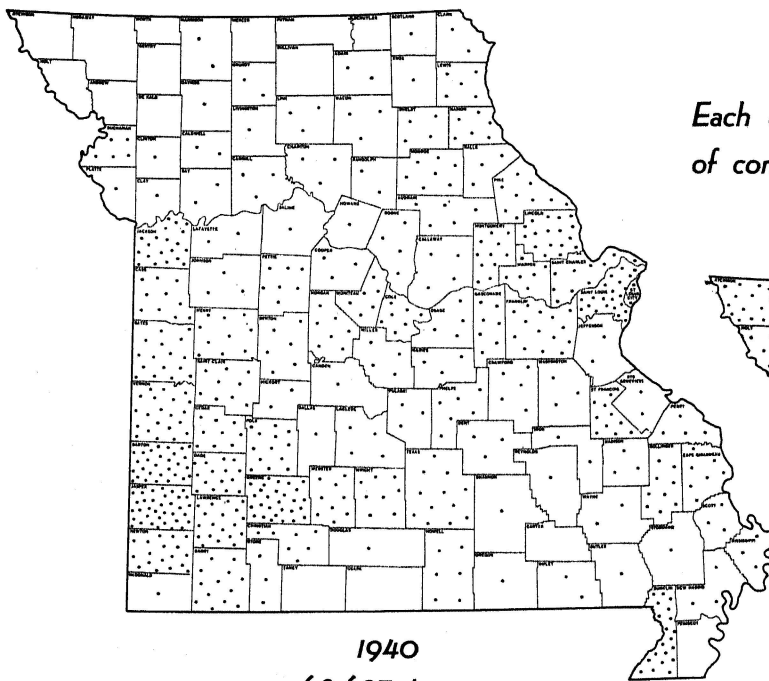


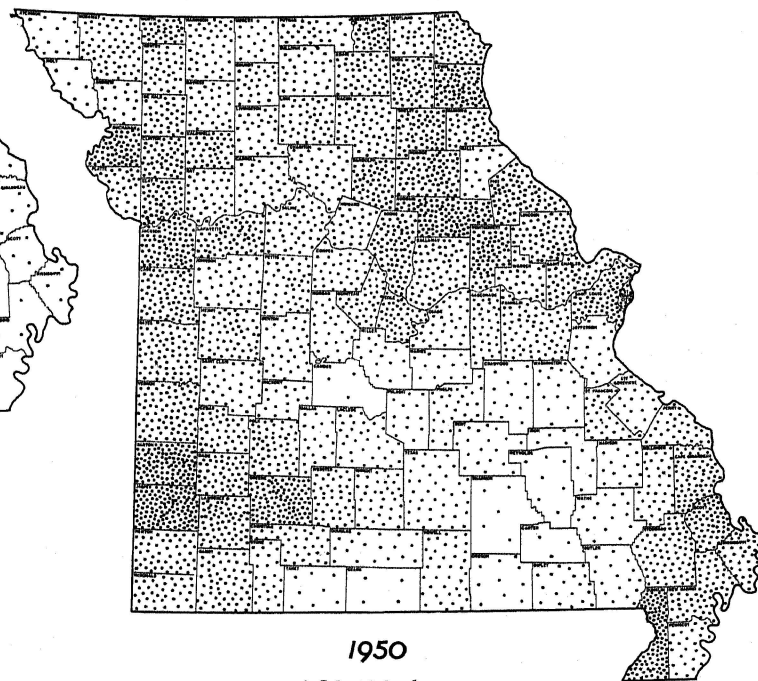
# MISSOURI

## FERTILIZER CONSUMPTION

### 1941-1950



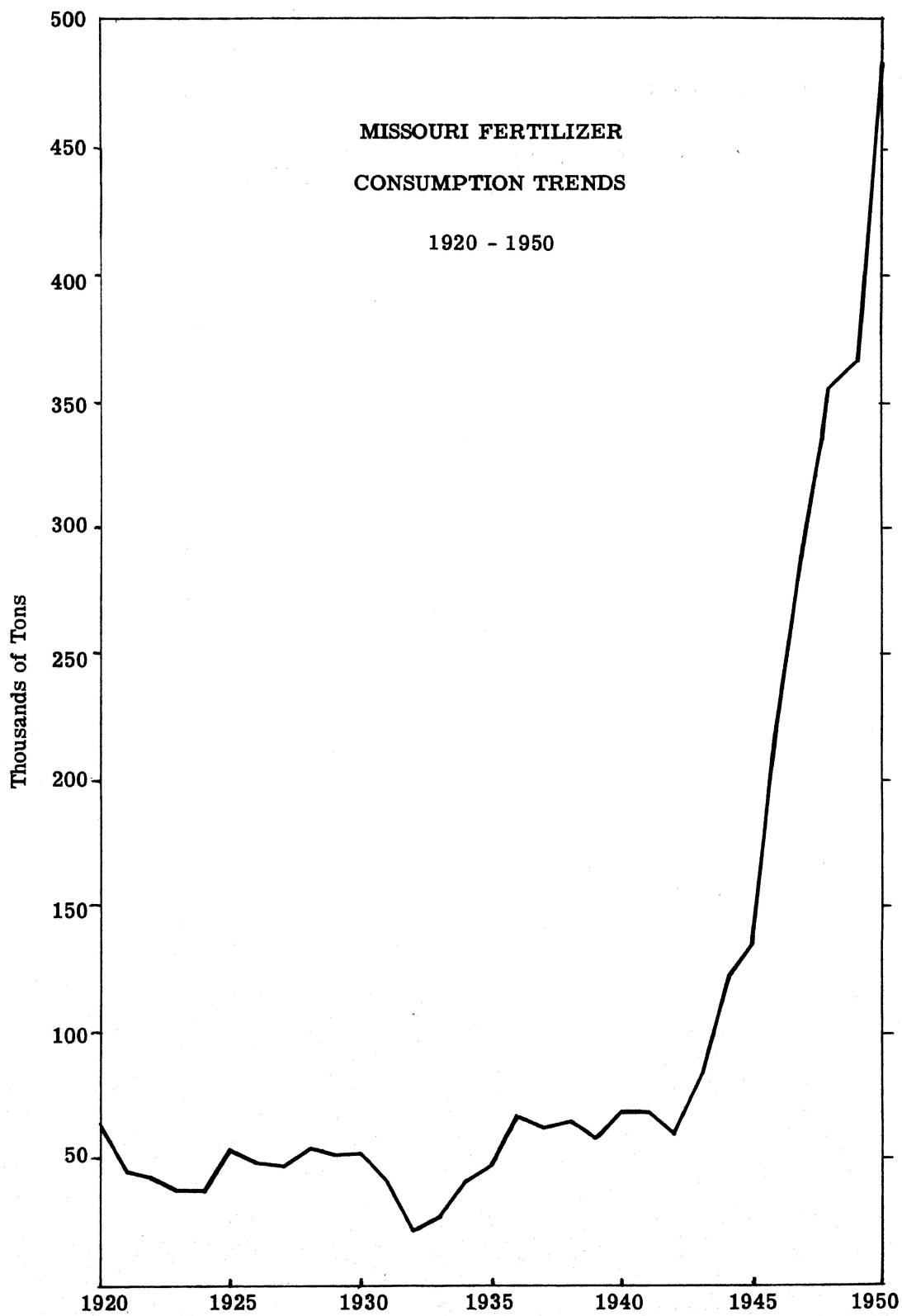
1940  
68,627 tons



1950  
482,123 tons

University of Missouri  
College of Agriculture  
Agricultural Experiment Station

J. H. Longwell, Director



# MISSOURI FERTILIZER CONSUMPTION

1941 - 1950

J. H. Longwell, Director

R. C. Prewitt, Supervisor Fertilizer Inspection

W. L. Baker, Assistant Fertilizer Inspection

Increased use of commercial fertilizers in Missouri during the past ten years has been remarkable. Yet, according to estimates of soil specialists, the unprecedented high of 482,123 tons of fertilizers used in 1950 was only a fraction of the amount that could have been profitably used under the favorable price relationship that existed. Few investments yield the farmer a higher rate of return than the wise use of fertilizers.

Since 1943 there has been a yearly increase in the tonnage of fertilizers shipped for use in Missouri. However, these figures do not tell the whole story. Together with the increased tonnage there has been an almost constant rise in the percentage of plant nutrients in these fertilizers. From 1941 to 1950 the average amount of primary plant nutrients contained in mixed fertilizers has risen from 19.3 to 27.4 per cent. Viewed in this light, the tonnage of plant nutrients used in mixed fertilizers in the past ten years has increased approximately tenfold as compared to a sevenfold increase in total mixed fertilizer tonnage.

