# Examining the Impact of Religion on Environmentalism 1993-2010: Has the Religious Environmental Movement Made a Difference?

**Carl M. Hand and Jessica Crowe**
*Valdosta State University and Georgia Military College, Georgia,USA*

## Abstract

The view that emerged in the social science and religious literature is that Judeo-Christian tradition was in part responsible for the environmental crisis by fostering a "dominion mandate" or mastery-over-nature orientation. Despite the growing significance of the environmental movement, most church bodies had not addressed the problem officially until the early 1990s. Several national and faith-based organizations evolved to catalyze interest and organize the movement. This paper examines whether those efforts resulted in a significant change in environmental attitudes, beliefs, or behavior among the religiously involved. Using data from the General Social Survey for 1993, 2000, and 2010, results indicate that the respondents' denominational identification, grouped in terms of its liberal, moderate, or fundamentalist orientation, was weakly but significantly associated with several indicators of environmentalism for all three study years. These associations remain relatively consistent throughout this period, suggesting little change overall in the relationship between religious identification and environmental concern.

## Introduction

Religion's role in the environmental crisis in America has been extensively discussed in the literature. In 1967, Lynn White attempted to explain the root cause of the world's mounting ecological crisis. His article, published in *Science*, blamed the problem on Judeo-Christian values. White asserted that the Judeo-Christian tradition encouraged an anthropocentric orientation which is inimical to environmental concern. In particular, the mandate to dominate and exploit nature for human ends resonated with Western technological mastery over the world. This view undermined the long held notion of many primitive religions that humans cannot exceed the confines of the natural world with impunity. White concluded his argument by saying that ". . .we shall continue to have a worsening ecological crisis until we reject the Christian axiom that nature has no reason for existence save to serve man" (1967, p. 1207).

While White's thesis pertained mostly to macro level and historically specific social change, research has followed the implication of his thesis for understanding the relationship between religion and environmental concern at the individual level (Eckberg and Blocker, 1996). Along this line, many studies have supported a negative relationship between conservative religiosity and environmental concern (Hand and Van Liere,1984; Eckberg and Blocker, 1989; Guth, Kellstedt, Smidt, and Green, 1993; Guth, Green, Kellstedt, and Smidt, 1995), although some studies have found little to no correlations between the two (Boyd, 1999; Greeley,1993; Hayes and Marangudakis, 2000, 2001). Further research has shown that religious commitment is not inimical to more environmentally responsible behavior (Haluza-Delay, 2000; Hitzhusen, 2007; Kanagy and Willits, 1993). This line of argument suggests that acceptance of a dominance over nature orientation does not necessarily equate to poor environmental attitudes and actions. In general, the view emerging from the literature is that fundamentalist or conservative Christianity

is associated with lower levels of environmentalism while religious liberalism tends to be more supportive.

The potential theological causes of this association are not well understood. Some have argued that the dominion mandate is more likely to be affirmed by more Biblicist theological traditions (Hand and Van Liere,1984). Other analysts suggest that the negative relationship between conservative Christian and environmentalism is less theological and more cultural, particularly given the religious right's hostility toward what is perceived to be a liberal and modernist cause (Eckberg and Blocker, 1996). The disparate nature of many of these findings is due in part to the unique methodological features of each study (Eckberg and Blocker, 1996; Djupe and Hunt, 2009). Researchers have also recognized a complex of individual and social factors influencing environmentalism and the limited impact that religious factors alone may have (Hitzhusen, 2007, p. 57; Sherkat and Ellison, 2007).

Much of this research was undertaken prior to or at the outset of growing concern for environmental problems within religious communities. Religious organizations clearly arrived late to the environmental debate. The Bruntland Commission of 1987 was one of the first opportunities for church leaders to interact with other public intellectuals to begin to make the connection between faith and environmentalism, particularly, in the words of the United Nations Report, to develop a “new global ethic” (Conroy, 1990). In 1987, an ecumenical gathering of Christian ecologists came together to give voice to the nascent movement, including such visionaries as Wendell Berry, Thomas Berry, and Matthew Fox. The North American Conference on Religion and Ecology also played a significant role in the 1990 Earth Day celebrations around the country (Conroy, 1990). Although the late 1980s saw an increase in awareness by church leaders, most denominations lagged far behind the rest of the nation in promoting environmental consciousness. Pope Benedict XVI's 1990 Word Day of Peace message signaled the first sign of a fundamental shift toward a more institutionally recognized religious environmentalism. The decade witnessed a dramatic increase in the efforts of religious organizations to join the environmental discussion. This was accomplished in part through denominational statements released by church leaders and councils[1].

While the majority of mainline United States denominations have officially recognized the religious significance of environmental problems, little research exists examining whether or not the official statements or associated efforts to promote environmentalism have made a difference among the religiously involved. The larger questions addressed are whether or not denominational affiliation remains a significant context for understanding differences in environmental beliefs and behavior and whether this has changed over time. This paper will seek to answer these questions by analyzing General Social Survey data between 1993 and 2010.

