

# Natural Resources

This section presents data on the area, ownership, production, trade, reserves and disposition of natural resources. Natural resources is defined here as including forestry, fisheries, and mining and mineral products.

**Forestry.**—Presents data on the area, ownership, and timber resource of commercial timberland; forestry statistics covering the National Forests and Forest Service cooperative programs; product data for lumber, pulpwood, woodpulp, paper and paperboard, and similar data.

The principal sources of data relating to forests and forest products are: An Analysis of the Timber Situation in the United States, 1989—2040, 1990; Forest Resources of the United States, 1992, 1993; U.S. Timber Production, Trade, Consumption, and Price Statistics; Land Areas of the National Forest System, issued annually by the Forest Service of the Department of Agriculture; Agricultural Statistics issued by the Department of Agriculture; and reports of the census of manufactures (taken every 5 years) and the annual Current Industrial Reports, issued by the Bureau of the Census. Additional information is published in the monthly Survey of Current Business of the Bureau of Economic Analysis; and the annual Wood Pulp and Fiber Statistics and The Statistics of Paper, Paperboard, and Wood Pulp of the American Forest and Paper Association, Washington, DC.

The completeness and reliability of statistics on forests and forest products vary considerably. The data for forest land area and stand volumes are much more reliable for areas which have been recently surveyed than for those for which only estimates are available. In general, more data are available for lumber and other manufactured products such as particle board and softwood panels, etc., than for the primary forest products such as poles and piling and fuelwood.

**Fisheries.**—The principal source of data relating to fisheries is Fisheries of the United States, issued annually by the National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA).

In Brief

Paper and board	1994
production	90.5 mil. sh. tns.
Recovered paper	
consumption	30.0 mil. sh. tns.
Petroleum balance, 1993:	
Products supplied	6.3 billion barrels
Net imports	2.4 billion barrels
Stocks	1.6 billion barrels

The NMFS collects and disseminates data on commercial landings of fish and shellfish. Annual reports include quantity and value of commercial landings of fish and shellfish disposition of landings, number of fishermen, and number and kinds of fishing vessels and fishing gear. Reports for the fish-processing industry include annual output for the wholesaling and fish processing establishments, annual and seasonal employment. The Magnuson Fishery Conservation and Management Act of 1976 (Magnuson Act), Public Law 94-265 as amended, provides for the conservation and management of all fishery resources within the U.S. Exclusive Economic Zone (EEZ), and gives the Federal Government exclusive authority over domestic and foreign fisheries within 200 nautical miles of U.S. shores and over certain living marine resources beyond the EEZ. Within the EEZ, the total allowable level of foreign fishing, if any, is that portion of the "optimum yield" not harvested by U.S. vessels. Adjustments in the "optimum yield" level may occur periodically. For details, see *Fisheries of the United States, 1993*. The NMFS collects and disseminates data on catches by foreign fishing vessels in the EEZ.

**Mining and mineral products.**—Presents data relating to mineral industries and their products, general summary measures of production and employment, and more detailed data on production, prices, imports and exports, consumption, and distribution for specific industries and products. Data on mining and mineral products may also be found

in sections 26 and 30 of this Abstract; data on mining employment may be found in section 13.

Mining comprises the extraction of minerals occurring naturally (coal, ores, crude petroleum, natural gas) and quarrying, well operation, milling, refining and processing and other preparation customarily done at the mine or well site or as a part of extraction activity. (Mineral preparation plants are usually operated together with mines or quarries.) Exploration for minerals is included as is the development of mineral properties.

The principal governmental sources of these data are the Minerals Yearbook, published by the Bureau of Mines, Department of the Interior, and various monthly and annual publications of the Energy Information Administration, Department of Energy. See text, section 19 for list of Department of Energy publications. In addition, the Bureau of the Census conducts a census of mineral industries every 5 years. Non-government sources include the Annual Statistical Report of the American Iron and Steel Institute, Washington, DC; Metals Week and the monthly Engineering and Mining Journal, issued by the McGraw-Hill Publishing Co., New York, NY; The Iron Age, issued weekly by the Chilton Co., Philadelphia, PA; and the Joint Association Survey of the U.S. Oil and Gas Industry, conducted jointly by the American Petroleum Institute, Independent Petroleum Association of America, and Mid-Continent Oil and Gas Association.

Mineral statistics, with principal emphasis on commodity detail, have been collected by the Geological Survey or by the Bureau of Mines since 1880. Current data in Bureau of Mines publications include quantity and value of nonfuel minerals produced, sold or used by producers, or shipped;

quantity of minerals stocked; crude materials treated and prepared minerals recovered; and consumption of mineral raw materials. The U.S. Mine Safety and Health Administration also collects and publishes data on workhours, employment, accidents, and injuries in the mineral industries, except petroleum and natural gas. In October 1977, mineral fuel data collection activities of the Bureau of Mines were transferred to the Energy Information Administration.