The data presented on the following pages were compiled from reports submitted by fertilizer manufacturers doing business in Missouri. The reader should bear in mind that it is impractical to trace the fertilizer shipments beyond the retail dealers. The location of actual usage is not known. For this reason, county data are dependent upon the location of dealers with respect to county lines and trade areas.

Any questions, or requests for additional copies of this publication, should be addressed to the Missouri Agricultural Experiment Station, Fertilizer Inspection, 22 Mumford Hall, Columbia, Missouri.

TABLE 1--FERTILIZER AND PLANT FOOD TONNAGES SHIPPED FOR USE IN MISSOURI, 1941-1950

Year	Total Tons Fertilizer	Mixed Fertilizers				Fertilizer Materials*				Rock Phosphate
		Total Tons	Tons Plant Food**	Average Composition	Per Cent	Total Tons	Tons N	Tons P <sub>2</sub> O <sub>5</sub>	Tons K <sub>2</sub> O	
1941	68,626	35,647	6,807	2.33-12.14-4.83	19.3	32,057	187	5,965	463	922
1942	59,854	28,420	5,985	2.17-11.99-6.90	21.1	30,892	184	5,828	407	542
1943	83,375	44,357	9,603	1.89-11.94-7.83	21.7	38,102	65	7,014	420	916
1944	120,937	67,005	14,073	2.30-11.88-6.82	21.0	52,585	270	9,889	230	1,347
1945	135,140	83,411	17,707	2.37-11.90-6.96	21.2	49,963	332	9,293	474	1,766
1946	221,753	149,829	31,438	2.60-11.95-6.43	21.0	67,953	769	13,140	330	3,971
1947	293,705	227,688	47,358	2.94-12.01-5.84	20.8	54,176	3,588	8,847	173	11,841
1948	355,283	263,936	56,484	3.03-12.11-6.25	21.4	62,041	3,369	13,175	782	29,306
1949	364,677	248,000	57,246	3.26-12.77-7.08	23.1	59,209	5,341	10,802	1,337	57,468
1950	482,123	290,497	75,291	3.80-13.93-8.19	25.9†	75,175	10,826	12,175	2,255	116,451

\* Does not include Rock Phosphate.

\*\* Includes only N, Available P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O.

† Last six months = 27.4 per cent.

