

**‘That some rich lode amongst these hills is waiting for us yet’:
Balancing Mining and Environmental Concerns in the Cradle
Mountain – Lake St Clair National Park, Tasmania**

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For the observant, material legacies of past mining activities linger throughout the Cradle Mountain St Clair National Park [The Reserve]. There are adits or horizontal tunnels north of Mount Pelion West, while around Old Pelion Hut and Lakes Ellen and McRae are mullock heaps, trenches, shafts and adits. At the Barn Bluff site near the Lake Will junction, artefacts lie next to trenches and open cuts. Unknown to the great majority of bushmen, a greater variety of sites and relics, such as remains of old huts and mining machinery are located off the beaten track. Those who can read the landscape through changes in vegetation patterns and their distribution can also see signs. The absence or relative youth of trees, particularly King Billy pines to the east of Lake Will and Lake Curran is one such indicator of former mining operations in this region.

This paper focuses on the attempts to exploit mineral resources in the Cradle Mountain-Lake St Clair National Park. Although the area’s current identity is inextricably linked with ‘wilderness and wilderness activities’, this was not always the case. Prior to the area being gazetted a scenic reserve in 1922, economic land uses such as grazing, mining, hunting and forestry, were dominant with recreational activities at a rudimentary level. Twenty-five years later, when the area became a national park, the positions had reversed and economic land uses were almost extinct. Mining was unprofitable while the other exploitative land uses were regarded as incompatible with national park status. The intermittent and sporadic post-1922 mining history is an indicator of changing political landscape altered official thinking and reflects the eternal optimism of many a miner, prospector and speculator.

Exploitation of resources is determined by the interaction between nature and society. Nature unequally endows regions with natural resources but ‘Firms, markets, law, and culture assign values to resources’.¹ Access and appropriate technology are other factors determining if and when resources will be utilised. The history of Mount Lyell and many other major Australian fields illustrates this point, it being evident that new technology made previously

unprofitable deposits worth exploiting.² From earliest times, Aboriginals displayed little interest in minerals other than from the widespread use of red ochre (brown or red haematite)³ and the use by various tribes of rock types, such as cherts and hornfels, for use in artefacts.⁴

In outlining and analysing the exploitation of minerals in The Reserve, it is necessary to establish the context. Thus there is a brief description of the area, its European discovery and subsequent land use. The focus of this paper, the phases of, and individuals associated with mining will be emphasised. Attention centres on the Northern and Central Reserve because only here were attempts made to exploit mineral resources. Prospecting was more systematic than in the south, not only because of access, but also because of development of the Wilmot-Middlesex fields north of Cradle Mountain. While making references to coal mining, the paper concentrates on copper mines at Pelion Plains, Barn Bluff and the wolfram mine in the Upper Forth valley. Prospectors and speculators sought ‘some rich lode’, or indeed, any lode, real or imaginary, ‘amongst these hills’.

The region

The Reserve, approximately 70 kilometres long and 20 kilometres wide and with an area of 161,000 hectares, is located in Tasmania’s central west. Here are located the headwaters of five of the state’s major rivers, the Derwent, Franklin, Murchison, Forth and Mersey. The variety of landscapes — mountains, plains, gorges, lakes and tarns, and watercourses ranging from mighty rivers to tiny intermittent creeks — is rivalled by the diversity of vegetation patterns which encompasses temperate rainforests, button grass plains, moorlands and alpine herbfields.

An outline of The Reserve’s geology is essential for this paper. Geologist I.B. Jennings’ compared the geology to a giant sandwich ‘consisting of at the bottom a Precambrian basement, in the middle Permo-Triassic sediments and on top thick dolerite sills’. The Precambrian layer, consisting of quartz and mica schists layers, has been complexly folded, tilted or block-faulted. The multi-layered Permo-Triassic filling includes the Cygnet Coal Measures whose horizontal seams have been exposed around mountain slopes in an approximate semicircle from Mount Pelion East to Cradle Mountain. Overlaying these fillings is Jurassic dolerite, which comprises a number of sill-like intrusions that resulted in low grade mineralisation, notably copper, galena, and wolfram, on Pelion Plains, the Upper Forth Valley and the lakes eastwards from Barn Bluff. Atop these rock strata are Pleistocene glacial deposits and Quaternary talus and scree. Although uplift, folding and tilting have uncovered many features, the dominant landscape-shaping force is glaciation. During the last three million years

there have been at least three major glaciation episodes with the last ending about 12,000 years ago. During the last glacial maximum, 18,000 years ago, over 1,280 square kilometres of ice covered Tasmania with maximum thicknesses between 300 and 450 metres. Ice sheets covered much of the Central Plateau, the Du Cane Range, Pelion Plains, Upper Mersey and Cradle valleys. Ice caps and glaciers scoured the landscape forming many topographical features including U-shaped valleys, lakes, cirques and moraines. This scouring of the landscape made surface recognition of minerals relatively easy.⁵

In The Reserve, nature tantalised the mining industry by providing traces of coal and minerals, such as gold, copper, silver and tin, but rarely in commercial quantities. In addition, isolation, high altitude, cold, high rainfall and snow proved hazardous to prospectors during the winter months. As an example, two men nearly died near Barn Bluff in May 1901 because of heavy snowfalls and freezing temperatures.⁶ Even summer activity was potentially dangerous because of unpredictable weather and furthermore, rugged topography made reliable access to the isolated and remote area problematic. Prospecting and Mining often proved a harsh gamble.

