



Alison Stevens and husband Chris Miley

Alison Stevens, ASHET's new webmaster

At the recent History Week ASHET/RAHS meeting when her husband Chris Miley presented a talk on the Australian wool industry, Alison made me an offer to join ASHET as a member and take on the responsibility for managing its website at no cost to ASHET. I said the offer was almost too good to be true. ASHET has now received her application for membership which in accordance with ASHET's constitution the committee must consider and formally accept for her to become a member. If it does so I will with great pleasure hand over the management of the website, currently one of the secretary's responsibilities, to Alison.

Alison runs a very successful business as a professional designer and manager of commercial websites. Three years ago ASHET engaged her to upgrade our website and organise it so it could be readily kept up to date by one of our members without any specialist knowledge beyond that of most computer users. At that time we had in mind that Felicity Barry, one of our committee members, would take on the job of webmaster. Alison provided training to Felicity in all that she needed to know for this task. But Felicity was never able to take up management of the website as she became heavily committed to starting a family. Felicity now has two very young children and is unable to take on responsibility for the website.

Alison knows that the website can now do with further upgrading and that we have in mind adding new features such as the records generated in our recent oral history projects. We are looking for other ways of enhancing its ability to serve our many members who cannot participate in the regular meetings, visits and tours.

Alison is already well known to many members of ASHET and RAHS because she was for several years the Business Manager of the *Journal of the Royal Australian Historical Society* and was also responsible for its design and typesetting. ■

Audit of ASHET's accounts

We are proposing that ASHET's accounts for the current year be audited by a qualified auditor. The reason is that eligibility of a society such as ASHET to apply for some government grants is contingent on their submitting with their grant application a set of audited accounts. We have in mind that next year ASHET should apply for one such grant.

We have never in the past had ASHET's accounts audited, and there is no legal requirement that we should do so. If you know of an auditor who might meet our need, please contact Ian Arthur, secretary of ASHET at sec@ashet.org.au. ■

ASHET receives grant for timber truss bridges project

We have just been advised that our application for a Heritage Grant administered by RAHS for a project to record history of New South Wales timber truss bridges was successful.

The grant of \$1,850, along with a matching contribution in kind from ASHET members, will allow us to record oral history interviews with two former Chief Bridge Engineers with the NSW Department of Main Roads and its successor organisations which own and maintain most of these bridges. These two engineers, Brian Pearson and Ray Wedgewood, were both heavily involved in the maintenance and conservation of timber truss bridges, though not in their construction which took place mostly in the late 19th and early 20th centuries. The project will include contributions from others who will be able to complement the information provided in the oral history records.

Project manager is ASHET member Michael Clarke, a former Chief Engineer with the NSW Department of Public Works, who has managed many oral history projects, and is also familiar with the history of NSW timber truss bridges. ■

Book review

Car manufacturing at Victoria Park, Sydney

BMC-Leyland Australia Heritage Group. *Building cars in Australia: Morris, Austin, BMC and Leyland, 1950–1975*; Halstead Press, Sydney, 2012

The story begins with Lord Nuffield's visit to Australia in May 1945. As Chief of the Nuffield Organisation, maker of Morris cars, he announced on his return to England in June that year that his company stood ready to undertake manufacturing in Australia, even though it could not be done profitably due to the small market. He said other companies were also interested in Australian manufacture and predicted 'It will be a costly business and some people are going to lose a lot of money'. His stated objective was to retain the market for British cars. This announcement came just a few months after GMH had made a submission to the Australian government proposing the manufacture of complete cars in Australia, which the government accepted late in 1945.

Sales of cars in Australia had been completely disrupted during World War II, and in 1945 there was a substantial pent up demand for new cars. Before the war American companies had dominated the market, and the major ones had arrangements with Australian body builders to assemble cars from American made chassis with Australian bodies and accessories. The government had tried to encourage British manufacturers to also import chassis on a substantial scale, but without success. At the start of the war, fully imported British cars, with assistance from preferential tariffs, had around 40 per cent of the market. (Continued on page 3) ➔

ASHET Events

Tuesday, 30 October, 2012

Talk by Adam Godijn and Virginia Hollister

Restoring a historic mural at Rylstone

The Bridge View Inn in Rylstone, in mid West NSW, contains a rare mural painted in the late 19th Century by an unknown artist, depicting the second Rylstone Bridge elaborately framed by decoration and nudes.

