

## GRAND CANYON

Robert Hefner III did two amazing things to mark the arrival of the year 2000. First he gave the party to end all parties at Ramiilaj and asked Margie and me to join his family and friends to welcome in the New Century. What a night!

The second thing he decided to do was raft down the Grand Canyon with a group of his geologists. The idea was that we would study the rock formations along the way as the Canyon presents one of the finest places in the world to do this because it is a mile deep. At one point at the bottom there is a juxtaposition of two rock formations that were formed 1 billion years apart!

Robert had chartered a 20-man inflatable raft, but as there were only eight geologists and plenty of room to spare he rang me and asked if I would be interested in joining the group. It was to be an all-man show to make the camping easier, as segregation of the sexes would be impossible on the tiny beaches where we would be spending the nights. As everything that goes into the Canyon has to come out, the toilet facilities are not that secretive and you can't just wander off into the Bush as you can in Australia!

I was delighted to be asked as I knew that when Robert does something he likes to do it well and I imagined this would be an experience not to be missed, which is exactly the way it turned out to be. In 1993 he had very kindly had his pilot divert and land at the Canyon airstrip where he had a car waiting to take us to the rim, so I could look down at the river. We then took off and illegally flew low over the Canyon so I could see it from the air.



### *The Grand Canyon from the rim*

I had been overwhelmed by the sheer vastness of the mile-deep gash in the earth surface. Now, to have the opportunity to actually glide down the river in a raft, was beyond belief. I immediately said, "Yes please!"

There was one problem, I was going to be in Australia the week before the trip was planned to start. This was solved by Margie suggesting that if I flew to the States for the week it would give her a chance to catch up with all

her relations while I was away! I could then fly back and collect her and we would return to England. And so it happened.

I met Robert in Aspen and the following morning he, Orlando and I flew down to Lee's Ferry where we met up with the geologists. The plan was for a very early start the following day so the afternoon was spent collecting supplies. As all the food was provided by the raft owner and would be handled by the two-man crew, our supplies only consisted of a vast amount of grog! Case after case of Silver Bullet was carried from the store and stacked in one of the motel bedrooms ready for loading in the morning. Could ten men drink 1,000 cans of beer in six days? A moment of panic happened when the storekeeper told Robert that he was *right out of tequila*, but the crisis was averted when he promised to have a case shipped in overnight!

