

Why Did God Make Ticks?

ROMANS 1:20

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Over the next several days, whether we are headed to camp or whether we stay here in the Madison area, most of us will probably encounter a good number of some very interesting creatures. And the more time we spend outdoors, some of us, of course, will encounter more of these creatures than others. As we conclude our song service about God and his creation, and as we begin a brief study of God's word this morning, I would invite you to be turning with me to Romans 1:20 (p. 1759). If you have not figured it out already, the creature on the wall up here is a TICK, and as we know, ticks are a major concern for those of us who spend any time in nature, primarily because of the diseases they carry. The life cycle of a tick has a number of stages, and they need to feed on blood in each of these stages in order to progress to the next stage. They can feed for several days, sometimes swelling up to 600 times their normal weight. I don't know if we really understand what that means. If that happened to me, if I sat down to eat and swelled to 600 times my current weight, I would step away from the dinner table weighing in at over 100,000 pounds. So, they have a voracious appetite. Unfortunately for us, when they feed, they inject a bit of tick saliva to anesthetize the wound and to keep the blood from clotting, which is absolutely amazing! But the bad part of this is that the saliva carries a wide variety of diseases - Lyme Disease, Rocky Mountain Spotted Fever, and many others, including a relatively new disease just discovered up in Eau Claire County, where those who are infected develop a severe allergy to red meat. To me, that is completely bizarre. There are roughly 1000 species of ticks, and all of them share this basic life cycle. I am thankful for the note at the bottom of this diagram, reminding us that the images up here are not to scale! I am so thankful that we are not facing ticks the size of our beagle this week!

As to the bite itself, ticks have some amazing mouthparts! This is something of the big picture, but I want us to focus in on the jagged and horrific-looking needle-like structure in the middle, because as we zoom in on that middle part, we notice that it is basically like a harpoon, or maybe a cross between a straw and a harpoon! Notice the trough in the middle - and then also notice the barbs on each side of it. The chelicerae are those two barbed parts up above that work back and forth, pushing the hypostome deeper and deeper into the body. All of this is so small, and so complex.

But as we make our way to the passage in Romans 1, I want us to ask: WHY DID GOD CHOOSE TO CREATE SUCH HORRENDOUS LITTLE CREATURES? As believers in God and his word, we believe that God created ticks on Day #6, along with all other land-dwelling creatures. Today, of course, ticks are a nuisance, carriers of disease, so perhaps we might be tempted to think that maybe God made a mistake, that perhaps he should

not have created these little creatures. Some might even look at the diseases they carry as proof that there is no God. However, there is another option, and that is: These little creatures were originally created to be good, perhaps originally designed to feed on plants (as many mosquitoes still do today). After all, we remember what the Bible says in Genesis 1:31, that ***“God saw all that He had made, and behold, it was very good.”*** As hard as it might be for us to believe, ticks, at one time, were ***“good.”***

How, then, did ticks, perfectly designed and created by God, become such a menace? We need to remember that Adam and Eve never faced death and disease until they disobeyed God. Only when sin entered the world did we start dealing with thorns and thistles and so many of the other frustrations that go along with living in a cursed and fallen world. The way I see it, then, ticks are a reminder that this world, once perfect, has now taken a horrible turn for the worse. Ticks, then, as we know them today – with the frustration, and disease, and even death, they bring – these little creatures are now a reminder that the creation itself is no longer good and pure, as it once was at the beginning.

However, even with this in mind, we look at the tick itself, and we are amazed at the incredible design that we see, even in this one little part of God’s creation. So, I suppose one lesson here is that no matter how much we might hate these little creatures, God made them. And as dangerous as they are to us, they also demonstrate God’s design. And this is where we come back to Romans 1:20. Hopefully all of us have our Bibles open to this passage, so I would like for us to look together again at Romans 1:20. Notice, please, the words of Paul in Romans 1:20, ***“For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made, so that they are without excuse.”*** As we bring our thoughts to a close this morning, and as we consider God’s creation, I would like to point out just two very small aspects of the lowly tick that surely serve as evidence of God’s design.