The mural is in an extremely unstable condition, with delamination between the bricks and render posing a serious risk to its future. Painting conservators Matteo Volonte and Adam Godijn from International Conservation Services recently travelled to Rylstone to commence stabilisation and remove the layers of overpaint that had been discovered to be covering the top third of the image. The journey to Rylstone turned into one of discovery in many different ways. Not only did the hidden third of the painting begin to emerge, but also the cleverness and thoughtfulness of the artist became apparent in contrast to the naive style of the painting. Work is currently expected to be completed in March 2013. Adam Godijn will be discussing the challenging conservation treatment.

Adam Godijn graduated in 2000 as a paintings conservator and has led an exciting career in Australia and abroad. He is based in Sydney with International Conservation Services as a Senior Paintings Conservator and has worked on many of the most important private and public collections. Adam has managed many major conservation projects including the conservation of the "Key Elements" project for Australian Parliament House, conserving the collection's 200 most important artworks. In Perth 2009, Adam led a team of painting conservators conserving the domed ceilings, paintings and iconostasis at St Constantine and Helene Cathedral, Perth. Shortly after successfully completing this massive conservation project, Adam travelled to Italy to conserve frescoes at a UNESCO World Heritage site in Genoa. Adam continues to be involved with many of Australia's most exciting conservation projects including the mural at the Rylstone Bridge View Inn in Rylstone.

The Bridge View Inn (originally the Bridge Hotel) was built by ex-convict Goodwin Spire Hall in 1871. Hall had moved to Rylstone in 1868 from the rich gold fields of Pennyweight Flat in Sofala. Building a large two-storey sandstone hotel, in a small rural town of less than 200 people, is evidence of Hall's supreme confidence in future trade. It would be in character for Hall to also commission an itinerant artist to paint a portrait of the timber bridge immediately opposite the hotel, and to artistically frame it in the latest European fashion. Virginia Hollister will be telling Hall's story and providing the local historical context for the mural, as well as exploring the artistic allusions to Greek classical culture within the mural.

Virginia Hollister moved to Rylstone in 2004 after a career working as a lecturer at Sydney College of the Arts, then arts administrator for the Australia Council and the NSW Ministry for the Arts, then freelance arts and museum researcher and writer. She helped develop the 'Code of Practice for the Australian Visual Art and Craft Sector' for the National Association for the Visual Arts, and co-authored with David Throsby a review of the economic situation of artists titled 'Don't Give Up Your Day Job' for the Australia Council. In Rylstone she is deeply involved with the Rylstone and District Historical Society, who own and manage the Bridge View Inn.

This talk is a joint activity of ASHET and the Royal Australian Historical Society.

Venue: History House, 133 Macquarie Street, Sydney

Time: 5.30 for 6 pm

Cost: \$8.00 Includes light refreshments on arrival

Bookings: phone RAHS on (02) 9247 8001 or email history@rahs.org.au

Thursday 1 November

Guided tour of Fairfax Printers at Chullora

This is a rare opportunity to visit the printing works at Chullora that are due to close next year, marking the end of an era. The tour will last about two hours, and include the printing presses, the operations where the printing plates are made and the publishing operations where the rolls or printed paper are stored and eventually turned into folded papers with preprinted inserts included.

Numbers on the tour are limited and we will take registrations in the order we receive them. Advance booking is essential and we need to provide Fairfax with a listing of the names of all the tour participants, so register with names not just 'and friend'

You will be sent detailed instructions about getting there and parking when you register, so include contact details, preferably an email address.

Venue: Fairfax Printers, 1 Worth Street, Chullora

Time: 10 a.m.

Cost: \$20.00. You may pay on the day.

Bookings: phone or email Ian Arthur, secretary of ASHET on 9958 8397 or sec@asht.org.au.

Tuesday 20 November

Talk by Philip Pells

Mining in the Blue Mountains

Late in the 1790s there was discovered in the Blue Mountains of New South Wales one of the richest deposits of oil shale anywhere in the world. It had been demonstrated at Torbane, south of Edinburgh in Scotland, that such material yielded a special oil with a far greater illuminating power than conventional lamp oils or candles. Therefore, in the days when no liquid petroleum oil was known, this raw material became black gold.

A number of extraordinary mining enterprises were developed in different parts of the Blue Mountains, from Joadja to Murrurundi, to exploit this mineral.

