



BOAB BULLETIN

No. 94

October 2009

NOTICE OF GENERAL MEETINGS

commencing 7.15 for 7.30 p.m. at

Shenton Park Community Centre, corner Onslow and Herbert Roads

Wednesday, 7 October 2009

Wendy Carter (Kununurra Historical Society)
“Border markers exhibition and other news”

Wednesday, 4 November 2009

Hugh Brown (photographer & bushwalker)

Wednesday, 2 December 2009

Fred Chaney (Chair, Desert Knowledge Australia)
“RemoteFOCUS, can we make government work for the Kimberley?”

Members and visitors are invited to stay for supper after the meeting.
The Society asks a \$2.00 hospitality fee from non-members.

Friday, 20 November 2009, at 5pm

Venue: the thetrette at The University Club (UWA)

INAUGURAL KIMBERLEY FOUNDATION AUSTRALIA LECTURE

Professor Mike Morwood

“What does the Flores Hobbit tell us about the peopling of the Kimberley?”

Mike Morwood, an eminent archaeologist, is Professor of Archaeology at the University of Wollongong, and active in research in northern Australia and the Indonesian archipelago. Known popularly as a discoverer of the "Flores hobbit", he is a prolific author.

The Foundation has assembled eminent scientific researchers to investigate vital links to Australia's pre-history. One of its major aims is to acquire knowledge about the earliest Australian peoples, their art and their relationship with the environment.

*Please note: there may be **limitations on available seats** so first registered will be first seated. **You must register**, and, to do so, you should email Gwen Williams at: micronite@ozemail.com.au and advise your affiliation*

FROM THE PRESIDENT

In the last *Boab Bulletin* I wrote of our proposed expedition of rediscovery. It seems that there have been several parties involving our members who have recently been on similar enterprises. I am happy to report that all I have heard about have been successful and that all expeditioners have returned alive and well. On our walk we found most of what we were looking for, "Brockman's Cave" in particular. Slow going forced us to abandon our most distant objectives. How easy it is to forget the tough nature of the region, and how one wished one could do all that one could fifty years ago! All of our party were pushed to the extremes of our capabilities. We wondered how Brockman could have negotiated the route with his horses: this seemed an impossibility to us. The likely reason is the changed nature of the environment which has now been uninhabited for over half a century, with no sign of the burning which Brockman remarked upon in that it had severely reduced the grass to feed his horses. We had no shortage of grass: dense and over our heads at times.

We also spent several days in Broome and Derby catching up with old friends. I was most impressed by the Clontarf Academy in Broome: dedicated staff and innovative programmes – not just football – for a bunch of kids who might otherwise easily go off the rails.

I found varying attitudes to the alcohol restrictions now operating in several towns and of course most were supportive. It seems to be regarded as irresponsible to take any other view. Surprisingly, however, several senior and respected Aboriginal leaders that I talked to were opposed to the bans, even though some of them were non-drinkers themselves. Restrictions in place, problem over, seems to be the attitude of the police and hospitals. Unfortunately this has led to exporting of the "problem" to other towns; it has not addressed the medical needs of the chronic alcoholics, indeed promising programmes seem to have been abandoned; and of course the bans do nothing to address the underlying causes of alcoholism in the Aboriginal community.

Hamish McGlashan

BOOK NOTE

A Pearler's Wife: Chapter extraction from A Pearling Master's Journey by G V Norman. Private publication, Strathfield (NSW), 2009, 38 pages, illustrated, including colour plates and maps. Soft cover, ISBN 9 7809803581 1 7, RRP \$29.95.

On 11 September, approximately 100 people attended the launch of *A Pearler's Wife* at Pearl Luggers, Broome, where the event formed part of the annual Shinju Matsuri Festival. The book, as the title indicates, is extracted from *A Pearling Master's Journey in the wake of the schooner Mist* by J E deB Norman and G V Norman. It is beautifully presented, having the same format as the larger work, and it includes additional photographs. A book note on the larger work appeared on page 8 of the *Boab Bulletin* in October 2007.

