

Kimberley Highlights 2: Aug-Sept 2013

Section 3: The Cockburn Range

Day 1. We were up early and headed off about 7 for the drive to Emma Gorge where the helicopter was waiting for us. It took three flights to get us all in.

We left our packs in a shady spot and headed downstream with our lunch in search of one of the Cockburn art sites.



Even this late in the year, there is plenty of water in the Cockburn gorges. We stopped for a swim at the first big pool, then pushed on further. There was one spot where we had no choice but to wade, but, for the most part, if you wanted to keep your feet dry, it was possible but somewhat challenging in places. Eventually we reached the small side creek with the paintings. There are quite a number there, but only a few are in good condition.

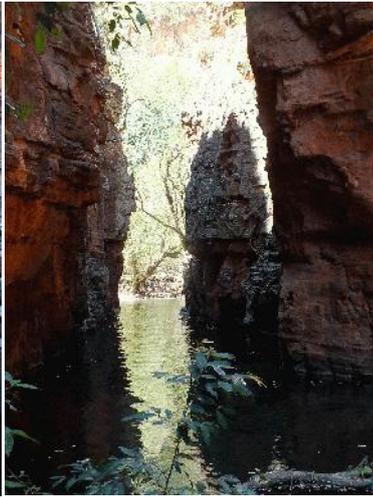
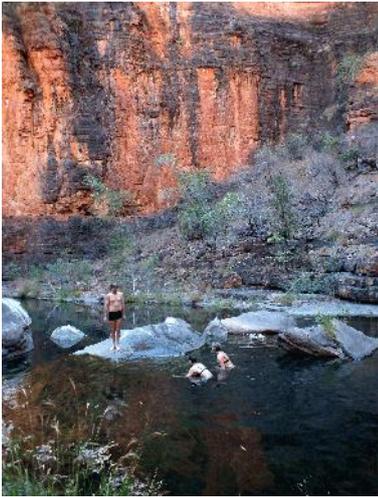
We had lunch near the art, then headed back to our packs. By the time we got back it was

fairly late so the nearby rock ledges and pool were irresistible as a campsite.

Day 2. Up just after 5 (it gets light very early in the east Kimberley) and moving by 7. We stopped at the base of a creek coming in from the east. At first I thought it was the one I'd walked up in 2011, but this one kept going and going. If I'd known what it would be like, I'd have taken a daypack and water. Some of us got all the way to the top and had some magnificent views back down from where we'd come and up to where we'd be going. The views from the edge were second to none I've found in the range.

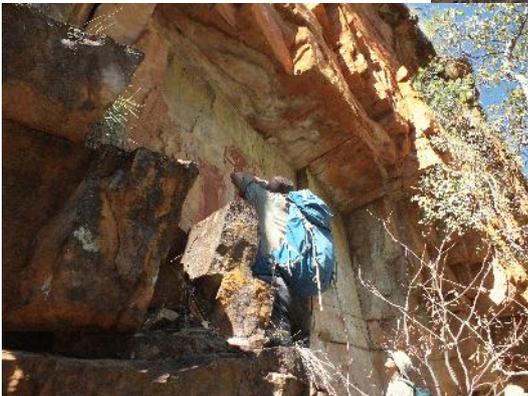


The panorama above doesn't do it justice. We may take lunch on a future trip so we can explore this area properly.



Once we got back to the main valley, we moved on a short distance to a campsite near the pool shown at far left. We

dropped our packs and headed up a side gorge. As the middle photo above shows, it was wall to wall water so we had to swim through as shown at right. It was only a short distance. With small daypacks, it wasn't hard.



Day 3. We left our tents set up and headed off to explore another one of the high gorges. The climb up and down was steep and strenuous as shown in the photo above left, but once on top, a recent fire had made the going exceptionally easy. We dropped down into a high gorge where we found a huge pool for a swim. Near the pool was the art site shown at left. We were back in camp by about 3 pm.

Day 4. We left about 7, walked into the start of the next gorge, dropped packs and headed up the western gorge which we'd seen from above the day before. The gorge ends at a cliff with a trickling waterfall and a huge rock shelter, so shady that everyone thought it was too cold to stay in for very long.



After a long break at the pool, we walked back, grabbed our packs and headed up the gorge to the swim spot. By staying mainly on the right side, it was possible to wade the entire distance, possible but easier to swim.