Philip Pells has spent over 30 years tracking down the stories of these enterprises and trying to make sense of the debris now lying scattered through the bush. The talk will cover these disparate mining ventures, some immensely profitable, others disastrous, and all controlled by the vagaries of the very special nature of Torbanite.

Philip Pells is a civil engineer, a fellow of the Australian Academy of engineering and technological Sciences, and a fellow of Engineers Australia.

Venue: History House, 133 Macquarie Street, Sydney

Time: 5.30 for 6 pm

Cost: \$8.00 Includes light refreshments on arrival

Bookings: phone RAHS on (02) 9247 8001 or email history@rahs.org.au

Tuesday, 4 December, 2012

Guided tour of the Parramatta River by ferry with lunch at Parramatta

Rob Renew will lead this river cruise with commentary through Sydney's vanished industrial heartland, exploring past and present industries along the Parramatta River.

After the establishment of Government Farm at Parramatta and

early land grants made in the 1790s along the Parramatta River, many small farms and businesses such as breweries, flour mills and tanneries were set up along shores of the River. Initially most heavy industries in Sydney were located around Darling Harbour. From the 1850s onwards, as Sydney population grew rapidly, many of these industries were moved westwards to the shores of the Parramatta River and its tributaries. By the late nineteenth century sites along the River had become Sydney's industrial heartland, and remained so for almost a century before entering a rapid decline. Today, there are few visible remains of the imposing industrial structures which once dominated the shores of the River. Apart from Cockatoo Island, the major industrial sites have been demolished and replaced by housing estates.

Participants will board the Rivercat Ferry departing at 9:52 a.m. at Circular Quay. Rob Renew, tour leader, will give a brief commentary on the main sites as we pass on the ferry. At Rydalmere we will change ferries for Parramatta, arriving at 11:25 a.m. Lunch at

Parramatta will celebrate the final ASHET event for 2012. Express ferries to Circular Quay depart Parramatta wharf at 1:30 and 2:30 p.m., taking about one hour.

What to bring:

- a hat, sunglasses and sunscreen (we will be in the open for about 90 minutes);
- a light coat or pullover (we will be travelling in a breeze);
- for those people holding a Seniors Card, a Pensioner Excursion ticket for \$2.50 covers all public transport fares for the day.

Meet at Circular Quay at 9:30 a.m. departing for Parramatta at 9:52 a.m.

Cost: To be advised, will include lunch, but not the fares on the ferry.

Bookings: phone Ian Arthur, secretary ASHET on 9958 8397 or email sec@ashet.org.au/

(Continued from page 1)

The Holden Australian car was announced to the public in 1948 and began production early in 1949. Contrary to Lord Nuffield's prediction, it was very profitable. Its success was attributed to very accurate targeting of the market. The Holden fitted neatly between the American cars that were becoming larger and more expensive, and the British ones, small and economical, with four cylinder engines that in those days were much noisier and rougher than the six cylinder engines in the American cars. The size of the Holden suited fleet owners, who made up a substantial share of the Australian market.

The Nuffield organisation purchased the site of the Victoria Park racecourse in Sydney for its factory and commenced construction in 1948, initially to assemble cars from completely knocked down (CKD) sets of parts imported from Britain. The factory opened in 1950. In fact Nuffield Organisation was not the first British firm to commence Australian assembly after World War II. The Rootes Group was the first, with the assembly of Humber, Hillman, Sunbeam, Talbot and Singer cars at a dedicated factory in Melbourne, and at its peak commanded five per cent of the market. By the mid 1960s it was in financial trouble, both in Australia and in Britain, and sold its factory to Chrysler, who moved it to South Australia. The British firm Standard established its own plant in Melbourne and began assembly operations in 1952. It later assembled many other makes of cars, and was eventually purchased by Toyota to establish its first manufacturing plant outside Japan.

In 1945 Austin contracted with a Melbourne body builder Ruskin Motor Bodies to build bodies for its Australian distributors and in 1947 purchased a controlling interest and renamed it Austin Motor Company (Aust) Ltd. At this time the Austin and Nuffield organisations were

negotiating to establish closer relations, that led to a merger in 1951 to form the British Motor Corporation.

