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2012–2013 Minerals Yearbook

MAINE [ADVANCE RELEASE]

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U.S. Geological Survey

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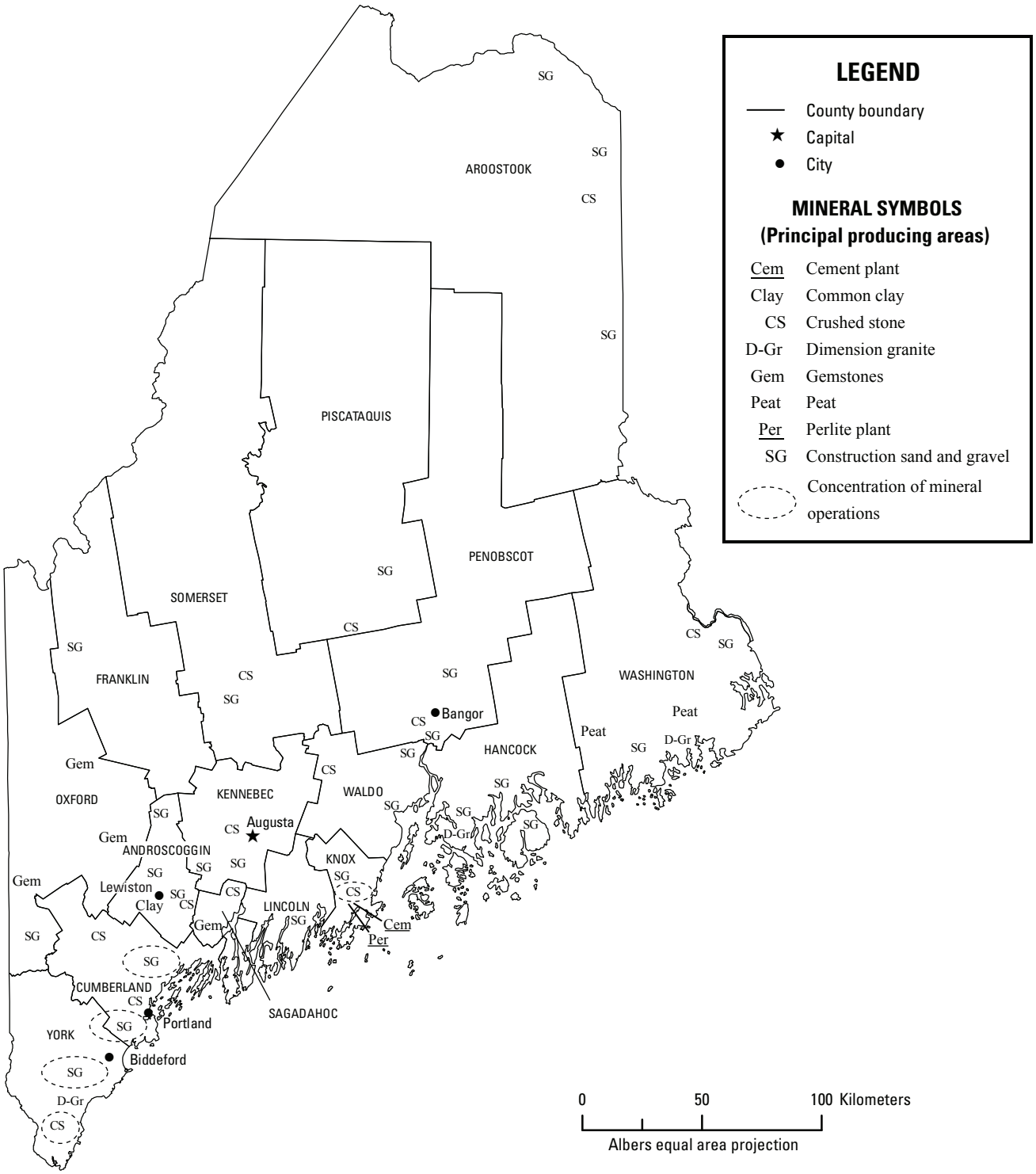
MAINE



Source: Maine Geological Survey/U.S. Geological Survey (2012–13).

