaval" of male power that "brought about, first, overexploitation, then lethal industrial expansion."²⁹

The Church and Ecology

Christian attitudes toward the environment are based on a distinctive understanding of the universe. The earth has exalted standing from its status as a creation of God and, as such, should receive respect. Since all of creation has value, even the nonliving environment is to be treasured.

The current ecological crisis has influenced some Christian scholars to pay more attention to the doctrine of creation. For example, Thomas Berry states that "we seldom notice how much we have lost contact with the revelation of the divine in nature. Yet our exalted sense of the divine comes from the grandeur of the universe, especially from the earth in all the splendid modes of its expression."³⁰

Threats to animals, birds, fish, air, soil, and ecosystems endanger not only human lives and community, but also go against the directives of God himself. The scriptural assignment of dominion and responsibility is a stewardship ethic. The obliteration of forests and wetlands, the pollution of waterways, and the extinction of numerous species of plants and animals should be a genuine concern to all Christians.

Some Christian environmentalists have moved beyond anthropocentrism. For example, James Nash defends the biotic rights of other species and their

principle)? Some moral pluralists would rank the two positions and select the one with overriding priority. They arrive at such a ranking with an appeal to some master standard. All the same, moral pluralists argue that life is too complex to be reduced to a single ethical standard.

²⁹See Warwick Fox, "The Deep Ecology-Ecofeminism Debate and Its Parallels," *Environmental Ethics*, 11 (1989); Ariel Salleh, "Deeper than Deep Ecology: The Eco-Feminist Connection," *Environmental Ethics*, 6 (Winter 1984); "The Ecofeminism/Deep Ecology Debate: A Reply to Patriarchal Reason," *Environmental Ethics*, 14 (Fall 1992); "Social Ecology and the Man Question," *Environmental Politics* 5/2 (1996); Mary Mellor, *Feminism and Ecology* (Oxford: Polity, 1997); Carolyn Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (San Francisco: HarperSanFrancisco, 1990).

³⁰Thomas Berry, *Thomas Berry and the New Cosmology* (Mystic, CN: Twenty-Third Publications, 1987), 17.

right to survive as a species ahead of human exploitation.³¹ Other stewardship models include concern for future generations with different degrees of intrinsic value for various species.

However, many Christians have been slow to respond to ecological concerns and are often negligent in linking ecology with their theology. Some Christians even argue that ecological issues are a waste of time since the world is going to be destroyed eventually anyway. Even worse, accusations about Christians allege that of all the world's religions, Christianity has proved uniquely dangerous to the environment, abusing the "dominion" that God bestowed on human beings at creation.³² Above all religions, Christianity is categorized as being negligent of ecological matters.

While Christians believe that God is Creator of this world and that he pronounced it "very good!" (Gen 1:31), unfortunately the emphasis placed upon Christian stewardship generally tends to focus on personal fiduciary responsibility and/or tithing, leaving the stewardship of the natural world neglected. Where is the needed encouragement from the pulpit to be mindful of the earth, the water, the air, and the animals? The consistent warning of many scientists is that our planet, with its many creatures and many systems, is not healthy. Mounting evidence testifies that the material world God created is indeed "groaning" (Rom 8:22).³³ What, then, would be the Christian response toward the natural world? Is it possible for Christians to find an appropriate response to the current ecological crisis?

A Biblical Perspective on Ecological Responsibility

The biblical perspective, from the beginning of the book of Genesis through the end of the book of Revelation, yields an impressive doctrine of ecology that emphasizes the close connection between human and animal life. Nowhere in Scripture is creation ever devalued. Rather, there is a consistent and impressive linkage between ecology and theology in the minds of the biblical writers.

The Hebrew Bible

The Pentateuch

On the fifth day of creation week, God pronounced a blessing on the new creatures of air and water, commanding them, as he did to humans on the sixth day, to "be fruitful and multiply" (Gen 1:22). Such blessing implies, at the very least, divine valuation of these creatures. Only a short time later the human fall into sin would, by divine directive, also affect the earth and all its nonhuman constituents (Gen 3:14-19).

³¹James A. Nash, *Loving Nature: Ecological Inquiry and Christian Responsibility* (Nashville: Abingdon, 1991).

³²Nash is one of many who writes about "the ecological complaint against Christianity." See esp. *ibid.*, chap. 3.

³³Unless otherwise noted, the NKJV of the Bible is used.

Later, when God could no longer tolerate the wickedness of humanity, he provided for the preservation of nonhuman creatures. Noah was told by God to take his family and a collection of animals into the ark "to keep this kind alive upon the face of all the earth" during a global catastrophe (Gen 7:3). The turning point in the flood narrative is seen to be Gen 8:1: "But God remembered Noah *and all the wild animals and the livestock* that were with him in the ark" (emphasis added). After the flood, the animals were explicitly included in God's renewed covenant with humanity: "Then God spoke to Noah and to his sons with him, saying: 'As for Me, behold, I establish My covenant with you, and with your descendants after you, and *with every living creature that is with you, the birds, the cattle, and every beast of the earth with you; of all that go out of the ark, every beast of the earth*'" (Gen 9:8-10, emphasis added). God links Noah with the animals four times in this covenant (Gen 9:9-10; 12, 15, 17). Thus, even in that current crisis, God did not forget his creatures and provided for the continuation of their kinds after the flood.