A Pearler's Wife tells of life in Broome when Catherine Mary Norman, who was known as Rene and married to Edgar de Burgh Norman, lived there between 1925 and 1942. The book is available from the Broome Historical Society or the Kimberley Bookshop in Broome. Kimberley Society members can also purchase it by sending a cheque for \$29.95 to G V Norman, PO Box 3633, Broome, 6725, or PO Box 966, Strathfield, 2135. For further details, telephone (08) 9192 1418 or (02) 9746 3037.

Cathie Clement

CONSTRUCTION OF THE ORD RIVER DIVERSION DAM – AN ILLUSTRATED HISTORY

On 2 September 2009, Peter Knight, a founding member of the Kimberley Society, delivered an excellent PowerPoint presentation. It was prepared with the assistance of Hamish McGlashan, focusing mostly on aspects of the dam construction in which Peter was involved but also showing the official opening and other sociable moments. The presentation included two video clips and 48 slides, commencing with one of the dam. Peter's verbal component of the presentation follows.

In discussing the construction, I will give an idea as to how I became involved, and I will comment on some of the other people. We are fortunate to have amongst us tonight John Lewis, who was the man responsible for the design of the Diversion Dam, and Gil Marsh who designed the roadway over the dam and the Dunham River Bridge. What a great joy it must have been for these men to see this project come to fruition.

By comparison, I was the most junior engineer on site! Because I was involved in the concrete work, my comments will I am sure be biased in this direction and not give sufficient credence to the other aspects of the undertaking.

Just for background, I graduated from UWA in 1960 and looked around for a job. I wanted to work in construction but not for the Government, even though they did most of the interesting and substantial work in this field. This left me with few choices. Christiani Nielsen and Clough (CNC) had a joint venture to build the Narrows Bridge across the Swan River in Perth, and they had, about that time, won a tender to construct the Ord River Diversion Dam. This looked to me like the ideal chance. I applied and was hired by the JV to go to the site and work on drilling and grouting the foundation and as assistant engineer for concrete on the dam. This meant setting out the works, planning and supervising the site preparation, and the placement of the concrete under the guidance of a senior engineer.

I got the opportunity to go north and took it with both hands! At the time the Kimberley was a pastorally dominated society days were measured by sunrise and sunset seasons by the wet and the dry access controlled by inadequate road systems, poor flight schedules, the State Shipping Service. RFDS radio for communication no telephone of any consequence.

Thrust into this pastoral scenario was a construction contract that depended on timely arrival of all the components, the manpower, the staff, the food and the beer! There had been the construction of the port facilities in Derby and Wyndham, the building of meat works etc but nothing on the scale of the Dam. Major logistical challenges had to be met and overcome.

Before all this could start, of course, there had been serious investigations, concept planning, establishment and operation of an Agricultural Research program and then the detailed design of the scheme. On top of this were the political manoeuvres and will to get the funding in place to allow it to proceed. So what I will talk about is really only a small part of the project, albeit a very interesting part, to me at least!

The dam structure consisted of an abutment on each side of the river and, in between, 20 Radial gates supported by concrete piers resting on a spillway sill, which in turn was bedded onto the rock. The abutments were linked to the banks with earthen embankments. Over the top of the gates a roadway was built and this was used not only as a bridge across the river but also as an access way to carry a gantry to service the gates.

Fortunately, CNC had within their organization some very talented and experienced people who were able to address the challenges presented and make the project work. The Project Manager was Mr. Leif Ott Nielsen, a widely experienced and competent engineer who had been project manager on the Narrows Bridge and had worked on remote sites in South Africa and elsewhere. He master-minded the plan.