Discovery of The Reserve

Diverse groups — kangaroo shooters, convict shepherds, convict escapees, pastoralists and official explorers — provided the first sightings of the Central and Southern Reserve during the first three decades of European settlement in Van Diemen's Land. The northern and southern extremities were the first areas visited by parties seeking new grazing country. Van Diemen's Land Company employees, notably Joseph Fossey and Henry Hellyer, visited Cradle Valley and the northwestern Reserve between 1827 and 1831. While attempting to discover the source of the Gordon, Huon and Derwent Rivers, Surveyor-General George Frankland's party discovered Lake St Clair in 1835. Accompanied by Aborigines, Charles and George Robinson, sons of 'The Protector', George Augustus Robinson, followed a native track through the northern Reserve in an unsuccessful attempt to capture Aborigines near the River Ouse.

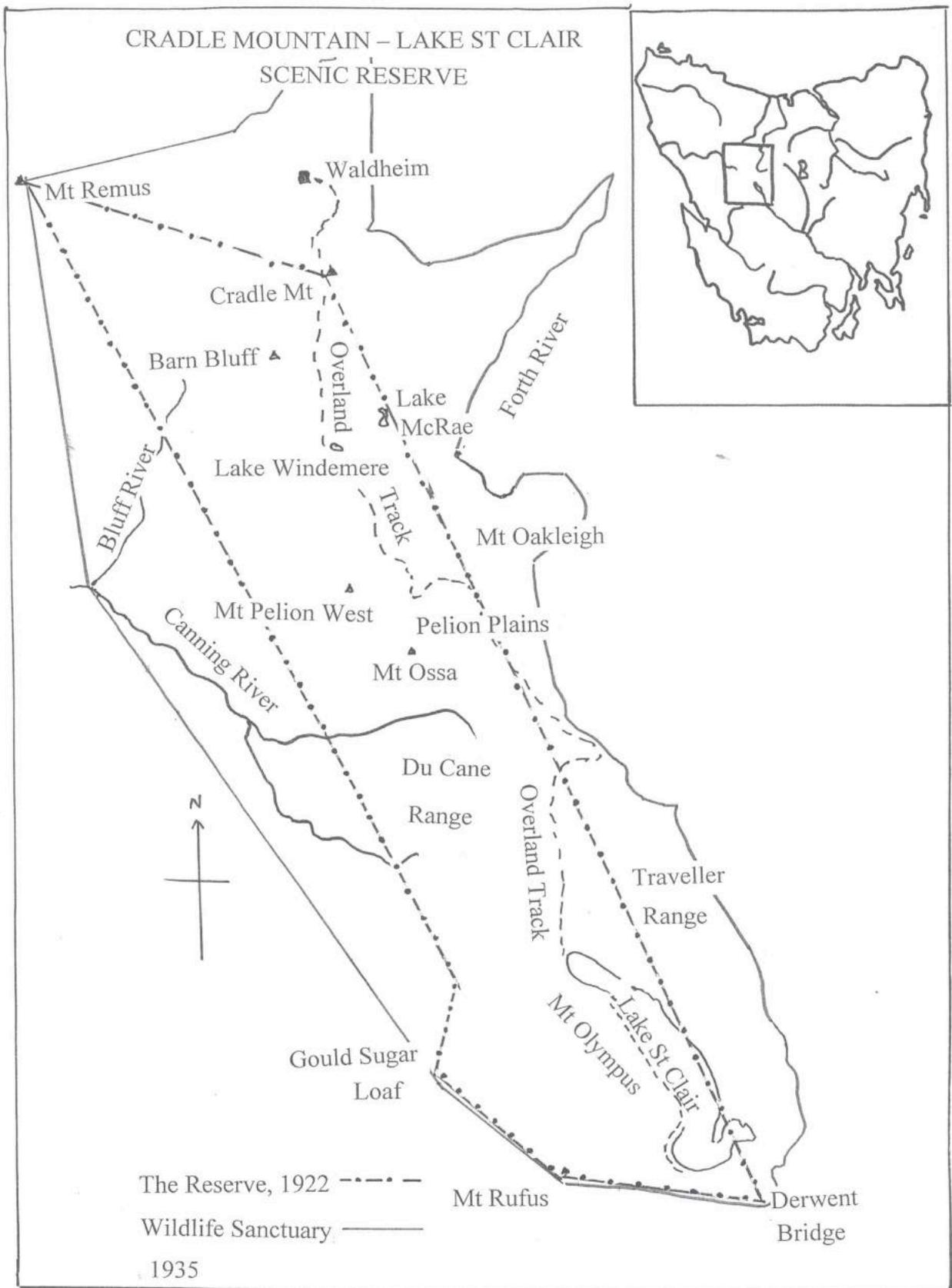
From the 1820s until self-government in 1856 only surveyors, pastoralists and an occasional pedestrian visited The Reserve. Grazing land remained the impulse encouraging such activity with the search for minerals almost non-existent. From 1836, lots were surveyed and taken up near Lake St Clair, thus beginning a practice which continued for nearly a century. Milder climate associated with lower altitude and better accessibility account for the greater interest in and use of the south. In the north, cattle belonging to the Field family grazed

on the fringes of The Reserve at Middlesex Plains north of Cradle Mountain and Howells Plains in the Upper Mersey.⁷

Despite the appointment of a Government Mineralogist, A.W.H. Humphrey, and discovery of coal and iron ore, there was little knowledge of the mineral resources when lieutenant-governor William Sorell departed Tasmania in 1824. Sorell lamented the lack of systematic geological examination of the island⁸ and amongst other duties, new Surveyor General George Frankland was instructed to investigate the 'geology and the Natural History of the Country' as an act of remediation.⁹ Despite this interest, reorganisation of the Survey Office in 1827 reduced available fieldwork time and exploratory expeditions were pastoral rather than geological. Furthermore, there was little interest even when mineral deposits were known to exist. For example, there was little attempt to exploit previous coal discoveries until Port Arthur became the colony's major penal station in the 1830s.¹⁰