TABLE 2--MISSOURI FERTILIZER TONNAGE BY GRADES, 1941-1950

GRADE	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
0-9-27		94			535	504	31	370	221	595
0-10-20	431	1,053	2,054	1,184	944	605	345	70	312	355
0-12-12	46	607	509	554	926	815	896	2,893	2,048	1,621
0-14-6	910	272								
0-14-7	189	5,673	8,247	6,575	9,361	12,854	11,244	9,966	5,976	2,313
0-20-10	125	94	52	35	167	288	536	1,289	1,612	2,289
0-20-20		89	24	12	9	120		214	5,082	9,603
2-12-2	14,263	6,824								
2-12-4	2,802	815								
2-12-6	5,264	2,497	23,008	39,563	46,158	72,738	98,990	90,918	64,848	54,730
2-14-4	657	337								
3-9-18	1,328	2,247	3,708	3,657	4,763	8,351	6,376	8,638	13,623	18,130
3-9-27										1,104
3-12-4						4,391	2,263	8,393	18	
3-12-6						260		5,294	542	
3-12-8						8	3,415	3,257	647	443
3-12-12	114	139	467	799	1,461	1,905	7,267	17,917	21,256	33,221
3-18-9			25					1,003	150	939
4-8-6	766	853								
4-8-7	515	563								
4-10-6	325	416	1,942	2,033	18					
4-12-4	2,705	2,466	3,302	11,343	15,401	41,349	85,475	91,874	96,451	87,669
4-12-8				53	1,012	1,833	1,858	3,367	2,570	2,738
4-16-0						600	2,883	2,088	2,605	1,358
4-16-4	1,792	1,237	418							25
4-24-12								1,428	9,025	21,604
5-10-5					37	146	306	3,162	1,573	3,830
5-10-10				650	583	724	628	661	730	571
6-10-4			6	29	30	61	37	56	98	2,239
8-8-8				62	1,162	1,163	2,423	3,057	5,293	10,613
8-24-8									1,454	21,108
10-6-4	168	197	40	372	756	750	1,006	1,517	853	677
10-10-10										1,381
10-20-0	20								1,077	2,431
16-20-0							742	712	40	458
Misc. Grades	3,235	1,947	555	84	88	364	967	5,792	9,896	8,452
Ammonium Nitrate			10	456	641	1,975	10,259	9,535	14,601	25,739
Anhydrous Ammonia										2,376
Ammonium Sulphate	233	43	22	6	1	31	167	717	206	409
Cyanamid	227	517		120	184	47	420	181	542	91
Sodium Nitrate	185	54	27	87	74	103	140	155	188	236
Normal Superphos.	27,331	26,707	35,152	48,275	44,836	60,689	37,197	34,113	25,287	23,757
Triple Superphos.	1,276	1,210	389	1,020	1,395	2,517	3,155	13,646	12,517	14,595
Calcium Metaphos.										836
Rock Phosphate	922	542	916	1,347	1,766	3,971	11,841	29,306	57,468	116,451
Potash Materials	1,334	1,066	1,212	891	1,216	786	489	1,796	3,052	4,039
Dried Manures	253	256	421	489	574	616	681	536	670	787
Misc. Materials	1,218	1,039	869	1,241	1,042	1,189	1,668	1,362	2,146	2,313
Total	68,626	59,854	83,375	120,937	135,140	221,753	293,705	355,283	364,677	482,123

TABLE 3--MISSOURI FERTILIZER TONNAGE BY COUNTIES, 1941-1950

County	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Adair	299	407	434	872	853	2100	3093	2596	3436	4744
Andrew	58	---	15	176	190	457	468	776	818	1639
Atchison	49	17	7	---	501	944	2426	1881	1581	1528
Audrain	684	453	790	1316	1996	2919	5130	7067	6929	11246
Barry	1221	1331	1534	1835	1737	4502	4609	4317	4805	5613
Barton	2118	1007	2854	3240	3860	4710	5310	6544	7840	10949
Bates	1216	536	1395	2431	2650	3579	5379	6200	6400	7534
Benton	635	371	697	1125	1323	1880	2225	2290	2464	3333
Bollinger	1194	1084	1330	1426	1343	2218	2628	3138	3224	3508
Boone	519	256	671	916	1529	2637	3998	4993	4321	7752
Buchanan	318	261	446	1434	1504	3657	5339	10172	6555	6061
Butler	288	195	347	362	729	879	1082	1112	1489	1623
Caldwell	121	120	409	677	503	1688	2380	2520	2421	4306
Callaway	422	303	596	890	990	2086	2275	2816	3744	6073
Camden	97	69	83	69	88	93	139	110	195	253
Cape Girardeau	1044	1181	1538	2112	2148	2878	4233	4890	5240	6471
Carroll	246	210	413	391	1166	1293	1901	2758	2845	3239
Carter	100	77	89	95	38	229	197	267	322	259
Cass	756	421	770	1468	1594	2563	3977	4964	5802	7542
Cedar	578	339	707	992	985	2072	1770	2208	2354	4027
Chariton	372	180	451	506	915	1746	2574	2668	3246	3530
Christian	973	929	943	1485	1580	2673	2234	3028	2365	3646
Clark	252	286	637	925	1411	2335	3358	3055	3261	5041
Clay	134	142	288	262	1153	2044	1816	3310	2775	4868
Clinton	39	110	125	593	928	1881	2236	2847	3193	4785
Cole	589	521	1011	1611	1230	2196	2357	3414	3663	4381
Cooper	360	215	340	597	555	1206	1982	2568	2722	3392
Crawford	389	366	384	519	407	678	805	1153	1364	1418
Dade	1077	602	1027	1771	1770	2997	3281	3672	3906	5175
Dallas	148	115	86	222	213	258	1136	1298	1201	1977
Daviess	75	99	223	172	737	1167	2414	2603	3237	3065
De Kalb	31	69	140	383	475	1365	2401	2450	3057	3583
Dent	388	412	350	572	597	932	1014	1287	1673	1874
Douglas	153	227	235	314	195	1173	1652	956	1455	1827
Dunklin	3284	3999	5105	3987	4276	3850	9992	12112	9848	11231
Franklin	1676	1264	2080	2516	2241	3618	3087	4618	5152	7386
Gasconade	714	550	1097	1219	1131	1748	2301	2958	3305	3752
Gentry	41	67	145	250	420	1025	2262	2572	2560	3685
Greene	3281	2950	3522	5099	5992	7651	8575	10261	9525	10990
Grundy	139	148	290	436	581	899	1660	1486	1980	2593
Harrison	102	200	512	664	1056	2272	3305	2704	2856	4204
Henry	674	473	839	1194	1331	2286	2999	3023	4105	5462
Hickory	256	112	227	476	577	900	1239	1376	995	1599
Holt	----	----	----	60	148	487	777	403	776	659
Howard	142	135	88	306	466	918	1023	1609	1898	2540
Howell	652	763	802	868	1407	1187	3241	3126	3462	3799
Iron	182	172	267	247	244	375	379	487	879	1025
Jackson	2281	2454	2437	2734	3831	6381	10535	9923	6662	8762
Jasper	3672	2066	4060	5653	5956	8953	10573	12037	11767	12666
Jefferson	488	238	326	621	522	882	1098	1656	1793	1884
Johnson	480	272	435	832	1231	1959	2804	3329	2885	3730
Knox	123	175	311	751	916	1379	1497	2699	3649	5534
Laclede	353	479	506	1004	1021	2359	2326	3513	2441	3337
Lafayette	280	318	420	863	1366	2847	3808	6498	4846	6841
Lawrence	2012	1805	1778	2947	2998	3744	5365	6052	5948	6772
Lewis	762	582	802	1273	1380	3076	3196	3830	4225	7237
Lincoln	1394	908	1817	2294	1859	3261	3367	5468	5239	6017

