

# CREATOR

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## CONSIDER THE ANT

### Part 1

*Go to the ant . . . consider her ways,  
and be wise (Proverbs 6:6 ESV).*

**Editor:** Today we will consider the ant and, in so doing, obey God (Proverbs 6:6)! But please be warned—studying ants takes courage and humility. Courage because much about the ant world is bizarre and frightening; humility because we must get down on our hands and knees to consider this special creature that our Lord Jesus has made.

A sincere study of God's glory takes great humility. Please consider reading Andrew Murray's excellent little book, "Humility: The Beauty of Holiness."

**Nemala:**<sup>1</sup> "Hey up there!"

**Editor:** Surprisingly, the different ways people behave in society are mirrored by ant colonies all over the globe. And ants basically populate the same habitats that we do. In this, we have a loving message from our Creator. Before the infinite God of the universe, we are like insects (Isaiah 40:22),

*yet He loves us!* Our pride leads us to think that we are more important than we really are (Isaiah 40:17), but a study of ants will hopefully correct this misconception.

**Nemala:** "Look down here!"

**Editor:** Ants remind us to be thankful that a God so exalted above His creation stoops down (Psalm 113:6) to love us (Isaiah 40:11). Christ tenderly cares for ants because He has compassion on all that He has created (Psalm 145:9). If He wasn't kind to ants, then we might be tempted to think, "Does God really love us?" Sadly, many in the world have stopped believing in a personal Creator who truly cares for them. Like Solomon, we need to consider the ant (Proverbs 6:6-8)—then we will see how *Jesus tenderly shepherds* all that He has made!

**Nemala:** "I've got something I want to tell y'all."

**Editor:** If you look down, you'll see a tiny ant, named Nemala, trying to get our



<sup>1</sup> "Nemala" is Hebrew (הלמט) for "ant." Nemala is from the deep South.

attention. I've spoken with her before. You'll have to use your imagination since ants can't really talk! And when appropriate, I'll add Scripture and explanations to what she says.

### FASCINATING FACTS

**Nemala:** “Why do your scientists want to study ants and ‘chase’ us all over creation? Maybe these folks are drawn to obey God’s command to consider us ants (Romans 2:14-15)? Someone once told me that the study of ants is called *myrmecology* (from Greek *myrmex* “ant” + *logos*, “study”). What a strange name! People are gonna have a tough time studying us because at last count there were 12,000 species of ants in the world—that’s a huge number!<sup>2</sup> What makes us so fascinating? Well, let me tell y'all:

- “In the Bible (Proverbs 6:6 ESV) we ants are referred to as ‘her’ or ‘she.’ That’s because our colonies are made up almost entirely of females. So the nest in which I live is a society of ‘sisters.’”
- “Compared to you, an ant’s strength is small (Proverbs 30:25), but some ants can lift 100 times their own weight. That’s like a 120-pound (54 kg) woman lifting six tons!”
- “Ants are the greatest predators on Earth. We eat more meat<sup>3</sup> than all lions, tigers, bears, and wolves combined.
- “It’s been estimated that the weight of all ants equals the weight of all the people on Earth. Scientists have also calculated that the weight of an average person equals that of one million ants. You guys are heavy!”
- “Like you, we ants sleep seven hours a day.”

**Editor:** Suddenly, Nemala is distracted.

**Nemala:** “Ooo . . . a pebble. Mmm, I’ll pick that up later. Where was I? Oh, yeah:

- “We inhabit almost every spot on Earth where people live—Antarctica, Greenland, and Iceland are the only places where ants aren’t naturally found . . . burrrr, too cold!”
- “Ants typically live less than a year, but some of us survive seven to ten years; a queen ant can live 20-25 years!”



“I’m pretty young myself—I just turned three yesterday.”

**Editor:** What the little one means is that she just turned three *months* old.

**Nemala:** “And you can put some of our kind underwater for up to 14 days and we do fine, although it’s not very nice if y’all do that!”