The detailed planning was done primarily by Mr. Uffe Hansen, an exceptionally talented engineer. He planned the work from go to whoa, getting all the materials, stores, equipment, personnel to site in a timely manner. Transport of cement from Cockburn Cement, in Cockburn Sound just south of Fremantle, to the site was handled by converting the State Ship MV *Dulverton* to a cement-carrying vessel using specially designed equipment made by F.L. Schmidt from Germany, installing storage bins at Wyndham, and providing specially designed spherical containers to be placed on the road trains to transport the cement to site. I was fortunate to work under Uffe in my first year on site and benefitted from his support and guidance.

The Site Manager for CNC was Mr. J J Hussom. The Resident Engineer for the Public Works Department was Mr. Roy Hamilton, and his 2IC on site, Brigadier Frank Hussey. Mr. J E Parker was the Chief Engineer for the PWD and Mr. C Munro the Project Engineer. There are also others here tonight who were involved in the construction ... notably Don Young to whom I am eternally grateful for his guidance, patience and tuition during the work on site. He was my boss in 1962. There are others here also I am sure who were there at the time!

My first job was to supervise the completion of eight houses for CNC and then build an outdoor movie theatre! Still standing I believe!

The site of the dam was on an exposed quartzite outcrop across the river known as Bandicoot Bar. The first job was to remove the excess rock down to foundation level. This was done by a subcontractor, D F D Rhodes. It was a very tough job and Don Rhodes lost a lot of money carrying out the work. To his credit he finished the work in a timely fashion.

Following this the foundation was drilled on a regular pattern and grouted with cement to fill any cracks in underlying rock. As it turned out the rock took very little cement grout as the fractures in it were in effect very well naturally sealed with fine clay. Then a deeper line of holes was drilled to form a curtain along the axis of the dam. These too were really of little effect as the job had already been done by the clay. We pumped in only about 10% of the volume of cement expected to go into the grout holes.

Next came the concrete. The rock had to be cleaned to near perfect cleanliness before one was allowed to place concrete onto it. It got down to a level of little dust pans and brushes and small foam pads like one uses in washing up, to get the standard demanded by Roy Hamilton!

We started off placing so-called dental concrete on the rock surface, filling in the major cavities. The technique was to place a cement-rich fine grout onto the rock surface before placing the concrete and then vibrating the courser graded concrete mixture into the surface indentations. This applied to all rock concrete interfaces.

The baseline survey was carried out by the surveyors and, from these few points, the rest was done by us on site. As you all know it can be quite warm in the Kimberley so, in order to minimize the effect of the heat shimmer, we did our key surveying at first light before the workforce arrived at 6.30am. Don and I would arrive while still

semi-dark and set up our instruments so that as soon as we could see we would carry out our work.

One morning we were walking in along the dam with our instruments on our shoulders and as usual the backs of our shirts were black with flies. This particular morning we had a young engineer who had just come out from Denmark and had never seen flies. I called out to Don, in front of me, "I see Fred's here this morning... and Sam is back." Then, after a few more paces, "Tom is here as well!" The young guy then said in amazement, "You don't know them all by name...do you?"

I mentioned that the cement for the construction was shipped up from Fremantle on the MS *Dulverton*. The other prime ingredients of concrete are aggregate and water. Aggregate was taken from the water worn gravel deposits in the river below the Bar as was the water. The concrete was mixed in a very efficient pan mixer on site. The batch plant, as they are known, provided the concrete for the precast yard as well as the concrete for the dam.

The plywood-faced timber formwork was prefabricated in the carpenter shop. The formwork was then erected on site, lined up and checked for its position before the final inspection prior to ordering the concrete. There was always a great push to get the concrete placement started, which occasionally caused a bit of friction but overall it was a very harmonious site. My goal was for 2,000 cubic yards to be placed in a week. I got very close a number of times but the only time we achieved it was when I was off-site at the Wyndham Races. That week we got 2,040 cubic yards! I put it down to the good planning I had done in the week previously. Others didn't see it quite so clearly! Mind you it was a great race meeting! But that's another story!

