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The Power of Praise

Nature's Worship of Christ v. A Silent World

"And you shall love the Lord your God . . . with all your strength." Mark 12:30

Editor's Note: The following is a fictitious court hearing where evidence was presented and testimony heard to demonstrate nature's universal and continuous praise of God. **Judge:** "We have before us the case of Nature's Worship of Christ v. A Silent World. Will the counsel for the plaintiff approach the bench?"

Professor Richter:¹ "Your Honor, may it please the Court for us to give testimony to the numerous ways Christ's creatures worship Him through the sounds they make. We especially desire to focus on *the amount of time and effort* they invest in praising our Creator." **Judge:** "Granted. But first, tell me what you are a professor of."

Professor Richter: "I am a grigologist." **Judge:** "A grigolo...?"

Professor Richter: "Grigologist. I study the lives of cicadas (sih - KAY - dahs), katydids (KAY - tee - dids), and crickets. As a hobby, I also research the hymns of all living things." **Judge:** "Richter? Are you related to the scientist who invented that earthquake scale?"

1 Professor Richter (pronounced rik - tur) and the Judge are fictitious.

Professor Richter: "Richter scale? . . Yes, he's a distant relative."

Judge: "Lastly, who is the 'Silent World' you are calling out?"

Professor Richter: "God created all creatures to praise Him with every fiber of their being because *He is worthy of worship*! And they do this for His everlasting glory and joy. Praising Christ our Creator is no half-hearted endeavor, or at least it shouldn't be. Many people refuse to acknowledge their Maker, much less exalt Him. We are here today, Your Honor, to challenge the world's intentional silence by pointing out nature's all-out effort at extolling God."

Judge: "Proceed."

Professor Richter: "As our first witness, we would like to call Carolina Wren." (A small but handsome brown and white bird immediately flits his way up to the front of the courtroom and lands on the judge's desk. Recalling a prior hearing that involved decomposers, the judge nervously clears his throat.)



Judge: "You're not going to eat the papers on my desk are you?"

Carolina Wren: "No, I eat only seeds." (*Relieved, the judge motions to the bird to begin.*) **Wren:** "I worship Creator Jesus when I sing and I can assure you, I do it with all my strength!"

Judge: "I was under the impression that male songbirds sang to attract a mate." Wren: "Our singing is attractive because we loudly exalt Christ with our voices—we do it with all the force God has given us. Above all, however, our songs are pleasing to our Lord.

"When people sing, they burn about twice as many calories as they do at rest. We Carolina wrens expend up to *nine times more energy* with our praise. This doesn't mean that human singing is less sincere, it's just that God created birds to worship Him at much higher energy levels. Scientists have calculated that the calling effort of birds, frogs, insects, and many other animals is near our physiological limits."

Judge: "Where did you learn such big words?" **Wren:** "Professor Richter is a very good teacher!

"Your Honor, all of God's creatures are members of nature's grand orchestra here on Earth. This includes the 'string and percussion sections' of insects, the 'horn section' composed of frogs, and the 'vocalists,' which includes 5,000 species of birds plus wolves, and a few whales."

Judge: "There are 5,000 different bird songs?"

Wren: "Yes. About fifty percent of the nearly 10,000 species of birds sing. Greater still, the world is filled with 7,000 unique frog melodies and 25,000 insect praise songs.

"Each species of bird has a special hymn and depending on where it lives, the song may vary somewhat. The striking melody of a northern cardinal in Georgia is somewhat different than that of cardinals in Illinois. You could say that birds possess *accents*; this is true for whales as well. "All male birds innately know their species song from birth, placed into our mind by Creator Jesus. As a youngster he listens to adults sing, then works hard at practicing his song, creating slight musical variations, and making it his unique praise to God. This is especially true of goldfinches and canaries."

Sing to Him a new song; Play skillfully with a shout of joy. Psalm 33:3

Judge: "I must say, I am stunned! I never knew so many animals sang." Wren: "Of course, not all creatures sing at the same time. In the eastern United States, spring peepers² cry out to the Lord from mid-February to mid-May. These tiny frogs expend an incredible amount of energy over those three months and eventually become



quite fatigued. In fall, they usually sing for an additional two weeks. Your Honor, their autumn worship *is proof positive* that Christ's creatures don't primarily sing to attract a mate because October is not the mating season for spring peepers!

