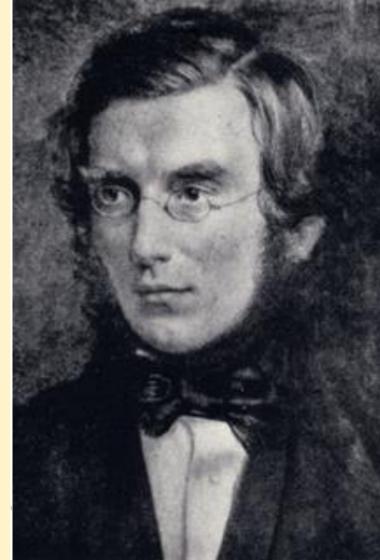
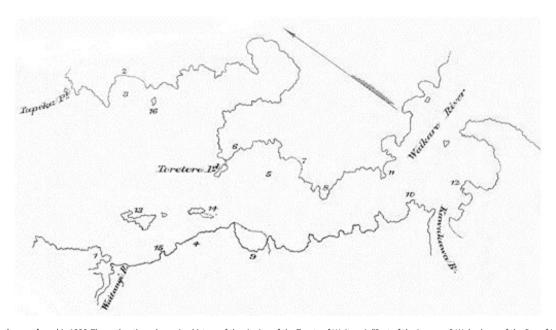
eColenso

Supplement to volume 9 number 3: March 2018

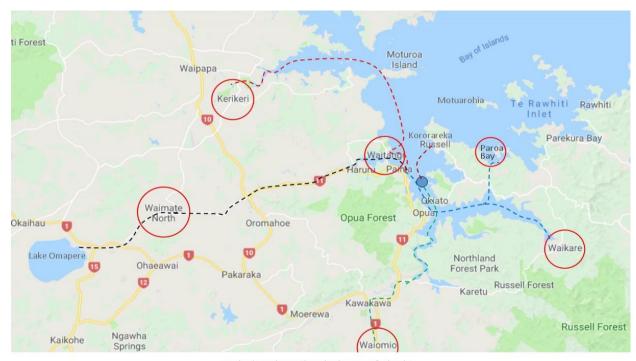
Joseph Dalton Hooker in the Bay of Islands 18 August to 23 November 1841

eColenso is the free email publication of the Colenso Society, 32 Hawkestone St, Thorndon, Wellington 6011: please forward it to interested others. Contributions should be emailed to the editor, Ian St George, istge@yahoo.co.nz. Past issues are at www.colensostudy.id.au/Newletter%20Masthead.htm.





Colenso's map, from his 1890 The authentic and genuine history of the signing of the Treaty of Waitangi: "Part of the inner or S.W. harbour of the Bay of Islands, showing Waitangi (where the treaty was signed), Okiato (Russell), the first seat of Government, and other principal places mentioned in this book. 1. Waitangi. 2. Kororareka (now Russell). 3. Kororeareka anchorage. 4. Paihia. 5. The inner anchorage. 6. Wahapu, merchant's store and American consulate. 7. Omata. 8. Okiato (first seat of Government and first Russell). 9. Te Haumi ("Muddy-muddy" of seamen!). 10. Opua. 11. Oropa. 12. Otuihu (Pomare's stronghold). 13. Motomaire Islet. 14. Motuorangi Islet. 15. Nihonui Point. 16. Observatory Islet (used by the French surveying ships, A.D. 1824, 1832, for that purpose)".



Hooker's major outings in the Bay of Islands

ANTARCTIC JOURNAL [p.156] August 1841.

- 16th. We are nearing the land very fast which consists of bare rusty colored hills about 1000 ft high ending in steep precipices towards the sea sparingly covered with trees
 Cape Maria Van Diemen & North Cape conspicuous many Rotges, black petrel, Porpoises & Albatross.
- 17th. Lat 34.29 Long 173.36. Many bk petrel Rotges & Albatrosses. Too misty to see the land lying along the coast with wind N.E. to N.
- 18th. Having lain to all night this morning the ships head was put towards the land & though the weather was thick by 9 a.m. we had land on both beams consisting of Rocky base capes & bearing up we ran into the Bay of Islands with thick & very squally weather tremendous rain & violent gusts of wind so that we could see very little of the country. Several vessels were lying off Korārīka the chief town on the E side of the Bay & among several whalers a Yankee Corvette the York Town Capt. Aulick.¹ Running with our Topsails on the caps far above the Anchorage we came to in the Kawa Kawa river in a strong tide & this being the first harbor we ever came into with a fair wind we were soon moored

Aulick, Wilkes and Ross participated in a celebrated row over Antarctic navigation.

the "Terror" astern, Point Omatta flagstaff S56E & pt. Tore Tore N.3W. All the afternoon & evening it continued raining hard.



The "inner anchorage" where the *Erebus & Terror* moored (Toretore N3W and Omata point S56E)

19th. A dense mist covering every thing so thickly that this morning we could hardly see the flying jib boom. Calm. At 9 a.m. it began to rise with a S.W. wind & soon unveil the beautiful points and islets of the Bay & the morning was succeeded by a clear & cloudless forenoon. A canoe coming along side we with some difficulty tendered a wish to be landed intelligible to a tattooed gentleman. These Canoes are hewn out of a single piece of wood thick & clumsy wedge shaped

below about 18 inches broad & 20 foot long with no thwarts the bow & stern very raking & obtuse – very crank – the Padder sits in the stern an intelligent dirty faced fellow with a flattish nose, & high cheek bones, & pouting lips & strikes the water alternately on each side with a short paddle having a lanceolate acute blade; squatting in the bottom we reached the shore and safety though we rather overloaded the little craft which sped with fleetness over the Bay. Landing on the W. shore of the Bay we started for Paihia the missionary settlement where I had a letter to deliver to Mr Collenso the printer of the establishment from Capt. King.² The shore was alternately sandy or rocky the rocks being clay slate? or trap which here & there runs out in spits. The holes in these rocks were productive in shells – a Hermit crab – some Isopods, Gammari,³ a fine shrimp, some Annelides, Chitons a crab & a curious little spider that skims over the surface of the salt water. Sand flies were very abundant & annoying, they were small black flies that settle in swarms especially on the hands when after sucking their fill of blood they fly away leaving the spot of blood flowing. Numerous vallys lead down to the water divided by low bushy hills with steep clayey banks towards the water above the high water mark. The

specimens were small. Above this & at the foot of the cliffs were the Metrosideros tomentosa⁵ & Myoporum lætum⁶ the former a very fine tree coming into flower which like the Auckland Island one has the flower terminal & at the back furnished with large tufts of pendant rhizomata. The back is whitish the leaves deep green with tomentose undersides, its whole habit was that of the southern one mentioned & they doubtless form a separate genus perhaps peculiar to these Islands. Among the Brushwood a pretty Leptospermum⁷ with white flowers is very common & beautiful. Turning sharp round a rocky point after a miles walk we suddenly opened Paihia Bay & were much struck with the beauty of the spot. Above a long sandy beach on which a long surf was rolling in a beautiful curve of about ¼ mile round were some pretty white & brick cottages fenced in with gardens & a long low wooden breakwater opposite the water & backed by some swelling wooded hills & valleys; the spot was retired in the extreme & shut out from all publicity.

plant on the beach was the <u>Salicornia Indica</u>⁴ growing on the rocks but within high water mark but the

² Phillip Parker King

³ Scuds

⁴ Samphire

⁵ Pohutukawa

⁶ Ngaio

⁷ Manuka



Establishment of the Missionaries at Paihia: de Sainson 1835

Several neatly & well-dressed clean natives were at work in the gardens while other healthy & strong young men were launching a boat. Some little English girls (with long tails like Marleena Kinwigs) were playing about one of the doors & altogether the place wore an air of English neatness & comfort that was pleasing in the extreme while the long canoes & black faces added

interest & gave a foreign aspect to the scene. Asking for Mr Collensos from an intelligent native we were directed to a square brick one-storied cottage with a high roof in which was the printing establishment as well as the owners dwelling. Entering the printing establishment I was surprised to find how complete all the arrangements were, they seemed all very busy & the sheets of native language well struck off & ready to be dried emitted a smell strongly reminding me of the time when in going backwards & forward to School I was wont to act as printers devil to my Father. In the sitting room was a portrait of poor Allan Cunningham & a pretty Lime tree in a bottle as also some of my fathers Botanical works on a table. Mr Collenso received us very kindly & talked some fine collections he had sent home & of the gratification their immediate acknowledgement gave him from Glasgow as also of Bidwill & Lady Franklin's visit.8 The difficulty now in going about the country arises from the scarcity of natives who being few in number are monopolised by the British at Korārīka where their intercourse is not improving to the blacks. Any part of the country may now be travelled over with safety the natives invariably inoffensive they never steal from the Missionaries who

⁸ John Carne Bidwill arrived at the Bay on 5 February 1839, Lady Jane Franklin in May 1841.

fear none here but the [158] deprayed set of runaways & the outcasts of Sydney. Of shells Mr Collenso has 150 species with many Insects & minerals. In his little garden I saw the Corynocarpus⁹ – Clianthus puniceus;¹⁰ Thelymitra Forsteri, 11 a little Celmisia from the southward. The Phormium tenax¹² a curious fan shaped variety of it with striped leaves like gardeners garters & a new species of the same genus. Some double sweet violets pleased me beyond anything, not having seen the flowers since leaving home. Some natives here accosted us shaking hands all round smiling very good-naturedly & seeming very well satisfied with themselves & others. From his house we went to look at the Church a very neat low square white washed building with benches. clean wood floor pulpit & organ complete; it is generally well filled with about 100 natives who attend English service in the morning & native in the afternoon. Some small horses in the neighbourhood seemed of a good breed & I was told they were Chilian. Leaving Paihia we walked on passing a boat which was taking on board some geese bound in a curious manner being enveloped singly or in pairs tail to tail by matting, their heads only being exserted which gave the living

9 Karaka

bundles a droll appearance. Some native women & girls came up & commenced jabbering their Lingo they were short & square built broad shouldered coppery black & very dirty with tangled black locks that hung over the backs of their head & were cut short over the forehead. Some wore ear ornaments of bone & another had a short thatched grass petticoat very thick & clumsy. All the older ones were more or less tattoed especially in lines on the red part of their thick blubbery lips which were in no wise tempting, they smoked & some carried children gipsy fashion on her back in an old counterpane. The shores of the Bay were covered with Turnips, Radishes & cabbage & all run to root & seed & among them a fine native Euphorbia the E. glauca Forst¹³ & a smaller one. Other seaside plants were Myoporum lætum a low very glossy green tree. The Corynocarpus, Salicornia Indica an Oxalis, Linum monogynum¹⁴ & the Metrosideros before mentioned. Passing another bay we came to some flat marshy land & turned up towards a wooded valley bounded by some hills. The rich soil of the plain produced a Gymnostomum pyriforme, 15 a Phascum & some Weissia with Brya & Fusaria hygrometrica. 16 The ground was every where covered

¹⁰ Kaka beak

¹¹ Maukuuku, a sun orchid

¹² Flax

¹³ Native spurge

¹⁴ Rauhuia, kaho, linen flax

¹⁵ A moss

¹⁶ Bryophytes

with a Leptospermum in beautiful flower, Bidens pilosa¹⁷? L. Plantago varia? A Goniocarpus, Epilobia, Stellaria nudia & Cerastium vulgatum?¹⁸ At the foot of the valley was a large swamp breast high with Typha angustifolia¹⁹ & Cyperus ustulatus²⁰ a lunate leaved Drosera²¹ & many Marsh plants Steganiæ²² &c. The Hills were steep with rounded or conical summits formed of a reddish yellow stiff clay which formed long land slips carrying down the ferns &c to the swamp below. They were covered with Pteris esculenta,²³ Doodia aspera?²⁴ & other ferns. The gully which ran among the hills was very deep & thickly wooded & at the bottom were the Cyathea glauca a fine tree fern grew was exceedingly dense & dark. The trees were the Corynocarpus, Vitex littoralis, ²⁵ Fuschia excorticata, Veronica, Aralidia, Pittospora, the Dacrydium plumosum? & other trees on which grew many ferns & Parasitic plants. The ground was covered with the



Drosera stenopetala, Walter Hood Fitch's lithograph from Hookers Flora Novae Zelandiae

¹⁷ An introduced aster

¹⁸ All flowering plants

¹⁹ Raupo

²⁰ Cutty grass

²¹ Sundew

²² Hard fern

²³ Bracken

²⁴ Pukupuku, a fern

²⁵ Puriri

Acæna sanguisorbæ. 26 Steganiæ, Asplenia. Hymenophylla, & many other Ferns which preponderated above all other vegetation. Hydrocotyle Asiatica²⁷ grew in the more open ground with a Weinmannium²⁸ & the Rubus Schmidelioides²⁹ crept over every thing & together with other climbing plants often rendered the thickets impervious. Coprosmæ were abundant as was <u>Leucopogon fasciculatum</u>. 30 The Racopilum tomentosum³¹ was very common with some Lichens. A little green bird³² was singing lustily among the woods & a pretty flycatcher? with a fan tail of white & grey feathers.³³ Returning as we came we found a whole party of the natives opposite the Mission houses all well dressed some really very handsome fellows with well tattoed faces. One chief had a curious Sharks tooth in his right ear & another a Parson bird skin in his. Some of them went through some steps of a war dance which appeared to me to consist of violently stamping the foot on the ground in time & with regularity making concomitant motions with the head & hands & singing a

26 Bidibidi 27 Pennywort monotonous quick howl. Opposite the ships we found a much larger canoe to take us off with a man & woman, who had a fine dog & two mat baskets one of Potatoes & the other of Cockles which are here abundant & good. The man wanted an exorbitant sum for his trouble but did not seem to know the value of money & soon came down to a couple of shillings. He could not speak English & indeed I am surprized to find here so few who can among the Natives. Many of those at Paihia however could & also were clever arithmeticians for we tried them & found one labouring man who added up sums on the Sand very quickly doubtless through the labours of the Missionaries.

20th. Accompanied Mr Oakeley³⁴ & Abernethy³⁵ in a boat up the Cawa Cawa river to pasture our sheep; after passing the Barracks the river gradually narrows though still nearly a mile broad its banks are steep & rocky with numerous Mangrove swamps in deep bays, the water muddy & dirty. The trees on the banks are small & generally confined to the hill valleys in the depths of which they gain a considerable height at times. These valleys however are a bright green tint even now in winter time which strongly contrast with the livid green

²⁸ Weinmannia racemosa = kamahi

²⁹ Bush lawyer

³⁰ Mingimingi

³¹ A moss

³² Korimako, the bellbird

³³ Piwakawaka the fantail

³⁴ Henry Oakley, mate on the Erebus

³⁵ Thomas Abernethy, RN gunner

woods of Tasmania & of the Huon River³⁶ which this in some points resembled though destitute of the noble timber which adorns that river's banks. Proceeding about [159] two miles up we came to a very neat little building belonging to a Capt. Bateman³⁷ the Port Officer close on the banks of the river. About a mile further up we landed at a Capt. Swain's ³⁸ & crossing a hill came down to a Mangrove swamp said to be full of ducks but except a few shags we saw no birds. The Morass at the back opened into a valley up which we went. The brushwood at the back was adorned with the large Lycopodium densum³⁹ Dracophyllum Urvillianum? & Gaultheria antipoda⁴⁰ with the everlasting Pteris & Leptospermum. In the wood which was rather dense & very steep were some beautiful Hymenophylla & other ferns. Lycopodium volubile? Todea pellucida, Lygodium articulatum climbing high up the trees – Polypodium pustulatum? Nipholobus rupestris. 41 several Lomaria & Asplenia, Allantodia tenera, Asplenia lucidum? Pterides, Adiantum affine, Trichomanes venosum, three or four Hymenophylla, & above all the

Cyathea dealbata⁴² which throws up stems about 12 ft high with a crown of leaves at the top. In beauty these tree ferns fall far short of the Tasmanian Dicksonia arborea which I have seen attaining a height of with stems feet in circumference of a rich brown color & beautiful tufts of leaves ft long of a rich yellow green & a graceful wave - while these are miserably herring gutted lanky things with black stems a few inches in diameter (3 or 4) & a naked tuft horizontal dark green fronds with silvery undersides - the latter their only beauty. There were also many specimens of what I took to be Areca sapida, 43 with Lepidosperma elatius,⁴⁴ Arthropodium cirrhatum⁴⁵ & Cordyline australis⁴⁶ which grows on the branches of trees in immense tufts sometimes crowning one with an immense mass. Among other trees were a Coprosma in flower & the Phyllocladus trichomanoides⁴⁷ of small size however & what I took to be the Freycinetia⁴⁸ growing up a tree. Near the head of the valley the little Pterostylis Banksii⁴⁹ was in full flower. Of Mosses the

³⁶ SW Tasmania

³⁷ Thomas Bateman had arrived in 1839.

³⁸ Captain Calvin Swain, a Nantucket whaler who settled in the Bay.

³⁹ Clubmoss

⁴⁰ Snowberry

⁴¹ Pyrrosia

⁴² Silver treefern

⁴³ Nikau

⁴⁴ A sedge

⁴⁵ Renga renga

⁴⁶ Cabbage tree

⁴⁷ Tanekaha

⁴⁸ Freycinetia banksia = kiekie

⁴⁹ Tutukiwi, a large greenhood orchid

chief were a Dicranum like glaucum, Racopilum tomentosum several Leskea & Hypna, Hookeria quadriferia & rotulata some Brya, Zygodon?. Nertera setifolia & planifolia, several Schlotheimiæ – & some more minute mosses, Lichens & Fungi. Ascending to the top of the hill I collected a few more specimens of the Phascum seen the day before, but it grew sparingly. The view from the summit was of a succession of low rounded topped hills covered with Fern & here & there clumps of wood. All along the tops of these Hills the natives have run tracks in which they walk in Indian file but I saw no signs of the fortifications that Mr Darwin mentions. – and even in the neighbourhood of the villages hardly any cultivated land is to be seen. Keeping along the top of the hill towards a higher one we crossed several heights & at length came to a wooded saddle looking down from which into the valleys the feathery summits of the Cyathea & the curious Cordylines on the summits of the dead and live stumps & trees had a curious & beautiful effect among the bright green foliage which remarkably reminded me of Diana's peak in St Helena. On some trees here the Nertera setosa was in fruit & a little green leaved Dicranum which I had found (I think) barren in D. Aucklands Islands. From this we ascended to the top of the hill about 700 ft above the sea & enjoyed a

magnificent view of the Bay, surely a Bay of rocky Islands & the sea beyond the river Cawa Cawa winding up among the wooden hills & to the Southward & Westward some detached ranges of blue high crater shaped mountains. Altogether the view was very fine though deficient in any striking point, it was pleasing & beautiful but not grand or fertile. Near the summit we shot a Lark & I found the Thelimitra Forsteri which is of a very pale purple or nearly white, & a small Weissia among some stones. From this we turned to the Westward & descended to a Mangrove swamp at the Bay. The swamp was left by the tide & head of very muddy intersected by muddy deep streams over which we leaped & were nearly bogged at times. The mud is of a yellow brown color out of which the Avicennia tomentosa⁵⁰ grows forming a sickly green thicket of trees about 12-14 feet high, branching from the base with smooth rounded dirty grey trunks & branches vary sparingly leafy. Under foot the mud was covered with solitary shoots of the plant from 2-4 inches high all muddy. Delicious oysters were abundant on these shoots & on the trunks of the trees while caddis & a Turbo? Covered the ground. Some King fishers were common near the sea & the Alyssum maritimum⁵¹

⁵⁰ A mangrove

⁵¹ Sweet alyssum

was abundant. No mosses but some liliaceous looking Lichen grew on these unhealthy looking Mangroves, nor did I see any Insects. In the middle of the swamp were some large lumps of a vesicular slag like that which covers newly cast pig Iron quite detached from the hills which are of trap. Walking round the Bay we came to some wet rocks where the Leptostomum macrocarpa was abundant & is a very handsome Moss from its bright though pale green foliage & the large size of the Capsule. The beautiful Niphobolus rupestris was also common with a little Peperomia perhaps the Urvilliana Rich. Further on on a rock there had settled an immense swarm of flies & another on a smaller rock near it. What brought them there I cannot conceive as there appeared to me no attraction of animal matter on the bare shaded face of two particular rocks which they entirely blackened by the quantity. The rocks were trap within a few yards of the sea & the one in particular on which they settled out of the two in most abundance might have weighed 3 or 4 Tons, thousands of similar rocks were near it on which there was not a single fly. Nor did they seemed to be being about any thing. About a mile further on came to a similar swarm. A little flycatcher was luxuriating on them. [160] Leaving the bay we came to the banks of the Cawa Cawa river opposite our ships at the residence of the American Consul who rents

his house for £600 a year from a person who has been in the Colony 23 years⁵² & who came out as a carpenter to a whaler & has since by business &c amassed a great deal of money. Except one of the Missionaries he is the oldest resident in New Zealand, he is a Scotch man & was a school fellow of our Gunner Abernethy. He very civilly gave us a boat to take us on board.

