

Paper Title - Collaborative Science & Religion Programs in Southeast United States:
Beyond Scopes Trial

Author: Wilding, Joyce M.

Institutional Affiliation: Co-chair ENTREAT LSI University of the South (Sewanee)

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Abstract:

Collaborative works led by science and religious leaders in nine southern states are described in this paper. Some of the work is connected to the Metanexus Local Societies Initiative (LSI) at University of the South. Most of the leaders are Christian, primarily Episcopalian; however, many leaders are active in multidisciplinary, multi-faith and interfaith networks.

Much attention has been given to Creationism, the Scopes Trial and the *Scopes Trial Revisited* and some attention to Intelligent Design (ID). The issues within and surrounding these themes are of interest to science and religion leaders in the Southeast; however, this has not been a primary focus of science and religion networks. The Metanexus media articles have helped leaders learn that these questions about the origin of humans and the conflict surrounding evolution are not unique to the Southeast United States.

A 2004 performance of the American classic *Inherit the Wind*, based on the real-life drama that unfolded when Darwin's Theory of Evolution was being taught in a small Tennessee school in 1925, inspired public forums about the issues in this play. Science, religion and legal justice professionals from several colleges and universities discussed why Tennessee's "Monkey Trial" still speaks to us about Creation and evolution.

Episcopal science and religion leaders in the southern states are eager to study *A Catechism of Creation*, an Episcopal understanding prepared by the Committee on Science, Technology and Faith. This catechism provides a foundation for extensive study of the theology of creation, the relationship of modern science to Christian faith, and challenges posed by creationism and Intelligent Design.

Appalachia, a region with a legacy of serious environmental problems and a strong Christian religious tradition, is a fertile ground for ongoing religion and science programs. Key research from *Faith-Based Initiatives and Environmental Sustainability: Reform Efforts In Appalachia*, (conducted at University of Tennessee) provides excellent foundation for expanding religion and science programs in the Southeast.

Biography:

Joyce Wilding is the ENTREAT Local Society Initiative (LSI) Co-chair at the University of the South at Sewanee, responsible for planning, hosting and/or facilitating the public *Science & Religion: Renewal of Reverence* series. She is a member of the Institute on Religion in an Age of Science; the Episcopal Ecological Network (EpEN) National

Steering Committee and the EpEN liaison to the Episcopal Science, Technology & Faith Committee; and responsible for Province IV Environmental Ministry programs for twenty Episcopal dioceses in nine southern states. Joyce is a Third Order Franciscan Novice, Volunteer Staff at Penuel Ridge Retreat Center and the Ecology Group Leader of Christ Church Cathedral in Nashville, Tennessee.

Joyce has been a management consultant liaison to the Tennessee Valley Authority (TVA) Green Energy Marketing Team, the Cumberland River Compact, the Coalition of Environmental Responsible Economies (CERES) and the Southface Energy Institute (a non-profit organization, dedicated to the advocacy of energy efficient and sustainable design). She has extensive experience in the behavioral sciences and more than twenty-five years of professional development experience, specializing in conflict resolution, culture diversity training and team building. Joyce designed and facilitated a five-year *Leadership Communication Training* program at IBM's Watson Research Division.

Paper Text:

Introduction

Much of the collaborative work in this paper is connected to the ENTREAT Metanexus Local Societies Initiative (LSI) at University of the South. Most of the leaders are Christian, primarily Episcopalian; however, many leaders are active in multidisciplinary, multi-faith and ecumenical networks. Key projects facilitated by science and religious leaders in nine southern states (Province of Sewanee-IV of the Episcopal Church of United States of American, ECUSA) are described below.

The Anglican Communion is remarkable - a body of 70 million people in 165 countries, both rich and poor, from north, south, east and west. As people of faith and hope, they share their experiences of earth stewardship in different regions of the Church. They are also citizens of a global community, needing to learn to live as one, rather than as many competing communities and individuals. Their religious tradition provides rituals that celebrate the beauty, complexity of the origins and continued development of the Universe. These rituals renew reverence for all life.

Beyond the Scopes Trial, the famous 1925 trial when Creation and Evolution met in a courtroom battle, suggests that there may be new ways and new issues for science and religion dialogue in the Southeast. Many southeast leaders have conducted serious study about the Scopes trial and how it continues to shape current issues. A few have found the arts a helpful discipline for dialogue about the history and relevance of this famous trial. In October 2004, the American classic *Inherit the Wind*, written by Jerome Lawrence and Robert E. Lee, was performed by the Tennessee Performing Arts Company in Nashville, Tennessee. This play was inspired by the real-life drama that unfolded when Darwin's Theory of Evolution was being taught in a small Tennessee school.

This production of *Inherit the Wind* inspired public forums about the issues in the play. After the opening night performance, representatives from the American Civil Liberties

Union (ACLU) as well as science and religion professors talked with the audience. This panel discussed how the play matched the actual trial events and how the issues in the play address key evolution and creation issues in our area. A few days later, a local nature center hosted a science and religion program for the public to discuss the power and beauty of the play as well as current issues that “sound” like issues of the 1920s. A judge, religion professors and a high school biology teacher discussed why Tennessee's "Monkey Trial" still speaks to us about creation and evolution. Participants at these programs learned how John T. Scopes (the biology teacher on trial accused of teaching the forbidden evolutionary theory) was simply a brief spectacle of religious intolerance and a cultural clash emblematic of the 1920s.

Only a handful of the phrases from the actual trial transcript were used in the play. The beliefs and passions of William Jennings Bryan and Clarence Darrow, the trial lawyers, provide a rich source for a terrific drama. Many feel the freedom of every American was at stake during this trial. The conflicts portrayed by the two lawyers reinforce the threats perceived during the trial. Some of these issues and “threats” are being revisited again and again in the 21st Century.

Dr. Charles A. Israel, from History Department at University of the South, writings provide the trial's place in the development of southern religious attitudes towards social engagement. He examines the religion and culture of Tennessee and the South in his book, *Before Scopes: Evangelicals, Education, and Evolution in Tennessee, 1870-1925*.

The play's title, *Inherit the Wind*, comes from Proverbs 11:29, “He that troubleth his own house shall inherit the wind.” In the closing of the play, the Bible and Darwin's *Origin of Species and The Descent of Man* are placed side by side. This imagery reminds us that these two tomes are not mutually exclusive. The title of the play and closing scene prompt us to continue dialogue about the relationship of science and religion regarding the origins of all life.

