



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Correspondence re: Proposed Moraine National Park. 1958

Thwaites, F. T. (Fredrik Turville), 1883-1961
[s.l.]: [s.n.], 1958

<https://digital.library.wisc.edu/1711.dl/4QKKQNPRSMX528L>

<http://rightsstatements.org/vocab/UND/1.0/>

For information on re-use see:

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

Mr. R. T. Zillmer,
Zillmer & Rodford,
1412 First Wisconsin National Bank Bldg.,
Milwaukee 2, Wisconsin

Dear Mr. Zillmer:

Yours of 24 th November and the description of the Kettle Moraine Drive are at hand and I wish to thank you. Much of the Drive was followed on the field trips I used to take but of course other considerations forbade following all of it. I am glad you liked the "Outline" which was prepared originally only for the use of students but has found its way into almost all counties outside the Iron Curtain. It still sells although I quit teaching in 1955. The maps which Mr. Hanson had me prepare were delayed by my visit to St. Louis to the meetings of the Geological Society. We celebrated our 30th anniversary by going on a field trip there.

I have done little in the Barron Hills. I was there once with one of my students but we did not accomplish much in the few hours we had. This was the territory being studied by the late Samuel Weidman at the time his work was terminated in 1917. His ideas on glacial action were unusual and unconvincing. Later the area was covered by the "Mineral Land Survey" of the State Survey. Then as in the rest of northern Wisconsin the geologists were beginners who were led by other students who had little more experience. The first consideration was the possible iron resources and glacial geology was only a side issue. The magnetic surveys were published but the glacial work was not. Mr. Bean was to use it for a PhD thesis which was never completed. Like me he never obtained the advanced degree. The country is cut-over land with dense brush cover where views are hard to obtain but it ought to be next to Baraboo in interest and could be developed.

I intended to write more about the Forest Bed. This is best described in my report on the Door Peninsula which I think Mr. Hanson must have sent you. If not I have a few copies left. This report, mine of 1943 which you appear to have, and Alden's Professional Paper 106 of 1918 cover the entire east part of Wisconsin. I used Alden's work plus some personal changes for the maps. The best locality for the Forest Bed or forest buried by a readvance of glacial ice is the Lake Michigan shore just south of the Manitowoc-Kewaunee county line. I tried to interest Prof. Curtis in having the State purchase this small area but apparently nothing was accomplished. I obtained the name of the owner of the larger part who lives just north of the County line but failed to get the name of the owner of the southern part next to a ravine. He is from Chicago but I never met him.

Your idea of development of a strip similar to the Kettle Moraine Drive and Kettle Moraine Forest is I think the only feasible one. I feel that new roads could be developed in some of the rugged areas which would be very striking. The new topographic maps will show you the most scenic areas. The area between the Antigo Flats and Wolf River is very striking but is cut-over brush land. There is no detailed topographic map.

Along the long stretch from this place to the west line of the state I feel that the small area in the Barron Hills is by far the most interesting. The lesson I used to try to impress on beginning students was that glaciation was a relatively recent event compared to the time which it took to make the valleys of the Driftless Area.

Mrs. Thwaites continues to improve but until she has the other eye operated on is limited to monocular vision with no depth perception

RAYMOND T. ZILLMER
JOHN M. REDFORD
WILLIAM C. DILL
JOHN R. ZILLMER

ZILLMER & REDFORD
ATTORNEYS AT LAW
1412 FIRST WISCONSIN NATIONAL BANK BLDG.
MILWAUKEE 2, WISCONSIN
BROADWAY 6-3120

November 24, 1958

Dr. F. T. Thwaites
41 North Roby Road
Madison 5, Wisconsin

Re: Moraine National Park.

Dear Mr. Thwaites:

I have received the geological maps through Mr. G. F. Hanson, together with your notes involving said maps. Thank you for the laborious job on the maps together with the fine material in your letter of October 29th. I have just finished your "Outlines of Glacial Geology", having read it very carefully a few pages at a time. Your book establishes what your letter states, namely, that your geological determinations are based on evidence, and if the evidence is not decisive, you say so and give the arguments involved in both sides. A lawyer appreciates this attitude perhaps more than anyone. I think I wrote you before that I wish you would expand this book to a larger volume. It would be of great benefit.

