

Bethel Mennonite Church

THE FOREST AND THE TREES

Artist-in-Residence project – a series for six weeks from January 10 – February 14, 2021

By Lynda Toews

1. THE FOREST AND THE TREES: Introduction and Overview (Jan 10)

Bulletin cover picture: *Vincent van Gogh. Study of a Tree.*



Painting: No painting for first week. For these six weeks, there is a painting to go with the topics on week 2, 4 and 6. The speaker could direct the audience to the painting corresponding to the topic on these weeks.

Other than people, trees are mentioned more than any other creature in the Bible. They are sign and symbol of the existence of life itself, which is not surprising since they grow taller, bigger and older than any other organisms on earth, giving us a different perspective on time (Sleeth, 2019, p. 5)). Trees make life possible in many ways: for example, they provide shade, habitats for animals, building materials, beauty, food, they lower temperatures, filter water, sequester carbon dioxide, pump out oxygen and so on.

Christianity is the only religion that weaves trees from one end of its sacred text to the other. It is not surprising that they play a significant part in the bible. There is a tree at the beginning of Genesis, at the end of Revelation, and in many places in between. The first Psalm exhorts believers to be like tree, yielding fruit. Every major character and every major theological event has a tree marking the spot (Sleeth, 2019, p. 5).

For example:

- There are trees in the Garden of Eden, the tree of life and the tree of the knowledge of good and evil (Genesis 2:9);
- Noah received the olive branch (Genesis 8:11);
- Abram arrived at the great oak of Moreh (Genesis 12:6);
- The disciples gathered on the Mount of Olives (Luke 22.39);
- Jesus died on a tree (Galatians 3:13);

- Wisdom is a tree of life (Proverbs 3:18);
- Righteousness is an oak (Isaiah 61:3)
- Powerful empires are characterized by trees (Ezekiel 31);
- The tree of life is in heaven and its leaves will be for the healing of the nations (Revelation 22).

Trees are also used in the bible to symbolize emotion:

- They shout for joy (I Chronicles 16:33);
- They clap their hands (Isaiah 55:12);
- They sing for joy (Psalm 96:12);
- They faint in mourning (Ezekiel 31:15).

It is not only the Christian tradition that holds trees significant. There is a “tree of life”, a “sacred tree” or a “sacred grove” in many other cultures/religions. Ojibwe people saw trees [and other parts of the natural world] as possessing personhood. Nuxalk people also saw trees as having personhood, and in fact considered trees and humans to once have been able to communicate [Trees and Religion, 2016].

Trees appear all over art, poetry and literature. William Blake wrote, “The tree which moves some to tears of joy, is in the eyes of others only a green thing which stands in the way . . . as a man is, so he sees”. Even philosopher Martin Buber used how one regards a tree to illustrate the re-dignifying shift of perspective at the heart of his philosophy – the distinction between “I-it” and “I-thou” relationships (Popova, n.d.). Vincent van Gogh painted 15 paintings of the olive trees at Gethsemane, trying to understand how Christ felt. Emily Carr painted the spirit of the great trees in B.C.; Henry David Thoreau cherished trees; Walt Whitman saw trees as wise teachers; and Hermann Hesse saw trees as our mightiest consolation for mortality.



Emily Carr 1937 – tree movement (overhead projection)

“Poets have elegized their wisdom, artists have drawn from their resonance with our human emotions, and scientists are only beginning to uncover their own secret language” (Popova, n.d.). Trees form communities that “talk” to each other, sharing their needs and providing mutual assistance. They communicate above ground through chemicals and hormones and underground through sound, electrical signals and chemicals. Below ground, roots connect with each other through a system of fungi which has been called “the Wood-Wide Web”. (Wohlleben, 2015, p. 249).

In the next few weeks we will be exploring many of these topics further, making connections between the Bible, the arts, science, and our lives.

2. THE FOREST AND THE TREES: Trees and Time (Jan 17)

Bulletin cover picture: Drawing by Lynda Toews

Think of the fierce energy concentrated in an acorn! You bury it in the ground and it explodes into an oak – George Bernard Shaw.



Painting: “Old Yellow Cedar”

Trees are the oldest living creatures on earth. There is an 1835 year old yellow cedar in B.C. that is Canada’s oldest tree. A cypress in Chile is 3648 years old, and Methuselah, a bristlecone pine in California is 4851 years old [List of oldest trees, n.d.]. Many of us also know of the old oak tree in the Mennonite village of Chortitza that lived to almost 800 years old. Then there are the clonal trees – whose roots “sucker” and create colonies, one of which is a quaking aspen grove in Utah which has lived for 80,000 years, show below (overhead projection?) (Wohlleben, 2015, p. 184).



(overhead projection)

It is easy for us humans to fall into a quotidian reality, devoid of long-term thinking. Trees remind us that life is much bigger than our present moment. Their deep roots and sprawling branches call us to look to heaven and eternity (Sleeth, n.d.). Trees are mostly very slow-growers, but are all the more enduring for their deliberate pace. They are examples of what can

be accomplished through time, patience and perseverance, even through adverse conditions. It can take a tree decades to close a wound in its bark (Wohlleben, 2015, p. 124). “God is always trying to teach humans to think long-term. We get blinded by short-term gain and lose sight of eternity. God wants us to see the forest and the trees” (Sleeth, n.d.).