21st. Drying plants all the morning. In the afternoon landed at Point Omatta where there is a small depot of 18 Soldiers the main body of military being at Auckland which has now become the seat of Government & the residence of Capt. Hobson the Lieut. Governor. Crossing the hill descended into a little valley running up the country from a Mangrove swamp full of tree ferns &c with the Vitex littoralis. Two of the Coniferæ grew here the Dacrydium cupressinum⁵³ & Dammara australis?⁵⁴ The former was a pretty young tree with pendant weeping branches & the latter had a stem or trunk about 50 ft high branched only at the top of a rich red brown cylindrical & straight, about 3 feet in diameter. Some little fly catchers, ground larks and a pair of parson birds were shot in the skirts of the wood. The Holomitrion vaginatum Hook grew sparingly on mossy trunks of

⁵² Gilbert Mair snr. The site is shown on Colenso's map, p2.

³³ KIIII

⁵⁴ Kauri

trees with an Orthotrichum⁵⁵ among which was a little Bolbophyllum.⁵⁶ In the densest parts of the valley the pretty Trichomanes reniforme⁵⁷ was abundant on the ground, stones & trunks of trees with Hymenophylla & several other ferns. Near the head of the valley the little Pterostylis Banksii was abundant & the Acianthus rivularis?⁵⁸ but not in flower. On the top of the hill we came to one of the numerous little native paths which intersect the country & found a little signal made of two sticks spliced together stuck into the ground with a bit of red cloth at the top – a practice common among the Malays. Descended to the beach opposite the ships & in breaking a piece of rock near the sea found a species of Nereis? living in such situations.

24th. A Sydney ship brought letters from home & the long lost Admiralty bag which came round by Van Diemens land.

> Cawa-Cawa River Bay of Islands, New Zealand August 24th 1841 7pm.

My dear Father

55 A moss

56 An epiphytic orchid

57 Kidney fern

58 The orchid Corybas rivularis

Your most welcome & long looked for letters have just come on board, via Sydney, & as a Mail is now making up to go tomorrow morning. I hasten to answer them. In this you will know that the news of Mary's ill health is old, & superseded by better which God grant may be ere long renewed. – We arrived here on the 18th after a rather long & bad passage for me, as the weather was such that I could not change my last gathered Sydney plants: as however I had taken the precaution of giving plenty of paper they did not suffer as much as I expected. Our stay at Port Jackson was a very rainy one, but about 200 sp were collected & among others a species of Sclotheimia(?) which may be new. During the passage nothing particular happened. I had one opportunity of using the tow net which produced some new & good things for the pencil, & we actually brought up several live Animals from a depth of 400 fathoms! in Lat 33.32 & Long 167.40 but no trace of Vegetable life. You will much regret this comparatively well known spot being our New Zealand rendesvouz but I must now as I have all along to do, make the best of a bad job, & have already made a tolerable commencement among the Mosses & Ferns: of the latter I have about 32 sp. & of the former about as many, including a Phascum & some Weissia new genera to Cunningham's Flora. Few plants are in flower but the Vitex littoralis & Fuchsia

excorticans, of Orchideæ the Thelimitra Forsteri & Pterostylis Banksii – of Fungi I have several fine species as also of Lichens & a few Seaweeds. My time shall be devoted here to the cryptogammia & having already some hundreds of specimens I hope to amass a tolerable set before leaving. Collenso I called upon immediately on my arrival, & found him very busy with missionary matters: he is printer to the establishment & seems a nice fellow Capt King gave me a letter to him; he has just despatched a parcel to you⁵⁹ who have pleased him extremely by your promptness in answering his first letter, & by the prospect of his orchideous plant being so soon figured. In a day or two I go up the country with him, in search of Cryptogamia, though I fear we cannot go far, the rivers up the country being impassable, indeed this is a terribly wet & swampy place, even along the shore it is impossible to go far, the bays are so deep & the bogs & rivers now so frequent. The scenery is very beautiful, all made up of green hills & wooded valleys but no high mountains, so that I fear I may not be able to find an Andræa, a very favorite genus of mine - Menzies' <u>Trichostomum</u> perichætiale (<u>H</u>olomitrium) I have gathered sparingly, so that now you can see the

peristome which is like that of the other species of the genus or subgenus, also <u>Nertera setosa</u> a <u>Fissidens</u> & other things. Most sincerely do I hope to find the <u>Dawsonia</u> & shall look earnestly for it, as also the <u>Polystichum dendroides</u> of which Bidwell showed me a specimen out of fruit in Sydney. As I suppose you will now correspond with Collenso for live plants, I have asked him when the time comes, to send mosses too; it would be a great treat to you to see some of these things alive — <u>Hookeriæ rotulata</u>, pennata & quadrifaria are common, but the two latter always barren. The <u>Leptostonum macrocarpum</u> is one of the finest things here with a Gymnostomum like pyriforme.

I was exceedingly glad to receive with your letters one from Robb & another from Mitchell it is very kind in them to write; the former recommends various Scientific enquiries to me which I shall attend to as far as circumstances permit, & the latter after sympathising most [2] deeply & feelingly, gives me a delightful account of his tour in the Continent, he was always a most kind hearted fellow & one I have a great esteem for. From Thomson I have not heard, nor from any one since leaving home but him what have come through you he is, I see, appointed to the Museum at Calcutta, where I hope he will improve himself. Like me medical studies occupy little of his time, & he is devoted Robb

⁵⁹ Colenso had written to WJ Hooker on 14 February 1840 with a number of specimens, including 14 orchids, several of which he thought new. He wrote again on 20 July 1841, with the "just despatched" parcel.

says to Natural History. Much do I wish that I had opportunity to devote myself entirely to collecting plants & studying them, but you know how I am situated, that we are comparatively seldom off the sea & then in the most unpropitious seasons, for travelling or collecting, this is my main reason for devoting my time to the Crustacea study to which I am not attached. & which I have no intention of sticking to, my other reasons are that there is no one else to study what there will be no other opportunity in all possibility of seeing alive, & the ready use of the pencil is indispensable to the subject. Again the discoveries we have hitherto made are not only beautiful but most wonderful serious & novel. The collection is almost all of my own making & Capt Ross's (altogether indeed). No other vessel or collection can ever enjoy the opportunities of constant sounding & dredging & the use of the Towing net that we do, nor is it probable that any future collector will have a Captain so devoted to the cause of Marine Zoology & so constantly on the alert to snatch the most trifling opportunities of adding to the collection, & lastly it is my only means of improving the expedition much to my own advantage (as far as fame goes) or to the public for whom I am bound to use my best endeavours. I again repeat that I have no intention of prosecuting the study further than I think myself in duty bound. In harbor I

only collect them, with seaweeds, & never draw or do any thing but stow them away & as for at sea I hope the notes & drawings I sent home will show that I do not neglect Botany, nay that I have spent as much time as the heavy seas & bad weather of 70 South would allow me the plants & mosses. – All this renders me most anxious to see the termination of the voyage for I have no wish but to continue at plants. Not that I am any thing but extremely comfortable here both in my mess. the cabin & the ship my only regret is that the necessarily altered course & prospects of the voyage stand so much in the way of Botany. The utter desolation of 70 South could never have been expected. & Capt Ross as fully expected to winter & collect plants in spring & leave the Ice for good & all as I did, as also that we should be able any where to land & collect as in the North. – It cannot be helped now, we must again return to the Southward & I shall again be employed alternately collecting sea animals examining plants & sketching coast views. I shall hitherto never regret having gone the voyage for I doubt not we shall enjoy the thanks & praise of our countrymen for what we have done. No pains has been spared to render the voyage serviceable we have done our best & Capt Ross' perseverance has been put to the most severe test in penetrating as far as he has, & for my own part I am

willing to work night & day, as I have done, to make accurate sketches of the products of our labors. To me it will always be a satisfaction to know that I have done according to my poor abilities. & if I cannot please Botanists I am not therefore to be idle when I may do some good to Zoology. Could I with honor leave the expedition here I would at once & send home my plants for sale as I collected them, but now my hope & earnest wish to be able on my return home to devote my time solely to Botany & to that end the sooner we get back the better for me. My habits are not expensive, but should I not be able to live at home with you, I would have no objections to follow Gardner's steps & gain an honorable livelyhood by the sale of specimens. – From here in a little more than a month we start for Chatham Island, & thence to the Southward for, I hope, the last time, we shall come up by the Falkland's (where I hope to hear from home) & thence Northward to the Cape. The tenor of your letters are so altered by my mother's news of Feby 1st & again by the newspaper announcement of your appointment to Kew, that I do not know at all what you are all about. Poor Mary is always in my thoughts, but I cannot think of her but as recovering & Elizabeth too. It is all a mistake about news of us having gone from Kerguelens Land [3] to Van Diemen's, but I am sorry that you should have

heard so, as you must naturally have expected to have heard from me long ere you did, however long ere this you have had long & full accounts of our two winters, at Kerguelen's Land & in the Antarctic Circle, for I wrote you many letters, indeed many more than I have received, though you write often & fully I know. I much fear that I have made some mistakes in my V.D.L. Flora especially in including the Tetratheæ pilosa under glandulosa. By the bye you now spell V.D.L. with a Dieman instead of Diemen you used to correct me for it very properly, & the inhabitants are sure to observe it here. Further they have established the name Tasmania which they much wish should be confirmed from home. *In the Icones*⁶⁰ *I made the following remarks on the 6th* part & hope you will excuse my mentioning them as it strikes me they are errors on your part – <u>Ranunc</u> pimpinellifolius I thought & still think new, its characters are constant & its habitat different from the true plant – Mniarum fasciculatum I thought a new sp. – Table 285 has letter press of 375 & vice versa a mistake of the binder both in Gunn's & my copy. Tillæa verticillasis is my Bulliarda recurva you will remark the hypogynous scales &c. The numbers of the Journal containing the V.D.L. plants have not yet arrived, I

60 Icones plantarum edited by WJ Hooker

thank you very much for them, as also for the fine box that I received before, indeed I cannot thank you too much for these things. Especially for the Journal which is capital, poor Gardner is home now & will do much I doubt not; all will supersede me & what a mass of background I shall have to work up on my return; but with your help & nothing else to do I ought to get on fast. Nothing would give me greater pleasure than to help you in removing your goods to Kew, 61 but between Fitch⁶² & Arnott⁶³ you will have some manual & head help, I sincerely hope the latter will obtain the Professorship he is such an attached friend to all our family, that I naturally include him at our fire side. -Iam most glad to hear that you have finished the Arctic Botany & Beecheys, though the former will be a sad contrast for the Antarctic. The Genera filicum too is in good hands with Fitch & I sincerely hope he may rival Bauer⁶⁴ though I doubt if he will ever be half so intelligent as our poor departed friend (I saw his death in the Athenæum). – Of the Association in Glasgow I know nothing but what your letter tells me, were you not so busy you would have sent me some Athenæum's or

61 WJ Hooker had been appointed Director at Kew

papers, for I should much like to have heard all about it. What would I not have given to see Link⁶⁵ & Klotzsch⁶⁶ (I forget how to spell his name). – I wrote Klotzsch a long letter before leaving, but have heard nothing from "the little pot who soon grows hot". And do you remember little Link's running away or rather pocketting the horny valves of the capsule of Frientalis Europeæ which Murray gave me? Poor Klst he is almost the only one I can associate with my bygone days. Poor Cunningham was a great favorite wherever he went & his portrait is every where, Collenso says his health was such that he could do little here. I suppose Lindley has succeeded to the Sectship of the Hort Soc. I am glad Bentham devotes his time wholly to Botany, his collection must now be getting a very fine one. Lindleys Gardeners Gazette or newspaper I have seen announced but have not seen it he must be a very indefatigable fellow; his Nat Orders are invaluable to me, & his arrangement of dividing plants into groups is very useful to the young Botanist & though his new fangled notions do not please me there is a vast deal of good in the book. Bagan has you tell me got Cumin's chair I cannot congratulate the University on the change, though the new Professor was very kind to me & signed

⁶² Walter Hood Fitch, botanical artist

⁶³ George Arnott Walker Arnott succeeded WJ Hooker as Professor of Botany at the University of Glasgow

⁶⁴ Franz Bauer, botanical artist

⁶⁵ Prof. JHF Link, Berlin, who trained Klotsch

⁶⁶ Johann Friedrich Klotsch was curator of WJ Hooker's Glasgow herbarium

a ticket of Med. Jurisprudence which I hardly attended. They surely have done wrong in neglecting Dr Chalmers, as to the Church Intrusion, it is a new phrase to me. By this conveyance you will receive a picture & map which I made for you I must request you to be very particular how you show them especially the latter for were it known publicly or taken advantage of I should get into hot water as "All charts drawings writings &c go without reserve to the Admiralty" & Capt Ross is very jealous; of course you will if you think proper show them to Brown, Boot & Bentham & all that I request is, that whoever may see them, will keep it strictly to themselves, not that I care for a scold after I get home, but because it is hardly fair of me to take an advantage which if all others did, would lead to most pernicious results. Do not think from this that I attach any value to the pictures, for they are very poor indeed though I cannot do better, you will understand my motives I feel sure & act accordingly. – I am very sorry that Cumins collections have suffered so much, mine I store in dried Rum or Tobacco casks & they keep beautifully. I do not send the best [4] set home as I do not know to whom they go. If I can manage to smuggle a cask out of the ship I shall send you one, but I do not know what the purser will say. I have also about 20 skins of birds for you which is a tolerable proportion, as they are very

difficult to be procured in the Southward. – For Maria I have been collecting shells & some curious ones for her, though none of any great beauty. – Insects are very scarce here indeed, I have a few. I had hoped ere this to have sent you another bill but we have had to lay in a 12 month's stock at Sydney which has eaten a terrible hole into my cheque; & you may have heard that the two ships gave a ball to the Tasmanians before leaving the Derwent which ran away with several hundreds of pounds. The unparalleled kindness which we received from the inhabitants of Van Diemens Land demanded some return & it was given in the shape of a dance on board the two ships which with immense trouble were lashed together, one as a ball & the other as supper room the most interesting part of it to you would be that the whole of the ball room was festooned with fronds of the tree fern of which many cart loads were brought down from Mt Wellington. The whole affair was unique & beautiful in the extreme & without doubt was the most splendid thing of the kind ever seen, the expense was however enormous & for my part I had been to so few public partys of any kind that I took no more interest in it than if it were in the Glasgow Assembly rooms. It was impossible for any person not to enjoy themselves that pleased, & the circumstances demanded some return for the many attentions we received. Sir

John Franklin took so much interest in it that he cut about 200 vards of carriage road for the vehicles! & an awned way was made on a bridge of boats from the ships to the shore. None of us ever hear what interest the public (I mean the discerning public) take in our expeditions; Further than seeing in the Navy lists that we are in commission. & our particular service, we are totally ignorant of our being thought of. A very different case to what the several Arctic expeditions presented. no crowds came to see us getting under weigh, & further than being cheered by the "Howe" at the Nore we received no public testimonial of good feeling. Doubtless the results of our last cruize will awaken them to think of us. I mention this because my shipmates often ask me (knowing your interest in us) what is said at home & because the executives though as hard worked as the Scientifics will want that fame which will be attached to such merits as others will gain from working at the collateral branches unconnected with the naval service. – I am sorry I have no time to add more as I must write to my mother & sisters if possible. – You shall hear from me ere long. Yours most affectionately Jos. D. Hooker.

I shall write to Dr Booth on leaving this.

25th. Walked along the beach opposite the ships to Paihia, found several seaweeds & a curious spider running on the top of the salt water and a pretty Orchideous plant not in Cunningham's flora, a species of <u>Cyrtostylis</u> near <u>reniforme</u> Br. At Paihia made arrangements with Mr Colenso to start next morning for the falls of the Kidi-Kidi⁶⁷ river.

Paihia⁶⁸

Wednesday

J. Hooker Esq. &c &c &c.

My dear Sir

I hardly know what apology to make, for my not having ere this visited your ship; but my very numerous and onerous duties will, I trust, plead my defence. I am in hopes of seeing you tomorrow; which day and Friday I have as it were located for the pleasure of your company – pray come as early as you can. Should the weather be fine, I think we had better make the most of it, (seeing that both you and I have duties to perform,) and proceed to Kerikeri waterfall.

⁶⁷ Kerikeri

⁶⁸ Undated letter from Colenso to JD Hooker, Wednesday 25 August 1841. Colenso was away from the Bay until 19 August, 17 September to 12 October, and embarked on his Journey on 19 November.

returning the Friday evening. I have but 2 hands, as rowers, but if we start early we shall be able to get on with my <u>small</u> boat. Should however, the wind, &c, prove unfavourable, we can proceed to some other suitable spot nearer home.

According to appointment, I must leave for the Coast on the 15th. Sept., consequently, considering your only having one half of the week at your disposal, we must make the most of our time.

If you have a <u>Generum Filicum</u>⁶⁹ at hand, pray bring it with you. I have but few Botanl. works, though I have some on order.

If convenient let me hear from you by Bearer, as to whether you had made any other arrangements for tomorrow.

I send you the letter I mentioned as having received from your Father, for your perusal, which you can return at your convenience.

and am

My dear Sir Very faithfully yrs: W. Colenso

26th. Set out early this morning for Paihia & found Mr

69 by WJ Hooker and F Bauer.