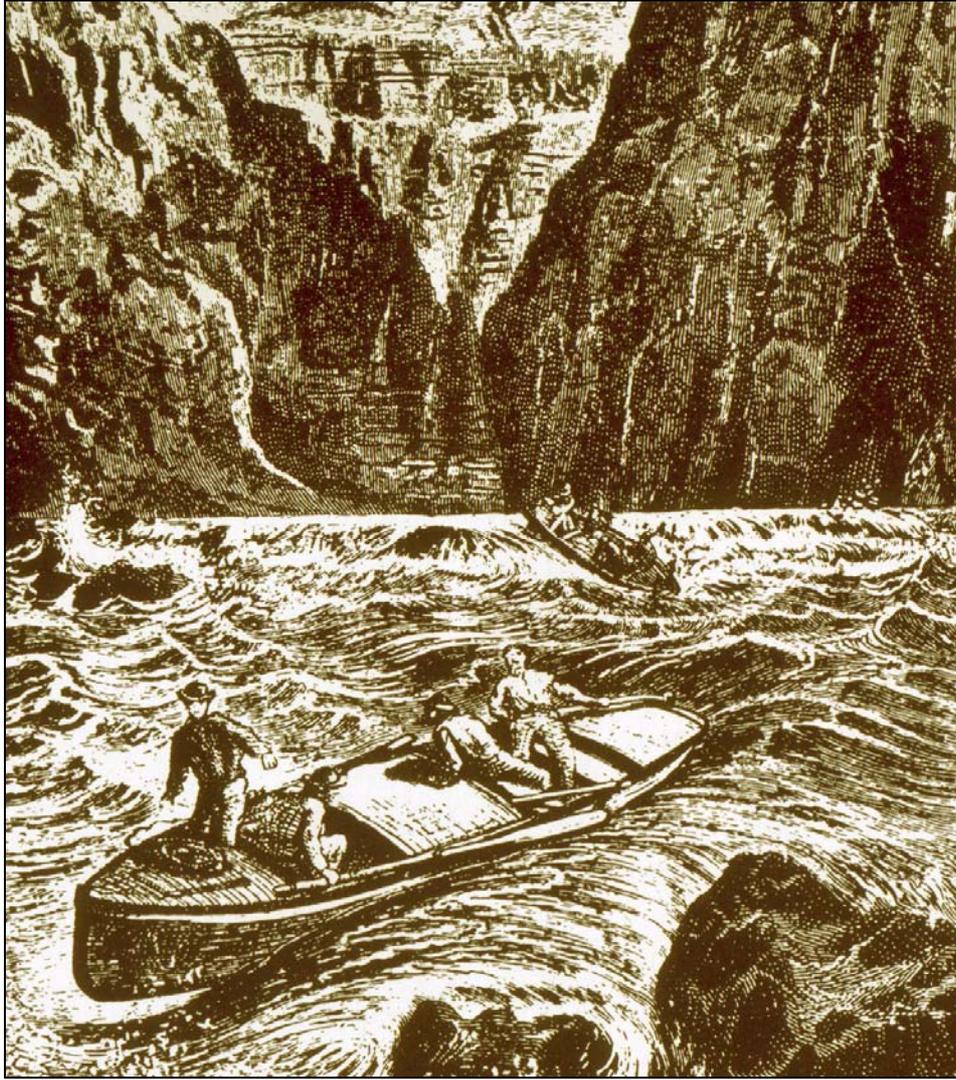


### *Loading beer is a hot job*

Next morning we drove down to Lee's Ferry Beach, which is one of the few places where a road reaches the water and a raft can be loaded. A chain gang was set up and beer cases began to be passed down the string of geologists to be stored by the crew. The river water is icy cold, so chilling the beer would be done by slinging it over the stern in two sacks that could be alternated, one cooling while the other was consumed. I could see that it was very well organised and the geologists had had plenty of camping experience!

A man with the magnificent name of Lieutenant Joseph Christmas Ives discovered the Canyon in 1857. The first brave person to boat down it was John Powell in 1869. He used four tiny wooden craft to cover 1,000 miles in three months and it must be counted as one of the greatest exploration trips ever made. However we would be on the river for six days and only cover a distance of 200 miles. We had one other important advantage over Powell; we had 1,000 cans of Silver Bullet on board as ballast!

We set off. So began a gentle routine of doing nothing except gaze in wonder at the scenery between the 15 rapids that we were to shoot. Ever since my geology lessons at Rugby, where I had delighted in drawing diagrams showing igneous, metamorphic and sedimentary rocks, geology has fascinated me, but I have always looked at things like seams of quartz through the eyes of an artist rather than geologist. I sat back and feasted my eyes on the scenery and what scenery it is! There is nothing in the world like the Grand Canyon.



*John Powell travelled 1,000 miles in four wooden boats in 1869*



*Sitting back and enjoying the view*

We arrived at our first set of rapids and with many *whoops* and much laughter we bounced our way through and then of course celebrated with a Silver Bullet apiece, although it was not yet ten o'clock. I could see that normal drinking hours were not going to be adhered to so I sat back and sipped the virtually tasteless brew, whose one virtue was that it was icy cold.



*Hitting our first rapid caused great excitement*

One of the things we soon adapted to was that when we were in the shadow of the Canyon wall it was really very cold, but when we were in the sun it was intensely hot. Putting jackets on and off was a problem for it was a law that at all times we had to wear life preservers. We arrived at our first camping beach as the temperature started to drop from boiling to zero.