The roadway beams as well as the Dunham River Bridge roadway beams were made in the precast yard which was located near the batch plant. Steel formwork was used throughout and the concrete was water-cured. The roadway consisted of seven post tensioned Tee beams (one of which was removable to allow the stop logs to be placed and removed) and two side beams that supported the rails on which the gantry ran.

After we poured the sills – the spillway – we had to form and pour the piers that supported the gates. These progressed across the dam without much of a problem.

Once the piers were constructed, the trunnions on which the gates hinged had to be placed and stressed to the piers with macalloy bars. This was a fairly delicate task, which had to be done with considerable precision. This operation progressed across the structure as we finished the piers.

In the first season we got partly across the Bar before the River started to flood. We had not had any substantial rain at the site and no one expected the river to flow. It happened that one Sunday another chap and I had taken a vehicle and gone up to the main Dam site to have a look at the gauging station. When we got there, we were astounded to see the river flooding through the gorge. Anyway, we were out for a bit of fun and it was, after all, Sunday, so we found a big dead tree and with considerable effort rolled it into the river and floated down through the gorge lying on the tree and admiring the sky above and the gorge walls as we gradually rotated in the swirling flood waters. It was great fun until a school of fish leapt out of the water under us! What was chasing the fish I wondered as I rapidly swam for the bank? It dawned on me that this could be of significance to our work on the Bar so we returned to Kununurra and informed my boss Jens Hussom.

That night we mobilized an earthmoving fleet and started to lift the elevation of the coffer dam which was built to protect our site so that we could continue to work for another month or so before the river came down in earnest. The river eventually came down on 6 January 1962 and the work substantially closed down for the wet. Things were a little more relaxed as we waited to get a flight back to Perth.

With the oncoming of the wet most of the workforce left the site. This meant for most of us a trip to Wyndham across the flowing creeks to catch the DC3 for the many-stopped flight to Perth. On the trip I took we got to Meekatharra and the pilot announced that we would have to wait there for a while as Perth airport was fogged in. We sat in the sweltering heat when to our amazement a BOAC Super Constellation touched down and pulled up beside us! God only knows what those £10 migrants said to one another as they looked out on the flat scrub expanse of Meekatharra and stepped out into plus 100°F heat and flies in their tweed jackets.

After a break in Perth, which I greatly enjoyed, it was back on the DC3 for Wyndham. We started again as soon as possible after the floodwaters went down, cleaned up the site, and progressed across the Bar. Once we got a few piers up to full height we put in the very accurately-placed stainless steel seal plates against which the gates were to seal. Then construction of the gates themselves could proceed.

On the final pier pour (Pier 19) we decided we needed to do something a bit special. So we got half a dozen bottles of champagne, chilled them in the chiller in the batch plant, and took them down to the pour in the last truck. We hoisted them to the top of the pier and there they were ceremoniously drunk and the bottles embedded into the pier concrete!



The Dam nears completion... all piers to full height... the roadway approaches the western abutment.

The gates were manufactured in Perth and shipped up in pieces. They are of riveted construction. This must be one of the last major constructions using this technique in Australia. The design was originally made by the Bureau of Reclamation in the States. John Lewis had spied these gates in operation on a trip he made there. He thought they would be just right for the Ord and so approached the Bureau for the design details which they generously provided. The design was also used on a project in NSW. It was quite a coup to get this tried and proven design for zero design dollars. It was also quite a challenge to get them completed before the floods came down in 1962 and, despite the best efforts of the metalworkers union, they were completed to a stage where they could retain water for the season.



Radial gates
1, 2 & 3
progress

In 1962 we had a bit of a disaster. One lunchtime, after the men had had their lunch, the mess caught fire and quickly burnt to the ground. There were very few options to feed everyone! The PWD mess was rapidly expanded. The contractor C R Keith, doing the earthworks for the main channel, had a mess and that was also expanded and swung into action. We chartered a DC3 and filled it with essentials and got this in the air that night! With some forbearance from the troops the crisis was overcome!

