

Ferdinand Mueller's Alpine Itinerary

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In the early 1850s, Victoria's newly appointed Government Botanist, Ferdinand Mueller, undertook three remarkable journeys of botanical exploration in the alpine region in the colony's north-east. There has been considerable uncertainty about the route that he followed, especially on his third expedition between November 1854 and March 1855. This paper offers a reconsideration of Mueller's travels in the mountains that takes account of his reports and correspondence, published and unpublished, and also the topography of the region. The conclusions reached have implications for the interpretation of Mueller's collection records from these expeditions. The paper also discusses Mueller's attempt to fix names on various geographical features in the area and suggests why this was unsuccessful.

When Ferdinand Mueller was appointed Government Botanist of Victoria in January 1853, the principal task before him was to undertake a systematic survey of the flora of the colony, in particular with a view to identifying species that might be of economic value.¹ Thus instructed by the Lieutenant Governor, C. J. La Trobe, he immediately set out on a remarkable, five-month-long journey of botanical exploration, travelling for much of the time on his own. During the following two summers, he undertook two further, equally remarkable expeditions, by the end of which he had thoroughly surveyed a large part of the colony. He had no intention, however, of being in this work a mere botanical collector whose findings would be written up by others. On the contrary, he was determined to publish his results himself. This for the most part he did locally, at first in the proceedings of the Philosophical Institute (later Royal Society) of Victoria, later in the series *Fragmenta phytographiae australiae* that he launched in 1858 and in his never-completed work, *The Plants Indigenous to the Colony of Victoria* (1862–5).²

During all three of these early expeditions, Mueller spent much of his time in the rugged mountainous country of north-eastern Victoria, which he had identified as a region of special interest from a botanical point of view. His principal targets as he set out on the first expedition were, he told Colonial Secretary William Lonsdale, 'Mount Aberdeen' (that is, Mt Buffalo) and

'the alpine country near the Mitta Mitta'.³ As he explained to the Director of England's Kew Gardens, William Hooker, his ambition was to ascertain 'as far as the lateness of the season and my somewhat limited means permit, the connexion likely existing between the vegetation of the only alps of this continent known ... with those of V.D.L. [Van Diemen's Land], N.Z., the Himalaya, Europe &c. &c.'. ⁴

Mueller's exploits in the mountains have attracted the attention of both botanists and historians. There has, however, been considerable uncertainty over the years about the routes Mueller followed in the mountains, especially during his third expedition. Some of the problems were definitively sorted out by Norman Wakefield⁵ but on other questions, disagreement has continued. This paper aims to remove most of the remaining uncertainty. Its conclusions have implications for the way in which some of Mueller's collection records are interpreted, and for our understanding of the way in which names of geographical features become fixed.

First Expedition

In 1853, when Mueller undertook the first of his three expeditions, the largest settlement in Victoria's north-east and the centre of local government administration was Beechworth, a booming gold-mining town then known as Mayday Hills.

Mueller, accompanied at this stage of his journey by the Superintendent of the Melbourne Botanic Garden, John Dallachy, went there first before proceeding, his own predilections having been buttressed by the advice of the government officials in Beechworth, to Mt Buffalo (or the Buffalo Ranges, as Mueller sometimes called the massif).⁶

At the time, there were very few maps available that Mueller might have used as a guide. The best would have been Thomas Ham's 1851 map of the squatting districts of the colony,⁷ Ham's updated 1853 map almost certainly not yet being available when Mueller set out. Mueller's use of the explorer Thomas Mitchell's name, Mt Aberdeen, for the highest peak, known today as The Horn, of what was generally known as Mt Buffalo suggests that he may also have carried a copy of the standard map incorporating Mitchell's work,⁸ or of John Arrowsmith's map of south-eastern Australia, published in London in 1852, that included Mitchell's name.⁹ None of these maps included any details of the alpine country east and south-east of Mt Buffalo.

Mt Buffalo itself is a huge, steep-sided granite outcrop with an extensive plateau on top from which project several higher, rocky peaks. Having reached the plateau, Mueller told Lonsdale,¹⁰ he and Dallachy encountered 'Mr Barnett, by whom this part of the country is surveyed'—that is, the local government surveyor, Edward Barnett—who guided them to 'the peak of Mount Aberdeen'. They proceeded to climb this—it had never previously been scaled, Mueller said—and also one of the other nearby peaks. They had reached Mt Aberdeen on 25 February, Mueller reported, and 'since that time Mr Dallachy and myself have been travelling through this mountains in various directions to examine and collect its botanical productions'.¹¹

It has been asserted in several recent publications that to reach the Mt Buffalo plateau, Mueller and Dallachy followed a track that had been cut by a local cattleman, Thomas Goldie, from the Buckland Valley up the east side of the massif (hence 'Goldie's Track').¹² While this was very probably the way they went, I know of no evidence to prove it. Neither in the letter cited above that Mueller sent to William Lonsdale, reporting his assault on the mountain, nor in his later published annual report¹³ does he give

any clue as to his route up but only describes what he did once he got there. His account does, however, suggest that they reached the plateau near its southern end, where The Horn is located, since it implies that scaling this was more or less the first thing they did on the mountain, with the botanizing being done later; and that is certainly consistent with their having used Goldie's Track, which comes out relatively close to The Horn and much closer to it than any of the very few other routes up that they could conceivably have used. Surviving specimens in the National Herbarium of Victoria lead to the same conclusion, all having been collected after the date on which Mueller scaled The Horn.¹⁴

If it was a clear day when Mueller scaled The Horn, he would have had a magnificent view of the main peaks of the Victorian Alps. Most importantly, he would from this have gained a clear understanding of their respective positions that would be invaluable to him during subsequent expeditions. To the south loomed Mt Buller and its attendant peaks and, in the far distance, Mt Wellington, which Mueller was to climb at an early stage of his third expedition. To the east and nearer at hand a cluster of still higher mountains beckoned, with others ranged behind them all the way to Mt Kosciuszko across the intercolonial boundary in New South Wales, named a few years earlier by the Polish explorer Paul Strzelecki and now known to be Australia's highest mountain.

