

The potential of religion for Earth Stewardship

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Religious communities are playing an increasingly important role in advancing Earth Stewardship. We briefly summarize the potential of religions and religious values to support this initiative, characterizing its development and acknowledging the inherent tensions between the problems and promise of religious influences. Mobilizing religious believers to contribute to responsible stewardship of the Earth requires a critical appreciation of the complexity of religious traditions and the ways that religious communities view nature, as well as the cultural and spiritual resources that religious teachings provide in confronting change and human suffering. We emphasize religious virtues that favor sustainable resource use and key developments that have prompted fruitful dialogue between ecologists and religious believers. We also describe promising alliances between scientists and spiritual leaders that may help to encourage cooperative Earth Stewardship. Religions have great potential to transform cultures toward improved Earth Stewardship, in collaboration with key scientific, economic, public policy, and education partners.

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The various manifestations of the most pressing contemporary environmental problems – collectively referred to as the “environmental crisis” (eg industrial pollution, resource depletion, biodiversity loss, climate change, and overpopulation) – are well documented (MA 2005). Given the urgent need to promote a flourishing, sustainable future, the world’s religious communities have much to offer because the attitudes and beliefs that shape most people’s concept of nature are greatly influenced by their religious worldviews and ethical practices. The moral imperatives and value systems of religions have the potential to mobilize the sensibilities of people toward the goals of Earth Stewardship, here defined as shaping the trajectories of social–ecological change to enhance ecosystem resilience and human well-being (Chapin *et al.* 2011).

The vast majority of the world’s people are members of a

religious tradition, and these affiliations influence Earth Stewardship views both directly and indirectly. Scholars in religion and ecology began important explorations of the ecological influence of the world’s religions in the 1960s, which led to the emergence in the 1990s of the disciplinary field of religion and ecology (advanced by Tucker and Grim 1997–2004; see also Sheldon 1992; Bakken *et al.* 1995; Wildman 2003; Bratton 2006; Gottlieb 2006; Berry 2009; Jenkins 2009; Jenkins and Chapple 2011; FORE nd). More recently, environmental organizations have increasingly allied with faith communities, faith-based environmental groups have multiplied (Figure 1), and ecologically oriented scientific and professional societies have begun to organize religion–ecology groups (Table 1).

Despite White’s (1967) argument that religiously derived environmental values (especially those from Western traditions) are counterproductive, most scholars of religion and ecology affirm that the world’s religions can make substantial contributions to environmental ethics (Tucker and Grim 1997–2004; Jenkins 2009; Jenkins and Chapple 2011). Many Americans have described spiritual influences as fundamental to their environmental values (Kempton *et al.* 1995), and communities of all faiths have rallied to the cause of Earth Stewardship (Table 1; eg McDuff 2010). At the same time, the best intentions for Earth Stewardship can fail in the face of complex cultural and economic pressures favoring excessive consumption of natural resources, or falter under conflicting religious and political views. For instance, consider the multifaceted environmental perspectives of evangelical Christians, which range from voicing pivotal support for environmental protection (Figure 2; Kearns 1997) to diminished engagement amid political controversy about climate change (Redden 2011) while still expressing an unexpected range of cli-

In a nutshell:

- Religions have an important role to play in Earth Stewardship, which has often been under-appreciated
- Increasingly, religious communities are expressing ethics and practices for sustainability that promote resilience and transformation in the face of the environmental crisis
- Scholarly attention to connections between religion and Earth Stewardship is growing in both theological and ecological disciplines, and partnerships between environmental and religious organizations are becoming more common
- Scientists, policy makers, economists, and educators can advance Earth Stewardship by engaging with the environmental perspectives and resources of the world’s religions

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mate-change risk perceptions and policy preferences (Wilkinson 2012; Smith and Leiserowitz 2013). Links between religion-based environmental values and scientific and public-policy disciplines continue to evolve (Tucker and Grim 2001; Lodge and Hamlin 2005), and religious scholars, spiritual leaders, and laity can facilitate this process. Ecumenical Advocacy Days in 2009, for example, impacted national climate legislation discussions by bringing more than 1000 people of faith together in Washington, DC, to learn from scholars and converse with legislators about climate change (EAD 2009).

