Behold the hippo: A zoologist sings the doxology

by Calvin B. DeWitt in the April 18, 2012 issue



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I am a boy scientist (even though my boyhood began seven decades ago) whose love for creatures was stirred in church, especially in song. There my parents, friends and I sang, "Let every creature rise and bring peculiar honors to their King." Each Sunday morning at the conclusion of our worship we sang in four-part harmony the doxology, "Praise God, from whom all blessings flow; praise him all creatures here below." For me that song made total sense. The toad in my backyard and the hippo at the zoo were praising God. The snails in my aquariums were bringing peculiar honors to their King. The painted turtles in my pond were praising God too. Even the trees were clapping their hands (Isa. 55: 12).

I focused my early love and work—from grade school through college—on animals, especially amphibians like toads and reptiles like turtles. *Anura* is the name zoologists have given to the order of frogs and toads, and these, along with turtles, lizards and snakes, are among the creatures that first held my interest. But batrachians, I learned when I was very young, are not loved by most people.

Most people are attracted to soft, furry creatures with big round eyes, or flashy, feathery ones with docile beaks, or colorful, scaly ones with whiskery fins. But how about creatures with flabby flesh and oozing pores (hippos), or those with bulging throats and acrid warts (batrachians)? Puppies, yes; hippos, not so much.

And so I wondered what might God have to say about the creatures most people don't think of as lovable. I discovered an answer to this question in God's speech to Job (Job, chapter 40).

While the name was not available to us until the 17th century, the hulking creature called Behemoth mentioned in Job 40 was well known way before that. It was reliably reported, according to zoologist F. S. Bodenheimer, being in two rivers that flowed into the Mediterranean Sea: the Orontes River in what is now Libya, Syria and Turkey and the lower Nile River. In biblical times people hunted this massive beast using harpoons with barbed hooks. The Romans greatly reduced the hippo population in Egypt to eliminate the damage it was doing to crops. The English name applied to it in recent centuries literally means "river horse," although it is more closely related to pigs. Given the description of its anatomy, behavior and habitat in Job 40, I join with most other zoologists, and with Job scholar Robert Gordis, to identify this creature as the hippopotamus.

It has been my good fortune to read Job 40 while watching hippos sport in the rivers of Kenya and while watching them eat their food at the National Zoo in Washington. At the zoo I made a special effort to behold the hippos, staying well into dusk to see if they would feed on grass "like an ox." Although there was no grass in apparent reach, as late afternoon turned to evening one of the hippos went to the surrounding wall and laboriously lifted his front end up against it, over which he awkwardly leaned to begin grazing on Kentucky bluegrass. Intent on beholding Behemoth, I had not noticed that the zoo had closed and all the lights were out. Wending my way to the entrance and finding it locked, I climbed over the wall and onto the street.

As a zoologist, it is my job to describe the creatures God has made. I believe that a closer look at how the Creator might describe these creatures can give us profound insights into how human beings should relate to creatures other than ourselves.

Behold Behemoth, which I made along with you and which feeds on grass like an ox. This giant herbivore is my creation. I am the one who created this marvelous animal with all of its remarkable qualities; I am the one who made this great beast. Behold!

Open your eyes and see!

What strength he has in his loins, what power in the muscle of his belly! My great hippo is strong and powerful. Look at those flanks! See its massive frame, woven together with superbly powerful muscles. Admire its capacity to contain its massive bulk.

His tail sways like a cedar; the sinews of his stones are close knit. While you may not want to admire the perfection and wonder of this creature's reproductive organs, I—their Creator—am proud of my wonderful provision for their propagation and fruitfulness.

His bones are tubes of bronze, his limbs like rods of iron. What architecture! Look how those pillars and beams are harmonized with the mass to which they give support and provide articulated strength. They do so even while subtracting and adding bone here and there to counter new and changing strains and stresses. Osteoclasts and osteoblasts dynamically reform these tubes and rods to meet challenges of life and growth, while never weakening. Dynamic support for dynamic mass. Beautiful!

He ranks first among my works. Not that you people are unimportant, of course! But my hippo ranks first. And why do you think I rate my hippo number one? It is to crack you out of your anthropocentrism for a moment, to get you to see my creations as I do. I want you to know the importance of this creature in my sight so that you will take notice, so that you will be inspired to wonder.