Mining remained a minor consideration until Edward Hargraves' 'discovery' of gold in New South Wales and the subsequent prediction by the Reverend W.B. Clarke¹¹ of gold west of Lake St Clair and along the range between Mount Humboldt and Western Bluff. Thereafter attitudes changed as monetary rewards offered by a local 'Gold Committee' encouraged prospecting¹² and gold fever became rampant. The *Hobart Town Courier* commented in 1851 that 'men do nothing now but think gold, speak gold ...'.¹³ At both ends of The Reserve individuals such as James 'Philosopher' Smith, extraordinarily gifted son of a convict,¹⁴ and an Irishman, James Tully,¹⁵ sought colours. Discovery of small quantities of gold in the Fingal valley and the Northwest whetted appetites. Occasional cautions by newspapers against miracles were ignored as instant auriferous gratification was not merely sought but demanded.¹⁶ Because of the failure to find large fields and the need to counter the gold-induced exodus to the mainland, the government appointed Charles Gould as official geologist in 1859.¹⁷ In traversing the western fringes of The Reserve on his northward journey to Cradle Mountain and Middlesex Plains, Gould crossed the Barn Bluff area where subsequent discoveries of coal and copper raised hopes. The Launceston *Examiner's* publication of extracts of this trip dampened public hopes, as did Gould's subsequent failure to discover a payable goldfield in the western country. His advice that systematic investigation was more likely to find minerals than 'chance discoveries of casual investigations' discouraged, but did not extinguish, government ardour. Hope persisted as evidenced by the 1863 Waste Lands Act, which contained special mineral clauses, despite the absence of major discoveries. Unsuccessful investigations at Mount Arrowsmith to the south-west of The Reserve in 1858¹⁸ and 1862 confirmed Gould's conclusions but did not deter individual prospectors.¹⁹

Figure 1: Cradle Mountain – Lake Sinclair Scenic Reserve



Source: Composite map prepared by author.

Awakening mineral hopes

Flickering hopes were revived when ‘Philosopher’ Smith discovered tin at Mount Bischoff in 1871. Fulfilment of the dream of a mineral-led revival, however, depended on overcoming an array of natural obstacles – topographical, botanic and climatic. The issue was exacerbated by parochial rivalries which complicated choices about routes and modes of transport. As regions competed to tap the wealth of western Tasmania, three phases of debate over land routes can be discerned.²⁰ The first centred on Mount Bischoff, the second on the Heemskirk-Zeehan-Dundas silver fields, while Mount Lyell was the focus of the last. Initially tramways and tracks were preferred to railways but the position changed in the late 1890s. Proposed routes pertinent to this paper were variants on those commencing at Chudleigh/Mole Creek, following the Mersey Valley or the February Plains to the Pelion Plains, crossing the Upper Forth River, and rounding Mount Pelion West before heading roughly westwards to the mining fields. The major exception was W. Ross Reynolds’ proposed railway which skirted the north western fringes of The Reserve. As each proposed route had its own advocates – politicians, business groups, community groups, and newspapers – debate was protracted and divisive. Advocates proclaimed that not only would links connect to existing fields but would also facilitate the discovery and development of new fields. Other proposed incentives were discovery of pastoral and agricultural land, commercial stands of timber, and later, the opening of tourist sites.

The case of the Lake St Clair Mining Association in the Southern Reserve illustrates the mining mania of the early 1880s. Rumours of gold on the King William Plains, seven miles west of Lake St Clair encouraged a mini-rush and the hope that ‘this Eldorado ... [would] revive the present deplorable state of business in the South’. Soon a telegram describing the goldfield as a ‘swindle’ and urging Hobartians ‘not [to] speculate one farthing’,²¹ dashed hopes. Lessons from the past, the previous failure at Mount Arrowsmith and Gould’s caution, were ignored. Almost contemporaneously a well-known mining figure, W.R. Bell, warned prospectors that quartz from the field was not auriferous and there was no alluvial gold. While the vindictive sought legal remedy from ‘discoverers’, prospectors and speculators sustained by the dream of ‘some rich lode’, persevered.

For two decades from the late 1880s prospectors combed The Reserve with the Middlesex Gold Field and Western mining fields acting as catalysts. The peripatetic William Aylett exemplifies this. In January 1901 he met the famed prospector G. Renison Bell at Pelion mines, prospected a galena lode near the Canning (nowadays the Wallace) River, examined

Mount Ossa and Mount Pelion West coal seams and met other prospectors at Barn Bluff mines.²²

Characteristics of mining in The Reserve

Those who discovered minerals were usually lone prospectors or those who searched in small groups. Sometimes they were 'grubstaked'. Discovery was either accidental, a by-product of limited geological and mineralogical knowledge, or occurred when prospectors noted similarities between geological structures in The Reserve and those associated with previous mining ventures. Should rocks be concealed by scrub or detritus, prospectors sought outcrops on ridges and sides of valleys. If impressed, prospectors, associations or companies registered claims.

This was followed by the exploratory phase to determine the extent and area of the deposit, average thickness, depth and direction of seams or lodes and, less precisely, the probable quantity and value. The best approach was to adopt economical yet thorough methods. The cheapest option, surface exploration, involved burning-off to clear scrub, digging trenches, and opening bench faces. Wise individuals restricted the number of expensive adits or cross tunnels into hillsides until the extent of mineralisation was known. The geologically literate knew oxidation altered surface veins and that valuable minerals could be leached out. They also knew that sometimes the value of deposits increased with depth. At either this or the previous phase, outside assistance was sought as samples were sent for inspection or assays. Lack of capital and expertise meant that control often slipped from prospector-miners to local financiers and, on occasions, to mainland or overseas capital.

If sober assessment or persuasive prospectuses indicated commercial development, companies raised additional finance to introduce machinery onto leases. For instance pipe lines were dug to convey water via flumes to Pelton wheels. Despite the introduction of machines, manual labour was essential to operations. Company directors and sometimes 'friendly' experts visited to observe operations and assess progress.²³ Often judgments were neither prudent nor sober as subsequent events revealed.

