

A STUDY OF THE INTEGRATION OF
ENVIRONMENTAL EDUCATION AND CHRISTIAN EDUCATION: A FIELD
GUIDE TO CHRISTIAN ENVIRONMENTAL EDUCATION

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A Capstone submitted in partial fulfillment of the requirements for the degree of Master
of Arts in Education: Natural Science and Environmental Education

Hamline University

Saint Paul, MN

April 2006

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To a beautiful woman who without her love, support, and encouragement this project would have never been completed. Thanks, Anna, I love you.

ACKNOWLEDGEMENTS

I would like to thank Michael Mack for all of his help in the journey of this project. I would also like to thank Renee Wonser for her help in the structure and format of this work. Thanks to Pastor Kjell Ferris for his help with the theological and spiritual guidance on this project. Also thanks to my family and friends for their support through prayer. Finally thanks to God for His work in my life and for the adventure He has led me on.

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INTRODUCTION

Personal Story

I have been a Christian and been interested in nature for as long as I can remember. Because these values in my life started at the same time, I see the direct correlation between the two. Growing up on a small hobby farm in Northwest Ohio, I had many opportunities to experience the Creation. From the farm animals that I raised, to the ditches that I explored, to the fields I walked, and the country roads where I searched for signs of wildlife; I was aware of being in and a part of the Creation. I was created by the same Creator as the natural world around me. I saw how families lived and died dependent on the land. The land was vital to these people and they were innately connected to it. I felt that same connection. Even though I did not have technical terminology or the biological knowledge to explain it, I knew that the tree in the front yard that I climbed was sharing life with me. I knew that we needed each other to survive even if I did not know the chemical and biological cycles involved.

I also knew, like the farmers around me, that the Creator was the Provider to all things. The Creator was the One who made the natural processes and cycles that would bring the rains to bring forth a fruitful crop. The Provider did this when He first created the earth. He knew that these processes and cycles would make the earth sustainable. Much like the Israelites of the Old Testament, the farmers living near me as a child knew

their God through the land that they worked. Although this is not the only pathway to God or the complete picture of God, the land they worked helped them to have a deeper connection to the God who made and provided the land. The farmers' actions affected the land positively or negatively, and they felt the consequences of those actions deeply. If they cared for the land in the way that they should they would reap a good harvest. If they abused the land, then there would be no harvest as in the "dust bowl" of the thirties. Even before I knew the term "environment" and knew that there was an environmental crisis, I had an understanding of how humans could affect the land.

Many times I would be reminded of the fact that I grew up in the historic Black Swamp, either by natural evidence or by my Boy Scout district name and other human verbalizations of this fact. The land was drained, "conquered" and became fertile farmland, but nevertheless, the land was always in control. It would bring back the swampy waters from time to time to let the farmers know on whom they were dependent. I saw how the land can be changed completely, but also saw that there is amazing resiliency in the land and its creatures. The pockets of forest and borderlands harbored the remaining stronghold of the Creation. Those were my lands; areas that were forgotten by others, but not by little boys. They were the mold by which God shaped me with.

As I grew older, I knew that I had been started on a path that would lead me to where I am today. Those first natural experiences were formative in who I have become and in how my relationship with God is played out. Part of how I know and understand my God is in and through the Creation. I learned concepts in church that played out before me in the natural world. I could see God in a flower, but also find Him in the car

as we passed through the farmlands near my home as I looked for tiny glimpses of beauty. The troubles that I found in childhood were comforted by the animals I experienced and the land that nurtured me. I found solace in those lands and could escape when I needed to. The canoe I was given at the end of high school was the vessel I could use to do just that. This further strengthened the three-way bond between God, His Creation, and me. I now could escape to areas seemingly vacant of others, where I could commune with God. This was my solitude and my relationship with my Creator grew. The river gave me new perspective on the land. It allowed me to be a part of it. I was one with the Creation around me in harmony with it. This harmony began to combine with passion, and more so compassion, as the Blanchard River was heavily polluted. I felt the pain and groaning of the Blanchard River waiting to be set free from the sins of man. This began my land ethic and my fight for the freedom of the Creation. My compassion for the troubles of the earth made the troubles my own. I knew that what was happening to the earth was also happening to me.

This awareness was strengthened when I went to Northland College, a small environmental liberal arts school in northern Wisconsin. It was there that I fully understood just how interconnected everything is on this God-given earth. I understood that we could not live without the provisions this earth gives us; something that God set in place long ago. I also found out just how we were treating the earth, how we are not living in connectedness, but apart from it, how we rape and pillage the earth thinking only of ourselves. As a Biology major at Northland, I was taught in detail about the science behind the environmental crisis facing the nation. The knowledge has now been

experienced through my studies in the master's program at Hamline University. These connections helped me to extend my knowledge of the environmental crisis to a global perspective. There are many issues that the whole earth is facing, many of which find their source in western civilization.

Christian Perspectives on "Environmentalism"

Since primarily and historically the United States is a nation made up of Christians, one can look at how the United States deals with the environment to understand how Christians may view this crisis. Americans seem to be the most lost when it comes to this environmental crisis. It is said in the Bible that “all have fallen short of the glory of God”, but I fear that Americans will not see this in an ecological way, and therefore not turn and repent. Their faith has become more and more disconnected with the land. Christians have come a long way since their Hebrew heritage – I would say a long way on the wrong path. This is the path down which original sin has led people. The act of original sin created all death - from the first killing of an animal to clothe a naked body, to killing to eat a plant or animal. No wonder humans have lost their connection with nature. Nature does not trust people any more; it lashes out or runs in fear. It takes a great effort on their part to gain that trust again. Lynn White’s essay on the Historical Roots of Ecological Crisis has some truth in it. White says Christians are not living the way they should. They have forgotten and neglected the Creation that, used by God, sustains them (1967). What right do I have to say I am better than others in the Creation? God also made the animals and plants for a purpose. They are living a life more in line with God’s purpose for them than I am - than people are. Their limitation to

fulfill their purpose is due to my sin – people’s sin. (Romans 8:20-23) Christians are not the only ones that are the problem as White says, for “all have fallen short”, but we, Christians, ought to know better. Christians do bear part of the burden of guilt for this ecological crisis. (Nash 1991) What Christians need is a more biblical view of nature, for it is not their biblical view of nature, but their unbiblical view that is at fault. (Van Dyke, Mahan, Sheldon, & Brand, 1996) Christians have no excuse for our selfishness here. Humans have lost our sense of kindness and courtesy towards the Creation. People have forgotten the language that they need in order to communicate with the earth and its inhabitants. (Berry 1990) People have forgotten the “least of these.” That is a sin, and people need to repent.

The exciting thing is that people have hope in this repentance. Sin is not the final word, Jesus Christ is. If people look at what the Bible teaches them about the Creation and a person’s responsibilities to it and to God, then people can find hope. Humans can place hope in the repentance, the turning away from sin, turning around to a new path - a path that is Christian stewardship. Christian Education has done a disservice around the biblical responsibility of stewardship. Ecological issues have seldom been a prominent feature in Christian theory and practice. (Nash 1991). Christians have forgotten that the first calling or responsibility given to man was the stewardship of God’s Creation. (Genesis 2:15) It is the first biblical mandate - environmental stewardship. Christians have left this out of their churches, their Christian Camps, their Sunday schools, their Christian private schools, their Christian colleges, and other avenues of Christian Education. They have shortchanged the Christian faith, and in some cases, have made it

wrong to steward the environment. Christians have taught a, “use it while you got it; it is all going to burn,” mentality. Christians look to the Second Coming as an excuse to defile the Creation. Original sin has brought people here. People’s own selfishness and pride has brought them here.

Unfortunately there are many arguments against Creation-care used by some Christians.

1. This world is not my home.
2. Caring for the Creation gets too close to the new age movement
3. We need to avoid anything that looks like political correctness
4. Respecting the Creation gets us too close to pantheism
5. There are too many worldly people out there doing environmental things
6. Caring for Creation will lead to world government
7. Before you know it, we will have to support abortion
8. I do not want to be an extremist or alarmist
9. The term domination means what it says - oppressive domination
10. People are more important than the environment

(DeWitt 1994)

This is where Christians have failed people. They have turned it into politics. All Christians have to do is look at the Bible to know the consequences of turning stewardship or any other biblical responsibility into a political issue. It is a heart issue, not a political one. Christians have a responsibility, and they have found excuses to warrant the right they think they have not to fulfill this responsibility. People do that with

all of their sins. People are justifiers. People rationalize why they are not living the lives they should. By doing this, people can just keep on sinning. They can keep on being lazy and selfish. Americans seem to have this mentality. It is Americans excuse to live the way they do. Americans have not lived a life of stewardship. If they do not change, their children will not have an opportunity to steward the environment because there will be nothing left. Here in the United States, people are currently raising a generation that has no concept of God as the Creator. Man's inventions and technology have become their "Creation." This makes man's technology into a god. The youth in America have begun to worship the god of technology and GNP. People have made nature soulless. (Bouma-Prediger 2001)

Humans are very adaptable. In fact, they are so adaptable that they can adjust to hell on earth and never even know that they are its prisoners - that they are bound to that hell. (Van Dyke et al 1996) People are fortunate that there are other ways for our youth to meet Jesus, but they are missing a large opportunity for understanding God's love and character. There is a large Creation-deficit in the youth of today. The generation before has some answering to do for this. If people do not, then all will be lost. America will have a generation of children who do not know what it is like to see the stars, to walk in the woods and not see garbage, to hear birds sing, to smell the sweet air after a spring rain, to jump into a clean, cold lake, to touch the slimy skin of a frog, and to taste the natural sweetness of fresh wild blackberries. That is a generation that scares me. I feel Creation's groaning, patiently waiting for man's redemption. (Romans 8:20-23) I eagerly wait for it and look for it, too. I have hoped that people can change their ways. This is the

most vital issue that Americans are facing today. It is this time period's Philistines, its Goliath. If people run all is lost. If they stand up and fight, there is hope of redemption.

Christians make up a significant percentage of the population in the United States. Change in behavior of this demographic will be needed in order to turn the corner in the environmental crisis. This will only happen through connection to the environment - to the Creation. With the knowledge and awareness of what is happening, people will change. Again, this is a heart issue. When a person has Jesus in their hearts, he or she knows what the path he or she needs to take. If a person just presses down deep within them, he or she will find and listen to the convictions of the Holy Spirit. These convictions take a person's faith to a deeper level. Christians are in serious need of repentance. The problem is they do not know that we are sinning. People do not know their place, their role. The ones that Christians depend on to teach and admonish them have not pointed this sin out. The Christian faith is all about accountability; it is about awareness. If a person does not know that they are doing something wrong, then they will continue to commit this act. If you do not know you are sinning, if you do not have conviction in your heart, you will continue to sin. Christians have lacked conviction on these issues. Many are unaware of the seriousness of this ecological crisis. Many do not know that they are biblically responsible to do something about it. This is where education has to step up and step into the gap for them. Christianity needs a wake up call, and needs to return to its Hebrew roots.

There is a need for Christian Environmental Education - an education that teaches awareness, appreciation, and responsibility for environmental stewardship. (DeWitt

1994) This education is vital to the Christian faith. Ignorance is the biggest hurdle. Ignorance is always the biggest hurdle. How can a person expect people to change if they have no concept of the need to change? I believe that most Christians know that there is an ecological crisis, but few know what they can do, and more than that, do not know that they are called to do these things. It is time for Christian Education to integrate the environmental values that are found in the Bible into its programming. It is time to follow Jesus' example of Creation-care.

Christian Education and Environmental Education Today

I believe that this fight lies in Christian Education, but Christian Education without Environmental Education is incomplete and inadequate. I believe that because of the critical need for it to address our responsibility of stewardship for all Creation, Christian Education *is* Environmental Education. The environmental crisis people are facing is deeply connected to their Christian experience of sin and redemption. This environmental connection is a critical piece missing from the puzzle of Christian Education programs. I was interested in learning if other people and organizations share my perspective. This interest led me to the development of the product I have created.

There are many Christian camps, home schools, private schools, organizations, churches, etc. that connect people and the Creation (nature), but they leave it at the basic connection. They leave it at the introductory level and do not give the students an idea of their roles and responsibilities. It is vital that people take this a step further because of the state that the Creation is in and the crisis it is now facing that worsens every day. These

organizations and locations are natural places where the integration of Environmental Education with Christian principles can occur. These are the institutions that Christians depend on to teach and admonish the people of the Christian faith. Many of these institutions are lacking in their teachings on stewardship - on the Christian land ethic. These Christian organizations do too little to discourage, and too much to encourage, the exploitation of the Creation. (Bouma-Prediger 2001) That is a big hole in their programming. Christians need to find a way to fill in this hole. It should be the church's desire to have complete ministries, for they serve complete people. This cannot occur with the holes and gaps in their educational programming. People need to understand that they are crucial participants in God's redemptive purposes for all Creation. This is the piece that is missing from the puzzle.

In order to fill this hole Christians are going to have to look at the Word with ecological eyes. The first thing that they are going to need to do is repent and then look to the Word to understand who they need to be, who they are called to be, and how God can help them to become this. God has made a covenant to provide people's needs through Creation, and it is time that people hold up our end of the covenant. People need to serve God by caring for the environment. How can Christians say they love and want to serve God if they defile the Creation that He made for them? This is a Creation that more than once in the Bible, He called "good". The most intense spiritual experiences have always been located in the midst of nature, not apart from it. (Santimire 1998) If people lose this, what will they have? It is true that people study the concepts of Christianity through the Bible, but Creation gives them a vivid picture of what those concepts could be like, even

though it is only a shadow of the heavenly reality. (Van Dyke, Mahan, Sheldon, & Brand, 1996) This is the hope that Christians have to place their trust in.

With the peril of the environment at stake, educators must use any and every opportunity to connect and educate people about the environment. The Christian Church seems to be lacking in environmental education, and this lack filters down to the organizations associated with it. Again, these are missed opportunities for connection. There needs to be less of a separation of church and environment. This change will come with positive, eye-opening experiences through the use of environmental education in the settings mentioned above.

The Need for Study and Development of the Connection between Environmental Education and Christian Education

The Creation stories of the Bible tell people three things. First of all, God created everything. Secondly, He created an ultimate order of things. One can think of this as the processes and cycles that govern this natural earth. Finally, it teaches people that God created humans to be the crown of the Creation. This means that humans have a larger effect on the earth and a larger responsibility in the order of things here. It means that humans are special. People also have the ability to create and destroy. In the very basics of Environmental Education there are these similar themes. This makes the connections between Environmental Education and Christian Education natural.

There are organizations and individuals that are teaching Christian Education using Environmental Education. I wanted to look at how that is occurring. I wanted to study the foundation of these occurrences in the form of vision, mission, program,

curriculum, and resources. I explored these areas as I carried out this research. These places are great places to foster those connections between people and the environment - connections that will lead to better care of the environment.

I investigated these organizations and explored how they make the connection between Environmental Education and Christian Education. By seeing how others are doing this type of integration, I could explore how the rest of the Christian Education field can do this the same. This will show those in the field of Christian Education the ways that these integrations can occur, and why they need to occur. It would be a shame to lose out on these opportunities. Many sources of Christian Education could easily fill in the gaps with environmental education. This type of teaching could lead to better stewardship of the resources that God has given, not only to people today, but also to future generations. I aim to help organizations to take this step in the right direction.

It is a critical time right now, and action must be carried out. This makes this research vital. This research heads into un-chartered territory, for in my preliminary searches, I did not come across any research in this area. This research is also a sensitive topic. It is sensitive because the separation of church and the environment has a foundation in the church not wanting to be for the environment out of the belief that it would be earth-worship. On the other end, the extreme environmentalist would argue that it is because of the Christian Church that the environment is in such peril. Things then get a bit sticky and tricky, with a lot of tiptoeing around. People do not have time to be so sensitive. They need to make some bigger strides. This makes it a very narrow road, but “wide is the path to destruction.” As I stated before, I believe that there is a lack of this

integration of Christian principles and environmental education in our sources for this type of education. There is a definite need for it in the Christian organizations that allow for experiences with the environment and education. This becomes increasingly significant the further humans continue down the path of destruction of the natural environment. Unless people turn back now, it will be too late. .

The Mission

This problem is something humans have been struggling since the fall of man in the Garden. This fall that has brought the Creation with it. The environmental crisis became real for me because I had a name for the destruction and desecration of the Creation. I knew the specifics of what was going on, and what we were doing. I also knew what I needed to do. God's call began to be placed on my heart, and the voice inside me began to cry out. The voice I first discovered in my "wilderness." I began to be "a voice calling in the wilderness," and the passion ensued. My college experiences were the springboard to my ministry here on earth. It was the beginning of my understanding - an understanding that continues to build each day. As more and more of this understanding comes, the more I have the responsibility and calling to spread the word. I am called to be a "disciple to all Creation" (Matthew 28:18-20). There is a need for me to pass this information on to others.

This calling has led me to the process of this research. From this process has come the product. The product of my research is a written documentation of current practices of those in Christian Education who are attempting to integrate Environmental Education into all aspects of their programming. This document is presented as a field guide of

program, curriculum, resources, vision, and mission shared by this group of practitioners. It is a field guide to Christian Environmental Education, which will provide framework and foundation to an integration of Environmental Education and Christian Education to those who use it. It combines all of the voices of who are carrying out this integration for one common purpose. That purpose is to stimulate discussion and communication among the current practitioners, and to provide inspiration and guidance to others in the field of Christian Education who may want to begin integrating Environmental Education into their programming. This research and field guide will be their "road map" to the development of Christian Environmental Education.

This is where the “rubber meets the road” when it comes to a faith in Jesus Christ. Christians are called to walk as He did. If they truly examine themselves, they will realize that is not what they are doing, and they will change their ways. This is the role of the Christian Education organization - to convict and then teach. I believe God wants to use these organizations to share Himself, His whole self, with the whole world. It is time that Christians again teach about the God of Creation, the Creator of heaven and earth. It is time that Christians connect with this part of God again. I believe that the field guide that has been built from this research will be a solid foundation on which to start this reconnection. It will give these Christian Education organizations a tool they can use to allow God to work through them to create awareness, appreciation, and stewardship of His Creation. The process of this project will lead people down a path to find solutions to the problems listed above. It will give people a clear picture of the gaps and the right gap-fillers for the gaps. The following chapters explain more fully how this has happened, and

tell how this project took flight.

CHAPTER 1

REVIEW OF LITERATURE

Introduction

This chapter briefly explores the literature on Environmental Education and the need for education of the public on the environmental crisis. However, the major emphasis is placed on Christian theology, belief, and ethics as they relate to Environmental Education and the environmental crisis. When the environmental movement first started about thirty years ago the church did not do much with it. There was a lack of input from the church all together. As the environmental crisis is becoming more apparent to the general public, the church still has been slow to respond. Unfortunately, this ignoring the problem by the greater Christian church has been noticed by the world, and has caused some to start to point the finger at Christians and the church; accusing them of being the reason the world is still in this crisis. In the beginning of the movement there were a few quiet voices calling for Christians to act for the environment, but now more are joining their call. These voices have begun to get louder and more mainstream in the church. Christians are looking to the church to know their biblical response to this crisis. It is those authors whose work is covered in this chapter.

Environmental Crisis

It is important to understand the components to the environmental crisis before discussing how to remedy this problem using Environmental Education. Therefore this section discusses the many components to the environmental crisis. Each part is a separate problem, but one must understand that each part makes up the whole of the crisis. Each issue is connected to the others, making this crisis extremely complex and convoluted. The parts are described separately below to help one clarify each of the major issues and to explain human's role in causing them. However, they should be not seen as separate, but interconnected as all things are in this world. People do not even know just how interconnected they are.

Global Climate Change

Global climate change is one of the biggest issues that the world is facing today. The earth is warming due to greenhouse gases like CO₂ and methane. These gases in our atmosphere produce green house like effects by trapping the warmth of the earth and sun (National Academy of Science, NAS, 2001). This causes the earth to warm. The warming of the earth causes there to be major changes in the earth's climate; among these changes are the warming ocean waters that can produce more storms and also more severe storms like hurricanes along the coasts. The glacial ice is melting, causing the ocean to increase in water level. This adding water can affect the ocean currents that fuel our weather patterns. Areas that normally have abundant precipitation can have droughts, and areas that are dry can have abundant precipitation that can cause flooding. Weather patterns that have been in place for thousands of years are suddenly changing (NAS, 2001).

Global climate change has had a large effect on certain species living on the earth. One whole ecosystem that is being affected is the Great Barrier Reef. The rising ocean waters are causing the bleaching of coral that is the foundation of this whole ecotone. If this climate change problem is not addressed, then the Great Barrier Reef will be gone in thirty years (World Wildlife Fund, 2006). One species that is familiar to most people is the polar bear. The polar bear is dependent on sea ice forming in order to find its food. Seals reproduce when the sea ice forms. The dens and shelves where the seals are found are the areas where polar bears are able to find and kill them. Without the formation of sea ice, the polar bears have no way of getting to their prey. In summer, the polar bears fast and do not eat. If the bear is unable to find adequate food in the winter he or she will die. Because of the climate change, the sea ice is thinner and is present for less amounts of time each winter in the artic. This results in a shorter period of time for the bears to find food (World Wildlife Fund, 2002).

Global climate change is occurring because of increases in the green house gases present in the atmosphere. These increases are not natural, they are human made by their present dependence on fossil fuels. As people burn fossil fuels in their cars, to heat their homes, and to power their electrical needs, they send large amounts of green house gases like CO₂ into the atmosphere. This causes problems like smoke and smog that then cause the global warming effect (NAS, 2001). If humans are to continue this use of fuel, then they are going to forever change the climate here on earth. It will affect growing seasons, fresh water availability, food production, economics, and habitat of animals and plants. This will cause extinctions, famine, floods, severe storms, and other natural and unnatural

disasters (NAS, 2001). In the United States, people have been slow to accept this as a real problem, and have refused to believe the scientific evidence behind this global problem. Other countries are switching to cleaner forms of fuel and energy sources. Americans need to follow suit.

Extinction of Species

The current rate of extinction is between 1,000 and 10,000 times greater than it should naturally be (Science Daily, 2002). The range is due to the fact that it is very hard to calculate the rate because scientists do not have every species classified, and because it is hard to keep track of what the earth is losing on a daily basis. This rate is even more alarming than the large extinctions of long ago. Often the efforts to save these species are too little too late as scientists are overwhelmed by the species in peril. One of the greatest threats to species today is the spread of invasive species. Invasive or exotic species are ones that do not naturally occur where they have been introduced. They can wreak havoc because there are none of their biological controls present in this new environment. They then can out-compete the native flora and fauna, taking over an area. Many of these invasive have come to new places due to human influence. Some were brought with humans on purpose, while others have hitched their way unbeknownst to their transporters (Science Daily, 2002).

Other species have been driven to extinction by over-harvesting, habitat loss, pollution, and misunderstanding. A loss of one species often causes the extinction of other species that are connected in some way to the original creature (Science Daily, 2002). This can cause a devastating chain reaction of extinction. People know not what

effect this will have on the greater environment, and on humans. Many of those lost species could be beneficial to humans, or be connected to one that is. Ecological biodiversity is something that keeps this environment healthy and strong. If the diversity is lessened due to extinctions, whether they be localized or a whole population, there is no telling what could happen to the greater environment (Science Daily, 2002). Science has taught humans know very little of the interconnectedness of the ecology of the environment. It is best to not to change what has worked for thousands of years (Olson, 2005).

Global Toxification: Poisoning of all Life

Ever since the industrial revolution, man has begun an assault on the earth. As soon as chemicals came on the scene, the plants and animals have suffered. There is now nowhere on this earth where there is no contamination of land, air, and water (Carson, 1962). These contaminants are by no means "nice" chemicals. Most of them are dangerous and lethal. Most of them have no purpose; but are just the byproducts of production. Many of these chemicals can not be destroyed, and they cause irrevocable damage. Many of the "useful" chemicals like pesticides cause more harm than good (Carson, 1962). DDT is one example. Used as an overall pesticide, it made its way into fish, then into eagles. Eagles began to produce weak egg shells causing them to have little success in reproduction. Fortunately the United States has stopped the use of DDT to help our national bird. The eagles have come back strong. Unfortunately, the United States has shipped DDT to other countries to use for the produce Americans buy, inflicting

unresearched harm on their environments (Carson, 1962)

Since the writing of Silent Spring there is no human being that is not subject to dangerous chemicals. There is not a human born who does not already contain harmful contaminants in their body. Many of the chemicals people use have not even been tested to show what dangers they can cause (Carson, 1962). Unfortunately, hindsight is usually 20/20 on these matters, and the damage is done. Water supports all life on this planet. Most of our water is found in the oceans and cannot be used. The blue planet is tricky this way. Therefore there is only 1% of the earth's water that is usable. Although it is precious, there is much of that 1% that is now unsafe to drink. Most pollution problems eventually become water pollution problems (Council for Environmental Education, 2000). The pesticides that have made their way into water only work for a while at what they are to do because species adapt to resist them. Therefore, far more dangerous chemicals are made to replace them (Carson, 1962). Unfortunately, these chemicals do not stay where they are released, but get caught up in the various global systems and get transported all over the earth. This is why scientists are finding DDT in Antarctic penguins (DeWitt, 1994)

These chemicals make their way into our clouds and become a part of the water cycle system that is responsible for transporting the water all over the earth. Because the water cycle connects all living things together, it transports the toxins throughout all the living creatures and their habitats. Acid rain is an example of this process. Sulfur dioxide from our smoke stacks and motor vehicles combines with water vapor in clouds which condenses producing precipitation. The form of precipitation combines with the sulfur

dioxide making acid rain. This falls to the earth, destroying plants and changing the pH of waterways (Nash, 1991). Acid rain is just one example of how these chemicals are transported through global systems of natural cycles.

Ozone Depletion

Ozone Depletion has occurred due to some of the chemicals released into the atmosphere. Chlorofluorocarbons (CFC) are the major contributing cause of ozone depletion. Aerosols and air conditioners have had CFC's in them. When CFC's are in the atmosphere they are broken down by ultraviolet light and release chlorine into the ozone layer (US EPA, 2006). This steals oxygen from O₃ (ozone), and causes the degradation of the ozone layer. The ozone layer is our protection against the harmful UV rays that come from the sun. Reductions in ozone result in more harmful rays entering earth's atmosphere. This form of radiation causes many problems with humans and other living things. UV rays are a major source of the skin cancers that people now face. This will continue to become worse if we continue to use ozone depleting chemicals (US EPA, 2006).

Plants are also affected by these harmful UV rays. They cause growth problems, nutrient problems, and problems with development. Marine ecosystems are severely impaired by UV because it hurts survival of phytoplankton which is the basis of the food chain in this environment (US EPA, 2006). The effects of this loss are felt all the way up the food chain. This UV problem can also affect biochemical processes. These biochemical processes sustain life here on earth, and could affect other things such as the

increase of green house gases. This would affect the biochemical feedback, which could cause there to be even more of these gases present and could expand their negative effects. This then would cause an increase in speed of global warming (US EPA, 2006).

Waste

When the earth produces waste, the materials are recycled back into the system. Humans have not followed this example. In our industrial production people have accumulated wastes - wastes that have then been put away in landfills and the like. This waste is causing many problems, the first of which is space. People only have so many places to put their waste. Americans waste about one million tons of material per person per year (Hawkins, Lovins, & Lovins, 1999). If you consider how many Americans there are, this adds up to a staggering amount of waste. A lot of that waste ends up in landfills, but also some ends up in the air and water. Along with this come the problems associated with the waste. Wastes does much more than take up space (Hawkin, Lovins, & Lovins, 1999).

Waste can contribute to many other environmental problems. It adds harmful materials to the environment. It wastes natural resources (which are in many ways finite). It wastes people, and can contribute to extinction, as well as many social injustices (Hawkins, Lovins, & Lovins, 1999). There are better options for dealing with human's waste. Much of that waste is recyclable which means could be used over and over. Much of it, like food waste, is biodegradable and if allowed to decompose, could be recycled back into the storehouse of the environment. Landfills create conditions that are not

favorable to this decomposition, and often have to be sealed off to prevent contamination of the environment (Hawkins, Lovins, & Lovins, 1999). There is some waste that has to go somewhere like a landfill, but much of the waste has better places to go and better uses for it. If the natural capital is wasted, then there will not be enough for later.

Americans must better use their human capital to manage the natural capital (Hawkin, Lovins, & Lovins, 1999).

Land fragmentation and Habitat loss

Land is fast disappearing. The land itself is still there but the life that lived upon it is gone forever. People are covering land, sprawling outward eating up land and habitat as they go. Humans are taking more and more, and forgetting that it is by the land they cover that they are fed and provided for. Humans have lost most of their wilderness northeast of the Rockies. The only land that is reserved as wilderness in the upper Midwest is the BWCA/Superior National Forest. Even that area has lost a lot of wildness. It is constantly under attack by those who would want to exploit her beauty. Another loss in the Great Lake Region is the natural coastlines and shorelines of lakes. Developers are fast devouring this land as it sells to the highest bidder. Shores that have no human structure are few and far between (Leopold, 1949).

This earth is limited - it is finite. People live lives that do not reflect this fact. People especially live this way regarding nonrenewable resources such as oil. When something is nonrenewable, that means that there is only so much of it. If you use it all, it is gone forever. Humans are currently using oil as if there will always be enough (Sliver & DeFries, 1991). Oil will run out, coal will run out, and natural gas will run out.

Renewable resources can be managed to always be growing more. Unfortunately, people do not manage these in a way that makes them renewable. If you use a renewable resource beyond its renewable capabilities, then it becomes nonrenewable. Therefore, people are living beyond their means (Sliver & DeFries, 1991). If people do this in their finances they go into debt. Right now humans are in major environmental debt. At some point, the environmental bank is going to come looking for its resources and humans are not going to have them. This will result in foreclosure and bankruptcy.