Only I, the Maker of this beast, can approach it with a sword. Only I have the authority to destroy this work of art—I alone. I say this not to tell you I am going to destroy it. I say this to tell you: Put down your arrow and gun. Don't be so foolish as to think that you are powerful because you are able to destroy what I have created. Real power, after all, belongs to the Maker, not to the destroyer. This living work of art—this grand expression of my creativity—belongs to me, its Creator, alone.

The hills bring him their produce, and all the wild animals play nearby. The hippo is not simply a creature that spreads its flesh over a concrete slab, as it does in your many zoos. I am pleased, I am honored, to see my hippo in its proper habitat, where it lives in concord with the other creatures—plants and animals, reeds and batrachians, where at dusk it leaves the river over two-rut trails (one rut for the right feet and one for the left) to graze like an ox on the vegetation that borders the

wetlands and rivers.

Under the lotus plants he lies, hidden among the reeds in the marsh. Its wetland habitat, while not very well suited for people, works nicely for my hippo. It is fully and harmoniously integrated into the dynamic fabric of its lush and watery world. Great floating and emerging leaves attend the water surface. Batrachians sing their nocturnes there under cover of darkness. Herons collect their dinner there, conspicuous at water's edge. And the hippo?

The lotuses conceal him in their shadow; the poplars by the stream surround him. Giant as it is, this great creature can also be inconspicuous. It fits into its riverine habitat in a marvelous beastly harmony. The wetland vegetation embraces hippo habitat with spreading boughs and concealing leaves. Moored in its marsh, even great currents do not sweep it away.

When the river rages, he is not alarmed; he is secure, though the Jordan should surge against his mouth. As the hippo's ecological relations are maintained with integrity within the framework of its habitat, so is its psyche. The hippo is secure in its wetland habitat. It is at home in the marsh and the river torrent.

Can anyone capture him by the eyes, or trap him and pierce his nose? This hippo creature of mine does not respond to your beckoning. It is not a creature you can put on a leash and parade around town. It is my creature and it praises me, its Creator, by being what I have created it to be. It is one of the creatures that brings "peculiar honors"—in the words of one of your hymns—to me, the King. Like all other creatures, it sings my praises. The hippo sings my praises by doing what I have made hippos to do. The honors they bring to me are so peculiar that you might not understand them at first; and yet honors they do bring.

By beholding Behemoth in the manner God would have us behold it, we can discover the beauty, integrity and habitat-fitness of a creature we might have considered at first glance monstrous or repulsive. We can see wetlands not as wastelands but as homes and habitats that God provides for God's creatures. We can begin to understand that within this web of relationships, our power is not measured in our ability to destroy creatures or their habitats, but in respecting God's creatures and sustaining them and their habitats. We discover and appreciate the peculiar honors each creature brings to the King.

In biblical perspective, the value and worth of God's creatures does not come from their usefulness, market value or charm. Instead we can appreciate their value and worth only when seeing them through the eyes of the Creator. God's speech to Job is only one of many biblical illustrations that the worth of creatures is not so much in the eye of the human observer as in the eye of the Beholder. The divine Beholder is also the Author of all things, and the hippo is the Lord's. Creator-based value makes all the difference, bringing us, as it does, to see other creatures and other kinds through the eye of the Creator and helping us to ascribe intrinsic value to the creatures and to creation.

And so concerning the hippo, we do not ask first, "How can I shoot it?" "Can I eat it?" "How can I market it?" "How can I get it out of my way?" Instead we wonder, "What does God think of this creature?" "How should I, in my relationship to it, honor its Creator?" "How might I learn to live with it?" "How does it fit into the larger system of which it is a part?" We come to understand that even if we have the opportunity to buy a hippo (or a toad), thereby gaining legal title to it, our first responsibility is to its Creator. We may have the privilege of having a hippo under our care, but that care must be under the eye of its Author and Creator, if at all possible, keeping this creature in it native habitat—"under the lotus plants, hidden among the reeds in the marsh."

Understanding human relationship to other living creatures in this way, of course, strongly affects our relationship with other kinds. The Creator-creature relationship controls the relationship between humankind and other kinds.

Clearly, human beings are themselves creatures. But they are also distinctively different from "other kinds." We humans differ greatly at least in this respect: we have the capacity to destroy our own kind, other kinds and even the creation itself—not only by bits and pieces but also on a grand scale. This is widely apparent now and has been to varying degrees over human history. This capacity to destroy appears to be joined with a tendency and even a will to do so, particularly when immediate personal or corporate "gains" appear to be achievable. In our time, we human beings—even when we know what environmental integrity means—still degrade creation.

