

Sermon
Sunday, January 8, 2023
First Unitarian Church
The Rev. Sarah C. Stewart

When I lived in central New Hampshire with two young children, our family looked for any opportunity for activities that got us out of the house. So we found ourselves, at all times of year, on the path walking around the Quincy Bog in Rumney, New Hampshire. The brochure assured us that bears, fishers, beavers and falcons made the bog their home; the wildlife we brought with us was always so loud and rambunctious that we never saw any other kind. What we did see were the large, beautiful trees growing in that natural and secluded spot.

There's one cherry tree I particularly remember. Much of the forest was made up of mid-growth tree species: birch and white pine predominated. But there were a few old trees, large trees, champion trees, that had been left standing and dominated the forest. One cherry tree stood twice as tall as its neighbors, straight and regal. Another tamarack pine rose to almost 90 feet. The bog expanded noticeably during the 11 years we lived in the area, as beavers went about their work. With only a foot trail, and no boat dock, the area was still and serene. I looked forward to seeing the trees. I felt pulled into their quiet presence.

I'm not the only one to remember a favorite tree. I asked this question on Facebook this week, and several people (including many of you) shared pictures of your favorite trees with me. [Images]

There is something about trees that captivates us. In *The Lord of the Rings*, J. R. R. Tolkien imagined they were sentient forces with moral lives of their own. Jewish

theologian Martin Buber imagined every living thing to have a divine self, including trees. There is a whole chapter in his most famous book, *I and Thou*, about how humans can encounter the sacred being of a tree. Perhaps he was remembering the Jewish tradition we heard about in our story this morning, of celebrating a new year for trees, distinct from the new year for people or the new year of beginning to reread the Torah. The cedars of Lebanon repeat as an image in the Hebrew Bible, an image of strength and steadfastness. The folk tales of northern Europe treat the forest almost as an alien landscape, alive with its own intentions. Trees matter to human life.

Recent research into the lives of trees has shown that they have complex familial and communications networks that preserve the entire forest. Forest ecologist Suzanne Simard has discovered that trees share information and resources through a network of fungi that cover their roots. Tall, old trees, like the cherry and tamarack I admired in New Hampshire, get extra sunlight and energy, often producing more energy than they need. The fungus on the roots give those same trees soil nutrients in exchange for some of that photosynthesized sugar. But the fungi don't need all the sugar they get. Their network is connected to other, smaller trees that don't have such good access to sunlight. The fungi share some of their sugar with these partners. Even trees of a different species can tap into the shared network of sugar and nutrients.

Different trees have extra sugar at different times of year; the trees use the fungal network to exchange what they have when it is needed. They can share warnings with each other, as well. If some trees become infested with insects, or are beset with fire, they can share the signals of what is happening to them through the fungal network with other trees. Trees not yet under attack can prepare by making

themselves less attractive to predators or less flammable. The stressed trees can even transfer resources that will help those other trees survive. We can't quite say that the trees are thinking or intending any of this behavior. They still compete for resources like space, sunlight and footing in the soil. But what Simard and her colleagues have learned is that trees have evolved to cooperate and communicate as well. The forest is not an inert presence or a fount of resources for humans to use. It is an interconnected web of existence in its own right.

Those big trees that anchor the forest ecosystem are called "hub trees" or—to use the phrase Simard coined—"mother trees." The mother tree is the heart of the forest network. If a forest is clear cut, or indiscriminately logged, the health of the whole system suffers. The fungal network can no longer send and receive messages and resources. If a forest is carefully managed, leaving the mother trees in place and harvesting smaller trees around it, the network helps the whole forest survive. [In British Columbia, where Simard did much of her research, she found evidence of forest management by the Shuswap people going back centuries. Instead of felling trees, they harvested bark in sustainable strips, allowing the tree to survive, or cut away side trunks, leaving the main trunk intact. They knew that they were living in community with the mother tree and her family.] The forest was not a resource to be exploited but a respected partner in life.

In our modern world, we have lost much of this sense of connection with the earth, a connection which pre-industrial peoples understood all over the globe. It's a deep irony that as our scientific understanding of the world and the universe have deepened, our sense of wonder and connection has attenuated. We know more about

how the sun builds atoms and releases energy than ever before. Scientists have just reproduced this effect on earth, with implications for vast sources of renewable energy. Yet, in the words of philosopher Hannah Arendt, we somehow can imagine ourselves outside of the earth, free from dependence on it, ready to unleash all sorts of horrors through the manipulation of the atom. [In 195x, she wrote, “quote here.]

