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AGSTONE USED IN ILLINOIS IN 1945

By

Walter H. Voskuil and Douglas F. Stevens

ILLINOIS STATE GEOLOGICAL SURVEY



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PRELIMINARY REPORT

AGSTONE USED IN ILLINOIS IN 1945

Reports of producers to the Illinois State Geological Survey show that the amount of agstone (ground limestone, dolomite, and marl) used for soil improvement in Illinois during 1945 amounted to more than 4,220,000 tons. This was about 10,000 tons more than that used in 1944 and establishes again a new all-time high record.

Table 1. - Agstone Used in Illinois, 1944 and 1945*

| | 1944 | | 1945 | |
|---|-----------|-------------|-----------|-------------|
| | Tons | Value | Tons | Value |
| Produced in Illinois: | | | | |
| Limestone | 2,500,261 | \$2,709,514 | 2,311,000 | \$2,622,200 |
| Dolomite | 1,561,956 | 1,546,597 | 1,915,400 | 1,952,800 |
| Marl | 10,832 | 10,596 | 7,500 | 7,400 |
| Total produced in Illinois | 4,073,049 | 4,266,707 | 4,233,900 | 4,582,400 |
| Less marketed in other states | 173,211 | 181,500 | 190,200 | 197,500 |
| Produced and used in Illinois | 3,899,838 | 4,085,207 | 4,043,700 | 4,384,900 |
| Produced in other states and used in Illinois | 314,762 | 303,679 | 181,200 | 168,400 |
| Total agstone used in Illinois | 4,214,600 | \$4,388,886 | 4,224,900 | \$4,553,300 |

* From canvass made by Illinois Geological Survey, in cooperation with Illinois Agricultural Association and Midwest Agricultural Limestone Institute.

This large production of agstone, exceeding slightly the record made in 1944, was accomplished by the industry in spite of many serious difficulties. The last three months of 1945 brought the end of actual hostilities after nearly four years of war, but the stone industry found that labor was very scarce and that it was almost impossible to obtain repairs for badly worn machinery and equipment.

The value of agstone for improving soil fertility is so firmly established that the demand for this product has caused the Illinois stone industry to produce an enormous tonnage. This is shown in Table 1 by the increased amount marketed in other states at the same time that the amount produced in other states and used in Illinois decreased about 42 percent.

The progressive increase of the use of agstone on Illinois farms during the years for which figures are available is shown in Table 2.

Table 2. - Agstone Used in Illinois Annually, 1927-1945*

| Year | Tons | Value | Av. | Year | Tons | Value | Av. |
|------|-----------|-----------|--------|------|-----------|-------------|--------|
| 1927 | 647,155 | \$579,639 | \$0.90 | 1937 | 1,310,513 | \$1,279,981 | \$0.97 |
| 1928 | 565,001 | 511,005 | .91 | 1938 | 1,251,263 | 1,247,150 | 1.00 |
| 1929 | 947,798 | 843,693 | .89 | 1939 | 1,497,458 | 1,318,173 | .88 |
| 1930 | 868,426 | 740,785 | .86 | 1940 | 2,365,663 | 1,999,850 | .84 |
| 1931 | 268,874 | 241,376 | .90 | 1941 | 3,084,855 | 2,873,536 | .93 |
| 1932 | 164,933 | 140,969 | .86 | 1942 | 3,866,568 | 3,600,313 | .93 |
| 1933 | 227,466 | 165,667 | .73 | 1943 | 3,221,477 | 3,152,608 | .98 |
| 1934 | 491,644 | 319,604 | .65 | 1944 | 4,214,600 | 4,388,886 | 1.04 |
| 1935 | 379,555 | 268,139 | .71 | 1945 | 4,224,900 | 4,553,300 | 1.08 |
| 1936 | 1,114,466 | 871,862 | .78 | | | | |

* U. S. Bureau of Mines, 1927-29; canvass by Illinois Agricultural Association, 1930; canvass by Illinois Geological Survey, 1931-45.

During 1945, agstone was produced in 44 of the 102 counties of the State. Of the total amount used during the year, 95.7 percent was produced in Illinois.

