STATE OF ILLINOIS
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DEPARTMENT OF REGISTRATION AND EDUCATION
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DIVISION OF THE

## STATE GEOLOGICAL SURVEY

M. M. LEIGHTON, Chief URBANA

CIRCULAR NO. 146

## AGSTONE USED IN ILLINOIS IN 1947

BY

WALTER H. VOSKUIL AND ETHEL M. KING



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Reports of producers to the Illinois Geological Survey show that the amount of agstone (ground limestone and dolomite) used for soil improvement in Illinois during 1947 amounted to more than 5,180,000 tons (table 1). This was 7.4 percent less than that used in 1946, but there was an increase of 11 cents per ton, or approximately 11 percent in value over 1946.

Even with this decrease in tonnage, Illinois continued to rank first among all the states in the amount of liming material used for soil treatment.

Table 1 .-- Agstone used in Illinois, 1946 and 1947a

	19	46*	1947		
	Tons	Value	Tons	Value	
Produced in Illinois				-	
Limestone	3,070,813	\$3,604,121	2,863,785	\$3,799,900	
Dolomite	2,283,195	2,471,340	1,916,590	2,216,515	
Marl	5,460	7,135	-	-	
Total produced in Illinois Less marketed in other	5.359,468	6,082,596	4,780,375	6,016,415	
states	154,648	167,531	91,663	112,348	
Produced and used in Illinois	5,204,820	5,915,065	4,688,712	5,904,067	
Produced in other states and used in Illinois	390,879	347,182	494,357	488,620	
used in inmois	370,817	347,102	T 7T, 351	400,020	
Total agstone used in Illinois	5,595,699	\$6,262,247	5,183,069	\$6,392,687	

<sup>\*</sup> Revised figures.

a Summary of canvass made by Illinois Geological Survey in cooperation with Illinois Agricultural Association and Midwest Agricultural Limestone Institute.

Table	2Agstone	used	in	Illinois	Annually,
	19	27-19	47	<b>a</b>	

Year	Tons	Value	Av. price per ton
1927	647,155	\$ 579,639	\$0.90
1928	565,001	511,005	.91
1929	947,798	843,693	.89
1930	868,426	740,785	.86
1931	268,874	241,376	.90
1932	164,933	140,969	.86
1933	227,466	165,667	.73
1934	491,644	319,604	.65
1935	379,555	268,139	.71
1936	1,114,466	871,862	.78
1937	1,310,513	1,279,981	.97
1938	1,251,263	1,247,150	1.00
1939	1,497,458	1,318,173	.88
1940	2,365,663	1,999,850	.84
1941	3,084,855	2,873,536	.93
1942	3,866,568	3,600,313	.93
1943	3,236,477	3,175,108	.98
1944	4,214,600	4,388,886	1.04
1945	4,287,568	4,627,705	1.08
1946	*5,595,699	*6,262,247	1.12
1947	5,183,069	6,392,687	1.23

<sup>\*</sup> Revised figures.

The value of agstone for improving soil fertility is now a well established fact. During 1947 the demand for this mineral material continued and far exceeded the supply. Many producers reported acutelabor shortage, and this, together with increased wages and higher costs of supplies and equipment, curtailed production. In other instances unfavorable weather conditions and floods hindered both production and sales.

Of the 187 plants reporting on 1947 operations, 9 percent had discontinued operations, 2 percent changed ownership, and 19 percent were idle. Table 2 shows the use of agstone on Illinois farms during the years for which figures are available.

During 1947 agstone was produced in 47 of the 102 counties of the State. Of the total agstone used during the year, 90.5 percent was produced in Illinois.

Table 3 gives the use of agstone by districts and by counties comprising each district, showing the amount produced in Illinois and in other states.

