

African Perspectives on God's Creation

Forests: More than Lungs of the Planet

A Christian View of Forests, Human Responsibility and the Blessings they Bring to God's Creation

Every product we make and enjoy, from the paper we work with, to every tree we fall, every building we construct, every road we travel, alters creation.

- HAH Ecumenical Patriarch Bartholomew
Brazil, July 14, 2006

Tree-planting initiatives must be undertaken.... children in our schools may adopt vegetable or flower gardens, forested regions, church compounds, abandoned properties or farm regions cultivated for the common good, as well as areas with natural beauty which they will care for on a voluntary basis. Their example can sensitize their parents and elders who can then be motivated to do likewise.

- HAH Ecumenical Patriarch Bartholomew
Halki, June 20, 1994

To commit a crime against the natural world is a sin. For human beings to degrade the integrity of the earth by stripping the earth of its natural forests, or destroying its wetlands; for human beings to contaminate the earth's waters, its land, and its life, with poisonous substances ... these are sins.

- HAH Ecumenical Patriarch Bartholomew
Santa Barbara, 1997

ACROSS AFRICA FORESTS ARE IN DECLINE. Over half of Africa's forests have been cut since 1900. This is leaving the continent drier, more subject to drought and less stable. In West Africa some countries have now lost over 90% of their original forests. Data from the UN Food and Agriculture Organization (FAO) shows that in countries toward the eastern horn of Africa, the loss has been only slightly less severe. Ethiopia has lost about 60% of its forests since 1900 and Eritrea about 65%. In Zambia and Malawi, the annual loss is running about 2.5% per year; for Zimbabwe, the loss is about 0.7%.

Where forests are healthy, they provide many ecological, economic, and social benefits to the local population. They protect water supplies, maintain hillsides from erosion, clean the air and help draw rainfall. They offer homes to birds and animals, and are far more valuable to the region standing than as timber or firewood. Forests also provide medicines, food, building materials as well as the foundation for

crafts and local economies. While forests are a local issue, they have global consequences.

The Orthodox Church has a long history of respecting forests, both in Africa and in other parts of the world. In particular the Christian saints are abundant in their commentary on trees.

“Love the trees. If you don't love trees, you don't love God.” This was a frequent saying of Saint Nikephoros (1750-1821) who lived on the Greek Island of Chios.

As a monk, Saint Nikephoros spent his entire life on this small island in the Aegean Sea and never once left it for the Greek mainland. He saw that trees were a source of health and wealth to the people. Many trees had been cut for firewood or timber, and the people were impoverished because of the conversion of cedar, pistachio, olive, and fruit trees to immediate uses, especially firewood. Throughout his life, he used every opportunity to teach that trees are a primary source of community wealth. He spent much of his life planting trees. When his parents died, he sold his entire inheritance to assist in tree planting throughout the island.

In future times, he would say, "men will become poor because they do not have a love for trees...." (Cavarnos, Vol. 4, p. 26)

The perspective of St. Nikephoros is not unusual. Saints throughout Christian history have demonstrated similar attitudes. If we examine trees and forests through the writings of the saints and correlate that with Scripture and the findings of scientists, a fascinating harmony of insights emerges. This combination leads to an awareness of the important role that trees and forests provide in the understanding of the Orthodox Church.

The Witness of the Saints

The saints provide a rich but largely unpublicized commentary on trees and forests that stretches back to the early centuries of the Church.

St. Ephraim the Syrian (306-373) in poetic language tells us that God created the first trees as a judge to test Adam and Eve and see how they would relate to His commands. If they obeyed God, this would be demonstrated in how they treated the trees before them.

The Tree to Adam was like a gate. Its fruit was the veil covering that hidden tabernacle.... Even though all the trees of Paradise are clothed, each in its own glory, yet each veils itself at the Glory; the Seraphim with their wings, the trees with their branches.... (Hymn III: 12-15)

St. Ephraim draws an amazing parallel between angels with their wings and trees with their branches. Trees, in his Christian cosmological consciousness, are like “angels” in the natural world, bestowing blessings upon the created order. As angels bestow blessings upon the whole universe, trees contain tangible blessings of Christ’s energies in the form of life, light, and love. They also serve the creation, providing food for animals and people; homes for birds; and shade for all creatures. They also

beautify the land and provide stability for the soils.