- “We ants survive intense radiation—I dunno, it doesn’t seem to bother us!”
- “Now do y’all see why some folks have given their lives to study us curious insects?”

### GOD THEIR KING

**Nemala:** “I gotta admit, our colonies are kinda strange compared to your towns and cities. Strange because, well, our nests are pretty complex, yet we’re not as smart as you. It’s weird, because an ant colony has *no visible leader* (Proverbs 6:7). Our instructions come from our Creator—Jesus. We obey Him. God has designed each of us ants to work according to our own desires, which

<sup>2</sup> And it’s been estimated that only 100 species have been well studied.

<sup>3</sup> The “meat” ants usually eat comes from insects or other invertebrates.

are usually for the good of the colony. No one forces us to be industrious. We, like our Creator, just seem to enjoy working! I guess this is why King Solomon urges you to consider us ants. By the way, do y'all labor with as much joy as we do? You'd do well to strive to see *all the glories* of our Creator, especially His glory displayed in us ants.

**Editor:** Ants live in a *theocracy*<sup>4</sup> (versus the form of government described in 1 Samuel 8:9-18). Our Lord has hidden the treasure of His wisdom in the lowest of these creatures (1 Samuel 10:7). Ant colonies prove, beyond doubt, that God is the only true Ruler on Earth (1 Timothy 6:15b)—a fact that most people have a hard time swallowing.

**Nemala:** “You might think that, at any given moment, we ants are all doing the same job. It turns out that in a large ant colony there may be 20 or 30 different tasks that need to be done daily in order for our nest to stay healthy. Once an ant is engaged in a particular nest duty, she performs that work with intense and focused effort. . . . Ooo, there's another pebble!”

**Editor:** Intense and focused effort?

**Nemala:** “She's not normally distracted by her sisters, who may be doing other jobs.”

**Editor:** No, just distracted by pebbles!

## THE GARDENERS

**Nemala:** “There's a really special type of ant, known as the ‘leafcutter,’ found in Central and South America.<sup>5</sup> Species of *leaf cutting ants* (*Atta* and *Acromyrmex*) have societies that are well organized and wonderfully disciplined. I think they reflect the wisdom of God (Psalm 104:24; Proverbs 30:24-25). Instead of hunting insects, or gathering

seeds and honeydew like other ants, leafcutters grow underground fungus gardens as their main source of food. Kinda gross, but it's their way! Our Creator is super sweet to His ants—He specially designed this fungus to grow *only* in their subterranean nests and nowhere else.

“Each leafcutter nest is made up of ants from the same species, but the ants aren't all the same shape or size (see photo on previous page). I suppose it's similar to how you folks appear to each other—only in us ants the differences are *far greater*.<sup>6</sup> In some of our species, the largest ants may be 500 times bigger than the smallest workers. All these different body types<sup>7</sup> allow a colony to accomplish the many tasks needed for growing fungus . . . it's harder than growing tomatoes, I assure you!

“Now, the largest worker ants bravely venture out of their nest at night in search of leaves to harvest. Usually the leafcutters climb trees and snip out round pieces of vegetation using their sharp jaws as scissors. These larger ants are so good at their jobs, that



Leafcutter ants by the hundreds carrying away pieces of leaf

several thousand of them can strip an entire tree clean of leaves in one night! Neat, huh?

“Somewhat smaller leafcutters—which accompany their bigger sisters on the night

<sup>4</sup> A theocracy is a government with God as its ruler.

<sup>5</sup> Leaf cutting ants are also found in southern Texas and Louisiana. Here, they are called “town ants,” “cut ants,” or “parasol ants.”

<sup>6</sup> God uses ants to challenge our prejudices. If ants can live & work with others of their own species, vastly different from them, why can't we?

