BOOK REVIEW

SOIL SURVEY OF SOUTHERN SASKATCHEWAN

By J. Mitchell, H. C. Moss, and J. S. Clayton. University of Saskat-
chewan, Saskatoon, Saskatchewan: Soil Survey Report No. 12. VIII +
259 pages, illus. 1944. $1.00.

Doctor Mitchell and his associates are to be highly compli-
mented for a soil survey report that is refreshingly outstanding
in both the scope and manner of presentation of soil data covering
a large area. The report to an unusual degree is a combined account
of the soil geography of southern Saskatchewan, a text on fundamen-
tal soil science, and a farmers' bulletin on soil management. An
appreciation of the immensity of the work involved can perhaps
be obtained when it is realized that the survey covers 96,000 square
miles, an area approximately equal to that of Oregon, the ninth
state in size in the United States. The map is published in four sec-
tions on a scale of 1 inch equals 6 miles.

As to be expected for an area of this size and published on the
above scale, the survey is reconnaissance in nature rather than
detailed. The authors explain that the methods of classification and
mapping have been derived from the Russian school of soil science,
the American system of soil survey, and the earlier surveys and
studies carried on in Saskatchewan and the other prairie provinces
of Canada. A marked feature is the use of "Soil Associations" as
the basic unit of classification, mapping, and discussion. The use of
"Soil Association" is taken from Manitoba and differs from its
use here in the United States, as exemplified by soil maps in the
U. S. D. A. 1938 Yearbook. The definition given in the report, "A local
association of soil group profiles developed upon similar parent ma-
terials and belonging to the same soil zone", shows that the concept is
similar to that of catena as used in the United States.

Descriptions of 42 soil associations occupy 119 pages. Each asso-
ciation is identified by a geographical name and described in terms
of the nature of the parent geological material, the character of
the individual kinds of profiles making up the association, and the
appearance of the landscape, as conditioned by land use, topography,
soil color, and vegetation. A detailed profile description is given
of the dominant soil within each association, and the character of
each of the associated members is indicated by such terms as the
solonetz member, the shallow knoll member, the poorly drained member,
and the calcareous earth member. A sub-heading, "Agriculture", dis-
cusses relations of the individual members of the association to land
use and management.

The 42 associations are grouped in the report and on the map as
classificational units of the zonal great soil groups or soil zones. Thus,
there are 8 associations listed under the Brown soils, 8 under the
Dark Brown soils, 12 under the Black soils, 7 under the Degraded
Black soils, and 7 under the Grey (Podzol) soils.

Miscellaneous soils are grouped and discussed separately. They
include Alluvium, Alkali (Saline) Soils, Peat (Bog) Soils, Dune