Table 3 gives the use of agstone by counties in Illinois during 1945, showing the amounts produced in Illinois and in other states. It also shows the arable land and plowable pasture in each county and the average quantity of agstone used, in pounds per acre of such land in each county. These data are from producers who reported sales of agstone in specific counties, or are estimates by county farm advisers, whichever is the larger. Production not accounted for in the county totals is given at the bottom of the table marked, "counties not specified." The total amount used in Illinois is the actual total of deliveries in Illinois reported by producers.

Table 3. - Agstone Used in Illinois, by Counties, 1944 and 1945*

| County | Total used in 1944 (Tons) | Tons used in 1945 | | | Acres of arable land and plowable pasture (1940 Census) | Av. No. of pounds per acre ^{a/} | |
|------------|---------------------------------|----------------------------|--------------------------------|------------------------------|---|--|------|
| | | Produced in Illinois | Produced in other states | Total used in Illinois | | 1944 | 1945 |
| | | | | | | | |
| Adams | 49,000 | 50,000 | | 50,000 | 328,009 | 299 | 305 |
| Alexander | 9,200 | 3,200 | | 3,200 | 58,779 | 313 | 108 |
| Bond | 40,000 | 33,800 | 1,200 | 35,000 | 168,876 | 474 | 414 |
| Boone | 15,700 | 16,900 | | 16,900 | 139,691 | 225 | 241 |
| Brown | 10,000 | 12,000 | | 12,000 | 119,648 | 168 | 200 |
| Bureau | 101,300 | 100,000 | | 100,000 | 440,808 | 460 | 454 |
| Calhoun | 16,000 | 18,000 | | 18,000 | 70,886 | 456 | 507 |
| Carroll | 33,000 | 36,000 | | 36,000 | 200,264 | 330 | 360 |
| Cass | 25,000 | 30,000 | | 30,000 | 157,002 | 319 | 382 |
| Champaign | 30,000 | 80,000 | | 80,000 | 560,583 | 107 | 285 |
| Christian | 51,700 | 75,000 | | 75,000 | 373,342 | 277 | 402 |
| Clark | 40,300 | 58,500 | | 58,500 | 217,376 | 372 | 539 |
| Clay | 30,100 | 21,600 | 3,000 | 24,600 | 201,735 | 299 | 243 |
| Clinton | 37,000 | 35,200 | 2,200 | 37,400 | 210,349 | 352 | 356 |
| Coles | 30,000 | 40,000 | | 40,000 | 254,255 | 236 | 315 |
| Cook | 46,400 | 21,400 | 3,600 | 25,000 | 199,206 | 466 | 251 |
| Crawford | 30,000 | 30,000 | | 30,000 | 193,868 | 310 | 309 |
| Cumberland | 30,000 | 25,000 | | 25,000 | 157,832 | 373 | 316 |
| DeKalb | 50,000 | 75,000 | | 75,000 | 349,131 | 286 | 429 |
| DeWitt | 4,500 | 13,200 | | 13,200 | 211,909 | 43 | 124 |
| Douglas | 4,000 | 20,000 | | 20,000 | 231,817 | 35 | 172 |
| DuPage | 26,100 | 46,600 | | 46,600 | 116,731 | 450 | 796 |
| Edgar | 30,000 | 30,000 | | 30,000 | 307,538 | 195 | 195 |
| Edwards | 16,900 | 11,300 | 2,100 | 13,400 | 108,888 | 310 | 247 |
| Effingham | 39,500 | 37,700 | 300 | 38,000 | 213,369 | 371 | 309 |
| Fayette | 20,500 | 27,000 | 200 | 27,200 | 275,732 | 149 | 109 |
| Ferd | 20,000 | 22,000 | 3,000 | 25,000 | 280,058 | 143 | 178 |
| Franklin | 17,200 | 24,800 | 4,300 | 29,100 | 146,843 | 235 | 395 |
| Fulton | 11,000 | 39,000 | 1,000 | 40,000 | 338,466 | 65 | 236 |
| Gallatin | 30,000 | 20,000 | | 20,000 | 127,951 | 470 | 312 |
| Greene | 17,700 | 17,700 | | 17,700 | 226,052 | 157 | 157 |
| Grundy | 18,000 | 20,000 | | 20,000 | 218,241 | 165 | 183 |
| Hamilton | 15,700 | 10,400 | 4,300 | 14,700 | 179,698 | 175 | 135 |
| Hancock | 47,000 | 21,400 | 400 | 21,800 | 340,637 | 276 | 128 |
| Hardin | 31,300 | 13,600 | | 13,600 | 50,649 | 1,240 | 533 |