In 1952 Lord Nuffield announced that the Victoria Park and Melbourne factories would be doubled in size and that Morris and Austin cars would be assembled at both factories. He retired later that year. In 1954 BMC set up its Australian subsidiary with G.A.Lloyd as managing director. In August that year Lloyd announced that a site had been purchased a modern factory in Melbourne to increase production of Austin cars and also that a new factory had been completed at Victoria Park to produce engines for both Morris and Austin cars. In the event all BMC production became concentrated at Victoria Park. The Unit Plant, with a capacity of 50,000 engine and chassis sets a year, started production in 1957. The Car Assembly Building and the Press Shop, which included a modern Rotodip paint machine, followed in 1958. All these new facilities were of modern design and highly automated. Each of the three facilities was expanded over the next few years.

By 1960 BMC's declining share of the market despite the heavy investment in manufacturing facilities became a matter of serious concern. This is illustrated in Table 1.

Table 1, Share of Australian passenger car registrations, per cent

	1951	1960
GMH	23.0	45.2
Ford	15.1	15.4
BMC (Nuffield and Austin)	30.4	10.0
VW	0	9.2
All others	32.5	21.2



Racing at Victoria Park where the Unit Plant will shortly rise. CKD building on the right

The situation became worse in 1961, when a recession and credit squeeze in Australia reduced the total number of registrations that year by 25 per cent. In mid-1961 Australian management was called to BMC headquarters at Longbridge to face an ultimatum. On their return to Australia, the executives implemented drastic changes:

- Operating costs and wages were cut;
- 1,000 employees were retrenched;
- A major dealer reorganisation was undertaken;
- The Australian engineering department was given design control and freedom over detailed engineering. →

The years 1962 to 1965 were ones of optimism as production rose to capacity on two shifts and became profitable for the first time. The big increase in volume was attributed to reorganisation of the dealer network and new marketable models. The Australian engineers made improvements to the previous models with larger engines, a six cylinder engine and minor body and chassis changes. A front wheel drive Morris 1100 came in 1964. The front wheel drive Mini, imported CKD from 1961 was an instant success with a niche market all to itself. Factory production of cars and station wagons increased from 24,000 in 1960 to 42,000 in 1964.



Press shop

But the future was not bright. Japanese cars were gaining a rapidly increasing share of the 4 cylinder market, and by the end of 1967 had a greater share than BMC. BMC had no model to compete with the Australian family cars produced by Holden and Ford. In 1966 BMC in Australia established a small group to consider design options. It recommended that work should start in 1968 on the design of one small (Model A) and one family sized car (Model B) with maximum commonality. It estimated that the lead time would be around five years because of the limited resources available and the need for overseas assistance with some of the design, styling and tooling. A small team started work in January 1968.

In May 1968 the parent company was in serious financial difficulties and was taken over by Leyland. Changes followed. One decision in Britain was to fast track a new rear wheel drive car using existing components, named the Marina. In Australia Model A was put on hold, allowing design effort to be concentrated on Model B. For Australian production the Marina was modified to use the Series E (east-west)

engines being produced in the Unit Plant. In 1969 Holden introduced a six cylinder version of its Torana with great success and Ford was planning a six cylinder version of the Cortina. Naturally, Marketing wanted a six-cylinder Marina. The E series engine was being modified to a north south configuration for use in Model B, by this time designated as the P76, so a six cylinder version of the Marina was designed to accommodate it. The four cylinder Marina was released in Australia in April 1972 and the six cylinder version in 1973.

The P76 with the V8 engine designed for it, and with the 6E engine as an alternative, was released on schedule in June 1973, but at the expense of skimping the program of testing of six production-assembled cars and allowing adequate time for rectifying faults before full sale production was commenced. A plethora of faults emerged in cars already delivered, causing much dissatisfaction among dealers and customers.

Funding for work on Model A was approved by the UK board at the time the P76 was released and it became P82. Work on the all aluminium V6 prototype engine was approved in mid-1973.

In February 1974 Leyland, desperate for cash, decided to close its overseas plants. A quick sale of the Victoria Park plant to the Federal Government for \$25 million was made and included a number of P76 and Marina cars. Production of Minis was transferred to a plant at Enfield which BMC had acquired from Pressed Metal Corporation in 1969. 6,800 employees at Victoria Park were retrenched. All the tooling was sold or transferred to other Leyland plants.

The history summarised above is only a small part of the contents of this book. This book is about building cars, not about the cars themselves. It is mainly a detailed and lavishly illustrated account of car production at Victoria Park, compiled from records and the recollections of a group of engineers who worked there. Almost all the research and writing of the text has been done by members of the BMC-Leyland Australia Heritage Group that was formed in 1998.

