# 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.

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) Land Capability and Yields per Acre of Crop and Pasture**
- **(b) Productivity of Missouri Soil (located in the county office)**

## Land Capability and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.)

| Map symbol and soil name | Land capability | Corn | Grain sorghum | Orchardgrass-red clover* | Soybeans | Tall fescue | Warm season grasses** | Winter wheat |
|---|---|---|---|---|---|---|---|---|
| | | Bu | Bu | Tons | Bu | Tons | Tons | Bu |
| 66014: | | | | | | | | |
| Haymond------- | 2w | --- | --- | 6.60 | --- | 5.00 | 6.40 | --- |
| 70028: | | | | | | | | |
| Moko---------- | 6s | --- | --- | --- | --- | 1.00 | 1.40 | --- |
| Rock outcrop-- | 8s | --- | --- | --- | --- | --- | --- | --- |
| 73013: | | | | | | | | |
| Lowassie------ | 5w | --- | --- | 6.50 | --- | 6.00 | 7.30 | --- |
| 73032: | | | | | | | | |
| Gatewood------ | 6e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73039: | | | | | | | | |
| Glensted------ | 2e | 96.00 | 89.00 | 6.50 | 32.00 | 6.00 | 7.30 | 38.00 |
| 73053: | | | | | | | | |
| Lily---------- | 4e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Bender-------- | 6s | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73066: | | | | | | | | |
| Bender-------- | 6s | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73067: | | | | | | | | |
| Bender-------- | 7e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Rock outcrop-- | 8s | --- | --- | --- | --- | --- | --- | --- |
| 73080: | | | | | | | | |
| Alred--------- | 7e | --- | --- | --- | --- | --- | --- | --- |
| Bardley------- | 7e | --- | --- | --- | --- | --- | --- | --- |
| Rock outcrop-- | 8s | --- | --- | --- | --- | --- | --- | --- |
| 73087: | | | | | | | | |
| Celt---------- | 2e | --- | --- | 4.50 | --- | 5.00 | 6.00 | 31.00 |
| 73089: | | | | | | | | |
| Rueter-------- | 7e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73094: | | | | | | | | |
| Gatewood------ | 7e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73098: | | | | | | | | |
| Plato--------- | 2e | 75.00 | 66.00 | 4.50 | 28.00 | 5.00 | 6.00 | 31.00 |
| 73135: | | | | | | | | |
| Union--------- | 3e | 70.00 | 63.00 | 3.60 | 24.00 | 3.60 | 3.80 | 28.00 |
| 73136: | | | | | | | | |
| Union--------- | 2e | 80.00 | 73.00 | 3.60 | 30.00 | 3.60 | 3.80 | 35.00 |
| 73159: | | | | | | | | |
| Yelton-------- | 3e | --- | --- | 3.60 | --- | 3.60 | 3.80 | --- |

See footnote at end of table.

Land Capability and Yields per Acre of Crops and Pasture--Continued

| Map symbol and soil name | Land capability | Corn | Grain sorghum | Orchardgrass-red clover* | Soybeans | Tall fescue | Warm season grasses** | Winter wheat |
|---|---|---|---|---|---|---|---|---|
| | | Bu | Bu | Tons | Bu | Tons | Tons | Bu |
| 73160: | | | | | | | | |
| Hobson-------- | 4e | --- | --- | 3.60 | --- | 3.60 | 3.80 | --- |
| 73161: | | | | | | | | |
| Alred--------- | 4e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Rueter-------- | 4e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73162: | | | | | | | | |
| Alred--------- | 7e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Rueter-------- | 7e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73163: | | | | | | | | |
| Bardley------- | 7e | --- | --- | --- | --- | --- | --- | --- |
| Alred--------- | 7e | --- | --- | --- | --- | --- | --- | --- |
| Gasconade----- | 7s | --- | --- | --- | --- | --- | --- | --- |
| 73164: | | | | | | | | |
| Bender-------- | 7e | --- | --- | --- | --- | --- | --- | --- |
| Rock outcrop-- | 8s | --- | --- | --- | --- | --- | --- | --- |
| 73165: | | | | | | | | |
| Knobby-------- | 7s | --- | --- | --- | --- | --- | --- | --- |
| Rock outcrop-- | 8s | --- | --- | --- | --- | --- | --- | --- |
| Bardley------- | 7e | --- | --- | --- | --- | --- | --- | --- |
| 73166: | | | | | | | | |
| Viburnum------ | 3e | --- | --- | 5.60 | --- | 5.30 | 5.50 | 30.00 |
| Tonti--------- | 3e | --- | --- | 3.60 | --- | 3.60 | 3.80 | --- |
| 73168: | | | | | | | | |
| Swiss--------- | 6e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73169: | | | | | | | | |
| Beemont------- | 7e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Gatewood------ | 7e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73170: | | | | | | | | |
| Beemont------- | 6e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Gatewood------ | 6e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73171: | | | | | | | | |
| Plato--------- | 4e | --- | --- | 4.50 | --- | 5.00 | 6.00 | 28.00 |
| 73172: | | | | | | | | |
| Rosati-------- | 2e | 83.00 | 73.00 | 4.50 | 30.00 | 5.00 | 6.00 | 32.00 |
| 73173: | | | | | | | | |
| Lily---------- | 3e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Yelton-------- | 3e | --- | --- | 3.60 | --- | 3.60 | 3.80 | --- |

See footnote at end of table.