Despite its potential to influence the direction of social–ecological change, religion alone, like science alone, is unlikely to sufficiently empower Earth Stewardship; members of religious communities that are intent on promoting Earth Stewardship must therefore participate in a broader alliance of scientists, policy makers, and non-governmental organizations. Although scientific and religious communities have not always viewed each other as allies, successes in strengthening the complementary influences of science and religion on Earth Stewardship have been achieved in recent decades (Table 1; Open Letter 1990; Pope 1998; Gardner 2006). Such progress is helping to create vital common ground for dialogue and creative partnerships with the aim of envisioning and implementing long-range sustainable solutions to intractable environmental problems. Here, we highlight this context and describe selected key dynamics, difficulties, and opportunities for ecologists and other scientists to engage Earth Stewardship insights and the resources of the world's religions.

■ Problems and promise

One of the greatest challenges for contemporary religious communities is how to respond to the environmental crisis, which is believed by some to have arisen from the enormous inroads of materialism and secularization in contemporary societies (Moncrief 1970). Others, such as the medieval historian Lynn White, have argued that the emphasis in Judaism and Christianity on the transcendence of God above nature and the dominion of humans over nature has led to a devaluation of the natural world and depletion of its resources for utilitarian ends (White 1967). Although this argument has been vehemently debated and may not hold up under scrutiny (Hiebert 1996; Minter and Manning 2005; Hitzhusen 2007), the environmental crisis presents a serious test of environmental values, religious and otherwise. Most Americans belong to religious denominations that have affirmed commitments to environmental stewardship (Table 1), but the mix of political, personal, and institutional dynamics that surround environmentally beneficial behaviors may at times overshadow such commitments (Shaiko 1987; Djupe and Hunt 2009; Fischer *et al.* 2012). Other religious emphases (eg personal salvation or a focus on heaven as opposed to Earth) and regional or cultural priorities may also serve to reduce the salience of envi-



Figure 1. Interfaith Power and Light national conference, 2013. Founded in 1998 and now the largest faith-based climate-change organization in the US, Interfaith Power and Light works through 40 state chapters with more than 15 000 congregations across religious traditions to respond to climate change.

ronmental issues (Guth *et al.* 1993, 1995; Djupe and Olson 2010).

Scientists often have difficulty communicating with religious communities, either because of historical tensions between religion and science or because of dogmatism from both religious and scientific sources (Barbour 2000). Furthermore, science and religion are influenced by the worldviews, priorities, and patterns of contemporary industrialized societies that often treat nature simply as a commodity to be exploited, and at times serve as means and justification for such exploitation. Thus the pathway to engaging the complementary influences of science and religion for Earth Stewardship is fraught with challenges.

Religion is sometimes avoided in “polite” conversation because of the strong feelings it can inspire, and religions have been associated with controversies (eg separation of church and state, evolution) that may mark religion as a troublesome partner. It is also sometimes claimed that religions, through intolerance and exclusive claims to truth, have contributed to tensions between peoples, leading to wars or forced conversion. Religious believers, however, have been central to achieving crucial reforms for avowedly religious reasons: for instance, William Wilberforce’s efforts to abolish the slave trade in the British Empire starting in the late 18th century, or the non-violent movements for freedom in India and for integration in the US, which were inspired by religious principles and led by spiritual leaders such as Mahatma Gandhi and Martin Luther King Jr. Religions have often been at the forefront of reforms, including in the labor movement, immigration law, and justice for the poor and oppressed.