Respect for animals and the close ties they share with humans is thus an important Pentateuchal theme. For instance:

- both animals and humans were created with the "breath of life" (Gen 1:20, 24; 2:7, 19);
- both were blessed by God (Gen 1:22, 28);
- both were given a vegetarian diet (Gen 1:29-30);³⁴
- both have blood in their veins, which is a symbol of life (Gen 9:4-6);
- both could be held responsible for murder (Gen 9:5; Exod 21:28-32);
- both were included in God's covenant (Gen 9:9-10);
- both are under the death penalty if they engage in bestiality (Lev 20:15-16);
- both are given the Sabbath rest (Exod 20:8-10; Lev 23:10-12; Deut 5:14);
- the firstborn of both belong to God (Exod 22:29-30; 13:12-13);
- priests and sacrificial animals were to be without spot or blemish (Lev 21:17-21; 22:19-25);
- animals could not be sacrificed unless at least eight days old and then they were to be first dedicated to God. The same time period of eight days was given for a boy to be circumcised and dedicated to God (Gen 17:12; Exod 22:30; Lev 22:27).³⁵

In the OT patriarchal period, the needs of animals were tended to first after traveling. For example, Rebecca watered the camels of Abraham's servant

³⁴As Charles Pinches and Jay B. McDaniel observe: "In the first story of creation, so often recited by Christians and Jews, animals and humans are treated together; both created on the sixth day, they are together given seeds, fruits and green plants to eat, not one another (Genesis 1:30)" (*Good News for Animals? Christian Approaches to Animal Well-Being* (Maryknoll, NY: Orbis, 1993).

³⁵Adapted from Jiri Moskala, *The Laws of Clean and Unclean Animals in Leviticus 11: Their Nature, Theology, and Rationale, An Intertextual Study* (Betrien Springs: Adventist Theological Society, 2000), 298-299.

before inviting him to her house (Gen 24). Moreover, the sport of hunting is mentioned only in connection with violent persons, such as Nimrod (Gen 10:8-9) and Esau (Gen 25:27), and never of the patriarchs and their descendants.

In the book of Numbers, Balaam's donkey, after being beaten by Balaam, pleads for respect and fair treatment (22:21-33). The heavenly being, whom the donkey is reacting toward and whom Balaam does not see at first, also criticizes Balaam's harshness toward the creature.

As God led the children of Israel to the "Promised Land," he described it to them as a land rich with "milk and honey" (Exod 3:8; Lev 20:24). He carefully instructed the people about ecological responsibility: "[T]he land in which you are about to cross to possess it, a land of hills and valleys, drinks water from the rain of heaven, a land for which the LORD your God cares" (Deut 11:11-12). The Mosaic laws include the protection of nature, even outlawing the destruction of fruit trees to aid a military campaign (Deut 20:19). Large work animals were not to be muzzled so they could eat while doing the heavy work involved in agriculture, but were permitted to enjoy the harvest they were helping to reap (Deut 25:4).

The Hebrew people had an obligation to be kind to their animals. The Jewish historian Josephus notes how Moses taught compassion for animals:

So thorough a lesson has he given us in gentleness and humanity that he does not overlook even the brute beasts, authorizing their use only in accordance with the Law, and forbidding all other employment of them. Creatures which take refuge in our houses like suppliants we are forbidden to kill. He would not suffer us to take the parent birds with the young, and bade us even in an enemy's country to spare and not to kill the beasts employed in labor. Thus, in every particular, he had an eye for mercy, using the laws I have mentioned to enforce the lesson.³⁶

Humans, animals, and even the land are included in the stipulations for the weekly Sabbath and the sabbatical year:

Six years you shall sow your land and gather in its produce, but the seventh year you shall let it rest and lie fallow, that the poor of your people may eat; and what they leave, the beasts of the field may eat. In like manner you shall do with your vineyard and your olive grove. Six days you shall do your work, and on the seventh day you shall rest that your ox and your donkey may rest, and the son of your maidservant and the stranger may be refreshed (Exod 23:10-12; cf. 20:8-10; Lev 25:6-7; Deut 5:12-15).

Norman Wirzba is sensitive to the sabbatical instructions: "Sabbath observance has the potential to release the depth and meaning of God's many blessings at work within creation."³⁷ Further, when the Sabbath is observed, many others are also allowed to rest.

In the annual sabbatical festivals, Israel worshiped the Lord of nature as the

³⁶Josephus, *Against Apion* 2:210-215, trans. H. St. J. Thackeray, vol. 1 (London: Heinemann, 1956).

