

This article was downloaded by: [University of Bath]

On: 04 October 2014, At: 16:55

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954

Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Scottish Geographical Magazine

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rsgj19>

North-West Australia

John George Bartholomew^a

^a Honorary Secretary, Scottish Geographical Society ,

Published online: 27 Feb 2008.

To cite this article: John George Bartholomew (1885) North-West Australia, Scottish Geographical Magazine, 1:11, 529-538

To link to this article: <http://dx.doi.org/10.1080/00369228508732309>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

THE SCOTTISH GEOGRAPHICAL MAGAZINE.

NORTH-WEST AUSTRALIA.

A SKETCH OF THE RESULTS OF RECENT EXPLORATION; AND THE SCOPE OF
THE COUNTRY FOR COMMERCIAL DEVELOPMENT.

Read at Meeting of British Association, Aberdeen, Sept. 1885.

BY JOHN GEORGE BARTHOLOMEW,

Honorary Secretary, Scottish Geographical Society.

IN introducing the subject of my paper to your notice, I should like to lay some stress upon the great importance, more especially at the present day, of diffusing among the public a thorough knowledge of the geography of our colonies. As every one knows, the old country is becoming incapable of supplying labour to sustain its rapidly increasing population; and to the greater number of those who have employment there is little or no scope for successful enterprise. Whereas, in possession of our immense colonies abroad, with their almost unlimited and, to a very great extent, undeveloped, resources, there is no reason why our large surplus population should not select prosperous new homes to their own liking in almost any quarter of the globe. It ought also to be borne in mind that at the present day, with our many lines of fast steamships and other ready means of direct communication by railways, posts, and telegraphs, the distant parts of the world are practically brought much nearer home; so that in this respect, emigration is a much less serious consideration than it used to be.

But, unfortunately, the general public, and more especially the poorer classes, who are really most concerned, know little or nothing of even the existence of the rich lands in these far-away countries, and continue at home pursuing their hard struggle for existence, instead of going where their labour would be in great demand, or where they might have lands of

their own to farm and trade on. Thus, the primary evil is ignorance, and this particular ignorance is only to be remedied by the teaching of Practical Geography, the value of which at the present day, from a social as well as commercial point of view, is not at all fully realised. The teaching of Geography in this country has as yet been a failure, because it has had no definite aim beyond the learning of dry undescriptive facts without illustration or explanation, and, therefore, with little practical result or value as far as Geography itself is directly concerned. Geographical teaching will only be satisfactory when our present vast stores of scientific and commercial information about the world are classified and reduced to correct and general results, and when these and their practical deductions are thoroughly taught and fully illustrated by competent men. Geography will then become one of the most essential and useful of all branches in either a scientific or commercial education.

But what I would specially advocate, in the meantime, is that the descriptive and commercial geography of our British colonies should be made a subject of primary importance in school education, so that the children of our working classes may thus become familiar with the advantages and disadvantages to be realised by living in India, Australia, Canada, Cape Colony, or any other part of our British dominions, and thus, by inducing free and voluntary emigration, avoid the very possible political necessity of compulsory emigration. Much has been done in this direction by the work of Colonial Governments, and even the enterprise of shipping agents, and railway and land companies; but, to be effectual, such "Emigration Geography" must be more widely diffused, and this can best be done in our schools.

In the short time at my disposal, and with such an extensive subject as North-West Australia, I cannot do more than give you a very brief and general sketch of that great tract of the British Empire which is so little known or heard of by the outside world. Whilst other colonies, which opened their career under more favourable auspices, have received all our attention, its claims for notice seem to have been neglected, and it has even remained until late years quite unexplored. However, it now appears that Western Australia by no means deserved her bad reputation, and that she is full of almost as much promise as any of our other colonies. She has just begun her pioneering work when her sister colonies are settled, and although she cannot yet raise the cry of "Gold," which so rapidly populated Victoria and New South Wales, yet the reports of her pioneers are much more hopeful than any one at first anticipated, and fully justify the prediction that she will now rapidly come to the front and soon be as well known for prosperity as the eastern provinces of Australia.