Table 3. - Agstone Used in Illinois, by Counties, 1944 and 1945 *

| County | Total used in 1944 (Tons) | Tons used in 1945 | | | Acres of arable land and plowable pasture (1940 Census) | Av. No. of pounds per acre ^{a/} | |
|------------|---------------------------------|----------------------------|--------------------------------|------------------------------|---|--|------|
| | | Produced in Illinois | Produced in other states | Total used in Illinois | | 1944 | 1945 |
| | | | | | | | |
| Henderson | 55,400 | 41,400 | | 41,400 | 156,071 | 716 | 531 |
| Henry | 90,000 | 85,200 | 4,800 | 90,000 | 423,236 | 425 | 425 |
| Iroquois | 60,000 | 64,500 | 500 | 65,000 | 611,482 | 197 | 213 |
| Jackson | 21,100 | 16,100 | 200 | 16,300 | 188,088 | 224 | 173 |
| Jasper | 50,300 | 37,800 | | 37,800 | 240,290 | 420 | 315 |
| Jefferson | 72,000 | 28,100 | 17,900 | 46,000 | 242,802 | 593 | 379 |
| Jersey | 17,500 | 35,000 | | 35,000 | 134,766 | 260 | 518 |
| Jo Daviess | 30,000 | 24,500 | 500 | 25,000 | 225,208 | 267 | 223 |
| Johnson | 9,000 | 14,000 | | 14,000 | 112,452 | 161 | 250 |
| Kane | 71,000 | 60,100 | | 60,100 | 255,882 | 556 | 469 |
| Kankakee | 64,000 | 77,000 | | 77,000 | 348,647 | 367 | 441 |
| Kendall | 30,000 | 25,000 | | 25,000 | 168,326 | 357 | 298 |
| Knox | 57,200 | 52,800 | 12,700 | 65,500 | 317,827 | 359 | 412 |
| Lake | 9,600 | 12,000 | | 12,000 | 140,960 | 128 | 170 |
| LaSalle | 125,000 | 128,000 | | 128,000 | 585,735 | 426 | 437 |
| Lawrence | 15,600 | 9,500 | 1,000 | 10,500 | 165,983 | 188 | 126 |
| Lee | 125,000 | 130,700 | | 130,700 | 385,196 | 648 | 680 |
| Livingston | 87,700 | 196,900 | | 196,900 | 595,765 | 294 | 661 |
| Logan | 79,700 | 46,300 | | 46,300 | 346,615 | 459 | 267 |
| McDonough | 30,000 | 25,000 | | 25,000 | 270,917 | 222 | 185 |
| McHenry | 40,200 | 39,900 | | 39,900 | 262,434 | 306 | 305 |
| McLean | 75,000 | 110,000 | | 110,000 | 656,782 | 228 | 335 |
| Macon | 33,800 | 26,900 | 100 | 27,000 | 305,531 | 222 | 176 |
| Macoupin | 16,800 | 28,600 | 1,000 | 29,600 | 342,781 | 98 | 172 |
| Madison | 40,000 | 36,300 | 2,700 | 39,000 | 307,651 | 261 | 253 |
| Marion | 37,600 | 25,000 | 11,900 | 36,900 | 239,131 | 314 | 309 |
| Marshall | 10,600 | 36,700 | | 36,700 | 189,489 | 112 | 384 |
| Mason | 33,000 | 38,800 | | 38,800 | 248,797 | 266 | 312 |
| Massac | 11,000 | 12,100 | | 12,100 | 89,357 | 247 | 272 |
| Menard | 21,400 | 20,000 | | 20,000 | 154,392 | 278 | 259 |
| Mercer | 20,000 | 19,400 | 600 | 20,000 | 251,449 | 159 | 159 |
| Monroe | 39,400 | 40,000 | | 40,000 | 155,971 | 506 | 513 |
| Montgomery | 36,700 | 70,300 | 400 | 70,700 | 322,306 | 228 | 437 |
| Morgan | 20,000 | 35,200 | | 35,200 | 261,346 | 156 | 266 |
| Moultrie | 16,800 | 24,000 | | 24,000 | 178,794 | 188 | 268 |