Censuses of mineral industries have been conducted by the Bureau of the Census at various intervals since 1840. Beginning with the 1967 census, legislation provides for a census to be conducted every 5th year for years ending in "2" and "7." The censuses provide, for the various types of mineral establishments, information on operating costs, capital expenditures, labor, equipment, and energy requirements in relation to their value of shipments and other receipts. Commodity statistics on many manufactured mineral products are also collected by the Bureau at monthly, quarterly, or annual intervals and issued in its Current Industrial Reports series.

In general, figures shown in the individual commodity tables include data for outlying areas and may therefore not agree with summary tables. Except for crude petroleum and refined products, the export and import figures include foreign trade passing through the customs districts of United States and Puerto Rico, but exclude shipments between U.S. territories and the customs districts.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

## No. 1147. National Forest System—Summary: 1970 to 1993

[For fiscal years ending in year shown; see text, section 9. Includes Alaska and Puerto Rico, except as noted. See *Historical Statistics, Colonial Times to 1970*, series J 33-34, for similar grazing data, and L 15-31]

ITEM	Unit	1970	1980	1985	1988	1989	1990	1991	1992	1993
Timber cut, total value . . . . .	Mil. dol	309	737	725	1,243	1,313	1,191	1,012	938	918
Commercial and cost sales: <sup>1</sup>										
Volume . . . . .	Mil. bd.	11,527	9,178	10,941	12,649	11,951	10,500	8,475	7,290	5,917
Value . . . . .	Mil. dol	308	730	721	1,240	1,310	1,188	1,009	935	914.6
Free use:										
Volume . . . . .	Mil. bd.	179	2,070	399	223	214	151	121	80	80
Value <sup>2</sup> . . . . .	Mil. dol	0.3	5.7	2.2	1.2	1.2	1.0	1.0	0.8	0.8
Misc. forest products:										
Value . . . . .	Mil. dol	0.7	1.1	1.7	2.0	2.2	2.6	2.7	2.7	2.8
Livestock grazing: <sup>3</sup>										
Cattle and horses <sup>4</sup> . . . . .	1,000 .	1,607	1,521	1,565	1,313	1,526	1,236	1,265	1,216	(NA)
Sheep and goats . . . . .	1,000 .	2,105	1,328	1,183	1,067	972	958	1,029	1,017	(NA)
Roads and trails:										
Road construction <sup>5</sup> . . . . .	Miles . .	942	925	1,903	1,352	866	857	910	853	816
Trail construction <sup>5,6</sup> . . . . .	Miles . .	278	2,419	987	1,834	1,944	1,635	1,921	1,976	1,976
Receipts, total . . . . .	Mil. dol	300	703	636	980	1,051	971	772	614	503
Timber use . . . . .	Mil. dol	284	625	515	888	910	849	667	520	425
Grazing use . . . . .	Mil. dol	4	16	9	9	11	10	11	11	11
Special land use, etc . . . . .	Mil. dol	11	62	112	83	130	112	93	84	67
Payments to local govt. <sup>7</sup> . . . . .	Mil. dol	73	240	229	325	368	368	335	322	323
25-percent fund <sup>8</sup> . . . . .	Mil. dol	72	234	212	317	354	358	327	(NA)	(NA)
Other <sup>9</sup> . . . . .	Mil. dol	1	7	17	8	15	10	8	(NA)	(NA)
Allotments to Forest Service <sup>10</sup> . . . . .	Mil. dol	30	73	60	104	111	106	88	(NA)	(NA)
Roads and trails . . . . .	Mil. dol	29	65	55	92	96	91	73	(NA)	(NA)
Other . . . . .	Mil. dol	1	8	5	12	15	14	16	(NA)	(NA)

NA Not available. <sup>1</sup> Includes land exchanges. <sup>2</sup> Includes some free use timber not reducible to board feet. <sup>3</sup> For 1970, data for livestock permitted to graze; thereafter, for number actually grazed. Calendar-year data, prior to 1980. Excludes Puerto Rico. <sup>4</sup> Excludes animals under 6 months of age. 1970 includes swine. Beginning 1980, includes burros. <sup>5</sup> Includes reconstruction. <sup>6</sup> Beginning 1980, includes work accomplished by Human Resource Programs and volunteers. <sup>7</sup> Payments made in following year. <sup>8</sup> Includes Tongass Alaska suspense account. <sup>9</sup> Includes Arizona and New Mexico School Fund (through 1980), State of Minnesota, and receipts paid to counties under Bankhead-Jones Farm Tenant Act. <sup>10</sup> For use in following year.