Collaborative Multi-faith Multidisciplinary Programs in Tennessee

Tennessee groups and organizations provide a wide array of science and religion programs. These include: the Penuel Ridge Retreat Center, The First Amendment Center, Scarritt-Bennett Center, William Pollard Project, and the Sewanee Metanexus LSI ENTREAT programs.

Penuel Ridge Center was founded by a group of persons with Christian and Jewish traditions of openness, compassion, and liberation. This Center hosts an annual Howard Thurman Day retreat and offers a science and religion series. Persons from all faiths and traditions are welcomed.

The *Theology and Science* series at Penuel Ridge offers a liturgy that is meaningful to Jews, Protestants, Catholics, Muslims, Buddhists, Agnostics or whoever might come. This liturgy does not water down or do disservice to the uniqueness of major religious traditions. After the liturgy, participants engage in dialogue about the role of a healthy

skepticism to keep them from falling for pseudo-science and pseudo-theologies, and to deepen their sense of wonder at the Sacred Mystery at the heart of life. Participants struggle with faith matters as they relate to the urgent need for dialogue between theology and science. These matters include evolution, fundamentalism (both the religious and the scientific kinds), and the political realities of today. This series intends to strengthen participants to return to their own faith communities and contribute more effectively to their handling of these questions, to relate with love and justice to nature and all persons. Pat McGeachy, a professional theologian, a writer, an amateur scientist with a doctorate in Science of Theology from San Francisco Theological Seminary leads this series.

Honoring Howard Thurman, a grandchild of slaves, a dynamic preacher, inspirational teacher, writer and lover of the trees, oceans and sky around his Florida home inspire many to embrace the beauty of *All Knowing Ever-Present God* as described in Psalm 139, his favorite Psalm. Many remember Thurman's life and work when they celebrate the work of M.L. King. Thurman scholars remind us that the church was a leader in the Civil Rights Movement and should be a leader of social and eco-justice issues. This requires a renewal of reverence for science and religion.

Dr. Alton Pollard III professor at Emory Candler School of Theology, Author of *Mysticism and Social Action* and a Howard Thurman Scholar in his booklet, *THERE IS A PRESENCE* writes:

The Sacred, however named and known, is not party to any scheme that violates the sanctity of the universe, be it the bitter curse of intoxicated elder called Noah, or whether it be the attempted bribery of evil one proposed to Jesus in the wilderness, or the pernicious effort to justify human slavery; or the scrupulously guarded need to diminish one form of human loving over against another; or our abject disregard of reverence for life and care of the earth...

The words below from Thurman's *The Search for Common Ground* capture the yearnings of the participants who study the relationship between science and spirit.

There is a spirit in man and in the world working always against the thing that destroys and lays waste. Always we must know that the contradictions of life are not final or ultimate . . . To be sure, life is not finished yet; creation is still going on, not only in the spinning of new worlds, systems, nebulae, and galaxies in the infinitude of space, not only in the invisible world where chemical elements are born and nourished to support conglomerates of matter yet to appear at some far-off moment in time, but also in the human body, which is still evolving, in the human mind, which so slowly loosens its corporal bonds, and in the human spirit, which forever drives to know the truth of itself.

The Freedom Forum First Amendment Center at Vanderbilt was founded December 15 1991, the 200th anniversary of the Bill of Rights to the U.S. Constitution. It is affiliated with the Vanderbilt Institute for Public Policy Studies. The Center serves as a forum for dialogue, discussion and debate on free-expression and freedom-of-information issues. Its Religious Freedom programs have led the way in helping communities and schools throughout the United States resolve their differences with civility and respect. The

programs are based on *Finding Common Ground: a First Amendment Guide to Religion and Public Education*. In 1995, The Center published *Liberty, Public Education and The Future of American Democracy: Statement of Principles* - a consensus statement that has support across religious spectrums. It offers a shared vision of religious liberty cosponsored by 24 organizations ranging from the Christian Coalition to People for the American Way. This document provides tactics and principles for negotiating tensions surrounding separation of church and state. It does not affirm the teaching of religion in the public schools. It affirms teaching about and the vital importance of protecting the liberty of conscience of students of all faiths or none in the spirit of the First Amendment. These principles can be used in varied science and religion programs including faith and conservation programs.

Scarritt-Bennett Center (SBC) is devoted to educational ministries of justice and equality. It is a conference, retreat, and education center committed to empowerment through cross-cultural understanding, education, creativity and spiritual renewal. SBC hosts an annual Celebrations of Culture event and *Diversity in Dialogue* programs that are part of a nation-wide Study Circles Resource Center. These programs provide opportunities for people to discuss difficult issues surrounding religious and ethnic differences. The Center has a peace garden that was inspired by The World Peace Prayer Society. This society brings people together across international boundaries to create a world dedicated to goodwill, justice and cooperation. When people read about the SBC Peace Garden they learn that in 1990, the United Nations awarded the Society the status of Non-Governmental Organization (NGO). World Peace Prayer Ceremonies and the Peace Prayer Pole Project broaden awareness and sow seeds for political, economic, and social change. SBC has cosponsored multicultural program with the First Amendment Center, Penuel Ridge and Vanderbilt University.

The University of the South (Sewanee) has been working on a project to extend the contributions of William G. Pollard, Physicist, Educator and Priest. The goal of this project is to influence science, engineering and pre-med students to broaden their knowledge and perceptions in the philosophical, religious and cultural realms, rather than to focus narrowly in their chosen technical fields.

The model of Pollard's life suggests that a broad perspective can enhance effectiveness in all walks of life including scientific and technical work. Like John Polkinghorne and Arthur Peacocke outstanding Anglican priests/scientists, Pollard crossed boundaries with nimbleness available to anyone who enjoys and comprehends life quests. His life revealed no inherent conflict among firm commitments to scientific rigor, educational effectiveness, and deep religious faith. He made lasting contributions to science, the academic excellence of hundreds of institutions, and the multi-disciplined search for a contemporary spirituality. Some refer to him as a modern, high-tech renaissance man. His life, research and writings should be better known, appreciated and emulated.

