



*Disturbing  
the insects.*

GEORGE M. DAWSON,

*McGill College,*

MONTREAL,

CANADA.

MCGILL UNIVERSITY ARCHIVES	
ACC. NO.	909B 36
REF.	25 a

CARRIER  
MONTREAL  
APR 16 1975  
C.E.

MONTREAL  
APR 16 1975  
C.E.

Centonia, Nebraska  
April 12<sup>th</sup> 1895

McGILL UNIVERSITY ARCHIVES
ACC. NO. 9098/36
REF. 256

Prof. E. M. Dawson;  
Dear Sir;

Your letter of March 30<sup>th</sup> is at hand. Am pleased to learn that what information I gave concerning grass hoppers was of some service.

In answer to your further enquiry as to the area of land covered by the grass hopper invasion of last year I can only say that nothing near the actual truth could be come at in my estimation; but I might give an opinion as to what was as near as possible the extent

of land covered by them.  
I think they must have  
come from some point  
almost directly south of  
this place, then passed north  
with a veering towards the  
east.

The dense clouds of them  
must have been on one  
occasion at least 200 miles  
wide. for while they were  
thick at the point I heard  
of them nearly one hundred  
miles west and over that  
distance to the east. How  
long the army could have  
been it is not so easy even  
to conjecture - the rapidity  
of their flight not being de-  
termined and no note being  
made of the length of time  
in passing over.

Perhaps I might guess at  
about 20 miles per hour.  
an ordinary train of cars will  
go faster than that too. I think  
on one occasion in August they  
were two or three days moving  
along in the sky. I think if  
we made the moving body  
even 6 or miles long it would  
be not underestimated.

This is only guess work however  
and I might not be quite  
near the mark.

These grasshoppers have passed  
over these plains time and again  
before I presume, only those being  
settles on the lands with crops  
of more attractive food. Human  
beings notice their appearance  
more. As a general thing the  
prairies around cultivated grounds  
were about a thick with them.

information or some fruit introduced it will be quite a pleasure  
to answer as well as I am able to  
you by my notes & by adding

as the cultivated fields were. But  
the grass and weeds on the prairie  
is so abundant that what the  
grasshoppers eat was but little  
noticed and was hardly missed  
indeed I observed that the grass-  
hoppers fed mostly on succulent  
weeds & grasses that cattle  
generally do not like to eat.  
When they find anything they  
like they generally stay by it  
till they are satisfied - although  
they do not seem to have com-  
mon sense enough to strike the  
same place again when dis-  
turbed by the hand of man. Much  
produce was saved by energetically  
disturbing the intruders on the crops.  
Disturbance is what they want and  
when they come every thing else should  
stop till they are ousted from the  
crops. I can not think of any  
thing ~~more~~ relative thereto now  
but should you desire more