TABLE 3 (Cont.)

County	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Linn	255	229	410	1112	1578	1930	3548	3448	3516	4502
Livingston	139	173	182	425	410	1002	1587	1781	2553	2704
McDonald	101	160	295	390	300	1452	1348	1756	2084	3511
Macon	254	264	370	771	985	1741	2355	3089	3498	5732
Madison	601	424	602	661	573	875	1116	1740	1493	1454
Maries	220	209	160	277	194	323	411	918	1018	1237
Marion	474	391	608	801	1214	2189	2774	2867	3514	3847
Mercer	6	26	88	338	1071	2470	2463	1316	1835	1938
Miller	402	159	459	519	287	889	1029	1429	1371	1589
Mississippi	581	498	1196	1054	1163	1133	1435	1702	2346	3557
Moniteau	394	280	510	873	1016	1334	2294	2754	2213	3772
Monroe	810	494	823	1025	1496	2265	3764	4798	5309	7921
Montgomery	1030	569	1370	1697	1697	3143	3525	5145	5301	7076
Morgan	566	261	535	967	823	1876	1863	2137	1862	2674
New Madrid	450	685	756	1081	779	1098	2772	5248	3800	6039
Newton	1237	1128	1753	2392	2319	3071	4669	5278	4699	4849
Nodaway	53	42	245	728	812	1105	1400	3327	3431	6141
Oregon	197	229	182	266	372	853	1182	1256	1451	994
Osage	426	389	708	927	924	1328	1852	2015	2268	3222
Ozark	----	----	----	----	----	150	418	345	385	358
Pemiscot	63	3	73	120	503	241	1242	2128	1150	2422
Perry	607	571	857	1189	1196	1759	2661	2665	2678	3140
Pettis	598	579	658	1129	1222	1991	2655	3490	3879	4647
Phelps	593	480	602	830	751	1618	1366	2210	2465	2728
Pike	889	556	1214	1382	1542	2660	3407	4828	5170	7625
Platte	187	232	302	940	1187	1490	1901	2537	1925	2848
Polk	1278	1111	1126	2291	2600	3826	4013	4715	4679	5607
Pulaski	152	283	230	286	173	508	562	974	1256	1311
Putnam	10	85	163	240	205	975	1461	1321	1697	2473
Ralls	285	95	285	437	440	393	658	1016	1293	1573
Randolph	193	153	287	327	770	1143	1907	2808	3647	5748
Ray	311	385	838	1104	1010	3183	3130	2570	2271	3594
Reynolds	88	93	106	95	102	43	346	417	512	723
Ripley	216	313	285	375	385	634	780	1190	1716	1867
St. Charles	854	773	1127	1406	1249	1937	2236	3220	3735	4958
St. Clair	788	315	626	1181	1301	1466	1883	2470	2667	3358
St. Francois	1332	1104	1413	1691	1384	821	2115	2865	2845	2876
Ste. Genevieve	274	259	454	529	551	1923	1509	1696	1685	1825
St. Louis	2947	2884	3695	3706	3266	3799	4885	6855	7003	8426
Saline	151	62	250	574	764	1988	2117	3460	3418	4677
Schuyler	98	162	237	509	641	1581	2063	1706	2302	3134
Scotland	239	246	443	832	1053	1572	2025	2008	2634	2840
Scott	620	785	950	1250	1668	1804	3676	3315	4772	6256
Shannon	101	97	39	91	106	657	646	425	597	470
Shelby	398	281	520	772	1065	2179	3389	4467	4785	6034
Stoddard	202	349	651	1153	989	1503	3217	3854	5112	7177
Stone	330	387	504	556	439	1460	1218	1191	1533	2531
Sullivan	49	96	157	430	469	971	1358	1504	2531	2762
Taney	----	20	81	72	86	650	671	618	751	772
Texas	1282	1489	1119	2134	1576	3012	2895	3507	3704	3899
Vernon	1664	719	1534	2900	2629	4108	5032	6464	6071	7901
Warren	587	474	946	1116	999	1519	2130	1959	1970	2664
Washington	336	260	349	465	482	637	647	977	1085	1553
Wayne	182	171	264	400	344	462	626	657	1189	1494
Webster	1094	1215	1403	2128	2916	3491	3218	3725	3207	4217
Worth	----	----	----	30	271	453	600	1122	1477	3425
Wright	844	1027	1172	2312	1703	3743	3092	4076	4073	3536

