IMPROVEMENT OF SOIL SURVEY REPORTS

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It may be said that bulletins and reports fall into two general classes, (1) those intended to reach a special group, and (2) those intended to reach several or many groups. In my opinion, soil survey bulletins or reports are in both of these classes. Perhaps first of all they must furnish information for the soil scientist, but they should also be at least partly understandable to other scientists as well as farmers, bankers, and many other business men.

Soil survey or land classification is fundamental to all agricultural scientists, the economist, the agricultural engineer, the forester, and all the others. It is likewise of even more fundamental importance to practical farmers, and others interested in land utilization and in valuation for loan, taxation, sale, or purchase purposes. Such a large field furnishes unlimited opportunity for service. No work stands ahead of it in fundamental scientific and practical importance. If it is to receive proper consideration though, it must be presented to this widely differing constituency in an easily understandable way.

To fulfill this obligation, time and thought must be given to the collection of field data and then careful attention must be given to the arrangement of these facts.

The first step in report preparation or writing is in properly equipping the field parties for the collection of needed data. Imagine a telephone company sending line men out with a pair of pliers and a ladder thrown in the back of a dump truck. Soil survey parties need to collect more data than is possible with the conventional equipment now in use. There should be more and better equipment, conveniently arranged in a truck designed for the purpose so as to encourage its use and promote efficiency. Such things (and places for them) as field test kits, a kodak, note books, a variety of soil tools, and the equipment now in common use should be a part of every party's equipment. Good detailed information cannot be obtained without good equipment. Poorly equipped parties invariably devote relatively more time to the job of map making and less to the study of soil characteristics. There is the tendency to be general and superficial and copy in a sense descriptions and materials from reports of other areas. Among other things, of late, we have been taking many descriptions at places which are not typical as well as those which are typical and running numbers of field tests. (See exhibit No. 1 for description sheets used.) Such things require time. A good soil description if carefully made to include growth, usage and such things, as well as a profile description may require an hour's time or more.

If time and thought has been given to the collection of data, the preparation of the report will not be a difficult matter, though, it will require time too. The report itself should be a dictionary of facts rather than a literary masterpiece. The facts should be arranged to conform to a regular outline in such a way as to permit fact finders, particularly those who are not soils men, to know just where to turn for specific information. The facts should be set up alike in all reports which would facilitate the comparison of soil descriptions and other data between areas and even within an area.

A suggested report outline would be something like the following with the headings in black type.

**DESCRIPTION OF THE AREA**

**CHAPTER I**

1. Location of County in State.
2. Physiography and Relief.
3. Vegetation.
4. Settlement and History of the County.
5. Transportation.
6. Telephones, Schools, Churches.
7. Industries.

**CLIMATE**

**CHAPTER II**

**AGRICULTURAL HISTORY AND STATISTICS**

**CHAPTER III**

1. General facts regarding agricultural development including yield and acreage trends.
2. Fertilizer.
3. Labor.
4. Size and Tenure of Farms.
5. Equipment.

**SOILS**

**CHAPTER IV**

1. Introduction by general discussion which includes much of the material now going in “Soils and their interpretation,” pH value, tables, etc.

Note: Next comes “soil group chapters,” each chapter beginning with the conventional introductory paragraphs. After the introduction, each type is taken up separately. The most important type in the group is taken up under the following headings using telegraphic language so as to be brief almost to the point of being scientifically inaccurate.

Location of Typical Sample, Descriptions, Variations from Typical, Parent Material, Surface Features, Topography (Slope), Mode of Formation, Under Drainage, Erosion, Native Vegetation, Organic Matter Content, Fertilizer Requirement, Lime Requirement, Other Characteristics, Uses in County, Productivity, Adaptability, Extent and Location in County, Occurrence in Other Sections, Experimental Data Available, Chemical Analyses.

Note:—Each other type in a series is discussed only under the headings in which it differs from the leading type of a series.

**MANAGEMENT**

**CHAPTER**

**SUMMARY**

**CHAPTER**

Except in the dark color of heading this outline is identical to the one suggested at present by the Bureau of Chemistry and Soils until it reaches type descriptions. Even there, it is not greatly different except in arrangement. The “Soils and Interpretation” chapter is omitted but the material is included under “Physiography” and in the beginning of the “Soils.”