Mueller and Dallachy had initially intended, when they had finished botanizing on Mt Buffalo, 'to proceed to some of the remoter ranges as far as the advanced season permits'.¹⁵ By the time they came off the mountain, however, in early March 1853, they had to change their plans. 'As the season is already so far advanced and the state of our horses made it impossible to extend our journey to the higher alpine country', Mueller now told Lonsdale, Dallachy would return directly to Melbourne with the seeds he had collected, while he himself would continue alone to Mt Buller, which had not previously been explored scientifically, and then on into Gippsland.¹⁶

From the Ovens River, from which Mueller had written to Lonsdale, he headed south, probably initially following the Buffalo River upstream before crossing to the King River where he botanized systematically while

following this to its headwaters on Mt Buller. His ascent of the mountain when he got there 'was not accomplished without considerable danger', Mueller later reported.¹⁷ From a botanical point of view, however, it was worth the effort because he here encountered Australia's true alpine vegetation for the first time. Descending again, he botanized on 'some other less elevated mountains in the neighbourhood' and on the upper reaches of the Broken and Delatite Rivers before following the Goulburn River downstream, away from the mountains.

Second Expedition

Mueller set out on his second expedition on 1 November 1853. Surviving letters reveal that on this occasion he had with him a map of Victoria supplied by the Government Survey Office,¹⁸ probably a tracing taken off their progressively updated map, an earlier version of which had been the basis of a map published in London by John Arrowsmith in early 1853.¹⁹ Arrowsmith's map gave much useful detail about northern Victoria and a little more about the mountainous regions of the north-east than its predecessor published a year earlier. It is unlikely that the Survey Office's updated version would have had any further information about the latter area included on it, but it would certainly have been the best map of the area available at the time. Mueller's requesting the map-tracing when he did suggests that he had not been provided with anything like this for his first expedition.

Mueller travelled light. When travelling alone, he had just a single packhorse in addition to his riding horse. Apart from the map, his only navigational equipment appears to have been a barometer and boiling-water apparatus for determining altitudes, supplied by his government colleague W. H. Archer who was responsible at the time for the colony's meteorological recording,²⁰ and a magnetic compass. He certainly kept a journal, but unfortunately none of his journals has survived. For his scientific work, he carried only a single reference work to help him identify the plants he encountered—Robert Brown's *Prodromus florae novae hollandiae* (London, 1810).²¹ He also carried a large supply of paper, between sheets of which he laid the plant specimens he collected before tying these together in bundles within a protective

leather or hide wrapping. He probably carried a vasculum in which to put the plant specimens he collected each day before sorting, labelling, pressing and wrapping them in camp each night. To keep the load he was carrying manageable, whenever he came to a settlement, he arranged to have the precious bundles of specimens that he had accumulated shipped back to Melbourne.

On this new expedition, Mueller headed first to the Grampians, the mountain range in western Victoria that Thomas Mitchell had named and reported to be very rich from a botanical point of view. From there he went north to the Murray River, which he followed downstream as far as its junction with the Darling. Anxious, however, to reach the mountains of the north-east while the vegetation was in flower, he then reversed his course and followed the Murray upstream to Albury, where he arrived in mid-January 1854.²² From there he followed the Mitta Mitta River upstream towards the mountains. Where the valley narrowed, he 'ascended and crossed the Gibbo Ranges at an elevation of at least 5000 feet' before continuing south up the Mitta Mitta to the small gold-mining settlement of Omeo. For most of the way, he would have followed the tracks of cattlemen and gold miners heading for Omeo. 'From here,' he reported, 'I attempted in vain to reach the Bogong Range, probably the highest point in this Island-Continent, being compelled to retreat by the extensive bush fires then raging in the intermediate mountains'.²³

Mueller's terminology here has given rise to considerable misunderstanding, with most of those who have written on the subject taking him to mean that he had tried to climb what later came to be recognised as Victoria's highest mountain, Mt Bogong. As becomes clear from Mueller's later reports, however, what he referred to as the 'Bogong Range' was not today's Mt Bogong but 'the culminating point of the westerly systema of the Snowy Mountains'²⁴—the range, some distance south-west of Mt Bogong, that he had seen from Mt Buffalo, that includes today's Mts Hotham, Loch and Feathertop. This is also clear from his itinerary on the present occasion, because had he been aiming for today's Mt Bogong he would have headed there from a point much further north than Omeo, probably even before he ascended the Gibbo Ranges. (In a later report, in the context of his supplying



Figure 1. Portion of Arrowsmith's 1853 map, showing 'Peaks of the Buffalo Mt', Lake Omeo, and in between them the Bogong Range as then conceived, marked 'Snow nearly all the year'.