These data are from producers who reported sales of agstone in specific counties. Production not accounted for in the county totals is given at the bottom of the table marked "counties not specified." Several counties, particularly Rock Island and Vermilion, show abnormally low tonnage. This is because some producers in these and other counties did not report their agstone production as distributed by counties, and therefore the proper allocation could not be made. The total production figures of these producers are included in "counties not specified." The total amount of agstone used in Illinois is the actual total of deliveries in Illinois reported by producers.

<sup>&</sup>lt;sup>a</sup> U. S. Buneau of Mines, 1927-29; canwass by Illinois Agriculture Association, 1930; canwass by Illinois Geological Survey, 1921, 1927.

Table 3.--Agstone Used in Illinois by Districts and by Counties, 1946 and 1947a (In tons)

-						
Districts and Counties	Total used in		bution to o	counties as oducers <sup>b</sup>	Produced in district, but county destination	Acres of arable land and plowable pasture
	1946	Total used	From Illinois	From other states	not reported by producer	(1940 census)
District 1 County						
Cook	25,000	24,844	19,407	5,437		199,206
Du Page	33,800	28,169	28,169	-		116,731
Ford	28,000	19,489	19,489	-		280,058
Grundy	34,670	32,119	32,119			218,241
Iroquois	82,177	101,085	49,625	51,460		611,482
Kane	86,814	60,007	60,007	-		255,882
Kankakee	76,000	55,437	55,382	55		348,647
Kendall	39,780	19,814	19,814	-		168,326
Lake	14,000	6,374	6,374	-		140,960
Livingston	134,466	138,019	138,019	-		595,765
McHenry	24,251	35,354	35,354	-		262,434
Will	100,000	61,086	61,086	-		396,213
Total agstone						
District l	678,958	581,797	524,845	56,952	520,788	3,593,945
District 2						
County			-			
Boone	46,164	49,764	49,764	-		139,691
Bureau	120,000	85,989	85,624	365		440,808
Carroll	49,000	8,000	8,000	-		200,264
DeKalb	70,000	55,698	55,698			349,131
Henry	66,000	12,570	10,700	1,870		423,236
Jo Daviess	35,000	16,970	16,470	500		225,208
La Salle	135,000	72,412	72,412	-		585,735
Lee	180,795	40,686	40,686	-		385,196
Mercer c	30,000	3,887	2,000	1,887		251,449
Ogle	100,000	68,619	68,619	-		383,404
Rock Island <sup>c</sup>	60,000	201	_	201		156,111
Stephenson	90,000	48,497	48,497	-		283,408
Whiteside	127,000	89,417	89,297	120		350,544
Winnebago	40,412	50,665	50,665	-		219,494
Total agstone		(22.22			252.500	4 202 (=2
District 2	1,149,371	603,375	598,432	4,943	252,570	4,393,679

Table 3.--Agstone Used in Illinois by Districts and by Counties, 1946 and 1947<sup>a</sup> (continued)
(In tons)