³⁷Norman Wirzba, *Living the Sabbath: Discovering the Rhythms of Rest and Delight* (Grand Rapids: Brazos, 2006), 15.

God of grace. The observance of these annual festivals was obligatory. God told Israel: "[T]hree times you shall keep a feast to Me in the year: You shall keep the Feast of Unleavened Bread . . . and the Feast of Harvest . . . and the Feast of Ingathering" (Exod 23:14-16; cf. Deut 16:16-17). These times of annual celebration commemorated the signal mercies of the God of Israel, who not only redeemed the people from bondage, but provided for them during their wilderness wandering. But further, the feasts also marked three different harvests. For example, the Feast of the Passover, followed immediately by the Feast of Unleavened Bread, commemorated Israel's redemption from Egypt. Taking place in the spring, usually during the month of April, the first sheaf of ripe barley was gratefully waved before the Lord. The second annual feast, the Feast of Weeks, also called the Feast of Pentecost or the First Fruits of Harvest, was celebrated fifty days (or seven weeks) after the Passover, around the beginning of June. This feast was a time of thanksgiving for the completed grain harvest of wheat and barley. The last annual festival, the Feast of Booths, was also known as the Feast of Ingathering, taking place during our month of October. By this time the produce of vineyard and olive grove had been gathered.

Thus Israel was taught to honor Jehovah, both as God of creation and as God of salvation. As such, the people, upon their settlement in the Promised Land, were to

take some of the first of all the produce of the ground, which you shall bring from your land that the LORD your God is giving you, and put it in a basket . . . and say to [the priest], "I declare today to the LORD your God that I have come to the country which the LORD swore to our fathers to give us . . . and now I have brought the first fruits of the land which you, O LORD, have given me." . . . So you shall rejoice in every good thing which the LORD your God has given to you and your house, you and the Levite and the stranger who is among you (Deut 26:1-11).

John Stott comments on the rich symbolism of the gift of the firstfruits of the new land to God: "The basket of fruit was a token of 'all the good things' which God had given Israel. It was the fruit of the ground, fruit which God had caused to grow. But from what ground? From ground which God had also given them, as he had sworn to their fathers. The fruit was a sacrament of both creation and redemption, for it was the fruit of the promised land."³⁸

The Historical Books

Besides redemption and salvation, God also linked ecology with righteousness. For example, following the dedication of the Temple, God appeared to Solomon in a dream and said to him: "When I shut up heaven and there is no rain, or command the locusts to devour the land, or send pestilence among My people, if My people who are called by My name will humble themselves, and pray and seek My face, and turn from their wicked ways, then I will hear from heaven, and will forgive their sin and *beal their land*" (2 Chron 7:12-14, emphasis

added). Later, Israel would suffer drought because of their apostasy (1 Kgs 17).

Wisdom Literature

When God speaks to Job out of the whirlwind, he recounts the wonders of the created world, urging Job to contemplate several wild creatures. In his longest recorded speech (Job 38-41), God refers to animals such as the lioness, the mountain goat, a stallion, leaping high to paw the air, and the hawk, eagle, and raven. Finally, he turns to the behemoth and the mighty leviathan, noting concerning it that "Indeed, any hope of overcoming him is vain; Shall one not be overwhelmed at the sight of him? No one is so fierce that he would dare stir him up. Who then is able to stand against Me?" (Job 41:9-10). Wirzba insightfully comments that the "Leviathan represents an equally ferocious creature that we would do our best to leave alone. Yet God finds a reason to delight in creatures such as these: 'I will not keep silence concerning its limbs, or its mighty strength, or its splendid frame' (41:12)."³⁹ God exults in these members of the created world who will never be controlled by human beings. Apparently, even wild, untamed animals are of value in the "world as God sees it."⁴⁰

Within the Psalter, God's providence for his creation inspired many prayers and hymns. The psalmists emphasize how nature reveals the glory of God, and how all of God's creation is included in his care. More than once, the reader is reminded that God provides sustenance for all life: "He gives to the beast its food, and to the young ravens that cry" (Ps 147:9). Further, the Psalter focuses attention on the glorious manifestation of life in God's creation. For instance, Ps 148:7-13 proclaims:

Praise the LORD from the earth,
You great sea creatures and all the depths,
Fire and hail, snow and clouds;
Stormy wind, fulfilling His word;
Mountains and all hills,
Fruit trees and all cedars;
Beasts and all cattle;
Creeping things and flying fowl;
Kings of the earth and all peoples,
Princes and all judges of the earth!
Both young men and maidens;
Old men and children.
Let them praise the name of the LORD,
For His name alone is exalted;
His glory is above earth and heaven.⁴¹

Admonitions in the book of Proverbs also include a high regard for the

³⁹Wirzba, 87.

⁴⁰Philip Yancey, *I Was Just Wondering* (Grand Rapids: Eerdmans, 1998), 10-11.