Chicanery and duplicity were always possible. The anecdotal account of legendary bushman Paddy Hartnett in his cups selling the wolfram mine he discovered, illustrates the assertion that prospectors sometimes were tricked by the unscrupulous.²⁴ Historian Charles Whitham's comments about the Lake Dora field near Queenstown are apposite. The mines, he pronounced, 'were never more than prospecting holes, and some went no further than

prospecting the pockets of the shareholders'.²⁵ Companies were floated or associations formed with the option dependent upon assessment of future prospects and degrees of hyperbole. Mining speculator and conjuror of the vision splendid, E.C. James was a master of this game.²⁶

The early phases in The Reserve, as they did on most mining fields, encouraged the optimist. Initially it was a small man's frontier involving minimal outlay with equipment often comprising only a pick, panning dish and tomahawk or half-axe. By issuing relatively inexpensive prospector's licences, governments made mining 'a lottery open to all', not just the wealthy.²⁷ The 1917 Mining Act illustrates this point: a prospector's licence at a cost of 10 shillings, authorised possession of 20 acres for gold, 100 acres for coal and 40 acres for any other mineral. If successful, there was the possibility of a reward claim of 20 to 240 acres, rent free.²⁸ However, the finance required for dressing, smelting and carting, curtailed the role of the small man.

Lifestyles were simple and food was basic, with kangaroo and wallaby supplementing tinned goods and staples such as flour, bacon, tea and sugar packed in by horse. On rarer occasions wattle birds and wild duck were an addition to the larder. Accommodation was simple, cheap and easy to erect. Tents, dubious shelter at these altitudes, were often used instead of huts.²⁹ Mining companies constructed huts, such as the Pelion Mining Company's at the Wolfram Mine and Pelion Plains, which also acted as rendezvous for prospectors, miners and visitors, especially walkers.³⁰

It is difficult to categorise the backgrounds of the prospectors. Many from the Mole Creek-Sheffield district were 'jack of all trades' who sometimes developed proficiency in at least one bush skill such as hunting-snaring, prospecting, packing and forestry work. Some were self-taught, melding personal knowledge and observations with readings from contemporary newspapers. At various mining camps or as packers-guides to geologists, a fortunate few extended their mining education. In contrast, West Coasters were more likely to possess a greater practical mining knowledge. Photographer John Watt Beattie's encomium of Harry Andrews, always 'badgering about' in the Pelion country, was fulsome: 'He knows every "hole and corner" of it, and keeps a nice assortment of mineral shows "up his sleeve" for the convenience of any speculative traveller who may come along'.³¹ Interaction between professional and amateur was essential in the absence of detailed field maps of these isolated and rugged areas.

First workings in The Reserve: Pelion Plains

Between 1891 and 1893 a series of discoveries marked the Central Reserve as an area of considerable potential. Individuals and the Launceston-based Mole Creek and Zeehan Mineral Prospecting and Exploration Company (MCZMPEC) were major players. Coal was found near Barn Bluff and Pelion Plains while silver and copper were discovered at the latter and copper lodes near Lake Windermere. Following preliminary investigations of silver, the MCZMPEC believed that ‘valuable developments will take place’.³² These finds and associated publicity attracted attention to the Central Reserve.

Development awaited further exploration to ascertain more accurately the resources. Mole Creek prospector, Richard How, gambled by trying to involve ‘Philosopher’ Smith in his Pelion Plains lease. Such involvement would increase publicity and facilitate the raising of capital for additional prospecting. How claimed that there were ‘miles of mineral Country that is really worth seeing’,³³ and appealed to Smith’s pride by claiming that another mining identity ‘[Joseph] Will anticipates another Bischoff in that quarter’.³⁴ Despite the blandishment, Smith neither visited the area for another two years nor became involved. In fact little development occurred.³⁵ Work by How and the MCZMPEC conformed to the pattern of discovery of promising veins, selection of leases, and then dashing of hopes when work revealed lack of commercial quantities. As well, the MCZMPEC found that the ‘large admixture of blende and arsenical pyrites rendered the copper pyrites valueless’.³⁶

Despite the lack of real activity, however, all was not lost. Government geologist Alexander Montgomery’s 1893 report, a blend of optimism and caution, offered sound advice. He noted that although none of the veins were as yet valuable, ‘They serve to show that the rock carries metallic minerals, and it is possible that there is a larger lode somewhere in the vicinity. The section is worth further prospecting’.³⁷ Montgomery also noted the possibility of gold and tin along the Mersey and Forth valleys. Furthermore he believed that widespread coal measures, especially Barn Bluff’s high quality cannel coal, which potentially formed ‘the great coal-field of the colony’, were an inducement to construction of a Mole Creek to Zeehan railway. Regardless of the outcome, all finds marked the Central Reserve as a potential mineral area.

Advice from Robert Sticht, of Mount Lyell fame, helped uncover several lodes at shallow depths, but work was abandoned when the copper content failed to improve.³⁸ Newspapers, such as the *Zeehan and Dundas Herald* and the *Examiner*, whose editor F.J. Prichard and photographer Steve Spurling visited the fields in 1898, not only provided

considerable publicity but also resulted in further sections being pegged.³⁹ A spokesman for the Mount Pelion Consolidated Copper Mining Company of Launceston, formed in 1897, told of finds of 'first class' ore consisting of copper with traces of gold and silver. Development was conditional upon a railway, otherwise ore would have to be smelted on site, as pack horses could not cope with the quantities mined. While surveying a track from Mole Creek to Zeehan in 1896/97, E.G. Innes further enlivened hopes by asserting that the area 'gives indication of being a valuable mineral field'.