In addition, the evolving dialogue on religion and ecology acknowledges that in seeking long-term sustainability, there is a disconnect between contemporary environ-

Table 1. Examples of synergy between religion and Earth Stewardship

Organization/example	Link
Key Religion–Ecology Organizations	
The Yale Forum on Religion and Ecology (FORE); “Engaged Projects” links describe the history of many religion–ecology groups across religions; monthly newsletter; religion and ecology news articles from United Nations Environment Programme (UNEP); world religion climate statements	http://fore.research.yale.edu http://fore.research.yale.edu/religion/christianity/projects http://fore.research.yale.edu/publications/newsletters http://fore.research.yale.edu/publications/massmedia http://fore.research.yale.edu/climate-change/statements-from-world-religions
National Religious Partnership for the Environment (NRPE) (includes National Council of Churches [NCC] Creation Justice Ministries; Evangelical Environmental Network; Coalition on the Environment and Jewish Life; US Conference of Catholic Bishops’ Eco-Justice Project and Catholic Coalition on Climate Change); NRPE provides links to environmental statements of various denominations	www.nrpe.org www.creationjustice.org http://creationcare.org http://coejl.org www.usccb.org/issues-and-action/human-life-and-dignity/environment http://catholicclimatecovenant.org www.nrpe.org/~nrpeorg/index.php?option=com_k2&view=item&layout=item&id=268&Itemid=385
The Alliance for Religions and Conservation (ARC)	www.arcworld.org
AuSable Institute	http://ausable.org
GreenFaith	www.greenfaith.org
Blessed Earth	www.blessedearth.org
Earth Ministry	http://earthministry.org
Faith in Place	http://faithinplace.org
Web of Creation	www.webofcreation.org
Interfaith Power and Light (IPL) national organization and state affiliates with climate-change focus	http://interfaithpowerandlight.org http://interfaithpowerandlight.org/about/state
Professional Society groups	
American Academy of Religion (AAR) Religion and Ecology Group	http://papers.aarweb.org/content/religion-and-ecology-group
Ecological Society of America (ESA) Environmental Justice Section	www.esa.org/enjustice2
Scientists’ Speakers Bureau for Earth Stewardship Outreach to Faith Communities	2012–2013 pilot effort of the ESA, NRPE, and other professional and scientific societies; www.esa.org/enjustice2/projects/faith-communities
International Society for the Study of Religion, Nature, and Culture (ISSRNC)	www.religionandnature.com/society
Society for Conservation Biology (SCB) Religion and Conservation Biology Working Group	www.conbio.org/groups/working-groups/religion-and-conservation-biology
Religion and Earth Stewardship	
NRPE online stewardship stories	www.nrpe.org/index.php?option=com_google&view=standard&id=1&Itemid=694
NCC congregational success stories	www.creationjustice.org/stories
Renewal, documentary film highlighting faith community environmental work in the US	www.renewalproject.net
Seminary Stewardship Alliance (Blessed Earth); Green Seminary Initiative	http://seminaryalliance.org www.greenseminaries.org
Catholic Climate Covenant “Real Stories”	http://catholicclimatecovenant.org/real-stories
Earth Ministry Greening Congregations	http://earthministry.org/congregations
Interfaith Power and Light “Cool Congregations” success stories	www.coolcongregations.org/category/cool-congregations

mental problems and traditional religious insights (Jenkins 2009; Grim and Tucker 2013). Religious teachings are not equipped to supply technological guidance in dealing with complex issues such as climate change, desertification, or deforestation. Yet at the same time, certain orientations and values from the world’s religions may be useful or even indispensable for fostering more ecologically appreciative worldviews and environmental

ethics. The links between social justice and environmental health, for instance, were clearly addressed by biblical authors (eg Isaiah chapter 5; Jeremiah chapter 12:4; Hosea chapter 4:1–3), and the social justice traditions of faith-based communities provide a framework for environmental concern and action (Bakken *et al.* 1995). Finding synergy with insights from the world’s religions to enhance Earth Stewardship is complicated but critical.