TABLE 4--COUNTY TONNAGE BY GRADES OF FERTILIZERS SHIPPED FOR USE IN MISSOURI, 1950

Counties	Total	0-9-27	0-12-12	0-14-7	0-20-10	0-20-20	2-12-6	3-9-18	3-9-27	3-12-12	3-18-9	4-12-4	4-12-8	4-16-0	4-16-16	4-24-12	5-10-5	5-10-10	6-10-4	8-8-8	8-24-8	8-32-0	10-6-4	10-10-10	10-20-0	Misc. Grades	Amn. Nitrate	SuperPhos		Rock Phos.*	Potash Mat.	Misc. Mat.	
																												Normal	Triple				
Adair	4744	6	---	7	2	22	357	---	---	151	8	770	5	12	---	253	54	---	2	22	276	---	---	20	1	7	70	199	158	2336	5	1	
Andrew	1639	---	2	---	8	1	---	---	---	13	---	106	---	49	---	5	---	---	---	---	27	3	---	---	37	10	34	103	9	1231	1	---	
Atchison	1528	---	---	---	---	---	---	---	---	---	---	23	---	38	---	6	---	---	---	9	43	---	45	---	95	126	391	5	226	461	---	60	
Audrain	11246	4	19	25	111	208	242	17	---	907	12	1744	98	18	43	517	11	---	---	252	1048	---	5	19	4	110	490	122	346	4808	53	13	
Barry	5613	---	24	17	---	289	1428	23	---	1121	---	1103	10	---	---	126	59	---	---	19	67	---	---	---	---	118	136	577	131	307	53	5	
Barton	10949	---	114	56	12	222	3659	15	---	2075	---	1639	58	17	6	427	197	8	1	80	114	---	---	---	---	108	297	274	110	1367	78	15	
Bates	7534	---	26	38	42	100	716	---	20	477	---	2175	19	267	---	283	13	---	1	329	458	43	---	---	36	150	233	420	337	1343	6	2	
Benton	3333	---	1	3	29	44	434	2	---	104	---	771	25	---	---	315	5	---	---	48	403	---	---	12	---	60	63	67	55	863	17	12	
Bollinger	3508	20	18	6	24	36	1252	7	---	204	---	1004	13	---	5	181	30	---	---	95	80	1	1	---	---	84	12	191	27	209	8	---	
Boone	7752	1	28	26	22	129	88	---	---	118	58	882	19	3	4	498	244	---	11	168	641	---	---	70	47	330	734	65	434	3026	95	11	
Buchanan	6061	---	---	23	29	43	77	---	---	53	---	1371	---	207	---	37	98	14	1	215	408	43	5	3	341	10	829	566	604	914	5	165	
Butler	1623	8	1	---	---	62	16	337	15	109	---	454	3	---	5	28	32	---	51	48	44	---	3	9	1	32	90	59	32	180	3	1	
Caldwell	4306	---	3	30	31	36	77	---	---	55	2	1122	---	13	---	1	6	---	---	20	298	---	---	27	16	24	184	205	182	1933	11	30	
Callaway	6073	1	13	22	23	69	140	13	---	240	8	696	29	---	1	503	62	---	1	82	262	---	---	39	---	71	180	128	160	3310	19	1	
Camden	253	---	---	---	---	4	57	---	---	6	---	83	---	---	---	12	1	---	---	3	17	---	---	---	---	---	1	27	5	35	---	2	
Cape Girardeau	6471	23	15	66	44	130	1187	129	---	628	---	830	83	---	26	133	86	---	14	104	34	---	2	---	---	160	276	242	68	2116	57	18	
Carroll	3239	---	---	---	1	3	---	---	---	10	---	318	3	58	---	3	11	---	---	38	255	15	10	---	68	4	365	48	157	1448	62	362	
Carter	259	---	6	2	---	14	23	---	---	25	---	57	---	---	---	18	4	---	---	14	32	---	---	---	---	21	---	13	30	---	---		
Cass	7542	---	24	3	60	24	180	1	---	167	---	1760	12	155	---	127	2	---	---	325	824	27	---	---	287	37	360	245	555	2353	13	1	
Cedar	4027	---	2	---	---	174	826	---	---	268	---	1029	---	6	5	338	24	---	---	45	148	---	---	---	19	160	82	177	57	648	6	13	
Chariton	3530	---	13	---	9	35	171	4	---	31	---	893	7	4	---	47	7	---	---	24	122	4	---	21	9	41	359	194	165	1350	19	1	
Christian	3646	---	34	50	---	253	940	---	---	138	---	1095	9	---	4	113	8	---	---	185	42	---	5	---	---	94	73	335	112	143	9	4	
Clark	5041	3	70	54	47	126	355	47	---	1049	---	499	32	2	29	183	---	---	---	210	57	2	1	7	2	106	103	105	22	1785	114	31	
Clay	4868	---	---	---	20	34	11	---	---	73	---	253	---	6	---	13	7	31	22	283	290	6	5	20	61	5	47	31	80	3549	16	5	
Clinton	4785	---	2	---	182	70	29	---	---	12	---	674	1	29	---	12	---	25	1	86	717	---	---	---	31	41	122	96	262	2375	18	---	
Cole	4381	---	8	43	29	41	779	5	20	62	---	673	11	6	---	327	4	---	13	44	199	---	5	1	---	62	142	379	135	1351	39	3	
Cooper	3392	---	4	42	37	28	162	---	---	54	---	425	1	---	---	276	8	---	1	76	308	10	19	13	10	163	239	255	139	1114	5	3	
Crawford	1418	2	1	3	8	41	231	2	---	86	---	317	11	---	---	79	6	---	2	36	15	---	2	17	---	22	24	71	9	431	---	2	
Dade	5175	---	23	13	---	163	1680	3	---	918	---	818	45	24	23	333	88	---	---	30	134	2	---	---	13	62	59	188	76	451	21	8	
Dallas	1977	---	3	3	---	171	405	---	---	11	---	505	---	---	---	100	5	---	---	30	---	---	---	---	---	19	42	364	156	145	18	---	
Daviess	3065	---	---	---	18	26	143	5	---	71	20	1363	---	3	---	122	1	---	---	37	267	---	---	---	4	11	49	102	130	202	430	31	30
DeKalb	3583	---	1	4	33	12	66	---	---	37	1	1348	---	32	---	71	---	---	---	45	131	14	---	---	---	68	177	28	1491	1	5		
Dent	1874	---	2	9	15	37	365	---	---	170	2	425	1	---	5	170	1	---	1	12	129	---	---	7	---	11	50	143	97	164	28	30	
Douglas	1827	---	21	37	---	118	387	---	---	99	---	631	---	---	---	69	6	---	---	10	8	---	---	---	---	40	236	21	130	9	5		
Dunklin	11231	173	2	---	---	75	3	5238	403	373	---	657	80	---	4	72	13	5	93	253	128	1	5	19	---	162	2005	128	179	120	620	420	
Franklin	7386	6	70	83	32	238	1723	43	1	289	---	1154	48	2	---	427	13	---	9	97	338	1	4	47	12	169	361	495	79	1626	9	10	
Gasconade	3752	---	21	38	6	36	1107	---	---	95	---	651	44	---	6	155	6	---	1	107	57	---	---	91	2	54	55	220	153	831	12	4	
Gentry	3685	---	---	---	5	38	41	---	---	24	15	881	---	3	18	99	1	---	---	12	228	2	5	13	39	6	146	144	163	1709	3	90	
Greene	10990	---	126	87	57	979	2770	6	---	1474	---	2511	10	3	2	456	295	3	109	136	134	---	---	5	---	222	328	471	150	428	153	75	



