A Study of Faith-Based Environmental Program Leaders and Congregants at Churches and Synagogues in the Mid-South and Mid-Atlantic Regions

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Abstract

Faith-based environmentalism involves caring for the earth through a reflection of one's morals, values, and faith. In this study, religious leaders that are actively involved in faith-based environmental groups were interviewed and congregational members surveyed to explore belief systems and attitudes with the goal of understanding how to increase program participation and make faith-based environmental groups more effective. Twenty environmental religious action leaders were interviewed. Survey questions were also administered to 10 church/synagogue congregations within the study region.

Interview results showed that action leaders were interested in secular and religious partnerships, although they felt that some partnerships may be more appropriate than others. Leaders felt that clergy support was essential to program success. The extent to which faith contributes to one's identity could be a factor for participation for some congregants. Leaders thought that a combination of hands-on, scripture-based, and sermon-based approaches, as well as integration throughout church or synagogue practices and activities would increase efficacy. Political perceptions were cited as a reason for non-participation.

Congregational survey results showed that environmental commitment positively predicted program participation, whereas political conservatism was an inverse predictor. Faith identity, secular and faith partnership attitudes, religiosity, church attendance, and attitudes about support from church leadership did not impact whether or not congregational members participated in faith-based environmental programs. Program preferences and environmental views were analyzed to determine any differences. Preferred learning methods included hands-on activities and expert guest speakers. Congregants most viewed environmental problems as being a moral, social justice, and economic issue.

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Chapter 1 - Introduction

Faith-based environmentalism can be defined as caring for Creation based on one's religious and scriptural faith, morals, and values. In order to narrow the scope of what is "faith-based", this research focuses primarily on Christianity, with some limited discussion on Judaism. In particular, this research assesses existing environmental programs in churches and synagogues via interviews with program leaders as well as surveys of congregants in order to discover what makes these programs effective, what drives participation, and ultimately, what may increase environmental commitment.

The topic of religion and the environment started to receive increased attention following Lynn White's 1967 thesis, "The Historical Roots of our Ecological Crisis". In this thesis, White arguedd that "Christianity bears a huge burden of guilt" for the ecological problems facing the world due to the way Christianity defines the relationship between man and nature (White, 1967). White's controversial thesis was subsequently tested by researchers who sought to better understand the relationship between religion and the environment. Results were mixed, but many studies found at least some support for White's hypothesis. Some studies found that a negative correlation existed between environmental concern and biblical literalism, belief in God, Christian affiliation, Evangelicalism, conservatism, and fundamentalism (Eckberg and Blocker, 1989; Hand and Van Liere, 1984; Guth et al., 1993; Guth et al., 1995; Boyd 1999; Tarakeshwar et al., 2001). However, other research studies found no correlation, or in some cases, a positive correlation for some religious variables, such as frequency of prayer and church attendance (Kanagy and Nelsen, 1995; Eckberg and Blocker 1996; Nooney et al 2003; Kanagy and Willits 1993).

Other research has occurred on factors that may influence environmental concern within churches. Political orientation can impact environmental attitudes and concern. Research shows that more politically conservative denominations are less concerned about the environment than more liberal denominations (Guth et al., 1993; Guth et al., 1995; Hand and Van Liere, 1984; Sherkat and Ellison, 2007; Tarakeshwar et al., 2001). Environmental concern also differs with denomination. Catholics have been found to be the denomination with the highest level of concern, and Evangelicals have been shown to have the lowest (Greeley, 1993; Guth et al 1993). Leadership can also have an impact on congregational environmental attitudes. If the clergy and leadership of the church frequently speak about environmental issues, then previous research shows that their congregation is more likely to be environmentally active (Djupe and Hunt, 2009; Holland and Carter, 2005). Identity with one's church and social influences may sway whether or not congregational members choose to participate in environmental programs at their church (Djupe and Hunt, 2009).

The purpose of this research is to study factors that may increase environmental program efficacy and participation in churches and synagogues, with the ultimate goal of characterizing steps to improve congregant environmental commitment. Another goal is to codify strategies for forming successful environmental partnerships between secular groups and the faith community. We hope to answer the following questions: 1) What variables help explain congregant program participation? and 2) What opportunities for partnerships could emerge from the faith-based environmental movement and how should they be structured? These questions are addressed using two research phases. In the first phase, action leaders in the faith-based environmental movement were interviewed about

their views on effective ways to increase program participation and environmental commitment within their churches and synagogues. In the second phase, church congregations with active environmental programs were surveyed. Congregants were studied in order to explain participation. Survey questions addressed attitudes toward religious and secular partnerships, environmental commitment, faith identity, leadership issues, religiosity, political perceptions, church attendance, program participation, and preferred methods for learning about caring for God's Creation.

The thesis is organized into three main components: a literature review, a section discussing findings from the qualitative interviews, and a quantitative section that focuses on results from the congregational surveys. The literature review (Chapter 2) covers research on the relationship between religion and environmentalism, the role of political influence, differences between denominations, social influences and identity, leadership, environmentalism as a moral issue, partnerships, and some current faith-based efforts that address environmental problems. Chapter 3 discusses qualitative results from interviews with action leaders concerning faith-based environmentalism, identity, politics, leadership, improving efficacy of church environmental programs, and the potential for environmental partnerships. The final component of this research (Chapter 4) describes survey research of congregational members that assesses churchgoers' participation in faith-based programs, and their environmental commitment, leadership, identity, religiosity, political perceptions, environmental views, preferred learning methods, and partnerships.

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Chapter 2 - Literature Review

"The Lord God took and placed the human in the Garden of Eden, to till and to tend it." (Genesis 2:15). This excerpt from the Bible could mean different things to different people. Some could interpret it as substantiating man's dominion over nature, with the view that God has placed humans in the Garden of Eden to use the garden solely to benefit mankind. Others may read this and see a stewardship angle, interpreting that God has placed humans in the Garden of Eden in order to carefully care for His Creation. This is just one example of a scriptural reference concerning the care of God's Creation, which could be interpreted differently by people, even if they are within the same denomination or go to the same church.

Research has occurred on how people's religious views impact their attitudes or actions regarding the environment. Some have even argued that subscribing to certain religions, such as Christianity, typically begets or indicates a lower concern for the environment. This literature review will discuss previous research on the correlation between Christianity and environmentalism, including any impacts that political considerations, denominational differences, or religious views such as fundamentalism may have. Within the context of the church, moral issues, leadership, identity, and social aspects will also be discussed, as these factors may be a crucial part of understanding participation in church environmental programs. The potential for churches to form secular partnerships to address environmental issues will also be explored. Finally, some examples of what various religious groups are currently doing to address environmental problems and raise awareness will be provided to offer a more complete picture of the faith-based environmental movement.

Lynn White: The Historical Roots of our Ecological Crisis

Although dialogue about religion and the environment has been ongoing for many decades, Lynn White's 1967 essay, "The Historical Roots of our Ecological Crisis" sparked new controversy and interest regarding the topic. In this essay, White argued that ecological problems exist because of the way that Christianity defines nature and man's relationship with the natural world. He stated that as population and technological advances have increased, man has had an increasingly exploitative impact on the environment. However, White said that it is because of fundamental Christian beliefs that many humans view the sole purpose of nature as servant to their needs. White went so far as to say that according to Christianity, it is God's will to exploit nature and that Christians do so with "a mood of indifference" and disregard to the natural world. At the controversial climax of White's thesis, White claimed that "Christianity bears a huge burden of guilt" for the ecological crisis that the world faces. He believed that science and technological solutions are not the answer to this crisis; rather, a rejection of the current Christian dominion beliefs about nature is needed: "since the roots of our trouble are so largely religious, the remedy must also be essentially religious" (White, 1967).

Not surprisingly, White's thesis stirred the Christian community. Although some viewed White's essay as an attack on Christianity, others pointed out that White himself was a Christian, and that he was advocating for solutions and attitude changes within Christianity, not outside of it (Derr, 1975). White's thesis prompted many researchers to empirically test if, in fact, Christianity is negatively correlated with environmentalism. Results from these studies vary in support of or disagreement with White.

Empirical support of White's hypothesis

Many research studies that tested White's hypothesis support, at least to some degree, his theory. For example, Greeley (1993) found a negative correlation with environmental concern and belief in God as well as Christian affiliation. Similarly, Hand and Van Liere (1984) found that non-Christians have a higher level of environmental concern and are less committed to beliefs of dominance over nature than are Christians. Another study found that people who attend church regularly are less pro-environmental than those who attend less frequently (Guth et al, 1995).

One finding that showed up throughout several studies is a negative correlation between biblical literalism and environmental concern. Biblical literalism is the belief that the Bible is the true word of God and should be taken literally, word for word (Greeley, 1993). Several studies have found that having a belief in biblical literalism negatively predicts concern for the environment (Eckberg and Blocker, 1989; Greeley, 1993). A multi-national study showed that people who take a literal view on the Bible are consistently more likely to have environmental concerns that are anthropocentrically based, instead of ecologically based; in other words, they are more concerned about how damage to the environment will affect humans, rather than the ecosystem in general (Schultz et al., 2000). Those who hold biblical literalism beliefs are also less likely to be politically involved in environmental issues (Sherkat and Ellison, 2007).

Another religious variable consistently shown to have a negative correlation with environmentalism is fundamentalism. Fundamentalism includes biblical literalism, and conservative eschatology beliefs, such as the belief that the end of the world is near ("End Times thinking") (Guth et al., 1993). Consequently, fundamentalism includes a

pessimistic view of thiswordly reform; since the end of the world is near, there is no reason to worry about the present condition of things here on earth. Fundamentalism has been shown to predict a lack of support for the environment, either in attitude, behavior, or both (Guth et al., 1993; Guth et al., 1995; Eckberg and Blocker, 1996; Boyd, 1999). Other religious variables that are often associated with fundamentalism, including revivalism, individualism, conservative eschatology, and evangelical identification, have also been found to be negatively correlated with environmentalism (Guth et al., 1993; Guth et al., 1995).

Research opposing White's hypothesis

Although there is a significant amount of research supporting White's hypothesis, consensus does not exist; some studies have found no correlation, or in some cases, even a positive correlation between certain religious variables and environmentalism. Some researchers have been quick to point out methodological limitations of previous research, including issues that may arise from asking loaded questions (Kanagy and Nelsen, 1995; Eckberg and Blocker, 1996). Other philosophers have taken issue with White's thesis itself, arguing that too many other factors, such as population growth, urbanism, and trade have played a role in western science and technology to be able to cast the sole blame of ecological problems on religion (Derr, 1975).

Some studies have shown that having conservative religious beliefs do not make one more likely to espouse a dominion interpretation of the Bible (Woodrum and Hoban, 1994) and do not predict differences between non-religious respondents when gauging the seriousness of environmental issues (Sherkat and Ellison, 2007). Kanagy and Nelsen

(1995) found that there was no difference between highly religious persons and those who are less religious when it came to supporting federal spending on environmental protection, or in personal identification of oneself as an environmentalist. Greeley (1993) found a negative correlation between Christian affiliation and concern for the environment, but also found that those who had no doubts about the existence of God, but who were more liberal in their political orientation and had a more gracious image of God showed the same amount of environmental concern as those respondents who were less certain of the existence of God. This study demonstrates that there are many factors that may affect environmental attitudes.

Contrary to White's thesis, some studies have shown that certain religious groups are indeed pro-environmental in both their attitudes and behaviors. In a survey of 2,400 clergy and over 1,500 congregational members from the Episcopal Church and the Evangelical Lutheran Church in America, Djupe and Hunt (2009) found that the congregational members had pro-environmental views, and the clergy were "overwhelmingly" in favor of environmental protection. One study that used the New Environmental Paradigm (a scale that measures pro-environmental orientation) found that respondents who were part of a liberal religious denomination had a higher NEP score, and therefore stronger pro-environmental attitudes, than those who were not affiliated with any religion (Nooney et al., 2003). This study also showed no differences in NEP scores between those not affiliated with any religion and those with a moderate or fundamentalist religious affiliation.

Several studies have found that certain religious variables are positively correlated with environmental actions and behaviors. Using the same set of data from the

nationwide 1993 General Social Survey, both Boyd (1999) and Eckberg and Blocker (1996) concluded that frequency of prayer was positively correlated with reports of proenvironmental actions and behaviors. The same correlation was found to be true with frequency of church attendance; religious participation and regular attendance at services had a positive relationship with personal pro-environmental actions (Kanagy and Willits; 1993; Eckberg and Blocker, 1996; Sherkat and Ellison, 2007).

White's Hypothesis: Is there a final verdict?

Both support and opposition for White's hypothesis are readily available in the literature. Some variables, such as belief in biblical literalism and fundamentalism may be correlated with lower levels of environmental concern, while other religious variables, like frequency of prayer and church attendance may be positively correlated with environmental concern. Results may be interpreted differently by different researchers, and methodological limitations and other possible unknown variables complicate conclusions about the exact relationship between Christianity and environmentalism.

Denominational Differences

Christianity encompasses different denominations, each with its own set of beliefs, biblical interpretations, and subcultures. As a result, denominations may have varying views of a dominion vs. stewardship interpretation of the Bible, and some denominations may typically be "greener" than others. In general, results suggest that Catholics and more liberal denominations have a higher level of environmental concern than other denominations. In two separate studies, Guth and colleagues found that

Catholics and mainline Protestants place the most priority on environmental problems, whereas Evangelical Protestants show the least concern (Guth et al., 1993; Guth et al., 1995). When compared to Protestants, Catholics have a higher level of concern about the environment, possibly due to their denomination having a more gracious image of God (Greeley, 1993). The correlation between church attendance and environmental concern is different across denominations. One study found that church attendance was strongly and positively correlated with environmental concern for Episcopalians and Lutherans, whereas Baptists, Mormons, and Sect groups were strongly and negatively correlated (Hand and Van Liere, 1984). However, another study found no differences between most denominational groups when it comes to environmental attitudes and behaviors. The exception in that study was African-American Protestants, who were found to have a significantly lower level of environmental concern, which researchers explained may be a result of effort and resources being directed toward civil rights issues, housing, employment, and other priorities rather than the environment (Wolkomir et al., 1997).

Political influences

While political beliefs may be seen by some as separate from environmental issues, research results show they likely play an important role in whether or not one is pro-environment. It has even been argued by some that it plays the main role in shaping people's environmental attitudes and beliefs, although actual pro-environmental behavior may not be affected (Hitzhusen, 2007). Eckberg and Blocker (1996) contend that environmentalism has become politicized and is therefore sometimes seen as a polarizing issue, or as an issue that is associated with a certain political party. It has consistently been shown that democrats and liberals have a higher level of environmental concern

when compared to their republican and conservative counterparts (Weigel, 1977; Guth et al., 1993; Guth et al., 1995; Boyd, 1999).

Researchers found this to be true as well within Christianity; the more liberal "Christian left" typically have much stronger pro-environmental beliefs and behaviors than the more conservative Christian denominations, which do not address environmental issues as often or consider them as urgent (Guth et al., 1993; Tarakeshwar et al., 2001). Along similar lines, liberal denominations are more likely to embrace a stewardship orientation, whereas the conservative denominations take a more dominion-oriented approach (Hand and Van Liere, 1984). Research studies found that theological conservatives are less willing to make personal sacrifices for nature (Sherkat and Ellison, 2007), have lower pro-environmental beliefs, do not want to spend their personal money on environmental protection, and are less involved in environmental activities (Tarakeshwar et al., 2001). Additional research found that simply being a member and participating in a conservative denomination may cause people to be politically conservative, which in turn leads to a lower level of environmental activity and concern (Sherkat and Ellison, 2007). When it comes to environmental protection issues, researchers contend that the democratic elite cause the opinions of the mass democrats, and the same is true with republicans (Lindaman and Haider-Markel, 2002).

Moral issue

Environmental issues have been viewed by many in the religious community as fundamentally moral. Religious institutions are viewed by some as one of the leading institutions that deal with issues of morality, so it is not surprising that many churchgoers feel the religious community has a responsibility and a moral obligation to address caring

for God's creation (Rockefeller and Elder, 1992; Carroll et al., 1997; Dunlap, 2004). Some feel that scientific analysis alone cannot save the earth; a new moral perspective and a major social transformation needs to take place in order to effectively address environmental issues, and this transformation cannot be done without religion (Rockefeller, 1992; Brockelman, 1997). Others feel that a failure to see the moral responsibility associated with environmental issues along with a failure of the religious community to recognize the connections between spirit and nature is a failure of faith itself (Engel, 1992).

