Matthew Grey/69 St John N.B. 29 Dec 1868

My dear Sir,

Supposing that any fragments of land plants which we may have collected during the past summer will be placed in your hands for examination, I send the following particulars respecting them.

1st The Dadoxylon sandstone at LePreau is as well exposed as at St John - Conifers are especially abundant in the ledges at LePreau and I nibbled at one bed of shale, which seems in the specimens to be a counterpart of the Neuropteris bed or Plant bed No 2 of Duck Cove. You will find a little bundle of fragments among the specimens forwarded. I had not proper tools when I visited the place, and did not care to spoil the ledge - I noticed nearby a pinnule of Neuropteris as large as the palm of my hand - I collected a number of specimens of the larger fossil Conifera &c (in sandstone) with anthracitized bark

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for microscopic examination. The measures are a good-deal faulted here — This locality promises well —

2d. At Cunningham's brook on the S. side of the Nerepis Hills we found a fragmt of Cordaites about ½ inch wide and a peculiar organism of a lance-oval form  or oblong, apparently a seed or attachment of seed of some plant — very abundant on some layers — This locality we think below the horizon of the St John plant beds. Specimens forwarded — This in W. part of Kings Co. on Nerepis R.

3d — At Perkin's brook N. side of the Nerepis hills is a thick bed highly charged with vegetable matter, did not spend much time here but met with Neuropteris polymorpha and a Cordaites like Robbii; poor fragments forwarded — SW corner of Queens Co.

4th — At Coye's Brook on Flume Ridge near N. border of Charlotte (West side of about the middle of Magaguadavic R.) gathered a fragmnt of a lycopodaceous plant (the stem) from a horizon either at or a little above the plant beds of St John —

5th At Oak Bay a calamite and obscure plant remains mingled with shells of mollusca — will be found among these — now in Mr Billings hands —

6th Visited the plant bed in Perry in company with Mr Jethro Bonus and made sure that it was in the Perry or St Andrews sandstone — This Prof Bailey and I found everywhere unembarrassed to the representatives of the Cordaite shales and Dadoxylon sandstone around Passamaquoddy Bay — The Lepidodendra & Rhodeolepis of Perry so far as we can make out, come from the base of the Cordaite and summit of the Dadoxylon —

We did not spend much time looking for plant remains last season as the Professor (Bailey) was injured to devote himself to structure but if a good collection is desired for the Survey cabinets I think it can be had

from Lepreau — Perkins Brook also is not unpromising —

Speaking on this subject reminds me that the $20 for expenses in distributing the collections of the Dev.
Nat. Hist. Society applies to the whole collection of which a part is here. If however you have compromised in any way for the whole amount, I will make up the balance.

Please notice this point when you write again —

If I should be employed next spring in survey work — I would like to spend the early part of the season in studying more carefully the St John & Portland Lawrentian
I am a little dubious about the upper part in which the graptolite beds are — The succession of the Lawrentian is a good deal like that in Canada, but less voluminous

Yours very sincerely G. F. Matthew

P.S. the Perkins Brook locality holds about the same position in the series as the plumbites of St John

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