names for individual mountains in the range, Mueller himself recommended that 'the signification 'Bogong Range' ought to be abandoned, as the natives apply it to any of the lofty mountains when in the fissures of the rocks ... the Bogong moth appears'.²⁵) Mueller's usage is entirely consistent with Arrowsmith's 1853 map, which shows the 'Bogong Range' as an otherwise undifferentiated chain of mountains running from north-west to south-east, about half-way between Mt Buffalo and Lake Omeo (see Fig. 1). The same feature would almost certainly have been shown on the map-tracing Mueller had been given by the Survey Office. Despite Mueller's strictures, the same terminology was still being used a decade later in *Baillière's Victorian Gazetteer*, where the Bogong Ranges were defined as 'a range of very lofty mountains, exceedingly rugged and precipitous, extending from the main Dividing range, near the township of Livingstone [i.e. Omeo], in a N.W. direction, through a broken country, for ~50 miles'.²⁶

Frustrated by the bushfires from penetrating these ranges, Mueller instead headed eastwards

towards 'the Cobboras Mountains, the most prominent points of the Great Dividing Range within the borders of this Colony' and then 'over a large tract of subalpine country in a north-easterly direction to the Snowy River, so far as the boundaries of New South Wales'.²⁷ During this part of his journey, he would have followed what was by then a well worn track, the route along which the first settlers in the Omeo district had driven their stock from the Monaro country in southern New South Wales and had later brought in supplies from the port of Eden, on the New South Wales south coast.²⁸ Mueller made no claim to have explored new ground at any stage of this expedition; in his report he concentrated throughout on characterizing the vegetation of the area. He must then have returned to the vicinity of Omeo before 'by a circuitous route along the Tambo to the south, and steering thence once more easterly, I reached, in the middle of March, the country beyond the mouth of the Snowy River'.²⁹ He eventually got back to Melbourne in mid-April 1854.

Third Expedition

On 1 November 1854, Mueller set out for the mountains once again. This time, he attacked them from the south, from Gippsland. In an initial foray from Angus McMillan's station 'Bushy Park' on the Avon River, he followed this river upstream to Mt Wellington, which he climbed on 14 November before returning to Bushy Park.³⁰ Among the plants he discovered on the mountain—the gem of his new collection, he told William Hooker³¹—was a white-flowered *Ranunculus* for which he coined the name *Ranunculus Millani* in honour of his host, and of which he sent Hooker a Latin description that Hooker promptly published in his journal, *Hooker's Journal of Botany and Kew Garden Miscellany*.³²

The ascent of Mt Wellington was a mere sideshow, however, in relation to Mueller's main objectives on this expedition. 'I am preparing now', he told Hooker, 'for an ascent of the Bogong mountain, which is probably higher than Mount Coskiusko in N.S.W.; it is at all events the king of the mountains in Victoria and I trust that I shall be able to surmount the difficulties on the long way to it. It is the real centre of the Australian alps...'. In other words—remembering that in Mueller's terminology, 'the Bogong mountain' would have meant 'the highest peak of the Bogong Range'—he aimed to do what the bushfires had prevented him from doing on his previous expedition, that is, to scale the highest peaks of the 'Bogong Range'. Four weeks after writing to Hooker, on 16 December Mueller wrote triumphantly from Omeo to the Colonial Secretary, William Haines, reporting that he had succeeded in doing this.³³

Having sent in this report, from Omeo Mueller proceeded in a north-easterly direction, as he had done a year earlier, 'through a delightful subalpine country' towards the headwaters of the Snowy River.³⁴ This time, however, he was not forced by the terms of his employment as an officer of the Victorian Government to confine his activities to the Victorian side of the boundary with New South Wales. In seeking permission to undertake this expedition, he had not only explicitly mentioned the 'Bogong mountains' as an area he still needed to investigate, he had sought and been granted leave to 'extend my exploration over the whole alpine chain unrestricted

to geographical boundaries'.³⁵ This he now proceeded to do, spending several weeks on the New South Wales side of the border. 'I ascended the most northern alpine hill of the Munyang [i.e. Snowy] Mountains on the 1st of January, 1855,' he later reported, 'and traversed in the weeks subsequent most of the principal elevations of these prodigious mountains'.³⁶ On 4 January, he told the new Colonial Secretary, William Haines, he climbed Mt Kosciuszko.³⁷ Towards the end of January, he followed the Snowy River out of the mountains and down into the lower country of east Gippsland.

Which Mountains?

In what follows, I focus on Mueller's assault on the 'Bogong Range'. Though his accounts of where he went have been the source of much subsequent perplexity and disagreement, the available evidence is I believe sufficient to establish definitively the route that he followed (Fig. 2).

