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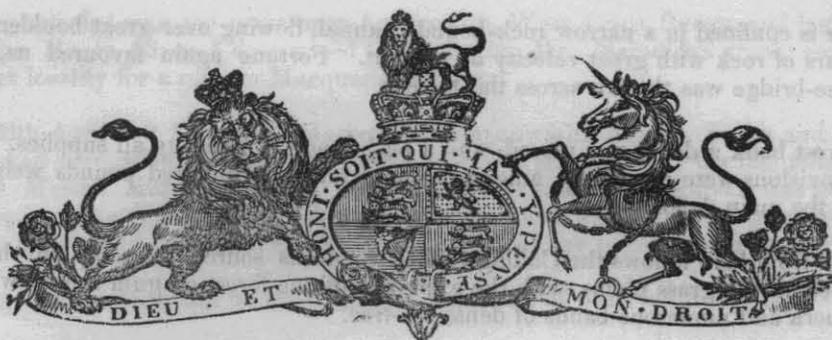
TASMANIA.

LEGISLATIVE COUNCIL.

EXPLORATION.

MR. T. B. MOORE'S REPORT UPON THE COUNTRY BETWEEN
LAKE ST. CLAIR AND MACQUARIE HARBOUR.

Laid upon the Table by Mr. Moore, and ordered by the Council to be printed,
July 24, 1883.



Hobart, 23rd May, 1883.

SIR,

ACCORDING to instructions received from you, authorised by the Minister of Lands, I now have the honour to furnish a report concerning an exploring expedition from the vicinity of St. Clair to the West Coast.

On the 5th February the party under my charge left Hobart, per conveyance, for the Ouse, a dray with provisions having preceded us to that township. The members of the party were Messrs. Tofft, W. C. Smith, and H. Simpson. In company with the dray we arrived next evening at the Duck Marshes, and on the following day crossed a dangerous ford over the Nive River, necessitated by the uncompleted state of Marlborough Bridge. From the Nive River we proceeded by the Lake St. Clair Road, crossing by very passable fords the Clarence, Traveller, Derwent, and Navarre Rivers, and arrived under Mount King William I. on the 10th February at a spot selected for our head quarters and starting point. Only two soft marshes were met with,—one at the Clarence, and the other south of the Derwent Ford. At both places the dray had to be unloaded, and its contents carried some distance. The road through the timbered country was very much blocked by fallen trees, which required clearing before the dray could proceed. Farley, the driver, a capital man with horses, surmounted many of these difficulties, which might have discouraged most men and led to much inconvenience and loss of time.

Our first work was to construct a depôt, a structure composed of logs, with a calico roofing.

From the 12th February to the 21st of that month our movements were greatly retarded by excessively severe snow and rain storms, so that a general start was not made until the latter date.

After leaving the depôt the track follows a southerly course, passing over comparatively hard basaltic plains, intersected by numerous small creeks, which would require bridging before a dray can be taken past our point of departure, yet the stockriders of the New Country ride their horses over them.

An easy ascent was found to the summit of Mount Arrowsmith, but the descent on the western fall is steep, and unsuitable for a road by the way of our first track.

After crossing Wombat Glen we followed the route of Sir John Franklin's track through about two miles of myrtle forest to the junction of the two head branches of the Surprise River. The old track was cut in 1842, and now many of the "blazes" appear more like hollows in the trees, for in many cases six inches of wood have encased the axe marks since our renowned exploring Governor passed that way. We managed to throw a tree across the left-hand stream, and the track was continued through very dense scrubs of bauera and horizontal over a moderately level country to Painter's Plains.

Here the country was examined carefully for the best route over the main branch of the Surprise River, a stream between twenty and thirty yards in width. After trying three routes we discovered a fair descent and ascent, through gum timber, to and from the river. A monster gum-tree was felled across this shallow, though rapid stream, and, judging from the position in which it is embedded, will remain a permanent crossing.

After gaining the high ground on the north side of the Surprise, we travelled over undulating hills, rising to no great height above the surrounding country, until we reached a spur thickly timbered with gum and bauera, situated between the watershed of the Collingwood and Surprise Rivers.