I was interested in your comments that the moraines in Dane County don't justify a National Park. On my own reconnaissance of the area, I said that this area was least significant of all the areas so far as moraines are concerned, but I added that the area was the most beautiful of all and should be included in the park on the latter ground. Then too, it is the best example in Wisconsin, other than perhaps the Baraboo Bluffs and Barron Hills, of the difficulties rugged bed-rock presents to glacial action.

A National Park could involve the Forest Beds and the Baraboo Hills. I like the area north of the Dells and beyond Antigo, including the area which you cover in your "Northeastern Wisconsin". By the way, have you or anyone else studied the glacial action on the Barron Hills? This has some similarity to the Baraboo area. It looks as though the glacier was unable to entirely cross the

Dr. F. T. Thwaites

-2-

November 24, 1958

Barron Hills to their west end. About five miles east of its west end, there is a north and south series of moraines with a variation of several hundred feet in elevation, the northern moraines next to the Barron Hills reaching almost to the top of the hills, whereas the southern end is several hundred feet lower. My own thinking is that the moraines are most evident where they are terminal because of low land next to them. Therefore, I favor a park along the terminals. A park along the terminals would benefit a larger area of the state, and therefore more people. The terminals have a few gaps where there has been insufficient study, and some areas are more interesting than others. The Antigo area, I thought, was particularly interesting. This is partly because the Antigo flats make such a contrast. A long narrow park with knots of greater development at unusual places would make possible a trail like the Appalachian Trail and a parkway along them, something like the Kettle Moraine Drive which is so greatly used today, and would serve to make the glacial formations accessible to proper use. I am enclosing a map of the Kettle Moraine Drive, which may be of interest to you.

I hope your wife's progress continues and thank you again for the great help you have been to me.

Sincerely yours,



Raymond T. Zillmer

RTZ/sab
Enc.

Notes on the maps

The approximate limits of the outer terminal moraine have been placed on the Evansville, New Glarus and Cross Plains quadrangles of the U. S. Geological Survey largely from the map in Alden's Professional Paper 106 which was published in 1918. Minor modifications have been made by the writer. In general it is thought that remapping would result in a much narrower ridge form than was shown by Alden. Alden paid little if any attention to material and carried no tools with which to dig. He included many areas of well-sorted sand and gravel which are termed "pitted outwash". It is very difficult to divide the morainal areas as to character. In very few places does it come anywhere near the rugged topography of much of the Kettle Interlobate Moraine of eastern Wisconsin. The only tract which comes near to that kind of country is southwest of Fitchburg on the Evansville Quadrangle. This is in SE $\frac{1}{4}$ sec. 36, T. 6 N. R. 8 E. This area belonged to the late Dr. Gillespie of University Hospitals. Most of the protuberances on the glacial side of the moraine in the Evansville Quadrangle are more or less doubtful as inspected in the field. The moraine owes much of its height to the rock hills beneath. The low tracts ~~are~~ near Brooklyn, Verona, and Cross Plains are in major valleys which existed before the coming of the ice which deposited the moraine. The writer used the relation of the moraine to such valleys to demonstrate to students that glaciation was a relatively recent event in the history of the landscape. "Here is a very striking moraine ridge where the moraine crosses the road from Paoli north to the Dane County Farm. Near Richardson Cave (Cross Plains Quadrangle) there is a narrow gap through the moraine made by glacial waters which made this sillway along the line of a pre-existing valley. North of the valley southeast of Cross Plains the moraine ridge is very weakly developed. All that it demonstrates is its course was controlled by the pre-existing rock topography. Ice advanced farther southwest in valleys than it did on divides. My opinion is that little if any of this portion of the outer moraine is worthy of development as a park. South of Verona this moraine does not border the glacial drift for an older glacier advanced farther west. This earlier ice (age uncertain) came from the Lake Michigan Lobe and in places moved toward the northwest.

RAYMOND T. ZILLMER
JOHN M. REDFORD
WILLIAM C. DILL
JOHN R. ZILLMER

ZILLMER & REDFORD
ATTORNEYS AT LAW
1412 FIRST WISCONSIN NATIONAL BANK BLDG.
MILWAUKEE 2, WISCONSIN
BROADWAY 6-3120

December 3, 1958

Dr. F. T. Thwaites
41 North Roby Road
Madison 5, Wisconsin

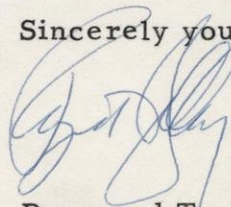
Re: Moraine National Park.