## The Religious Environmental Movement

The religious environmental movement remained in an "institutionally nascent" phase at least until the mid to late 1980s. As noted earlier, significant efforts by the United Nations, as well as Nobel Prize winning scientists (Kearns,1997), spurred religious leaders to focus on the environment (for analysis of the emergence of the religious environmental movement, see Smith and Pulver, 2009). As with any movement sector, the religious environmental movement ranges across varied institutional, organizational, ideological, and theological fronts. Kearns (1996) summarizes the constituent dimensions of and conflict between the three distinct "models" of religious environmentalism that have emerged—Christian stewardship, ecojustice, and creation

spirituality. As can be expected, each approach to religious environmentalism appeals to different sectors of the religious community and each demonstrates significant variation in issue-foci, focus of change (individual vs. institutional), root causes, solutions, and the like. Christian stewardship appeals more to evangelical and conservative groups who remain largely traditional in their orientation to Christianity who nonetheless wish to address the modern ecological crisis. Ecojustice is located primarily within denominational contexts and as such, is an extension of traditional concerns with economic and social justice. Creation spirituality seeks to tell a new story regarding the relationship of humans to nature, often moving beyond orthodox boundaries of Christianity, and thus appeals more to liberal Protestants, disaffected Catholics, and the unchurched. At root, all three approaches extend the boundaries of traditional religious discourse and seek expressions of religion environmentalism which are integral and global.

The most contentious sector of the movement has undoubtedly been among conservative and evangelical Christians. Kearns (1997) notes that while groups such as the Evangelical Environmental Network, the Au Sable Institute, and many religious environmental leaders have created a receptive audience among many evangelicals, there has also been a great deal of push back from other religious conservatives. At issue, she notes that conservative Christianity has often celebrated the American way of life, including capitalism, opposition to birth control or population limitation more generally, as well as a ". . .focus on individual redemption and other-worldliness" (1997, p. 354). Packaging a pro-evangelical environmentalism around these issues has been fraught with political and theological problems.

The religious environmental movement has spurred significant institutional innovations, such as the development of the National Religious Partnerships for the Environment[2], as well as the development of new faith-based environmental organizations. Work by Feldman and Mosely (2002), and Smith and Pulver (2009) indicates that many denominations and faith-based organizations have made significant inroads in promoting religious environmentalism at the individual and congregational level. As Feldman and Mosely note, many of these faith-based environmental initiatives began in response to official environmental statements made by the national religious assemblies and the corresponding emergence of national ministries. Their research on the Appalachian Region indicates that while this is true for some church-based environmental initiatives, other faith-based groups emerged to address local environmental concerns. As they note, stewardship is the conceptual common ground across groups they studied, but the theological meaning of this idea diverges greatly as does issue foci, tactics, and strategies for change.

Smith and Pulver (2009) provide one of the most extensive analyses to date on religious-environmental movement organizations. Their work focuses on 42 US based organizations, dividing them into "issue-based" and "ethics-based." They argue that the religious environmental movement may have emerged in part to articulate a values and ethically oriented approach to environmentalism lacking within the larger debate. They suggest, as do Shellenberger and Nordhaus (2005), that environmental debates have become too issue-oriented and technocratic to inspire widespread personal and social transformation. Their research shows that religious-environmental organizations are able to infuse a moral and spiritual dimension into the movement that could help to sustain a longer and more deeply transformative effort. Such an effort provides religiously involved ". . . an alternative environmental ethic, stressing human responsibility to care for the earth as a matter of faith" (p. 169).

As previously noted, a dearth of research exists focusing specifically on the success of denominational or faith-based organization efforts although a few studies have emerged. For example, Holland and Carter's (2005) research on Presbyterian churches in Georgia found that clergy activism, rather than clergy awareness of official statements, was associated with significant congregational effects. Similarly, Djupe and Hunt (2009) argue that congregations, not just denominations, serve as significant sources of communication and thus pathways for change in environmental attitudes and behavior. Such congregational effects will vary even within the same denomination. Their research indicates that while clergy can have a positive, albeit small, effect on congregant's environmental opinions, these effects are largely "swamped" by the congregation's average environmental view.

**Methods**

The research question addressed by this research is whether or not environmental attitudes, beliefs, or reported behavior have changed significantly over the past two decades among the religiously affiliated. This question is relevant given the significant outpouring of recognition of the environmental crisis by major church bodies since the beginning of the 1990s. While a significant number of studies have examined the relationship between religiosity and environmentalism, few if any studies have examined whether environmental attitudes, beliefs, and behavior have changed among religious individuals over the course of the past two decades, a time when several of the major church bodies have made public environmental statements.