In the bible trees are often signposts and gathering places and they provide images of the blessing of God. The sturdy oak stood as witness to certain events. In the time of the patriarchs, Jacob took the false idols from the members of the household and buried them under an oak at Shechem (Gen 35:4). When the land of Israel was oppressed by Midian, the Angel of the Lord appeared to Gideon under an oak tree and made a covenant with Gideon to deliver Israel from their oppression (Judges 6:11-19). Isaiah proclaimed that those moved and transformed by the good news God spoke would be called “Oaks of Righteousness” (Isaiah 61:3).

In the holy land, a certain tree stood apart – the great oak of Moreh. God spoke a promise to Abram to leave his homeland and journey to a land that would become his home. At age 75 Abram went, first arriving at the great oak of Moreh – a towering metaphor of the strength of Abram’s unwavering belief (Genesis 12:6).

These stories remind us of the Mennonite story and the great oak at Chortitza – it was a gathering place and a symbol of strength and longevity, and is now resurrected in its many saplings around the world. “The famous old oak tree was at one time considered sacred by the Cossack tribes. It provided shelter to the earliest Mennonite settlers in Russia and generations of Mennonites grew up in its shade” [Mennonite Archival Image Database].

Overhead projections: The Chortitza Oak tree, saplings at CMU, MHV.



When we learn about the timeline and strength of these great trees, we need to remember what great creatures God can make from a very small seed, acorn, pinecone, and he numbers their years with rings. The greatest oak was once a little nut who held its ground.



God put the notion of living on a vast time scale in our hearts: “He has made everything beautiful in its time. He has also set eternity in the hearts of men. . .” (Ecclesiastes 3:11). “As the days of a tree, so will be the days of my people” (Isaiah 65:22).

And when we are stricken and cannot bear our lives any longer, then a tree has something to say to us: Be still! “When a tree is cut down and reveals its naked death wound to the sun, we can read its whole history in the luminous inscribed disk of its trunk: in the rings of its years, its scars, all the struggle, all the suffering, all the sickness, all the storms endured, all the happiness and prosperity, all of it stands truly written” (Popova, n.d.).

3. THE FOREST AND THE TREES: The Tree of Life (Jan 24)

Bulletin cover picture: photo credit - Johannes Plenio

(The photo is used in Robert Macfarlane's book "Underworld: A Deep Time Journey" on page 86, and credited on page 468 thus: "The photo is by Johannes Plenio, and is made available for free us under the @pixabay/CCO Creative Commons Licence.")



No painting (but several overheads, there are many paintings imagining the Tree of Life)

The tree of life is mentioned several times in Genesis, Proverbs and Revelations. Why was a tree chosen as a metaphor for eternal life and a symbol of human access to God? In the literal sense, trees really do sustain life on earth. They are the breath of the planet – sequestering carbon dioxide while providing oxygen, and producing rain through transpiration. Trees GIVE: beauty, shade, clean air, shelter, food, protection, medicine, rubber, olive oil, paper, cinnamon, cork, chewing gum syrup, and building materials. We also get our fossil fuels from trees that lived 300 million years ago. (Wohlleben, 2015, p. 94). They are a perfect sign and symbol of the existence of life itself, and the longest living organisms on earth.

Trees are also our mightiest metaphor for the cycle of life and even resurrection. “At least there is hope for a tree, if it is cut down, it will sprout again and its new shoots will not fail. Its roots may grow old in the ground and its stump die in the soil, yet at the scent of water it will bud and put forth shoots . . .” (Job 14:7-9). Hope, symbolized by the tree, does not die.

Trees also have amazing survival tools at their disposal, adjusting to the season in order to sustain life. They can sense the coming of winter by the temperature change and the length of daylight. Conifers’ needles have an anti-freeze-like substance so they don’t freeze, and deciduous trees know when to drop their leaves in order to avoid the added weight of heavy snow (Wohlleben, 2015, pp 75 + 148). October 2019 in Winnipeg was an exception and one of

the ways our planet's natural systems seem to be getting confused as it struggles with climate change.

Overhead projections of October storm 2019.



The tree of life is a fundamental widespread archetype in many of the world's mythologies, religions, and philosophical traditions. Even in popular culture, there is a tree of life in Disney's Animal Kingdom theme park with its 325 carvings of different species of animals in its trunk [Tree of Life, Wiki]:



(overhead projection)

According to Jewish mythology, "in the Garden of Eden there is a tree of life, or the 'tree of souls' that blossoms and produces new souls, which falls into the Guf, the Treasury of Souls. The Angel Gabriel reaches into the treasury and takes out the first soul that comes into his hand. Then Lailah, the Angel of Conception watches over the embryo until it is born" [Tree of Life Biblical, Wiki]. Later in Israel, the "tree of life" became a common poetic simile to represent that which may be a source of great blessing, associated with wisdom, righteousness, and longing fulfilled. (Proverbs 3:18, 11:30, and 13:12).

Many artists have depicted how they imagine the tree of life (overhead projections):



In the Christian tradition, there are also many interpretations. The Eastern Orthodox church has traditionally understood the tree of life in Genesis as a prefiguration of the Cross, which humanity could not partake of until after the incarnation, death and resurrection of Jesus.