Courtland Randall, who knew and worked with Pollard for twenty years at Oakridge, is coordinating the Pollard Project. Randall has interviewed science professors at University Tennessee Knoxville and Vanderbilt who value the work Pollard accomplished as

Executive Director of the Oak Ridge Institute of Nuclear Studies (ORINS), a consortium of Southern universities. Pollard helped ORINS connect with the Atomic Energy Commission research projects in medicine, agriculture and other fields.

Pollard lectured, preached and taught at Sewanee for over a period of 30 years. He was a Sewanee trustee and an honored commencement speaker. His books are still used in the School of Theology classes; including his classic *Chance and Providence*.

Many find Pollard's model of God helpful when studying science and religion. His model of God as "determiner of indeterminacies" declares that God's the one who brings definite outcomes for observations from array of quantum possibilities. Pollard used Martin Buber's distinction between "I-It" and "I-Thou" relations to distinguish between two types of knowledge of God. Scientific knowledge of the world results from experiencing parts of the world as "it" and Pollard believed that the experiencing of the numinous as "it" also makes possible a natural knowledge of God. Revelation, however, he saw as something different, "a category of knowledge which belongs peculiarly to the world of *I and Thou*" (Murphy, 2003).

The Sewanee LSI, *ENTREAT - Enter Now The Reflection, Education, Action Treatise* offers programs that enhance science and religion dialogue and promotes collaborative activities. Their core leaders recognize that more people attend houses of faith than attend science programs; thus, they are developing a treatise that enable religious organizations to keep people informed about current science, technology and faith issues.

The ENTREAT model provides a method for examining the concerns, connections and conflicts of science and religion from three perspectives: reflection, education and action. These perspectives offer insight about the science, religion, and ethics intersect. Both secular and sacred perspectives are illuminated with the ENTREAT model.

- The *Reflection* component offers new ways to celebrate the beauty and awe of both science and religion including arts in liturgies. Sacramental tradition of Anglican Communion, scripture, prayer, theology, liturgy, visual arts, instrumental music and dance may be used to open our hearts. These nurture the inner and outer spiritual journey. This component is designed to enhance the education and action focus of our religion and science dialogue.
- The *Education* component opens our minds, enabling us to learn and teach current science and religion issues. Ongoing study and dialogue deepen knowledge of the religious and scientific issues that inform and enlighten. Modes for working across disciplines and professional boundaries are demonstrated. Multi-disciplinary workshops are designed to demystify complicated science and religion issues.
- The *Action* component invites us to open our hands to implement projects and to conduct activities that support vital public policy. The roles of activism for people of faith with science background are examined. Advocates and activists

are writing guidelines that help core leaders implement, assess and monitor all ENTREAT hands-on activities.

Vibrant science and religion programs can help people of faith connect liturgy, learning and lifestyle. The Reflection, Education and Action components of ENTREAT ensure that the programs avoid stand-alone lectures. These enable people to open their hearts, heads and hands when addressing important issues.

Reflection, Education and Action offer inclusive decision-making among scientists, conservationists, religious leaders, theologians, policy makers and citizens. Collaborative work enables people to examine what science can offer religion and to explore the sacred in science. This programmatic approach is illustrated in the table below.

Topics	Reflection	Education	Action
What Religion Offers Science Sense of Sacred in Science Conflicts & Connections Between Religion & Science	Renewal of Worship: New Liturgies, Revised Creeds Litany for the Cosmos Sacred Callings: Scientist & Priest	Functional & Sacred Cosmology What Time is it in the Universe? Economics, Ecology, Ethics and Religion	Expanding Multi-faith Dialogue Collaborative & Transformative Actions Public Policy Shaped by Beliefs and Facts
Scopes Trial Revisited Origins & Meaning Living Faithfully In Multi- Faith World	Old and New Creation Stories Cosmos As Creation What Bible Teaches About Creation	Avoiding Bad Theology and Bad Science Creationism, Evolution and Intelligent Design (ID)	Teaching About Religion Religious Group Compact – First Amendment Center
Water Rights/Rights of Water Water In A Changing World	Water of Baptism – Sacramental Water Healing Water/Water Healing Why the Church Should Care about Water	Water Sacred & Profaned Connecting Water Usage, Land Conservation and BioDiversity Status of Cumberland Plateau Water Sources	Water Privatization Issues Economic Value of Water Interfaith Water Initiative Restoring & Protecting Local Watersheds

Several of the ENTREAT Core Group science and religion discussions were built around the theology and science issues below. There has been a sincere effort to include the human and social sciences as well as the natural sciences – physics, chemistry, biology and geology.

Since technologies often elicit significant questions about what use should or should not be made of new technologies, ethics also needs to be involved. Christian ethics has close connection with theology, but is not simply reducible to

the latter, and needs to take seriously ethical claims that arise from other religions or from secular world views (Murphy, 2003).

Earth and Faith: A Book of Reflection for Action - a publication of the Interfaith Partnership for the Environment based on years of work with members of many faith communities and the United Nations Environment Programme will be used in 2006 workshops at Sewanee. Concrete suggestions for action are given, along with sources for information on the interrelated concerns of religion and environment.

Formal religious programs need to give greater attention to immanence of God that expands our sense of the sacred in the natural world. As we give thanks for the vast and amazing things taking place in the Universe, we may find more ways to protect and care for all creation. This could inspire us to live lighter on this earth, never forgetting those who are poor and marginalized (McFague, 2001).

The central focus of ENTREAT supplemental work will be science and religion issues in our Appalachian area that are connected with educational and ecological problems in the Cumberland Plateau region. This work will be promoted in the regional Episcopal Appalachian Ministries programs (EAM), whose mission is to inspire, nurture and affirm those who serve the unique needs of people of Appalachia through networking, education and advocacy. They focus on issues of poverty, economic justice and care for the environment. EAM sponsors summer work camps, coordinates small church resources and helps raise capital for special projects.

Sewanee's Forestry Department already has an active collaboration with a number of Appalachian colleges on watershed management. One of the major projects in the Religion Department has been a study of the impact of religious ethics on water management in our surrounding Appalachian counties and on our Domain.