Dear Mr. Thwaites:

I have been asked to write an article for the Wisconsin Alumni Association magazine on the question of the Moraine National Park.

I would like to make a reference in the article to the splendid geological work done by Wisconsin professors in the matter of the Ice Age. Will you kindly give me the names of faculty members that have contributed in this field, and roughly speaking, the dates of their faculty tenure.

Sincerely yours,



Raymond T. Zillmer

RTZ/sab

41 N. Roby Road,
Madison 5, Wis.
5 December, 1958

Mr. R. T. Zillmer
Zillmer & Redford
1412 First Wisconsin National Bank Bldg.,
Milwaukee 2, Wisconsin

Dear Mr. Zillmer:

Yours of the third arrived just as I was making you a letter.

The Department of Geology at Wisconsin University was always most famous for work on the Lake Superior region which was to a large extent confined to the iron and copper deposits. The glacial drift was just a nuisance in these studies and hence was neglected. T. C. Chamberlin who first publicized the Kettle Moraine was never a member of the faculty of the Geology Department. He was such at Beloit College and was in charge of the State Geological Survey when its work was completed and the four volume final report was published. In 1887 he became President of the University and resigned in 1892 to go to the new University of Chicago. Most if not all of the Survey (a separate organization) reports were written if not published by the time Chamberlin became President.

H. M. Fenneman did some work on the glacial geology of the lakes of southern Wisconsin. I think he was at the University from about 1900 to 1909 when he went to Cincinnati but I have no information at home.

Lawrence Martin was a member of the faculty from 1906 to 1917 when he entered the Army. He was interested in glacial geology but did not do detailed work. His Bull. 36 of the State Geological Survey was based mainly on the work published by others. He did some rough reconnaissance in northern Wisconsin

W. C. Alden who is famous for his report on southeastern Wisconsin, took over work formerly assigned to I. M. Buell of the Beloit faculty. His report of 1918 was the first detailed mapping of glacial deposits in the state. But he got his PhD at Chicago and never was on the Wisconsin faculty. I worked for him as field assistant in 1907. We worked from Monroe north to Wisconsin Dells. I was not then a member of the faculty nor was I when I worked for Samuel Weidman of the Wisconsin Survey the next summer.

I joined the faculty as curator of the museum in 1912 but did not teaching until 1916. My detailed survey of northeastern Wisconsin began in 1926 and was continued with Highway Commission funds for three seasons. Then support was withdrawn and the work was completed in 1934 and 1936 with a grant from the Geological Society of America. This work was published in 1943. The work east of that (Door Peninsula) was begun in 1948 with Prof. Kenneth Bertrand of the Catholic University of America at Washington, D. C. We carried our own field expenses but were aided by two grants from the Alumni Research funds. This is the work published in 1957 thus completing the detailed mapping of the Green Bay Lobe with adjacent part of the Lake Michigan Lobe. Bertrands was a former student at Wisconsin and obtained his PhD in Geography, not Geology. I do not recall just when he got it but think about 1939.

Prof. R. F. Black took over my position at the University in 195 and is doing some mapping in northwestern Wisconsin along with a student of his. I had areas mapped up there by two students, J. T. Mathiesen who now works in Milwaukee and F. D. Hole. Hole is now Associate Professor of Soil Soils He has been with the Soils department since 1945 I think.

This is about all I can do without making a trip downtown to look up reference books on dates.

Sincerely yours,

RAYMOND T. ZILLMER
JOHN M. REDFORD
WILLIAM C. DILL
JOHN R. ZILLMER

ZILLMER & REDFORD
ATTORNEYS AT LAW
1412 FIRST WISCONSIN NATIONAL BANK BLDG.
MILWAUKEE 2, WISCONSIN
BROADWAY 6-3120

October 20, 1958

Mr. F. T. Thwaites, Geologist
41 North Roby Road
Madison 5, Wisconsin

Re: Moraine National Park.

Dear Mr. Thwaites:

The United States Park Service is making a survey to determine the kind and location of future national parks in the United States. As you know, Congressman Reuss and I took the team of four experts of the United States Park Service to examine the interlobate and terminal moraines of Wisconsin, to-wit, along the line suggested in my article. This could only be a superficial survey because only five days were devoted to it.