Colenso already waiting with a nice boat & crew of 3 boys to proceed on our excursion. Sailing down the bay we landed opposite the entrance of the harbor at a point on Mr Bushby's⁷⁰ estate called Waitangi, it was a low steep mass of black trap rocks from which a dangerous spit runs out to sea. On these rocks several Mosses & Lichens grew with an Asplenium near lucidum, a new Cheilanthis & pretty Pimelia with quadrifarious leaves. Salicornia indica, Samolus littoralis & the large Euphorbia all immediately above high water mark & which do not leave the sea coast. Above them were the Myoporum latum & Metrosideros tomentosa while the rising ground was as usual densely covered with Leptospermum & Pomaderris ericifolia & Pteris. A curious little branched seaweed perhaps a Chondrus was common on the rocks & on the tide pools a kind of gnat settled in swarms. A few Insects were found under the stones - some Geophilæ, dipteræ & a large Forficula a tailless scorpion & small Scolopendra – Juncus maritimus formed large dense tufts - with a small Isolepis & other Monocot. Arthropodium Cordyline & Phormium tenax. We now commenced sailing across the Bay for Kents passage but it blew so strong that a bubble of a sea got up between the opposing tide &

70 James Busby

 71 in wind & lowering the sail pulled for Point Kent's passage at the mouth of the Kidi-Kidi 7 miles from Paihia. Landed again under some steep trap precipices but found nothing to interest; the boatmen commenced their dinner by kindling a fire to boil their potatoes. Before settling themselves they strip off their trouzers & coats & wrap in a blanket. Until this is accomplished they do not seem half comfortable. Near the mouth of the river are several small Islands & large shoals which at low water extend nearly across. I was much surprized to see the extensive operations the natives had conducted here especially in flattening the tops of the hills & digging huge trenches round them in the claev soil. Almost all of these hills & there were very many bore marks of fortifications. This mode of warfare was very desultory & consisted in taking possession of & holding these hilltops as long as they could, defending themselves with simple unbacked spears of wood which are however so slender that the point used generally to break off & the curious stone club called Meri. They studiously avoided close quarters & when they were forced to it, though always with extreme reluctance, they fought with savage ferocity. They invariably kept along the hill tops to avoid

old water levels or other geological formations. About 2 miles above the mouth of the river it is intersected by two parallel narrow black trap dikes about 200 yards asunder leaving here & there passages for boats. They are about a mile long & project more or less above the water. A small penguin is not uncommon here which swims like an awk. Gannets gulls & Tern are also abundant. About 2 miles further up we landed on a small rounded Island in mid-channel – or rather midway between the shores for the real channel is very narrow & confined to the North side of the river bounded by the South by an immense flat sand bank left dry at low water & abounding in cockles. The island was called Tarranaki & formed of a claey stone. On it were with the Pteris in immense abundance - Senecio mylantus, a Wahlenbergia the pretty Pimelia several Marchantiæ – Anthoceros in great abundance & above all the magnificent Clianthus puniceus forming a low bush with magnificent racemes of crimson flowers. The leaves were much eaten by some Insect. The top of the Island was flattened & trenched for purposes of warfare & it was lately sold to an Englishman for £3 for what purpose I cannot conceive, it is not more than an acre in

area. [161] About 3 miles past the Island the river

ambuscades of which they stand in great dread. Many of

their cuts & clearings might easily be taken for marks of

narrows to about 200 yards across & runs through mangrove swamps amongst low naked hills. We passed one or two very green spots where the Phormium tenax flourished & was told that they were left untouched from being tabood or sacred to the memory of a chief's wife buried there. No native from motives of fear & superstition dared to gather any of the flax. Further up the mangroves disappeared & the Edwardsia microphylla⁷² began to be common along the banks, it was a small branching naked tree with numerous pendant yellow blossoms. The rocks of the bed of the river are generally trap often overlying a kind of white clay called here pipe clay & used as such. Passing a low fortified hill the residence of the late renowned chief Shongi⁷³ we came to a sudden bend of the river & after our wet & stormy passage were kindly welcomed by Mr Kemp⁷⁴ the Missionary resident at Keri Keri (pronounced Kiddi Kiddi). A rapid here prevents boats ascending higher & we disembarked opposite a large stone two-storied building built by the Missionaries in which they stow their stores for barter &c. The floors of the rooms were covered with mats made of the Phormium & the tables with others of a fine description

usually worn by the natives as cloaks & generally now superseded by a dirty English blanket. The borders of these mats are often beautifully worked in with patterns of black & red the former color produced by the bark of the Ricinocarpus hinau⁷⁵ & the latter from worsted picked from sailors shirts. These mats now command a much higher price than they do at home & hence it is very difficult to procure a really good one under £2 or 3 & the same may be said of their clubs, axes & other carved instruments.

27th. The morning broke beautifully though some heavy clouds to windward foreboded a squally day. Saw a magnificently tattoed chief who was as usual wrapped in a dirty blanket, his naked forehead (for he was advanced in years) even tattooed up to the crown of the head in beautiful diverging curved lines from the meeting of the eyebrows. He was of commanding height with a fine open good natured countenance & in talking to Mr Kemp his moderate gestures & soft flowing language appeared quite retorical. On asking Mr Collenso for an explanation of the harangue he gave me to understand that the natives were in the habit of piling up immense quantities of Potatoes in wicker work frames to make which feast larger sometimes several

⁷² Kowhai

⁷³ Hongi Hika

⁷⁴ James Kemp

⁷⁵ Hinau

tribes subscribe. They then roast the whole pile & at a given signal they all fall to tooth & nail & in a few minutes, such is the capacity of their holds that an inconceivable quantity of the roots are devoured. The procedure put me in mind of the Cæsars commentaries & the Druids roasting our forefathers. The necessary consequence of these feasts in a country where the soil is naturally ungrateful is a famine with its concomitant train of evils & it is on this account that the Missionaries who are any thing but averse to the natives retaining their innocent amusements have long been endeavouring to dissuade them from this feast. On Mr Kemp's telling this chief that he preferred such a meeting to church the sophist immediately answered that there was no more harm in his going to the feast than in the Missionaries attending committees which like our Scotch feasts often terminate in a succession of agreeable reverses. Before breakfast about a dozen little native girls met for morning prayers & sang a hymn very correctly & with voices of a much fuller tone than the throats of their coevals in Britain could produce. The river here is not much more than 50 yards wide & we crossed it below a little fall & ascended the opposite bank to some flat hills covered with short Fern & the usual fern land plants & totally bare of trees. Proceeding up the river towards the falls of the Kiri Kiri saw

immense quantities of the <u>Thelimitra Forsteri</u> & the leaves of the <u>Microtis</u> – <u>Pteris Mertensioides</u> & <u>attenuata</u>, the former I can scarcely suppose to be an introduced plant. Near a marshy place the Gleichenia hecistophylla⁷⁶ grew 3 or 4 feet high. A walk of about a mile brought us within hearing of the fall & we soon afterwards sighted it. The river in the shape of a rapid stream runs through open Fern lands & suddenly precipitates itself over a mass of trap (Basaltic columns) 76 feet high in one clean fall.



Hooker's sketch of the Aniwaniwa falls, Kerikeri: the cavern behind

⁷⁶ Umbrella fern

An immense wooded basin receives the flood & a beautiful rain-bow spans the dark ravine. The effect of looking down over the fall into the abyss below is very pleasing from the variety of foliage from the dark green Coprosma & Corynocarpus to the lighter glaucus Lauri & the pale waving fronds of the Tree ferns which jut out like magnificent plumes of feathers. Above the fall the Dracophyllum Lessonianum abound. Descending by a narrow winding path into the ravine the transition from a hot open Fern land to a deep & rank forest was very sudden & we at once plunged into region of Mosses & ferns though a careful & practised eye could with a little study define the limits not only of the great classes & orders but of many species with accuracy. At the base of the valley the masses of tree ferns consisting of both Cyathea glauca & medullaris, Loxoma cunninghamii, Hymenophylla, & remarkable, the Lauri, Tarairea & another formed large trees with the Vitex littoralis & Fuchsia excortica though there was no timber of any great size. Proceeding upwards to the falls the narrow path became almost dangerous from the quantity of water & the slippery tops of the columns. A large cavern runs about 20 yards under the cascade formed by the removal of a large bed of soft clay about 12 feet thick whilst the immense body of water resting on a mass of hexagonal columns held together nearly by the cohesion

of their adjacent sides inspired a feeling of dread on feeling oneself under so enormous a surface incumbent mass held together by to all appearance such slight means & which must at some future time prove too slender a support when many thousands [162] of tons of rock will be precipitated with a fearful shock into the black abyss beneath. The cavern was very dark & produced some curious ferns & Mosses, a very large leaved Marchantia & a beautiful little Neckera which lined the roof – on which also grew the Nertera depressa &c. Under the fall of water in itself the little Oxalis cataractæ & Gnaphalium Kiriense were common, with the magnificent Hypnum Menziesii, filicoides? comosum? Followed the river down on the opposite side in a dense jungle amongst which the Rhypogonum & Lygodium threw out their tough wiry stems. Found an Alseuosmia filicifolia⁷⁷ which I had several times smelt but which from its sameness of color &c to the Geniostoma & some Coprosmæ was easily overlooked. The name is certainly most appropriate though I cannot agree with Mr Cunningham as to its nearest affinities. The little Bolbophyllum pygmæum was very abundant with the Earina, Tmesipteris & many other plants new to me & mosses innumerable. Ascending from the fall

⁷⁷ Coprosma rubra

found the Rhabdothamnus, Acianthus, & little Pterostylis very abundant. Birds & Insects were very scarce. Followed the river for about a mile above its fall. The banks are lined with the two common Dracophylla, Knightia excelsa small & the Persoonia Tu _ _ _ ^ 78 Leptospermum on which the curious little Viscum salicornioides grew & Gaultheria antipoda with some Monocotyledonous plants. Descended to the Valley to take a last look at its rich variety of vegetation of which the commoner shrubs & trees are Lauri, Coprosmæ Veronicæ, Leiospermum, Leucopogon, Coranocarpus, Friesia, Podocarpus, Aster, Brachyglottis & Metrosideri a few. Returned to Mr Kemps by dark & enjoyed a pleasant sail back to Paihia landing at Taranakki as we passed for specimens of the Clianthus.

Paihia ⁷⁹
Mission Station
Monday Eveg.

J. Hooker Esq. My dear Sir,

Your kind offer to lend me Sprengel, Forster, & Brown, induces me to send my Boat, this afternoon, to

78 Probably *Persoonia toru = Toronia toru,* mihimihi

fetch the same: as, busy though I am by day, I have an hour or two in the evening which I must make the most of.

I hope your specimens from the Kerikeri have rewarded your indefatiguable research & patient endurance of cold & cramp & wetting – I am sure you will regret with me my loss, when I tell you, that all my specimens (from my late trip on the E. Coast) were destroyed by fire yesterday, through the carelessness of my lad who was in charge. Fortunately nothing else was injured. My poor lizard, too, died during our visit to the Waterfall; I have managed to preserve him in spirits.

Is there a probability of my getting any Spirits of Wine from anyone on board the Erebus? –

I hope to see you on Thursday morning – but I intend writing you a Note (should I not see you here) on Wednesday – to inform you fully of our movements.

Ever my dear Sir Most truly yours W. Colenso

Sept 1st. Walked along beach to Paihia. At Marion Bay in which the observatories are Inland there is an extensive flat up which a narrow river runs & a broad sand flat extends for several hundred yards across the mouth of the Cawa Cawa river. On the margin of the flat

⁷⁹ Undated letter from Colenso to JD Hooker, probably Monday 30 August 1841

immediately at high water mark are an immense quantity of the roots & branches of mangroves which are now confined to a spot higher up the flat where the river forms a large swamp. A few shells & seaweeds are thrown up on the beach. Collected some Mosses & made arrangements with Mr Colenso for starting on the morrow for Wycari (Wicaddi). Close to the high water mark on the beach beyond the Observatory are three or four trees about 15 ft high of the Cordvline under which the unfortunate Capt. Marion's body was cooked & was afterwards as is customary with the natives removed to a distance to be eaten. An old man was lately alive & known to the inhabitants who was present at the time of the murder which was said to be owing to the French cutting wood on a tabood place. The ground about these trees has been tabood ever since & the beach known by the name of Marion. The extensive sand flats are the favorite resort of numerous cockles & other bivalves. hence the natives of one district purchase the right of gathering them for a certain time from the owners when at spring tides many hundred canoes come down the rivers & the women immediately commence collecting, using a small piece of stick to turn up the sand & picking up the shell fish with extraordinary dexterity. The men never or hardly ever assist their helpmates but saunter along the beach or making a fire commence

- roasting & eating them. They are called Pipis & as often eaten raw as cooked when they are opened by smashing them one against the other.
- 2nd. At 7 A.M. Mr Collenso came alongside for me with his boat. The morning was foggy in the extreme (more or less) calm shewing the sun quite white. Proceeding up the Kawa Kawa river about a mile we turned off to ascend the Wycari a light breeze springing up & dispersing the fog in this the broad part of the river. The rich vegetation along the banks began now to be entwined by the Pomaderris Kumeraho coming into flower a plant which was such a favorite with poor Cunningham that the natives always called him by its specific name. Passing Capt. Batemans some extensive burnt forests were pointed out to me on the hills, caused by the natives firing indiscriminately any part of the ground where they wish to commence planting & letting the fires run into the noble forests when immense tracts of land are laid bare & timber of immense value wantonly destroyed. From the East the river turns up to the Southward & narrows considerably among some high densely timbered hills. The scenery here is remarkably beautiful, from the numerous deep valleys & the richly wooded forests that run out into the water. The fog still continued to hang in the low sheltered parts of the river above the water. Here we met with the

"Terrors" boats coming down loaded with spars of fine wood that had been cut in some of these valleys. A little higher up the river ran through a long flat muddy bed covered with low mangrove trees amongst which were numerous ducks Solan geese⁸⁰ & some gulls feeding on the shell fish. These extensive mangrove swamps often occur where the salt water meets the fresh in these rivers above which they run with more rapidity through deeper channels & accompanied by a marked difference in the vegetation. Through the trees glimpses of peaches in full flower whose petals in some cases nearly covered the stream shewed that we were approaching a Missionary station. It being low water we had some difficulty in getting up to a small creek where we put the boat in & crossing a low reedy swamp came to a large stockaded Pah, which though contiguous to the Missionary settlement was I was surprized to hear not christian. At the Wycari station we were kindly welcomed by Mr Baker & then proceeded up the valley on a path that had been cut for the transportation of timber through much good cultivated land. We passed also an extensive brick field whose produce was as good as was expected. Both the Cyathea medullaris & Dicksonia squarrosa were not uncommon in the little woods we passed through & a

Coprosmæ, Knightia, Lauri, & all the larger trees of the forest growing in a rich vegetable mould which overlies a stiff clay soil. Along the bottom of the valley the Ferns & Mosses were in immense profusion. The Hymenophylla especially on the damp soaks, trunks of trees & banks. The noble Hypnum Menziesii is abundant in such situations & a beautiful Hookeria with a crested Seta. Further on we came to a little waterfall. lined with Todea pellucida, Steganiæ & other ferns. The Areca was here abundant with the Rhipogonum parviflorum⁸¹ & Lygodium articulatum⁸² which two latter form an almost impenetrable jungle, the Rhipogonum throwing up its long black canes which cross one another in every direction running along the ground & tripping you up at every step whilst the Lygodium hangs down like a dense wiry mat from the branches which like the Cassythæ in V.D. Land cannot

be broken or burnt through but must be cut. In the damp

pretty sweet scented Clematis. The Coranocarpus [sic]

[163] the low herbage with several introduced plants

was the little Lagenophora, personating our English

now coming into flower was a common tree & amongst

Daisy & the Cardamine debilis. Entering the wood we at

once plunged into a dense vegetation of tall Tree ferns,

⁸⁰ gannets

⁸¹ Supplejack

⁸² Mangemange

soil close to the stream of water the Platostoma covers the ground with a rusty brown foliage amongst which the Aspidium pennigerum & Lomaria discolor assume an arborescent form. Very few birds but Tuis flitting among the trees & the curious little chattering green bird were seen except here & there a solitary pigeon winging its heavy flight among the trees with a whizzing flap of its clumsy wings. Of Insects I saw none but mosquitoes are said to be in summer abundant in such situations. Ascending the side of the hill from the valley the steep banks were covered with moss & those ferns which love a drier situation, very little vegetable matter covered the hard stiff yellow soil amongst which much of the larger timber delights to grow. The Phyllocladus Trichomanoides, 83 Podocarpi totarra 84 & ferruginea 85 were all abundant with a little higher up some noble Kauri trees Dammara australis⁸⁶ with trunks of 20 to 30 feet in circumference. Its foliage & branching are peculiar & different in the young & old trees. The Knightia excelsa is common in such situations & becomes a very lofty tree. Lauri⁸⁷ form the most extensive portion of the other lofty vegetation under

83 Tanekaha 84 Totara

which the common shrubs are Aralaceæ, 88 Midæ, 89 Melicytus, 90 Leptospermum, Leucopogon, Cyathodes, Drimvs, Pittospora, Though the common tree fern Cyathea dealbata does not here attain the height it does in the lower valleys still it covers a much greater proportion of the surface & its fronds if any thing are though shorter, thicker & more luxuriant. The herbaceous plants in these situations consist of some Ferns, the curious Schizæa dichotoma Louraria Fraseri & others such as love the dry woods. The Metrosideri⁹¹ climb up the larger trees their trunks closely appressed to the branch for 10 or 15 feet when they branch out into a dense rich dark green bush, their presence does not always materially affect the tree they encircle. Orchidiæ abound more in these situations than elsewhere. On the horizontal branches or fallen trunks &c of the trees, the Earina & Dendrobium Cunninghamii are abundant with two other parasitical orchideæ⁹² & on the ground the Pterostylis Banksii & another smaller species, the Acianthus n.sp. which delights in drier places than the A. rivularis, & a small Cyrtostylis both growing on dry or moist moss under the shade of the larger trees. At the

⁸⁵ Miro

⁸⁶ Now Agathis australis

⁸⁷ Laurels

⁸⁸ Ivies

⁸⁹ Maire

⁹⁰ Mahoe

⁹² Bulbophyllum and Drymoanthus

summit of the hill about 700 ft above the sea we were disappointed in finding the wood so dense that no view would be obtained & a potato plant left by some natives were the only novelties! seen. Descending to Mr Bakers the view of the valley with its peaches, wheat stacks, cattle & Brick Kiln alongside the fortified Pah was interesting. The soil requires much trenching before it is good for the cultivation of wheat or other better grain. Maize does well in the lighter soil. Potatoes in one good crop exhaust the ground. Peaches thrive amazingly Mr Baker having in one season gathered 1000 bushels from the trees round the house. They are considered very good though inferior in flavor to the English ones. They sow themselves & it is a common practice with the natives to propagate them by seeds. Apples promise well when better stocks & cuttings are established. The Cape gooseberry has covered the ground in some places to a great extent. Neither Currants, Raspberries nor Kidney beans have done well with Mr Baker. The houses at the station are what are called Rapoo houses, the walls are made of the Typha tied up in bundles with the Phormium or Lygodium. Inside it is white washed or very neatly in some instances covered with a matting formed by intertwining the segments of the leaves of the

<u>Areca</u> of which the roof is formed & then tiled with shingles made of the <u>Dacrydium excelsum</u>. ⁹³ The kitchen is generally detached from the building in case of fire or if a fire place is introduced it juts out a considerable distance from the gable, is built of stones with which also the neighbouring walls are cased.