⁴¹Some have wondered if Christians should stop repeating Scripture passages of rivers and trees clapping for joy to the Creator (Ps 98:8; Isa 55:12) while forests are being turned into wastelands and waterways into life-destroying pollution.

³⁸John R. W. Stott, *Understanding the Bible* (Grand Rapids: Zondervan, 1999), 49.

animal kingdom. Solomon, for example, states: "Go to the ant, you sluggard! Consider her ways, and be wise, which, having no captain, overseer or ruler, provides her supplies in the summer, and gathers her food in the harvest. How long will you slumber, O sluggard? When will you rise from your sleep?" (Prov 6:6-9), and "A righteous man regards the life of his animal, but the tender mercies of the wicked are cruel" (Prov 12:10).

The Prophets

Isaiah the prophet instructed that if God's covenant is broken and the responsibilities of stewardship neglected, deterioration and pollution of the earth will follow: "The earth mourns and fades away, the world languishes and fades away; the haughty people of the earth languish. The earth is also defiled under its inhabitants, because they have transgressed the law, changed the ordinance, broken the everlasting covenant. Therefore the curse devours the earth, and those who dwell in it are desolate" (Isa 24:5-6).

The prophet Jeremiah concurs, highlighting how Israel's sins affected the earth, drawing a direct correlation between deceitfulness and vengefulness and the broken conditions of the earth: "Shall I not punish them for these things?" says the LORD. "Shall I not avenge Myself on such a nation as this? I will take up a weeping and wailing for the mountains and for the habitations of the wilderness a lamentation, because they are burned up, so that no one can pass through them; nor can men hear the voice of the cattle. Both the birds of the heavens and the beasts have fled; they are gone" (Jer 9:7-10).

Hosea contrasts the state of the earth when Israel remains within the constraints of the covenantal relationship with the dire consequences of gross sinfulness. In an echo of the Noachic covenant, God promises that "In that day I will also make a covenant for them with the beasts of the field, with the birds of the air, and the creeping things of the ground. Bow and sword of battle I will shatter from the earth, to make them lie down safely" (Hos 2:18). But Israel did not guard their covenantal relationship, thereby bringing against them the charge, "There is no truth or mercy or knowledge of God in the land. By swearing and lying, killing and stealing and committing adultery, they break all restraint, with bloodshed after bloodshed" (Hos 4:1-2). But the gross inhumanity of humans for one another is not limited to affecting human life, Hosea states. It also leads to dire consequences for the ecosystem: "Therefore [because of Israel's sinfulness] the land will mourn; and everyone who dwells there will waste away with the beasts of the field and the birds of the air; even the fish of the sea will be taken away" (Hos 4:3).

According to the prophet Joel, both animals and land are devastated as the Day of the Lord approaches: "The seeds shrivel under their clods; the storehouses are in shambles; barns are broken down, for the grain has withered. How the beasts groan! The herds of cattle are restless, because they have no pasture; even the flocks of sheep suffer punishment. O LORD, to You I cry out; for fire has devoured the open pastures, and the flame has burned up all the

trees of the field. The beasts of the field also cry out to You, for the water brooks are dried up, and fire has devoured the open pastures" (Joel 1:17-20).

The prophet Jonah, petulantly demanding that God destroy the inhabitants of Nineveh even after they repented, had to be rebuked: "And should I not pity Nineveh, that great city, in which are more than one hundred and twenty thousand persons who cannot discern between their right hand and their left hand, and *also much livestock?*" (John 4:10-11, emphasis added). Thus God ends his discussion with Jonah with an intriguing reminder of his profound mercy that extends not only to the wicked Ninevites, but also to their animals.

God's statement to Jonah should not be surprising; the natural world is important to the Creator. The concluding question in the book of Jonah pointedly reminds the reader that even the animal kingdom is expressly included in God's tender regard. In God's extension of mercy to the humans of Nineveh, he was also sparing the animals. In an echo of Pss 36:6 and 145:9, the sentiment that God cares for the natural world is expressed. The psalmist states: "Your righteousness is like the great mountains. . . . O LORD, You preserve man and beast. . . . The Lord is good to all, and His tender mercies are over all His works."

The prophet Zechariah also repeats the pervasive biblical theme of human sin destroying the earth:

Execute true justice, show mercy and compassion everyone to his brother. . . . But they refused to heed, shrugged their shoulders, and stopped their ears so that they could not hear. . . . Thus great wrath came from the LORD of hosts. Therefore it happened, that just as He proclaimed and they would not hear, "so they called out and I would not listen," says the LORD of hosts. "But I scattered them with a whirlwind among all the nations which they had not known. Thus the land became desolate after them, so that no one passed through or returned; for they made the pleasant land desolate" (Zech 7:9, 11, 12b-14).