Under the guidance of editor Barry Anderson, the group spent three years on the project of compiling the book and it reflects their viewpoints. They chose to present a pictorial history with far more space devoted to illustrations than to text. There is far more detail here than in the recorded accounts of any other car manufacturing activity in Australia. In addition there is a complete listing with brief descriptions and photographs of the 150 odd makes and models of vehicles made at the factory during its life.

One is left with the impression that by 1960 BMC had a first class Australian manufacturing facility, but failed to exploit its potential for producing cars that met market needs while at the same time operating efficiently and profitably with provision for the future. The only analysis of why the company failed is a brief chapter based on a single speech in 202 by Peter North, who was managing director at the time the plant closed. Had the decisions made in 1968 to design and build a small range of cars carefully targeted at the Australian market been taken earlier, the outcome might have been different. The Australian manufacturing operation could perhaps have survived the debacle that overwhelmed the parent company in 1974.

Ian Arthur ■

The New Guinea Goldfields between the wars by Michael Waterhouse

This article is based on a talk presented by Michael Waterhouse at a meeting of ASHET and RAHS on Tuesday 26 June 2012.

In the mid-1920s, Europeans had barely penetrated the interior of the New Guinea mainland. Much of the rugged, jungle-covered terrain was inhabited by fierce tribes, which fought each other and any white men who strayed into their territory.

A decade later it was the location of unparalleled scenes as New

Guinea led the world in commercial aviation, with planes flying more than half as much freight as Canada, Germany, the USA, UK and France and 20 times the amount flown in Australia.

New Guinea was administered by Australia between the wars under a Mandate from the League of Nations; yet due largely to the destruction of most official and private records following the Japanese invasion in 1942, few today know about it.

Economist and historian Michael Waterhouse has sought to fill this gap in our history with a book that reconstructs the events of this period. It has had many excellent reviews and is the subject of a talk to be held at History House on 26 June. This talk will be followed by rare film footage from the 1930s, some of it in colour.



In 1926, Australian newspapers carried accounts of a major new gold discovery, with headlines such as 'Phenomenal New Guinea Goldfield', 'Gold Madness Grips New Guinea' and 'Gold Fever. New Guinea Infected'. The inspiration for these stories was the discovery of gold at Edie Creek, 32 miles inland from the coast but a six to eight day hike over some of the most difficult country imaginable. One traveller portrayed the challenge as climbing 30,000 feet for a net gain of 3,000, another describing the terrain as "as steep as a steeple".

Miners needed carriers to bring in all their food and equipment over the jungle trails, and labourers to work the alluvial gravels. The Administrator claimed a miner would need £1,000 to keep himself going for six months, so it was not a poor man's field.



Cecil Levien

The discovery was a rich one, prospectors recovering as much as 20 ounces to a dish – 100 times what was regarded as rich on other goldfields. Two miners won 7,600 ounces in six weeks – the equivalent of \$1 million today. But for most, the pickings were slim, and within a few years most of the easily found gold had been taken.

A former District Officer turned miner, Cecil Levien, was convinced that, however rich Edie Creek was, there was likely to be even more gold downstream.

Here the Bulolo River, into which Edie

Creek drained, opened out from a narrow gorge into a valley, whose floor comprised alluvial gravel that had been washed down from the mountains over the ages. The valley was uninhabited, though the dense jungle provided a rich hunting ground for the occupants of villages located on ridges in the surrounding hills where they could be defended against attack.

Levien used the Edie Creek discovery to attract Australian investors and before long a new company, Guinea Gold NL, had been established to test for gold in the Bulolo Valley. But the company was small and costs high, and in 1928 a Canadian mining company Placer Development took an option over Guinea Gold's leases.

While Canadian-based, Placer's Chairman and one of its directors, the author's grandfather Les Waterhouse, were Australians. Four of the five directors were mining engineers.

Testing with hand drills – there being no other source of power – indicated that Levien was right: the alluvial gravels were rich in gold. But how to extract it? The valley was suitable for dredging, but there was no infrastructure to support this, no road on which dredging equipment could be brought in from the coast, no airfield, no power and no townships.

While an airfield could be constructed, the few planes in New Guinea at this time were mostly ex-World War 1 biplanes and several small aluminium planes – quite unsuitable for flying the equipment required. However an experienced aviator alerted Placer's directors to the existence of a three engine aircraft, the Junkers G31, which could be loaded through a hatch on top of the fuselage and whose payload was three tons. It was one of the largest planes in the world.