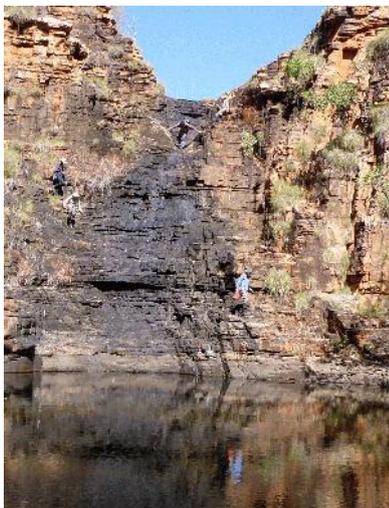
We had lunch on the upstream side of our swim/wade, then climbed up to one of the two most spectacular campsites of the trip, beautiful flat rock ledges above a small waterfall. No photo can do it justice.



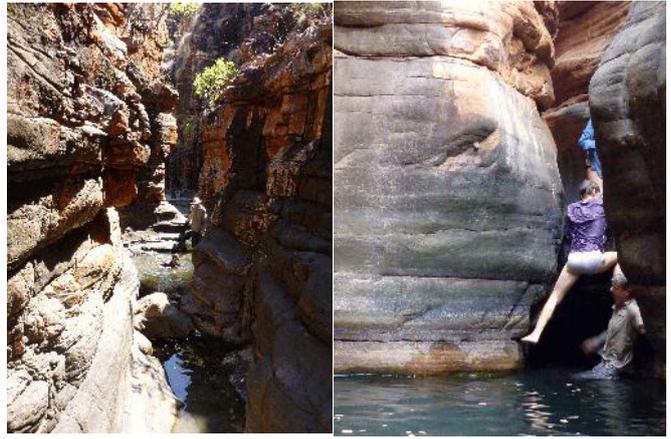
Day 5. Most of us decided to go explore a small cave at the head of the valley. The others decided to have a more leisurely walk and began the steep climb to the top. The photo at far right shows the entrance to the cave and just how deep the gorge is at this point. The nearer photo is inside the cave looking out toward the entry.



The climb up to the next level above our campsite was steep but straightforward. Once on top, it was relatively flat until we got to a small side creek where a dry waterfall led down into the gorge below. Time for a leisurely lunch and a swim or two.



But, before lunch, four of us headed downstream to explore the narrow part of the gorge above the cave we'd visited early that morning. First came a wade, then we had to climb down underneath a huge fallen tree, then a scramble over the rock where I'd stopped the last time. Paul managed it on his own so he could help us. We kept going until we got to a point where dropping in would have resulted in an impossible return. The two photos at right should give you an idea of the challenges we faced.



The walk to the campsite was straightforward, back up where we'd come down, then along some flat ledges to where the gorge floor rose up to meet us. Nearby was a large Aboriginal art site.



Day 6. We got our earliest start – 6:40 am. We followed the creek upstream for about a kilometre, climbed a ridge, crossed a plateau and dropped down to the gorge above Emma Gorge. Everywhere we went we got great views.



Left to right above: looking back toward where we'd come from at the top of the first climb; looking down toward Emma Creek; Emma Creek campsite, two falls above the one that drops into Emma Gorge.

Day 7. Once again we left at 6:40. We had a stop to look at the view at a side creek, then continued on and came down the next little gully beyond the waterfall one. It took us only two hours to get down – we were there at 8:40. We dropped packs and went up to the lower falls at Emma Gorge for a final swim before heading back to Kununurra.

Photos, left to right: side creek view stop; happy campers; Emma Gorge main pool.



It's worth noting that El Questro had a project designed to keep the cane toads out of Emma Gorge.

Emma Gorge Sanctuary Project

The vision

Cane toads are listed in the World Conservation Union's world's 100 worst invasive species and they are now in the process of invading Australia's last wilderness frontier, The Kimberley.

Using a newly developed control method, this project will be the first ever attempt in Australia at creating a 'toad-free sanctuary'. The aim of the project is to keep the majority of toads out of the iconic Emma Gorge on El Questro Wilderness Park using a barrier fence and to study the biodiversity of the surrounding area before and after toads.

The project is a joint venture between El Questro Wilderness Park, The Stop the Toad Foundation, FrogWatch, The Australian Geographic Society and Chief Scientist Dr. Sean Doody. El Questro management, Delaware North, is the first privately owned company to be pro-active in terms of toad control.

The 2km Emma Gorge fence was erected in 2011. Before toads reached this area in early 2012, it took 18 days to build with the help of 8 volunteers. The total cost was \$6625 - a small investment well worth spending in the effort to protect one of the most iconic gorges in the Kimberley!

Keeping Emma Gorge 'toadally' free

Emma Gorge is one of the most spectacular and breath taking gorges in The Kimberley. It is home to a suite of wildlife, including ten species of gasneras and the endangered northern quoll. Some of these animals are rapidly disappearing in Queensland and the Northern Territory where toads have been for years. The Emma Gorge fence aims to protect some of the same animals in Western Australia.

