

EPIPHANIES

FROM THE ANGLICAN JOURNAL

Crisis in Creation



**“The apple trees were coming into bloom,
but no bees droned among the blossoms,
so there was no pollination and there would be no fruit.”**

Rachel Carson, Silent Spring

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COVER IMAGE: The Rev. Sheilagh Ashworth holds out a frame filled with bees from one of her hive boxes. PHOTO: SASKIA ROWLEY



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From regular flooding in Miami to unprecedented fires in the Arctic, climate change is making itself known everywhere.

MEUNIERD/SHUTTERSTOCK

By Matthew Townsend
SUPERVISOR, EDITORIAL

AND ALL WHO LIVE IN IT

Welcome to this first edition of *EPIPHANIES from the Anglican Journal*. The *Anglican Journal* continues in print—the publication you’re reading is an experiment, a first attempt to see how readers feel about efforts to translate the *Anglican Journal* into a digital periodical. While our aim is to provide printed material to readers for as long as possible, I think it’s important that the *Journal* explore new products and methods of reaching people. As Paul says to Timothy, we must carefully prepare to share the Word in all seasons.

As you can see, we’ve formatted this edition in the style of a magazine. This affords us a few opportunities otherwise unavailable in a newspaper format, including the ability to tell in-depth, long-form stories and to provide an underlying theme for our work. This format also allows us to supply a file ready for your home or parish printer, should you need a physical copy.

In this paper-saving issue, we’ve decided to venture into a meditation upon the environment.



**The earth is the Lord's, and everything in it,
the world, and all who live in it;
for he founded it on the seas
and established it on the waters.**

Psalm 24:1-2



When I was in my early 20s, I accompanied a friend to a screening of Al Gore's *An Inconvenient Truth* at a movie theatre in Orlando, Florida. In the course of the film, the former U.S. vice-president presented several simulations of sea-level rise expected to occur within the next century. One such simulation showed Florida's transformation into something unrecognizable—a wasteland seemingly 50 per cent of its previous size, in which every coastal city was inundated.

Seeing that Orlando would remain on high ground, I loudly proclaimed to the theatre, "We're fine." My commentary was met with laughter and jeers. In any event, I'm sure my interjection boosted few spirits in the midst of such grim prophecy.

The realities of climate change can be overwhelming—gallows humour, grief and denial are pretty natural reactions to the changes that are both here and ahead. But as people of faith, I believe we are called to respond prayerfully to something that seems unmanageably complex at best and irreversible at worst. Worldwide, the earth appears to be entering—or already coping with—environmental catastrophe. The earth is the Lord's, but humans have contaminated its surface. God breathed the air, but internal combustion

has changed its nature. God founded the seas, but we have filled them with single-use plastic. The psalmist reminds us that the earth and all its inhabitants belong to God—but living into such a call is more easily said than done. So far, our performance as a species leaves much to be desired. We have lived as if the planet is ours to dispose of as we please—and consequences are emerging at a frightening pace.

How, then, should the church respond? How should individual Anglicans respond—or repent? In this issue, we look at a few ways to answer these questions, from the practical to the theological. From bees to community gardens to melting permafrost to the relationship between Indigenous peoples and the land, we'll look at how Canadian Anglicans are relating to God's environment—and how they struggle with the looming spectre of climate change.

While the subject matter can be intense, we hope that you find this meditation provocative in thought, prayer and action. The answers won't be definitive, but perhaps they'll help us along the way—even if we don't agree on our contribution to the changes occurring around us. Let us hear what the Spirit is saying to us all. ■

By Linda Nicholls

PRIMATE OF THE ANGLICAN CHURCH OF CANADA

NO HIDING PLACE

Friends in Christ,

Over the past 50 years, we have been challenged to realize our share in the devastation of our planet. Given stewardship over creation (Genesis 1), we failed to notice when that “stewardship” had been subverted by economic forces, human greed and an attitude of complacency. We answered God’s very first call to us with neglect, disregard and denial.

We only began to pay attention when ecological devastation started to affect our daily lives. Today our failure of stewardship affects us through climate change. Shifting weather patterns warm the planet and oceans, breaking delicate links in our food chain and melting polar ice. This melt, which further confounds Earth’s weather patterns, is already devastating the livelihoods of Indigenous people in the North.

In my lifetime we have incrementally addressed environmental concerns: recycling, pollution regulations and low-energy appliances have all been presented as meaningful ways for us to address the warming of our planet. While helpful, I fear incrementalism has allowed us to hide—to pretend the damage is not as bad as it is and deny the radical changes we need to make in our personal and corporate lives. The time to hide is now over; there are no rocks left for us to crawl under, no shelter large enough to conceal us from this crisis in creation. The changes needed are urgent! The only time we have to change is now. What will we do to see and respond?

I pray we will listen to the call for action and begin today—in our own lives and in our parishes—lifting our voices in our communities. May God grant us courage to see and to act! ■

By Mark MacDonald

NATIONAL INDIGENOUS ANGLICAN ARCHBISHOP

GLOBAL DANGER, SPIRITUAL DANGER

There is a growing consensus that we have 10 to 12 years left to act on climate change. After that, it seems almost certain that the planet will face catastrophic changes that will threaten global stability and life itself. These predictions are made against a growing backdrop of political inertia and, as well, more and more evidence that the consequences of our environmental violations and injustice are already upon us.

With that, I may have lost the doubters and the distracted and those who would say that this is not an appropriate topic for Christian comment. But even if you ignore the scientific warnings, the moral issues surrounding humanity's relationship with the environment are just as pressing. The forces that are destroying your planet are destroying your soul.

The dominance of economic categories and thinking has become the primary reference for human behaviour and belief. It has become more important than either faith or morality in determining our way of life. The living God has become an adjunct to the comprehensive claims of the marketplace. Barely hidden in these claims are destructive forces that threaten our ecosystem and our life.

The economic-cultural patterns that dominate our lives and our planet are fuelled by a fever to find security in the possession of things that can never satisfy. There is a spiritual deception at the heart of this systemic evil. What the marketplace asks of us is in direct and dangerous competition with the claims that God makes upon our attention and loyalty.

The consequences of our spiritual sickness are carefully described in gospel teaching and Indigenous



wisdom. The remedy is also clear: we must turn around and we must sustain hope. We must act in a way that is as dedicated and comprehensive as our entrenchment to the culture of money.

Rarely does the choice between life and death become so clearly present. Rarely does the promise of God to be with us in our struggles for humanity and life seem so urgent. Let us choose life. ■



PHOTO: ROMAN MIKHAILIUK

IN THE NEWS

'TEN MONTHS AWAY FROM THE NEXT FLOOD': DELUGE NOW A FACT OF LIFE, OTTAWA-AREA PRIESTS SAY

By Tali Folkins

STAFF WRITER

As record-breaking floodwaters began to recede along the Ottawa River, priests in two of the hardest-hit areas were wondering when the next deluge will sweep the area—and how faith organizations can be better engaged when it does.

“The height of the crisis is done, but we were way above the 2017 flood levels, and they were a hundred-year flood,” said Canon John Wilker-Blakley, incumbent at the Parish of March, a three-point parish sitting on the south bank of the Ottawa River west of Ottawa. “I think we’re all beginning to feel that we really are only 10 months away from the next flood, since it’s happening so often now.”

The Rev. John Stopa, incumbent at the nearby Parish of Fitzroy Harbour, a two-point parish that also abuts the river, said frequent floods are now “a fact of life” for those who live in the area.

In April and May of 2017, areas around the St. Lawrence and Ottawa Rivers were hit by floodwaters at [once-in-a-century levels](#), according to a Quebec provincial government official. Two years later, this spring, those levels [were surpassed](#).

In 2017, Stopa said, the flooding affected parishioners in only one of the two points of his parish; this year it was both—and the effects were more severe.

“Entire streets were flooded out... [People] had their basements flooded; in some cases it went up to the main floor,” he said. “I’ve had parishioners who had to leave their homes for days and go and live with relatives. I had a warden who...had to sit there at his house and make sure the pump was working, and pray that there wasn’t a power outage or anything like that, but watch as cottages on either side, which were up on stilts or bricks or what-

have-you, were knocked off completely and flooded and gutted. So there’s a lot of devastation all around.”

Members of both parishes joined other local volunteers in helping build walls of sandbags around threatened homes. They also took part in a drive for gas coupons to fuel the gas-powered generators used by homeowners to power their pumps.

Stopa’s parish, which both priests said was the harder-hit, also held a drive for snacks to hand out to people battling the flood. Wilker-Blakley offered the parish hall of one of his churches up to local authorities in Kanata and the church’s labyrinth for anyone who wanted to relieve their stress. He also emailed other churches in the area about the need for volunteers and gas coupons.

Some are concerned that the floods of recent years—and those expected in years to come—may mean their property has lost much of its value, the priests said. But unlike the province of Quebec, which [has announced](#) partial buyouts of homes in flood plains and incentives to move to higher areas—Ontario has no plan to fund homeowners who now find themselves living in flood-prone areas and want to move.

Wilker-Blakley, who is also the ecumenical and interfaith officer for the diocese of Ottawa, said he’s been working with other religious leaders in the area to raise the profile of faith organizations as potential partners in disaster relief.

“It’s very haphazard right now—the city gets engaged, first responders get engaged, but churches and other religious communities tend to get called as an afterthought” when disaster strikes, he said. Sometimes their potential to provide help doesn’t end up being fully actualized because of this. For example, he said, members of a local Muslim association had been helping with relief efforts, but the association was not told about the need of homeowners for gas coupons.

“We need to get whatever credibility is necessary so that we’re on the early call list, because we have incredible resources to bring to a natural disaster,



Floodwaters menace a house beside the Ottawa River in Gatineau, Quebec, May 2017. Once again this spring, the Ottawa area was subjected this spring to record-setting floods. PHOTO: CLARKE COLIN/SHUTTERSTOCK

whether it's a tornado, a flood and so on," Wilker-Blakley said.

A tornado [touched down](#) in the Ottawa area June 2; a number of tornadoes [ravaged the area](#) last September 21.

Stopa agreed. For him, the problem extends beyond just natural disasters to social services generally.

"The (for lack of a better term) secular world—the other NGOs and the government—doesn't always see us as partners," he said. "And we can be, because we've got space, we've got volunteers, we've got access to other resources that they don't have. And we've got them easily at our fingertips, so we can do stuff quickly."

GENERAL SYNOD PASSES ENVIRONMENTAL JUSTICE RESOLUTIONS

By Matthew Townsend

SUPERVISOR, EDITORIAL

General Synod of the Anglican Church of Canada passed four resolutions on July 13 related to the church's public witness for social and ecological justice. Each resolution was on the synod's no-debate list—meaning the resolutions were presented, moved and then immediately voted upon. They all passed with limited opposition.

General Synod first passed "[A200 – Amendment to Public Witness of Social and Ecological Justice](#)

[Coordinating Committee Terms of Reference](#)," which adjusts the terms of reference by which said committee operates.

Afterward, the synod passed "[A201 – Single-use Plastics](#)" and "[A202 – The Season of Creation](#)," both of which recommend the church adopt new ecological practices. A201 encourages dioceses and parishes to curtail their purchase of single-use plastics, with the aim of ending their use by 2023 (with an exception for accessibility needs). It also asks individual Anglicans to reduce their reliance on such plastics, and calls upon the Anglican Church of Canada to "develop and promote resources aimed at supporting local efforts toward plastics reduction."

Likewise, General Synod resolved, via A202, to adopt the Season of Creation in the church as "an annual time of prayer, education and action from September 1 – October 4." It also encourages dioceses to engage with the season, developing initiatives, resources and suitably authorized liturgies for use during the season, and it directs the "Creation Matters Working Group to monitor, network and share Season of Creation initiatives through the General Synod website and in other ways."

Finally, by passing "[A203 – The United Nations Global Goals for Sustainable Development](#)," General Synod opted to encourage use of the UN's Sustainable Development Goals, which the resolution's explanatory text says "build on the successes of the Millennium Development Goals." ■



The Rev. Sheilagh Ashworth keeps three essential items with her: her hive tool, her pen knife and an oil stock, for anointing.

