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About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

HOBBS, W. H.

from Fogg

November 27, 1942.

Dr. William H. Hobbs,
Professor Emeritus of Geology,
University of Michigan,
Ann Arbor, Michigan.

Dear Dr. Hobbs:

I was tremendously interested in the paper which you read last Saturday at the meetings of the American Philosophical Society. You may recall that I spoke to you afterwards in the corridor, expressing my appreciation of the work which you have done and saying that I would communicate with you in writing.

As a student of plant geography I have long been intensely interested in Pleistocene phenomena. One matter that has engaged my attention has been the remarkable similarity between the present-day floras of northern North America and western and northwestern Europe, those very areas so severely denuded by the ice. There are several hundred species of plants which in this country enjoy an arctic or boreal distribution throughout Canada and New England and which likewise occur in the glaciated areas of Scandinavia and the Baltic countries. This is in marked contrast to the situation south of the glacial flora in both continents where the similarity in the floras is exceptional rather than usual. That is, few plants of Alleghenian range are known to occur in the unglaciated portions of Europe. There are some examples of closely related species in the two areas, but relatively few examples of specific identity. It has long been my feeling that the explanation of such a strong resemblance in the northern floras of the two continents lay in the possibilities for survival in some unglaciated northern areas such as Alaska, northern Canada along the Arctic Ocean, or some of the islands in the Arctic Archipelago. Furthermore, if the level of the ocean during periods of maximum glaciation was significantly lower than it is to-day, there would have been even greater areas exposed and therefore conceivably available for plant occupation. I believe continued occupation by plants in these regions to be no more difficult than is the occurrence of a flora of over four hundred species of vascular plants along the rim of Greenland to-day. If we are correct in assuming, and here I would like to learn your opinion, that the ice retreated or underwent shrinkage southward in terms of the Arctic Circle, then it seems to me entirely reasonable to suppose that this persistent northern flora would have taken advantage of this stagnation and should have moved southward and invaded the occupied areas. Is it possible that there was also, when the sea level was lower, an approach to a land bridge, or at least a series of stepping stones, from North America to Europe by way of Newfoundland, Greenland and Iceland, conforming to the present submerged ridge? Another explanation,

Dr. W. H. Hobbs. #2.

of course, is that the plants I am speaking of lived during Pleistocene in northern Asia and underwent post-Pleistocene dispersal eastward into North America by way of Alaska and westward across Siberia into Europe. The fact remains that we have this remarkable similarity in the floras of northwestern Europe and northern North America, and I should indeed be grateful for any light which you can shed on this situation.

I was particularly delighted in your remarks because it has been difficult for me to conceive of such tremendous ice thickness over the North American centers which the earlier glacialists require. I would be interested in learning of the views you have concerning the climatic changes involved, particularly as to what order of magnitude the lowering of the mean annual temperature should be in order to bring about ice accumulation of continental proportions. I was delighted to hear your interpretation of the origin of loess and can well believe that many of the inconsistencies which have bothered us in the past seem now to be reconcilable.

I should be very grateful to you for any consideration which you can give to my questions. I feel that here, as elsewhere, answers to fundamental problems are forthcoming only as a result of collaboration between the geologist and the biologist. I greatly enjoyed seeing and hearing you and hope that at some future time we may have leisure to discuss some of these matters.

Sincerely yours,

John M. Fogg, Jr.,
Associate Professor of Botany.

from Hermann

HOBBS, W.H.

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MARTHA WHEELER, CUSTODIAN AND SECRETARY

December 3, 1942

Professor John M. Fogg, Dean
The College
University of Pennsylvania
Philadelphia, Pennsylvania

Dear Professor Fogg:

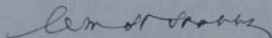
Thank you for your good letter which has interested me very greatly. The connection across the Atlantic, which many geologists regard as pretty well established, occurred long before the Pleistocene. I think that accounts satisfactorily for the development of similar Boreal peculiarities in both hemispheres. The invasions by the continental glaciers should ~~heavily~~ ^{plac} destroy these plants where the glacier covered the surface. Outside they could flourish without difficulty. Sir Albert Seward has shown tree ferns close to the glaciers of New Zealand. As you are well aware, the flora near the ice front in Greenland is very much like our Boreal flora. It may surprise you, however, that owing to the glacial anticyclone and the adiabatic elevation of temperature because of the descent of the air from the high interior, ^{it} gives an only slightly lower winter temperature at the ice front in Greenland than we have in Ann Arbor.

I think the best studies on the reintroduction of plants after their destruction beneath the glacier has been furnished by Cooper's papers on Alaska where the break-up at the ice front exposed a large area for the later invasion of plants from the margin. You of course know of his papers (William S. Cooper, The Third Expedition to Glacier Bay, Alaska, Ecology, Vol. XII, January, 1931; and a paper in the Bulletin of the Torrey Botanical Club, Vol. LVII, May, 1931). I wonder if you have seen the paper by Dr. Carl O. Erlanson on "The Vesicular

Plants of an Inland Region Within the Holstensborg District of West Greenland," which is published in Volume II of the reports of our University of Michigan Greenland expedition. This will surely be accessible to you, for our copies are exhausted due to the demand for them by the United States government while prosecuting the war. Erlanson was the botanist of my first expedition there, and is now, I believe, in Washington on one of the Bureaus.

I am to give my papers much more fully than I did at Philadelphia at the meeting of the American Association in New York on Wednesday, the 30th. I am,

Very sincerely yours,



Wm. H. Hobbs

WHH/ro

** notice of cancellation came this morning.*