TABLE 4--COUNTY TONNAGE BY GRADES OF FERTILIZERS SHIPPED FOR USE IN MISSOURI, 1950 CONT'D.

Counties	Total	0-9-27	0-12-12	0-14-7	0-20-10	0-20-20	2-12-6	3-9-18	3-9-27	3-12-12	3-18-9	4-12-4	4-12-8	4-16-0	4-16-16	4-24-12	5-10-5	5-10-10	6-10-4	8-8-8	8-24-8	8-32-0	10-6-4	10-10-10	10-20-0	Misc. Grades	Amm. Nitrate	SuperPhos		Rock Phos.*	Potash Mat.	Misc. Mat.	
																												Normal	Triple				
Grundy	2593	---	---	7	14	2	125	---	---	61	---	560	---	---	65	10	---	---	29	172	---	---	5	30	104	110	100	216	970	13	---		
Harrison	4204	---	31	15	22	48	150	---	---	48	49	1091	6	25	---	250	9	---	164	249	29	1	10	109	139	188	474	364	563	45	125		
Henry	5462	---	9	---	30	36	294	---	---	46	---	2047	4	35	---	177	2	---	5	38	494	1	---	14	154	231	305	576	917	34	13		
Hickory	1599	---	10	4	2	13	479	---	---	33	---	533	---	---	---	53	14	---	---	18	4	---	---	---	3	18	133	7	270	5	---		
Holt	659	---	---	---	---	---	---	---	---	4	---	129	---	5	---	---	1	---	---	1	5	5	---	30	4	314	7	44	40	---	70		
Howard	2540	---	---	12	---	29	87	2	---	7	---	236	---	---	---	7	6	4	2	52	174	---	---	5	14	36	327	27	120	1253	15	125	
Howell	3799	---	4	---	---	155	860	2	---	159	---	754	1	4	---	216	35	---	3	68	106	---	---	---	20	214	194	130	767	65	42		
Iron	1025	---	1	109	87	16	216	3	---	64	---	122	4	6	---	22	---	---	1	10	---	---	---	---	5	---	162	34	163	---	---		
Jackson	8762	---	4	---	37	---	53	---	---	140	---	710	8	29	7	18	205	---	572	640	150	---	96	---	130	386	517	301	363	3498	111	787	
Jasper	12666	---	119	139	32	391	3466	9	---	3825	2	2310	51	2	10	331	65	5	53	137	38	---	2	---	---	237	546	480	90	291	27	8	
Jefferson	1884	5	27	32	11	39	437	3	---	225	---	198	78	2	17	55	4	---	3	101	43	---	6	1	5	72	61	235	43	148	22	11	
Johnson	3730	---	2	21	17	33	391	---	---	82	---	758	1	5	---	286	5	---	1	29	357	---	9	13	12	152	165	82	126	1166	7	10	
Knox	5534	4	15	26	57	76	331	15	---	99	163	1053	62	10	1	912	8	---	---	189	255	---	---	---	3	51	104	105	41	1942	11	1	
Laclede	3337	---	7	---	---	127	804	2	---	72	---	671	3	---	---	160	14	---	3	6	82	---	---	---	---	20	104	263	214	752	28	5	
Lafayette	6841	---	---	21	12	51	116	---	---	23	---	873	7	10	---	75	4	---	1	51	821	22	---	11	84	185	585	165	758	2941	24	1	
Lawrence	6772	2	34	71	18	412	1719	5	---	927	---	1210	8	2	20	408	103	---	1	100	92	2	7	---	5	95	378	395	113	588	56	1	
Lewis	7237	---	32	28	48	107	1003	4	---	441	51	1272	12	---	5	752	24	---	---	86	303	---	---	24	10	88	317	146	197	2260	17	10	
Lincoln	6017	6	30	34	29	106	359	20	---	714	15	1302	153	---	6	558	4	---	---	253	118	---	8	5	2	243	529	287	41	1171	17	7	
Linn	4502	---	14	16	8	72	278	4	---	70	21	1407	6	2	---	149	19	---	2	3	294	2	1	19	42	106	87	530	247	1097	5	1	