A heartbroken Zechariah can only lament:

Open your doors, O Lebanon,
That a fire may devour your cedars.
Wail, O cypress, for the cedar has fallen,
Because the mighty trees are ruined.
Wail, O oaks of Bashan,
For the thick forest has come down.
There is the sound of wailing shepherds!
For their glory is in ruins.
There is the sound of roaring lions!
For the pride of the Jordan is in ruins (Zech 11:1-3).

An Old Testament "Theology of Life"

While the creation must suffer the consequences of human sin, God promises that ultimately the original perfection of creation will be restored. The prophet Isaiah eloquently describes the righteous reign of God and the reestablishment

of justice and righteousness on the earth. At last,

The wolf also shall dwell with the lamb, the leopard shall lie down with the young goat, the calf and the young lion and the fatling together; and a little child shall lead them. The cow and the bear shall graze; their young ones shall lie down together; and the lion shall eat straw like the ox. The nursing child shall play by the cobra's hole, and the weaned child shall put his hand in the viper's den. They shall not hurt nor destroy in all My holy mountain, for the earth shall be full of the knowledge of the LORD as the waters cover the sea (Isa 11:6-9).

The New Testament

The "theology of life" is also found in the NT, which often refers to God's care for his creation. Jesus' own appreciation for animals is demonstrated repeatedly in his teachings. He stresses that even the lowliest of creatures is loved by God. He once asked: "Are not five sparrows sold for two pennies? And not one of them is forgotten before God" (Luke 12:6). The assurances that not a single sparrow falls to the ground without God's knowledge (Matt 10:29) is an echo of Ps 84, where the tiny sparrows are welcome in God's sanctuary.⁴²

In the Gospels, Jesus stressed the divine concern for earth's smaller creatures: "Look at the birds of the air; they neither sow nor reap nor gather into barns, and yet your heavenly Father feeds them" (Matt 6:26). Further, he compared his care for Jerusalem with that of a mother hen's concern for her chicks (Matt 24:37). The Architect of two lavish OT sanctuaries marveled at the astonishing beauty of the flowers he created: "Consider the lilies of the field, how they grow; they neither toil nor spin; and yet I say to you that even Solomon in all his glory was not arrayed like one of these" (Matt 6:28-29).

Jesus continually demonstrated in his earthly ministry his lordship over nature:

- his first miracle changed water into wine (John 2);
- he walked on water (Matt 14:25-27);
- the stormy sea knew his voice and obeyed his command (Mark 4:35-41);⁴³
- the barren fig tree immediately withered at his command (Matt 21:18-19);
- disease was healed by his authority, included the dreaded leprosy (Luke 17:11-21);
- death could not remain in his presence (Luke 7:16; John 11).

As Paul Santmire contends: Jesus "can be thought of as an ecological figure as well as an eschatological figure."⁴⁴

⁴²"How lovely is Your tabernacle, O LORD of host! My soul longs, yes, even faints for the courts of the LORD; my heart and my flesh cry out for the living God. Even the sparrow has found a home, and the swallow a nest for herself, where she may lay her young—even Your altars, O LORD of hosts, my King and my God. Blessed are those who dwell in Your house; they will still be praising You" (Ps 84:1-4).

⁴³Speaking of Jesus' quieting of the storm on Galilee, Jakob van Bruggen writes: "Jesus is not the pawn of the elements" (*Christ on Earth* [Grand Rapids: Baker, 1998], 178).

⁴⁴H. Paul Santmire, *The Travail of Nature: The Ambiguous Ecological Promise of Christian*

Because of Jesus' incarnation, life, and resurrection, matter is no longer only warped and sinful. Human flesh is once again exalted. Moreover, Jesus restored health to crippled limbs and damaged bodies as a preview of the perfect world he promises—a world where sin, sickness, and death will be removed. Resurrection is even linked to the environmental renewal of this planet. The apostle Paul affirms:

For I consider that the sufferings of this present time are not worthy to be compared with the glory which shall be revealed in us. For the earnest expectation of the creation eagerly waits for the revealing of the sons of God. For the creation was subjected to futility, not willingly. . . . For we know that the whole creation groans and labors with birth pangs together until now. And not only they, but we also who have the firstfruits of the Spirit, even we ourselves groan within ourselves, eagerly waiting for the adoption, the redemption of our body (Rom 8:18-23).

Ben Witherington summarizes: "The resurrection of Christ, the destiny of believers, and the destiny of the earth are inexorably linked together."⁴⁵ Paul's profound theology of creation clearly recognizes the source of all things: "For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him. And He is before all things, and in Him all things consist" (Col 1:16-17). Paul goes on to insist that creation reveals the very nature of the Godhead: "For since the creation of the world His [God's] invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse" (Rom 1:20).⁴⁶ Thus Paul, ever sensitive to the close intertwining of all life, argues that the entire creation has been affected by human sin and is enduring the resultant suffering.

