

DOMESTIC

EAST AFR. PROT.

39895

39895

9 DEC 03

Name of Individual

W. H. R.

1909

Dec.

Previous Paper

1959

Report on Tana River

Submit - explains delay

W. H. R. Report
 We shall get the course through the first with his remarks. In the meantime you may like to glance at the photos which are interesting - & the Report should then go to the S. M. O. for perusal & return & afterwards to Mr. Ross's father as desired

H. J. R.

Interesting

9/xii

about 11.10

after waiting for return 27/Jan 10

Report returned today C. H. J.

Report to H. W. Ross & photo

1959 7/2

39895

DEC 9 DEC 09

28 King's Mount,
Doton,

Ponkenhead.

December 8th 1909.REPORT ON THE TANA RIVER.

Sir,

With reference to the third paragraph of your letter No. 1086 E. Africa of the 9th ult., I have the honour to inform you that I have today forwarded to you the copy of my report on the Tana River in the East Africa Protectorate. The original, of which this is a copy, was sent out to Nairobi to be typed and submitted to Government there in the usual form. The one now forwarded is complete except for one or two diagrams and appendices of which copies were not made at the time.

2. I regret the delay that has occurred in supplying you with this. After getting off the first copy to East Africa I sent a considerable number of my negatives to a photographic firm to have enlargements made. They were kept quite an undue time. On receiving them back, I completed the photographs for this second copy, which occupied me until now.

3. I should be obliged if you could, without inconvenience, have this copy returned to the above address when done with the photographs which it contains, for insertion, ultimately, in the second copy of the report, which will be published in the next issue.

office in Nairobi. If it might be
 returned to my father Mr. W. Ross,
 it would be sent out to me without
 delay.

I have the honour to be,
 Sir

Your most obedient humble servant,

W. McGregor Ross

Director of Public Works,
 East Africa Protectorate.

The Under Secretary of State for the Colonies,
 Colonial Office,
 Downing Street, S.W.

5702: (Under separate cover)
 Des report

War Office,
Whitehall,
S.W.
28th January 1910.

The Director of Military Operations presents his compliments to the Under Secretary of State for the Colonies, and begs to return with thanks a Report on the Tana River, British East Africa, by Mr. W. Mc.G. Ross, which has been perused with interest.

101

R
39895/09
rap.

2
3

~~See~~

Iron

DRAFT

W. Ross Esq.

4 Feb 10.

MINUTE

Mr. Naall 3/1/11

Mr. Butler ~~3/1/11~~

Mr. Fiddle.

Mr. Just.

Mr. Cox.

Sir C. Lucas.

Sir F. Hopwood.

Col. Seely.

Lord Crewe.

Sir,

I am directed by the
E of Crewe to transmit
to you, ^{in accordance with} to be forwarded
to your care, Mr. W. Huggins
Ross, the accompanying
copy of his report on the
Tana River. It is
understood that he
wished that his
report should be

~~(report 2/10/11)~~

... to you in order
... you might forward
... to him in the
Contract.

I am st.

(Blair, C. S. RIDGES)

to you in order
to get a night forward
to him in the
practice.

I am st.

(Signed, U. S. RIDGES)