Bio scientists of all kinds worked together to create the Covid vaccines in record time, using new technology that could revolutionize vaccinations for many diseases. A third round of booster shots has been available since this fall, and if you haven't had it yet, it is one of the best things you can do to protect yourself from serious illness with Covid. The Covid vaccines are a scientific breakthrough. Yet they don't do anything to improve our relationship with the wildlife that harbor yet unknown diseases, who are losing their habitats and coming into ever closer contact with human beings. In the U.S., we were able to mobilize our public health infrastructure to make the Covid vaccines available for free to everyone. Yet tens of millions of Americans don't have health insurance or access to reliable health care for their ongoing needs. Science deepens our knowledge of the world. But on its own, it does not connect us to each other or to the environments on which our lives depend.

In the book of Job, Job has suffered as much as a human can suffer. His livestock have been stolen, his children have died, his skin is covered in sores and his friends are giving him terrible advice. Job knows that he has done nothing to deserve these curses—and he's correct, the story says that God allowed Satan to torment Job, a righteous man, in order to test his loyalty to God. Yet Job does not curse God; instead, he calls God to appear and defend God's side of the covenant. God's covenant with the

Jewish people is “I shall be your God and you shall be my people.” Job’s demand is that God has fallen down on God’s side of the covenant, even though Job has done his part.

Uniquely in the history of humanity, God shows up when Job demands God’s presence. God has heard all of Job’s complaints. Rather than weigh in on them, however—or apologize—God says to Job, “Have you seen the wonders of the universe?” [Quote from the Bible.] It’s possible to hear that question with a sneer in God’s voice: “You think your problems matter, Job? Have you seen what I have to deal with?” But I would rather hear them with a childlike wonder and excitement, as though God is so amazed at the beauties of the world that God can barely hear what Job is saying. “Job, have you seen the snow? What about hoarfrost, the whisker-like frozen deposits of water vapor in the coldest, clearest weather? Oh, and let me show you where the thunder comes from, and the lightning”—a phenomenon, by the way, that scientists still don’t completely understand. I hear God as an excited explorer, so in love with the universe that God can’t stop sharing its amazements. It’s not that Job’s sufferings don’t matter. It’s that they are part of a much bigger universe than Job can imagine.

I felt this way when I first saw the images from the James Webb space telescope. The Webb telescope is the largest telescope ever deployed in space, and is capable of capturing beautifully detailed images of parts of our universe we’ve never seen before. With the Webb telescope, we have seen images of the Southern Ring nebula, what remains of a star like our sun, but later in its life. [Photo] It has captured images of thousands of galaxies. [Photo] We’ve seen the Cosmic Cliffs, a star nursery 7,600 light

years away from earth. [Photo] The Webb telescope speaks with a sacred voice: there are wonders in the universe we have not even begun to fathom.

In reality, our struggles as humans and the life of the world around us are intricately connected. Without the universe, we would have no galaxy and no star. Without our sun, there would be no life. Without the simplest and most ancient forms of life on our planet, we would not have evolved. Without the myriad plants, insects, bacteria and animals on the earth, we human animals could not thrive. Without the well-being of distant landscapes like the arctic ices and the tropical rain forests, we may all be in peril. The world is not ours to use up. It is a constant source of awe and wonder, and part of the interdependent web of existence of which we are all a part.

So let's recommit to the earth, and to its wellbeing. Let's listen to the voice of the holy, through the ancient words we read this morning, as it reminds us of the beauty and sacredness of the universe. "Dawn is changed like clay under the seal, and it is dyed like a garment." Reducing emissions will preserve clear, smog-free mornings in Los Angeles and Beijing. "Have you entered into the springs of the sea, or walked in the recesses of the deep?" asks God. By reducing plastic use and pollution, we can preserve life in the oceans. "Have you entered the storehouses of the snow?" In the midst of our own nearly snowless winter, we can reduce carbon emissions to limit global warming and preserve the wonders of winter. "Who has cut a channel for the torrents of rain?" God asks. As flooding and drought feed off of each other in ever stronger cycles, in Pakistan and California, may we learn to be respectful of nature, and in awe of it, instead of believing it to be here for our use.

Human life can flourish and thrive on a planet in balance. Billionaires may be trying to make it to Mars, but we know that this Earth is our only home. It is not ours to dominate but ours to understand. Connected to the universe, to the trees and all other life around us, our best future lies in cooperation and respect. I love you all. Amen.