In the final book of Scripture, the entire world is dramatically encompassed with divine judgment. In Rev 7:1, four angels are pictured standing at the four corners of the earth, holding the four winds of the earth, that the wind should not blow on the earth, on the sea, or on any tree. Then I saw another angel ascending from the east, having the seal of the living God. And he cried with a loud voice to the four angels to whom it was granted to harm the earth and the sea, saying, "Do not harm the earth, the sea, or the trees till we have sealed the servants of our God on their foreheads" (Rev 7:1-3).

After the seventh trumpet sounds in Rev 11, the twenty-four elders fall on

Theology (Philadelphia: Fortress, 1985), 201.

⁴⁵Ben Witherington III, *Paul's Narrative Thought World: The Tapestry of Tragedy and Triumph* (Louisville: Westminster John Knox, 1994), 171.

⁴⁶Even Jonathan Edwards understood that God communicates not only "by his voice to us in the Scriptures, but also in creation and in historical events. The whole creation of God preaches" (cited in Allen C. Guelzo, "The Return of the Will," in *Edwards in Our Time: Jonathan Edwards and the Shaping of American Religion*, ed. Sang Hyun Lee and Allen C. Guelzo [Grand Rapids: Eerdmans, 1999], 133).

their faces and worship God, as they cry out against those who have wreaked havoc on the created world:

We give You thanks O Lord God Almighty, the One who is and who was and who is to come, because You have taken Your great power and reigned. The nations were angry, and Your wrath has come, and the time of the dead, that they should be judged, and that You should reward Your servants the prophets and the saints, and those who fear Your name, small and great, and should destroy those who destroy the earth (Rev 11:17-18).

The book of Revelation concludes with the resplendent restoration promised earlier by the OT prophets, reminding the reader again that redemption involves the renewal of God's original creation. The material world will participate in redemption. Salvation is never described as an escape from the earth, but rather as a reclamation of the earth! God's salvation is earth-affirming.⁴⁷ There is nothing in God's creation that is irrelevant. Throughout Scripture, the profound value that God places on this created world is often repeated.

Conclusion

From Genesis to Revelation, Scripture consistently reveals a close link between ecology and theology. When compared to modern attempts to attach earthly values to ethical motivation, the biblical writers are far advanced. A close study of the Scriptures suggests that authentic Christian faith must include ecological concern. Since God is the Creator and Sustainer of this world, and humans are created in his image and are to be his image-bearers on the earth, surely this must include showing loving concern for this world as manifested by the Creator. Any negative interference with his creation would be a daring act. The biblical writers warned of the serious implications of failing to maintain a covenantal relationship with the Creator. Tragically, what they warned against has become reality. As pioneering ecological theologian Joseph Sittler insists:

When we turn the attention of the church to a definition of the Christian relationship with the natural world, we are not stepping away from grave and proper theological ideas; we are stepping right into the middle of them. There is a deeply rooted, genuinely Christian motivation for attention to God's creation, despite the fact that many church people consider ecology to be a secular concern. "What does environmental preservation have to do with Jesus Christ and His church?" they ask. They could not be more shallow or more wrong.⁴⁸

⁴⁷Nancy Pearcey states: "God's command to Adam and Eve to partner with Him in developing the beauty and goodness of creation revealed His purpose for *all* of human life. And after He has dealt with sin once for all, we will joyfully take up that task once again, as redeemed people in a renewed world. This comprehensive vision of Creation, Fall, and Redemption allows no room for a secular/sacred split. All of creation was originally good; it cannot be divided into a good part (spiritual) and a bad part (material). Likewise, all of creation was affected by the Fall, and when time ends, all creation will be redeemed" (*Total Truth: Liberating Christianity from Its Cultural Captivity* [Wheaton: Crossway, 2004], 86).

⁴⁸Joseph Sittler, *Gravity and Grace* (Minneapolis: Augsburg, 1986), 15.

Secular materialists believe that the world is unfolding in an endless process. Pantheists believe that God is in eternal emanation with this world. Atheists think the world evolved out of matter by chance. New Agers worship the earth as divine. Buddhists and Christian Scientists do not believe the world is real.⁴⁹ By contrast, biblical Christians believe God created this world with lavish care and declared it to be "very good" (Gen 1:31).

The Bible writers also insisted that God is not a distant or absent landlord. His hand is still seen in storms, thunder, and rain (Ps 77:17-18); he causes the wind and the darkness (Amos 4:13); he is active in and through all of creation, "for in him we live and move and have our being" (Acts 17:28). As Jonathan R. Wilson concludes: "God is creator and God remains creator even of the fallen world. The fallen world has no life independent of God. Even in its rebellion it is dependent on God. . . . [I]n Jesus Christ, God redeems creation. That redemption is not salvation *from* the world but the salvation *of* the world through repentance and faith in Jesus Christ."⁵⁰

Excursus: What Can Be Done?

It is not easy to become motivated to be frugal with the earth's abundant treasures in a land of plenty. However, Christians could recycle everything possible: glass, cans, plastic, batteries, newspapers, phone books, plus use white paper on both sides to save trees, "the lungs of the earth," and replenish soil by composting.⁵¹ Water conservation and control of air pollution are also vital.