In a similar spirit, **St. Basil the Great** (329-379) writes about trees and the spiritual implications hidden in plants and grass. "A single plant, a blade of grass or one speck of dust is sufficient to occupy all your intelligence in beholding the art with which it has been made." He writes this because God's spiritual presence and power is at the root of every living thing.

St. Columba (521-597) is considered the most prolific evangelizer in Christian history. He founded numerous monasteries across Scotland, and is reputed to have established the single largest monastery in Christendom on the coastal island of Iona.

His biographer, Adamnan, writes that Columba had such a deep love for the forests and all of God's creation that he made sure that his monasteries were built without a single tree being cut. He asked that whenever his monks built a new monastery, that it maintain groves of trees around it. His monks absorbed his respect for creation and thereafter Irish and Scottish monasteries cultivated a keen appreciation for the natural world as the vesture of the Holy Spirit. In one of his hymns, he declared that he was more afraid of the sound of an axe in the forest, than he was of the voice of hell itself.

Among the teachings that he left for posterity was that the monks were never to cut any trees. If a tree fell of itself, or was blown down by the wind, the monks were not to touch it for at least nine days. Then they would share its wood between "the people of the town, bad and good, a third of it to the great house, and a tenth to be given to the poor."

St. John of Damascus (675-749) is considered one of the most comprehensive writers on Orthodox theology. He lived among the early Islamic people in what is now modern Syria. St. John tells us "the whole earth is a living icon of the face of God." Through creation we are to discern the Divine Presence in all things. As he probes deep into the nature of the created world he tells us about the spiritual presence in trees.

It is possible to understand by every tree the knowledge of the divine power derived from created things. In the words of the Apostle Paul, "The invisible things of Him from the creation of the world are clearly seen, being understood by things that are made" (Rom. 1:20).

A western monastic from Switzerland, **St. Bernard of Clairvaux** (1090-1153) sought to restore the original Rule of St. Benedict to a monasticism that had grown weak and lax. Bernard was considered a giant of scriptural wisdom and theology. Many in his day considered it amazing that his biographer William of St. Thierry wrote that Bernard gained his brilliant understanding of scripture and spirituality alone out under the trees and in the forests. He writes:

Indeed, to this day, he declares that whatever competence he has in the Scriptures, whatever spiritual sensitivity he has for them, stems from his meditating or praying in woodland and field. And among his friends, he

jokes merrily of having no other masters for such lessons but the oaks and the beeches.

Bernard explained this in a letter. “Believe one who knows: You will find something greater in woods than in books. Trees and stones will teach you that which you can never learn from masters.”

A more recent voice comes from an Orthodox elder who lived on the Island of Patmos. “Love the trees,” was a common saying of **Fr. Amphilochios** (1889-1970), writes Orthodox scholar Metropolitan Kallistos Ware. He relates his experiences with this wise elder who taught the importance of planting trees:

I remember the teaching of the *geronta* (“elder”) Father Amphilochios (+1970) on the island of Patmos, whom I knew when I was a deacon at the Monastery of Saint John the Theologian. “Do you know,” he used to say, “God gave us one more commandment: *Love the trees.*” Whoever does not love the trees, so he believed, does not love God. “When you plant a tree,” he affirmed, “you plant hope, you plant peace, you plant love, and you will receive God’s blessing.”

According to Metropolitan Kallistos, Fr. Amphilochios was a practicing ecologist long before environmental concern became popular. The local tradition on Patmos recalls that the elder used to hear the confessions of local farmers, and would regularly give them as a penance the task of planting a tree, while he himself would walk about the island watering young trees during times of summer drought. His Christian love for trees transformed Patmos, the rocky island where St. John the Evangelist received the visions that became the Book of Revelation. Photos taken around the turn of the last century near the cave of the Apocalypse show only a barren hillside. Now a thick and healthy forest grows in the same area and tall trees line the road from the sea up to the Cave of Revelation.