<sup>7</sup> The different sizes and shapes found in a single species of ants is known as *polymorphism*.

harvest—pick up the dropped pieces of leaf and cut them up further or just bring what’s dropped back to the nest. Since some of these harvesting parties may travel a good ways from home, the smaller ants often take turns shuttling each piece of leaf back to the central colony along well-marked trails. They organize themselves in an ant version of the ‘bucket brigade,’ or a relay race, handing off a piece of leaf to the next ant on the path, once the first ant is tired from running. Y’all gotta remember—our legs are pretty short!



“The effort of these leafcutters is nothing short of . . . of . . . of *really intense*. An ant climbing a 100-foot-high tree located 300 feet from the nest is the same as one of your athletes running ten miles, scaling Mount Everest, and then running another ten miles back home. And some ants do this twice in one night!

“Once the leaf fragments find their way to the nest, small ants there cut up the pieces even more and pass them on to yet smaller ants. These then move the bits of leaf into the fungus chambers where their gardens are located. Tiny ants tending the fungus gardens take the leaf bits, chew them up, add

chemicals that encourage fungal growth and prevent “weeds,” and insert them into the garden. The chemicals that these ants use in their gardens are similar to the fertilizers and pesticides you apply to your gardens. Any growth of a foreign fungus is quickly removed by the tiniest of ants and taken outside of the nest.”

## THE WEAVERS

**Nemala:** “I’ve been told stories of a special kind of ant living in a far-off land.<sup>8</sup> Apparently, several species of these ants are as skilled as leafcutters in their ability to show teamwork. I think you call them *weaver or tailor ants* (*Oecophylla*).<sup>9</sup> These insects make ordinary nests by extraordinary means—they actually sew leaves together!

“To build their homes, weaver ants must cooperate with each other. Several ants use their bodies to pull the edges of two leaves together. Once the leaves are touching, then other ants take babies (larvae) from their nest, hold them in their mandibles, and move their unborn sisters back and forth over the seam of the leaves. As they do this, the babies freely release threads of silk, which ‘stitch’ the two leaf edges, one to the other. These ants are able to build a true ‘green house’—both waterproof and wind resistant.



<sup>8</sup> The East Indies, Australia, and Brazil

<sup>9</sup> We might also call these tiny insects “beaver ants” because whenever their nest is damaged, they immediately set out to repair it.



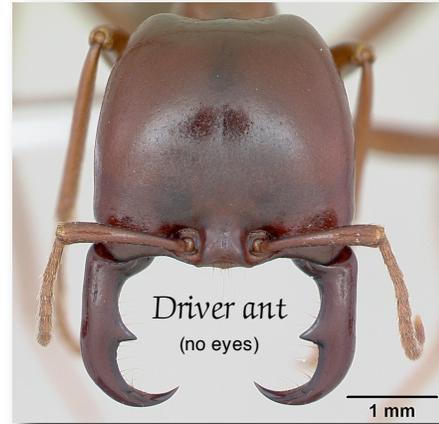
“God designed us ants to go through different stages as we change from an egg to an adult. An ant egg hatches into a larva, which becomes a pupa, and finally turns into an adult like me.<sup>10</sup> Some larvae produce silk that is spun into a cocoon, similar to the cocoon of a moth. But if the thread is needed for nest construction, the larva willingly donates her precious silk.

“The downside to this is if a baby ant sacrifices herself for the good of the colony, she then doesn’t have enough silk to spin her own cocoon and thus mature into an adult. She remains a sweet infant (larva) all her life. But your Jesus, our Creator, is always showing us so much kindness (Psalm 145:9). He secretly directs the adult weaver ants to care for these babies the rest of their lives. *What a good God we serve!*”

## ARMY ANTS

**Nemala:** “I’ve often overheard people arguing with each other about which is the most dangerous animal in the world. Some say it’s the lion; others insist it’s the hippopotamus. Now, I don’t want to brag, but I think that we ants are the most fearsome of predators!”