In the course of this preliminary survey, the park officials stated on several occasions that it had been tentatively determined before my article appeared in Lore that a National Park would be created to symbolize the Glacial Period.

Having already determined that issue, the problem now seems to be to convince the Park Service that Wisconsin contains the most representative collection of phenomenon to demonstrate the Glacial Period. If you were required, as a lawyer for example, to state why a park should be located in Wisconsin, what would you say?

I have given this question long consideration. With my limited background in the field of geology, I could not give it the consideration or the answer that you could. For example, however, the first good reason that did occur to me is the fact that only in Wisconsin do we have the "Driftless Area", together with a clear-cut boundary on its east side. Would I be correct in stating that nowhere in the United States has the Glacial Age been studied as thoroughly as in Wisconsin, especially in the eastern one-half of Wisconsin, and that there are, therefore, available in Wisconsin greater evidence of its work.

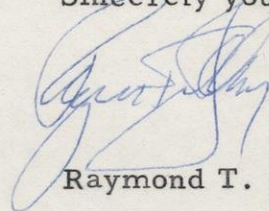
Mr. F. T. Thwaites, Geologist

-2-

October 20, 1958

I would appreciate it if you could give consideration to this problem and give me your opinion - quotable or not, as you see fit - of why Wisconsin should be selected to represent the Glacial Period. I should like to submit this statement, either as yours or as mine, to the Park Service.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'Raymond T. Zillmer', written in a cursive style.

Raymond T. Zillmer

RTZ/sab

41 N. Roby Road,
Madison 5, Wis.
29 Oct., 1958

Mr. R. T. Zillmer
Zillmer & Redford,
1412 First Wisconsin National Bank Bldg.,
Milwaukee 2, Wisconsin

Dear Mr. Zillmer:

Now that Mrs. Thwaites can do more of the work around the house I can get to answering yours of the 20th. I will try to answer your questions to the best of my ability. Since I taught subjects at the University which were illustrated by field trips to demonstrate many of the evidences of glaciation I think maybe I can help in this

Many teachers simply state conclusions without much if any real evidence. I always tried to stress evidence first. Wisconsin for a long time at least led in studies of the Glacial Period and I think our detailed maps of the eastern part of the state are still some of the best which have been published. For this reason it seems suitable to select the site of a National Park to illustrate the phenomena of glaciation.

On the other hand no detailed maps of the glacial features of the northern part of the state have ever appeared. When I compiled a map of the glacial geology of the state a few years ago I had a hard time with this northern country. What work was done there was the result of studies by inexperienced students and little of it could be used. Science is always progressing and I had to make changes in some of my own maps of not too many years ago. *Would this colored map have good publicity in a Sunday paper?*

One of the first glacial features to be publicized was the Kettle Moraine. It is still the best known and most spectacular feature as has been recognized by the formation of the State Forest areas. The parts which display the most unusual landscape are those made of water-deposited gravel rather than ice-deposited "till". The new topographic maps of the U. S. Geological Survey show the distribution of these rugged areas very well. Such areas have few roads through them on account of poor farming conditions and the expense of road construction. One near Cedar Lake in southern Manitowoc County seems particularly striking although I have never seen it except on the map.

Not clear
The locality which was most used to demonstrate basic evidence is in the vicinity of Devils Lake in Sauk County. There it is easy to show that the boulders which are unlike adjacent bedrock were transported by a solid, ice, from the slope of the boundary which is easy to see.

Very little of the moraine at the edge of the glaciated territory is as striking as the Kettle Moraine. In rough country as near Wisconsin River much of it is a very low ridge which is hard to see. South of Verona as in northern Wisconsin the area outside this moraine consists of an older drift and the contrast is not as sharp as it is at Devils Lake. North from ~~Gluskab~~ Devils Lake the moraine is bordered by a sand plain formed by washing out sand. This long segment up to east of Wausau is striking but not equal to phenomena at the Lake.

In conclusion, I think a National Park in the Kettle Moraine area would be very desirable. In addition Devils Lake State Park might well be extended to the east to show the interesting phenomena of the moraine where it crosses the Baraboo Bluffs. *The Point Beach area near Manitowoc Co is also very well worthy of development*

Sincerely yours,

RAYMOND T. ZILLMER
JOHN M. REDFORD
WILLIAM C. DILL
JOHN R. ZILLMER

ZILLMER & REDFORD
ATTORNEYS AT LAW
1412 FIRST WISCONSIN NATIONAL BANK BLDG.
MILWAUKEE 2, WISCONSIN
BROADWAY 6-3120

October 9, 1958

Mr. F. T. Thwaites, Geologist
41 North Roby Road
Madison 5, Wisconsin

Re: Moraine National Park.