REPORT
ON THE
TANA RIVER

AND DIARY OF A TOUR

DOWN ITS VALLEY

FROM NYERI TO THE SEA

ILLUSTRATED BY ONE HUNDRED QUARTER-PLATE
PHOTOGRAPHS AND PHOTO-DIAGRAMS

SUBMITTED TO THE GOVERNMENT OF EAST AFRICA
BY THE DIRECTOR OF PUBLIC WORKS,
EAST AFRICA PROTECTORATE

H. M. G. Ross
DIRECTOR OF PUBLIC WORKS

1910

Date	Day	Time	Miles	Direction	Remarks	Species	Count	Notes
JUNE 18	LIX	0	596.61	Subsidiary		Nil		
17	LVIII	18.4	572.8	At Olenok		Nil		
16	LVI	24	566.9	at Olenok		Sp. Kingfisher		
15	LVI	32.5	542.5	at Olenok		Nil		
14	LVI	46.6	530.0	at Olenok		Nil		
13	LVI	58.5	511.5	at Olenok		Nil		
12	LVI	70.1	499.4	at Olenok		Nil		
11	LVI	82.6	477.8	at Olenok		Nil		
10	LI	147.2	449.4	at Olenok		Nil		
9	LI	159.9	436.7	at Olenok		Spotted dove seen Jordan 3 E. Swift		
8	XLIX	179.2	417.4	at Olenok		Spotted dove seen Jordan 3 E. Swift		
7	XLVIII	192.1	402.5	at Olenok		Spotted dove seen Jordan 3 E. Swift		
6	XLVIII	212.0	382.6	at Olenok		Spotted dove seen Jordan 3 E. Swift		
5	XLVIII	230.0	366.6	at Olenok		Spotted dove seen Jordan 3 E. Swift		
4	XLVI	241.0	352.6	at Olenok		Spotted dove seen Jordan 3 E. Swift		
3	XLVI	261.8	324.8	at Olenok		Spotted dove seen Jordan 3 E. Swift		
2	XLVI	276.8	317.8	at Olenok		Spotted dove seen Jordan 3 E. Swift		
1	XLV	299.1	308.5	at Olenok		Spotted dove seen Jordan 3 E. Swift		
MAY 31	XLIV	299.4	298.2	at Olenok		Spotted dove seen Jordan 3 E. Swift		
30	XLIV	307.8	279.4	at Olenok		Spotted dove seen Jordan 3 E. Swift		
29	XLIV	308.5	268.7	at Olenok		Spotted dove seen Jordan 3 E. Swift		
28	XLIV	319.3	257.3	at Olenok		Spotted dove seen Jordan 3 E. Swift		
27	XLIV	338.2	244.4	at Olenok		Spotted dove seen Jordan 3 E. Swift		
26	XLIV	346.2	233.4	at Olenok		Spotted dove seen Jordan 3 E. Swift		
25	XLIV	360.0	226.6	at Olenok		Spotted dove seen Jordan 3 E. Swift		
24	XLIV	371.7	216.9	at Olenok		Spotted dove seen Jordan 3 E. Swift		
23	XLIV	388.0	208.6	at Olenok		Spotted dove seen Jordan 3 E. Swift		
22	XLIV	402.2	194.4	at Olenok		Spotted dove seen Jordan 3 E. Swift		
21	XLIV	416.3	182.6	at Olenok		Spotted dove seen Jordan 3 E. Swift		
20	XLIV	422.8	172.8	at Olenok		Spotted dove seen Jordan 3 E. Swift		
19	XLIV	429.4	164.4	at Olenok		Spotted dove seen Jordan 3 E. Swift		
18	XLIV	438.1	157.2	at Olenok		Spotted dove seen Jordan 3 E. Swift		
17	XLIV	448.3	158.8	at Olenok		Spotted dove seen Jordan 3 E. Swift		
16	XLIV	450.1	147.5	at Olenok		Spotted dove seen Jordan 3 E. Swift		
15	XLIV	456.2	140.2	at Olenok		Spotted dove seen Jordan 3 E. Swift		
14	XLIV	457.9	138.7	at Olenok		Spotted dove seen Jordan 3 E. Swift		
13	XLIV	464.2	132.2	at Olenok		Spotted dove seen Jordan 3 E. Swift		
12	XLIV	471.7	124.9	at Olenok		Spotted dove seen Jordan 3 E. Swift		
11	XLIV	482.0	115.7	at Olenok		Spotted dove seen Jordan 3 E. Swift		
10	XLIV	491.8	104.8	at Olenok		Spotted dove seen Jordan 3 E. Swift		
9	XLIV	498.4	98.2	at Olenok		Spotted dove seen Jordan 3 E. Swift		
8	XLIV	507.1	84.9	at Olenok		Spotted dove seen Jordan 3 E. Swift		
7	XLIV	513.2	83.4	at Olenok		Spotted dove seen Jordan 3 E. Swift		
6	XLIV	523.7	74.9	at Olenok		Spotted dove seen Jordan 3 E. Swift		
5	XLIV	533.4	69.2	at Olenok		Spotted dove seen Jordan 3 E. Swift		
4	XLIV	543.4	63.2	at Olenok		Spotted dove seen Jordan 3 E. Swift		
3	XLIV	553.8	42.8	at Olenok		Spotted dove seen Jordan 3 E. Swift		
2	XLIV	560.6	36.8	at Olenok		Spotted dove seen Jordan 3 E. Swift		
1	XLIV	561.2	35.4	at Olenok		Spotted dove seen Jordan 3 E. Swift		
		570.9	25.7	at Olenok		Spotted dove seen Jordan 3 E. Swift		