I. And the first aspect of design comes in a kind of GLUE or CEMENT that a tick secretes to help it latch on to us.

And again, if I’m the one being latched on to, this is terrible! But it does demonstrate some amazing design. We have some science types here at this congregation, so you might already be aware of this. I was not. But if you want to know more, there are a number of scientific papers out there going into great detail on this. But as I understand it, ticks normally wait on blades of grass, holding on with their rear legs, reaching out with their front legs, sensing heat and carbon dioxide, and as we pass by, they grab on. They then make their way up to the most sensitive and tender skin they can find, and then, as they cut through our skin with their mouthparts, they excrete what scientists describe as “cement.” This cement not only binds the tick to our skin, but it also seals the hole, so that no blood or tick saliva gets wasted. This has been documented quite extensively over the past 100 years, but we continue to learn more about this cement almost constantly.

I am thankful for an article from NASA that helped bring it down to my level. In an article dated February 17, 2017, NASA summarized some of the research that’s been done concerning this cement, and they were outlining efforts to replicate this cement for use in closing wounds. Most of us know that doctors will often use “glue” instead of stitches. The problem is: Many of the glues we currently use are at least somewhat toxic. So, scientists are now trying to replicate the cement secreted by various ticks. It’s all-natural, the glue itself doesn’t seem to be dangerous in any way, and we already know that it sticks quite well to a jagged, bloody hole in the human body! We want that! There are now 150 researchers from 30 countries working together in an “Institute for Experimental and Clinical Traumatology,” in an effort to recreate what God has done in ticks. If you do a quick online search for “tick cement,” you will be flooded with information on this.

So, first of all, as dangerous as they are in other areas, there is at least some value in this cement. There is evidence of design.

II. There is a second evidence of design in that ticks are also able to SECRETE A SUBSTANCE THAT ALLOWS THEM TO PULL IN MOISTURE FROM THE ATMOSPHERE, allowing them to go for months without actually drinking any water.

They sense high humidity, they secrete a hydrophilic substance (that is, a substance that loves or attracts water), once that substance is saturated, they take it back in, and they absorb that water vapor back into their bodies. I am completely oversimplifying this, but if you would like to know more, go for it! In my feeble mind, I compare it to what happens with those silica packets we find in various electronics. But the tick creates this, allows it to absorb moisture, and then brings that moisture back into the body, allowing them to go for months without drinking any water, even in fairly dry environments. But here's where it matters to us: Scientists are looking at this process to try to mimic it with air conditioning systems. A big part of air conditioning is taking humidity out of the air. And if we can somehow duplicate what ticks do, we can be a lot more comfortable using less energy than we do with the systems we have now.

The point here is: This amazing creature was designed by God – not designed to torment us, necessarily, but designed to feed very efficiently, designed to survive. And as I understand it, only after the first sin did God tell ticks that humans are fair game. At the beginning, all of us were vegetarians. My sister was a vegetarian for many years, and when she was a teen, I remember she had a poster that said, “Animals are my friends, and I don't eat my friends.” That's the way it was in the Garden of Eden. But, ever since the flood, everybody has been fair game. We can now eat each other! But the point is: Ticks were not originally designed to torment us. But, they were designed by God to feed efficiently, which they do. And again, scientists right now are working to copy God's design in these two areas - the cement and also the moisture absorption. By the way, we are not using other parts of God's creation to battle these little creatures. Right now, I have permethrin (a derivative of the Chrysanthemum plant) on my clothing. If a tick or mosquito lands on my pants right now, it will die, which is awesome! I'm also using a citronella-based beard balm this week, to help keep the skeeters away from my face at camp. So, God has given us other tools from nature to help protect us.

Conclusion:

This morning, we have studied one small (and at times almost microscopic) part of God's creation. I hope we agree with Paul that in the creation, God's “***...invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made.***” As Paul went on to explain, the creation leaves us “***without excuse.***”

The Bible explains that even before God created the world and everything in it, he had a plan for our salvation. And the plan is: He would send his only Son as a sacrifice for our sins. This morning before the offering, we sang, “At the Cross,” and we sang a line in that song about a time, “When Christ the mighty maker died, for man, the creature's sin.” Christ, our creator, died for our sin. We respond to that sacrifice in faith – turning away from sin, turning our lives toward God, having a change of heart concerning sin, confessing our belief in Jesus as the Son of God, and by allowing ourselves to be buried with Christ in baptism, for the forgiveness of our sins. If you have turned away from God and need to come back, we would invite you to let us know, and we would be honored to go to God in prayer on your behalf. If you are ready to obey the gospel, though, we

would love to help you with that as well. We would invite you to let us know about your decision as we sing this next song. Let's stand and sing...

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