

August 11, 2009

Hi Everyone,

We haven't written for a while, so here is an update:

### **Astronomy:**

We had the great privilege to see the stars viewable in the Southern Hemisphere thru telescopes at the Gin Gin Observatory an hour's drive north of Perth. Gin Gin is an outback area well away from the lights of the city. Road signs advise that you drive more slowly after dark in the area to avoid hitting a kangaroo.

Imagine looking up into the night sky and seeing a completely different array of stars than you are used to seeing (if you can see them at all). It was pretty shocking to see the Milky Way from such a different view point – the Milky Way is much more connected from the vantage point of the southern hemisphere. Polaris, the north star, is not visible here in the southern hemisphere, so people refer to a constellation, the Southern Cross, for orientation.

One telescope was pointed towards Saturn and we saw the full rings of this incredibly beautiful planet. What an amazing site!!

We also heard an astronomer explain about an internationally significant Square Kilometer Array (SKA) radio-astronomy project. The SKA plan is for a revolutionary next-generation radio telescope 50-100 times more sensitive than present day instruments. The outback of western Australia and southern Africa have been identified as the most likely suitable sites for the project because of their lack of radio and cell phone interference. The Australian equivalent of the FAA has already re-routed airplane flights away from the proposed site to help get the project into Australia.

### **Wedding:**

Cathie and I spent part of May in San Ramon and were married on May 23<sup>rd</sup> in the town of Lafayette, CA. It was a cool day in California, but the sun came out just as the Bride came down the aisle to the Beatles song, "Here Comes the Sun." Here's the [wedding photo website](#). The password is cathieandbill



Our Wedding Day



Our tandem bike cake topper with Bride and Groom

We returned to Perth in June with a goal to venture out to other parts of Western Australia on long weekends. Starting on June 21, winter began here in the Southern Hemisphere and we have been getting a lot of rain, hail, cold and wind storms. We keep hearing about how hot it was and now how cool it has been in California and Oregon. What a difference it is to be experiencing winter here in June, July and August.

They even have a celebration here called, "Christmas in July". Because this area was settled by the British, they try to recreate an experience of a wintery Christmas with all the Christmas type foods on sale in the markets. The American Women's Club of Perth held a full Christmas lunch event in a fully decorated home with a beautiful Christmas tree and we all sang Christmas carols. It felt a little bizarre, and we had fun.

### **Kalbarri:**

We drove 590km (365 miles) north of Perth to view the spectacular scenery of Kalbarri National Park on the western coast of Australia. We hiked up the Murchison River gorge through 400 million year old rock layers, and to our surprise saw purple colored sand deposited locally along the river. Along the coast, the sea has fashioned very dramatic patterns among the soaring sea cliffs. The colorful coastal views are breathtaking.



**Murchison River Gorge**



**Horizontal bands of 400 million year old rock**



Purple colored sand in piles along the river



Sea cliffs at the ocean edge



Bill and Cathie at cliffs overlooking the Indian Ocean



Note that the Sun Set is Free!



Big, Big signs visible from airplanes are popular here.



Another BIG sign!

### Margaret River and Augusta:

We also spent a weekend on a driving trip south of Perth towards the towns of Margaret River, and Augusta. This area is an internationally renowned wine region and tourist destination. And beneath the terrain lies an awe-inspiring labyrinth of limestone caves.

Because it rained most of the weekend, we explored several of these underground caves where the rain couldn't reach us. Jewel, Lake and Mammoth Caves are each filled with unique formations that are well preserved and cared for by the Australian Government. And because Australia is such a stable continent, generally lacking in earthquakes, the stalactites, stalagmites and soda straws are very well preserved. We saw one soda straw – a calcite tube about the diameter of an actual drinking straw, and growing down from the cave ceiling – which was about 5 meters long (16 feet). The cave guide estimated that it had been growing for 30,000 years.



The entrance to Lake cave.



Stalagmites, which grow from the bottom up, as drops fall from the ceiling.



Soda straws growing down from the ceiling. They are very fragile -- about 6mm (1/4 inch) in diameter and are many feet long.



The ceiling is covered with Stalactites and Stalagmites are growing up from a rock which shifted position some time in the past, as only a few of them are vertical.

We also took a hike through the local Margaret River forests, which feature an array of unusual, but common-to-Australia trees. It was beautiful to walk through the bush area and see such unique plants and trees.