Over this spur easy gradients were obtained to the lower and more level country of the Collingwood Valley. Once in the valley the sight of the open plains made all exuberant, but after travelling about one mile a most luxuriant jungle of bauera had to be cut through before the button-grass on the west side of the Collingwood River was gained.

The river is confined in a narrow rock-bound channel, flowing over great boulders and dashing down steep bars of rock with great velocity of current. Fortune again favoured us, and another permanent tree-bridge was thrown across this torrent.

On the west bank a depôt was placed, and a push made to bring up all supplies. By the 10th March the provisions were carried up, amounting to about eight hundred pounds weight when first brought from the main depôt.

The track from here follows the Collingwood River to its source, keeping on the south side, and passes over button-grass plains, with the exception of one forest of gum timber with an undergrowth of bauera and numerous bands of dense tea-tree.

At the head of the valley a grand picturesque wooded pass, lying between two round-topped hills, was discovered, and a gradual sideling track cut on the western slope to a branch of the King River. This branch is crossed twice and followed for about three miles, large timber and dense moss-covered scrub growing along its banks and flats; but, owing to the river bending to the south, and becoming confined in a gorge, we left the stream and continued a direct course over a low saddle to another large water-course emptying into the King River. Soon after crossing this stream we had the pleasure of seeing the Long Marsh, an extensive button-grass plain extending throughout the whole length of the King Valley and averaging in width about one mile. After travelling through another half a mile of gum, myrtle, and dogwood timber, dispersed among wattle flats, the largest stream we had met with on our journey met our gaze.

The King River is about forty yards wide, and although not a sluggish stream cannot be called a rapid one. Its banks are low, but as bilabongs run along its course natural byewashes are formed to drain the flats and keep them from inundation. No tree available for a bridge could be found, so the river was forded on a beach of rounded shingle over which about two feet of water ran. Old blazed trees and the stumps of timber that had been fallen by the work of man remain to indicate that Mr. Gould crossed at the same spot.

A depôt was left on the west bank, and all provisions packed to it by the 31st April.

Here I climbed a prominent round hill, the termination of a spur of Mount Owen, fixed its position as accurately as possible, and had a splendid view of the surrounding country which afterwards was useful to me in my further researches. Soon after leaving the King we crossed the Linda River, a rapid, insignificant water-course, whose bed is full of large conglomerate boulders.

The Chamouni Valley is entered by first climbing a spur leading to a rather broken hard button-grass country, the latter herbage being somewhat scant. This we followed to a saddle between Owen and Lyell, and found a good get-up to the summit of this narrow divide.

A good view was obtained of the vast extent of timbered land, extending to the sea-board, and the wide gulch through which the Queen River flows, and a course fixed for the track. After descending a steep spur leading down to a large creek, Mr. Gould's old blazes were followed over a rough broken country to within one mile of the Queen River. Here our track turns slightly more to the south, and strikes the last-named stream about three miles above Lynch's diggings.

A visit was paid to the goldfield for information and news, and resulted in my learning that the Messrs. Meredith were pushing forward a track from Macquarie Harbour; so, supposing that Mr. Carlisle would join his track with that of Mr. Counsel's, I decided to take a westerly course to the mouth of the Henty River, and so give the miners a much shorter communication with Mount Heemskirk, at the same time being fully convinced in my own mind that this line could never be utilised for the construction of a road.

The channel of the Henty is deeply cut below the level of the surrounding country, and winds alternately through myrtle flats and between steep spurs, with a sluggish current, to within four miles of the coast line. The spurs in places were difficult to cut round on account of their steepness. The upper flats in high floods are under water, the river rising some thirty feet above its summer level.

One large stream emptying into the main river on the south side is forded before the gully is crossed. The latter stream also runs sluggishly, and joins the Henty about one mile and a half above the Heemskirk ford, and is bounded on both banks by extensive flats.

On the 20th April we gained the coast, with only about two pounds of rice left out of our stock of provisions; the bacon was exhausted two or three days before this, but with the aid of a few hooks fine eels were caught in the Henty River. We arrived at Heemskirk on the 21st April, and spent two days there in recruiting strength for the backward journey.

Not being satisfied with the route over Arrowsmith, West Coast Range, and latter part of the track down the Henty River, I determined to return by Mr. Meredith's track, and inspect the country in that locality for a road to Macquarie Harbour.