Americans must also become more sensitive to the issue of wasting food. When Jesus fed the 5,000, and later the 4,000, the disciples gathered up the leftover fragments so that nothing would be lost (John 6:12; Mark 8:8). The God who earlier provided the miracle of manna to the people in the wilderness for forty years (Exod 16:35) and who later provided a miracle lunch for

⁴⁹Stephen Webb observes a significant result of a nonbiblical understanding of the material world: "The deist philosophers of the Enlightenment portrayed God as an architect who built what we can see, rather than a rhetor who spoke the world into being. The origin of modern science lies in this silencing of nature. . . . The primacy of vision turns the world into a thing and thus endows humanity with enormous powers, but it also makes humanity a spectator, alienated and estranged from the objects of our inspection. Our world is dull and quiet—the heavens no longer declare God's glory (Ps 19)—no matter how much we fill that void with the sights and sounds of consumerism" (*The Divine Voice: Christian Proclamation and the Theology of Sound* [Grand Rapids: Brazos, 2004], 40).

⁵⁰Jonathan R. Wilson, *God So Loved the World: A Christology for Disciples* (Grand Rapids: Baker, 2001), 158.

⁵¹E-technologies, such as e-mail, have helped to conserve paper. Even the postal service has noted the difference in the amount of paper they move. Long before humans thought of recycling, however, nature provided examples. Beetles, ants, flies, maggots, and other insects work as recyclers. They assist with the decomposition of debris and other vegetation, while worms aerate the ground—all contributing to the renewing of the soil.

thousands from one boy's lunch (John 6:1-14), teaches the privilege of eating and the miracle of food by urging that nothing be wasted.

Diet is also related to ecological concerns. The vegetarian diet should be revisited in the light of ecological and even mental-health concerns. Philosopher Stephen Webb links this issue to the biblical record of the life of Daniel:

The Book of Daniel, for example, tells the story of how Daniel and his friends refused to eat the impure food of Nebuchadnezzar, the Babylonian king. Instead, they ate only vegetables, and "at the end of ten days it was observed that they appeared better and fatter than all the young men who had been eating the royal rations" (Dn 1:15). It is tempting at this point to argue that even the Bible understands that eating less meat is better for one's physical as well as spiritual health.⁵²

Perhaps the Christian Church should pay more attention to the crucial ecological issues involved with eating meat. When a fourth-generation cattle rancher⁵³ and Mennonite hog farmer⁵⁴ ceased raising animals for slaughter and became vegetarians, they pointed to the critical ecological issues involved in eating flesh meat. For instance, there is a wasteful "funnel effect" of many pounds of grain fed to a single steer—the same amount of grain that could be used to feed far more people. A few years ago, it was thought that animal protein was of paramount importance for optimum health. Now science has demonstrated from the study of human physiology that the optimum diet for human beings does not include meat. In fact, the digestion of animal flesh puts an enormous strain on the human body. Second, the huge amount of water used to grow fodder for feeding animals for slaughter is also well documented. The same amount of water could serve a much larger community of people.⁵⁵

⁵²Stephen H. Webb, *On God and Dogs: A Christian Theology of Compassion for Animals* (New York: Oxford University Press, 1998), 22.

⁵³See, e.g., Howard F. Lyman, *Mad Cowboy: Plain Truth from the Cattle Rancher Who Won't Eat Meat* (New York: Simon & Simon, 2001). Lyman is well aware of what goes into U.S. livestock—high doses of pesticides, growth hormone, and the ground-up remains of other animals. A fourth-generation Montana farmer, he regularly doused his cattle and soil with chemicals. It was only when he narrowly escaped paralysis from a spinal tumor that Lyman began to question his vocation and the effect it was having on people and on the land he loved. The questions he raised and the answers he found led him, surprisingly, to adopt a vegetarian diet. As a result, he lost 130 pounds and lowered his cholesterol by more than 150 points. He is now one of America's leading spokesmen for vegetarianism. Along the way, Lyman learned even more about the alarming dangers associated with eating meat, and blasts through the propaganda of the beef and dairy industries (and the government agencies that often protect them) and exposes an animal-based diet as the primary cause of cancer, heart disease, and obesity in this country.

⁵⁴Gary L. Comstock, "Pigs and Piety: A Theocentric Perspective on Food Animals," in *Good News for Animals? Christian Approaches to Animal Well-Being*, ed. Charles Pinches and Jay B. McDaniel (Maryknoll, NY: Orbis, 1993), 105-127.

⁵⁵It takes approximately 14 trillion gallons of water annually to water crops grown

Some studies even show that not only is our water supply being slowly depleted on this basis, but also that our deep underground water sources are being polluted by the seepage from immense amounts of cow manure, resulting from present methods of animal husbandry.⁵⁶ These are but a few of the serious ecological issues related to the meat industry⁵⁷ and say nothing about the frightful cruelty to the animals that are slaughtered.⁵⁸ Webb is correct: "As long

to feed livestock in this country. As much as 4,500 gallons of water are required just to produce a quarter-pound of raw beef. Just to irrigate hay and alfalfa, it takes more water than that required for all vegetables, berries, and fruit orchards combined.