Watersheds are in crisis due to increasing population, pollution, climate change and a multitude of competing local, regional and global demands. Local leaders, around the world, with diverse science and religion expertise could shape local care of fresh water and connect these with national and international concerns by utilizing programs of: United Nations International Decade for Action – “Water for Life” and Local Societies Initiative (LSI) groups. Several dioceses and parishes in our province are conducting excellent water conservation programs. A few of these projects are described below.

Several Southeast United States watershed programs offer models for local and regional initiatives. Risks from the increasing demand for water, rapid population growth, development, and urbanization negatively impact the water-rich Southeast. These conditions require more dynamic water conservation practices and compliance with water policies. The University of Tennessee (UT) Southeast Water Policy Initiative has an interdisciplinary research group and educational partnership that develop innovative policies to anticipate, avert and resolve disputes over the management and distribution of water. The UT and Sewanee professors are developing collaborative projects.

ENTREAT Core Group members are working with the Southeast Watershed Forum and the Cumberland River Compact. These two watershed groups pursue cooperative effort among government agencies, industries and organizations. Their organizations have voluntary cooperation among local officials, business leaders, and citizens across political boundaries; sustainable green building practices that model water conservation and prevent pollution during construction and maintenance; Best Management Practices to restore water quality to impaired streams; and techniques that result in measurable improvement in water quality and serve as teaching tools for replication. Their technical water protection tactics and the public/private partnership are critical to long-range change. A few Southeast watershed associations are pursuing voluntary cooperation among government agencies, local officials, industries, business leaders, and citizens across political boundaries. The leaders of this work disseminate the lessons of the project on extensive interactive website that help spread information about watershed protection to people across the globe.

ENTREAT LSI 2005 Conference - *Dominion, Domain & Stewardship: Roles and Responsibilities*. Conference participants examined how the biblical concept of the dominion of humanity over the created order has been blamed for the current ecological disasters as well as praised for the demythologizing that made modern science possible. While theologians have tried to correct for the first by emphasizing that biblical dominion is more a form of stewardship than of manipulative or abusive rule, this can downplay the responsibility our species has as the only one with the power to destroy the planet. The "Domain" of the University of the South clearly implies some sort of expression of dominion as both governance and responsibility, derived from a unique blend of University and Church

Local churches in Southern Appalachia have long played a significant role in shaping the beliefs and behavior of their members; thus they may be change agents for new science and religion programs that invite people to open their hearts, minds and hands to the issues before us. Faith based and environmental research conducted at The University of Tennessee (UT), Knoxville provides a framework for policy change based on the view that peoples' values, attitudes, and behaviors toward the environment are inextricably connected to the content and commitment of their religious faith. The success of this work will provide significant lessons for transformational change on the Cumberland Plateau (Feldman, 2002).

Appalachia, a region with a legacy of serious environmental problems and a strong Christian religious tradition, is a fertile ground for ongoing religion and science programs. Key research conducted by a graduate student UT and the Department of Chair of Political Science provides excellent foundation for expanding religion and science programs in the South. Sewanee plans to cosponsor research and programs with UT Knoxville and Vanderbilt University.

Many components of *Ecology and Spirituality in America: Exploring Possibilities for Cultural Transformation*, a research project sponsored by the Center for the Study of

Religion and Culture at Vanderbilt University compliment the Sewanee programs. Leaders from each university have begun to define best modes for working together in 2006. These leaders will explore ways to include the UT Appalachian research.

While faith-based environmental initiatives are growing, little *systematic* research has been undertaken about their goals and methods. These initiatives warrant serious attention because they demand that we consider how our attitudes toward environmental problems reflect deeply held values toward nature and our obligations toward all living things (Feldman, 2002).

Dr. Rosalyn McKeown's *Education for Sustainable Development Toolkit* provide excellent resources for expanding ENTREAT's programs in local communities and schools. The tools in this kit are based on the idea that communities and educational systems within communities need to dovetail their sustainability efforts. As communities develop sustainability goals, local educational systems can modify existing curriculums to reinforce those goals. The toolkit was inspired by the work done at the United Nations (UN) Commission on Sustainable Development (CSD) in 1998. The UT Energy, Environment and Resources Center supports this work.

Southeast leaders can learn much by examining how The World Bank finds partners who share common tactics for overcoming poverty and protecting biodiversity. The Alliance of Religions and Conservation (ARC) provides many good models for Southeast projects.

In 1986, the international president of World Wildlife Fund invited leaders from five major faiths to meet with leading environmentalists in Assisi, Italy. From this, arose a network of faith groups working on ecological and development issues. By 1995, nine religions and thousands of practical projects were developed and a new nongovernmental organization, the ARC was established. The eleven faiths that now make up ARC represent two-thirds of the world's population. Religious organizations are serious stakeholders in development activities and the oldest institutions in the world which possess wisdom about how to live and keep hope alive (Palmer 2003).

In 2002, an International Interfaith Investment Group was created. The World Bank and ARC sponsored meetings and projects. The Archbishop of Canterbury co-chaired the 2002 conference that led to the formation of The World Faiths Development Dialogue. ARC is responsible for working on the environment and natural resource management from the faiths' perspective with the World Bank (Palmer 2003).

In a February 2005 presentation at Vanderbilt University, Katherine Marshall, director of World Bank Development Dialogue on Values and Ethics, provided a dynamic history and status of the relationship between world religions and the World Bank. She said in the past the "world of religion" has been unacknowledged and is often an unseen force for many development practitioners. Hard-worn traditions of separation of state and religion are deeply ingrained and deliberately place a chasm between development and faith issues. She suggested that religion is important for development and the converse, that development is important for religion, and hence that dialogue between religious

institutions and leaders and their counterparts in development institutions should be increased.

Marshall and some eco-economists recommend that religious communities need to take stock of their influence and conduct audits to learn their financial worth. Many faith groups know about social responsible investing but do not know the value of their portfolios. Financial reviews and audits are a huge undertaking when combined with careful financial management. However, these audits enable the religious groups to discover their spiritual and financial currency. This should enable world faith leaders to promote effective development while protecting finite resources and cultural diversity.

In 1990, a coalition of Nobel Laureates and other eminent scientists circulated an open letter to the religious community acknowledging the limitations of science and the potential of faith to promote environmental reform. Religious leaders from 83 traditions declared the environmental crisis to be “intrinsically religious” and pleaded for all major faith traditions to include instruction to care for the “Sacred Creation” The growing number of centers, institutes, and conferences on faith and the environment illustrate the efforts to explore and understand the relationship between religious faith and environmental degradation (Feldman, 2002).