In Western Christianity, two trees in the Garden of Eden represent the choice of free will. In Genesis the tree of life (the source of eternal life) is described as being in the midst of the Garden of Eden along with the tree of the knowledge of good and evil (Genesis 2:9). Some scholars believe that “the Eden plot is about a divine test of first humans. Not to eat of the forbidden tree of the knowledge of good and evil is the test case: to obey or not? The fruit of the other tree, the tree of life is the prize if the test is passed” (Mettinger, 2007, p. 40). Other scholars believe that through the tree of the knowledge of good and evil, humans would come to know good and evil EITHER from above as masters of temptation, or from below, as slaves to sin (Taylor, 2011). Since humans failed the test, they brought sin and death upon themselves.

After the fall, cherubim were placed to guard the way to the tree of life “lest he put forth his hand, and take also of the tree of life and eat and live forever” (Genesis 3:24). So the tree of life is a symbol of the glorious possibilities which lay before the first humans, and which might have been realized by them had their sin not prevented it. God’s intervention was a great mercy to the human race. Immortality in sin is rendered impossible, but God’s mercy made possible immortality through redemption: man [sic] at first is pictured as neither mortal nor immortal, but both are possible, as represented by the two trees (Reeve, n.d.).

Redemption has been made possible in a more glorious way – through the story of another tree – a cross. A cross is a tree stripped of its roots and branches. Jesus the messiah died by crucifixion upon a tree – a picture of how low humanity can sink and how far God will go to rescue us. Christ became a curse for us: “cursed is everyone who is hanged on a tree” (Galatians 3:13). And this tale of the tree of the curse had to be faced, and death conquered by resurrection in order for the long-lost tree of life to re-appear. Revelations tells us it is there in paradise producing fruit twelve times a year and that its leaves are for the healing of the nations. The tree of life (immortality) is promised as a reward for those who have overcome (Revelations 2:7, 22:14, 22:2). The cross might be seen as the bridge between the two trees.

From Genesis to Revelation, to understand the trees is to understand the story. It is perfectly appropriate that in the end, it is the trees themselves that will sing the true song of this story: “Let the trees of the forest sing, let them sing for joy before the Lord, for he comes to judge the earth” (I Chronicles 16:33).

What a story! One can apply it to daily life by taking up our own cross and following Jesus – bearing the burden of existence in this epoch, knowing that we will die a physical death one day. But we can pass from a metaphorical death to life here and now by practicing daily resurrection. “Whatever the eternal might be, it begins here as part of who we are today. The message of resurrection is new life now – giving of ourselves and risking for love’s sake” (Living the Questions, 2013 pp. 46 + 47).

4. THE FOREST AND THE TREES: Trees Clapping (Jan 31)

Bulletin cover picture: *Lynda Toews – Dancing Tree, 2005*



Painting: “Trees Clapping”

In order for poets to have eulogized the wisdom of trees, and for artists to have drawn from their resonance with human emotions (Popova, n.d.), poets and artists must have to have a special way of seeing and relating to trees (and nature). William Blake wrote: “The tree which moves some to tears of joy is in the eyes of others only a green thing [object] which stands in the way . . . as a man is, so he sees”.

There is no innocent eye. What we see ‘out there’ depends upon our social location and upon all the assumptions and habits of mind that go with it. “For where your treasure is, there your heart will be also. The eye is the lamp of the body. If your eyes are healthy, your whole body will be full of light. But if your eyes are unhealthy, your whole body will be full of darkness. If then the light within you is darkness, how great is that darkness!” (Matthew 6:21 – 23).

We are responsible for how we imagine the world, our reality. Since the capitalist and industrial revolution of the 17th century (complemented by the dualistic metaphysics that arose simultaneously out of Descartes), we have been imagining it as an object and resource base – with the resultant multiple threat now to the ecological web that took billions of years to construct. Our deadly habits will not be changed if our deadly minds (imaginations) are not (Ridd, 1994, p. 27). On the other side of this double whammy, the Romantics became conscious of their own

presence in the phenomena – on the hither side of objectivity – and scientists have also become aware of the presence of the observer in the observed. “According to anthropologists, primitive cultures achieve effortlessly the conceptual reality of the oneness of the observer with the object, which Einstein and others have validated as the scientifically verifiable case. Whereas Western societies have gone through an intermediary stage of dislocating consciousness from its surroundings . . . primitive cultures still retain their perception of the essential unity of all being” (Owens, 2005, p. 81). This discovery of ourselves “in” what we see ought to make us more gentle with it, the “it” no longer an “it”, but more like a “thou”, or a “him” or “her” (Ridd citing Buber).

The Song

*The tree, cut down this morning, is already chain sawed and quartered,
stripped of its branches, transported and stacked.*

Not an instant too early, its girl slipped away.

She is singing now, a small figure glimpsed in the surface of the pond.

As the wood, if taken too quickly, will sing a little in the stove, still remembering her.”