				,		
Districts and Counties	Total used in		ibution to o		Produced in district but county destination	Acres of arable land and plowable
Counties	1946		Total From From not reported used Illinois other states by producer		pasture (1940 census)	
District 3 County						
Adams	65,000	77,059	76,151	908		328,009
Brown c	13,600			-		119,648
Cass	45,873			689		157,002
Champaign <sup>C</sup>	100,000			-		. 560,583
Christian	110,973	64,315	63,199	1,116		373,342
Clark	74,875	91,166	91.166	_		217,376
Coles <sup>C</sup>	45,000		1,263	466		254,255
Cumberland	34,000		16,174	_		157,832
DeWitt	21,500		17,798	-		211,909
Douglasc	25,633		1,421	660		231,817
Edgar C	40,000	6,172	6,172			307,538
Fulton	50,000		42,118	9,659		338,466
Hancock	74,000		84,940	2,157		340,637
Henderson	25,000		18,000	2,151		156,071
Knox	87,289		40,429	36,427		317.827
Knox	01,209	10,030	70,727	30,421		317,027
Logan	78,974		85,921	1,349		346,615
McDonough	67,345		39,275	14,516		270,917
McLean	112,000	39,945	39,765	180		656,782
Macon	45,369		36,243	1,428		305,531
Marshall	21,307	23,490	23,490	-		189,489
Mason	55,000	51,001	50,820	181		248,797
Menard	27,000	39,029	36,828	2,201		154,392
Morgan	55,000	31,203	22,029	9,174		261,346
Moultrie	30,000	11,772	11,772	-		178,794
Peoria	100,000	45,662	45,542	120		243,380
Piatt	50,000	47,737	47,737	-		246,223
Pike	40,000	17,109	17,109	-		341,756
Putnam	21,386	12,956	12,956	-		66,867
Sangamon	76,660	105,222	93,625	11,597		425,644
Schuyler	12,000	30,496	14,414	16,082		144,306
Scott	20,152	32,925	31,106	1,819		103,624
Shelby	63,856	48,415	48,415	-		374,712
Stark	24,000	26,428	26,428	-		148,213
Tazewell	45,000	19,962	19,962	-		304,959
Vermilion c	80,000	3,332	516	2,816		451,146
Warren	77,204	40,564	40,000	564		271,171
Woodford	32,666	23,472	23,472	. 504		258,560
	32,000	23,712	23,412			250,500
Total agstone District 3	1,947,662	1,402,504	1,288,395	114,109	345,462	10,065,536

Table 3.--Agstone Used in Illinois by Districts and by Counties, 1946 and 1947<sup>a</sup> (continued)
(In tons)

Districts and	Total used in		bution to o	counties as oducers <sup>b</sup>	Produced in district, but	Acres of arable land and plowable
Counties	1946	Total used	From Illinois	From other states	county destination not reported by producer	pasture (1940 census
District 4 County						
Alexander	12,250	12,030	11,830	200		58,779
Bond	35,000	16,462	8,519	7,943		168,876
Calhoun	16,500	6,260	6,260	-		70,886
Clay	32,426	25,407	15,519	9,888		201,735
Clinton	48,833	67,952	62,415	5,537		210,349
Crawford	25,375	20,663	17,155	3,508		193,868
Edwards	21,576	33,904	23,218	10,686		108,888
Effingham	49,827	56,377	39,695	16,682		213,369
Fayette	40,024	37,428	36,682	746		275,732
Franklin	36,906	39,388	32,815	6,573		146,843
Gallatin	25,000	43,411	42,841	570		127,951
Greene	32,000	31,746	31,694	52		226,052
Hamilton	25,200	30,129	10,672	19,457		179,698
Hardin	10,000	13,000	13,000	-		50,649
Jackson	38,000	37,471	37,471	-		188,088
Jasper	40,000	37,722	37,177	545		240,290
Jefferson	50,000	53,326	8,828	44,498		242,802
Jersey	25,273	22,000	22,000	-		134,766
Johnson <sup>C</sup>	22,000	9,918	9,918	-		112,452
Lawrence c	23,000	5,107	1,543	3,564		165,983
Macoupin	45,000	30,613	24,752	5,861		342,781
Madison	64,948	43,881	41,287	2,594		307,651
Marion	50,000	36,244	22,328	13,916		239 131
Massac	19,150	17,016	17,016	-		89,357
Monroe	60,000	110,184	110,184	-		155,971
Montgomery	112,000	97,717	76,543	21,174		322,306
Perry	35,000	26,086	18,074	8,012		156,265
Pope	10,000	18,372	18,372	-		92,321
Pulaski	12,277	23,903	23,903	-		68,920
Randolph	75,000	51,606	48,078	3,528		227,475
Richland	28,675	35,125	17,136	17,989		186,383
St. Clair	88,913	55,177	54,648	529		258,552
Saline	38,200	23,300	16,024	7,276		145,818
Union	35,854	37,122	37,122	-		123,799
Wabash	23,095	26,970	1,247	25,723		103,459