WET	TEMP	WIND	SEA	MOON	STAR	PLANETS	OTHER
70	22.2	72					
69	20.5	69					
69	20.5	69					
70	21.1	70					
70	21.1	70					
68	20.0	68					
68	20.0	68					
69	20.5	69					
73	22.7	73					
72	22.2	72					
71	21.6	71					
66	18.8	66					
71	21.6	71					
73	22.7	73					
68	20.0	68					
70	21.1	70					
63	17.2	63					
68	23.9	68					
63	17.2	63					
70	21.1	70					
69	20.5	69					
69	20.5	69					
68	20.0	68					
71	21.6	71					
72	22.2	72					
68	20.0	68					
69	20.5	69					
71	21.6	71					
75	23.9	75					
69	20.5	69					
69	20.5	69					
66	18.8	66					
70	21.1	70					
64	17.7	64					
66	18.8	66					
64	17.7	64					
66	18.8	66					
64	17.7	64					
63	17.2	63					
64	17.7	64					
60	15.5	60					

[Miles to 2000, 3000, 4000, 5000, 6000, 7000, 8000, 9000, 10000]

June 19 1909. *Tornal* ²⁰
crispus ¹⁸
crispus ¹⁸

Some smaller magpies seen

One or two brown ticks seen

Specimens number of beetles on the ground.
The first caught from the sea

Found first grasshopper ¹⁸
¹⁸ ¹⁸ ¹⁸ ¹⁸ ¹⁸
¹⁸ ¹⁸ ¹⁸ ¹⁸ ¹⁸
¹⁸ ¹⁸ ¹⁸ ¹⁸ ¹⁸
The grasshopper
seen on June 18
and June 18

Grasshopper seen on June 18

No magpies. 4 magpies seen on June 18.

No magpies seen on June 18.

Magpies seen on June 18.

Magpies seen on June 18.

Magpies seen on June 18.

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Magpies seen on June 18.

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PART I. 10 pp. CONCLUSIONS AS TO
TIMBER TRADE ON THE TANA.

PART II. 23 pp. GENERAL REVIEW OF THE
TANA VALLEY.

PART III. 90 pp. DIARY OF THE TOUR.

Handwritten signature or initials, possibly 'R. H. 4'.

K. 10/11

CHAND

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To the Honourable

Commissioner of Public Works,

Nairobi.

14th March 1910

Sir,

I have the honour to report that in accordance with your instructions I have examined the River Tana throughout its entire length by walking down the South bank from Nyeni to Kipini. This journey was undertaken in company with Mr. Battiscombe, Acting Chief Conservator of Forests, who is reporting separately to Government. Our combined caravans left Nairobi on April 14th. and reached the sea on June 18th. We then separated, he proceeding to Lamu and Witu, while I walked Southward down the coast through Malindi to Mombasa completing a journey of 820 miles on foot. After one night at Mombasa I returned by rail with all my porters to Nairobi, arriving on July 1st. Although we had much sickness among our men, particularly towards the end of the tour, I am glad to say that we lost none of them.