(Ridd, 1994, p. 28)

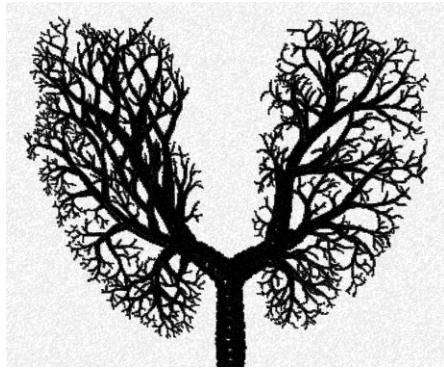
If we cannot learn again to experience the world in this way, we are not going to make it. This does not mean going back to such a view, but going on to self-conscious imaginative re-seeing of it in this way – not as the only way, but as one important, real way (Ridd, 1994, p. 29).

The Romantics were recovering on the other side of the Cartesian [subject-object] split, what some, like our First Nations People, had never lost. Aboriginal peoples experience the earth as alive and not their property, and trees as possessing personhood, regarding non-human life with dignity. “The earth is the Lord’s and everything in it . . .” Psalm 24:1.

Poetic nuances are the norm with trees and their meanings. “I think I shall never see, a poem as lovely as a tree”, wrote American poet Joyce Kilmer. Walt Whitman contemplated the wisdom of trees; he saw in them qualities almost emotional, palpably artistic, heroic. To truly see a tree, or any being beyond ourselves, requires a special kind of regard which invites contemplating the difference between objectifying and subjectifying the universe. George MacDonald, J.R.R. Tolkien, and C.S. Lewis – three of the most beloved and influential Christian fiction writers of our time . . .championed trees – painting a picture of shalom among trees”

(Sleeth, 2019, p. 20). Artists like Vincent van Gogh and Emily Carr for example, surely painted how they imagined and experienced trees, beauty and soul, moving from photographic or literal representation, to expressionism.

When the bible proclaims that the trees of the woods give glory to God, this metaphor may be a reality in unexpected ways. Researchers are discovering that trees form communities that



“talk” to each other, sharing their needs and providing mutual assistance. Trees also breathe. An upside-down image of the human bronchial tree beautifully demonstrates the trees we carry inside us – associated with breathing (*overhead projection of digital drawing by Lynda Toews*). At the level of respiration, humans and trees share an eerily similar architecture. (Sleeth, 2019, 31. There is also research

that has discovered that roots can vibrate at a frequency of 220 hertz and other roots orient their tips in the direction of the sound. (Wohlleben, 2015, p. 13). (There will be more on the science of trees next week). The temptation to anthropomorphize trees is understandable, and maybe not a bad thing to do (self-consciously). After all, trees are used several times in the bible in metaphorical ways:

- They shout for joy (I Chronicles 16:33);
- They clap their hands (Isaiah 55:12);
- They sing for joy (Psalms 96:12);
- They faint in mourning (Ezekiel 31:15);
- They don't fear or worry (Jeremiah 17:8);
- They express righteousness (oaks) (Isaiah 61:3).

A lack of feeling for the holiness or soul in nature accounts for its easy despoliation. A reverence for nature, a view of the universe as organism rather than as mechanism and an acknowledgment that human nature is part of nature, characterized Romantic landscape painting and nature poetry (often through the use of pathetic fallacy).

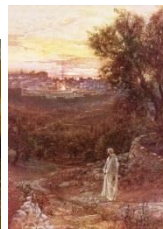
The Romantic poet, Baudelaire, held that mysterious correspondences exist between nature and feeling. Van Gogh must certainly have felt these correspondences. His landscape paintings are utterances of the religious heart, and their central premise seems to be what can be seen to reflect, simultaneously the will of its Creator and the passions of its observers.

5. THE FOREST AND THE TREES: The Olive Tree Garden at Gethsemane (Feb 7)

Bulletin cover picture: *Vincent van Gogh – The Garden of Gethsemane 1889*



No painting (but several overheads - there are many paintings of Gethsemane, the first image is a photo of part of Gethsemane today)



Another tree of significance, especially in Israel, was the olive tree. The tree became the Biblical symbol for the nation of Israel (Romans 11:15-25). Its berries continue to be leading articles of Israeli commerce. The tree is an emblem of peace, prosperity and wealth (Psalm 128).