"When one of nature's musicians tires out, another takes over.³ Crickets and cicadas often start singing when spring frogs become exhausted. Since so much energy is expended by each species, the Lord's creatures from all

2 Pseudacris crucifer

3 Hear one frog after another worship Christ through the spring and summer! youtube.com/watch?v=CVi_0DHOUoY&feature=share over Earth help one other in worship. They join the global jubilee at different times of the day and night and at various times of the year creating an incredible richness of praise." **Professor:** "Creation attempts to reflect the unending worship of angels (Revelation 4:8)." Wren: "We wrens typically sing our hearts out to Creator Jesus in the early morning hours shortly after sunrise and then again when the sun sets. Much of our message is an expression of 'Thank You!' to the Lord for His faithful care of us."

It is good to give thanks to the LORD and to sing praises to Your name, O Most High; To declare Your lovingkindness in the morning, and Your faithfulness by night. Psalm 92:1-2

Judge: "I don't deny that God is worthy of praise, but I still think you sing primarily to attract a mate."

Professor: "Your Honor, yes 'God created ... every winged bird after its kind' and commanded them, 'Be fruitful and multiply.' But why? He desires that His Creation be full of 'joy and gladness ... thanksgiving and sounds of melody."⁴

Wren: "And many male and female birds form a lifelong bond between them. You could say that avian couples are 'married.' Yet the male of a permanent pair continues to sing sweetly every day. Why? He's already got a mate, so he's not trying to attract another; these birds are faithful to each other! As Scripture beautifully proclaims, our songs fill Creation with the joy of the Lord and gladness with thanksgiving, and the sound of melodies. This is why we sing.

"Even one of your own hymn writers proclaims that 'the birds sing sweetly in the trees' in worship to our great God.⁵ Your Honor, with all due respect, though our hymns do attract other birds—and are pleasing to people as well—we sing first and foremost to honor our Creator Jesus!" **Professor:** "In addition to what Carolina Wren has said, I need to mention that the rhinoceros katydid of Central America (*Copiphora rhinocerces*) sings even when no female katydids are present.



"If it would please the court, I would like to call our next witness."

(*The judge turns to Carolina Wren.*) **Judge:** "You may flit down. Thank you for not making a mess."

Professor: "I would like to ask Wolf to come forward."

(A 120-pound (54-kg), powerfully-built yet slender canine bounds out from the back of the courtroom. The wolf's imposing presence and quick entrance nearly knock the judge backward off his chair.)

Judge: "Wait a minute, you can't bring him in here!"

Wolf: "It's OK, Judge, I'm not here to hurt anyone; I just want to tell you about my pack's worship of the Almighty."⁶

(The judge's hands turn white as he clinches his fists.)

Judge: "Ahh, . . permitted."

Wolf: "Wolf families, or packs, run between four and nine members. When one of us starts to sing to Creator Jesus, the rest of us quickly join in. Singing as a pack is our time of 'family worship.' We also howl individually when alone, and sometimes a male and a female wolf will *sing a duet* to the Lord.

4 Genesis 1:21, 22; Isaiah 51:3 5 "How Great Thou Art," Carl Boberg of Sweden 6 There was not a single person killed by wolves in North America during the 20th century.

Court Document: B16753

One of the most amazing and mysterious examples of animal duets is found among mosquitoes. The male moves its wings at an incredible 600 beats a second: a female beats at 400 a second (creating the sound many people find annoying). When a male and female mosquito are near one another, they can adjust their wing speed in response to the other's song. The frequency of their wings creates "harmonic convergence." When this occurs, their combined songs—*a* duet—ring out at 1200 beats per second. Strangest of all is the discovery by researchers that females are deaf. How then does she harmonize with the male?! It is our conclusion that Christ's Spirit is intimately involved in creating this duet.

You can hear us howling throughout the year, but our favorite time to sing is January and February."