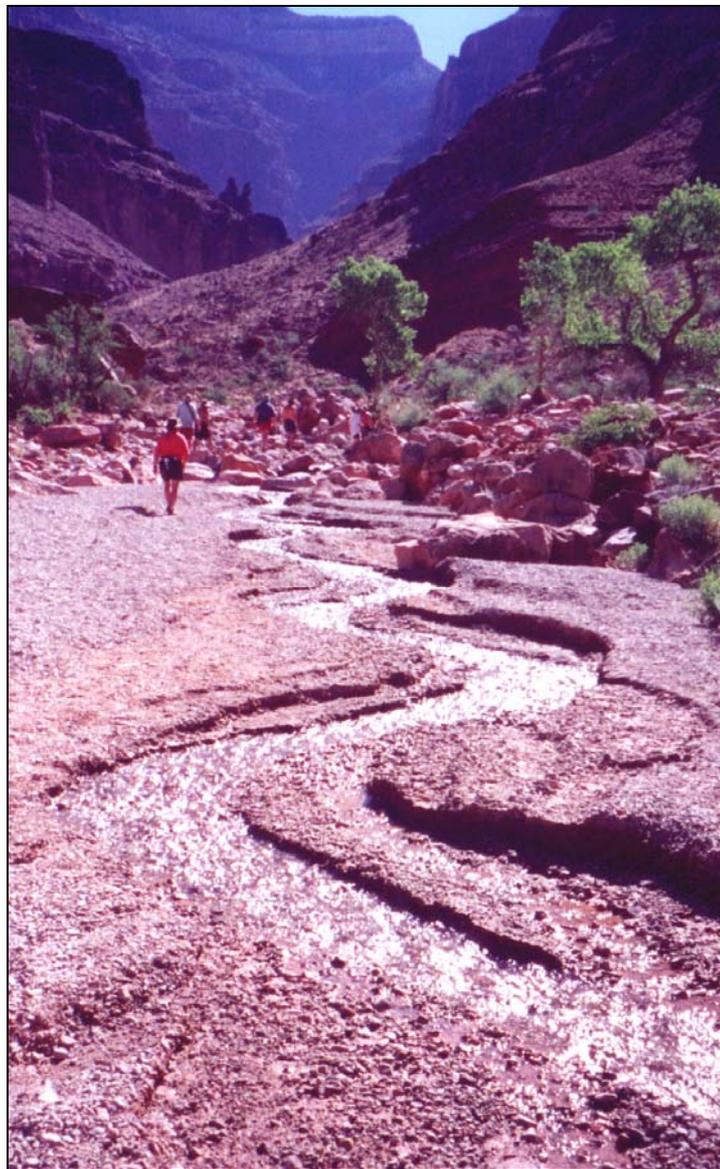


*Our first night's camp beside the Colorado River*

Our boatmen set up tables and a gas stove and prepared a fantastic meal of steaks and fried chips as we busied ourselves with opening several bottles of red wine to breath while contemplating the tough life and sipping tequila on the rocks. This was way beyond the Outback-of-Australia type camping that I had arranged for Robert in Kimberley. The food prepared by our guides for the whole trip was of a very high standard, so what with no exercise and too much alcohol, we were obviously not going to lose any weight during the week. I did wonder what John Wesley Powell would make of all this!

The daily routine was extremely simple. We were woken at first light by the sound of a mixture of guttural coughing from the scattered sleeping bags laid out along the beach and the clatter of tin pots and pans that announced that breakfast was being prepared.

The next move was a spasmodic stumbling of individuals towards the fire to sample the coffee that was steaming in an old black pot in the fire. Being all men there then followed a line up along the bank for a pee into the river, while we asked each other how we had slept!



*A snake-pattern rivulet*

After breakfast the crew cleared up while we folded our gear and stored it in orange waterproof sacks, each marked with a big black number so we could claim it next evening. Once these were all tossed back on to the boat down a chain gang of helpers, stored away and securely roped, we climbed onboard and settled down to the first Silver Bullet of the day!



*Canyon reflections*

Lunch was taken anywhere between twelve and two depending on when we reached a beach. The plan was to land where there were some interesting rocks to see so that we could stretch our legs before eating. The geologists had done their homework and knew of several places of interest to visit along the way. The guides knew of other places of outstanding beauty or historically interesting, so there was a varied mixture of sites for us to visit.

On one particular day I was astonished to come upon one of the wonders of the world and something that has always fascinated me. I had been wandering along looking at the scenery and not paying much attention to individual rocks when I came upon several of the geologists examining a giant rock some fifteen foot long and eight foot high beside the track. I stopped to listen to what they were saying and suddenly heard the word *Stromatalite*. For me Stromatalites have always been rounded humps that looked like a scoop of ice-cream, like the ones still living off the west coast of Australia.



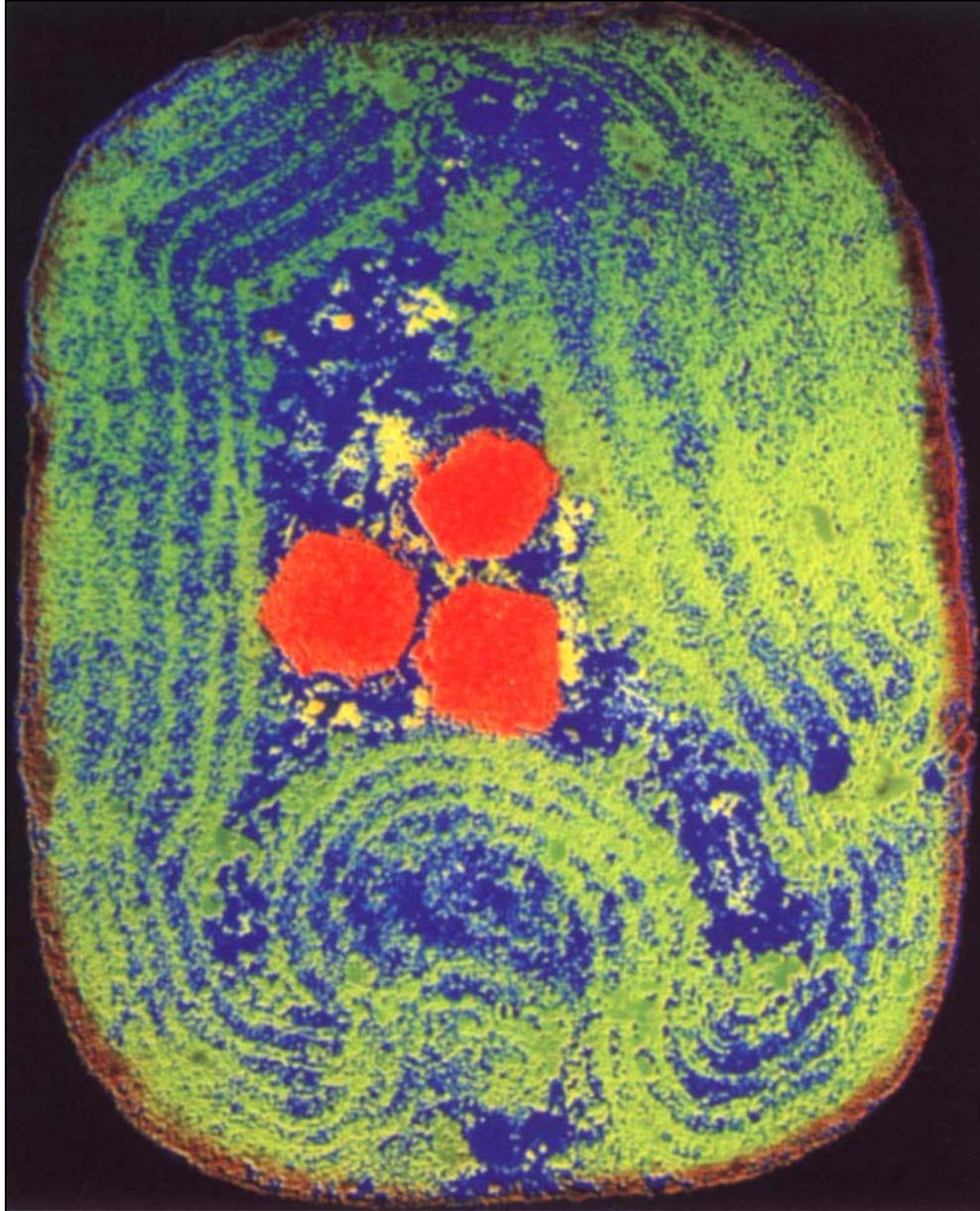
*Live 'Stromatalites' in Shark Bay, Broome*