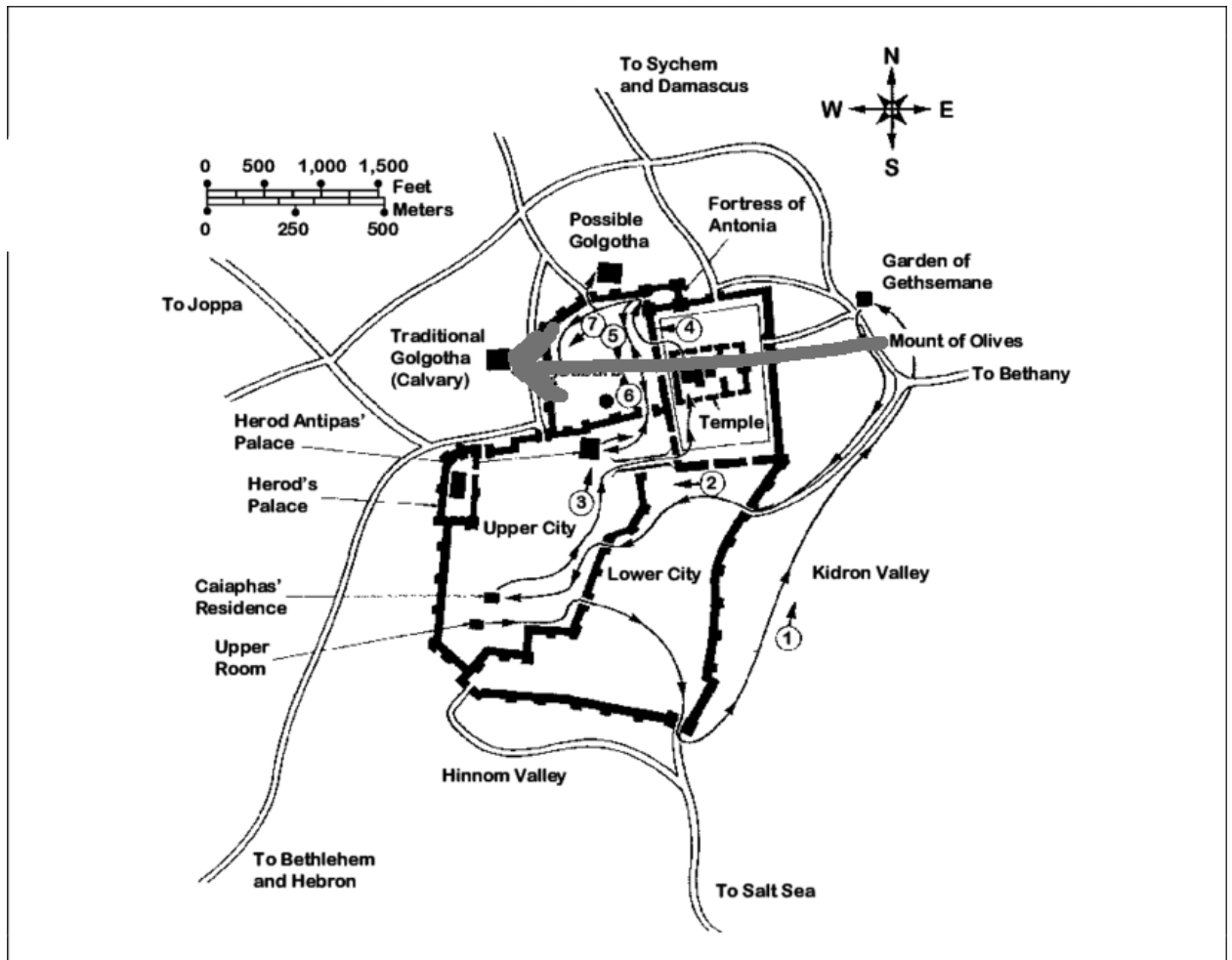
Olive trees in ancient Mediterranean life offered much. Their edible fruits and the oil pressed from the fruit – versatile in cooking, baking, nourishing sun-dried skin, and lighting the home as lamp oil – provided a comprehensive resource. An olive tree sheltered owners from pressing sunshine and was a poetic expression of *shalom*, a Hebrew word conveying complete peace (Cramm, 2018). The olive tree even played a role in Genesis when the dove returned with an olive leaf in its beak and Noah knew the flood waters had receded from the earth (Genesis 8:11).

Vincent van Gogh painted 15 paintings of olive trees, many depicting the Garden of Gethsemane. The olive tree paintings had a special significance for van Gogh. Those he did from

November 1889 arose out of his attempt to symbolize his feelings about Christ in Gethsemane [Olive Trees (Van Gogh series)]. One hundred years later, Dutch theologian Henri Nouwen describes van Gogh as one of the most spiritual figures of the 19th century – an artist who fully deserves the attention of modern theologians interested in interreligious dialogue (this is from a review of a book by Cliff Edwards titled: *Van Gogh's Ghost Paintings: Art and Spirit in Gethsemane*).

On a Thursday evening (a day we now call Maundy Thursday), Jesus had one last meal with his disciples, and then went as usual with them to the Garden of Gethsemane to pray. They will have walked from Jerusalem to cross the Kidron Valley and enter the Garden of Gethsemane at the base of the Mount of Olives (see map). The story in Luke 22 reads: “Jesus went out as usual to the Mount of Olives, and his disciples followed him. On reaching the place, he said to them, ‘Pray that you will not fall into temptation’. He withdrew about a stone’s throw beyond them, knelt down and prayed, ‘Father, if you are willing, take this cup from me; yet not my will, but yours be done.’ An angel from heaven appeared to him and strengthened him. And being in anguish, he prayed more earnestly, and his sweat was like drops of blood falling to the ground”.

Overhead projection: Jerusalem in Jesus’ time.



Would Golgotha (Calvary) have been visible from the Garden of Gethsemane, on the other side of the Temple of Jerusalem?

The idea that Jesus' agony was brought on only by dread of suffering a physical death seems shallow. No doubt a Roman scourging and death by crucifixion would be excruciating, but thousands of people died this way in Roman times. There must have been more to Jesus' dread – so severe that he sweat drops of blood (Luke 22:44), cried loudly with tears (Hebrews 5:7), became deathly sick (Matthew 26:38) fell to the ground to pray (Mark 14:35).