“In Africa, you can find some really nasty ants, which locals call ‘saubas.’ I believe that you refer to them as **driver ants** because they ‘drive’ other animals out of their way. These ants are as ferocious as they are infamous. Driver ant species (*Dorylus*) have no eyes and are completely blind. Their colonies



have no visible leaders and they make no permanent nests. These wandering insects have been pegged by your scientists as the ‘Genghis Khan hoards of the natural world.’

“Just how dangerous are driver ants? Well, they’ve been known to overpower large pythons. And there’s one story out of South Africa some years ago that a full-grown leopard was killed by a large assault of ants. Prevented from escaping from its cage, the cat was eaten by the driver ants clear down to its bones in one night. I’m really glad that I don’t live in Africa!

“The South American cousin of the driver ant is the **army ant** (*Eciton*). Like the driver ant, an army ant is mostly blind—though it does have tiny peepers. Each morning, army ants head out into the jungle in search of food, which amounts to any creature not fast enough to flee their advancing columns.

<sup>10</sup> Like butterflies, ants undergo *complete metamorphosis*. Read about insect metamorphosis in **CREATOR** Vol 12 Num 4.





**Editor:** Henry Walter Bates, a 19th century English naturalist, wrote of these ants, “wherever they move, the whole animal world is set in commotion, and every creature tries to get out of their way.”<sup>11</sup>

**Nemala:** “One reason these ants are so deadly is the size of their colonies—a single nest in the Amazon can number a million or more ants; African driver ant colonies can reach 20 million strong!

“Army ants, however, aren’t always on the move. Half the time they stay in one spot of the jungle, making daily raids from that location. Whether on the move or camped in one place, army ants live out of something called a *bivouac* (BIV - wak). A bivouac is a temporary nest, constructed at night, consisting of a hollow ball of workers. This living nest—two or three feet (one meter) across—may include a half million ants all linked together by their legs. That’s some fancy footwork! The bivouac even has passageways and chambers. The queen and her young live safely in the center.

“At daybreak, the army ants release their grip on one another and the bivouac begins to dissolve as hungry workers prepare for a raid. Since there’s no leader, these raids flow out like water in random directions—

swirling, engulfing, and consuming every slow-moving animal in their path. A single colony can consume 100,000 insects in one day. Oh, my!

“These ants give me a better idea of what it means to fear the Creator who made them!”

### “COWGIRLS”

**Nemala:** “Your great Lord Jesus has placed in the world of ants our own version of ‘dairy farmers.’ You could call these ants ‘herdsmen,’ but since they’re all female, ‘cowgirls’ would seem to be a better name. These ants are the gentler souls of the ant kingdom, revealing the sweetness of our Creator. They don’t usually eat other creatures, but keep herds of aphids to obtain ‘honeydew,’ their favorite food.

“Aphids are tiny, wingless insects with ‘beaks’ that are used to suck sweet juice out



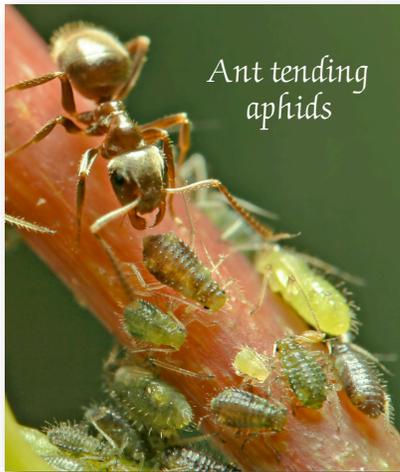
of green plants. The generosity of our God is seen in the aphids He created, for they are able to share their bounty. I’ve been told that as an aphid draws fluid from a plant stem, sugary liquid is pushed out its backside. This

<sup>11</sup> Bates, Henry Walter, “The Naturalist on the River Amazons” 1863.



sweet liquid—known as *honeydew*—is irresistible to us ants.

“Now, aphids have no way of defending themselves. Our Creator directs the cowgirl ants to watch over the aphids much the way you might care for dairy cows. In exchange, the ants are given plenty to eat.