■ Critical context

Many religious attitudes, spiritual practices, and common ethical values serve to broaden and reinforce environmental perspectives (Hitzhusen 2006). These values affirm the actual and potential contribution of religious ideas, even ecological theology, for inspiring environmental ethics and grassroots activism. As previously noted, religions are now reconstructing these attitudes, practices, and values in efforts to encourage Earth Stewardship. Careful methodological reflection – entailing a creative approach to retrieving and reclaiming texts and traditions while considering varying religious expressions (Jenkins 2009) – is needed to link religious responses to particular environmental challenges. Such work has contributed to the evolution of religious traditions to function more effectively as sources of spiritual inspiration, moral transformation, and sustainable community life in the midst of the environmental crisis.

Examining the dynamic personal, institutional, and political influences of religious communities is also important because the various world religions are recognized as more than simply a belief in a transcendent deity or a means to an afterlife. Rather, religions are seen as providing a broad orientation to the cosmos and human roles in it. For millennia, attitudes toward nature have been substantially, but not exclusively, shaped by religious views in cultures worldwide.

In this context, religions can be understood as a means whereby humans, recognizing the limitations of material reality, undertake specific practices to transform themselves and achieve genuine community within a cosmological setting. Religions thus refer to those cosmological stories, symbolologies, ritualistic practices, ethical norms, historical processes, and institutional structures that transmit a view of the human as embedded in a world of meaning, responsibility, transformation, and celebration. Religions connect humans with a divine presence or numinous force, thereby bonding human communities and assisting in forging relations with the broader Earth community. In summary, religions aid in linking humans to the larger mystery from which life arises, unfolds, and flourishes (Grim and Tucker 2013).

A culture's worldviews are contained in religious cosmologies and expressed through rituals and symbols. Religious cosmologies describe the experience of origin and change in relation to the natural world. Religious rituals and symbols – which arise from those cosmologies and are grounded in the dynamics of nature – encourage spiritual and ethical transformation in human life. This is true in Buddhism, which considers the human response to change in nature and the cosmos as a potential source of human suffering. Confucianism and Daoism, on the other hand, affirm nature's changes as the source of the Dao. The death–rebirth cycle of nature also serves as an inspiring metaphorical mirror for human life, sometimes echoed in the Western monotheistic traditions of Judaism, Christianity, and Islam. All religions translate natural



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Figure 2. Calvin DeWitt is a professor of environmental studies emeritus at the University of Wisconsin, Madison. In 1979, he became the founding Executive Director of the AuSable Institute of Environmental Studies, which served as an ecology field station for Christian colleges. Since its creation, AuSable's graduates have gone on to create biology and ecology departments at their alma maters, and AuSable now maintains Graduate Fellows groups at major research universities in the US to support Christian environmental stewardship.

cycles into rich tapestries of interpretive meanings that encourage humans to move beyond tragedy, suffering, and despair. Human struggles expressed in religious symbolism find their way into a culture's art, music, and literature. By linking human life and patterns of nature, religions have provided a meaningful orientation to life's continuity as well as to human death and diminishment. In addition, religions have helped to celebrate the "gifts" of nature such as air, water, and other resources that support life.

In short, religions have assisted their believers in coping with change and transcending suffering. The creative tensions between humans seeking to transcend this world and yearning to be embedded in this world are part of the dynamics of world religions. Christianity, for example, holds the promise of salvation in the afterlife as well as celebrating the incarnation of Christ as a human in the world. Similarly, Hinduism espouses the goal of *moksha*, which is liberation from the world of *samsara*, the cycle of death and rebirth, while also highlighting the ideal of Krishna acting in the world (Grim and Tucker 2013).

Recognizing these creative tensions leads to a more balanced understanding of the possibilities and limitations of religions regarding environmental concerns. Many religions retain otherworldly orientations toward personal salvation beyond this world, while simultaneously fostering commitments to social justice, peace, and eco-

logical integrity within this world. Environmental discourse has often overlooked how religious symbols, rituals, and ethics imply the need for changes in attitudes toward and actions for creating a sustainable future. Ongoing developments in what has been called the “greening of religion” (Nash 1989; McDonagh 1990) have renewed attention to such questions, and new alliances that join social justice with environmental justice are emerging (eg www.uua.org/environment).