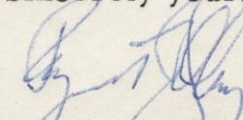
Dear Mr. Thwaites:

Thank you for your letter of October 7th. I hope your wife will soon be recovered from the cataract operation and that she will not be too handicapped. A very close friend of mine has just gone through a second cataract operation and I know what that means.

Thank you for your acceptance of your appointment to the Citizens Committee. I do not know anyone who could be of greater value than you. I have given up over four-fifths of my time this summer on this project and it has given me a great deal of pleasure. Not being a geologist, although I have studied glaciers and their work considerably, I feel a reticence in speaking of the glaciers of Wisconsin. I would appreciate any corrections you make of anything I write or say. I knowingly call the last glacier the "Wisconsin Glacier, rather than the glacier of the "Wisconsin Glacier Period." When I made a reconnaissance of the terminal moraines of the state I lived with your Geology of Northeastern Wisconsin and the map was always beside me. I found it of tremendous value. I wish that you could, however, sometime expand the summary statement of this small pamphlet into a larger book which would be suitable for the non-geologist. I believe that it would be of great value. The people know so little about the wonderful glacial background of Wisconsin. I am wondering whether I could have the further privilege of referring to you as "Advisor to the Citizens Committee on Geology".

I am enclosing herewith check for Three Dollars (\$3.00) for the "Outline of Glacial Geology".

Sincerely yours,



Raymond T. Zillmer, Chairman
Citizens Committee.

RTZ/sab
Enc.

7 Oct., 1958

Mr. Raymond T. Zilmer,
Zilmer & Redford,
1412 First Wisconsin National Bank Bldg.,
Milwaukee 3, Wisconsin

Dear Mr. Zilmer:

Your letter of 11 Sept. was overlooked because Mrs. Ervites had a enteract operation just about that time and I was so occupied with that and doing all the house work since she returned from the hospital that everything else was shoved aside. Now she is better I can begin to catch up.

I mailed you a copy of my "Outline of Glacial Geology" the cost of which is \$3.00 postpaid. If this is not what you want please advise me. I also have a few copies of a detailed map north of the Southeastern Wisconsin report to the end of Door County. This is free unless I have to buy a copy when it is 75 cents.

Thank you for the material you sent me.

I will be pleased to have you add my name to the Committee. I have explored large parts of the Kettle Moraine while I was teaching at the University. I am now retired with address given above.

Sincerely yours,

RAYMOND T. ZILLMER
JOHN M. REDFORD
WILLIAM C. DILL
JOHN R. ZILLMER

ZILLMER & REDFORD
ATTORNEYS AT LAW
1412 FIRST WISCONSIN NATIONAL BANK BLDG.
MILWAUKEE 2, WISCONSIN
BROADWAY 6-3120

September 11, 1958

Mr. Fred Thwaites
University of Wisconsin
Madison, Wisconsin

Dear Mr. Thwaites:

I am enclosing herewith a reprint of an article from Lore, the quarterly publication of the Milwaukee Public Museum, on the proposed Moraine National Park. Some of the geological references may not meet with your approval in not being exactly correct, such as the reference to the Wisconsin Glacier instead of to the Wisconsin Glacier Period. A bill has been introduced into Congress by Congressman Reuss to make a National Moraine Park to follow these moraines.

I have made a reconnaissance of the terminal moraines from Whitewater north, around Antigo to Hudson on the St. Croix River. In that reconnaissance, of course, I made use of the book on the Geology of Southeastern Wisconsin as well as your article and maps on the Geology of Northeastern Wisconsin. From there on I was on my own.

We have created a Citizens Committee of those favoring the Moraine National Park along the terminal moraines. We have an eminent committee of over 50 names, and I would like to add your name on this Citizens Committee. Your name was suggested by Professor Uber, formerly of the University of Wisconsin at Milwaukee. I remember your address at Watertown this spring on which occasion I also gave you part of the contents of the article which I enclose herewith.

I would also like to order your book on geology.

Sincerely yours,



Raymond T. Zillmer

RTZ mrt
Encls.