

# Light Reading

Diamond's Light Reading for Schools Competition 2013

## Winning story by Christy Flora Au

### 'Lambelasma, That is My Name'

I am very old, 462 million years old, in fact. Many would say I am dead, a fossil, and to the naked eye, I might seem to be. Being that old and dried and pressurised under so many layers of rock and sand, sometimes I really doubted about my existence. How can I be if nobody knew I ever was? My world was so small and isolated from the rest of the world; I didn't even have a name! In human terms, I was depressed. That was, until the day I was found.

It was quite a normal day to begin with. The sun was blazing away and I was, as always, shifting around slightly, trying to get more comfortable with all this rock pressed up against me. Yet there was something off, some sense of anticipation was humming in the air; the sand particles nearest to me were talking with tones an octave above their usual gravelly rasping voices, and so excited were they, their words were blending into one another. They usually moaned about how passersby would stomp down hard on their little delicate 'frames', which is quite entertaining at first but gets irritating after the first hour. The occasional squawk from a bird above, the soft giggling from the breeze, and the distant squeaking of the sand was enough to slowly lull me to sleep. That is, until it happened.

"Boys!"

I woke with a start, hearing the incoming stampede of feet. All right then, time to brace up. Holding myself as steady as possible, I waited for the downward force that would surely have scraped off some more of my already depleted outer shell, but it never came. Instead I felt a tickling sensation on my rear end that made me burst out laughing. The sand particles nearer to the surface were laughing as well, "They are brushing off your bottom!" Very soon I felt a few tentative rays of sunlight lick at my exposed shell, more giggling and guffawing could be heard around me from the broken rock pieces and sand particles as my backside was revealed to the world to see. From above, a collective gasp went around with more than one "it's beautiful". What was so beautiful about my derrière?

"I have a feeling that it's a rugose coral."

"Can't slice it though, too small, too rare."

"X-ray tomography?"

"Diamond Light Source?"

"What do you think?"

"Yes, brilliant. Let me clear it with above."

Now, mind you, this made no sense to me at all. I was a tiny little existence packed in a rock, who was called Ordovician by the way, and sand particles that groveled in gravelly voices everyday! I didn't know about any of this stuff! All I knew was that I was removed from the ground, my bottom still on show, with only Ordovician for company, cries of "bon voyage" and sand-made confetti following us along the way. Things went hazy after that, for we were put into a place with no light at all. It was

scary. I remember being taken out again and snapping sounds were aimed at my butt, the tickler thingy was used on me as well. Then it was back into the darkness and strange noises that echoed in my surroundings.

Emerging once again into the dim light, my nerves calmed as the cacophony of sounds vibrated through Ordovician and then through me. I didn't know what that place was, I don't even know now, but the many sounds just calmed me and made me smile and sigh, well, until some sand particles left behind started squealing because of my sudden movement. There wasn't the scorching heat of the sun, nor were there the grumbings and mumbings of the environment I was used to. Instead, I heard the controlled, continuous blips that echoed through the air from time to time. I felt two warm objects, not like the scorching heat of the sun or of clumped sand, but of lukewarm rain, carry me up and up and across wherever I was. Entering another world of sound, the blips were soon accompanied by the occasional note of rushing air, reminding me of the balmy breeze on a summer's day. Whooshes and whizzes and other sounds I couldn't describe enchanted me, along with the low baritone voices, high soprano melodies and their coexisting thud-thud-thuds that emitted from the species that once stood upon my fragile shell, but now were caring for me so tenderly.

"All ready!"

"Let's find this baby's name now, shall we?"

This was the point where things started to sink in. I couldn't help but get excited by the future they had planned for me, they were giving me a name! I wriggled around in happiness, my joy ringing in my ears, blocking out sudden squeals from the sand particles and from Ordovician, who grumbled at my movement. The warm objects that cuddled me carefully set me down on a cold surface, making Ordovician grumble even more. I can't lie, I was a little scared then for the melodies and the baritones slowly faded away, muffled and quiet. What did they want to do with me? Am I going to get my name? Then, a humming sound slowly increased in volume, clattering my shell and clattering Ordovician. It grew and grew and grew, the humming separating into their own strains of tune, each playing their own little game, prodding and poking at me in a whimsical and half-hearted way. I felt like laughing, I'd never felt anything like this before. My thoughts were jumbled as the intensity of the sound washed over me, the shrieking of the sand particles unheard over the din, when suddenly, suddenly I was blinded by such a powerful force of light. It pierced through the dense Ordovician and the annoying little grains that lay on the surface. It ripped through the cavernous space filled with the hypnotizing humming, before finally, finally it reached me. It saw me. It saw me. From far away, I heard a shout of baritones and soprano melodies accompanied with their thud-thud-thuds. "It's a Lambelasma! Look at the beautiful coral patterns!" they cried.

And I cried, and laughed and sighed as well. For I was Lambelasma, that was my name.

## Judge's comments

*"Christy's enchanting story about a rugose coral being brought to Diamond for analysis and identification stood out from all the entries we received. By giving the coral a voice, she immediately draws readers in, taking them on a journey that is exciting, amusing and very heartwarming."* Laura Holland, Diamond's Outreach Manager



## Background

*Lambelasma, That is My Name* was inspired by real life experiments that took place at Diamond. By using the high-energy X-rays produced by the UK's synchrotron science facility, scientists revealed the earliest rugose coral recorded to date. High-resolution tomography helped researchers, led by Dr Christian Baars, from Amgueddfa Cymru – National Museum Wales and Golestan University (Iran) to create 3D images of the rare fossil, without having to sample it destructively. The clear, detailed images confirmed that the fossil was a 462 million year-old rugose coral, five million years older than previous discoveries of this type. The results, published in *Geological Magazine*, demonstrate that this non-destructive synchrotron technique holds great promise for the "virtual dissecting" of fossils and could be set to transform palaeontological studies in the UK.