To assess this question, data from the National Opinion Research Center General Social Survey (GSS) was used. While GSS has a few environmental questions which are asked yearly, a more complete panel of questions was asked in the 1993, 1994, 2000, and 2010 surveys. Because we were interested in examining the trends over time, the 1994 survey has been excluded. While it would have been better to begin this trend analysis in 1990, 1993 was associated with significant denominational efforts to promote environmentalism and thus constitutes an appropriate beginning point for the analysis. The environmental questions included in this analysis are those that were included in at least two of the survey years with the majority of questions included in all three years. Wherever possible, question items were scaled to expedite the analysis. These measures, reported in Table 1, represent essential dimensions of environmental debates (Newport, 2009; Hand and Macheski, 2003), including respondents' support for growth over the environment (Progrowth), willingness to pay more for consumer goods and taxes to support the environment (Paymore), belief that the environment is being threatened (Environmental Threat), and the number of behaviors that respondents reported engaging in to support the environment other than recycling (Environmental Activism). Recycling was not included in the Environmental Activism Scale given its widespread practice and is examined separately.

**Table 1**

***Descriptive Statistics for Environmental Indicators***

| Scale Items | Year | Mean | S | N | Range | Cronbach's Alpha |
|---|---|---|---|---|---|---|
| **Progrowth** | | | | | | |
| "Worry too much about environment, | 1993 | 5.78 | 2.02 | 1419 | 2-10 | .69 |
| too little about the economy." | 2000 | 5.68 | 1.98 | 1137 | | .69 |
| "Worry too much about progress | 2010 | 5.98 | 1.90 | 1356 | | .62 |
| harming the environment." | | | | | | |
| **Paymore** | | | | | | |
| "Accept cut in living standards to help | 1993 | 9.10 | 3.03 | 1438 | 3-15 | .85 |
| environment" | 2000 | 8.61 | 3.12 | 1118 | | .84 |
| "Pay higher taxes to help the | 2010 | 8.53 | 3.25 | 1319 | | .84 |
| environment" | | | | | | |
| "Pay higher prices to help the | | | | | | |
| environment" | | | | | | |
| **Environmental Threat** | | | | | | |
| "Water pollution dangerous to | 1993 | 14.57 | 2.80 | 1258 | 4-20 | .75 |
| environment" | 2000 | 14.84 | 2.71 | 1020 | | .75 |
| "Temperature rise from climate | 2010 | 14.64 | 2.86 | 1285 | | .74 |
| change" | | | | | | |
| "Car pollution dangerous to | | | | | | |
| environment" | | | | | | |
| "Pesticides dangerous to | | | | | | |
| environment" | | | | | | |
| **Environmental Activism** | | | | | | |
| "Signed environmental petition" | 1993 | 1.12 | .86 | 1379 | 0-4 | .62 |
| "Member of an environmental group" | 2000 | .54 | .91 | 1152 | | .61 |
| "Gave money to environmental | 2010 | .43 | .82 | 1397 | | .60 |
| organization" | | | | | | |
| "Participated in environmental | | | | | | |
| demonstration" | | | | | | |
| **Recycling** | | | | | | |
| "How often do you make a special | 1993 | 2.88 | 1.1 | 1464 | 1-4 | na |
| effort to sort glass or cans or plastic or | 2000 | 2.77 | 1.1 | 1144 | | |
| papers and so on for recycling?" | 2010 | 2.90 | 1.1 | 1394 | | |

As Table 1 indicates, the environmental indicators have changed over the 17 year period between 1993 and 2010. The Progrowth measure indicates a slight increasing in willingness to trade off environmental protection for economic growth. However, given the economic recession in the latter half of the decade, the change from 2000 is surprisingly modest. Willingness to pay more to protect the environment (through increased consumer prices, taxes, or reduced living standards) also declines. Perception of environmental threats (from global warming, pollution, cars, and chemicals) remains essentially unchanged. Environmental activism declined significantly over the study period, going from an average of 1.1 of the 4 activities (petition signing, organizational membership, environmental contributions, or protesting) to .43--less than half this number. To put this into perspective, 77.2 percent of respondents had done at least one

activity in 1993 compared to just 26.3 percent in 2010. Ironically, recycling remained relatively unchanged over the study period.

Measures of religiosity include religious preference (RELIG), religious attendance (ATTEND), and a GSS coded measure of respondent's denominational culture (FUND) with categories of fundamentalist, moderate, and liberal. For this analysis, this measure is referred to as the respondent's religious orientation. FUND is based on respondents' reported denomination affiliation, rather than a self-reported orientation (Smith, 1987; also footnote 3 for classification of denominations). This measure serves as a proxy for denominational culture and has already been used by a variety of studies examining the religion-environment relationship (e.g., Boyd 1999). As noted earlier, denominational differences have figured prominently in the religious environmentalism debate. Liberal and moderate denominations have addressed the environmental debate more vociferously. Fundamentalist or conservative denominations have been slow to address the problem, as noted earlier. Thus, denominational orientation should be one basis for understanding the effect of religiosity on environmental beliefs and behavior. Religious preference was coded as Protestant, Catholic, Jewish and None. Religious preference was recorded into two categories—those without a stated religious affiliation and those who report one. This variable was then combined with the FUND into one single measure of religious orientation with the categories of religiously unaffiliated, liberal, moderate, and fundamentalist.