Forest Fragmentation

People are losing habitat at such a rate that it cannot be replaced. The habitat that is available is degraded. Deforestation is occurring at a rate that is far above the regrowth abilities of that land to regenerate itself. This is happening in the most vital forest areas on the planet; forest areas that give people the ability to breathe. Figures in the tens of millions are the estimates of forests acres that are cleared annually (Hoekstra, Boucher, Ricketts & Roberts, 2005). Ecological deforestation is most felt by the poor and weak. The members of the countries that Americans harvest their lumber from are the ones who suffer the most (McFague, 1993).

The land that is left is usually degraded and fragmented (Myers, 2006). That means that there is a piece here and a piece there. There are no connections between these islands of land. That affects the diversity of species and the diversity of the genetic make-ups of those species that are living separated from the rest of the population. The lack of genetic diversity can cause those species to not be a healthy and viable (Myers, 2006). These fragmentations of land eat away critical habitats for many species and make it

harder to manage to help threatened species. Development that causes fragmentation endangers water quality because of runoff and erosion (Myers, 2006). All of this can affect sensitive species by dislocating them. It development and overuse changes the face of the land. This also affects sustainable forestry, a practice that Americans will depend on for their lumber needs now and in the future if Americans are to have resources for future generations (Myers 2006).

All one has to do is look and they can see the fragmentation all around them. If a person is to experience a more complete ecosystem then they can understand the problems with the fragmented landscape they have already experienced. When a person studies ecology, they come to understand that more complete an ecosystem is the healthier and more beneficial it is. In order to maintain the health of life on the planet, people need to preserve the most intact ecosystems and/or make the ecosystems already preserved more intact (Myers 2006). This does the most good for the most life.

Degradation of Farmland

The farmland that supports humans is also becoming degraded. Farmlands lose 24 billion tons of topsoil each year. To put that in perspective, it takes a hundred years to form one inch of topsoil (Brown & Young, 1990). Topsoil is what supports life here on earth. Without it, the soil does not have the growing capacity it needs. Our topsoil is washing and blowing away at a rate far above the regenerative capabilities of the earth (Brown & Young, 1990).

Conclusion

These are important environmental problems that need action immediately. If humans do not act now, things will get worse. This is a major crossroads and turning point for the environment. Extreme action is warranted. If it fails to happen, then people will fail the environment.

Environmental Education and the Environmental Crisis

According to the National Academy of Science (NAS), environmental awareness has been growing among public and policy makers since the 1960's. This time period was when it was first discovered that human activities have harmful and large-scale effects on the environment. The NAS has found that environmental health has been linked through scientific research to human health, well being, and economic health. In the early 1970's research found Chloroflorocarbons (CFC's) to degrade the ozone layer. The Montreal Protocol was legislation in 1987 that mandated the reduction of CFC's. The decade of 1970-1980 was the decade of clean up, generating programs such as Earthday, Endangered Species Act, Clean Water Act, and Clean Air Act (1992). In recent years, most of those policies have been severely damaged and reduced. This, along with the United States' refusal to sign the Kyoto Protocol to reduce greenhouse gases, make many environmental educators question whether humans have made any progress at all in the environmental crisis.

According to the Environmental Education Council of Ohio, the 1999 National Report Card on Environmental Knowledge, Attitudes, and Behaviors gives people living

in the United States an "F" on understanding basic environmental problems. The Council believes that this shows a need for quality Environmental Education from a variety of sources. They have determined that the public supports Environmental Education in the public schools (2000). If the environmental crisis truly is the major issue facing people today, then there is great need to change the grade that people have in environmental knowledge in the United States.

The National Academy of Science (NAS) has determined that as the 21st century approaches there is an increase in the importance of science. They believe that there will be a growing role for science and technology in managing environmental quality. The NAS insists that public and private sectors must make environmental considerations an integral part of decision making in order for human societies to achieve a productive, healthy, and sustainable relationship with the environment. The NAS maintains that humans must move toward a sustainable future and relationship with the natural world. They desire to use science to strengthen environmental policy. The NAS asserts that, in many ways, the scientific and technical knowledge available is inadequate to provide good solutions to current and future environmental problems. They believe that this calls for more study and funding for science to help humans solve these problems (1992).

The NAS has declared that multiple parties must be included in the decision making process. However, they insist that those parties need to be educated on the environmental crisis. Along with this, the NAS maintains that policies need to change as new knowledge and circumstances are discovered. Something that is needed for this to work is for there to be support from the government to encourage companies to use more

sustainable practices, and support to universities to develop and implement these technologies. The NAS adds that science will be a large part of the planning, educating, and modifying. They believe that natural and social sciences will be crucial in developing new options for limiting the growth of human population, protecting the environment, and improving the quality of life (1992).

Christian Environmental Literature

Due to the slowness of the Christian church to involve itself in the environmental crisis, there is a significant lack of Christian environmental literature. This leaves a hole in the discussion on the environmental crisis. The authors represented in this chapter are the ones who are beginning to fill that hole. The Christians who are beginning to speak out and call others to do the same are the authors reviewed below. I have chosen to separate the literature into five categories. The categories are “Ecotheology”, “Christian Environmental Action or Responsibility”, “Christian Land Ethic”, “Christian Environmental Education and/or Outdoor Education Research”, and the “Life of Jesus”.

Ecotheology is also referred to as nature theology, environmental theology, natural theology, or ecology theology. Ecotheology studies the Bible’s teachings on the environment - in other words the Creation - and what that means to the Bible’s followers. It is the tool that provides a way to interpret the road map that the Bible gives Christians on how to live, specifically dealing with their relationship and responsibilities to the Creation. It sheds light on how Christ's followers are to act, and what the results of their actions will be. This category explores the biblical interpretations about the natural world, and the Bible's teachings for the Christian church regarding the environment. The Bible

does not discuss how the earth was created in a scientific way, but rather who made it and why (Nash, 1991). This section will offer scholarly interpretations of the Bible on the environmental crisis

Literature about Christian environmental action and responsibility helps to take the theology discussed and make it practical for Christians. This category explores this topic to shed light on the Christian church's action and responsibility regarding the environment. The approach of this literature is to discuss actions that Christians can take in their daily lives. Where Ecotheology is the philosophical, this section's literature discusses the concrete actions that the church is responsible for doing for the environment. This section deals with the specifics involved with a person's walk with Jesus regarding their relationship with, and responsibility to the Creation.

The Christian land ethic is based on the Aldo Leopold's land ethic. The literature in this section discusses how Christians view and use the land. This would be the picture of Christians' relationship with the land. The literature tries to help the reader see clearly what the Bible's teachings say about human's actions to the earth. Christian land ethic literature helps Christians understand some of the spiritual aspects of their interconnectedness to the land and our dependence on it. This section discusses Christian values, virtues, and general ethic of the land. Part of the review will discuss the belief of the sacredness of land - a belief that is found in many religions. This section's literature makes the tie between ecology/land ethic and the Bible. These works tell what scriptures have to say about the interconnectedness and interdependence of all life.

In the search for literature, Christian research in Environmental Education and

Outdoor Education was hard to find. There are few studies exploring this subject. The research discussed in this section involves the programming aspects of Environmental Education and Outdoor Education. It explores the different program styles and their effectiveness. Research of this type is trying to answer the questions of the “how” and “where” of Christian Environmental Education. The previous sections are exploring the “why” question of Christian involvement with caring for the environment. This research gives a good idea of what has been studied, and identifies the gaps in Christian environmental research. This will help to understand what research questions still need to be answered.

The last section discusses literature on the person, teachings, and character of Jesus regarding his interactions with the natural world. The literature explores the scriptural passages related to Jesus discussing how the environment was applied or used in his ministry and how He treated the earth. The works explore how Jesus’ life and His actions regarding the environment can inspire and guide the Christian land ethic. Because Christians believe that Jesus is their clearest picture of God, it is helpful to know how He interacted with the Creation in order to know how His followers should act. He is who Christians follow, so Jesus is their best example of how to live. Although the extent of the ecological crisis was not as great in the days that the Bible was written, Christians believe that Jesus has knowledge of every that has happened, is happening, and is going to happen. In this belief is also the belief that what Jesus modeled two thousand years ago is still appropriate for living one’s life like Jesus today. This means that His story could open up some discussion on what actions Jesus might have modeled regarding the

environment. This discussion will help Christians to understand what their environmental roles, responsibilities, and land ethic should be.

Ecotheology

“We must expand our doctrine of God to acknowledge that He is not only the Lord to whom I flee in times of trouble, but He is also the maker of heaven and earth - God of all that is. When we Say ‘I believe in the Holy Spirit, the Lord and giver of life,’ the reference is not just to religious life, devotional life, prayer-book life. It means all of life” (Sittler, pg35).

Theology according to the Webster’s New World College Dictionary is defined as “the study of God and the relations between God, humankind, and the universe.” (pg 1484) Hitzhusen takes this farther by saying that theology is the interpretation of God’s word. Hitzhusen also states that theology is the scholarly thoughts of what God’s word means. Theology plays an important role alongside spirituality, because theology gives to spirituality a contextualization and understanding beyond the realm of human bias (Hitzhusen, 2005). Nash believes this gives Christians the framework from which to build their faith. He thinks that theology provides Christian ethics and morals with their biblical grounding. This gives the church their basic Christian values and norms (Nash, 1991). Ecotheology would then be the Creation-specific theology. It would help Christians to understand relations between God, humankind, and the universe regarding the environmental roles and responsibilities each part has. According to James A. Nash, the Christian church needs a new theology and ethical bases for sustaining the ecological integrity of the Creation. He does not mean an abandoning or replacing of Christianity's

major themes. Nash does, however, mean that it will require extensions and reinterpretations of those major themes (1991). Bradley states that the church needs to return to the original message contained in the Bible which was preached and practiced in the early church. According to Bradley, there are many long-lost or neglected ideas and images from Christianity's past which can help the church return to the original message (1992). The following sections are explorations of some of the theological arguments for Creation care and a better stewardship of the environment, God's Creation.

Dominion

The Genesis mandate for dominion has been one that many environmental groups have cited in arguing that Christianity is not green; even that it is the source of the environmental problem (White, 1967). Many theologians and Christian scholars argue that "dominion" does not mean oppressive dominance and a reckless consumption of natural resources (Mingarelli & Ish, 2005). The theologian Calvin Dewitt defines dominion as, "responsible care and keeping that does not injure abuse, neglect, dissipate, degrade, mar, corrupt, or ruin the earth (2003)." The theologian Steven Bouma-Prediger would also add that dominion does not necessarily mean domination. He wrote that to rule is to be more like a servant - to serve those one rules over. Bouma-Prediger asserts this idea to mean to exercise dominion is to suffer for the good of the one who dominion is over. He maintains this to mean to serve and protect the Creation, since in the Bible, man is given dominion over the earth. Bouma Prediger also adds if God loves the world, then one of faith would not be excused for hating it or be justified in destroying the world that God loves (2001). Special dominance implies with it special accountability as much

as it implies special value; it gives Christians their role of stewardship (Van Dyke, Mahan, Sheldon, & Brand, 1996). Dominion is practiced properly when humans care for God's Creation benevolently and justly in accord with the will of God, who is the ultimate owner (Nash, 1991).

Subdue

There is also a mandate in Genesis to subdue the Creation. Secular scholars like Lynn White have argued that this has given Christian people full license to pillage the earth; that they are to control nature and bend it to their will (1967). According to biblical scholars Van Dyke, Mahan, Sheldon, and Brand, "subdue" did not mean the same to Adam and Eve as it does to followers in present day. The scholars believe what it meant to Adam and Eve was to continue to bring the Creation into conformity with God's ways and purposes. At that time, they write, one who "ruled" meant one who served. Therefore, "ruling over the Creation" meant to serve and preserve it. In order for humans to rule and subdue the Creation, they must understand what the Creation does and how it works (Van Dyke, Mahan, Sheldon, & Brand, 1996) According to biblical scholars, Christians are as much servants of the Creation as masters of it (Bradley, 1992).

Christian Environmental Stances in Activism and Theology

The author, Haluza-Delay, has defined three broad Christian environmental stances in activism and theology: stewardship, ecojustice, and Creation spirituality. Stewardship is probably the most common of the three, and is basically defined by Haluza-Delay as the care for Creation. Ecojustice is the connection between environmental problems and social problems. Haluza-Delay has found that these

connections are the areas most quickly acted upon by all. The last stance, Creation spirituality, involves seeing all nature as sacred (Haluza-Delay, 2000).

1. *Stewardship*

According to the National Council of Churches, stewardship is the calling in which Christians are charged to serve and preserve the garden. It is a sharing of earth's bounty to promote and defend the common good. The Council includes in this stewardship, recognition of God's purposes for all of Creation. This includes sharing in joys and sufferings of all of Creation and making them one's own (NCC, 2004).

Stewardship is people's responsibility, regardless of whether there is an environmental crisis or not (DeWitt, 2003). Christians were even called to stewardship from the beginning before sin entered the world. Stewardship has eternal consequences because the Creation is precious to God (Bouma-Prediger, 2001).

Santimire believes if Christians are faithful to God's calling for the church, then the church will have the relationship with nature that God originally intended for humankind to have in Eden (Santimire, 1995). This means a Christian's moral responsibility to steward the Creation cannot be left out of his or her Christian calling (Dyrness, 1999). This moral responsibility, therefore, makes Christians the stewards of life's continuity on earth. Nature becomes the "new poor" for which the church is to care for (McFague, 1993). Bradley adds that stewardship involves accountability, which is accountability to God, Himself. In the Christian belief, followers have to answer to God about how they have managed their lives and his world during their time here. This is an active and creative role to have. According to Bradley, Christians are charged with the

major and awesome responsibility of carrying the whole of Creation up to God.

Christians are the priest of Creation (1992). DeWitt adds that Christians are responsible for thinking about what consequences their actions have for the Creation. They are charged with keeping and caring for the Creation (1994).

2. Ecojustice

According to the National Council of Churches, working with ecojustice means that Christians need to create right social and environmental relationships. This type of justice is the integration of social justice and ecological integrity (2004). “Ecological problems, moreover, are not simply scientific, technical, political, or strategic questions. They are fundamentally moral issues, because they are human-created and soluble problems that adversely affect the good of humans and other kind in our relationships” (Nash, 1991, pg 23). Nash maintains that poisoning one's neighbors and wasting resources are serious moral offenses that demand a response from the church. These ecological crises represent humans' failure to satisfy the moral obligation to prevent harm to their neighbors, both human and non-human (Nash, 1991). What these theologians are stating is that the biblical “least of these” refers to the poor and powerless people, including victims of environmental racism and ecological injustices (Bush, 2005). According to Bunge, this means that Christians cannot love their neighbors without taking into account the environmental injustices in this world and what they can do to solve them and restore justice (Bunge, 2005).

3. Creation Spirituality

As Haluza-Delay defines it, Creation spirituality deals with the earth's sacredness

(2000). DeWitt declares that if there is a belief that the earth is in fact sacred, to honor the Creator and yet despise His works and workings is inconceivable (2003) The theological idea that the earth and everything in it belongs to the Lord, includes the proposition that the earth has other purposes and responsibilities to the Creator than merely serving human needs (DeWitt, 2003). According to the proponents of Creation spirituality, since it all belongs to God and was made by Him, nature, like God's Word, must reveal the divine mentality. Bouma-Prediger believes that through understanding how His Creation operates, Christians can better understand the mind of God. Among the things better understood, according to Bouma-Prediger, are the following: Only God can create something from nothing. God empowers the Creation to respond to Him by fulfilling its role, to thus benefit from the blessings of serving Him. God has wisely ordered the wonders that He has created (Bouma-Prediger, 2001).

DeWitt states that the Creation praises its Creator and breaks forth in testimony to God (1994). According to Bradley, each created being has is an instrument in an orchestra, blending its own tune with the other instruments to play the great symphony that is playing in response to the biddings of the divine Conductor (1992). Bouma-Prediger supports this interpretation by stating that the earth is for all living creatures, not just a habitat for humankind. He thinks humans are unique because they are called to rule as God rules, but they share this earth with others (2001). Bradley continues these thoughts, when he says that the Creation's true purpose is to raise man up to God. Humility is to first be close to the earth and be in tune with nature (1992). Berry insists that humans have lost their sense of grace toward the Creation - lost their willingness to

recognize its sacredness. He maintains that humans have forgotten the language needed to communicate with the Creation. Berry believes the beauty that is found on earth gives humans little glimpses of the divine. He says that if people lived on the moon, they would have a very different picture of God (1990).

Covenants

Bouma Prediger explores covenants in his book For the Beauty of the Earth. He determines that covenants have been established between God and all living creatures. In Genesis 9, God creates a covenant with *all* living things; therefore people are a part of the Creation not the whole of it. Bouma-Prediger and other biblical scholar's have discovered that God is about relationships. Everything is connected - relationality is a fundamental characteristic of the Creation. Psalm 104 speaks of the Holy Spirit being the very "breath of life." Bouma-Prediger believes this is the common denominator among all things that humans live in a spirit-enlivened earth (2001). McFague adds to this position by inferring that God is the source of all life, and the source of renewal of life. She believes He gives direction and purpose to everything, which makes all of Creation valuable (1993).

Building on that belief, Santimire holds that because all is valuable, all will be saved. The same Creator, who cares for man, cares for His other creatures as well. Sanitmire insists that through this covenant, and to this Creation, God communicates His goodness.

Santimire writes that God delights and rejoices in His works of goodness and His Creation. Just as man's personal sacrifices are pleasing to Him, the glories of nature are enjoyable and pleasing to Him (1995).

Nature is Sacred

The well-known famous theologian, Joseph Sittler writes that nature is not a separate entity or process that is alongside God, but rather continuous with the reality of God as Creator. He believes that people's current view of nature has nothing to do with the divine, and is completely opposite the Old Testament view in which nature comes from God, cannot be apart from its Creator, and is capable of bearing the "glory" of God. (2000). This idea is further explored by Bradley when he states that, because the Bible begins by speaking of all Creation, that means God is concerned with all of the creatures mentioned, not just humans. Bradley affirms that a God who is only known as the god of humankind is no longer the God of the Bible. Bradley continues to explore this idea when writing that God is not the divine watchmaker who made the earth perfect and can now just sit back and watch it tick. One loses the continuous aspect when one thinks in this way (1992). Nature is sacred by virtue of having been created by God, in which He declared it to be good, and placed it under his ultimate divine sovereignty (Nash, 1991).

Ecological Destruction is Sin

Some theologians share the belief that ecological destruction is a sin – that to commit an injustice towards the Creation is a sin. The National Council of Churches even goes as far as saying that humans have become un-creators (2004). McFague defines sin as the refusal of people to accept their place or role (1993). Sittler believe that sin has to do simply with selfishness, pride, and greed. Sittler takes this idea further by holding the belief that since the natural world is a sign of the divine presence of God, ecological degradation is outright blasphemy (2000). Thomas Aquinas states that any error about the

Creation will lead to an error about God. Romans 8:19-23 speaks of the Creation groaning to be set free of the bondage to decay, brought on by the sin of humankind. Bouma-Prediger further extends this idea saying that sins like unclean water, waste, energy over-use, climate change, and reduction of biodiversity, have our earth in chains (2001). Along with this interpretation comes our responsibility to repent of these sins. The National Council of Churches believes that addressing this degradation is the moral assignment of this time (2004). Nash connects this concept to the Bible's story of Noah, specifically of the covenant God made with all of Creation after the flood waters had reseeded. Nash states that the ecological crises that are of human-made problems are a violation of the rainbow covenant, and the ecological covenant that it symbolizes (1991). In other words, humans are not protecting what Noah was called to risk his life to preserve.

Sittler has much to say on the topic of sin and the effect sin has on the Creation. His understanding is that the sins today can be traced back to original sin in the garden. This act of sin created the death and decay on earth. He believes that death is a lost connection with the living God. He identifies that it not only disconnects man from God, but from His created works. Sittler states that this is a problem because it is necessary for a man to be related to nature in a right way for the preservation of his body, the sanity of his mind, and the salvation of his soul. If the relation is limited to man as plunderer of nature, then man ultimately destroys what he uses. Sittler affirms that reverence and respect is graceful, whereas, abuse and manipulation is disgraceful, and what is disgraceful is sinful. Along with this discussion, Sittler asserts that when the Creation is

seen as a gift, a grace, it can be rightly enjoyed and justly used. He asserts that the heart of sin is when men use what they should enjoy, and enjoy what they should use (2001). One can infer then that abuse is use without grace; when enjoyment is honored, use is blessed. Grace does not destroy the Creation but protects it (Sittler, 2000). Rhoads sums these thoughts up by stating that there is a clear correlation between the righteousness of human beings and the state of Creation (2006).

Redemption

Bouma-Prediger believes that Romans 8 also alludes to the fact that there will be a redemption of the Creation. He thinks that the fire that will come will be a refiner's fire, not a destroyer's fire; it will come to purify. He states that in the purification, there will be redemption and restoration of the Creation. Bouma-Prediger defines redemption as always meaning the renewal, not the destruction, of something – in this case, the earth. He further clarifies this belief when he states that salvation is not the escape from this earth, but it is the earth's reclamation, its recreation. This, he believes, is found in Isaiah 42:3 when it speaks of God making all things new, not all new things. Bouma-Prediger insists this means that they will be new in quality, not new all together; in other words there will be a restoration of the earth. This theologian asserts that Jesus came not to save just humans, but the whole earth. Bouma-Prediger thinks that the Christian's view of the future should be earth-affirming, not earth-denying. A Christian's view of salvation should be salvation, not *from* the body, but the restoration of the whole body of the Creation (2001). Santimire holds that when the Bible speaks of a "new heaven and new earth," it signifies the restoration of the cosmos which Bouma-Prediger speaks about in

his work. Santimire interprets the words in Ephesians to mean that God says He has a plan for the whole universe, this being revealed in the fulfilled Christ whose purpose was to unite all things in Him (1995). Sittler believes that humans need to expand their redemption-centered theology to include the whole of Creation, and to accept that the whole of Creation is capable of bearing the grace that comes with God's presence. Sittler further identifies that in Him all nature is the invaded field of grace. Sittler maintains that it is this same grace of the Creator, which sustains nature even in the fallen state, which confers the salvation in Jesus Christ. Sittler pulls all of these ideas together by stating that the Son of God was crucified for all and everything in order to restore all human and material Creation to Himself (2000). Bradley adds to Sittler's when he says that the Messiah is to help all living things live up to their combined potential; meaning that humans have a part in this revelation of a new heaven and earth (1992).

Christian Environmental Action and Responsibility

“We have lost the sense of belonging and the sense of life. We have lost the sense of belonging in our world and to the God who creates, nurtures, and redeems this world and all its creatures and we have lost the sense that we are a part of a living, changing, dynamic cosmos that has its being in and through God.” (McFague, 1993, pg 34)

Justice

Justice is a responsibility that Christians have. The National Council of Churches makes important points about ecojustice: 1) Christians need to integrate social justice

with ecological integrity. 2) It is important that Christians make sure that they have right social and ecological relationships. 3) Many are calling for a development of a set of basic human environmental rights (2004). McFague points out that ecological deterioration and destruction hits the poor, the weak, and the vulnerable on the largest scale (1993). Bouma-Prediger believes this is because social justice and ecological health are intimately linked. God is righteous and just, he adds. Christians who are called to be his image should be the same. This Christ-like character is central to the care of the earth (2001).

Training Missionaries

The authors of Redeeming Creation take a strong position about the training of professional missionaries. They write that, Christians have set up their missionaries for failure. The missionaries can not heal the spirit without healing the body first. Missionaries are in the midst of the environmental crisis storm. The authors state that the greatest numbers of missionaries are in the world's most ecologically damaged places. They believe that the church has not given missionaries the proper training, that the church has in some ways slighted them. Environmental solutions must be a part of missionaries' long-range plans, goals, and works. If these solutions are not, then the peoples that they are trying to reach will be wiped out by environmental injustice before the salvation can take hold. In Redeeming Creation, the authors contend that a person's stewardship should include loving one's neighbor. They declare that environmental injustice is the opposite of loving your neighbor. Missionaries cannot properly love their neighbors, their parishioners, without taking on the environmental burdens these people

face. They need to be able to provide the “least of these” with their basic environmental rights. The authors assert that the church must commit to training its missionaries and all its parishioners as stewards (Van Dyke, Mahan, Sheldon, & Brand, 1996).

Sustainability

Sustainability is a huge buzz word in environmental education. It is beginning to make its way into the church, paired with the biblical mandate of stewardship. Specifically, the stewardship that is being discussed by the National Council of Churches is the stewardship of resources for future generations. This stewardship includes living within the bounds of our planet’s capacities (2004). According to Bouma-Prediger, Christians are called to use the fruit of the earth, and have to use it in order to live. Christians should not, however, destroy the earth’s ability to be fruitful. They should act in a way that allows the living creatures to maintain themselves and reproduce - this is sustainability (2001).

Responsibilities to the Creation

All types of stewardship, relationship, and caring for the earth, are a part of Christians’ God-given responsibilities. Fulfilling this responsibility is central to obeying God (Berry & Clarke, 1991). In Redeeming Creation, the authors state that obedience means living within the carrying capacity of the Creation in harmony with all of the cycles that God has established. They add that this should be done out of conscious joy and value in caring for the Creation. Christians then, in being obedient, should share God’s work and witness on the earth (Van Dyke, Mahan, Sheldon, & Brand, 1996). Berry and Clarke think that Christians should obey God because their lack of obeying has

brought about this environmental devastation. They believe this should not have happened in a Christian society and among a people with a Christian view of life. Berry and Clarke state that Christians have missed something and have taken a wrong turn somewhere back in their cultural history. Christians today did not ask for this place and time but it is what they are given. Berry and Clarke assert that it is up to the Christians of today to decide what to do about what they have been given (1991).

Santimire has proposed that the main task of the church is not only to win souls, but to bear the burdens of others, human and non-human alike (1995). Van Dyke, Mahan, Sheldon, & Brand state that creating was the first work of God, sustaining is the present work of God, and redeeming is the future work of God. They believe Christians have the awesome gift and responsibility of joining God in the sustaining work here on earth. They also add that Christians are responsible to start the renewal process in this sustaining time in preparation for the final restoration by God. These scholars maintain that Christians have a choice - they can be exploiters, or be those who nurture. Only in this nurturing process is there stewardship, and only in this stewardship is there a witness to the world (1996). As stewards, Christians must be responsible to God to think about the consequences their actions will have for the rest of Creation, with which we are so intimately connected (DeWitt, 1994). Nash believes that the doctrine of Creation states in an indirect way that nature is not alien to the human race. Instead humans are interconnected and interrelated parts and products of a world that is always and continually being made, molded, and nurtured by God (Nash, 1991).

The National Council of Churches asserts that there is a certain

“bioresponsibility” that Christians are supposed to have. The Council defines bioresponsibility as meaning extending the biblical mandate of justice to include all of God’s Creation. The Council affirms that Christians should see each creature as an expression of God’s presence, wisdom, power, and glory. This, the Council believes, means that all life deserves its fair share of the resources, and in addition deserves the church's compassion. The church’s compassion is sharing in the joys and sufferings of all of the Creation’s members, and making these joys and sufferings the church's own (2004). Bouma-Prediger thinks that along with these required actions there is a responsibility for Christians to be ecologically literate. This environmental literacy ought to engender humility and a mindful tending of God’s earth. Bouma-Prediger believes this literacy is both a matter of survival, and a responsibility (2001).

Santimire considers that Christians are beginning to regain the knowledge of the Creation - a knowledge which was forfeited by the fall of Adam through original sin (1995). According to Bouma-Prediger, knowledge without affection, however, gets humans nowhere. He asserts that humans must have affection in order to put knowledge and skill to work. Just having knowledge of such problems as high populations of people, low biodiversity, deforestation, energy overuse, and climate change is not the solution. Bouma-Prediger believes humans must have both a knowledge of how to change, and a desire to do so. He states that this is the reason humans are unique; it is not about being superior, but about responsibility and service. Bouma-Prediger believes that humans are called to be earth keepers. He maintains that God is the owner and people are the managers. He insists that human actions should promote the well-being of other

creatures, and come from an unselfish concern for the good of those they care about. He asserts that humans should care about the members of Creation because it is an appropriate and proper Christian response to God's providential care for his followers (2001).

Berry and Clarke contend that the critical function of Christianity is to cause its followers to show care and concern for the Creation. By enhancing their relationship with the earth they grow closer to God and sustain themselves through this provision from God (1991). McFague extends this idea by stating that ecology cannot be just an extra-curricular activity; it must be the central focus of one's work, the bulk of the hours of one's day. She thinks that a focus on ecology will determine if humans and other living creatures will live, and how well. This, she insists, is the moral issue of today. McFague asserts that humans have the power to destroy themselves and other species, and the power to keep the processes of earth going. This gives people a special burden of being God's partners in the continuing of earth's processes. (1993).

Humility

The National Council of Churches maintains that humility is something that Christians should be practicing. The council considers this to include recognizing that there are limits to human knowledge, technology, ingenuity, and moral character. They believe Christians are not the masters of Creation that they may think that they are (2004). Christians should live with a theocentric perspective - one where God is at the very center, and all things exist to serve Him and give Him praise (Bouma-Prediger, 2003). Bouma-Prediger calls Christians to remember it is God who is infinite, not them;

that God is perfect, not them. He insists that Christians must live in brokenness, which should cause them to act cautiously, not with reckless abandonment (2001). In Redeeming Creation, the authors state that the Bible provides Christians with a clear and principled description of what the Creation means to God, and what it then should mean to them. The authors believe the Bible gives Christians the vision of God and the viewpoint that God is the Creator and Sustainer of this world. This tells Christians that God has given them a special responsibility and privilege of carefully managing the natural world (Van Dyke, Mahan, Sheldon & Brand, 1996).