Land Capability and Yields per Acre of Crops and Pasture--Continued

| Map symbol and soil name | Land capability | Corn | Grain sorghum | Orchardgrass-red clover* | Soybeans | Tall fescue | Warm season grasses** | Winter wheat |
|---|---|---|---|---|---|---|---|---|
| | | Bu | Bu | Tons | Bu | Tons | Tons | Bu |
| 73174: | | | | | | | | |
| Lily---------- | 4e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Yelton-------- | 4e | --- | --- | 3.60 | --- | 3.60 | 3.80 | --- |
| 73175: | | | | | | | | |
| Poynor-------- | 4e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Bendavis------ | 3e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73176: | | | | | | | | |
| Bendavis------ | 4e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Poynor-------- | 6e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73178: | | | | | | | | |
| Bendavis------ | 6e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73179: | | | | | | | | |
| Viraton------- | 4e | --- | --- | 3.60 | --- | 3.60 | 3.80 | --- |
| Wilderness---- | 6s | --- | --- | --- | --- | 1.60 | 2.00 | --- |
| 73180: | | | | | | | | |
| Gatewood------ | 6e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Gasconade----- | 7s | --- | --- | --- | --- | 1.00 | 1.40 | --- |
| 73181: | | | | | | | | |
| Useful-------- | 4e | --- | --- | 5.60 | --- | 5.30 | 5.50 | 28.00 |
| Gatewood------ | 6e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 73182: | | | | | | | | |
| Lebanon------- | 2e | --- | --- | 3.60 | --- | 3.60 | 3.80 | 35.00 |
| 73183: | | | | | | | | |
| Scholten------ | 6e | --- | --- | --- | --- | 1.60 | 2.00 | --- |
| Tonti--------- | 4e | --- | --- | 3.60 | --- | 3.60 | 3.80 | --- |
| 73184: | | | | | | | | |
| Knobby-------- | 7s | --- | --- | --- | --- | 1.00 | 1.40 | --- |
| Rock outcrop-- | 8s | --- | --- | --- | --- | --- | --- | --- |
| 73186: | | | | | | | | |
| Bardley------- | 7e | --- | --- | --- | --- | --- | --- | --- |
| Alred--------- | 7e | --- | --- | --- | --- | --- | --- | --- |
| Gasconade----- | 7s | --- | --- | --- | --- | --- | --- | --- |
| 73187: | | | | | | | | |
| Bender-------- | 7e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Rock outcrop-- | 8s | --- | --- | --- | --- | --- | --- | --- |
| 73188: | | | | | | | | |
| Bendavis------ | 4e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| Poynor-------- | 6e | --- | --- | 4.40 | --- | 4.00 | 6.40 | --- |

See footnote at end of table.

Land Capability and Yields per Acre of Crops and Pasture--Continued

| Map symbol and soil name | Land capability | Corn | Grain sorghum | Orchardgrass-red clover* | Soybeans | Tall fescue | Warm season grasses** | Winter wheat |
|---|---|---|---|---|---|---|---|---|
| | | Bu | Bu | Tons | Bu | Tons | Tons | Bu |
| 73189: | | | | | | | | |
| Useful | 3e | --- | --- | 5.60 | --- | 5.30 | 5.50 | 34.00 |
| Gatewood | 4e | --- | --- | 4.40 | --- | 4.00 | 4.60 | --- |
| 74634: | | | | | | | | |
| Hartville | 3e | 91.00 | 81.00 | 6.50 | 34.00 | 6.00 | 7.30 | 37.00 |
| 74652: | | | | | | | | |
| Lecoma | 3e | 85.00 | 75.00 | 5.60 | 32.00 | 5.00 | 5.30 | 35.00 |
| 74653: | | | | | | | | |
| Racoon | 2w | 91.00 | 81.00 | 5.80 | 28.00 | 5.30 | 7.40 | 37.00 |
| Freeburg | 2w | 108.00 | 94.00 | 6.40 | 40.00 | 5.00 | 6.60 | 44.00 |
| 74656: | | | | | | | | |
| Deible | 2e | 91.00 | 81.00 | 5.80 | 34.00 | 5.30 | 7.30 | 37.00 |
| 75375: | | | | | | | | |
| Horsecreek | 2w | 110.00 | 88.00 | 6.60 | 37.00 | 5.00 | 6.40 | 44.00 |
| 75376: | | | | | | | | |
| Cedargap | 3w | --- | --- | 1.00 | --- | 2.00 | 2.50 | 22.00 |
| 75388: | | | | | | | | |
| Kaintuck | 5w | --- | --- | 6.60 | --- | 5.00 | 6.40 | --- |
| Relfe | 4s | --- | --- | 2.40 | --- | 2.30 | 2.50 | --- |
| 75391: | | | | | | | | |
| Possumtrot | 2w | 81.00 | 71.00 | 6.60 | 30.00 | 5.00 | 6.40 | 33.00 |
| 75398: | | | | | | | | |
| Kaintuck | 5w | --- | --- | 6.60 | --- | 5.00 | 6.40 | --- |
| 75412: | | | | | | | | |
| Razort | 2w | 95.00 | 85.00 | 6.60 | 35.00 | 5.00 | 6.40 | 37.00 |
| 75413: | | | | | | | | |
| Relfe | 4s | --- | --- | 2.40 | --- | 2.30 | 2.50 | --- |
| 75414: | | | | | | | | |
| Wideman | 5w | --- | --- | 2.40 | --- | 2.30 | 2.50 | --- |
| 99000.<br>Pits, quarries | | | | | | | | |
| 99001.<br>Water | | | | | | | | |
| 99003.<br>Miscellaneous water | | | | | | | | |

* Alsike clover should be substituted for red clover on somewhat poorly drained and poorly drained soils.

** Average yield of all suitable native warm season grasses.