LAND USE AND THE SOIL SURVEY IN ILLINOIS

by

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There appears to have been a tendency to complicate the discussion of the problems of land use. This may be inevitable; however, there are some who feel that simplification is possible. This paper is the result of an effort at simplification, or better, an effort to emphasize some essentials. It divides itself naturally into two parts, first, a brief set-up of the problems of land use, with particular reference to Illinois, and second, the responsibility and opportunity of the Soil Survey in helping to meet the problems.

Land Use, With Particular Reference To Illinois

I assume that in Illinois our chief interest for the present is in the commercial use of rural lands. Even with this limitation the topic is broader than may profitably be discussed in this paper, and therefore, it is further limited to the use of rural lands for the production of commercial crops including timber. In Illinois the use of rural lands for purposes other than the production of crops is of relatively small importance, and moreover, it seems that the most significant contributions of the Soil Survey to the problems of land use are and will continue to be in connection with the use of lands for commercial crop production.

With the above limitations in mind it seems desirable to subdivide the discussion of land use into two sub-topics: first, the capacity of the land to produce; and second, the factors determining probable success in use. By thus directing our thoughts we may automatically eliminate elements thought by some to lack significance and thus to some extent avoid complicating and encumbering our consideration of the problem.

First, the capacity of the land to produce. In thinking of the capacity of land to produce and of its adaptation it is necessary to think in terms of land units. That is to say, land is diverse in adaptation and in producing capacity. It is amazing that this self-evident fact is not more generally appreciated. The difficulties arising from this diversity must be reduced to a minimum by some sort of a classification. However, as pointed out by Dr. Marbut, before a group of objects can be classified they must be created. Fortunately such a group of objects is at hand. All that is needed is a grouping of these objects; namely, soil types, on the basis of producing capacity and adaptation.

The soils of a region and consequently the soils of a region and consequently must be segregated into groups and on types of farming. Even when these remain interfering factors which interfere, average returns, when properly of great value in determining the

Second, probable success in production of the soils of a region with respect to production and adaptation in a reasonably satisfactory manner because it can be based on long-continued experience and to soil investigations of the soil survey and state organizations. When we attempt to get at probable success we find that a long list of factors influencing capacity to produce and adaptation. Some of these factors are economic; personal, having to do with man-gender, personal traits. It seems that the preference to these two groups of factors is a grouping of those which are economic stability and significance and, of those on the basis of those which can be evaluated and others which cannot be.

The apparent impossibility, or at least the difficulty of forming a sound judgment as to probable success in use of land leads to the suggestion that the land-use maps, in so far as capacity to produce and adaptability to commercial crops is of relatively small importance, and moreover, it seems that the most significant contributions of the Soil Survey to the problems of land use are and will continue to be in connection with the use of lands for commercial crop production.

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