Potential challenges

The Emma Gorge toad fence represents the first-ever attempt at keeping the majority of toads out of a specific area. It is largely a trial and the weaker sections of the fence line will most likely need to be modified throughout the course of the project.

There are three parts of the fence that are the weakest and could potentially allow toads to enter Emma Gorge: the cattle grid, the permanent water crossings and the escarpment. They were all secured to the best of our abilities, but will need to be managed in the future.

Fire is also a potential risk to the fence due to its location, the fact that it is a natural part of the environment and the material that the fence is made out of (shade cloth).

Staff are stationed at El Questro Wilderness Park all year round, so the fence can also be carefully monitored all year round.

The conquest of the toad

Cane toads (*Bufo marinus*) were introduced into Australia in 1935 in an attempt to control pest beetles in the sugar cane industry. They were unsuccessful in their control efforts and have ironically become a pest themselves. Cane toads were originally released in Gordonvale in Queensland, but have spread west and south to now cover 1/3 of Australia.

As cane toads have spread across Australia, they have left a trail of ecological destruction in their path. They impact native wildlife in numerous ways including poisoning predators preying upon native species and competing with native species for food and habitat. Key species that have been negatively affected by cane toads in Queensland and the Northern Territory include quannas, freshwater crocodiles, snakes, and quolls.

In 2009, cane toads reached the Kimberley region of Western Australia and have the potential to damage the biodiversity of this unique region in the future. Research results reveal that the impact of cane toads on native species is more severe in areas with a more arid climate and longer harsher dry seasons. This may mean bad news for the Kimberley, an area that has harsher dry seasons than the Northern Territory. Unless areas are protected from the toads they will have a significant impact on a range of species, some which are only found in the Kimberley.

Toad vs Science

Over the past 30 years, there has been considerable Federal and State Government funding invested into research for a biological solution to control the cane toad. Some toad control ideas have included using a virus to interfere with tadpoles turning into toads, the introduction of sterile males into the population, using sex pheromones to attract toads and lure them into a trap, and using a long parasite to weaken the population. Despite scientists' best efforts, a solution for broad-scale control has not yet been found.

The good news is that local control may be possible. Community groups across Australia have also put a huge amount of effort into the local control of toads using manual methods such as hand collection, trapping and fencing.

Two community groups, The Stop the Toad Foundation and FrogWatch, have been using fences to control toads in northern Australia since 2007. These barrier fences are designed to keep cane toads out of an area, but allow other native animals to pass through. The success of this control tool created the idea for the Emma Gorge project.

Monitoring toad impact on biodiversity

Scientist Sean Doody has been studying the biodiversity on El Questro since 2008. He has been collecting valuable data on what animals can be found at El Questro before the toads arrived. To date, his team has found 100 species of birds, 68 reptiles, 16 mammals, and 16 frogs.

The Emma gorge project presents a good opportunity for scientists to determine the impact of toads on current biodiversity and the impact of the fence on both toads and native wildlife. The 2 km long fence acts as an extensive survey line with pitfall traps and funnel traps on the inside and outside of the fence to survey the native animals on either side. Scientists have said it's the longest pitfall line they've ever seen!

In conjunction with scientists from the Australian Geographic Society, annual studies are carried out to determine the type and numbers of native animals found along the Emma gorge fence line and surrounding area.

One of a kind!

The Keep Emma Gorge Sanctuary Project is an exciting project. It has huge potential that if successful may set an example for other areas in Australia to follow. A biological or genetic solution to cane toads may still be 10-20 years away. Until that time, this project represents a pro-active solution to keeping unique wildlife areas cane toad free.

Did you know?

- 102 cane toads arrived in Australia in 1935. The population is now estimated to be over 100 million.
- Female toads can produce up to 35,000 eggs every year, sometimes twice a year!
- Adult toads can weigh up to 2kg, grow to 24cm and live up to 15 years.
- There are no natural predators to cane toads in Australia.
- Cane toads are not fussy eaters - they will eat anything that fits into their mouth including mice, birds, lizards, crabs, centric frogs, snakes and beetles.

The Emma Gorge Sanctuary Project is proudly supported by the Department of Environment and Heritage, the Australian Geographic Society, and the Stop the Toad Foundation.

STOP THE TOAD **FrogWatch** **EQ**

Final note. This report describes the walk we did in 2014. Every trip is different. While we follow the same basic route, we may use different campsites depending on the conditions at the time as well as on the fitness and interests of those taking part.