The country along the north-west coast to which I wish to direct your special attention, extends from Shark's Bay to Cambridge Gulf, a length of about 1200 miles, and reaches about two or three hundred miles inland, until it is lost in the dry and sandy desert country of the interior.

It includes the Northern District of Western Australia, extending from Shark's Bay to beyond the De Grey River, and the adjoining district of Kimberley lying to the north of it, extending northwards to the Timor Sea and eastwards to the boundary of the Northern Territory of South Australia.

It is rather extraordinary that this north-west coast, which was the first part of Australia to be discovered, should be the last to be explored. As long ago as 1500 it was known to the Spaniards and Portuguese as "Great Java," and, later on, the Dutch gave it the name of "New Holland," a name afterwards applied to the whole continent. But, in those days, European nations did not settle down to found sheep-rearing colonies; the search was for plunder; and if a profitable trade in gold, silk stuffs, spices, or other rich produce was not readily found they sailed away again. Thus it has been that the sandy coasts of North-Western Australia have, with the exception of passing visits, remained so long neglected, and the country in the possession of its aboriginal inhabitants, until recent explorations revealed the fine large rivers and broad pastures which are now bringing it into notice.

As my object is to deal more with the results of recent discovery, a record of the explorations of the country would be quite beyond the scope of this paper, and I can only include in my general description the results of the earlier journeys made by the Gregorys, the Forrests, Warburton, Giles, Von Mueller, Austin, Sholl, and other brave pioneers whose names are so much identified with Australian geography. They endured the most severe privations and hardships in their persevering efforts to explore the interior; and although they brought to light the pasture lands of the Gascoyne, Ashburton, Fortescue, and De Grey Rivers, yet these discoverers were not so encouraging as those of later date; and, strangely enough, the discovery of the great desert regions seems to have made the deepest impressions, and frightened away possible settlers from the other districts. The recent tide of good fortune really seemed to set in after the celebrated journey of Alexander Forrest to the Kimberley district in 1879; for since then the reports have continued more and more favourable, while many are most glowing and enthusiastic, and lead to the most sanguine expectations for what is yet to be discovered.

I shall now endeavour to give a descriptive sketch of the country, beginning at Shark's Bay and proceeding north-eastwards with the coast.

Shark's Bay itself is a large shallow inland sea, about 150 miles long by 60 or 70 broad. A profitable pearl-fishery is carried on here, the annual export of pearl for the north-west coast valuing about £50,000. In the fishing, a fleet of some 60 little cutters, managed by Europeans, and employing aborigines and Malays as divers, is engaged dredging on the banks here.

The Gascoyne River, which flows into Shark's Bay, is about 500 miles long, and its tributary, the Lyons River, about 250 miles. The surrounding country is pretty much broken up with detached ranges of sandstone

and trap formation, the disintegrated trap-rock forming a rich soil which is clothed with short green grass and with a plentiful growth of water-melons. Fine broad alluvial plains, well suited for cultivation, lie along the river valleys. Just bordering on the Tropic of Capricorn, the climate is hot in summer, but at other seasons very agreeable and, sometimes, even chilly; the heat, however, is never unhealthy, for, being dry, it causes no unhealthy vapours to rise from the lands.

