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SOUTH AUSTRALIA.

REPORT ON THE LAKE EYRE EXPEDITION.

Ordered by the House of Assembly to be printed, 14th September, 1875.

Sir—I have the honor to inform you that I left Beltana on Thursday, October 22nd, 1874, with party all well; but my camel outfit, although complete, was considerably out of repair, which caused great delay in starting, in fitting saddles to the camel's back. We proceeded along the Telegraph line to the Mussel Waterhole, north end of the base line, lat. 28° 27', long. 136° 20', where we arrived November 14th, 1874.

I was delayed several days repairing camel saddles and ascertaining if water was procurable lower down Umbum Creek, or in Sunny Creek; we, however, finally started for Sunny Creek on November 20th, to a good waterhole in it, from which place I examined Umbum Creek down to its mouth in Lake Eyre. The country on the creek, as far as I saw, consists of red silicious stones covering large patches of ground, other parts being fairly grassed, and with salt and cotton stones covering large patches of ground, other parts being fairly grassed, and with salt and cotton bushes scattered in patches, and varying in extent.

From Sunny Creek waterhole we proceeded northwards to the Neales, examined it down to Lake Eyre; finding nothing but salt water in the river, and indifferent and poor sandhill country on both sides.

Starting from the Neales Depôt on a westerly course, over very good sandhill country, we struck and followed up Brown's Creek to Brown's Waterholes; striking north again, we crossed the watershed between Brown's Creek and Koorakarrinna Creek, which we followed down for some distance to waterhole marked on plan. The country here and eastward to Lake Eyre is remarkably well grassed; patches of outcropping limestone were here observed for the first time over a considerable extent of country. Several small creeks were crossed en route, on the banks of which a large species of myall (commonly known as gigia) grow most luxuriantly.

From the lower waterhole on Koorakarrinna, we proceeded northwards to the Macumba, crossing good country, dry watercourses, and sandhills. We were fortunate in finding a good waterhole in the Macumba, from which I followed it up to the junction of the Alberga and Stevenson Rivers. The country on the south side is the same kind of redstone plains previously mentioned, but exceedingly sterile in places; the north side, as far as I saw (excepting Mount Samuel and thereabouts), and what I learnt from the natives, consists entirely of sandhills and inferior country. From the depôt up to the junction of the Alberga and Stevenson, all the water I could find was one small hole in a branch creek, and a native well fully twelve feet deep in the

On my return I mapped the shore of Lake Eyre from the Neales, as far as possible, crossing

over some good country, entirely destitute of water.

We then followed down the Macumba to the junction of Kallakoopah Creek, through country quite unsuited to European occupation; the river, with few exceptions, contained only brackish water, and in other respects being only a salt boggy channel, with high barren sandhills close in on both sides. Crossing Kallakoopah near the junction, we followed up the left bank, to where our black guide said there was a good well of water, which, however, on trial proved a where our black guide said there was a good well of water, which, however, on trial proved a failure, being merely a slight drainage in a dry watercourse on blue saudy clay; but by going through this abont one foot we came to fine clean sand—very fine, and after repeated trials to sink through the sand, timber not being procurable, we obtained, what I have no hositation in calling, a permanent well of fresh water; but this is all that can be said of the place, it heing impossible to convey an idea to those who have not traversed the country—the barren, sterile, and desolate appearance it presents, the sandhills being very high, and in many places washed into precipitous cliffs and gullies; no sign of any vegetable life, except in places, where withcred plants of solanum grow in small patches.

From the well (at which all hands labored during the day, the thermometer standing at 140°) I followed the creek up for about twelve miles, but the country being so unpromising, I did not deem it necessary to waste any time over it.

did not deem it necessary to waste any time over it.