SELECTION OF DATE
FOR THE TOUR.

2. In undertaking this trip in the month of April it was hoped that the river would be seen during its period of rise and at the time of highest flood. The rains had

not properly begun at Nairobi at the time we left, and we hoped to be able to reach the Tana at a time when all the tributaries from Kenia would be delivering their full flood discharge. These expectations were however not fulfilled. The rains this year, though by no means a failure, were both scanty and scattered. At the beginning of May we were able, for instance, to wade across the River Thika at its confluence with the Tana, which is probably very unusual state of affairs for that time of year. We thus only saw the Tana in very moderate flood. Throughout its course, both floodmarks on the banks and also native reports pointed to a frequent rise in flood time to a height of at least four or five feet above that at which we saw it.

CONCLUSION AS TO
"RAFTING".

3. As a result then of a close inspection, during which an endeavour was always made to realize the appearance that the river would present under a further increased rise of five feet, I am convinced that prospects for rafting timber down from Kenia may be abandoned. In the highland portion of the river, cascades, narrows, islands, and rapids put the idea of rafting out of the question. In the lowland portion, bends, narrows and shoals would render the passage of rafts almost equally impossible.

CONCLUSION AS TO
"LOGGING".

4. I consider that the river might be made available for sending down individual logs of medium size at a less cost than

would be incurred in building a branch line of railway from Kenia to the Uganda Railway. The cost would nevertheless be enormous, and after incurring expenditure amounting to many thousands of pounds, work would only be carried on in face of the following disadvantages:-

(a) One logging season of four or five weeks' duration every year.

(It would probably only be in exceptionally wet years that the "smaller rains" of November and December would render the river available for logging.)

(b) The necessity of maintaining a large resident staff throughout the logging season, scattered at various points over a length of two hundred and fifty miles of the river in its highland portion.

(c) The necessity of either subsidizing local chiefs and elders of villages along the lowland portion, or of maintaining a brisk patrol by motor launches, to refloat stranded logs and prevent or break up log-jams.

(d) The receipt of the bulk of a season's consignment perhaps some five years subsequent to its launch into the river under Kenia. If logs travelled down at an average speed of two miles an hour they would clearly traverse the entire length of the river in two or three weeks, but there does not seem the slightest doubt that eddies and backwaters, in addition to the

other obstructions already mentioned would impede consignments to such an extent that several successive floods would, as a general rule, be required to take them down all the way.

(e) The probable loss of a certain amount of timber which at the short period of maximum flood might get stranded a mile or more from the river channel in regions of tall grass and bush where its value would not justify the cost of attempting to recover it.

(f) The impossibility of sending down any of Kenia's heaviest timber without first breaking down into, say, three-foot thick pieces and a maximum of forty-foot lengths. None of the enormous "campyer wood" timbers six to ten feet in diameter and sixty to eighty feet in length could be got down at all.

(g) Scanty local labour supply - perhaps also neither very vigorous nor willing to work.

(h) The probability of much sickness among imported staff whether European, African or Indian.

(i) A troublesome estuary at the mouth of the river with a winding channel constantly shifting among sandbanks and facing an inferior anchorage swept by a two-knot northerly current.

5. It must moreover be borne in mind that considerable expenditure would be required

TRANSPORT TO THE
RIVER AN EXPENSIVE
MATTER.

to get the Kenia timber into the Tana at all, at any point below the suspension bridge. It is quite possible that, by artificial floods, timber from Kenia, previously broken down to the sizes mentioned, might be got down the ^{or Kogadi} Nagathi, Mutonga, Kasita and other feeders. The investigation of this point was outside our instructions, and, in view of the unfavourable report which it is necessary to make with regard to the main stream, appears to be unnecessary. From my previous safari in 1906 around Mount Kenia, I am convinced that ample power would be obtainable on most of these streams for generating electricity for working sawmills, or for operating forest tramways and also light railways, to the Tana river, if there were any point in going there, or to a branch line of railway connecting with the Uganda Railway.