Approaching environmental problems through a moral lens has worked well as a uniting strategy for many within the religious community who are fighting for active involvement within churches to address these tough problems. For example, some in the Evangelical community have reached out to other Evangelicals on the topic of climate change by pointing out the inequity of the disproportionate impact on regions of the world, particularly those that are already poverty-stricken (Goodstein, 2005). Taking a moral approach could help some religious groups operate from a common belief system or worldview. In another example from the Evangelical community, one leader in the Evangelical Environmental Network attended a pro-life rally and handed out fliers saying "Stop Mercury Poisoning of the Unborn" in order to raise awareness about dangerous levels of mercury in newborns and to raise support for environmental legislation concerning regulation (Little, 2005). By taking an ethical approach to environmental issues, some feel that leaders can stay focused on core issues and more easily find common ground and shared principles in their quest to achieve goals (Posas, 2007). Posas (2007) argued that religion is an essential part of assigning a sense of moral obligation

and responsibility that individuals should have when it comes to finding solutions to deal with environmental issues.

Leadership

Church leadership can play a significant role in shaping environmental attitudes and prompting action among congregational members. If clergy and other church leaders speak out frequently about environmental issues, and are actively involved in making sure that they practice what they preach, researchers have found that their congregations will be more pro-environment and environmentally active (Holland and Carter, 2005; Djupe and Hunt, 2009). Additionally, if the congregation as a whole views the environment as important, individuals within the congregation will also view it as important (Djupe and Hunt, 2009). Holland and Carter (2005) found that church ministers who are members of environmental groups have a more environmentally active congregation than the congregations of ministers who are not members of an environmental group. Presbyterian ministers who had knowledge of statements about the environment made by the Presbyterian Church of the United States of America, and who used these materials and other materials in their teachings, had more environmentally active congregations (Holland and Carter, 2005). However, others have noted that clergy have a stronger positive relationship between religious and environmental attitudes and behaviors when compared to their own congregational members, suggesting a lack of a "trickle down effect" (Tarakeshwar et al., 2001). Still, if congregational members perceive that their clergy is addressing environmental issues, and if deliberate and

sustained efforts are made, then significant long term change is possible (Djupe and Hunt, 2009).

Identity

Being a member of a church may be an important part of an individual's identity, in terms of how they view themselves as well as how they think that others view them. Tyler and Blader's (2003) Group Engagement Model discusses identity and explains discretionary behavior. The model suggests that procedural justice, such as being treated fairly in both an informal and formal setting, resource judgments, pride, respect, and identification all influence whether individuals engage in voluntary behavior. Several studies have either looked at the model in its entirety or certain aspects of it (Blader and Tyler, 2003; Fuller et al., 2006; Sleebos et al., 2006; Blader and Tyler, 2009). For the purpose of this literature review, only the model's identity construct will be discussed in detail.

Tyler and Blader (2003) argue that people cooperate with groups and engage in voluntary behavior because they want to "create and maintain a favorable identity". They contend that being a member of a group is important to people because it contributes to their social identity, helps them to define who they are as a person, and contributes to their status and feelings of well-being and to some degree, their self-worth. Pride and respect are also important and contribute to identification. Pride is how one views the status of the group that they belong to, and respect is how people view their own social reputation, or status within the group. People with a high level of pride and respect in their group will be more motivated to merge their identity with the group and therefore more willing to cooperate with the group (Tyler and Blader, 2003). Having group

members that strongly identify with their group is very beneficial to the group itself. People with strong group identification will be more willing to cooperate and expend personal effort and time trying to make the group succeed, without any need for external incentives or rewards (Tyler and Blader, 2003). Therefore, it is ideal for groups to have members who are highly internally motivated and identify strongly with the group, because these will be the ones who are most likely to be active within the group. Based on these theoretical implications it could be that some people may participate in church activities, regardless of the activity itself, because the church is part of their identity.

Social Influence

Social influences could have a huge impact on how congregants behave and think. Congregational views can shape the views of individual members. For example, Djupe and Hunt (2009) focused on a variety of social factors and concluded that social context was important when it comes to religious beliefs and practices. According to these researchers, information in churches is widely spread through congregational members, and members in congregations take cues from other church members when forming attitudes and behaviors so that their beliefs align with their peers. In their study, Djupe and Hunt (2009) found that members who had regular interaction with other members had similar beliefs to the overall beliefs within the congregation; those who were in the minority with their beliefs found their own social spaces that were consistent with these beliefs. When it came to environmental attitudes, specifically, an interesting finding was reported; personal involvement with environmentally-themed Sunday School and other adult education classes did not have an effect on an individual's environmental attitudes,

but when the church simply offered these types of classes, pro-environmental attitudes in the church increased (Djupe and Hunt, 2009). The researchers speculate that this could be due to increased awareness and conversation throughout the congregation, which helps spread the general church perspective on environmental issues to the individual members of the congregation.

Partnerships

The opportunities to forge environmental partnerships between secular groups and religious communities are considered by many to hold promise. Partnering with religious institutions could help the environmental movement galvanize a critical and far-reaching audience (Tarakeshwar et al., 2001; Posas, 2007). Religion could help in addressing environmental issues from a moral and ethical perspective, while helping to bridge the gap by stressing commonalities (Posas, 2007). In bringing their members to act, religious institutions have the potential to be highly influential, especially in the political realm, where they may have unique clout that secular organizations do not possess. For example, a conservative legislator who may disregard messages from environmental groups may suddenly pay attention if the same message comes from constituents that are members of the faith community (Goodstein, 2005; Posas, 2007).

Environmentalists are realizing the benefits of partnerships with religious communities, and some have started to reach out with the goal of gaining new allies in their quest to solve the world's environmental problems. In 1990, a group of 34 scientists wrote an open letter to the religious community urging such partnerships, saying that the environmental problems facing humanity are so severe that solutions must include not

only a scientific dimension, but a religious one as well (Wolkomir et al., 1997). Carl Pope, the current chairman and former executive director of the Sierra Club, has also reached out to the religious community and called for environmentalists to change their attitudes and realize that there are those in the faith community that have the same goals and commitment to the environment, and suggested that environmentalists engage with this community and churches to unite forces and work together on the shared mission of environmental stewardship (Pope, 1997; Pope, 1998). There are, however, certain challenges and obstacles that may arise when secular environmental groups try to partner with religious institutions. For example, some in the Evangelical community have expressed concern due to ideological clashes involving issues such as support for government regulation, population control, and other agendas that they fear environmentalists may try to push (Goodstein, 2005). Some religious groups may want to establish their own identity, voice, and strategies first before partnering with secular organizations (Little, 2005).

Current religious activities and programs

Significant environmental efforts are underway within the religious community. Numerous churches have Creation Care or environmental stewardship programs, and there are a multitude of standalone faith-based environmental groups and religious coalitions that address environmental issues. In this section, a few of the many faith-based environmental actions, activities and groups will be highlighted with the intent of recognizing some of the efforts underfoot, as well as to showcase resources and networking sources.

As discussed previously, a consistent finding in multiple research studies is that fundamentalism and Evangelicalism are negatively correlated with concern for the environment. However, some members of the Evangelical community have been active in the faith-based environmental movement. In 2002, the Evangelical Environmental Network started a program called "WWJD – What Would Jesus Drive?" to help raise awareness among Evangelicals about the connections between transportation and health impacts, global warming, and dependency on oil (as discussed in Goodstein, 2005; Posas, 2007; and Slaby, 2008). Evangelical leaders wrote a paper in 2004 that focused on Creation Care, entitled "For the Health of the Nation: An Evangelical Call to Civic Responsibility" that urged Evangelicals to live sustainably, and called on the government to address pollution and resources issues (Little, 2005). In 2006, 86 leaders in the Evangelical community signed on to an Evangelical Climate Initiative statement, which discussed solutions to anthropogenic climate change (Slaby, 2008).

Other sects of the Christian community have taken a stand in support of stewardship of God's creation as well. Under the leadership of "the green Pope" Pope Benedict XVI, Catholics are repeatedly being encouraged to take responsibility for caring for God's creation. Pope Benedict XVI frequently speaks about the moral and social obligations to protect creation, and even made this the theme of his 2010 World Day of Peace message, which was titled "If You Want to Cultivate Peace, Protect Creation" (Pope Benedict XVI, 2010). In addition, Pope Benedict XVI has installed 2000 solar panels on the auditorium building roof of the Vatican, and even restored forestland to offset emissions, making Vatican City carbon neutral (Slaby, 2008).

A variety of faith-based farms, eco-communities, and eco-spirituality centers exist around the country that focus on both spirituality and sustainability. Many of these places are models of sustainability that emphasize religious foundations while implementing such practices as strawbale solar houses that minimize energy usage while providing cheap homes for the poor, community supported agriculture, organic farming, renewable energy usage including wind energy, composting, energy efficiency measures, and more (Carroll, 2004). In the Appalachian region, researchers Feldman and Moseley (2003) highlighted 20 faith-based environmental groups and discussed in detail how these groups translate their beliefs into action and why they may operate from a paradigm that is unique when compared with the rest of the faith community due to the circumstances of their region.

In addition to what is described above, there are many resources and networks across the faith community that could be helpful. Some of these networks, websites, and resources include:

- Interfaith Power and Light (http://interfaithpowerandlight.org/): This national program includes 28 states and more than 4,000 congregations. In response to climate change, Interfaith Power and Light helps educate congregations, conducts energy audits at churches, and encourages the purchase of green power.
- Evangelical Environmental Network (http://creationcare.org/): This is a network that uses scripture to educate and mobilize the Christian community to address caring for Creation.
- National Council of Churches Eco-Justice Program (http://nccecojustice.org/): This is a networking site for Protestant and Orthodox denominations that provide program ideas and resources to help congregations implement stewardship programs.
- National Religious Partnership for the Environment (http://www.nrpe.org/): This website profiles specific environmental programs currently being implemented (sorted by denomination),

- discusses environmental issues from a religious perspective, and provides partnership information and resources.
- Web of Creation (http://www.webofcreation.org/): This website provides ecological and environmental ministry resources to the faith community. It has numerous resources, including a scripture section on Biblical verses that focus on Creation Care, and an 'Earth Bible' section that explores the Bible from an eco-justice perspective.
- Discovery Series: Celebrating the Wonder of a Tree (http://www.rbc.org/bible-study/discovery-series/bookletDetail.aspx?id=47946): This resource comes in the form of a booklet (or pdf) that focuses on trees in the Bible.
- Earth Charter Guide to Religion and Climate Change: (http://www.scribd.com/doc/27322860/The-Earth-Charter-Guide-to-Religion-and-Climate-Change): This guide is intended as a toolkit that religious leaders and other members of the faith community can use to help address climate change from a religious perspective.
- Lenten Carbon Fast: (http://catholicclimatecovenant.org/wp-content/uploads/2010/01/Lenten-Carbon-Fast-Calendar-2010.pdf): This is a Lent calendar that gives day-by-day suggestions on how to "give up carbon" for Lent and reduce impact.

Additional programs, such as GreenFaith, Earth Ministry, Faith in Place, Religious Witness for the Earth, and many more, also address issues concerning faith and the environment. As these highlighted programs show, the faith-based environmental community is anything but idle; they are increasingly involved in the current environmental movement and address related issues through a unique perspective and worldview.

Summary

Research regarding the correlation between Christianity and environmental attitudes and behaviors has produced mixed results. In general, fundamentalism and biblical literalism typically relate to a lower concern for the environment. However, other

religious variables, such as frequency of prayer, may have a positive correlation. Political orientation and differences between denominations may influence environmental attitudes. People both inside and outside of the religious community feel that environmental problems are a moral issue and that a spiritual approach could help solve these problems. Partnerships with secular organizations could be an effective way to reach solutions. In addition, support for the environment from the church leadership has been found to have a positive impact on congregations. Identity and social influence may impact whether or not congregational members choose to participate in environmental programs at their church. All told, there are numerous faith-based environmental programs and groups in existence across the country working to promote stewardship and efficacy can relate to myriad factors.

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Chapter 3 - Faith-based Environmentalism: Leadership Principles and Perspectives on Church and Synagogue Programs

Introduction

Faith-based environmentalism seeks to address environmental problems with solutions that are grounded in religious beliefs, morals, values, and a sense of responsibility for caring for God's Creation (NRPE, 2010). There could be numerous benefits from involving faith communities in environmental learning and action. Faith groups could offer new and helpful perspectives, social motivations, and reasons for engaging in environmental problem solving that may be different from secular groups. Their distinct identity and voice could bolster associated efforts. At the same time, faith-based environmentalism could help members of the religious community overcome social stigmas associated with environmentalism. The upshot could be successful partnerships between faith-based and secular organizations, which can include educational institutions, governmental organizations, and nonprofit environmental groups.

The purpose of this research was to study faith-based leaders, learn about what they prefer in environmental partnerships and how they define faith-based environmentalism, and explore ways in which faith-based environmental programs could be more effective in delivering stewardship messages and increasing participation.

Leaders of faith-based environmental groups were interviewed about their preferred methods of environmental learning and action, and asked to share their opinions on congregant interest. The primary objective was to use interview data to characterize ways in which interviewed leaders believe the efficacy of faith-based programs could be improved and share insight with faith communities. A secondary objective was to use interview themes to develop questions for a congregant survey addressing similar topics.

For this study, 20 faith-based environmental leaders were interviewed. Interview questions focused on such topics as program efficacy and approach, faith partnerships, secular partnerships, leadership, religious identity, church identity, and definitions of faith-based environmentalism. Grounded Theory was used during the interviews and Nvivo was used to extract and analyze common themes. In this chapter, results are split into two sections. Section 1 focuses on how leaders define faith-based environmentalism, the role of the church, leadership, identity, and politics. Discussion of interview results is guided by previous research findings. Section 2 focuses on environmental program efficacy, as reported by faith-based leaders who have played an active role in such programs. This section is more descriptive in nature; results are derived from leaders' own experiences on what has been successful in their associated faith-based environmental programs.

Foundation, Leadership, Identity, Politics

Religion is an important part of life in the United States. Nearly 48% of the population adheres to Christianity, while just over 2% of the population is Jewish (U.S. Census, 2010). According to a 2007 Gallup poll, over 40% of Americans self-reported that they attend a church or synagogue on a regular basis. The majority of Americans attend services at least occasionally; only 16% reported that they never attend church or synagogue. The same poll asked those who attended churches and synagogues regularly about the most important reason for their attendance; the leading reason (23%) was "for spiritual growth and guidance", followed by "it keeps me grounded and inspired" (20%) (Newport, 2007). Religion and environmentalism have become increasingly intertwined

in America in recent years, the history of which contains both critical and constructive components (Siemer and Hitzhusen 2007).

The relationship between Christianity and the environment gained new interest with Lynn White's 1967 thesis, "The Historical Roots of our Ecological Crisis", which argued that Christianity is to blame for many of the world's pressing environmental problems due to a fundamental flaw in the way that Christians think and view the world. White believed that the Christian view of nature begets exploitation because the world is something that should be dominated according to God's will. Interestingly, he claimed that since the problem is religious, the solution must be as well. White's thesis stirred up debate and controversy among the scientific community, which subsequently sought to study if there is, in fact, a negative correlation between Christianity and environmentalism.

Many researchers found that Christianity was associated with lower levels of environmentalism, defined in various forms and fashions, but some researchers found no correlation, or relationships only with certain variables. One variable frequently found to be negatively correlated with pro-environmental attitudes and behaviors was fundamentalism. Fundamentalism can be defined as believing in a literal interpretation of the Bible and belief that the end of the world is coming (Guth et al., 1993). Numerous researchers have found that fundamentalist beliefs are negatively correlated with environmentalism (Guth et al., 1993; Guth et al., 1995; Eckberg and Blocker, 1996; Boyd 1999).

Some research results, on the other hand, were not quite so clear. Several studies included findings that contradict White's hypothesis (Nooney et al., 2003; Sherkat and

Ellison, 2007; Djupe and Hunt, 2009). Denominational differences were also found to relate to how "green" a Christian might be; Catholic, mainline Protestants, and more liberal denominations were typically more concerned about the environment than those that were evangelical or associated with a more conservative congregation (Greeley, 1993; Guth et al., 1993; Guth et al., 1995). Because of their more gracious image of God, Greeley (1993) argued, Catholics are more concerned about the environment than Protestants. According to Guth et al. (1993; 1995), mainline Protestants and Catholics are the greenest denominations, while Evangelical Protestants are the least green Christian. Hand and Van Liere (1984) Episcopalians and Lutherans are more concerned about the environment than Baptists and Mormons.