From the well (Tommy's) we went south-east to the Warburton River, and followed it up a short distance to where, by digging under the right bank, we obtained a good supply of water. I was here necessitated to establish a depôt, and taking the black boy, followed down the creek to the junction of the Macumba. I endeavored to get across to ascertain the exact place the salt creek empties into Lake Eyre, but my attempts were unavailing, as the channels of both creeks and numerous small marshes, over which it was also necessary to cross, were so boggy that a stick or a small piece of earth would sink in the mud there being no water visible; consequently I had to a small piece of earth would sink in the mud, there being no water visible; consequently I had to follow up the Macumba and a branch of Kallakoopah to Tommy's Well (previously described) before I could cross. I then followed down the south side of the Macumba to where it joins the Warburton, then down it to Lake Eyre, over country which is quite worthless, being all high the Warburton, then down it to Lake Eyre, over country which is quite workings, being an ingu-sandhills, producing nothing but pig's-face plants (mesembryanthemum) and a little cane bush. In some of the low-lying valleys, which were not of so saline a nature, I observed a species of native lupin. This was all the camels had to eat. Returning to the depôt by way of Tommy's Well

Well we followed down the creek again to where a portion of it breaks off and goes southward. We crossed, and proceeded in a south-west direction, over very high sandhills, to the eastern side of the mouth of the Warburton. Here levels were taken and holes sunk, for a distance of seven miles out on the lake, details of which are shown on plan. I also followed the shore of the lake to the mouth of the eastern branch, which I followed up, crossing at the same place to the depôt

We then continued our journey up the creek for a considerable distance, finding no country worthy of notice, but numerous small springs in the banks, until we reached lat. 27° 57′ 8″. Here the natives showed us a very fine waterhole, and we found decided improvement in the

country, the sandhills getting lower and receding further from the creek.

From this place (native name Wadlarkaninna) up to the small lake named Goyder's Lagoon, lat. 26° 53′ 11″, the country is very good, suitable for either cattle or sheep. It consists of salt and cotton bush flats, low, well-grassed sandhills, and stony plains—the plains around Mount Hogarth being particularly well grassed, and interspersed with salt and cotton bushes.

A few miles south and westward of Goyder's Lagoon the creek fails to form any channel. Near this place, through very heavy rains and one of the camels going blind, I was obliged to leave the main camp, with instructions to return down the creek, as soon as practicable, to the fish hole; I, with three companions, passing Goyder's Lagoon and proceeding northwards, crossed a very large barren saltbush plain, on which the Everard spreads, then turning a little westerly we found a good waterhole situated in low, well-grassed, sandhill country. Proceeding northward again over some good country, till the sandhills began to rise, we then turned eastward. Striking the Gerty, we followed it up to where it rises in large nardoo flats. The country

on this creek is, generally speaking, very good.

From the head of the Gerty we continued our course eastward till we struck the Eleanor.

This was afterwards found to be a branch from the Everard. Following up the Eleanor a short distance we continued our eastward course, and struck the Everard in lat. 26° 11' 28". It, unfortunately, was running bank high, thus preventing us crossing or judging as to its permanency; but, from the great width and depth of the water, and the large gum trees growing on the banks. I am of opinion that, if not permanent, the holes contain water for a long time—such trees only growing near permanent water. As we could not cross, we followed up the west bank to Camp No. 44, lat. 25° 50′ 40°. Here we were most effectually stopped by boggy ground and water overflowing the banks of the creek and covering the plains for three and four miles out. We tried in several places to get to the creek, without success, as the water was in many places four and five feet deep. However, at last we managed to get about seven miles northward, still could not get near the creek; and, as the water kept rising, I was reluctantly obliged to abandon my former intention of ascending farther up.

From Camp 44 we returned by a more westerly route (crossing some good country, excepting near Camp 45, where the country consists of high sandhills, with barren gravelly flats between) to the place we first struck the creek, and followed down the west bank to Camp 48, where the creek spreads on the plain before mentioned. We then crossed the plain (which is in places very good, others full of cracks and polygonum watercourses) to Goyder's Lagoon, thence down the west bank of the Warburton, over some magnificent saltbush country, to the fish hole. From here the camp returned to the first waterhole found; I, with one companion, followed down a branch which breaks out at the fish hole, joining the others at Camp 31. From here I examined the country north and westward along a salt lake, finally joining the party at Camp 29 (Wadlarkaninna). To sum up the whole of the country from Wadlarkaninna to my highest point on the creek, I am quite satisfied that (excepting small patches) it is equal to any in South Australia for grazing

purposes.