RAILWAY
VERSUS
RIVER.

6. When comparison is made between the immense impetus to commercial activities in many directions which follows the construction of a railway, and which is available all the year round and is to all intents and purposes independent of weather, and, on the other hand, the very special and restricted use to which the Tana River might be put for a period of a few weeks only during such years as were not unfavourable in point of rainfall, the argument in favour of spending the larger sum of money required for a railway rather than

THE TANA VALLEY
AS AN AGRICULTURAL
REGION.

the still considerable amount required to improve the Tana is unanswerable.

7. Along the upper part of its course from Nyeri to Hamaye, a distance of two hundred and eighty miles, the Tana may be considered a useless stream from the point of view of transit and communications, though enormous areas along its banks might be brought under perfectly - controlled irrigation, and native occupation. This region might be well kept in view by Government as an outlet for the presumably inevitable increase in population which will follow the establishment of the Pax Britannica among the swarming tribes to the South and East of Kenia - peoples hitherto periodically decimated by famine, epidemic diseases, and inter-tribal wars, all of which Government activity tends to avert, or at least to render less calamitous than formerly. Along the lower reaches of the river, where the country for one or two hundred miles is almost flat, the ear-banking of the river along one side would bring agricultural operations under control over an enormous area of land of a fertility which is probably not exceeded by that of any other region in the Protectorate. This would however be a work of the first magnitude and would entail the expenditure of scores of thousands of pounds. Political questions would moreover arise in connection with the dislocation of the native populations on the unprotected bank of the

of the river which would be inundated to an extent far beyond all previous experience. On the reclaimed side moreover it is quite likely that the nomad tribes that are dependent on water-holes for the supply of their herds might find that the yield from these sources was interfered with, even at a considerable distance from the river, by a general fall of the surface of saturation when the enormous annual contribution resulting from the inundation of scores of square miles of country was artificially withheld. Final decision upon the method of execution of a work of this magnitude would necessitate due consideration of the fact that earthquakes is, according to native report, not an unknown phenomenon in the district. In the event of any land being alienated along these lower reaches of the river, I suggest that the unfettered right of Government should be specifically reserved to carry out comprehensive measures of land reclamation or flood prevention in the valley in case it became feasible at some future time to incur the expenditure which would be necessary for the execution of such schemes. Meanwhile lessees intending to introduce partial drainage or reclamation works on any such ~~xxxxx~~ estates along the river should be required to first submit to Government a detailed description of the nature and scope of the projected works.

This should be minuted on by the Provincial Commissioner of Tanaland, the Secretary of Native Affairs, the Land Office, the Agricultural Department and the Public Works Department before the sanction of Government is accorded for the works to be proceeded with. The ill-advised execution of works along a river of this type may be attended with such far-reaching results that no effort should be spared ~~to avoid~~ ^{to avoid} on the one hand untoward developments which might involve Government in heavy expense for absolutely necessary remedial measures, or, on the other hand, to give concessionaires, if their presence on the lands is permitted, the clearest possible statement as to the nature and extent of development which will meet with Government sanction. Otherwise they might be involved in heavy loss through inaugurating schemes which Government, in the interests of the enormous native population in the valley, or for other adequate reasons, might find it necessary to limit or disallow.

THE TIMBER ALONG
THE BANKS.

8. As regards the timber along the banks, it is not necessary for me to say much as Mr. Battiscombe is reporting on it in full detail. Both in quality and extent it was very disappointing. It would I consider be a liberal estimate to suggest that the supply, taking the value of the timber, proximity to the river, local cost of labour, and other factors into consideration

C.O. 533
PUBLIC RECORDS OFFICE, LONDON

CONTINUED

ON

NEXT

FILM