Half a century earlier, **St. Nectarios** (1846-1920) had a unique teaching about trees. He had established a monastic community for nuns on the Greek island of Aegina. By demand from several dozen students, he taught theology in the classroom and gardening skills on the monastery grounds. About trees he observed that every tree is unique. “If one listened carefully,” he said, each tree has its own distinctive sound, what he called a “song.” He showed the nuns how to recognize the differing songs within trees. One nun applied this insight so well that she developed an amazingly successful skill in the orchard art of branch grafting. She found that by identifying harmony between tree songs, she could graft one sapling to another with exceptionally high success. St. Nektarios observed that anyone who listened with attention and sensitivity could hear the subtle sounds in trees, almost like a form of music.

These commentaries from the saints on trees remind us that Christ and the Holy Spirit are “everywhere present and fill all things.” They show that there are social and economic implications to our Orthodox vision of creation. Thus, everything we experience and know in the natural world is a reflection, or “condensation,” of a divine principle or spiritual archetype. This is what Saint Paul means when he writes,

For the invisible things of him from the creation of the world are clearly

seen, being understood by the things that are made, even his eternal power and Godhead” (Romans 1:19-20).

The Orthodox theology of creation teaches that God is known by the things which He has created. The reason that it is possible to know God through creation is because His Presence and divine energies remain within it. The witness of the saints reflects this wisdom about creation – just as King Solomon observed more than a thousand years earlier. He was considered the wisest man of his time, because he was able to discern the meanings of trees and animals.

And God gave Solomon wisdom and understanding... And he spake of trees, from the cedar tree that is in Lebanon even unto the hyssop that springeth out of the wall: he spake also of the beasts and fowl, and of creeping things and fish. And all people came to hear the wisdom of Solomon, even the kings of the earth (1 Kings 4:29, 33-34).

The Biblical Account of Trees and Forests

From the first chapter of Genesis to the end of the Book of Revelation the tree is the single most prominent non-human feature in the Bible. In over 400 passages the tree takes on a variety of meanings with at least seven distinct and different purposes.

Even before the Fall, the first thing that Adam and Eve meet in the Garden of Eden are two trees. God tells them that they may eat of the fruit of any of the trees in the Garden – except one tree – the Tree of the Knowledge of Good and Evil. This tree they may not eat or they will die. When they disobey God and eat of this tree, their disobedience casts them out of the Garden of abundance. Thus we have the Fall, the condition that causes us to become sick, to fail at understanding, to have accidents, and eventually to die. By a tree, wrongly used, we inherit the consequences of sin. Ironically, at the end of the Bible in the last chapter of the Book of Revelation, the tree again appears, only this time the leaves of the tree are for the healing of the nations.

Between Genesis and the Book of Revelation, the Bible offers a rich and changing commentary on trees. It describes trees as food, as offering praise, as a reminder for restraint in war, as an icon or symbol of ulterior meaning, as a means of judgement, as test of vision, and even as a symbol for the forward advance of the Church.

Trees as a test of human obedience and vision

In the first chapters of Genesis trees provide a test for Adam and Eve (cf. Gen. 2:9-3:19). Would they obey God and maintain remembrance of His commands, or would they would fall prey to temptations, follow their desires, disregard God’s commands, and see only things to use and take from the world?

The story of Adam and Eve and two trees is not just a story from ancient human history. Trees symbolize the whole creation. The choices placed before our earliest parents still remain as choices

before each person. They remind us of a central question in our lives. Will we obey God in our use of creation, or will we disobey and follow our desires and whims? Trees ask us, will we see the trees and all of the other animals, minerals and plants as the sacred handiwork of God? Or do we hold a material vision in which we forget God and see only natural resources to use according to our desires? The two trees which originally provided a test for Adam and Eve have now expanded because the choices before us in our present day involve the whole of creation. The ancient test in the Garden of Eden is now a test of our vision and how we chose among the choices before us. If we remember God and his commands, we will use trees and all the things of creation with a sense of thanksgiving for their sacred worth. If we forget God, then we take wantonly without regard for God or the place of trees in the biological systems that support life. In this way the trees which originally tested Adam and Eve represent the test of how we view God's creation. Thus our vision shapes and determines how we relate to the world.

Trees as a symbol of praise for God

Yea, the fir trees rejoice at thee, and the cedars of Lebanon...
(Isaiah 14:8).

Sing, O heavens, for the Lord has done it; Shout O depths of
the earth; break forth into singing, O forest, and every tree in
it (Isaiah 44:23).