In his 1993 Templeton Lectures at Trinity College, Cambridge, British historian of science Colin Russell examined prospects for restoring Earth's environmental integrity. Making explicit his commitment to scholarly historical inquiry, he described

the changing views of Earth from antiquity to current scientific understanding, tracing the history of perceptions of Earth from isolation to unity with the heavens, from fixed center of the universe to whirling speck of cosmic dust, from deified organism to understandable mechanism. After careful consideration of floods, earthquakes and other natural disasters, he described the disasters and degradation that people inflict on the environment, paying special attention to the history of chemistry and the chemical industry. Probing the causes, he did not indict science and technology. Instead, he found the underlying problem in the motivating springs of human action: human arrogance, ignorance, greed and aggression. Human beings know what environmental integrity means, yet they degrade the earth.

Russell seeks a way out of this predicament. He concludes that the postmodern, organismic view that deifies the earth as Gaia or Mother Earth counters the very science needed to restore environmental integrity. On the other extreme, the reductionist notion that sees creation as a mere mechanism cannot solve human problems either. In seeking a third way, Russell remarkably concludes that the ancient view espoused by scripture has the very qualities that are in concord with current science. This biblical view perceives Earth and the heavens as unified within the same universe under their Creator. It affirms consistent and lawful operation of the earth and universe. This view sets the earth in its proper place within the universe—as God's footstool, rather than at the center of all things. Ultimately, in his comprehensive historical inquiry into the earth, humanity and God, Russell concludes that the Bible's image of human stewardship is the key to responding to human and environmental degradation.

Stewardship of the earth impels us to deeply understand the complex systems of the planet and biosphere. In times of environmental degradation, it recognizes that the need for public understanding of science is greater than ever. It leads people to value the earth as a treasure held in trust. And it elicits practical strategies for relating people to the earth as responsible members who are obedient to the dictates of conscience.

Scripture provides an answer that comes from perceiving Earth unified with the universe, under its orderly Creator, Author and Owner. While the concept of stewardship is taught throughout the Bible, the most fundamental and important biblical text is Genesis 2:15. Here are four English translations of the Hebrew:

- The Lord God took the man and put him in the Garden of Eden to work it and take care of it (NIV).
- And Jehovah Elohim took Man, and put him into the garden of Eden, to till it and to guard it (DBY).
- The Lord God took the man and put him in the garden of Eden to till it and keep it (NRSV).
- And the Lord God took the man, and put him into the garden of Eden to dress it and to keep it (KJV).

The Hebrew word translated in English here as *man* is the word *adam*—the word for humankind. And it is *adam* of *adamah* (*human* of the *humus* or *earthling* of the *earth*), a Hebrew play on words that connects Adam and humanity to the soil.

In these versions of Genesis 2:15, the Hebrew word 'avad is variously translated work, till, guard, dress or serve. We know from experience that gardens (and the biosphere) serve us—with good food, beauty, flavorful herbs, useful fiber, healing remedies, pleasant microclimates, soil-making, nutrient processing and seed production. The biosphere provides "ecosystem services"—including water purification by evaporation and percolation, moderation of flood peaks and drought flows by riverine wetlands, development of soils from weathering of rocks and moderation of local climates by large water bodies. Yet, Genesis addresses *our* service to the garden. Service from the garden to us is implicit; service from us to the garden is explicit.

What God expects of Adam, and of us, is returning the service of the garden with service of our own: a reciprocal service—a *con-service*, a *conservancy*, a *conservation*. This reciprocal service defines the relationship between garden and gardener, between the biosphere and its human safe-guarders. Our love of God our Creator, God's love of the creation and our imaging this love of God join together to commission us as con-servers of creation. This is the essence of stewardship.

Scripture tells us that all of creation, every creature, praises God. Every creature reflects back something of the love God pours out through all creation. The heavens and all creatures declare the glory of God. And the chief end of each creature and all creation is to glorify God and enjoy God's blessings. The chief end of human beings is also this: to glorify God and to enjoy God forever. And so, in the light of God's speech to Job on the hippopotamus and God's love for the creatures and the world, we ask, "What are people for?" As we contemplate the answer to that all-important

question, we mirror God's love for the world, confess this love in deed and publish God's love in life and landscape, singing, "Praise God from whom all blessings flow; praise him all creatures here below."

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