PHOTO: SASKIA ROWLEY

By Joelle Kidd
STAFF WRITER

FOR THE LOVE OF BEES

POLLINATORS ARE IN DANGER,
BUT SOME ANGLICANS ARE PUSHING BACK



**“The apple trees were coming into bloom,
but no bees droned among the blossoms,
so there was no pollination and there would be no fruit.”**

Rachel Carson, Silent Spring

There's an old custom called “telling the bees.”

The Rev. Sheilagh Ashworth is using her hive tool—a thin piece of metal with a right-angled hook at its end—to pry sticky bits of honey and ease languid bees off the top of an open hive box as she relays this piece of folklore.

“If an important thing happens in your life—there's a wedding, or a child is born, or someone died—you must tell the bees. If you don't, they'll leave.” You'll go to check on the bees, she says, “and they'll be gone! Completely gone! No note, nothing.”

Ashworth calmly prods at her hive. She wears no protective gear. The hive tool is one of three essential items she keeps on her person, she says; the other two are a pen knife and an oil stock, for anointing.

Ashworth is the rector of the parish of Loyd town, a two-point parish serving the rural towns of Kettleby and Schomberg, Ont. For the last seven years, she has also been an amateur apiarist, carefully tending to a colony of

about 40,000 honeybees.

Since she began beekeeping, Ashworth says, she has seen changes in the bees. “They don't build up as much as they used to build up, the amount of honey you get is way less than it used to be. And it's a lot more work. Proper pest management is a lot of work, where it didn't used to be before.”

The fate of the poor apiarist who neglected to “tell the bees” rings familiar today. Bees face a myriad of problems, including plagues of new diseases, parasitic mites and colony collapse disorder, a not-wholly-understood phenomenon wherein the majority of worker bees in a colony simply disappear.

Bees, along with many of the more than 700 native species of pollinators—including butterflies, moths, wasps, flies, some beetles and hummingbirds—found in Canada are facing decline. A study by York University researchers [recently published](#) in the *Journal of Insect Conservation*



PHOTOS: PIMCHAWEE, RUUD MORIJN PHOTOGRAPHER

found that the American bumblebee, a species once common to Ontario, is now facing “imminent extinction.”

Biodiversity in general is at risk. A [study](#) published in the journal *Biological Conservation* in April found that more than 40 per cent of insect species are threatened with extinction due to habitat loss caused by intensive agriculture and urbanization; pollution from synthetic pesticides and fertilizers; pathogens and introduced species; and climate change. And in May, a [United Nations-backed study](#) concluded a shocking one million species on the planet are threatened with extinction, a number higher than ever before in human history. Species extinctions are accelerating at an “unprecedented” rate due to human activity, the report found, with many species projected to go extinct within decades.

A number of environmental factors are behind pollinator decline, but many scientists identify neonicotinoids—commonly used pesticides containing nicotine—as a main culprit. Health Canada has

[announced](#) restricted use of neonicotinoid pesticides, cancelling some uses and limiting others. Harder lines have been drawn in the EU, which [banned neonicotinoids](#) altogether in 2018. However, the degree to which these restrictions should be drawn is contested, and other dangers—environmental shifts due to climate change and decreasing plant diversity—remain.

A quote commonly (though likely erroneously) attributed to Albert Einstein asserts that if the bees go, humans go soon after. People have been cultivating bees and harvesting their honey for centuries; a quick search indicates that honey is mentioned around 100 times in the Bible. But losing bees does not simply mean less of the sweet stuff. It also means that plants like apples, cherries, squash and certain field crops won’t be properly pollinated. It means crop failure and disruptions in the food chain. It means the eerie silence of empty air as blossoms go to seed.



**“Because of us,
thousands of species will no longer give glory to God
by their very existence, nor convey their message to us.”**

Pope Francis, Laudato Si’

“In a sense, this environmental moment is challenging us to rethink what it means to be human, at the species level,” says Stephen Scharper. An associate professor at the School of the Environment and the Department for the Study of Religion at the University of Toronto, Scharper describes his area of work at the intersection of ecology, religious ethics and the environment as an “overarching quest [to] look at the ecological impetus to a new ontology.”

It’s a heady subject, one Scharper comes by honestly, ever since his mother introduced him at an early age to the theology of French philosopher and Jesuit priest Pierre Teilhard de Chardin—“My mom was a big fan of Teilhard and this notion of the spirit at work in evolution and in the unfolding of the cosmos.” While studying for his master’s degree in liberation theology, he discovered Gustavo Gutiérrez and Latin American liberation theology, as well as Thomas Berry’s new cosmology. (Scharper holds a Master’s in Theology from the University of Toronto and a PhD in religious studies from McGill University, and is a senior fellow of Massey College and a fellow of Trinity College at University of Toronto.)

Yet concerns of the cosmos, for Scharper, intersect with some of its smallest inhabitants.

In 2016, Scharper gave a lecture entitled “Falling in love with the earth: Pope Francis, Bees, and the Quest for an Integral Ecology” as part of a University of Toronto

Mississauga lecture series. Scharper was inspired by the pope’s writing on the environment in his encyclical, *Laudato Si’*.

“In the encyclical...there’s a beautiful segment where [the pope] says, with each species that is lost, we lose that voice of the divine, that it’s a part of revelation,” says Scharper. “Others have said it’s like tearing out a page of scripture. The pope says we have no such right.”

A Christian understanding of nature as a revelation of God should make Christians very concerned about species extinction, Scharper says. He recalls hearing a homily by the then-Archbishop of Canterbury Rowan Williams in 2008.

“He gave a beautiful homily on species extinction. He referred to Noah and the ark and he said, ‘Imagine if Noah had not been faithful.... This is what we’re doing. We have broken faith by willfully allowing, and forcing, these species into extinction.’”

This idea ties into the Christian social teaching of the common good, Scharper says. “This is why corporate greed is antithetical to Christian social teaching and the common good tradition, because the common good demands that we protect bees for the sake of our food worldwide.”

There is a need to reframe our entire relationship to nature, Scharper suggests. In his book *The Natural City*, Scharper draws on a quote from Roman Catholic priest and ecological theologian Thomas Berry: “The universe



It is easier to clear-cut a forest when we think of it as a collection of objects instead of a communion of subjects, says Stephen Scharper, an associate professor at the School of the Environment and the Department for the Study of Religion at the University of Toronto.

PHOTO: AMELIA MARTIN

is a communion of subjects, not a collection of objects.”

“When we want to oppress something or destroy it, we turn it into an object,” Scharper says. If we say animals don’t have souls, it becomes easier to kill them; if we believe plants don’t feel, it becomes easier to clear-cut a forest. “This shows that there is a deeper interconnection, not only physically but psychically and spiritually.... For people of faith who are examining this, this is all part of the communication of the divine. For Tom Berry, the universe is the primary source or revelation—all our scriptures come from that experience of responding to this universe. That’s God’s opening gambit in self-manifestation: the universe.”

Solving the pollinator problem, and species extinction in general, is not “a matter of fine-tuning or shopping more consciously within a consumer culture,” Scharper says.

“This is an invitation to a revolutionary way of looking at the earth and each other as deeply connected, and not disassociated. That’s what this is about. It’s a reframing—morally, spiritually, culturally, economically and politically.”



**“My son, eat honey, for it is good,
and the drippings of the honeycomb are sweet to your taste.
Know that wisdom is such to your soul;
if you find it, there will be a future,
and your hope will not be cut off.”**

Proverbs 24: 13-14

On an azure-skied, sunny day in June, in a patch of tall grass next to Ashworth's hives teeming with honeybees, these problems seem far away.

Ashworth loads a smoker with pine hamster bedding and egg cartons, igniting it with a barbecue lighter. She pumps the creaky bellows and releases the scented smoke into the air. The smoke will get in the bees' eyes and block the pheromone receptors with which they communicate, calming and incapacitating them.

“OK, so a lesson about being with the bees,” Ashworth says. “They want us to get to a place where we're peaceful and kind of chill. That's definitely what they like.”

It's mating season, and the air is filled with a steady drone of buzzing. Ashworth eases the lid off of a hive box and removes the “queen excluder”—a metal grate that leaves space for regular-sized worker and drone bees to pass through but blocks the larger queen bee.

Apiary tools are charmingly simple, relatively unchanged since their invention. Hives, large wooden boxes filled with thin frames on which the bees vertically build their honeycomb, were invented in the 1840s, according to Ashworth. “The system we use now for bees was started by a Methodist minister who was depressed and hiding from his work,” she says. “He would come and hide with the bees... He noticed that they really liked three-eighths of an inch, a centimetre—when they built their comb, they always built it with that much space. So he invented this system so that you can remove the bees without having to kill them—you can take the honey

without damaging them.”

Ashworth pulls out a frame from the box. Inside is its own world, teeming with fuzzy, buzzing bodies. She points at different sections of the comb—covered cells filled with runny spring honey, glossy sections filled with pollen, some dotted with little white pupae and eggs.

Ashworth's bees are Buckfast bees, a breed which was, fittingly, saved from extinction by a Benedictine monk. Brother Adam of the Buckfast Abbey in England nurtured the only surviving colonies after a plague of parasitic mites caused a wave of colony collapse in the early 1900s. Today, the University of Guelph Honey Bee Research Centre has been able to keep and propagate Buckfasts.

Ashworth took some courses on beekeeping at the University of Guelph and has learned through trial and error over the last seven years. The priest, who grew up in Scarborough, always wanted to be a farmer, she says, but couldn't afford to buy land.

“I realized...that I need to be outside as part of my vocation, and do some tending of creation,” she says. “[With] beekeeping, you don't need to own the land—this is owned by a neighbor, and they're really happy to have the bees here. You can start small, you don't have to take care of them every day like sheep and other livestock.”

Hearing Ashworth speak to, muse about and bless her bees (“I always say a little blessing on my way out from them—God bless you, bees!”), a beekeeping priest seems like ever more of a natural fit.

“A bee colony is a super-organism. It's like



CLOCKWISE FROM TOP: Ashworth uses her hive tool; the smoker pumps out pine smoke, which incapacitates bees by blocking their pheromone receptors; Ashworth points out a swarm in a tree; a hive tool is a simple device with many uses; bee swarms typically happen in the spring, when a colony runs out of space or hatches new queen bees. The swarm is in the circle. PHOTOS: SHEILAGH ASHWORTH AND SASKIA ROWLEY



**“We fret and worry about everything that’s happening in the world,
and it feels like you’re powerless all the time.
And then you come to the bee yard.
That puts things back in perspective.”**

—Sheilagh Ashworth



Christians—one Christian is no Christian, right? Because we need community. One bee is no bee—that’s what makes it an organism...one organism with different parts. I’m sure St. Paul would have more to say about that.”

Bees reproduce and form new colonies by swarming. On this day, there happens to be a swarm of Ashworth’s bees hanging off a low tree branch, a giant clot of buzzing bees crowding together in a single mass.

It typically takes about an hour to get a swarm into a new hive, Ashworth says.

Swarming happens typically in the spring, when a colony runs out of space or hatches new queen bees. Then the old queen and a large group of worker bees leave the hive to start a new one.

Ashworth has a theory about queen bees. “The queen has maybe three or four days of mating, where she’s out, she flies for about three or four days, mates as much as she can. Then she comes back inside after these days of glory in the sun, she comes back inside and she’s in this dark box, and everything she makes looks like and behaves like sunlight,” she says. “The honey looks like sunlight. The wax makes the best candles that look just like sunlight. Everything that she does. The propolis and the pollen look like sunlight.

“Some people say [bees] are divine beings,” Ashworth adds. “I wouldn’t say they’re wrong.”

With the dangers facing pollinator species, beekeepers have had to adapt. While once prevailing

wisdom was the bigger the hive, the better, hives now must be smaller to protect against mites while overwintering, Ashworth says. Climate change has caused warmer winters and a higher chance of mites and mould. Local farmers in her area have stopped using neonicotinoid pesticides to help protect insects.

But taking care of her colony is a tangible way to help the earth, Ashworth says.

“We fret and worry about everything that’s happening in the world, and it feels like you’re powerless all the time. And then you come to the bee yard. That puts things back in perspective.”

For Eugene Park, it was learning about issues like colony collapse that led him to try his hand at beekeeping. “I’m a scientist, that’s my job. I’ve always had a fascination with nature—bugs, fish, animals, that sort of thing—so bees were just a logical extension of that,” Park says. He signed up for a beekeeping course at the botanical gardens in Toronto, where he lives. “Once I had taken that course and had my hands on a hive, I was absolutely hooked.”