In alignment with these “ecojustice” concerns, religions can encourage selected values for formulating broader environmental ethics. Specifically, with the help of the world’s religions, humans can advocate for a reverence for Earth, respect for myriad other species, reciprocity between humanity and the natural world, restraint in the use of natural resources, equitable distribution of wealth, and renewed emphasis on sustainability (Tucker and Grim 2001).

■ Call and response: emerging models

We are encouraged by the growing call for the world’s religions to participate in facilitating a more sustainable future; to that end, religions have been making mostly positive contributions (Tucker and Grim 1997–2004; Gardner 2006; see also Jenkins and Chapple 2011). Exemplary models of synergy between spiritual and ecological partners have become easier to find as diverse approaches within the sciences and within religious communities have begun to interweave and expand from local to global scales (Table 2). In addition, there has been a marked growth in schol-

arly articles related to environment and ecology within the theological literature (Figure 3a; see also Tucker *et al.* in press), and attention to religion is increasing in ecology literature (Figure 3b). Several national and international meetings have also been held on this subject (Table 3). This growing body of scholarly and institutional work on religion and ecology suggests opportunities for more systematic exploration and engagement with religious contributions to Earth Stewardship.

Faith-based community responses to environmental concerns have also proliferated; for example, in the US, stewardship, environmental/economic justice, and creation spirituality have been primary avenues of thought and action (Kearns 1996). Other approaches evoke kinship with humans’ fellow creatures (Santmyre 2003); the linked fates of the land, humans, non-human organisms, and the planet (Swimme and Tucker 2011); and religious naturalism (Goodenough 1998; Walker *et al.* 2012). Religious communities played a key role in sparking the environmental justice movement in the US (Jablonski and Poling 2007), and “stewardship” has become a particularly resonant category of response (Jablonski and Hitzhusen 2010). Parallel examples emerging across the globe (Table 1) indicate the potential for building upon these foundations.

■ Directions for the future

Awareness of these developments and prospects for complementarity in religion and ecology are valuable. Informed ecologists and other scientists may be able to improve their partnerships with religious communities,

Table 2. Religious engagement in ecological restoration

Project	Description
Balinese Water Temple Networks, Indonesia (Hitzhusen <i>et al.</i> 2013)	Soil in terraced rice paddies has been preserved through ritual processes among decentralized water temples
Congregations Caring for Watersheds and Wildlife (http://watershedsandwildlife.org)	Project linking ecologists and religious leaders to support watershed and wildlife habitat restoration projects on congregation land
Columbia River Pastoral Letter (www.columbiariver.org)	The first pastoral letter of Catholic bishops devoted specifically to a bioregion, developed from a 3-year collaboration of scientists, community members, religious leaders, and regional stakeholders to develop guidance for stewardship of the Columbia River watershed
Marianist Environmental Education Center (http://meec.udayton.edu)	Catholic environmental education community focused on ecology-based simple living, social justice, and spirituality; established the Mount St John Nature Preserve, an Ohio Natural Landmark, and maintains multiple community engagement projects
Monteverde Tropical Cloud Forest (Nadkarni and Wheelwright 2000)	Conservation success in part attributed to the Christian values of colonizing Quakers, who helped create a sense of community with local inhabitants and were receptive to the conservation message of visiting biologists
Sugar Creek Project, NE Ohio (Hitzhusen <i>et al.</i> 2013)	Natural and social scientists worked with Amish farmers to reduce nitrate and bacteria levels in waterways; project also improved manure management by recycling milk house waste high in phosphorous back onto fields to improve water quality; methods have become a model for 21 adjoining counties

