



Prof Wm &
Newbey

June 16, 1885

My dear Dr Newbey,

I thank you for
the information in yours of
May 13, and find what
you say suppose there are no
N. Jersey beds equivalent to
our Lower Cretaceous. There are
however some beds farther
north holding Grads and what
Dr Zinn used to call Wealden.

Owing to the facilities
now afforded by our railways
and the good collections bought
in by my son and others as
the money permits, and the
opportunities I had myself of
collecting in 1883, I am now



able, in a paper in the *Trans*
of our Royal Society to be
printed sheets, to ~~be~~ ^{define}
very clear several *Cretaceous*
Floras extending from the
Jurassic up to top of *Sarawak*.
We have also the *Leithian*
Flora, probably *Miocene*, from
the entrance of *Brit Columbia*.
On these I have given some
preliminary notes in the
several *Trans* reports, but nothing
detailed.

I shall describe in my
forthcoming paper, in ascending order,
1. The *Kootanie* Flora

of pines, grasses & ferns
up, and having as
prevalence of European
types with some common
of the L. Cretaceous of Green-
land. This is true L. Cret.,
and of age of the Queen
Charlotte Island Flora I
described some time ago.

2 The Mill Creek Flora,
with chelypterid leaves
many the same with those
of Dakota Group and
of Heer's *Ataria* and *Patot*
series.

3. These already described
in a paper sent you a
year ago, the *Dumetum*
flora of the Peace River, not
represented so far in the
U. States, and equivalent to
your *Nickarv*. There were
the plants some of which
I showed you when here in
1882.

Above there is the
rich *reticulate* *flora* of
Pawnee Island and
that of the Pierre and
Saurimo of the Western
plains. There are



June 16, 1885-

Dear Dr Newbery,

I thank you for
the information in your
favour of May 13th, though
it is somewhat negative.

Being to the running
out of our Canada Pacific,
and the good collections
now being made by our
foot survey parties, I hope
I shall be able to send
to you some help
in return for what you
kindly gave me some years
ago.



We have now the following
folds:—

1. 2^d Charlotte Island or
Kootanie series, European
cretaceous or Lower cre-
taceous. Ferns, Cycads &
Conifers conf; & remarkably
dense cretaceous of Greenland
& so called Jurassic of
Siberia. Memoir now in prep
in Trans R. S. C.
2. Mill Creek series =
Sakota of Simpson & Putt
& Stone of Greenland
memoir as above
3. Durwagan Group of the

Peace River, Flora of Great
the mt Wp in the States,
- equivalent to fresh
marine Murchison,

Trans. A.S.C. 1884, 3
Memor. sent to

to Pierre and Saronie -

one great flora

Equivalent
of lower = Saronie of U.S. Geol
part of this = Ft Union of Newbery
to Upper
cretaceous = the Keane & Greenland
Flora of
Nauyasoo
Trans. A.S.C. 1883.

Miocene of New.

No 4 as per River 9
have held for the last

Prof. Cope &
Newbury

Ten years & the Upper
Cretaceous & Tertiary
between Cretaceous &
Eocene and the evidence
is quite overwhelming now,
Indeed the plates you have
published as Foot = Upper Mes =
are an excellent guide to
our Tertiary flora, and
this reaches far down into
the Tertiary. I have seen
all your great leaves of
Platanus & find them
beds & in abundance.

I hope to have the
above in print early in
the summer & shall send
you early copies. Truly yours
J. M. Dawson

all Upper Cretaceous of
 different stages, and
 we now know assuredly
 that all the sand
 layers of this Fort
 Union group are Sarmian,
 and some of them go
 well down toward Pierre,
 the same is true of the
 Mc Kenzie River & Greenland
 "Miscell" of Beer. They
 are all Paleocene or
 Cretaceous.

You know I have
 believed this for the last

I have not scrupled to maintain it
ten years, on the evidence
of the Stratigraphy, animal
fauna and probable climatal
conditions; but I have
now I think ample material
to place it beyond doubt,

Our true Miocene is
represented by some beds with
Miocene mammals in the
Appalachian hills, and beds
with plants on the Similkameen
Mountains & elsewhere in British
Columbia. You will see
that Sturkie Gardner is
getting on the right track
on this matter in London,
and I hope you will soon
find the Heerian & Desperauxian
"Miocene" a *comp. degree* in the
United States.

Yours truly
J. M. Dawson