Note: hematomatosis is a condition where extreme anguish causes one's capillary blood vessels to dilate and burst, mixing sweat and blood. Also, "Typical Jewish prayer posture of the day was standing, eyes open and hands lifted to heaven" (Wilson, n.d.).

Was it that Jesus would be accounted guilty of every sin that was ever committed? Was it the consequent alienation from God? (This could be consistent with His cry from the cross "Why

have you forsaken me?") Were the world's sins actually loaded onto Jesus at Gethsemane? Perhaps part of the redemptive price was paid in this unprecedented and indescribable agony at Gethsemane (McCormick, 2017).

Jesus' prayer at the Garden of Gethsemane is one of the most foundational and instructive prayers of all. It was a prayer about resisting temptation, and in a sense the two greatest battles to resist temptation were fought in treed gardens. In Eden, humans failed and chose their own will over God's. In Gethsemane, we get the clearest picture of how Jesus submitted his human will to the Father (Rodgers, n.d.). "Father, if you are willing, take this cup from me; yet not my will but yours be done" (Luke 22:42). Being familiar with Hebrew scripture, Jesus will have known what "the cup" involved:

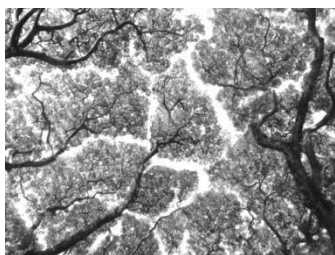
"Surely he took up our pain and bore our suffering, yet we considered him punished by God, stricken by him, and afflicted. But he was pierced for our transgressions, he was crushed for our iniquities; the punishment that brought us peace was on him, and by his wounds we are healed. We all, like sheep, have gone astray, each of us has turned to our own way; and the LORD has laid on him the iniquity of us all." (Isaiah 53:4-6)

Jesus, in his second and third prayer, did not continue to ask for the cup to be removed, he prayed for strength to do God's will. And though the cup did not pass him by, an angel strengthened him to undergo it. Perhaps this explains Hebrews 12:2: "For the joy that was set before Him, He endured the cross". He foresaw that his obedience would overcome death. (Piper, n.d.). And the cross was a tree.

When we are faced with temptation or a seemingly impossible task, we should not forget Jesus' struggle in the midst of the olive trees, nor God's promise in I Corinthians 10:13 that ". . . God is faithful; he will not let you be tempted beyond what you can bear. But when you are tempted, he will also provide a way out so that you can endure it".

6. THE FOREST AND THE TREES: Relationship Lessons from Trees (Feb 14)

Bulletin cover picture: *Crown Shyness*. Image credit: kottke / Rob Macfarlane



Painting: “Moonlight Sonata”

(This painting of two trees in the moonlight attempts to make energy visible between trees, branches and roots. It would be nice to hear the song “Moonlight Sonata” as an intro.)



It is February 14, 2021 and the final week on the tree series. We are going to end on a note about love and relationship, since it is Valentine’s Day.

Somewhere along the way, a lot of people have had the notion that loving trees was somehow pagan, hippie, New Age, Druidic, even “tree-hugging Liberal”. But as we have seen the bible is a veritable forest full of towering cedars and heavy-laden fruit trees.

Science also has a lot to say about trees, and how they care for each other and the earth in a harmonious mutualism. Trees are nature’s greatest connectors. They share food with their own and other species. They are perfectly capable of distinguishing their own roots from the roots of other species (Wohlleben, 2015, p. 3). There are advantages to sharing. A tree is not a forest. On its own, a tree cannot establish a consistent local climate, but together, many trees create an ecosystem that moderates extremes of heat and cold, store a great deal of water, and generate a great deal of humidity, bringing rain inland. And in this protected community, trees can live to be very old (Wohlleben, 2015, p. 4).

When looking up in a forest canopy, one can trace patterns of space running along the edges of each tree’s crown – a beautiful respect of each other’s space called crown shyness (as depicted on the bulletin cover). Theories of why they do this include: to reduce the spread of

harmful insects; to protect one another's branches from getting cracked and broken in the wind by keeping a safe distance from each other; and being careful to not steal each other's sunlight. (Macfarlane, 2019, p. 99).

Every tree is valuable in the community, so even sick ones are supported and nourished until they recover (Wohlleben, 2015, p 4). How do trees do this? Through communication – an important relational tool. Their Creator imbued them with unique abilities. One of their defences against being overeaten is producing chemicals that make them taste bad. At the same time, other chemicals warn nearby trees that a swarm of beetles, for example, is invading. (Hennigan, 2017). As hungry insects salivate on elms and pines for example, the trees can chemically analyze the insects' saliva, reproduce it in mass quantities, and broadcast the chemical to the forest community. This cry for help alerts predators who like to eat the invading insects (Hennigan, 2017). Trees also have defensive compounds and anti-biotic properties called phytoncides . . . if you add a pinch of crushed spruce or pine needles to a drop of water that contains protozoa, in less than a second, the protozoa are dead. (Wohlleben, 2015, p. 156).