I knew that Stromatalites were algae mats that had first been formed over 2,000 million years ago, *the world's oldest form of life*, and were what had produced the oxygen that made our mammalian existence possible. For me to see this giant fossil in the bottom of the mile-deep Canyon staggered me.

As an aside, the discovery of Stromatalites at the bottom of the sea off the coast of Sardinia was the proof that 5½ million years ago the Mediterranean was dry apart from four shallow lakes. Stromatalites only grow where they can be submersed by coastal salt-water tides so this meant that the

rocks at the bottom of the Grand Canyon had once being lapped by salt water on a shallow tropical coastline similar to Shark Bay in Western Australia.

The Stromatalite is formed by a microorganism named *Prokaryote* and is the earliest form of life known to Man. Stromatalite fossils can be seen in North America on the shores of Lake Superior embedded in what are thought to be the Earth's oldest rocks, dated at 1,900 million years old, so a cell of this creature deserves to be shown here! It is also very beautiful.



### *Prokaryote*

From the scientists: *A membrane, as found in all more complex organisms, does not surround its nuclear material. The green concentric inner folds are photosynthetic membranes and are a remarkable miracle of evolution. These organisms cannot survive for long out of water so the ones found near the shore are broad and flat like mushroom tops. Further out in deeper water they grow into pillars up to ten foot tall and it is growths like those that formed the fossils on the shores of Lake Superior.*



*A bed of fossilised 'Stromatalite' layers at the bottom of the canyon*



*The footprints of a vertebrate reptile*

On another day we were taken to where we could see a fossil track of a creature that passed by before the dinosaurs roamed the Earth. To actually see the claw marks of a creature that walked over 100 million years ago is really quite remarkable, especially if they are at the bottom of a mile-deep Canyon. Every day that passed something new would leave us all speechless and reaching for another Silver Bullet!

Our home for the night was always a beach, but some of them were little more than 10 foot wide and 50 foot long. They were all the most perfect of camps and the views were equally staggering. The crew would prepare our meal while we collected driftwood for a fire to keep ourselves warm on the outside, leaving the insides to the tequila shots that preceded too much red wine, succulent steaks and stimulating conversation.



*♪ A beach and a view and you, and no one to bother us ♪*

On our third day we came to the confluence of the Colorado River and the Little Colorado River. The waters of the tributary are the colour of the Caribbean Sea and where the two rivers meet is like chalk and cheese.

