NATIONAL OBJECTIVES IN THE UTILIZATION OF PEAT LAND IN AGRICULTURE AND INDUSTRY

by

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Considerable attention is now being given to peat land utilization through regional organization, since desirable economic adjustments for a land type generally spoken of as "marginal" or "submarginal" must needs be made from the standpoint of a region coordinated as a whole.

At the outset it is recognized that it is difficult to differentiate between areas of peat clearly adapted to the use for farming from areas that are submarginal for farming but can be made to serve the manufacture of commercial peat products, or such major objectives as pasture, timber conservation, provision for suitable water storage basins, reserves for wild life, and other purposes.

It is recognized also that progress in any economic and efficient development of the Nation's peat resources will be dictated by two considerations: first, a classification of peat land that is relatively permanent in comparison with changing economic programs affecting land use, and second, the selection of types of peat land that will best fulfill the respective objectives under existing local or prospective demands.

In the course of the next few years the classification of peat land is likely to be an important consideration. Consequently those objectives that can be satisfied by a characterization of peat land based on genetic, historical, and developmental features of profiles, should receive special attention at this time.

The physical basis for a new system of classifying peat land in the United States has been described and illustrated by means of distinctive type profiles in a book recently published as volume VII of the Handbuch der Moorkunde. For the purpose of ascertaining the stratigraphic arrangement of layers, the character and volume range of different kinds of peat and muck, and of grouping various types of peat land under the physical conditions controlling the utility of areas in the major regions of this country, this system of classification may constitute a desirable basis for economic land-use adjustments.

In many cases problems of specific uses of peat land coincide with great regional groups that are fairly homogeneous in inherent (morphological) features, surface vegetation, and climatic conditions. A map of the United States, published in the Journal of the American Society of Agronomy, 22:356, 1930, shows several major regions in which major groups of peat land occur. Although provisional in character, the map may provide a means for defining the greater possibilities in the use of peat resources and in estimating regional trends.

Of the major groups, referred to above, the group of Northern Peat Land represented on the map indicates in one way or another that the economic feasibility of making improvements by drainage and clearing is uncertain particularly at this time. The production of farm crops on peat soils consisting of a surface layer of moss peat is very difficult. It has become increasingly apparent that a better use of extensive deposits of peat would be the production of timber primarily as a supply for the State or Nation, for the support of resident industries and employment, and in providing for the manufacture of certain grades of commercial peat products. Other significant lines of general emphasis are the conservation of excessively moist peat areas for wild life and for their scenic value and primitive character, or in association with other objectives such as the protection of water sheds, and the acquisition of water storage basins, along important streams, and of peat areas that have no present or potential value but may be useful in reducing pollution, run-off and erosion.

The most important of the regional groups in which the best use has been fairly well demonstrated is the group of Central Continental Peat Land. Use is here well adjusted to the character of the peat land through specialized and intensive farming, nearness to centers of consumption, and local facilities for transport. But though the group contains many areas in truck specialties and supports relatively remunerative general farming practices, including timber production in woodlots, a distinction should be made between areas whose use is problematical and areas having little or no agricultural value. A realization of different objectives compatible with agricultural and industrial purposes and addressed definitely to the task of conserving specified natural peat areas would lead to a better regional balance.

Other peat areas in this group occur in the coastal plains of the Atlantic. They support in the main a diversity of native tree growth, evergreen shrubs, and cane brakes. The questions of proper use and justifiable objectives are more or less complex, but efforts are being made to clarify them.

The group of Southern and Western Peat Land which comprises the Florida Everglades and the Delta peat land of California, supports fairly intensive and extensive farming. The southeastern peat areas are characterized by much diversity, with types ranging from high to low in natural productivity. The western types are frequently too arid and require irrigation. Interspersed are areas of peat the best use of which is uncertain, while for other areas classification and grading will be tentative because of a lack of adequate data. It is important that systematic steps be taken to provide the indispensable basis for determining the capacity and adaptability of the different types of peat land in this group for those principal uses for which they appear most likely to be employed.

In a previous paper, which appeared in the Scientific American (February, 1922), the writer pointed out the range of activities and the direction in which he believes a solution to lie regarding the usefulness of peat land in states in which they are most extensive.

In a subsequent paper, to be published in the Geographical Review, some of these suggestions will be considered in greater detail.