For ye shall go out with joy, and be led forth with peace:
the mountains and the hills shall break forth before you into
singing, and all the trees of the field shall clap their hands
(Isaiah 55:12).

When the Bible speaks of creation rejoicing, it reveals a thinly veiled, cosmic dimension to trees and all of creation. When the trees are said to "clap their hands" and the hills "break forth into singing," this reveals how a great cosmic prayer, or better, a cosmic liturgy fills creation.

St. Maximos the Confessor called this "a *mystagogia*," or an initiation into the mystery of creation. He says that the entire cosmos is "a worshiping cosmos." This worship is the Logos is creation returning back to its Creator. It is the offering of life back to God. The Divine Liturgy is our human effort to participate in the great song of creation, to offer ourselves and the whole world back to our Creator God. In this regard, the action of trees praising God reminds us of human purpose in this world. This is reflected in the word "Orthodoxy" which literally means right praise, or right worship, or right participation in the cosmic dance of creation. We receive life from God and we are challenged to return what we have received in worshipful thanksgiving. The trees and all creation obey this purpose which is planted deep into their very nature. As we humans discern creation's praise, as indicated in these verses and others, we too will enter into participation in this praising of our Source and Origin.

For Saint Maximos and the Early Church, the purpose of the Divine Liturgy was the

transformation and transfiguration of the world. The liturgy was not only for the moral and spiritual well-being of believers, because it served and blessed the entire world. Sacrifice is at the heart of the Divine Liturgy. In sacrifice there is participation in the transforming action and energies of Jesus Christ. This action extends through the transfiguring energies of sacrifice to those who offer the sacrifice, to those who participate, and to the whole world. This places the Church in the midst of the cosmos. As the Church recognizes its role in the transfiguration of the world, it more consciously participates in the salvific action of Jesus Christ which ushers in the New Creation.

Judgement is represented through the trees

The trees of the wood sing out because he comes to judge the earth... (1 Chronicles 16:31-34).

Woe to them that write unrighteous decrees.... And shall consume the glory of His forest... And the rest of the trees of His forest shall be few.... (Isaiah 10:1,18-19).

They make a graven image,... he cuts down forests for his greed which is his god.... They have not known or understood, they have shut their eyes and their hearts (Isaiah 44:9-23).

Through trees, and through disobedience to God, Adam and Eve fell into a world of sickness, sorrow, sin, and death. Their sight was dimmed and they became susceptible to misunderstandings, mistakes, and misgivings. This dynamic continued through succeeding generations. The Prophet Isaiah writes that when people see poverty, pestilence and plague, these conditions arise through forgetfulness of God and His commands. The sins of the people are then experienced in a variety of painful conditions (Isaiah 24). Isaiah shows that this pain and suffering can change to rejoicing and peace through repentance, represented as a return to God's commands and faithfulness to them (Isaiah 25).

The lesson for us today is that when pain and suffering fills the world, the blame should not only be placed upon our leaders. A proper response begins with those who see the pain and poverty that holds the world in a bondage to sin. The solution is to live by the commands of God and to pray for repentance and obedience to God on a wider scale (cf. Isaiah 24-25). We are not isolated islands, separated from one another. We are all connected. What each person does spreads throughout creation. Therefore we should remember that the smallest action done because it represents obedience to God brings repercussions that ripple throughout the world.

The cross as a tree

Five times in the Book of Acts and the Epistles the Apostles Peter and Paul refer to a tree as the cross of Christ. Why is this? Is there some further meaning to trees in the Bible? Close examination of these verses by Orthodox theologian Vincent Rossi reveals something fascinating. In each of these instances, he finds that the invocation of the tree, where we would expect to read the word "cross," symbolizes

the forward movement and further articulation of the meaning of the Early Church.

These five instances are found in Acts 5:30; 10:39; 13:29; Galatians 3:13; and 1 Peter 2:24. Each of these instances represents a unique moment in the life and growth and development of the Early Church, and each occurs precisely at a divine moment in which the Holy Spirit is extending an understanding of the Christian faith.