Giving

The National Council of Churches affirms that Christians are called to give freely and often. The Council maintains that this generosity should include sharing of the earth's riches to promote and defend the common good in all Creation. In order to do this, Christians must recognize that God has purposes for all of Creation. The council states that Christians are not islands, but are connected in every way to the world around them, interdependent on the natural communities. The council includes that there is certain solidarity in acknowledging that Christians are bound together as a global community. This should bring people to cooperation on all levels, including the international level (2004).

The opposite of giving freely is the hoarding - greed. According to the Bible, greed is a terrible sin. The National Council of Churches' interpretation of this biblical principle is that Christians are called to be a people that lives its days with frugality. This means, to the Council, restraining economic growth, production, and consumption for the sake of

Creation and justice. The Council believes that Christians should live lives that are filled with God's spirit, not with the material things of this world that people have created. Christians should end the excessive taking and wasting of the good Creation (2004). Jesus led a simple life, and calls others to do the same (Douglas-Klotz, Grabill, & Oberg, 1997). Bouma-Prediger adds to these thoughts by asserting that Christians need to understand that the earth is finite. He insists that Christians have no warrant from God to act as though it is not. This author calls Christians to an economy of efficient use, of living well within their means (Bouma-Prediger, 2001).

Worship

The authors of Redeeming Creation call Christians to a modern worship that returns to a focus on the joy of the works and wonders of God. They maintain that this will ensure that joy will once again become an experience instead of just a concept. The authors believe that God, in Christian worship, must be not only the Lord of heaven above, but also the Maker of the Creation below (Van Dyke, Mahan, Sheldon, & Brand, 1996). Nash states that Christians do not worship matter. He affirms that Christians worship the Creator of that matter, who in humbling Himself became matter for the sake of man. Christians worship He who will use matter to perfect them and the world in final redemption (1991). Bradley believes along with worship, there must be thought, teaching, and practice of science. Bradley states, science is here to assist Christians to see the much greater continuous interactions between God and all His Creation. Science, he thinks, can reintroduce the elements of mystery, awe, and wonder into their view of the Creator. This gives Christians a more holistic and ecological view of the relationship between God and

all He has created (1992).

Christian Education

Van Dyke, Mahan, Sheldon, and Brand have determined that Christian Education has failed at connecting God with His Creation; it has failed to connect with science. They contend that there has been a deficiency in Christian Education. The authors believe devotion has been pushed inward instead of outward; it has become one-dimensional. They state that Christians need to have joy and beauty of His works - His Creation - because without this joy, scriptures will fall on deaf ears. Van Dyke and his colleagues maintain that Creation gives Christians powerful concrete illustrations of what scripture teaches only as concepts. They assert that the Creation is good, and called good by God. According to these authors, the Creation is not good for humans alone, but because God made it. They believe nature is from God, cannot be separate, and is capable of shining the glory of God. As with Christians' worship, the Creation's worship of its Creator is pleasing to God. Van Dyke and his co-authors add that Christians need to understand their roles and join in the obedience and worship. Christians need not escape the world, but should stand in it thanking God and returning it back to Him. Out of this worship and these principles, Christian Education needs to produce professional stewards (1996). Nash adds that the Christian church also needs to be an ecological agent of liberation and reconciliation, along with ending the alienation between the human race and the rest of the Creation (Nash, 1991).

Love

Nash also believes that the church needs to combine its teaching of love with

ecology. He maintains a Christian ecological ethic is very deficient unless its foundation is built on love. If God is love, then the process of Creation itself is a direct act of love.

Nash states that there are several virtues that combine to create the whole emotion of love. He determined that beneficence, a virtue of love dealing with service and doing good, is built upon simple acts of kindness. Nash includes that love esteems others in its acts as it honors, respects, and values others, including the rest of Creation. He contends that there is certain receptivity with love, because it is not envious, boastful, or rude.

Nash also thinks that humility is an important virtue of love which causes Christians to be cautious in their love, or to be careful in our actions. He insists love involves understanding with the whole mind; it is being knowledgeable about others. Nash adds that there is a sense of communion in love because it binds together what other things have destroyed. This communion means there is unity and harmony in love. Nash finishes his thoughts on love by stating our love should be that of God - a love that is concerned with all of Creation. According to Nash, human's ecological catastrophes have come in a large part because of ecological ignorance (1991).

Love for the Creation can also be demonstrated in public policy. According to the following ideas from Nash, public policy needs to be ecologically sound and morally responsible. This means that it should continually resolve the economics-ecology dilemma. It should include public regulations that are sufficient to match the various social and ecological needs. Public policy must protect the interests of future generations. Also, protection must be provided for the human race now so that the conditions that are necessary for perpetuation and on-going change will continue. This policy will promote

international cooperation as a means to confront the global ecological crisis. Nash maintains a policy that is ecologically sound and morally responsible will pursue ecological integrity in an intimate alliance with the struggles for social peace and justice (1991).

A Christian Land Ethic

"The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land... In short, a land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such." (Leopold, 1949, pg 204).

Sacred Land

Berry and Clarke maintain that the earth is sacred. They believe that Christians would have no sense of the divine without the Creation; it all speaks of God's glory (1991). Nash states that nature is sacred by this association - it is a bearer of the sacred. He believes that the Creation has always been, and is, a prime place to encounter the grandeur and glory of God. According to Nash, it is an effective medium of revelation and communion with the living God. It is a means of grace, a temple of the Spirit. Nash determined this means that all nature is to be valued and loved because it is valued and loved by God. God values and loves the Creation as the mode of spiritual presence and residence; it is God's beloved habitat (1991). Rossing adds that the earth is a body, a

body that God loves (2005).

Lilburne is one of several authors who remind us that the Hebrew Scriptures are filled with stories of a people intimately tied to the land. In the Hebrew faith, the land is seen as a scared gift. It is not necessarily intrinsically sacred, but rather as God's Creation and gift, it is made sacred by God dwelling in that space and time (1989). According to Helmuth, the Hebrew passages are examples of how the earth is the Lord's and people are here to share in its bounty by caring for it. Helmuth asserts that these scriptures tell of a people who directly depended on the land, and of a land that was directly influenced by the people (Helmuth, 1997). In these scriptures, the land community had intrinsic value and thus a moral standing (Bouma-Prediger, 2003). It, and all that it provided, were seen as gifts from God (Santimire, 1995).

According to Santimire, the land that is promised is the central theme of the Old Testament. God's promise to His people is always about His land. This, Santimire believes, makes land the central theme of the Christian faith. This gives the land sacredness. God was the Lord of heaven and earth to the Hebrew people. This view of God allowed them to see the same God intimately bound to the land specifically, and to the whole earth generally. Santimire states that when the Israelites praised God, they did it for many reasons, including the majestic power that God exercises throughout all of nature (1995). Much of the Old Testament, then, is about God's people interacting with God's land. Lilburne believes that Christians are on the same journey as were the Israelites. This journey is a pursuit of the historical belonging that requires a sense of place - a tie to the land. He thinks this gift of place bears the stamp of the Creator on it.

According to Lilburne, the Creator in the Hebrew faith can not be understood apart from the gift of the Creation. The inheritance and occupation of the land was completely dependent upon the grace of God who gave the land to the Hebrews. Lilburne asserts that this grace extends to the faithfulness of the covenant regulations ensuring the well-being of the people in the land. The gift of land was given to a community, not to an individual, and it must then be preserved and maintained by the community so that the gift may be passed on to future generations. Lilburne insists the land is not held for personal gain, but is held in trust (1989).

Ties to the Land

Bouma-Prediger believes like the Hebrews, Christians today are tied to the land, even if in a less direct way. Christians live on the land, they dig into it, and they are made from it. According to the interpretations of this author, humans are spirit enlivened dust or dirt. God made Adam from the dirt and breathed the breath of life into him (2003). Berry and Clake add that Adam is of the earth, of the land. They state Adamah is the Hebrew word for land, and the name Adam is derived from the word for land. Berry and Clarke believe behind this concept lies the idea that the very self - the nephesh - permeates the land and all of Creation (1991). This interpretation is shared by the authors of Redeeming Creation who believe that it means that humans are physically and spiritually connected to the universe. These authors assert that out of the common matter of the earth, God made man and began the race that humans are a part of today. When they die, God returns their bodies to the dust from which they were formed in the beginning (Van Dyke, Mahan, Sheldon, and Brand, 1996). "It is a great pity that modern

civilization strongly alienates us from the land...Perhaps this is one of the reasons why many of us feel homeless.” (Lilburne, 1989, pg 86)

According to Nash, even the original sin is linked to the Creation. He interprets that human sin literally defiles the land. This, to him, means that nature’s fate is completely linked with human actions. Nash believes Christians’ moral responsibility is to restore the harmony of the new Creation to the fullest extent possible under the current constricted conditions of the present state of the Creation. Because Christians and the land are both so intimately connected there is a great dependence on the ecological common good. This truth, Nash maintains, is why any land ethic that Christians have must value and nurture ecosystems and the ecosphere as wholes (1991). Sittler adds that in addition to this action, children must be exposed to the Creation. The further they are from these existential experiences of the land, the worse off things will be. This situation requires Christians to integrate the rhetoric of grace about the Creation in the teachings, preaching, and listening of the church (2000).

Sabbath

According to Henderson, the biblical mandate for a Sabbath is not only for people's bodies, but for the land as well (2000). Van Dyke and his co-authors also believe that the biblical concept of the Sabbath is applied to people, land, and animals - to all. They contend that on the Sabbath, nothing should be created or destroyed; people are simply to enjoy the bounty of the earth. In Leviticus 25:1, it says that the land should rest. On the seventh year, God’s people were to let the land rest. These scholars insist that it was understood that God's people were not inheriting this earth from their parents, but

rather they were borrowing it from their children and their children's children (Van Dyke, Mahan, Sheldon, & Brand, 1996). Rhoads declares that the idea of the Sabbath requires obedience. According to Rhoads, in the Bible there are clear connections between the righteousness or obedience of God's people and the state of the Creation. This, he believes, puts the burden on Christians who have the choice to obey or not to obey. Rhoads insists that the consequences of this choice will be felt in all the land (2005).

Land Ethic

Bouma-Prediger asserts that because there are passages in the Bible that speak of the land being scared and of the land requiring a Sabbath, land ethic should be integrated into a Christian theological framework. He also adds it should be an ethic that combines attention to duties and rights, with a concern for goods and consequences (Bouma-Prediger, 2003). Bush interprets these same biblical passages to mean that Christians are called to keep and till the earth. To keep is "shamar," which means to watch over and preserve. To till is "abad," which means to work the ground, to labor, to serve (2005). This interpretation requires the church to integrate land ethic principles and teaching in its theological framework.

A land ethic, according to Aldo Leopold, who coined the term, includes the concept that all living things are a part of the biotic community. The stability of this community depends on its very own integrity. This means that all species must be preserved and present in the earth's processes (1949). These are the principles that have been a part of the Christian faith in the past, and in the view of Leopold and the other writers cited above are the principles the church needs to return to in this time of

ecological crisis.

Christian EE/OE Research

“I heard of a boy once who was brought up an atheist. He changed his mind when he saw there were a hundred-odd species of warblers, each bedecked like to a rainbow, and each performing.” (Leopold, quoted by Lorbiecki, 2005 pg 21)

According to the research by Hitzhusen, spirituality has great influences on well-being. It contributes to wilderness therapy and healing, and enhances aesthetic and/or recreational enjoyment and value. Hitzhusen finds that now more than ever, theologians, spiritual directors, environmentalists, and outdoor educators stand together on common ground. Specifically, this is observed within Christian spirituality, where there are now rich environmental justice and stewardship themes. These concepts are beginning to be rediscovered by Christian environmentalists. Hitzhusen asserts this is important because a large number of Americans are influenced by this faith system. He insists that by participating in Outdoor Education/Environmental Education experiences and challenges in God’s Creation, people can enjoy and discern links between God, humanity, and Creation. Hitzhusen maintains that the environmental change that happens because of these experiences is a result of spiritual change. This affirms his belief that there must be a spiritual foundation in order to bring about environmental change in people. This change comes from a connection to the spiritual level not just the intellectual level. Hitzhusen insists that the importance of caring for the Creation must be seen as part of the gospel not just something extra, and therefore, optional (2005).

Haluza-Delay asserts that spirituality can be a source of motivation and encouragement for ecologically friendly lifestyles, even within traditional religious practices. He declares that this is accomplished by not separating the spiritual and the secular as has happened in modern times. According to Haluza-Delay, this separation has brought about the myth that one cannot be an environmentalist and go to church. He believes that environmentalists need to have spirituality and that religion is a powerful ally in the battle to guide people to have environmentally friendly lifestyles. In addition, Haluza-Delay states there should be an experiential component to one's spirituality. This, to him, means that if person's spirituality does not lead to ethically better lifestyles then it cannot be considered true spirituality. Haluza-Delay thinks that an educator can build on the familiarity of a person's spiritual traditions to develop moral and spiritual judgments that may be unfamiliar at first (2000). This will open the door to the environmental changes that need to occur to fight the battle against environmental degradation.

Henderson believes that because religion is important to people's lives, educators may have an obligation to understand more about the influence of spirituality. He writes that this is especially true because religious beliefs can have great influence on how people learn, work, and play. Therefore, religious doctrines have a role in determining cultural attitudes, and behaviors toward the natural world. To Henderson this means that the role religious doctrines have in a society greatly influences the institutions and social structures of that culture. The beliefs of a religion influence the behavior of the society that follows that religion (Henderson, 2000). Because of this influence, religious beliefs and spirituality must be considered a critical factor in deciding how information on the

environmental crisis should be presented to people of faith.

Jesus and the Environment

Matthew 4:1 “Then Jesus was led by the Spirit into the desert to be tempted by the devil” (Bible, NIV, Zondervan, 1993)

In the book of Mark there are nine accounts of Jesus going into the wilderness to pray. Wilderness experiences, according to the Bible, can be spiritual in nature (Haluzadelay, 2000). According to Page, in reading the scriptures on John the Baptist one finds that he is the one that is to prepare the way for Jesus. This man who is to prepare the way for the Messiah is called “a voice crying in the wilderness”. Page believes this is a significant concept in discovering what Jesus’ relationship is with the Creation. Page further describes this relationship when he speaks of the first interaction of Jesus and John the Baptist. Jesus first meets John in the wilderness and is baptized there. Then Jesus is led by the Spirit into the wilderness for a time of preparation for His divine mission and ministry on earth. So according to Page’s interpretations, even Jesus has a wilderness experience (1995)

Lilburne declares that Jesus is a “nature theologian” of sorts as He experiences deeply the presence of the Creation, which in turn presses daily upon the lives of the common people in their suffering and celebration. Lilburne states Jesus needs no special temple, building, or room to fully commune with God. Instead Jesus retreats and seeks connection in the homing environment of the Creation. Lilburne believes that Jesus is ultimately at home in nature and that He models a relationship of intimacy with both the natural and built environments - a relationship Christians should follow. According to

Lilburne, Jesus experiences the environment as a living symbol of God's presence (1989). DeWitt holds the belief that since Jesus is Christians' example of how to live, Jesus is Christians' best example of what it means to practice dominion and stewardship in the Creation (1994).

Bradley interprets the Gospels of Jesus as showing Jesus having a unique power of communion and connection with the Creation, even to the very physical elements of wind and wave. According to Bradley's interpretations, Jesus truly can calm the storm, walk on water, and move mountains. He adds that there are many nature images in the gospels: Jesus walking along the lakes, praying in the mountains, being born among the animals, and preaching on the hillside. Even the parables include these natural world images. Bradley points out that in the final moments of Jesus' life, He is found in a garden, then crucified in a garden, and following the resurrection, He first reappears in the garden. According to Bradley, these images connect Jesus, as the Second Adam, with the first Adam in the Garden of Eden. In this interpretation, Bradley argues that what Adam could not do in that first garden, Christ does in the garden of Creation (1992).

Douglas-Klotz, Gradill, and Oberg note that Jesus was a man of simplicity. He had no need for worldly possessions and lived a very simplistic lifestyle. These authors insist even the fact that Jesus spoke the Aramaic language is important in understanding His connection with the world. Douglas-Klotz and his co-authors explain that the Aramaic language combines the inner world of a person and the outer world around that person. Both of these worlds are connected in the Aramaic language by the realm of God's making. Because they are combined, and both made by God, the language makes it

ecological to include everything in one's speaking. The language ties together the spiritual world with the natural world; it also ties man's environment with the natural environment (Douglas-Klotz, Grabill, & Oberg, 1997).

According to Santimire, Christ has a two-fold vocation: to redeem humanity, and to fulfill the Creation. Santimire interprets this to mean that Jesus will restore all to Him and in Him. Santimire adds that Jesus was present in the beginning, and will be there in the end. To Santimire, Jesus viewed "Abba", his Father, as the Maker of heaven and earth, the gracious and powerful Creator, and the Consummator of all of the Creation. Since, as the Bible makes clear Jesus is one with God, He is these things as well. Santimire declares that not only does Jesus see his Father as "Abba", but as the Father of all things of earth. The Bible speaks of the Creation as groaning for redemption. This redemption, Santimire insists, is revealed in the fulfilled Christ as He unites all things to Him. The restoration of the Creation started at Easter, at the cross (1995). Nash adds to this thought by stating that to say all was made through Christ in the beginning is to affirm and confirm that the natural world as a whole has a redemptive purpose from the very beginning, when things were made through Him (1991). This means that the Messiah make all things complete, which will allow them to live up to their full, combined potential that God originally intended (Bradley, 1992). Harms reminds Christians that Jesus even humbled himself by not claiming equality with God, but became a part of the Creation. Jesus did this out of divine love and service to the Creation that He had made (Harms, 2005). There is certain significance in the belief that Jesus created both humans and the Creation. There is a three way connection that is established.

Jesus is the Lord of Creation, humans are its caretakers, and the Creation is both a provision for the humans and a window into viewing the character and beauty of God. The Bible also establishes that Jesus is the example of how Christians are to live. This means that the life that He led, Christians should also lead.

Conclusion

There is ample support in these writings from Christian scholars, philosophers, and theologians, and also in the Bible itself, for the belief that Christians are biblically mandated to care for the Creation. In reviewing the same writings, Christian environmentalists and educators can find a rich variety of concepts and interpretations to use in creating curricula and developing and implementing Christian Environmental Education programs. This review grouped the diverse literature into the five categories of Ecotheology, Christian environmental action or responsibility, Christian land ethic, Christian Environmental Education and/or Outdoor Education research, and the life of Jesus because these categories can provide a framework that will assist those environmentalists and educators in their efforts to combine this literature and their work. The next chapter describes how this body of literature was used to organize this project resulting in *A Field Guide to Christian Environmental Education: A guide to integrating Environmental Education into Christian Education*.

CHAPTER 2

METHODS OF RESEARCH

Terminology

It is important to understand what Environmental Education and Christian Education is before approaching the issues of why and how these two disciplines can be integrated into one. Since the terms are so commonly used, there is a variety of ideas about what these two types of education are. Therefore, instead of defining these terms a spectrum of views representing Environmental Education and Christian Education is presented. This spectrum of views will serve as a filter that will help focus the information gathered for this project. What follows is more of a discussion and reflection on what Environmental Education and Christian Education is.

Many think of Environmental Education as being education that creates awareness, knowledge, and appreciation of natural and cultural environments and their resources (Ham, 1992). Environmental Education differs from basic science education because it hopes to change the life of those whom it is educating. The ulterior motive in Environmental Education is to foster an appreciation and stewardship for our environment. Environmental Education interprets the world around us and also identifies the effect that we have on it. It is not just about the knowledge of science, but about a love of nature and a mandate of responsibility. Environmental Education attempts to

instill a certain value system in the learner (Ham, 1992). With these instilled values come a change in attitude, a development of skills helpful in stewardship, and an active participation in the overall effort to have positive, harmonious interactions with the environment. Environmental Education is an all-encompassing science, an integrating concept that can span many educational disciplines, not just the sciences. It requires the ability to translate the technicality of science into concepts that all can understand in the way that works for them (Ham, 1992).

Christian Education is a ministry that involves people in the understanding and comprehension of Jesus' commands to love God and love neighbor. It is the active ministry of the Christian church, so any activity that has the ultimate goal of edifying the church is a part of Christian Education (Christian Methodist Episcopal, 2005). It is a ministry that attempts to help people experience life in Christ Jesus, and as a result of this, influence its followers to transmit a witness of love to the world. Like Environmental Education, Christian Education is all encompassing, addressing the whole human being in its case. Christian Education embodies the basic biblical idea of "go forth and make disciples" (Christian Methodist Episcopal, 2005). As in Environmental Education, in Christian Education there is a hope for a life change, a change of action and behavior, and a change in the whole of society. Christian Education prompts a belief system which, it is hoped; the individuals being educated will accept and then share with others (Christian Methodist Episcopal, 2005). Although the content is different, the process is similar to that of Environmental Education.

Approach

This study investigated how Christian organizations (camps, colleges, environmental organizations, etc.) integrate Environmental Education and Christian Education in their programs, specifically, how they do this, why they do it, and what forms this integration takes. This information was gathered by using a surveying method. The people already attempting this integration in their organizations were identified and surveyed. The answers gained from this survey helped to build a field guide of how organizations can begin to integrate Environmental Education and Christian Education in their programs. The field guide can be a resource for those who are just starting in this field or those who are just starting to combine these two areas of study. This field guide can also help those already in the field by giving them fresh ideas and new avenues to explore.

Identifying the Contacts

I am employed and trained in the field of Environmental Education, and a few of my contacts were people I already knew who shared my passion. In this field, many people are connected to one another in various ways, so these contacts led me to others. “Christian Environmental Education” was searched on the World Wide Web and located additional contacts for the survey. A basic contact and information letter, (see Appendix A), was sent to these contacts explaining who I was, what I was researching, and how they could help. The contact letter explained that a survey would be sent in the coming weeks and asked if the contact would fill it out. It also indicated that this study was looking for others in this field that could serve as contacts. This request led to other

contacts. Ultimately, sixty-six contacts were located.

Each contact was sent a survey (see Appendix B) in email form. Email form was chosen because many people use email and are comfortable with it. It also aids in the ease of responding to the survey and returning responses. To eliminate any problems with attachment failure, the survey was pasted directly in the email. There was an anticipated return percentage of around twenty-five percent because about that many of the contacts responded to the contact letter with supporting thoughts and expressions of interest in helping build the field guide with their responses. The study needed about fifteen responses to provide a variety of voices for the field guide. However, the more voices that could be obtained, the more complete the field guide could be.

Survey Questions

The survey consisted of four sections with eight questions in each section. The survey questions were short-answer, open-ended questions. This allowed each of the participants to tailor their responses to their particular situation. It gave them the opportunity to respond in the way that they felt was most appropriate. Although, this type of format tends to be a little harder to analyze, it gave the best results to work with. This format allowed for more diverse responses. The variety of responses that were received gave variety to the field guide. This helped give more complete ranges of responses to work with, and aided in making a more complete field guide.

The four survey sections were: Background and Training, Vision and Mission, Program and Curriculum, and Resources and References. These categories were chosen to fit well with planned the layout for the field guide. The answers that were received for

each of these sections fit into similar sections of the field guide. This provided the information that was needed to build the field guide. It allowed for analysis of each of the survey sections' responses and to use that information for the appropriate section of the field guide. Each of the survey sections is discussed in greater detail below

Background and Training Section

The "Background and Training" section was helpful in identifying characteristics of the respondents - their journey and preparation to work in this field. It showed the variety of different paths one takes to find him or herself in this calling or field. This section gathered the information of what training each person had in both Christian Education and Environmental Education. This helped identify what type of training people who are considering starting in this field might want to explore. The section considered a basic question, "Do participants have similar training and background experiences that have helped them get where they are, and that gave them the ability to develop these types of programs?" The answer might suggest what type of training people could offer those entering this field. It also gives those already in the field an idea of where people are coming from, and what types of training are currently available.

This section also explored how long people had been working with Environmental Education and Christian Education. This information could suggest how long this integration has been happening, and could give an idea of the experience level each participant has had with the subject. This information gave greater weight to responses which are tied more directly into the field guide. This allowed the study to

explore the path a person came to working with the subject matter. This information could indicate the nature of the paths available and could suggest which of those paths seem to lead more frequently to working with this integration. In this, and in all of the sections, the section was ended with an opportunity for contacts to add any more thoughts, comments, and information that they thought would apply to the section. The purpose of this question was to catch any information that might have missed in asking the limited number of questions that were chosen.

Vision and Mission Section

The second section of the survey was the “Vision and Mission” section. This section asked questions about the "why" behind doing these types of programs. The section dealt with the more personal calling and passion of each respondent. The "vision" part of the section asked about formative nature experiences in the respondent’s lives. The section’s purpose was to know if there were some similarities that could be drawn from the responses to these questions. Do people in this field have similar experiences that bring them to this path? If this is the case, then aspects of those experiences might be integrated into the field guide. Also this information could tell people in the field if their programs offer similar types of formative experiences for their audiences. This section explored why the participants felt it was important to carry out Christian environmental programming. Knowing this could help practitioners know why it is that they are doing this type of work, and what they can hope will be the outcomes for their audience. Questions in this section asked respondents to define their audience, and to provide information about what audiences are being served. Because audience becomes so

important in designing and carrying out a program, this information could allow for pairing ideas with audiences in the field guide.

Related to audience is the issue of the mission of the people being surveyed. Vision is internal; mission is the outside expression of that internal vision. Missions define who one is and why one is doing the work he or she is doing. This section's purpose was to investigate missions in order to reveal the outcomes that respondents hope to see in their audience. A mission statement indicates what an organization is all about. Knowledge of the mission can be an important consideration for someone starting a program. Knowledge of mission helps the person to know what they are doing and why they are doing it. Having this information might help them to build their program up from the foundation that they have discovered in defining their mission.

The answering of the survey questions may have been helpful to the respondents, because the questions reminded them of the vision that they have had, and the outward expression of this vision in their mission. The questions may have refocused them and their programs to work towards the outcomes that they want to see in those who participate in their programs. It seems that sometimes when a person who has worked on something for a long period of time, they can lose sight of the mission and vision behind their work. It is important to return to the mission and vision of a program or organization from time to time.

Program and Curriculum Section

“Program and Curriculum” was the third section on the survey. This section addressed the specific details of the programs that the respondents are developing and

delivering. This section provided important information for the field guide because it addressed the “how” of the integration of Environmental Education and Christian Education being developed and implemented at these organizations. In their responses in this section some respondents gave examples of how they are combining these two subject areas. One question asks for an example of the most popular class or program. This information, combined with the audience information, was used in the field guide to identify concrete activities that people can use when they start combining environmental information and Christian teaching. The activities reported by respondents had already proven themselves and had stood the test of time. In the field guide, they can provide a basis for developing a program, and can allow for early success. Another question in this section asks if the program is a Christian program that incorporates Environmental Education, or if it is an Environmental Education program that incorporates Christian principles. This distinction is important because it makes it possible to separate these programs into two categories in the field guide where there will be two categories of programs using the information as a resource.

The “Program and Curriculum” section explored how Environmental Education and Christian Education work with and apply to one another. This helps make a case for encouraging more integration to happen in Christian organizations. These responses were combined with information from various literary resources to give the field guide reasons for an organization to start doing this kind of integration. Including this information in the field guide may help organizations that have not already decided if this is an option for them, as well as help organizations that are looking for funding and/or support in

carrying out the integration of Environmental Education and Christian Education. The examples in the field guide of reasons for the integration of Environmental Education and Christian Education will provide organizations with some good information to include in their proposals.

The last question in the “Program and Curriculum” section explored how organizations that have program staff (interns, counselors, educators, etc.) train their employees to integrate Environmental Education and Christian Education. How to train employees is important because most people doing this type of work are not doing it alone - most of the respondents have staff working with them. Most new programs have program staff, or at some time will have program staff. Those in the field know that effective staff training is the key to an effective program. The information that this question provided allowed the field guide to include suggestions and ideas about training a staff. The training information in the field guide can give the people who are starting out information they can use to effectively run staff training which will lead to effective programming. Effective programming is essential to successful outcomes - the change, effects, and/or actions a person would like to see in their audience.

Resources and References Section

The last section of the survey was “Resources and References.” The questions in this section were less open-ended because of the nature of the topic. The first two questions in this section dealt with the various curriculum resources that the respondents found helpful in designing their integrated programs. These resources will be listed in the field guide with any comments the respondents provided about them. This listing can

allow a person using the field guide to know what resources might be helpful and which are not and thus save much time and effort. The questions about curriculum are separated into three categories: Environmental Education, Christian Education, and published integrated curriculum. These three categories are also used in the “Curriculum” section in the field guide. In addition to the integrated curriculum question, there was a secondary question asking the opinion of the professional on the need for specific Christian Environmental Education curriculum. Some believe there is a need for such resources, and this study investigated what many professionals in this field think about this need. Depending on the answers, this area could prove to be an avenue for someone to explore in a future study.

Other types of resources included in the questions of this section were: Biblical resources, websites, publications, people, books, and organizations. Biblical resources could include scriptures, nature theology, eco-theology, Christian writers, or other Bible-based resources. Gathering information about the Biblical basis of their combined programs could provide others with a start to a Biblical basis for their future programs. These resources could also provide some additional focus to the programs currently offered. Other resources, beyond Biblical resources, lend themselves to a great deal of variety. After surveying the resources that are mentioned, by respondents, they will then be divided into categories for the field guide.