Park is a parishioner at St. John’s Anglican Church Norway in Toronto. About four years ago, he says, his burgeoning interest in beekeeping dovetailed with the church’s desire to find programs that could include kids and young people. Since then, Park has been maintaining between two and four hives per year on the church’s property.



PHOTOS: COURTESY OF EUGENE PARK

“On the...west side of the church, there’s an old pathway that basically goes to nowhere anymore, and it’s fenced off, so it’s a really nice protected area,” says Park. With the beehives placed there, the bees have free rein to forage and pollinate over the church’s 35-acre cemetery.

Urban beekeeping involves much the same process as beekeeping in a rural area, Park says, though it is important to watch for swarms.

“Toronto is great, because we have a lot of greenery around the city. We think of bees going flower to flower, but in fact the majority of honeybees do their work up in the trees, because that’s where the pollen and the nectar [are]—there’s just a lot more available to them up in the trees,” he says.

The hives have been a great way to involve the church’s youth group and Sunday school, Park says. Last year, the youth group helped extract honey from the hives. The 80 pounds of honey the group extracted and bottled were sold at the church’s Christmas bake sale, raising around \$350 and helping to fund a youth-run Out of the Cold dinner event and some fun group activities like rock climbing.

This year, Park says the Sunday school kids will make candles with the beeswax from the hives and help garden in a raised bed recently built in the cemetery. “We’ll...teach them about growing vegetables and

pollination, sustainable food practices, that sort of thing.”

Park has also had to deal with challenges like adverse weather and mites. “That’s just part of the learning experience, and just through trial and error, I’ve lost colonies as well, in part to mites, disease—and then also we’ve had some bad winters where I’ve lost whole colonies just because of the weather,” he says.

“It’s really heartbreaking. You get really attached to them. I check the hives about every seven to 10 days, just go in there and make sure everything’s good. It’s really heartbreaking when you find your colony in early December [has] just completely died out, and it looked so healthy going into the winter—you know it’s probably because of the mites.”

Park, who is also a photographer and takes macro photographs of his bees, is drawn in by the complexity of nature. “There’s something so complex here that’s been created and has just maintained itself for really millions of years—they’ve been around as far back as the dinosaurs.

“It’s been really neat to see the connection the bees have had with our church community,” he adds. “It’s really brought people out and gotten them interested in the program, and [appreciating] nature.”

Not everyone is able to start their own bee colony. But for those concerned with the plight of pollinators, one



**“To make a prairie it takes a clover and a bee
One clover, and a bee.
And revery.
The revery alone will do,
If bees are few.”**

Emily Dickenson

way to help bees, flies and butterflies flourish is to create places for them to nest and, of course, pollinate. Bee-friendly gardens have thus become a popular way for anyone with a little green space to help.

Few know this better than Murray Hunter, an Anglican in London, Ont., whose philanthropic work is all about getting his hands dirty (literally).

“I did some research. I had what you’d call a sample garden, a prototype, for three years at a public allotment garden where I tried to see what plants would live without a lot of watering, that could stand up to weeds, and that would actually attract the bees,” Hunter explains. He kept bee counts and notes of what varieties of plants and colours of flowers most attracted pollinators.

This trial and error gardening was in service of Gardens4Bees, an initiative of Hunter’s charity, the Julia Hunter Fund.

“Our fund...is always looking for useful ways to contribute to people and the environment,” says Hunter. “It became clear, perhaps about five or six years ago, that bees in particular were in trouble, and there was public attention on that. And we thought, now there’s an area where we can make a contribution.”

The fund has always focused on gardening projects. “I knew I wanted to do something in my daughter’s

name, and the [London] Community Foundation advised me to take a very specific focus, that that would really help me in the long run, and I think that was true,”

Hunter explains. “Gardens—my daughter and I always had a garden.... I thought it would be something positive and cheerful and community-oriented.”

Hunter started the Julia Hunter Fund in 2005, in memory of his daughter, who was killed in a car accident when hit by a drunk driver. The fund’s impact is a testament to Murray Hunter’s character, says Diane Silva, director of donor relations for the London Community Foundation, which manages the fund.

“The Julia Hunter Fund...was clearly a healing opportunity for him. He was working with MADD [Mothers Against Drunk Driving] and was also in contact with the girl who tragically, unfortunately, killed his daughter through the accident.... One of the first initiatives [of the fund] was to plant a tree at a halfway house [for] people who are incarcerated for whatever reason, to rehabilitate them and reintegrate them back into society. So they planted a tree, and for him, forgiveness was basically allowing this person to heal and have a good life again, to have a second chance,” Silva says.

As Hunter began to think about Gardens4Bees, he realized he would need to find a group able to take on the task of maintaining a garden. “Gardens require people



and the environment working together. You can't simply plant something and it turns into a garden," he says. "We found, in our donations previously, that it's important that we give to a group, first of all, that has volunteers that can work and also that controls their own land."

It occurred to him that churches were a natural fit. "You've got a congregation, you've got a piece of land, and also a mission." He began reaching out to churches in the London area.

One of these churches was St. Luke's Worshipping Community—then called St. Luke the Evangelist, Broughdale—which is surrounded by the University of Western Ontario. The church also runs Luke's Place, a ministry to the 18- to 30-year-old population of mostly students in the surrounding neighbourhood.

"We had done some work on the building itself, and put a new entrance [in] to make it accessible. Once that entrance was in, it presented this area where we could put a large garden," says the Rev. Adèle Miles, priest at

St. Luke's. The garden would be a good way to make their space inviting for the church's neighbours and care for creation, the church thought.

In 2015, Hunter contacted the church about making their garden bee-friendly. "He said, 'Well, it's pretty good what you have, but you could do a lot better—these are some of the things you can do,'" recalls Miles. The Julia Hunter Fund provided some money to revamp the garden with more pollinator-friendly plants. "And when we were done...it turns out we had an award-winning garden," Miles says with a laugh. The church received the Judge's Choice award at Gardens4Bees' Bee Fest 2015.

The garden is now a leafy pollinator paradise, with bee-friendly plants like echinacea and thyme. "Actually, we had a bit of fun with it—we used a Biblical theme," says Miles. Among the 51 varieties of plants in the garden are St. John's wort, Jacob's ladder, Solomon's seal, praying hands hosta, burning bush and lemon



PHOTO: IYD39

balm—a reference to the “balm of Gilead.”

There are also two benches placed among the plants. The aim, Miles says, was to create an “oasis in the city.”

The church is surrounded by student housing, says Miles, most of which has no space for students to plant their own gardens. “We see people enjoying the garden, just using it as a place to reflect quietly...even if they’re just cutting through the property—sometimes I think they do that just so they can go through the garden.”

Visitors who come to the church for its monthly hospitality meal—a free breakfast offered in partnership with the Middlesex London Health Unit—often spend time sitting in the garden, she says. “I think that those kinds of impacts are hard to measure, but in addition to caring for creation and caring for the bees, we’re caring for our neighbours who may not have the luxury of the resources to have a garden for themselves.”

The church also hosts a STEM (science, technology, engineering and math) camp for kids during the

summer, which has used the garden as an educational tool. “They’ve found little voles in there, they’ve identified different kinds of bees and different caterpillars. They’ve used it as their outdoor laboratory.”

There is also a “bee motel”—a panel of small tubes that hold solitary bees that tunnel to nest—and a honeycrisp apple tree given to the church as part of an interfaith tree planting initiative. “That draws bees to it too, so the tree draws bees to the garden, and the garden draws bees to the apple tree,” says Miles.

“Part of the purpose of these gardens is educational... we want to let people know about what we’re doing and the impact it can have on creation,” she says.

At St. Anne’s Byron Anglican Church, a Gardens4Bees garden was planted last June.

“I can recall we were all out there in last spring’s late snowfall, trying to figure out where the garden was going to be,” says Hunter, who helped design it. They chose to keep a limited number of plants, making the garden

much easier to weed. “It looks very rich without being a lot of trouble. Our aim is always to make something low-maintenance as much as possible, and well-maintained,” says Hunter.

The garden is circular, with a circumference of 25 feet. Four stone paths cut through the garden, meeting in the middle, made of stone chosen “to coordinate with the beautiful stone of St. Anne’s,” says Lorna Fratschko. Fratschko is a parishioner and a member of the three-person committee who helped bring the garden to life.

The project appealed to her as a gardener and as someone who wanted to “contribute to God’s world and help support our pollinators.”

However, the community outreach provided by the garden has also been a pleasant surprise, she says. “We have two benches at the garden, and people walking by...love to look at that garden.” She adds, “When you’re working in the garden, whoever is walking by wants to stop and talk, for some reason.”

“I think it’s a very important thing for us to do, to green our spaces in whatever way we can,” says Miles. “I think whenever we encourage and tend creation, we’re doing the right thing. It’s not just about the bees—it’s about providing a garden for people to feel closer to God, a garden for people to find a Sabbath moment. A garden for people to just breathe more easily.”

According to Hunter, there are now more than 30 Gardens4Bees in the community. In addition to churches, a local legal firm and Growing Chefs, a non-profit urban agriculture project that serves children in the area, have started pollinator gardens with the help of the fund.

Hunter has “driven such awareness to the causes of pollinator gardens, and the fact that we need to return back to these beautiful spaces,” says Silva.

Gardens4Bees has also sparked donor interest, she adds. “He’s not all on his own doing this, he’s got people who want to contribute to his fund because they believe in his cause and they believe in the work that he’s doing.”

His vision has had a “ripple effect,” says Silva. “It’s contagious.”

The gardens have “helped bring people together,” says Peggy Sattler, NDP MPP for London West. “I think that it is wonderful... It has helped raise community awareness of the importance of environmental stewardship and the value of ecological and environmental initiatives in building community.”

Sattler first heard of Gardens4Bees shortly after she was elected in 2013, when she was invited to attend a recognition event for the Anglican churches who planted the first pollinator gardens for the project.

In addition to helping the environment, Gardens4Bees is “a model of how people can honour and remember a loved one that they have lost,” she adds. “This project... will allow Julia’s memory to live on for years while it is creating beautiful public spaces for Londoners to enjoy.”

Liberal MP for London North Centre Peter Fragiskatos also says he’s seen great community impact through Gardens4Bees. Fragiskatos has known Hunter for years, he says, and finds his work with the Julia Hunter Fund “incredibly inspiring.”

“He has endured the worst of personal tragedies, and yet has found a way to channel his grief into this form of advocacy. And not only is he honouring his daughter as a result, but I think he’s also sending out a profound message to our wider community about the fact that our environment matters, and we have to pay attention to things we’ve taken for granted in the past,” says Fragiskatos.



**Some, on the trail of these clues and examples,
Have said that the bees have a share in the divine mind, and have drunk
Of the substance of heaven; for God, they say, runs through
Every land and the sea's expanse and the soaring sky.**

Virgil, Georgics (translation Tali Folkins)

Reversing the damage done to pollinator species will take action on both the personal and political level, Scharper says—both through grassroots projects like pollinator-friendly gardens and by outlawing and restricting harmful pesticides like neonicotinoids.

As Anglicans are proving, churches can be a source of sanctuary for some of the environment's most at-risk insect species.

Scharper often takes his students at the University of Toronto up to the roof of the tower of Trinity College, which houses apiaries run by the university's Beekeeping Education Enthusiast Society (B.E.E.S.).

"It's beautiful honey," he adds. The bees buzz around the campus during the day, pollinating the flowers at nearby Queen's Park and Philosopher's Walk. "It's so sweet. It's a gentle sweetness."

On April 15, 2019, thousands of people in Paris—and around the world, via video—watched as the city's historic Notre-Dame cathedral was wrapped in flames. Belching dark smoke into the clear sky, the fire consumed the ancient church's wooden roof, ultimately causing its spire to buckle and fall.

While many watching the fire feared for the historic



The fire at Notre-Dame de Paris raised immediate concerns among apiarists: what of the bees?

PHOTO: LOIC SALAN/SHUTTERSTOCK

architecture and relics inside the church, Nicolas Géant had another worry: the bees.

