**Wonders of Earth – Great Barrier Reef**

Kristoph’s TARDIS had been disguised as a sleek white and blue yacht since just before sunset last night when they had arrived just off the Whitsunday Islands. Supper under the stars on a balmy evening had been enchanting. Waking just before dawn was equally beautiful, watching the sunlight spread across the world until the sea was the dazzling ice blue of a flawless diamond and the sky a perfect cloudless hemisphere displaying every other shade of blue on an artist’s palletye.

Aineytta was still surprised by blue skies. She was so used to yellow deepening to shades of orange. Blue told her she was on another world than her own. She admitted that she liked it, though. This warm expanse of water with its group of palm fringed islands was not only beautiful, but very peaceful.

Most of the islands, she had discovered, had names such as ‘Hamilton’, ‘Lindeman’ and ‘Hayman’ obviously meant to honour people in the eighteenth century British Admiralty. The one they were ‘anchored’ off this morning was Daydream Island. Even though it had been given that name by investors wanting to attract visitors to a resort facility the name still appealed to something in Aineytta’s soul. She loved the very idea of an island that encouraged daydreams – the more so since she came from a world that looked down on such things as unscientific and unproductive.

Her son and daughter-in-law came to join her on the outside deck of the the TARDIS yacht which bore the name Dulcibella out of some semi sentient regard for Marion’s love of English literature. They all waved good naturedly as a tourist boat that passed them by. In return binoculars and video camera lenses were tuned on them. A group of rich people in their own yacht, even if they weren’t recognisable celebrities was a point of interest in the seascape until the low, long glass-bottomed boat reached the Great Barrier Reef.

“We’ll head out once they’re back,” Kristoph said. “They’re only allowed to make three trips a day so we’ll have plenty of time to explore at our leisure.”

They sipped cool fruit drinks as they watched the tourist boat go out to a natural wonder that was so big it could be seen from the moon yet so vulnerable to human influence that access to it was restricted. That glass bottomed boat was not allowed to exceed a given speed limit over the reef, or to drop an anchor that could damage coral growth. Private yachts and boats were similarly restricted. Divers were only allowed under licence. Fishing was virtually prohibited.

And even so, as Marion had read to her dismay, there was environmental damage to the reef. That was why everyone visiting the reef was so closely monitored and controlled to try to prevent irreversible damage like coral bleaching.

So many great, beautiful things on Earth and Humans were ruining them.

“Humans aren’t the worst environmental criminals,” Kristoph assured her. “At least they know and care what has happened and are trying to mend the damage. The Creesa of Andromeda VIII poisoned their whole ocean system and then tried to abandon their planet and move to another.”

“Tried?”

“They were refused visas. The entire population of a billion are living on an artificial satellite above their own ruined world as sort of space refugees, waiting for a colony planet to come available or a suitable inhabited world to allow them to settle.”

“Humans in my time couldn’t even do that. Even the moon is hard to reach. So they need to look after this planet.”

“Yes, they do.”

The glass bottomed boat came back, its tourist complement full of enthusiasm for what they had seen. Many of them waved as they passed. Marion and Aineytta waved back before going inside.

Kristoph had made preparations for their exploration of the reef. Two sunloungers with pillows had been placed in the console room. The ladies made themselves comfortable before he adjusted a number of settings on the environmental console that turned the walls, ceiling and floor of the room transparent. Above was the warm blue sky. Below was the sea, green-blue and clear as crystal.

At the same time the exterior appearance of the craft morphed into a sleek bullet that could move smoothly through the water, descending to the sea bed and heading towards the restricted zone of the Reef itself.

As the water closed overhead the interior lights were turned off, beating a glass bottomed boat hands down for all round viewing. Puzzled fish darted around the invisible TARDIS. Jelly fish drifted by, their stinging fronds strewn out below them. A fish called the Māori wrasse opened and shut its thick lips as if trying to communicate with the visitors to its territory.

And at last they reached the Reef. Aineytta gasped in delight as it came into focus. Marion had explained what coral was – a structure made from the calcium excretion of a small marine animal – but she had hardly expected something like an underwater version of her favourite garden. Every colour that she had seen in the flower beds was represented in the coral reef. There were red, pink, purple and yellow fan shaped corals, as delicate looking as spun glass, greenish blue brain corals, overlapping plate corals resembling the petals of huge flower heads, staghorn corals spreading out a bush full of twiggy extensions, feathery sea pens – named for the quill pens of the early marine explorers, and pillar corals that reminded Marion of the huge weathered rocks of Death Valley.

They also passed over places where the worrying ‘coral bleaching’ had destroyed the endosymbiotic algae that clung to the coral and gave it its colour as well as providing nutrients for the polyps. Aineytta thought the creamy white corals were beautiful in an eerie, ghostly way, but she understood that they were the result of a tragic environmental problem.

“My goodness, what are they?” Aineytta asked as they passed over a sandy area littered with sea grass and other plants. The creature that had excited her interest was about two and a half metres long with a smooth grey hide. Its face was turned downwards to graze on the sea bed, and it looked for all the world like an organic vacuum cleaner.

Marion didn’t know what it was, either. She looked at Kristoph for the answer.

“That is a Dugong, close relative of the Manatee, found in many warm water areas of the planet, but hunting for food has depleted their numbers and they are officially listed as ‘vulnerable’. Fishing for Dugong is absolutely banned.”

“I should hope so,” Marion said. “I have never heard of them before. I hope they don’t become extinct. They look so inoffensive.”

“The reef’s cows,” Kristoph agreed. “Grazing harmlessly.”

The Dugong could not have been aware of the TARDIS. It moved silently and made no coral damaging wake. It was invisible from the outside. Even so, the creature paused in its grazing and swam up towards the unusual presence. Marion and Aineytta both exclaimed in delight as it faced them, a bunch of sea grass still in its wide mouth. They both felt a unique connection to the ungainly but fascinating animal.

