SCRIPTURE:
Then God said, “Let the land produce vegetation …”
And God said, “Let the land produce living creatures …”
Then the Lord God formed a man from the dust of the ground and breathed into his nostrils the breath of life. (Genesis 1:11a, 1:24a, 2:7)

The Word became flesh and made his dwelling among us. (John 1:14a)

For God was pleased to have all his fullness dwell in him, and through him to reconcile to himself all things, whether things on earth or things in heaven, by making peace through his blood, shed on the cross. (Colossians 1:19–20)

MEDITATION:
NASA's Perseverance Mars rover has taken some remarkable images of the red planet, including the fine layer of dirt that gives it its name. Although sometimes called Martian soil, the planetary scientist’s use of the term "soil" differs dramatically from that of the ecologist. Martian soil is not true soil because, so far as we can tell, it lacks life.

On Earth, when you dig your hands into a layer of topsoil and smell that beautiful earthy smell, you are holding in your hands a fraction of a vast, microscopic ecosystem that dictates many of the important processes on our planet. Water film adhering to soil particles is home to aquatic rotifers, nematodes, protists, and bacteria. Roots from plants release sugar-rich molecules into the soil in an effort to, as it were, farm some of these microscopic creatures—as an ecosystem forms around the roots, creatures are born and die, and in turn feed the plants.

Although the author of Genesis knew nothing of this, I find it fascinating to think that the soil, a living, vibrant ecosystem, birthed the plants and animals and humans. The soil then becomes a mirror of our own bodies—we too are living ecosystems. Mites live and move and have their being in the hair follicles of our skin. Bacteriophage viruses are embedded in the mucus of our throat, acting as a first line of defense against bacteria. It is becoming increasingly apparent that mothers nurture, not just their newborn, but the gut fauna within the newborn; the complex carbohydrates in milk apparently require just the right bacteria to be broken down, precisely because our bodies are not just our own. We need our internal ecosystem to flourish, just as we need healthy soils to flourish. We are ecosystems within ecosystems. Human, animal, plant, we are all connected in substance through the soil.
Soil also contains substances not derived from living beings, what we ecologists refer to as the weathered products of the “parent material”: rocks and minerals. Our bodies require nitrogen, phosphorus, calcium, sodium, and the like—substances forged over vast geologic time scales into the varieties of rocks that cover our planet. Nutrients are slowly released from this parent material by the weathering of wind and rain and plant, eventually entering and building our bodies. We are ecosystems, but these ecosystems depend on geologic processes to build the many bodies that make them up.

But of course the story does not end there. The material substances of our bodies did not begin as rock, but as stars. There are no ecosystems—no living bodies, no soils—without exploding supernovae and dying low mass stars which forge the very stuff of our bodies.

And then I read that Jesus became flesh and dwelt among us. What was this incarnation but God clothing himself in stardust? What was it but God forming for himself a body made from the stuff of dirt—a living, fully human, fully divine, ecosystem?

**REFLECTION:**
The hope I have as an ecologist, in a discipline where hope is in short supply, is that Jesus did not stop with the incarnation—an event that in itself has such mind-boggling implications for ecosystems that we should not pass it by too quickly in our haste to get to the cross—but that Christ died as God-in-flesh, as God-in-ecosystem, as God-in-soil, as God-in-stars. I do not mean this in some pantheistic way but simply because all of those things are what it means to be fully human. And then he rose from the dead as a new creation, but still one of body—and therefore, presumably, one of ecosystem, one of soil, one of stars. There is then hope for ecosystems in this: Christ died to reconcile “all things” to God. By dying as ecosystem and rising as ecosystem, he brought ecosystems into a new way of being. By dying as stardust and rising as stardust, he brought stars into a new way of being.

If God appearing in a burning bush made the ground around it holy, what does Christ’s incarnation, death, and resurrection of a dirt-derived body do to the universe?

**PRAYER:**
God, thank you for the vast, complex interconnectedness of life on this planet. Thank you for the processes that formed our bodies, which we are only just beginning to understand. Thank you for the incredible riches and mysteries of this natural world, which are but a drop compared to the full riches and mysteries of your Person. We cannot comprehend the new creation, but we look to Christ’s resurrected body as a sign of what the new creation will be. We eagerly await the day when we too will take on our resurrected bodies, and participate in the new heaven and new earth that you have prepared. Amen.
ABOUT THE AUTHOR:
Matthew Morris is assistant professor of biology at Ambrose University in Calgary, Alberta, Canada, where he studies the ecology and evolution of fishes. He is a member of the CSCA, and most recently coauthored an article in *PSCF* on taxonomy and theology.