Friday 3rd. Early in the morning I was roused by the lively notes of the Tui & other birds common in the neighbourhood & getting up walked round the establishment. A nice sweet briar hedge runs along a considerable enclosure & promises well as does another of the common Hedge or Hawthorn. In these alluvial valleys where there is a stratum of good soil above the clay some grapes chiefly introduced propagate themselves & afford a good fodder for some fine cattle which however are not benefited by the amazing quantity of the Leek⁹⁴ which was originally introduced by the French (Marion?) & has found too suitable a soil & climate here, as it sometimes covers large tracts of ground. In this situation a very fine herd of cattle emitted a most nauseous smell from feeding on it, instead of the pleasant smell the animals naturally emit. It does not however affect the milk or butter which are

⁹³ Kahikatea

⁹⁴ Onion weed. Allium triquetum

extremely good. Pigs which almost run wild in the country are the standing stock both of the native & of the settler; they are not however rich & fat like the English breed but lean & comparatively tasteless & the flesh when [164] hashed eats so much like mutton that it is often difficult to distinguish them in this state. On the coast the natives feed the swinish multitude on Raw Fish hence they become inedible except to the native to whom no coarse food comes amiss

Some patches of a dense mist hanging across the upper wooded portions of the hill are here considered inevitable signs of rain which soon followed in a succession of smart showers. With a rapid tide we sailed down the channel of the Wycari after looking into the Pah – & as the day cleared up we commenced Botanising on its banks which are densely wooded with Lauri & among others found the Laurus calicaris in full flower & a tree of Podocarpus ferruginea in fruit a tree of dark green color & which as far as I have seen never looks rusty untill dead, which is not the case with the P. totarra. These banks are amongst the best localities for mosses which grow under the overhanging branches & roots of the trees abundantly. I was most pleased with a little Polytrichum which grew in the clay soil and had a capsule much resembling that of the Dawsonia. Lower down we landed on a small Island on which a beautiful

Aspidium was found along with a hispid Plantago a Chinopodium & the Entelea. On the coast opposite I collected 14 sp of Lichens from one Mangrove tree & on the shores a fine <u>Viscum</u> in full flower with a Dodonea (dioecious) & the curious <u>Myrsine Urvillii</u> in fruit. The <u>Myoporum lætum</u> in flower & some other plants. Landed at Capt Bateman's & put by my plants.

Saturday 4th. Ascended the Kawa Kawa river with Abernethy passed Pomares Pah which is in very bad order & much frequented by the crews of whalers. A large grog shop is near it. Pomare is a chief of very bad character, cunning greedy to a degree & cruel. He conceives himself one of the great men of the neighbourhood though of mean origin & visits all the ships that come in dressed in mats, military trouzers & a gold laced cap on, accompanied with his wives & slaves daughters & children tricked out with as much European trumpery as they can lay their hands on. In person he is tall & thin not well tattood or otherwise remarkable. The hills on both sides of the river are nearly denuded of wood by the fires, though nature is quickly replacing the loss. The Knightia is here very abundant standing above the other foliage like a Lombardy Poplar. From the South the river turns to the West & divides into two branches. At a great swamp covered (by) large beds of dead shells, the Kawa Kawa runs South again & the Karitoo up which

we went continues to the Westward amongst Mangroves & swamps of the Typha bounded to the South by low Ferny hills & to the North by higher wooded ones. The head of the river is in a narrow densely wooded valley where it runs through some of the Dacrydium excelsum, at a village formed of many scattered huts on both sides of the river with a considerable deal of cultivated land. Ascended the hills which are well wooded but remarkable for nothing but considerable quantities of the beautiful Dacrydium cupressinum & the Elæocarpus Hinau with which the natives dye a beautiful black color. Found a little Lindsæa in the drier woods with abundance of the Lomaria Fraseri. Descended to the beach & returned stopping in our way at Mr Johnson an old Whaling Capt. who knew Jorgen Jorgensen by name being originally a Dane himself. From Bateman's went on board. Found that HMS "Favorite" had arrived on the 2nd.

9th. Spent the day looking over Colenso's collection of plants, from whom I received some valuable additions & information.

Was sent for late to go with Capt Bateman & Smyth to Pawah⁹⁵ Bay; at 10 p.m. pulled up to the cottage & slept the night.

95 Paroa bay

10th Mounted crossed the hills to the Northward of the Wycari, all of the Fern land & bare of trees but in the valleys, kept along the ridges where the paths lye on the hard clay soil, descended into a broad marsh full of reeds & the Typha & struck up an opposite very steep ascent & through a thick wood from which we emerged at the top of a hill which commanded a good view of the surrounding country, all consisting of barren yellow or deep green wooded hills. Descending through a valley. passed a large mass of pure flint & near it some Iron stone & continued our route to a Mangrove swamp with its characteristic mud & marsh plants, which led us to Pawah Bay opposite an Isthmus which separates this from Mana Wara Bay. 96 The scenery here is pretty, the beach either pebbly girt with wood & the Cordyline or else steep the rocks prettily clothed with brushwood or with here & there, fine trees of the Metrosideros tomentosa. Large swamps of the Salicornia indica were common under which was a little freshwater? Lymnæa?⁹⁷ Hailing a Canoe from the opposite side a little boy came in a very dilapidated one with which he ferried us one by one over a river which enters the Bay - but as it was blowing fresh it could not take us across the Bay. Kind woman was however a witness of our

⁹⁶ Manawaora

⁹⁷ A freshwater snail

distress & she accordingly crossed the Bay to us in a large leaky cranky concern & after getting a good ducking we were landed in safety on the Isthmus among some huts & a great deal of very good land well & very cleanly cultivated by the natives who were planting their potatoes. Ascending the hill we looked right down upon Mana Wara Bay studded full of rocky Islets on one of which Moutu Ariah⁹⁸ Marion was killed. Here I had hoped to find some maritime plants & especially some good seaweeds but the shores were too bold steep & exposed for either & a sp. of Bromus⁹⁹ was almost all that repaid my toil. Introduced to Mr Bartley & returned to Bateman's house.

11th. Ascended the Wycari river with Abernethy to complete the vegetation [165] of that district by visiting the forests of Dacrydium excelsum. Taking a native from Too's Pah where the inhabitants came to visit our boat, we ascended the hills to the S.E. first passing through the pine swamp, full of noble trees rising to 70 ft in a straight bole of 3–6 feet in diameter curiously channelled in perpendicular lines – growing in a heavy swamp over which the large roots spread horizontally enclosing pools of mud or water in which the Potamag.

nutans¹⁰⁰ grew with some other plants. The shrubby under vegetation was peculiar but the trunks were generally bare of much cryptogamic vegetation. Came to some women cultivating their potatoe grounds in a patch of the drier wood cleared by burning, they were cooking the Kumerah & Pipys or cockles to which our guide very unceremoniously helped himself while they look upon it as a matter of course that the men do as they please. Ascending a slope we came to where the native expected some pigeons Cuccuba the beautiful Columba spadicea which retires to the hills at night to roost & descends in the morning to feed during the spring on the Laurus Taraire, in Summer on the Vitex littoralis, on which I have observed they grow poor & in Autumn & winter when they are in the best condition on the Dacrydium excelsum, which afford even to the natives a nourishing article of food. At this season they are found on the Laurus trees high up among the branches where they are only detected by the keen eve of the native who sees their white breasts contrasted against the sombre foliage of the tree. When shot at they scarcely move or if they do it is merely to fly from one branch to another with such a lazy heavy flight that a second shot is sure to bring them down on the wing.

98 Motuarohia 99 A grass

100 Pondweed

Proceeding by a narrow track up a valley I commenced ascending one of the highest hills in the neighbourhood. After passing through much cleared land on a Ridge where the Pteris & Pomaderris were striving for the mastery, I entered the dense wood where tree ferns predominated & I hoped to retrace my way easily by bending back a frond every few yards so as to shew the silvery underside looking down hill. After a hard pull through the dense vegetation keeping along ridges I reached the top but found the wood here so dense that I had to ascend a Totarra tree to be sure of the fact. From the topmost branches the view was beautiful of the Wycari river emerging as a small stream from the wooded mountains, running through the Missionary establishment then through the native Pahs & huts, & mangrove swamps till it formed a wide stream, confined by low undulating wooded Hills & finally emerged into the Bay of Islands & mixed with the waters of the sea which here bounded on the E of the Valley of the Wycari sending down numerous streamlets for its sustenance, from E to E.S.E. the open sea appeared & to the S.E. in the far distance the little Islands called the "Poor Knights" just emerged above the horizon. To the Southward & S.W. the view was most striking of an immense gulph of wood bounded on all sides by wooded hills, beautiful from the various tints of the

foliage but giving the most perfect idea of solitary & impenetrable forest that can well be imagined. I looked back & thought of the heavy sighs the present little ascent had cost me & turned again to the mass of jungle which has often stopped even armies of the natives themselves who can thread these mazes with wonderful alacrity compared to the foreigners who visit them. To the West were a quantity of wooded hills covered with a slight haze which the sun shed on them of a pale blue tint, along whose crests the noble Kaudi tree was here & there conspicuous.

Taking new bearings my descent was at first easy as long as the broken ferns where found, as even as they were lost, so was the path. Although in ascending it is easy to keep along ridges & avoid valleys, in descending it is quite a different thing – & I soon found myself in thickets of the Areca which was very abundant in such places from 2 to 4 feet high but no where in flower or fruit & with here & there immense masses of the Lepidosperma which was fond of growing where a tree had fallen & exposed a piece of ground. With compass in hand after several hours I emerged & as is usual in such cases not very far from the right place. The difficulty of ascending these steep gullies

amongst the Smilax, Rubi & Lygodium¹⁰¹ at the chance of finding the top easier is hardly worth the trouble for they anastomose so much that few ridges run long in one line. Such as there are when they do the natives have in many cases constructed narrow paths along them. Our guide had found several pigeons in the lower wood. Returning to the Pah after calling on Mr Baker we descended the river & I soon went on board.

- 16th. Went to Paihia & walked along the beach with Colenso to the Wytangi found several Epilobia & an Ophioglossum in grassy places on little hillocks &c.
- 17 Visited with Yule 102 some of the hills and valleys opposite the ships one of which in particular is more rich in ferns & other plants than any spot in the neighbourhood with which I am acquainted. Saw several pigeons & Tui birds. A few days before I had visited the same spot to collect Ferns & other plants for Mr McLeay 103 to whom I sent two boxes pr the Favorite.
- 18th. Walked with Smith¹⁰⁴ to the Wytangi river & after

101 Bindweed, bush lawyer & ferns

102 Henry Yule, Second Master of the *Erebus*

104 Alexander J Smith, Mate of the Erebus

coasting it for some time turned off up the hills to the right of its bank. Crossed 2 or three ridges with abundance of the Leucopogon Fraseri – all very barren. Came to the village of Kia Patika so-called from Ki to eat & Patika flat fish. The natives being accustomed to catch these in the neighbouring river which falls with the Wytangi. After obtaining some eggs &c from the natives who form a straggling village we proceeded several miles up the valley in which the Lycopodium laterale grew abundantly amongst grass in damp places. Leaving Smith [166] I ascended some hills & slipped into a deep wood which filled the Valley & in which the Dimou¹⁰⁵ Dacrydium cupressinum was abundant but no other trees in particular, descending it found Smith had sprained his leg most severely; leaving him to return to Kia patika I ascended another chain & proceeded several miles along hill tops all so like one another that it required a considerable degree of caution to keep the proper way. The beautiful Clematis indivisa was abundant in the woods but impossible to be found except it grew near the margin for though very conspicuous when looking down on a forest, when the forest is entered, the scene totally changes & the plant makes no show against the sky. Followed Smith to the

105 "Dimou" = rimu

¹⁰³ Alexander McLeay or his son William Sharp McLeay, naturalists, both of whom Hooker met in Sydney, referring to McLeay snr as "my fathers old friend".

village & returned to Paihia by a narrow road across the hills leading amongst wood – chiefly of the Dimou & a Leptospermum. – Not being able to obtain a boat at Paihia we had to walk on to the Observatories & got on board late at night.

H. M. S. "Erebus", Bay of Islands, New Zealand September 21st, 1841.

My dear Father

I do not like to let a letter bag leave the ship without addressing a very few lines to you, though any time is so much taken up that my letter must be a very short one, & will serve little other purpose than to inform you of my continued perfect health & comfort.

Since my last envoy went, which was addressed to you through Capt Beaufort (& contained some drawings & letters for several of our family, I think for all), I have been hard at work collecting, especially the mosses of this neighbourhood; & have succeeded beyond my utmost expectations. My Phenogamic collection too is not small & will contain most of poor Cunningham's plants, with many others not included in his Flora, which is not only incomplete but very inaccurate in many of its details. Collenso has been extremely kind to me & taken me several excursions, he is a very good

fellow in every respect, & shown me the greatest attention, his time is however too much taken up at present with the printing establishment & with the other higher duties of a missionary's life, of which class of men he is among the most superior; for I regret to say that I was much disappointed in the high good opinion which I had previously formed of them, from some of their own narrations at home. Among them there are however many most exemplary characters & Mr Colenso's among them especially. He is now gone on duty into the interior & will not return for a fortnight. Fearing that we might have sailed before his arrival back, he gave me some curiosities of the Island. including some minerals & a beautiful paper Nautilus which I intend for Maria; it belonged to Cunningham & is much to be valued on that account.

You will with me much regret to hear that from this place we go straight to the Ice, without visiting Chatham Island, & perhaps no other part of the coast instead, my disappointment is very great, but as usual I must make the best of a bad job & do what I can whilst here.

There have been two separate arrivals from England since we moored here, but nothing for me, so that I must content myself with the news of the 1st Feby from home,

for some time at any rate. H.M.S. "Favorite" has been here for a month now, & she is on the eve of sailing for Sydney to take the letters for home, & to bring back any first arrivals for us. After which she will it is reported accompany us to the edge of the Ice & carry back our latest despatches for England, this will take about a month & should she not bring a letter for me I must expect to receive some accounts at the Falklands. Dayman wrote to me from VDL & told me that Kay had received late news, but that his letter contained no tidings of your family, this is good news as far as it goes in so it might be worse. Lady Franklin who wrote to Captain Ross informing him of the probable loss of part of his journal & of my collection of plants, which were sent home from Hobartown. She must mean the Kerguelen's land collections though she does not mention particulars, & it may be the VDL, Auckland Islands, & Cape Isls ones with all the notes & drawings which took me so many months in the ice to draw up, for I am a slow worker & have little to show for the time employed. After all I am not as badly off as Sir Stamford Raffles, Mr Brown, & yourself, having duplicates of almost everything on board. & I must endeavour to make better collections as I go on to make up for those that are lost.

I often wonder how the Kew appointment has affected

you, where you are, & who is along with you, as also what has become of our excellent friend Arnott. It is sometimes terribly dull work botanizing all by oneself in these lonely woods & hills, & my only satisfaction lies in the hope that some of what I collect may prove interesting to you or if not that they may be valuable as duplicates.

Among the mosses there is here a <u>Polytrichum</u> with a triangular capsule & smooth calyptra. A beautiful <u>Hookeria</u> with a pendent capsule & a crest at the curvature the Seta like <u>H. cristata</u> (which it may be). A <u>Phascum – Splachnum</u>, & <u>Trematodon</u>? besides a very beautiful little moss with lateral Seta & which throws out long foliaceous shoots in the axles of whose leaves are numerous anthers &c.. – its leaves too are cut & cilia like those of a Jungermannia.

I shall write to you at length before leaving this Port, in the mean time give my kindest love to all, who there will be to receive it I do not know & Believe me

Your most dutiful & affectionate Son Jos D Hooker

23rd. Fine day. Sailed HMS Favorite for Sydney to return with our letters &c; took plants for McLeay —

- 24th. Went down to Kororarika with Webber¹⁰⁶ and returned, highly disgusted with the dirty hamlet which consists of one bad hotel, 3 cheating stores, many grog shops & more houses of ill fame.
- 25th. Went to Kiapatika with Lyall¹⁰⁷ & Webber, found some difficulty in crossing the stream from the tide being up: the narrow muddy stream crossing. Ascended some miles over the Wytangi hoping to descend at the falls of that river which however we missed & after descending to a flat creation and good deal of stiff soil sparingly covered with the Pteris & came to a small but pretty little fall on a streamlet on which the Gnaphalium Keriense & several other scarce plants grew. Also near it a curious little new genus near Lycopodium remarkably like an Orchideous plant in habit. Dark returning over the hills, saw many owls. Supped at Tibby's hotel at Paihia & went on board.

Septr. 30th. Started with Webber to go to Waimate in company with Mr Mair a gentleman who has been 20 years in the Island having first come out as Carpenter to a Whaler, he made a considerable fortune by repairing & refitting ships, soon kept a Store, married Miss¹⁰⁸

the daughter of one of the then few Missionaries on the Island, bought property on part of which at the Whapoo¹⁰⁹ he lives, at the residence of the American Consul Mr Clendon,¹¹⁰ in one of the best houses on the colony; though the soil around is poor, he has formed a nice garden full of figs roses & fruit trees. House nicely furnished, rooms lined with Sydney Mahogany or Cedar, the same as Mr McLeay's & varnished with a varnish rather coarser than Copal which is made from the Kaudi gum by the Americans to whom he sold the resin at 1d per lb: this gum is nearly insoluble in proof spirit & is I suspect either dissolved in hot spirit or more likely Spirits of Turpentine. —

Met Mr Mair at Paihia who had brought over a horse & boy with his boat to take us part of the way. At this season the Houses are beginning to make a pretty show at Paihia with plenty of roses, lillies, Iris &c & violets in Mr Colensos garden especially where there are many English & some native plants. Past Dr Ford's the former surgeon¹¹¹ to the Establishment who has one of the best horses I have seen in the Island, one of many that were imported from Chile in a large old man of war & with which the island is stocked. They are strong &

¹⁰⁶ Edmund Webber had arrived on the Favourite

¹⁰⁷ David Lyall, Assistant Surgeon on the Terror

¹⁰⁸ Gilbert Mair snr married Elizabeth Puckey

¹⁰⁹ Te Wahapu

¹¹⁰ James Reddy Clendon

¹¹¹ Samuel Hayward Ford

surefooted good tempered & some of them fine looking though generally small animals.