Three additional measures of religiosity are used. First, religious attendance (ATTEND) is included and is measured with the question, "How often do you attend religious services?" which includes nine categories ranging from "never" to "more than once a week." Attendance is the most frequently used measure of religiosity (Hall et al 2008) and is indicative of the respondent's organizational religiosity. Second, frequency of prayer (PRAY) provides a measure of personal piety and is measured by, "how often do you pray?" with six categories ranging from "never" to "several times a day." PRAY was not asked in the same panel in 2000 with the environmental questions. Finally, strength of denominational affiliation (RELITEN) is included and is measured by, "would you call yourself a strong [preference named in RELIG or DENOM]?" with four categories ranging from "no religion" to "strong." The impact of each of these measures will be analyzed along with a combined measure of religiosity. For the latter, Religscale was created by recoding PRAY, ATTEND, and RELITEN into three categories (to give equal weight to each measure) and summed together with categories ranging from 1 to 9 (Cronbach's alpha .70 for 1993 and .67 for 2010).

**Results**

Table 2 reports the One-way ANOVA (a One-way ANOVA examines the hypothesis of significant difference between two or more groups or samples relative to the dependent variable) and post hoc comparisons for religious orientation with each of the measures of environmentalism for the three study years. The F tests are statistically significant for all three years for each of the environmental indices. For 1993, the patterns of means across categories of religious orientation for each year are similar—religiously unaffiliated are less Progrowth, more willing to pay for environmental protection, more likely to perceive environmental threats, more likely to report environmental activism, and more likely to recycle. Religious fundamentalists were the converse for each of these measures. Religious liberals and moderates fall between religiously unaffiliated and fundamentalists. The post hoc comparisons indicate that in every instance, religiously unaffiliated and fundamentalist were significantly different from each other.

**Table 2**

***One-way ANOVA and Post Hoc Comparisons for Religious Orientation and Environmentalism***

| | | | | 1993 Means | | |
|---|---|---|---|---|---|---|
| **Environmentalism** | **F** | **Unaffiliated N=146** | **Liberal N=284** | **Moderate N=575** | **Fundamentalist N=539** | **Post Hoc Comparisons U=Unaffiliated L=Liberal M=Moderate F=Fundamentalist** |
| Progrowth | 26.2[c] | 4.9 | 5.4 | 5.7 | 6.3 | UF, UM, UL, FM, FL[1] |
| Paymore | 11.3[c] | 10.0 | 9.5 | 9.1 | 8.6 | UF, UM, FM, FL[1] |
| EnvThreat | 2.9[a] | 15.0 | 14.5 | 14.7 | 14.3 | UF, FM[1] |
| EnvActivism | 12.1[c] | 1.3 | 1.2 | 1.2 | .92 | UF, FM, FL[2] |
| Recycling | 16.7[c] | 2.9 | 3.0 | 3.0 | 2.6 | UF, FM, FL[2] |
| | | | | **2000 Means** | | |
| **Environmentalism** | **F** | **Unaffiliated N=397** | **Liberal N=416** | **Moderate N=1016** | **Fundamentalist N=844** | |
| Progrowth | 14.5[c] | 5.0 | 5.3 | 5.8 | 6.1 | UM, UF, ML, LF LM[1] |
| Paymore | 4.8[c] | 9.3 | 8.8 | 8.5 | 8.2 | UF, UM, FL[1] |
| EnvThreat | 6.4[c] | 15.5 | 14.7 | 14.9 | 14.3 | UF, UM, NL, FM[1] |
| EnvActivism | 15.0[c] | .74 | .77 | .53 | .30 | UF, FM, FL, ML[2] |
| Recycling | 18.7[c] | 2.8 | 3.0 | 3.0 | 2.4 | UF, FM, FL[2] |
| | | | | **2010 Means** | | |
| **Environmentalism** | **F** | **Unaffiliated N=363** | **Liberal N=260** | **Moderate N=795** | **Fundamentalist N=521** | |
| Progrowth | 15.4[c] | 5.5 | 5.8 | 6.0 | 6.5 | UF, UM, FM, FL[2] |
| Paymore | 10.5[c] | 9.4 | 8.5 | 8.4 | 7.9 | UF, UM, UL, FM[1] |
| EnvThreat | 4.5[b] | 15.2 | 14.4 | 14.6 | 14.6 | UF, UM, UL[1] |
| EnvActivism | 8.0[c] | .56 | .49 | .42 | .26 | UF, FM, FL[2] |
| Recycling | 20.3[c] | 2.9 | 3.3 | 3.0 | 2.6 | UF, UL, FM, FL, ML[2] |

[a]P<=.05; [b]P<=.01; [c]P<=.001; [1]LSD P<=.05; [2]Dunnett's C P<=.05

The general pattern found in 1993 does not change significantly for 2000 and 2010, with two exceptions. Liberals are more environmentally active than religiously unaffiliated in 1993 and more likely to recycle for both 2000 and 2010. In each case, the F test indicates overall significant differences between categories of religious orientation. Furthermore, in each case, the religiously unaffiliated are significantly different in post hoc comparisons with religious fundamentalists. In all but one case (willingness to pay more in 2010), liberals are also significantly different from fundamentalists. Overall, the average magnitude of mean differences between groups, while significant, is relatively small.