Below ground, roots connect to each other through a system of mycorrhiza (fungus). Fungal filaments called hyphae weave into the tips of the roots at the cellular level. (Macfarlane, 2019, p. 89). Literally miles of these tiny tubes are found within a single cubic foot of soil between two tree roots. Electrical impulses pass through nerve-like cells from root tip to root tip. Studies show that a tree in a forest can be connected to as many as 50 other trees, not all from the same species, eg, from birch to douglas fir. This subterranean communication network of tree and fungus mutualism has been called the wood-wide-web (Wohlleben, 2015, p. 11, 248-249).

This web functions in interesting ways. The fungi siphon off carbon that has been produced in the form of glucose by the trees during photosynthesis by means of chlorophyll that the fungi do not possess. In turn, the trees obtain nutrients such as phosphorus and nitrogen that the fungi have acquired from the soil by means of enzymes that the trees do not possess (Macfarlane, 2019, p. 97). When one tree is sick, nearby trees share nutrients through this wood-wide-web. "Some older trees even 'nurture' smaller trees that they recognize as their 'kin'. . . A dying tree might divest its resources into the network to benefit the community, all of this shaping future generations, affecting gene regulation, defence chemistry and resilience in the forest community" (Macfarlane, 2019, p. 91 + 98). In this sense, the forest is a cooperative community.

“These discoveries have transformed our understanding of trees from competitive crusaders of the self to members of a connected, relating communicating system (Wohlleben, 2015, p. 249). The longest living organisms give us perspective on life and how it is interconnected. Our separateness is an illusion. “In the forest we find mutually beneficial relationships, lavish provision, and steady communication. These are qualities of the Creator (Hennigan, 2017). "For since the creation of the world God's invisible qualities--his eternal power and divine nature--have been clearly seen, being understood from what has been made, so that people are without excuse” (Romans 1:20).

"Despite a learned wariness towards anthropomorphism, it is hard not to imagine these arboreal relationships in terms of tenderness, generosity, and even love (Macfarlane, 2019, p. 99).

Bibliography

- Athena, ? (July 2016) Significant Trees in the Bible and Their Symbolisms. Retrieved from [www.http://athena.expertsolum.com](http://athena.expertsolum.com) March 23, 2020
- [Chortitza Oak Tree] (n.d.) Mennonite Archival Image Database. Retrieved from [www.http://archives.mhsc.ca/informationobject/browse:topLod=0query=chortitza+oak+tree+&repos=](http://archives.mhsc.ca/informationobject/browse:topLod=0query=chortitza+oak+tree+&repos=) March 24, 2020
- Cramm, Shelley S. (March 2018) These 5 trees take you on a biblical journey of grace and growth. Retrieved from [www.http://dallasnews.com/arts-entertainment/2018/03/23/these-5-trees-take-you-on-a-biblical-journey-of-grace-and-growth/](http://dallasnews.com/arts-entertainment/2018/03/23/these-5-trees-take-you-on-a-biblical-journey-of-grace-and-growth/) March 24, 2020
- Hennigan, Tom (April, 2017) Talking Trees – Secrets of Plant Communication. Retrieved from [www.http://answersingenesis.org/biology/plants/talking-trees/](http://answersingenesis.org/biology/plants/talking-trees/) March 27, 2020
- [List of Oldest Trees] (n.d.) Wikipedia. Retrieved from [www.http://en.wikipedia.org/wiki/List_of_oldest_trees](http://en.wikipedia.org/wiki/List_of_oldest_trees). March 24, 2020
- Living the Questions 2.0. (2013). Livingthequestions.com, LLC
- MacFarlane, Robert (2019) Underland: A Deep Time Journey. UK: Penguin Random House.
- Mccormick, Sam (August 2017) Gethsemane. Retrieved from [www.http://sermoncentral.com](http://sermoncentral.com) March 26, 2020
- McLeod, Jonathan (n.d.) The Cup. Retrieved from [www.http://sermonsearch.com](http://sermonsearch.com) March 26, 2020
- Mettinger, Tryggve (2007) The Eden Narrative: A Literary and Religio-historical Study of Genesis 2-3. Winona Lake, Indiana: Eisenbrauns.
- [Olive Trees (Van Gogh series)] (n.d.) Wikipedia. Retrieved from [www.http://3n.wikipedia.org/wiki/Olive_Trees_\(Van_Gogh_series\)](http://3n.wikipedia.org/wiki/Olive_Trees_(Van_Gogh_series)) March 26, 2020
- Owens, Virginia Stem (2005) And the Trees Clap Their Hands: Faith, Perception and the New Physics. Eugene, Oregon: Wipg & Stock.
- Paauw, Glenn (October 2019) The Story of the Bible Told Through Trees. Retrieved from [www.http://outreachmagazine.com](http://outreachmagazine.com) March 23, 2020
- Piper, John (n.d.) The Greatest Prayer in the World. Retrieved from [www.http://desiringGod.org](http://desiringGod.org) March 26, 2020
- Popova, Maria (n.d.) Brainpickings: Consider the Trees: Philosopher Marin Buber on the discipline of not objectifying and the difficult act of seeing others as they are, not as they are to you. Retrieved from [www.http://brainpickings.org](http://brainpickings.org) March 27, 2020
- Popova, Maria (n.d.) Brainpickings: Hermann Hesse on What Trees Teach us About Belonging and Life. Retrieved from [www.http://brainpickings.org](http://brainpickings.org) March 28, 2020