During 1962 an airstrip was constructed at Kununurra and in early 1963 the Queen and Prince Phillip paid a royal visit.

Painting and some other minor work was carried into 1963. To work on the gates when the dam was full stop logs were placed in the specially designed slots just upstream of each gate. This allowed access to the gates (one at a time) to be sandblasted and painted in the dry.



The Dam passes
the 1962-63 flood

The Dam was officially opened by Prime Minister Robert Menzies on 26 July 1963.

Along with the dam construction, the development of the agricultural project proceeded with the main channel construction and the pump station together with development of the farms.

Kununurra itself gradually developed to the thriving town it is today.

To me it was a great introduction to construction. I was very privileged to be part of this project.

BOOK NOTE

Devonian reef complexes of the Canning Basin, Western Australia by Phillip Playford, Roger Hocking and Anthony Cockbain. Geological Survey of Western Australia, Bulletin 145, 2009, hard cover, 444 pages, profusely illustrated with 536 figures in full colour, and 8 large maps (folded), in presentation box. ISBN is 978-1-74168-233-5 (print) , 978-1-74168-232-8 (PDF). Price \$77 including GST.

This is a landmark publication that represents some 50 years of field work and related research by the principal author and Kimberley Society foundation member Dr Phil Playford. His detailed studies of many aspects of the Kimberley's Devonian reef systems in the Napier and Oscar Ranges have been widely published over many years, but this volume brings it all together with the latest thinking on the formation of this marvellous geological feature. These fossil reefs are known around the world as the best examples of ancient barrier reef systems, and geologists from far and wide visit the area regularly to learn how reefs formed in past eras.

Although it is a technical publication, it will be of interest to many with more than a passing interest in the limestones of the Napier and Oscar Ranges, and there is much that the non-technical reader will readily understand and appreciate. The hundreds of excellent photographs illustrate diverse geological processes, fossils, and reef structures, and the commentary includes references to Aboriginal names and mythology associated with ranges as well as European historical points. There are also sections detailing the economic aspects of the Devonian rocks, including the zinc and lead sulphide deposits at Pillara and Cadjebut (and others) and the small oilfields that may point to the presence of larger, as yet undiscovered oil occurrences.

The contributions by the other authors balance Phil's major input, and the publication makes extensive reference to the many people from around the world who have contributed to the amazing level of detail that we now have on the origin of these fascinating rocks. To view a PDF copy go to www.dmp.wa.gov.au/GSWApublications where you will find lots of other Geological Survey material, most of which can be downloaded free of charge.

Mike Donaldson

SPINIFEX HOTEL, DERBY

The Spini is on the market after eight years in the same ownership. As Derby's oldest hotel, it has a long and interesting history, part of which relates to when it was known as the Club Hotel.

THE MONTARA OIL SPILL NORTH OF THE KIMBERLEY

The editor compiled this log to give members insight into the oil spill and its management.