As previously stated, the environmental indicators changed over time between 1993 and 2010 with a general downward trend. Environmental activism (petition signing, letter writing, contributions to environmental organizations, and joining an environmental organization) declined steeply, going from an average of 1.12 in 1993 to .43 in 2010. This decline occurred for all groups and was approximately equal in magnitude. Perceptions of environmental threat remained consistent across all three years. Willingness to pay more to protect the environment declined in the overall data from 9.10 in 1993 to 8.53 in 2010. The decline is equally evident among all four groups. Finally, recycling remained equally prevalent throughout the three years. Overall, these results indicate that religious orientation is significantly related to environmental beliefs and reported behaviors. Religiously unaffiliated had the highest mean environmental beliefs and behavior while fundamentalist had the lowest. Finally, the pattern of associations between religious orientation and environmentalism does not vary significantly over the course of the three time periods. These results also suggest that despite significant efforts at the denominational and organizational level, substantive change in a pro-environmental direction are not evident among those with religious identification.

If the perspective of religious environmentalism was becoming more prevalent among church goers, we would expect to find significant correlations between religiosity—measured here in terms of religious attendance, frequency of prayer, and self-identified importance of respondent's denomination, and environmentalism. We would also expect that the correlations would become larger in magnitude over time as the differences between the religiously involved and uninvolved become more pronounced. Table 3 breaks these correlations down by religious orientation excluding the religiously unaffiliated for each study year.

**Table Three**

***Bivariate Correlations of Religious Attendance, Prayer, and Denominational Importance with Environmental Indicators by Religious Orientation and Year***

| | | **Liberal** | | |
|---|---|---|---|---|
| **Environment Indicators** | **Religiosity** | **1993 (n=480)** | **2000 (n=320)** | **2010 (n=425)** |
| Progrowth | Attendance | .03 | .11[a] | .05 |
| | Prayer | .03 | --- | .13a |
| | Rel. Importance | .14[b] | .07 | .17[a] |
| | Religscale | .12 | --- | .11[a] |
| Paymore | Attendance | .07 | -.08 | -.04 |
| | Prayer | -.07 | --- | -.07 |
| | Rel. Importance | .03 | -.06 | -.12[a] |
| | Religscale | -.06 | --- | -.07 |
| Environmental | Attendance | -.01 | -.09 | -.09 |
| Threat | Prayer | .01 | --- | -.03 |
| | Rel. Importance | -.08 | -.14[a] | .11[a] |
| | Religscale | -.05 | --- | -.06 |
| Environmental | Attendance | -.01 | -.02 | -.05 |
| Activism | Prayer | -.06 | --- | -.04 |
| | Rel. Importance | -.04 | .03 | -.05 |
| | Religscale | -.06 | --- | -.05 |

| Environment Indicators | Religiosity | 1993 (n=520) | 2000 (n=435) | 2010 (n=540) |
|---|---|---|---|---|
| Recycling | Attendance | .09 | .01 | .08 |
| | Prayer | -.04 | --- | .02 |
| | Rel. Importance | .06 | .03 | .16[c] |
| | Religscale | .03 | --- | .07 |
| | | **Moderate** | | |
| Progrowth | Attendance | .06 | .00 | .05 |
| | Prayer | .09 | --- | .06 |
| | Rel. Importance | -.05 | .00 | .06 |
| | Religscale | .09 | --- | .06 |
| Paymore | Attendance | -.01 | .06 | .09[a] |
| | Prayer | .05 | --- | -.04 |
| | Rel. Importance | -.15[c] | .11[a] | -.02 |
| | Religscale | -.05 | --- | -.04 |
| Environmental | Attendance | .05 | -.00 | -.04 |
| Threat | Prayer | .10 | --- | .04 |
| | Rel. Importance | .08 | .04 | -.02 |
| | Religscale | .09 | --- | .04 |
| Environmental | Attendance | .03 | -.02 | -.02 |
| Activism | Prayer | .04 | --- | .01 |
| | Rel. Importance | .03 | -.03 | -.04 |
| | Religscale | .04 | --- | .01 |
| Recycling | Attendance | .12[b] | .05 | .10[a] |
| | Prayer | .00 | --- | .04 |
| | Rel. Importance | .10[a] | .06 | .01 |
| | Religscale | .10 | --- | .04 |
| | | **Fundamentalist** | | |
| Progrowth | Attendance | .07 | .11[a] | .01 |
| | Prayer | .12[a] | --- | .01 |
| | Rel. Importance | .09[a] | .03 | .07 |
| | Religscale | .08 | --- | .04 |
| Paymore | Attendance | .00 | -.08 | .10 |
| | Prayer | .03 | --- | .02 |
| | Rel. Importance | -.03 | -.10 | .07 |
| | Religscale | -.02 | --- | .08 |
| Environmental | Attendance | -.11[a] | -.09 | -.01 |
| Threat | Prayer | .02 | --- | .05 |
| | Rel. Importance | -.07 | -.04 | .01 |
| | Religscale | -.04 | --- | .03 |
| Environmental | Attendance | -.01 | -.02 | -.06 |
| Activism | Prayer | -.03 | --- | .04 |
| | Rel. Importance | -.04 | .05 | -.04 |
| | Religscale | -.03 | --- | -.03 |
| Recycling | Attendance | .05 | .01 | -.13[a] |
| | Prayer | .12[a] | --- | -.03 |
| | Rel. Importance | .02 | .09 | -.10 |
| | Religscale | .11 | --- | -.10 |