Leaving the horse & boat about a mile up the Wytangi we commenced our walk, crossing a neck of land over a hill we came in full view of the falls of the Wytangi, pouring over a ledge of rock into a large basin below. These are horse shoe falls about 22 ft high & 30 or 40 yards broad. The neighbouring country being comparatively low, the falls are very conspicuous. Passing a large enclosed fence of Mr Williams for keeping cattle in I was astonished to hear how expensive this sort of railing was though made of a very common & easily split tree the Kaikatea. We were now in the flat valley of the Wytangi bounded by low hills on all sides undulating covered with Fern & the valleys or rather gullys with wood, about 100 ft above the sea & the first of the steppes which rise successively in crossing this part of New Zealand. The land is very bad of stiff clay & was once covered with forests. Ascending to another height on a small hill we stopped to enjoy the beautiful view to Seaward. A narrow road traversable by Bullock carts here turns off to a large farm belonging to one of Williams' sons, about 10 miles distant. Here are some of those square holes which the natives often dug to sleep in at night when on journeys & also to bury potatoes in near their huts. As usual the tops of these hills were all

cut & trenched. Descending came to some very good rich land though not much of it. This is easily detected at a distance from the luxuriance with which the native plants grow in the rich black mould which sounds hollow under the feet. Coming to a narrow belt of Marsh, found the Torresia¹¹² abundantly scenting the air like new Hay & a little Myriophyllum. Passing on to more bad stiff soil certainly the worst I have seen, on which the Fern was scanty & a stiff horrid grass grew in scattered tufts with fine Thelimitræ & Microtis Orthoceras¹¹³ &c in abundance – all characteristic of dry poor land. Crossed the Wytangi at a ford which was swollen a little & above the horses haunches which took us over one by one. A few Leptospermum & Kaikatia trees grew along the banks with tree ferns & plenty of brushwood. Hereabouts there is a good deal of Marsh land covered with the Phormium tenax & here & there a Dact. excelsum raising its sinuose trunk bare of bark & charred by the fires. The Wytangi is here so often swollen by rains that all communication is cut off between the Waimate & the B of Islands. Ascended another tier of hills where there was much pipe clay scattered in soft lumps through the clay earth which gave it a marbled appearance. From the top another flat

¹¹² Scented grass

¹¹³ Orchids

remained to be crossed a little below, beyond which the Waimate district extended [167] as a last steppe in a long straight line. Below us on the flat there was an immense quantity of flax belted by extensive dark colored forests which stretched to the Southward while in the distance the blue hills of the Kia para harbour were relieved against the sky. At the back of Waimate & a little to the Southward were two isolated hills perfectly Volcanic in appearance with water formed tops. Numerous fires sent up a blue smoke along the edges of the forests caused by the natives burning the wood for as they never cultivate their potatoes using two consecutive seasons on one spot & so they gradually eat into the woods burning & clearing, in so doing destroying immense quantities of magnificent timber. A few miles back we had met Baron? Tierry¹¹⁴ who has made such a noise in London. He had a squad of natives with him mounted on some nice horses. The Baron himself is worth nothing almost & lives in a most wretched manner at the Hokianga district where the natives laugh at his claims on the land, many of the latter being much richer than he is especially in horses & cattle, in fact I was given to understand that they were a very superior class & as their appearance testified

were well civilised as is often the case. They had been made a tool of by the Baron who had got them into scrape about some cattle which he had given them in payment without having a right to them himself. The view on first coming on the settlement of the Missionaries is very pretty. After passing some smiling cornfields we came to a large grass flat bounded by trees on one side, while a stream ran through it turning a water mill, a bridge thrown across, led by a road to the village prettily situated among the trees, fenced land, hedges & garden ground, while the church spire in such a situation brought England to the mind in full force. The land is a light loam with a great deal of Iron. Passing on to Mr Taylors we found his boys playing cricket on the green. The house is one of three which belong to the Mission (Davis Taylor Clark) or are alike & in a continuous row with their gardens fields & hedge rows sweet briars and roses. At Mr Taylors we received a hearty welcome. The climate here from the elevation is much colder than at the Bay of Islands but all English fruits do well, no others however but the Cape gooseberry. The garden here is very good & kept in excellent order, as is a small flower garden in which are some of the (rare in this country) English plants, Cape bulbs, & Australian shrubs. The little Sorrel dock is however the most troublesome introduced weed. After

¹¹⁴ Charles Philippe Hippolyte de Thierry

tea I saw some very interesting specimens of large birds bones fossil from the E. Cape. A fine Apterix much the largest I ever saw. The bill of this bird when fresh was described to me as very beautiful covered with a transparent membrane through which innumerable small red blood vessels ramify and anastomose. Also a feather of a bird sent from a hill called near the E. Cape which is described as sluggish & cannot fly, very large & very fat almost wingless; their feathers & food were reserved for the Chiefs but the tradition is that now only one exists in a cavern on the Mountain & is looked upon with superstitious reverence. Mr Taylor thinks his fossil bones may belong to it. The name of the bird is Tarapu, the feather was something like a grouse feather prettily marked. 115 The Apterix is very rare now nor has

one been heard of for some time. The Missionaries are still of opinion that a second & larger species exists on the Middle Island. Of Mr Taylors fossil wood some are very good, they are, in this neighbourhood – as are lignite & the leaves of the Kaudi pine imbedded in a sulphureous soil near some hot springs about 10 miles to the S. of Waimate. Some of the Fossil shells are very interesting chiefly brought from the Limestone at the E. Cape. Of his recent shells the freshwater ones like those of Europe are Unio, Lymnaea, Fusus Dentalium, Crepidula &c. Of the land shells some noble Bulinii & Planorbis. Asking about the Chatham Islands & their present inhabitants Mr Mair informed me that their original settlers were New Zealanders not differing much from those of the Islands that Capt Harwood arrived at Pt Nicholson in 1823 where in exchange for pigs & flax he agreed to assist the natives to expel the Chatham Islanders; for this purpose he supplied them with ammunition & took over 240 of them at one time. leaving his mate, & another time as many more who driving the Islanders up into a corner killed them for food until they could raise their potatoes, & finally exterminated them. On Harwood's return the natives cheated him with regard to his cargo & so his expedition did not succeed, he pretends that the natives took the ship from him. These facts are asseverated by all of

¹¹⁵ In Colenso's "An Account of some enormous Fossil Bones of an unknown Species of the Class Aves, lately discovered in New Zealand," he wrote, "During the summer of 1838, I accompanied the Rev. W. Williams on a visit to the tribes inhabiting the East Cape district. Whilst at Waiapu (a thickly inhabited locality about twenty miles S.W. from the East Cape), I heard from the natives of a certain monstrous animal; while some said it was a bird, and others 'a person,' all agreed that it was called a Moa; that in general appearance it somewhat resembled an immense domestic cock, with the difference, however, of its having a 'face like a man;' that it dwelt in a cavern in the precipitous side of a mountain; that it lived on air; and that it was attended or guarded by two immense Tuataras, who, Argus-like, kept incessant watch while the Moa slept; also, that if any one ventured to approach the dwelling of this wonderful creature, he would be invariably trampled on and killed by it. A mountain named Whakapunake, at least eighty miles distant in a southerly direction, was spoken of as the residence of this creature; here, however, only one existed, which, it was generally contended, was the sole survivor of the Moa race. Yet they could not assign any possible reason why it should have become all but extinct."

whom I asked on the subject & further accidentally heard through Mr Mair that Harwood was lately seen begging on the streets of London. Another person of the name of Roberton afterwards went to the Chathams & after purchasing potatoes of the natives refused to pay for them & getting irritated from the natives importunity he stabbed him through with a harpoon which was at hand & left the Islands. After that Roberton returned as Whaling master to a French Whaler to the Chathams when the natives murdered them all. On the arrival of the French corvette Capt D'Alcidie?¹¹⁶ he went to revenge his nation but could only catch an old woman or something of that sort. These imported natives then split into two parties one of whom has driven the other into an Isthmus where they are starving them out. The customs of the natives have given rise to many quarrels with the English which have arisen through mutual ignorance but from superstition on one side & selfish aggrandizement on the other have terminated seriously. Thus the natives when purchasing ground from one another hold the land only for life. Tabooing &c are all instances.

October 31st. 117 Getting up early I walked about the settlement & was both surprized & gratified at the early hour of 5 to hear the natives at their morning prayers at each hut that I passed. With the situation & appearance of the church I was much pleased, it is built of wood Kaudi with a steeple & spire, the bell hangs close by & several neatly kept graves both of natives & one or two Europeans complete the English scene. Descending from the hill entered a little wood with a stream of water in which were some Mosses & I took notice of the following trees which compose the generality of the small woods. Vitex littoralis, Laurus Tawa & Taraire, Knightia excelsa, Dacrydium cupressinum, & excelsum near the water. Piper excelsum. Laurus calicarus. Myrsine Urvillei, Geniostoma, Rubus australis, Coprosmæ, Fuschia whose mawkish berries are eaten, Cyathea glauca, some Aralaceæ, Polygona, Alseuosmia &c. Sketching the Church from this spot I returned by the backs of the gardens where a profusion of English roses hang over the palings. Saw Mr Taylors Lizard or Guana one of which Mr Colenso had in spirits, it is a harmless animal, eats nothing in confinement & suffers itself to be handled without erecting its crest or shewing any irritation, its motion in walking is waddling with the

¹¹⁶ The French whaling vessel Jean Bart anchored at the Chatham Islands on 16 February 1839 when its Captain Gautraux committed suicide; subsequently his ship was burnt and the entire crew either drowned or massacred by local Mãori. Later in the year the French naval corvette Hêroîne (Captain Cécille) returned for revenge.

¹¹⁷ So marked, but must be 1 October.

legs sprawling out horizontally & the tail on the ground. The natives regarded with some dread others with reverence & superstition according as they consider it, a devil, a god or a receptacle for the departed spirits of their relations. A few of the more civilised natives will look at handle & even capture it alive, as will even some of the more brave savages, others again, as in a case Colenso told me of, dare not approach it, & one in particular a man otherwise of strong mind a good man & a particular friend of the Mission, entreated Mr Colenso not to bring it into the room or near him, manifesting inconceivable horror & repugnance at the idea of seeing it & covering his head in his mat he actually cowered from superstitious fear, & yet this man's Christian faith was impregnable; we laughed at this in a savage but how many among our selves betray more foolish & reprehensible fear for a spider or cockroach - who sneer at a Naturalist & are disgusted with an Entomologist. At Breakfast had some Jam made of the fleshy bases of the bractiæ of the Freycinetia the spadices &c cut up & preserved in sugar, it is very sweet with a slight peculiar flavor which reminded me strongly of Strawberry Jam.

After breakfast started for the volcanic looking hill which from rising from the Waimate level higher than any of the surrounding country I had hoped would have

produced some peculiar plants. It is called Puke Nui literally the big hill. Crossed a wood by the Hokianga road in a moist place of which was plenty of the Pteris Brunoni 8 feet high amongst the brushwood, it is a peculiar looking glaucous handsome fern - very succulent in the young state. Passed through a village at the base of the hill whence two natives came & insisted upon accompanying us. The sides were steep but the highest could not exceed 4 or 500 ft above the level & it was covered with Fern & the Coriaria. The crater at the top was filled up & very indistinctly marked. But the view, though the day was very unfavourable, splendid. To the East was the Waimate like a garden, under our feet the church bearing NE of N. beyond which again was the Bay of Islands, the peaked Hill of Cape Brett. To the Southward a succession of woods & hills were bounded by the Kaipara hills E.S.E. To the West a large extent of flat bare & wooded country with a large square lake called Lake Mawe (or Mapere?)¹¹⁸ about 4 miles across apparently & nearly square, the extremes WNW & S.W. of S. It was bounded by marshes flat land & forests of the Kai ka tia. In the far distance were the mountains at the Hokianga & the sea NW of N. To the Northward was a large deep valley in which the

118 Lake Omapere

Waimate river runs well wooded above which more elevated table land runs along & the forests join on to the great Kai tia forests which had never been crossed even by natives till the Missionaries cut a path through after a fortnight's labour to a more Northerly station. Descended towards the lake & after a walk of 2 miles came to a native village around which were very many peach trees & Cape gooseberries. Some of the houses were very neat as was a church in which one of the native schoolmasters performed service every Sunday. A narrow pathway took us down to the Lake through a dense marshy wood, where some canoes were. It was our intention from hence to have visited a place opposite where there are some curious rifts in the rock but it was blowing so hard that the natives would not put to sea. The Lake is shallow all over particularly on the West shore where extensive sand flats are. On this the East side the wood is most dense with an underscrub of Coprosmæ & that peculiarity which marks the presence of much Dacr. excelsum. The absence of water plants as Potamogetons & Nymphæ was noticed, this was also the wrong shore for shells &c & I found nothing but a small Lymnæa an Elaphrus? & Hydrophila? with plenty of larvæ of Phryganeidæ some curious spiders & the remains of the cases of Libellulæ. Of plants a fine Loranthus? not in flower the Parsonsia & several other

things. Also a small land Helix & plenty of a Gammarus or Salitra not only on the banks of the Lake but under dry dead leaves far from any water. A curious green Tremella was washed up & also found under the stones of the beach. Capt Ross afterwards hauled the Seine in the Lake & took a fine kind of Unio – Anatina? a large Chara, a fine Cray-fish, a very few small fish & plenty of fine large eels. Hanging on the trees were some fishing baskets round made of wicker work with mouse trap entrance holes. Fish are however [169] scarce in the lake & small. The tradition among the natives of the formation of this lake is that it was thrown up in token of the anger of the Gods, with fire & smoke & that an Island rose from the bottom & disappeared again. I however saw no pumice on the East, Lee shore, & as I before remarked the whole lake is shallow & sandy where Capt Ross's net was torn by the stumps of trees – that however the lake is of recent date is probable from the fact that all the points which now run out as shallows once had the names of now submerged villages. However this may be it is certain that the land on the opposite side has been rifted by earthquaques & indeed the whole country is more or less Volcanic. Having strayed for some hours I soon lost my companion & from a mist coming on my way in the wood, with the compass I indeed knew my direction but

there are so many marshes & thickets that it is difficult to go far in a straight line. Webber however had as usual smelt his way to some potatoes & sent a native to look for me who came in a little canoe along the banks of the lake, halloing singing & shouting. On seeing me he became impetuous in his noise, the more so on seeing me walk back into the wood. For my part I had no idea what he wanted with me & as there had lately been a battle in the neighbourhood I did not like the idea of this tattoed customer with sharks' teeth in his ears. Seeing however that he was determined to have me for good or evil & as he gave chase to me in the wood I thought it better to give in with a good grace much fearing I had been trespassing on tabood ground & that this fellow wanted to avenge his fathers angry shades. After a great deal of persuasion I entered his canoe not knowing what better to do & at the same time determined to resist any attempts he might make to wash me for Ki ki (eating). I lay down in the canoe but he was very surly talking angrily to me in his lingo to which I made answer of Kapai kapai (good good) on all occasions. Finding me incorrigible he left off & landing with his frail bark signed to me to follow him to some smoke in the wood where I was not sorry to find Webber cooking potato's with two other natives & some women pigs cats & dogs, & I found that my friend had been upbraiding me for

keeping him waiting so long & a great deal more. They were all very civil & well-behaved making the women cook for us, Potatos & Kumeraho. One pulled the Testament (native) out of his pocket & told me it was Kapai, whilst another shewed me his knife shirt &c. One little girl rather a pretty one brought me a pet pig she had in her bosom for my especial admiration & another a dog or cat – all of which lived together in great harmony. The natives do not eat salt, which every New Zealand traveller should carry with him. They looked at my plants with great curiosity telling me their names, as however I could not spell them correctly & Mr Colenso knows them well I did not take them down, finding that I had gathered one out of flower one of them immediately started off for the wood & returned with flowering specimens. It was now getting late & one of them immediately started to put us into the Waimate road, an old knife & a few sixpences delighted them all & we rubbed noses in passing though I believe it is false etiquette & should be on meeting. On our return we passed some fine horses belonging to the chief of the Hokianga district who preferring these things to Musquets & powder, the general demand, has as many as 30 fine head of cattle & other good stock. Ere we gained Mr Taylor's it had begun to rain hard. These table lands are much colder & more rainy than the lower

ones, scarcely a week passes without two or three days of rain or drizzle & never is there a whole dry week. The name Waimate means the waters of bitterness or as some say the sick waters referring either to the cold climate, to some sorrow or battle lost there or as most say to the chalybeate waters in the neighbourhood.

After dinner had a good deal of conversation with Mr Taylor about the hot springs & the Kaudi forests to the Northward. Lignite is in the process of formation in several places where now no Kaudi exists & under very curious circumstances. Especially in an earth full of Sulphur near the hot springs whose temperature is 197° Fahr & tastes strongly of Alum. Once when travelling through the great Kai Taia forest he encamped among the Kaudi trees where they are most abundant on elevated ground growing in moistish but very stiff clay soil covered with their own debris. The night was dark & rainy, every thing was saturated with moisture & dense mist hung among the trees & on the ground, the weather was warm & close, when at night looking about him he saw in the tent several globes of fire floating about in the air of the size & appearance of a common Sinumbra stand Lamp & after a few seconds appeared to hang to the leaves of a palm which stretched into the tent. Thinking it might be an illusion Mr Taylor shut his eyes & on reopening them found that they had changed

to parallel vertical beams of light, floating in undulating lines & lastly they dissolved into luminous clouds like those of the aurora borealis, the slightest movement put them in motion & on touching his face they felt to him like as if a soap bubble had burst upon his cheek. This he believes to be a gas disengaged from the Kaudi trees during the decomposition of whose ruinous debris this gass is evolved. From the density of the Atmosphere the gas could not rise & its own motion may have produced combustion as in the case of Meteors. Certain it is the immense proportion of ruinous matter in this of all other timber must where the tree abounds produce some Atmospheric phenomena whether appreciable to us or not, & as nature can combine causes to produce this highly inflammable substance, may she not also separate them during decomposition under such circumstances especially. [170] This subject is of course intimately connected with the formation of coal & with the meteor called Jack o' Lantern on both of which I received from Mr Taylor his own views. The latter the Ignis fatuus¹¹⁹ he once witnessed in the fens of Lincolnshire, "I was returning" he said "one night from a neighbouring parish when I saw a faint blue light playing before me on the side of a path in a marshy spot

119 St Flmo's fire

several feet above the ground, the slightest breath or motion set it dancing about; with great care I approached very near it when it suddenly divided into two & vanished, the light was strong enough to shew me white gate posts at a little distance which were otherwise not discernible". This he also refers to the presence of gas evolved most probably from the peaty matter which exists in the fens. With regard to coal he believes that all coal was formed of coniferous woods & of them alone. In the fens of Lincolnshire there are two preserved woods Oak & Fir the remains of ancient forests which tradition tells us covered the land. The Oak remains hard black & entire under the supericumbent weight, but the Fir is partly decomposed & pressed down into thick beds of peat, owing he thinks to the presence of resinous gasses which tend to preserve the wood after a certain stage of decomposition, & which favors their conversion to coal. With most other woods this is not the case & they therefore would decay or silicify. The remains of wood at the mouth of the Mississippi would probably not turn to coal but silicify all except the pines. Some crude Ideas of the same sort occurred to me in Kerguelen's Land where in one situation the wood is turned to stone & and another to coal & yet coniferous woods do not always turn to coal as in the instance of the V.D. Land

silicified wood. The quantity of Kaudi wood destroyed about Waimate is incredible & there as in all other of these parts of the Island the gum is dug up every where. Saw some fine specimens of the Sphæria Robertsii called here the Bullrush caterpillar, the whole body of the animal is filled up with the fungous matter & immersed in the ground the spindle shaped fructifying mass only exserted, it is common under the Cyathea glauca. Mr Taylor also gave me for my father another splendid species from the Murrambidgee river in New Holland. Both grow from the first joint of the body between that & the head & the spores most probably nestle there as the caterpillar works with his head down into the soil to form its cocoon.