On the 26th April, left Macquarie Harbour in company with Messrs. Smith and Tofft; Simpson having asked permission to leave the party at Mount Heemskirk. On the following day we arrived at the Messrs. Meredith's camp, and finding that their well cut track was not completed, two days were spent, in company with Mr. O. Meredith and one of his party, assisting to break through dense bauera and horizontal scrub, and at last joined my track near Honeysuckle Plain.

The King River was forded on the 1st May, in a depth of water up to our hips.

To economise the provisions and further the work of exploring, I instructed Messrs. Tofft and Smith to cut a sideling track round the west slope of Mount Arrowsmith, and stake the plains situated between that mountain and our main depôt, remaining myself to thoroughly explore the different gaps in the West Coast Range.

Taking a southerly course over the Long Marsh, I crossed the King River about a mile further down its course from the crossing of our track. From this crossing timbered country extends for a mile and a half to the open country situated between Mounts Owen and Jukes.

A range of open hills, 2005 feet in altitude, towers above an extensive button-grass plain located in the large bend of the King River. This range I followed over numerous peaks, and on arriving at the southernmost end found the King River bending to the westward and flowing through a narrow gorge between Mounts Huxley and Jukes.

Mr. C. Lynch, the energetic prospector of this district, first informed me of the incorrect manner in which the King River is charted, and I found his information to be true.

On the 4th May, a valley was followed on the west side of the range of hills, and an ascent made on a bare spur leading to a gap between Mounts Owen and Huxley. The ascent to the gap is less easy in the way of gradients than the one our track passes through, but the grades on the western slope are far superior in every respect.

I climbed Mount Huxley and obtained a good view of an extensive area of country; the position of the mount and course of the King River I carefully fixed.

Arriving at the King River on the 5th May, I left next day to examine the gap between Mounts Sedgwick and Lyell. Following the Long Marsh for about four miles on a north-west course, after passing through a band of forest on the banks of the King River I crossed over that stream on a swift running rapid above the junction of a river rising from the Sedgwick Gap. Half a mile more of timber brought me to hard button-grass plains which extend to within a short distance of the Gap. On arriving at the timber I followed Mr. Counsel's track through the Gap for about seven miles, until all the small tributaries of the Queen River were headed.

The altitude of this Gap is much lower than any yet examined, and the gradients also greatly surpass those of the before-mentioned two passes.

After three days' travelling I arrived at the main depôt at Mt. King William I. on the 12th May, and found that Messrs. Tofft and Smith had just completed pegging the plain and track round Mount Arrowsmith.

Mount Arrowsmith may be likened to a conglomeration of spurs, with an easy gradient gradually rising to the summit on the east side. On the north and south sides the two head branches of the Surprise River encompass the mountain, and small creeks flowing through deep ravines to the larger streams furrow the mountain on both these slopes. The face of the mountain on the western slope is three miles long, and free from any great indentations.

Suitability of line of country for a future road.

On the general course of the track as far as the King River, no engineering difficulties are met with that enhance the cost of the construction of a metal road, and, where cuttings are essential, slight deviations from the present route would be necessary. The work at Mount Arrowsmith would necessitate the greatest expenditure. Here a sideling road, commencing about two hundred feet from the summit on the east side, requires cutting round the western slope to Wombat Glen. If so constructed, a gradient of one in forty can be obtained.

By crossing the right branch of the Surprise River at Wombat Glen, and keeping on the north side of that stream, a better and shorter line of road may possibly be found to the timbered spur

situated between the Collingwood and Surprise Rivers, but, if not practicable, the present track can be utilised.

Slight alterations are also advisable in the track through the saddle after leaving the Nelson River (newly named), and again after crossing the Princess River before reaching the Long Marsh. Both these alterations can be seen from the present track.

The line of road from the Long Marsh would wind round to the Sedgwick Gap, and head the small tributaries of the Queen River; afterwards keeping on a leading spur to Honeysuckle Plain, would follow a flat spur situated east and south of the Messrs. Meredith's track, to Macquarie Harbour.