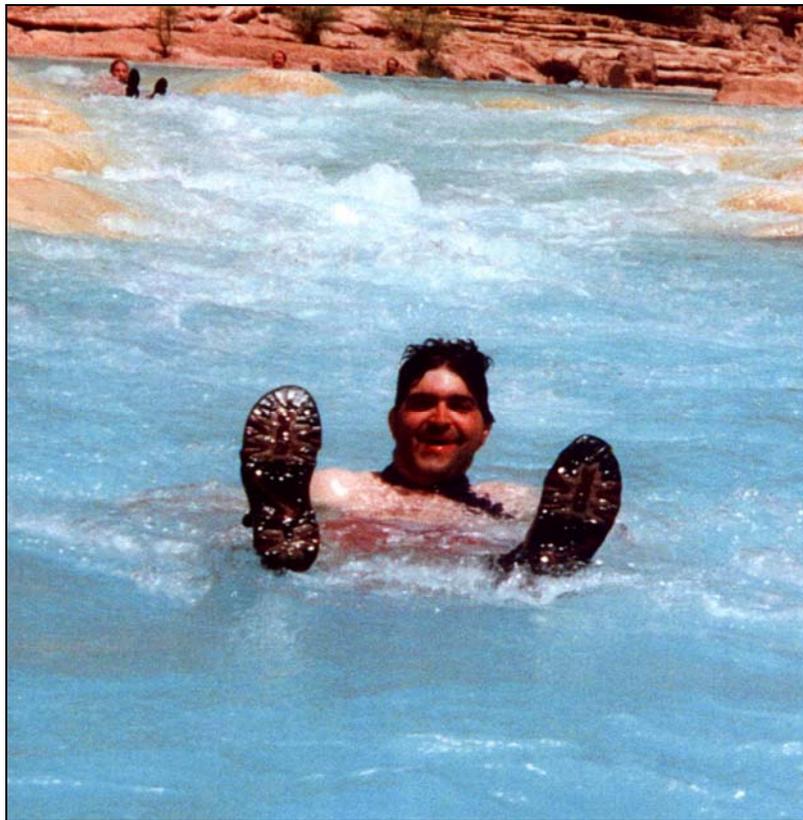


*The light blue of the 'Little Colorado River' tributary*

The Little Colorado is the one place that you can actually swim in safety in the Grand Canyon, so we all took advantage of this luxury not having been able to have a wash for three days. The way to do this was to put your legs through the arm holes of your lifejacket and bottom in the back, then float down the river as though you were sitting in a rubber tube. It was also necessary to keep your boots on to fend off the sharp rocks along the way!

We continued on down the river and passed a collection of dories moored in a tiny creek that flowed into the main river. These dories are the same size as the rowboats that Powell used in 1869. They looked tiny and when I thought about some of the rapids that we had already passed through I

could hardly imagine that they would not be swamped. Their crews would take three weeks to do the same journey that we were doing in six days, so obviously it would have been a much more Spartan adventure than ours.



*Orlando, travelling a speed, with his 'rock-fenders' up*



*The Caribbean waters of the 'Little Colorado'*



*Dories moored in a side creek*

On August 29 1869 John Powell made the following entry in his diary. *The relief from danger, and the joy of success, are great...The river rolls by us in silent majesty; the quiet of the camp is sweet; our joy is almost ecstasy.*

The way our inflatable raft plunged and bucked its way through a rapid did make me wonder about doing the same thing in a dory, especially for Powell in 1869 not knowing what was waiting for him round the corner.



*'Anasazi' rock petroglyph*

One day we moored at a rocky cove and climbed a short way to a small plateau to see an Anasazi ruin. It is amazing to think that a Red Indian tribe occupied this very inhospitable canyon. The ruins were composed of rough loose stone walls and presumably must have had a thatched roof.

Another of our camps was on a much wider beach, not far below where the Little Colorado joins its mother that was backed by an extensive flat of over 100 acres covered in eight foot high water rushes. Our crew told us that there were Anasazi petroglyphs somewhere above us, so Robert and I went to see if we could find them. We followed a track obviously made by other people interested in Rock Art and arrived at the most incredible natural-rock armchair covered in hieroglyphs, spirals and lines that snaked all over the surface.



*Anasazi Chief on his throne*

Robert has a favourite chair he always likes to sit in beside the open fireplace in the sitting room at Ramiiilaj. On it there is a small embroidered cushion that a friend gave him which reads, *It is hard being King*. I couldn't resist asking him to sit in the Anasazi throne for a photocall! It must also have been hard being a chief in such an amazing place.

The whole area was a natural amphitheatre and would have been able to hold several hundred people. One could not help but imagine that important ceremonies were held in this place and maybe this was indeed a throne. It was certainly one of the most spectacular places we saw on the trip, because from this vantage point we were able to see a grand horizon, it not being confined between the sheer walls of the Canyon. We made our way back up to the throne again and had another good look at the petroglyphs.



*The right wing of the 'Throne' with spirals and circles*

On one side of the chair I found a carving of little people, two of them joined together by a looping cord. I couldn't believe my eyes as in 1976 I had done several spiral-headed figures as part of the symbolic Universe Series, and one sculpture was of two people joined in this way!



*Anasazi*



*Birth Cycle*

We walked across to the opposite ridge and looked back at the *throne* and could see that it was in line with another *large engraved panel* and a *finger of rock* on the skyline miles away on the far side of the Canyon pointing to the sky. Surely the Anasazi would have seen all this and given some religious meaning to the whole scene. The strata of the distant rock face were awe-inspiring as was the whole scene.



*Dots encircle the 'Throne' below the skyline 'Finger Rock'*

We came across many other sites that held signs of Man's occupation of the Grand Canyon long before John Powell and his gallant crew had risked life and limb to travel down its 1,000 miles with no idea of what lay ahead of them.