October 2nd. Raining hard during the night & this morning.

Mr Taylor told me during breakfast that on the West coast Sandhills are daily forming from the violence of the winds blowing up the siliceous fragments, these are held together by a Triticum like the Marram of the Norfolk coasts, when this is burnt as is sometimes the case, sand shifts to an amazing extent when detached masses of the roots are blown about, settle & form nuclei for other hillocks, when these flat roots become strata, roots of dead trees & comminuted shells of course, are common: now under favorable circumstances these would become Sandstone fossils. In

other places the sand downs are backed by low hills of trap over which the violence of the wind blows the particles of sand, whence sand flats are formed separated by a range of hills from the sea. Now it occurs to me that such a situation should abound in the siliceous coats of marine Infusoria & calcareous testæ of Crustaceæ which are lighter than the sands & again should the sea retire from its present level this artificial marine formation would be attributed erroneously to the presence of the sea. Mr Taylor has also some very nice Insects among them a beautiful Brentus & noble Locusta which bores in the trees here. Also very many pretty & characteristic sketches of New Zealand scenes. Started for Paihia in a tremendous shower of rain found the Wytangi very much swollen so as to be difficult to cross. After descending for several hundred feet we emerged from the rainy heights quite drenched through. Some land here was pointed out to me as having been given to Mr Busby the British resident by the natives as a douceur to atone for their having attacked & fired into his house when he was lying unwell, a heinous offence in their eyes, to attack a sick man. Government now claim the land which Mr Busby resists. Passing Mr Williams' fence examined it, & it is made of Totarra wood of 4 rails the lower 3 placed close together so that pigs could not get through & costs 4/6

per rood. Walked round the beach to Paihia & refreshed ourselves. Mr Mairs boat came across & he put us on board. A Lay Missionary gets £100 a year with rations & £10 per annum for each child of his own. Mr Williams gets £15 for each child as being the head Missionary & having worked for many years on his half pay as Lieut in the Royal Navy. Each child when 14 vears old is thrown off the hands of the Society with £50. Further an excellent education is provided for the children, the society having appointed Mr Taylor to board the males & Mr Williams the females besides his £100 & house &c & £10 for each of his two children he is allowed I think £20 each child he schools of whom he boarded 23 having an assistant allowed him. He also instructs the natives two nights in the week by means of an interpreter, some of them are very quick & I heard some candidates for Baptism repeat long responses from the catechism with wonderful accuracy & [171] fluency - the girls especially - sometimes as many as 60 or 70 attend this schooling & on the Friday night several had to come for 5 or 6 miles in a pitch dark night through a drenching rain. All these can read & some write, their ear for music is very accurate but their voice very harsh from want of training. The best of these Scholars are appointed to be catechists in the several villages where they do much good & are always respected by the other

inhabitants. Coughs were very numerous almost all being affected by them which through their own carelessness often end in consumption. --

Paihia Station, 120 Wednesy. Morng.

My dear Sir,

Many thanks for your kind remembering me with Endlicher, which, by the bye, I have scarce time to look into. I rejoice at your finding 3 Rubus, besides R. australis, and hope they may prove distinct & well defined species. I think on examination your Pteris will prove a Lindsæa, and one, too, long known to the writer (who first found it in that very locality) & sent by him to your Father.

With reference to your kind Invitation, to pay you and your gallant Bark a visit today, I fear I must refrain from doing so, independent of what the weather may prove, for if I take today; I must, of necessity, give up Friday, which I should be sorry to do, as I hope to have the pleasure of your company on that day. I hope, also, to see you tomorrow, either from 8 to 12, morning,

or from 2 to 6, evening, as I have a half a day to spare. If you should not come this way by 10, and the weather permits, I shall conclude you won't give me a call 'till the afternoon, and shall proceed to Kororareka, the village opposite, where I have some business to transact.

I have, however, set down in the Book of Remembrance, next Monday or Tuesday as the day in which I hope to visit the "Erebus". – It is very unfortunate that I should be so pressed for time just now, and doubly so, too, as I have to <u>leave</u> things in such a state next week that the work, over which I have the charge, may <u>proceed</u> in my absence.

Pray, my dear Sir, when you come tomorrow, bring the Ist or last of De Candolle, with you; and your 2 pair specs. that I may seize the present opportunity of giving a fair trial to their lenses.

Believe me Yours very truly W. Colenso

October 7th. Having procured the loan of a nice dinghy from Mr Mair, Smith, Webber & I started up the Kawa Kawa river to visit the Limestone rocks at Waiomio. The wind was blowing down very strong raising a bubble of a sea, so that we had some work to get up to the bend, after

120 Undated letter from Colenso to JD Hooker, possibly Wednesday 6 October

that however the tide being favourable we soon sped along to Johnsons¹²¹ where we got a Gridiron Fng pan some potatoes & Eggs in addition to our previous stock; passing the mouth of the Karitoo we ascended the Kawa Kawa to the southward among reedy banks confined amongst low hills tolerably wooded here & there. About 5 miles up came to some Sawyers huts who work cutting the Dacr. excelsum into planks, here we made the boat fast & crossed an Isthmus to the village which is large & rather compact with much good cultivated soil & a stockaded Pah, in very dirty condition backed by a burying ground & a native church & school house. Asking our way we were told that we should certainly be eaten by the gouls amongst the rocks for the place was tabood. Ascending a hill about 400 ft by a narrow path we came to some trap boulders & enjoyed a fine view of the Kawa Kawa running up amongst extensive marshes & immense black forests of the Dacr, excelsum which have a most gloomy appearance. & of the native village with a pretty stream running through a valley in which the native women were washing clothes, a scarce occurrence & the naked little urchins learning how to use a cano, the men Idly lounging about witnessing their decidedly better halves hard at work on the Potato

grounds. Proceeding on a narrow ridge of hill came to many more trap boulders some of large size & found the ground all cut so as to leave a very narrow path bounded by the slope on each side & the road apparently raised across the most depressed parts. The soil was all clay & bare of any thing but Fern &c. After walking about three miles we came to a much higher hill from whence we could see the position of the Waimate bearing W½N. and an extensive range leading from the interior the West Coast at Kaipara where they were very craggy from S.S.W. to SW by S.

We soon came in sight of the rocks of a gray color amongst some fern & brushwood on the face of a small hill above a native village, from this distance they reminded me of the pictures of Stonehenge. On the neighbouring hills were plenty of masses of Limestone & Trap covered with ochreous matter (Iron?). All around was however very naked there being a few trees but in the narrow Gullies. On approaching the stones we found some native words cut deeply in the clay soil of the path intimating that the place was tabood and warning others not to trespass. The first mass we came to was nearly square with many parallel deep channels on one face, about 12 feet every way, composed of beautiful white crystalline limestone which takes a grey hue from exposure to the air & produces a curious black

¹²¹ John Hawkins Johnson left his whaler to become a sawyer in the Bay in 1827

Lichen. Others of the stones are full of small rounded pebbles, some of them are large masses 30 ft high & look as if built with the hand slab upon slab so that the appearance of ruined walls & old castles is quite striking & complete. An old man came from the village to stop our hammers a very fine looking chief quite grey headed & tattoed all over nearly to the crown of the head, around the back of which was a ring of white hairs. He harangued me with great earnestness pointing away & particularly drawing my notice to Webber with horror who was coolly sitting astride on a pinnacle singing melodiously, my plants he particularly abhorred as being gathered there; all my Kapais were of no avail & even that universal Panacea, Tobacco, he threw away with disgust. After a little time however he became pacified & left us more in sorrow than anger. In the mean time the women collected at the bottom of the hill calling out & using all inducements to draw us from a place they dare not approach. Having satisfied our curiosity we descended to the village which is small & scattered, the old man however would not appear to us, but a young chief did with one of the staffs of office Cook represents & of which Colenso gave me a very nice one.— In Botany there is nothing or little to interest, except (as in most tabood burial places) that the brushwood is in some places rather more luxuriant than

- usual, the difference of soil does not shew a different vegetation nor can it be expected in so very isolated a spot. Returned to the Sayers & sailed down the river to the junction of the Karitoo & Kawa Kawa on whose South bank we made arrangements for passing the night under a fine tree of Myoporum lætum. Lighting the fire was our first object & then after arranging a bed of fern commenced [172] cooking & sleeping.
- 8th. Immense fleets of Canoes are coming down the river to attend a baptising at Paihia, considering how scattered the population is, one wonders where they all come from but then as they only hold three or four each they make a great shew. They are all rigged with a low mast a spreet & a blanket for a sail with which the natives manage them admirably & their appearance emerging from the little creeks & rounding the points is very pretty & pleasing. Ascended a high range of hills amongst dense wood of the same nature as has been described before & then walked along the water side which is brackish & the beach covered with Samolus & Plagianthus divaricatus, found a small Triglochin in a salt marsh. When the wood has been cleared from the bottoms of narrow valleys I have often observed the Fuchsia to cover the ground with native & European weeds amongst it, when it is herbaceous very succulent & does not flower. At the top of the hill I saw the

pigeons flying down to the lower vallies for food & the hawks already on the alert. A few birds chiefly a little green one & the Tui were singing very prettily all the morning but Insects as usual were scarce. Being anxious to visit the pine forest on the river we reascended the Kawa Kawa & took the boat up above the village where the river is narrow & rapid & the scenes on the wooded banks very pretty. The Myriophyllum & a Callitricha were common in the stream with a narrow leaved Potamogiton in the slower water also a Unio in the stream. The forest was characterised by the same vegetation as that at the head of the Wycari & at Lake Mawe. Descending the river with the ebb tide and current through its narrow bed we let her shoot – passing many canos with the youngsters of the family's who had gone down to Paihia, fishing with rods & lines, rude hooks of various kinds & bait. They were catching a small black codling which is also caught in the sea & Bay of Islands. The little urchins seemed perfectly happy singing their native songs, which only admit of three tones rather bawled than sung, they either refer to old traditions when I understand from Colenso the events refer to unknown or forgotten deeds of valor & sometimes the very words they use are obsolete nor can they explain them. The rhythm of the generality of their Sea songs is if paddling – "speed along, good cano;

good canoo go very fast," &c, or if fishing "Come good fish, catch away good hooks" &c, or the like. At night they more commonly sing than in the day to frighten away the Devil. A young man on passing the village shewed us a very nice green Jade ornament cut into a supernatural monstrous figure with Sealing wax eyes a form commonly taken in their carving though they worship no Idols. He was anxious to part with it for Smith's Trowzers of very old fustian only cut according to fashion in preference to a most excellent pair of trouzers thick cloth ones. These Jade things are of very great value now & can often hardly be procured at any price. So much for a love of fashion in a New Zealander. The stone is the nephrite Axe stone, or green Jade, a Serpentine mineral of great toughness of which the natives make ear ornaments & Meris or stone clubs. hatchet heads. &c. I never saw a native or unworked specimen & the accounts of its original state vary much amongst the residents. Some have told me and insist that it is dug up soft in the mountainous interior of this Island cut into the requisite shape & then dried by exposure. This from the nature of the mineral is obviously untrue & impossible, nor am I sure that it is ever found in the Northern Island. Most of it perhaps all Colenso tells me is brought from the mountainous parts of the Middle Island - "The natives" he tells me

"procured their axe stone from the neighbourhood of Q. Charlottes sound in the Middle Island, which article they valued highly (as gold) & named it Pounamu – the sea adjacent, was hence named Te wai Pounamu – Englished thus, – the water (where) Pounamu is found; – hence Capt. Cooks error in calling that Island Tavai Pounamu – is easily supposed." – Passed several ducks in descending the river & landing at our cooking place we dined & returned on board by night fall.

- 9th. Called on Mr Mair & from thence went to Kororareka.
- 13th. Dredging the East shore of the Bay from Mairs to Pt Omatta for shells & Seaweeds with no success the bottom being all very muddy from the estuary of the river.
- Took the Gig to dredge the "Favorites" bank with no success many comminuted shells &c but no large ones or marine animals got much better ones along the rocky beach beyond the Wytangi where Oysters & Patella abound. The commoner sea shells are Cardium, Cressidula, Chiton, Ostrea, Voluta, Turbo, Donax, Purpura, a beautiful rose colored Terebratula very rare, Pisina Pholas in the soft clay rocks, Tillinæ very common, a large Maitre, Pectunculus, Strombus, Haliotis, Bulla, Buccinum, Mitræ, Turritella, Calyptræa, Haliotis Doris & several noble nudibranchs, though rare.

Hyalæa & Creseis the former very rare Spirula & the beautiful Argonauta¹²² for a specimen of which belonging to the late Mr Cunningham I am indebted to Collenso. Other Cephalopods are not rare. The beautiful Zantheria purpurea is taken commonly by the whalers from the stomach of the Sperm Whale and I have taken a smaller species in the outer sea as well as the genera Hyalæa, Creseis, & Cleodora. On the West coast there are many very fine shells of other species differing from those of the E. coast. Annelides are numerous sometimes boring into the soft rocks – as are some Actiniæ & various Polypi. Of Decapod Crustacea¹²³ there are 8 or 10 species of Grapsus. Hymenosonia, Pinnotheres, Pagurus, Eurypodius? or Pisa & Porcellaria. Of the Macroara Astacus, 124 among the rocks very fair eating. Squilla¹²⁵ in the sand at the mouths of rivers. Palæmon a common shrimp in tide pools &c. Of Amphipods Palitrus¹²⁶ or Gammarus every where along the beach. [173] there are also several sp of Idotea or some neighbouring genius & the rocks are covered with a Serpula?¹²⁷ Corals scarce a few

¹²² Nautilus

¹²³ Crabs

¹²⁴ Crayfish

¹²⁵ Shrimp

¹²⁶ Sandhopper

¹²⁷ Idotea & Serpula are worms

Corallines Flustræ & sponges. Fish are plentiful & good in the harbor especially the red mullet & Snapper several small kinds of Mackerel one of which the Yellow-tail a kind of horse Mackerel attains a weight of lb60. The soles are all of very small size but the Flounders are large & rather good. Sting rays & sharks attain a good size & are very voracious. Barracoota are caught at times, Hippocampi, 128 noble John Dorie's. Leather Jackets & handsome Gurnet. The natives are good fishermen with the rod & line using a bit of Mother of Pearl or glass to attract their game to the hook also with the hand net & with immense Seines which several partys use together made of long shreds of the Phormium knotted together, they shoot these nets in deeper shallow water & when hauling it one or more go outside the bight of the net & splash the water to deter the fish from returning, sometimes using fires to attract them of Kaudi gum &c.

24th. Sunday morning HMS "Favorite" made her number in the Bay & soon afterwards was moored between us & the "Terror". She brought us a passenger Dr Sinclair who took letters for me from England to V.D. Land in the main convict ship, sailed from V.D.L. to Sydney & took the opportunity of the Favorites sailing to follow me here. I was not a little glad to have some one with me attached to the Study of plants.

- 28th. Accompanied Dr Sinclair to Paihia where he took boarding at Tibby's hotel; from whence we went to my favorite glen for Ferns where in the space of a few roods we gathered nearly 40 species besides plants in proportion. Met Pearsall who had shot me a beautiful pigeon from a tree of the Vitex with whose berries its craw was filled.
- 29th. Accompanied with Webber went to Paihia & took Collenso's boat with Sinclair to the Wytangi river ascending as high as the falls. The name Wytangi is derived from Wai-tangi, sounding waters from the roar of the falls which we heard on still nights at Kororareka & all over the Bay about 5 miles off. Wai, water, is the common first syllable for rivers, as, Wykare or properly Waikare fluctuating water from Kare, Kare Kare, verb. to shake as water in a bucket, from the troubled state of the waters when the wind & tide or current are opposed. Waimate is another instance & Waiomio – from Wai, o of, mio a prayer, or ceremony formally used with the dead. The river Karotu is so-called from that being the name of the sedge so abundant on its banks. The Kawa Kawa is a diminutive from Kawa bitter, Kawa Kawa bitterish perhaps from the salt water. Keri Keri

¹²⁸ Seahorses

pronounced Kidi Kidi is a place partly dug from Keri verb to dig. Again the place where Marion's body was cooked since tabood & called Madion (the natives pronounce r as d) bore the name of Haumi, from the form of the outline of the Sandy beach from a height, haumi subst. is the stern post of a canoe (Derivations from Collenso). Below the falls which are 22 feet at high water there is a very large deep pool surrounded on all sides by basaltic rocks sparingly covered with vegetation from which however several good Mosses were procured. Ascended two or 3 miles above the river & saw a good many ducks in the stream with some Shags one of which after being shot went over the fall & in spite of the enormous body of water & his wounded state came up apparently unhurt in the pool below. A naked savage covered with Tattooing & who I had seen prowling about in the morning immediately struck out for it, he put me much in mind of Darwin's savage, the one he met with up this river with the horrible countenance. Found some Fresh water shells in the streams but little else. Insects are rare although the day was splendid & we sought diligently. A few of them & the spiders especially are very common all others rare though there must be many species in the country but

few specimens of them. Locusts are very abundant as our some Grylli¹²⁹ from the trunks of the tree is one of which obtains an enormous size. An extremely beautiful little Melolonthid insect¹³⁰ is very abundant on the flowers of the Leptospermum, with some Haltiæ? Carabidæ¹³¹ are very few except a species of Cicindela perhaps the tuberculate Fab. whose habits are those of the English ones. I have heard of a Dityscus¹³² but never saw it. An Elaphin¹³³ is not uncommon in the same situations as at home; the Staphylinideæ are very scarce. Curculionidæ¹³⁴ more abundant parts confined to the woods where a noble Brentus¹³⁵ lives in the Kaudi. Lamelli, Corus & Longicorns I suspect form the largest proportion of Coleoptera the former on the hot exposed plains & the latter in the woods. There are also some Heteroptera. A large Earwig is very common under the stones. One species of Blatta¹³⁶ is intolerably fetid from living under the barks of dead trees & devouring the Eunicidiæ, its smell is certainly more loathsome than that of any thing with which I am acquainted, & may be

¹²⁹ Crickets

¹³⁰ Green Manuka beetle

¹³¹ Beetles

¹³² Dytiscus diving beetle

¹³³ Stag beetle

¹³⁴ Weevils

¹³⁵ Weevil

¹³⁶ Cockroaches

winded several yards of. It often enters & lives in the houses. Libellulidæ¹³⁷ are very abundant. Of Orthoptera three species of wood boring Grylli a Locusta & small Acryda with one or two others. Of Hymenoptera a small bee which Capt Ross tells me are very abundant boring into a soft cliff near the hot springs, & a large Ichneumon also one or two species of Ants. Several Phasmæ¹³⁸ – all apterous that I have seen. Some Phryganeidæ. ¹³⁹ Of Lepidoptera 2 sp of Butterfly a Nymphalis¹⁴⁰ & a Sphinx several Hepiali, ¹⁴¹ a good many Noctuæ & Geometræ & some Crambi & Tineæ¹⁴² amongst which I saw a feather wing. Hemiptera are a considerable proportion and Diptera abound especially a small black sand fly & a common small blue bottle that blows upon meat as soon as it is killed, & upon any animal substance & is a serious nuisance, as the eggs are hatched in its body which I have often proved by cutting them open & taking the crawling maggots out. A species of Mosquito I have been told of but never saw. Tipula & other long legged gnats are common. Indeed both in number of species & specimens I should think

the Diptera exceeded all other orders put together. $\[174 \]$

Of Reptiles there are none but a species of Lizard which I have seen, one the large one from the coast, the other more or less common. No snakes or Batrachiens¹⁴³ or water newts. What Rutherford means by saying that this place produces tortoiseshell I do not know, (see Acct of New Zealand 144) there being no Chelipus in the Island. Birds are scarce about the Bay of Islands but much more common to the Southward here there are two Hawks & an owlet often found under the fronds of the tree fern. Several Merops¹⁴⁵ & the beautiful Tui some small birds like Titmice – a ground Lark. – a fly catcher, a small cuckoo, one or two Wattle birds. A pretty King fisher which sits on the branches of the Avicennia & darts down on the Porcillariæ when they emerge from their holes, their stomachs are always full of this crustacea, for which purpose its coats are very thick, indurated, & transversely rugose. A small green parrott & a larger species both Nestors? The Columba spadicea. 146 A fine Bittern – two sandpipers a red billed

¹³⁷ Skimmers

¹³⁸ Stick insects

¹³⁹ Caddis flies

¹⁴⁰ Tortoiseshell butterflies

¹⁴¹ Ghost moths

¹⁴² All are moths

¹⁴³ Frogs and salamanders

¹⁴⁴ Hooker had clearly read George Lillie Craik's *The New Zealanders* in which John Rutherford ("the white chief") said that if he returned "he might acquire many of the most valuable productions of the country, particularly tortoiseshell, which he considered the best object for an English commercial adventure".