Source: U.S. Forest Service. In *Agricultural Statistics*, annual; and unpublished data.

## No. 1148. Forest and Timberland Area, Sawtimber and Stock: 1970 to 1992

[As of Jan. 1]

YEAR AND REGION	Total forest land (mil. acres)	TIMBERLAND, OWNERSHIP <sup>1</sup>				SAWTIMBER, NET VOLUME <sup>3</sup>		GROWING STOCK, NET VOLUME <sup>4</sup>	
		All ownerships (mil. acres)	Federally owned or managed <sup>2</sup> (mil. acres)	State, county, and municipal (mil. acres)	Private (mil. acres)	Total (bil. bd. ft.)	Softwood (bil. bd. ft.)	Total (bil. cu. ft.)	Softwood (bil. cu. ft.)
United States, 1970 . . . . .	754	504	116	29	360	2,587	2,035	694	458
North . . . . .	(NA)	154	11	18	126	295	81	146	39
South . . . . .	(NA)	203	15	3	185	569	302	191	87
Rocky Mountains . . . . .	(NA)	65	42	2	20	398	384	101	95
Pacific Coast . . . . .	(NA)	82	47	5	29	1,325	1,268	257	238
United States, 1987 . . . . .	731	485	97	34	354	2,853	2,040	766	453
North . . . . .	165	154	11	19	124	459	126	190	48
South . . . . .	203	197	16	4	177	781	388	245	106
Rocky Mountains . . . . .	142	61	39	3	20	411	394	108	100
Pacific Coast . . . . .	220	72	31	8	32	1,202	1,132	223	199
United States, 1992 . . . . .	737	490	97	35	358	2,992	2,047	786	450
North . . . . .	168	158	11	19	127	540	137	207	51
South . . . . .	212	199	16	4	179	842	389	251	103
Rocky Mountains . . . . .	140	63	40	3	20	415	397	110	101
Pacific Coast . . . . .	217	70	30	8	32	1,196	1,124	218	195

NA Not available. <sup>1</sup> Timberland is forest land that is producing or is capable of crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation. Areas qualifying as timberland have the capability of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands. Currently inaccessible and inoperable areas are included. <sup>2</sup> Includes Indian lands. <sup>3</sup> Sawtimber is timber suitable for sawing into lumber. Live trees of commercial species containing at least one 12-foot sawlog or two noncontiguous 8-foot logs, and meeting regional specifications for freedom from defect. Softwood trees must be at least 9.0-inches diameter, and hardwood trees must be at least 11.0-inches diameter at 4 1/2 feet above ground. International 1/4-inch rule. <sup>4</sup> Live trees of commercial species meeting specified standards of quality or vigor. Cull trees are excluded. Includes only trees 5.0-inches diameter or larger at 4 1/2 feet above ground.

Source: U.S. Forest Service, *Forest Resources of the United States*, 1992.

## No. 1149. National Forest System Land—States and Other Areas: 1990 and 1992

[In thousands of acres. As of Sept. 30. See also *Historical Statistics, Colonial Times to 1970*, series L 10-11]