Despite these omens, the overall picture remained unchanged. Leases held by individuals and the Pelion Company were forfeited in 1898 and 1901.⁴⁰ Government Geologist George Waller's 1901 report noted that previously worked adits on the Douglas Creek were now filled with water, while the ore contained only small quantities of copper pyrites. Despite this, and recognition that further testing would involve the sinking of tunnels, Waller concluded that overall the country was favourable.⁴¹ Beattie attributed the Company's failure, after spending £1,200, to the mine's 'utter isolation'. Several tons of bagged ore awaiting recommencement of operations was testimony to the perennial optimists.⁴² Even the intelligent were receptive to hopes of 'some rich lode'. The example of F.A.W. Gisborne, teacher, orchardist, mine manager and acute observer, who took over the lease about 1905, illustrates that all classes were susceptible to mining optimism.⁴³

The Barn Bluff-Lake Windermere Fields

A similar pattern to that on the Pelion Plains emerged with copper mining in the lakes' area between Barn Bluff and the Forth River. Nothing had been done about Will's 1893 copper discoveries in the Lakes Windermere-McRae area until Tullah prospectors Thomas Cook and C.P. Smith re-discovered large ore bodies near Commonwealth Creek in 1899. Perhaps this duo were inspired by the Mount Lyell copper boom of 1895-96, as earlier prospectors on Pelion Plains had been by visions of a Tasmanian-version of a Broken Hill silver boom. Smith's dreams remain vivid despite surviving heavy snowfalls and a near drowning.⁴⁴ There were two main bodies: one, a very low grade chlorite containing a small amount of gold and silver and the second and more important containing actinolite with tin and traces of silver and gold.⁴⁵ That in 1900 'Tasmania had the nation's largest tinfield, largest copperfield, second largest silverfield, and gold as well',⁴⁶ helps explain the prevailing optimism.

Subsequent attempts by E.C. James' Hobart-based companies, Barn Bluff Gold, Copper & Silver Mining Company and North Barn Bluff Gold, Copper & Silver Mining Company, to

develop these bodies had little success.⁴⁷ The companies confined themselves to surface trenching for high grade yellow chalcopyrite before Barn Bluff Options Development Association Limited's commenced operations in January 1901.⁴⁸ To indicate the mine's profitability, Smith emphasised that samples were taken 'indiscriminately across both faces [so] they constitute a good round sample',⁴⁹ as opposed to common practice of sampling only the richest ore bodies. Many visitors, including mainland experts and directors, the former to add authenticity to reports, and the latter to see that money was well spent, corroborated Smith's hopes.⁵⁰ After clearing the scrub and button grass, workmen felled timber, excavated a 200 metre water line, erected fluming, and installed a Pelton wheel.⁵¹ Investors' hopes of a financial return were strengthened by preliminary assays revealing promising traces of copper, gold and silver.⁵² Waller suggested tunnelling under the present spur and the Big Blow, south of Commonwealth Creek but then dampened hopes by indicating that most deposits contained very low copper content.⁵³

Beattie's 1901 visit reflected contemporary opinion that mining operations were a tourist attraction. He found that whereas most mineral fields made 'a poor photographic show', Lake Agnew formed 'the loveliest composition I have yet seen in Tasmania'.⁵⁴ Formal recognition of the landscape aesthetes 'rich lode' awaited the creation of the National Park in 1916.

About this time C.P. Smith, workmate and close friend of E.C. James, the master of purple prose, enthused that

I herewith state - and truthfully, too - that all the expectations held out in the prospectus issued by you when floating this property are fully realised, and if the immense ore body we have laid bare counts for anything then Barn Bluff will be working beyond the limits of economical mining. That this mine will work its own wonders is as certain as that tomorrow's sun will rise. I have subordinated every feeling of my nature to that one thought of success. I am working hard, and there is not the slightest doubt in my mind that all my labours will be crowned with success and the Barn Bluff mine become the premier mine of Australasia, as no doubt we have the biggest property under the sun.⁵⁵

Smith was 'working hard' with his essays but on investigation Nature's words remained low grade. Still, there were monetary rewards for the speculators as Barn Bluff shares reached £4.15s. in late April 1901.⁵⁶

Access and finance remained a problem. During 1902 the long awaited Razorback track was constructed. Despite being shorter and less exposed than the Innes Track which crossed the February Plains, the Razorback, with a 1:3 or 1:5 gradient, remained 'too steep for anything

like the ordinary pack load'.⁵⁷ Hopes of a practical all-season track to the west never eventuated. A corollary was that packing charges from Liena remained high: food cost 11s 2d per lb, and for explosives and other mining gear 3d per lb.⁵⁸ Expenditure at the Devon Mine north of Cradle Mountain further illuminates the situation. To freight galena worth £13 per ton, the Mine paid £5 per ton for 17 miles conveyance by pack-horse, and incurred charges for a further 65 miles to Devonport.⁵⁹ These imposts remained a substantial burden, especially when the Barn Bluff field workings became more mechanised. Compressors and machine drills operated by a Pelton wheel were used in tunnelling, which had become the main activity by 1903.⁶⁰

Continued operations depended upon raising sufficient capital. Favourable press reports could not disguise the fact that ore deposits were low grade. When an increase in share numbers raised insufficient capital, calls were made on shareholders. Agreement with James' vision declined and in January 1904 he was sacked. Within a month an extraordinary general meeting determined the 'advisability of selling, or otherwise disposing of the Company's property'. Still the Company lingered into 1906.⁶¹

Operations of the North Barn Bluff Company which adjoined Barn Bluff leases on the north-west were similar to the Barn Bluff Company. Under Thomas Cook's management, there were open cuts and a proposed tunnel to test the nature and extent of the formation. Like James and Smith, Cook was also prone to overstatement as exemplified by the assertion of 'thousands of tons of splendid metal ... [which] seems to be one mass for about 500ft'. Despite other supposedly promising signs the Company ceased work in April 1903.⁶²

Contemporaneously other smaller shows endured with similar lack of success. Rumours of English investment sparked renewed interest around 1907, as did the pronouncement in the *Examiner* that even if parts of copper ore body were not high grade, with economies of scale the area could 'be made to pay handsomely'. The paper further encouraged investors by reporting that the Mount Lyell Company had taken up 25 sections on Norfolk Plains (unknown location) near Barn Bluff.⁶³ Again nothing positive eventuated.