¹⁴⁵ Bee-eaters

¹⁴⁶ Wood pigeon

& legged <u>Totanus</u>?¹⁴⁷ Three Sulæ¹⁴⁸ all common, two species of duck & the black backed Gull & Penguin. The only native quadruped is a small rat, it is not however common & differs little in ordinary appearance from the brown English rat. Cats dogs & pigs are already beginning to run wild about the country the latter especially.

Novr. 1st. Monday. Capts. Ross, Crozier & Sullivan 149 with a party of 15 men went by the Keri Keri to Waimate taking the Lime & a skin boat with them. Went on board the Favorite and thence to Paihia, returned & dined on board.

2nd. Went with Sinclair on the hills at the back of Paihia to a wood near Kiapatika where we found the Cyathea medullaris in full fruit. It is by far the most handsome of the tree Ferns. The trunks are jet black & about 12–14 feet high, the tufts of fronds are not horizontal but at an angle of 45 gracefully curved outwards, the stipitus stout deep black 10 feet long. The upper side of the fronds glossy dark green contrasted beautifully with the abundant dark brown clusters of Sori on the under surface. The young crozier headed stipitus are densely clothed with bright long dark scarious chaff. The inner

substance of the trunk & stipites are composed of cellular substance of a pure white color & full of a mucilage, so that a lump of it looks something like half dissolved white sugar or more like bread soaked in thin arrowroot, the taste is mawkish, rather sweet & melting in the mouth. When used for food it used to be roasted or half cooked when it is said to be very nutritious as is also the root of the Peteris esculenta with which & cockles the natives never can starve.

Wedy. 150 Eveg.

JD Hooker Esq. &c &c

My dear friend

I have just returned from taking a stroll with Dr. Sinclair¹⁵¹ to <u>your</u> "Muddy-muddy" – and, in the course of conversation, have been given to understand, that in the 1^d-Cyclopedia is a <u>good</u> article on <u>Botany</u> & <u>Conchology</u> – and, moreover, that you have the work – Now I won't apologise for asking you to allow me a

¹⁴⁷ Waders

¹⁴⁸ Seabirds

¹⁴⁹ James C Ross (Erebus), Francis RM Crozier (Terror), TR Sullivan (Favourite)

¹⁵⁰ Undated letter from Colenso to JD Hooker, probably Wednesday 3 November. 151 Andrew Sinclair arrived from Sydney on the "Favorite" on 24 October (Bagnall & Petersen p86).

peep at it, and to bring it on shore with you tomorrow when you come this way – which, I am given to learn, will be ere Phoebus peeps over the Eastern hills. – Oh! never again think that you gentlemen of the R. N. have but <u>little</u> time to call your own – or, when you do so, think on the <u>writer</u>.

I forgot to mention to you this evening, that I had just received No. 1 of the "Tasmanian Journal" from Henslowe – who again asks for "my" contribn!!

By-the-bye, I must get you to explain what you mean by an "amianthus-like moss on the ventricle of the stump."

Excusez moi – Ever most truly yrs W. Colenso

4th. Sailed the harbour masters Schooner Trent with Lieuts Wood & Phillipps¹⁵² for Auckland – she hoisted a pennant as being under our command. Left the ships to go to Waimate with Sinclair, & bid adieu to Webber who had been our messmate since the Favorite sailed for Sydney & who embarked in the "Trent" for Auckland.

Met Collenso & Sinclair at Paihia & took Tibby's boat

to the falls of the Wytangi where we got out to walk on to the Waimate (14 miles). On the road the vegetation had advanced a good deal especially amongst the Gramineæ & Glumaceæ in general. Also now beautiful Convolvuli appeared in full flower with a Sparganium & some other common plants. The Gaultheria fluvialis, Viscum Salicoides, & Dracoph. Lessonianum were as common on the upper banks of the Wytangi as on the Keri Keri above its falls while the beautiful Agrostis – was a noble ornament to the river banks, its appearance strongly reminded me of the Arundo phragmites but it grows in much drier places. The river was very low at the crossing place & in the stream I found a Unio & Crepidula – also one or two beetles on the sandy banks. Near the Waimate a fine Epilobium 3 feet height & upwards had come into flower on the upland regions. Found Mr Taylor in his garden & heard that Capt Ross & his party had that morning left for the Keri Keri on their return to the ships, - in fishing they had had very poor success. The gardens were very forward to what they were 5 weeks ago, the strawberries were nearly ripe & also the early peas.

5th. This morning found all the boys of Mr Taylors School very busy making a Guy faux for the famous 5th of November for which they had a holiday. These old customs remind one strongly of home at such a distance

¹⁵² James FL Wood (Erebus) and Charles G Philips (Terror)

in so very wild a spot. Went to the Kaudi forests & in our way entered a small wood in which were abundance of the Nephrodium molli a very beautiful fern then new to me. Crossing the Waimate river in a deep hollow we left the volcanic soil of the Waimate district at the base of some hills of the yellow clay, densely wooded though a good road for the transportation of timber was cut into it. On the upper part of the hill are many fine Kaudi trees one of which measured 27 feet at 4 feet above the cone of mould and debris which forms round the trunk & must have been much larger below, as the mound was 9 feet high. As with the former ones I had seen the brown smooth trunk was 40 to 60 ft high branched & then throws out irregular limbs horizontally from which the branches & leaves ascend forming a small oval head in the most perfect specimens. The young trees are very different looking but peculiar & beautiful, a perfectly straight taper stem is thrown up to the height of 60 to 100 feet. The branches commence from \(\frac{1}{3} \) way up are few in number, first divaricate at an angle of 45° & then rise straight up provided with little tufts of leaves on naked curved sprigs. The leafing is so scattered that the stem is seen up to the tip & the outline of the ramification is conical. The bark abounds in gum trickling down like amber, in one sp. I saw a beetle enclosed, it also lies in cavities of the wood which is too

well known to require description. Several Curculonidæ & a beautiful Brentia & several Ips &c appear to bore into & feed on the live wood raising a vast quantity of dust. Under the trees found abundance of small specimens of the Dicksonia squarrosa covered with clusters of Sori. After dinner Mr Taylor accompanied us to the wood where the Nephrodium molli grew when we gathered a pretty little Trichomanes on some loose rocks near the stream. Also ate some of the roots of the central leaves of the Areca which tastes something like Chestnuts. The Bark of the Laurus Tawa makes a tolerable tea which was much used by the early settlers as does those of the Piper excelsum still used for that purpose in [175] Auckland & formerly chewed to cure the Toothache by the natives. In a hole amongst the rocks above the stream some natives bones still remain deposited by a tribe now expelled from that district, they seemed those of a child but very few remained. In the stream found a Dentalium¹⁵³ hanging on to the stones under the water. On our return crossed a little stream of chalybeate waters in which the mosses &c were coated with the ochreous matter, whence, as some say, the name Wai-mate is derived from the bitter or bad water though it is very good. The first Kaudi trees to be seen

¹⁵³ Tooth or tusk shell

in this part of the Island are in the great Kai-tia forest to the northward of this district occupying about 30 miles in length of hard clay soil & crossed by one or two low tiers of hills – here there is a tree upwards of 40 feet in circumference & another of 7 large trunks growing close together & called the 7 sisters. At night the boys having cleared a large open space among the fern on a hill the Guy was burned to the infinite delight of the natives many of whom asked an explanation of the ceremony & showed their detestation of the frail actor in the company by firing their guns at the burning effigy. This morning left the Waimate to walk to the Keri Keri by the only cart road in New Zealand more than a few miles long this being (10) & very fair the whole way, though sometimes rather round about. Descending to the river about three miles off we came to a Hakari or one of those series of stages on which the natives are accustomed to pile provisions & give a feast or rather feed. It was beautifully situated near a little village on a flat surrounded on all sides by low wooded steep hills, out of which the river emerged among trees of the Dacryd. excelsum – crossed by a neat wooden bridge. It consisted of three parallel rows of 8 spars in each row placed about a pace apart, formed of Kaudi wood in general but not all. The middle row was upright running E.N.E. & W.S.W. & rose to a height of perhaps 160

feet, the two other rows were placed one on each side of the middle one at three paces distant & leaned towards the central ones to which they were lashed, it had then the appearance of a very high roof at the gables of which were one or two slender spars leaning to. -8transverse stages were then formed across these uprights & leanto's at equal distances above one another of strong short spars lashed firmly to the others & crossed by wattling. Here & there rude rattlines ran up to the top for the convenience of carrying up the provisions. These feasts are now becoming rare & I never heard that any ceremonies or religious rites were in any way connected with their use or fabrication. What should induce the natives to erect such unwieldy & inconvenient tables for the convenience of their guests I cannot conceive except it may be that as it is their universal custom to avoid robbery by placing their food on high trees or posts near their cottages, it might be inconvenient to watch as many stages as would hold all the food during the length of time it must have taken them to collect so much. Descending some steep wooded hills came to an immense tract of flat land covered with Fern & reedy marshes. None of these marshes are deep, the covering of decayed vegetable matter being from a few inches to 2 feet above the clay soil, which every where abounds in masses of the Kaudi gum whence it is inferred that that

tree once covered the ground though there are no trunks roots or remains of it to be seen amongst soil perhaps because the forests were burnt down when owing to the resinous nature of this tree the fire eats down destroying the stumps for some feet underground as I was told, it would be curious to know in what state the roots exist deep in the soil in the salt & dry places. The marshes are covered with reeds 3 or four feet high, amongst which the Gleichenia hecistophylla, three species of Drosera, Micromeria Cunninghamii & some other plants grow. On coming to a pretty stream crossed by a neat bridge found abundance of a beautiful little Libertia & the Loxoma Cunninghamii in a very diminutive state under the bridge all evidences of the existence of former forests. The views of the settlement at Waimate with its woods fields & hills from these hills is very beautiful. At about 4 miles from the Keri Keri the estuary of that river is seen on one hand (the right) & its falls on the other pouring over a shelf of rock into a wooded ravine & winding above it in the distance amongst groves of the Dacrydium excelsum whilst to the Northward the wooded hills of the Kaitia forest close the view. The descent to the Valley of the Keri Keri is sudden & the view of the river immediately beneath ones feet with the cultivated missionary grounds its houses orchards fields & the boats in the creek are the more striking from the

- contrast they form to the barren lands we had just been traversing. Went into Mr Kemp's at the Missionary Station & finding that Mr Tibby's boat had arrived we crossed the river went to the falls under them & round to the other side when we hurriedly returned & as darkness was coming on sailed down to Paihia whence I returned on board
- 11th. Went to Paihia & thence to the hills opposite the ship botanising with Dr Sinclair, returned to Paihia.
- 12th. Collecting shells & seaweeds along the beach with Sinclair. Walked along the beach Collenso in passing with his boat picked us up & took us on to Mr Busby's at Waitangi over whose grounds he took us, where he has a large Winery & fig Plantation & a live capital screen of Cordyline trees to protect his vineyards from the E winds pointed out a new Coprosma along the beach. Some fine Cactus had its purple fruit quite ripe which was not bad eating. Leaving Colenso we continued along the beach where the Phormium tenax was in full flower & full of a watery honey it was growing in quite a dry place. Found many new seaweeds a little Limosella & an Attriplex with some other plants.

- 13th. Entomologizing over the Hills caught a pretty <u>Cicindela</u> & continued on to the Observatory crossed the stream & collected plants along the woods to fill my Ward's case.
- 18. The Jupiter sailed for Sydney taking my dried plants to go home. Filled Ward's case with plants chiefly pines, other timber trees & Ferns on that day.

Paihia, 154 Missn. Station, Thursday night.

J. D. Hooker, Esqr. &c &c &c H. M. S "Erebus" My dear friend

According to promise I send your Books to Dr. Sinclair's in Lodgings; availing myself of the opportunity of sending a ½ doz. Stout and a Bottle Claret, for your use when Botanizing at the base (or peak) of Mt. Erebus, which I pray you to accept. Would that my Cellar allowed of my doing so in a manner more worthy of your acceptance.

Our acquaintance, my dear friend, has been, indeed, brief! and that, too, under great disadvantages –

154 Undated letter from Colenso to JD Hooker, probably Thursday 18 November.

but, believe me, I shall <u>ever remember</u> you; and though it is not probable that we shall ever <u>meet on earth</u> again, yet I endeavour to console myself with the hope of hearing from and corresponding with you. – You are going, my friend, to scenes of – perhaps – danger, but look <u>beyond second</u> causes, and ever put your trust in HIM, who stills the raging of the waves and holds the winds in his fist. May that Benevolent Being ever keep you! and may HE grant you a safe return to your Native Land, and a happy meeting with your Family and Friends! –

A Dieu, Hooker, A Dieu! Sometimes think on New Zealand, and on your

attached friend
William Colenso
C. M.

19th. On board writing &c.

20th. Landed with Sinclair at Mr Mair's & walked from thence by the high hill visited on my first excursion to Mr Bartly's at Pawah Bay. Found on the way the small Leptospermum beautifully in flower above Mair's, two species of Uncinia & a grass like a <u>Brachypodium</u>. Procured two skulls at an old burial place close to Bartlys. Capt Bateman & party accompanied us part of the way back. Supped at Mr Mair's who gave me an axe he had made of trap & used for hollowing out canos after burning. Mr Mair was the first person who introduced the Phormium tenax into Sydney by buying ½ ton which was laid up too tight & snapped. When laid up loose it is used for whale line though the Manilla hemp is far preferable. Capt Harrison R.N. was a great advocate for it & the "Vernon" was rigged with it. I suspect that something may still be done with this valuable plant by proper usage & careful handling nor do I doubt but that the nature of the hemp of the large red flowered Northern species of which coarse mats are made may differ materially from that of the small vellow flowered species with which the Southern natives make such a beautiful fabric. With regard to the extensive destruction of the Kaudi I heard an instance to night. Two tribes disputed the possession of a large tract of wood & met at Wytangi point to settle the matter, when the one tribe treacherously fell on the other & murdered many of them, the remainder rather than see the forests fall into the others hand destroyed 25 miles of the trees the fire passed quickly from tree to tree & now nothing but the blackened stumps remain. It appears that this tree once existed not only in the Middle but in Stewarts Island as a native servant of Mr Mair who was brought up from that Island immediately recognised the gum in the ground behind the house gave

the proper name for it & said that where she came from the natives chew it a practice now very much discontinued but once in full vogue when they were accustomed to pass it from mouth to mouth. One method of sending ships for this wood is the most expensive & least satisfactory of any that could be employed, the same purpose might much better be effected by contracting with the natives for a certain supply to be ready cut for transportation or still better with a trading ship acquainted with the coast & the language. The Phyllocladus¹⁵⁵ makes most beautiful decks for ships which never require caulking, its spars are also excellent. The Dacrydium excelsum is useless for spars & requires constant greasing or it will snap. The Burnet & Fern are great objections to the raising of sheep as well as the scanty pasturage. Whales which used to be common & frequently taken in the Bay are now rare. Capt Bateman has also taken them close in shore, & he tells me that the Ambergris is only found in the smaller lower intestines of weak & sickly sperm whales, which produce no oil, its present value is 3/6 per ounce but it is of no known use.

21st. Sunday. Capt Bateman came on board at noon & told us that immediately after our departure from Pawah Bay on

155 Tanekaha

the previous day, they had observed the home of a Mrs Robertson to be smoking on one of the Islands opposite & that on going across to assist in quenching the fire they found the whole edifice a rapoo hut, burnt to the ground as was the kitchen removed some few paces from it. Near the position of the fire place were the bodies of a woman & Child both dreadfully mutilated the breasts & limbs of the former being cut off & then the trunks burnt so that they could not be identified. The servant a man was found murdered near the house, he had been lying asleep near the house & had two wounds in skull apparently made by a Carpenters broad axe. A little boy was missing. Mrs was the widow of a whaling captain who had left her the house with some land, money & the nicest position on that part of the island & the deed was supposed to be done by two convicts who had been at labor in the Bay but who were imprisoned at Kororareka for their offences & who had lately affected their escape. A cano was seen to go to the Island that morning – Mrs Robertson had been on the day before settling her claim to the land with the Government Commissioners who were at the Bay of Islds for the purpose of enquiring into the several claims of the different land owners. Capt Bateman soon left, & we afterwards heard that the murderers were natives of Mana Wara bay who seemed to think according to their

own custom that on the death of the purchaser the land is given up to the original proprietor. They had taken the boy with them & kept him at the Pah refusing to restore him to any one. The whole circumstance was considered as a precursor to a general rise amongst the natives some of whom are jealous of the inroads of the English & say that native or "Mouri soon go into bush all the same as pig" whilst others again resist the authority of Government which has refused leave to any of the purchasers of property to cut timber untill all the claims throughout the Island are settled, such as are friends to the purchasers have been known to declare that they will burn the Kaudi trees rather than let such a law be enforced. There are rumors that the murder was known of at Kororareka on the Saturday. Many of the better natives are most anxious to bring the perpetrators to immediate justice & feel much offended when some persons suggested that Mouris had done the deed when they mustered to search the Island for the missing boy & to keep guard over the Island, as also to mourn after their own fashion over the little girl who was killed & burnt, she happening to have belonged to a civilised tribe who are burning for revenge. Went to Paihia in the afternoon but heard no more news on the melancholy subject. Colenso had started a few days before for the E. Cape. Went into his garden to take a last look at his

native plants Phormia moss rose & violets & returned over the hill to the Observatorys & thence on board where all was ready for sea.