Proceeding north-eastwards we come to the Ashburton, Fortescue, and Sherlock Rivers, with numerous tributaries, having their source far inland, at a height of about 2000 feet, among some fine mountain scenery where the peaks are 3000 and 4000 feet high. The interior here is described by Mr. Gregory as "a very rocky but highly fertile country of trap formation," and the numerous short hill-ranges all over the country are spoken of as sources of fecundity as well as humidity to the country. In the river valleys are rich alluvial plains, adapted either for cultivation or rich pasture, so that the lands here alone could easily support a much larger population than is at present in the whole of Western Australia. The coast-line of this region is, however, not so attractive as it is inland. After leaving the low sand-hills of Shark's Bay, we pass the headlands of Cloates Point and North-West Cape, under the shelter of which lies the large inlet of Exmouth Gulf, where the coast again becomes low and sandy, and bordered with coral reefs and islands extending as far as the Dampier Archipelago and Nickol Bay. Nickol Bay is described by Gregory as "a harbour only second to King Sound, as it can be entered in all weathers:" owing, however, to the want of fresh water for a township there, the principal harbour at present is Port Cossack, a little further east, where there is a thriving settlement, and where considerable quantities of wool are shipped to England. Cossack is also the headquarters of another large and very important pearl-fishery, which is here capable of great development as a very profitable industry. The fishing season, which is limited by the temperature of the water, lasts from beginning of September to the end of May. It is carried on by divers who work at slack water on the pearl banks, some of which are as far as 100 miles from Cossack. Stormy weather is the only serious interruption to the fishing. The divers, who are principally natives, are paid off at the end of the summer, when they either return to their tribes or find employment as shepherds or shearers at the sheep stations.

Eight miles inland from Cossack lies Roeburne, the centre of the trade of this large and successful pastoral region; it is administered by a Government Resident, and is a rising township with a bank, post-office, and several stores. Indications of lead and copper have been found in the district, but capital and labour are required to discover and develop these resources.

Proceeding eastwards from Roeburne, and crossing the Sherlock River, we come to the Yule, Turner, Strelley, and De Grey Rivers, which all

flow in a north-westerly direction through a continuation of the same fine grassy plains of the Fortescue. The De Grey, which is about 200 miles long, with many important tributaries, has rich agricultural lands in its lower course, the delta being described by Gregory as containing between 90,000 and 100,000 acres of alluvial land, which, he imagines, would be well suited for the growth of either cotton or sugar-cane.

Briefly reviewing the physical features of this district between the Ashburton and De Grey Rivers, we find an area of about 70,000 square miles well watered by large rivers, and broad grassy plains divided by low ranges of sandstone and granite hills, lightly wooded with eucalyptus and baobab trees. The country, however, cannot be said to be all fine, for there are large patches of desert, sandstone, and hard granite, and in many parts the water is scarce, and there is little or no vegetation; but it is to these desert patches that the salubrity of the hot climate is largely due. Mr. Bonwick, in his admirable little geography of West Australia, says that "the settlers soon come to know that a sandy desert belt adds enormously to the health conditions of a more fertile neighbourhood." The general climate here is said to be somewhat like that of Spain and Southern Italy.

The country near the coast, which was surveyed for the Government by Mr. John Forrest in 1878, is now being rapidly taken up for sheep and stock stations, which are worked almost entirely by native labour, and the wool crop is in every way satisfactory. Fish are plentiful in the rivers, kangaroos are common, and ducks, partridges, and other birds numerous. Fruit cultivation has not yet been attempted, but there is every probability that most tropical fruits, spices, and sugar-cane will be successful. Of the minerals little is yet known.

After leaving the De Grey there are no other rivers until we come to the tributaries of the Fitzroy, a distance of about 250 miles. The intervening country is a long level plain of sand and limestone formation, very unpromising, and, as Mr. Bonwick truly says, "there is more spinifex than grass, more scrub than forest, more unavailable than available land." At the latitude of $19^{\circ} 30'$ south we cross the boundary of the North District of West Australia into Kimberley District—the most recently opened up, but perhaps the most hopeful of all. It comprises all the country in West Australia lying north of $19^{\circ} 30'$, and has an area of about 134,000 square miles. The Government is doing much to explore and survey this district, and, towards this end, have already spent £10,000, with the most hopeful results. The report of the well-known traveller, now Surveyor-General, the Hon. John Forrest, on his recent expedition there, corroborates the accounts of his brother, Mr. Alexander Forrest, together with those of Messrs. De Grey, Von Mueller, Stokes, Durack, O'Donnell, Greffrath, Panton, and others, whose enthusiastic descriptions of the richness and beauty of the country bode so well for its future. A survey of the coast has also been carried out under Commander Coghlan.