Information provided in this section may also help in understanding where people get their environmental knowledge and their Christian knowledge. This information may provide resources to those new or starting in either of these fields. The field guide may

give them a source for accurate and good information on the two subjects. This is important in the age of the Internet where there can be difficulty in judging the accuracy of such information. Because most of the Christian knowledge a person does and should get comes from the Bible, it is the best guidebook for the work in this field. However, there are other resources that can be used, and that can help a person make sense of the Word. It is these types of resources that this section aimed to identify by asking the types of questions included in this section. The final resource questions gave respondents the opportunity to recommend curriculum and other resources for those that are starting out. The curriculum/resources they attached will be put into the field guide as activity helps for those individuals and organizations designing new integrated programs.

Organization of the Field guide

Responses from the survey question were combined with other resources from the literature reviewed and then compiled into a field guide containing fifteen sections. Each section was compiled from information from one or more of the sections of the survey. Each of the sections of the field guide deals with a different subject helpful to those who are investigating integrating Environmental Education, or starting to integrate Environmental Education, into their Christian Education programming. The sections are: Definitions, Curriculum, Scriptures, Theology, Virtues/Values/Rights, Provisions/Degradations, Activities/Topics, Ideas for Integration, Staff Training/Helpful Background, Outcomes/Goals, Mission and Vision, Concepts/Objectives, Resources, Environmental Education Politics/Arguments, and Words of Advice. The sections chosen were those thought to be the most helpful for people entering into this type of

programming. The information gathered will be more easily understood by categorizing this information into sections. A person can then look up the section that they may need to investigate at that time. This format will be the most useful to the people exploring this integration. Along with this format, the sections each deal with an important factor for a person or organization to consider when developing integrated Environmental Education and Christian Education programming.

Definitions Section

The first section of the field guide is the “Definitions” section. This section includes definitions of some of those terms that seem to come up frequently in conversations, programs, curriculum, resources, and meetings. There are many common terms that are used in this field. Sometimes the people that use them probably do not know what they mean. Awareness of these terms and their meanings can help a person to know the language necessary for effective work in Christian Environmental Education. It is important to know the language of the subject in order to be able to communicate effectively with others in the field and to teach in the field. This common language is the basis of professionalism. The definitions will prove helpful for those beginning to join in the discussions surrounding this discipline.

Curriculum Section

The “Curriculum” section outlines and discusses the different sources of curriculum being used in the field. It helps the reader to narrow curriculum sources down to what they need and what may be effective for their programs. The section is divided into three subcategories: Environmental Education curriculum, Christian Education

curriculum, and Integrated Environmental and Christian Education Curriculum. The reader can see what is available in each of these categories, and use them to decide which curriculum resources are best for their needs. This section also includes information about how to find and use these resources. The “Environmental Education Curriculum” subcategory lists sources that include only Environmental Education activities and that do not include any faith-based activities. The “Christian Education Curriculum” subcategory lists sources that deal primarily with the Christian faith and beliefs and does not include activities that are about the environment. The “Integrated Environmental Education/Christian Education Curriculum” subcategory includes resources that bridge the gap between the two disciplines of Environmental Education and Christian Education. This subcategory lists only Bible-based Environmental Education curriculum resources.

Scriptures Section

The “Scriptures” section of the field guide lists the passages that are environment or Creation oriented. The passages are further categorized into common themes. This gives the reader the opportunity to see what scripture has to say on the subject, and may prove helpful for finding scripture passages to support or underline specific curriculum and activities. This section may also prove helpful when making a case for the value, need, and responsibility to have an integration of Environmental Education and Christian Education in their programs. There are eight subcategories in this scripture section.

The “Consequences and Sin” subcategory of the “Scripture” section contains the scripture passages that speak of consequences to abusing the earth. Among these scriptures are many prophecies of what will happen if people do not care for the Creation.

The passages speak of abusing the land as a sin. The “Responsibility and Roles” subcategory contains passages that speak to people’s role and responsibility of environmental stewardship. These scriptures help humans understand their part in the Creation and tell what that means their actions toward the Creation should look like. The third subcategory, “The Land Speaks/Witness of Creation,” contains passages that show the Creation’s role in God’s works. These scriptures speak of the praise that the Creation has for its Creator. Included are passages that speak of the witness that the Creation has of God. The passages in this section help people to understand what the Creation has to teach them about the nature and character of God.

A fourth subcategory in the “Scripture” section of the field guide, “The Lord and His Works,” includes passages that speak of God’s role in Creation and His presence there. These scriptures deal with God as Creator and what that means for the rest of the Creation. The scriptures help people to know what it means to be created by something larger than themselves. The passages show people the works of His hands and what that tells them about God. The works are a window into the house of God. One can learn a great deal about someone by seeing what they do, what they create.

In “The Jesus” subcategory are scripture passages which speak of who Jesus is, and how He interacts with the Creation. These passages help His followers to know how to live a Christ-like life in regards to the Creation. The seventh subcategory of the “Scripture” section in the field guide is the “Christian Land Ethic and Sacred Land” subcategory. These scripture verses speak of how humans should live on the land and treat it. They help them to understand the sacredness of land and what that means. They

help to build a person's land ethic – his or her relationship with the land - the land being all of Creation.

The last subcategory in the scripture section consists of a listing of the scriptures that are “Nature Stories.” Scripture stories are one way God can speak to His people. These particular stories are ones that deal with the Creation and nature experiences. These subcategories may prove helpful when an individual is working on a particular activity and needs a specific scripture passage that fits into the activity's topic. It may also prove to be an important section when directly relating Christian Education and Environmental Education.

Theology Section

The “Theology” section includes a variety of in-depth interpretations for scripture verses found in the Scripture section. This section gives some additional rationale for Christian Environmental Education programming, and defines what a Christian's roles and responsibilities are regarding the environment. Topics like stewardship, Christian land ethic, and Creation-care are discussed in this section. Information for this section comes not only from the survey responses, but also from several theological references. The section shows the reader the biblical basis for some of these topics in order to help them in building an integrated Environmental Education and Christian Education program. As with the “Scripture” section, the “Theology” section may prove helpful in defending and gaining support for programs, and giving more substance and validity to those programs. With this information, readers may be better able to represent their programs and this field.

Virtues and Values Section

The “Virtues and Values” section deals with both Christian virtues and values regarding the environment. The section lists things such as biological values and virtues, Creation values and virtues, and human values and virtues. These are the virtues, values, and rights are taken from the book Loving Nature by James A. Nash (1991). Values and virtues are what make a society’s culture and faith. If these precepts are changed then the society also changes. The values and virtues listed in this section are those that professionals in this field are hoping that participants will adopt. If a majority of the culture comes to feel that these are the important values and virtues, then the whole of the culture will change. If the faith is changed, the culture will be changed too. This change in cultural values is the basis of forming our mission, vision, and outcome. The values and virtues listed are broad. They provide the foundation for the building of the mission, vision, and outcomes, so critical to the development of Christian Environmental Education programs.

Provisions/Degradations Section

The “Provision/Degradations” section explores the seven processes that God has ordained that keeps the earth going, and the seven degradations people have done to hurt these processes. This section’s information comes from the book Earth-Wise by Calvin B. DeWitt in which he develops and explains these ideas in greater detail (1994). The provision and degradation concepts are helpful for an environmental educator to know because they are some of the basic concepts and issues that they will teach to their audiences. This section was included to help those who are exploring the idea of

integrating Environmental Education and Christian Education. It will help them to know each of these seven processes and degradations in order to make better connections between the two disciplines and to teach about the environmental crisis.

Activities/Topics Section

Following the “Provisions and Degradations” section is the “Activities/Topics” section. In the survey, the respondents were asked about their most popular programs and activities. The responses to these questions are compiled in the activities section of the field guide. This section has activity suggestions and ideas that a person can try in their programming. The section provides some fail-safe activities that others have found to be popular and successful. This way, a person developing a new program already has some activities that they know will work and be useful. It gives them the opportunity to get started on the right foot in their programming. They can try new ideas, but have a sturdy foundation to fall back on in case those ideas do not work.

Ideas for Integration Section

The “Ideas for Integration” section in the field guide follows and supplements the “Activities/Topics” section, but is broader. The source of this information is a question in the “Program and Curriculum” section of the survey: “What are some specific ways that you incorporate Environmental Education into your Christian Education programs (or vice versa)? Information in this section of the field guide goes beyond specific programs, and ties all aspects of programming together. Included are ways in which a person can bridge the gap between Environmental Education and Christian Education, making them one discipline. As in the “Activities/Topics” section, these techniques are ways that have

been proven to work, and are successful ideas. This information further builds the knowledge base which someone can use to begin a program of this type. The ideas in this section are designed to get the creative juices flowing in the individual or organization. Readers will be able to come up with other ideas that apply directly to their specific situation. The “Idea for Integration” section can give them the basis for brainstorming and ideas they can build upon as they develop programming integrating Environmental Education and Christian Education.

Staff Training/Helpful Background Section

The “Staff Training/Helpful Background” section of the field guide is designed to be used several ways. First, this section explains what professionals in the field feel is important in a person’s background and training in order to be effective in this field. This information can help a person to know what useful background and training they already have, and what additional training they may want to consider obtaining. However, there is no specific background or training required for those interested in integrating Environmental Education and Christian Education. Anyone who is in Christian Education or the greater Environmental Education field will tell you that people come to this type of work from many different paths. This makes the field more diverse, and this diversity is largely beneficial. The section, however, gives them an indication of what people working in the field find helpful in their background and training. The “Staff Training/Helpful Background” section also gives a person or organization a menu of things they might want to consider when hiring staff. Furthermore, part of this section provides information about with the training of program staff. Building and delivering a

combined program is difficult to accomplish alone. Finding and training a community of staff can be vital to the success and longevity of a program.

Another part of the “Staff Training/Helpful Background” section is a listing of places to obtain the training that is mentioned in the above sections. These places have been suggested by the respondents because of the valuable information and successful training programs that they offer. The suggested sources of training in this section can give a person or organization a list to start from and to build on. The list given is not intended to be a complete list, but instead can be used to get someone headed in the right direction and to generate ideas.

Mission and Vision Section

The “Mission and Vision” section may help the reader determine some important foundations of their programs. One must know the mission, the “why,” of the program and the vision, the “where and how.” These two elements, along with the outcomes, are the most important parts of a program because they are the filters by which all other parts are seen and developed. This section of the field guide contains example mission statements that explain reasons why others are doing this work, which can complement the individual goals and outcomes of each program. This section does not include a comprehensive list of mission statement, but instead gives some examples of what others feel their mission is. This section gives insights and ideas for people and organizations that have to define these things themselves. The goal is to aid the reader in verbalizing the mission that is inside of them.

Outcome/Goals Section

The “Outcomes/Goals” section can be important to the reader because goals and anticipated outcomes are vital to building a program. A person must know the results they want to see in the audience of their programming. The outcomes are the “effect” the program has on the participants. A program has no purpose without outcomes. A program should be built up from this foundation. Awareness of outcomes aids in developing a program by allowing the programmer to start from the finish and think backward when planning. The reader can use this section to develop his or her own outcomes. The outcomes are the baseline that is used when selecting activities that make up a particular program. If an activity will not provide the outcome desired, then this section of the field guide may provide help in choosing a different activity.

Concepts/Objectives Section

The “Concepts/Objectives” section contains information that is important early in developing a program because these concepts and objectives help bring structure and focus to the topics of specific programs. Concepts and objectives also provide a way to have common ground and consistency in the programs offered, even when there are several different people teaching them. While the “Mission and Vision” and “Outcomes/Goals” sections are broad and cover a whole program, the “Concept/Objective” section is focused on integrating Christian concepts and objectives with environmental concepts and objectives. Concepts and objectives are the important pieces information a person wants a participant to take home from each activity, whereas outcomes and goals are what a person wants a participant to come away with from the

program as a whole. There should be specific concepts and objectives for each activity and curriculum that a person develops. Some sample concepts and objectives are listed in this section to help the person or organization develop their own specific concepts and objectives. Again these concepts and objectives are the main points or specific information programmers hope participants will experience and learn when participating in a specific program or activity. For example, a participant might learn the parts of the water cycle: evaporation, condensation, precipitation and infiltration, in an activity on the water cycle. Concepts and objectives are the focus and direction of the activities and curriculum of a program.

Resources Section

The “Resources” section has four subcategories: Books, Organizations/Websites, Publications, and People. The books that others have found helpful in their programs are listed in the first subcategory. These types of resources always prove to be helpful. The people who participated in this survey and who are willing to be resources to others are listed in the “People” subcategory. These people are willing to share curriculum, ideas, and general advice with the readers of the field guide. Groups and their websites that can be helpful for information, curriculum, policies, etc. are listed in the “Organization/Website” subcategory. These organizations and/or websites proved to be helpful to the people who responded to the survey. They are sources of environmental and Christian knowledge, and provide ideas for programming.

Environmental Education Politics/Arguments

The “Environment Education Politics/Arguments” section, which follows the

“Resources” section, is divided into two parts. First, there are many national and state policies and laws that can positively or negatively affect an Environmental Education or Christian Education program. This section helps bring awareness of these to the reader, and gives them sources of additional information. This section is a source for finding both pending and existing legislation on the state and federal levels that could affect the programs they are developing. This knowledge will help them to tailor their programs accordingly.

The second part of this section includes information on the arguments Christians have against Creation-care, or in the secular arena, environmentalism. The arguments listed in this section give the reader an idea of the negative attitudes and disagreements that they might encounter in developing these types of programs. This background information may help the person or organization be prepared for negative mindsets that they may be trying to change, and help them prepare to tailor their programs accordingly. This part of the “Environmental Education Politics/Arguments” section will include Christian arguments against Creation-care. Through previewing these types of arguments in this section of the field guide, the reader can become a better educator, and come to know their audience more completely. In addition, these arguments are what organizations will face when trying to gain support and backing for their programs. By knowing the arguments beforehand, programmers will be able to build a stronger defense against these types of mindsets. They can develop programs that much more successful and powerful. The arguments that Christians have can also be political in nature as they incorporate the politics of the church, or are a part of the politics of the church. Having

accurate political information is becoming more and more important in this field because there is much activity going on in every level of government regarding environmental policy.

Words of Advice Section

The last section is the “Words of Advice” section. This section contains statements from the people who have “been there and done that”. These are the words of the sages of Christian Environmental Education - the voices of the experienced ones. This is advice that is specifically directed to the readers of this field guide to give guidance in developing their programs. It is lessons learned by the respondents to the survey that they want to share with those who will follow them - the next generation of Christian environmental educators. If the next generation hopes to be wise, and hopes to be successful, then they will want to heed the advice of those who have come before them. This has always been the best way of passing on the lessons of the past - through advice of those who learned the lessons first.

Final Thoughts on the Field Guide

The fifteen topics which comprise the sections of the field guide are the topics that a person or organization needs to think about and work with in order to develop an integrated Environmental Education and Christian Education program. This field guide is not the only resource that they need, but it can serve as a good place to start and a way to get headed in the right direction. It will open some doors for its users and lead to communication and discussion within the field. It will give users a good foundation on which to begin developing their Christian Environmental Education programming.

Environmentally, people are running out of time, and it is time to do something. Therefore, this type of programming is becoming more and more important. This field guide will help Christian individuals and organizations to take the necessary steps to integrate Environmental Education into their Christian Education programs or vice versa. These programs are human's future and hope - a future and a hope that God gives them (Jeremiah 29:11). Perhaps this field guide will contribute in some small way to the securing and taking hold of that future.

CHAPTER 3

RESULTS OF THE SURVEY STUDY

Returns

I sent sixty-six surveys to professionals in the field of Christian Environmental Education. I had seventeen respondents to the survey. From those responses I built my field guide. The return percentage for these surveys was twenty-six. I believe this is an acceptable return percentage especially since they were a long answer format and consisted of many questions. This was about the percentage I expected after the initial contact. The response was likely helped by sending them to specific people and by sending a contact letter prior to the sending of the actual survey. I also sent a reminder note to help spur others on to complete the survey. This allowed me to get a few more back than I would have had I not done this.

Characteristics of the Respondents

In my survey, I included questions that had the purpose of discovering information about the respondents. These questions did not tie directly to building and developing the field guide but did give some relevant information. I wanted to see what kind of person typically found themselves in this particular field. I wanted to know if the respondents had certain things in common. This might give some ideas about how to develop the field and what background might best prepare those who become involved in

integrating Environmental Education and Christian Education. These similarities might also give insight in to what is important for the audience of these programs to experience and know in order to mold them into people who also find the connection between God and the environment. This information could be important when developing programs and activities that combine Environmental Education and Christian Education.

The first personal background information I wanted to discover was how long these individuals had worked with Environmental Education, Christian Education, and the integration of the two. This gave me an idea of the range of experience levels among the respondents. I wanted to make sure to survey a diverse sample of the people involved in Christian Environmental Education. I wanted to gather information from people from different walks of life and at different stages in the integration process. The results seem to show that I was able to do that.

The question about how long they have worked in the field also gave me information about how long this integration has been happening (see Figure 1). The shortest amount of time in each category from any respondent was one year. It was interesting to compare the responses of this person with those of a person who had been working in

this field for

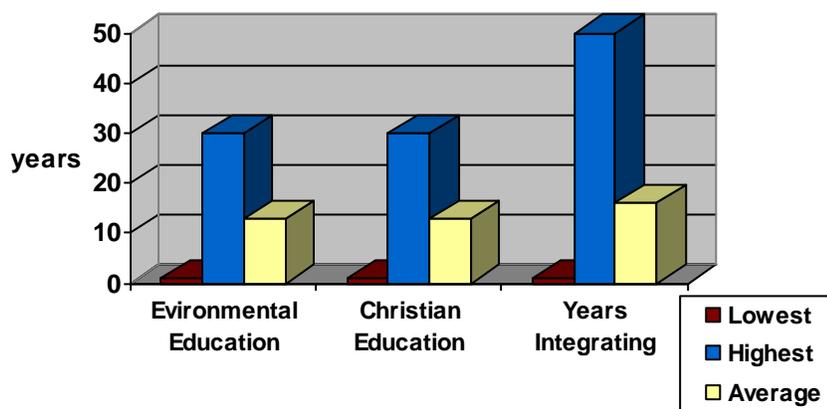
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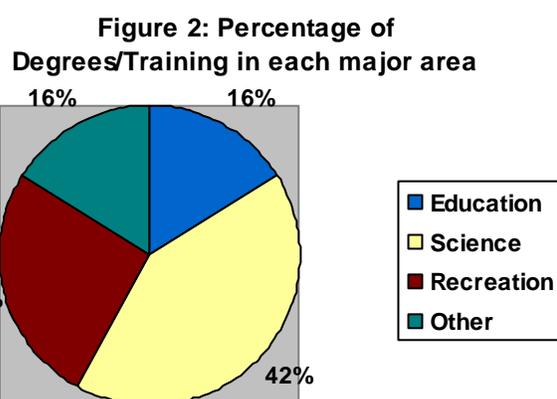
time for

Figure 1: Bar Graph of Time Working with each of the Dicipines



experience in Environmental Education and in Christian Education was thirty years. The longest amount of experience in combining these two subjects for an organization was fifty years. The average amount of experience with Environmental Education and with Christian Education was thirteen years for each. The average for combined programming was sixteen years. I believe that the variety of levels of experience in each of the categories gave me a good sampling of the overall field of Christian Environmental Education. This variety also gave a good sampling of voices to include in the field guide.

I also asked about respondents' primary area of background and training (see Figure 2). Although I received a wide range of answers, there were some common themes in the responses about background and professional training. Many of the respondents had some type of education training and/or background. This information makes sense because the people who responded were professional educators of some type. The sciences were well represented in the backgrounds of many of these professionals. Some of the scientific disciplines represented were biology, ecology, environmental science, and life sciences. In addition, there were many respondents who had some recreational training such as outdoor education, leisure studies, and outdoor recreation. There were a few respondents who had



professional training or background in Christian Education, but most of them had learned

most of their knowledge in this area through experience on the job. Although interesting, this discovery was not unexpected.

Personal Stories

Many of the respondents had important, life-changing experiences in nature. Many of these nature memories came from experiences at summer camps, grandparent's farms, hunting and fishing, wilderness trips, national park vacations, and scouting events. It seems that these experiences were critical in shaping these people into becoming who they are today. Many of these critical nature experiences were experienced when these professionals were growing up. Often the stories include family member influence as an important piece of the puzzle.

It came as no surprise to me that people passionate about both God and the environment would have similar experiences in nature. I had expected that these people would have stories that are similar to my own; that they too would be deeply affected by experiences they had in nature. This seems to be a common thread in anyone who works with Environmental Education. Many of these respondents' formative spiritual experiences also occurred in or had some tie to nature. Again, summer camp and those types of experiences were important in developing their passion for sharing the environment and God with others. Family members played a significant role in this area as well.

Importance of the Integration

There were many responses to the question of why respondents believe that this integration is important. Many of the responses centered on the current environmental crisis. Others included the reason that there are very few programs in the church calling

for the stewardship of the earth. The biblical mandate of stewardship was an underlying theme in the responses given for the importance of integrating Christian Education and Environmental Education. There was importance placed on fostering appreciation for the natural world. The responses included mandates for change in the negative environmental behaviors among humans. There were certain spiritual components in these responses. I have included some of them below. Again, there were many common themes running through these responses – many common senses of calling in this field.

- “It is important to witness to those who think Christians have destroyed the environment and seek to loosen environmental restrictions. It is important for Christians to know that they are responsible for the resources provided for life for all Creation.”
- “It is important to teach about God and Christ while outdoors, but never talking about God’s Creation would be ridiculously lacking in responsibility.”
- “God reveals something of himself as we encounter the Creation; a camping experience without this is incomplete.”
- “God called us to be stewards of what He created.”
- “If we can connect people with the Creation they can begin to see his simple Creation in them without all of the junk that gets in the way of our daily lives.”
- “Caring for the Creation is directly linked to a Christian faith – it cannot be separated.”

- “It is another way for people to learn and change behaviors that are more in tune with the environmental and health needs of their communities.”

Audiences

I asked the respondents about their primary audience. I wanted this information to provide a framework for interpreting their responses on mission and programs. It helped me to understand their responses on various Mission/Vision section and Program/Curriculum section questions. Most of the residential centers that responded had a primary audience of school children in kindergarten through eighth grade. The centers had both public and private schools attending their programs. A few organizations worked primarily with older students in eighth through twelfth grade, and a few also worked with adults. Some of the organizations had contact with families and congregations which gave them a wide variety of ages for their programs. I had the goal of surveying groups with both different and similar primary audiences. I wanted several different audiences to be represented for the field guide, but I wanted at least a few responses from programs serving the same audiences in order to add some depth to the responses I would receive. I feel as though my goal was met with the responses I received.

Percentages

I also wanted to know what percentage of an organization’s program was Christian Education and what percentage was Environmental Education. I asked this question to find out if the respondents’ organizations were primarily focused on Christian Education with Environmental Education as a secondary focus, or the reverse. I found that the

percentage was dependent on the organization's audience. For example, if the audience was a church group or private Christian school, then the content could be closer to fifty/fifty, or would be higher in the Christian Education category. If the audience was a public school, the program's content would be mostly Environmental Education with the only Christian Education being the Christian actions and attitude modeled in the staff.

Most of the residential centers' programs were more focused on Environmental Education during the school year, and more focused on Christian Education during the summer camp program. A few organizations mostly worked with Christian groups, so their programs tended to have a higher proportion of Christian Education with Environmental Education only worked in when applicable. Another factor influencing percentage mix was the group's expectations and desires. If a group was primarily coming for Christian Education, then the program would have a higher percentage of Christian Education. If a group was coming for Environmental Education, then the program would be focused on this.

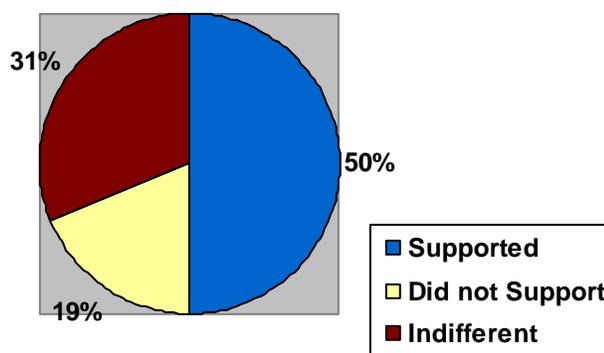
Many of the respondents had trouble answering the question about relative percentages of Environmental Education and Christian Education. This makes sense because these respondents are working with integrated programs and those integrated programs are not segregated into Christian Education and Environmental Education sections. In such programs, there is a lot of overlap between the two areas, making it harder to think about the percentage that is Christian Education and the percentage that is Environmental Education. Also, most of the professionals in this field have a hard time separating these disciplines because they feel that they are one and the same. When a

person is both passionate about Christianity and about the environmental crisis, they tend to link those together, and find it difficult to separate the two for a question like the one I asked.

Christian Environmental Education Curriculum

In my searches for resources for both Environmental Education and Christian Education, I found only a few combined resources. I wanted to know if others had the same problem when looking for

Figure 3: Percentage of opinions on a need for integrated curriculum



these resources. Therefore, I asked if the respondents used any curriculum resources that specifically integrate Christian Education and Environmental Education. Most of the respondents did not have any curriculum that was designed or marketed to do that. They have either made their own or collaborated within their larger organization to create some.

I also wanted to know whether professionals felt that there was a need for integrated curriculum materials (see Figure 3). A majority of the responses for this question were supportive of the need. Many of the respondents stated that there is a need for integrated curriculum resources. There were only a few who did not feel that this type of resource

was necessary, and a few who did not express an opinion. After receiving these survey responses, I feel that there is general support for integrated curriculum.

I found that there are a few larger organizations that have developed integrated curriculum. Perhaps these organizations could share their resources with other organizations working on the same integration. This could be the start of sharing integrated resources available to those who are in this field. I believe that sharing resources is important. Sometimes people want to hold on to what they have and are not willing to share. My philosophy is to not “reinvent the wheel” or to start from scratch. If someone has something that is successful, then why not share it with others? Most of the respondents appeared to share this view.

I believe that there are further studies that could build on my research. One approach would be to gather integrated resources from a variety of organizations and provide them for others. The study would encourage the sharing of resources among professionals. Another possible approach would be to gather existing integrated resources and build on them to create a formalized integrated curriculum. The finished product would be an integrated curriculum guide. A third approach would be to study outcomes so that professionals can know if they are having the effects on people that they desire. Evaluation of outcomes is something that is often forgotten in the process of developing and implementing these programs. Without such evaluation one cannot know if a program is accomplishing what it is intended to do. It helps to know how to improve and make the programs better.

Field Guide

I gathered responses in four major areas: Background and Training, Mission and Vision, Program and Curriculum, and Resources and References. The detailed responses from these four major areas have been compiled into the field guide – A Field Guide to Christian Environmental Education: A guide to integrating Environmental Education into Christian Education. It is found in Appendix C. I was fortunate to get wonderful cooperation from the respondents. They gave detailed and useful responses. The responses have helped me to develop a complete field guide. My hope is that this field guide will help those who are committed to this growing field. I believe that this will help to make the field of Christian Environmental Education to be the best it can be.

CONCLUSION

The Journey

Throughout the journey I have taken in the time that I have been designing and administering the survey, organizing the results, writing this paper, and developing the field guide, I have had several experiences which have broadened my perspective on the topic of integrating Environmental Education and Christian Education. These experiences have reinforced my beliefs about why this topic is so critically important. I believe I need to use some recent experiences as a framework for concluding this paper. Two of the experiences are literary works that I have read in the concluding months of this project. They have given me some more perspective on the state of today's youth. Another is a conversation I had with a group of concerned people of faith. In that conversation was a man from Zimbabwe. This conversation reinforced the findings of this paper and gave those findings a global perspective. Reading the man from Zimbabwe's unpublished paper allowed me to see this topic from a new perspective. Taken together, I feel that these four experiences illustrate the need for my project, summarize the spiritual foundations of work in this field, and demonstrate why this work is of great importance to everyone.

Nature-Deficit Disorder

There has been a lot of discussion over newly published book, Last Child in the Woods by Richard Louv. In this book Louv describes something happening in today's youth, something he calls nature-deficit disorder. Although this is not a proven psychological disorder like attention-deficit disorder, he feels that any professional working with young people recognizes this deficit in today's youth. He describes nature-deficit disorder as the lack of natural outdoor experiences in a child's life. Louv feels that children are getting further and further separated from nature. He says that this generation is the instant gratification generation. They are the "plugged in" generation. Children today are consumed with technology in the form of iPods, video games, microwaves, TV's, computers, and cell phones. They have never known a time without these devices. In fact one child interviewed by Louv said that he liked to play inside because that was where the electrical outlets are (2005).

This new kind of child is one who has never experienced the feel of mud swishing between their toes, has never felt the moist, slick skin of holding a frog, has never climbed a tree, and has never laid on their backs and watched the clouds pass by. There are a few reasons that Louv believes that these truly are the "last children in the woods." There is the constant over-stimulation of technology around them. This distracts them from nature and makes nature not as fun and exciting. Louv asserts that another reason is that the world is seen as a scarier place. Parents fear for their children. They keep them close and do not allow them to explore the neighborhood on their own. Parents have a deep child abduction fear from the reports on the news. Louv states that child abductions

have not increased, but the fear of them has. Unfortunately this keeps kids indoors and away from wilder nature areas due to the fear that the “boogieman” is waiting to grab unsupervised children. Louv points out that there is also the fact that wild places are no longer close by. Development has sprawled across the areas that were places for nature experiences before. Louv states that people have left the farms. There are mostly cooperate farms now. No longer are children spending time at the Grandparent’s farms as their parents did when they were children. There is now a disconnect between the land and the people (2005).