Southeast Ecumenical Projects and Province IV Episcopal Diocesan Programs

The Catholic Diocese of Knoxville, TN - *Office of Justice, Peace, Integrity of Creation* (JPIC) promotes a consciousness raising effort that addresses the human relationship with the earth and calls humans to action. They enable their diocesan institutions to promote environmentally friendly policies and practices; celebrate, liturgical or otherwise, specific local, national and international environmental justice activities.

Every year they give out “St. Francis Eco-Church Awards” to recognize innovative or creative efforts to draw awareness to God’s call to care for the planet. The recipients are always engaged in efforts to strengthen the interconnectedness of all creation. Their efforts are replicable in other locations. The awards are given to identify models in the diocese, not promote competition among parishes. Sometimes, they are given to churches, organizations, or individuals who are not Catholic.

The *Creation Care Task Force* in the North Carolina Synod of the Evangelical Lutheran Church of America (ELCA) is involved a wide range of environmental issues and attempts to bridge the chasm between the environment and theology. A diverse group of men and women, pastors and lay members, non-scientists and scientists of several different disciplines serve on the task force. Their “mission” statement *Caring For Creation: Vision, Hope, and Justice*, was approved by the Church Assembly in 1993. It has been promoted by a cross-section of ELCA parishes across the nation. The Bishop believes Caring for Creation may be the important spiritual issue in the 21st century.

Bishop Mark Andrus of Diocese of Alabama is the author of Province of Sewanee IV - *Pastoral Letter on the Care of Creation*. His diocesan Stewardship of Creation Task Force has distributed copies of this Pastoral Letter along with a Study Guide to all twenty dioceses in the province. In the near future, this Task Force will have a web site with many of its resources on-line. Highlights from the Bishop's *Pastoral Letter* are below:

The Episcopal bishops ask all parishes to take seriously stewardship of God's creation. They speak to the theology of earth stewardship, the imminent earth crisis that demands our attention as stewards of the earth, and a specific call to engage in environmental education. There is deep-seated theology of earth stewardship that we locate primarily in the opening chapters of the Bible.

Because this theology is both a theme of the Bible, and because we find it proclaimed in central texts of the Bible, accounts of origin and the revelation of the teaching of God, we can affirm the importance of care for the earth as stewards for God.

In our own day there is recognition that an unprecedented challenge to the health of God's creation is upon us. The reality of this crisis is widely agreed upon in the scientific community, yet we recognize that the Archbishop of Canterbury is right when he says the "threats [to global health] are just sufficiently over the horizon of our lifetimes to allow us to feel rational in refusing to change."

The dioceses of the Episcopal Church in the Fourth Province encompass land of surpassing beauty, which supports rich diversity of plant and animal life. Some of these places of beauty are so well-known and well-loved as to be iconic: the Barrier Islands of North Carolina; the Smokey Mountains of North Carolina and Tennessee, the Gulf Shores of Alabama and Florida, the Florida Keys, the Mississippi Delta, and the bayous of Louisiana, to name only a few.

Others places are less well known, but are unique and precious. The Black Belt prairie land of Mississippi, Alabama, and Georgia may stand as an example of this. One source states that this land has been entirely converted to agriculture and other human uses. Pockets of this beautiful, historic ecosystem are fragile.

This same land and water within the Fourth Province is the basis for important economic activities that support human life. How are we to balance the needs of the current generation for economic security with the needs of generations to come? And how are economic needs to be balanced with the spiritual value we attach to the integrity of creation? Where there are pockets of economic poverty, there is much environmental deprivations. Political entities within our province teeter on the edge of difficult conflict over finite, precious resources, the chief being water. Intelligently balancing these environmental, economic, and social concerns will demand our best efforts.

We urge the dioceses and parishes of the Fourth Province to make use of materials in Christian formation that help our children, youth, and young adults find meaning as stewards of God's creation. We further urge the recognition and use of the Fourth Province leader for environmental concerns as a resource for identifying curricular materials, and educational programs for use by dioceses.

The Province IV Environmental Ministry Leader, Joyce Wilding endorses the *Opening The Book of Nature* (OBN) retreats that teach us to read "the book of nature" that we might experience God and gain insights into the spiritual life. OBN is a component of The Religious Campaign for Forest Conservation - a coalition of churches, synagogues and para-religious organizations which are joined by a common concern for forest conservation and wilderness as religious issues.

Diocese of Alabama

Black Belt Roundtable Environmental & Social Justice Project

In February 2003, project directed Bishop Mark Andrus facilitated the first meeting in Greensboro, Alabama. Fifty people, who were Episcopal, Lutheran and Roman Catholic, who were already engaged in ministry in the Black Belt discussed best tactics for expanding the existing ministries including the creative work of the Freedom Quilt Project. They explored options for improving housing via the Rural Architecture Studio at Auburn, collaborating Habitat projects, improving home insulation, installing septic systems, extending medical services and increasing college education opportunities for poor Black Belt residents. The need for educational support was addressed.

This diocese attained funding for a comprehensive look at the ecological factors within the Black Belt, and to use that information to inform and support current and future ministries. There is an emerging awareness within the Christian community that efforts to promote human justice and quality of life must be tied to the wider environment if these efforts are to be successful.

Diocese of North Carolina

Partners for Environmental Justice (once known as Episcopalians for Environmental Justice) directed a community effort that restored a neglected wetland in southeast Raleigh, within a predominantly low-income African American community. This project was initiated by three Episcopal parishes but now has more than 20 churches, civic organizations, and government agencies. The civic and religious groups established an Urban Wetland Educational Park on 80 acres of the wetland to educate the public about the value of natural wetlands as well as provide a recreational area to encounter nature for the purpose of soothing and uplifting one's spirit.

The primary leader of the Raleigh wetland projects is the science and religion leader in his diocese. His marine biology and wetland expertise and civic activities caught the attention of the Head of the Department of Environment and Natural Resources at Duke University. This helped him get grants for the wetland project.