The chief uncertainty for many years concerned the mountains that Mueller so proudly reported he had climbed. In the report that Mueller sent from Omeo on 16 December 1854, he wrote that

On the 3rd December I ascended the south-eastern of the two highest mountains of the Bogong Range. In its upper regions even the vegetation of bushes ceases, the lightly arched summit being covered with Alpine grasses and herbs. About noon I ascertained the boiling point to be 198°, according to Fahrenheit's thermometer, and 75° according to Reaumur's scale. I am at present unable to calculate from this the barometer height and approximative altitude of this mountain, but I believe that it will be found nearly 7,000 feet above the level of the sea. The much more abrupt and yet higher summit of the north-western mount I ascended from the Upper Mitta Mitta, which skirts its base, on the 6th December. The boiling water point I observed again to be 198°F. (although the elevation of this mountain is unquestionably higher to the extent of several hundred feet), a circumstance owing to the greater atmospheric pressure of that day.... On both these mountains mighty masses of snow lay far below the summits, lodging chiefly in the ravines, and these never melt entirely under the heat of the summer sun.³⁸

While it is possible that he had been preceded by stockmen from the Cobungra cattle run or by



Figure 2. Mueller's route to the 'Bogong Range' in 1854, as argued for in this paper. Adapted from Google Earth.

gold-seekers en route to Omeo,³⁹ Mueller evidently saw no signs of their passing, for in his report he claimed that the ranges he had traversed on the way to these peaks had 'never before been traversed by civilized men' and that he was 'the first man who ever reached these commanding summits'. This, he thought, entitled him to bestow names on the two mountains he had scaled, and he sought permission to name the higher peak Mt Hotham in honour of the colony's then Governor, Sir Charles Hotham, and the lower one Mt La Trobe in honour of his great patron, Hotham's predecessor, Charles Joseph La Trobe. To fix the positions of the two peaks, he took compass bearings from the top of each of them on several of the other peaks that he could see. There is, however, no evidence of his ever drawing up a sketch map of the area to show the relative positions of the different features.

Unfortunately, when the area was surveyed, years later, by government surveyors equipped with theodolites, they were unable to reconcile their readings with the bearings Mueller had given from his 'Mt La Trobe' and so were unable to determine which mountain he had climbed. In addition, while they could identify Mueller's 'Mt Hotham', they opted not to use Mueller's name but the name local settlers had since bestowed on it, 'Mt Feathertop', and gave the name 'Mt Hotham' to another peak. In the end, neither the names Mueller had bestowed on the two mountains nor the names—for example Hooker's Plateau, Mitchell's Plateau, Clarke's Peak—that he had given to various other features on which he had taken bearings survived on the maps the surveyors compiled.

Mueller's observing that his names were ignored on the definitive map published by the Surveyor-General, A. J. Skene, in 1876 may have been one of the factors that prompted him to send a paper later that year to the Royal Geographical Society in London, proposing that the same strict priority rules as had been adopted in the recently agreed international rules of botanical nomenclature should also be applied internationally in the naming of geographical features. 'Perhaps one of the geographic Congresses', he wrote, 'might be induced to frame a code for a rigorous (*sic*) nomenclature'.⁴⁰ However, the paper was not published, the referee, Francis Galton, judging Mueller's scheme 'Utopian'.

When a geological map of the Victorian Alps was published in 1882, Mueller wrote to the man chiefly responsible for it, James Stirling, formerly the Lands Department's surveyor at Omeo and now Assistant Government Geologist, protesting at 'the systematic manner in which all my early & toilsome work for the geography of the Australian Alps has become suppressed'.⁴¹ Stirling was not responsible for this, Mueller recognised: 'You will kindly understand', he hinted darkly, 'that I am to some extent aware, how these arbitrary and unjust changes in the nomenclature of several of our highest mountains occurred or were brought about long before your time'. 'Is there no means of remedying this yet?', he pleaded. Stirling must have expressed support for Mueller's cause, for in a later letter, Mueller thanked him for 'the just and generous manner in which you advocate my claims on the geography of the alps'.⁴² Mueller's names were not, however, restored. If Stirling was not just humouring Mueller but actually looked into the matter, he would presumably have run into the same difficulties in Mueller's bearings as his predecessors had done.

By this time, even Mueller himself, who had never returned to the area, seems to have become confused over which mountains he had climbed. 'What is called now Mt. Feathertop is my Mt. Hotham of 1854, and what is named Mt. Bogong I called then already Mt. Latrobe', he told Stirling in October 1884.⁴³ However, at least as far as Mt Bogong is concerned, this is certainly not correct and Mueller's statement could only have added to the confusion. Barnard, who was so far as I am aware the first person to address this question in print, was aware of Mueller's statement to Stirling, but was unable to reconcile it with the bearings Mueller had reported.⁴⁴ Unfortunately, the alternative identifications that he suggested, namely that 'Mt Hotham' was Mt Bogong and 'Mt La Trobe' was either Mt Wills or Mt Nelse (or Nelson, as Barnard called it), were even less plausible.

In his reconsideration of Mueller's data, Wakefield argued convincingly that Mueller's 'Mt Hotham' was indeed the mountain that subsequently became known as Mt Feathertop.⁴⁵ The bearings Mueller reported from its peak were all, he showed, within 1 1/2 degrees of 'a perfectly accurate line to the point concerned',

if one made allowance for the magnetic declination reported in the area at that time of $9\frac{1}{2}$ degrees. Mueller's compass was evidently working well and, equally evidently, he was competent at using it. Why, then, were the data he reported from 'Mt La Trobe' so problematic? Wakefield showed that the problem was systematic, not random. Mueller reported many fewer bearings in this case because much of his view had been obscured by cloud on the day he climbed the mountain, and all three of the readings that he did report (setting aside what appears to be a calculated rather than measured back-bearing to 'Mt Hotham') apparently included an error of 24° clockwise. This Wakefield was inclined to attribute to 'a temporary internal maladjustment ... or to deflection owing to the near-presence of a metal article or even a ferrous lode'.