STATE	GROSS AREA WITHIN UNIT BOUNDARIES <sup>1</sup>		NATIONAL FOREST SYSTEM LAND <sup>2</sup>		OTHER LANDS WITHIN UNIT BOUNDARIES	
	1990	1992	1990	1992	1990	1992
United States . . . . .	231,443	231,502	191,324	191,453	40,119	40,049
Alabama . . . . .	1,280	1,288	658	659	622	629
Alaska . . . . .	24,345	24,345	22,220	22,193	2,126	2,152
Arizona . . . . .	11,880	11,887	11,239	11,247	642	641
Arkansas . . . . .	3,490	3,490	2,509	2,529	981	961
California . . . . .	24,401	24,401	20,619	20,616	3,782	3,785
Colorado . . . . .	16,039	16,037	14,462	14,467	1,577	1,570
Connecticut . . . . .	-	(Z)	-	(Z)	-	-
Delaware . . . . .	-	-	-	-	-	-
Florida . . . . .	1,246	1,254	1,128	1,135	118	119
Georgia . . . . .	1,846	1,846	859	860	987	986
Hawaii . . . . .	-	(Z)	-	(Z)	-	-
Idaho . . . . .	21,674	21,674	20,438	20,441	1,236	1,233
Illinois . . . . .	840	840	266	268	573	572
Indiana . . . . .	644	644	188	189	456	455
Iowa . . . . .	-	-	-	-	-	-
Kansas . . . . .	116	116	108	108	8	8
Kentucky . . . . .	2,102	2,102	670	673	1,431	1,428
Louisiana . . . . .	1,022	1,022	601	601	422	421
Maine . . . . .	93	93	53	53	40	40
Maryland . . . . .	-	-	-	-	-	-
Massachusetts . . . . .	-	-	-	-	-	-
Michigan . . . . .	4,885	4,895	2,816	2,849	2,069	2,046
Minnesota . . . . .	5,467	5,467	2,810	2,815	2,657	2,652
Mississippi . . . . .	2,310	2,310	1,150	1,153	1,160	1,157
Missouri . . . . .	3,082	3,082	1,475	1,478	1,606	1,603
Montana . . . . .	19,101	19,102	16,806	16,806	2,295	2,296
Nebraska . . . . .	442	442	352	352	90	90
Nevada . . . . .	6,275	6,275	5,797	5,801	478	474
New Hampshire . . . . .	825	825	720	721	105	104
New Jersey . . . . .	-	-	-	-	-	-
New Mexico . . . . .	10,367	10,367	9,321	9,321	1,046	1,045
New York . . . . .	13	13	13	13	-	-
North Carolina . . . . .	3,165	3,165	1,232	1,234	1,934	1,932
North Dakota . . . . .	1,106	1,106	1,106	1,106	(Z)	-
Ohio . . . . .	833	833	203	212	630	622
Oklahoma . . . . .	461	465	297	301	165	164
Oregon . . . . .	17,502	17,504	15,651	15,655	1,851	1,849
Pennsylvania . . . . .	744	744	513	513	231	231
Rhode Island . . . . .	-	-	-	-	-	-
South Carolina . . . . .	1,376	1,376	607	609	768	767
South Dakota . . . . .	2,344	2,352	1,996	2,013	349	339
Tennessee . . . . .	1,212	1,212	628	628	585	585
Texas . . . . .	1,994	1,994	753	755	1,241	1,240
Utah . . . . .	9,186	9,186	8,099	8,099	1,087	1,087
Vermont . . . . .	815	816	340	345	475	471
Virginia . . . . .	3,223	3,223	1,645	1,648	1,578	1,575
Washington . . . . .	10,050	10,061	9,151	9,160	899	901
West Virginia . . . . .	1,863	1,863	1,025	1,025	838	838
Wisconsin . . . . .	2,023	2,023	1,517	1,518	506	505
Wyoming . . . . .	9,704	9,704	9,255	9,255	449	449

- Represents zero. Z Less than half the unit of measure. <sup>1</sup> Comprises all publicly and privately owned land within authorized boundaries of national forests, purchase units, national grasslands, land utilization projects, research and experimental areas, and other areas. <sup>2</sup> Federally owned land within the "gross area within unit boundaries."

Source: U.S. Forest Service, *Land Areas of the National Forest System*, annual.

**No. 1150. Public Lands—Disposal: 1980 to 1993**

[For fiscal year ending in year shown: see text, section 9. Period figures are totals, not annual averages.  
See also *Historical Statistics, Colonial Times to 1970*, series J 10-15 and J 28-32]

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992	1993
Applications, entries, and selections allowed <sup>1</sup> . . .	1,000 acres	1,167	1,404	1	1	1	7	1	1	-
Applications, entries, and selections approved <sup>1</sup> . . .	1,000 acres	175	6,491	1,812	1,387	579	238	436	1,219	819
Patents and certificates <sup>1</sup> . . .	1,000 acres	2,495	4,217	3,000	5,419	780	1,052	476	1,585	1,460
Mineral class, total . . .	Number . . .	106,125	119,419	89,789	82,585	83,762	81,355	83,358	72,337	59,631
Leases . . .	Number . . .	105,963	119,101	89,546	82,450	83,656	81,248	83,259	72,192	59,523
Permits <sup>2</sup> . . .	Number . . .	132	316	231	121	96	96	88	121	84
Licenses <sup>3</sup> . . .	Number . . .	30	2	12	14	10	11	11	24	24
Grazing Leases <sup>3</sup> . . .	Number . . .	7,700	7,387	7,164	7,197	7,263	7,105	7,185	7,036	6,994
Permits <sup>4</sup> . . .	Number . . .	14,741	12,493	12,368	12,537	12,362	12,153	12,312	12,128	12,069

- Represents or rounds to zero.

<sup>1</sup> Excludes Indian fee and reissue trust and corrective patents.

<sup>2</sup> Excludes free-use permits for disposition of mineral materials.

<sup>3</sup> Beginning 1985, as of September 30.

<sup>4</sup> Licenses and permits within grazing districts.

Source: U.S. Bureau of Land Management, *Public Land Statistics*, annual.