Paris has become an [urban beekeeping mecca](#) in the past decade, with hundreds of hives installed on the rooftops of the city's oldest and most famous buildings: The Opéra Garnier, Musée d'Orsay, the Grand Palais and more.

Since 2013, Notre-Dame's roof has been host to a collection of hives tended by Géant, the cathedral's apiarist. In total, more than 180,000 bees live in the hives.

The Thursday following the fire, the French urban beekeeping company Biopic Apiculture confirmed the bees were alive with a post to their Instagram page. In the photo, a cluster of honey bees huddle on the outstretched neck of a gargoyle, a golden smear amongst the ridges of stone.

The bees had made it through the destruction. The fire hadn't reached the sacristy, 30 metres below the main roof, where the hives are kept, and the smoke, which is commonly used by beekeepers to sedate the insects, had simply put them to sleep.

"It is a miracle," Géant told [CNN](#). The bees were alive, sheltered by the enduring nooks of a centuries-old church. ■



Designs abound for cavity-nesting bee homes.

PHOTOS: CLOCKWISE FROM TOP: YUSIA, DMYTRO LOPATENKO, STEPHAN MORRIS, LORE PATTERSON / SHUTTERSTOCK

HOW TO PLANT A POLLINATOR GARDEN

Find the right plants

Plants and pollinators from the same geographical area have co-evolved to work well together, so look for native species of plants. Also look for single-bloom varieties of flowers, which pollinators can easily navigate because the flowers' nectaries—from which pollen and nectar are extracted—are exposed. Do some research on "host plants," specific varieties of plants that butterflies look for in order to lay their eggs. Honeybees find white, yellow, blue and purple flowers easiest to spot, while hummingbirds gravitate towards red blooms. Bees also love aromatic plants like lavender, and sunflowers pull in pollinators with their bright colour and impressive height. Research online and by connecting with local beekeeping and pollinator groups to learn more about what plants will work best in your ecosystem.

Plant with a plan

Pollinators require a constant source of food from spring to fall, so make sure to pick plants that will yield a continuing sequence of blooms through the growing season. When planting, group species together in the garden so that bees, which tend to collect pollen from one type of plant at a time, can spot their food sources easily and efficiently gather pollen.

Go natural

Pollinators are extremely sensitive to chemicals, so look for organic or pesticide-free plants, try to use natural fertilizers like compost, and do your weeding by hand. Don't worry about having the most neatly manicured lawn on the block—dandelions provide essential nutrients, and leaving fallen trees in your yard provides a home for cavity-nesting bees. Avoid excessive raking or tilling in case of ground-nesting pollinators—leaving some fall leaves on the ground can help pollinators overwinter. Patches of bare soil can also host bee species that tunnel into the ground to build nests.

Provide water and shelter

You can build nesting boxes for cavity-nesting species such as Mason bees yourself, or purchase them from your local garden centre. Pollinators also need a source of fresh water. Roll out the welcome mat by filling a shallow dish with water and marbles, where insects can perch to collect water without drowning. Just be sure to change the water regularly.

Sources: [Landscape Ontario](https://landscapeontario.com/pollinator-friendly-garden/) (landscapeontario.com/pollinator-friendly-garden); [David Suzuki Foundation](https://davidssuzuki.org/) (davidssuzuki.org)

By Matt Gardner

STAFF WRITER

CLIMATE CHANGE IN THE NORTH

**'EXISTENTIAL THREAT' RAISES CALLS FOR
CHURCH LEADERSHIP, VISION IN TACKLING CRISIS**



Graves in the northern Arctic, as in most places, are dug six feet deep. Unlike areas further south, the ground at these high latitudes is frozen below a certain point. Ground that is frozen for two or more years is known as permafrost.

When David Parsons returned to the Arctic in 2003 to serve as incumbent at the Church of the Ascension in Inuvik, N.W.T., his duties included preaching at funerals. It was prior to these funerals that he first began to notice a disturbing sight: the graves that had been dug had begun to fill with water. ▶

“Being the canary in the North, we’ve seen the change in the environment,” Bishop David Parsons says. “It’s not a theory to us.”

PHOTO: CONTRIBUTED



▶“When I’m going through the graveyard to bury somebody, I would have to jump down into the grave and bail it out, because of the water,” recalls Parsons, now bishop of the diocese of

the Arctic.

“You try to do that before the family got there, but if you’re coming right from the church, other people may have done it,” he adds. “But it wasn’t uncommon to have to do that at times with some of the graves, and I’ve done that in Aklavik, in Tuk and Inuvik.... We definitely see a change in the permafrost.”

The thawing of permafrost is one of the most significant effects of climate change. Scientists have warned that the thawing permafrost could have dire ramifications by causing a feedback loop that will further accelerate global temperature rise. But in the Arctic and Yukon, the growing impact of climate change is already a reality—one that Anglicans throughout these regions are bearing witness to.

On May 19, Archbishop Fred Hiltz, then-primate of the Anglican Church of Canada, blessed the opening of a new Anglican church, St. Luke’s, in the community of Old Crow, Yukon. That same day, the Vuntut Gwitchin First Nation of Old Crow declared a climate change emergency.

The Yeendoo Diinehdoo Ji’heezrut Nits’oo Ts’o’ Nan He’aa Declaration points to drastic changes in the land and animals in Old Crow and the surrounding territory of the Vuntut Gwitchin, and the fact that annual average temperature in the Canadian North has increased by 2.3 degrees Celsius. It calls on communities, governments, organizations and movements to utilize all their resources towards efforts to prevent the rise of world temperatures

to more than 1.5 degrees Celsius above pre-industrial levels—the benchmark identified by the Intergovernmental Panel on Climate Change (IPCC) to reduce catastrophic effects on the global ecosystem, human health and well-being.

Lorraine Netro, a member of the Vuntut Gwitchin First Nation and St. Luke’s Anglican congregation in Old Crow who serves on the chief’s committee for climate change and the environment with the Assembly of First Nations, has seen the negative effects of climate change in her community firsthand.

Netro is a longtime advocate for protecting the calving grounds for the porcupine caribou, which are located in the Arctic National Wildlife Refuge. The porcupine caribou are vital to food supplies for the Vuntut Gwitchin.

“We depend solely on the porcupine caribou herd for our food sustenance, and for the past number of years, we haven’t seen the caribou go by, nearby our community, like it used to,” Netro says. “So we don’t get our food harvest like we used to, and that causes food insecurity.”

Like many other animals in the North, porcupine caribou subsist on lichen, a slow-growing plant that forms a surface over rocks and trees. Because of warming temperatures, snow that used to stay frozen now melts and re-freezes, forming a layer of ice over the lichen that makes it difficult for the caribou to eat.

Each spring, the porcupine caribou pass through the area near Old Crow in April, May and June, a period known as the caribou days. In recent years, caribou numbers have dwindled. The 2019 caribou days marked the first time that the porcupine caribou herd had come through the community in meaningful numbers in four years. ▶



Porcupine caribou subsist on lichen, a slow-growing plant that forms a surface over rocks and trees. Snow that used to stay frozen now melts and re-freezes, forming a layer of ice over the lichen that makes it difficult for the caribou to eat.

PHOTO: MIKE BOYLAN USFWS/PIXNIO



►The changing climate impacts food security in other ways for the Vuntut Gwitchin. Hunters and trappers, who relied on their traditional knowledge of animal migrations and weather patterns, now face greater uncertainty due to changes in these patterns. Safety is also an issue as ice disappears sooner in the spring.

Meanwhile, fishers have seen salmon numbers go down. The Clayoquot Biosphere Trust's 2016 Vital Signs report noted that rising air temperatures cause declining water levels in rivers and higher rainfall precipitation during cooler seasons, causing more frequent flooding and increased erosion in salmon spawning habitat—driving down the number of salmon who return to rivers.

With Old Crow being a fly-in community, the Vuntut Gwitchin must rely more on food transported by air into the community, which means higher food prices. But Netro says that these changes also have a spiritual effect on her people.

"We live a traditional and cultural way of life," Netro says. "Our lifestyle depends totally off the land and our rivers. The Vuntut Gwitchin people [are] spiritually connected to our land, animals and waters."

"When we don't harvest caribou for one spring or one



“When we don’t harvest caribou for one spring or one fall, that impacts us as a people. When you take away one key aspect of our cultural way of life, that has a domino effect on our emotional, spiritual well-being.”

—Lorraine Netro



fall, that impacts us as a people,” she adds. “When you take away one key aspect of our cultural way of life, that has a domino effect on our emotional, spiritual well-being.”

Conversely, when the caribou came back this spring during the May long weekend, “the spirit and energy and everyone in our community was just lifted.”

Chief Dana Tizya-Tramm is unequivocal about the danger that climate change poses to the Vuntut Gwitchin.

“This is an existential threat for our people,” he says. “But we share this threat with the world.... The world is telling us that it’s come to a point of break. The environmental systems we’ve stressed, the natural resources we’ve stressed, our manipulation of chemicals and how we flow them through our environments, have stressed the world to the point where we are now not dealing with a climate issue. We are dealing with a people issue.”

While the Vuntut Gwitchin have raised the alarm with their declaration of a climate emergency, the ramifications of climate change have left their mark on all people living in the North, as Parsons can attest.

The ministry of Parsons in the Arctic stretches back

to 1989, when he began a five-year term as incumbent at All Saints Church in Aklavik, N.W.T. After 10 years as an evangelist with the Church Army in New Brunswick, he returned to the North for a stint as incumbent at the Church of the Ascension in Inuvik. In 2012, he was elected bishop of the Anglican diocese of the Arctic.

During that time, Parsons has noted a variety of changes in the Arctic climate, from warmer temperatures to differences in snowfall. Such anecdotal observations reflect conclusions from the IPCC’s latest report, which describes rising temperatures leading to the further thawing of permafrost, reduced sea ice and changing precipitation patterns that threaten Arctic infrastructure and services.

For example, all buildings in the North are usually built on stilts, akin to telephone poles, dug three to six metres into the ground. In the past, residents would dig a hole, stick a wooden post in and wait for the ground to re-freeze, which would provide a solid foundation for the building.

“Nowadays, because [of] the permafrost, a lot of those poles are experiencing dry rot,” Parsons says. “Now to build, you have to use metal pipes, and the metal pipes are put down deep into the permafrost.... That’s very



Melting permafrost has already cost cities like Dawson City, Yukon, hundreds of thousands of dollars—as buildings slant, pipes burst and roads crack, according to reports published by the CBC. PHOTO: PI-LENS/SHUTTERSTOCK

expensive.... If you have 30 holes, it could be \$1,000 [per pipe] in some places at the lowest level. That would add an extra \$30,000 onto your building.”

A 2016 study by scientists in Siberia warned that buildings would start to collapse by the mid-2020s as a result of the thawing permafrost, which makes the ground unstable and can lead to landslides and coastal erosion.

Roads are also at risk, as the shifting of ground due to the thaw can cause highway asphalt to buckle, resulting in large bumps in the road.

“A lot of highway crews...put in a road, and from Newfoundland across the country, you can see then parts where the road has swelled up, where it’s frozen or melted, and it shifts the pavement up or down,” Parsons says. “In our roads in the North, you can see those areas where it’s a lot more than what is considered normal.”

Because many areas of the Arctic do not have any proper roads or are otherwise inaccessible, drivers there have long travelled on frozen ocean, following routes that were safe in the past. But with shifting currents, warming temperatures and dwindling ice cover, the ice that vehicles travel on often proves more precarious than drivers expect.

In some cases, the consequences can be deadly—a reality that can be hard to grasp for people who live further south.

“Just imagine driving down the Don Valley Parkway [in Toronto] and a number of cars disappear in sinkholes. I think that would cause a bit of a problem, right?” Parsons says.

“A number of years ago, we lost one of our deacons. He and his wife were well-seasoned travellers, and they went through the ice. I’ve heard of stories of people going

through it thinking that they're on what we call multi-year ice, and it was year ice, and so they've gone through [the ice] with their snow machines."

Despite such tragedies, Parsons points out that for people living in the North, the effects of climate change are often complex. With the melting of polar ice, for instance, parts of the Northwest Passage that were previously inaccessible to ships are now navigable, providing an influx of new jobs. For example, some Arctic residents now work on cruise ships.