In the story of Peter and the other apostles witnessing to the Jewish rabbis, Peter declares that they “ought to obey God rather than men” (Acts 5:30). For God “raised up Jesus whom you slew and hung on a tree” (Acts 5:31). Notice that instead of saying that Jesus was crucified on a cross, Peter here says that he was crucified on a tree.

Several chapters later, Peter is visiting the centurion Cornelius. There he has a vision in which he sees all manner of animals and birds and creeping things, and he hears the words, “Kill and eat.” At first Peter disagrees, saying, “Not so, Lord, for I have never eaten... anything unclean” (Acts 10:11-16). The voice corrects Peter saying, “What God has cleansed, do not call unclean.” Peter had still been calling some creatures unclean because he was observing the old Jewish law. By this vision, he understands something new which the Christian Church will observe. The Church is moving forward. Thus when he recounts this story and describes the crucifixion of Jesus Christ, he says “whom they slew and hanged on a tree” (Acts 10:39).

In each instance where the Scriptures use the image of a tree to describe how Jesus was crucified, careful reading shows that this is what theologians call a “kyrigmatic” moment in the life of the Church. A kyrigmatic moment is a special time when the Holy Spirit provides some further articulation of the law and rules of the Church.

The Apostle Paul also uses this image of a tree at special moments. When he is preaching in the synagogue at Antioch, he delivers a sermon in which he shows that the Old Testament promise of salvation is fulfilled in Jesus Christ. He shows too that Christianity is the culmination of all that the prophets taught. He then says that “they took him down from the tree” on which he was crucified. Once again, a further understanding about the meaning of the Church is coming into clarity. In one sense this use of the tree implies that as by a tree humans fell, now by a tree humanity is redeemed and can overcome sin and death.

Trees should be protected

This theme of protection first appears in Deuteronomy when God tells Moses that even during wartime, trees should be protected.

“Even in warfare, you shall not destroy the trees...” (Deuteronomy 20:19-20).

Trees serve the entire community of life, not just individuals. This concept appears again in the Book of Revelation when the plagues of the demonic spirits are being poured upon the earth. Then suddenly a good angel with the mark of the living God on its forehead appears and provides a simple

guidance to heaven and earth about creation. The angel says:

“Hurt not the earth, neither the seas nor the trees....” (Revelation 7:3).

This guidance means that human actions should not hurt or harm the world. If this guidance is followed, we would defeat the pollution and desecration of the world that is taking place because humans no longer see the world as a sacrament of God’s grace and gift to humanity.

The leaves of the Tree are for the healing of the nations

The final meaning of trees in the Bible is as a representation of the New Creation.

He showed me a pure river of the water of life, clear as crystal, proceeding out of the throne of God and of the Lamb. On either side of the river there was the Tree of Life which bare twelve manner of fruits and yielded her fruit every month, and the leaves of the tree were for the healing of the nations. And there shall be no more curse, but the throne of God ... shall be in it and His servants shall serve Him. And they shall see His face and His name shall be in their foreheads. And there shall be no night, and they need no candle... for the Lord God gives them light, and they shall reign for ever and ever (Revelation 22:1-5).

In Genesis Adam and Eve disobeyed God and ate from the Tree of Good and Evil instead of the Tree of Life. In the passage above, the Judgement is now past, and once again, as in Paradise, there exists only the Tree of Life in the center of the River of Life. People are once again obedient to God. Right relationships are restored and the Lord is honored on His throne.

In all of these Bible passages, trees are complex and carry many meanings. They symbolize the creation, but also the choices (i.e., tests) that are placed before all people. They symbolize judgement and the choices that Christian vision sets before each person. Through a right and respectful vision of trees, put into action in our lives, we can reestablish a right and sacred relationship to God and the rest of creation.

The Scientific View of Forests

Scientists tell us that forests are incredibly complex. According to Jack Ward Thomas, former chief of the U.S. Forest Service, forest systems are not only more complicated than we have thought, “they are more complex than we can think.” This insight highlights the infinite depth that exists in forests and every other living thing.

Another view of forests, observed by biologists and climatologists alike, is that forests are “the lungs of the planet.” They say this because forests have a form of breathing in which they take carbon dioxide (CO₂) out of the air, they absorb and retain the carbon, and release oxygen. Without trees and plants, the world’s atmosphere would not contain sufficient oxygen for life. Forests are therefore crucial

for a healthy world.

