

Cropland Interpretations

Crop Yield

The average yields per acre of principal crops under a high level of management are presented in published soil surveys. In any given year, yields may be higher or lower than those indicated in these tables because of variations in rainfall and other climatic factors. The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, or green manure crops; and harvesting that insures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. Absence of a yield indicates that the soil is not suited to the crop or the crop is generally not grown on the soil.

Productivity Index

The productivity index rating system provides an index for ranking all the soil mapping units in Missouri based upon their suitability to produce crops. An individual productivity index rating for a soil map unit reflects the integrated effects of numerous factors that influence the yield potential. The booklet entitled "Productivity of Missouri Soils" can be found in the local NRCS Field Office Service Center.

Many users consider the comparative yields between soils to be of more value than the actual yields because the index relationships are likely to remain constant over a period of years.

This subsection includes:

- **(a) Irrigated and Nonirrigated Yields by Map Unit Component**