Table 3.--Agstone Used in Illinois by Districts and by Counties, 1946 and 1947<sup>a</sup> (concluded)
(In tons)

				1947			
Districts and	Total used in	used Distr		counties as oducers <sup>b</sup>	Produced in district, but	Acres of arable land and plowable	
Counties 1946		Total used	From Illinois	From other states	county destination not reported by producer	pasture (1940 census)	
District 4 County (cont.)							
Washington	33,000	27,681	13,765	13,916		242,105	
Wayne	60,000	48,407	12,034	36,373		330,724	
White	62,650	61,700	35,107	26,593		240,726	
Williamson	26,732	20,077	17,868	2,209		128,514	
Total agstone District 4		1,390,882	1,074,740	316,142	83,480	7,080,314	
Total agstone distributed		3,978,558	3,486,412	492,146			
County not specified	*330,024	1,204,511	1,202,300	2,211	1,204,511		
Total	*5,595,699	5,183,069	4,688,712	494,357		25,133,474	
* 5 1 16					Tr. 1 In		

<sup>\*</sup> Revised figures.

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

b This represents only the tonnage of producers who gave county distribution. Production figures for which county distribution was not given are listed in column 6.

<sup>&</sup>lt;sup>c</sup> This county shows abnormally low tonnage because some producers did not report distribution by counties.

Table 4	-Agstone	Produced	in Other	States
and	Used in	Illinois, la	941-1947ª	

Year	Tons sold in Illinois	Percent of total Illinois consumption
1941	95,226	3.2
1942	171,035	4.5
1.943	166,518	5.3
1944	314,800	7.5
1945	181,200	4.3
1946	390,879	*7.0
1947	494,357	9.5

<sup>\*</sup> Revised figures.

The total quantity of agstone produced in other states but marketed in Illinois is shown in table 4. This amounted to 9.5 percent of the total used in Illinois.

Table 5 gives the total quantity of agstone produced in Illinois which was marketed in other states. This amounted to 1.9 percent of the total amount produced in Illinois.

The map on page 10 shows the four limestone distribution districts into which the State is divided, and the counties comprising each district (table 3).

Table 5.--Agstone Produced in Illinois and Marketed in Other States, 1941-1947<sup>a</sup>
(In tons)

Indiana	Iowa	Kentucky	Missouri	Wisconsin	Other states <sup>b</sup>	Total
1,800	100	940	867	_	1,125	4,832
28,811	-	9,700	203	450	19,853	59,017
34,579	11,000	1,000	1,192	-	28,200	75,971
46,302	7,683	8,900	8	-	110,318	173,211
46,000	-	23,600	2,700	-	117,900	190,200
46,495	5	4 504	208	5,140	102,800	154,648 91,663
	1,800 28,811 34,579 46,302 46,000	1,800 100 28,811 - 34,579 11,000 46,302 7,683 46,000 -	1,800 100 940 28,811 - 9,700 34,579 11,000 1,000 46,302 7,683 8,900 46,000 - 23,600 46,495 5 -	1,800 100 940 867 28,811 - 9,700 203 34,579 11,000 1,000 1,192 46,302 7,683 8,900 2,700 46,495 5 - 208	1,800 100 940 867 - 28,811 - 9,700 203 450 34,579 11,000 1,000 1,192 - 46,302 7,683 8,900 8 - 46,000 - 23,600 2,700 - 46,495 5 - 208 5,140	1,800 100 940 867 - 1,125 28,811 - 9,700 203 450 19,853 34,579 11,000 1,000 1,192 - 28,200 46,302 7,683 8,900 8 - 110,318 46,000 - 23,600 2,700 - 117,900 46,495 5 - 208 5,140 102,800

a From canvass made by Illinois Geological Survey.

a From canvass made by Illinois Geological Survey

b Marketed outside Illinois, destination seldom specified.



LIMESTONE DISTRIBUTION DISTRICTS

Illinois State Geological Survey Urbana, Illinois Circular 146 1948