From Wadlarkaninna we proceeded in a south-easterly direction to Lake Kopperamanna, crossing sandhills running north and south nearly all the way. Generally speaking, good grazing country if watered.

From Lake Kopperamanna I followed the Barcoo down to Lake Eyre, finding no water pt in two wells. Thence along the shore of the lake to the mouth of the eastern branch of except in two wells.

the Warburton, returning by a more northerly course to Lake Kopperamanna.

After this, from Lake Kopperamanna we proceeded to examine the country westward to Lake Eyre, south, along the shore to the mouth of the Clayton, then east to Gerty's Hill and Lake Boocaltaninna, the whole of which, westward of the Isa, consists of sandhills, in many places splendidly grassed, but without water. Eastward of the Isa is stony country, forming in many places table-topped hills, the whole well grassed, and growing abundance of cotton and salt bushes; but I am of opinion that, excepting Lake Kopperamanna (which at times goes salt), none of the waters are permanent.

From Boocaltaniana we struck northwards to the Barcoo, and followed it up to Lake Hope, thence up to Innamincka (Burke's grave). It is useless attempting a detailed description of the country on the Barcoo, as it is nearly all alike, being sandhills varying in height, but very little in quality, except in a direct line between Lake Hope and Boocaltaninna, where the hills are higher. Between Lake Hope and Innamincka the whole country consists of well-grassed sand-

hills, with flooded flats (in places) between. Of Lake M'Kinlay and the neighboring lakes I shall not attempt any description, as they have been ably described, many years ago, hy the late John

McKinlay, Esq.

On my return from Innamincka to Lake Hope, I sent across to Mount Hogarth, with a view of finding a more practicable stock and dray route to the salt creek than the one from Kopperamanna; this unfortunately proved a failure, as the sandhills were in many places higher and covered with spinifex, and the distance is greater.

With regard to the collection of natural history, which has already heen forwarded and examined by you, I have to report that on account of the dryness of the season during the early part of the trip, making a botanical collection was an impossibility, there being no flora to collect. Finding flowering plants so scarce, the Collector said he could only make a collection of grasses, which, as the country we were travelling on was new, I considered would be interesting, and of value as information to future occupants. As to the animals and birds, they were of course particularly scarce on account of the previous drought; however, I can safely say that all that came within reach were obtained, and I trust they will give satisfaction to the scientific com-

munity, and also benefit the Collector.

In conclusion, I wish to offer a few remarks as to the number and nature of the natives on the Salt Creek. Previous to leaving Adelaide I heard numerous accounts of their ferocity, treachery, and general hostile feeling towards whites; and also read of a black corpse having been seen roasting before a large fire for a repast for his companions. In consequence of which I furnished myself and party largely with firearms and ammunition; but, contrary to my expectations (founded myself and party largely with firearms and ammunition; but, contrary to my expectations (founded myself and party largely with firearms and ammunition; but, contrary to my expecta-I turnished inyser and parcy largely with trearms and ammunition; but, contrary to my expectations (founded purely on reports and my previous reading), I found the natives very harmless in
every respect, and could we have understood them they appeared to be most desirous of giving
all information they could, being kind in their ways, parting with their possessions freely, either
by gift or barter. When we first arrived on the Warburton, previous to the rain, they were very
numerous; thus showing that when all other waters in the district failed, they could make it their
home, finding sufficient food and water. This is also the first place I ever saw natives return and
live in the care required which ever have been and well beith their hive in the same wurlies, which are very large and well built; their camps may be considered more as villages than anything else; their principal food is fish (we saw large quantities in their possession), and I am certain they are as healthy and well grown a tribe as any in the Colopies.

A daily detail journal is in course of preparation, and will be forwarded as soon as possible.

All places mentioned in this report may be readily found by referring to the published

map.

I have, &c., J. W. LEWIS.

The Hon. the Commissioner of Crown Lands and Immigration.