To understand this relationship in a personal way, imagine what would happen if the tiny capillaries inside one's lungs became valuable. A person could sell them and make money. But no person could sell capillaries for any extended length of time. Why? Because the body needs those capillaries to take oxygen out of the air and place it into the blood. Death would be the consequence of taking too many capillaries. Every person needs lungs and clean oxygenated air. The same is true for the whole earth. We may take a few trees, but if we take too many, we fatally damage the earth's ability to absorb carbon dioxide and release oxygen.

The world is facing massive climate disruption because we have cut the world's great forests while we have increased human impact on the atmosphere by burning carbon fuels (gas, oil, and coal). This causes an increase in the carbon dioxide in the air and other greenhouse gases. Carbon dioxide holds heat. As the carbon dioxide (from burning fossil fuels) builds up in the atmosphere, this is what causes earth's atmosphere to become like a giant greenhouse that retains heat from the sun. This is the force that changes the atmosphere and its climate. With scientific instruments this increase can be measured. It is estimated that about twenty percent of the rise in atmospheric carbon dioxide is due to deforestation.

Recent findings indicate that the forests are more than the lungs of the planet and more than places which store carbon dioxide. Just as lungs are connected to the heart and provide oxygen to the blood which the heart circulates throughout the body, so the world's forests provide, in a heart-like manner, for the global circulation patterns of air and moisture. Forest research has recently discovered that rainforests are responsible for creating winds that circulate around the planet.

Russian climate scientists Dr. Anastassia Makarieva and Dr. Victor Gorshkov in their research on the Amazon Basin's rainforest call this wind dynamic from forests a "biotic pump" which affects air pressure and causes winds to push moisture around the globe. Even though this recent discovery about the deeper role and value of forests is increasing scientific appreciation about the place of forests in God's creation, will it be enough to slow the relentless commercial effort to cut trees for their monetary values?

Biologists and botanists describe numerous other forest functions. Healthy forests provide clean water, clean air, and oxygen for the world. They become places for fish and birds and wildlife to thrive. Forests contain a variety of foods, medicines, and materials for local societies. They hold soils in place, maintain stable slopes, and prevent erosion and landslides. In contrast logging and deforestation leads to floods during rainy seasons and dry stream beds between rains. This is because healthy forests act as sponges that soak up water and store it for gradual release throughout the year. Deforestation destroys fishing, hunting, and other recreational uses of the forest. In the U.S., tourism and recreational uses of forests generate more revenue than logging. When financial values are assigned to the many natural services that derives from forests, healthy forests are worth far more to the local community and the larger creation when standing than as a commodity.

Brock Adams, an official of the National Audubon Society, provides a grander and more

farsighted perspective on forests. He describes them as a repository of botanical wisdom, rather like a natural library:

All over the world, there are libraries of a sort. They are among the most beautiful places on the earth, and they hold more information than the Library of Congress. Within these libraries are millions of books, each a unique masterpiece to see and touch. They are teaching this language to scientists. However, so far only one percent of these “books” have been deciphered. Some tell how to find new medicines; others reveal new things to eat.... These treasure houses of knowledge are the ancient forests of our planet.

Over twenty-five percent of prescription medicines contain compounds derived from plants. Half of the rare and endangered plant species in the U.S. have known medicinal uses. Many of these plants are found only in our ancient or old growth forests. The Pacific yew tree, for example, is found only in the ancient forests of the Northwest. The drug taxol, which is used to treat ovarian cancer, is produced from its bark. Incredibly, less than 1% of tropical plants have been examined for their medicinal and pharmacological properties.

Of 75,000 humanly edible plants in nature, only about 150 are routinely cultivated and eaten by humans. Out of this total, about 20, mostly domesticated cereals, stand between society and starvation. Yet there are wild trees in the Amazon that will yield over 600 pounds of oil-rich seeds a year, others whose fruits have more vitamin C than oranges and more vitamin A than carrots, and others whose seeds contain 27% pure protein. So far, of about 300,000 known plant species that could be analyzed and classified, scientists have carefully evaluated only about 5,000.