Nevertheless, the negative effects of climate change have compelled communities to seek solutions to rising global temperatures, as evidenced by the declaration of a climate change emergency in Old Crow. Precisely what such a role might look like, however, garners different responses among different communities and individuals.

In Old Crow, the Vuntut Gwitchin have taken on what Tizya-Tramm calls "the largest solar energy project in the circumpolar north," in the form of a 940-kilowatt solar array that the community will own and operate for 25 years.

Old Crow previously flew diesel into the community to be burned in a diesel generator, making it one of the highest carbon emitters per capita in the Yukon. The new solar array aims to satisfy 24 per cent of the community's energy needs, allowing Old Crow to turn off their diesel generator from early March to late September. The Vuntut Gwitchin are also working on feasibility studies for biomass and wind energy.

Tizya-Tramm hopes that the climate emergency declaration will serve as a stepping stone towards a pan-northern or pan-Arctic climate accord. He sees the church as a key ally in supporting the call to action outlined in the document.

"When we stand with the church, it helps legitimize things," the chief says.

"When we label each other, it devolves the conversation, because one person is industry, the other is an activist," he adds. "Just right there, it sets up biases and an uneven ground.... But when the church is involved in this as well, that is the greatest equalizer, as an activist and an industry [person], they both go to church.

"There's a large vacuum here, and I believe that climate change offers all of us an opportunity of reflection, cohesion and moving forward. But I also see a large opportunity here for the church to be a leader in

all of this.... Their teachings in general, I believe, all very much pertain to this—respect for one another, respect for creation and a larger context in which we all fit into, not just an individual pressing their will upon creation."

Parsons believes that the Anglican Church of Canada must pray and support investments into technology to facilitate the transition away from fossil fuels towards sustainable energy. He decries what he calls a lack of "vision" in the church.

"Being the canary in the North, we've seen the change in the environment," he says. "It's not a theory to us. But to be thinking stupidly, if we just cut out Alberta gas for instance, or northern oil and natural gas, that that's going to fix something—we're light years away from what needs to be done. But light years can happen in one year."

He cites the telephone as an example of how quickly technology can change, from landlines and rotary telephones to the smartphones of today.

"The Anglican Church of Canada can pray and support people from all walks of society.... We're supposed to pray for our governments, pray for the engineers and other scientists who are working diligently trying to come up with solutions, support people in all walks of life to be able to be moving in that direction," Parsons says.

"But my part is to try to encourage people that there's hope—that there is a God that is interested in us, and he calls us to walk by faith to be able to look at things that do not exist as if they're possible to exist.... The Anglican Church of Canada can encourage young people to study, study really hard to learn and seek solutions and to invent things that do not exist yet."

"We need to encourage scientists to keep going," he adds. "It's no simple thing. But it's an act of faith, believing that what is not possible is possible. I don't mean to be critical. I mean to be encouraging to others. For us up here, sometimes you've just got to deal with things. And the Arctic people have always been innovators."

For Netro, the call to action is succinct, based on concern for those who will come after her.

"People need to wake up and make it a priority, because what kind of land are we going to leave for our future generations?" she asks. "It's my responsibility as a grandmother to do whatever I can today." ■



One parish's green audit called on it to switch from using Styrofoam cups. But in the end the parish decided against this, Rois says, because they felt the Styrofoam cups were "part of their congregational culture."

PHOTO: REDCOM PRODUCTIONS

By Tali Folkins

STAFF WRITER

O GREENEST CHURCH?

GREEN CHURCH MOVEMENT FINDS SUCCESS STORIES MIXED WITH RELUCTANCE, 'NEED FOR EDUCATION'

In 2018, Canon Judy Rois, adjunct faculty member of the University of Toronto's Trinity College and executive director of the Anglican Foundation of Canada, undertook a research project with Daphne Rixon, a business professor with an expertise in accounting at St. Mary's University in Halifax, and Alex Faseruk, a retired professor of business at the Memorial University of Newfoundland. The three wanted to evaluate the effectiveness of "green audits"—environmental friendliness assessments of their buildings—performed, with financial help from the national church, at nine Anglican parishes in 2013.

As part of their research, they asked a series of questions of the rector or another parish member on various aspects of its audit, such as whether the parish agreed with the audit's recommendations, what were its environmental and financial effects and whether the parish would be willing to continue with the green audit program.

Their findings—to be published in the *Journal of Accounting and Finance*, a U.S.-based business journal—showed mixed levels of enthusiasm for the audits, Rois says. In some cases there were a number of greening successes—churches switched to higher-efficiency and longer-lasting LED lightbulbs (in one parish this added up to 220 bulbs), and away from single-use plastics, for example. Some aging boilers were replaced. One parish considered selling excess power generated by the solar panels it installed. But other churches responded to the audits less

enthusiastically. Not all adopted their recommendations. One parish's green audit called on it to switch from using Styrofoam cups. But in the end the parish decided against this, Rois says, because they felt the Styrofoam cups were "part of their congregational culture."

Of the nine parishes surveyed, seven reported no desire to continue with the green audit program because they believed they had already benefited from it as much as they were likely to. Rois also believes it's noteworthy that only nine parishes did the 2013 audits—even though the national church originally requested that 40 parishes complete them.

"We've got 1,600 parishes. Forty were asked to please do this...and nine—nine—did it," she says.

The handful that responded comprises a small fraction of total Anglican parishes in the country, making it difficult to generalize about the state of the Canadian church; and in any case, making a judgement on Canadian Anglicans' eagerness to green their buildings was outside the scope of their study, Rois says.

Nevertheless, its findings—as well as the apparent reluctance of parishes to take part in the audits in the first place—leave her personally with difficult questions.

"The first thing I'd say is it's a very small sample. But it's the only sample we have. So if we were to put a judgement on it, which we don't, as authors—but if we were—we would say, 'Why? Why aren't you doing this?' It's a very important issue. The Anglican church is the third-largest church in Canada...Why nine parishes?"



Since 2012, St. Mark the Evangelist Anglican Church in Ottawa has had solar panels, forming a cross, on its roof.

PHOTO: ST. MARK THE EVANGELIST ANGLICAN CHURCH

When greening gets thorny

Rois isn't alone in her concern. When it comes to greening their buildings, Canadian Anglicans face a number of challenges—including a lack of awareness about the need for change and the difference that their own actions could make, say others who have worked closely in the area.

Julia M. Roberts, a retired environmental technologist and member of the national church's Creation Matters Working Group, did energy audits for a number of Vancouver-area churches in 2002. In the lower level of one church, she discovered a large hole through which cold air was freely entering the building.

"People were bringing blankets to church to stay warm, and all it needed was a bit of insulation and a bit of closing off this area," she says.

Because she moved away from Vancouver shortly thereafter, Roberts says she's unsure to what extent the churches implemented her recommendations. But she says she's found aspects of the church greening process discouraging. She also says she once met another energy auditor who said she found it a waste of time to do the audits for churches, because they tended not to implement her recommendations.

Recent years have seen a number of Anglican churches in Canada take big steps toward renewable energy. Over the winter of 2006-2007, the parish of St. Andrew and St. Mark of Dorval, Que., [installed](#) an energy-saving geothermal heating and cooling system. Various

churches across the country have begun harnessing the power of the sun: [All Saints' Anglican Church](#) in Collingwood, Ont.; the convent of the [Sisters of Saint John the Divine](#) in Toronto; [Trinity Anglican Church, St. Mark the Evangelist Anglican Church](#) and the [Anglican Parish of Huntley](#) in Ottawa; the [Church of St. Stephen the Martyr](#) in Thunder Bay, Ont.; [All Saints' Anglican Church in Mission, B.C.](#) and [St. David of Wales Anglican Church of Vancouver](#); and tiny [St. John the Divine](#) of Quick, B.C., just to name a few. By 2017, three parishes in the diocese of Ontario had not only installed solar panels but were [selling excess power back to the grid](#).

While Roberts says she knows there have been some greening success stories among Canadian Anglican parishes, she also has the impression that many congregations feel overwhelmed by what they see as more immediate challenges. They're mostly volunteers with other demands on their time, and they may not necessarily be skilled in how to maintain a building.

"Everybody's clinging on by their toenails trying to keep their church running, and they can't find the time or the energy to look at it," she says.

Some congregations fear the extra expense—even though the greening of their buildings typically saves parishes money, she adds.

"There may be a lack of awareness as to how this could be a contribution to mitigating climate change, and also that, ultimately, it should reduce operating costs," she

says. “I think there’s still room for education about this.”

Rois’s research group reached similar conclusions.

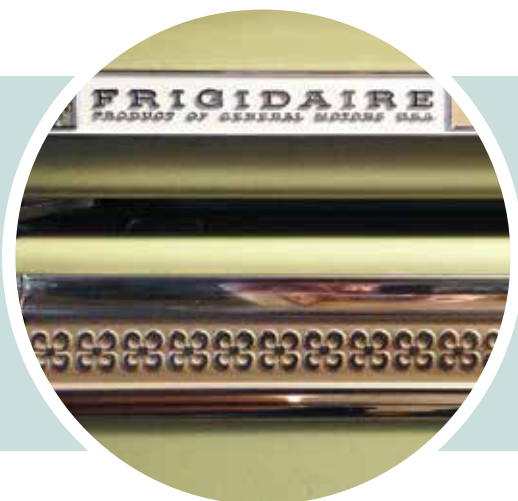
“Parishes are so busy with capital campaigns, and raising money, and balancing the budget and everything else that it’s not necessarily top-of-mind,” she says. “A lot of people said, ‘My small action is not going to really be effective.’”

Some priests reported a lack of enthusiasm for change among their congregations, Rois says. But some reluctance to greening might be coming from the priests themselves, she adds.

“You know, if you go broad you could go crazy, and I

think some clergy feel it’s too big: ‘There’s homelessness, there’s addiction, there’s climate change—there’s so many things, I can’t begin to face it all. So I’m just going to take care of my own parish, baptize the babies, bury the dead, do Sunday services and I’m done,’” she says.

Her group’s paper concludes that “to date environmental auditing has not yet proven to be effective in the programs of the [Anglican Church of Canada].” Its recommendations include a before-and-after form for parishes to use to clearly specify how their energy consumption and expenses changed after they implemented the improvements specified by the audits.



“If you’re still rockin’ an avocado-green fridge in the kitchen from the 1970s, it’s [financially] killing you, it’s killing the environment,” he says. “Stop using it. Unplug it and drag it to the curb.”

—Stephen Collette

PHOTO: MITCHELL HAINFIELD/Flickr

Low-hanging avocado-green appliances

The audits studied by Rois’s group were offered as part of a green audit program of the Anglican Church of Canada from from 2013 to 2016. Under the program, the national church provided grants of up to \$1,000 to pay for two-thirds of the cost of green building audits done in cooperation with the [Greening Sacred Spaces](#) initiative of Faith & the Common Good, an interfaith organization aimed at helping religious communities in Canada become more sustainable.

The program was ended for a number of reasons, says Ryan Weston, lead animator of public witness for social and ecological justice at the Anglican Church

of Canada. One is that there has been a burgeoning of efficiency-boosting incentives offered by numerous other organizations across the country.

“A national program didn’t seem like the best fit for the array of incentives that might be available,” Weston says. “Each province might have their own program of supports, and then individual municipalities and even different utility providers may also have additional programs and incentives. Even within a single diocese, then, there might be several different options, including possible low-cost energy audits.”

The program also involved flying someone in from

Toronto to do the audits, he says, meaning both an increased carbon footprint and a limit to the number of parishes that could take part.

The national office, he says, is hoping to put together tools to help dioceses and parishes take advantage of energy efficiency incentives in their regions.

Stephen Collette, building audit manager for Faith & the Common Good, says church members aren't always aware that it's often the simplest things that can make the most difference to the environmental sustainability of their house of worship—and save their parish the most money. Greening a church isn't always about installing solar panels or other big projects, he says—in fact, switching to solar or some other renewable form of energy generally shouldn't be the first priority of a church that wants to be kinder to the earth.

"It's the last thing you should do from an energy perspective," he says. "You need to get your energy management under control. You need to be Energy Star everything: LED lights...power bars. Making sure the minister's actually turning the computer off when they leave. You need to have all that under control before you do the most expensive thing possible.

"It's always about getting the low-hanging fruit first."

This is partly because these easily achievable goals tend to have an immediate impact that can be a great morale-booster for parishioners.