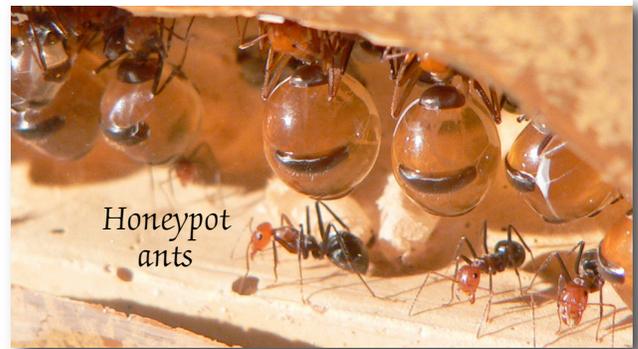
“If these cowgirl ants move their nest, they frequently take their herd of aphids with them. Some ant colonies even gather up aphid eggs in autumn as the weather starts to turn cold, and store them in their cozy underground nests during winter for safe keeping. This ensures a new herd of aphids for next spring.”



## THE HONEYPOTS

**Nemala:** “I’ve also heard through the grapevine that in 1879, a Presbyterian minister named Henry C. McCook discovered a fantastic ‘twist’ to the life story of honeydew-eating ants. While exploring a place in Colorado called the Garden of the Gods, he stumbled upon the *honeypot ant*. By the way, why do y’all call it ‘Garden of the Gods’ when there’s only one God? Kinda strange!

“Anyway, unlike bees, we ants can’t make wax. We’re unable to produce waxy combs in which to store sweet liquids, as bees do. So our really smart Creator, your Christ Jesus, gave the honeypot ant a special way of storing honeydew during winter.



“Certain members of this ant family volunteer to become living storage tanks, or ‘honeypots,’ for the nest’s stash of honeydew. These ants then help the colony to survive in colder months. The volunteers go into an underground chamber and hang from the ceiling like bats. During the summer and fall, sister ants regularly bring the honeypots fresh supplies of honeydew harvested from aphids and mealybugs.

“The honeypots have super-thin skin covering their tummies and they’re able to



consume a large amount of honeydew. But this causes their bellies to swell and it makes them completely helpless. They're fully dependent upon their sisters for survival.

"Throughout the colder months when honeydew isn't available outside the nest, the honeypots feed the colony. They bring up honeydew from their bloated bellies and provide sweet food for their hungry sisters. So for part of the year, the ant clan relies on others in the colony. During the other half of the year, the tables are turned. I think this provides a hint at how much we need our Creator (and each other) all the time.

"By spring, their deflated tummies look like raisins. How embarrassing! But once a



honeypot, always a honeypot—they're very dedicated. These ants never return to normal life nor see the light of day. They do, however, spend several years in faithful service to their honeypot community.

"Oh, gotta go, y'all, I see a really great pebble to move. Bye now!"

This ends Part 1 of our study of ants. You can read more about Christ's amazing creation and control of these wonderful insects in the next issue of **CREATOR**.

## ANTS THAT HUMBLE

**Editor:** The life and death of Christ Jesus should strongly motivate us to explore all parts of His creation, especially the tiniest things He formed. If Jesus was humble enough to save us, should we not be humble enough to consider the things He has created, even if this requires us getting on our hands and knees? Philippians 2:10 reminds us that "at the name of Jesus every knee should bow." The English word "name" can mean "glory" in this context. Since ants clearly display Christ's glory (His name, His character), should it seem strange for us to get on our knees in a sincere study of ants? We're not bowing to the ant—no! We are bowing to Christ's greatness. And by studying the ant, we get to know our Creator better. He is exalted throughout nature and He has hidden a treasure of wisdom in the lowest of these creatures. Do you see it? □

*Go to the ant . . . consider her ways,  
and be wise (Proverbs 6:6 ESV).*



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