[a]P<=.05; [b]P<=.01; [c]P<=.001

Examining religious attendance first, the patterns of correlations would indicate relatively little relationship between attendance and environmentalism. Looking first at respondents with a liberal denominational affiliation, we can see that the only significant correlation is for Progrowth in 2000. This correlation is positive, indicating that increasing attendance is associated with a more pro-growth response. This correlation is also true for respondents with a fundamentalist denominational affiliation in 2000. The pattern of correlations across time for liberals indicates no substantive change otherwise. This pattern of no relationship is equally true for moderates with the exception of a positive association with recycling in both 1993 and 2010, and a positive association with willingness to pay more in 2010. For respondents with a fundamentalist denominational affiliation, perceptions of environmental threat are negatively associated with attendance in 1993, as is recycling for 2010. The magnitude of these correlations (from .09 to .13), while statistically significant, would indicate little substantive difference.

Second, frequency of prayer is, for the most part, unrelated in 1993 and 2010 (2000 environmental panel excluded PRAY) with environmentalism with a few exceptions. For fundamentalists, prayer is positively related to a pro-growth orientation in 1993 but unrelated in 2010. Prayer is also positively related to recycling in 1993 (.12, $p<=.05$), but disappears for 2010. For moderates, no significant correlations are reported between frequency of prayer and environmentalism. For liberals, prayer is negatively associated with Paymore in 2010 (.11, $p<=.05$) and otherwise completely unrelated to environmentalism across the two study years.

Third, strength of denominational affiliation is inconsistently correlated across the three study years. For liberals, denominational strength is significantly associated with Progrowth for 1993 and 2010 (.14 and .17 respectively, $p<=.05$), negatively associated with willingness to pay more in 2010 (-.12, $p<=.05$), negatively associated with Environmental Threat in 2000 (-.14, $p<=.05$), but positively so in 2010 (.16, $p<=.001$), and positively associated with recycling but only for 2010 (.16, $p<=.001$). For moderates, denominational importance is negatively associated with willingness to pay more in 1993 (-.15, $p<=.001$), but positively associated for 2000 (.11, $p<=.05$), and positively associated with recycling in 1993 (.10, $p<=.05$) but unrelated in the following years. For fundamentalist, Progrowth is positively associated with denominational importance in 1993 (.09, $p<=.05$) and is otherwise unrelated to environmentalism in all three years.

Given the inconsistency in findings across each of the individual measures of religiosity, a scale summarizing the three measures (ATTEND, PRAY, RELITEN) called Religscale was created. As noted earlier, each of the components parts are equally weighted. The Pearson correlations are reported in Table 3 for 1993 and 2010. For liberals, the only significant correlation is for Progrowth in 2010 (.11, $p<=.05$) suggesting that among liberals, those who are more religiously involved, are more likely to support economic growth over environmental protection. Otherwise, Religscale is unrelated to all other measures of environmentalism for both years. For moderates and fundamentalists, Religscale is uncorrelated with environmentalism for both 1993 and 2010.

Overall, the results can be summarized. First, religious affiliation and religious orientation are significantly associated with variations in environmental views. In general, the results indicate that, while the magnitude of mean differences is small, a significant pattern of results persists across the study period between religious groups. These findings are also consistent with existing research noted earlier. Religiously unaffiliated respondents are generally more environmentally oriented across all five measures for 1993, two of the measures for 2000, and three of the measures for 2010. In contrast, respondents with a fundamentalist denominational affiliation had a higher Progrowth mean, and lower environmental means for 1993 and 2000, and lower environmental means for all but Environmental Threat for 2010. Thus, these results

would indicate little overall change across the study period in the relationship between religious orientation and environmental concern.[4]

Second, religious attendance, frequency of prayer, and the strength of denominational identity are for the most part unrelated to environmentalism. The authors expected increased association between religious involvement and environmental concern given the outpouring of effort to communicate pro-environmental attitudes among the religiously affiliated. However, these efforts did not result in significant changes among the religiously involved. The overall lack of association between attendance and environmentalism among liberals is perhaps the most perplexing finding given that this is where we would have expected the strongest association. Prayer and strength of denominational identity are occasionally related to environmentalism but often inconsistently across time and across religious groups. Scaling these items together demonstrates a consistent lack of association between religiosity (as measured by attendance, prayer, and denominational strength) and environmentalism for 1993 and 2010.

The implication of these findings emerging here is that denominational identification and denominational culture remains a more significant and consistent explanation of the variation in environmental beliefs between individuals than religious commitment. When the impact of religiosity within denominational orientations is examined, the results indicate little to no difference between levels of religious involvement. Thus greater exposure to church culture (through attendance), greater commitment to personal piety (through prayer), and a greater commitment to one's denominational identity does not generally increase pro-environmental beliefs and behavior. Furthermore, the evidence indicates that the strength of these associations remains consistent across the study period.