Notwithstanding this difficulty, Wakefield presented very strong arguments for concluding that the mountain concerned—which Mueller reported as being only a few miles from 'Mt Hotham' in a south-easterly direction—was the one now called Mt Loch, which stands in precisely that relationship to Mt Feathertop. Mueller also referred in his report to a 'lower range not far distant' from 'Mt La Trobe' which, Wakefield argued, can be identified as today's Mt Hotham. As Wakefield noted, Mueller's later assertion that it was Mt Bogong that he had climbed most likely resulted from his trying to reconcile the bearings he took from 'Mt La Trobe' with later maps of the area. However, nothing else he said about the mountain in his reports at the time fits with this identification, whereas everything is consistent with its being Mt Loch.

Mueller believed that the two mountains he climbed, which thanks to Wakefield we have now identified, were 'probably the two highest in the Australian Continent', whereas we know that not only Mt Kosciuszko but also today's Mt Bogong, some 25 km to the north-east of the mountains Mueller climbed, is higher than either of them. How could Mueller have overlooked the latter peak? Almost certainly because, on each occasion when he might have seen it, its peak was hidden in cloud—it often is!—so that he never realized quite how big the mountain was. We know from Mueller's report that on the day he scaled 'Mt La Trobe', he was only able to take bearings on the nearby 'Mt Hotham' to the north-west—and even here, as

noted earlier, the figure he gave seem to a calculated rather than a measured value—and on three features (including 'Mt Aberdeen') located in a generally westerly and south-westerly direction, everything else being obscured by cloud. The sky was much clearer on the day he scaled 'Mt Hotham' and one of the bearings he took that day, on a feature he called 'Hooker's Plateau', was in the general direction of today's Mt Bogong—passing, as Wakefield noted, some two miles north-east of that mountain's summit. Wakefield on this basis identified 'Hooker's Plateau' with Mt Bogong, but this is dubious. Mueller would certainly have taken the bearing on the peak, had it been visible. However, the fact that he referred to a plateau rather than a mountain suggests that it was not the peak that he was seeing but a somewhat lower spur, and that the peak itself was hidden behind cloud. Mueller also later took bearings from Mt Tambo, further to the east,⁴⁶ but the only ones he reported from there were on 'Mt Hotham' and 'Mt La Trobe'—the bearings he gave being entirely consistent with the identification of these peaks as today's Mt Feathertop and Mt Loch respectively. Once again, he made no mention of a large mountain further to the north, in the position of Mt Bogong.

Of Rivers and Mountains

When Mueller left McMillan's station on the Avon River, determined to reach the 'Bogong Range', he proceeded first to the Mitchell River 'and thence to the Dargo', which he followed upstream towards the Dividing Range. What route he then took has been a matter of dispute. On the one hand, while Wakefield did not consider Mueller's route in any detail, he thought it 'reasonable to assume' that Mueller crossed the Divide in the vicinity of the Cobungra cattle run, and that from there his most probable route to Mt Loch would have been 'between the present Cobungra Creek and Bundarra River'—a route that would have brought him on to the Bogong High Plains.⁴⁷ These suggestions were, however, vigorously challenged by Carr,⁴⁸ who argued that Mueller followed the Dargo River much further upstream before crossing the Divide near the headwaters of the Cobungra River, from which point he would have had a clear view of Mt Loch, not far to the north: 'The further he was from

Mt Hotham when he made the crossing', she wrote, 'the more impossible it is that a course to the NE. would have allowed him a view of Mt Loch to the N.'

Carr's analysis, subsequently accepted by Gillbank,⁴⁹ derived from her reading of Mueller's Third Report as Government Botanist, which he submitted in June 1855 and which included a summary account of his third expedition. The relevant passage reads as follows:

Proceeding ...along the Darga [i.e. Dargo], which flows through some luxuriantly grassed recesses of the mountains, I advanced through a difficult country to the Bogong Range, the culminating point of the westerly systema of the Snowy Mountains; a dense scrub, and the total absence of water on the crest of the Wentworth Ranges, rendering the progress tedious, until I reached the Dividing Range towards the sources of the Cabongra [i.e. Cobungra], where again the feature of the country changes on the northern slopes of the mountains, or along the sources of the Murray tributaries. Here open valleys give access to the central ranges in almost every direction....⁵⁰

Carr did not, however, list among her references the special report that Mueller sent from Omeo on 16 December 1854, which included some additional details, as follows:

The main journey to the central part of the Australian Alps I commenced again from the Avon on the 22nd November, proceeding to the Mitchell River, and thence to the Dargo. Following along the scrubby ranges between this river and the Wentworth, I crossed the Dividing Range between the waters of Gipps' Land and those of the Murray River near the upper part of the Cabongra. Thence I traversed a grassy table land in a north-easterly direction along the Cabongra downward, until the country appeared practicable, towards the north, to reach the highest part of the Bogong Ranges.⁵¹

It is possible that Carr had read this report of Mueller's even though she does not cite it, because some of the details in her argument—for example, her references to 'a course to the NE' and 'a view of Mt Loch to the N'—appear in the special report but not in the later, annual report. She may, however, have drawn these details from Wakefield's paper. If she did see the special report, she clearly overlooked Mueller's crucial statement in it that he ascended the Dividing Range by following the 'scrubby ranges'

between the Dargo River and the Wentworth. Not only does this statement completely negate Carr's argument, it allows us to identify the otherwise mysterious 'Wentworth Ranges' mentioned in the annual report. More than this, it enables us from an inspection of the contour lines on the modern 1: 100,000 map (titled 'Dargo') of the area in question to identify quite precisely the most likely route Mueller would have followed to the top of the Dividing Range. This is the line of what is today the standard route from Dargo to Omeo, the Birregun Track, which allows a relatively gradual ascent of the range without the very steep sections that Mueller would have encountered, had he taken almost any other path.