Most tree species exist as part of a larger web of life, or ecosystem. Trees provide habitat for animals, insects, and other plants. They continue this function even after they fall to the ground. The energy stored in the decaying tree becomes available to fungi, bacteria, molds, earthworms, and many other creatures. A rotted tree becomes part of the humus mat which becomes a den for mice, voles, insects, and countless animals. The porous mat slowly turns into soil, the organic foundation of the forest.

In addition to habitats for animals, birds, and plants, ancient forests serve as air filters for the world. Forests not only absorb carbon dioxide from the air, they filter the air. Without these massive “lungs,” through which polluted air is processed into clean air, the world would be filled with smog so thick that living things could scarcely breathe. Even today, if you visit great metropolitan areas such as Mexico City, Cairo, or Shanghai — massive cities with dense air pollution and few trees — you often have to wear a handkerchief over your mouth to prevent soot from filling your lungs.

The Destruction of the World's Forests

To understand the destruction of the world's forests, we must place this problem in its wider context as a symptom of a spiritual illness that afflicts not only the planetary biosphere, but also our souls. The

difficulty which Christians encounter when engaging environmental problems is that we still have to realize that neither the problem nor the solution are in the facts, but in ourselves, particularly in our attitudes and worldview. At issue are basic beliefs about who and what we are, about our place and purpose in the world, and therefore our responsibilities to the natural order.

If we are to understand the problem of deforestation, we must also understand the nature and meaning of trees, and from that understanding, discern our proper relationship to them. What does it mean that so many saints have seen forests as gifts from God? What does it mean that the Bible characterizes trees as the symbol of God's creation and as a test for our ability to obey God? What does it mean that scientists see forests as the lungs of the planet and as the heart-like biotic pump that moves the great circulation patterns of moisture and air?

Action Recommendations

The witness of the saints has emphasized the need to protect the trees and the forests. The Scriptures mandate us into a sacred view and a respectful and reflective use of the world. At precisely the time when science is revealing many previously unknown and unsuspected values to the world's forests, we are cutting them down at an unprecedented pace for the sake of cheap lumber and paper products. As the forests disappear to greed and the love of money, with them also disappear a variety of natural services that are essential for a healthy planet.

The forests of the world are not merely valuable natural resources; they are a basic part of God's creation that connects to the well being of all creation, including our human families and communities. An understanding of the moral and spiritual implications of the use of the forests has to be understood, taught and practiced.

Christians should understand these principles better than anyone. The theology of the Orthodox Church preserves the ancient Christian doctrine of creation alongside a cosmology that discerns Christ and the Holy Spirit in all things, including the forests and everything else on earth. We should therefore be at the forefront of any campaign to respect and restore the forests of the world.

As the holy elder from Patmos has said, "growing trees are a sign of hope, peace, and love." This should lead us to respect and even love the forests. In practical terms, this should cause us to take at least the following recommended actions:

- ◆ **Teach** the role of forests for a healthy community. Do everything possible to end the commercial logging of Africa's original forests. The trees and forests are worth far more standing than cut.
- ◆ **Encourage** parishioners (and children too) to plant native trees and help to restore local forests. As you plant trees, you help to restore moisture to the land and health to the larger community. You also plant hope for the future.

- ◆ **Plant** trees on church grounds, especially fruit trees. In Ethiopia the Orthodox Church has flourished since apostolic times. Its churches are located at the top of hills. These Church grounds serve as wildlife refuges and forest preserves. This cools the area and provides an example of respect for the local animals and trees. (See the Appendix for the story of trees on parish grounds in Ethiopia).
- ◆ **Respect** all forest products - lumber, paper and even firewood. Use them carefully and with a sense of frugality.
- ◆ **Minimize** the use of wood. Use recycled wood products whenever possible, especially recycled paper; use solar ovens for cooking whenever possible.
- ◆ **Protect** and save all of the remaining old growth forests; avoid using any wood and paper products produced from these ancient forests
- ◆ **Learn** the unique values associated with local forests. Forests contain medicinal plants, indigenous fruits, edible plants and insects, bees wax and honey, and mushrooms of many kinds. These can be collected from the forest and consumed locally while a portion can also be sold to buyers outside the region.
- ◆ **Discuss** the value of forests. Wangari Maathai in Kenya teaches that the indiscriminate cutting-down of trees has resulted in "drought, malnutrition, famine and death." Describe how this ripple effect takes place. (Consider too the migration of rural people to big cities; the needs to generate income; the use of wood as fuel for heat and cooking; the energy needed to travel longer distances for fuel, food, and water; the choosing of foods which are less nutritious but easy to prepare; and so forth.)
- ◆ **Embrace** and practice the vision that all things are filled with God's holy presence, and worthy of love, reverence, respect and restraint.
- ◆ **Help** others to respect the trees which God has placed in your area. Teach the Christian doctrine of the transfiguration of creation as an essential doctrine for our time.