Relationships and identity are relevant aspects when studying religion and the environment. Those who identify with the church and are members of a congregation that is environmentally active may be pro-environmental, even if they do not participate in the programs themselves (Djupe and Hunt 2009). Additionally, researchers found that if the congregation as a whole views the environment as important, individuals within the congregation will also view it as important (Djupe and Hunt, 2009). Tyler and Blader (2003) argue that the driving reason behind why people cooperate with groups and engage in voluntary behavior is because they want to "create and maintain a favorable identity". Being a member of a group, such as a church, can profoundly contribute to a person's identity, help them to define who they are as a person, and shape their status and feelings of well-being and, to some degree, their self-worth.

Leadership is another important aspect. Some have spoken up about the need for faith members to become involved in environmental issues because they view such issues

as deeply moral problems that can be addressed through faith. (Rockefeller and Elder, 1992; Carroll et al., 1997; Dunlap, 2004). Support from church leadership has been found by some to be critical in successfully raising environmental awareness, attitudes, and actions around the faith community; churches whose leaders speak frequently about environmental issues and who are active themselves are more likely to have a congregation that is environmentally active. (Holland and Carter, 2005; Djupe and Hunt, 2009).

Political orientation has also been studied as a correlate of environmental-mindedness among Christians. Numerous studies have found that respondents that self-identified as republicans and conservatives were typically less concerned about the environment than were those that listed themselves as democrats and liberals (Weigel, 1977; Guth et al., 1993; Guth et al., 1995; Boyd, 1999). According to Sherkat and Ellison (2007), being a member of a conservative denomination drives political conservatism. Hand and Van Liere (1984) argue that dominion over nature is emphasized more in these conservative denominations, whereas stewardship is more common among liberal denominations. More recently, Tarakeshwar et al. (2001) state that congregational members holding conservative theological views are less likely to practice or believe in environmentalism and less willing to invest in the environment.

Methods

To achieve study objectives, faith-based environmental action leaders were studied. For the purposes of this research, "action leaders" are defined as people who lead faith-based environmental initiatives and can be grouped into one of the following

categories: 1) preachers, priests, rabbis, ministers, etc. that lead an environmental program at their church or synagogue; 2) congregational members who lead environmental programs at their church or synagogue; or 3) leaders of stand-alone faith based environmental groups, such as nonprofit groups that have both a religious and an environmental focus.

The action leaders were initially contacted through the National Religious

Partnership for the Environment (NRPE) website. Additional participants were contacted via the snowball technique. The snowball technique, a chain-referral method typically used to find participants that are otherwise difficult to locate, consists of asking current participants to refer researchers to other eligible participants (Babbie, 2007). The National Religious Partnership for the Environment website (www.nrpe.org) was used to gather available e-mail and phone contact information for specific environmental efforts in the Jewish, Catholic, Mainline Protestant, Evangelical, and interfaith communities within the study area. The study area included 5 states: Virginia, Maryland, West Virginia, Tennessee, and Kentucky.

The initial pool of potential participants were e-mailed or phoned to see if they would be willing to participate. Half of the action leaders that were ultimately interviewed were contacted using this method; the remaining half of the participants were recruited via the snowball technique. To be eligible, interviewees needed to have had a leadership role in a faith-based environmental program or project. Leadership roles varied from active congregational members to involved church or synagogue clergy. Ultimately, action leaders at churches, synagogues, and stand alone faith-based groups were interviewed.

Action leaders were asked to participate in phone interviews. First, action leaders were contacted by phone, for a preliminary interview about their environmental programs. The preliminary interview addressed program details, leadership role of the interviewee, program genesis, participation, and other programmatic questions. The purpose of preliminary interviews was to study the types of activities that faith-based environmental groups engage in and to gather background information before identifying the project's interview protocol. Based on preliminary phone conversations, as well as scientific literature, a set of semi-structured interview questions were developed. The questions (Appendix A) addressed a variety of topics, including partnerships, religious identity, church identity, and definitions of faith-based environmentalism. Questions also explored potential opportunities and barriers to faith-based environmentalism, and how environmental programs may improve efficacy.

In addition to a priori questions, Grounded Theory was used throughout the interview process to structure content. Instead of starting with a hypothesis, Grounded Theory extracts common themes after data are collected, and then uses these concepts to form theory (Glaser and Strauss, 1967). As participants were being interviewed, new questions that arose based on how the participant answered previous questions were asked. When new themes or ideas were identified, they were incorporated into the semi-structured interview questions asked of future participants. This method afforded flexibility and helped integrate important information not directly related to the preplanned questions. Interviews lasted between 30 minutes to over an hour, with an average of 45 minutes. Interviews were recorded and transcribed using Express Scribe. Nvivo8 was used to analyze the data and extract common themes and ideas from the data.

Findings, Section 1 – Foundation, Leadership, Identity, Politics

Twenty action leaders were interviewed from the 5-state study area. Participants were associated with a variety of denominations and faiths, to include Presbyterian, Methodist, Catholic, Evangelical, Episcopal, Jewish, and interfaith or nondenominational. Participants reported a range of environmental experience and interest, and were diverse when it came to age, gender, and urban, rural, or suburban residence. Several themes emerged throughout the interview process, including commonalities in attitudes toward partnerships, relevance, leadership, in program success, and other key relationships. Leaders helped define faith-based environmentalism and offered insight about relevant roles for the church. Opinions on identity and community were also discussed. Leaders shared thoughts on issues related to faith-based environmental program membership and characterized the influence of politics and political involvement. Approaches and tactics for increasing environmental program efficacy and membership were discussed, along with attitudes toward partnerships with other faith groups and secular initiatives. Finally, challenges and barriers to bolstering participation in church environmental programs were considered.

Foundation: Faith-Based Environmentalism and the Church

Definitions of faith-based environmentalism ranged from very general, such as "environmentalism that is inspired and informed by one's religious belief', to those that are more in depth, such as "activism on behalf of the earth community through the means of transforming the essence of people's values and morals and efforts". For action leaders in general, faith-based environmentalism is an essential part of having a relationship with

God; as one put it, "a relationship with God compels us to be in relationship with God's Creation".

Others refer to Creation as one of God's gifts, and believe that we are "required to be good stewards of God's gifts to us" and that we should become a "co-gardener with God in dealing with his Creation". Some leaders view nature itself as having spiritual essence that is a demonstration of God's work that we have a responsibility to care for since it is sacred and "reflects the awesomeness of God". "Caring for nature is part of...protecting [one's] spiritual life", one leader explained.

Many of the action leaders felt that this "responsibility" that people of faith have in caring for God's Creation is made clear in scripture. "For me, faith-based environmentalism is looking to the scriptures for the reasons to participate in environmentalism", one participant said. "The impetus for environmentalism is based on scripture", another participant echoed. Using these definitions, faith-based environmentalism can be described as caring for creation based on one's religious and scriptural faith, morals, and values.

Role of the Church

Action leader participants believed churches could play a unique role in the mainstream environmental movement, particularly by increasing value-centered approaches to being green, with specific emphasis on religious moral and spiritual responsibility. Some leaders even felt that the faith community's participation was essential in order for the mainstream environmental movement to truly succeed. "I believe that we're not going to straighten out some of the problems we have

environmentally, if people of faith do not get on board....the faith communities are pretty large in this country, and without them, I think it's going to be hard to make some real changes environmentally", one participant said.

The faith community could bolster opportunities to reach larger segments of society because component churches regularly discuss and ponder substantial existential questions. "Church is really a place where intergenerational communities still come together to talk about the big questions of life and eternity, there may be no other institution that does that", one participant said. Another participant explained, "It's where our morals are formed, where our values are formed. It's really one of the few places that every single week we're in there thinking about how am I going to be in the world, how am I going to act towards another creature, and we're challenged to define our value system and the context of our...faith". A third action leader said, "Congregations should be spiritual and moral centers where individuals go ground themselves in something bigger than all of us, that's the role religion can serve, as a touchstone for the values which must drive our daily choices".

Additionally, participants feel churches could be effective vehicles for increasing pro-environmental behaviors and attitudes among society, but the issue will need to be cast in terms of morality. "I think faith groups have an obligation", one of the action leaders said. "Every one of us who contributes to this society should have a role, but it is much easier to connect to if, in my opinion, if you do it through your faith based connection." Another participant agreed, saying, "A fundamental part of being a Christian is live simply, and taking care of what God has given us, so it just seems like we should be more involved in those issues instead of balking at them". The approach,

however, will need to drive home a sense of moral responsibility and ethical obligations which are at the heart of faith based environmentalism for some, and may also be one of the advantages of the faith approach in addressing these issues. "I think that the issues confronting us are fundamentally moral issues", one participant said. "Moral issues that the churches and other religious bodies are well equipped to address...there is nobody better equipped to speak to those issues than the churches and other faith interests."

Another action leader explained, "The church or faith community are places where we get to talk about deeply moral and at times eternal values...applying those values to caring for Creation is an essential role [that faith groups can play]". By considering environmental issues through a moral lens, the churches could profoundly impact stewardship by encouraging members to accept responsibility for their actions, relative to the moral beliefs and behavior of their religious faith.

Churches, according to interviewed action leaders, could also make environmentalism more accessible by offering a basis for emotional and spiritual connections instead of those based solely on science. "I think we have to go beyond making intellectual, rational arguments on why we should do this, so in that regard I think that the faith community should be leading the effort, because what we would call Creation in the Christian standpoint is really the heart of our faith journey and so without Creation, there really isn't anything left about which we can have faith", an action leader said. "Some of the deepest motivations for ecology are hard to articulate, there are people who love and feel those connections to nature and it's not necessarily a cognitive or brain connection, as much as it is an emotional or spiritual connection", another leader explained during the interview. "The Bible talks about [how] we are to love the Lord or

God with all of our heart, mind, soul, and strength. Therefore I think the whole person needs to engage in environmental issues and I think the church can help the whole person, especially on areas of spiritual and emotional connection to the earth".

Churches also offer social and material infrastructure wherein environmental issues can be addressed. "Houses of worship have a unique opportunity on a regular basis to communicate with a large portion of the American adult populace, and help them understand what environmentalism, sustainability is all about, which means that the faith community has to understand the science and policy of it, and wrap that up in its faith message of sustainability and environmentalism", an action leader said during their interview. This leader pointed out that while children are repeatedly exposed to environmental messages through school it is much harder to find ways to expose older generations to the same information. Churches, synagogues, and other stand-alone faith-based programs have the potential to provide venues and networking centered not solely on science-based facts, but also rooted in spiritual and moral considerations.

Overall, leaders felt that houses of worship are an appropriate place to address environmental issues because they are structural and spiritual symbols of moral purpose and as such are particularly appropriate for conveying the principles of faith-based stewardship. These findings represent a significant opportunity to potentially to expand the reach and relevance of environmental messages. Churches and synagogues offer a unique way to connect people with the environment by grounding motivations in a way that may resonate with congregants' lives. Because the leading reason Americans attend church or synagogue is for spiritual growth and guidance (Newport, 2007), successful

integration of environmental thought and commitment into church or synagogue life could have important implications for society.

Leadership

Support from higher church or synagogue leadership was overwhelmingly noted as necessary for the success of congregational environmental programs. "It has to be something that you hear from [the leadership of the church] because if not, then it's not going to be thought of as important to the people who go there", said one leader. Leaders' enthusiasm about various projects, events, or meetings can also help get more members interested. "If the rector will get behind any project in the church, it has a far, far better chance of succeeding than if Joe Blow or you or I were to get up and say, gee, I think this is a nice idea, wouldn't you care to join me....when any rector or priest or minister or deacon gets up and says something, it carries weight with that". Another leader spoke of some environmental stewardship work she had done, saying, "Pastors are very much revered and kind of looked to for guidance [in this community]...these pastors had a tremendous role to play".

One action leader's personal involvement in their church's environmental program was sparked by the advent of a green rector and bishop who put him in charge of his church's environmental efforts. This leader conveyed that supportive upper leadership was very empowering. "Suddenly, within a period of three months, we had a green rector and a green bishop...suddenly, I have people at the top who are saying, yes you may, we will support you, as opposed to...rolling the snowball up the hill...when you have somebody at the top saying yes, I'm ready to help you with this snowball, it becomes a

lot easier". Another leader said, "I think that where churches are most successful in this area you will probably find...that the pastor, the minister, the priest, the leader of that community sees it as being important". Some recommended that the pastor (or other leadership) of the church talk about the environment once a month in their sermons to help make it an ongoing issue that is regularly incorporated into church life.

Findings that higher church leadership can positively impact environmental programs by addressing congregational members are consistent with findings from previous research, which showed positive results from clergy who spoke frequently about environmental issues (Holland and Carter, 2005; Djupe and Hunt, 2009). Involving higher leadership in church or synagogue environmental programs could dramatically boost efficacy and membership. If pastors, priests, rabbis, and ministers include environmental stewardship messages in their sermons on a regular basis and voice support for environmental projects and activities, congregational members may place more value on these programs and may be more likely to attend.

Identity

During the interview, action leaders were asked if they thought that congregational members would participate in an environmental program simply because it was being held by their own church or synagogue. Results were mixed; most people felt that members were more likely to attend an environmental program or activity simply because it was hosted by their church or synagogue, but others did not think this was true. "I definitely think there are people who participate who wouldn't if it wasn't their church that was doing it…it just wouldn't be a priority for them, that's all", one leader said,

adding, "We have a way of making it a higher priority, because they've made time in their lives for church, and that's one of the things they've decided is a cornerstone of their lives... [If] this is what their church is doing, they tend to make time for it." For example, one church's group decided to have a carbon fast during an extended religious celebration. Participants followed a green calendar that had something different to do each day to lower one's carbon footprint. Calendars were made available to members of the congregation. The leader shared an unexpected effect - "A woman stepped up and she said, you know, I don't really believe in this environmental stuff, but the church had this out...so I tried it, and you know what, I think I'm going to keep on doing it".

Some leaders felt that it depended upon the person. "[Congregational members are] a pretty mixed bag", one leader said. "Some are very loyal to the church and so they will engage in an environmental ministry simply because their church is doing it and they feel like what their church is up to is pretty important, [but] there are other people who....can be very, very critical of their own church and so if the church is about things about which they disagree, then they don't mind hollering about it and yelling about it".

For other leaders, identifying strongly with one's church doesn't necessarily beget a higher chance of participation. "I think the only thing that gets loyalty is when they're in the planning process and they're invested in it", one leader said. Another leader was also less than optimistic. At her church, "we have agreed that we will wash dishes after our meals rather than using disposable things, people do that. Whether or not they totally buy into the whole issue, I think they're agreeing to participate in the efforts that we have going on, because we do it, and it's not difficult for them to do that, and I think they [do it] to be a part of the group. And then they'll jump in and help wash dishes, and you

know, I'm hoping that will spill over into their own daily life in small ways, even if it's small ways it's good, so I'm hoping that anything that you know we're doing at church will soon become normal and they'll do it at home".

Results generally support findings from Tyler and Blader (2003) that people may engage in certain voluntary behaviors, such as participating in faith-based environmental activities, because it contributes positively to their identity, which in this case may be as an actively involved member of a church or synagogue. However, not all those interviewed were in agreement, so no conclusive implications are possible. Still, for some congregants, active involvement may be important in shaping how they view themselves, and thus they may be more willing to participate in environmental activities simply because it is an activity that is organized and administered by their house of worship.

Similar to participating in a program simply because the church is the one hosting it, leaders have found that fellowship and relationship building help improve program interest. "Churches are all about relationships and you attend a church because of people that you're comfortable with", one leader said. Another said, "The important thing is relationships, and issues should not get in the way of that." Another leader spoke about the power that social pressure has, saying, "It's most powerfully successful when your friends and your neighbors do it, you're going to do it, too". A different leader echoed that sentiment, saying that it worked really well to integrate a social component into the program's environmental activities.

In addition to activities such as eco-potlucks, clean-ups, and tree plantings, educational field trips may be especially effective at fostering a sense of fellowship and community. One leader said that an upcoming event at her synagogue involved a trip to

the aquarium, which will be a family friendly, informal event that will be fun for everyone, and may provide exposure for some to "Eco-Judaism", which they may not otherwise have received. Another leader also spoke about the social aspect of educational field trips, saying, "Last year certain people went, this year a different group of people are going because I think they realize they missed out on something. Other people went and came back and said 'oh that was great', 'oh we learned so much', 'that was so fabulous', so yeah I think there's a draw there".

Fellowship and community are seen by action leaders as important reasons for, and benefits of, participation in faith-based environmental programs. Utilizing relationships within congregations can help improve efficacy and participation in environmental programs, possibly because it may make the issues and actions more relevant, personal, and interesting. Activities and events that are fellowship-based and community friendly may boost congregational participation. On a larger scale, utilizing relationships and communities to address environmental issues may help connect people by reaching them on a more personal level.