The environmental ministry team in this diocese has accomplished much since it began about 23 years ago. It may be the oldest Episcopal Environmental Ministry (EM) group in the country. This EM group was organized by former Province IV President, who helped write, publish and distribute their environmental stewardship resources. At one time every parish had an EM group. These groups have been strong as an ecological advocate providing diocesan support for various legislative initiatives and providing comments on assorted national and local environmental issues. Bishop Curry supports all of this work and has asked the EM team to give special attention to water conservation.

The NC diocesan committee sponsored a major conference in June 2002 - *Keeping God's Creation: Making Disciples, Making a Difference*. The keynote speaker was Dr. William Schlesinger, James B. Duke Professor of Biogeochemistry and Dean of the Nicholas School of the Environment, Duke University. Schlesinger exclaimed the moral components of current ecological crisis and encouraged religious leaders to do more!

Duke University Divinity School professor Ellen Davis, associate professor of Bible and practical theology is regional and national leader. Davis was actively involved with a full page letter published in the NY Times April 2004 that challenges President Bush on the high ground he has claimed for himself as an evangelical Christian. Davis, whose current scholarly work focuses on developing a scripturally based response to ecological writes this about the letter: "What is striking is its wide appeal to Scripture. The letter cites Genesis, Amos, Isaiah, Job, Psalms -- books that are authoritative for both Jews and Christians." The letter criticized the administration's intention to change federal air pollution rules and lower requirements for power plant pollution-control equipment. It also affirmed human and national obligation both to protect God's gift of air and to defend the poor, the elderly and children, whose health is threatened by air pollution.

Dr. Davis was speaker at the February 2005 *Holy & Beautiful: Greening Sacred Spaces* conference at Duke. This conference brought together church pastors and laity, architects, builders, academics and environmentalists for education and reflection on ways to implement environmentally friendly building design in North Carolina churches. Participants at this program explored green building design (also known as sustainable design) and ways it can be used to meet both the spiritual needs of a congregation and its economic realities. The Duke Divinity School and the Nicholas School of the Environment and Earth Sciences offered presentations about environmentally responsible church buildings.

Diocese of South Carolina

A naturalist who conducts programs for Furman College also leads environmental stewardship programs for her parish and community. Her church Creation Stewards focus on educating, encouraging and facilitating the protection of God's Creation. Their ministry is based upon the following precepts set forth by the Episcopal Ecological Network: Reflection, Education and Action. They write articles for the church newsletter about protecting God's Creation. Each article has a special focus: recycling ideas, Biblical

The SC activities above illustrate how a parish can promote three national Episcopal Ecological priorities:

- *God's Covenant with Noah* - preserve biodiversity, native habitats and wilderness areas. Learn how to make a *Backyard Wildlife Habitat* in your yard, at your parish and diocesan centers. Connect care of land, air and water with biodiversity concerns*.
- *Trees of Life* – encourage sustainable forest management and endorse road-less forests, learn how religious networks are preserving and protecting our forests.
- *Garden of God* – implement healthy practices for agriculture and land; learn more about food and faith, and CBA, community based agriculture. * Buy *Bishop's Blend Coffee*, a Fair Trade, shade grown organic coffee that benefits ERD, Episcopal Relief & Development.

Diocese of Georgia and Diocese of Atlanta

A retired medical doctor, former CDC employee; an Atlanta sustainable research engineer; an ecology department director of GA University, and a retired priest facilitate varied science and religion programs. Bishop Louitt is very concerned about environmental issues in the state and wants priests and lay leaders more involved. A few Georgia leaders have organized dynamic and innovative projects. Some of these are connected with Southface Energy Institute, a non-profit organization, dedicated to the advocacy of energy efficient and sustainable design. Southface targets the commercial sector in an effort to promote the adoption of energy efficiency in high performance buildings, works with Energy Smart Schools initiative which encourages Georgia school authorities to construct high performance schools; works on the Georgia Energy Code project and the DOE Million Solar Roofs initiative. They promote LEED – Leadership in Energy & Environmental Design project management. LEED is the USBGC, US Building Green Council's primary vehicle for promoting sustainable design and construction. Their unique EarthCraft houses -high performance affordable homes -cut energy bills and protect the environment. All of these activities and leadership expertise help Episcopalians promote two priority issues:

- *Source of Light & Breath* - respond to global warming through promotes green renewable energy, energy conservation, energy efficiency and clean air.
- *House of the Lord* - greening our churches, camps, and conference centers. Building A Sustainable Future

Diocese of Central Florida

An award-winning free-lance writer specializing in Florida environmental topics including “nature” travel, growth management, and endangered species is coordinating a statewide environmental conference in 2005 at Canterbury Retreat Center in Oviedo, Fla., just east of Orlando. Conference theme: Christianity, the Environment and Care of Fresh Water. Bishops Duncan and Leo Frade are pleased that leaders from four of the five Florida dioceses will cosponsor the conference. After the conference, the diocesan

leaders hope to find more ways to work together to expand and enrich attention to Environmental Ministry: Care for Creation though out Florida with special attention to water programs.

Declining water resources are approaching the critical stage in Florida. Water was once the most abundant resource in Florida. Careless use of the resource as well as rapid development of the region to accommodate ever increasing populations have harmed or depleted many of the sources of water, including the Floridan Aquifer. If something is not done to help conserve the water resources, severe environmental damage will expand.

Diocese of Lexington (KY)

A priest with nearly 30 years of professional experience in environmental issues formerly employed by the United States Army Corps of Engineers, the Natural Resources and Environmental Protection Cabinet, and most recently as an environmental scientist for the Kentucky Transportation Cabinet is organizing the diocesan care for creation programs. This priest is a recent retiree from state government as an environmental scientist. Presently he serves as Canon for Mission Development for the diocese and is an adjunct professor (Human Ecology & Biological Concepts) at a local college. His graduate and undergraduate studies/degrees are in Environmental Science/Wildlife Biology and Resource Management. He is an active member of the Episcopal Science, Technology and Faith Network and thinks its new Catechism provides an excellent resource for environmental programs and projects. Bishop Sauls encourages the diocese to implement environmental ministry projects utilizing lay and clergy leadership. The bishop and diocesan leaders are very concerned about environmental degradation surrounding the coal mines and coal extraction in this Appalachian area.