Previous failure was no deterrent. Archaeologist and scientist, Dr Fritz Noetling (whose career was to decline after his World War I internment) produced a glowing report in 1907 of the Hobart-based Derwent Prospecting Association's three 'Copper Mining Propositions', Derwent, Cradle Mount, and Lake Windermere. He attributed previous failure to the small scale of operations and lack of capital. With expenditure of £100,000, these mines 'would soon rank as one of the foremost Copper mines in Tasmania, and pay handsome dividends for many

years to come'.⁶⁴ Nonetheless they failed because ore grades were so low that mining was uneconomical even if transport was available. The misnamed Cradle Mount Copper Mining Company working the glaciated area between Swallow and Curran Creeks also failed.⁶⁵

A disinterested Government Geologist, McIntosh Reid, concluded that the absence of 'commercially valuable concentrations' of copper was the cause of failure. Further he claimed that there was no cogent support for the widespread belief that ore concentrations increased with depth.⁶⁶ Repeatedly miners ignored the lessons of the past to their own cost and that of shareholders.

Hopes Revived: Wolfram Mining in the Upper Forth Valley

Legislative force came to endorse notions of reserving land for monuments of nature rather than exploiting it. The 1915 Scenery Preservation Act, SPA (inspired by 1903 New Zealand legislation), the creation of the Scenery Preservation Board [SPB] and the proclamation of the National Park at Mount Field the following year were indicative of these changing perceptions. Although 35,000 acres were withdrawn from selection in 1916 in Cradle country, the area was not yet proclaimed a scenic reserve, and only after a vigorous public campaign did the Cradle Mountain-Lake St Clair area become a reserve in May 1922. Spearheading the campaign were conservationist and naturalist Gustav Weindorfer, Cradle Valley landowner Major Ron Smith (son of 'Philosopher' Smith) and indefatigable walker and tourism advocate Fred Smithies. An amendment to the SPA, which allowed the Government to exempt land from the Act's provisions was necessary before the reserve was proclaimed. Even then support from SPB Chairman, Edward Counsel, was conditional on protection being afforded to the pastoral, timber and mining industries,⁶⁷ as witnessed by the exclusion of Pelion Plains, Mount Oakleigh and Cradle Valley from The Reserve to cater for these vested interests.

In 1916 Paddy Hartnett discovered wolfram and cassiterite in the Upper Forth valley, outside The Reserve.⁶⁸ Exploitation depended upon improved access by extending the Lorinna Road to the Upper Forth Valley and the Razorback Track. In 1918 a Melbourne-based takeover of the Mount Pelion Company indicated a growing mainland interest in The Reserve.⁶⁹ Although the Company's work on the Pelion Plains repeated the cycle of failure, its operations on newly acquired Forth Valley selections, such as Hartnett's, seemed more favourable.⁷⁰ The Company's purported discovery of the main lode and McIntosh Reid's avowal that the 'hitherto neglected field promises to become one of the most important mining district of north-central Tasmania', promised much.⁷¹ Potential costs were reduced because exposed wolfram veins in

quartz rocks along hillsides facilitated tunnelling. Topography favoured the use of water power in mining and treatment of ores and the River Forth's easterly flowing tributaries could be easily impounded, while steep falls provided optimal conditions for power generation.⁷² On some small selections, such as Hartnett Prospects, signs of activity were hard to discern. Perhaps the leaseholders, including E.C. James, were hoping that the Pelion Company's open cuts, trenches and tunnels would uncover rich lodes and thus increase the value of their own lease. The Pelion Company invested heavily in machinery to separate wolfram and cassiterite by wet milling but world prices sufficient to exceed production and transport costs failed to materialise. Withal, as on the Pelion Plains, the 'rich lode' remained elusive.

Almost contemporaneously there were attempts to work coal seams at Mount Pelion West and Barn Bluff for petroleum by mining oil as inspissated asphaltite, Mainland registered companies, the Adelaide Oil Exploration Company and Tasman Oil and Products Company, received considerable media coverage, lobbied politicians and sought public support, despite less than flattering reports from Government Geologist Loftus Hills.⁷³ Intentionally or otherwise they misread the geology, believing their 'Pelionite' coal to be identical to 'Albertite', which contained dried oil. A consequence of the failure of these 'perennial optimists' was the 'prospecting of the pockets of shareholders.'

The last rites of Mining in The Reserve?

As the storm clouds gathered over Europe, there was a trickle of applications to re-examine the three areas where mining had previously occurred but now there was an added complication to the granting of a mineral lease - the reserve status of the area. Initially the wolfram mines, unlike the Pelion Plains and Lakes Agnew-Ellen-McRae area, were not included in the Reserve but the creation of the Animal and Birds Protection Board (commonly known as the Fauna Board) in 1928, complicated the issue. Because the Game Sanctuary was larger than the Reserve, there was pressure to align the two, especially as the boundaries of the former were more closely aligned to natural features. Thus there were enlargements and amendments in 1934 and 1936 that included areas where mining and pastoralism had previously occurred.⁷⁴

In acting as mining industry advocate in the late 1930s, Devonport MHA, H.T. Lane replicated the role played by E.F.B. Blyth in the 1910s.⁷⁵ Lane echoed the optimism of those, mainly from the Sheffield district, who wanted to rework the Pelion Plains' leases. But both politician and miners recognised the altered political landscape whereby they would refrain from damaging the natural scenery and recognize that mining and tourism were compatible.⁷⁶

Before approval could be granted the area had to be excised from The Reserve and placed under the purview of the 1929 Mining Act. The SPB Amendment Act, 1938, permitted the revocation of land in a scenic reserve only at the recommendation of the SPB and the Mines Department but only if advantages derived from mining materially outweighed other considerations that included those of a non-pecuniary nature. Nevertheless, in a time of national emergency, such as war, material benefits would always outweigh environmental concerns.