The Mineral Industry of Maine

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Maine Geological Survey for collecting information on all nonfuel minerals.

In 2013, the value of the nonfuel mineral production[1] in Maine decreased to $88.2 million,[2] 0.1% of the total U.S. nonfuel mineral production value, ranking it 45th in the Nation. In 2012, the corresponding value was $98.6 million,[2] 0.2 % of the U.S. total nonfuel mineral production, ranking it 46th among the 50 States. In 2013, on a per capita basis, nonfuel mineral production in Maine had a value of $66 compared with the national average of $238. In 2012, the per capita value was $74 compared with the national average of $241.

The value of nonfuel mineral production in Maine for the years 2006 through 2013 was as follows (in millions of dollars): $162 (2006), $179 (2007), $161 (2008), $126 (2009), $112 (2010), $90.3[2] (2011), $98.6[2] (2012), and $88.2[2] (2013).

In 2013, there were 588 employees in nonfuel mineral mines in Maine and 77 in mills and preparation plants. In 2012, the corresponding numbers were 606 in nonfuel mineral mines and 78 in mills and preparation plants (U.S. Mine Safety and Health Administration, 2013, p. 10; 2014, p. 10).

In 2013, Maine ranked fifth in peat sales out of 12 producing States and in 2012, the State ranked fourth out of 13 producing States. In 2013, the State also produced construction sand and gravel, crushed stone, dimension stone, masonry and portland cement, and natural gemstones. In 2012, Maine also produced common clays in addition to the other minerals produced in 2013 (table 1).

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All USGS mineral production data published in this chapter are those available as of February 2016. Data in this report are rounded to three significant digits and percentages are calculated from unrounded data. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at http://minerals.usgs.gov/minerals.

[2]Partial total; excludes values that must be withheld to avoid disclosing company proprietary data.

Commodity Review

The following information has been extracted from the U.S. Geological Survey (USGS) and other sources (Cameron, 1989). Non-USGS data may differ from USGS data, which are based on company responses to USGS surveys and estimation for nonrespondents. The USGS withheld some data to avoid disclosing company proprietary data.

Industrial Minerals

Considerable study has been devoted to peat in Maine. Peat is commonly used as a plant-growth medium in a range of agricultural and horticultural applications. Its fibrous structure and porosity facilitate optimum water-retention and drainage attributes. Peat has been used for heat generation, although this is inefficient compared to other energy fuels. Minor quantities have been used for freshwater aquaria, water filtration, and balneotherapy (Cameron, 1989).

In both 2013 and 2012, there were 28 crushed stone operations, 23 quarries, and 23 processing plants in the State. In 2013, there were 161 construction sand and gravel operations, including 3 dredging operations. In 2012, there were 168 sand and gravel operations with no dredges.

Gemstones found in Maine include andalusite, aquamarine morganite, chrysoberyl, garnet, kyanite, lepidolite, quartz, sodalite, spodumene, staurolite, topaz, and tourmaline.

References Cited

Cameron, C.C., 1989, Peat and its occurrence as a resource in Maine: Maine Geological Survey, Studies in Maine Geology, v. 5, p. 126–146.(Accessed May 17, 2016, at http://www.maine.gov/dacf/mgs/pubs/online/general/stud5i.pdf.)

U.S. Mine Safety and Health Administration, [2013], Mine injury and worktime, quarterly, January–December 2012, Final, closeout edition, 33 p. (Accessed February 4, 2016, at http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20125.pdf.)

U.S. Mine Safety and Health Administration, [2014], Mine injury and worktime, quarterly, January–December 2013, Final, closeout edition, 34 p. (Accessed February 4, 2016, at http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20135.pdf.