## Conclusion

At the outset of the environmental movement, analysts examined the historical and contemporary impact of religious orientations, as well as membership, on environmental concern. Through the past three decades, researchers have provided empirical justification for the view that the Judeo-Christian tradition was implicated in significant ways in the worsening of the ecological crisis; in particular by promoting an anthropocentric and utilitarian view of nature and by not taking the crisis seriously. The latter state of affairs changed significantly in the 1990s as church organizations worldwide addressed the environmental problem and promulgated official statements clarifying the need to recognize the central spiritual nature of environmental problems and to marshal institutional resources to promote their amelioration. In the U.S., several religious organizations not only produced such statements, they worked collaboratively to get the environmental message down to the local level. Institutional efforts to popularize and mobilize the environmental message were undoubtedly felt and heard by many congregations.[5]

This research does not point to a fundamental change in the state of the relationship between religious identification, religiosity and environmentalism over the past two decades. Significant but small differences continue to exist between denominations/religious traditions already evident in the research. While this research would suggest that religiosity is unrelated to differences in environmental beliefs and behavior, alternative measures of religiosity or environmentalism may yet demonstrate this association both within and across denominational traditions. Our results would suggest that future examinations of religiosity and environmentalism are most likely to bear empirical fruit at the specific denominational and even congregational level rather than across such contexts. What we may find is perhaps more

generally true with any effort to infuse a certain perspective on contemporary issues—information is insufficient for widespread belief or behavior change. Many churches have undertaken long term efforts to address environmental concerns. These case studies may shed more light on understanding the religion-environment relationship.

**Footnotes**

1. Religious statements can be found at:

National Religious Partnership for the Environment
http://www.nrpe.org/index.php?option=com_k2&view=item&layout=item&id=279&Itemid=922
Statements included here are from the United States Conference of Catholic Bishops, the Evangelical Environmental Network, the National Council of Churches of Christ, and the Coalition on the Environment and Jewish Life.

Resolutions of the Southern Baptist Convention
http://www.sbc.net/resolutions/amResolution.asp?ID=456

Additional resolutions and statements: http://greenfaith.org/religious-teachings/christian-statements-on-the-environment/baptist-statements-on-the-environment.

Seventh Day Adventist Church, Statement on Stewardship of the Environment
http://adventist.org/beliefs/statements/main-stat10.html.

Christian Reformed Church history of environmental statements
http://www.crcna.org/pages/osj_creationstatements.cfm

See also http://earthministry.org/resources/ecumenical-interfaith/denominational-statements

While lacking official doctrinal statements regarding the environmental, see Brown (2011) and Galli (2011) for an analysis of Mormon ecotheology as well as
http://rsc.byu.edu/archived/stewardship-and-creation-lds-perspectives-environment/15-latter-day-saint-perspective-envir

2. The National Religious Partnership on the Environment, which evolved between 1990 and 1993, was one of the largest partnerships and collaborations of denominations to emerge from this invitation. NRPE is collaboration between four groups: The United States Conference of Catholic Bishops, the National Council of Churches, the Coalition of Jewish Communities and Environment, and the Evangelical Environmental Network. The partnership's goal is to broaden and deepen scholarship on the environment and its connection to faith and to spread this message to local religious communities (NRPE, 2011).

3. **Fundamentalist**: American Baptist, Southern Baptist, Other Baptist, Lutheran Missouri Synod, WI Evangelical Lutheran Synod, Other Presbyterian, LDS Church, Other; **Moderate**: Roman Catholic, American Baptist Church USA, African Methodist Episcopal, American Lutheran, Lutheran Church of American, Other Lutheran, Evangelical Lutheran Church of America, Presbyterian Church USA, Other; **Liberal**: Jewish, United Methodist, United Presbyterian Church USA, Presbyterian Merged, Other Presbyterian, Episcopal. See Smith (1987) for a complete list of denominational designations.

4. In a separate regression analysis (not reported) demonstrates that religious orientation accounts for between 1 and 6 percent of the variance in the environmental indicators net of such socio-demographic factors as political ideology and socioeconomic index (SEI). This

pattern of association between religious orientation and environmentalism remains consistent across the study period. While we would expect that political ideology and SEI would explain away much of the association between religious orientation and environmentalism, the regression analysis points to an enduring and consistent, albeit small, religious effect.

5. As for example, the Princeton University's Survey Research Center Religion and Politics Survey reported in 2000 that approximately 41 percent of respondents had heard a sermon, lecture, or group discussion dealing with the environment, a number markedly similar across levels of attendance. (http://www.thearga.com/Archive/Files/Analysis/RELPOL2000/RELPOL2000_Var65_1.asp).

## References


Boyd, Heather Hardwig. (1999). Christianity and the environment in the American public. *Journal for the Scientific Study of Religion*, 38, 36-44.