Grass trees – Xanthorrhoea -- also known as balga grass – the Aborigine term for “black boy”

The town of Augusta features the Cape Leeuwin lighthouse on the shore where the Indian and the Southern Oceans meet. Many ships have been lost in the area due to offshore reefs and the common stormy weather. During our visit we walked out to the lighthouse to take a tour. A windy rain squall hit suddenly during our walk – the wind was so strong out on the cape that we almost couldn't walk and literally feared that we'd be blown into the ocean. The worst that happened was that one side of Cathie's pants got soaking wet from the sideways wind and rain. During our tour up inside the lighthouse we could feel the walls shake while the wind howled outside – and this lighthouse has walls 2m (6ft) thick at the base and 1m (3ft) thick at the top!



Cape Leeuwin Lighthouse in the distance



The two oceans meeting, with a rainbow in the sky!

### Uluru (Ayers Rock):

At the end of July we flew northeast to visit Uluru (Ayers Rock) in Central Australia for a 3 day weekend visit. Being in the presence of this very powerful, majestic, ancient,

and world famous monolith was inspiring. While there, we saw beautiful cloud formations and rainbows over the monolith. Uluru is sacred to the Aboriginal people and signs at the base, request that you not climb. However, an existing cable hand rail bolted into the rock provides some measure of safety for those who choose to climb. The climb is steep and dangerous – 35 tourists have died on the climb over the years. We chose not to climb -- it was closed to climbers anyway due to rain. A trail that circumnavigates the base of the rock is just under 10km in length – Bill ran it in the chilly winter morning air.



**Uluru from the airplane. The monolith is 3.5 miles long.**



**A view from the ground;**



**The side of Uluru. A most surprising thing is that there is no build up of rubble at the base – the steep face of the monolith descends to the flat plain, and here it is eroded back in a smooth curve.**



**Sunlight causes the rock to change color all day long.**



Uluru with a rainbow at sunset.



Bill and Cathie with Uluru in the background.

About 20 miles west of Uluru is Kata Tjuta, which means “many heads” in the Aboriginal language. Kata Tjuta (The Olgas) consist of 36 steep-sided domes of a conglomerate formation. At Kata Tjuta we took a 3 hour hike along the Valley of the Winds Trail, up and down between the heads thru steep and difficult terrain. At night we had a gourmet dinner in bush under the stars of the outback. A didgeridoo player, an astronomer, interesting dinner table guests from Sidney, Los Angeles and Virginia Beach, and Australian wine and beer made it a great evening.



Kata Tjuta just after sunrise.



Some of the domes close up.

We expected that the area around Uluru and Kata Tjuta would have been “contaminated” by tourist signs and commercialization. But all of the lodging and restaurants are located far from the rock sites and hidden in the bush trees. There are no commercial billboards. The Australian government respects and honors the specialness and spirituality of the area.



The Uluru Visitor Center hidden in the trees in front of the rock.

We also took a “Dot Painting” workshop with an Aboriginal artist and her translator in order to learn more about the language and art of the people. It turns out that the dot paintings are a fairly modern development – only since 1970 – and they convey geographic knowledge about a tribe’s home region, including the locations of water holes and trails. We painted these using acrylic paint from drop bottles. The circles represent water holes.



Bill's creation showing the Monongahela & Allegheny rivers in Pennsylvania joining to form the Ohio River at the golden triangle, and the lake in North Park in the upper left.



Cathie's creation showing a bird enjoying food.

We returned to Perth from the weekend, feeling very mellow and creative.

### **Simon & Garfunkel:**

In early July we were lucky enough to get tickets with our friends Lyle and Carole Burgess to see Simon and Garfunkel in person at the Burswood Dome in Perth. What an amazing experience to see and hear them live. The show was fantastic and they sang beautifully with a full orchestra backup as needed. Both Bill and I were moved to tears at hearing the “Sounds of Silence” and “Bridge over Troubled Waters.”



On the way home we were joined on the train by some of the 5000 US naval officers and personnel who were in town on a 4 day R & R weekend. The aircraft carrier George Washington, which is normally based near Japan, was docked off the coast of Fremantle, a major shipping port town just south of Perth. It was interesting to see the young American service men and women and to hear their stories.

Looks like we will be here until December, so we'll keep you updated with our further adventures. Please come visit.

Cathie and Bill