- 21 August Gas condensate and oil began leaking into the Timor Sea from a well on the Montara wellhead platform. Located about 150km (93 miles) south-east of the Ashmore Reef and 250km north-west of Truscott air base on the Kimberley coast, the well had been plugged in anticipation of being pumped later this year. The danger associated with leak—thought to have originated up to 3,500 metres below the ocean floor—saw the Clough pipe-laying barge *Java Constructor* evacuate all 69 workers from the adjacent West Atlas rig. The rig is owned by Norwegian company Seadrill Ltd and operated by PTT Exploration & Production Public Company Limited (PTTEP), a subsidiary of the Petroleum Authority of Thailand. PTTEP's ownership of the Montara project dates from February, and its spill contingency plan received Federal Government approval as recently as June. The Australian Maritime Safety Authority (AMSA) began coordinating the emergency spill response in accordance with Australia's National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances. To enable AMSA to assemble resources sufficient for its response, PTTEP privately estimated the amount of oil flowing from the wellhead at 400 barrels a day. Australia's National Offshore Petroleum Safety Authority formed a team to investigate the spill.
- 22 August Authorities declared a 37-km exclusion zone for vessels around the West Atlas rig. AMSA hired a dispersant-capable Hercules aircraft from an oil spill response company in Singapore to spray the slick, which was about 30m (98 feet) wide and 15km (eight nautical miles) long. Fifty tonnes of dispersant were sent from Darwin and Geelong, two of the nine locations of strategic stockpiles of dispersant managed by the Australian Marine Oil Spill Centre, while the Fixed Wing Aerial Dispersant Contractor, AMR, sent two aircraft to Truscott as contingencies. A ship sprayed near the rig to minimise the fire risk. A team of international gas and oil spill experts arrived in Perth to work with PTTEP's engineers and help them to devise a salvage plan.
- 23 August Spraying, aided by evaporation, dispersed the continually replenished slick, with the Hercules working 45m above the water and approaching no closer than two nautical miles to the rig. AMSA's Darwin-based Dornier aircraft provided top cover for the Hercules and reported on its effectiveness. Conservationists expressed concern, partly because the spraying started only on the third day of the spill. AMSA stated that its priority was to get the oil off the water as quickly as possible to mitigate any risk to the environment. The fire risk prevented anyone boarding the Montara wellhead platform in safety, ruling out that option for plugging the leak. PTTEP announced a plan to have it plugged within about seven weeks, with 16 to 20 days of that time allocated to towing a mobile offshore rig almost 3,000km to the site. West Australian Greens Senator Rachel Siewert called for the company to pay not just for the clean-up but also for ongoing monitoring of the environmental impact and for any environmental problems.
- 24 August PTTEP secured access to the West Triton rig at Batam near Singapore. A financial analyst estimated that the spill could cost the company between \$10 million and \$50 million, possibly reducing its 2009 profit by as much as six per cent. Aerial spraying continued, with tens of thousand of litres of dispersant breaking the oil into smaller globules that then scattered. Oil spill experts from the UK endorsed that approach. The Australian Petroleum Production and Exploration Association (APPEA) defended the oil and gas industry's safety record, stating that more than 1500 wells had been drilled since 1984 without the occurrence of an offshore gas well blowout.

- 25 August Woodside Petroleum offered the use of a drill rig and an emergency response team. PTTEP decided to charter an Ilyushin IL-76 aircraft to “deluge” the West Atlas rig. AMSA, having used its Dornier to check the slick, started using the more manoeuvrable AMR fixed wing aerial dispersant aircraft from Truscott for spraying. The Kimberley Professional Fishermen's Association, advised by marine scientist Dr Walter Starck that the slick should have been left untreated, voiced its concern that the clean-up could be dangerous. The slick, now said to be 30km long, was heading towards the Ashmore Reef, a RAMSAR-listed wetland. Associate Professor Monique Gagnon, an environmental toxicologist who has studied the impact of the petroleum industry on marine environments for 15 years, pointed out that the mixture of gas condensates and sweet light crude oil in the spill was unlikely to form long-lasting slicks and would evaporate more easily than heavy grade oil. She believed that letting the oil stay on the surface could pose the greater ecological risk, however, because potential existed for it to drift to the coast and contaminate sensitive mangrove forests. Using dispersants on the oil would obviate that risk, she said, but, by causing droplets of it to sink, would expose some fish to higher levels of oil.
- 27 August The West Triton rig, operated by Seadrill, left Batam on its 20-day journey, towed by two tugs that would take it to within two kilometres of the Montara wellhead platform where it would drill a relief well to plug the faulty well.
- 28 August Senator Siewert, who chartered a plane to fly over the spill, condemned the handling of it. She claimed that a tide line slick was within about 20km of the coast and that the oil film around the West Atlas rig stretched at least 180km from east to west. She also argued that PTTEP should be compelled to take up Woodside's offer of a closer rig, to stop the leak sooner. She later admitted that her claims about the slick and its proximity to the coast might have been inaccurate.
- 29 August AMSA confirmed the size and nature of the slick, which was more than 80 nautical miles from the Australian coast. AMSA also wrote: ‘It is notoriously difficult to distinguish between oil and a variety of other unrelated phenomena such as: cloud shadows, ripples on the sea surface, differences in the colour of two adjacent water masses, suspended sediment, floating or suspended organic matter, floating seaweed, algal/plankton blooms.’
- 30 August Monitoring of the slick’s movement continued, using both aerial surveillance and satellite tracking buoys that AMSA had deployed on day one to drift on the sea surface and send position data on an hourly basis. The rig tender vessel *Lady Gerda* sprayed dispersant on oil patches near the West Atlas rig as well as undertaking regular sampling and testing.
- 31 August Forty wildlife rescue officers were on standby in Karratha in case the slick reached the coast. Two specialised pumps ordered by PTTEP arrived in Darwin by air from Singapore to be fitted to two vessels to spray 100,000 litres and 30,000 litres of seawater respectively onto the Montara wellhead platform to disperse the gas condensate and reduce the risk of fire.
- 1 September The clean-up continued, with the dispersant spraying targeted to prevent the oil moving into sensitive areas. Two vessels arrived with boom and skimming equipment that allowed them to remove oil from the surface of the water. Fishermen off the Kimberley coast reported seeing sick and injured turtles and ‘globules of yellow gunk’ well south of the oil spill. Over the following days conflicting opinions were offered on the wisdom of spraying dispersants. Dr Starck’s views were cited again, and Associate Professor Monique Gagnon said that the use of dispersants in such a remote location, while unnecessary, was unlikely to be harmful. Conservationists began to call for a national emergency response to the oil spill, echoing earlier assertions that it was much worse than was being admitted.