**No. 1151. Timber-Based Industries—Summary of Manufactures: 1991 and 1992**

[Data based on 1987 Standard Industrial Classification Manual, published by the Office of Management and Budget, see text, section 26. N.e.c. = Not elsewhere classified]

INDUSTRY	SIC <sup>1</sup> code	1991			1992		
		All employees		Value of shipments (bil. dol.)	All employees		Value of shipments (bil. dol.)
		Number (1,000)	Payroll (mil. dol.)		Number (1,000)	Payroll (mil. dol.)	
Logging and sawmills . . .	241/242	207.6	4,307	28.9	221.7	4,739	31.3
Logging . . .	2411	78.1	1,561	11.4	83.6	1,693	13.8
Sawmills and planing mills, general . . .	2421	129.5	2,747	17.5	138.1	3,046	17.5
Hardwood dimension and flooring mills . . .	2426	26.1	462	1.7	28.5	502	2.0
Special product sawmills, n.e.c . . .	2429	2.0	36	0.2	1.8	31	0.1
Millwork and veneer <sup>2</sup> . . .	243	209.9	4,487	21.4	224.6	5,027	24.9
Millwork . . .	2431	84.9	1,836	9.0	85.9	1,973	9.6
Wood kitchen cabinets . . .	2434	57.1	1,139	4.2	63.0	1,311	5.0
Hardwood veneer and plywood . . .	2435	17.3	320	1.9	20.2	400	2.3
Softwood veneer and plywood . . .	2436	31.7	810	4.6	313	828	5.5
Structural wood members, n.e.c . . .	2439	18.9	382	1.8	24.3	516	2.5
Wood containers . . .	244	39.8	634	2.9	40.0	639	2.9
Nailed and lock corner wood boxes . . .	2441	6.2	100	0.4	5.9	101	0.4
Wood pallets and skids . . .	2448	27.1	413	2.0	28.6	448	2.1
Wood containers, n.e.c . . .	2449	6.5	120	0.4	5.5	90	0.3
Wood buildings, mobile homes . . .	245	54.1	1,106	6.0	56.2	1,230	6.6
Mobile homes . . .	2451	35.1	714	3.9	37.1	813	4.5
Prefabricated wood buildings and components . . .	2452	19.0	392	2.0	19.1	416	2.1
Miscellaneous wood products . . .	249	90.9	1,706	9.5	84.9	1,740	10.3
Wood preserving . . .	2491	11.7	233	2.6	11.0	237	2.7
Reconstituted wood products . . .	2493	21.0	537	3.0	22.9	613	3.9
Wood products, n.e.c . . .	2499	58.1	936	3.8	51.0	890	3.7
Pulp mills . . .	261	16.8	697	5.3	15.9	688	5.5
Paper mills . . .	262	130.3	5,224	33.3	130.7	5,425	32.8
Paperboard mills . . .	263	50.6	2,027	15.0	51.5	2,135	16.1
Paperboard containers and boxes . . .	265	198.6	5,392	30.6	199.0	5,710	32.6
Setup paperboard boxes . . .	2652	8.7	150	0.6	6.6	129	0.4
Corrugated and solid fiber boxes . . .	2653	108.7	3,047	18.0	111.0	3,247	19.7
Fiber cans, tubes, drums, & similar prods . . .	2655	12.9	341	1.9	12.4	337	1.9
Sanitary food containers, except folding . . .	2656	17.6	411	2.7	15.4	386	2.5
Folding paperboard boxes, incl. sanitary . . .	2657	50.7	1,443	7.4	53.6	1,610	8.0
Converted paper and paperboard products <sup>3</sup> . . .	267	224.3	6,043	44.6	229.2	6,521	46.0
Packaging paper & plastics film, coated & laminated .	2671	15.4	492	3.1	18.2	560	3.7
Coated and laminated paper, n.e.c . . .	2672	34.2	992	7.4	32.3	1,032	7.6
Plastics, foil, and coated paper bags . . .	2673	35.4	875	5.1	38.4	979	5.7
Uncoated paper and multiwall bags . . .	2674	17.9	398	2.7	18.7	440	2.8
Die-cut paper and paperboard and cardboard .	2675	17.0	408	2.3	15.6	373	2.0
Sanitary paper products . . .	2676	38.8	1,343	15.6	40.5	1,451	15.5
Envelopes . . .	2677	24.5	616	2.7	24.9	672	2.8
Stationery, tablets, and related products . . .	2678	10.1	209	1.4	9.3	218	1.4
Converted paper and paperboard products, n.e.c . . .	2679	30.9	711	4.3	31.2	795	4.4

<sup>1</sup> Standard Industrial Classification code; see text, section 13. <sup>2</sup> Includes plywood and structural members. <sup>3</sup> Except containers and boxes.