Professor: "If I may jump in, Your Honor, this would be a good time to mention that creatures often cooperate with each other in their worship.⁷ Here is an outline of the different expressions of worship based on the number of creatures engaged in it:"

- $\bullet \textit{ individual song} -\!\!\!-\!\!\!most \textit{ creatures}$
- *duets*—insects, birds (especially wrens), wolves
- *calling back and forth*—chorus frogs, wolves
- family worship—wolves
- small groups (dozen or more)—frogs, insects
- large groups (thousands)—insects
- super-groups (billions)—periodical cicadas

Judge: "Interesting chart. By the way, don't wolves normally howl at the full moon?" Wolf: "That's an old wives' tale, Judge. As Christ's creatures, *we're not capable of idolatry*. We don't worship the moon, but

7 It's not uncommon for different species to join one another in the worship of our great God!

howl to our Master in the joy of the Lord! It's true that wolves have been known to howl during a lightning storm. In this case, we accompany the thundering of 'God's voice.'⁸

"Animals can make all kinds of sounds and noises, and for many different reasons. We wolves bark and growl to ward off an enemy. Rattlesnakes 'rattle' their tails to show they are frightened and might bite. An injured dolphin makes a whistling sound; baby ducks let out a special quack when they feel safe and content in their flock. And it is often the case that when Creator Jesus leads an animal to food that it responds by singing 'Thank You, Lord!' in its own special way."

Who prepares for the raven its nourishment, When its young cry to God? Job 38:41

Judge: "Why do you howl mostly in January and February?"

Wolf: "In the northern latitudes where we live much of Christ's praise has gone silent due to the harshness of winter. We don't hibernate, so God has given us the privilege of worshiping Him when others can't."
Judge: "I'm sorry, but I'm still not convinced your howls represent worship."
Wolf: "When we howl, our gaze is pointed upward toward heaven. If we were simply



8 Psalm 29:3

communicating to one another, why call straight up in the air?"

Professor: "I also anticipated your objection, Your Honor. If you will permit, I would like to present a scriptural account in support of Wolf's testimony."

Judge: "Granted."

Professor: "The thirteenth chapter of Isaiah describes the fierce wrath of our Sovereign God against Babylon's wickedness. The Lord announces that Babylon will be laid waste and there will be no human survivors. Shepherds will dare not approach the wasteland for fear of God's anger. Babylon's desolation, however, will provide a safe place for beleaguered animals: desert creatures, jackals, owls, and ostriches will find a safe home there. Goats will frolic for joy, and hyenas will howl in thankfulness.

"Romans 8:19-22 teaches us that all Creation suffers under the curse of humanity's sin, and anxiously longs for Christ the Creator to redeem it. In the meantime, most animals—like rattlesnakes will continue to fear people (Genesis 9:2). It is only when the enemies of God are defeated that wild animals cease being 'wild' and find peace.

"Christ's original design meant security for all His creatures. Two chapters earlier in Isaiah, the prophet declares a day when 'the earth will be full of the knowledge of the LORD as the waters cover the sea' (Isaiah 11:9). Animals will then be at peace with mankind again and with one another, together praising our Creator."

(The judge is left with nothing to say as he ponders the Scriptures presented by Professor Richter.)

Professor: "Your Honor, God's Word declares that 'the sea . . . and all it contains' (Psalm 96:11b) will praise the Lord. We would now like to call Spiny Lobster as a witness." (*The judge nods "yes," but privately wonders about the strangeness of this hearing.*) Spiny Lobster: "Hi-yah there!"

Judge: "Please drop the vernacular and refer to me as 'Judge' or 'Your Honor." Lobster: "Oh, sorry, Ya Honor." (There is a long pause of silence.)

Judge: "Well, do you have something you want to tell the court?"

Lobster: "Oh, ya, well . . . truth is, Ya Honor, the ocean vibrates with uh bewildering number of different hymns to our Maker. It's almost impossible to say just how much effort sea creatures put into singing, but it's uh lot." Judge: "Wait a minute! How in the world *can* you make music?"

Lobster: "Using my antennae. I move them back and forth across my body—kinda like drawing uh bow across uh violin." Judge: "Do you sound like a violin?" Lobster: "Well, no, but to the Lord and us lobsters it's uh pleasing sound.

"Far and away the loudest musicians of the ocean are the whales. The humpback whale is considered by some to be Creator Jesus' greatest natural singer. Many types of whales make chirping and whistling sounds, but the humpback is the virtuoso of the sea.



"It's not uncommon for uh male humpback whale to sing for an hour straight before coming up for air. As ya probably know, Ya Honor, whales are mammals and must breathe air; they don't got gills."



Judge: "You say that the humpback is nature's greatest singer . . . just how much time and effort do they invest in singing?" Lobster: "Uh few years back, uh marine biologist decided to record the worship of uh single humpback whale. The animal sang for 22 hours straight. It may have been longer, but the researcher later confessed that he needed to stop recording after 22 hours, so he could go home to sleep."