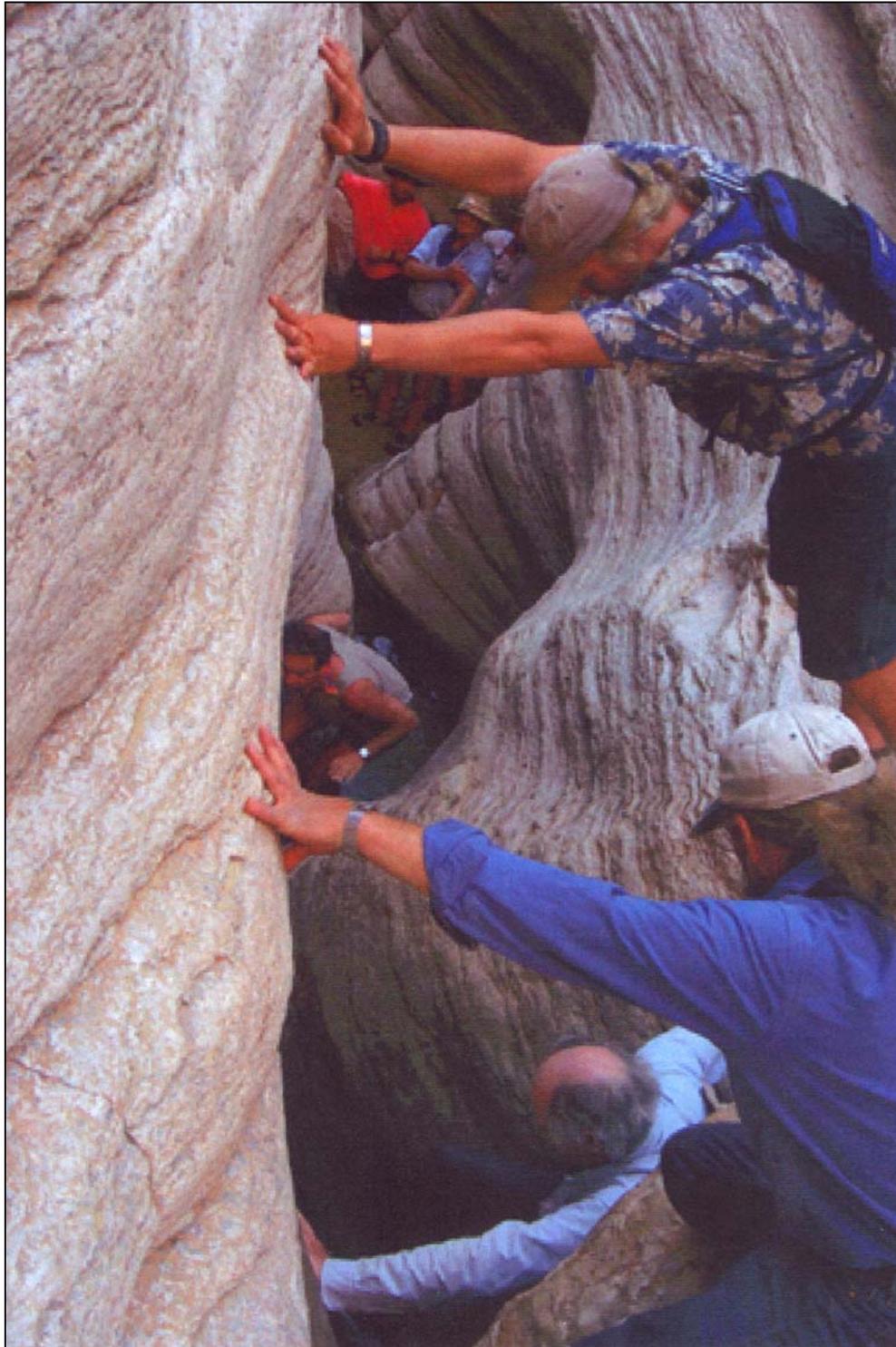


*Anasazi votive offerings of deer made of willow twig*

One day we swept past a cave situated high up the Canyon wall, well beyond the reach of floodwaters. This cave had turned out to be a very important archaeological dig where they found willow sculptures that must have been offerings to the Anasazi gods, or perhaps simply children's toys!

What is certain is that for tens of thousands of years the Stone-Age Hunter gatherers were masters of the *art of survival*, enabling them to colonise the world. More than 60,000 years ago they built craft in which they were able to cross the open seas from Indonesia to Australia. When Christopher Columbus arrived in the Caribbean he saw natives paddling between the islands in canoes hollowed from a single tree capable of carrying an 80-man crew! Even today the Amazonian natives often canoe up a tributary, climb over a mountain range, and then cut down another tree to make a new canoe in which they can paddle downstream and return again to the main river. Being on a river makes you think about such things. Man's creative ingenuity is limitless and unique.