Source: U.S. Bureau of the Census, *Census of Manufactures, 1987 Final Industry Series*, MC87-I-24A-D and MC87-I-26A-C, and *Annual Survey of Manufactures*.

**No. 1152. Timber Products—Production, Foreign Trade, and Consumption, by Type of Product: 1970 to 1988**

[In millions of cubic feet, roundwood equivalent. See also *Historical Statistics, Colonial Times to 1970*, series L 72-97]

ITEM	Unit	1970	1975	1980	1983	1984	1985	1986	1987	1988, prel.
Industrial roundwood:										
Domestic production . . . . .	Mil. cu. ft. . . . .	11,105	10,575	12,120	12,065	12,725	12,515	13,845	14,670	14,985
Imports . . . . .	Mil. cu. ft. . . . .	2,430	2,215	3,250	3,710	4,165	4,340	4,375	4,575	4,445
Exports . . . . .	Mil. cu. ft. . . . .	1,540	1,685	2,350	2,110	2,060	2,070	2,300	2,650	3,200
Consumption . . . . .	Mil. cu. ft. . . . .	11,995	11,105	13,020	13,665	14,830	14,785	15,920	16,595	16,230
Lumber:										
Domestic production . . . . .	Mil. cu. ft. . . . .	5,215	4,890	5,300	5,370	5,770	5,665	6,545	6,990	6,920
Plywood and veneer:										
Domestic production . . . . .	Mil. cu. ft. . . . .	1,020	1,165	1,175	1,365	1,400	1,420	1,505	1,650	1,630
Pulp products:										
Domestic production . . . . .	Mil. cu. ft. . . . .	3,835	3,485	4,390	4,165	4,355	4,165	4,545	4,670	4,885
Logs:										
Imports . . . . .	Mil. cu. ft. . . . .	25	15	25	30	30	20	15	15	15
Pulpwood chips, exports . . . . .	Mil. cu. ft. . . . .	145	195	275	155	145	145	150	160	215
Fuelwood consumption . . . . .	Mil. cu. ft. . . . .	540	570	3,105	3,235	3,620	3,450	3,115	3,150	3,360
Timber products, per capita	Cu. ft. . . . .	61.1	54.0	70.8	72.0	77.9	76.2	78.8	81.0	79.5
Industrial roundwood	Cu. ft. . . . .	58.5	51.4	57.2	58.2	62.6	61.8	65.9	68.0	65.9
Fuelwood . . . . .	Cu. ft. . . . .	2.6	2.6	13.6	13.8	15.3	14.4	12.9	12.9	13.6
Lumber . . . . .	Bd. ft. . . . .	193.0	171.0	188.0	190.0	205.0	207.0	224.0	233.0	221.0
Plywood and veneer . . . . .	Bd. ft. . . . .	34.0	32.0	30.0	34.0	34.0	35.0	37.0	39.0	37.0
Pulp products . . . . .	Cords (128 cu. ft.)	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1960-88*, annual.

**No. 1153. Lumber Consumption, by Species Group and End Use: 1970 to 1992**

[In million board feet, except per capita in board feet. Per capita consumption based on estimated resident population as of July 1]

ITEM	1970	1986	1991	1992	END-USE	1970	1976	1986	1991
Total . . . . .	39.9	57.0	54.8	56.0	New housing . . . . .	13.3	17.0	19.3	15.0
Per capita . . . . .	194	237	217	219	Residential upkeep and improvements . . . . .	4.7	5.7	10.1	11.6
Species group:					New nonresidential construction <sup>1</sup> . . . . .	4.7	4.5	5.3	5.4
Softwoods . . . . .	32.0	48.0	44.0	45.7	Manufacturing . . . . .	4.7	4.9	4.8	5.6
Hardwoods . . . . .	7.9	9.0	10.8	10.3	Shipping . . . . .	5.7	5.9	6.8	8.2
					Other <sup>2</sup> . . . . .	6.8	6.7	10.9	8.8

<sup>1</sup> In addition to new construction, includes railroad ties laid as replacements in existing track and lumber used by railroads for railcar repair. <sup>2</sup> Includes upkeep and improvement of nonresidential buildings and structures; made-at-home projects, such as furniture, boats, and picnic tables; made-on-the-job items such as advertising and display structures; and miscellaneous products and uses.

Source: U.S. Forest Service. *The 1993 RPA Timber Assessment Update*, forthcoming.