Diocese of Mississippi

A biologist/lawyer works on the Scenic Streams Stewardship Program and Natural Heritage Landowner Outreach at the Mississippi Museum of Natural Science. His professional expertise augments his diocesan environmental committee work. He specifies ways for each parish church to conduct business in a more environmentally friendly way. Bishop Duncan Gray, III gives resources and support to this ministry.

Much attention has focused on the Earth Lab and Eco House at the diocesan Conference, Retreat and Camp Center. The Eco House's orientation on the site, the shape of the house, the arrangement of the rooms, the location of the windows, the support systems, and the building materials all respond to the natural forces of sun, wind, and rain. It is a building for which the notion "form follows function" truly applies. The house doesn't simply take advantage of the natural forces' it is an expression of a harmony between the house and nature. In summary this leader and his committee act as environmental consultant to diocese on ways for the churches to conduct business in a more environmentally friendly way. This includes pursuing recycling in partnership with the Department of Environmental Quality and promoting water quality and conservation.

Diocese of Louisiana

The former Dean of the Coast and Environment School at Louisiana State University (LSU) and a LSU environmental studies professor are the stewardship leaders in their diocese. Both leaders are active in diocesan spiritual formation programs that promote Care for Creation activities. These leaders are working on LSU's new LSI programs. They are promoting several activities for the Grand Bayou community in coastal Louisiana. This includes working with Grand Bayou Families United on an economic development request through Bishop Jenkins to the national church.

The majority of the Grand Bayou residents make a marginal living by shrimping, fishing and crabbing. This isolated, unique community lies in the midst of Louisiana's marshland and sits one mile outside of the Mississippi River levee. Because of the town's unique geography, the remote community is only accessible by boat. There are many social and environmental justice issues in this project.

Residents of Grand Bayou have had to risk their well-being for decades to sustain their cultural identity. Now they are turning to several university professors and religious leaders for help. This community's location makes it susceptible to a number of hazards, from sinking structures to storm surges. The National Science Foundation and several non-profit organizations have teamed up with the University and agreed to fund research on the area in order to preserve and document this threatened community. The project will provide the people with vital counseling and advice, which may allow the close-knit community to maintain its way of life. This project models how social and environmental justice issues are connected.

In summary, all Province IV science and religion leaders are encouraged to attend the ENTREAT annual conferences at Sewanee. Leaders from five southern states attended the 2005 conference. The conference workshops enabled the provincial leaders to attain new ideas, information and resources for their diocesan work. ENTREAT programs provide a theological and scientific dialogue, focused on issues of Domain and campus management, which lead to a more faithful exercise of regional responsibility and also serve as a laboratory for addressing issues world-wide.

Supportive Networks

The Episcopal Church Network for Science, Technology and Faith (ST&F): facilitates dialogue between this Church and members of the scientific, technical and medical communities; is an education resource for this Church, its seminaries, and the wider Christian community; and provides guidelines in Christian ethics for use in everyday decisions within contemporary American culture. ST&F is a member of the Ecumenical Roundtable on Science, Technology and the Church that enhances the churches' capacity to understand and fulfill their mission and ministry in this world so shaped by science and technology.

The ST&F network is not as interested in Science Education as much as helping the church deal with the interface of Science and Faith. It uses the extensive resources of the Network to assist the Church in understanding and relating to the various issues of Science and Technology that impact the Church, especially on the local level. Special interests: Evolutionary Biology (including stem cell research, cloning, etc.); Creation as Doctrine (including creationism, evolution, intelligent design, etc.); Human Reproduction; Relations Between Humans and Machines; and Chemical and Biological Issues (as related to various environmental issues).

A Catechism of Creation - an Episcopal Understanding Prepared by the Committee on Science, Technology and Faith was recently linked to the ECUSA web site. Written in the traditional question-and-answer format, the catechism provides a foundation for a more extensive study of theology of creation and of the relationship of modern science to Christian faith.

The Catechism is composed of three sections. Part I-Theology of Creation presents an extended look at the biblical elements of our doctrine of creation and concludes with basic themes developed by early Church theologians. Part II -Creation and Science outlines the basic features of the modern scientific world picture, i.e., big bang cosmology and the evolution of life, looks at contemporary theologies of an evolving creation, and responds to challenges to the evolutionary paradigm posed by young earth creationism and the "intelligent design" movement. Part III - Caring for Creation presents the biblical roots of creation care, summarizes the threats to earth's environment, and suggests ways that individual Christians and congregations might carry out our divine commission to care for the creation in the light of these challenges.

Many science and religion leaders in the southern states were pleased to learn about this Catechism that provides a foundation for a more extensive study of theology of creation and of the relationship of modern science. A few excerpts are provided below:

Does the Bible teach science? Do we find scientific knowledge in the Bible? Episcopalians believe that the Bible “contains all things necessary to salvation” (*Book of Common Prayer*, p. 868): it is the inspired and authoritative source of truth about God, Christ, and the Christian life. But physicist and priest John Polkinghorne, following sixteenth-century Anglican theologian Richard Hooker, reminds us Anglicans and Episcopalians that the Bible does not contain all necessary truths about everything else. The Bible, including Genesis, is not a divinely dictated scientific textbook. We discover scientific knowledge about God’s universe in nature not Scripture.

What is biological evolution? Biological evolution means that living things change over time. A great variety and diversity of organisms have come into existence over the past four billion years from one or a few original life forms. All living things—bacteria, archaeobacteria, protists, fungi, plants and animals, including human beings—are descendants of other life forms, most of which are extinct. The evidence for evolution shows that all life on earth is related and

interconnected, and is often depicted as a great "Tree of Life." Evolution happens gradually, sometimes at a rapid rate and sometimes slowly, but never with discontinuities. Evolution happens because of natural selection; in the face of environmental pressures, some organisms will survive at higher rates than others. Charles Darwin was the first to bring together all these ideas. Scientific researchers since Darwin have refined and added to them, but never thrown out his basic framework.

What is "Young Earth Creationism"? Young earth creationists interpret the creation stories in Genesis as historical and scientific accounts about the way God originated the universe. They believe that the earth and the whole cosmos were created in six literal twenty-four hour days some 6,000 years ago, and that God separately created each living "kind." They claim that there is scientific evidence to back up their interpretation of the Bible. However, they reject any evidence that does not fit their biblical interpretation, including all of the compelling evidence that the universe is billions of years old and that species have evolved. Young earth creationists oppose the teaching of evolution not only because it is contrary to their interpretation of the Bible but also because they believe that the teaching of evolution is responsible for changes in modern society they consider harmful to Christian morality.