- Popova, Maria (n.d.) Brainpickings: Relationship Lessons from Trees. Retrieved from [www.http://brainpickings.org](http://brainpickings.org) March 28, 2020
- Reeve, James Josiah (n.d.) [Tree of Life]. International Standard Bible Encyclopedia. Retrieved from [www.http://biblestudytools.com/encyclopedias/isbe/tree-of-life.html](http://biblestudytools.com/encyclopedias/isbe/tree-of-life.html). March 25, 2020
- Ridd, Carl (March 1994) Environmental Stewardship: History, Theory and Practice: Workshop Proceedings. Winnipeg: University of Winnipeg
- Rodgers, Daniel (n.d.) Gethsemane. Retrieved from [www.http://sermonsearch.com](http://sermonsearch.com) March 26, 2020.
- Sleeth, Matthew, M.D. (April 2019) Reforesting Faith: What Trees Teach Us About the Nature of God and His Love For Us. New York: Penguin Random House.
- Sleeth, Matthew, M.D. (n.d.) What is the Significance of Trees in the Bible? Why did Jesus Die on a Tree? Retrieved from [www.http://christianity.com](http://christianity.com) March 23, 2020
- Taylor, Justin (September 2011) The Tree of Life and the Tree of the Knowledge of Good and Evil. Retrieved from [www.http://thegospelcoalition.org](http://thegospelcoalition.org) March 25, 2020.
- The Holy Bible (1984) New International Version. International Bible Society. Grand Rapids, Michigan: Zondervan.
- [Tree of Life (biblical)] (n.d.) Wikipedia. Retrieved from [www.http://en.wikipedia.org/wiki/Tree_of_life_\(biblical\)](http://en.wikipedia.org/wiki/Tree_of_life_(biblical)) March 25, 2020
- [Tree of Life] (n.d.) Wikipedia. Retrieved from [www.http://en.wikipedia.org/wiki/Tree_of_life](http://en.wikipedia.org/wiki/Tree_of_life). March 25, 2020
- [Trees and Religion: Worldwide Indigenous Religions] (December 2016) Arboriculture blog. Retrieved from [www.http://arboriculture.wordpress.com/2016/12/17/tree-and-religion-worldwide-indigenous-religions/](http://arboriculture.wordpress.com/2016/12/17/tree-and-religion-worldwide-indigenous-religions/) March 23, 2020
- Wilson, Dr. Ralph F. (n.d.) The Garden of Gethsemane. Retrieved from [www.http://Jesuswalk.com](http://Jesuswalk.com) March 26, 2020.
- Wohlleben, Peter (2015) The Hidden Life of Trees: What They Feel, How They Communicate. Munich: Ludwig Verlag

Ideas for Children:

Children's story – Three Trees? <https://bible.org/illustration/story-three-trees>
(not sure if this is age-appropriate)

Children experience the world through their bodies much more than adults. It might be interesting to do a “drama”, asking them to pretend that they are trees with their feet being roots planted (they can't move), and their branches (arms) blowing in the wind. If it is done in the sanctuary, the audience could pat their palms on their laps creating the sound of rain and the children could pretend they are trees getting wet, and then imagine their “roots” soaking up the water, etc.

Children also experience reality as very concrete, not abstract. Therefore they like to use all their senses, especially touch. It would be nice to have tree stumps with growth rings, leaves, acorns and pinecones, drift wood, etc., for them to touch.

Since they are small, they could imagine a huge tree growing out of such a small thing as an acorn or pinecone.

To appreciate all that trees give us, they could count all the things in the room that are made of wood (benches, piano, paper, etc), and extra things could be brought in that are made of wood (talking sticks by Henry Neufeld from Bethel Place, for example). A discussion could also be had about how animals use trees (children connect with animals)

Ideas for Adult Education:

- Bring in a speaker to discuss the situation with Winnipeg's trees as result of the October 2019 storm, and ongoing issues with disease.

<http://treeswinnipeg.org/>

[Saving Winnipeg's urban forest - YouTube](#)

[Storm Ravages Winnipeg's Trees - October 17, 2019 - Winnipeg, Manitoba - YouTube](#)

<https://www.treesaregood.org/>

<https://www.winnipegfreepress.com/local/planting-a-million-trees-would-cost-43m-report-567589172.html>

- Do a presentation/workshop that delves deeper into the science of trees, complete with videos, etc.

VIDEO - The Wood-wide web – how trees communicate underground
<https://m.youtube.com/watch?v=yWOqeyPIVRo>

VIDEO - fungi helps trees communicate:
<https://www.youtube.com/watch?v=tjt8WT5mRs>

VIDEOS - trees pump like a heart beat:
<https://www.youtube.com/watch?v=zUaT4CVXdbe>
<https://www.youtube.com/watch?v=kRFty9YZ344>
<https://www.youtube.com/watch?v=u1VV1miB6C4>
<https://www.youtube.com/watch?v=9-dicqNoODg>

VIDEOS - trees create their own rain:
<https://www.youtube.com/watch?v=kKL40aBg-7E>

SCIENTIFIC ARTICLE - Trees: guardians of the earth:
https://www.rainforestinfo.org.au/good_wood/trees_gs.htm#anchor308408