TABLE 1
NONFUEL MINERAL PRODUCTION IN MAINE[1, 2]

(Thousand metric tons and thousand dollars)

Mineral	2011		2012		2013	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones, natural	NA	353	NA	358	NA	364
Sand and gravel, construction	8,120 r	54,400 r	8,500	62,700	7,450	54,200
Stone:						
Crushed	3,990 r	31,900 r	3,840	31,500	3,690	30,900
Dimension	6	3,640	7	4,150	5	2,770
Combined values of cement, clays (common), peat	XX	W	XX	W	XX	W
Total	XX	90,300 r	XX	98,600	XX	88,200

rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data; excluded from "Total." XX Not applicable.
[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
[2]Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 2
MAINE: CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE[1]

Type	2012				2013			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone[2]	7	1,620	$10,400	$6.38	7	1,620	$10,800	$6.66
Granite	6	1,530	14,800	9.62	6	1,510	14,600	9.72
Traprock	2	57	750	13.17	2	50	666	13.21
Sandstone and quartzite[3]	2	288	2,280	7.91	2	237	1,940	8.16
Miscellaneous stone	6	341	3,340	9.79	6	274	2,840	10.34
Total or average	XX	3,840	31,500	8.19	XX	3,690	30,900	8.37

XX Not applicable.
[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Includes limestone-dolomite reported with no distinction between the two kinds of stone.
[3]Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

TABLE 3
MAINE: CRUSHED STONE SOLD OR USED BY PRODUCERS BY USE[1]

Use	2012 Quantity (thousand metric tons)	2012 Value (thousands)	2012 Unit value	2013 Quantity (thousand metric tons)	2013 Value (thousands)	2013 Unit value
Construction:						
Coarse aggregate (+1½ inch):						
Riprap and jetty stone	14	$178	$12.68	19	$227	$11.80
Filter stone	18	221	12.25	5	43	8.16
Unspecified coarse aggregate	14	71	5.09	46	395	8.62
Coarse aggregate, graded:						
Concrete aggregate, coarse	100	523	5.23	28	147	5.24
Railroad ballast	1	13	13.00	--	--	--
Unspecified graded coarse aggregate	W	W	W	22	248	11.23
Fine aggregate (-⅜ inch):						
Stone sand, concrete	25	133	5.32	9	48	5.24
Unspecified fine aggregate	W	W	W	9	48	5.13
Coarse and fine aggregates:						
Graded road base or subbase	30	307	10.24	W	W	W
Crusher run or fill or waste	W	W	W	--	--	--
Roofing granules	W	W	W	--	--	--
Unspecified coarse and fine aggregates	W	W	W	--	--	--
Chemical and metallurgical:						
Cement manufacture	493	1,760	3.58	W	W	W
Other miscellaneous uses and specified uses not listed	--	--	--	--	--	--
Unspecified:[2]						
Reported	1,660	13,200	7.92	1,790	14,600	8.16
Estimated	1,280	13,100	10.27	1,170	12,600	10.80
Total or average	3,840	31,500	8.19	3,690	30,900	8.37

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.
[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Reported and estimated production without a breakdown by end use.

TABLE 4
MAINE: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2012,
BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	401	$3,670	$9.15
Concrete products (blocks, bricks, pipe, decorative, and so forth)	45	188	4.18
Asphaltic concrete aggregates and other bituminous mixtures	541	4,840	8.95
Road base and coverings[2]	1,480	12,300	8.31
Fill	621	2,700	4.35
Snow and ice control	144	1,150	7.99
Other miscellaneous uses[3]	58	545	9.40
Unspecified:[4]			
Reported	684	5,180	7.57
Estimated	4,530	32,100	7.09
Total or average	8,500	62,700	7.38

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes road and other stabilization (cement and lime).
[3]Includes filtration and railroad ballast.
[4]Reported and estimated production without a breakdown by end use.

TABLE 5
MAINE: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2013,
BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)[2]	295	$1,820	$6.18
Asphaltic concrete aggregates and other bituminous mixtures	82	548	6.68
Road base and coverings	556	3,660	6.58
Fill	246	913	3.71
Snow and ice control	104	702	6.75
Other miscellaneous uses	23	283	12.30
Unspecified:[3]			
Reported	604	4,760	7.89
Estimated	5,540	41,500	7.50
Total or average	7,450	54,200	7.28

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes concrete products (blocks, bricks, pipe, decorative, and so forth).
[3]Reported and estimated production without a breakdown by end use.