What is "Intelligent Design"? The proponents of the Intelligent Design Movement assert that it is possible to discern scientifically the actions of God in nature. They claim that certain features of living organisms are "irreducibly complex," too complex to believe that they could ever have developed through biological evolution. Therefore, they can be accounted for only by the direct action of an Intelligent Designer. Most advocates of "Intelligent Design" oppose biological evolution, which they equate with what they call "Naturalism." They define "Naturalism" as a philosophical belief system that claims that nature is all that exists, and therefore there is no God who acts in nature. To scientists, however, "naturalism" has a far different meaning: they seek to study and seek to understand nature using methods that make no claims either for or against the existence of God.

An article by Phina Borgeson about the new Catechism was posted March 28, 2005 on the Episcopal News Service (ENS). Feedback and excerpts from the ENS article:

Committee member Sandra Michael, professor in the Department of Biological Studies at New York's Binghamton University, finds having such an Episcopal publication "especially important for our youth. Many want to go into a science-related field, but often feel they can't talk about their faith in scientific circles. The Catechism of Creation should help them."

The Rev. Barbara Smith-Moran, Committee co-chair and interim assistant at Christ Church, Cambridge, Massachusetts says she sees "scientists I work around

light up when they realize that not all Christians are pushing a literalist or fundamentalist belief agenda, especially about creation."

Schneider, the document's principal author, adds that using the Catechism of Creation in parish adult forums could provide a service to local communities "when informed parishioners speak up at local school board meetings. A Christian witness from Episcopalians that affirms creation and supports good science education just might make a difference."

Nevada's Bishop Jefferts Schori agrees: "We have seen resurgence in attempts to dictate curriculum to school districts, for example, and (the Catechism) would be a helpful teaching tool for both parishioners and for members of the community."

Other early responses to the Catechism of Creation underscore its significance. Jim Miller, senior program associate of the Dialogue on Science, Ethics and Religion of the American Association for the Advancement of Science said he considers the Catechism of Creation a gift to the mainline Protestant Christian community. "It provides a clear affirmation of creation theology that is fully cognizant of and consistent with the best contemporary scientific understanding of nature," he said. Like other members of the Ecumenical Round Table on Science, Technology and the Church, Miller has been concerned with bringing the science and theology dialogue, strong in the academic world, into local worshiping communities. "This is a good example of the science and theology dialogue in action. It should be useful at many age levels," he added.

Future Programs

Programs like those described above could increase participation in the Ecumenical Roundtable on Science, Technology and the Church in the United States and Canada, in Dialogue on Science, Ethics and Religion of the American Association for the Advancement of Science and other Southeast science and religion programs. Increased participation will enable Southeast leaders to more effectively address conflicts that emerge about how science and religion should teach the origins of life.

Leaders will continue to be challenged about who is right and what can be taught about evolution. *Inherit The Wind* is not forbidden in the public theaters; however, some IMAX theatres have refused to show movies that mention evolution or the Big Bang because some groups believe the ideas contradict the Bible, according to The New York Times (March 19, 2005). The protests involve a dozen or fewer theaters, but the effect could be significant because only a few dozen IMAX theatres exhibit science documentaries. Once again "Scopes Trial" issues hit the news. More multidisciplinary programs like the ones in the Introduction of this paper are needed to ensure continued dialogue that respects disagreement about how to teach evolution.

There are ten Local Societies Initiatives (LSI) groups located in the Southeast US and two of these are Episcopalian. About 20% of the Episcopal Science, Technology and Faith members are from Southeast. These numbers suggest more efforts should be devoted to expanding science and religion programs. More religion and science expertise focused on current issues would be most beneficial to the Southeast.

A big success of ENTREAT is its ability to connect local people with external resources, personnel and organizations. In the near future, they expect people outside the region to use their local resources. Sewanee LSI core leaders will help organize the work of other LSI groups to promote the United Nations International Decade for Action – “Water for Life” and Metanexus programs that expand attention to a Global University.

A future Sewanee LSI Treatise and its implementation could lay a foundation for a Restorative Justice Center. This center would expand the science and religion programs at Sewanee, promote better care of all natural resources and improve dialogue with local people. Programs and activities promoted by this center will help remove the conditions that endanger the Cumberland Plateau.

The Revd. Dr. Jeffrey Golliher is the editor of *Healing God's World*; a book that provides summaries from the Global Anglican Congress on the Stewardship of Creation, August 2003 in South Africa. Golliher writes: “Examining any part of the Earth’s ecosystems - freshwater, oceans, the atmosphere and climate, food and agriculture, forests, cities, or rural areas reveals how the web of life is under destructive pressure.” The papers in his book provide a good world view about ecological issues from an Anglican perspective. This information enables the reader to examine barriers that hinder national and local leaders from effectively addressing the destruction of earth’s resources. This book will be used in 2006 Southeast workshops to help Anglicans learn more about healing God’s creation.

People from around the Southeast and around the world are invited to the mountain at Sewanee to learn how to honor the Axis Mundi:

Although we are moving toward the global community, we face what seem to be insurmountable obstacles: ecological disaster, economic injustice on a worldwide scale, widespread warfare. Against these forces we must individually and globally devote ourselves to “building the earth”, we must recapture unity of tribal consciousness and see humanity as a single tribe; and we must see this single tribe related organically to the total cosmos. This means that the consciousness of the 21st Century will be global from two perspectives. First from the horizontal perspective, cultures and religion must meet each other on the surface of the globe, entering into creative encounters that will produce complex collective consciousness. Second, from a vertical perspective, they must plunge their roots deep into the earth in order to provide a secure base for future development. They must develop a new spirituality of the earth and of the material aspects of human existence. This new spirituality must be organically

ecological, supported by structures of justice and peace. The voices of the oppressed must be heard and heeded; the poor, the women, racial groups, and all other minorities. These groups, along with the earth itself, can be looked upon as the prophets of the 21st century. This emerging global consciousness is not only a creative possibility; it is an absolute if we are to survive.”

- *COMPASSION*, A Millennium Music Production by Michael Fitzpatrick.

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