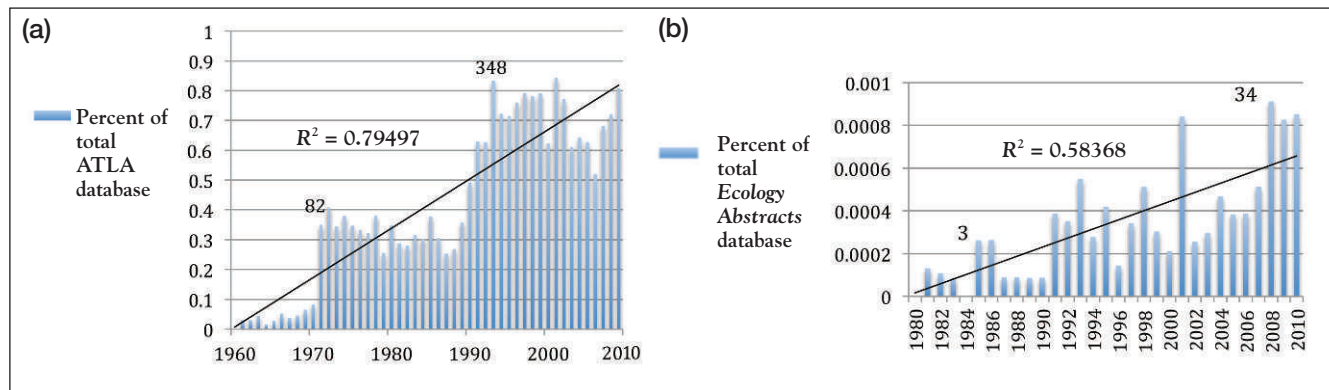


Figure 3. (a) Increase in percent of total sources in the American Theological Library Association (ATLA) database over a 50-year span, based on a title field keyword search for “*ecolog* or environment**”. Significant increases in the literature were seen after Earth Day in 1970 (peak of 82 articles in 1971) and after the formation of the National Religious Partnership for the Environment and the Religion and Ecology Group of the American Academy of Religion in the early 1990s (348 articles in 1993). (b) Increase in percent of total sources in the Ecology Abstracts database over a 30-year span, based on a keyword search for “*religio**”. No abstracts were found prior to 1981; the greatest number of hits is 34 in 2008.

with the aim of facilitating Earth Stewardship. This knowledge also helps to dispel the assumptions among many scientists that religions, especially those of Western origin, are an obstacle to promoting Earth Stewardship.

The evolution of religious environmental response and thought has created a new source for Earth Stewardship-related values and resources, providing an opportunity for scientists and others to lend their expertise to assist religious communities in taking the “next steps” to bring about Earth Stewardship. Religious environmental perspectives have matured to such an extent that many denominations profess basic theological and ethical reasons for environmental concern, but scientific research can reinforce denominational policy platforms to enhance local community efforts or shape national and international policies.

There are many cases that illustrate the robust links between religious communities and ecologists. Peer-reviewed science has been essential to the formation of religious environmental policy statements, such as those about climate change that draw upon Intergovernmental Panel on Climate Change reports (Table 1). Clergy who testify about the need for local, national, or international environmental legislation often rely on scientific partners to inform their recommendations (eg Schori 2007). Many local congregations proceed from a concern about climate change to a need for specific information to aid them in conserving energy and reducing their carbon footprint. This is a key opportunity, given the vast collective extent (and relative inefficiency) of religious buildings worldwide; in such cases, energy audits, behavior-change research, energy-efficiency best practices, and other resources provided by experts are vital. Congregations or religious camps that seek to restore or sustainably manage their land and facilities also commonly draw on the expertise of local ecologists or land-grant university cooperative extension agents. Moreover, current interest in local and organic foods within faith

communities is frequently supported in part by collaboration with experts in sustainable agriculture.

