Orthodox Ecological Perspectives



Forests: More than Lungs of the Planet

A Christian understanding of forests

by Fred Krueger

Every product we make and enjoy, from the paper we work with, to processed meat and the soy beans that sustain the [Amazonian] farming industry, every tree we fall, every building we construct, every road we travel, alters creation.

- HAH Ecumenical Patriarch Bartholomew Manaus, Brazil, July 14, 2006

Our attention must be given to developing programs of practical application. Tree-planting initiatives must be undertaken, children in our parochial and catechetical 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 serve to sensitize their parents and elders who can then be motivated to do likewise.

- HAH Ecumenical Patriarch Bartholomew The First Summer Seminar on 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

"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 did he leave 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 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 place of forests and trees 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) recounts that God created the first trees to serve as a judge that would test Adam and Eve and see how they would relate to His commands. If they obeyed God, this would be demonstrated in how they related to the two trees that He set before them.

The Tree was to Adam 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 Seraphs 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 as "angels" of 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.

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 the vitalizing force 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 a new monastery was constructed, that it maintain groves of trees around it. His monks absorbed his respect for creation and especially trees, 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 until at least nine days had past. 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 perceive 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, "The invisible things of Him from the creation of the world are clearly seen, being understood by things that are made."

A western monastic **St. Bernard of Clairvauix** (1090-1153) sought to restore the original Rule of St. Benedict to a monasticism that had grown weak and lax. He was considered a giant of scriptural wisdom and theology. Many in his day considered it amazing that his biographer William of St. Thierry could write 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 [Bernard] 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 **Fr. Amphilochios** (1889-1970) who lived on the Island of Patmos. "Love the trees," was his common saying, writes the 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 go 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.

A half century earlier, the beloved **St. Nectarios** (1846-1920) had a unique teaching about trees. By demand from several dozen students, he established a monastic community for nuns on the Greek island of Aegina. 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, or what he called "song." He taught 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 fruit 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 ramifications to our Orthodox vision of creation. Thus, everything we know and experience in the natural world is a reflection, or "embodiment," 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 dwell 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 (I Kings 4:29, 33-34).

The Biblical Account of Trees and Forests

From the first chapter of Genesis through 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, both symbolic and descriptive, with at least seven distinct and different meanings.

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 the Tree of the Knowledge of Good and Evil. This tree they may not eat or surely they will die. When they disobey God and eat of this tree, the very act of their disobedience casts them out of the Garden. Thus we have the Fall, the condition that causes us to become sick, to fail at understanding, and eventually to die. By a tree, wrongly used, we inherit all 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, Scripture offers a rich and varied commentary on trees. These include trees as a means for vision, as offering praise, as food, as a reminder for restraint in war, as an icon or symbol of ulterior meaning, as a

means of judgement, and even as a symbol for the forward advance of the Church.

Trees as a Test of Human 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 a 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 creation?

The story of Adam and Eve and two trees is not just a story from ancient human history. Trees symbolize the entire creation. The choices placed before our earliest parents still remain as choices before people today. Will we obey God in our use of creation, or will we follow our desires and whims? For us today, do we see trees and the things of creation as the sacred handiwork of the Lord? Or do we hold a material vision in which God is forgotten and the elements of creation become mere natural resources to use according to our desires? The two trees which originally framed the test of human vision and obedience to God have expanded because the choices before us now involve the whole of creation. The ancient test in the Garden of Delight is now a test of how we chose between the choices before us. If we remember God and his commands, we will use trees and all the things of creation with a reverential sense of 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 two trees which originally tested Adam and Eve represent the test of how we today view and use God's creation. Thus the nature of 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 you 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 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 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 of creation back to our Creator God. In this regard, the action of trees praising God reminds us of our human purpose in creation. 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 are challenged to return what we have received in worshipful thanksgiving. The trees and all of the natural creation obey this purpose planted and infused into their very nature. As we humans discern creation's praise, as indicated in these verses and others, we too are invited to enter into participation in this praising of our Source and Origin.

For St. 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 self-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 continues through all succeeding generations. The Prophet Isaiah writes that when people see poverty, pestilence and plague, these conditions arise through forgetfulness of God's commands. These sins 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, characterized by a return to God's commands and fidelity to them (Isaiah 25).