Mainstream Participation vs. Separate Identity

Action leaders shared thoughts on whether faith-based environmental programs should maintain a separate or unique identity from the mainstream environmental movement. This question was interpreted differently by different people, and results were evenly mixed. Many people felt the way that one leader put it: "Same results, different motivations". In the same vein, another leader said, "The means and actions and legislation and realities are the same however we get there". "They have a separate

identity, they are different, their voice comes from a different place, but we all have to work together", one leader said.

Leaders that were supportive of having a separate identity said things like "If you stay away from religious judgments you can get to the heart of the environmental issue so that you can talk about what the issues are", and "I think our strength is our distinctiveness". One leader felt that members of the faith community should keep themselves separate because not all secular actions are appropriate for Christians. For example, some protests or actions that may be viewed as "extreme" by some members of the general public may not be the best course of action for some Christians. "Personally I've always felt like if your actions turn people off, then you've lost the message. So yes, I do think Christians should be above that. There are many, many ways to get the message across rather than being completely mainstream".

Others felt that a separate identity might not be necessary in all cases. "Absolutely we have a unique voice, not a better voice, and not a worse voice, but we have a unique voice that needs to be heard, but that voice can be heard very, very well alongside the voices of all these other environmental organizations out there, we can work together extremely well." Another said, "I don't think it's important one way or the other...I think it's more of a matter of how what works for which group of people". Another echoed the same sentiment, saying, "I think you'd probably have both that want their own separate identity, and others that are comfortable with joining an already secular group that's already working at those activities".

Many felt that people of faith should not seek out a separate identity when addressing environmental concerns. "We don't need to do anything that singles out that

this is the big Christian way of doing things. We work together." Another leader said, "We all come with our identities and part of our identities is that we're green and that brings us all together, and part of our identities is that we're secular, Christian, Jewish, work for the governor's office, work for the Sierra Club, whatever, and we know that those are people's identities and we accept them as their identities, I don't think that religious piece have any unique distinction there".

One leader felt that the best approach might be for Christians to maintain a separate identity when working within their own denomination and faith community, but not when they work with the larger environmental movement. "I'm not going to rub [it in] the face of anybody – there are many people who are turned off by organized religion who are doing noble tasks of serving community and preserving the environment. [In the secular environmental movement] I would say 'I'm here to stand with you as we try to preserve the environment' but back in my Catholic circles, I would say 'I'm a Catholic and I'm a big environmentalist and I see it as an expression of my faith.""

Action leaders did not reach a consensus on whether members of the faith community should join in the mainstream environmental movement, or if they should instead work on environmental issues separately. Different approaches may work better depending on the congregation or on the individual. There could be benefits to maintaining separate identities; for example, it may be easier to gain support from within one's faith group if leaders approach the issue as a faith-based effort, as opposed to simply joining a mainstream movement. However, some may feel that the most important thing is for all involved, regardless of personal religious beliefs, to collaborate when

addressing environmental problems without singling out particular groups or being conspicuously divisive.

Politics

When discussing barriers for participation in church or synagogue environmental programs, politics was repeatedly listed as a reason why some may not participate. Many of the faith-based environmental groups were also cautious on engaging in political activities. Some, however, pointed out that involving faith communities in political conversations could have a tremendous impact on the environmental movement. Leaders also felt that by focusing on environmental issues through a faith lens, political barriers could be reduced. "Unfortunately, care for the earth and environment has come to be seen as a liberal issue...I don't think it's a liberal issue, I think it is an issue for humanity", one leader said. "You can name the word environmental and you're categorically thrown into one of the political parties, and at that point then the other people don't want to listen", another leader said. "People don't often like to mix the so called political with the so called spiritual, and they see, wrongly to my mind, environmental issues as political", a participant said. Another said, "[People say] oh that's what those liberal folks do, this is not what our congregation would do".

Because of the frequent association of politics and the environment, many groups try to steer clear of politics completely. "We look for nonpolitical ways to weave [environmentalism] into the conversation", one leader said. "We're trying to be very careful not to label ourselves one way or another", another said. "I work in a predominantly Republican parish, conservative, and so I try to use language that they're

familiar with, and I push but I push softly...I don't try to go too far because I think they'll reject the message and the messenger and then I don't have a voice. I try to be very careful about it and I also try to point out that it's not me, that it's the Pope, and the Bishops that have this message and I try to point out Scripture as much as I can, so I always try to remove myself from the message and have it more scriptural based or from...the teaching authorities of the church", one leader said. "If I continually did stuff that went against [the church leadership's] values and transgressed them, they would fire me, I have little doubt about that".

Action leaders suggested that looking at environmental issues through a faith perspective can help depolarize the issue and help groups to overcome political barriers. "I think churches can bring people who think environmentalism is a political issue to understand that it's a faith-based issue", one leader said. "They can rise to a higher plane and appeal to people on a moral level, that's one thing, they can speak up in way that's less controversial... they can bring people together who might be on the opposite sides of an issue", another leader pointed out. Some feel that depolarizing the issue will get easier as "going green" increasingly gets seen less as radical and more mainstream. "How we care for the planet is becoming much more of a mainstream thing, so that barrier may be kind of fading away. You no longer have to be wildly progressive in order to bring this up". Another leader said, "Even if you don't believe in global warming, you could believe in saving money, you could believe in not polluting".

Action leaders also believed that the mainstream environmental movement could benefit from having religious communities on their side, especially in terms of politics.

Hearing from members of a typically right wing, conservative, faith-based community

about how environmental issues are important to them and should be addressed could substantially affect legislation. "If we're meeting with Congress, and there were 100 conservative Christians meeting with congress, they're going to have more impact as conservative Christians because they represent kind of the unity and diversity on this issue then if we just had 9900 people, and the 100 extra Christians made it 10,000 people even – then we get lost in the crowd, and the moral distinctiveness of our message is important", one leader said.

The religious community may have different priorities than others in the environmental movement when it comes to certain pieces of legislation, but they could speak to lawmakers from a different perspective. Another leader talks about the unique voice that the faith community has, saying, "If I go into a Congresspersons' office in Washington and sit down and identify myself as a United Methodist, and then from then on use the exact same science-based argument that somebody from the Sierra Club would, for example, then I don't really have a unique voice. But if I can somehow articulate why it is that my faith as a Christian compels me to take a particular position on an environmental issue, then I have not only communicated some science arguments, perhaps, but I have contributed a very passionate argument based on who I am as a faithful Christian".

Politics can be complex in the faith community and environmental issues can be very polarizing and may inhibit participation in environmental programs. Leaders have pointed out that taking a faith perspective may help to overcome this barrier, by showing members that environmental issues are a faith issue and a moral issue instead of a political one. Thus, political involvement represents a potentially powerful action

opportunity for church or synagogue programs, particularly if the mainstream environmental movement collaborates with members of the faith community.

Findings, Section 2: Efficacy

Leaders discussed what methods (hands-on, scriptural, or sermons) were most effective in terms of increasing participation and potentially influencing environmental beliefs and behaviors. Leaders suggested that different approaches worked for different people, and in general, some combination of all should be used. However, some clearly felt strongly about one approach. Leaders also suggested that integrating environmental stewardship into the church or synagogue, administration, and maintenance may help efficacy. Couching issues in terms of social justice could also help. Developing opportunities for youth is considered another potentially promising way to bolster congregant participation.

Approach

Hands-on programs were commonly cited as preferred methods for providing environmental messages to church or synagogue members. Examples range from native tree plantings to stream clean ups to composting. Action leaders agreed that hands-on approaches can be a great way to involve and educate congregations and members of society more generally. Some of the leaders organized outdoor activities, such as camping, hiking, canoeing, with the goal of connecting people with nature, which some see as an essential step in learning to care for God's Creation. Reflection on and appreciation of God's Creation is viewed as a vital component in prompting churchgoers

to embrace environmental stewardship. One participant led a "silent river float as a worship", where congregational members went out on canoes on the river, heard a devotional, and then spent the next 2 hours on the canoes in total silence. This participant described this as a "transformative spiritual experience".

Aside from experiencing nature and spending time outdoors, the hands-on approach can also be particularly effective when it comes to learning about operations that impact the environment. Educational field trips, such as tours of a dairy farm, landfills, and water systems, were considered to be very effective learning experiences for faith-based environmental groups. For instance, some action leaders who work on issues stemming from mountaintop removal felt strongly that seeing the impacts of this strip mining practice firsthand has the most profound effect on people. "I'll show you some people who are wheezing and coughing...I'll show you some people who have orange water...We'll [visit communities impacted by mountaintop removal] and we'll sit down with people and they'll tell their story, and I get out of the way...I personally don't feel like I have to convert anybody, I truly believe that if I [show people the impacts firsthand] a person of good will and good faith will recognize where the truth is".

Some indicated that the hands-on approach may be most beneficial for reaching youth. One action leader said, "I work with teens for the most part, and if you're going to ask me, for teens it's hands-on, hands-on, hands-on. You can listen to anything until you're blue in the face, [but] until you get there and actually do something that makes a difference, I truly believe we don't get it. I mean, everything else is great, I'm not knocking it, but I truly believe that we need to set the tone with getting our hands dirty and doing it".

Some leaders felt strongly that scripture is the most effective way to reach members of the faith community, while other leaders suggested that the main benefit of scripture is that it verifies program actions. Many leaders integrate scripture and environmental theology into their program curriculum, newsletters, and activities. One leader offered an example of how they use a scriptural approach, saying "I think you can definitely bring environmentalism out in the Christian context by going back to some of those core teachings of Jesus and connecting his teachings about not being so attached to our possessions, with not being such consumers, and a lot of what's damaging the earth is our consumption patterns". Speaking about how scripture helped, another leader said, "It was only because others began to point out to me and to others in the faith community that the scripture does say something about preserving land, preserving water, cleaning the air, and being gentle with the species in some way or another that we suddenly began to learn". One leader emphasized the benefit of turning to scripture to ground stewardship ethics, saying, "Locating values from our scripture and our traditions inform (though they do not dictate) the life and death choices we make today regarding the fate of life on earth and our own lives".

Utilizing stewardship principles found in the scripture can help reach congregational members in a way that is unique to their faith and thus may increase receptivity to the message. One action leader said, "I do biblical foundation workshops, and that is absolutely the most effective way to do it for me...to go into a congregation and talk about global warming or to show Al Gore's film An Inconvenient Truth...that doesn't work, that's fine for those people who are already greenies in the congregation, but for the rest of them, that just doesn't work...what does work for me is to connect to

what is already familiar to them and already a part of their faith and that's the biblical tradition of Christianity. And so, if I can begin with biblical theology, really good, sound, biblical theology, if I can start there, then that's how I can raise the awareness of people who are not already aware of this. And it works great, it works great, I've done it hundreds of times, and it works great". Another participant testified to the effectiveness of scripturally based environmentalism, saying, "They realized their was a dissonance between their action and what their ethic and their scriptures taught, so they recognized that there was a dissonance, and then...some changed because they realized that their actions weren't meeting what they really believed".

Similar to scripture-based approaches, some action leaders championed integrating stewardship messages into sermons given by pastors, priests, ministers, or other church or synagogue leaders. "I believe that it's through the Bible and through the pulpit more than anything", one action leader said. "I think it hits people on a different level", another participant added. "I think there's a tremendous opportunity for sermons and preaching that's not really being taken advantage of", one action leader said, adding, "I think there's a tremendous need for pastors and preachers and ministers and lay ministers and ordained ministers to be trained and to see the opportunity, to feel educated and knowledgeable so that they can speak about it, to be given concrete things to do and to talk about, so that they don't feel that it's overwhelming, that it's such a huge topic, and then to be shown how to connect that to their faith".

Hands-on, scripturally based, and sermon-based approaches could all be effective tools for reaching congregational members with a stewardship message. Since people prefer various ways of learning, leaders recommend using a multi-pronged approach.

Offering stewardship messages using various means could help reach more congregational members and may help boost participation. Hands-on approaches may resonate strongly with congregants because the method helps them learn and keeps their attention. Scripturally based approaches may work the best for those who are stronger adherents to the Christian or Hebrew Bible, whereas integrating stewardship into sermons may make environmentalism more salient among congregants who look to their pastor, priest, minister, or rabbi for guidance and inspiration.

Integration

Throughout the interviews, integrating environmentalism throughout the daily practices and activities of the church or synagogue was commonly covered. "Being green for earth day is great, but how do we get that 4 times a year, or how do we institutionalize things?" Another participant agreed, saying, "Start weaving it around the programs that we already do, so let's not create environmental clubs on a campus, or at a church, let's find you know, ways that at Thanksgiving or at Christmas or at summer, you know, four times a year at least different programs of the church are engaging some aspect....also we have to work to make the environment more than just our personal circles". "[We need to] look for lots of little ways to weave the conversation in.....weave nature appreciation into Sunday school curriculum...weave it into our worship life", one participant said.

Other action leaders agreed that integration was the best route. "Equally important is to take that [environmental] program and look for all kinds of ways to embed it into programs that are already existing, you know, preschool children Sunday School worship, outreach, youth, community, those kinds of things". "It should be, in my opinion, a part

of everything the church does and talks about", another action leader stated, "I try to get the church to infuse creation care into every aspect of the life of the congregation. So, for example, how does worship reflect care for God's Creation, and how does the education ministry of the church, in other words, what are we teaching our children who come to church in terms of their responsibility to care for God's Creation. So it's not just the lifestyle issues that are important, but how does every part of the life and the ministry of the church, how does that reflect Creation Care?"

Another participant said, "The way to get the church to recognize our stewardship responsibilities as stated in the Bible is to infuse an environmental ethic, and ethic of sustainability, in all the committees of the church...we need to ingrain...an ethic that in everything that we do, we need to consider what the implications are". This particular leader and members of his environment group work to integrate Creation Care into all committees of the church by attending various church meetings to ensure that they are involved in all aspects of church life and have a say in a variety of matters. Attending these meetings is more than merely making their presence known; they are active participants as well. "We don't just go there for me, we need to be part of their team too, and so we have to contribute as well, and what can we bring to the table, I think is an important thing, so it's a two way street."

Integrating a stewardship message throughout church or synagogue life can help make environmental activities less of an occasional action and more of a regular part of daily life in church or synagogue administration. Having multiple events throughout the year, instead of just one big event for Earth Day, can help integrate stewardship into faith lifestyles and raise awareness among congregants. Ultimately, leaders believed that an

important step for church or synagogue environmental programs will be weaving stewardship behavior into all church activities, not just during separate, special events that focus on the environment.

Demonstration

Many leaders argued that another necessary step is for the environmentally active churches or synagogues to provide other congregations with examples. "We need to set an example for parishioners and the world around", one leader stated. "Our hope was that if we could do this as our own little piece, our own little patch of forest, that this might be an example to other people", another leader said, speaking of conservation efforts on property owned by the church where the program is administered.

Leaders suggested that those active in environmental groups at their house of worship should be especially cognizant of modeling green behavior. "They have a responsibility to set an example for folks in their congregation...their job is to raise the awareness, and they can do that primarily by setting an example...by talking about what it is about their own faith that compels them to be a green person", one action leader who was convinced of the importance of being a role model shared. Another leader also found modeling appropriate behavior to be effective, saying, "Make sure that the synagogue shows visibly how it is trying to be green, have CFL sales, have recycling, organize recycling opportunities for CFLs".

Clergy leaders can have an impact on people by also personally setting an example. "I've heard more from people who have seen me pull up to the synagogue on my bicycle than I have heard comments on environmentally themed sermons. Walking

the talk is vitally important, for our clergy and congregational leadership", one leader said. At another faith institution, "Reverend tries to set an example to his church community by walking everywhere, which is both a good physical as well as mental exercise, as well as community building".

In addition to people and activities at churches and synagogues modeling green behavior, also effective could be ensuring the buildings themselves incorporate environmental conservation in their design and operations. "In our congregational buildings, we really have to be the models. We have to be sort of the green congregation on the hill to show that all these practices are doable and to really be a public witness about what's possible". At a different faith institution, an action leader discussed "using our houses of worship as demonstration sites for sustainability, and making sure that in the process of worshipping the Creator, we are treading as lightly as possibly on Creation". This synagogue also used sustainable materials in their buildings. "It's a point of pride for members of the congregation when they walk in each week", the leader explained. Although the buildings were constructed 10 years ago, the facility still continues to let people know about the importance of their efforts. "We have a small booklet that we encourage visitors to read which outlines the environmental as well as the aesthetic places that were made in the building so that the commitments we made a decade ago continue to educate and hopefully inspire others".