The subsequent debate over mining in The Reserve can be likened to a sandwich with the SPB the filling between two determined layers, the Cradle Mountain Reserve Board [CMRB] and the Mines Department. The latter relied on its bureaucratic power and economic arguments whereas the CMRB, established in 1927, four years after the Southern Reserve came under the control of the National Park Board, was an advisory body with very little funding. Perhaps the Mines Department was also miffed at not having a representative on either Board, despite that having been earlier mooted. Earlier skirmishes had involved the CMRB's attempts to extend The Reserve in 1934 but this had foundered in part because of the Mines Department's opposition to any westward extension into potential mineral country.⁷⁷ Two years later, however, The Reserve boundaries were aligned with those of the Game Sanctuary.

If the SPB was somewhat divided on the issue, the CMRB was unequivocal in its opposition. Spearheaded by its Secretary, Major Smith, the CMRB stressed the area's scenic attraction and its past mining history. Since the discovery of minerals,

the district has frequently attracted attention. But all that has been disclosed ... is discouraging, and the various parties soon lost interest in what they were satisfied would not pay to work.

The organisation also cited previous government geologists' reports as evidence that nothing payable was likely to be found. Furthermore, it claimed that it would reflect badly on the mining industry if capital was subscribed and then operations failed. Of concern was potential loss of valuable scenery because of 'the great temptation for prospectors to burn the country to uncover outcrops' and also damage to valuable timber resources. 'As the finest natural approach' to The Reserve, Major Smith opined that the exclusion of the Upper Forth Valley 'would be a distinct loss'. Smith was somewhat hypocritical as he denied such arguments when they were applied to the logging of pines and inclusion of his Cradle Valley land in an enlarged Reserve. The CMRB also used a private report to discredit economic arguments.⁷⁸ Yet the

CMRB was no anti-development lobby, and voiced their Giffard Pinchot-style conservation views of wise use of natural resources by avowing that they would not delay ‘anything that will add to the prosperity of the State’.⁷⁹

Mines Secretary Scott dismissed claims for additional geological reports, declaring that his minister had ‘directed me to inform you that my recommendation to you is sufficiently conclusive’. As his department was the sole repository of mineral knowledge, he would brook no further delay to granting approval to wolfram mining because ‘the price of that mineral is at a comparatively high figure and ... a good market exists’.⁸⁰

As the filling in the sandwich, the SPB was caught between the two uncompromising groups and, as a volunteer body dependent upon the Lands Department, was a victim of its own weakness. Tension between SPB chairman, Surveyor General Colin Pitt, and the CMRB, a subsidiary of the SPB, complicated matters, while ill-feeling between Pitt and Smith exacerbated the issue. Considerable correspondence ensued before a subcommittee of the SPB and Mines met to thrash out the issue. Unsurprisingly the Mines Department prevailed and 3200 acres ‘reserved for mining purposes’ was excluded in 1940.⁸¹

New demands and higher prices during World War II brought forth new proposals, some novel, some a replay of the past. If J.W. Burrows’ proposal to assess suitability of lodes near Barn Bluff for the ‘manufacture of Manure’⁸² (fertiliser) exemplified the latter, then E.C. James’ campaign in 1941/42 was a case of history repeating itself. An eternal optimist, James wanted to prospect and apply for a lease in the Lake McRae area. He believed his past record when expending over £20,000 floating the Barn Bluff, North Barn Bluff, Windermere and Queenborough Mines, building huts at Barn Bluff and Lake Windermere, opening up the Razorback Track and spending £250 on the Upper Forth road, warranted favourable consideration. He avowed, ‘I claim and can prove that I with my own Money and Brains have done more for tourists and Mining in Tasmania than any other man or Men’. Accidentally or intentionally, James overlooked the expenditure of £3,500 by the independent Adelaide-based Barn Bluff Development Company. Patriotic considerations involving war demand for metals was also a plank in James’ argument, as was the benefits of increasing employment by 10 to 20 men, and opening up ‘some of the Richest Mineral Bearing Country in Tasmania’ which would become ‘larger and richer than Mt Lyell’.⁸³ The Mines Department supported James’ application and hoped that the SPB would grant him ‘sufficient latitude in selecting areas preferred for his prospecting venture’.⁸⁴ The CMRB again remained sceptical, with Fred Smithies doubting the genuineness of the application. Its opposition on environmental grounds

had hardened, avowing that burnt areas took years to reforest and in ‘some cases for all practical purposes never with the same class of timber’.⁸⁵ Although granted approval to open up faces to facilitate a mining survey, James never took advantage of the permission.⁸⁶ Perhaps age had finally diminished the dream of that rich lode.

In the final mining instalment of the war, the SPB sought the re-inclusion of the excised area in the Upper Forth if there had been no mining in the previous five years. Mines Director Williams admonished the SPB for having ‘possibly accepted incorrect information ... [because they relied on] some authority not conversant with mining activities’, arguing the area had seen four parties prospecting there for four months.⁸⁷ As with earlier ventures, nothing eventuated from these ventures.