For us today, the lesson is that when pain and suffering fill our world, the blame should not only be placed upon our leaders. A proper response begins with those who see the poverty, pestilence, and pain that holds the world in the thrall of sin. The solution is to live by the commands of God and to pray for repentance on a larger scale in human affairs (cf. Isaiah 24-25). We are not isolated islands, separated from one another. We are all connected. What each person does reverberates 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 the cross as a tree. Why is this? Is there some further meaning to trees in the Bible? Close examination of these passages 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 Peter 2:24. Each of these instances, reports Rossi, represents a unique moment in the life and development of the 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 apparently still been calling some creatures unclean because he was observing the old Jewish law. By this vision, he understands a further aspect of the new law 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, a careful reading shows that this is what theologians call a "kyrigmatic" moment in the life of the Church, a moment in which the Holy Spirit provides some further articulation of the shape of the Church.

St. Paul uses this same image of a tree at key moments. When he is preaching in the synagogue at Antioch, he delivers a sermon in which he shows that the history of salvation is fulfilled in Jesus Christ, and that Christianity is the culmination of what the prophets taught. He then declares that "they took him down from the tree" on which he was crucified. Once again, a further implication of the meaning of Church is being defined. 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 the Book of 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, not just individuals. This concept appears again in the Book of Revelation when the plagues of the dark angels are being poured upon the earth. Then suddenly a good angel with the seal of the living God on its forehead appears and provides a simple guidance to heaven and earth about creation:

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

This guidance means that human actions should not harm the creation. If this guidance is followed, we would defeat the pollution and desecration of the world that is taking place because humans no longer discern 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 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. Right relationships are restored and the Lord is honored on His throne.

In all of these Bible passages, trees are complex in their 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, 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, forests are not only more complicated than we have thought, "they are more complicated 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 conclude this because forests have a form of respiration in which they absorb carbon dioxide (CO²), 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 comprehend this relationship in a personal way, imagine what would happen if the capillaries in 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 oxygenate 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 a measurable increase in atmospheric carbon dioxide and other greenhouse gases, which in turn causes earth's atmosphere to become a giant greenhouse that retains too much heat from the sun. This becomes the force that changes the atmosphere and its climate. It is estimated that about twenty percent of the rise in atmospheric carbon dioxide is due to deforestation.

Recent scientific discoveries indicate that the forests are more than the lungs of the planet and "sinks" for 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 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 realization about the further value of forests is increasing scientific appreciation about the value of forests, 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 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 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., 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 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 in the U.S. 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 pharmacological properties.

Of 75,000 humanly edible plants in nature, only about 150 are routinely 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 each 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 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 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 personal 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 unsuspected values to the world's forests, we are cutting them down at an unprecedented pace for the sake of cheap consumer 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 resources; they are an integral part of God's creation that connect 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, practiced, and taught.

Orthodox Christians should understand these principles better than anyone. The theology of the Orthodox Church preserves an intact doctrine of creation alongside a cosmology that discerns Christ and the Holy Spirit in all things, including the forests. 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 actions:

- ◆ Respect all wood products lumber, paper and even firewood
- ◆ Recycle all used paper; do not waste paper
- Use recycled products whenever possible, especially recycled paper
- ◆ Save all of the world's remaining old growth forests; avoid using any wood and paper products produced from these ancient forests
- ◆ Do all that we can to end the commercial logging of public forests. The trees and forests are worth far more standing than cut.
- ◆ Hold the vision that all things in creation are filled with God's presence, and therefore worthy of reverence, respect and restraint.
- ◆ Help others respect what God has created. Teach the Orthodox doctrine of the transfiguration of creation as an essential doctrine for our time.

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 shade, burial sites, food,

buildings, idols, fuel, and the cross. Fruit trees were important enough to God 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 give to us and 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.

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

Human activity has acquired an ability to affect global processes and these powers increase constantly due to the accelerated development of science and technology. Industrial wastes which pollute the environment, the destruction of forests, bad agricultural technology... — these suppress biological activity and cause a steady shrinking of the biological and genetic diversity of life.... The ecological balance has been violated. Man now has to face the emergence of pernicious processes in nature, including the failure of its natural reproductive power.

HB Patriarch +Alexiy
The Russian Orthodox Church