Leading by example could be a very effective way for churches and synagogues to demonstrate their environmental commitment to congregants and prove that they are "walking the walk". By showing congregants specific, easy ways to live green, houses of worship may inspire congregational members to follow in their personal lives. Leading

by example may help churches and synagogues set a new norm and standard of behavior for their congregants. Engaging in environmental actions at the church or synagogue level may also help raise awareness, educate, and keep such issues salient among congregants and, by extension, significant cross-sections of society.

Social Justice

Many action leaders felt that emphasizing the social aspects of environmental issues is a highly effective way to reach more congregants and getting them interested in seeking solutions to many environmental problems. "The church should be advocating not just the financial bottom line, but what is the ecological bottom line and what is the social justice bottom line", one leader said. Another said, "One of the great insights of religious environmentalism is that we can never take the human out of the environmental equation... and that means we have special responsibilities to the members of our species even as we need to do better by all the other species as well". For some, the more they explored environmental issues through their faith, the more they discovered links to social justice. "As I began to learn about the Christian faith and environmentalism, suddenly I was beginning to be taught that this is a piece of justice that when in any group, but especially minorities, are deprived of their right to clean air, clean water, good, clean, land, arable land on which to grow their foods, this is a justice issue."

Social justice issues are not new issues for members of religious institutions.

Hunger and poverty are issues that faith communities typically spend time, effort, and money addressing. "Part of what we want to do is help Christians understand that we're supposed to be helping take care of the environment as well as the poor among us", one

leader said. "Our human fellow citizens of the earth will be the first and are being the first to suffer from our abuses...I think one goes hand in hand with the other, and it would be wrong if we secluded them", another participant said. Many leaders have tried to help congregational members make connections between environmental issues and social justice by appealing to concerns about hunger and poverty, which faith institutions already commonly deal with. "We go down and feed 50 people down the road in a town's...assistance center, but in our habits, in our consumptive habits, our energy consumption, there are millions of people in Africa that don't have food because of lack of water because of climate change", one leader said.

Perceptions that climate change is likely to have a disproportional negative effect on the poor were a common example used to help illustrate possible positive impacts of stewardship action. "We are trying to connect our lifestyles here in the United States and other industrialized countries around the world and [how they are] negatively contributing to...third world countries", one leader explained, "We've always been concerned about people who are having hunger issues and food-related issues, but the new twist on that is am I somehow being responsible for that? And if so... maybe I better examine the way I live my life and the way people in the United States live our lives, and so maybe my mission as a Christian is not just to feed those people, but to change policy and to change lifestyles that will permanently bring solutions to some of their problems". A different participant remarked that the link between ecological and social issues is a good opportunity, saying, "You put a face on hungry people and relate that to environmentalism...that has some power I would say".

Another leader worked specifically with the issue of mountaintop removal coal mining and found the social justice component too powerful to ignore. In fact, this leader's main strategy for engaging faith groups was to bring their attention to connections between the social justice and environmental implications. "Asthma is going up, breathing problems are going up, pollution, you know how come the water is orange?....This is what the ramifications are...people are hurting, and then we're destroying God's Creation in the process". By showing faith groups that the issue at hand involved not just environmental consequences, but also human injustice, this leader found the message to be much more effective and beget notable impacts on program participants.

Looking at the social aspects of environmental problems may help reach congregants at a different level, interest those who may not be otherwise interested, and could enhance the effectiveness of the overall message. Including social justice as part of the dialogue may help boost participation. For some, it may be a necessary part of the message. Tying in social justice issues could appeal to congregants on a moral level and help congregants consider issues from a different and deeper perspective. By taking a holistic approach to environmental issues, church or synagogue programs may help congregants make connections and understand consequences that may not be immediately obvious given the prevalence of polarized media debates.

Youth

Involving teens, children, and youth groups in faith-based environmental activities and programs could help reach a wider faith-based audience and institute an

environmental ethic among younger congregants. "The way [to get environmentalism] embedded in the church philosophy and the church spirit is through the youth groups", one participant maintained. "There's a picture that they drew of an energy tree...and each branch has what we're going to do to conserve energy, and that was posted in the church, and the youth did that, so when people look at it, it's well here's not that old man's doing that, it's a kid doing it, so that's really important". This leader, and others, viewed youth as having a unique influence in the faith based community, because, they argued, educating and inspiring youth may lead to new changes in thoughts and behaviors in their parents.

"Young people are the ones who are going to convert their parents", one participant said. Another participant argued that when you involve the youth, you should involve the parents as well: "Involve the children and get them excited and wanting to learn more, and doing things...bring in the parents, and when you bring in the parents, have a role for the parents, too, [so] that they can participate, not just drop the children off". Youth participation can vary widely, from special programs and activities geared toward Sunday School classes, youth groups, etc., having completely separate environmental programs or clubs for kids, or having Boy Scout and Girl Scout projects incorporated into the church or synagogue's efforts.

While youth could help inspire the rest of the congregation, leaders also suggested that their participation could also benefit from receiving an environmental message that has a faith basis. "Houses of worship...should help everybody from college age down...understand how what they're learning out in the secular world is in fact fundamentally an expression of their deepest faith values, so I think that the church

should do that, so that the young folks don't think that this is just a secular value system...but that in fact, even though America can't talk that way, the churches can and should, and let them understand that this is powerfully a spiritual and religious imperative".

Involving the youth of the faith community can be beneficial to the youth, as well as to the church or synagogue's environmental group. Engaging the youth could result in increased interest and engagement from their parents, or from other members of the faith community. Additionally, involving congregants of all ages could further integrate stewardship ethics into church and synagogue lifestyles. Moreover, participation in certain activities may increase if the youth are highlighted or actively involved; congregational members may view these opportunities as multi-generational fellowship, where elders support youth by expressing their interest in leaving behind a better world.

Other Tactics

In addition to the results covered above, other notable discussion included the use of multiple avenues for getting the message out, which may include Bible studies, sermons, newsletters, websites, church bulletins, seminars, guest speakers, videos, special events, etc. Making the program as convenient as possible was also covered, which could involve strategies such as making recycling or composting bins readily available at church or synagogue activities. Leaders also advised making environmental groups open, friendly, and non-threatening so that people from all perspectives, backgrounds, and knowledge levels feel welcome. Presentation is important, too; some leaders said that a "hook" may be necessary to compete with other events. Leaders also suggest making it

relevant; for example, choosing activities that have an immediate impact on participants' lives.

Language considerations may also be important. For some congregational members, certain terminology may diminish the likelihood that they will participate. "Be careful about the language they use...'environmentalism' for some groups is a bad word", one leader cautioned. Another leader offered an alternative suggestion. "The term Caring for Creation really resonates for everybody...it's got a real comforting ring to it and it has a sort of inspirational feel to it and you can make it very concrete". Leaders also recommended using language that does not sound "technical, distant, or boring"; instead, choose words that people can relate to, understand, and that sound interesting.

Efficacy Summary

A multi-pronged approach, including hands-on, scripturally based, and preaching environmental stewardship through sermons, was collectively promoted by action leaders based on their experience. Using adaptive techniques to improve the relevancy of church or synagogue programs could help boost participation. Leaders felt strongly that incorporating stewardship into daily considerations of the church or synagogue and promoting associated lifestyles among the congregation could have repercussions beyond each individual congregation. For example, they believe members of the faith community should lead by example, by behaving in environmentally conscious ways, including in the building and operations of the houses of worship. Connecting environmental issues to social justice issues could also help reach more members of the faith community, as well

as involving youth in activities to build an ethic among the next generation and generate interest among the congregation more generally.

Partnerships and Secular Approaches

Some faith leaders feel that partnerships within the religious community could be some of the most valuable relationships for church programs to form. "The commonalities with other people of faith who arrive at environmental actions via their own scripture and values and history are tremendous". Another leader said, "There needs to be a faith connection, you know that grounding of God...I think there should be a spiritual component to it, a prayer component to it, and I think that makes it a little bit different [than secular efforts]". "A more promising route is for an alliance of the faith communities to work together," added another faith leader. One person listed "3 great layers for partnerships": first, "one synagogue to another, sharing ideas and resources for what works in our similar but distinct contexts. Second is the interfaith local level, and finally, the partnership with the 'traditional secular environmental secular' organizations".

Partnerships between faith groups and secular groups were discussed by action leader participants. Secular partnerships with faith communities could include educational institutions, governmental organizations, environmental nonprofit groups, and more. Almost all leaders spoke favorably of secular partnerships. For example, one leader felt that partnerships should be made "anywhere you can get in", including with the government, interfaith, community, secular and other partnerships; "There's hardly a person out there that can't be part of a partnership to work with you on going green, and

anywhere that you can get traction and attention, I say partner". Many of the leaders were already involved in successful secular partnerships and felt more were possible and could be beneficial.

Some of the benefits of partnering include providing faith groups with access to expertise, resources, and networking opportunities. "They have real expertise that we need to tap, just as we have unique access to real people who they need to tap", one leader said. Another agreed, saying, "If someone is an expert in something, then why should we try to become experts in that thing? Why should we not utilize their talents?...They bring tremendous experience and knowledge and ways of doing things to the table". They continued, "If you're working with a larger audience, bringing to bear more resources through partnerships is the only way that we're going to achieve our objective." Another leader said, "I think partnerships are definitely the way that you can take advantage of all the resources of the respective organizations."

While leaders believed that partnerships between faith and secular groups could be beneficial to all involved, some were more cautious or had specific stipulations for engaging in such partnerships. Action leaders shared thoughts about what partnerships might work best and what things secular groups should keep in mind when approaching the faith community. "It depends on the secular group in particular, and their goals and methods and missions and that kind of thing", one leader said, which is a sentiment that many other leaders shared. Some secular groups, especially some environmental nonprofit groups, may be seen by church members as "liberal whackos", too political, or too extreme. A fear of being ostracized by others in the religious community may make

some refrain from partnering with certain groups if it would make them appear "guilty by association."

Secular groups can try different approaches, but mainly, they just need to "put the word out." Secular groups need to "invite themselves to be part of what the faith community is doing...and invite the faith community to be a part of what they're up to." Some leaders suggested there is no difference in how you approach faith groups compared to how you would approach other groups, while others believed that it might be best to go through church members. One leader suggested such an approach, saying, "[Go] through individuals in the church who might have an affinity to the organization or the institution that's trying to approach the church". The faith leaders also suggested groups meet people where they are. "You need to work within the worldview of a community to reach them for change". It is critical that all groups be patient and recognize that each community has different priorities, organization, and perspectives. Be aware of differences and be open to new ways of thinking. "Respect their faith and respect their worldview...don't talk condescendingly", one leader advised.

Partnering with groups that are already organized and successful on their own is seen by some as essential. "We've been extremely successful when we partner with organizations that are effective in their own means", one leader said. Another leader said, "They need to be very carefully orchestrated to play to the respective strength of both organizations". Listening and forming real, meaningful relationships are essential for secular and faith partnerships to work. Instead of having a secular group come in and tell faith groups what they should be doing, one leader recommended that secular groups "start by listening, start by seeing what their concerns are, seeing what concerns you

share, and seeing what they can offer churches". Another leader suggested something similar, and stressed that looking for commonalities in goals and values can help build these conversations and relationships. Secular organizations should also be prepared to provide education and training for leaders and members of the faith community. In return, faith groups should be upfront about any expectations or intentions they may have with regards their own priorities, moral concerns, or religious beliefs. If both groups make a solid effort to understand each other's goals, values, and worldviews, then it may help the partnership achieve greater success.

Secular partnerships, according to some faith leaders, may be very challenging to orchestrate. Faith leaders had some specific concerns, such as multiple agendas, that they feared may jeopardize the common goal. "Never use faith as a tool to do anything", one leader warned. Another leader spoke of his experience as a member of a large (mostly secular) partnership formed to address environmental issues. This leader was considering revoking his membership because the partners expected all coalition members to sign a statement of support for a social issue that was not directly related to environmentalism. This leader refused to sign that statement because he felt it would result in his own faith organization being "written off by 99% of churches and people in the religious community". For him, there is a critical balance to strike between meeting the needs of a broader partnership while also staying loyal and representative of faith value systems. "What makes us distinctive can be somewhat off-putting for the left, but they are the litmus test for the right. If we don't have the litmus test, we don't have that conversation. So is my work to build a coalition with the left or to be effective in reaching the right?"

Efforts to form broader partnerships should be cognizant of such situations and keep partnerships focused solely on environmental goals.

Secular partnerships are a desirable option for many members of the faith community, since they can provide resources and expertise regarding the environment. There is a mutually beneficial opportunity in that secular organizations can help improve the efficacy of faith-based environmental efforts while faith organizations can benefit secular organizations by providing a larger, perhaps more diverse audience. Both groups should be cognizant of the unique identity and priorities of partnered members, and should be respectful and refrain from promoting any unrelated agendas. The potential is that these types of partnerships could be highly successful in terms of achieving critical mass and fostering broader, diverse social change.

Barriers

In addition to politics, leaders reported several reasons why they thought some congregational members did not participate in their church or synagogue's environmental programs. Barriers included being too busy, conflicting or overriding church priorities, disinterest in environmental issues, and issues being too complex or had to understand. Leaders believed that many clergy or rabbis may often feel overwhelmed by the multiplicity of initiatives underway at their church and may shy away from new programs or activities. "We talk to ministers that say yeah, I know this is important, but we just have so many things going on in our church, I don't see how we can take on one more thing. Our response to that of course is, we're not asking you to take on one more thing, we're asking you to do the things you do, but do them differently, but with this

consciousness of the importance of caring for the earth and the earth's resources being integrated into everything we do". Congregational members face the challenge of prioritizing in a busy world, too. People may be sympathetic toward environmental issues, but still not choose to participate in finding solutions because of hectic life schedules.

According to interviewees, environmental issues are often perceived as being too complex and overwhelming. "There's a lack of understanding, a lack of willingness to admit that we're all integrated, we're all interdependent", one leader said. Another leader added, "The topic is huge and it covers such a wide range, it's very hard to be knowledgeable about it, so people get overwhelmed". The same is true for church leadership. "The average pastor, on say like climate change, doesn't really want to be wrong, also doesn't want to do all the research it takes to figure out who's right, so if it appears that it's a controversial conversation, then they just choose not to have it", one leader said. Denial is another barrier: "People have a remarkable ability to ignore reality and defend or more simply extend an unsustainable status quo", one leader said. There may also be theological obstacles in the way for some congregational members. "There are those Christians out there who will say, well Jesus is coming back in 2 weeks now, so why do I need to worry about the planet, because it's all going to end before long anyway".

Other barriers include lack of knowledge, money issues, and feeling overwhelmed by the severity of environmental problems and feeling like individual effort cannot really make a difference. One leader warned that if the issue seemed too large to handle, some people may just shut the message out entirely. "People who are integrative, who see these

connections get it, [but] I think it overwhelms those who compartmentalize, and they then tend to look for reasons to not have the conversation". Church and synagogue environmental groups could work to overcome these barriers by employing strategies suggested by leaders as previously discussed.

Conclusion

Leaders that were actively involved with the faith based environmental movement were interviewed to determine their thoughts on faith based environmentalism, partnerships, and how to improve the effectiveness of congregational environmental programs. Many leaders felt that environmental problems are moral issues and churches and synagogues could have profound impacts because they offer existing existential infrastructure. Support from the leadership of the church or synagogue is seen by many leaders as essential to the success of their environmental program.

According to leaders, identifying strongly with one's church or synagogue may make some congregational members more likely to participate in environmental programs that are hosted by their church, simply because the church is the one hosting it. Relationships, fellowship, and community play a strong role in boosting interest and participation in environmental programs and activities. However, politics can complicate participation, as many conservative congregational members may view environmental issues as liberal issues, and therefore not want to participate. Leaders suggested that this can be overcome by using a moral or faith-based lens to address environmental issues.

Effective ways to reach congregations and increase participation in environmental programs and activities were discussed. A hands-on approach was supported by many,

especially when working with youth. Using scripture as a basis for faith-based environmentalism was essential for a large portion of the leaders, as were sermon based approaches. All told, leaders often felt that a multi-pronged approach involving many different methods and communication would be most effective.

Leaders advocated an integrative approach that involved weaving environmentalism into the daily practices of their church or synagogue, instead of just having one or several big green events a year. Churches also need to lead by example - doing things such as making buildings greener and engaging in conservation practices like energy efficiency and recycling that are visible to members. Exploring social justice impacts of various environmental issues is an important aspect of faith-based environmentalism at the church or synagogue level, and can help draw more attention and interest to such topics within the faith community. Involving youth can also be a successful way to help integrate environmentalism further.