**No. 1154. Selected Timber Products—Producer Price Indexes: 1980 to 1994**

[See also *Historical Statistics, Colonial Times to 1970*, series L 206-210]

PRODUCT	Unit	1980	1985	1990	1992	1993	1994
Lumber and wood products, except furniture . . . . .	Dec. 1984=100 . . .	(NA)	100.3	117.0	129.7	148.3	154.4
Logging camps and logging contractors . . . . .	Dec. 1981=100 . . .	(NA)	94.8	135.6	151.3	186.4	192.6
Sawmills and planing mills . . . . .	Dec. 1984=100 . . .	(NA)	99.7	113.7	131.3	161.8	165.2
Millwork, veneer, and plywood <sup>1</sup> . . . . .	Dec. 1984=100 . . .	(NA)	99.9	115.4	128.4	142.8	148.7
Softwood plywood . . . . .	Dec. 1980=100 . . .	91.4	90.0	102.5	124.2	145.4	153.1
Wood containers . . . . .	June 1985=100 . . .	(NA)	(NA)	113.9	123.5	141.7	147.4
Wood buildings and mobile homes . . . . .	Dec. 1984=100 . . .	(NA)	100.6	115.5	121.5	129.5	139.8
Particleboard . . . . .	Dec. 1982=100 . . .	92.1	110.0	117.1	120.7	138.6	156.2
Paper and allied products . . . . .	Dec. 1984=100 . . .	(NA)	98.8	121.9	121.2	120.2	123.6
Pulp mills . . . . .	Dec. 1982=100 . . .	105.5	100.9	153.8	118.5	105.8	117.2
Paper mill products; except building paper . . . . .	June 1981=100 . . .	93.5	109.5	134.0	126.6	126.6	128.4
Paperboard mills . . . . .	Dec. 1982=100 . . .	97.3	112.0	146.0	142.6	138.3	152.2
Converted paper and paperboard products <sup>2</sup> . . . . .	June 1993=100 . . .	(NA)	(NA)	(NA)	(NA)	100.6	
Paperboard containers and boxes . . . . .	Dec. 1984=100 . . .	(NA)	98.4	117.7	118.5	118.0	123.7

NA Not available. <sup>1</sup> Includes structural wood members. <sup>2</sup> Excludes containers and boxes.

Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly.

# Lumber Production

699

## No. 1155. Selected Species—Stumpage Prices In Current and Constant (1982) Dollars: 1980 to 1993

[In dollars per 1,000 board feet. Stumpage prices are based on sales of sawtimber from National Forests. See also *Historical Statistics, Colonial Times to 1970*, series L 199-205]

SPECIES	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
CURRENT DOLLARS												
Softwoods:												
Douglas fir <sup>1</sup>	432	162	133	126	161	190	256	390	466	395	477	318
Southern pine <sup>2</sup>	155	141	139	91	104	136	121	131	127	166	198	217
Sugar pine <sup>3</sup>	667	138	84	110	170	288	260	289	285	241	492	598
Ponderosa pine <sup>3,4</sup>	206	104	123	101	157	209	182	292	252	238	292	535
Western hemlock <sup>5</sup>	213	62	62	51	75	105	163	223	203	164	165	364
Hardwoods:												
All eastern hardwoods <sup>6</sup>	52	60	90	65	70	88	151	136	146	160	167	264
Oak, white, red, and black <sup>6</sup>	66	88	145	95	108	147	146	179	188	164	211	195
Maple, sugar <sup>7</sup>	70	55	81	70	66	81	108	129	135	121	145	220
CONSTANT (1982) DOLLARS <sup>8</sup>												
Softwoods:												
Douglas fir <sup>1</sup>	481	160	128	122	160	185	240	347	401	339	407	270
Southern pine <sup>2</sup>	173	139	134	88	103	132	133	117	109	143	169	184
Sugar pine <sup>3</sup>	742	136	81	106	169	280	244	258	245	207	419	508
Ponderosa pine <sup>3,4</sup>	230	103	118	98	156	204	170	260	217	204	249	455
Western hemlock <sup>5</sup>	237	61	60	49	75	103	152	199	175	141	140	309
Hardwoods:												
All eastern hardwoods <sup>6</sup>	58	59	87	63	70	86	142	121	126	137	142	224
Oak, white, red, and black <sup>6</sup>	73	87	140	92	108	143	137	159	162	140	180	166
Maple, sugar <sup>7</sup>	78	54	78	68	66	78	101	115	116	104	123	187

<sup>1</sup> Western Washington and western Oregon. <sup>2</sup> Southern region. <sup>3</sup> Pacific Southwest region (formerly California region).

<sup>4</sup> Includes Jeffrey pine. <sup>5</sup> Pacific Northwest region. <sup>6</sup> Eastern and Southern regions. <sup>7</sup> Eastern region. <sup>8</sup> Deflated by the producer price index, all commodities.

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics*, annual.

