

## 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)**

Table 5.--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	Grain	Sorghum	Tall fescue	Wheat	Winter wheat
		sorghum	grazed	seed	grazeout	
		Bu	Tons	Lbs	Tons	Bu
70030:						
Noark-----	4s	47.00	4.00	194.00	3.10	22.00
Clarksville-----	4s	47.00	4.00	194.00	3.10	22.00
70031:						
Hailey-----	7e	---	---	---	---	---
Rueter-----	7e	---	---	---	---	---
70032:						
Tonti-----	2e	59.00	5.00	243.00	3.90	28.00
70033:						
Moko-----	6s	---	---	---	---	---
Rock outcrop-----	8s	---	---	---	---	---
70034:						
Moko-----	7s	---	---	---	---	---
Blueye-----	7e	---	---	---	---	---
Rock outcrop-----	8s	---	---	---	---	---
70035:						
Sonsac-----	6e	---	1.60	78.00	1.20	---
Gobbler-----	6e	---	3.20	156.00	2.50	---
70036:						
Sonsac-----	7e	---	---	---	---	---
Gobbler-----	7e	---	---	---	---	---
70037:						
Sonsac-----	7s	---	---	---	---	---
Rueter-----	7s	---	---	---	---	---
70038:						
Moko-----	6s	---	---	---	---	---
Rock outcrop-----	8s	---	---	---	---	---
70050:						
Rueter-----	6e	---	3.80	185.00	2.90	---
Goss-----	6e	---	3.80	185.00	2.90	---
70051:						
Hailey-----	7e	---	---	---	---	---
Rueter-----	7e	---	---	---	---	---
71252:						
Britwater-----	3e	66.00	5.60	272.00	4.30	31.00
73070:						
Sowcoon-----	5w	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Grain	Sorghum	Tall fescue	Wheat	Winter wheat
		sorghum	grazed	seed	grazeout	
		Bu	Tons	Lbs	Tons	Bu
73113: Scholten-----	4s	---	3.20	156.00	2.50	---
73114: Captina-----	2e	85.00	7.20	350.00	5.60	40.00
73115: Horneybuck-----	3e	68.00	5.80	282.00	4.50	32.00
Tonti-----	3e	54.00	4.60	224.00	3.50	25.00
73116: Pomme-----	2e	73.00	6.20	301.00	4.80	34.00
73117: Clarksville-----	6e	---	3.40	165.00	2.60	---
Scholten-----	6s	---	2.60	126.00	2.00	---
Hailey-----	6e	---	3.00	146.00	2.30	---
73118: Rueter-----	6e	---	3.20	156.00	2.50	---
Goss-----	6e	---	3.20	156.00	2.50	---
73119: Rueter-----	7e	---	---	---	---	---
Hailey-----	7e	---	---	---	---	---
73120: Rueter-----	7e	---	---	---	---	---
Gasconade-----	7s	---	---	---	---	---
Rock outcrop-----	8s	---	---	---	---	---
73121: Scholten-----	4s	---	3.20	156.00	2.50	---
Tonti-----	3e	54.00	4.60	224.00	3.50	25.00
73122: Gasconade-----	7s	---	---	---	---	---
Rock outcrop-----	8s	---	---	---	---	---
73123: Mano-----	6e	---	5.40	262.00	4.20	---
Ocie-----	6e	---	4.60	224.00	3.50	---
73124: Alred-----	7e	---	---	---	---	---
Ocie-----	7e	---	---	---	---	---
73125, 73126: Knobby-----	7s	---	---	---	---	---
Rock outcrop-----	8s	---	---	---	---	---
73127: Gobbler-----	4e	52.00	4.40	214.00	3.40	24.00