(The judge quietly exclaims to himself, "Twenty-two hours!")

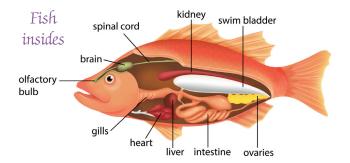
Judge: "How is it possible that animals can vocalize for such a long time?"

Lobster: "Because 'the joy of the Lord is our strength!"⁹

"The most numerous of the 'sea crooners,' however, are fish."

(A confused look crosses the judge's face.) Judge: "Fish sing?"

Lobster: "Some do, Ya Honor. The Lord supplied all bony fish with something called uh 'swim bladder,' which is uh air-filled bag in the center uh the body. Fish use it



to maintain buoyancy in water. There are muscles surrounding the swim bladder that cause it to shrink and expand. By squeezing then releasing the bladder very quickly, some fish can create uh clicking or drumming sound. If uh fish contracts and expands its swim bladder several times in uh row, it can produce uh strange song that sounds like uh boat whistle or uh foghorn (toadfish). Fish often sing when they're feeding; it's their way of thanking our Great Provider.

9 Nehemiah 8:10



"We ocean invertebrates are also very grateful to Creator Jesus for His faithful care of us. And we praise Him in lots uh different ways: by rubbing two body parts—like claws, legs, or antennae—together or by moving them across our hard shells. We can drum on the ocean floor or drag uh body part over uh rock, which is what sea urchins do. Some invertebrates use muscles inside their body to make their carapace 'hum' or 'buzz."" Judge: "Carapace?"

Lobster: "It's the scientific name for our outer shell."

(The judge is impressed by the depth of testimony he's heard today, but he is still reeling from how bizarre it has been.) **Professor:** "If it would please the Court, we would now like to call our final witnesses— Snowy Tree Cricket and Gray Treefrog." **Judge:** "Granted."

(A tiny gray and green frog hops up to the witness stand while a cricket takes to wing, landing on the Judge's robed right arm. Meanwhile, Lobster lumbers back to his seat.) Gray Treefrog: "Judge, it's difficult for researchers to estimate just how much energy a whale or a spiny lobster uses when it worships our Creator, but scientists have been able to study several kinds of frogs and insects. They've learned a great deal about our metabolism in the process." Judge: "What have they discovered?" Treefrog: "Well, when we sing to the Lord Jesus, the metabolic rate of some insects increases 21 times normal and for certain frogs, up to 24 times resting metabolism.

An Olympic marathon runner increases his or her metabolic rate 15-16 times normal during a race. This means, Your Honor, that when frogs and insects sing to God, they're using proportionately more energy than a marathon runner!"

Judge: "How does this compare to human singing?"

Treefrog: "An Olympic marathon runner might burn 1,400 calories an hour. A person who sings while standing uses about 150 to 200 calories. So insects and frogs are expending ten times more energy in worship (proportionately) than people do." **Judge:** "Hmmm."

Treefrog: "Of course, this all depends on the size of the frog, the number of notes he sings, and how loud or long his praise is. Male frogs sing with all they've got. In fact, frogs and humpback whales have something in common—our hymns radiate outward through our entire body!

"Most daytime musicians of the natural world cease their praise when it gets dark. But many insects and frogs are designed by Creator Jesus to carry on worship throughout the night. This is especially true of crickets and katydids, as well as frogs.

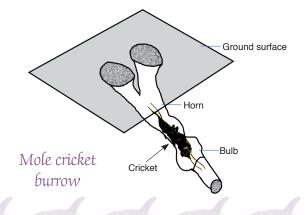
"We gray treefrogs are quite loud and produce roughly 10,000 notes per hour. And if we sing four hours continuously, that's a total of 40,000 notes. By comparison, an average human symphony is composed of 70,000 notes. Yet, that number is divided among 100 musicians. One hundred treefrogs in a single forest can create a concert of 400,000 notes. And that's just one species of frog!" **Judge:** "I recently went to Panama on vacation and found the nighttime jungle there to be deafening!"

Treefrog: "In the forest where I worship, there are about a dozen species of katydids, Your Honor, each singing their own hymn. The jungles of Central and South America may possess ten times that number, plus frogs and other animals. **Professor:** "Most insects sing in a frequency range we humans can hear (20 hertz to 20,000 hertz).¹⁰ Entomologists have recently discovered three species of katydids, however, that move their wings so fast, the hymns they produce are *ultrasonic* and far beyond our hearing. Known as the *Supersonus* species, the most energetic of the three can sing at 150,000 hertz or eight times higher in pitch than people can perceive.