After crossing the boundary, there is some good land along the coast

at Lagrange Bay, but the first place of importance that we reach is Roebuck Bay, where a township, named "Broome," after the present Governor of the colony, has just been planted. To the north-east, between Roebuck Bay and King Sound, lies Dampier Land, of which, as yet, little except the coast-line is known; but the country in the neighbourhood of Broome, especially towards the Logue River, is described by Mr. Forrest as being magnificent pasture-land, well suited for cattle, and in some places thickly wooded with baobab and short eucalyptus trees. At some seasons it is not well watered; but, as in most other places along this coast, good water can easily be procured at any time by sinking to a depth of 16 feet.

Descending the Logue River, which runs through a flat country splendidly grassed, and well suited for either cattle or sheep, we come to the Fitzroy River, which here runs into the splendid inland sea called King Sound. King Sound is about 70 miles long by 30 broad. Forrest describes it as like a large tidal river in which you can anchor at any time, and the water is generally as smooth as in a pond. There, as in all other bays to the extreme north-east, the pearl fishery can be carried on; and as it may almost be said to be inexhaustible, it is capable of very great development. At the head of King Sound is Derby, the capital of the Kimberley District, and named after the present Lord Derby. There is a Government Resident here; and from its splendid position as a port at the mouth of the Fitzroy River, and as the trade outlet of an extensive stock-raising country, it may soon be expected to become a very thriving town, although at present there are only a few small huts and tents scattered among the baobab trees.

Flowing into Stokes Bay, at the south-east end of King Sound, are the May and Meda Rivers, forming the delta of the Leonard River, which rises 100 miles inland, among the forests at the foot of Mount Broome in the Leopold Range. The land between the May and Meda is rich alluvium, splendidly grassed, and at present supporting thriving flocks of sheep and cattle. Its suitability for cultivation is more a question of climate, which has yet to be determined by experience, as we have no statistics of the meteorology of the district.

North of Stokes Bay towards Port Usborne the country is more hilly, and formed chiefly of quartzite ranges, cut up by many narrow valleys, in which there are abundance of fresh-water streams, with palms lining their verdant banks. To the southward, between the Leonard and Fitzroy Rivers, is mostly a plain, grassy in places, and in others sandy, with spinifex. Proceeding up the Fitzroy, which is navigable for several miles inland, we pass through extensive plains of fine pasture-land, bounded by wooded uplands. For about 200 miles, Mr. Forrest says, "this fine river flows strongly and steadily through a grassy country which, without it, would be scarcely fit to be occupied;" but the never-failing springs in the Leopold Ranges supply this immense valley with a permanent stream, while the tropical rains cause it to overflow its banks, and leave large

waterholes, many of which, if not permanent, last a considerable time. Alexander Forrest said he believed the Fitzroy Valley alone could carry more sheep than were at present existing all over the colony. The main river, which is, altogether, over 300 miles long, has for its principal tributary the Margaret; and they both have their sources in the Leopold Range, a chain of mountains, about 130 miles long, running N.W. and S.E., and forming a watershed varying from two to three thousand feet high, between the rivers of King Sound and those flowing into Cambridge Gulf. The grassy lands of the Fitzroy are continued eastwards across the Leopold Ranges down into the valley of the Ord River, and southwards towards Sturt Creek and Denison Plains; beyond that the country is unexplored, but is supposed to be principally desert, with occasional fertile oases.

Perhaps the finest part of Kimberley, if not one of the finest in all Australia, is the Glenelg District. Its splendid harbours, beautiful tropical scenery, and rich luxuriant pasture-lands have been the admiration of all who have visited it.

Camden Sound, Port George, Port Nelson, and, indeed, all the bays along the coast here, are splendid natural harbours. The Glenelg, Prince Regent, and Roe Rivers contain in their lower courses fine land, well suited for rice and sugar-cane culture, while the richly grassed plains of the higher lands are more essentially a wool-growing country.

Proceeding round the coast, past the large inlets of York Sound and Vansittart Bay, numerous islands are passed, on many of which valuable deposits of guano have been found and profitably worked. The trepang fisheries along the coast here are described by Commander Coghlan as capable of much development. As a field for the naturalist, this coast teems with unexplored wonders.