Despite this, dreams of ‘some rich lode’ persisted and like the myth of Chummy’s Gold in the Upper Forth Valley,⁸⁸ talk of Hartnett’s rich lode persisted. For over a decade-and-a-half from 1978, companies such as Central Tasmanian Tungsten, and individuals, such as Neville McCoy, unsuccessfully mined the area. The final episode occurred in the early 1980s when Geopeko, exploration arm of the Peko-Wallsend group, sought a mineral exploration licence in the Mount Remus in the north-west tip of The Reserve. In many ways it was a rerun of earlier episodes, with Mines Department approval and National Parks and Wildlife Service opposition. The new elements in the equation were new technology, with Geopeko conducting aerial rather than terrestrial exploration, and emergence of a non-government interest group, the Tasmanian Wilderness Society. Although the venture did not proceed, there is no certainty that this was the conclusion to nearly a century of attempts to mine The Reserve.⁸⁹

Conclusion

Pursuit of the dream of ‘some rich lode’ amongst the hills involved environmental impact. Burning cleared vegetation,⁹⁰ and open cuts, trenches, adits and tell-tale mullock heaps modified the landscape. More elaborate, but restricted to a few areas, was digging of channels for water. With the establishment of camps relatively large numbers of trees, mainly King Billy pines, were felled for use in adits and hut construction, and more particularly, for heating and warmth for miners. Destruction of vegetation disturbed microclimates and habitats of many species depriving some of shelters, others of food supplies and increasing competition elsewhere. Browsing by horses around camps and hunting by dogs also impacted on the environment. Some water pollution must have occurred especially in the Lake Will-Lake Curran area and Douglas Creek, where activities were close to watercourses. Some

modifications were short term such as reduced number of wallabies whereas impact on slow-growing species such as pines was long term. The Mount Pelion Company's buildings — two huts, a manager's house, blacksmith's shop and forge — and clearing a hundred square yards for a machinery site illustrate the nature of local disturbances.⁹¹ Only the failure of mining shows reduced the overall impact compared with that on major western fields.

Surface scratching persuaded many that the geological structure of the Northern and Central Reserve was probably highly metalliferous. Hopeful and excited shareholders — initially Tasmanian but later mainland — became disillusioned after calls on their capital failed to produce fortunes. Nonetheless in offering hope to investors, small and large, The Reserve became known both by a different group and for a new reason. Mining with its inherent temptations, such as deceptive and misleading interpretation of assay reports, fostered many human vices.

Topographic nomenclature is another legacy of the mining years. A small number of prospectors and miners, including Harry Andrews, Joseph Will and Paddy Hartnett gained official recognition in the names of Lake Andrew, Lake Will, Paddy's Nut and Hartnett Falls, while others such as Philip Henry Parsons, John Hetherington Miller and William Aylett remained in relative obscurity.⁹² Their names appear on official leases, but this is small testimony to their endeavours as packers and guides. E.C. James, whose statewide ventures exemplified belief in some rich lode amongst the hills, is commemorated by Lake James, a small lake west of the Overland Track, visited by only a few walkers.

Government reports, company prospectuses and photographs, especially those of Beattie and Spurling, maintained public attention, even if somewhat spasmodically. Extracts from geological reports printed in contemporary newspapers alerted the public to developments and prospects.⁹³ The Wolfram Track was crucial to making the Central Reserve accessible to tourists, particularly guided bushwalkers. Mining huts were invaluable accommodation on the Pelion Plains at Lake Windermere and Barn Bluff,⁹⁴ while cartography of The Reserve improved safety as illustrated by a situation in December 1894 when two bushmen travelling from Mole Creek to Mount Lyell were exposed to hardships when their map showed two instead of four streams.⁹⁵

In all this a sense of proportion must be kept. The Reserve's largely non-auriferous geological structure made it less attractive than most Tasmanian mining fields.⁹⁶ The Reserve mines were small by contemporary Tasmanian standards, and often mismanaged. That they were not highly regarded can be inferred by their gaining only brief references in annual

Ministerial statements⁹⁷ and Secretary for Mines Annual Reports. In *The Progress of the Mineral Industry in Tasmania*, an annual assessment from 1897 until 1913, The Reserve is not even mentioned.

Mining hopes that some rich lode would be discovered in The Reserve never materialised. Similarly, a corollary, Hartnett's dream in 1920 that on their next trip to the Wolfram Mines, walkers would hear 'the chimes of church bells'⁹⁸ also never eventuated. Attempts in the 1980s to rework these mines demonstrated that distance from markets and transportation costs could be overcome but the absence of payable quantities of mineral bearing ores remained an insurmountable barrier. Whitham's comments are apposite: 'they had been living on the fairy tales sold by boosters, and had no ore worth getting out'.⁹⁹ If location is everything in real estate, it is crucial to the concerns of this paper. These largely small-scale ventures, most which probably would have been forgotten, have assumed an importance because of their location in a national park. As well, they demonstrate the potency of the dream 'that some rich lode amongst these hills is waiting for us yet'. Notwithstanding, even because of their failure, these ventures have added another dimension to The Reserve's history.

Endnotes

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³ Antonio Sagona (ed), *Bruising the Red Earth: Ochre Mining and Ritual In Aboriginal Tasmania*, Melbourne University Press, Melbourne, 1994.

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⁵ I.B. Jennings, 'Geology of the Cradle Mountain Reserve', *Tasmanian Mines Department, Technical Report No 3*, 1958, pp. 73-78, and A.P. Scanlon, G.J. Fish & M.L. Yaxley, *Behind the Scenery: Tasmania's landforms and geology*, Tasmanian Department of Education and the Arts, Hobart, 1990, p. 100.

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- ²⁴ Haygarth, *A View to Cradle*, p. 104.
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- ²⁷ D. Garden, 'Catalyst or Cataclysm? gold mining and the environment', *Victorian Historical Journal*, vol. 72, nos 1 & 2, September 2001, p. 30.
- ²⁸ *Walchs Tasmanian Almanack*, Hobart, 1921, p. 142.
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- ⁴⁵ Reid, *The Mount Pelion Mining District*, pp. 65-6.
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- ⁵⁰ *Monitor*, 22 August 1902; *Examiner*, 19 February 1901.
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