"Katydids have the highest metabolism of all insects. Their wing motion is so vigorous that the thoracic muscles used to create song raise the body temperature of these otherwise cold-blooded creatures to 104° F (40° C)." **Treefrog:** "Your Honor, the reason why rainforests are so loud with praise is that Creator Jesus has filled them with countless species of worshipers. Scientists wrongly believe that the members of each species are competing with one another for attention. Nothing could be further from the truth. *Praise begets praise!*"

Professor: "Your Honor, I'm not very adept at singing myself. But when I am in church and others around me are singing loudly, I tend to sing more loudly."

Snowy Tree Cricket: "Worshiping animals do all they can to loudly praise the Lord. Whales have been known to use deep, oceanfloor canyons to project their voices; mole crickets dig a two-chambered (horn and bulb) burrow in the ground that acts like a trumpet, greatly increasing the volume of their calls.

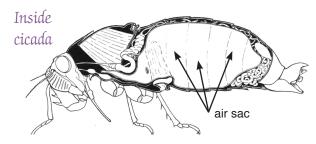


10 Hertz is a measure of a sound's frequency; one hertz equals one cycle per second.



Snowy tree crickets use green leaves to amplify songs. Sometimes I chew a hole in a rather large leaf and position my wings over the hole. The leaf acts as a megaphone." **Judge:** "I'm perplexed. Why your wings? Don't you sing with your mouths?" **Cricket:** "We have no vocal cords, so we rub our forewings back and forth across each other very quickly to make sweet music."¹¹ **Judge:** "Oh, similar to the invertebrates of the sea?"

Cricket: "Yes, all crickets and katydids create music this way. Grasshoppers also rub their legs over their wings to produce sound. On the other hand, Creator Jesus fashioned the body of cicadas quite differently.



"The male cicada possesses a thick drumlike membrane at one end of a large air sac in its abdomen. Strong muscles attached to this membrane cause it to change shape. When this is done very quickly, a loud buzzing song is produced. Most people find insect worship to be noisy, but the cicada is clearly the loudest. There are many cicadas on Earth that sing to the Lord at 106 to 107 decibels equivalent in volume to a chainsaw!"

11 Watch a delightful video of a cricket singing (normal and slowed down): youtube.com/watch?v=YAaAZdVeoRU **Judge:** "Are they the loudest creatures on Earth?"

Treefrog: "Oh, no, Your Honor. Believe it or not, many are louder. We treefrogs often sing at 100 decibels; bullfrogs can worship at 120 decibels; and a howler monkey's call rings out at 140 decibels, which is quite painful to the ears. But the greatest vocalizations of all come from whales.

"The volume of a fin whale's clicks have been likened to a jet plane taking off from an aircraft carrier. And Humpback whale songs can travel across the ocean. But the creature with the loudest praise is the sperm whale. Its clicks have been recorded at 233 decibels ... loud enough to kill."

Cricket: "Truly our Creator Jesus desires robust *and beautiful praise*. Your Honor, can you think of anything more pleasant than crickets chirping softly on a warm summer's evening? Though energetically expensive, the southern mole cricket produces a beautiful, high-frequency trill similar in musical quality to that of the American toad.

"Animal adoration of God is very different from human praise and often difficult to characterize: The distant 'family worship' of a wolf pack has been described as 'enchanting,' the otherworldly calls of loons as 'haunting,' and the incredibly complex hymns of humpback whales as 'mesmerizing.' And we mustn't forget the countless tunes of male songbirds that bring so much joy to bird lovers. Animals often sing loudly to the Lord *and also* with as much sweetness as we can muster."