How, though, are we then to understand Mueller's statement that he crossed the Divide near the upper part of the Cobungra, when today's maps show the Cobungra River (or Creek on some maps) originating a long way away from the Birregun Track, and close to Mt Loch? So far as Carr was concerned, this was the sticking point, a definitive statement by Mueller of where he crossed over.

Carr was also apparently concerned that, wherever Mueller crossed over, he needed to be able to see Mt Loch, so that he knew the direction in which he then needed to go. This, however, ignores the fact that Mueller already knew very well where the high peaks were that he was aiming for, both from the Survey Office's map and because he had seen them from The Horn and knew where they stood in relation to the other mountains round about.

The key to understanding Mueller's statements about the mountains he had climbed was, we have seen, a recognition that the names he gave do not correspond to the modern names—that his Mt Hotham was not our Mt Hotham, and nor was his Bogong Range (or Bogong mountain) our Mt Bogong. It now also needs to be recognised—or so I wish to argue—that neither do the names he gave to the rivers he followed always coincide with the modern names. In particular, what Mueller called the Cobungra was not the river we call by that name. Rather, as Wakefield asserted but offered no argument for, Mueller's Cobungra was what is known today as Spring Creek, a stream that has its beginning high on the Dividing Range, just below the point where the Birregun Track crosses the top of the Divide near Mt Phipps. The stream flows

in a generally northerly direction initially until it joins what is now called the Victoria River, which then flows north-eastward through the Cobungra cattle run. In due course, the Victoria joins the river we know as the Cobungra but which Mueller, I shall argue, called the Upper Mitta Mitta.

'Cobungra' is an Aboriginal name that was bestowed by the pioneering pastoralist George Gray on the cattle run he took up in 1851, that is still known today as Cobungra Station. When Mueller passed through the area, the run was being tended by two stockmen, James Brown and John Wells. It would surely have been from them that Mueller learned the name 'Cobungra' and to apply it, as they would have done, to the river running through the centre of the property—not to another river, the one to which the name is applied today, several kilometres away on the northern boundary of the run.

If our understanding of Mueller's use of the name 'Cobungra' is correct, his route over the Divide becomes clear—from the Dargo he followed what was to become the Birregun Track up to the top of the Divide, and then Spring Creek down the north slope to its junction with the Victoria River or perhaps somewhat beyond this, to a point where it appeared practicable to strike off to his left towards the high peaks of the 'Bogong Range'. Following such a route, he would undoubtedly have encountered the stockmen Brown and Wells along the way.

A recent botanical discovery lends further support to this conclusion as to where Mueller crossed the Divide. Among the plants he collected on this journey is the type specimen of *Calotis pubescens*, now in the National Herbarium of Victoria, labelled by Mueller as having been found on 'grassy mountains on the Mitta Mitta'. The species, better known from around Mt Kosciuszko, was never again collected in Victoria until 2009, when a flourishing colony was found by James Turner on a small grassy plain, high on the northern slope of the Dividing Range near the source of Spring Creek, at latitude 37°10'50'S, longitude 147°24'44'E.⁵² It is tempting to suppose that Mueller found his specimen in the same spot. Since he would have known from his previous visit to Omeo that the Mitta Mitta had some of its main sources south and west of that settlement, he may well have thought initially that the stream, the beginnings

of which he encountered soon after crossing the Divide, was the start of the Mitta Mitta itself. One can readily imagine him recording it thus on the collection record that he wrote up in camp that evening for the new *Calotis* he had found. Only later, as he followed the stream down, would he have learnt the name Cobungra for this stream from the stockmen whom he encountered on the Cobungra run.

As we have seen, Wakefield suggested that Mueller made his left turn 'between the present Cobungra Creek and Bundarra River'. However, this would have meant first crossing 'Cobungra Creek'—the Upper Mitta Mitta in Mueller's terminology, as I shall argue shortly—and he makes no mention of having done this. More likely, I believe, he turned off before reaching the river and followed more or less the line of today's Great Alpine Road, up towards the mountains. Such a route would have brought him out very close to Mt Loch, with a very easy climb to the summit. Such a route is also more consistent than is Wakefield's alternative with Mueller's use of the term 'ranges' to describe the country through which he passed on his way to the high peaks.