“There’s a herd of them just a bit further on,” Kristoph told them. He manoeuvred the TARDIS up a little so that they glided over the dozen or more grey grazers without disturbing them.

“Time to get back to our mooring,” Kristoph said after what really didn’t seem like long enough. Marion was surprised to find that they had been underwater for more than two hours. That was far longer than any scuba diver could stay down, and they had seen far more than the flats-bottomed boat passengers would eventually see. “We’ll have a quiet afternoon, and after dark we’ll come back again. I want to see what the reef looks like under different light spectrums – infra red, ultra violet, supra-orange. It should be spectacular. And night viewing of the Reef is a privilege few are allowed. You shall have some treasured memories.”

“And lots more photographs for the album,” Marion reminded him. He had set the TARDIS exterior cameras to take still pictures of all the most exciting aspects of their trip. The image of the Dugong chewing its sea grass was definitely going to be a favourite. Marion joyfully anticipated her Gallifreyan friends looking at that one in amazement.

A quiet afternoon with cool, fruity drinks and delicious snacks suited Marion and Aineytta. Kristoph busied himself at the TARDIS console, mapping the Reef in three-dimensional imagery. He broke off for supper and they watched another marvellous sunset as the lights from the resort on Daydream Island made their own constellations to match those in the sky above.

It was quiet here offshore. Few yachts were allowed night permits. All the tourist boats were in harbour. The TARDIS’s nocturnal trip to the Reef would be unnoticed.

 And it proved to be well worth waiting for. The reef at night was even more active than by day. The light filters Kristoph employed turned it into a completely different world with a whole new spectrum of colours. Ultra violet light turned the sea garden into a myriad hyper-bright colours and textures with details that could easily be missed in ordinary light.

Infra-red brought out a whole different colour palette with, not surprisingly, bright reds showing up prominently, especially amongst the plate corals.

Supra-orange, a light spectrum not known to Earth scientists, had an even more spectacular effect. Even the bleached coral shone like gold and the natural colours were enhanced beyond description. The Reef looked like the treasure cave of a very covetous dragon, full of glittering jewels.

“Enough of that, I’m afraid,” Kristoph said after a while. “Nobody knows the effect such light might have on the living polyps. We’ll take another pass using ordinary light before we resurface.”

“I feel like when I was a child at the end of a fireworks display or a trip through Blackpool Illuminations,” Marion said. “I wish I could go back to the start and do it all again. But that would be greedy, I suppose.”

She expected Kristoph to say something, but he didn’t. She looked around. He was intently watching something on the environmental console.

“There’s a boat above us,” he said. “A large yacht, I think.”

“Yachts aren’t allowed over the Reef at night,” Marion said. “What are they doing?”

“I have a very nasty suspicion,” Kristoph answered. He turned on the supra-orange light filter again. It illuminated the Reef without being visible through the water by anyone on the yacht.

“Oh no!” Marion exclaimed. The filtered light turned a huge net golden and the hides of half a dozen Dugong trapped in it to shining silver. “Oh no. They can’t. It’s illegal.”

“Kristoph, do something,” Aineytta said in a peremptory tone that made it an order, not a plea.

“I am,” he answered. I’m changing the TARDIS’s outer shape so that the prow is a sharp swordlike projection.”

“How will that….” Marion began. Then she felt the TARDIS move upwards quickly, to where the net closed over the helpless dugong. The swordlike projection cut through the ropes and the net drifted away. Most of the creatures escaped. One remained trapped, falling to the sea bed in an ungainly tangle.

Though it was a water dwelling creature, it would drown if it couldn’t swim freely. Marion and Aineytta looked on in sorrow.

Kristoph opened the TARDIS door. A forcefield held back the water, but he stepped through it and began to swim towards the stricken creature.

“At this depth he can hold his breath for six minutes,” Aineytta confirmed. Marion glanced at the temporal clock and then at Kristoph untangling the Dugong from the net. It wasn’t easy to do without hurting the animal. Time ticked by seemingly faster than it ought to. Time was like that.

At last the Dugong swam free, unharmed by the net which Kristoph balled up and brought with him as he swam back to the TARDIS.

He stepped through the wall of water as if he had been out for a stroll, though he did take several deep breaths that betrayed his close call. Marion hugged him, despite the sea water running off him then looked at the net he threw down on the floor. Nylon fibres must have cut into dugong hide painfully. It was a vile thing.

“Give me a moment and we’ll give the poachers a lesson they won’t forget,” he said, going back to the console. He changed the outer aspect again. On the viewscreen he allowed a camera to show the shape anyone outside would see. Marion and Aineytta both expressed their approval and braced themselves as the TARDIS began to accelerate upwards.

They had a perfect view of what looked like a giant sea serpent rising out of the sea and the panicked faces of the poachers as it rose up over their yacht in a graceful arc. As the TARDIS descended into the depths the outer camera showed the hull of the yacht lurching in an ungainly and un-yachtlike way as the crew tried to get it moving as quickly as possible and obviously forgot all of their sailing experience in their hurry.

“They won’t get far,” Kristoph noted. “I’ve also notified the coastguard. They have no catch, but their equipment will be evidence enough for a prosecution, and if they mention giant sea creatures in their defence it will doubtless go hard with them.”

“Well done, my boy,” Aineytta told him.

“Very well done,” Marion echoed. “Thank you for that. I know it won’t stop all poachers, but we’ve done our bit.”

Kristoph smiled enigmatically as he brought the TARDIS back to its resting anchorage and its pleasure yacht disguise.

“It’s a fine night. Late supper on deck under the stars?” he proposed.