Louv observes that people’s vacations have changed. No longer are they camping, fishing, and the like. The attendance of national and state parks has dropped, and the type of experience of those that do visit has changed (2005). The national and state parks have turned into drive-through experiences. People are experiencing nature through technology. They are experiencing the wild in cars, and nature on TV. “Animal Planet” is a popular network and it is very educational, however, it is still one-dimensional. The child does not truly experience nature. They learn more facts and figures, but do not have actual hands-on, experiential encounters with nature. Louv believes that hands-on experiences are more important than systematic knowledge. He states that unless this situation changes, there will be some serious consequences. He states that people who work with children have been calling for this change for quite some time now (2005).

Louv also includes some thoughts about how nature-deficit disorder affects a child’s spirituality. First, he states that spirituality is to be constantly amazed, and that the most transcendent childhood experiences happen in nature. That the state of being

constantly amazed happens more often when a child is in nature. He believes that nature is nourishment for a person's spirit. With this nourishment comes unfettered joy in that natural place. Louv states that nature has the power to calm and soothe people in their hurried lives. The children today are busier and busier in their lives. They are overworked and overscheduled - a child no longer gets to be a child. Louv asserts that the more that people separate their children from nature the more that they will be separated from God (2005).

According to Louv, parents have a responsibility to bring their children to nature. Parents choose to be shepherds and stewards, or they do not. Human beings did not need scripture to rape and pillage the land, so religion is not necessarily the problem. The type of religious experience may be the problem. Parents who do not choose to bring their children to nature are keeping an important spiritual experience from their children. Louv believes that children do not need to know whether to care about the land, but why to care. For the attachment to land does not only do great good for the child, but for the land as well. Louv states that it is by these experiences that passion is given to the child. It is a personal experience (2005).

Louv has some suggestions for people regarding this spiritual deficit in today's youth. He believes that their future lies in awaking them to the Creation. People, especially parents, need to recommit to the spirit-nature connection, because it is by this connection that children will become closer to God. Therefore, caring for the Creation is for the future of children. This makes conservation a spiritual act (2005). Nature-deficit disorder may not be a real psychological disorder, but it is something that is

disconcerting. If parents do not “cure” their children of this disorder, there will be serious consequences. Society has changed the way children have grown up and I agree with Louv that it is not for the better. I think that many others would join in that belief.

Nature-Spirit Connection

Harvey Locke is an author who has more to say about the lack of the nature-spirit connection in our youth. He expands upon what Louv believes is happening spiritually to our youth. Locke states that in order to “save” the earth there needs to be a restoration of a sense of the sacred to the Creation. From this will come a common deep and abiding concern for the Creation. People will share a sense that nature is sacred and worthy of protection. Locke believes that it is no light matter to work for the survival of the Creation (2005).

Locke states, “I think that instead of focusing on what is wrong with one tradition or another, we must look to what these traditions could bring to the protection of the earth.” (2005, pg. 14). Locke asserts that every major religion deplors greed, and encourages reverence for the sacred. He believes that religions need to reach out and embrace others who believe nature is sacred. Locke maintains that people have poorer spiritual, physical, and emotional lives if they cannot feel nature’s power and receive it in their hearts and in their pores (2005). It is this feeling that people need to rediscover. If not, the nature-spirit connection will be lost – something that would leave people with a large hole in their spirituality. It is not everything that our relationship with God is, but it is an important part that people are missing.

Conversations

I have had many conversations in the process of writing this paper. Conversations are good – communication is good. People need to talk and discuss these things. If they do not, nothing will happen – something we cannot afford. One particular conversation I had with some concerned people gave me new perspective on this topic. In that conversation, it was agreed that people are living in a stimulative storm - that they are distracted and blinded by the light of technology. This has led to the path of destruction that the world is taking. The group also agreed that a change in society will not happen if there is not first a change in religion and in governmental policy and values. If the culture is changed, the environment will change. This paper has focused mainly on the United States, and specifically the Christian people of the United States. However, the environmental crisis is a global issue that requires a global perspective. In this particular conversation, there was a man who is involved with environmental work in Africa. Talking with him and reading his paper gave me this global perspective. I believe that this global perspective was a necessary way to conclude this paper.

Hati Mvundura is working on a proposal for Christian environmental centers at the mission schools of the United Methodist Church in Zimbabwe. He believes that people have the mission to be stewards – that people are to demonstrate loving care and respect to the Creation. He states that our current course of action jeopardizes the natural inheritance God has entrusted to *all* generations. Mvundura states that the results need to provide a higher quality of life for all of God’s Creation (unpublished, 2005). This is the global perspective – higher quality of life for *all* of God’s Creation. Here in the United

States, Environmental Education is a “touchy feely” science. In Zimbabwe, Environmental Education is about showing people how to survive in the current environmental crisis – how to get clean water and how to get food. In the United States, people are fortunate to have the privilege to clean water, abundant food, and no worries of surviving.

Mvundura believes that the people of the earth need to be and, are in this together (Galatians 3:28). This is a foundation of hope. In Zimbabwe, communities are tied to the land and were established with these strong ties. I feel that in the United States, communities need to return to these ties. Americans can learn from the people of Zimbabwe in this regard -Americans can – and need to – live simple, less resource-dependent lives. In Zimbabwe, the people are trying to emulate the Americans. Mvundura feels that they need to be who they are instead of trying to be like someone else. Zimbabweans need to use the land and resources they have to support themselves. The Zimbabweans need to return to expertise they have had for thousands of years while incorporating the useful knowledge of today (unpublished, 2005).

Mvundura agrees with others in this field who believe economic health and environmental health are inextricably linked. This is apparent in the communities of Zimbabwe and in other developing countries. He feels that in order to have a healthy economy and environment, the “village” needs to be helped to see and understand the variety and complexity of the Creation around them and how it was created. This will help the “village” to regenerate God’s Creation so that it may sustain life and be a place of joy. Mvundura believes that since the Creation is a common gift to all life, it requires

that people use just patterns of land use. The church, in his opinion, needs to provide the basic needs of food, water, shelter, and space to its people. This has not happened in Zimbabwe. They have tried to give Jesus to the poor before giving the poor the physical things like food, clothing, and shelter that Christians are called to give. Without these basic needs being met, the people cannot know Jesus. Jesus provided first for the physical needs then for the spiritual needs. He fed the five thousand, healed the lepers, and gave fish to the fishermen. God can be first known as Provider and then as Redeemer.

Mvundura states that the church has not used its weight and pull in our cultures in the way that it should have. The church has a great effect on the society and it can be a positive or negative effect. He believes that in respect to the environment, the church has had too negative an effect. Mvundura asserts that the church needs to change because of the responsibility it has to this generation and future generations (unpublished, 2005).

Mvundura is currently attending seminary here in the United States. He again brings a global perspective when discussing the current generation of youth in the United States. He shares the concern Louv has about our youth. Mvundura feels that youth here are missing natural experiences, that they are over stimulated, that they are a generation of instant gratification, and that they know more about the technology around them than about the natural world. Mvundura believes that Americans have done a disservice to today's youth by giving them all they want and desire. Americans, by doing this, have taken away what the youth of this country truly need. Today's youth miss out on what they need – the vital experiences in the Creation. The church is doing nothing to stop or remedy this growing issue (unpublished, 2005).

The Disease and the Cure

I think that it would be appropriate to think about this issue in today's youth as a large part of the environmental crisis. It can be compared to a disease. As one knows, diseases need to be treated. There is much support, money, and effort that is given to finding the cure for a disease. If a disease is not treated, it leads to more suffering and longer suffering. I believe that the Christian church has a responsibility of healing. In that responsibility, the church should do all it can to ease the suffering of the people. This will be done partly by easing the suffering of Creation since its health and human health are linked. Christ came to redeem – He came to renew. The Bible is direct when it comes to stating how Christians should be Christ-like. That means Christians need to redeem and restore. It is through this that the curse is cured. Sin is the disease, and by isolating children from nature the disease is spreading. As Mvundura states one can choose to shepherd and steward or one can choose not to (unpublished, 2005).

One way that the disease can be cured is by integrating Environmental Education into Christian Education. By making this integration, the restoration and redeeming process can start. I believe that this process is vital to the sustainability of this earth and the people on it, and therefore to the sustainability of the Christian Church. The field guide found in Appendix C will give organizations and individuals the tools to help implement this integration. This integration can be the vaccination for the disease plaguing youth and the Creation. With effective, integrated Christian Environmental Education, people will begin to renew the Creation-spirit connection – a connection that is vital to their relationship with God. This relationship with God is vital for man to have,

and vital for the whole Creation. The responsibility to nurture the relationship is in the hands of the people – it is their choice. Life always comes down to choices. They can choose to receive the gift of salvation and follow God or they can choose to go the other way. What a person chooses affects their eternity. Will they continue to go down the path of environmental destruction, for “wide is the path that leads to destruction,” or will they take the narrow road which leads to salvation and renewal? I hope that people will choose the narrow path.

APPENDIX A: CONTACT LETTER

Dear (Name)

My name is Joel Light and I am the interpretive naturalist/day camp coordinator at Wargo Nature Center in the Anoka County Parks and Recreation Department located in the Twin Cities area of Minnesota. I am presently pursuing a master's degree in Environmental Education at Hamline University also located in the Twin Cities.

For my master's thesis I am studying two areas of interest to me: Environmental Education and Christian Education. Specifically, I will be surveying organizations which may presently be including some elements of Environmental Education in their Christian Education programming or curriculum. I will use the information I obtain to begin to build a model that other Christian organizations can use in integrating Environmental Education in their Christian Education curriculums.

I anticipate that the finished model will include many voices of those who have "been there and done that" in the field of Christian Environmental Education. These voices will be able to pass on important information about issues such as: staff training, effective curriculum models, important scriptural references, theological basis, resources, and tips and tricks.

You may have been referred to me as someone who shares my interest in this field, and who might be willing to assist me in my project by completing a survey form, and possibly by participating in a telephone or personal interview. I hope you will allow me to add your voice to the model I am hoping to build through my study.

If you know of others in your organization, or elsewhere, who might have an interest in this project, please send me their names and contact information so that I can communicate with them about the project and solicit their participation.

If you have questions about my project or want further information, feel free to call, e-mail, or write to me. You can expect a survey to arrive via email in the next few weeks.

Sincerely,
Joel Light

APPENDIX B: CONTACT SURVEY

Hello again,

This is Joel Light. As my previous letter has stated, I am gathering survey information about programs that integrate Environmental Education and Christian Education. I will use the information I gather to develop a model for use by others interested in integrating Christian Education and Environmental Education.

For ease of opening and completing the survey, I have pasted it below. However, feel free to print a copy and return it to me by U. S. mail if that is more convenient for you than responding by e-mail.

The survey consists of four sections of eight questions each. Answer only those questions that apply to those of your programs that combine Environmental Education and Christian Education. If some questions do not apply to your program or situation, please indicate this by answering N/A to those items. The names of all persons and organizations participating in the survey will be kept confidential.

If you would like to receive a copy of my final report and model, please indicate that at the end of the survey form. If you are available for a possible follow-up telephone interview, please provide that information below.

Thank your assistance with this project; your time is greatly appreciated.

Sincerely,

Joel Light

Background and Training

1. How long have you been working with Environmental Education (EE)?
2. How long have you been working with Christian Education (CE)?
3. What is your primary area of professional training?
4. What type of formal training have you had in EE?
5. What type of formal training have you had in CE?

6. How did you come to work with EE and CE?
7. What type of background and training would you recommend for a person interested in working in with a program which combines EE and CE? Can you recommend any organization(s) where one can obtain this type of training?
8. Please add any other information or comments about Background and Training that you feel might be helpful to others interested in entering the field, or in developing programs which integrate EE and CE.

Vision and Mission

1. What experiences in nature led to your interest in Environmental Education (EE)?
2. What spiritual experiences caused you to become interested in Christian Education (CE)?
3. What was your most significant experience with God in the Creation?
4. Why do you feel that it is important to integrate EE into your CE in your programming (or vice versa)? Why do you do this in your programs?
5. Who is your primary audience? What outcome, change, and/or effect in their lives do you hope to achieve with your combined EE and CE programming?
6. If you have a sense of calling or mission in combining EE and CE in your programming, how would you state that mission?
7. In what ways are your vision and mission affected by outside sources and what are they? Are you aware of any current legislation that could affect your mission and/or programming either positively or negatively?
8. Please add any other information or comments about your Vision and Mission in integrating EE and CE that you feel might be helpful to others entering this field or developing integrated programs.

Program and Curriculum

1. What are some specific ways that you incorporate Environmental Education into your Christian Education programs (or vice versa)?
2. Describe your most popular class or program.

3. If you had to put a number on it, what average percentage of a program's content is EE, and what average percentage is CE?
4. How long have you been **integrating** EE and CE in your programs?
5. If there are worship elements to your programs, please describe them.
6. What relationship do you see between caring for the environment and serving God (or vice versa)? How is that relationship taught or modeled in your programs?
7. If you have program staff (interns, counselors, EE educators) involved in developing or presenting your programs, how do you train them to work with integrated EE and CE programs.
8. Please share any other information about your program or curriculum that you feel might help others working, or starting to work, in this area.

Resources and References

1. Are there any specific EE curriculum resources that you use?
2. Do you use specific CE curriculum resources?
3. Do you use any curriculum resources that are specifically designed to integrate EE and CE? Do you feel there is a need for Christian-specific EE curriculum materials?
4. Are there any books you would recommend someone to read who is starting out working EE into their Christian programs?
5. Are there any other resources that you use for EE and/or CE? (websites, publications, people, etc.) Are there other organizations that you use as a resource?
6. What do you feel is your best source of environmental knowledge?
7. What Biblical resources do you use? (Scripture, Nature Theology, Ecotheology, etc.) Aside from the Bible, what other sources of Christian knowledge have you found helpful in developing and presenting your programs?

8. If there are other references, resources, curriculum materials, or suggestions that you wish to share, please add them here.

Section Five - Contact Information:

1. If you would like to receive a copy of the final report and model, please give the street address or e-mail address to which you would like the report to be sent.

2. If you are willing to participate in a possible follow-up telephone conversation about your survey responses, please provide the telephone number (or e-mail address) that I should use when contacting you.

3. If you have any final comments about the topic of integrating Christian Education and Environment Education, please add them here.

APPENDIX C: THE FIELD GUIDE

A Field Guide to Christian Environmental Education:



A guide to integrating Environmental Education
into Christian Education

Joel Light

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Introduction:

Ever since I can remember I have enjoyed spending time in nature. I grew up on a farm in northwest Ohio and spent as much time outdoors as possible. I grew up in a Christian home and had a relationship with Jesus from a young age. As I grew and developed my person both of these passions became more and more intertwined. In my undergraduate studies at Northland College, a small environmental liberal arts college in northern Wisconsin, I grew in leaps and bounds in my faith as new challenges and hardships often cause us to do. As I was growing in my faith I was becoming more aware of the Creation around me not only in an academic sense but in a spiritual sense. This coupled with the agonizing knowledge of the state of the environment began to mold and shape me into the Christian environmentalist I am today. After college I was further led down this path and purpose when pursuing my master's in Environmental Education at Hamline University in Saint Paul, MN. I began to see the global perspective on the environmental crisis. Along with this I came to understand that my people, the Christians, were not living up to their biblical responsibilities to be good stewards to the earth. This has brought about a deep purpose and calling to help my fellow Christians rediscover the Creation and connect to God in this way. I want to help Christians figure out how to live the lives that Jesus calls us to live. This includes caring for the Creation.

I believe that there is a huge disconnect from the land in the culture of the United States today. I believe that this disconnect like other facets of our culture is spreading to other countries. We have lost the nature-spirit connection that was established in the garden and reinforced throughout the Bible. This has caused us to have a different view of God. If you think about our view of God being a large puzzle, there are many pieces

that fit together in our view of God. All of them are important and vital to complete the picture we have of God. I feel that Christians are missing a few pieces of the puzzle – the Creation pieces. Without these our view is not complete. We can see God in some ways, but the picture has holes. These holes cause us to miss out on the complete picture and relationship of God.

There is a book that has just come out titled The Last Child in the Woods by Richard Louv. Louv investigates many important points about our children today. They are missing the nature component in their lives, and this is causing some interesting and scary consequences. Louv believes our children are missing some nourishment that time in nature provides. Without this nourishment our children will not develop properly (2005). I believe that this disconnect is a large problem in the Christian church. We have come a long way from our Hebrew roots. We have lost the Christian land ethic. We have forgotten our roles and responsibilities. It is up to the concerned members of the church to bring about change and revival. Hopefully if you are reading this guide you share my concerns. Hopefully you see that there is a problem and that timing is vital. Christians need to understand their place and actions in this time of environmental crisis. It is up to Christian Education to help them know this. This can only be done through integrating Christian Education and Environmental Education.

I have come to this project as a result and continuation of my personal journey here on earth. In this personal journey, God has given me a deep conviction to get the word out and to help others who share my concerns to educate Christians on the environmental crisis. This conviction has allowed me to see the great need for integrating the two extremely important disciplines of Christianity and Environmentalism. This can be accomplished through the integrating of the educational processes behind these two disciplines. I have done this by building a field guide. Field guides give us all the information we need on a particular topic. This guide has the necessary framework and information that will give you a solid foundation on which to build your Christian Environmental Education programs.

This Field Guide to Christian Environmental Education has come out of a case

study project through my master's work and final project at the Hamline University through the Center for Global Environmental Education. This guide was built from the responses to a survey on the integration of Christian Education and Environmental Education from professionals in the field of Christian Environmental Education. The survey consisted of four sections labeled: Background and Training, Mission and Vision, Program and Curriculum, and Resources and References. These sections correspond with the sections of this field guide. The responses, combined with a literature review on this topic, have yielded the compiled information that follows. The compiled information is organized into sections to help you to build each aspect of your programs. This will be your road map for developing and implementing a successful Christian Environmental Education program at your facility.



I. Definitions:

The following words are common words used in this field. This section includes definitions of those terms that seem to come up frequently in conversations, programs, curriculum, resources, and meetings. Sometimes the people who use them probably do not know what they mean. This section will help you to understand what these words mean and how to use them. It is important to know the language of the subject in order for you to be able to communicate effectively with others in the field and for you to teach in the field. Therefore, it is appropriate to have a working definition for each. This common language is the basis of professionalism. The definitions will prove helpful to you when joining in the discussions surrounding this discipline. It will also help you to know what elements of these words you want to include in your programs.

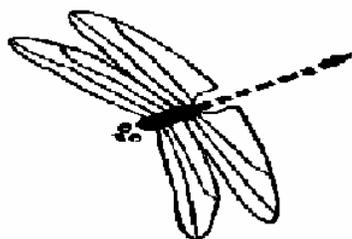
Environmental Education – 1. Creating awareness, knowledge, and appreciation of natural and cultural environments and their resources 2. Education that fosters stewardship of the natural environment 3. Translating the technical language of a natural science or related field into terms and ideas that people can readily understand 4. A process that is aimed at developing a world population that is aware of and concerned about the total environment and its associated problems

Outdoor Education - 1. Education in, about, and for the out-of-doors 2. Education in knowledge of the natural environment as a medium for leisure 3. When small groups of people participate in organized adventurous activities in natural settings and primarily use themselves as the resource for solving problems

Christian Education – 1. The ministry that engages people in the understanding of Jesus' commandments to love God and to love their neighbor 2. Any activity that has the goal of edifying the church 3. Attempts to help persons experience life in Christ, and as a result, transmits to the world a witness on love to the world

Interpretation – 1. The act or result of interpreting; explanation, meaning, translation, exposition 2. Explaining nature in terms that are easily understood by all

Sustainability - 1. To keep in existence without destroying or depleting 2. To maintain a given condition in the natural world



II. Curriculum:

This section of the guide will help you with choosing curriculum, as this section outlines and discusses the different sources of curriculum being used in the field. It will help you to narrow curriculum sources down to what you need and what may be effective for your programs. The section is divided into three subcategories: Environmental Education curriculum, Christian Education curriculum, and Integrated Environmental Education/Christian Education Curriculum. You can see what is available in each of these categories, and use them to decide which curriculum resources are best for your needs. This section also includes information about how to find and use these resources. The “Environmental Education Curriculum” subcategory lists sources that include only Environmental Education activities and that do not include any faith-based activities. The “Christian Education Curriculum” subcategory lists sources that deal primarily with the Christian faith and beliefs and does not include activities that are about the environment. The “Integrated Environmental Education/Christian Education Curriculum” subcategory includes resources that bridge the gap between the two disciplines of Environmental Education and Christian Education. This subcategory lists only Bible-based Environmental Education curriculum resources. These curriculums have been field tested by professionals in the field of Christian Environmental Education and come from their recommendation. They include many activities that have been useful in teaching combined Environmental Education/Christian Education classes. Behind the curriculum title, you will find the source for each of these curriculums and/or where you can find more information about them. Contacting these organizations will inform you on where you can get these materials or where you can get trained in these materials. Most of the organizations offer training in the use of their curriculum guides, and included in the

workshop is the curriculum guide.

Environmental Education Curriculum

- 🐾 Project Wet – www.projectwet.org
- 🐾 Project Wild / Aquatic Wild – www.projectwild.org
- 🐾 Project Flying Wild – www.flyingwild.org
- 🐾 Project Learning Tree – www.plt.org
- 🐾 Project Food, Land, and People – www.foodlandpeople.org
- 🐾 Great Lakes Curriculum – <http://wupcenter.mtu.edu/teachers.html>
- 🐾 KARE (Keystone Aquatic Resource Education) – www.pole.state.pa.us/preK-12
- 🐾 Wonders of Wetlands – www.wetland.org/wowteacher.html
- 🐾 The Aldo Leopold Project – Leopold Education Project – www.lep.org
- 🐾 Leave No Trace – www.lnt.org
- 🐾 Environmental Educator’s Notebook – National Outdoor Leadership School (NOLS) – www.nols.edu - store
- 🐾 Wilderness Educator’s Notebook – NOLS – www.nols.edu - store
- 🐾 Teaching in the Outdoors – Donald Hammerman, William Hammerman, & Elizabeth Hammerman – publisher: Prentice Hall
- 🐾 Backcountry Classroom I & II – Wilderness Education Association – Jack Drury, Bruce Bonney, Dene Berman, & Mark Wagstaff – publisher: I – Globe Pequot; 2 - Falcon
- 🐾 Sharing Nature with Children and Sharing Nature with Children II – Joseph Cornell – publisher – DAWN Publications
- 🐾 Outdoor Living Skills Program Manual: Environmental Guide – Catherine M. Scheder – American Camping Association (ACA) – www.acacamps.org - bookstore
- 🐾 Living Lightly on the Planet I & II – Maura O’Connor – publisher: Schlitz Audubon Center
- 🐾 Living Lightly in the City I & II – Maura O’Connor – publisher: Schlitz Audubon

Center

- 🐾 Audubon Adventures – www.audubon.org/educate/aa/index.php
- 🐾 Earth Child 2000: Earth Science for Young Children: Games, Stories, Activities, and Experiments – publisher – Council Oaks Books
- 🐾 Nature Scope Series - National Wildlife Federation –(NWF) -
<http://www.nwf.org/wildlifeuniversity/curriculum.cfm>
- 🐾 Access Nature - NWF - <http://www.nwf.org/wildlifeuniversity/curriculum.cfm>
- 🐾 School Yard Habitats: A How-to Guide for K-12 School Communities – NWF –
<http://www.nwf.org/wildlifeuniversity/curriculum.cfm>
- 🐾 Hands-on Nature: Information and Activities for Exploring the Environment with Children – Vermont Institute of Natural Science -
www.vinsweb.org/education/elf/HON.html
- 🐾 Teamwork & Teamplay - Team-building curriculum -
www.teamworkandteamplay.com

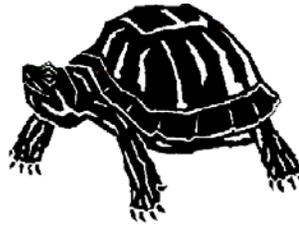
Christian Education Curriculum

- ✚ Any Christian camping curriculum
- ✚ Bible Study Curriculum for Outdoor Ministry - Evangelical Lutheran Church in America (ELCA) - www.elca.org/camps/curriculum.html
- ✚ Christian Education Warehouse – www.christianedwarehouse.com
- ✚ Youth Specialties’ free curriculum resources -
www.youthspecialties.com/free/programming/camps
- ✚ Group Publishing youth ministry curriculum – www.grouppublishing.com
- ✚ Simply Youth Ministries – free resources -
<http://content.simplyyouthministry.com/freebies>
- ✚ Resources for Christian Teachers – free resources - www.teacherhelp.org

Combined Environmental Education/Christian Education Curriculum

- Peace Talks 2006 / God's Calling 2005 / Join the Party 2004 / Under God's Roof 2003 - Outdoor Ministry Curriculum Resources - National Council of Churches - www.nccusa.org/nmu/mce/educaministr.html#anchorcom
- Greening Congregations – Earth Ministries - <http://www.earthministry.org/Congregations/handbook.htm>
- La Frontera - ELCA - Bible Study Curriculum for Outdoor Ministry - www.elca.org/camps/curriculum.html
- Pray! – ELCA – Bible Study Curriculum for Outdoor Ministry - www.elca.org/camps/curriculum.html
- Life is Good - ELCA – Bible Study Curriculum for Outdoor Ministry - www.elca.org/camps/curriculum.html
- More than Mud Pies – Beth Rowland, editor – publisher: Group Publishing Inc
- Considering God's Creation – Susan Mortimer and Betty Smith – publisher: www.eagleswingsEd.com
- Exploring Creation – www.apologia.com – science curriculum for home schools
- Character Booklet and Character Sketches - The Institute of Basic Life Principles - series of books on animal behaviors that exemplify Christ-like qualities – www.iblp.org/iblp
- National Council of Churches of Christ – Eco-justice Programs - www.ncecojustice.org/resource.htm
- Interfaith Climate Change Network – climate change resources - www.protectingCreation.org/resources.html
- Caring for God's Creation: A Five Section Curriculum for Children with 101 Nature Activities, Carole Essenmacher and Nancy Regensburge - To order, write to Carole Essenmacher, 221 N. West St., Vassar, MI 48768.
- Loving Our Neighbor, The Earth: Creation-Spirituality Activities for 9-11 Year-Olds, by Christie L. Jenkins - www.rpinet.com

- Your Will Be Done on Earth: Eco-Spirituality Activities for 12-15 Year-olds, y
Christie L. Jenkins - www.rpinet.com



III. Scriptures:

This section of the field guide lists the passages that are environment or Creation oriented. The passages are further categorized into common themes. The topics or themes are further divided into the books of the Bible. Below each of the books are the scripture passages that have the particular theme of that subcategory. This gives you the opportunity to see what scripture has to say on the subject, and may prove helpful for finding scripture passages to support or underline specific curriculum and activities. This section will help you to gain the biblical backing for your programs and for your own knowledge. This section may also prove helpful for you when making a case for the value, need, and responsibility to have an integration of Environmental Education and Christian Education in your programs. If you are to include a scripture passage with each activity or theme in your programs, this section will be the most helpful with that. Many professionals in the field surveyed do this in their integrated programs, to set the tone for the program.

There are eight subcategories in this scripture section: “Consequences and Sin”, “Man’s Responsibility and Roles”, “Creation Praises/Witness of Creation”, “The Lord and His Works”, “Christian Land Ethic/Sacred Land”, “Jesus and the Creation”, and “Nature Stories of the Bible.” All of the scripture quotes com from the Men’s Devotional Bible, New International Version (1993) published Zondervan. This version is consistent with all NIV versions. I believe the NIV has the best and most appropriate language for integrating with Environmental Education.

Consequences and Sin - effects on land

This subcategory contains the scripture passages that speak of consequences to abusing the earth. Among these scriptures are many prophecies of what will happen if people do not care for the Creation. The passages speak of abusing the land as a sin.

Genesis

3:23 “So the Lord banished him from the Garden of Eden to work the ground from which had been taken.”

Leviticus

26:3-6 “If you follow my decrees and are careful to obey my commands, I will send you rain in its season, and the ground will yield its crops and the trees of the field their fruit. Your threshing will continue until grape harvest and the grape harvest will continue until planting, and you will eat all the food you want and live in safety in your land. I will grant peace in the land, and you will lie down and no one will make you afraid.”

Isaiah

11:6-9 “The wolf will live with the lamb, the leopard will lie down with the goat, the calf and the lion and the yearling together; and a little child will lead them. The cow will feed with the bear, their young will lie down together, and the lion will eat straw like the ox. The infant will play near the hole of the cobra, and the young child put his hand into the viper’s nest. They will neither harm nor destroy on all my holy mountain, for the earth will be full of the knowledge of the Lord as the waters cover the sea.”

24:1-7 “See the Lord is going to lay waste the earth and devastate it; He will ruin its face and scatter its inhabitants – it will be the same for priest as for people, for master as for servant, for mistress as for maid, for seller as for buyer, for burrower as for lender, for debtor as for creditor. The earth will be completely laid waste and totally plundered. The Lord has spoken this word. The earth dries up and withers, the world languishes and withers, the exalted of the earth languish. The earth is defiled by its people; they have disobeyed the laws, violated the statutes and broken the everlasting covenant. Therefore a curse consumes the earth; its people must bear their guilt. Therefore earth’s inhabitants are burned up, and very few are left. The new wine dries up and the vine withers; all the merry-makers groan.”

66:3-4 “But whoever sacrifices a bull is like one who kills a man, and whoever offers a lamb, like the one who breaks a dog’s neck; whoever makes a grain offering is

like one who presents pig's blood, and whoever burns memorial incense, like one who worships an idol. They have chosen their ways, and their souls delight in their abominations; so I also will choose harsh treatment for them and will bring upon them what they dread. For when I called, no one answered, when I spoke no one listened. They did evil in my sight and chose what displeases me.