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Grain sorghum	Sorghum grazed	Tall fescue seed	Wheat grazeout	Winter wheat
		Bu	Tons	Lbs	Tons	Bu
73127: Sonsac-----	4e	---	2.80	136.00	2.20	---
73128: Gobbler-----	6e	---	---	---	---	---
Sonsac-----	6e	---	---	---	---	---
73129: Gasconade-----	6s	---	---	---	---	---
73130, 73131, 73132: Gasconade-----	7s	---	---	---	---	---
73133: Alred-----	4e	71.00	6.00	292.00	4.60	33.00
Ocie-----	3e	61.00	5.20	253.00	4.00	29.00
73134: Alred-----	6e	---	---	---	---	---
Ocie-----	6e	---	---	---	---	---
Sonsac-----	7s	---	---	---	---	---
74638: Waben-----	3s	52.00	4.40	214.00	3.40	24.00
74639: Waben-----	6e	---	3.80	185.00	2.90	---
74640: Hootentown-----	1	99.00	8.40	408.00	6.50	46.00
75401: Horsecreek-----	2w	94.00	8.00	389.00	6.20	44.00
Jamesfin-----	2w	94.00	8.00	389.00	6.20	44.00
75402: Pinerun-----	3w	61.00	5.20	253.00	4.00	29.00
75403: Cedargap-----	3s	47.00	4.00	194.00	3.10	22.00
Woolly-----	3s	57.00	4.80	233.00	3.70	26.00
75404: Pinerun-----	3s	52.00	4.40	214.00	3.40	24.00
75405: Pinerun-----	3s	52.00	4.40	214.00	3.40	24.00
Waben-----	3s	57.00	4.80	233.00	3.70	26.00
99000. Pits, quarries						
99001. Water						
99005. Landfills	8s	---	---	---	---	---

Table 6.--Pasture and Hayland Groups and Yields per Acre of Hay 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	Pasture and hayland group	Caucasian	Improved	Orchardgrass-	Tall fescue	Tall fescue-
		bluestem hay	bermudagrass	alfalfa hay	hay	red clover
		Tons	Tons	Tons	Tons	Tons
70030:						
Noark-----	GrU	3.0	2.9	2.3	2.0	2.0
Clarksville-----	GrU	3.0	2.9	2.3	2.0	2.0
70031:						
Hailey-----	GrU	---	---	---	---	---
Rueter-----	GrU	---	---	---	---	---
70032:						
Tonti-----	LyP	3.0	2.9	2.9	2.5	2.5
70033:						
Moko-----	ShU	---	---	---	---	---
Rock outcrop-----	GNS	---	---	---	---	---
70034:						
Moko-----	ShU	---	---	---	---	---
Blueye-----	MdU	---	---	---	---	---
Rock outcrop-----	GNS	---	---	---	---	---
70035:						
Sonsac-----	MdU	0.9	0.9	0.9	0.8	0.8
Gobbler-----	GrU	2.3	2.3	1.9	1.6	1.6
70036:						
Sonsac-----	MdU	---	---	---	---	---
Gobbler-----	GrU	---	---	---	---	---
70037:						
Sonsac-----	MdU	---	---	---	---	---
Rueter-----	GrU	---	---	---	---	---
70038:						
Moko-----	ShU	---	---	---	---	---
Rock outcrop-----	GNS	---	---	---	---	---
70050:						
Rueter-----	GrU	2.8	2.8	2.2	1.9	1.9
Goss-----	GrU	2.8	2.8	2.2	1.9	1.9
70051:						
Hailey-----	GrU	---	---	---	---	---
Rueter-----	GrU	---	---	---	---	---
71252:						
Britwater-----	GrU	4.1	4.1	3.3	2.8	2.8
73070:						
Sowcoon-----	WLO	---	3.7	---	3.2	3.2

Table 6.--Pasture and Hayland Groups and Yields per Acre of Hay and Pasture--Continued