In a passage quoted earlier, Mueller reported how, after climbing Mt Loch, he scaled the 'much more abrupt and yet higher summit' of Mt Feathertop, some miles to the north-west. This he ascended, he said, 'from the Upper Mitta Mitta, which skirts its base'. There is, in fact, a watershed, now known as Dibbins Divide, in the steep-sided valley on the eastern flank of the two mountains. From this the river now known as the West Kiewa flows northwards, while today's Cobungra flows south and then east. The watershed is, however, somewhat south of Mt Feathertop towards Mt Loch, and for this reason both Wakefield and Carr identified the river that Mueller called the Upper Mitta Mitta, that he said skirted the base of Mt Feathertop, as the West Kiewa. In my view, this cannot be correct. Mueller would have had no basis whatsoever for linking the West Kiewa with the Mitta Mitta River, since he would have had no idea where it went once it left the vicinity of Mt Feathertop. (In fact, it flows almost due north to the Murray, without ever linking up with the Mitta Mitta.) On the other hand, he knew—or, if he didn't, he would discover on his way to Omeo—that what is now called the Cobungra is one of the largest of the streams that come

together north of Omeo to form the Mitta Mitta. In other words, there was every reason why he might have regarded it not as a separate river but as the principal branch of the Mitta Mitta itself, and so referred to it as the Upper Mitta Mitta. In support of this conclusion, we may note that later in his report, Mueller declared, more accurately than in his comment about Mt Feathertop, that 'one of the main branches of the Mitta Mitta has its sources at Mount La Trobe'.

From Mt Loch, then, Mueller's route would have taken him in a generally northerly direction down the spur known today as Machinery Spur to the headwaters of today's Cobungra River. After crossing the stream, a short climb would have taken him up to Diamantina Spur, which in turn would have led him up to the final rise to the top of Mt Feathertop.

Interpreting Mueller's terminology in the way suggested also helps us understand a remark he made in a letter he wrote to William Hooker from Omeo on the same day as he penned his special report to the Colonial Secretary.⁵³ He had been delighted, he told Hooker, to find 'our old acquaintance, *Alchemilla vulgaris*', which he had not seen since leaving Europe seven years earlier, growing 'in the very heart of the Alps, namely at the sources of the Mitta Mitta'.

Mueller's account of what he did after scaling Mt Feathertop is unfortunately too brief to enable us fully to reconstruct the route he followed: 'After extending my journeys over several mountains in the neighbourhood, and an exploration of the Upper Mitta Mitta, I went over a generally fertile country to Omeo.' We may be sure that one of the other mountains he explored (and presumably scaled) would have been today's Mt Hotham, the 'lower range not far distant' from Mt Loch, enabling him to declare that another branch of the Mitta Mitta—probably he meant the Victoria River but he may have been referring to today's Swindler's Creek—and also the Ovens River and the Mitchell (i.e. the Dargo, which flows into the Mitchell) had their sources there. No doubt he also scaled some of the subsidiary peaks around Mt Hotham, and perhaps some of the nearer peaks projecting from the Bogong High Plains. His statement that he explored the Upper Mitta Mitta suggests that he followed the Cobungra downstream for a time. Which route he then followed into Omeo, however, remains undetermined.

The Fate of Mueller's Names

Reinterpreting Mueller's account of his third expedition in the way suggested in this paper provides, I believe, a much more coherent view of his journey through the Victorian Alps than has previously been achieved. Given that Mueller is a figure of considerable historical interest in his own right, and that his itinerary through the mountains has been a matter of debate for so many years, this is of value in itself. It also has implications for our understanding of his collection records deriving from this journey, because it follows from our analysis that plant specimens recorded as having been collected along the Cobungra River must now be understood as having been collected in the Spring Creek-Victoria River area, while those recorded as being from the Upper Mitta Mitta could like the *Calotis* be from the same area, or from today's Cobungra River.

The analysis presented here will serve as, among other things, a cautionary tale for would-be historians, for it shows how difficult the interpretation of an historical document can be. Carr was led astray, I have suggested, chiefly because she assumed too easily that when Mueller wrote of the Cobungra River, he was referring to the river known by that name today. However, very few of the geographical features of the areas through which Mueller passed on his third expedition had yet had names fixed on them by the European invaders of the region, so it is really not surprising that many of the names he used did not stick. We have seen that in the case of his 'Mt Hotham' and 'Mt La Trobe', Mueller did his best to ensure that the names he bestowed would become fixed, but was defeated by elements apparently outside his control. In the case of the rivers, however, he almost certainly used names that he found settlers in the area to be using already and made no special effort himself to secure their use thereafter.

Very few details of the area in question and none of Mueller's names appeared on the important map of Victoria's census districts published in 1858.⁵⁴ However, many of Mueller's names of mountain features—Mt Hotham, Mt La Trobe, Mt Leichardt (thus mis-spelled in Mueller's report), Barkly Ranges, Clarke's Peak, Mitchell's Plateau, Hooker's Flat, Kennedy's Height—did appear on versions of Frederick Proeschel's



Figure 3. Portion of the version of Proeschel's map of Victoria published in early 1860. Note the peculiar triangular array of mountains in the centre of the image, some distance north of the main line of the Dividing Range, with Mt Hotham and Mt La Trobe at the two southern apexes of the triangle and Mt Leichardt south-east of the latter. Note also the Bogong Range marching off to the north of the triangle of mountains and the Cobungra River, to the south of the triangle, becoming further downstream the Livingstone and then the Mitta Mitta.

well known maps of Victoria from early 1860 onwards, after not being included on earlier versions of his map (Fig. 3). Once included, the representation remained the same through the whole sequence of subsequent maps.⁵⁵ Yet even though Proeschel must have got his information directly from Mueller, it is hard to reconcile with more modern maps the positions in which he placed the major features of the high alps named by Mueller—Mt Hotham, Mt La Trobe, Mt Leichardt (which Wakefield identified from the bearing taken by Mueller with what became known as Mt Nelson), Hooker's Flat and the Bogong Range—or his positioning of the Cobungra River in relation to these. As a result, Proeschel's maps would have carried little weight with the Government's surveyors who mapped the area in the 1870s, and may indeed have prejudiced them against using Mueller's names.