The possibility of partnerships with other faith groups, interfaith groups, and secular groups was explored. Leaders were, in general, very supportive of partnerships, but had some cautions, especially concerning secular partnerships. Secular partnerships can provide faith groups with resources, expertise, and networking opportunities. Certain groups may not be appropriate for churches to partner with if they are seen as too radical or political, or would otherwise polarize the faith community. Leaders advised that secular groups seeking to form partnerships with the faith community should be respectful of faith and unique worldviews, be interested in forming real relationships instead of solely pushing agendas, and should avoid taking sides on issues that do not directly relate to environmental goals. On the flip side, faith-based groups should be

equally respectful, willing to contribute to the partnership, and cognizant of other beliefs and worldviews that differ from their own.

There are some additional barriers when trying to involve members of the faith community in environmental programs. Often times, congregational members are too busy, have other priorities, or feel that environmental issues are too complex or hard to understand. Sometimes, congregational members are in denial about the severity of issues, feel that they cannot make a difference, or believe that environmental stewardship does not matter due to end-times thinking.

Despite these challenges, faith-based environmental groups can still be a successful part of many churches and synagogues. Focusing on the values behind environmental issues and looking at problems through a faith lens can help to reach out to the faith community and get members who are passionate about their relationship with God to also be passionate about caring for God's Creation. Increased congregant participation in faith-based environmental programs could spill over and engender subsequent action outside of congregational life. In that vein, environmental dialogue and action at churches and synagogues could pay significant environmental dividends and build widespread potential for collaborative conservation.

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Chapter 4: Environmental Programs at Christian Churches: A Case Study of Congregant Participation and Preferences

Introduction

Interest in environmental issues has grown substantially among religious groups in the United States (US) in the past three decades (Siemer and Hitzhusen 2007). In recent years, citizens have increasingly banded at local and regional levels to address environmental problems, and religion is one arena where this formation has occurred (Dowie 1997). Its role in community networking makes religion a potentially effective social institution for addressing sustainable living, ecological conservation, and human wellbeing (Hale and Bennett 2003). Increases in the position and magnitude of the religious community in solving environmental problems could substantially change the public landscape in terms of environmental attitudes and behavior.

While numerous religions are practiced in the U.S., the most common is Christianity (US Census, 2010). Christian attitudes toward the environment range from a hierarchical belief in dominion over nature to stewardship of God's creation (Moyers, 2005; Orr, 2005; Hitzhusen, 2006). Recently, an increasing number of faith-based environmental groups have formed across the spectrum of denominational and non-denominational Christian congregations (NRPE, 2005). While the focus of these church groups can be quite diverse, in general they emphasize caring for God's creation, often times referring to their group as a "Creation Care" organization – though this reference is by no means obligatory. In general, Christian environmental groups are often similar to other secular environmental groups in that they seek to improve public environmental

stewardship, but they also differ in that their faith is considered the basis for their environmental interests and actions.

This case study surveyed congregational members of 10 Christian churches in 3 states that span portions of the Mid-Atlantic and Mid-South regions of the US. The study had two objectives: 1) identify significant predictors of program participation; and 2) examine program preferences. The findings are used to discuss congregant participation in church environmental programs.

Research questions and corresponding hypotheses were as follows:

1. What predicts program participation among case study congregational members?

We hypothesized that the role the church plays in a congregant's identity, their belief in the influence of pastor/priests on church program success, their self-reported religiosity, political orientation, church attendance, environmental commitment, and their attitudes toward faith-based and secular environmental partnerships would predict program participation.

2. Which types of church environmental programs are preferred by case study participants?

We hypothesized that preferences for sermon-based communication, scriptural studies, hands-on learning, and guest speakers would differ.

3. How do case study participants view environmental problems?

We hypothesized that there are differences between the extents to which congregants view environmental problems as a moral, religious, economic, political, or social justice matter.

To test our hypotheses, we used a respondent-driven survey method to measure congregant participation in their church's environmental programs, preferences for environmental programs and views of environmental problems at 10 churches in 3 Mid-Atlantic and Mid-South states. We also measured congregant attitudes regarding environmental partnerships between their church and other groups, their religiosity, the

role church plays in shaping their personal identity, their environmental commitment, and opinions about the influence of pastors/priests on the success of church programs. Results are discussed in terms of congregant participation in church environmental programs and strategies that may be effective in increasing congregant involvement.

Literature Review

Though the relationship between religion and environment had been considered before, by Aldo Leopold (1949) for instance, the issue gained significant contemporary attention with the publishing of Lynn White's essay in *Science* entitled "The Historical Roots of Our Ecological Crisis" (White, 1967). White argued that many ecological problems exist because of the manner by which Christianity conceptualizes nature and articulates the human relationship with the natural world. Because Christianity is underpinned by a fundamental belief in domination, White suggested that exploitation of the environment is viewed as an appropriate expression of God's will. At the same time, White also noted that the solution to this problem must be religious in nature.

White's theory sparked reaction among scholars and scientists, many of whom set out to test his theory that a negative correlation exists between Christian religiosity and environmental attitudes and behaviors. In general, most studies following White's thesis have found negative correlations between Christian religiosity and environmentalism, but consensus was not possible because some observed no relationship between the two and others noted positive correlations with certain religious attributes. Nevertheless, one variable that frequently correlated with low levels of concern for the environment was fundamentalism.

Fundamentalism typically espouses a literal view of the Bible and may uphold strictly to dominion interpretations of the environment. It has been shown by many researchers to be a negative predictor of support for the environment. For example, Eckberg and Blocker (1989) found that a belief in biblical literalism was a negative predictor of pro-environmental attitudes. Guth et al. (1993) demonstrated that doctrinal fundamentalism reduces environmental sentiment, along with individualism and revivalism. In later studies, Guth et al. (1995) also found that people who attend church regularly are less pro-environmental than those who attend less frequently, while Boyd (1999) noted that fundamentalists participate less often in environment-oriented actions and held a less serious view of environmental issues.

While some researchers found a negative correlation between Christianity and the environment (e.g., Hand and Van Liere, 1984; Greeley, 1993), others reported results that did not confirm or were in direct opposition to White's hypothesis. For instance, Djupe and Hunt (2009) found that religious beliefs have little to no effect on environmental views; in fact, results suggested that most congregational members held proenvironmental attitudes. Other researchers found no difference in beliefs about the seriousness of environmental problems between conservative Protestants, biblical inerrantists, and other respondents. They also found that increased church attendance results in an increase of private environmental actions and a higher stewardship orientation (Sherkat and Ellison, 2007). When measuring environmental attitudes, Nooney et al. (2003) found that members of liberal religious denominations scored higher than those who did not identify with any religious affiliation and that there were no

differences between religious fundamentalists, moderates, and those with no religious affiliation.

Researchers have also studied environmental attitudes and behaviors among different denominations. Catholics, mainline Protestants, and more liberal denominations had greater environmental concern than evangelicals and other more conservative denominations. Because of their more gracious image of God, Greeley (1993) argued, Catholics are more concerned about the environment than Protestants. Mainline Protestants and Catholics are often described as the greenest denominations, while Evangelical Protestants are the least "green" Christians (Guth et al., 1993; Guth et al., 1995). For example, Hand and Van Liere (1984) found that Episcopalians and Lutherans are more concerned about the environment than Baptists and Mormons. Aside from denominational differences, political orientation has been a fairly consistent determinant of whether or not one is "pro-environment".

According to Sherkat and Ellison (2007), participating in church and being a member of a conservative denomination begets political conservatism. Research has consistently shown that congregant democrats and liberals have higher levels of environmental concern when compared to their republican and conservative counterparts (Guth et al., 1993; Guth et al., 1995; Boyd 1999). In addition, dominion over nature was emphasized more in conservative denominations (whereas stewardship was the focus of more liberal denominations) and congregational members that held conservative theological views were more likely to have lower environmental beliefs, behaviors, and be less willing to invest in the environment (Hand and Van Liere, 1984; Tarakeshwar et al., 2001). In addition to potential relationships between politics and environmentalism,

there are other potentially important aspects to consider. Many in the religious community have embraced environmentalism because they feel religion has a place in addressing associated environmental problems – particularly so because they view these problems as moral issues and believe as such that addressing them is an appropriate responsibility (Rockefeller and Elder, 1992; Carroll et al., 1997; Dunlap, 2004).

In accordance with such thinking, some have studied the role of religious and secular environmental partnerships to address things such as environmental problems and community wellbeing more generally. Hale and Bennett (2003) studied the extent to which clergy and laity would welcome partnerships with secular health-providers to reduce chronic-illness, while Hitzhusen (2006) explored common ground between religion and environmental education using an environmental citizen behavior framework. At the same time, Minnow (2003) examined the positive and negative implications of religious and secular partnerships in terms of blurring the lines between formal and informal governance. On the other hand, Shinn and Polsky (2002) and Rast (2006) documented the capacity of inter-faith partnerships and their ability to achieve specific environmental objectives.

Leadership within the church can also be a key predictor of the extent to which environmentalism is integrated into religious life; churches with clergy and other church leaders who are environmentally active and frequently speak about environmental issues are more likely to have an environmentally committed congregation (Holland and Carter, 2005; Djupe and Hunt, 2009). Also, identity with the church and social influence from the congregation as a whole may influence congregant attitudes toward environmental issues. For example, congregations that are environmentally active or have "green"

themed Sunday School classes can increase pro-environmental attitudes among churchgoers, even if they do not participate in the program (Djupe and Hunt, 2009).

Methods

Ten Christian churches in Maryland, Tennessee, and Virginia with environmental programs participated. Respondent-driven surveys were administered to congregants using convenience, or chain-referral sampling. These techniques can be effective and efficient in gathering data on hidden populations, or those populations that are difficult to sample in a random sense because of sensitive behavior (e.g., drug use) or when distinguishing study populations from the general population is difficult (e.g., church member) (Salganik and Heckathorn, 2004).

Churches were first identified using the National Religious Partnership for the Environment's (NRPE) website which profiled environmentally active partner churches (found at: www.nrpe.org). Additional churches were identified as needed using a snowball chain-referral technique (Coleman, 1958). Snowball sampling uses contact information provided by initial study participants to identify additional participants (Babbie, 2007). The method uses networks rather than a sampling frame to identify and recruit study participants and has been show to be effective in gathering data on hidden populations (Salganik and Heckathorn, 2004). As a result, findings from chain-referral research are, as in this study, typically not generalized to the larger population, but are widely considered useful.

Willing churches were asked if they were aware of other churches with environmental programs that might be interested in participating. If so, contact information was obtained and church leaders asked if church congregants could be studied. Since it was not immediately obvious from the NRPE list which churches in the study region had environmental programs, the snowball technique helped gain access to churches that may have been more difficult to reach otherwise. Denominations included Catholic, Episcopalian, Lutheran, Methodist, and Presbyterian.

Survey questions were designed using a literature review, as well as 20 focusoriented phone interviews with faith-based environmental action leaders in and around
the case study area. Action leaders were also identified using chain-referral and were
either the pastor or priest of a church with an environmental program, leader of a church
environmental group, or leader of a standalone faith-based environmental organization
not associated with a particular church. During these 20 phone interviews, action leaders
were asked questions about faith-based and secular environmental partnerships, role of
church leadership, influence of church identity, as well as their thoughts on effective
programming and participation.

An initial draft of the survey instrument was reviewed by members of a Creation Care group in Southwestern Virginia. Following revisions, the instrument was piloted with 39 congregants at a church in the study region and subsequently evaluated for internal consistency. The final survey instrument measured church attendance, political orientation, attitudes toward internal and external partnerships, importance of church pastors/priests in program success, the role of church in shaping personal identity, religiosity, environmental commitment, and participation in church environmental programs (Appendix B).

Most variables were measured using 7-point Likert indicators. Church attendance was measured using 5 ordinal categories. The identity scale measures the extent to which a congregational member thinks their church membership contributes to their personal identity. The religiosity scale measures how religious congregational members consider themselves. Environmental commitment, which assesses how interconnected people feel with the environment, was measured using indicators published in Davis et al. (2009). Additional survey questions measured attitudes about the influence of pastors/priests on church program success and a self-assessment of how frequently congregational members have participated in environmental programs at their church. Political orientation was measured using a single 7-point liberal-moderate-conservative indicator.

The survey used single 7-point desirability indicators to collect data on how preferable different learning methods would be for church programs (hands-on, preached in a sermon, studying scripture, expert guest speakers). Views on environmental problems were also measured with single 7-point indicators (economic, moral, social justice, religious, political). Similarly, political perceptions of one's church environmental program and the extent to which pastors/priests support matters for church program success were measured with a single 7-point indicator. The measurement of attitudes about internal and external environmental partnerships also used a 7-point indicator. When indices were created, individual indicator scores were summed and averaged to construct summated rating scores for each variable. Summated rating scales are useful when measuring latent constructs such as attitudes because multiple indicators can more adequately reflect the underlying variable (Spector, 1992).

Surveys were administered during church activities when groups of congregational members could be conveniently sampled. Scale indicators used to generate summated ratings were determined using Principal Components Analysis (PCA) and inter-item reliability tested using Cronbach's α. In the PCA, data were rotated using Varimax with Kaiser Normalization and Eigenvalue of 1. Indicators that did not coherently group in the PCA were removed. Cronbach's α was used to measure the reliability, or inter-item correlation, of PCA groupings. Results of the analysis are included in Table 1.

Table 1. Likert-type indicator items for summated latent constructs and results of the varimax principle components factor analysis. The orthogonal rotation grouped items into six components and explained 75% of the variance.

			Pr				
Construct (α)	Survey Item	1	2	3	4	5	6
	I participate in church activities because I get to spend time with people who share similar	.144	040	227	.140	.725	.026
Identity (.74)	religious beliefs Being active in the church is important to who I am as a person	.097	- 011	.256	.128	.816	004
	I feel like "part of the family" at church	.050	.143	.305	.105	.773	030
	I am interested in strengthening my connection to the environment in the future	.717	.177	.283	018	.028	056
	When I make plans for myself, I take into account how my decisions may affect the env	.776	.093	.124	101	.143	058
Environmental	Feeling a connection with the environment is important to me	.866	.184	.134	072	.068	045
Commitment (.92)	I believe that the well-being of the natural environment can affect my own well-being	.742	.092	.217	173	.041	.120
Commune (:52)	I feel very attached to the natural environment	.861	.111	.078	025	.019	002
	I feel committed to keeping the best interests of the environment in mind	.840	.127	.156	032	.085	.025
	I never doubt existence of God	048	.033	076	.687	.251	005
Religiosity (.75)	The Bible is the actual word of God and should be taken literally, word for word	158	011	022	.855	026	.018
Kenglosity (.73)	Scriptures are the true word of God not only in matters of faith, but in all other matters as well	078	059	.015	.854	.132	.164
	My church should partner with other churches to address environmental issues	.363	.311	.814	046	.112	.026
Internal Partnerships (.96)	Different denominations (e.g., Baptist, Methodist, Catholic, etc) should work together in matters related to the environment	.313	.305	.840	054	.144	004
	Regardless of religion (e.g., Christian, Jewish, Muslim), congregations should join forces to address environmental issues	.378	.338	.791	033	.090	030
	Environmental partnerships between churches and universities are (a bad/good idea)	.275	.766	.282	097	.076	.003
	Environmental partnerships between churches and universities are (a bad/good idea)	.080	.832	.135	.064	011	.067
External Partnerships	Environmental partnerships between churches and businesses are (a bad/good idea)	.084	.839	.120	.021	.079	.094
(.88)	Environmental partnerships between churches and nonprofit environmental groups are (a bad/good idea)	.394	.729	.304	094	.057	.023
	I am more likely to attend a church program when my pastor or priest is enthusiastic about it	122	.103	129	.019	.179	.828
Leadership (.67)	Collaboration with the pastor or priest is important for a church program to be successful	.096	.052	.118	.134	.037	.852

Stepwise multiple linear regression was used to model variables that were hypothesized to affect program participation. Identity, religiosity, internal partnerships, external partnerships, leadership, environmental commitment, and political orientation

variables were tested. One component model was used to identify statistical significance and assess overall change in R^2 . Final output includes β coefficients, t-values, F values, changes in adjusted R^2 , final adjusted R^2 , and model significance. Collinearity was evaluated for all stepwise models and found to be within an acceptable range.

Next, a one-way means ANOVA was used to test for differences between preferred methods of learning about stewardship in the church for the entire set of respondents (hands-on, sermon, scripture, or expert guest speaker). A one-way means ANOVA was also used to test for differences between congregant views of environmental problems for the entire set of respondents (as a religious, moral, political, social justice, or economic issue). The ANOVA tests were replicated within respondent subset groups (liberals, conservatives, less environmentally committed congregants, and more environmentally committed congregants) to probe more specifically for differences among congregants with varying political orientation and environmental commitment.