Brown, J. (2011). Whither Mormon environmental theology. *Dialogue: A Journal of Mormon Thought*, 44(2), 66-87.

Conroy, D. (1990). The church awakens to the global environmental crisis. *America*, 162(5),149-152.

Djupe, P. & Hunt, P. (2009). Beyond the Lynn White thesis: Congregational effects on environmental concern. *Journal for the Scientific Study of Religion, 48*, 670-686.

Eckberg, D L. & Blocker, T.J. (1989). Varieties of religious involvement and environmental concerns: testing the Lynn White thesis. *Journal for the Scientific Study of Religion*, 28, 509-517.

Felman, D., & Moseley, L. (2002). Faith-based initiatives and environmental sustainability: reform efforts in Appalachia. Paper presented at the Annual Meeting of the American Political Science Association, Boston, MA.

Galli, C. D. (2011). Enoch's vision and Gaia: An LDS Perspective on Environmental Stewardship. *Dialogue: A Journal of Mormon Thought*, 44(2), 36-57.

Greeley, A. (1993). Religion and attitudes toward the environment, *Journal for the Scientific Study of Religion,* 32, 9-28.

Guth, J., Green, J., Kellstedt, & Smidt, C. (1995). Faith and the environment: religious beliefs and attitudes on environmental policy. *American Journal of Political Science*, 39, 364-82.

Guth, J., Kellstedet, L., Smidt, C. & Green, J. (1993). Theological perspectives and environmentalism among religious activists. *Journal for the Scientific Study of Religion*, 32,19-28.

Hall, Daniel E., Keith G. Meador, and Harold G. Koenig. (2008). Measuring religiousness in health research: Review and critique. *Journal of Religion and Health,* 47, 134-163.

Haluza-Delay, R. (2000). Green fire and religious spirit. *The Journal of Experiential Education*, 23, 143-150.

Hand, C., & Van Liere, K. (1984). Religion, mastery-over-nature, and environmental concern. *Social Forces*, 63, 555-70.

Hand, C.,& and G. Macheski. 2003. Environment economy tradeoffs and forest environmentalism, *Electronic Green Journal,* 1(18). Retrieved September 19, 2012 from http://escholarship.org/uc/search?entity=uclalib_egj;volume=1;issue=18

Hayes, B. & Marangudakis, M. (2001). Religion and attitudes towards nature in Britain. *British Journal of Sociology*, 52,139-55.

Hayes, B., & Marangudakis, M. (2000). Religion and environmental issues within Anglo-American democracies. *Review of Religious Research*, 42,159-74.

Holland, L. & Carter, S. (2005). Words v. deeds: a comparison of religious belief and environmental action. *Sociological Spectrum*, 25, 739-753.

Hitzhusen, G. (2007). Judeo-Christian theology and the environment: moving beyond skepticism to new sources for environmental education in the United States. *Environmental Education Research*, 13, 55-74.

Interfaith Power and Light (2012). A Religious response to global warming. Retrieved November 2, 2012 from http://www.interfaithpowerandlight.org

Johnson, William T. (2000). The Bible on Environmental Conservation: A 21st Century Prescription, *Electronic Green Journal,* 1(12). Retrieved September 28, 2012 from http://escholarship.org/uc/uclalib_egj?volume=1;issue=12

Kanagy, C. & Willits, F. (1993). A greening of religion? Some evidence from a Pennsylvania sample. *Social Science Quarterly*, 74, 674-683.

Kearns, L. (1997). Noah's ark goes to Washington: A profile of evangelical environmentalism. *Social Compass*, 44, 349-366.

National Religious Partnership for the Environment. (2012). Retrieved November 2, 2012 from http://www.nrpe.org

Newport, F. (2009). Americans: Economy takes precedence over environment. Retrieved November 2, 2012 from http://www.gallup.com/poll/116962/Americans-economy-takes-precedence-environment.aspx

Shellenberger, M. & Nordhaus, T. (2004). The death of environmentalism: Global warming politics in a post-environmental world. Retrieved November 2, 2012 from http://thebreakthrough.org/archive/the_death_of_environmentalism

Sherkat, D. & Ellison, C. (2007). Structuring the religion-environment connection: identifying religious influences on environmental concern and activism. *Journal for the Scientific Study of Religion*, 46, 71-85.

Smith, Tom W. (1987). Classifying Protestant denominations. *GSS Methodological Report* No. 43. Retrieved November 2, 2012 from http://www3.norc.org/GSS+Website/Publications/GSS+Reports/Methodological+Reports/Methodological+Reports.htm

Smith, A. & Pulver, S. (2009). Ethics-based environmentalism in practice: Religious-environmental organizations in the United States. *Worldviews*, 13, 145-179.

White, L. (1967). The historical roots of our ecologic crisis, *Science,* 155(3767),1203-07.

---

Carl M. Hand <chand@valdosta.edu>, Valdosta State University, Valdosta, GA 31698, USA.

Jessica Crowe <jcrowe@gmc.cc.ga.us>, Georgia Military College, 4201 N. Forrest Street Valdosta, GA 31606, USA.