Rounding Cape Londonderry, the northernmost point of West Australia, little is known of the country until we come to Cambridge Gulf, a considerable inlet of about 70 miles in length, described by Commander Coghlan, who has recently surveyed it, as a splendid port for landing or shipping stock. Viewed from La Crosse Island, at the entrance, he says Cambridge Gulf has the appearance of a magnificent river from 6 to 12 miles wide. The western shore consists of sandstone hills from 800 to 1000 feet high; the eastern side is low and marshy, and lined with dense mangrove thickets, over which the tops of the distant hills are just seen. Half-way up Cambridge Gulf is Adolphus Island, where the gulf divides into an eastern and a western arm. The eastern arm is the outlet of the Ord River, the upper course of which was discovered by Alexander Forrest in 1879. Since then its whole course, about 300 miles long, has been explored by Messrs. Durack, O'Donnell, Carr-Boyd, and other travellers, who have discovered two large tributaries on its west bank—the Denham River and the Bow or Fraser River, both supposed to rise in the Leopold Range. In this district are the Cambridge Downs and Ord Plains, and other stretches of fine country, already being stocked

with sheep. It is composed principally of high downs and rich grassy valleys, watered by numerous streams, and has the advantage of being free from the floods which visit the lower levels of the Fitzroy. At the head of the western arm, or the gulf proper, the lofty peak of Mount Cockburn is the most prominent object in the landscape, and down at its western base is the mouth of the Pentecost River, discovered by Mr. Durack.

In addition to the Ord, Pentecost, and Durack Rivers, an expedition at the end of 1884, under Mr. Stockdale, reports the discovery of six other rivers falling into the west side of Cambridge Gulf: they were reported to be larger than the Ord, and as having their sources in the Leopold Range. Mr. Stockdale describes the surrounding country to be "as fine pasture-land as he had seen anywhere in Australia—entirely free from poison plants; and, although it was then the dry season, the grass was in splendid condition and water everywhere abundant." Game was scarce, but the rivers abounded with fish. The natives were friendly, but not at all numerous. The discovery of these rivers is as a new mine of wealth to the Kimberley District, and insures a prosperous future for Cambridge Gulf.

About 60 miles east of Cambridge Gulf, at the meridian of 129° East longitude, we cross the boundary between Western Australia and the Northern Territory of South Australia—a country which will no doubt share much in the future fortunes of the North-West.

Briefly reviewing the leading features of the Kimberley District, we have an extensive country about four-and-a-half times the size of Scotland, the greater part of which is well watered with splendid rivers, and possessing millions of acres of some of the finest pastoral and agricultural land in Australia. The heat of the climate in summer, although to a certain extent a drawback to Europeans, is not nearly so bad as in other countries in similar latitudes. Owing to the heat being dry, the climate is not at all unhealthy, and there is an almost entire absence of fevers. In winter the air is said to be quite bracing; while Captain Grey and other explorers speak of it as one of the finest and healthiest climates in the tropics. The wet season, during the north-west monsoon, extends from the beginning of October to the end of April, and the dry season from May to September; but, even in the dry season, the dews at night are so heavy that land where the grass has been burnt by the natives is very soon green again.

As to the geology and minerals little is known, but from the fragmentary data now before us, Mr. Panton, the explorer, sums up his description by thinking it probable that Kimberley may be found to yield gold, antimony, silver, copper, and, perhaps, tin.

The present population of Kimberley only numbers about one hundred white men. The blacks are not numerous, but at present they may be seen in all their native simplicity and savagery: they are, however, often very tractable, and, when better acquainted with the white man, will no

doubt prove useful as shepherds, stockriders, and general station hands, as well as on the coast fisheries.

Sheep, cattle, and horses thrive well, and it is almost a certainty that the breeding of horses for the Indian and Eastern markets will be one of the most important industries of the colony in the future. On the rich alluvial lands of the rivers, especially those flowing into Cambridge Gulf, it is confidently expected that sugar-cane and other tropical products may be successfully cultivated, but, as yet, they have not been tried.