The peculiarities evident in Proeschel's maps point to a wider problem. They suggest that even a mapmaker who, like Proeschel, wanted to incorporate Mueller's data found it difficult to transfer the information that Mueller gave him on to his maps—not because of a problem with the bearings that Mueller reported from 'Mt La Trobe' but because the information Mueller provided more generally was not sufficient for mapping purposes. It would seem that Mueller's observations had not given him the kind of detailed overview of the topography of the region that the mapmakers needed.

Mueller's name 'Mt Hotham' appeared on a map of Gippsland privately produced by John Lidgate Ross in 1864, but its position is hard to reconcile with either Mueller's or modern usage (Fig. 4).⁵⁶ Ross's use of the name suggests in itself that he is following Mueller's account,



Figure 5. Portion of Baillière's *Map of the Murray and Gipps Land Districts* (1866). Note Mt Feathertop separate from and to the north of the main line of the Dividing Range, with a mysterious 'Great Bogong Range' stretching to the north from this point. Note also the confused mass of ridges to the east of this, roughly in the position of today's Mt Bogong, and the system of east-flowing rivers, shown all eventually flowing into the Mitta Mitta, with the Victoria and the Cobungra as the two southernmost of these.

Mt Hotham, the name he used for it both in his published report⁵⁸ and on the map that accompanied this, that would have been prepared on the basis of the information available to him before he returned to Germany in 1864. Perhaps as a sign of things to come, however, on the first occasion on which Neumayer mentioned the mountain in his report, he referred to it as 'Mt Hotham (Mt Feathertop)', thereby also acknowledging the name preferred by local residents who had by then settled in the area below the mountain near present-day Harrietville. Of Mueller's 'Mt La Trobe' he made no mention, almost certainly because he had been unable to identify it from the bearings Mueller had reported.

On Baillière's map of 1866, Mueller's Mt Hotham appears unequivocally as Mt Feathertop, but with a mysterious 'Great Bogong Range' that defies identification running NNE from this; the Cobungra and Victoria rivers are named in their

modern sense (Fig. 5). This map is also noteworthy for showing for the first time a substantial mountainous feature in the position of today's Mt Bogong—a confused cluster of ridges with peaks named 'Mt Cooper' and 'Mt Marun' but without a name for the formation as a whole.⁵⁹

On the maps produced by the Survey Department in the 1870s that finally fixed the names of most of the more prominent features, none of Mueller's names of mountains survived (except 'Mt Hotham' applied to a different peak from the one on which he had bestowed it).⁶⁰ Why the surveyors who produced these maps also named the rivers differently from the way he had is something of a mystery. As on Baillière's map, however, the Cobungra and Victoria Rivers were now shown in their modern sense, and none of the streams forming the Mitta Mitta was identified as constituting the upper reaches of the Mitta Mitta itself in the way I have suggested

Mueller did with what is now known as the Cobungra.

At the very least, the argument presented here demands a reconsideration of the names Mueller gave to the rivers, and hence to his collecting localities. Beyond that, in the absence of clear and unambiguous documentary evidence, the validity of the interpretation offered can only be judged by the degree to which it yields a coherent and convincing account of Mueller's itinerary. This, I claim, it does, providing an understanding that is fully consistent both with Mueller's own statements and with what we know about the area through which he travelled.

Epilogue

Late in his life, Mueller visited Victoria's alpine country one more time, in January 1890, as one of a party of 53 members of the Second Congress of the Australasian Association for the Advancement of Science who took part in a post-congress excursion to the mountains. After two days of travelling from Melbourne, by train to Myrtleford and then coach, the group reached the top of the range on the second evening. A camp had been set up at Diamantina Springs, high on the range close to Mt Hotham, and most of the group spent the night there. 'Tea over', it was reported, 'Professor Tate, of Adelaide, took the chair on the limb of a tree, and announced that everyone must either sing a song, tell a story or stand drinks all round in the morning. Baron von Mueller led the way with a verse from Bobbie Burns, and song and story followed each other in quick succession' until lights out at 11 p.m. All then turned out at 4 a.m. next morning to see the sunrise but were disappointed because haze obscured the view.⁶¹ James Stirling, who accepted Mueller's claim that the mountains he had climbed were those that had since come to be known as Mt Feather-top and Mt Bogong, was one of the leaders of the excursion. Years later, he told Barnard that during the excursion—presumably in the morning, following the night of songs and stories—"the late Baron pointed out all the points he had ascended in 1855".⁶² He could certainly have pointed out all the nearby peaks he had climbed including (if we continue to follow Wakefield) Mts Feather-top and Loch. However, the reported haze makes it highly likely that, yet again, he would not have seen Mt Bogong!

Acknowledgements

I am grateful for comments and suggestions on earlier drafts made by Wendy Cross, Tom Daragh, Linden Gillbank, Arthur Lucas and two anonymous referees, and to Sally Stewart for preparing the map of Mueller's route to the high country in 1854.

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