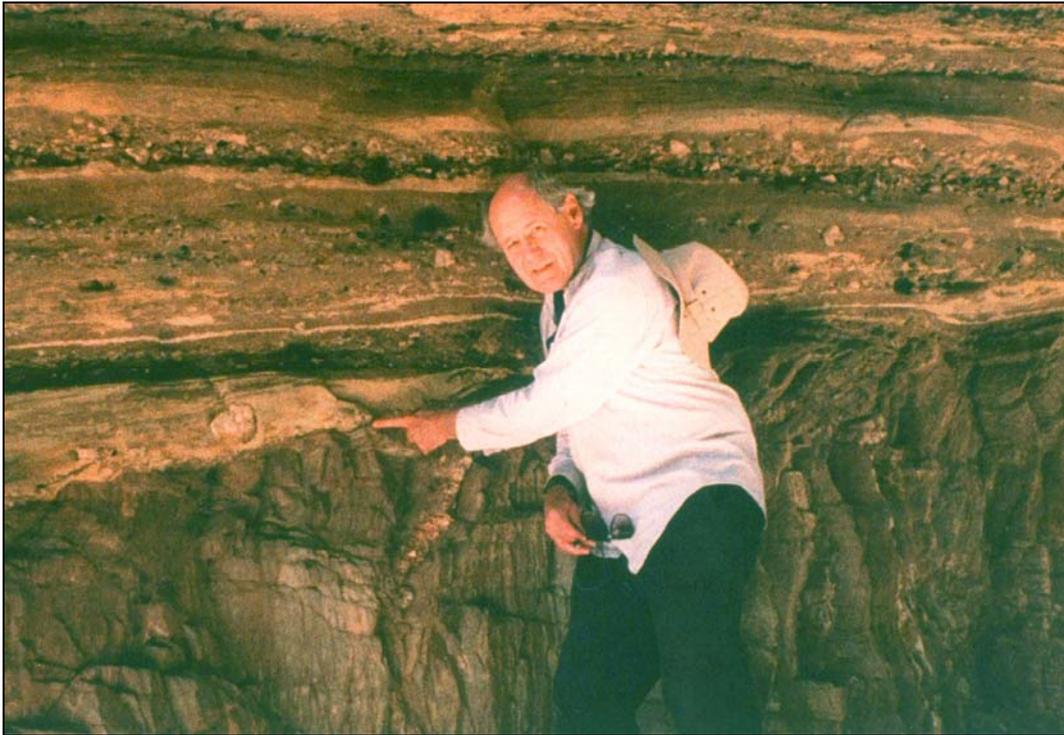
Our team of geologists continued to examine the rocks of the Canyon as we floated on our peaceful way down the great Colorado River towards Hoover Dam. It was a relief to get off the raft and stretch the legs when we explored tiny side canyons to find examples of different rocks. Some of these expeditions led us into some very awkward places that usually meant squeezing through extremely narrow gaps and climbing up vertical washed-out chimneys. One in particular was a real trial and I am glad someone took a photo of my bald head as I struggled up it as proof. I was not very happy on reaching the top to find that Robert had found an easier way up unknown to our guides!



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*JR asked, "was my journey really necessary?"*

We were fast approaching the end of our journey and I had been shown many astonishing things. The most amazing must be the missing billion years. Robert took a photograph of me pointing at where the two rock types came together, the upper sedimentary and the lower igneous. The lower is as old as the Earth and the one above was laid down a billion years later. The aeons of time involved in the making of our home planet, compared to the mere 200,000 years of Modern Man's existence, does leave one feeling very humble.



***Where is the missing billion years?***

The length of time is quite brainstorming to think about, but then for most of us there is just no way of coming to terms with the miracle of our unique island planet that floats in the Milky Way galaxy like a tiny cork on the waters of the mighty Colorado River.

In Korean mythology there is a *mythical unit* for measuring long periods of time. Firstly you have to imagine a solid granite mountain exactly one mile high above sea level. Then imagine an angel flying down once every thousand years and brushing the summit with the tip of her wing. One unit of time equals the number of years it would take for the angel and her summit-brushing wing to erode the mountain to sea level!

Before reaching our final destination we had to pass through the last of the rapids, which of course had to be the biggest and roughest! *Lava Falls*. The sides of the Canyon are sheer walls of basalt pillars that plunge vertically into the river. It is a dark eerie place and the air is full of freezing spray. The waves were huge and their tumbled appearance reminded me of the woodcut by Hokusai called the *Great Wave* from the *36 Views of Fuji*.

In passing, this famous painting is very special to me because not only is it incredibly pleasing to the eye, it also holds a secret which is that it's an astonishing example of symmetry. Look at the image with half-closed eyes and you immediately see the left-front wave is actually another Mt Fuji, which is why the painting has such incredible depth!

Some years after my trip down the Grand Canyon I had the opportunity to experiment with two of Hokusai's paintings from the *36 Views* on a 45-foot long wall of an indoor swimming pool. I painted the *Great Wave* 13-foot high and found the experience to be one of the most exciting things I have ever done, but I will tell that story later on.



*Lava Falls*



*'The Great Wave', by Hokusai*

The Anasazi had left their mark on the Grand Canyon in the form of petroglyphs. We had also seen some handprints in red ochre, but I was not so convinced by these as they just happened to be right beside a hiking track. I knew that Australian aboriginal handprints were very fragile and if touched

would soon disappear. I wondered if these were not just a little too lasting to be genuine! Whatever the case, the *painted hands* made me think that it was about time that I left my mark on the Canyon! Whatever I did would have to disappear within the week, washed away by a rise in the water or kicked to pieces by the tourist following on behind, so it had to be simple.