In addition to its intrinsic wealth, the commanding geographical position of the north-west coast in its proximity to India and the East, and in its being the nearest coast of Australia to Europe, together with its possession of a series of the finest harbours in the world, give it commercial advantages which it is difficult to exaggerate, and almost sufficient to justify the prediction that it may one day, as the terminus of a trans-continental railway, be the chief outlet for Australian trade. La Crosse Island, at the entrance to Cambridge Gulf, while 1850 miles distant from Perth, is only 1450 from Batavia, and 1950 from Singapore; so that it will be seen that in this direction is one of the most likely highroads for its commerce; and, indeed, a line of steamers, subsidised by the West Australian Government, is already run by Messrs. Trinder, Anderson, and Co., from Freemantle to Singapore, calling at all the ports along the coast. Messrs. Bethel and Co., of London, are also enterprising pioneers of the shipping trade on this coast. From Singapore there is, of course, ready communication by different steamship lines to India, China, and Europe.

From this hasty descriptive sketch of the general features of the country, it may be seen that it possesses valuable resources, to develop which, population and a very moderate capital are all that is required. As Sir Napier Broome says—"The colony is like a ship undermanned, which, however fair the wind may blow, cannot spread its sails to catch the breeze." At present there are many large tracts of fine country, capable of supporting millions of sheep and cattle, which have never been visited except by the travellers who discovered them. It is a good field for enterprising emigrants, either with small or large capital, and those who are afraid of the long severe winters of Canada may here find a warm sunny land more to their liking.

Under the present energetic Government, with Sir Napier Broome at its head, great advances are now being made; roads, railways, telegraphs, and shipping communication are extending in all directions, and no effort towards promoting the interests of settlers seems to be neglected, so that at last a new era for Western Australia appears to have fairly commenced.

The keen business men of Victoria and New South Wales are becoming alive to the advantages which it offers as a field for commercial speculation, and there is little doubt that when the existence of its rich pastures becomes more generally known, they will soon be covered with flocks and herds. Its rich soil and warm climate will soon attract the

planter, and its almost inexhaustible pearl-shell beds will be largely and profitably fished.

At present it is a country of almost unlimited hopeful possibilities, and offers as great scope for enterprising settlement as any other part of the globe.

THE BASIN OF THE BEAULY.

READ AT MEETING OF BRITISH ASSOCIATION, ABERDEEN, SEPT. 1885.

BY THOMAS D. WALLACE, F.G.S. ED.; F.S.A. SCOT.

INTRODUCTORY REMARKS.—The geography of Scotland has long and wisely occupied a foremost place among the subjects of our earliest instruction; but while this is the case, it may well be questioned whether the knowledge thus imparted leaves any real lasting impression of the country upon the youthful mind.

Those interested in the advancement of geographical knowledge, and specially of such knowledge as tends to the development of a wider and more correct acquaintance with the geography of Scotland, must have hailed with enthusiastic satisfaction the inauguration of the Scottish Geographical Society, which will no doubt make the geography of Scotland the subject of investigations, and the spread of such knowledge, through the Society's publications, one of its principal aims.

Many admirable descriptions of Scottish scenery are to be found scattered here and there among the literature of the country—some of them the result of much careful investigation and moderate good taste: others at best but flashes of enthusiasm, kindled in the mind of an occasional patriotic observer. They are pleasant pictures much overdrawn, and very often conveying an impression quite disappointing to the subsequent visitor.

Some guide-books, again, convey much that is interesting to the holiday-seeker; but to *know* a district, more than a passing visit must be must be paid to it. Days must be spent in leaving the beaten paths, and miles of moorland, bog, and hill-side must be traversed before an acquaintance can be claimed with either the country or its people.

At intervals during the last two years it has been my privilege to traverse the greater part of the basin of the Beaully—with the exception of the most westerly parts, bordering on Kintail—to make myself acquainted with its geology, archæology, natural history, and general physical features, a condensed summary of which I have now the honour to submit to you.

BOUNDARIES.—The basin of the Beaully may be roughly considered as