Linking science with religion is often straightforward: scientists partner with and provide information and resources to religious communities just as they do with any other community. At the same time, depending on the topic, region, and cultural or ideological contexts, familiarity with the values and beliefs of a given religious community can help ensure success in outreach efforts (Nadkarni 2007). Guidelines for outreach to faith communities have been developed (eg recommendations of the Biodiversity Project; Lowry and Swartz 2001), which may help scientists when responding to potential cultural tensions between science and religion (eg creationism versus evolution). Building on such guidelines, in 2012–2013, the Ecological Society of America (ESA) has partnered with religious communities to pilot a speakers’ bureau that supports religion–ecology dialogue and scientists’ outreach to faith communities; this effort (www.esa.org/enjustice2/projects/faith-communities) is intended to grow in partnership with other scientific and professional societies. Through such collaborative projects, religious and scientific communities can expand their common ground, deepen mutually beneficial dialogue, celebrate progress, and build social trust to move the Earth Stewardship initiative forward.

■ The need for interdisciplinary and cross-cultural dialogue

Religions play a central role in formulating worldviews that orient humans to the natural world and in articulating ethics that guide human behavior. The magnitude and complexity of the environmental crisis requires collaboration among religions and a long-term dialogue between religious supporters of Earth Stewardship and other domains of society, including science, economics, education, and public policy. Environmental changes will

Table 3. Key meetings and symposia addressing religion and Earth Stewardship

<i>Meeting and sponsor</i>	<i>Location and year</i>	<i>More information</i>
World Wildlife Fund (WWF); the Vatican	Assisi, Italy, 1984; 1986	Helped inspire founding of NRPE and ARC; www.arcworld.org/about.asp?pageID=2
North American Conference on Christianity and Ecology (NACCE)	Indiana, 1987	Helped connect the environmental work of many denominations in the US and inspire the formation of the NRPE; NACCE Archive guide (Schwab and Smalley 2010)
Spirit and Nature Conference, Middlebury College	Vermont, 1990	http://gailpellettproductions.com/spirit-and-nature/ ; Rockefeller and Elder (1992)
Earth and Spirit Conference, Chinook Institute	Seattle, WA, 1990	Over 1000 participants; Hull (1993)
Declaration of the “Mission to Washington” (NRPE); see also timeline of NRPE development: www.nrpe.org/index.php?option=com_k2&view=item&layout=item&id=1215 ; catalyzed the formation of the NRPE in the US; inspired by Open Letter (1990)	Washington, DC, 1992	www.nrpe.org/index.php?option=com_k2&view=item&layout=item&id=1215 ; catalyzed the formation of the NRPE in the US; inspired by Open Letter (1990)
Harvard World Religions and Ecology conferences	Cambridge, MA, 1996–1998; publications 1997–2004	10-volume series addressing the world’s religions and ecology, with more than 800 scholars and theologians participating (Tucker and Grim 1997–2004); http://fore.research.yale.edu/publications/books/cswr
Global Forum of Spiritual and Parliamentary Leaders	Oxford, UK, 1988; Moscow, Russia, 1990; Rio de Janeiro, Brazil, 1992; Kyoto, Japan, 1993	Attended by leaders such as the Dalai Lama and Mikhail Gorbachev; http://akiomatsumura.com/akio/global-forums
Tehran Seminar on “Environment, Culture, and Religion” and on “Environment, Peace and the Dialogue of Civilizations and Cultures”, Iran and UNEP	Iran, 2001 and 2005	Co-sponsored by the Iranian Government and UNEP; http://fore.research.yale.edu/events/archived/2001/unesp.html
Gorbachev Earth Dialogues on “Globalization: Is Ethics the Missing Link?”	Lyon, France, 2002; Barcelona, Spain, 2004; Brisbane, Australia, 2006	www.earthcharterinaction.org/invent/images/uploads/Earth%20Dialogues%20SynthesisReport.pdf
Scientists–Evangelicals Retreat; National Association of Evangelicals, Harvard School of Public Health	Melhana Plantation, Thomasville, GA, 2006	Attended by eminent scientists and US evangelical Christian leaders to discuss climate change, described by DeWitt: www.yesmagazine.org/issues/climate-solutions/evangelicals-protect-creation
World Conservation Congress, panel on “Spirituality and Conservation”, International Union for Conservation of Nature (IUCN)	Barcelona, Spain, 2008	Part of IUCN Sustainability Dialogues: https://cmsdata.iucn.org/downloads/sd_spirituality.pdf
Religion, Science, and the Environment Symposia, Ecumenical Patriarch Bartholomew	Focus on water issues in Europe, the Amazon, and Arctic: Aegean Sea, 1995; Black Sea, 1997; Danube River, 1999; Adriatic Sea, 2002; Baltic Sea, 2003; Amazon River, 2006; Arctic, 2007, Mississippi River, 2009	www.rsesymposia.org