- 7 September Federal Energy Minister Martin Ferguson announced his intention of securing a quick change in legislation so that 'a top-level commissioner with coercive powers' could investigate the oil spill.
- 9 September A Federal Government scientist, Jamie Oliver from the Australian Institute of Marine Science, spoke about whether AMSA should continue to spray dispersant on the oil. The dilemma is that, while spraying does help birds and sea mammals by breaking up the oil, it can cause harm to any coral reefs below a slick by making the globules sink.
- 10 September The West Triton rig, after a delay en route, reached the edge of the two-nautical-mile exclusion zone around the West Atlas rig. The next few days were spent securing it to the ocean floor, conducting safety checks, and putting equipment on board. On the 14th, it began a 20-day program of drilling, using magnetic equipment to guide the drill towards the existing pipeline. The aim, once the pipeline is intersected, is to spend another eight days injecting heavy mud to plug the leak. The two ships with the high-capacity water pumps remain on site to deluge the West Atlas and minimise the risk of fire.
- 16 September AMSA reported decreasing amounts of oil on the water. APPEA asserted that, in the absence of proof of an impact on the Northern Demersal Scalefish Fishery (currently under assessment for ongoing export accreditation), it was too early for commercial fishermen to talk of seeking compensation for the oil spill and/or the use of dispersants. Federal and State Government monitoring of the potential effects of the spill on wildlife showed that five birds affected by oil had been treated at Ashmore so far. By the 18th, nine common noddies and brown boobies had been treated and a government officer said that birds had died after coming into contact with the crude oil. The Northern Territory Environment Centre pointed to the death of the birds as an additional reason for creating new protected marine areas in the region. Ashmore Reef and Cartier Island are protected but other marine areas closer to the Kimberley coast are still the subject of marine bioregional planning that the Department of the Environment, Water, Heritage and the Arts is undertaking to identify areas that should be protected. This planning is intended to lead to the creation of a network of marine parks by 2012, and the proposed network will be released for public comment early next year.
- 17 September Laws proposed by Federal Energy Minister Martin Ferguson passed the senate. WWF-Australia released online a commissioned report titled *Montara Field Oil Leak and Biodiversity Values*. Prepared for the organisation by Australian ecologist Simon Mustoe, it suggests that five turtle species, up to fifteen species of whale and dolphin, and more than thirty seabird species are potential victims of the oil slick. The report assumes that 'the slick could reach Ashmore Reef and beyond' and it therefore includes the marine populations of Ashmore Reef, Browse Island and Cartier Island in its estimates of 'potential victims'.
- 18 September The Federal Opposition's spokesman for the environment, Greg Hunt, called on the government to pay for an independent organisation, e.g. Charles Darwin University or James Cook University, to carry out environmental monitoring of the oil spill.
- 22 September PTTEP announced that the relief well being drilled by the West Triton rig was almost halfway to the point where it will intersect the leaking well.
- 24 September The Australian Conservation Foundation demanded a moratorium on oil and gas development in WA until the state is better equipped to deal with spills.
- 1 October To be advised.

