



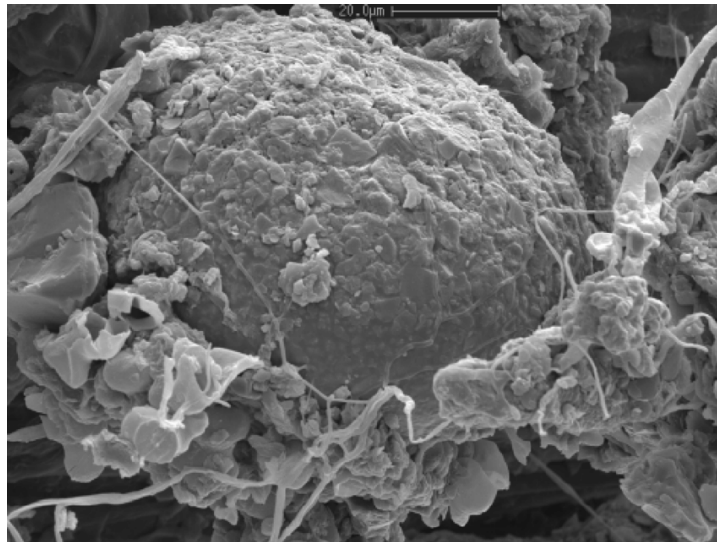
SERMONS AT SAINT MARK'S

THE REVEREND LISA GRAUMLICH, GUEST PREACHER

THE TWENTY-SECOND SUNDAY AFTER PENTECOST: PROPER 25A, OCTOBER 29, 2023

LEVITICUS 19:1-2,15-18; PSALM 1; 1 THESSALONIANS 2:1-8; MATTHEW 22:34-46

LOVE, FUNGUS, AND CONNECTIVITY



Scanning Electron Microscope (SEM) image of mycorrhizal fungi in the *Acacia falciformis* rhizosphere mining scarce mineral nutrients from soil aggregates, with silicon (Si) and iron (Fe) concretions accumulating around the fungal strands¹

Matthew 22:34-46 [When the Pharisees heard that Jesus had silenced the Sadducees, they gathered together, and one of them, a lawyer, asked him a question to test him. “Teacher, which commandment in the law is the greatest?” He said to him, “You shall love the Lord your God with all your heart, and with all your soul, and with all your mind.’ This is the greatest and first commandment. And a second is like it: ‘You shall love your neighbor as yourself.’ On these two commandments hang all the law and the prophets.” Now while the Pharisees were gathered together, Jesus asked them this question: “What do you think of the Messiah? Whose son is he?” They said to him, “The son of David.” He said to them, “How is it then that David by the Spirit calls him Lord, saying, ‘The Lord said to my Lord, “Sit at my right hand, until I put your enemies under your feet”’? If David thus calls him Lord, how can he be his son?” No one was able to give him an answer, nor from that day did anyone dare to ask him any more questions.]

I'm grateful to be at Saint Mark's Cathedral this morning. I regard Saint Mark's as my spiritual home—where I discerned my path to the diaconate. I am grateful to Dean Steve, Canon Jennifer, Deacon Earl, and the many others for support in discernment process by asking astute and probing questions—and often uncomfortable questions—and urging me to listen to God's voice.

My initial question in discernment, which I boldly stated to Dean Steve, was "Is there a role for me to bring decades of training as a scientist to bridge the world of faith and action, especially in the arena of climate change?" With time, and discernment, I started a not-so-subtle rewording of that question. I let go of the simple bridge metaphor as passive. I started to consider whether the church might provide a sort of bully pulpit allowing me to motivate urgency in climate action on behalf of humanity and creation?

With even more time, I came to see an alternative to the bully pulpit. The ministry of a deacon is about building relationships and community—beloved community. Instead of a bridge, it's a bit more like an underground network of roots and fungal associates. More on those fungi in a moment!

It's this diaconal perspective, infused with just a bit of science, that I bring to my homily today. What does creation—in this case fundamental process in the earth's ecosystems—teach us about loving God and loving our neighbor?

Today's gospel is set during Holy Week. It closes out Matthew's description a long series of dialogs between Jesus with Sadducees, lawyers, chief priests, elders, scribes, and, last but not least, Pharisees. The dialogs were thinly veiled effort to box Jesus into a corner—with great consequences.

A legal expert from among the Pharisees asks Jesus one last question, "Which commandment in the law

is greatest?" "You shall love the Lord your God with all your heart, and with all your soul, and with all your mind.' This is the greatest and first commandment. And a second is like it: 'You shall love your neighbor as yourself.'"

Let's pause for a moment—those two commandments are the cornerstone of our faith. The commandments are key elements of our Baptismal vows. And consistent with those vows, every time we pray the confession of sins, we ponder our struggle to fulfill those vows. For me it's a perpetual meditation on things done and left undone.

Why is loving our neighbor so challenging?

- The challenge is profoundly manifest in world today:
- War in Gaza and Israel—neighbors in bitter struggle for rights and power
- Divisive politics and culture in our country
- Loving those people in our families and community with whom we disagree
- Our most vulnerable neighbors whose lives can seem so difficult—frighteningly so.

Why is it hard? Why does it feel like it may be getting worse? Why does our human capacity to love our neighbor often fall short? We ponder these questions in the silence of our own confessions and also here as gather together for worship and prayer.

The question—How do we turn things around? —is both personal and collective. Where do we find the pathway to becoming beloved community in which we love God and love our neighbors?