"If I can empower volunteers to do a couple simple things on a Saturday morning, that's awesome," Collette says. "Now they're like, 'Oh, that wasn't so hard.' 'Oh wow, I notice the difference.' 'Oh—you know, that was great.'"

"We need to build that capacity, and that understanding, one step at a time."

Conserving energy in these ways—saying goodbye to an energy-guzzling appliance, for example—can mean immediate benefits both to the environment and a church's finances, he says.

"If you're still rockin' an avocado-green fridge in the kitchen from the 1970s, it's [financially] killing you, it's killing the environment," he says. "Stop using it. Unplug it and drag it to the curb."

Other relatively simple but effective measures include air sealing and weather stripping around windows and doors, he says, and installing setback thermostats, which you can program to reduce heating and cooling in spaces when no one's around.



"Oftentimes in older buildings there's a door up into the belfry that's typically propped open, and the heating dollars are literally escaping out the building. So you can take your offering plate and walk up to the attic hatch and just throw it at it, because that's what it's costing."

—Stephen Collette

PHOTO: LANE V. ERICSON

The anatomy of physical plants

Once a church that wants to move to solar has undertaken measures like these, and has reduced its electricity consumption, it may find it also needs to install fewer solar panels, he says. But until it has taken these steps, installing panels might not be advisable.

"If you can make it less than 11 years and even better, less than a seven-year payback, it's better than a GIC. Slam-dunk, go put panels on your roof. But: it's always cheaper to do all the other stuff first and foremost," he says.

Another important part of the awareness that congregations need to build, he says, is of the nature of their buildings themselves—many of which were built long ago, with features very different from the buildings most of us are more familiar with.

"Because they perform differently, it's important to understand how they work, how they fail and where the opportunities lie to improve them," he says. "I think the challenge is ... we don't have people managing the buildings who have skills and knowledge of how the really old-timers used to do it, like 100 years ago. And as such, we try to apply modern fixes that are inappropriate to the building typology."

This, he says, is one reason why it can be so beneficial to churches to have a green audit done by a professional.

Sometimes a solution that's advisable in other buildings is not a great idea for a church. For example, Collette says, insulating a stone building such as a church could cause the mortar on the outside to freeze and crack in winter.

On the other hand, a process that might not be necessary in any other type of building could boost a church's energy efficiency dramatically. Most people are unaware that church steeples with lots of cracks and other holes for air to escape operate essentially like chimneys in wintertime, all-too-efficiently drawing heated air up and out of the building.

"Churches...literally are the tallest chimneys in town. And oftentimes in older buildings there's an attic hatch or a door up into the belfry, or a door into the attic that's typically propped open, and the heating dollars are literally escaping out the building, because the hot air is rising, and the greater the chimney, the greater the suck. So you can take your offering plate and walk up to the attic hatch and just throw it at it, because that's what it's costing," he says.

"Air sealing is more important in an older building than insulation is. You should still insulate, of course, where possible, but air sealing especially the attic hatch, especially up into the towers, the attics, the belfries, is very critical."

Finding a lifegiving path

Churches that have done what they can to both reduce consumption and generate their own energy might find themselves able to go off the grid altogether.

This, at least, is the goal of the Anglican Church of the Incarnation in Oakville, Ont. Last February, [it switched from natural gas to a geothermal system](#), which heats and cools the building with the help of more than 2 km of underground pipes that exchange heat with the ground. The retrofit made it the first faith community in the Halton Region—which includes Oakville and some surrounding towns—to have made the switch to geothermal energy. Once it has the geothermal system

paid for, the parish's next step will likely be to install enough solar panels on the church's roof to completely fill its demand for energy—and possibly even sell excess to the grid to fund mission, says its rector, Archdeacon Michael Patterson.

Being good stewards of creation, Patterson says, has always been part of the ethos of the Church of the Incarnation, which was founded in the late 1980s. Over the years the parish has undertaken a range of environmentally-friendly measures, including completely changing over to LED lighting, insulating, sealing and installing energy-efficient windows. The



Mac Morrison, a parishioner at the Church of the Incarnation in Oakville, Ont., switches on the church's new geothermal system.

PHOTO: CONTRIBUTED

immediate impetus of its switch to geothermal was the failure in 2015 of one of the units in its existing heating system; Patterson felt it would be a good opportunity to float the idea of the church switching to a greener system.

There was some pushback against the geothermal system, he recalls, from church members.

"There were vocal opponents because of costs," he says.

In the end, concerns about the environment prevailed.

"The big thing was for us was the risk that we were taking paled in comparison to the risk of not doing something in regards to the climate—that by doing nothing we are exacerbating and contributing to the environmental disaster that we're all confronted with," Patterson says. "This was really at the core of what ultimately took us over the top, that people recognized we need to make big choices, big decisions, take big risks in order to mitigate climate change."

The church also recognized that by switching to geothermal, the church could serve as a role model to

other community organizations.

“We wanted to be a leader in our area, providing examples of the things that can be done by small groups of people,” Patterson says.

The project ended up costing the parish of about 165 families around \$430,000—about \$270,000 of which it covered through a fund-raising campaign and another \$100,000 through a bank loan. The parish estimates the new system will mean a 30 per cent reduction in its utility bills, and that it will have recouped the cost of the system in 12 to 15 years, Patterson says.

What is it that makes some parishes resistant to green their churches, whereas others seem to embrace the process enthusiastically? Some—including Rois and the co-authors of her study—say demographics could be a factor; one interviewee cited in the paper said elderly congregants tended to lack a desire to engage in the process. (The same interviewee also reported that middle-aged congregants were often too busy in other activities inside and outside the church to give themselves over to environmental action—and that youth members were more involved in other forms of activism.) Rois says it’s possible that some—not all—elderly people aren’t used to seeing creation care as a high priority, because it wasn’t an important focus of concern in their younger years.

The Rev. Marian Lucas-Jefferies, another member of the Creation Matters Working Group and coordinator of a

green group in her diocese, the Anglican Diocese of Nova Scotia and Prince Edward Island Environment Network, agrees.

“It’s so foreign to people’s experience, especially if they’re older,” she says. It’s partly for this reason why Lucas-Jefferies says she’s been greatly encouraged by a recent [burgeoning of contacts](#) between her diocese’s group and a number of young environmentalists in the area. These growing relationships, she says, in many cases originated with churches lending local green groups space for meetings, but it has grown to include attendance by some ecology-oriented people on church-organized retreats.

“I’m hoping it will make people who aren’t in church feel welcome and comfortable in their relationship with the church, and it will motivate our people to commit themselves further to caring for creation as well,” she says. “Getting these younger people in is a real plus—they see it in a different light.”

Collette believes a church’s embrace of greening sets it up to better connect with the young, who may otherwise be unfamiliar with church and unengaged by its traditional symbols.

“If faith communities and the Anglican church truly accept their creation care mandate, I think there’s a golden opportunity to reach younger people,” he says. “It’s a symbol to get them in the door. Because the big shiny ‘t’ on the top of the building doesn’t do it anymore.”

When the church exudes greenness

Archdeacon Katherine Bourbonniere is rector of the Church of St. Andrew in Cole Harbour, N.S., which has undertaken a wide range of ecological initiatives in recent years, including a green audit through Faith & the Common Good subsidized by the national church. One of its most important recent initiatives, she says, was the installation in 2016 of a set of heat pumps, which heat and cool the building by transferring heat between it and its surroundings. Installing the heat pumps would have cost the parish \$38,000, but their cost was defrayed with the help of a \$8,500 grant from Efficiency Nova Scotia, a provincial energy efficiency organization funded

by Nova Scotia Power. The parish has already saved \$28,000 in electricity bills from using the heat pumps, Bourbonniere says, and expects to have recouped the cost of the project this year. The parish is also considering installing solar panels on the church.

Part of the parish’s embrace of greening she attributes to its unique culture: possibly because of the community’s history; it sits on farmland that was expropriated for development about four decades ago, and people are sensitive to the use and misuse of the land, she says. Bourbonniere believes the parish probably has more members of Lucas-Jefferies’s

environmental network than any other in the diocese.

But part of the difference could also be the way these issues are approached in her parish, she says.

“We don’t force people.... We make them think about what impacts they’re having,” she says. “Any time we’ve gone in and said, ‘Now we can’t do this,’ people get their backs up and immediately they start saying then they’re not going to [change].”

“I think it’s conversing. And bringing people into that conversation on a regular basis, making them feel part of it.”

Patterson says that the biggest factors in the Church of the Incarnation’s leaders eventually winning over reluctant parishioners to the geothermal project was being patient with their questions and making sure that they would find the answer to what they were not able to answer immediately.

Another important element in the project’s success, he says, was finding local partners to provide whatever kind of support they could—help in this case that ranged from expertise to public relations.

“We got the town behind us, we had politicians supporting us, and so it really became a community effort,” he says. The church also had assistance from Faith & the Common Good as well as a local green group, the Halton Environmental Network.

Individuals pitched in as well, as word spread through the community. “There were people who were not members of the parish who gave to the project because of the mission and the ethos that was underlying the whole thing,” Patterson says. Their donations, though not enough to cover a significant portion of the project’s cost, were nevertheless “surprisingly helpful,” he says.

Roberts says her experience, too, has led her to believe that local support can make the difference. In the fall of 2015, her church, St. Saviour Pro Cathedral in Nelson, B.C., and a number of other faith communities were approached by a local environmental group about getting together to study *Laudato si’*, an encyclical from Pope Francis expressing concern about the excesses of consumerism and environmental degradation. From the seven weekly sessions that followed emerged the Nelson Interfaith Climate Action Collaborative, a green group with membership drawn from a range of local faith communities. The group meets every month for climate vigils and has put on an [awareness-raising parade](#).

“We don’t force people.... We make them think about what impacts they’re having.... Any time we’ve gone in and said, ‘Now we can’t do this,’ people get their backs up and immediately they start saying then they’re not going to [change].”

— *Katherine Bourbonniere*

Five of its members, including the parish of St. Saviour Pro Cathedral, [have pledged](#) to make their buildings dependent only on renewable energy by 2050. It’s this pledge, and the sense of not being alone in its efforts, Roberts says, that’s driving the church’s current goal of improving its heating system to reduce greenhouse gas emissions.

“I think it’s that support from the wider group, you know? That we’re all working together,” she says.

“Somehow that’s given it some inspiration, some energy and so we’re actually working on it.... I think support is really important, and...it doesn’t have to come from the diocese, or the national church.”

Though it’s important for Canadian Anglicans to know that in many cases their buildings will need work to be environmentally sustainable, they should also know that these same structures often have considerable potential as “green” buildings, Collette says. Though they may be old, Anglicans shouldn’t assume their buildings are simply outmoded and not fit for an era of climate crisis.

“I think in general the typical Anglican building stock has the capacity to be very resilient moving forward, if certain details are upgraded appropriately,” he says.

“They can very easily take us through the 21st century.”

Moreover, there’s also an environmental incentive to keep these buildings from the wrecking ball: the vast outlay of energy that would be required to demolish them and construct any new building in their place.

“The energy it takes to mine, extract, process, transport, build, use, then tear down and ship to the landfill...three-quarters of that [work] is already done in an existing building,” he says. “It’s something to keep in mind.... The greenest building is the one still standing.” ■



PHOTO: DK SAMKO

TEN WAYS TO GREEN YOUR CHURCH WITHOUT BREAKING THE BANK

1. Weather strip and caulk around windows and doors.
2. Insulate attics and other areas that may not yet have been insulated. (But note that this might not always be advisable with stone walls—see above.)
3. Get setback, or programmable, thermostats, which automatically reduce heating and cooling in rooms when no one is present. Set the temperature to 14 C in winter or colder areas, and 29 C in summer or hotter climates.
4. Install automatic lights or dimming switches, or post reminders by light switches to turn off lights when they're not being used.
5. Host a green conversation after worship, or start a green team to brainstorm new projects.
6. Use a portable fan and/or ceiling fan together with your air conditioner.
7. Unplug appliances that aren't in use, and turn off unused power bars.
8. Open and close window blinds depending on the season. In the summer, turn on fewer lights and rely on natural light. In the winter, keep blinds closed to keep heat from leaking out through windows.
9. Switch to LED light bulbs. Replacing light bulbs in exit signs can be particularly effective in saving energy, because these lights are on 24 hours a day.
10. Get rid of energy-wasting appliances, or replace them with Energy Star appliances or appliances with high EnerGuide ratings.