My first effort was to collect some stones and make an outline of the *Bonds of Friendship* as a tribute to my friend and patron Robert Hefner III.



*Bonds of Friendship*

The second idea was for a memorial to the Anasazi, so I made a sunburst out of driftwood around a spiral on the edge of the river so it was bound to be washed away, or used as fire wood by the next campers!



*Sunburst Life Spiral*



*Water Passage*



*Aware*

It was time to leave the wonders of the Grand Canyon and return to reality. It had been the most amazing trip imaginable and I shall always be in debt to Robert for making it possible. I had seen so much and had learnt to appreciate once again the awesome *Power of Nature*.



*Twisted beds of rock strata*



*Canyon Baptism*

We had managed to find a few waterfalls which we had made use of to wash some of the grime from our bodies, but I must say I was looking forward to a hot shower and using soap again. On the morning of our last camp we helped fold the outer floats of the raft so the crew could make a faster passage down to where they could lift it from the river onto a truck and cart it back to the beginning for the next group of tourists. It would take them another three days to reach their destination.

We were more fortunate as a helicopter came whirling in and lifted us out of the Canyon to a nearby airstrip. While we waited for a small plane to move us on to Las Vegas Airport, we luxuriated under hot-water showers while scrubbing away the week's grime with soap. Nothing beats unspoilt Nature, but Civilisation does have its compensations!

On our way we flew over Hoover Dam. As a spectacle it is simply stunning. From the air it is without doubt a magnificent feat of human engineering.

Suddenly I had had my fill of being astounded and was dying to board the aeroplane that would take me back to Australia to collect Margie so we would return to work in my studio in sleepy old Somerset.



*Hoover Dam in the Grand Canyon*

The journey was over. Writing about our trip down the Grand Canyon has brought back some marvellous memories. It is very hard to come to terms with the fact that just one year later the whole world was going to be turned upside down with the horrendous event of 9/11 that would lead to another Gulf War and the downfall of the tyrant Saddam Hussein.

## CANCER

The Bradshaw Foundation has also enabled Robert, Damon and myself to become involved in what I believe will eventually lead to a medical breakthrough. It concerns one of the most important areas of research of this century, that of understanding the dreaded disease of Cancer.

How this came about is a convoluted story, but if I keep it short I think it is worth relating and could be of interest. Professor Tommy Gold was due to arrive in London and emailed asking if I could join him for lunch. Tommy is one of the most fascinating men I have ever met and listening to his conversation was an experience not to be missed. Damon was also free and suggested that we both lunch with him at Albany.

A couple of days before the lunch I received an email from a man called John Saul who lived in Paris. He wanted to get in touch with Robert, as he needed a partner in his search for Black Diamonds in the Libyan Desert! Well that was something I knew nothing about but in the correspondence that followed Saul happened to mention that he was an old acquaintance of Tommy Gold. I suggested to Damon that it might be fun to get Saul over from Paris to make up a foursome for the forthcoming lunch at Albany. Damon agreed having worked as a young man painting radio masts in the Libya, so I asked Saul if he would like to join us.

The conversation over lunch was fascinating and Saul turned out to be just as good a talker as Tommy, so I sat back and listened, one of my favourite occupations, as the talk jumped from topic to topic. One of the subjects Saul touched on set *bells ringing in my head* when he said he had met a professor working in Boston at Tufts University Medical School who thought he and his colleague were about to crack the Cancer problem.

Six months later Margie and I were in Paris for a couple of nights to visit Napoleon's home at Malmaison. We had read a fascinating biography of his wife, Josephine, about how she rebuilt the house and we just had to see it for ourselves. The day after visiting Malmaison, which by the way is out of this world, I arranged to meet Professor Carlos Sonnenschein at Saul's office.

I was intrigued by what Carlos had to tell me about the state of Cancer research. In his opinion, the scientists had been barking up the wrong tree for the last 100 years! Well we have all heard that kind of claim before, but when he said that he and his colleague had done experiments that could lead to a breakthrough in the understanding of how cancer cells came into being, I did sit up and listen. It was a bold claim, but if correct it would be of major significance as the results could be aimed straight at breast cancer. The problem was they could not raise the funds to carry out the research as everything they proposed went against what their peers currently thought. What a challenge!

I promised to report on our meeting to Damon and Robert and see if they were prepared to finance the required experiments that would take place on rats in the laboratories of Tufts Medical School. Carlos had asked for \$250,000 in a lump sum to cover two years of experiments, but knowing this would be instantly rejected, I suggested instead that the Bradshaw Foundation might consider four payments of \$50,000 each, paid half yearly, and that if the experiments proved to have negative results at the end of the first six months, we would cancel the grant and discontinue the experiments. Carlos thought this was a fair so I agreed to put the proposal to my friends.