The line of road through the Sedgwick Gap not only being superior in every respect to any that can be found through the other openings in the West Coast Range, has other advantages to recommend it; viz.,—on the east side of the range its course runs parallel to first-class agricultural land in the valley of the King. On the west side a band of auriferous country is passed through.

A direct route to Heemskirk is rendered impracticable by the gorges of the Henty River and its large tributaries. The open country along the track and Sedgwick route is soft in many localities, but the average depth of surface is from a few inches to a foot, under which a detritus of angular and rounded pebbles occur.

During all my experience in track-cutting and exploring the country from the South to the West Coast, the course marked as the proposed road far excels any yet travelled over, and is the only one that can be conscientiously recommended to the Government for proposed construction.

Geological Formations.

The summit of Mt. King William I. is composed of greenstone. On a leading spur north of the mountain, at an altitude of 2700 feet, a bed of fossiliferous limestone occurs. The plains from the main depôt to Mount Arrowsmith are covered with disintegrated masses of greenstone and quartzite which have been derived from the cliffs of the two mountains just mentioned.

The formation of Mount Arrowsmith is a granular quartz rock. On the northern slope at a high level, Messrs. Smith and Tofft report having found a solitary slab of fossiliferous limestone quite foreign to the country rock.

The bedrock of the Surprise River is a mica slate at the junction of the head branches.

From Wombat Glen to the Surprise Junction the rocks are composed of a Tertiary deposit, and, judging from the old shafts there, is from twenty to thirty feet in thickness.

Large companies would only be able to prove whether these gravels are auriferous, as the expense of working would be too heavy for the individual miner.

A small creek west of the junction has a bedrock of a light coloured limestone.

Painter's Plains are described by Count Strzelecki as an accumulation of pebbles. The accumulation is composed of every variety of rock, with large boulders of greenstone strewn over the plains. These boulders are also met with cropping out on the tops of the surrounding quartzite hills. It is quite probable that these masses of greenstone, occurring as they do in solitary blocks or groups, have been brought, in the Glacial Period, from the higher lands of Mount Gell, or the Eldon Range, and deposited by that agency in their present resting-place.

In the Surprise River, below the second crossing, banks of gravel or wash some twenty or thirty feet in thickness were observed, but in no case could the bedrock of the river be seen, yet I fancy it must be a mica slate.

Metamorphic rocks, chiefly mica slates and schists, extend along the whole valley of the Collingwood through which we passed. Large blocks of granite and Silurian rocks with fossils were found in the bed of the Collingwood River.

These boulders have been denuded from the higher levels or slopes of Gould's Sugar Loaf Pyramid, or the Pine Hill Range, and carried down by the water-courses on the northern side of the river. This block of country as far as the Eldon Range is well worthy the attention of prospectors.

At the commencement of the timber at Victoria Pass Primary limestone, overlaid by a fossiliferous sandstone, takes the place of the mica slates, and extends to within about three miles of the King River. In the limestone formation, caves containing beautiful stalactites and stalagmites were discovered, but owing to the want of light and time to visit them again, they were not explored.

After leaving the limestone a band of argillaceous slate extends to the King River. This band is traversed by veins of quartz, yet no auriferous alluvial deposits could be found.

The higher levels of the West Coast Range are composed of huge blocks of conglomerate and quartzite, but in the lower ground and gaps schists crop out, containing veins of crystalline quartz, impregnated with copper and iron pyrites.

A quartziferous conglomerate, similar to that found near the auriferous drifts of the Pieman, occurs on a range marked on the chart as the Thureau Hills.

Descending to the watershed of the Queen River an auriferous zone of schists and slates about five miles in width, extending north and south, is met with, which most probably is a continuation of the Pieman zone, and may be found auriferous in places throughout its whole length.

All the tributaries of the Queen River contain a per-centage of gold, and many have been worked with profitable results. The main stream is still untried, but I fancy, from the appearance of the fine banks of wash exposed to view along its banks, that parties of miners would reap a rich harvest if they would give time and patience to prospect it thoroughly.

At the time of my visit to Lynch's Creek only seventeen miners were in the district. Mr. Lynch with a party of men was busily employed prospecting for an auriferous quartz lode, and undertaking his work under great difficulties. A more likely country for reefing cannot be found on the West Coast, and the only reason why it carries so small a population is the want of overland communication with Macquarie Harbour.