There are many paths. One that is on my mind is inspired by my understanding—and, yes, love of—nature.

How can we find our way towards deeper beloved community? A quick guide to what's coming:

- What can we learn from fungus? Hint: we're all connected.
- if we are all connected—is that good news or bad news or it's complicated? Hint: it's complicated.

- How do we become the fungal hyphae of our community? Hint: love our neighbors.

What can we learn from fungus?

Fungus—technically neither animal or plant. Most fungi are inconspicuous because of the small size, and what biologists call their cryptic lifestyles in soil or on dead matter. They are most often symbionts, in mutualistic relationship with other plants, animals. And we love to eat their fruiting bodies—mushrooms.

I know this kind of thing because I was a botany major as an undergraduate. And I thought fungi were weird—not in an interesting sort of way. The faculty who studied fungi—mycologists—were largely concerned with esoteric issues of taxonomy and were relegated to the basement of the very large botany building at University of Wisconsin.

As an undergraduate, I was surprised one day when I was cutting through the usually empty basement corridor when a senior mycologist came running out saying “Lisa you have to see this!”. Laying open on his desk was the latest issue of a prominent scientific journal, with black and white electron micrographs—highly magnified, detailed pictures—of plant roots cells infected by fungus.

You could see the fungus extending into the cells of the root and then their long filaments extending out into the soil. It was documentation of mycorrhizal fungus—a partnership between a green plant and a fungus. The plant makes sugar molecules by photosynthesis and supplies them to the fungus, while the fungus supplies the plant with water and mineral taken from the soil.

The mycology professor said, “This is a big deal. This is going to fundamentally change how we think about plant biology.” And it did... sort of. In a way that was very focused on individual plants.

We now know that fungal infections of roots are critical for plant vigor. It’s used in commercial agriculture and forestry. Fungal inoculation of roots is absolutely critical in large scale reforestation or restoration projects. And you can buy it for your houseplants at the hardware store.

For decades that was the deal. Fungi helped trees grow. Trees were solitary individuals that competed for space and resources and were otherwise indifferent to one another.

Was that a big deal as my professor had promised? Yes. But there was an even bigger deal in the works decades later.

Forest ecologist Susan Simard challenged this framework as far too simplistic. There was much more going on in the forest than a 1:1 relationship between a fungus and a plant. It started with a hunch about how the fungal mycelium might be connected.

She put a bag full spiked with radioactive carbon dioxide over a birch tree in the forest. She waited a while and then use a Geiger counter to track whether radioactive carbon has been taken up by other birch trees. It had! What’s even better was that the radioactive carbon was also taken up by the neighboring Douglas-firs. They were all exchanging carbon and nutrients—among each other and across species—through their fungal connections.

This system works exceedingly well because there’s a lot of fungus in the forest floor. Simard documented that underneath a single footstep there are nearly 300 miles of fungi hyphae.

This transformed the way we think about forests! An old-growth forest is definitely not an assemblage of stoic organisms tolerating one another’s presence. It’s a vast, ancient, and intricate society. Yes, there is competition in a forest, but there is also negotiation, reciprocity, and selflessness. The trees, understory

plants, fungi and microbes in a forest are so thoroughly connected, communicative and codependent that some scientists have described them as superorganisms. I would call them a beloved community. I'm inspired by Robin Wall Kimmerer (*Braiding Sweetgrass*) who sees the profound role of fungal networks: "Through unity, survival. All flourishing is mutual." Could this be what loving our neighbors really looks like?

If we are all connected—is that good news or bad news? or maybe both?

In the forest, all flourishing is mutual through deep, multiple, complex, ongoing connections. This is the blueprint for the commandment to love our neighbors.

Like trees in forest, our human communities are deeply connected—locally, and globally—connected through resources—money, stuff—but also through our fossil fuel economy and the climate warming pollutants we emit.

And there's more. Our politics are global. Our hearts are torn apart right now by the war in Israel and Gaza. Why? Because—and this, I would argue, is the good news here—we are all connected by the indelible thread of humanity—a web of life infused with love.

What if we acted more like the fungal mycelia connecting the trees of the forest? Can we weave a deeper web of reciprocity, of giving and taking. Is loving our neighbor, nurturing the fungal like connections that allow us to thrive.

Listen to the forest. Through unity, survival. All flourishing is mutual.

How do we become the fungal hyphae of our community?

Number 1: Don't be an old school fungus, that solely focused on transactional give and take.

The fungal web of connections is rife with signals of abundance and deficit, of safety and danger. Connections are rich with information. To tap into this richness means listening and observing to understand one another's concrete needs.

Listening, learning, and acting—concretely, consistently, and in an ongoing way. 6 it's knowing the needs of each community member, from food to medical bills to transportation to childcare, and working together to meet them.

Remember the lesson of the forest: through unity, survival. All flourishing is mutual.

As people of faith, we worship a God that exists across time, across borders, across belief systems, and cultures. And we are all connected by the indelible thread of our common humanity.

There's so much at stake here. When one suffers, humanity suffers. When one is oppressed, humanity is oppressed.

Through unity, survival. All flourishing is mutual.

To truly become beloved community, we all must be free. And that liberation is a collective journey. We can do this because of the power of our connectedness.

¹ Photo from David Little, John Field, & S.A. Welch (2004). *The Life and Times of Tree Roots: Elemental Dynamics in the Rhizosphere of Co-occurring Trees in a Mixed-species Dry Sclerophyll Forest.*