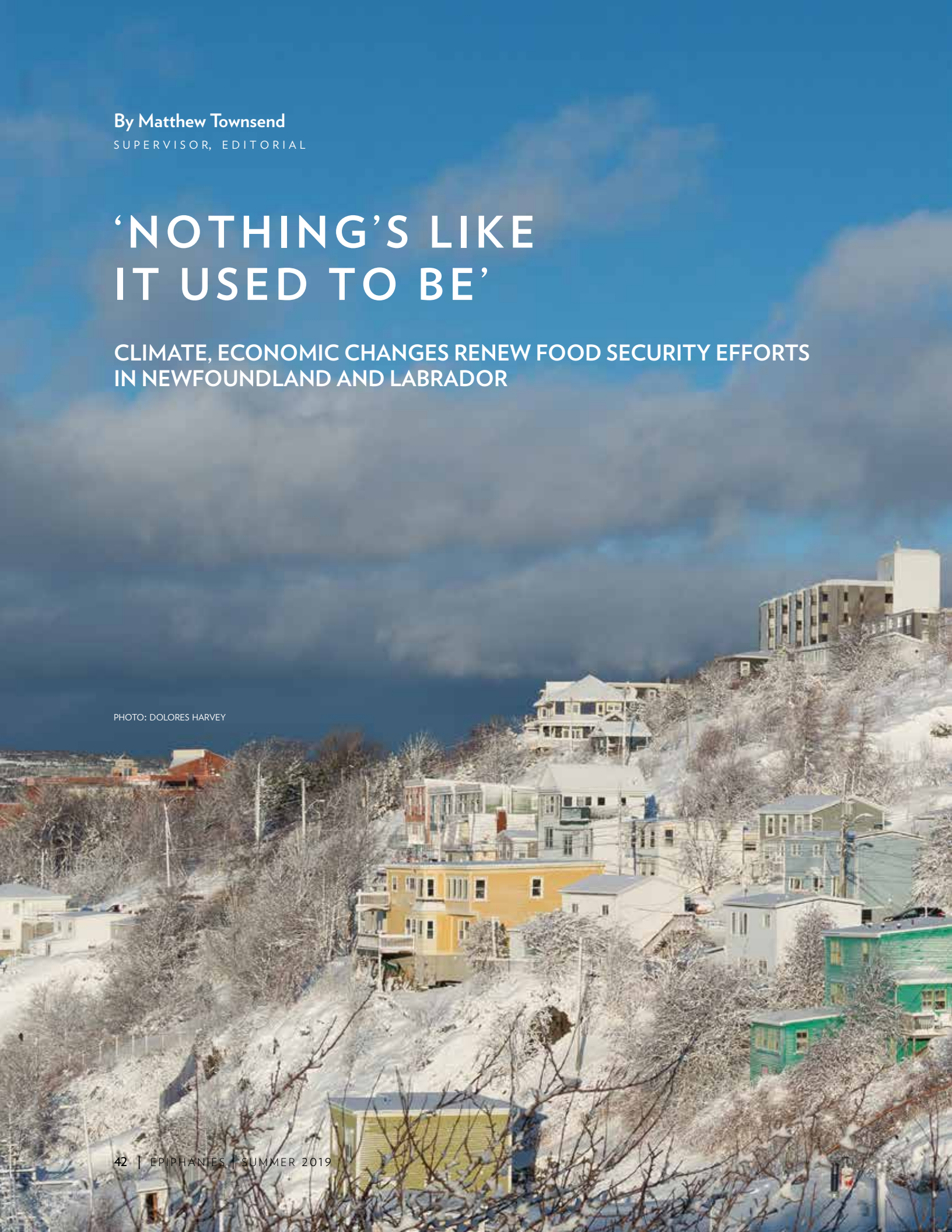
Adapted from: "Top 10 Green Actions Under \$10"; "Reduce Your Ecological Footprint: Faith Community Tips"; and "Do-It-Yourself' Faith Building Energy Audit Guide", all by Faith & the Common Good.

By Matthew Townsend
SUPERVISOR, EDITORIAL

‘NOTHING’S LIKE IT USED TO BE’

CLIMATE, ECONOMIC CHANGES RENEW FOOD SECURITY EFFORTS
IN NEWFOUNDLAND AND LABRADOR

PHOTO: DOLORES HARVEY



Ask people about buying food in Newfoundland and Labrador, and you'll start hearing a few consistent comments: that fresh produce can be very expensive, that storm-related shipping delays can cut off the supply of food, and that the island of Newfoundland has, at any given time, three days of fresh food on the shelves.

Whether the last assertion is true or not, the nature of food security in Newfoundland and Labrador is both economic and geographic—the province is far away from major centres of

agricultural production. The weather can be harsh, the soil is rocky, and the region's growing season is short. Decades of job losses, and the problems that follow them, have made it difficult for people to afford healthy, fresh food. And then there's the anticipated and palpable effects of climate change: worse storms, changing growing seasons and more stretched resources.

In Newfoundland and Labrador, Anglicans are taking notice of these challenges, and they're also taking action. ▶



“The population I work with... they can go to soup kitchens, they can get some assistance from the government. But the quality and the standard of food that they’re able to buy is very poor.”

—Brenda Halley

► In the 1996 Rome Declaration on World Food Security, the United Nations Food and Agriculture Organization defined food security as universal “physical and economic access to sufficient, safe and nutritious food to meet...dietary needs and food preferences for an active and healthy life.”

This means that food security, conceptually, isn’t limited to the idea of running out of food on the shelves. It can mean that you just can’t afford the spinach that is on the shelf, and are left to other, less nutritious options. It can also mean that there is nowhere from which to procure food, or that the shipments can’t make it. All of these conditions can apply to Newfoundland and Labrador.

And as climate change advances, such circumstances can change—and get worse.

Fresh produce—and community

In St. John’s, questions around food security and climate change inspired Brenda Halley to approach the Anglican Cathedral of St. John the Baptist, which she also attends, about planting a community garden.



Halley is a social worker whose team focuses on people living with mental health issues and addictions.

“There’s a high rate of unemployment, and there’s a high correlation between suicide ideation and addiction issues when there’s nothing to do during the day. There’s no job, there’s no fisheries and you’re home,” Halley says.

The garden project, which began last year with help from a grant from Eastern Health, would give Halley’s clients the chance to work the land and eat the produce they grew. Eight raised beds were installed at the cathedral. But, she says, food security was always on her mind.

“The population I work with... they can go to soup kitchens, they can get some assistance from the government,” Halley says. But “the quality and the



PHOTO: NATALIE SHUTTLEWORTH

standard of food that they're able to buy is very poor."

The social worker says she supports people from all walks of life, including those with lucrative professions, but those who struggle economically were most interested in the garden project "because they don't have access to the quality of food that their bodies want." She cites the example of one person who can't work and feels constant stress from bills. He found comfort in the garden, being able provide himself with fresh vegetables.

The garden project has also built community, Halley says. Thirty-six people attended a barbecue at the end of the last season which included food from the garden. On Fridays, after working in the garden, people would stay with Halley and do yoga. Around the garden grew a community of people, she says.

Gardeners also got familiarized with the church and the grounds, with Archdeacon Roger Whalen, rector of the cathedral, providing tours and getting to know people.

For Whalen, community is a primary goal of the project, a chance for participants to nurture plants and relationships. He says that people in poverty will struggle to obtain healthy food, but that this is not a universal problem in Newfoundland, which is also home to wealthy and middle-class people. For poorer people, though, "a bag of chips is a lot more accessible to them than a salad," he says.

"The way I look at it, the way I pray for it, is we are enabled to continue to connect with the community to provide what's missing, what's needed for the people in our community.

In terms of our community garden project, it's trying to grow their health and welfare," he explains. "What does the community need, how can we address those needs? And do it as the church?"

Halley agrees. "We built community, and that was the beautiful part of it. The fellowship we experienced together was really powerful."



"Peas grown on my
kitchen window sill"

PHOTO: CRYSTLE MICHELIN

A boost to self-sufficiency as climate changes

In Labrador, as with Newfoundland, obtaining fresh, healthy food can be a challenge. Labrador is geographically diverse: resource extraction in the west, central hydroelectric plants and isolated coastal regions. The picture of food varies from place to place.

As archdeacon of Labrador, Julie Brace is familiar with ministry needs in each of these regions—and she is especially acquainted with Churchill Falls, where she has lived for 13 years, and Rigolet, where she serves as rector of St. Timothy's Parish.

Brace says Churchill Falls is a company town—that company being Nalcor Energy, the provincial Crown corporation that generates energy in Newfoundland and Labrador. Churchill Falls is home to Canada's second largest hydroelectric generator, which is operated by Nalcor.

Everything in the town, including the church, was built by Nalcor, Brace says.

"I honestly can't even tell you how much the rent is on my house because it's taken out of my husband's salary," she explains, adding that it might be around \$98 to \$100 each month. And the hydro bill? "There's not even a meter on the house."

The town grocer is operated by Nalcor, which means food is relatively accessible there. "Because we're a company town, the prices here are comparable to St. John's and to Nova Scotia," she says. There's also a travel allowance for employees, and Churchill Falls is connected by roads to Labrador City and Happy Valley-Goose Bay, giving further options for shopping.

The story is different on the coast, in places like Rigolet, Brace says—an area connected to larger cities by warm-weather ferry service and fair-weather flights. She says that while there is a government subsidy for food, quality goes down as winter comes. Despite best efforts, the weather can destroy fresh, sensitive produce—even exposure between the airport and the store is problematic. "Greens won't make it, like lettuce—it's too far, too cold. When I go to the grocery store, even in some of the best times of the year, it's produce that wouldn't be left on the shelf here."

Nevertheless, "prices go up in the winter, but they never seem to get back to the prices before the winter

months. It's just steadily climbing, and jobs are not as plentiful."

Thanks to climate change, such problems are emerging more often—even at the start of summer. Pamela Frieda, who is temporarily working as food security coordinator in Hopedale, said the community was experiencing the problem "right now," when she spoke with the *Journal* on June 28. "The shelves are really empty at the stores here."

At the time, the community was waiting for the food supply to ship by ferry. "They are meeting our demands," Frieda says. "They will ship on the plane if they have to."

Hopedale, an Inuit community governed within Nunatsiavut, is home to about 600. Located roughly halfway between Rigolet and Nain, the coastal community is pretty far away from anything.

The problem with that distance, especially when the weather is bad: "Freight charges [by boat] are really low compared to freight charges on the plane.... That affects us too, because we have to pay some of those charges as well."

In communities like Hopedale and Rigolet, the high costs of shipping food have prompted people to consider alternatives old and new: keeping traditional means of hunting and gathering alive while exploring gardening and hydroponics.

"I was actually surprised when I posted online on social media looking for interested persons in starting a gardening program this year," Frieda says. "I was expecting a maximum of five to participate."

Instead, more than 20 people signed on.

Crystle Michelin, Rigolet-based food security coordinator with Food First NL, has experienced a similar surge in interest from gardeners. Like Hopedale, Rigolet is predominantly Inuit and is part of Nunatsiavut. Of its 300 residents, 19 are involved in the backyard gardening program, with another 12 participating as they are able. In other words, more than 10 per cent of the town has decided to start growing produce.

Problems with food availability in Rigolet, combined with traditional views on living off the land, have spurred this involvement. "We have one supplier, one grocery store. In this town there's no competition," Michelin says. "The prices are really high. Very often, too, we have low-quality foods, when it comes to



Crystle Michelin, left, delivers Good Food Boxes to participants in Rigolet.

PHOTO: COURTESY OF CRYSTLE MICHELIN

produce and frozen meat.”

And with one airline serving the town, sometimes food from afar is just not available, she says. Ships come in the summer—but summer weather can be long delayed. “That hasn’t even started yet, and it’s almost July—it’s a very short shipping season,” she explains.

Rigolet has responded to food security problems with more than gardening. One initiative—which Brace says began inside the church but was quickly taken on by the community—involves placing bulk food orders ahead of winter.