Liberals were grouped to include congregants who responded with a 1, 2, or 3 on the political orientation question on the survey, and conservatives were grouped to include those who responded with a 5, 6, or 7. Neutral respondents, score of 4 (moderate), were not placed in either subgroup. Environmental commitment sub-groups were determined by classifying respondents as less or more environmentally committed using the 50th percentile score as the demarcation. Tamhane post hoc tests were used in most cases due to inequality of variance between factored data; if factors had equal variance, Tukey HSD post hoc tests were used.

Results

A total of 243 surveys were completed by congregational members. Summary descriptives are reported in Table 2. The environmental commitment mean, on average, is noticeably higher than the neutral score (4), and the data are normally distributed within the range of responses (skewness and kutosis \leq +/-1.0). Mean identity is also noticeably high, but the data are slightly negatively skewed and tightly grouped. Participation is only slightly higher and political conservatism slightly lower than the neutral score and both are normally distributed. Somewhat differently, church attendance is higher than the center score and slightly skewed, meaning that the respondents, for the most part, go to church fairly frequently.

Preferred methods for learning, including hands-on, by studying scripture, preached through sermon, and by an expert guess speaker had means that were higher than the neutral score (4). The same is true for responses about whether environmental problems were perceived as religious, moral, social justice, political, or economic issues, as well as whether or not respondents felt that the support of their pastor or priest is important for a program's success. Perceiving that one's church environmental program was too political had a mean lower than the neutral score (4).

Table 2. Descriptive results from respondent-driven surveys of 243 congregational members of 10 churches in Maryland, Tennessee, and Virginia. Means, standard error, skewness, kurtosis, and frequency of distribution are reported. Church attendance was measured on a scale of 1 to 5. All other variables were measured using a scale of 1 to 7.

Variable (scale)	N	Mean	SE	Skewness	Kurtosis
Environmental Commitment (1-7)	240	5.93	0.06	589	436
Religiosity (1-7)	225	4.15	0.11	052	730
Identity with ones' church (1-7)	240	5.91	0.06	-1.22	2.12
Internal Environmental Partnerships /Partnering with other Faith Groups (1-7)	241	6.20	0.07	-1.44	2.28
External Environmental Partnerships/Partnering with Secular Groups (1-7)	238	5.48	0.08	-0.43	-0.667
Leadership of the Church Important for a Program to be Successful (1-7)	240	5.16	0.08	452	.147
Participation in Church Environmental Activities (1-7)	233	4.46	0.11	.037	809
Political Orientation Ranging from Liberal to Conservative (1-7)	231	3.58	0.12	.194	967
Church Attendance (1-5)	240	3.84	0.06	-1.11	.664
Preferred Learning Method: Hands-On Learning (1-7)	242	5.83	0.07	887	1.074
Preferred Learning Method: Studying Scripture (1-7)	240	5.43	0.08	575	.063
Preferred Learning Method: Preached through Sermon (1-7)	241	5.22	0.09	580	203
Preferred Learning Method: Expert Guest Speaker (1-7)	241	5.81	0.07	992	1.141
View: Environmental Problems are a Religious Issue (1-7)	237	5.06	0.11	589	567
View: Environmental Problems are a Moral Issue (1-7)	241	5.98	0.07	-1.10	1.138
View: Environmental Problems are a Social Justice Issue (1-7)	239	5.94	0.08	-1.02	.542
View: Environmental Problems are an Economic Issue (1-7)	241	5.94	0.07	857	173
View: Environmental Problems are a Political Issue (1-7)	240	5.27	0.11	796	304

Environmental commitment was significant in the first stepwise modeling procedure. In the final model, environmental commitment and political orientation were significant (Table 3). Environmental commitment was a direct predictor of environmental commitment, whereas a conservative political orientation was inverse. About 29% of the variance in program participation is explained by environmental commitment and political orientation measures.

Table 3. Stepwise multiple regression testing the effect of 8 independent variables on the program participation dependent. Environmental commitment and political orientation are significant in the final model.

	Stepwise Models		
	First Step	Second Step	
	Beta	Beta	
Indonordant Variables	[Sig.]	[Sig.]	
Independent Variables	(t-value)	(t-value)	
	.517*	.460*	
Environmental Commitment	[.000.]	[.000.]	
	(8.635)	(7.369)	
	175	175*	
Political Conservatism	[.005]	[.005]	
	(-2.812)	(-2.812)	
	.048	.069	
Identity	[.439]	[.260]	
	First Step Second St Beta Beta [Sig.] [Sig.] (t-value) (t-value) .517* .460* [.000] [.000] (8.635) (7.369 175 175* [.005] [.005] (-2.812) (-2.812) .048 .069 [.439] [.260] (.775) (1.130) 056 .041 [.361] [.562] (915) (.581) 052 058 [.428] [.370] (794) (898 .110 .083 [.130] [.254] (1.519) (1.143 042 017 [.487] [.772] (-696) (290 .012 .034 [.840] [.568] (.202) (.572) 74.557 42.490 .000 .000	(1.130)	
	056	.041	
Religiosity	[.361]	[.562]	
	(915)	(.581)	
	052	058	
External Environmental Partnerships	[.428]	[.370]	
		(898)	
Internal Environmental Partnerships		[.254]	
		(1.143)	
Leadership			
01 1 1 1 1			
Church Attendance			
F			
Model Significance			
Adjusted R ²	.264	.000	
Adjusted K	.204	.288	

^{*} Significant at $P \le 0.05$

One-way means ANOVA tests for the entire set of respondents indicate that preferences for learning through scripture and sermon were significantly lower than hands-on and expert guest speakers (Table 4). Additionally, the level at which congregants view environmental problems as a religious and political issue were found to be, among all respondents, statistically lower than the levels at which environmental problems were viewed as a social justice, economic, and moral issue (Table 5). ANOVA tests by political subset showed that mean preferences for hands-on and guest speaker methods were significantly higher than sermon and scripture for liberals; however,

conservatives preferred scriptural methods, in addition to hands-on and guest speaker methods, at a significantly higher rate than delivery through a sermon (Table 6).

In terms of environmental problems, liberals viewed environmental problems as a moral, social justice, and economic issue more so than a religious issue, but viewed problems as economic with the same strength that they considered it political (Table 7). Conservatives viewed environmental problems as moral, social justice, and economic issues more than they viewed them as a religious issue, but considered problems as a matter of social justice with the same strength they viewed it as political. ANOVA tests within environmental commitment subsets showed that less committed congregants were most interested in learning about stewardship through expert guest speakers, hands-on activities, and scripture (Table 8). More committed congregants, on the other hand, were most interested in expert guest speakers and hands-on learning. Regarding environmental problems, less committed congregants viewed them more as moral, social justice, and economic rather than religious, but viewed them as political with the same strength they considered them moral and social justice issues (Table 9). More committed congregants viewed environmental problems more as moral, social justice, and economic rather than political and religious.

Table 4- Preferred learning methods for church congregants and ANOVA results with Tamhane post hoc tests.

			_	
Variable (Method)	N	Mean	F	Sig.
Sermon	241	5.22ª	14.516	.000
Scripture	240	5.43 ^a		
Hands-on	242	5.81 ^b		
Expert guest speaker	241	5.83 ^b		

Note: Means with the same letter are not significantly different $(p \le .05)$

Table 5- Views of environmental problems for church congregants and ANOVA results with Tamhane post hoc tests

with runniane post	noc tests.			
Variable (Environmental View)	N	Mean	F	Sig.
Religious	237	5.06 ^a	22.584	.000
Political	240	5.27 ^a		
Moral	241	5.98 ^b		
Social Justice	239	5.94 ^b		
Economic	241	5.94 ^b		

Note: Means with the same letter are not significantly different $(p \le .05)$

Table 6- Preferred learning methods for church congregants by political subset and ANOVA results using Tamhane post hoc tests.

	- 0			
Liberals	N	Mean	F	Sig
Sermon	106	5.66 ^a	9.248	.000
Scripture	107	5.56 ^a		
Hands-on	107	6.10^{b}		
Expert guest speaker	107	6.21 ^b		
Conservatives*	N	Mean	F	Sig
Sermon	67	4.66 ^a	5.712	.001
Scripture	67	5.21 ^b		
Hands-on	67	5.40 ^b		
Expert guest speaker	67	5.43 ^b		

Note: Means with the same letter are not significantly different $(p \le .05)$

^{*}Tukey HSD post hoc was used instead of Tamhane due to equal variance for this subgroup

Table 7- Church congregant views of environmental problems by political subset and ANOVA results using Tamhane post hoc tests.

Liberals	N	Mean	F	Sig
Religious	107	5.64 ^a	9.248	.000
Political	107	5.68 ^{a,b}		
Moral	107	6.37°		
Social Justice	107	6.43°		
Economic	107	6.19 ^{b,c}		
Conservatives	N	Mean	F	Sig
Religious	64	4.14 ^a	5.712	.001
Political	65	4.62 ^{a,b}		
Moral	67	5.46°		
Social Justice	65	5.20 ^{b,c}		
Economic	66	5.61°		

Note: Means with the same letter are not significantly different $(p \le .05)$

Table 8- Preferred learning methods for church congregants by environmental commitment subset and ANOVA results using Tamhane post hoc tests.

Less Committed	N	Mean	F	Sig
Sermon	108	4.48 ^a	11.482	.000
Scripture	107	4.91 ^b		
Hands-on	107	5.26 ^b		
Expert guest speaker	108	5.24 ^b		
More Committed	N	Mean	F	Sig
Sermon	130	5.83 ^a	6.992	.000
Scripture	131	5.85 ^a		
Hands-on	131	6.30^{b}		
Expert guest speaker	131	6.26 ^b		

Note: Means with the same letter are not significantly different $(p \le .05)$

Table 9- Church congregant environmental views by environmental commitment subset and ANOVA results using Tamhane post hoc tests.

Less Committed	N	Mean	F	Sig
Religious	105	4.34 ^a	14.211	.000
Political	107	4.89 ^{a,b}		
Moral	108	5.34 ^{b,c}		
Social Justice	107	5.39 ^{b,c}		
Economic	108	5.52°		
More Committed	N	Mean	F	Sig
Religious	130	5.62ª	13.845	.000
Political	130	5.57 ^a		
Moral	130	6.50^{b}		
Social Justice	129	6.40^{b}		
Economic	130	6.27 ^b		

Note: Means with the same letter are not significantly different $(p \le .05)$

Discussion

Responses encompassed a wide range of responses and reflected diversity relative to the measurements among congregants. Environmental commitment and political conservatism were found to be significant predictors of program participation.

Conversely, identity, pastor/priest influence, religiosity, attitudes toward internal/external environmental partnerships, and church attendance were not significant predictors of program participation.

Some have argued that favorable environmental attitudes can increase based on the extent to which a congregant derives personal identity from their church where environmental programs exist and church leaders have an influence on church program success (Holland and Carter, 2005; Djupe and Hunt, 2009). Others have contended that religiosity and church attendance are often inversely related to environmental behavior

(e.g., Hand and Van Liere, 1984; Tarakeshwar et al., 2001; Nooney et al. 2003). Results suggest that perhaps more important in the case of congregants in this study are environmental commitment and political orientation.

It stands to reason that environmental commitment and program participation would normally be closely linked. Those congregants who already have proenvironmental attitudes and behaviors would likely participate in stewardship programs since these activities are well-aligned with their existing interests and beliefs. It may be beneficial to promote participation among those less environmentally committed congregants in order to maximize reach and avoid simply 'preaching to the choir'. To do this, it may be helpful for program leaders to market programs and activities with this particular audience in mind and doing so would likely mean relating programs more specifically to religious faith because these congregants may not place a high priority on environmental actions for the sake of the environment.

Key to consider would be political conservatism, which has been shown to directly relate to lower levels of environmental concern among congregants and, perhaps more importantly, inhibit environmental action (Hand and Van Liere, 1984; Guth et al., 1993; Guth et al., 1995; Boyd, 1999; Tarakeshwar et al., 2001). Seeking ways to override political stigmas associated with environmentalism as well as working to de-polarize issues at the church-level may help to galvanize a politically diverse group of people and point them toward environmental action. Accounting for differences between congregants who may be less likely to participate (i.e., politically conservative members and those with a lower level of environmental commitment) and those who participate more (i.e.,

liberal members and those with a higher level of environmental commitment) may lead to the formation of effective strategies for increasing program participation.

Results showed that among liberals and those more environmentally committed, the most preferred methods for learning about stewardship are through the use of expert guest speakers and action-oriented, hands-on activities. Conservatives and those with lower levels of environmental commitment also prefer hands-on and expert guest speakers; however, these groups also equally prefer scripture. Therefore, utilizing stewardship examples from within the scripture may help engage congregants who may not typically participate, including those who may avoid participation due to political perceptions. This could result in increased program participation and may also help to diversify church environmental groups by including congregants that vary across the political spectrum. By doing this, members may be able to put aside differing views and unite through faith perspectives to address environmental stewardship. Using scripture to guide spiritual teachings is a unique aspect of church life which could prove to be beneficial when reaching out to congregants with a faith-based stewardship message.

Since conservatives and those with lower levels of environmental commitment agree with their liberal and environmentally committed counterparts that hands-on activities and expert guest speakers are preferred, these programming methods should also be utilized. Action oriented approaches to stewardship, such as tree plantings, river clean ups, recycling and composting at church events, may be one of the best ways to engage congregants in church environmental activities. In addition, guest speakers capable of covering topics that are broadly interesting and relevant, such as energy efficiency or community-specific issues, may also prove successful in engaging more

members. It may be beneficial to include a scripturally-based environmental message to market or in concert with these hands-on and expert guest speaker events in order to better reach those participants who prefer scriptural components as part of stewardship programs.

In terms of how congregants view environmental issues, results indicated that all groups most strongly agreed that environmental issues were moral, social justice, and economic issues. Church-level initiatives could reap rewards in terms of congregant appeal and participation by couching environmental issues along these lines.

Characterizing environmental problems as pressing moral, social justice, or economic matters could help congregants relate and make commitments that are consistent with their values and belief system. Congregants who have a lower level of environmental commitment also view environmental issues as being a political issue, but to a lesser extent than as an economic issue, and to the same extent as moral and social justice. It may be that helping to de-polarize environmental programs at churches could lead to these groups seeing associated environmental efforts more as a moral or social justice cause than one rooted in politics, which may in turn, increase participation.

Seeing environmental problems as moral and social justice issues may mean that congregants consider them to be more a matter of ethics and equity and find germane inspiration in tackling the impacts of environmental problems on humans. Some have argued that the church has a responsibility to address moral and social justice issues stemming from environmental concerns (Rockefeller and Elder, 1992; Carroll et al., 1997; Dunlap, 2004). On the other hand, the observed economic associations with environmental problems suggest that some congregants may feel that these issues could

be remedied if money is spent to fix environmental problems, or, conversely, money can be made through certain measures to improve the environment. Pointing out the moral, justice, and economic implications of environmental issues may resonate best with both conservative and liberal congregants and inspire them to participate at greater rates.

Future research could include measuring and testing similar variables across multiple religions. Differences could be examined in terms of program preferences and questions asked that more specifically gauge the environmental issues congregants are interested in and how they would like to take action to address these issues. Barriers to participation could also be explored more thoroughly in order to further develop new ways to increase participation. Additionally, churches that do not have an environmental program in place could be examined and compared to those that do.

Conclusion

Few social transformations occur in the U.S. without religion and faith playing significant roles. Arguably, mounting environmental crises present need for a social transformation. Recently, many major religious institutions have moved aggressively to address these environmental concerns. Most every mainline denomination now has strong policy positions for the denomination and abundant program materials for laity. In this study, we examined congregant involvement in church sponsored environmental programs and congregant preferences for program delivery and views on environmental issues with the goal of discussing program design to improve capacity. Among our sample, we found that voluntary participation in church-based environmental activities depends mostly on a congregant's political orientation and their level of environmental

commitment. Attributes such as clergy advocacy, identification with church, attitudes toward internal and external environmental partnerships, and church attendance did not significantly predict program participation.

Since results point to environmental commitment as a significant predictor of participation, we further examined congregants' preferred methods of learning and environmental views to better understand how programs may be designed to increase participation. We found that more committed congregants preferred to learn through hands-on activities and expert guest speakers, whereas less committed congregants preferred hands-on, expert guest speaker, and scripture-based learning approaches. We also found that both less and more environmentally committed congregants primarily viewed environmental problems as moral, social justice, and economic issues.