INDIGENOUS HERITAGE LAW REFORM

The Federal Government is looking at reform of the legislative arrangements for protecting Indigenous traditional areas and objects. It has issued a discussion paper (copies at www.environment.gov.au/heritage/laws/indigenous/lawreform or from 1800 033164). The paper relates to the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, which was designed to provide protection for traditional areas and objects when state and territory laws proved ineffective. The Act sits beside others (Federal and State) that also afford protection to traditional areas and objects. Some parts of those Acts could also do with reform.

The discussion paper puts forward 15 proposals that “aim to ensure that Indigenous Australians have the best opportunities to protect their traditional heritage in balance with other social and economic considerations”. The proposals seek to clarify responsibilities for protecting Indigenous heritage, set standards of best practice nation-wide, remove duplication, and improve processes for Australian Government decisions about protection when the standards are not met. More generally, there is an intent to clarify the meaning of the law and the limits of its application. One outcome might be to ensure that, if legally recognised traditional custodians exist, only they can seek Commonwealth protection of Indigenous heritage. The invitation to comment reads in part:

If the proposals in this paper are adopted and fully implemented, Australians could expect to see improvements in Indigenous heritage protection laws in every state and territory, based on a common set of standards. The right standards would identify the positive outcomes that good legislation can achieve, including strong protection for traditional areas and objects, a central role for traditional custodians in decision-making, opportunities for early engagement with traditional custodians in planning processes, and decisions that are made fairly and transparently.

The deadline for submissions is Friday, 6 November 2009. They can be lodged electronically (atsihpa@environment.gov.au) or sent to Indigenous Heritage Law Reform, Heritage Division, Department of the Environment, Water, Heritage and the Arts, GPO Box 787, CANBERRA ACT 2601.

COUNCIL 2009-2010

President: Hamish McGlashan
Vice-Presidents: Jack Vercoe and Cathie Clement
Secretary: Jeffrey Gresham
Membership Secretary: Mike Donaldson
Treasurer: Gilbert Marsh
Councillors: Kevin Kenneally, Daphne Edinger, Josh Coates and Susan Clarkson

Grant Sellwood manages the Kimberley Society's Web site (www.kimberleysociety.org). It carries summaries of the Society's talks (as published in the *Boab Bulletin* but sometimes with additional images), FAQs, and information about the Society and how to join it. An upgrade is almost finished.

© Kimberley Society Inc. 2009

Dr Cathie Clement OAM edits this newsletter for the Kimberley Society. The material it contains is copyright but may be cited with acknowledgment. Correspondence, including requests to reproduce articles, reports or book notes, should be directed to The Editor, Kimberley Society, PO Box 8471, Perth Business Centre, Perth, WA, 6849; E-mail clement@q-net.net.au; telephone (08) 9272 3308; or facsimile (08) 9272 2087.

DISCLAIMER: The opinions and the information presented in this newsletter are offered solely to inform members about matters that may interest them. The Council of the Kimberley Society accepts no responsibility for the newsletter's content, and it advises readers to obtain appropriate advice before they either apply information from the newsletter to particular circumstances or use it as a basis for formulating decisions.