Jeremiah

2:7 "I brought you into a fertile land to eat its fruit and rich produce. But you came and defiled my land and made my inheritance detestable."

4:23-28 "I looked at the earth, and it was formless and empty; and at the heavens, and their light was gone. I looked at the mountains, and they were quaking; all the hills were swaying. I looked, and there were no people; every bird in the sky had flown away. I looked, and the fruitful land was a desert; all its towns lay in ruins before the Lord, before his fierce anger. This is what the Lord says, 'The whole land will be ruined, though I will not destroy it completely. Therefore the earth will mourn and the heavens above grow dark, because I have spoken and will not relent, I have decided and will not turn back.'"

5:6 "Therefore a lion from the forest will attack them, a wolf from the desert will ravage them, a leopard will lie in wait near their towns to tear to pieces any who venture out, for their rebellion is great and their backslidings many."

8:7 "Even the stork in the sky knows her appointed seasons, and the dove, the swift and the thrush observe the time of their migration. But my people do not know the requirements of the Lord."

9:12-14 "What man is wise enough to understand this? Who has been instructed by the Lord and can explain it? Why has the land been ruined and laid waste like a desert that no one can cross? The Lord said, 'It is because they have forsaken my law, which I set before them; they have not obeyed me or followed my law. Instead, they have followed the stubbornness of their hearts; they have followed the Baals, as their fathers taught them.'"

12:4 "How long will the land lie parched and the grass in every field be withered? Because those who live in it are wicked, the animals and birds have perished. Moreover, the people are saying, 'He will not see what happens to us.'"

12:10-13 "Many shepherds will ruin my vineyard and trample down my field; they will turn my pleasant field into a desolate wasteland. It will be made a wasteland, parched and desolate before me; the whole land will be laid waste because there is no one who cares. Over all the barren heights in the desert destroyers will swarm, for the sword

of the Lord will devour from one end of the land to the other; no one will be safe. They will sow wheat but reap thorns; they will wear themselves out but gain nothing. So bear the shame of your harvest because of the Lord's fierce anger."

14:4-7 "The ground is cracked because there is no rain in the land; the farmers are dismayed and cover their heads. Even the doe in the field deserts her newborn fawn because there is no grass. Wild donkeys stand on the barren heights and pant like jackals; their eyesight fails for of pasture. Although our sins testify against us, O Lord, do something for the sake of your name. Fore our backsliding is great, we have sinned against you."

Hosea

4:1-3 "Hear the word of the Lord, you Israelites, because the Lord has a charge to bring against you who live in the land: 'There is no faithfulness, no love, no acknowledgement of God in the land. There is only cursing, lying and murder, stealing and adultery; they break all bonds and bloodshed follows bloodshed. Because of this the land mourns, and all who live in it waste away; the beasts of the field and the birds of the air and the fish of the sea are dying.'"

Romans

8:19-22 "The Creation waits in eager expectation for the sons of God to be revealed. For the Creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope that the Creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God. We know that the whole Creation has been groaning as in the pains of childbirth right up to the present time."

2 Peter

3:10, 13 "But the day of the Lord will come like a thief. The heavens will disappear with a roar; the elements will be destroyed by fire, and the earth and everything in it will be laid bare...But in keeping with His promise we are looking forward to a new heaven and a new earth, the home of righteousness."

Revelation

11:18 "The nations were angry; and your wrath has come. The time has come for judging the dead, and for rewarding your servants the prophets and your saints and those who reverence your name, both small and great – and for destroying those who destroy the earth."

21:1 “Then I saw a new heaven and a new earth, for the first heaven and the first earth had passed away, and there was no longer any sea.”

22:1-3 “Then the angel showed me the river of the water of life, as clear as crystal, flowing from the throne of God and of the Lamb down the middle of the great street of the city. On each side of the river stood the tree of life, bearing twelve crops of fruit, yielding its fruit every month. And the leaves of the tree are for the healing of the nations. No longer will there be any curse. The throne of God and of the Lamb will be in the city, and His servants will serve Him.”

Man’s Responsibility and Roles

This subcategory contains passages that speak to people’s role and responsibility of environmental stewardship. These scriptures help Christians understand their part in the Creation and tell what that means their actions toward the Creation should look like.

Genesis

2:15 “The Lord God took the man and put him in the Garden of Eden to work it and take care of it.”

2:20 “So the man gave names to all the livestock, the birds of the air, and the beasts of the field. But for Adam no suitable helper was found.”

3:23 “So the Lord banished him from the Garden of Eden to work the ground from which had been taken.”

Exodus

23:10-12 “For six years you are to sow your fields and harvest the crops, but during the seventh year let the land lie unplowed and unused. Then the poor among your people may get food from it, and the wild animals may eat what you leave. Do the same with your vineyard and your olive grove. Six days do your work, but on the seventh day do not work, so that your ox and donkey may rest and the slave born in your household, and the alien as well, may be refreshed.”

Leviticus

25:2-7 “...When you enter the land I am going to give you, the land itself must observe a Sabbath to the Lord. For six years sow your fields, and for six years prune your vineyards and gather their crops. But in the seventh year the land is to have a Sabbath of rest, a Sabbath to the Lord. Do not reap what grows of itself or harvest the grapes of your untended vines. The land is to have a year of rest. Whatever the land yields during the

Sabbath year will be food for you – for yourself, your manservant and maidservant, and the hired worker and temporary resident who live among you, as well as for your livestock and the wild animals in your land. Whatever the land produces may be eaten.

25:18-21 “Follow my decrees and be careful to obey my laws, and you will live safely in the land. Then the land will yield its fruit, and you will eat your fill and live here in safety. You may ask, ‘What will we eat in the seventh year if we do not plant or harvest our crops?’ I will send you such a blessing in the sixth year that the land will yield enough for three years.

25:23 “The land must not be sold permanently, because the land is mine and you are but aliens and my tenants.”

Deuteronomy

5:14 “...but the seventh day is a Sabbath to the Lord your God. On it you shall do any work, neither you, nor your manservant or maidservant, nor your ox, your donkey, or any of your animals, nor the alien within your gates, so that your manservant and maidservant may rest, as you do”

22:6-7 “If you come across a bird’s nest beside the road, either in a tree or on the ground, and the mother is sitting on the young or on the eggs, do not take the mother with the young. You may take the young, but be sure to let the mother go, so that it may go well with you and you have a long life.”

Psalms

8:6-8 “You made him ruler over the works of your hands; you put everything under his feet: all flocks and herds, and the beasts of the field, the birds of the air, and the fish of the sea, all that swim the paths of seas.”

103:14-16 “...for He knows how we are formed, He remembers that we are dust. As for man, his days are like grass, he flourishes like a flower of the field; the wind blows over it and it is gone, and its place remembers it no more.”

115:16 “The highest heavens belong to the Lord, but the earth He has given to man.”

Proverbs

12:10a “A righteous man cares for the needs of his animal..”

Isaiah

5:8-9 “Woe to you who add house to house and join field to field till no space is left and you live alone in the land. The Lord Almighty has declared in my hearing: ‘Surely the great houses will become desolate, the fine mansions left without occupants.’”

Ezekiel

34:18-19 “Is it not enough for you to feed on the good pasture? Must you also trample the rest of your pasture with your feet? Is it not enough for you to drink clear water? Must you also muddy the rest with your feet? Must my flock feed on what you have trampled and drink what you have muddied with your feet?”

Matthew

3:3 “This is he who was spoken of through the prophet Isaiah: A voice of one calling in the desert, ‘Prepare the way for the Lord, make straight paths for Him.’”

5:5 “Blessed is the meek, for they will inherit the earth.”

Mark

16:15 “He said to them, ‘Go into all the world and preach the good news to all Creation.’”

Creation Praises/Witness of Creation

This third subcategory contains passages that show the Creation’s role in God’s works. These scriptures speak of the praise that the Creation has for its Creator. Included are passages that speak of the witness that the Creation has of God. The passages in this subcategory help Christians to understand what the Creation has to teach them about the nature and character of God.

Genesis

1-2:4 “In the beginning God created the heavens and the earth. Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters. And God said, ‘Let there be light,’ and there was light... And God said, ‘Let there be an expanse between the waters to separate water from water.’ So God made the expanse and separated the water under the expanse from the water above it. And it was so... And God said, ‘Let the water under the sky be gathered to one place, and let dry ground appear.’ And it was so. God called the dry ground ‘land,’ and the

gathered waters he called ‘seas.’ And God saw that it was good. Then God said, ‘Let the land produce vegetation: seed-bearing plants and trees on the land that bear fruit with seed in it, according to their various kinds...’ And God said, ‘Let there be lights in the expanse of the sky to separate the day from the night, and let them serve as signs to mark seasons and days and years, and let them be lights in the expanse of the sky to give light on the earth...’ And God said, ‘Let the water teem with living creatures, and let birds fly above the earth across the expanse of the sky...’ And God said, ‘Let the land produce living creatures according to their kinds: livestock, creatures that move along the ground, and wild animals, each according to its kind...’ Then God said, ‘Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground.’ So God created man in his own image, in the image of God he created him; male and female he created them. God blessed them and said to them, ‘Be fruitful and increase in number; fill the earth and subdue it...’ Then God said, ‘I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it...’ God saw all that he had made, and it was very good... Thus the heavens and the earth were completed in all their vast array. By the seventh day God had finished the work he had been doing; so on the seventh day he rested from all his work. And God blessed the seventh day and made it holy, because on it he rested from all the work of creating that he had done.”

Job

12:6-10 “The tents of marauders are undisturbed, and those who provoke God are secure— those who carry their god in their hands. But ask the animals, and they will teach you, or the birds of the air, and they will tell you; or speak to the earth, and it will teach you, or let the fish of the sea inform you. Which of all these does not know that the hand of the LORD has done this? In his hand is the life of every creature and the breath of all mankind.”

38-41 “Then the Lord answered Job out of the storm...while the morning stars sang together and all the angels shouted for joy...Have you comprehended the vast expanse of the earth?...Does the rain have a father? Who fathers the drops of dew?...Who provides food for the raven when its young cry out to God and wander about for lack of food?... Does the hawk take flight by your wisdom and spread his wings toward the south? Does the eagle soar at your command and build his nest on high?... Look at the behemoth which I made along with you and which feeds on grass like an ox... Can you pull the leviathan with a fishhook or tie down his tongue with a rope?...

Psalm

19:1 “The heavens declare the glory of God; the skies proclaim the works of His hands.”

96:1 “ Sing to the Lord a new song; sing to the Lord, all the earth.”

96:11-13 “Let the heavens rejoice, let the earth be glad; let the sea resound, and all that is in it; let the fields be jubilant, and everything in them. Then all the trees of the forest will sing for joy; they will sing before the Lord, for He comes, He comes to judge the earth. He will judge the world in righteousness and the peoples in His truth.”

97:6 “The heaven proclaim His righteousness, and all the peoples see His glory.”

98:4 “Shout for joy to the Lord, all the earth, burst into jubilant song with music;...”

98:7-9 “Let the sea resound, and everything in it, the world, and all who live in it. Let the rivers clap their hands, let the mountains sing together for joy; let them sing before the Lord, for comes to judge the earth. He will judge the world in righteousness and the peoples with equity.”

148 “Praise the Lord from the heavens, praise Him in the heights above... Praise Him, sun and moon, praise Him, all you shining stars. Praise Him, you highest heavens and you waters above the skies...Praise the Lord form the earth, you great sea creatures and all ocean depths, lightning and hail, snow and clouds, stormy winds that do His bidding, you mountains and all hills, fruit trees and all cedars, will animals and all cattle, small creatures and flying birds, kings of the earth and all nations...”

Proverbs

30:18-19 “There are three things that are too amazing for me, four that I do not understand: the way of the eagle in the sky, the way of the snake on a rock, the way of a ship on the high seas, and the way of a man with a maiden.”

Isaiah

6:3 “...the whole earth is full of His glory.”

35:1-2 “The desert and the parched land will be glad; the wilderness will rejoice and blossom. Like the crocus, it will burst into bloom; it will rejoice greatly and shout for joy. The glory of Lebanon will be given to it, the splendor of Carmel and Sharon; they will see the glory of the Lord, the splendor of our God.”

40:26 “Lift your eyes and look to the heavens: Who created all these? He who brings out the starry host one by one, and calls them each by name. Because of His great power and mighty strength, not one of them is missing.”

43:20 “The wild animals honor me, the jackals and the owls, because I provide water in the desert and streams in the wasteland, to give drink to my people, my chosen...”

55:12-13 “You will go out in joy and be led forth in peace; the mountains and hills will burst into song before you, and all the trees of the field will clap their hands. Instead of the thornbush will grow the pine tree, and instead of briers the myrtle will grow. This will be for the Lord’s renown, for an everlasting sign, which will not be destroyed.”

Hosea

4:3 “Because of this the land mourns, and all who live in it waste away; the beasts of the field and the birds of the air and the fish of the sea are dying.”

Amos

5:8 “(He who made the Pleiades and Orion, who turns blackness into dawn and darkens day into night, who calls for the waters of the sea and pours them out over the face of the land – the Lord is His name - ...”

Matthew

6:26-30 “Look at the birds of the air; they do not sow or reap or store away in barns, and yet your heavenly Father feeds them. Are you not much more valuable than they? Who of you by worrying can add a single hour to his life? And why do you worry about clothes? See how the lilies of the field grow. They do not labor or spin. Yet I tell you that not even Solomon in all his splendor was dressed like one of these. If that is how God clothes the grass of the field, which is here today and tomorrow is thrown into the fire, will He not much more clothe you, O you of little faith?”

10:29 “Are not two sparrows sold for a penny? Yet not one of them will fall to the ground apart from the will of your Father.”

Luke

12:6 “Are not five sparrows sold for two pennies? Yet not one of them is forgotten by God.”

12:27-28 “Consider how the lilies grow. They do not labor or spin. Yet I tell you, not even Solomon in all his splendor was dressed like one of these. If that is how God clothes the grass of the field, which is here today, and tomorrow is thrown into the fire, how much more will He clothe you, O you of little faith?”

Romans

8:19-22 “The Creation waits in eager expectation for the sons of God to be revealed. For the Creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope that the Creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God. We know that the whole Creation has been groaning as in the pains of childbirth right up to the present time.”

Revelation

5:13 “Then I heard every creature in heaven and on earth and under the earth and on the sea, and all that is in them, singing: ‘To Him who sits on the throne and to the Lamb be praise and honor and glory and power.’”

The Lord and his Works

This subcategory includes passages that speak of God’s role in Creation and His presence there. These scriptures deal with God as Creator and what that means for the rest of the Creation. The scriptures help Christians to know what it means to be created by something larger than themselves. One can learn a great deal about someone by seeing what they do, what they create. The passages show God’s people the works of His hands and what that tells them about God. The works are a window into the house of God.

Genesis

1-2:4 “In the beginning God created the heavens and the earth... And God blessed the seventh day and made it holy, because on it he rested from all the work of creating that he had done.”

9:8-16 “Then God said to Noah and to his sons with him: ‘I now establish my covenant with you and with your descendants after you and with every living creature that was with you – the birds, the livestock and all the wild animals, all those that came out of the ark with you – every living creature on earth. I establish my covenant with you: Never again will all life be cut off by the waters of a flood; never again will there be a flood to destroy the earth.’ And God said, ‘This is the sign of the covenant between me and you and every living creature with you, a covenant for all generations to come: I have set my rainbow in the clouds, and it will be the sign of the covenant between me and the earth. Whenever I bring clouds over the earth and the rainbow appears in the clouds, I

will remember my covenant between me and you and all living creatures of every kind. Never again will the waters become a flood to destroy all life. Whenever the rainbow appears in the clouds, I will see it and remember the everlasting covenant between God and all living creatures of every kind on the earth.”

Deuteronomy

11:12 “It is a land the Lord your God cares for, the eyes of the Lord your God are continually on it from the beginning of the year to its end.”

11:15 “I will provide grass in the fields for your cattle, and you will eat and be satisfied.”

1 Chronicles

29:11 “Yours, O Lord, is the greatness and power and the glory and the majesty and the splendor for everything in heaven and earth is yours. Yours, O Lord, is the kingdom; you are exalted as head over all.”

Job

36:27-33 “He draws up the drops of water, which distill as rain to the streams; the clouds pour down their moisture and abundant showers fall on mankind. Who can understand how He spreads the clouds, how He thunders from His pavilion? See how He scatters His lightning about Him, bathing the depths of the sea. This is the way He governs the nations and provides food in abundance. He fill His hands with lightning and commands it to strike its mark. His thunder announces the coming storm; even the cattle make know its approach.”

37:6 “He says to the snow, ‘Fall on the earth,’ and to the rain shower, ‘Be a mighty downpour.’”

37:8-13 “The animals take cover; they remain in their dens. The tempest comes out from its chamber, the cold from the driving winds. The breath of God produces ice, and the broad waters become frozen. He loads the clouds with moisture; He scatters His lightning through them. At His direction they swirl around over the face of the whole earth to do whatever He commands them. He brings the clouds to punish mean, or to water His earth and show His love.”

38-41 “Then the Lord answered Job out of the storm. He said: ... ‘Who shut up the

sea behind doors when it burst forth from the womb... Who cuts a channel for the torrents of rain, and a path for the thunderstorm,... Who gives birth to the frost from the heavens... Who endowed the heart with wisdom or gave understanding to the mind? Who has the wisdom to count the clouds? Who can tip over the water jars of the heavens... Who provides food for the raven when its young cry out to God and wander about for lack of food?... Who let the wild donkey go free? Who untied the ropes?... Who has a claim against me that I must pay? Everything under heaven belongs to me..."

Psalm

23 "The Lord is my shepherd, I shall not be in want. He makes me lie down in green pastures, He leads me beside quiet waters, He restores my soul. He guides me in paths of righteousness for His name's sake. Even though I walk through the valley of the shadow of death, I will fear no evil, for you are with me; your rod and your staff, they comfort me. You prepare a table before me in the presence of my enemies. You anoint my head with oil; my cup overflows. Surely goodness and love will follow me all the days of my life, and I will dwell in the house of the Lord forever."

29:3-11 "The voice of the Lord is over the waters; the God of glory thunders, the Lord thunders over the mighty waters. The voice of the Lord is powerful; the voice of the Lord breaks the cedars; the Lord breaks in pieces the cedars of Lebanon. He makes Lebanon skip like a calf, Sirion like a young wild ox. The voice of the Lord strikes with flashes of lightning. The voice of the Lord shakes the desert; the Lord shakes the Desert of Kadesh. The voice of the Lord twists the oaks and strips the forest bare. And in his temple all cry, 'Glory!' The Lord sits enthroned over the flood; the Lord is enthroned as King forever. The Lord gives strength to His people; the Lord blesses His people with peace."

50:1 "The Mighty One, God, the Lord, speaks and summons the earth from the rising of the sun to the place where it sets."

50:4 "He summons the heavens above, and the earth, that He may judge His people."

95:4-5 "In His hand are the depths of the earth, and the mountain peaks belong to Him. The sea is His, for He made it, and His hands formed the dry land."

97:4-5 "His lightning lights up the world; the earth sees and trembles. The mountains melt like wax before the Lord, before the Lord of all the earth."

102:25 "In the beginning You laid the foundations of the earth, and the heavens are the work of your hands."

104:1-32 "O Lord my God, you are very great... He stretches out the heavens like

a tent and lays the beams of His upper chamber on their waters. He makes the clouds His chariot and rides on the wings of the wind. He makes the winds His messengers, flames of fire His servants. He set the earth on its foundations; it can never be moved. You covered it with the deep as with a garment; the waters stood above the mountains. But at your rebuke the waters fled, at the sound of your thunder they took flight; they flowed over the mountains, they went down into the valleys, to the place you assigned for them... He makes springs pour water into the ravines; it flows between the mountains. They give water to all the beasts of the field; the wild donkeys quench their thirst. The birds of the air nest by the waters; they sing among the branches. He waters the mountains from His upper chambers; the earth is satisfied by the fruit of His work. He makes grass grow for the cattle, and plants for man to cultivate – bringing forth food from the earth:... The trees of the Lord are well watered...that He planted. There the birds make their nests; the stork has its home in the pine trees. The high mountains belong to the wild goats; the crags are a refuge for the coneys. The moon marks off the seasons, and the sun know when to go down. You bring darkness, it becomes night, and all the beasts of the forest prowl. The lions roar for their prey and seek their food from God... the earth is full of your creatures. There is the sea, vast and spacious, teeming with creatures beyond number – living things both large and small... These all look to You to give them their food at the proper time... when you take away their breath they die and return to dust... You renew the face of the earth... He who touches the earth, and it trembles, who touches the mountains, and they smoke.”

124:8 “Our help is in the name of the Lord, the Maker of heaven and earth.”

145:9 “The Lord is good to all; He has compassion on all He has made.”

145:16 “You open Your hand and satisfy the desires of every living thing.”

147:8-9 “He covers the sky with clouds; He supplies the earth with rain and makes grass grow on the hills. He provides food for the cattle and for the young ravens when they call.

147:16-18 “He spreads the snow like wool and scatters the frost like ashes. He hurls down His hail like pebbles. Who can withstand His icy blast? He sends His word and melts them; He stirs up His breezes, and the waters flow.”

Proverbs

3:19-20 “By wisdom the Lord laid the earth’s foundations, by understanding He set the heavens in place; by His knowledge the deeps were divided, and the clouds let drop the dew.”

Isaiah

6:3 “And they were calling to one another: ‘Holy, holy, holy is the Lord Almighty; the whole earth is full of His glory.’”

40:26 “Lift your eyes and look to the heavens: Who created all these? He who brings out the starry host one by one, and calls them each by name. Because of His great power and mighty strength, not one of them is missing.

43:1b-2 “Fear not, for I have redeemed you; I have summoned you by name and you are mine. When you pass through the waters I will be with you; and when you pass through the rivers, they will not sweep over you. When you walk through the fire, you will not be burned; the flames will not set you ablaze.”

43:19-20 “See I am doing a new thing! Now it springs up; do you not perceive it? I am making a way in the desert and streams in the wasteland. The wild animals honor me, the jackals and the owls, because I provide water in the desert and streams in the wasteland, to give drink to my people, my chosen...”

51:3b “...He will make her deserts like Eden, her wastelands like the garden of the Lord...”

65:17 “Behold I will create a new heavens and a new earth. The former things will not be remembered, nor will they come to mind.”

66:12 “For this what the Lord says: ‘I will extend peace to her like a river, and the wealth of nations like a flooding stream; you will nurse and be carried on her arm and dandled on her knees.’”

Jeremiah

10:12-13 “But God made the earth by His power; He founded the world by His wisdom and stretched out the heavens by His understanding. When He thunders, the waters in the heavens roar; He makes clouds rise from the ends of the earth. He sends lightning with the rain and brings out the wind from His storehouses.”

Hosea

2:18 “In that day I will make a covenant for them with the beasts of the field and the birds of the air and the creatures that move along the ground...so that all may lie down in safety.”

Amos

5:8 “(He who made the Pleiades and Orion, who turns blackness into dawn and darkens day into night, who calls for the waters of the sea and pours them out over the face of the land – the Lord is His name - ...”

Matthew

5:45b “He causes His sun to rise on the evil and the good, and sends rain on the righteous and the unrighteous.”

6:26-30 “Look at the birds of the air; they do not sow or reap or store away in barns, and yet your heavenly Father feeds them. Are you not much more valuable than they? Who of you by worrying can add a single hour to his life? And why do you worry about clothes? See how the lilies of the field grow. They do not labor or spin. Yet I tell you that not even Solomon in all his splendor was dressed like one of these. If that is how God clothes the grass of the field, which is here today and tomorrow is thrown into the fire, will He not much more clothe you, O you of little faith?”

Acts

14:17 “Yet He has not left Himself without testimony: He has shown kindness by giving you rain from heaven and crops in their seasons; He provides you with plenty of food and fills your hearts with joy.”

17:24-26 “The God who made the world and everything in it is the Lord of heaven and earth and does not live in temples built by hands. And He is not served by human hands, as if He needed anything, because He Himself gives all men life and breath and everything else. From one man He made every nation of men, that they should inhabit the whole earth; and He determined the times set for them and the exact places where they should live.”

1 Corinthians

8:6 “...yet for us there is but one God, the Father, from whom all things came and for whom we live; and there is but one Lord, Jesus Christ, through whom all things came and through whom we live.”

Ephesians

1:9-10 “And He made known to us the mystery of His will according to His good pleasure, which He purposed in Christ, to be put into effect when the times will have reached their fulfillment – to bring all things in heaven and on earth together under one

head, even Christ.”

4:6 “...one God and Father of all, who is over all and through all and in all.”

4:10 “He who descended is the very one who ascended higher than all the heavens, in order to fill the whole universe.”

Hebrews

4:13 “Nothing in all Creation is hidden from God’s sight. Everything is uncovered and laid bare before the eyes of Him to whom we must give account.”

Jesus and the Creation

In this subcategory are scripture passages which speak of who Jesus is, and how He interacts with the Creation. These passages help His followers to know how to live a Christ-like life in regards to the Creation.

Matthew

4:1 “Then Jesus was led by the Spirit into the desert to be tempted by the devil.”

8:24-27 “Without warning, a furious storm came up on the lake...Then He got up and rebuked the winds and the waves, and it was completely calm...Even the winds and the waves obey Him.”

Mark

1:12-13 “At once the Spirit sent Him out into the desert, and He was in the desert forty days, being tempted by Satan. He was with the wild animals, and angels attended to Him.”

4:37-41 “A furious squall came up... He got up, rebuked the wind and said to the waves, ‘Quiet! Be still!’ Then the wind died down and it was completely calm...Even the wind and the wave obey Him.”

9:2 “After six days Jesus took Peter, James, and John with Him and led them up a high mountain, where they were all alone. There He was transfigured before them.”

Luke

4:1-2 “Jesus, full of the Holy Spirit, returned from the Jordan and was led by the

Spirit in the desert, where for forty days He was tempted by the devil.”

9:28 “About eight days after Jesus said this, He took Peter, John, and James with Him and went up onto a mountain to pray.”

22:39-41 “Jesus went out as usual to the Mount of Olives, and His disciples followed Him... He withdrew about a stone’s throw beyond them, knelt down and prayed.”

John

1:1-4 “In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through Him all things were made; without Him nothing was made that has been made. In Him was the life, and that life was the light of men.”

1:23 “John replied in the words of Isaiah the prophet, ‘I am the voice of one calling in the desert, Make straight the way for the Lord.’”

15:5 “I am the vine; you are the branches. If a man remains in Me and I in him, he will bear much fruit: apart from Me you can do nothing.”

Romans

11:36 “For from Him and through Him and to Him are all things...”

2 Corinthians

5:19 “...that God was reconciling the world to Himself in Christ, not counting men’s sins against them...”

Ephesians

1:9-10 “And He made know to us the mystery of His will according to His good pleasure, which He purposed in Christ, to be put into effect when the times will have reached their fulfillment – to bring all things in heaven and on earth together under one head, even Christ.”

Philippians

3:21 “...who, by the power that enables Him to bring everything under His control, will transform our lowly bodies so that they will be like His glorious body.”

Colossians

1:15-17 “He is the image of the invisible God, the firstborn over all Creation. For by Him all things were created: things in heaven and on earth, visible and invisible... all things were created by Him and for Him. He is before all things, and in Him all things hold together.”

1:20 “...and through Him to reconcile to Himself all things, whether things on earth or things in heaven, by making peace through His blood, shed on the cross.”

Christian Land Ethic/Sacred Land

The scripture verses in this subcategory speak of how Christians should live on the land and treat it. They help them to understand the sacredness of land and what that means. The passages included help to build a person’s land ethic – his or her relationship with the land - the land being all of Creation.

Genesis

1:31 “God saw all that He had made, and it was very good...”

9:8-16 “Then God said to Noah and to his sons with him: ‘I now establish my covenant with you and with your descendants after you and with every living creature that was with you – the birds, the livestock and all the wild animals, all those that came out of the ark with you – every living creature on earth. I establish my covenant with you: Never again will all life be cut off by the waters of a flood; never again will there be a flood to destroy the earth.’ And God said, ‘This is the sign of the covenant between me and you and every living creature with you, a covenant for all generations to come: I have set my rainbow in the clouds, and it will be the sign of the covenant between me and the earth. Whenever I bring clouds over the earth and the rainbow appears in the clouds, I will remember my covenant between me and you and all living creatures of every kind. Never again will the waters become a flood to destroy all life. Whenever the rainbow appears in the clouds, I will see it and remember the everlasting covenant between God and all living creatures of every kind on the earth.’”

Exodus

23:10-12 “For six years you are to sow your fields and harvest the crops, but during the seventh year let the land lie unplowed and unused. Then the poor among your people may get food from it, and the wild animals may eat what you leave. Do the same with your vineyard and your olive grove. Six days do your work, but on the seventh day do not work, so that your ox and donkey may rest and the slave born in your household, and the alien as well, may be refreshed.”

Leviticus

25:2-7 "...When you enter the land I am going to give you, the land itself must observe a Sabbath to the Lord. For six years sow your fields, and for six years prune your vineyards and gather their crops. But in the seventh year the land is to have a Sabbath of rest, a Sabbath to the Lord. Do not reap what grows of itself or harvest the grapes of your untended vines. The land is to have a year of rest. Whatever the land yields during the Sabbath year will be food for you – for yourself, your manservant and maidservant, and the hired worker and temporary resident who live among you, as well as for your livestock and the wild animals in your land. Whatever the land produces may be eaten.

25:18-21 "Follow my decrees and be careful to obey my laws, and you will live safely in the land. Then the land will yield its fruit, and you will eat your fill and live here in safety. You may ask, 'What will we eat in the seventh year if we do not plant or harvest our crops?' I will send you such a blessing in the sixth year that the land will yield enough for three years.