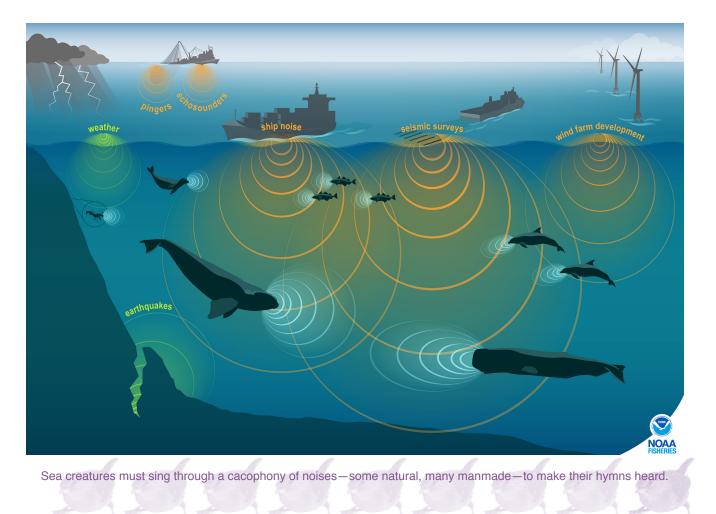
Doq-day cicada

Professor: "Sometimes God leads *animals and people* to compose very complex worship songs. Two examples are the otherworldly cries of the humpback whale and Handel's soul-soaring *Messiah*. Complexity does not always equal beauty though. One of the most beautiful hymns ever written—in my opinion—is the *Doxology*. It is composed of just 35 notes. Most God-exalting hymns average only 300 notes. There have been many symphonies and concertos written over the years—with untold numbers of notes that do not move my heart to worship like the *Doxology*!

"Of all the creatures on Earth, God's children alone are able engage their minds in uniquely praising Him. The genius of Handel's *Messiah* or the theological writings of Jonathan Edwards is testimony to this. Listening thoughtfully to deep, rich sermons, studying God's Word, or reading the Christian classics involve our minds and often are expressions of adoration to our Lord Jesus Christ.

"The world of unrepentant sinners is silent toward its Creator because, sadly, it does not see Him or His majesty. Most of mankind minimizes the importance of worship, and knowingly or unknowingly interferes with Creation's praise of Christ." **Judge:** "Why do Christ's creatures here on Earth need to be so loud—as I experienced in the Panama jungle?"

Professor: "The worldly activities of people often cause their hearts to become hardened, effectively muting Creation's praise of God in their ears. And it's not uncommon for careless human activities to dampen a creature's worship. Frogs and insects often stop singing when disturbed by unnatural noise—a loud



motorcycle or a car driving by. Sadly, many creatures struggle to make their voice heard in cities and other noisy environments, and have altogether gone silent.

"We must also appreciate that worshiping God involves more than singing. This side of Heaven, people simply cannot praise the Lord with as much energy as a katydid or a treefrog, a nightingale or a humpback whale. So our Lord commands us to worship Him with 'all our heart . . . and mind,' as well as our strength. For the Christian, *life* is worship (or it should be). Throughout the week, we sing, pray, read, meditate, explore, and share our faith.

"True worship always costs us something. Most especially, it cost Jesus His own life in order to make us fit to worship His Heavenly Father in Spirit and Truth (John 4:23-24). Only people united to Christ can adore God. You see, Your honor, sin prevents our hearts and minds from loving God." Judge: "Then who can love Him?" **Professor:** "Only God can create love and praise in His creatures (Isaiah 57:19). He alone leads people to *confess their sins* before His throne in prayer, *repent* of them, and believe that Jesus died on a cross to pay the infinite penalty for their transgressions.

"As we have seen, though costly, true worship may also be simple. The opposite is not necessarily true—'simple' does not necessarily equal 'praiseworthy.' Lighting candles is simple, but not costly. The poor widow, on the other hand, had only two small copper coins to place in the temple treasury. It was an offering *simple and costly* because it was all she had to live on (Luke 21:1-4).

"Secular scientists would have us believe that all these animal melodies are songs to attract a mate and nothing more. There is little research to support this notion. I don't deny that singing has a powerful and mysterious effect between the males and females of God's creation. But I am also convinced that Jesus has given His creatures a voice—first and foremost—to saturate the earth with the sweet worship of His name. This is what His Heavenly Father bids us

to do, for when the Son is glorified, so is the Father!"

Judge: "I wish to thank the plaintiff for an excellent presentation today. It would seem that the Silent World did not think it worthwhile to appear in court. You and your witnesses have given a compelling argument that most of the sounds Creation makes are hymns of praise to our Maker. I only hope more people come to realize this truth. Court adjourned."

Let the heavens be glad, and let the earth rejoice; Let the sea roar, and all it contains; Let the field exult, and all that is in it. Then all the trees of the forest will sing for joy Before the LORD, for He is coming; For He is coming to judge the earth. He will judge the world in righteousness, And the peoples in His faithfulness. Psalm 96:11-13



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