The Good Food Box project was born, Brace says, as a way of addressing a quandary particular to coastal Labrador: the only people who can afford grocery store prices are also the only ones who can afford to buy their

food in advance at wholesale prices, leaving others to fend for themselves. The Good Food Box project pooled money together, allowing Rigolet residents to bulk order frozen meat and share the discount. Michelin now oversees the program for the town.

Brace says that increasing climate and economic pressures—including reduced ferry operations to the community—mean people in places like Rigolet are beginning to organize around issues of food security. “And they’re proud of themselves, too. They’re not looking for someone to lead from outside.” Brace says that self-awareness of isolation in places like coastal Labrador makes it easier to try new things, since driving to a neighbouring town’s grocery store isn’t an option. “Necessity is the mother of invention.”

New—and traditional—approaches to change

Some of that invention includes hydroponic projects, started both in Rigolet and Hopedale. Greenhouses are on the minds of both Michelin and Frieda. Frieda says the Inuit community government recently donated a greenhouse to Hopedale for food security purposes; the project will come online in September. And as the [CBC recently reported](#), students at the K-12 Amos Comenius Memorial School in Hopedale started growing hydroponic vegetables last winter.

Michelin says a community greenhouse in Rigolet could be used to help meet the community’s needs. “If we have enough room and enough interest and enough participation, we can produce our own food.”

The economic realities in places like Rigolet help dictate their need for self-sufficiency. In a globalized world of international trade, tiny Rigolet doesn’t exactly fit into grand economic schemes. “One thing about Rigolet, unfortunately, is our lack of economic development—we have none,” Michelin says. “We’re a town that doesn’t export anything, we don’t process anything. So, it’s poor.”

Michelin, who is Inuit, says the people of Rigolet have been living off the land for many years—but increasing modernization has meant increasing prices. Seaworthy watercraft and outboard motors can cost many thousands of dollars. Guns are expensive, ammunition is

expensive, snowmobiles are expensive.

“Normally, you would think of all of these watercraft and snowmobiles and these guns...the main idea would be for recreational use,” Michelin says. However, in Rigolet—and in the North, in general—they are ways of feeding your family. A boat can take you to where ducks nest—which means you can eat the eggs. A boat or a snowmobile can connect you to Goose Bay (and its comparative abundance of goods and services) within a four- or five-hour trip, instead of an \$800 flight.

Michelin tells the *Journal* that she brought her baby boy for his first trip to Goose Bay in the spring. “I bundled him up and took him [along],” she says. “Not 100 years ago, people were doing this on dogsled.

“I think the old ways have always been here. I don’t think it ever left at any point. We have always lived in the way of our ancestors,” she says. “If you walk up and down the road and meet 100 people today in Rigolet and ask them what their ideal food is, 99 per cent of the time people say it’ll be country food. We catch wild salmon across the bay all summer long. [There’s] trout in our backyard. In the winter, in the fall and the spring we eat geese—we always have a nice goose for Thanksgiving or Christmas.” Ptarmigan arrives on the dinnerplate in winter, and ducks in the spring.



After hearing an MLA promise to fly food via helicopter and plane to Labrador following “storm after storm,” Brenda Halley wondered why politicians haven’t suggested more empowering approaches to the problem.

PHOTO: JOSHUA DUGGAN/Flickr

Climate change has made living out these traditional ways difficult, even with modern tools. Ice hasn’t formed where expected, limiting travel for essentials like geese and wood. Some distances can no longer be traversed, “because we don’t have those cold temperatures. We have a lot of rain. We don’t have the freezing cold of Labrador that we once grew up on. We don’t have our ice as early in the year as we should. So, it’s decreasing our hunting ability for sure,” Michelin says. Movement of animals is likewise affected, sometimes making them inaccessible.

Climate change doesn’t necessarily lengthen the gardening season, either, since snowfall has been replaced by “rain and fog”—not sunshine. “It used to be called global warming, once,” she says. “When it comes down to us people on the ground, with our feet on the earth, it’s climate change. Nothing’s like it used to be.”

Changing political approaches

Michelin says she hopes the people of Rigolet will “continue to acknowledge our self-sustainability...to try to grow our own food, which goes hand in hand, always, with harvesting our own food. Our harvesting of wild berries, our harvesting of wild animals.” She says she hopes people remain aware that this traditional view of diet—now trendy in southern Canada and elsewhere—is “the healthiest approach. That’s not something we want to give up or are willing to give up.”

Back on the island of Newfoundland, Halley echoes Michelin’s view that local production of local food is important to the culture and economy.

She and her partner Susan have three children, and “this is where they’re going to grow up.

“Lots of times, we expect fully that our children will move away to gain employment somewhere else.” Thus, the idea of creating jobs appeals to her—creating reasons for people to stay.

She says she would like to see a shift in political rhetoric around how to respond to food insecurity in

places like Newfoundland and Labrador. After hearing a politician promise to fly food via helicopter and plane to Labrador following “storm after storm,” she wondered why politicians haven’t suggested more empowering approaches to the problem.

“I’m thinking, people in Labrador are really smart, and they’ve been hunting and fishing for years,” she says. “Why aren’t we supporting them with a hydroponic green house? We provide employment, they become self-sufficient. We’re flying in food for people when they can grow it here, and it gives them something to do.”

However, she says, approaches have to be practical. Halley cited the infamous case of Newfoundland’s ill-fated cucumber greenhouse. Advanced by former Newfoundland and Labrador Premier Brian Peckford and Philip Sprung’s Enviroponics, the Mount Pearl-based project consumed more than \$13 million from taxpayers—and \$22 million in total—before Enviroponics went bankrupt and the facility was sold for a dollar. The greenhouse shut down soon afterward. [The story is so infamous that CBC Archives wrote about it again last year.](#)

Halley says she remembers the project and its unearthly orange glow, visible from St. John’s at the time. The problem, she says, is that the hydroponic greenhouse wasn’t used to grow produce of local interest. Instead, Peckford proposed that Newfoundland might position itself to dominate the world cucumber market. The plan failed, and cows ate many of the 800,000 cucumbers grown—at a cost of \$27.50 per cucumber to taxpayers. The problem, as the CBC reported at the time: Newfoundlanders ate, on average, half a cucumber per capita per year.

“Really, cucumber is probably the least popular thing here to eat,” Halley says.

While the Sprung greenhouse serves as a cautionary tale, Halley says new and innovative projects are needed in Newfoundland and Labrador. They just need to be focused on the province’s unmet nutritional, cultural and economic needs.

“I’m really, just as a citizen in St. John’s, pretty bored with the calibre of ideas from politicians,” she says. “We need industry here, and people have energy here. They’re diligent. They want to work and earn what they get, because they just feel better.

“Who doesn’t feel better from a full day’s work?” ■

**“TODAY THE TAR SANDS OF
FORT MCMURRAY
HAVE POISONED
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THE FISH AND FOUR-LEGGEDS
ARE FULL OF POISON.”**

—Vivian Seegers

By Vivian Seegers
GUEST COLUMNIST

ANGLICAN VOICES: LIVING AS ECOLOGICAL REFUGEES

WHEN THE LAND IS POISONED, WHAT HAPPENS TO THE PEOPLE OF THE LAND?

In 1962, at three years old, I was allowed to go with my mom to town. We lived in the bush all year round. My dad had usually been the only one who went with other men to sell furs and buy supplies. But the men had decided to take their families and move near the mining town of Uranium City that year, hoping to get work in the Eldorado mines.

Lots of changes came with that move. The first time I had sugar I was four years old: Wrigley's Spearmint Gum and Orange Crush. Before that, us kids would climb the spruce trees for the sap and chew that. We lived in tents and had moccasins and jackets made out of caribou and moose hide. Blankets made from bear hide kept us warm. Moving into town was a cold decision in my experience. My dad built a little house made of board

and tar paper on the side of a hill, and it was cold. I have no memory of cold or hunger when we lived in the bush.

My dad died in a drowning accident shortly after we moved into the outskirts of town. My mother couldn't hunt, fish or chop wood for five little ones, so she rented a house right in the town itself. Then we knew cold and hunger too often. The thought was we would be able to live the life the white mining families did. But not so.

My mind always went back to the comfort and warmth and plenty of food we had in the bush. Fish, moose, caribou, beaver, ptarmigans, ducks and rabbits—the bush was full of food. And the snow, packed tight all around our tents, kept the cold out and the heat in, even if the fire went out. I saw the snow as a protector from the cold. And the summers burst the bush into abundance.



PHOTO: RUSS HEINL

Processing of oilsands in Alberta

We would eat the buds off the trees and the rose petals, pick roots and leaves and make teas, and there were berries of every kind: saskatoons, choke cherries, blueberries, strawberries and raspberries were picked all summer long.

Living in town, we now had to venture out into the bushes to pick these berries and for hunting and fishing. But the adults turned their hopes toward living like the Whiteman; they didn't realize how much the racism was going to affect their striving. We were in constant hunger and poverty, with my mom cleaning houses for those mining families and trying to feed us on very little income. I saw the bush, the place that most Europeans see as the "wild dark forest," as a place of abundance, safety and comfort. I knew that no matter where I went



PHOTO: CHRIS KOLACZAN

Oilsands development: slash-and-burn forest clearing

into the bush, I would find everything I needed to make our lives content—because Mother Earth was full of generosity and abundance. We knew how to live in reciprocity with all creation. We never harvested too much of anything. We knew to never kill a female for meat. We knew to leave the berry bushes in a way that they would still grow the next year.

But those days are gone now, unavailable to us. That way of life is dead now. Today the tar sands of Fort McMurray have poisoned the land and water. The fish and four-leggeds are full of poison. The uranium mining and the gold mining also added to the poisoning of our waters and the lichen. Water and lichen are two very important, life-giving gifts from our Creator. The water provides a place for the fish to thrive and live and



PHOTO: M. LEONARD PHOTOGRAPHY

A young black bear shows his curiosity.



PHOTO: PUFFIN'S PICTURES

A ptarmigan catches the last rays of the setting sun.

move and have their being in abundance. The lichens are eaten up by the moose, and they thrive and live in abundance. And we too lived in abundance because of their abundance. But not anymore.

Because of the oil and mining corporations, our land and water are now full of mercury and arsenic in abundance, which results in cancers of various kinds and, ultimately, death. Ecological refugees, we now live in communities that have no place for us and don't understand who we are. We are a people of the land scattered upon cement and asphalt, living in a different kind of place—a place where they don't even have a clue what "people of the land" really means.

This is what it means: We come from a place where we were taught to walk through the bush without turning

over a leaf in consideration of the bears, whose living room we were walking through. A place where we were taught to leave no sign that we were there—to clean up our campsite and leave it as natural as possible, as if we hadn't been there at all, in gratitude, respect and consideration of the animals who would come through there later.

They would see our respect and gratitude to them by how natural we left the places we had occupied for the winter or the summer. ■

The Rev. Vivian Seegers coordinates the Urban Aboriginal Ministry at St. Mary Magdalene Anglican Church, Vancouver. She is the first Indigenous woman to be ordained in the diocese of New Westminster.



20/20 Vision

imagine
 what you could do with \$2,500 ...

to address the

Crisis of Climate Change

Our planet is in peril because of climate change.

The Anglican Foundation of Canada challenges your parish to respond by upholding our Baptismal Covenant: "to safeguard the integrity of God's creation, and respect, sustain and renew the life of the earth."

20 grants of up to \$2,500 each will be awarded to parishes or dioceses for projects that foster sustainability, reduce the carbon footprint, and plant seeds for change for a greener Canada.

Some initiatives that have already been undertaken by Anglican churches include:

- planning "low-carbon footprint" parish dinners
- installing energy-efficient dishwashers and low-flush toilets
- purchasing china mugs and plates
- putting bulletins and meeting minutes online
- eliminating single-use plastic cutlery and bottles
- changing to energy-efficient lighting

AFC encourages you to be creative and imagine other ways to address climate change in your church. A small step can have a positive impact.

Proposals must meet all of the following criteria:

- new project to begin in 2020
- address the climate crisis by making a local change
- AFC grant may comprise up to 100% of the project budget
- endorsed by your diocesan bishop in the Anglican Church of Canada

Proposals do not count as one of the three annual diocesan submissions.

Submission deadline is April 1, 2020.

Find out more at

anglicanfoundation.org/rfp