⁵⁶As Carol J. Adams documents: "Meat' eaters do not have to pay the true costs for the 'meat' that they eat. The cheapness of a diet based on grain-fed terminal animals exists because it does not include the cost of depleting the environment. Not only does the cost of 'meat' not include the loss of topsoil, the pollution of water, and other environmental effects, but price supports of the dairy and beef 'industry' mean that the government actively prevents the price of eating animals from being reflected in the commodity of 'meat.' My tax money subsidizes war, but it also subsidizes the eating of animals. For instance, the estimated costs of subsidizing the 'meat' industry with water in California alone is \$26 billion annually (Hur and Fields 1985a, 17). If water used by the 'meat' industry were not subsidized by United States taxpayers, 'hamburgers' would cost \$35 per pound and 'beefsteak' would be \$89. Tax monies perpetuate the cheapness of animals' bodies as a food source; consequently 'meat' eaters are allowed to exist in a state of denial. They are not required to confront 'meat' eating as a 'pocketbook issue'" ("Feeding on Grace: Institutional Violence, Christianity, and Vegetarianism," in *Good News for Animals? Christian Approaches to Animal Well-Being*, ed. Charles Pinches and Jay B. McDaniel [Maryknoll, NY: Orbis, 1993], 148).

⁵⁷Nineteenth-century health reformer Ellen White was sensitive to this issue: "Think of the cruelty to animals that meat eating involves, and its effect on those who inflict and those who behold it. How it destroys the tenderness with which we should regard these creatures of God!

"The intelligence displayed by many dumb animals approaches so closely to human intelligence that it is a mystery. The animals see and hear and love and fear and suffer. They use their organs far more faithfully than many human beings use theirs. They manifest sympathy and tenderness toward their companions in suffering. Many animals show an affection for those who have charge of them, far superior to the affection shown by some of the human race. They form attachments for man which are not broken without great suffering to them.

"What man with a human heart, who has ever cared for domestic animals, could look into their eyes, so full of confidence and affection, and willingly give them over to the butcher's knife? How could he devour their flesh as a sweet morsel?" (*Ministry of Healing* [Mountain View, CA: Pacific Press, 1942], 315-316).

Even the skeptic David Hume granted this point, even while insisting that any truth was opposed to his methodological skepticism: "[N]o truth appears to me more evident, than that beasts are endow'd with thought and reason as well as men. The arguments are in this case so obvious, that they never escape the most stupid and ignorant" (*A Treatise of Human Nature*, 272, cited in Bernard E. Rollin, *The Unbeeded Cry: Animal Consciousness, Animal Pain and Science* [Ames: Iowa State University Press, 1998], 22).

⁵⁸J. R. Hyland states: "We have increasingly hidden the slaughterhouse, and its

as it is more acceptable to say that we love meat than it is to say that we love animals, our views on animals will continue to be deeply distorted.⁵⁹

A meatless diet, then, permits humans to live in peace with God's creation, even before the Parousia. At Christ's return, the nonviolent diet of the original Eden will be restored for both humans and animals. One day, all killing will cease. People and animals will stop doing harm to each other (Isa 11:6-9). As we await this glorious future, Christians can begin to live by the compassionate patterns of God's governance for all of his creation.⁶⁰ In the process, we can offer praise to God for his glorious creation by how we live and eat. Thus we will, finally, be linking our theology with ecology, as God has done in Scripture, where he instructs us how to see and love the world as he does.

victims, from sight. Very few persons have any direct experience of the violence and brutality that is inflicted on animals in order to satisfy a carnivorous population. Additionally, the steaks, chops, hamburgers, and cold cuts that are consumed show little resemblance to the creature who had to be killed in order to obtain them" (*God's Covenant with Animals: A Biblical Basis for the Humane Treatment of All Creatures* [New York: Lantern Books, 2000], 102); see also Eric Schlosser, *Fast Food Nation: The Dark Side of the All-American Meal* (New York: Harper, 2002).

⁵⁹Webb, *On God and Dogs*, 12.

⁶⁰"1 Cor 6:14 comes in the middle of Paul's discussion about the proper use of the human body. Resurrection is introduced here to explain why it is important to act morally in and with the body—the body is meant for the Lord and, in fact, will participate in the eschatological state of salvation. V. 14 makes the analogy between Christ's resurrection and that of believers quite explicit. Both are raised up by God's power. The context makes clear that by resurrection Paul means something involving a body. Again, we see a clear connection made between the believer's present condition and his or her future condition. Ethics circumscribes bodily conduct because the body has a place in the eschatological future of the believer" (Witherington, 174).