If the Government intend to construct an overland metal road, I would strongly recommend that a commencement should be made at Macquarie Harbour to the good land on the King River, and a branch track could then be constructed to the chief scene of mining operations.

After leaving this band, slate formation extends to within a short distance of the sea coast; but from the appearance of the country I would say it is non-auriferous.

Valuable Timber.

Beautiful clumps of the elegant Pencil Cedar (*Athrotaxis laxifolia*) grow along the banks of the Collingwood River. Fine beds of King William Pine (*Athrotaxis cupressoides*) add to the beauty of the Victoria Pass and the flats of the Nelson River.

A small drooping pine, different I believe, but very similar to the Huon Pine, lends enchantment to the banks of the King River. But the extensive beds of *Dacrydium Franklinii*, on the Queen River, surpass all, both in size and grandeur.

Agricultural Land.

The vast extent of open country on the eastern and north sides of the King William Range occupy a large area of fertile land, formed by the decaying of the trap rocks, but owing to the high altitude, 2400 feet, it is doubtful whether the cultivation of cereals would be productive, yet artificial grasses might be grown with great success.

The wattle and dogwood flats of the King River extend for ten miles in length, and from a half to a quarter of a mile in breadth, and appear to be extremely fertile. Patches of fine herbage, closely cropped by the wallaby and kangaroo, give this locality a more civilised appearance.

A patch of about 2000 acres, situated near the Tully River, comprises all the good soil met with on our journey.

Approximate Heights and Distances.

	TOTAL.		OPEN.	TIMBER.
	Feet.	Miles.	Miles.	Miles.
Main depôt	2415	—	—	—
Arrowsmith	2810	5½	5½	—
Wombat Glen	1110	1 and 3	—	1 and 3
Crossing of Surprise	1095	2	—	2
Painter's Plains	1220	3	1	2
Crossing of Surprise	1140	2	1½	0½
Camp under timbered spur	1095	1½	1½	0½
Timbered spur	1370	1½	0¾	0¾
Collingwood depôt	995	2	1	1
Source of Collingwood River under Pass	1250	11	8	3

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	TOTAL.		OPEN.	TIMBER.
	<i>Feet.</i>	<i>Miles.</i>	<i>Miles.</i>	<i>Miles.</i>
Victoria Pass	1410	0½	—	0½
Flats of Nelson River	955	2	—	2
Second crossing of Nelson River	790	2	0½	1½
Saddle through spur	970	1½	—	1½
Camp at Small Plain	740	1½	—	1½
King River	670	2½	1	1½
Owen Gap	1590	2½	2	0½
Creek on west fall of Gap	690	1½	0½	1
Queen River	440	2	—	2
Heemskirk Ford, Henty River	—	17½	1	16½
TOTAL.....	—	62½ or 64½	23½	38½ or 40½

Approximate Heights of Gaps in West Coast Range.

	<i>Feet.</i>
Huxley Gap.....	1670
Sedgwick Gap.....	1260
Mount Huxley.....	2830

The first column contains the leading heights, taken approximately, as far as the Queen River from the main depôt. Why I do not continue them to the coast line is for this reason, that I believe them to be incorrect. In column second the estimated distance between each height is shown in miles: the totals of mileage represent the distances of the two tracks over Arrowsmith. Columns third and fourth contain the distance of open and timbered country between each height respectively.

With this Report is forwarded a map with line of track and alterations of the course of rivers, &c., shown with tolerable accuracy, and fixed by prismatic compass observations to Trigonometrical Stations, where possible. New names, conferred by myself and party, are marked thereon for the approval of your Department; also a diary, containing observations by prismatic compass.

Small specimens of all the different strata along the track will be forwarded to your office when properly labelled.

Before concluding, I wish to mention that the three gentlemen who accompanied me bore all hardships with extreme fortitude, and rendered every assistance to further the success of the expedition. The good humour, jocularity, and harmony which prevailed were characteristics of the journey.

I have the honor to be,
Sir,

Your obedient Servant,
T. B. MOORE.

J. FINCHAM, Esq., Engineer-in-Chief.