25:23 "The land must not be sold permanently, because the land is mine and you are but aliens and my tenants."

26:3-6 "If you follow my decrees and are careful to obey my commands, I will send you rain in its season, and the ground will yield its crops and the trees of the field their fruit. Your threshing will continue until grape harvest and the grape harvest will continue until planting, and you will eat all the food you want and live in safety in your land. I will grant peace in the land, and you will lie down and no one will make you afraid."

Deuteronomy

8:7-10 "For the Lord your God is bringing you into a good land – a land with streams and pools of water, with springs flowing in the valleys and hills; a land with wheat and barely, vines and fig trees, pomegranates, olive oil and honey; a land where bread will not be scarce and you will lack nothing; a land where the rocks are iron and you can dig copper out of the hills. When you have eaten and are satisfied, praise the Lord your God for the good land He has given you."

11:12 "It is a land the Lord your God cares for, the eyes of the Lord your God are continually on it from the beginning of the year to its end."

20:19 "When you lay siege to a city... do not destroy its trees by putting an ax to them, because you can eat their fruit. Do not cut them down. Are the trees of the field people, that you should besiege them?"

22:6-7 “If you come across a bird’s nest beside the road, either in a tree or on the ground, and the mother is sitting on the young or on the eggs, do not take the mother with the young. You may take the young, but be sure to let the mother go, so that it may go well with you and you have a long life.”

Proverbs

12:10a “A righteous man cares for the needs of his animal...”

Isaiah

6:3 “...the whole earth is full of His glory.”

Ezekiel

34:18-19 “Is it not enough for you to feed on the good pasture? Must you also trample the rest of your pasture with your feet? Is it not enough for you to drink clear water? Must you also muddy the rest with your feet? Must my flock feed on what you have trampled and drink what you have muddied with your feet?”

Matthew

4:1 “Then Jesus was led by the Spirit into the desert to be tempted by the devil.”

Luke

4:1-2 “Jesus, full of the Holy Spirit, returned from the Jordan and was led by the Spirit in the desert, where for forty days He was tempted by the devil.”

Romans

1:20 “For since the Creation of the world God’s invisible qualities – His eternal power and divine nature – have been clearly seen, being understood from what has been made, so that men are without excuse.”

8:19-22 “The Creation waits in eager expectation for the sons of God to be revealed. For the Creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope that the Creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God. We know that the whole Creation has been groaning as in the pains of childbirth right up to the

present time.”

1 Corinthians

10:26 “...for, ‘The earth is the Lord’s and everything in it.’”

Connections

Deuteronomy

8:10 “When you have eaten and are satisfied, praise the Lord your God for the good land He has given you.”

Ecclesiastes

3:18-21 “I also thought, ‘As for men, God tests them so that they may see that they are like the animals. Man’s fate is like that of the animals; the same fate awaits them both: As one dies, so dies the other. All have the same breath; man has no advantage over the animal. Everything is meaningless. All go to the same place; all come from dust, and to dust all return. Who knows if the spirit of man rises upward and if the spirit of the animals goes into the earth?’”

Isaiah

55:10-12 “As the rain and the snow come down from heaven, and do not return to it without watering the earth and making it bud and flourish, so that it yields seed for the sower and bread for the eater, so is My word that goes out from my mouth: It will not return to me empty, but will accomplish what I desire and achieve the purpose for which I sent it. You will go out in joy and be led forth in peace; the mountains and hills will burst into song before you, and all the trees of the field will clap their hands.”

Romans

8:19-22 “The Creation waits in eager expectation for the sons of God to be revealed. For the Creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope that the Creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God. We know that the whole Creation has been groaning as in the pains of childbirth right up to the present time.”

Revelation

21:1 “Then I saw a new heaven and a new earth, for the first heaven and the earth had passed away, and there was no longer any sea.”

Nature Stories of the Bible

This last subcategory consists of a listing of the scriptures that are the Creation-oriented stories of the Bible. Scripture stories are one way God can speak to His people. These particular stories are ones that deal with the Creation and nature experiences. Due to their length and familiarity only the scripture verses and title of the story are listed.

Genesis

- 1-2:4 - First Story of Creation
- 2:4-25 - Second Story of Creation
- 6-9 - Noah, the Ark, and the Flood

Exodus

- 3 – Moses and the Burning Bush
- 19-20 – Moses and the Ten Commandments

Daniel

- 6 – Daniel in the Lion’s Den

Job

- 38-41 - great nature descriptions

Jonah

- 1 – Jonah and the Whale

Matthew

- 3 – John the Baptist Prepares the Way
- 7:15-23 – A Tree and its Fruit
- 8:23-27 – Jesus Calms the Storm
- 13:1-8 – The Parable of the Sower
- 13:24-30, 36-43 – The Parable of the Weeds

13:31-35 – The Parable of the Mustard Seed and the Yeast
 14: 22-36 – Jesus Walks on Water

Mark

1:1-8 – John the Baptist Prepares the Way
 4:1-20 – The Parable of the Sower
 4:30-34 – The Parable of the Mustard Seed
 4:35-41 – Jesus Calms the Storm
 6:45-56 – Jesus Walks on Water

Luke

3:1-20 – John the Baptist Prepares the Way
 6:43-45 – A Tree and its Fruit
 8:1-15 – The Parable of the Sower
 8:22-25 – Jesus Calms the Storm
 13:18-21 – The Parable of the Mustard Seed and the Yeast
 22:39-46 – Jesus Prays on the Mount of Olives

John

6:16-24 – Jesus Walks on Water
 15:1-17 – The Vine and the Branches



IV. Theology:

This section includes a variety of in-depth interpretations for scripture verses found in the “Scriptures” section. This section gives some additional rationale for Christian Environmental Education programming, and defines what a Christian’s roles

and responsibilities are regarding the environment. Topics like stewardship, Christian land ethic, and Creation-care are discussed in this section. Information for this section comes not only from the survey responses, but also from several theological references. The section shows you the biblical basis for some of these topics in order to help you in building an integrated Environmental Education and Christian Education program. It will add biblical interpretation to your programs. It will add more weight to your call of responsibility in your programs. This will also add to your knowledge of what nature theologians and professionals in the field have interpreted the Bible to say about the relationship between humans and the Creation. It is important to have a good foundation in these theological themes or ideas and the scripture behind them if you are to have solid and successful programs. As with the “Scripture” section, the “Theology” section may prove helpful to you in defending and gaining support for your programs, and giving more substance and validity to those programs.

- Environmental stewardship is a Biblical mandate
- Loving your neighbor includes caring for the environment that supports you both
- Stewardship of the Creation is the first call given to God’s people
- Sabbath includes the land
- Taking care of each other and caring for the environment are connected
- There is a Christian response to environmental issues and problems
- People can come to a knowledge and understanding of God through nature experiences
- Serve the poor by serving the Creation
- The Creation is ultimately called good
- Humans’ fall caused the Creation’s fall
- Humans’ sins and the land are intimately connected
- Creation eagerly waits for redemption
- People can understand God’s character by studying the things He created
- The Creation is a glimpse of God’s beauty

- God made people to be dependent on the Creation and He provides for them through the Creation He has made
- God's command to love your neighbor includes environmental justice
- Jesus utilized familiar, tangible circumstances to teach spiritual realities through parables
- God is with people all the time, in joy and adversity, no matter where they are
- Caring for the Creation is mandated in the writings of the Bible
- The heavens are telling the glory of God
- Serving God through caring for the environment is a person's privilege not just his or her duty
- The Creation sings praises to the Lord
- The Creation has a witness to its creator
- As the Lord keeps and sustains people so must they keep and sustain their Lord's Creation
- People must be disciples of Jesus Christ, the Creator, Sustainer, and Reconciler of all things
- People must provide for Creation's Sabbath rests
- People should enjoy, but not destroy, Creations fruitfulness
- People must seek true contentment
- People must practice what they believe
- The Creator's goodness is evident everywhere
- The whole Creation belongs to God
- There is a testimony of God from the Creation
- Dominion does not mean oppressive dominance, but to rule as God rules – to serve those one rules over
- Subdue means bringing the Creation into conformity with God's ways and purposes
- The name Adam is from the Hebrew word "adamah" which means land

- God calls us to “keep” the Creation in Genesis; it is the Hebrew word “shamar,” which means to watch over and preserve
- God calls us to “till” the Creation in Genesis; it is the Hebrew word “abad,” which means to labor or to serve



V. Virtues, Values, and Rights:

The following section lists things such as: biological values and virtues, Creation values and virtues, and human values and virtues. These virtues, values, and rights are taken from the book Loving Nature by James A. Nash. Values and virtues are what make a society’s culture and faith. If these precepts are changed, then the society also changes. The values and virtues listed in this section are those that professionals in this field are hoping that participants will adopt. If a majority of the culture comes to feel that these are the important values and virtues, then the whole of the culture will change. If the faith is changed, the culture will be changed too. This change in cultural values is the basis of forming your mission, vision, and outcome. The values and virtues listed below are broad. They provide you the foundation for the building of your mission, vision, and outcomes, which are so critical to the development of Christian Environmental Education programs. They are good background information and foundation information for your programs. The Christian faith is a value system. Virtues, values, and rights are a big part of Environmental Education. The virtues, values and rights are representative of both Christianity and the environmental movement.

Ecological Virtues

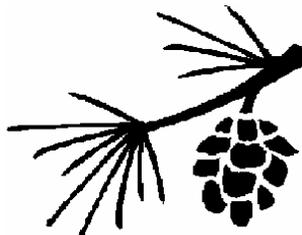
1. Adaptability – species adapting to changes in environment
2. Relationality – everything is connected
3. Frugality – living lightly on the earth
4. Equity – justice in distribution
5. Solidarity – interdependence of all things
6. Biodiversity – the great variety of life on earth
7. Sufficiency – solutions that match the problems
8. Humility – guides the norms for all other virtues

Human Environmental Rights

1. Sustainable productivity and use of regenerative resources – includes present and future generations
2. Protection from pollution of soil, water, air, and atmosphere
3. Disclosure from government and private companies about risks of ecologically harmful behavior
4. Equitable shares of natural resources
5. Preservation of biodiversity
6. Public protection of “private” behavior
7. Redress or reparations to victims for violations of their environmental rights

Biotic Rights

1. To participate in the natural competition for existence
2. Satisfaction of basic needs and the opportunity to perform their individual and/or ecosystemic functions
3. Healthy and whole habitats
4. Reproduce their own kind
5. Fulfill their adaptive potential with freedom from human-induced extinctions
6. Freedom from cruelty
7. Redress through human interventions to restore a semblance of the natural conditions disrupted by human actions
8. Fair Share of the goods necessary for the sustainability of one’s species



VI. Provisions and Degradations:

This section, based on the ideas of the book Earth-Wise by Calvin DeWitt, explores seven processes DeWitt identifies which God has ordained to keep the earth going, and seven degradations people have done to hurt these processes (1994). The seven provisions of the Creator are the processes that have been happening for centuries and that are necessary for the continuation of life on earth. God set these in place at the beginning of the earth. The seven degradations of the Creation are the seven major issues in the environmental crisis. These are the major issues that are caused by humans. The concepts in both of these sections are important to for you to understand to teach Environmental Education combined with Christian Education. In his book, DeWitt develops and explains these ideas in greater detail. The provision and degradation concepts are helpful for you to know because they are the basic concepts and issues that you will teach to your audiences. This section introduces you to each of these seven processes and degradations in order for you to make better connections between the two disciplines and to teach about the environmental crisis.

Seven Provisions of the Creator

1. Energy Exchange – the energy transfer from the sun through the whole food chain; also in this is the protection of the ozone layer from the sun’s full energy
2. Soil Building – decomposition of animals and plants that recycles nutrients back into the soil; 100 years for 1” of topsoil
3. Cycling – Carbon Cycle: the recycling of CO₂; Hydrologic Cycle: the recycling of water, rain = love; Many other vital cycles
4. Water purification – plants/wetlands as environmental scrubbers and sponges cleaning pollutants from water
5. Creative Fruitfulness – each living thing blessed with special fruitfulness and the abundance of life on earth
6. Global Circulation of Water and Air – the seasons of the earth; weather patterns
7. Human Ability – we have the awesome ability to learn from the Creation

Seven Degradations of the Creation

1. Land Conversion/Habitat Loss – areas of land turned from the natural to the built environment
2. Species Extinction – the loss of thousands of species a year
3. Land Abuse – over use of land; polluting the landscape
4. Resource Conversion and Waste/Hazards Production – areas of land that are needed as a natural resource being converted into built landscape; production of harmful chemicals and products that cannot be unmade
5. Global Toxification – the lack of clean water and air everywhere on the earth
6. Alteration of Planetary Energy Exchange – change in the cycling of energy; loss of energy in the cycle; a global change in climate
7. Human and Cultural Abuse – abuse to the “least of these”; social injustice due to environmental injustice



VII. Environmental Education Activities and Topics:

In the survey, the respondents were asked about their most popular and successful programs and activities. The responses to these questions are compiled in this section of the field guide. This section has activity suggestions and ideas that you can try in your programming. The following activities have been field tested and proven by the professionals surveyed to build this guide. The program title and a short description are provided. Following these are the tips about how to do this program, and the topics/concepts to include. Many of these activities have been built from activities in the various curriculum resources in the curriculum section of this guide. This section's

purpose is to provide you with fail-safe programs to start with. This will give you a good foundation on which to develop and add your own programs. It would be helpful to see some of these programs in action. Most places that teach environmental education would have similar programs to the ones below.

Pond or Stream Studies – This program involves exploration in the water of a stream, river, pond, or lake. This requires the students to get a little wet and muddy. It can be completed from a dock, walkway, or platform to minimize the wet and muddy aspects, or can be done in a way that requires the students to get right in the thick of things.

Suggestions and/or Ideas:

Most programs have the element of looking at and catching aquatic invertebrates, plants, etc. - best done in the spring or summer and with opportunity to get right into the pond or stream; maps of watersheds pull in the whole picture; information about stream features like riffles, runs, pools, bends, etc is helpful, guides or charts that help with ID of invertebrates are good; teaching about water quality effects on these invertebrates (i.e. invertebrates as an indicator of water quality) is a good way to tie in environmental degradation

Edible Plant Hikes – This program involves finding and trying wild edible plants. It tends to include a historical component. This is a good program to help students see their ties to the land.

Suggestions and/or Ideas:

This program requires specific knowledge of the areas' plants; fun way to tie in outdoor survival and historical uses of the land; is good to include actual trying of wild foods; usually done in a nature hike format

Living History – This program helps students to understand cultural history of a particular place or the history of the land use in an area. There tends to be some type of demonstration of the period in history through interpreters dressing up and/or modeling particular actions of the land's people and time periods

Suggestions and/or Ideas:

Should be done with dressing the part and having relics of the past; can be done in first person (hard, but adds quite a lot to the atmosphere) or third person; the more accurate the costumes and props the better the program will be; can follow certain themes depending on the area (i.e. Pioneers and settlers, fur trade, Civil War, etc.)

Predator/Prey Interactions and Adaptations – This program teaches about the differences between predators and their prey. It helps introduce the terms carnivore, herbivore, and omnivore and explains the adaptive differences between these types of animals.

Suggestions and/or Ideas:

Many different large group games can be used with this activity to show interactions between predators and their prey; need to know natural history of specific animals; examples of skulls of each of carnivores, omnivores, and herbivores brings hands-on and visual learning; the more props that you can use to compare these animals the easier the students will pick up the concepts

Tracing Where Food Comes From – This program helps a student understand where their food comes from and how it gets to their tables. It will connect to the student to the land that supports him or her.

Suggestions and/or Ideas:

Many curriculum guides have an activity or two for this topic; can be tied into the dining hall if a residential facility; can also be tied to a composting program or to composting methods in general; it is good to use common examples that most kids eat on a regular basis

Ecological Footprints – This program helps a student measure their impact on the environment. It measures the amount of land that a person needs to support his or her lifestyle.

Suggestions and/or Ideas:

There are many ways to measure this out there a simple internet search would bring several good ones; it is good to compare the average American's ecological footprint to other countries; need to have a way to help students know how to practically reduce their footprints; Hamline University's Center for Global Environmental Education has a good video on ecological footprints that could be incorporated into a program of this type; the organization's website is listed in the resource section

Water Quality – This program deals with the chemical testing of water. This program teaches students about water chemistry and on how people can determine the quality of the water in a certain waterway.

Suggestions and/or Ideas:

Can complete the chemical testing of dissolved oxygen, bacteria

levels, phosphate/nitrogen levels, algal levels, pH, light penetration, temperature, etc.; needs to be connected to the effects of water quality on plants and animals as well as what determines or affects water quality; can be combined with pond/stream study to give the whole picture

Canoeing/Kayaking – This Outdoor education class is a nice way to teach students a new skill. The two skills are usually taught separately.

Suggestions and/or Ideas:

Good hard skills activities that can get students out into areas that are not accessible otherwise; can be combined with various programs; gives the mode of transportation that interpretation can use to its benefit; need proper equipment and training for teaching this program

Snowshoeing/Cross County Skiing - the winter option to above - both fit with wildlife tracking

Wildlife Tracking – This program teaches students what they can learn about an animal by studying its tracks. It teaches identifying animals by their tracks.

Suggestions and/or Ideas:

Best done in the winter when snows yield tracks of animals otherwise not seen; can also be used if one has a sandy spot where wildlife trails converge; areas like these this can be easily made, good tracking guides are needed to help students ID tracks; goes well with snowshoeing and cross country skiing

Night Hikes – This program is a nature hike done after dark. It is a great way to experience the land in a very different way. It helps to teach the students that the woods are not a scary place to be at night

Suggestions and/or Ideas:

No flashlights for this activity, better to use your natural night vision; can be combined with astronomy, owl calling or quiet reflection; good to have two leaders for this program one leading and one taking up the rear

Hikes – This program is your basic walk in the woods. It is pretty open-ended. You should interpret the nature things that you find along the way.

Suggestions and/or Ideas:

Can provide opportunities for quiet reflection; can provide time for

personal exploration; could include time in God's word; you need to be open to whatever may happen; let the group become distracted by the natural world and see where it leads

Leave No Trace – This program teaches about the specific impact people have when in a certain area. It includes suggestions of how to minimize impact and not leave evidence that a person has been there.

Suggestions and/or Ideas:

Can and should be incorporated into every program at your site; if there is a camping/backpacking/wilderness experience involved in your programming this needs to be the most important tenant that you have; helpful if practical information is presented

Habitat Study (Biomes) - This program teaches students the four needs an organism has that their habitat should provide. They are food, water, shelter, and space. This program can compare the different ways that habitats provide these needs.

Suggestions and/or Ideas:

Helps to have several major habitats to compare; lends itself to nature exploration and detective work; helpful if you compare the same type of animal in each of the habitats represented at your facility or in your region (i.e. insects); make this program as hands-on as possible (i.e. sweep netting in the prairie, dip netting in the pond, log flipping in the forest, etc.)

Maple Syruping – This program is done in the spring mostly in the month of March. It helps students understand where maple syrup comes from and how it is made. This program is popular but is very dependent on geographic location and weather. The temperature must be above forty degrees in the day and below freezing at night. Maple trees are the best to tap with the very best being sugar maple.

Suggestions and/or Ideas:

Can compare the different techniques that have been used historically; can be combined with tree ID, tree ecology, and tree anatomy; must have opportunities to taste the sap and the syrup

Outdoor Survival / Living Skills – This program teaches the ways people can survive in the wild. It also teaches practical primitive skills like knotting, tying, fire building, twine making, shelter building, etc.

Suggestions and/or Ideas:

Safety can be an issue with this program especially if making fire or staying overnight in the shelters; can be combined with cultural history; the more practical the more retention there will be in the students



VIII. Ideas for Integration:

This section of the field guide supplements the “Environmental Education Activities/Topics” section, but is broader. The source of this information is a question in the survey: “What are some specific ways that you incorporate Environmental Education into your Christian Education programs (or vice versa)?” Information in this section of the field guide goes beyond specific programs, and ties all aspects of programming together. Included are ways in which a person can bridge the gap between Environmental Education and Christian Education, making them one discipline. This section is the compellation of the tips, tricks, and ideas of integrating environmental education and Christian education that professionals in the field have used in their programs. They are quick, easy ways of beginning the integration of these two disciplines. As in the “Environmental Education Activities/Topics” section, these techniques are ways that have been proven to work, and are successful ideas. This section's purpose is to give you practical ways to start the integration of environmental education and Christian education in your organization's programs. This information will further build the knowledge base which you can use to begin a program of this type. The ideas in this section are designed to get your creative juices flowing. This is not the “end all be all” list of ideas for integration, but it is a start. You will be able to come up with other ideas that apply directly to your specific situation using this list as a starting point. This section will give you the basis for brainstorming and ideas you can build upon as you develop programming integrating Environmental Education and Christian Education. The options

are truly endless when finding ways to make this integration a reality.

- ☐ - Use and display of live animals
- ☐ - Including a scripture reference for every Environmental Education class
- ☐ - Serving fair trade coffee/organic food/locally grown food
- ☐ - Allow for every camper to have some type of nature experience each day
- ☐ - Having staff be good role models of environmental stewardship
- ☐ - Spiritual emphasis to accompany each year's program or theme
- ☐ - Exchange vocabulary of Environmental Education with words from the Christian faith (i.e. Creation instead of nature; stewardship instead of saving or caring)
- ☐ - Energy conservation practices used in all the buildings
- ☐ - Using Creation images in worship or devotion time
- ☐ - Daily devotions with environmental principles included and/or devotions that relate to the day's topic
- ☐ - Creating metaphors from nature for the Christian faith (i.e. the changing of leaves in fall to our "seasons" of spiritual life)
- ☐ - Recycling containers conveniently located and visible to the participants as well as including a lesson on this in your orientations
- ☐ - Conservation tips posted around the building with scripture passages
- ☐ - Earth-friendly systems build into new construction or old construction updated with earth-friendly systems
- ☐ - Nature hikes included in the orientation to the facility
- ☐ - Worship outside by campfire light
- ☐ - Connecting the Bible study times to environmental study times
- ☐ - Allowing for times of quiet devotion and reflection in the natural environment
- ☐ - Working with diverse groups to provide them with environmental education
- ☐ - Integrate local environmental issues – youth can relate better to this and it

gives practical, experiential situations to study and work on changing

- ☐ - Demonstrate acts of stewardship through organic/sustainable farming, composting food waste, recycling,
- ☐ - Reuse materials in activities like craft time
- ☐ - Give parishioners opportunities to escape from everyday life and challenge in a natural environment
- ☐ - Allow God opportunities to share the gospel and instill responsibility, stewardship, and accountability both to the environment and life in general
- ☐ - Take the existing curriculum be it either Environmental Education or Christian Education and integrate the other discipline.
- ☐ - Publish information about environmental stewardship in your newsletters
- ☐ - Include books on environmental stewardship in your libraries
- ☐ - Build a bird feeding station near windows where people congregate and sit in your buildings
- ☐ - Have an energy audit to find out how your organization could use energy more efficiently
- ☐ - Provide classes on environmental stewardship to local pastors or to the leaders of the churches you serve
- ☐ - Develop service projects that your participants can be involved with while they are at your facility
- ☐ - Become a information center for your area on environment stewardship – recycling information, source reduction information, etc
- ☐ - Make an inventory of the animal and plant species found at your site
- ☐ - Participate in Earth Day events or host your own Earth Day event
- ☐ - Be a site for local produce by hosting a farmers market
- ☐ - Invite individuals who can help people see and interpret their natural surroundings to do programs at your site
- ☐ - Set a goal each month of environmental stewardship for your site
- ☐ - Adopt a “no chemical” policy for lawn and plant care

- ☐ - Use recycled products – i.e. recycled paper for all your publications, correspondence, etc
- ☐ - Devotions with each class subject
- ☐ - Teachers have the option how many Bible study activities will be integrated into the residential program (Christian schools)
- ☐ - Encourage schools to worship while at camp in the outdoor chapel (Christian schools)
- ☐ - Spend the night out under the stars
- ☐ - Worship service focused on the Creation with songs about nature and taking place in nature
- ☐ - Worship with the focus on Creation stewardship and the spiritual aspect of caring for the earth
- ☐ - Offering nature activities for your summer camp participants
- ☐ - Help summer camp counselors to incorporate Environmental Education activities into their time spent with campers
- ☐ - Try to show participants how their choices and decisions at home can effect the environment that you are in at that particular moment
- ☐ - Students have to spend a certain period of time outdoors alone away from distractions



IX. Staff Training and Helpful Background:

In the survey, I explored the respondents' primary area of background and training. Although I received a wide range of answers, there were some common themes

in the responses about background and professional training. Many of the respondents had some type of education training and/or background. The sciences were well represented in the backgrounds of many of these professionals. In addition, there were many respondents who had some recreational training such as outdoor education, leisure studies, and outdoor recreation. There were a few respondents who had professional training or background in Christian Education, but most of them had learned most of their knowledge in this area through experience on the job.

This section of the field guide is designed to be used several ways. It is broken down into three sections: “helpful training to obtain,” “places to obtain training/experience,” and “ideas and suggestions for training program staff.” First, this section explains what professionals in the field feel is important in a person’s background and training in order to be effective in this field. These professionals have identified these areas of training as helpful for themselves and others working in the field of Christian Environmental Education. This information can help you to know what useful background and training you may already have, and what additional training you may want to consider obtaining. However, there is no specific background or training required for those interested in integrating Environmental Education and Christian Education. Anyone who is in Christian Education or the greater Environmental Education field will tell you that people come to this type of work from many different paths. This makes the field more diverse, and this diversity is largely beneficial. This section also gives you and your organization a menu of things you might want to consider when hiring staff. The list given is not intended to be a complete list, but will get you headed in the right direction and will give you ideas.

The second part of the section is a listing of places to obtain the training that is mentioned in the above section. These places come highly recommended by the respondents because of the valuable information and successful training programs that they offer. The suggested sources of training in this section can give you and your organization a list to start from and to build on. The areas of training are listed behind the organization’s name.

The final part of this section provides information about the training of program staff. Building and delivering a combined program is difficult to accomplish alone. Most of the professionals surveyed have program staff who carries out their programs. Finding and training a community of staff can be vital to the success and longevity of your program. This part of the section gives you ideas and suggestions for staff training. The professionals have used these techniques and have found them to be successful when training staff. If you do have or will have some type of program staff facilitating your combined programs, you will want to make special note of this section. Good staff training is vital to a successful program.

Helpful training to obtain:

- ☛ Combination of Bible and Biology or Environmental Studies
- ☛ Education training with Environmental Education or Science emphasis
- ☛ Strong personal relationship with Jesus
- ☛ Training in the specific beliefs, practices, and theology of the denomination you work for
- ☛ Experience at an organization with a solid theological core and strong Environmental Education program
- ☛ Good science foundation
- ☛ Education in the sciences outside the church to understand the broader environmental movement
- ☛ Knowledge of state science standards
- ☛ Field courses in Biology
- ☛ Training in nationally known environmental curricula
- ☛ Environmental Education certification
- ☛ Christian education courses
- ☛ Training in CPR/First Aid
- ☛ Wilderness First Aid/Wilderness First Responder if dealing with intensive outdoor wilderness experiences
- ☛ Training in hard skills like backpacking, canoeing, kayaking,

snowshoeing, skiing, etc.