Because political orientation is such a divisive issue in contemporary society, and because we found it to be a significant predictor of participation in church-based environmental programs, we also examined the impacts of political orientation on a congregant's preference for different program delivery methods and views on environmental issues. For program preferences, we found that liberals preferred to learn through hands-on activities and expert guest speakers, whereas conservatives preferred these two methods, but also preferred to learn through scripture. We also found that both liberals and conservatives primarily viewed environmental issues as moral, social justice, and economic issues.

Church-level programs have the potential to bring environmental stewardship messages to new and increasingly large audiences, particularly if they can overcome participation barriers such as political stigma. Such participation in church-level

programs may have far-reaching implications if commitments are taken beyond the time spent in church and out into society. The collective action toward mitigating environmental problems could be dramatically improved if conveyed environmental attitudes and behaviors are meaningfully transferred to congregants' day to day lives.

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Chapter Five - Conclusion

Religion and faith play an important role in many social movements in the U.S. Some feel that a social movement may be necessary to properly address growing environment concerns. Religious groups have been increasingly involved in addressing these concerns. This research focused on participation in environmental programs at churches and synagogues, as well as potential strategies for increasing program reach and efficacy. A mixed-method approach was used that included both qualitative and quantitative research. Twenty religious action leaders were interviewed to gain insight about the barriers to and opportunities for congregant participation in church or synagogue environmental programs, as well as their thoughts and attitudes toward partnerships, identity issues, program efficacy, and preferred methods for program design and implementation. For the quantitative portion of the study, members from 10 churches in the Mid-Atlantic and Mid-South regions were surveyed to measure congregant participation in church-level environmental programs and their perspectives on inter-faith and secular environmental partnerships, the role church plays in their personal identity, the influence of church leaders on program performance, preferred learning methods, views on environmental problems, church attendance, and political orientation.

Previous research has suggested that people engage in voluntary behavior if it contributes positively to their identity. The influence of identity was found to be important in the qualitative study, but less so in the quantitative study. Leaders interviewed suggested that identifying strongly with one's church or synagogue may make congregants more likely to participate in church-hosted programs. They stressed fellowship and relationships as key benefits and appeals of participating in environmental

activities. Contrary to findings from the interviews, results from the church survey did not show that one's identity led to increased participation. On the other hand, variables such as political conservatism and environmental commitment were found to be more influential.

Since political conservatism has been frequently found to be negatively correlated with environmental concern, this issue was addressed in the interviews and the surveys. Politics was cited as a major barrier for program participation by leaders. According to leaders, some conservative members may be hesitant to participate in a Creation Care program. To overcome this barrier, leaders suggested addressing environmental issues through a faith or moral lens. Results from congregational surveys supported these findings. Political conservatism was found to be a negative predictor of program participation.

Support from the church or synagogue leadership was cited by most of the interviewed leaders as essential to program success; therefore, encouraging pastors, priests, rabbis, ministers, and other leaders to support church/synagogue environmental efforts may serve to benefit these programs. Several leaders felt that if the clergy showed support for the church or synagogue environmental program, then congregants would be more likely to attend activities. In the congregational surveys, leadership support was not found to be a significant predictor of environmental commitment.

Since faith and secular partnerships that address environmental issues were advocated strongly by interviewed leaders, it may be beneficial to promote such partnerships when possible. Several leaders looked favorably on all partnerships, while others were a little more cautious and recommended that partnerships with radical or

highly political secular groups be avoided. Leaders advised that secular groups seeking partnerships be cognizant of faith groups' worldviews and priorities, and avoid pushing agendas not related to the shared environmental goal. Church survey results showed that congregant attitudes toward and acceptance of partnerships did not predict program participation.

Leaders suggested ways to improve environmental program efficacy. They recommended a multi-prong approach that included hands-on, scripturally based, and sermon based methods. Leaders also contended that integrating a stewardship ethic in all of the church or synagogue activities, buildings, administration, and operations would be more effective than simply having infrequent, standalone environmentally themed events. Congregant surveys showed that church members most preferred to learn about stewardship through either hands-on activities or through an expert guest speaker, although congregants who were politically conservative or less environmentally committed also preferred learning through scripture. Leaders also suggested that congregant interest and participation may be boosted if environmental issues were viewed as religious, moral, or social justice issues. Results from church surveys showed that congregants most strongly viewed environmental issues as a moral, social justice, and economic issue. Using approaches such as these may help to recruit new program participants by appealing to them in a way that may be more personally interesting or relevant to their faith beliefs.

In response to the negative impacts of political conservatism on program participation, it was recommended that church environmental groups be aware of and try to work to reduce any political barriers that may inhibit participation in their programs.

Incorporating expert guest speakers or hands-on activities that have a moral, social justice, or economic approach may help to increase program participation by utilizing existing interests and belief systems. Using the scripture to teach about caring for creation may resonate with an audience that is typically less engaged. Integrating a stewardship ethic into church life may translate into increased environmental attitudes and behaviors outside of the church.

Appendix A: Interview Questions with Action Leaders

- 1. How would you define faith based environmentalism?
 - What role can and should churches/synagogues/faith groups play in the larger environmental movement?
 - How are faith and environmentalism best balanced?
- 2. What do you think are effective ways to reach out to Christians/Jewish in terms of environmentalism?
 - How can churches and synagogues engage more members in environmental programs and activities?
 - What are the opportunities and barriers to doing so?
- 3. How do you feel about secular partnerships to achieve environmental goals?
 - What are the most promising partnerships?
 - How can these partnerships be effective?
 - How should secular groups approach churches?
- 4. Do you think that Christians/Jewish should maintain a separate/unique identity among the mainstream environmental movement?
 - If yes, how can secular groups be accommodating to this separate identity?
- 5. Do you think that church/synagogue members feel a certain loyalty or identity with their church/synagogue that causes them to participate in programs simply because their church/synagogue is the one hosting it?

Appendix B: Church Surveys

Church Survey





Thank you so much for participating in our survey!

This study examines churchgoer's attitudes and thoughts about the environment, partnerships, leadership, and faith identity. The results will be used to help churches design more effective environmental programs, as well as provide information on partnership opportunities.

By participating in this survey, you are consenting to have your input used in this research study. The survey is anonymous, so your responses cannot be traced back to you.

The survey should take approximately 15-20 minutes to complete. Please circle only one answer for each question and be as honest as possible!

Thanks!

Sara Murrill
M.S. Candidate
Forest Resources and Environmental Conservation
Virginia Tech
smurrill@vt.edu

Please circle ONE answer and be as honest as possible

Have you ever participated in any of the activities put on by the Creation Care Committee at your church? Yes No Please describe your level of participation in environmental activities at your church 4 5 2 3 6 7 As Often As Never Sometimes Possible In general, I feel comfortable partnering with other churches to solve problems 4 5 7 3 Strongly Neutral Strongly Disagree Agree In general, I feel comfortable partnering with different denominations (e.g., Baptist, Methodist, Catholic) to solve problems 3 4 5 6 7 Strongly Neutral Strongly Disagree Agree In general, I feel comfortable partnering with other religions (e.g., Christian, Jewish, Muslim) to solve problems 1 2 3 4 5 6 7 Strongly Neutral Strongly Disagree Agree My church should partner with other churches to address environmental issues 3 6 Strongly Neutral Strongly Disagree Agree Different denominations (e.g., Baptist, Methodist, Catholic, etc) should work together in matters related to the environment 4 5 7 1 2 3 6 Strongly Strongly Neutral Disagree Agree

Regardless of religion (e.g., Christian, Jewish, Muslim), congregations should join forces to

4

Neutral

5

6

3

address environmental issues

Strongly

Disagree

7

Strongly

Agree

<u>In general,</u> I th	hink partn	erships betv	veen churches an	d universi	ties are	
1 A Bad Idea	2	3	4 Neither A Good or Bad Idea	5	6	7 A Good Idea
In general, I think	-	-	churches and g			
1 A Bad Idea	2	3	4 Neither A Good or Bad Idea	5	6	7 A Good Idea
In general, I think	k partnersl	hips betweer	churches and b	usinesses a	re	
1 A Bad Idea	2	3	4 Neither A Good or Bad Idea	5	6	7 A Good Idea
In general, I think	k partnersl	hips betweer	churches and n	onprofit en	vironmenta	l groups are
1 A Bad Idea	2	3	4 Neither A Good or Bad Idea	5	6	7 A Good Idea
Environmental pa environmental iss	_					
1 A Bad Idea	2	3	4 Neither A Good or Bad Idea	5	6	7 A Good Idea
Environmental pa	rtnerships	s between ch	urches and gove	rnment are	e	
1 A Bad Idea	2	3	4 Neither A Good or Bad Idea	5	6	7 A Good Idea
Environmental pa	rtnerships	s between ch	urches and busin	nesses are		
1 A Bad Idea	2	3	4 Neither A Good or Bad Idea	5	6	7 A Good Idea
Environmental pa	rtnerships	s between ch	urches and nonp	orofit envir	onmental gr	oups are
1 A Bad Idea	2	3	4 Neither A Good or Bad Idea	5	6	7 A Good Idea
Religion should be						
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

Churches should	only partic	-	-	-		
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
Churches should issues	remain sep	arate from	non-religious g	roups when	addressing	environmental
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
Religion should a environmental or	•		vhen churches j	oartner with	non-religio	ous
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
I participate in cl religious beliefs	hurch activi	ties because	e I get to spend	time with pe	eople who sl	nare similar
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
Being active in th	e church is	important t	to who I am as a	a person		
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
I feel like "part o	f the family	" at church				
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
I would be more	likely to att	end an activ	vity if it was hos	ted by my c	hurch rathe	er than another
group 1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
I am more likely	to attend a	church prog	gram when my	pastor or pr	iest is enthu	siastic about it
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
Collaboration wi	th the pasto	r or priest i	s important for	a church pi	rogram to b	e successful
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

My pastor or priest strongly supports environmental initiatives at my church						
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
I think addressing	environm	ental proble	ems are (<i>circle d</i>	one for each):	
A religious issue						
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
A moral issue						
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
A political issue						
l Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
A social justice iss	ue					
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
An economic issue	;					
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
I am interested in	strengthe	ning my con	nection to the e	nvironment	in the futur	e
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
When I make planenvironment	s for mys	elf, I take int	to account how	my decision	s may affec	t the
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
It seems to me tha	t humans	and the envi	ronment are in	terdepende	nt	
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree

Feeling a connect	ion with th	ne environm	ent is important	to me		
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
I believe that the	well-being	of the natu	ral environment	can affect r	ny own well	-being
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
I feel very attache	ed to the n	atural envir	onment			
1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree
I feel committed t	o keeping	the best into	erests of the envi	ronment in	mind	
1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree
How desirable wo God's Creation?	ould the fo	llowing chui	rch opportunities	be for lear	rning about	how to care for
Hands on learning	g activities	S				
1 Highly Undesirable	2	3	4 Neither Desirable or Undesirable	5	6	7 Highly Desirable
Preached in a seri	mon					
1 Highly Undesirable	2	3	4 Neither Desirable or Undesirable	5	6	7 Highly Desirable
Studying scriptur	e in Bible	study				
1 Highly Undesirable	2	3	4 Neither Desirable or Undesirable	5	6	7 Highly Desirable
Expert guest spea	ker					
1 Highly Undesirable Any other ideas?	2	3	4 Neither Desirable or Undesirable	5	6	7 Highly Desirable
ing office ideas.						

Forest conservation is defined as planned management of a forest to prevent exploitation, destruction, or neglect. Which of the following forest conservation activities would you be interested in participating in through your church? (check all that apply)

H	ands-on activitie	s, such as	s tree plantings or	r removal of	invasive spe	ecies
Se	eeing a speaker to	o discuss	forest conservati	on issues		
A	dvocacy, such as	supporti	ng forest policy l	egislation		
C	hanging consum	ption, i.e.	buying environn	nentally frier	dly product	s for the church
E	ducational field t	rip				
			ouble sided on ch	nurch bulletir	is, etc	
St	udying trees in t	he Bible				
	ther (please spec					
N	one of these inte	rest me				
Tell us a little b	it about yoursel	f				
How often do yo	ou attend churc	h service	es? (Please circle	only one)		
Less than	n once a month	Once a	week			
2-3 times	s a month	2 or me	ore times a week			
Once a n		_ 01 111				
How often do yo	ou go to church	for activ	vities other than	services? (P	lease circle	only one)
•	n once a month			301 V1003V (1 V		o , oe,
2-3 times	s a month	2 or me	ore times a week			
Once a n		Never				
I am a atimalmin	volvod in mov ob	ah?a a				
I am actively in	•		-	_	(7
I Strongly	2	3	4 Neutral	5	6	7 Strangly
Disagree			Neutrai			Strongly Agree
I am aware of n	ny church's env	ironmen	tal programs			
1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree
Religion is an in	nportant part o	f my dail	ly life			
1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree
I never doubt th	ne existence of C	God				
1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

The Bible is the a	ctual word	of God an	d should be taken	literally, v	vord for wo	rd
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
Scriptures are the	true word	l of God no	ot only in matters	of faith, bu	ıt in all othe	r matters as well
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
Are you a male _	or f	emale	?			
What year were y	ou born? _					
How many years	have you b	een a mem	ber of your churc	h?		
If my church beca	ame politic	ally involv	ed in environment	al issues, l	would be	
1	2	3	4	5	6	7
Extremely Unhappy			Neither Happy or Unhappy			Extremely Happy
I think my church	ı's current	environm	ental programs ar	e too politi	ical	
1 Strongly Disagree	2	3	4 Neutral	5	6	7 Strongly Agree
What is your poli	tical orient	ation?				
1 Liberal	2	3	4 Moderate	5	6	7 Conservative
Do you live in an	urban, rur	al, or subu	rban area?			
What do you thin more effective?	k would m	ake enviro	nmental stewards	hip progra	ıms within y	our church
Any additional co	mments?					

Thank you very much for your participation! If you have any questions about this survey or our project, please contact me, Sara Murrill, at smurrill@vt.edu.

Appendix C: IRB Permission Letters



Office of Research Compliance Institutional Review Board 2000 Kraft Drive, Suite 2000 (0497) Blacksburg, Virginia 24061 540/231-4991 Fax 540/231-0959 e-mail moored@vt.edu www.irb.vt.edu

FWA00000572(expires 1/20/2010) IRB# is IRB00000887

DATE: July 22, 2009

MEMORANDUM

TO: John Munsell

Sara Murrill

FROM: David M. Moore

Approval date: 7/22/2009

Continuing Review Due Date:7/7/2010

Expiration Date: 7/21/2010

SUBJECT: IRB Expedited Approval: "Faith Based Environmentalism", IRB # 09-626

This memo is regarding the above-mentioned protocol. The proposed research is eligible for expedited review according to the specifications authorized by 45 CFR 46.110 and 21 CFR 56.110. As Chair of the Virginia Tech Institutional Review Board, I have granted approval to the study for a period of 12 months, effective July 22, 2009.

As an investigator of human subjects, your responsibilities include the following:

- Report promptly proposed changes in previously approved human subject research
 activities to the IRB, including changes to your study forms, procedures and
 investigators, regardless of how minor. The proposed changes must not be initiated
 without IRB review and approval, except where necessary to eliminate apparent
 immediate hazards to the subjects.
- Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.
- Report promptly to the IRB of the study's closing (i.e., data collecting and data analysis complete at Virginia Tech). If the study is to continue past the expiration date (listed above), investigators must submit a request for continuing review prior to the continuing review due date (listed above). It is the researcher's responsibility to obtain re-approval from the IRB before the study's expiration date.
- If re-approval is not obtained (unless the study has been reported to the IRB as closed) prior to the expiration date, all activities involving human subjects and data analysis must cease immediately, except where necessary to eliminate apparent immediate hazards to the subjects.

Important:

If you are conducting **federally funded non-exempt research**, please send the applicable OSP/grant proposal to the IRB office, once available. OSP funds may not be released until the IRB has compared and found consistent the proposal and related IRB application.

cc: File

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An equal opportunity, affirmative action institution



Office of Research Compliance

Institutional Review Board 2000 Kraft Drive, Suite 2000 (0497) Blacksburg, Virginia 24060 540/231-4606 Fax 540/231-0959

e-mail irb@vt.edu Website: www.irb.vt.edu

MEMORANDUM

DATE: June 25, 2010

TO: John Munsell, Sara Murrill

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires June 13, 2011)

PROTOCOL TITLE: Faith Based Environmentalism

IRB NUMBER: 09-626

Effective July 22, 2010, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the continuation request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:

Approved as: Expedited, under 45 CFR 46.110 category(ies) 6, 7

Protocol Approval Date: 7/22/2010 (protocol's initial approval date: 7/22/2009)

Protocol Expiration Date: 7/21/2011 Continuing Review Due Date*: 7/7/2011

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

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