Livingston	2704	---	---	20	3	9	61	---	---	24	---	589	---	6	---	31	1	---	---	13	303	5	---	5	56	71	86	102	153	1163	2	1	
McDonald	3511	---	12	25	---	9	254	7	---	195	---	858	---	---	---	3	---	---	3	---	---	---	---	---	---	69	1848	20	150	58	---		
Macon	5732	2	2	37	12	12	323	1	---	126	5	1185	3	---	2	113	90	---	---	201	245	---	---	14	9	59	195	396	15	2624	21	40	
Madison	1454	---	2	---	3	13	333	5	---	310	---	395	4	---	10	72	3	---	6	61	45	1	---	---	---	34	34	99	11	13	---	---	
Maries	1237	2	12	10	7	41	329	---	---	67	---	189	17	---	---	103	3	---	---	34	29	---	---	14	1	104	3	177	13	80	2	---	
Marion	3847	6	29	48	7	19	720	40	---	680	25	550	41	2	---	205	6	---	6	104	53	11	---	---	15	138	240	126	134	617	23	2	
Mercer	1938	---	---	---	6	---	29	---	---	10	45	583	---	---	---	108	3	---	---	93	173	2	---	---	6	---	130	411	215	120	4	---	
Miller	1589	---	3	15	6	20	361	---	---	19	---	338	---	---	---	118	5	---	1	24	136	---	---	---	---	51	29	218	112	114	4	15	
Mississippi	3557	85	12	---	---	21	5	1097	49	340	---	94	98	---	---	3	49	1	3	359	5	---	---	20	---	10	1113	105	33	---	52	3	
Moniteau	3772	---	5	28	23	45	287	2	---	23	1	467	5	1	1	220	24	---	---	11	501	---	---	24	16	73	306	140	328	1119	70	52	
Monroe	7921	5	8	45	96	148	378	30	---	641	40	1320	50	17	10	927	33	---	---	138	583	21	2	---	31	125	513	184	133	2403	36	4	
Montgomery	7076	15	20	12	27	128	393	33	---	845	16	1215	197	3	6	721	91	---	---	171	387	---	4	32	20	143	364	143	46	1963	21	60	
Morgan	2674	---	---	11	7	31	342	---	---	31	---	420	1	---	---	249	5	---	---	33	163	---	---	---	---	20	91	97	166	982	25	---	
New Madrid	6039	182	33	---	81	138	13	2855	30	302	---	256	---	---	---	---	34	---	1	250	25	---	86	---	---	1	268	114	1	396	104	869	
Newton	4849	---	43	13	---	74	1117	1	---	848	---	991	---	1	---	194	12	5	27	62	44	---	---	---	---	14	316	210	100	687	88	2	
Nodaway	6141	---	2	2	19	6	20	---	---	3	---	762	---	150	---	23	7	---	---	15	96	22	25	---	117	101	295	456	235	3724	10	51	
Oregon	994	---	---	---	2	45	111	2	---	356	---	212	---	---	---	101	1	---	---	37	18	---	---	---	---	2	2	11	4	90	---	---	
Osage	3222	4	23	4	19	91	505	12	7	101	---	441	5	1	1	312	4	---	1	36	150	---	---	26	32	38	260	216	83	818	29	3	
Ozark	358	---	1	2	---	10	98	---	---	7	---	113	---	---	---	8	4	---	---	2	7	---	---	---	---	---	---	104	1	---	2	---	
Pemiscot	2422	3	---	---	3	2	---	565	2	234	---	32	32	---	---	36	13	---	2	199	---	---	76	5	---	---	---	647	38	11	---	5	340
Perry	3140	1	11	19	20	48	578	19	---	222	---	560	22	---	---	333	50	---	8	70	152	---	---	19	8	119	170	96	126	388	57	40	

TABLE 4--COUNTY TONNAGE BY GRADES OF FERTILIZERS SHIPPED FOR USE IN MISSOURI, 1950 CONT'D.

