



John Muir Correspondence (PDFs)

---

1872-09-07

## Letter from Joseph Le Conte to [John Muir], 1872 Sep 7.

Joseph LeConte

Follow this and additional works at: <https://scholarlycommons.pacific.edu/muir-correspondence>

---

### Recommended Citation

LeConte, Joseph, "Letter from Joseph Le Conte to [John Muir], 1872 Sep 7." (1872). *John Muir Correspondence (PDFs)*. 1473.

<https://scholarlycommons.pacific.edu/muir-correspondence/1473>

This Article is brought to you for free and open access by Scholarly Commons. It has been accepted for inclusion in John Muir Correspondence (PDFs) by an authorized administrator of Scholarly Commons. For more information, please contact [mgibney@pacific.edu](mailto:mgibney@pacific.edu).

I find evidence of this also in Lake valley  
at the South end of the lake - in the form  
of sand hills apparently deposited in the  
Lake.

Set me down for one of us as to  
the results of your further exam-  
ination of Mt. Lyell

Remember me very kindly to  
Mrs Hutchings - through you I wish  
to thank her again for her many  
kindnesses - Mr Clark I also remem-  
ber with much pleasure.

Ever truly yours

Joseph Le Conte

P.S. Prof Agassiz is here. I have seen him  
and will see him again many times.

He is very anxious to visit the interior, par-  
ticularly since I have told him what a fine  
one glacial field it is - but he is not strong  
enough - He will remain here 2 weeks or more. So  
if you wish to see him you must come down.

Oakland Cal. Sept. 7. /72

My Dear Sir

I reached Oakland on the 3rd.

Since that time I have been so sluggish  
I could do little else than eat & sleep - I  
am much in the same condition still  
but I must redeem my promise to write  
you of my observations about L. Tahoe.

We crossed the Sierras by passing westward  
through Carson Cañon into Hope valley.  
thence over a low ridge which is little else  
than a pile of debris, into Lake valley  
(a valley continuation of Lake Tahoe south-  
ward). thence over Johnson's pass into the  
Cañon of the South fork of the American river  
this Cañon carried us entirely out of the Sierras  
nearly to Placerville. About 15 miles  
south of L. Tahoe are a cluster of snowy sum-  
mits (don't know the name) from which issued  
a glacial glacier which <sup>flowed northward</sup> filled Hope valley

and then turning westward flowed through Car-  
son Cañon into the Great Carson Valley.

The evidence is complete and of every kind.

From the same snowy summits another great  
Glacier flowed northward into Lake Valley  
and onward into L. Tahoe. On both sides

of the Valley and of the Lake the mountains  
are high and still snowy. Innumerable

tributaries flowed down these into the  
main icy stream. These tributaries

continued after the main icy stream  
had dried up. They have therefore by their

debris somewhat obscured the evidences  
of the main Glacier in the lower part

of the valley. One of these tributaries I ex-  
amined closely. It came down from Colu-

son's summit. The scenery & polishing is per-  
fect. From the same summit another Gl

passed westward down the Cañon of the Am. River  
at least 25 miles. Below this for 25 miles

more the Cañon is equally deep & bold, but ap-  
parently water worn. at least I could find no

evidence of Glaciers. This change however is

nearly or quite coincident with the change  
of the rocks from Granite & Slate. In the

Glacial region the Cañon is broad at bottom  
with successive <sup>and other evidences of</sup> meadows. In the lower

Gl<sup>ial</sup> region V shaped & not a single meadow.

As to the question whether L. Tahoe was  
scooped out by Glaciers. Observe the main

Gl did not run at steep incline into it, but  
through Lake valley for 15 miles. That L.

Tahoe was filled with ice, a true mer de  
glace, I have no doubt, but that it was

scooped out by ice seems more doubtful.  
I do not think it could have been scooped out

by what I might call the Lake Glacier.  
But I know not what an unusual ice sheet

might have done at a still earlier period.  
I learn from my brother that the outlet gorge

is rocky and very narrow, in some places  
only 100 or more feet. Nevertheless there

are abundant marks of Gl<sup>ial</sup> as I understand  
lined about. The upper margin of the gorge

It has probably been deepened by water  
and the Lake partly drained off. I think



Oakland, Cal.,  
Sept. 7, '72.

My dear Sir:

I reached Oakland on the 3rd. Since that time I have been so sluggish I could do little else than eat and sleep. I am much in the same condition still, but I must redeem my promise to write you of my observations about L. Tahoe.

We crossed the Sierras by passing westward through Carson Canyon into Hope Valley, thence over a low ridge which is little else than a pile of debris, into Lake Valley (a valley continuation of Lake Tahoe southward); thence over Johnson's pass into the canyon of the South fork of the American river. This canyon carried us entirely out of the Sierras nearly to Placerville. About 15 miles south of L. Tahoe are a cluster of snowy summits (don't know the name) from which issued a great glacier which flowed northward, filled Hope Valley, and then turning westward flowed through Carson Canyon into the great Carson Valley. The evidence is complete and of every kind. From the same snowy summits another great glacier flowed northward into Lake Valley and onward into L. Tahoe. On both sides of the valley and of the Lake the mountains are high and still snowy. Innumerable tributaries flowed down these into the main icy stream. These tributaries continued after the main icy stream had dried up - they have therefore by their debris somewhat obscured the evidences of the main glaciers in the lower part of the valley. One of these tributaries I examined closely. It came down from Johnson's summit. The scoring and polishing is perfect. From the same summit another gl[acier] passed westward down the canyon of the Am[erican] River at least 25 miles. Below this for 25 miles more the canyon is equally deep and bold, but apparently water worn. At least I could find no evidence of glaciers. This change, however, is nearly or quite coincident with the change of the rocks from granite to slate. In the glacial region the canyon is broader at bottom with succession of meadows and other evidences of gl[acier]s; in the lower region V shaped and not a single meadow.

As to the question whether L. Tahoe was scooped out by glaciers. Observe the main gl[acier] did not run at steep incline into it, but through Lake Valley for 15 miles. That L. Tahoe was filled with ice - a true mer de glace, I have no doubt -- but that it was scooped out by ice seems more doubtful. I do not think it would have been scooped out by what I might call the Lake Glaciers. But I know not what an universal ice-sheet might have done at a still earlier period. I learn from my brother that the outlet gorge is rocky and very narrow, in some places only 100 or more feet. Nevertheless there are abundant marks of gl[acier]s, as I understand him, about the upper margin of the gorge. It has probably been deepened by water and the Lake partly drained off. I think I find evidences of this also in Lake Valley at the south end of the Lake - in the form of sand hills apparently deposited in the Lake.

Let me hear from you as to the result of your further examination of Mt. Lyell.

Remember me very kindly to Mrs. Hutchings. Through you I wish to thank her again for her many kindnesses. Mr. Clark I also remember with much pleasure.

Sincerely your friend,

Joseph LeConte.

Prof. Agassiz is here. I have seen him and will see him again many times. He is very anxious to visit the interior, particularly since I have told him what a glorious glacial field it is, but he is not strong enough. He will remain here 2 weeks or more, so if you wish to see him you must come down.

[Folder marked by Muir, "Prof. Joseph LeConte on gls., etc., and mention of Agassiz 1872 after 1st visit to Yo. and Sierra."]