Listen carefully to the words of a famous African hero who worked long and hard to preserve forests. Wangari Maathai, who won the Nobel Peace Prize for her tree planting, describes the many values that forests bring to the community. Here are four quotes that capture a small portion of her message about forests and what you can do:

"People need to understand that if you didn't have trees, trees that are taking away carbon dioxide from the atmosphere constantly, we would suffocate in our carbon dioxide. Even the carbon dioxide that we are exhaling ourselves, let alone that which is coming from cars, planes, cooking fires, and all the other activities that we do, burning charcoal and all the other fossil fuels."

“Trees are the best friends you have on the planet. They need to be planted, and those that are standing need to be protected and appreciated.”

"Anybody can dig a hole and plant a tree. But make sure it survives. You have to nurture it, you have to water it, you have to keep at it until it becomes rooted so it can take care of itself. There are so many enemies of trees."

“I’m very concerned about Africa and climate change.... Many countries in Africa, especially south of the Sahara, are poor. They are unprepared for this crisis. As we have seen recently, when the rains didn’t come for three years, the government announced an emergency in the country. And over ten million people are in danger. That’s only an indication of the kind of crisis we are likely to face in the future. This is a very, very serious, and it’s largely due to the fact that Africa has not prepared herself for an environmental crisis.”

One topic that Wangari did not talk too much about but which is central to saving forests is love. We cannot save the forests unless we love them, and we cannot love them until we understand the love that God has for them and the rest of creation. How important are forests to God?

There are several hundred references in the Bible that relate to over 100 different species of trees. Scripture refers to trees used for food, shade, burial sites, buildings, idols, fuel, and even the cross. Fruit trees were important enough that God commanded that even in the midst of war, these food trees may not be destroyed.

Surely with all this commentary as a witness and reminder, with all of the many values that forests bring to us and to the world, we can learn to love, cherish, preserve, and respect this blessing of life and goodness in the world whose full value we scarcely know how to appreciate.

Christians in other parts of the world are similarly concerned. From the Church of India, properly called the Malankara Orthodox Syrian Church, a call has been issued by His Beatitude Paulose Mar Milithios, Metropolitan of Madras, India, to change our attitudes and behavior. His 2007 message begins by observing the low level of rain that has fallen compared with historic levels:

We in Kerala are worried about the weak and sporadic rains in this season [when we expect] heavy downpours. It is felt that the rhythm and the balance in nature is disturbed. Although the issue of climate change can seem like a complex issue, there are many simple actions that individuals and parishes can take to make a difference. A few of the possible actions which we can employ are energy conservation, education programs to create awareness, planting trees, using less petrol and diesel vehicles, and recycling projects.

I exhort all Church members to observe the seriousness of this problem and learn to go back to the nature. A simple, natural and unsophisticated lifestyle is the only cure for all these maladies. Let us all join our hands to save our planet. Let us unite to combat climate change and make this planet a commodious dwelling place for the posterity.

His Beatitude Paulose Mar Milithios
India, 2007

We especially advise the clergy and others in parish ministry to encourage love for nature, to care for trees and shrubs.... It is only fitting that love for the environment must begin on the church grounds which must be replete with greenery and flowers in bloom throughout all the seasons of the year "for the Author of beauty has created them" (Wisdom of Solomon 13:3).

HAH Ecumenical Patriarch Bartholomew
Halki, 1994

We have expanded our dominion over Nature to the point where absolute limits to our survival are being reached. We have lost half of the great forests of the world to the demand for timber and for conversion to agriculture, without thinking that these giant wet sponges are responsible for the delivery of much of the fresh water.

HAH Ecumenical Patriarch Bartholomew
New Orleans, October 21, 2009