Counties	Total	0-9-27	0-12-12	0-14-7	0-20-10	0-20-20	2-12-6	3-9-18	3-9-27	3-12-12	3-18-9	4-12-4	4-12-8	4-16-0	4-16-16	4-24-12	5-10-5	5-10-10	6-10-4	8-8-8	8-24-8	8-32-0	10-6-4	10-10-10	10-20-0	Misc. Grades	Amm. Nitrate	SuperPhos		Rock Phos.*	Potash Mat.	Misc. Mat.	
																												Normal	Triple				
Pettis	4647	---	---	9	44	44	314	---	---	113	---	602	5	5	---	810	3	---	37	49	398	4	3	19	24	41	279	99	261	1415	37	32	
Phelps	2728	---	---	22	72	222	416	1	---	468	---	445	23	---	---	220	2	---	12	22	100	---	---	9	3	59	110	125	17	346	33	1	
Pike	7625	2	18	56	30	71	574	98	---	965	9	1003	105	---	18	534	18	---	3	315	90	---	5	86	---	108	567	126	85	2708	23	8	
Platte	2848	---	2	2	15	---	55	---	---	10	---	590	268	3	---	4	445	1	168	170	---	---	---	94	75	372	121	147	287	2	13		
Polk	5607	---	12	53	60	408	1546	3	---	286	---	1029	---	2	---	438	26	---	1	28	36	---	---	---	---	114	93	472	199	760	40	1	
Pulaski	1311	---	2	1	2	24	221	---	---	39	15	406	8	---	4	88	4	---	1	29	15	1	3	---	---	13	30	217	19	166	2	1	
Putnam	2473	---	---	1	---	10	106	---	---	118	1	436	39	8	---	13	3	---	4	31	92	4	---	10	20	9	39	309	35	1168	3	15	
Ralls	1573	---	12	14	7	23	108	23	---	238	20	482	7	6	---	194	1	---	1	25	130	---	---	48	1	15	57	49	25	80	7	---	
Randolph	5748	4	---	5	26	96	33	6	---	108	---	1109	8	---	---	181	5	---	7	48	455	---	---	10	3	3	371	68	197	2943	30	1	
Ray	3594	---	---	---	13	21	10	---	---	67	5	647	---	6	---	17	20	---	---	212	643	8	73	---	---	47	73	192	25	96	1303	26	90
Reynolds	723	---	17	4	5	65	102	---	---	60	1	233	5	---	---	35	9	---	---	90	10	---	---	10	---	5	9	48	14	---	1	---	
Ripley	1867	2	5	2	---	54	315	61	---	125	---	738	7	---	---	64	8	---	5	7	9	3	---	---	1	62	44	244	25	65	18	3	
St. Charles	4958	1	32	11	32	119	644	6	---	260	---	504	19	---	3	213	47	---	1	144	195	---	14	133	17	80	492	205	120	1506	88	72	
St. Clair	3358	---	---	19	8	9	290	---	---	112	220	1148	5	17	15	300	30	---	1	140	133	---	---	---	5	230	80	192	121	244	7	31	
St. Francois	2876	4	39	62	45	48	660	2	5	703	---	508	27	---	2	102	6	---	15	24	52	---	3	---	---	39	45	107	39	333	1	5	
Ste. Genevieve	1825	---	6	14	3	16	444	4	---	337	---	312	22	5	14	61	6	---	---	43	67	5	1	18	24	24	168	51	51	129	---	---	
St. Louis	8426	2	29	27	38	42	319	65	---	772	---	511	203	---	7	147	500	---	1054	383	32	---	103	25	---	293	225	376	21	1125	35	2092	
Saline	4677	---	---	8	---	19	13	---	---	24	---	569	3	11	---	199	12	---	6	57	659	10	---	26	108	118	637	32	261	1676	1	228	
Schuyler	3134	---	---	---	11	21	87	5	---	108	5	300	5	---	---	105	24	---	1	9	290	---	---	39	---	23	66	230	51	1714	---	40	
Scotland	2840	---	22	9	15	34	305	11	---	81	98	715	29	---	---	295	25	---	1	34	122	---	15	1	2	59	65	132	58	692	---	20	
Scott	6256	1	14	2	20	47	66	1944	80	567	---	568	144	---	4	17	92	21	32	297	---	---	---	8	---	132	822	75	53	1106	73	71	
Shannon	470	---	---	5	---	39	101	---	---	8	---	192	---	---	---	27	1	---	---	1	34	---	2	4	---	1	24	15	6	7	3	---	
Shelby	6034	1	18	12	48	94	531	4	---	257	---	1405	26	---	7	532	19	---	---	101	467	---	---	26	19	16	238	139	109	1913	51	1	
Stoddard	7177	7	20	27	1	80	377	1215	229	499	---	1500	54	---	12	261	90	---	1	113	456	---	---	126	---	78	598	91	232	946	87	77	
Stone	2531	---	---	7	---	109	431	---	---	286	---	348	2	---	---	38	14	---	---	25	---	---	---	---	1	4	56	26	17	1153	14	---	
Sullivan	2762	3	---	2	18	27	103	---	---	62	---	834	1	4	---	74	2	---	---	37	207	---	3	8	25	9	91	362	233	630	6	21	
Taney	772	---	8	96	---	15	40	---	---	41	---	311	---	---	---	---	2	---	---	1	---	---	---	---	---	1	6	225	1	22	3	---	
Texas	3899	---	18	31	10	154	1263	23	---	473	---	515	60	---	1	276	4	---	6	18	41	---	---	---	1	104	56	449	8	379	9	---	
Vernon	7901	1	32	79	8	77	2278	7	---	665	---	2879	5	8	---	182	327	4	4	96	184	---	---	---	---	149	53	302	74	473	14	---	
Warren	2664	2	4	3	10	64	482	1	---	165	8	572	47	---	---	145	4	---	---	78	50	---	2	32	---	68	103	53	18	735	12	6	
Washington	1553	---	12	42	13	7	324	---	---	71	---	232	26	1	---	40	---	---	---	65	1	---	1	---	---	30	10	372	28	275	3	---	
Wayne	1494	---	11	48	12	28	298	5	---	111	---	599	27	---	---	21	5	---	---	52	21	---	1	---	3	34	8	73	3	134	---	---	
Webster	4217	---	3	4	13	431	1232	4	---	251	---	707	---	---	---	353	9	---	1	34	23	---	20	---	25	99	246	107	612	32	11		
Worth	3425	---	5	---	---	---	16	---	---	---	---	338	---	10	---	81	3	---	---	1	138	---	---	---	72	6	95	10	200	2449	1	---	
Wright	3536	---	34	9	9	323	1064	---	---	168	---	920	---	6	---	221	19	---	---	79	6	---	---	---	6	31	73	324	89	126	13	16	
**State (Misc.)	7944	---	---	20	11	15	9	4008	243	382	---	948	2	---	---	16	111	---	---	242	132	---	1	---	---	494	350	196	9	80	641	34	---

\*Includes Colloidal Phosphate.

\*\*County not designated on manufacturer's report.