After careful consideration, the company decided in December 1929 to construct an airfield at Bulolo and fly the components of two dredges into Bulolo on G31s where they would then be erected. The risks were high. Aviation had never before been used to fly mining equipment on the scale envisaged and the Great Depression was beginning to take hold.

An operating company Bulolo Gold Dredging (BGD) was quickly formed, a prospectus issued and the necessary funds were soon raised – despite slumping share prices worldwide. 11 March 1932 was set as the target to begin dredging operations.

To meet this timetable, BGD needed to order and ship several thousand tons of material to Lae, where there wasn't a port, fly this to →



Number 4 dredge on the Bulolo River in 1934



Junkers G31 'Paul'

Bulolo on planes it didn't have, to an airstrip that didn't exist. And it would need to construct a dredge and a hydro-electric power plant using a labour force that hadn't been recruited.

Placer's directors orchestrated an extraordinary logistical exercise from their Canadian and Sydney offices, ordering equipment and supplies from all over the world. The dredge hull and superstructure were made in Sydney, dredge machinery came from San Francisco, turbines from Sweden, electrical equipment from England, electric motors from Switzerland and the G31 planes from Germany—with American engines.

The key to BGD's success was two Junkers G31s. Flying up to five round trips a day between Lae and Bulolo, they were named 'Peter' and 'Paul' after the children's nursery rhyme. Their job was to ensure that whatever was needed in Bulolo to construct the dredge and power station was on hand when required.

On 21 March, only ten days later than the date set 21 months earlier, the Administrator, Brigadier-General Wisdom launched the first dredge. It weighed over 1,000 tons and had 63 ten cubic foot buckets, each capable of gouging the alluvial gravels at the rate of 23 buckets per minute, 24 hours a day.

Building the hydro-electric power station was easier than the water race that fed it, which drew water from 1½ miles upstream. Its construction involved carving a tunnel by hand through sections of steep mountain side as well as long sections of cedar fluming, often mounted on wooden trestles.

Dredge No.2 was launched in October 1932. Over the next few years, with a higher gold price and substantially increased reserves, BGD constructed a further six dredges, the last of which began operating in 1939. The two largest weighed 2,500 tons and were capable of digging to much greater depths.

It was a remarkable feat of both engineering and aviation. In 11 years, BGD's dredges produced 1.3 million ounces of gold and 576,000 ounces of silver from 119 million cubic yards of alluvial gravel. This made BGD easily the largest gold miner in New Guinea, and the second largest in Australasia during the 1930s. While a General Manager managed day-to-day operations at Bulolo, Les Waterhouse oversaw and directed progress from his Sydney office, visiting the field regularly when he often shot film footage.

Aerial support for mining in a remote location had never before been attempted on such a scale and drew a constant stream of visitors from all

over the world, including the Australian Governor-General, Lord Gowrie, Federal Ministers and many international mining and aviation experts.

Throughout this period, 'Peter' and 'Paul' flew back and forth between Lae and the field, flying in everything required to construct and maintain eight dredges, three hydro-electric plants and two townships. Though owned by BGD, the planes were operated by Guinea Airways, of which Les Waterhouse was also a director. By the time they were destroyed by Japanese zeros on Bulolo aerodrome on 21 January 1942, they had flown 1.4 million miles and carried 40,000 tons of freight. Not a bolt was ever lost.

The Morobe goldfields exerted considerable influence over the rest of New Guinea. Indentured labourers were drawn there from all over the country, putting pressure on traditional village life—often with unforeseen consequences. Royalties on gold production were the lifeblood of the Administration, starved as it was of support from the Australian Government. The miners' need for an ample supply of labourers became the main driving force for extending European influence, with recruiters often not far behind patrol officers as they opened up new territory.

Relations between BGD and villagers who lived near the field were good, with Buang villagers in particular a prolific source of fruit and vegetables. But conflict was never far away. In the early 1930s, after several miners were injured or killed by the fierce kukukuku within a few miles of Bulolo, patrol officers embarked on a policy of pacification, which resulted in many deaths. Thereafter an uneasy peace prevailed.

[Michael Waterhouse's book *Not a Poor Man's Field. The New Guinea Goldfields to 1942 – An Australian Colonial History* is published by Halstead Press. It is available in bookshops or through the website www.notapoormansfield.com] ■

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