22nd Monday passed over very quietly though there were rumours of an insurrection amongst the natives & the guilt was fully established upon the Mouris who still refuse to give up the Boy. Sent plants on board the Exporter for Sydney in Wards case for which they want an exorbitant charge. Sinclair came on board sent him letters for England & a Fungus on a large Caterpillar to my father, bid a temporary adieu to the "Favorite" to meet again at the Chatham Islds. About 10 A.M. a boat came on board from the "Favorite" with a requisition requesting an armed force to protect the town &c. Sent Lieut Ellerman to Kororareka to see whether there were any real grounds of fear who returned with a favorable report, which we were very glad to hear as it was now full time for us to be off for the Antarctic regions. ¹⁵⁶

My dear Father

It is now some time since I have addressed myself to you in a good long letter, the last being only a short one sent to Sydney by HM Favorite's letter bag. Since then I have received your most welcome Athenæum ones, which were brought by Dr Sinclair, forwarded to Sydney, & on here before the rearrival of the latter vessel. They were most acceptable though I could have wished for better accounts of poor Mary's health, than what they contained. Most sincerely do I rejoice with you on your *Kew appointment & may God grant that all your family* may soon be gathered together again, to enjoy the nice house you describe to me, where I shall ere long meet you in health & happiness, I am afraid to mention names of those so far off & in such precarious health, it is however doubtless all over by this time. About a fortnight after the receipt of the letters Dr Sinclair himself arrived in the "Favorite" & right glad I was to find some one at last who could viva-voce give me particulars of my friends. I have enjoyed his society extremely though a homely thoroughbred Scotsman he is one of great shrewdness & who has given me a very great deal of information – of you he speaks in the most

H.M.S. "Erebus" Bay of Islands New Zealand November 23d 1841.

¹⁵⁶ Ross's account of this episode is given as an appendix

grateful terms & likes to talk over all he said & saw with you & especially of the new house near Kew, its comforts & beauties. From here he sails for Auckland tomorrow in the "Favorite" where he will remain for a short time & then proceed to Port Nicholson, where he has opportunities of going for some distance into the country, during his stay here I have given him as good a drilling as I could into the Botany of this part of the Island, so that he may collect to more advantage in others, his eye for plants is however not at all good, he can however work very hard though, & is most anxious to do all he can for you especially.

By the ship Jupiter I sent to Sydney a box containing about 250 species of Bay of Island plants, together with a few Sydney & Van Diemen's Land ones, that were not contained in the former one. The best of the New Zealand plants are however yet retained as they were not well dried as also better specimens of many which are very poor & a very large collection of duplicates, besides nearly all the Cryptogamia the notes & drawings which I hope to draw up as the Auckland Isds ones were; which went from V.D. Land. Dr Sinclair will fully explain to you how I am situated with regard to leave &c. All I hope is that you will find that I have done my best in thoroughly investigating every branch of the Botany of this part of the Island, the notes

especially will I hope please when they shall be sent home. Of my private collections I have as many Insects as I could pick up without interfering with my Botany. the choice of which I of course have given to the Captains for the Government. Of the shells I may say the same, they are much more numerous, as the Insects have only now begun to appear. – Of Birds I have about 40 skins for you all shot for me, as I never take out any guns among them some beautiful Tui or parson birds & of the beautiful Columba spadicca which is by far the most difficult bird to skin I ever saw from its tender skin, loose feathers & fatness. I have also a few minerals chiefly given to me. – In Mosses I have come to a stand still as with all my eyes I can get no more than about 70 species or 80 which is perhaps a considerable number considering that there is no elevated land here. Two days ago I found the curious Gastrodia which R. Cunningham first found & which has not been seen since, there were only two specimens, as also a new Halorageous plant like Callitriche, hermaphrodite with no floral envelopes whatever, the mature stamen only 1/100 inch long splitting transversely across & 1 celled, not with a horse shoe opening. – The 4 carpels are beautifully winged. Another new plant which I think Colenso had is very near Milligania & Gunnera, but I could not find the male flowers; the embryo is however

very minute & of the same form &c as <u>Gunnera</u> – we did not see that of <u>Milligania</u> & I begin to think that none of them belong to <u>Halorageæ</u>, are not the leaves opposite in all <u>Halorageæ</u>? which is not the case in other any of these three genera. – I have also examined a beautiful little <u>Limosella</u> which grows here & which differs very materially from my Kerguelens Land plant. The filaments are long & cross one another. Amongst the monocotyledons I have a good many plants not mentioned in Cunninghams list & I have completed my collection of seaweeds as far as I am able.

Two days ago I bade adieu to my most kind & amicable friend Colenso, for sincerity & true Christian feeling he reminds me often of poor Nelson & I am sure a more warm hearted happy minded person I never met. We formed an intimacy which shall never be forgotten by me. His whole time is taken up in endeavouring to better the Natives for he is the most zealous servant in the great cause in the Island, he received your letter from Dr Sinclair who explained to him as I did how your time was taken up, for he is very anxious about the plants he sent home. Since I left Paihia he sent me some bottled Porter & Claret which I am sorry for, as I am sure his poor cellar could not well afford it, it did not however arrive untill he had sailed for the East Cape & he sent a most kind note with it. I have many nice things from him

as minerals shells, & native ornaments &c. The only return I could make him was in what we had obtained during our cruize. – His last trip about 200 miles to the Southward above the coast, produced some very good things amongst others a plant whose large leaf he sent vou before & which I make out to be a Pisonia -- A plant he called a Coprosma with spathulate emarginate leaves 1/4 inch long, silvery underneath which also he sent you in fruit, which is a new Corokia making allowance for Cunninghams inaccurate generic character of the common sp. of his new Fagus I have a specimen from Bidwell. – Though it has not been my lot to find these fine things I do delight to see them brought in by another. What novelty I profess must be amongst the Cryptogamia amongst which I have spared neither trouble nor patience. – From the East Cape Colenso will come up inland to the Thames district, in which route he will visit the mountains & bring home inestimable treasures of Botany for he intends devoting himself entirely to plants during his trip. – I did not write by the Jupiter which took my dried plants as she came in & sailed on the same day during my absence. -This morning however I sent on board the Exporter our large Wards case upwards of 4 foot long full of Ferns & plants for Kew Gardens they have been several days boxed & I saw them last night in beautiful condition,

they go to McLeay's at Sydney who will look at them take out any duplicates he may wish for, put in other things & forward the box to the Admiralty to whom Capt. Ross has written requesting them to be forwarded to you. Among them you will find the Corokia buddlioides, several Alseuosmiæ, Laurus Tawa & Tarairi, Libertia sp., Astelia Banksii, Freycinetia, Haxtonia furfuracea, Veronica 2 sp, Myrsine Urvillei, Pittosporum umbellatum, Piper excelsum & Piperomia urvilleana, Podocarpus ferruginea & totarra, Phyllocladus trichomanoides & Dacrydium excelsum, Cyathodes acerosa, Quintinia, Azaleaceæ sp., Ackama? - Edwardsia & Carmichælia, Thelemitra Forsteri, Pterostylis Banksii & a small Acianthus, Genestylis. Coriaria sarmentosa, Vitex littoralis, Knightia excelsa, of Ferns which I hope will please Mr Smith Todea pellucida, Lygodium articulatum, Schizæa dichotoma, Polypodium Billardierii & pustulatum, Niphobolus rupestris, Lomaria discolor, procera & Fraseri – Asplenium lucidum & bulbiferum, Cænopteris flaccida, Doodia caudata, Pteris macilenta microphylla, Adiantum 2 sp, Lindsæa linearis, Dicksonia squarossa, Aspidium pennigerum, Nephrodium glabellum, Cyathea dealbata - Trichomanes reniforme & elongatum, Hymenophyllum sp. – These were all gathered & packed with my own hands & if they all do as well as they look

& as those I previously sent to McLeay, I shall be well content, many will doubtless die this being a very bad season for transplanting as Colenso warned me, but on hearing of your appointment I could not resist asking Capt Ross to allow me to send you somethings, which he granted at once & gave me hands to remove & fill the box. – As no tiles or garden pots are to be got here I filled the bottom of the box with billets of wood, covered them with Sandy soil & then put in the claev soil in which all these plants grow with some vegetable mould watered them untill the water ran freely from the plug hole, let it drained covered it up & put on the covers. – Not knowing what plants would do best I put in more species than in preference to many specimens except of the Pines which if they arrive safe you may like to distribute.

Along with your letters came two from Jas Mitchell, abounding in gratitude for your kindness which he says he never can sufficiently thank you for, I feel very much pleased & truly obliged to you for remembering my friend. I do not think that the Echo had any thing of mine on board or if so it was a short letter to tell you of my safety. Capt Ross has heard from Lady Franklin that all my collections which went from V.D.L. & a part of his private journal which went by the same ship have been lost, if this be true I fear they are the Kerguelen's

Land plants for which I am very sorry, but am glad the notes were retained; however I have duplicates of the most of them. — I sent a letter to Maria by the mail bag which went on board the Jupiter this morning for Sydney. These along with others for Mitchell, Dr Robb, Mrs Richardson Mr Children & Mr Ward will go to Auckland by Dr Sinclair who will forward them from thence to Sydney or England.

From here we sail tomorrow morning for the Chatham Islands, where we meet the "Favorite" again, which will come sail with us & go to Auckland. From there we go down to the Barrier where we left of last season & come up to Deception Island, there to winter if possible or thereabouts, thence to the Falkland Islands the Cape & then home – if however we are not completely successful we are to have another season to the *Southward.* – *However that may be I have plenty of* plants & mosses to occupy me in making a flora of New Zealand, like my Auckland Isld one, & german books &c to work away with. – I have bought a German testament here so you need not mind my one. – I send home another bill with the duplicate of the former one which you will burn if the other has come safe to hand, I promised Gunn a portable Barometer which you will perhaps be good enough to procure, at Newman's it will cost about £7. or else one of those new Instruments the

Thermo-barometer if any friend at the Athenæum can tell you whether they are yet proved to be useful. Gunn forwarded my letters from V.D.L. but retained what he thought were some trinkets of which no mention is made in your letters to me; his leg is getting quite well. – Dayman also wrote to me telling me that the old Governor insisted on his reading a part of one my letters to him, he always asks for me very kindly. – Dayman begs of me to thank Aunt Ellen for communicating to his friends any account she hears of our ships. – From McLeay I had a short letter expressing his delight at the good condition in which some live plants I sent him arrived. – I shall write to my mother from the Chatham Islands as also to Mr Lvell & Mrs Booth to whom I should have written before but I am so very busy now that it is out of my power.

Dr Sinclair has for you a noble Fungus growing out of an immense caterpillar from New Holland, given to me for you by the Revd Mr Taylor of Waimate to whom you will please to send a copy of the engraving of it, should it be worth figuring. through Mr Colenso. Should we not meet the "Favorite" at the Chathams you will not hear of me untill we arrive at the Falklands Wherever I am you may always think of me as your most affectionate Son

Jos D Hooker

Please to get me also at Newman's a small Daniell's Hygrometer packed in a leather not wooden case so that I can carry it in my pocket it will cost about £4. Of books you know what to send me. I shall write to you again from the Chathams & send particulars concerning the Fungus that Sinclair has got.

23rd. At 4.40 A.M. weighed & made all plain sail down the harbour with the Favorite in company running under topsails jib and Driver yet beating us with every stitch of canvass set skuddingsails &c. When off the sent rock hove to & Capt Sullivan came on board. At 10 he left we exchanged cheers & the Favorite parted company steering down along the coast for Auckland.—



Appendix

A most atrocious murder

Ross JC. 1847. A Voyage of Discovery and Research in the Southern and Antarctic Regions. Chapter V, p 125

All our arrangements being completed, the ships were unmoored on the evening of the 22nd of November, in readiness to sail at an early hour the next morning. Late at night Commander Sulivan brought on board a letter he had just received from a surgeon at Kororarika, who held also the office of coroner, stating he had received information that a most atrocious murder had been committed by a party of "Maoris," who, after killing Mrs. Robertson, an European woman, three children, and her man-servant, had set fire to the house; and the inhabitants of the town, being in dread of an immediate attack, requested that an armed force might be landed for their protection. As this application was not backed by the magistrate, although he had been solicited to do so by the constable whom the coroner had charged with the delivery of it, I suspected that he considered their fears groundless. I, however, directed Commander Sulivan to send a strong party immediately to the village to make more particular inquiries into the circumstances, and report to me, without loss of time. Lieutenant Ellerman, to whom this duty was intrusted, returned soon after midnight, and acquainted me that he had found the inhabitants in a state of great excitement and alarm, but that he could not hear that any number of natives had assembled in the neighbourhood, and that many

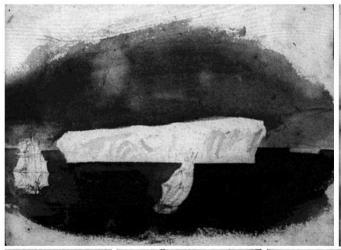
circumstances concurred to show that the murder had been an act of individual vengeance. It did not appear to me necessary to interfere any further; I therefore directed the force to be withdrawn as soon as their fear of an attack had subsided, as the civil authority was sufficiently powerful to arrest the murderer, who, of course, had fled into the bush. The natives had long threatened to repossess themselves of the island which Mrs. Robertson's husband had purchased several years before; for they thought when they sold their land it would again revert to the tribe on the decease of the purchaser. Mr. Robertson was drowned in sight of his own house shortly before this melancholy event, and Mrs. Robertson had the day previous to it attended the Court of the Commissioner for settling the claims to land, and had substantiated her right to the island in question: the murder following so immediately. led to the supposition that the deed had been clone by the tribe who claimed the island, and that they intended to establish their claim by force. But the following account of the horrid tragedy which is given by Mr. Marioribanks in his recent account of New Zealand, places the event in its true light. He says that Mrs. Robertson, the widow of a Captain Robertson, was a Sydney lady, and resided on one of the numerous islands from which the Bay of Islands derives its name. It had belonged to her husband, and at this time she and her family were the only occupants. She had employed this young chief, who was a remarkably powerful lad, though only sixteen years of age, to assist her white man servant, Thomas Bull, in some of her farming operations; and Thomas having told Mrs. Robertson that the Maori was a lazy fellow, he watched the opportunity, when Thomas was asleep, to split his skull open with an axe. Mrs. Robertson having accidentally happened to come upon him, when in the act of doing so, he judged it advisable to despatch her also with the same instrument, and then the two female children. Mrs. Robertson's son, seeing what was going on, fled to a mountain close by, but the monster overtook him, and threw him headlong over the rock, two hundred feet high, so that he was literally dashed to pieces. One of the children was the grand-daughter of Nene, 157 the great chief of the Ngapuhi tribe, which principally inhabits Kororarika; and her murder, which led to hostilities between Nene and the notorious Heki, 158 was the means of preventing the destruction of the town of Auckland and its inhabitants, which the latter had declared his intention to accomplish, and which even the humane and wise policy of Governor Fitzroy could not have averted.

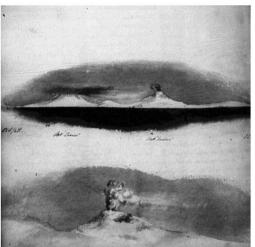
The murderer, having effected his purpose, set fire to the house in order to conceal the foul deed; and it was seeing it in flames that excited the fears of the inhabitants of Kororarika, and led them to believe the whole tribe of "Maoris" was upon them. He was afterwards given up by his father, who dreaded the vengeance of Nene. He was taken to Auckland, tried, condemned, and executed on the 7th of March following, with great formality, being the first execution that had taken place in the colony since the establishment of the British government.

¹⁵⁷ Tamati Waka Nene 158 Hone Heke



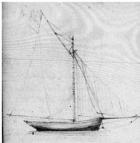
HMS Erebus and Terror in New Zealand 1841 by John Wilson Carmichael, National Maritime Museum, Greenwich







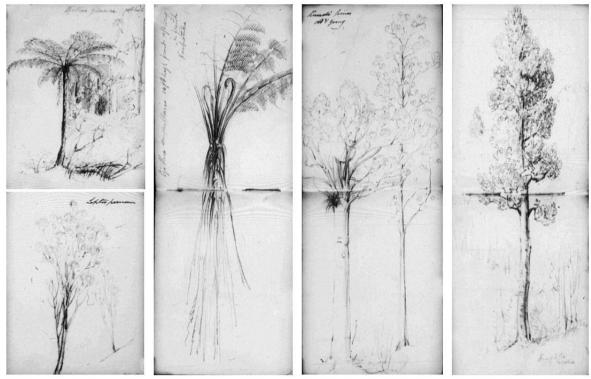




From the Antarctic:

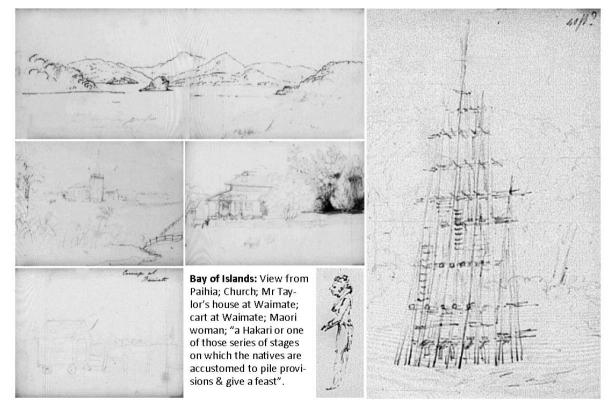
HMS *Erebus* and *Terror* and iceberg Mounts Erebus and Terror One of the ships under full sail Two sketches of a cutter

eColenso Supplement March 2018 page 72



Trees: treeferns, manuka, kauri, rewarewa





eColenso Supplement March 2018 page 75

Acknowledgements

The sketches from Hooker's notebooks and from his Antarctic Journal are reproduced with the kind permission of the Board of Trustees of the Royal Botanic Gardens, Kew., Surrey, England. They are copied from a microfilm (Micro-Ms-Coll-10 Reel 28) in the Alexander Turnbull Library, it in turn copied by the Australian Joint Copying Project.

- The images on p.23, p.73, p.74 and p.75 are all taken from JDH/1/8/1/4 "Notebook Bay of Islands, New Zealand 1841"
- The image of the iceberg and Mount Terror and Erebus come from the "Antarctic Journal" JDH/1/1 f. 123 and opposite f.130
- The image of the ship (on the left) of p.72 is from JDH/1/8/1/2 "Notebook Cape of Good Hope, Kerguelen's and Van Diemen's Lands 1840" and the other two images of ships on the same page are from JDH/1/8/1/3 "Notebook Miscellaneous 1840-1843"

Hooker's journal is transcribed from https://www.biodiversitylibrary.org/item/227693#page/316/mode/1up pp.156-177

 $His \ letters \ are \ copied \ from \ \underline{https://www.kew.org/explore-our-collections/correspondence-collections/joseph-hooker-collections}$

Colenso's letters to Hooker are transcribed from Kew JDH/2/10 Joseph Hooker Correspondence 1839-45: p17–21; Alexander Turnbull Library Micro-Ms-Coll-10 Reel 27. They are also reproduced in *Colenso's collections*, published by the New Zealand Native Group in 2009.