be motivated by these domains in specific ways: scientific analysis is critical to understanding nature’s economy; economic incentives are central to the equitable distribution of resources; educational awareness is indispensable to promoting sustainability; public-policy recommendations are invaluable in shaping national and international priorities; and moral and spiritual values are crucial for humans in confronting uncertainty and adversity and promoting transformation amid the environmental crisis.

In his book, *A Sand County Almanac with Other Essays on Conservation from Round River*, Aldo Leopold (Figure 4) showed appreciation for the insights of the prophet Isaiah; he also wrote that the proof that conservation had not reached the foundations of human conduct was because “philosophy and religion have not heard of it yet” (Leopold 1949). Today, with the growing contribution of religions to environmental ethics, Leopold might be encouraged. Surely it will take humanity’s best collective

efforts to overcome historical and contemporary barriers to empower Earth Stewardship, but there are solid foundations in place for scientific and religious communities to work together to secure a more sustainable future.

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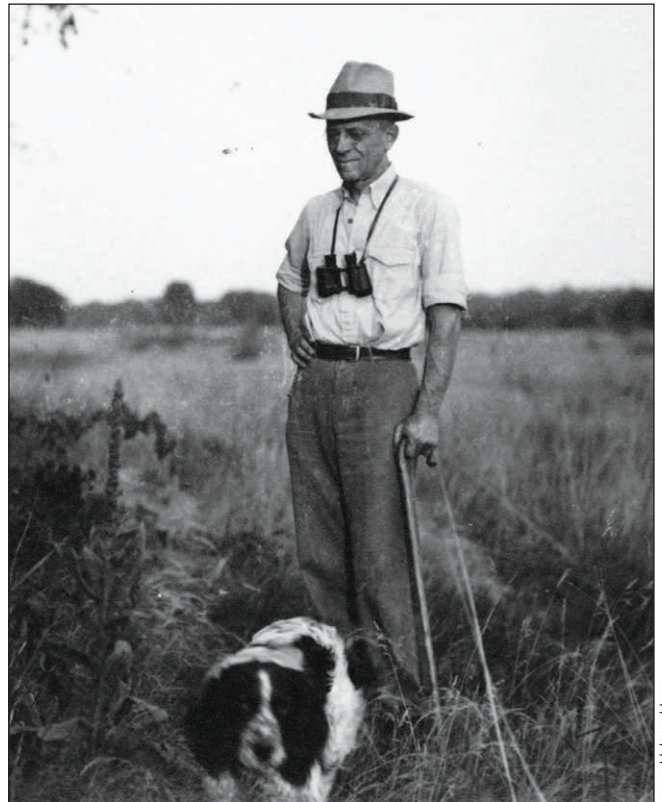


Figure 4. Aldo Leopold, seen here in 1944, is often regarded as the father of environmental ethics in the US. In his book, *A Sand County Almanac* (1949), he articulated the need for a land ethic for the biotic community. Leopold's elegant prose illustrates the importance of religious and aesthetic references when discussing land conservation. Image courtesy of the Aldo Leopold Foundation.

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