Table 3. - Agstone Used in Illinois, by Counties, 1944 and 1945*

| County | Total used in 1944 (Tons) | Tons used in 1945 | | | Acres of arable land and plowable pasture (1940 Census) | Av. No. of pounds per acre ^{a/} | |
|-------------------------|---------------------------------|----------------------------|--------------------------------|------------------------------|---|--|-------|
| | | Produced in Illinois | Produced in other states | Total used in Illinois | | 1944 | 1945 |
| | | | | | | | |
| Ogle | 60,000 | 73,700 | | 73,700 | 383,404 | 314 | 385 |
| Peoria | 75,000 | 74,500 | 500 | 75,000 | 243,380 | 616 | 616 |
| Perry | 16,800 | 14,200 | 8,700 | 22,900 | 156,265 | 215 | 293 |
| Piatt | 20,000 | 45,000 | | 45,000 | 246,223 | 163 | 366 |
| Pike | 40,000 | 40,000 | | 40,000 | 341,756 | 235 | 235 |
| Pope | 6,500 | 5,000 | | 5,000 | 92,321 | 141 | 108 |
| Pulaski | 12,500 | 5,100 | | 5,100 | 68,920 | 363 | 148 |
| Putnam | 11,800 | 20,100 | | 20,100 | 66,867 | 354 | 600 |
| Randolph | 50,000 | 50,700 | 4,300 | 55,000 | 227,475 | 440 | 484 |
| Richland | 24,400 | 17,500 | 2,500 | 20,000 | 186,383 | 262 | 215 |
| Rock Island | 75,000 | 39,500 | 500 | 40,000 | 156,111 | 960 | 512 |
| St. Clair | 78,400 | 74,900 | 100 | 75,000 | 258,552 | 582 | 579 |
| Saline | 23,700 | 17,000 | 2,300 | 19,300 | 145,818 | 326 | 264 |
| Sangamon | 60,500 | 64,900 | 100 | 65,000 | 425,644 | 284 | 305 |
| Schuyler | 2,500 | 7,300 | 100 | 7,400 | 144,306 | 35 | 103 |
| Scott | 15,000 | 21,000 | | 21,000 | 103,624 | 290 | 404 |
| Shelby | 36,500 | 46,000 | 100 | 46,100 | 374,712 | 196 | 246 |
| Stark | 12,800 | 26,000 | 2,900 | 28,900 | 148,213 | 173 | 391 |
| Stephenson | 50,000 | 75,400 | | 75,400 | 283,408 | 353 | 533 |
| Tazewell | 30,000 | 40,000 | | 40,000 | 304,959 | 197 | 262 |
| Union | 24,700 | 20,800 | | 20,800 | 123,799 | 399 | 335 |
| Vermilion | 50,000 | 70,000 | | 70,000 | 451,146 | 222 | 310 |
| Wabash | 10,000 | 4,800 | 11,800 | 16,600 | 103,459 | 193 | 322 |
| Warren | 75,000 | 60,000 | | 60,000 | 271,171 | 553 | 442 |
| Washington | 55,000 | 4,400 | 15,800 | 20,200 | 242,105 | 455 | 166 |
| Wayne | 60,000 | 14,200 | 30,100 | 44,300 | 330,724 | 363 | 267 |
| White | 55,400 | 37,400 | 17,600 | 55,000 | 240,726 | 460 | 458 |
| Whiteside | 85,000 | 100,000 | | 100,000 | 350,544 | 484 | 569 |
| Will | 39,100 | 47,500 | | 47,500 | 396,213 | 197 | 239 |
| Williamson | 25,000 | 15,300 | | 15,300 | 128,514 | 389 | 237 |
| Winnebago | 25,000 | 30,000 | | 30,000 | 219,494 | 228 | 274 |
| Woodford | 21,200 | 29,400 | | 29,400 | 258,560 | 164 | 227 |
| County not specified | 411,300 | 42,700 | 3,900 | 46,600 | -- | - | - |
| Total | 4,214,600 | 4,043,700 | 181,200 | 4,224,900 | 25,133,474 | 336 | 336 |
| | | | | | | (Av.) | (Av.) |