Map symbol and soil name	Pasture and hayland group	Caucasian	Improved	Orchardgrass-	Tall fescue-	Tall fescue-
		bluestem hay	bermudagrass hay	alfalfa hay	hay	red clover hay
		Tons	Tons	Tons	Tons	Tons
73113: Scholten-----	GrP	1.9	1.9	1.9	1.6	1.6
73114: Captina-----	LyP	4.2	4.2	4.2	3.6	3.6
73115: Horneybuck-----	WtP	3.4	3.4	3.4	2.9	2.9
Tonti-----	LyP	2.7	2.7	2.7	2.3	2.3
73116: Pomme-----	LyU	3.6	3.6	3.6	3.1	3.1
73117: Clarksville-----	GrU	2.6	2.5	2.0	1.7	1.7
Scholten-----	GrP	1.5	1.5	1.5	1.3	1.3
Hailey-----	GrU	2.3	2.3	1.7	1.5	1.5
73118: Rueter-----	GrU	2.4	2.4	1.9	1.6	1.6
Goss-----	GrU	2.4	2.4	1.9	1.6	1.6
73119: Rueter-----	GNS	---	---	---	---	---
Hailey-----	GNS	---	---	---	---	---
73120: Rueter-----	GNS	---	---	---	---	---
Gasconade-----	GNS	---	---	---	---	---
Rock outcrop-----	GNS	---	---	---	---	---
73121: Scholten-----	GrP	1.9	1.9	1.9	1.6	1.6
Tonti-----	LyP	2.7	2.7	2.7	2.3	2.3
73122: Gasconade-----	GNS	---	---	---	---	---
Rock outcrop-----	GNS	---	---	---	---	---
73123: Mano-----	GrU	4.1	4.1	3.1	2.7	2.7
Ocie-----	GrU	3.5	3.5	2.7	2.3	2.3
73124: Alred-----	GrU	---	---	---	---	---
Ocie-----	GrU	---	---	---	---	---
73125, 73126: Knobby-----	ShU	---	---	---	---	---
Rock outcrop-----	GNS	---	---	---	---	---
73127: Gobbler-----	GrU	3.3	3.2	2.6	2.2	2.2

Table 6.--Pasture and Hayland Groups and Yields per Acre of Hay and Pasture--Continued

Map symbol and soil name	Pasture and hayland group	Caucasian	Improved	Orchardgrass-	Tall fescue	Tall fescue-
		bluestem hay	bermudagrass hay	alfalfa hay	hay	red clover hay
		Tons	Tons	Tons	Tons	Tons
73127: Sonsac-----	MdU	1.6	1.6	1.6	1.4	1.4
73128: Gobbler-----	GrU	---	---	---	---	---
Sonsac-----	MdU	---	---	---	---	---
73129, 73130, 73131, 73132: Gasconade-----	ShU	---	---	---	---	---
73133: Alred-----	GrU	4.5	4.4	3.5	3.0	3.0
Ocie-----	GrU	3.9	3.8	3.0	2.6	2.6
73134: Alred-----	GrU	---	---	---	---	---
Ocie-----	GrU	---	---	---	---	---
Sonsac-----	MdU	---	---	---	---	---
74638: Waben-----	GrU	3.3	3.2	2.6	2.2	2.2
74639: Waben-----	GrU	2.9	2.9	2.2	1.9	1.9
74640: Hootentown-----	LyO	4.9	4.9	4.9	4.2	4.2
75401: Horsecreek-----	LyO	4.7	4.7	4.7	4.0	4.0
Jamesfin-----	LyO	4.7	4.7	4.7	4.0	4.0
75402: Pinerun-----	GrO	3.0	3.0	3.0	2.6	2.6
75403: Cedargap-----	GrO	2.3	2.3	2.3	2.0	2.0
Woolly-----	GrO	2.8	2.8	2.8	2.4	2.4
75404: Pinerun-----	GrO	2.6	2.6	2.6	2.2	2.2
75405: Pinerun-----	GrO	2.6	2.6	2.6	2.2	2.2
Waben-----	GrU	3.6	3.5	2.8	2.4	2.4
99000. Pits, quarries						
99001. Water						
99005. Landfills						