- ↗ Experience in nature / Spending time in nature
- ↗ Love of children
- ↗ Passion for God and His Creation
- ↗ Internship/Seasonal positions where there is opportunity to do some of the grunt work in Environmental Education/Christian Education is helpful in getting the full experience
- ↗ There should be some deeper understanding of the Bible and the theology that supports Environmental Education
- ↗ Experience working with youth of all ages
- ↗ Training in team-building/low ropes/high ropes
- ↗ Volunteer with professionals in the field
- ↗ Keep current with periodicals, internet news, and peers

Places to obtain training/experience:

- ⊕ Montreat College – Asheville, NC – Small Christian college – majors in Biology, Environmental Studies, Outdoor Education
- Northwestern College – Saint Paul, MN – Small Christian liberal arts college – majors in Biology with environmental science courses
- Lewis and Clark College – Portland, OR – Small liberal arts college on 137 acres of forest – majors in Biology and Environmental Studies
- Northland College – Ashland, WI – An environmental liberal arts college – majors in Outdoor Education with emphasis in natural history, adventure recreation, therapeutic recreation, Biology, Natural Resources, Geology, Education with Science or Environmental Education emphasis
- Northern Illinois College – DeKalb, IL – Mid-sized public university – majors in Biology – minors in Environmental Studies
- ⊕ University of Minnesota – Duluth – Duluth, MN – Mid-sized public school – majors in Recreation - Outdoor Education, Biology, and Environmental Studies

- Bethel University – Saint Paul, MN – Small Christian college – majors in Biology, Environmental Studies, Environmental Science
- Evergreen State College – Olympia, WA – Unique liberal arts college – majors in Biology, Botany, Ecology, Ecological Design, Environmental Studies, Geology, Marine Studies, Sustainable Agriculture, Zoology
- Au Sable Institute of Environmental Studies – Mancelona, MI – institute offering environmental courses with transferable credits for undergraduates and graduate students – Five campuses internationally with the main campus in Michigan
- National Association of Interpretation conferences – National and Regional – Various themes and topics
- Pollution Control Education workshops – Contact your state’s office – Various themes and topics
- North American Association for Environmental Education – conferences – National and Regional – Various themes and topics
- American Red Cross – National – First Aid/CPR certification, Life guard certification
- American Canoeing Association – canoeing and kayak instruction and certification www.acanet.org
- National and state organizations of certification in Environmental Education – Web search organizations in your state
- National Outdoor Leadership School (NOLS) – WY – Various expedition and Outdoor Education training trips – www.nols.edu
- Arocha International – Cambridge, UK – Christian nature conservation organization with many projects worldwide with volunteer opportunities www.arocha.org
- Project WET, WILD, and Learning Tree workshops – Look in the curriculum section of the guide for website addresses – Trainings in how to use the various curriculum guides

- ☛ Christian Camping International (CCI) – International alliance of Christian camping organizations – resources and conferences on various camp related topics

Ideas and Suggestions for training program staff:

- ☑ “Look at connection with God, camp, and nature”
- ☑ “Instruct staff formally on curriculum”
- ☑ “Have staff share faith stories and journeys”
- ☑ “Have weekly staff meeting including continuing education in Environmental Education/Christian Education”
- ☑ “Give staff a book on environmental theology”
- ☑ “Process each week with the staff”
- ☑ “Have discussions of tough environmental topics at a higher level than their teaching”
- ☑ “Train in basic stewardship and why this is a key to serving God”
- ☑ “Hire people who are comfortable making the link between God and nature”
- ☑ “Teach staff basic sciences and then show them how to integrate Biblical principles into their lesson plans”
- ☑ “Give staff time to practice lessons and writing lesson plans”
- ☑ “Have several intense trainings during the year with your staff discussing methods, ideas, mission, vision, curriculum, learning theories, etc.”
- ☑ “Have intensive staff training in Bible knowledge and theology”
- ☑ “Get your staff Environmental Education certified
- ☑ “Allow for opportunities of continuing education for your staff to attend conferences, workshops, and classes”
- ☑ “Have staff work with local professionals like forest rangers, biologists, etc”
- ☑ “Regularly schedule trainings to keep programming fresh and exciting for staff and students alike”

- ☑ “Certify staff in Wilderness First Aid/Wilderness First Responder” – again if dealing with intensive wilderness experiences
- ☑ *****“Certify staff in CPR/First Aid – a must for people working with youth”*****
- ☑ “Schedule training opportunities in hard skills like canoeing, kayaking, outdoor survival skills, snowshoeing, etc”
- ☑ “Make sure that staff members are contributing to the solutions as much and preferably more than being ‘fed”
- ☑ “Train staff on how to make connections between their faith and the environment”
- ☑ “Make sure staff get personal time to experience nature”
- ☑ “Facilitate frequent devotions and reminders of the mission”
- ☑ “Let staff brainstorm and develop new ideas and programs”
- ☑ “Make sure staff have a love for people and the outdoors”
- ☑ “Make sure both disciplines should be experienced and modeled”
- ☑ “If both subjects are integrated in the staff training then the staff will experience first hand how they can be integrated”
- ☑ “Have staff members observe the same class taught by different instructors”



X. Mission and Vision:

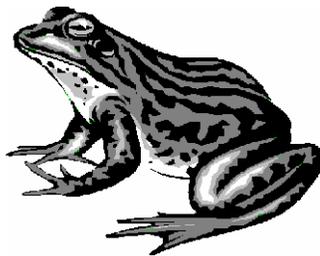
Mission statements are vitally important to an organization’s program and should also be developed early in the process of this integration. This section will help you

determine some important foundations of your programs. You must know the mission, the “why,” and the vision, the “where and how” of your combined programs. The mission statement affects the vision of what you want to do. These two elements, along with the outcomes and goals, are the most important parts of a program because they are the filters by which all other parts are seen and developed. This section of the field guide contains statements of mission from the respondents that explain reasons why they are doing this work. Mission statements can provide the framework, the outcomes and goals, you will have for the program you are developing. This section does not include a comprehensive list of mission statements, but instead gives you some examples of what others feel their mission is. This section gives insights and ideas for you and your organization to define these things yourselves. The goal of this section is to aid you in verbalizing the mission that you have inside.

- “To create a sense of wonder and curiosity about the world”
- “Revealing the nature of God through the study of Creation”
- “To teach all people to take care of God’s Creation”
- “To foster encounters with Christ in a wilderness setting”
- “To provide meditative time and/or challenge for others to rediscover God’s purpose in their lives”
- “Providing Environmental Education experiences that teach a greater awareness and appreciation for the natural world and each other”
- “To expose school children to nature so that they appreciate it, and eventually desire to care for it themselves”
- “To excite others about being outdoors and learning about their environment and to provide experiences that open others to God’s voice”
- “To teach the church how to steward the environment”
- “To cultivate environmental stewardship in all aspects of the church”
- “To create a place for all to live out the Gospel of Jesus Christ as we explore God’s Creation”
- “To share the passion for, love of, and knowledge of the natural world with

others so that they will value it”

- “To provide facilities and programs, using God's Word and also His Creation to help initiate faith and cultivate maturity in Jesus Christ”
- “To create engaging communities where each young person encounters Christ through a dynamic camp experience”
- “To be a hands-on learning experience where the wonders of Creation draw people to Christ”
- “To engage visitors in science programs that excites and motivates them to discover the wonders of the universe”



XI. Outcomes and/or Goals:

This section includes outcomes and goals from various Christian Environmental Education programs. These outcomes and goals are the changes or the “take away message” that the educators want to instill on their participants. It is important for you to know the results you want to see in the audience of your programming. A program has no purpose without outcomes and, therefore, should be built up from this foundation. Awareness of outcomes aids in developing your program by allowing you to start from the finish and think backward when planning. It is important to know what you want your participants to come away with. It helps to frame the whole program you will develop. The outcomes are the baseline that you will use when selecting activities that make up a

particular program. Outcomes and goals are something that should be defined early in the development process. These outcomes and goals below will give you some ideas of what message(s) others feel are important for their participants to take home. This will help you as you decide what message(s) you want your program to send. This section will aid in the brainstorming sessions for the outcome and goals of your program.

- “We hope to plant seeds”
- “To know that there is a Christian response to environmental issues and problems”
- “To integrate environment stewardship into everything the church does”
- “To create positive change in the institutions of the Church”
- “To bring students to a faith in Jesus Christ through the testimony of the Creation”
- “To give participants a better understanding of God’s character through the things He has created”
- “To have students walk away with a reason to get involved at home in taking care of the earth and share the love of the Lord”
- “To instill awareness and appreciation that will lead to caring and responsible decision-making”
- “To bring about lives of faithfulness in people”
- “To help people to be good caretakers of the earth and to love their neighbor”
- “To help youth to make changes in order to make the world a better place”
- “To help youth see how their faith is connected to the world they live in – including local, national, and global issues”
- “To expose kids to nature so that they first appreciate it then eventually desire to care for it”
- “To create a sense of wonder of nature”
- “To develop an appreciation for what God made first”
- “To achieve awareness, appreciation, and knowledge about the outdoor

environment, as well as experience God in the environment He created for humanity and other living things”

- “To excite others about being outdoors”
- “To give students ways they can care for the earth at home”
- “To model caretaking to the students so that they too will be caretakers of the earth”
- “To motivate people to learn more about nature and to question their own impacts on the environment”
- “We want to leave every person that visits our facility or participates in our programs the feeling that they have been given a finite gift by God, the gift of Creation, and as servants of God and ministers of Christ they are responsible for taking good care and making wise use of that burrowed gift”
- “To bring someone closer to God by using the Creation as a pathway to do this”
- “To get students away from all the distractions of life”
- “To help students see the pure beauty that God has made for us in the outdoor environment”



XII. Concepts and Objectives:

The concepts and objectives are the underlying environmental education themes that structure each activity or curriculum. They are important early in developing a specific program or activity because they help bring structure and focus to the specific

program or activity. Concepts and objectives also provide a way to have common ground and consistency in the programs offered, even when there are several different people teaching them. While the “Mission and Vision” and “Outcomes/Goals” sections are broad and cover a whole program, this section is focused on integrating specific Christian concepts and objectives with specific environmental concepts and objectives. Concepts and objectives are the important pieces information you want a participant to take home from each activity, whereas outcomes and goals are what you want a participant to come away with from the program as a whole. For example, a concept that a participant might learn in a water cycle program are the parts of the water cycle: evaporation, condensation, precipitation and infiltration; whereas the outcome or goal would be to have the student to better steward the water resource.

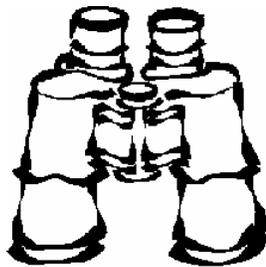
Each separate curriculum or activity that you design should have some major environmental and spiritual concepts that you want your participants to learn. Below are some example concepts and objectives from other Christian Environmental Education curriculums and activities. These can be used in the programs you develop or can serve as examples as you develop your own concepts and objectives. It is important to set the concepts and objectives for each theme that you have before you add activities and/or write your curriculum. Concepts and objectives will provide the focus and direction of the activities and curriculum you use and develop for a specific program.

-  Environmental stewardship is a Biblical mandate
-  Nature is God’s Creation in its simplicity
-  If we take care of the earth we are basically taking care of ourselves
-  You cannot care about God and abuse His handiwork at the same time
-  Protect the environment because it is a work of God showing His love and care for us
-  Environmental Justice – if we abuse the Creation the vulnerable gets hurt first and worst, protecting these persons is a part of the mission of the Church

- 💡 We need the environment to live (common convictions)
- 💡 One spirit – many parts of the body make one body – there is an interconnectedness of all life
- 💡 The Creation is good
- 💡 Environmental stewardship is the consistent ethic of life that covers all things
- 💡 Environmentalism is serving God
- 💡 Our first call/purpose is to be stewards of the earth – Genesis
- 💡 Every day is a significant experience with God in the Creation
- 💡 God is in everything
- 💡 Take care of your neighbor by caring for the environment
- 💡 We can easily meet God in the Creation
- 💡 Caring for the environment is one of the most important ways of serving God
- 💡 We are a part of the environment God created so it only makes sense to care for it
- 💡 Caring for the Creation is a way of life
- 💡 Everything is interconnected – ecology of the Creation
- 💡 Awareness and appreciation
- 💡 We do not care for the earth to make our lives easier, but out of love for our neighbor
- 💡 We cannot love our neighbor if we are taking more than our fair share or polluting their air or water
- 💡 We love our neighbor by treating the Creation in an appropriate manner
- 💡 There is awesome yet fragile interconnectedness of God's Creation
- 💡 God calls us to live simply, purely, holy, and carefully, we fail to do so if we are not stewards of the earth
- 💡 We cannot serve God in complete disregard for the environment
- 💡 Caring for the environment is a part of obedience to God's commands as

in the Bible

- 💡 God provides this environment for our work, family, life, and play
- 💡 Caring for God's environment is our duty, but more over our privilege
- 💡 God has given us special responsibility over the Creation
- 💡 To truly appreciate and value our natural resources, we have to understand Creation
- 💡 The Earth is the Lord's and how we treat it is a direct expression of our care for the Lord - this is modeled through our responsible actions
- 💡 We have been given a gift of Creation and we are responsible for taking care of it and making sure all life has a fair share of its bounty
- 💡 We have no control or power that is not given by a gracious God and our response to that fact determines how resources are distributed and used
- 💡 We are not separate from Creation
- 💡 To live harmoniously you must have respect - respect for yourself, for God, for others, and for the environment
- 💡 To realize that the God of Creation is the God of salvation
- 💡 God has given us two great books - the Bible and the Creation
- 💡 God has given us responsibilities for His Creation just as He gave us responsibilities for His church



XIII. Resources:

This section includes several different kinds of helpful resources. This section has

four subcategories: “Books,” “Organizations/Websites,” “Publications,” and “People.” The books that others have found helpful in their programs are listed in the first subcategory. They have been suggested reading for a person who is just starting in the field of Christian Environmental Education.

Groups and their websites that can be helpful for information, curriculum, policies, etc. are listed in the “Organization/Website” subcategory. The websites and organizations come highly recommended as they proved to be helpful to the people who responded to the survey. They are sources of environmental and Christian knowledge, and provide ideas for programming. The publications listed are recommended for people working with Environmental Education. They also provide helpful current environmental information.

The people who participated in this survey and who are willing to be resources to others are listed in the “People” subcategory. These people are willing to share curriculum, ideas, and general advice with you. They are professionals in this field and have a great deal of experience with Christian education and Environmental Education. They have some good advice to give to educators who are beginning this journey.

Books:

-  The Science of God – Gerald Schroeder (1997) Broadway Books – This book explains the convergence of scientific and biblical knowledge.
-  Given: Poems – Wendell Berry (2005) Shoemaker and Hoard – These are a collection of spiritual nature poems of times of meditation.
-  A Sand County Almanac - Aldo Leopold (1949) Oxford University Press – This book has chapters of phenology of each month and includes chapters on the Leopold’s famous land ethic.

- 📖 Round River - Aldo Leopold (1993) Oxford University Press – This is a collection of his writings from journals and essays.
- 📖 Comforting the Whirlwind; God, Job, and the Scale of Creation- Bill McKibbin (2005) Cowley Publications – This book makes some comparisons between the book of Job and the current environmental crisis.
- 📖 Bible - NIV, The Message – These are the most appropriate version and offer scriptures in a language that is easy to integrate in Environmental Education.
- 📖 The Last Child in the Woods - Richard Louv (2005) Algonquin Books of Chapel Hill, NC – This is a fairly new book on a concept called “nature-deficit disorder.” It speaks of the state of today’s youth and how that is affected by the disconnect between youth and nature.
- 📖 Divine Drama - Harry Wendt (1983) Shekinah Foundations – This is a book study on the Christian faith in word and diagram.
- 📖 Any of Sigurd Olson’s books – He is a famous nature writer with many great books that offer good information and good nature quotes.
- 📖 Any of John Muir’s books – He is a famous nature writer and conservationist that provides many great quotes.
- 📖 A Spiritual Field Guide: Meditations for the Outdoors – Bernard Brady & Mark Neuzil (2005) Brazos Press – This is a collection of writings on nature with spiritual elements used for meditation times.
- 📖 Earth in Balance - Al Gore (1993) Plume – This book explains the necessity of environmentalism and includes Gore’s bold initiatives for change.
- 📖 Any Christian Parenting books – These books provide information on age development; understand where kids are coming from, how to discipline etc.
- 📖 The Institute of Basic Life Principles – This organization has books on animal behavior and how those behaviors relate to a faith in Jesus Christ.
- 📖 Field Guides - Peterson, Audubon, and Golden – These guides provide good information and pictures on the flora and fauna of North America. They are handy in learning identifying characteristics and taxonomy of local wildlife.
- 📖 Any of Joseph Sittler’s books – He is a famous ecotheologian that has written much on this topic.

-  Ecological Literacy – David Orr (1992) State University of New York Press – This work approaches environmental literacy from diverse perspectives. It includes specifics on how the education system can play a role in how the future generations will live on the earth.

-  Caring for Creation in your own Backyard – Loren Wilkinson & Mary Ruth Wilkinson (1992) Servant Publications – This book gives over a hundred examples of how Christian families can help the earth.

-  Handbook for Nature Study – Anna Botsford Comstock & Verne N. Rockcastle (1986) Comstock Publishing – This is a very complete nature study guide. It discusses details of most living things. It includes lessons, questions, and projects.

-  Earth-Wise – Calvin DeWitt (1994) CRC Publications – This book is set up in small group study format. It provides excellent information on biblical response to environmental issues.

-  God is Green – Ian Bradley (1990) Image Books by Doubleday – This book discusses Ecology for Christians and how Ecology relates to the Christian faith.

-  A Sense of Place – Geoffrey R. Lilburne (1943) Abingdon Press – This book discusses a Christian theology of the land and gives us a vivid picture of the Christian land ethic.

-  Redeeming Creation – Fred VanDyke, David Mahan, Joseph Sheldon, & Raymond Brand (1996) InterVarsity Press – This book provides the biblical basis for environmental stewardship. It also discusses the Christian response to the environmental crisis.

-  Care for Creation – Max Oelshlaeger (1985) Yale University Press – This book discusses the ecumenical approach to the environmental crisis.

-  God's Good Earth - Lloyd Mattson (1985) Camping Guideposts

-  God's Fantastic Creation - Muriel Larson (1975) Moody Press

-  Nature and Nature's God - Herman W. Schaars (1990) Department of Christian Education of the Lutheran Church – Missouri Synod – This is a collection of nature articles.

-  Gospel in the Stars – Joseph A. Seiss (1999) Kregel Publications – This book discusses astronomy and the Bible specifically how both reinforce the unity of Creation and revelation.

- 📖 The Witness of the Stars – Ethelbert W. Bullinger (2003) Kregel Publications – This is an in-depth study of the constellations and principle stars as they pertain to prophetic truth.
- 📖 Earthkeepers – Steve Van Matre & Bruce Johnson (1987) The Institute for Earth Education – This book discusses the four keys for helping youth live in harmony with the earth.

Websites/Organizations:

- 📖 www.Enature.com – This is a great American wildlife resource. It provides online field guides, fun resources, general information, etc. that is specific to your area
- 📖 Sierra Club – This is a member organization that is committed to working together to protect communities and the planet. It is the world’s oldest, largest, and most influential grass roots environmental organization. They offer a good deal of environmental news and information. – www.sierraclub.org
- 📖 www.webofcreation.org – This site has ecology resources that transform faith and society and ideas and resources. They offer strategies for doing ecojustice.
- 📖 North American Association of Environmental Education (NAAEE) – This organization is a network of professionals, students, and volunteers working in the field of Environmental Education throughout North America. – <http://naaee.org/pages/index.html>
- 📖 www.pastor2youth.com – This is the largest youth ministry freebie archive on the web.
- 📖 www.youthministry.com – This is another youth ministry resource site.
- 📖 www.egaideas.com - This is a site of absolutely free games and resources for youth.
- 📖 www.ultimatecampresource.com – This is a site with camp games, camp songs, camp skits, and more that are all free resources to use.
- 📖 SEEK - www.seek.state.mn.us – This is a project of the Minnesota Office of Environmental Assistance. It is a site with resources, calendar of Environmental Education events, regional pages, resources for Environmental Education in the classroom and a whole lot more.
- 📖 Pollution Control Agency – This is a branch of state government that offers informational resources and trainings.

-  www.ee-link.net – This site has a wealth of information and links on Environmental Education.
-  The Office of Environmental Education (EPA) – This organization offers information, grants, and training resources. www.epa.gov/enviroed
-  Nature Net – This is the environmental learning network offering one stop shopping for Environmental Education resources. – www.naturenet.com
-  The Institute of Basic Life Principles – This organization is giving the world a new approach to life through seminars, trainings, and resources of following God’s principles. – www.iblp.org
-  The National Council of Churches – This organization is the leading force in ecumenical cooperation among Christians – www.ncccusa.org – Has a site dedicated to eco-justice work and resources. – www.ncecojustice.org
-  Monarch Watch – This site displays information about a monarch larva monitoring project. It enables others to join in the monitoring research on monarchs. – www.mlmp.org
-  Audubon Society – This organization has great information on birds and bird conservation around the world. There are state chapters that would have this information specific to your state. – www.audubon.org
-  Journey North – This is a site about the global study of wildlife migration and seasonal change. It enables others to participate in this research and provides current information on this topic. – www.learner.org/jnorth
-  Arocha – This is an international Christian conservation organization. It provides global conservation information and projects for Christians. They offer volunteer work with different conservation projects around the world. - www.arocha.org
-  National Association of Interpretation – NAI – This is a professional association dedicated to the advancement of the profession of interpretation. It offers information, trainings, and conferences. – www.interpnet.com
-  Association of Nature Center Administrators – This organization promotes leadership and quality management for the nature center profession. It offers resources, trainings, and seminars for nature center administrators. – www.natctr.org

-  Acorn Naturalists – This is a company that sells hands-on nature materials, artifacts, etc. – www.acornnaturalists.com
-  The Center for Global Environmental Education – Hamline University – This organization offers courses, resources, degrees, and certificates in the field of Environmental Education. – <http://cgee.hamline.edu>

Publications:

-  Creation Care Magazine – This magazine is published by the evangelical environmental network on creation care issues and information. – www.creationcare.org
-  Creation Illustrated – This is a Bible-based nature journal offering science articles favored with faith. – www.creationillustrated.com
-  Sojourners Magazine – This magazine offers progressive Christian commentary on faith, politics, and culture movements of spirituality and social change. – www.sojo.net
-  A Green Print for Minnesota – This is the state plan for Environmental Education in Minnesota. It provides information on outcomes and strategies of Environmental Education in Minnesota. However this guide is helpful for others outside the state of Minnesota and is being used by other states to write their plans for Environmental Education. It is available on the SEEK website – www.seek.state.mn.us.
-  Sierra Magazine – This is a publication of the Sierra Club. It provides current information and articles on wildlife conservation. – www.sierraclub.org/sierra
-  Journal of Experiential Education – A journal that publishes articles on the subjects of Outdoor Education, Experiential Education, and Environmental Education. Includes the up-to-date information in these subjects. - <http://www.aee.org/publications/journal/aeejourn.html>
-  *ACA Camping Magazine* – This publication is the primary source for the most recent trends in the camp industry, the latest research in the field of youth development, critical management tools, and program ideas. – www.acacamps.org/campmag
-  Nature – This journal reports the latest of scientific research and discovery. – www.nature.com/nature
-  National Geographic – This is the publication of the National Geographic

Society. It reports on scientific exploration and research. There is a version available for the classroom call NGExplorer Magazine for the classroom. – www.nationalgeographic.com



Green Teacher Magazine – This is a magazine by and for educators to enhance environmental and global education across the curriculum at all grade levels. – www.greenteacher.com



Earthlight Magazine – This is publication of eco-spiritual writing and artwork. – www.earthlight.org

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XIV. Environmental Education Politics/Arguments:

Unfortunately, both the environmental movement and Christianity become political. This section will help you understand what politics and arguments you may face when developing and implementing Christian Environmental Education programs. First, there are many national and state policies and laws that can positively or negatively affect an Environmental Education or Christian Education program. These are the politics and arguments that other professionals have faced in working in this integration ministry. This section will help give you an awareness of these policies and will give you sources of additional information. This section is a source for finding both pending and existing legislation on the state and federal levels that could affect the programs you are developing. This knowledge will help you to tailor your programs accordingly.

The second part of this section includes information on the arguments Christians have against Creation-care, or in the secular arena, environmentalism. These come from the book Earth-Wise by Calvin DeWitt, in which they are further discussed. The arguments listed in this section will give you an idea of the negative attitudes and disagreements that you might encounter in developing these types of programs. Through previewing these types of arguments in this section of the field guide, you can become a better educator, and come to know your audience more completely. This background information will help you and your organization be prepared for negative mindsets that you may be trying to change. In addition, these arguments are what you and your organizations will face when trying to gain support and backing for your programs.

Having accurate political information is becoming more and more important in this field because there is much activity going on in every level of government regarding environmental policy.

Politics that affect the program

- ✘ Denomination rules and policies – These can have an effect on your decision making and might be limiting on what you can do.
- ✘ State Science standards – These are important to know if you want public schools to come. It helps with justifying participating in your programs for the school administration.
- ✘ Statue 115A.037 Environmental education goals and plan – This is a plan for environmental education for the state of Minnesota. It includes the goals that each citizen must know about the environment.
- ✘ Weakening of the Clean Air Act, Clean Water Act, and Endangered Species Act – These are overall changes in policy which will allow for big business to get away with more and make it harder to keep to the standards set when these laws were written.
- ✘ Lack of legislation on global climate change – Kyoto Protocol – Global Climate Change is probably one of the “hottest” topics and biggest issues the world is facing today. With the lack of legislation, it will continue to be a large problem and will eventually start affecting things in a major way.
- ✘ Weakening of sustainable resource development incentives – This will make it less desirable and cost effective to be sustainable in development which will mean development projects will become less and less sustainable.
- ✘ Being a part of a larger organization – Sometimes larger governing bodies can cause problems in the organizations under their control. This could be a factor in how you develop your program, what support you receive, and the time line of implementation.
- ✘ Current administration’s (Bush 2005) systematic, under-the-radar dismantling of environmental regulations – This has made it harder and harder to maintain good environmental standards. We have lost the backing of the government in this battle.
- ✘ Legislation attempts to drill Artic National Wildlife Refuge – This maybe does not directly have an effect on your programming but it will open the door to more environmental degradation not only in Alaska, but everywhere.
- ✘ State of the economy – This can have a large effect on budgets of non-profit,

private, and even governmental organizations.

- ✘ School budgets – This has a direct impact on how many programs you can do and how you do them.
- ✘ Energy crisis – This can add a great deal of cost to our already stressed budgets.
- ✘ Present oil/fuel crisis – The rising cost affects programs and mission of the organization.
- ✘ Legislation in California that will require Christian organizations to cover religious materials (crosses, pictures, bibles, etc) when dealing with public schools
- ✘ Society does not uplift church activities any more – There has been more and more of a separation of people from local churches and their activities. This filters down to the ministries that the church supports and carries out.
- ✘ Food service regulations are beginning to make it harder to do outdoor cooking / some legislation allows camps to be exempt – This is especially important to note if planning to have students camp over night, cook meals over the fire, and/or go on trips or expeditions
- ✘ The greater organizations limits on participants (i.e. students are not allowed to participate in certain activities) – This would be from the schools, churches, or other organizations that come to your programs.
- ✘ When working with public schools you are limited to what the school will allow – This is just a given with the separation of church and state legislation that has been around for a while. You have to be more creative in how you integrate it then.

Arguments against Creation care

1. This world is not my home – the idea that we do not belong here and so need not care about the environmental crisis
 - We are called by God to steward the Creation
 - The Creation was made for us to live in – sin’s corruption is what causes it not to be our home
2. Caring for the Creation gets too close to the new age movement
 - Caring for the Creation dates back to Genesis
 - It is simply a biblical mandate – we are to uphold the Bible’s teachings

3. We need to avoid any thing that looks like political correctness
 - We are God's stewards and approach Creation-care as such
 - Our biblical responsibilities have nothing to do with be politically correct
4. Respecting the Creation gets us too close to pantheism (earth-worship)
 - Respecting the Creation is a way to worship God
 - Fulfilling responsibilities is a way to give God the glory – He is our King
5. There are too many worldly people out there doing environmental things
 - We cannot excuse ourselves from our responsibilities to the Creation because others who do not believe as we do are caring for the earth
 - God can use all people even though they may not acknowledge him
6. Caring for the Creation will lead to world government
 - Even though it will take a global effort to “fix” environmental problems this will not lead to a world government
 - Governments are working together to care for the earth but have not become a world government
7. Before you know it, we will have to support abortion
 - We have a obligation and privilege to care for the earth but still must do this in a way that is following our beliefs
 - Abortion is not the solution to environmental problems, even environmentalist know that
8. I do not want to be an extremist or an alarmist
 - Gloom and doom are not necessarily the arguments that are most effective to urge others to Creation-care
 - We must serve God through Creation-care out of our love and gratitude to Him
9. The term domination means what it says – oppressive domination
 - Outright oppression is not condoned or advocated by the Scriptures
 - Dominion means responsible stewardship – one sees this modeled in the actions of Jesus
10. People are more important than the environment
 - If that were true God would not have saved the animals in the great flood
 - People are special in the fact that we are given the special responsibility to care

for the other creatures on earth



XV. Words of Advice:

This section contains statements from the people who have “been there and done that.” These are the words of the sages of Christian Environmental Education - the voices of the experienced ones. This advice is specifically directed to the readers of this field guide to give you guidance in developing your programs. It is lessons learned by the respondents to the survey that they want to share with you who will follow them - the next generation of Christian environmental educators. If the next generation hopes to be wise, and hopes to be successful, then they will want to heed the advice of those who have come before them. This has always been the best way of passing on the lessons of the past - through advice of those who learned the lessons first. Therefore, below you will find the advice that other professionals feel is important to give to people starting out in this adventure. This is not everything that you will need to know, but it is a good start. These are their words:

- ➡ “Coordinate all activities with the state’s education framework and standards for environmental education, science, and social studies”
- ➡ “Being a good example of care for the earth is an essential part of fulfilling God’s call to care for the earth”
- ➡ “What makes an Environmental Education program Christian Education is that the students are studying the Creation under the guidance of spirit-filled Christians; the curriculum is the same the vocabulary is the only thing that changes”
- ➡ “Science is only the study of the Creator God’s handiwork”

- ➡ “The world of Environmental Education says we need to protect our environment or we die, Christian Education says we protect our environment because it is a work of God showing his love and care for us”
- ➡ “Christian education without Environmental Education is missing a vital component”
- ➡ “Only hire people who are comfortable making the link between nature and God”
- ➡ “Get as much free information from your local DNR, Forest Service, College, etc. They are great resources of free information specific to your ecosystem”
- ➡ “Approach everything with prayer and counsel, and never be rushed into a decision outside of actual emergencies”
- ➡ “Never ever compromise biblical principles and Christ character qualities”
- ➡ “Always remember, it’s all about God”
- ➡ “Experience, commitment, and interest counts for more than training”
- ➡ “Actually working a program is difficult to replicate in a classroom setting”
- ➡ “Getting internships/seasonal positions where you do grunt work really gives you the appreciation for what is involved in Environmental Education and Christian Education”
- ➡ “It is easy to get overwhelmed by the doom and gloom; remember that God has called you to do only the work which He has given you and no more and trust that He is also giving others work that combined with yours, will result in a greater good than individual work alone”
- ➡ “Subtle Environmental Education is often the most important teaching tool one can use. We teach through how we are observed by groups. We instill passion only if we are passionate. Through our actions we show what God requires without ever having to mention the name of God. We need to make sure we are the good models we are called to be”
- ➡ “A love for God's Creation has to start with the camp leadership and be woven into the camp mission and program; having Environmental Education as just another program option is not going to be very effective or last for very long”

➡ “If you have questions ask. Reinventing the wheel is not efficient”

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