* Compiled from canvass made by Illinois Geological Survey, in cooperation with Illinois Agricultural Association and Midwest Agricultural Limestone Institute.

^{a/} Calculated from columns 5 and 6.

Table 4 gives the total amount of agstone produced in other states but marketed in Illinois. Table 5 gives the total amount produced in Illinois which was marketed in other states.

The map shows the average amount of agstone used in each county in pounds per acre of arable land and plowable pasture. In previous reports the averages have been based on acres of arable land, but in this report plowable pasture land is also included in order to give a broader basis of comparative use for agstone in the various counties.

Table 4. - Agstone Produced in Other States and Used in Illinois, 1940-1945*
(In tons)

| Year | Amount sold in Illinois | Percent of total Illinois consumption |
|------|-------------------------|---------------------------------------|
| 1940 | 106,912 | 5.9 |
| 1941 | 95,226 | 3.2 |
| 1942 | 171,035 | 4.5 |
| 1943 | 166,518 | 5.3 |
| 1944 | 314,800 | 7.5 |
| 1945 | 181,200 | 4.3 |

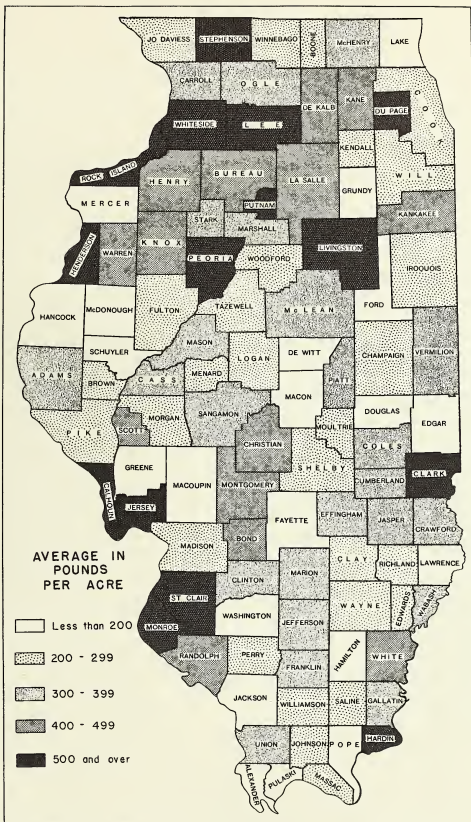
* From canvass made by Illinois Geological Survey.

Table 5. - Agstone Produced in Illinois and Marketed in Other States, 1940-1945*
(In tons)

| Year | Wisconsin | Iowa | Missouri | Kentucky | Indiana | Other states ^o | Total |
|------|-----------|--------|----------|----------|---------|---------------------------|---------|
| 1940 | 950 | --- | 353 | 5,450 | 3,800 | 15,225 | 25,778 |
| 1941 | --- | 100 | 867 | 940 | 1,800 | 1,125 | 4,832 |
| 1942 | 450 | --- | 203 | 9,700 | 28,811 | 19,853 | 59,017 |
| 1943 | --- | 11,000 | 1,192 | 1,000 | 34,579 | 28,200 | 75,971 |
| 1944 | --- | 7,683 | 8 | 8,900 | 46,302 | 110,318 | 173,211 |
| 1945 | --- | --- | 2,700 | 23,600 | 46,000 | 117,900 | 190,200 |


* From canvass made by Illinois Geological Survey.

^o Marketed outside Illinois, destination seldom specified.



AGSTONE IN ILLINOIS IN 1945

County averages in pounds per acre of arable land and plowable pasture



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