## No. 1156. Lumber Production and Consumption, by Kind of Wood: 1988 to 1993

[In millions of board feet, except as indicated. Based on sample survey; see source for sampling variability. See also *Historical Statistics, Colonial Times to 1970*, series L 98-112 and L 122-137]

ITEM	1988	1989	1990 <sup>1</sup>	1991 <sup>1</sup>	1992	1993
Total production . . . . .	44,576	43,576	43,466	40,031	(NA)	(NA)
Softwoods <sup>2</sup> . . . . .	36,845	36,040	36,224	33,250	(NA)	(NA)
Hardwoods <sup>2</sup> . . . . .	7,731	7,536	7,242	6,781	(NA)	(NA)
Domestic consumption . . . . .	58,834	58,847	54,482	51,134	(NA)	(NA)
Percent net imports <sup>3</sup>	16.5	16.7	15.7	15.5	(NA)	(NA)
Softwoods . . . . .	48,513	47,975	45,003	41,998	(NA)	(NA)
Hardwoods . . . . .	10,321	10,872	9,480	9,136	(NA)	(NA)
United States . . . . .	50,300	49,960	48,451	44,794	46,635	45,247
North . . . . .	6,814	6,797	6,917	6,620	6,750	6,767
South . . . . .	19,751	19,695	20,110	18,885	20,893	21,239
West . . . . .	23,735	23,468	21,423	19,290	18,992	17,242

NA Not available. <sup>1</sup> New sample, based on the new MA-24T sample. <sup>2</sup> Includes types not shown separately. <sup>3</sup> Imports minus exports.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, series MA-24T, annual.

## No. 1157. Wood Products—Production: 1980 to 1990

ITEM	Unit	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990, prel.
Hardwood flooring . . . . .	Mil. bd. ft . . . . .	78	83	75	98	110	122	145	174	193	206	205
Softwood plywood . . . . .	Bil. sq. ft., 3/8" . . .	15.5	15.5	15.1	18.3	18.9	19.3	20.4	21.1	22.9	21.4	20.7
Insulation boards . . . . .	1,000 short tons . . .	1,051	845	593	713	785	735	732	605	529	460	474
Hardboard . . . . .	Mil. sq. ft., 1/8" . . .	6,140	6,104	5,587	7,303	6,837	6,300	5,822	5,458	5,118	5,196	5,025
Particleboard . . . . .	Mil. sq. ft., 3/4" . . .	2,950	2,869	2,393	3,009	3,196	3,331	3,603	3,706	3,829	3,858	3,806

<sup>1</sup> Beginning 1982, data are for shipments.

Source: U.S. Dept. of Commerce, International Trade Administration, *Forest Products Review*, monthly (discontinued April 1983); and unpublished data. Based on reports of U.S. Bureau of the Census, National Oak Flooring Manufacturers Association and National Particleboard Association.

**No. 1158. Paper and Paperboard—Production, New Supply, and Ratio of New Supply to Real GDP: 1990 to 1993**

[In thousands of short tons. See also *Historical Statistics, Colonial Times to 1970*, series L 172, L 174, and L 178-191]

ITEM	PRODUCTION				NEW SUPPLY				RATIO OF NEW SUPPLY TO REAL GDP <sup>1</sup>			
	1990	1991	1992	1993	1990	1991	1992	1993	1990	1991	1992	1993
Total paper . . . . .	39,361	39,084	40,973	41,745	49,494	47,379	49,424	51,244	10,106	9,734	9,926	9,980
Total paperboard . . . . .	39,423	40,416	41,985	43,213	36,406	36,826	38,543	40,045	7,434	7,566	7,741	7,799
Unbleached Kraft . . . . .	20,357	20,950	21,658	21,447	17,780	17,794	18,515	18,456	3,631	3,656	3,718	3,595
Semicheical . . . . .	5,640	5,552	5,762	5,672	5,609	5,482	5,730	5,774	1,145	1,126	1,151	1,125
Bleached Kraft . . . . .	4,399	4,572	4,503	4,583	3,638	3,781	3,690	3,788	0,743	0,777	0,741	0,738
Recycled . . . . .	9,026	9,332	10,063	11,510	9,378	9,768	10,608	12,026	1,915	2,007	2,130	2,342

<sup>1</sup> GDP = Gross domestic product.

Source: American Forest and Paper Association, Washington, DC, *Monthly Statistical Summary of Paper, Paperboard and Woodpulp*.

**No. 1159. Newsprint—Production, Stocks, Consumption, and Price Index: 1970 to 1992**

[In thousands of metric tons, except price index. See also *Historical Statistics, Colonial Times to 1970*, series L 192-198]

COUNTRY AND ITEM	1970	1980	1985	1987	1988	1989	1990	1991	1992
Canada: Production . . . . .	7,808	8,625	8,890	9,630	9,840	9,640	9,068	8,977	8,931
Shipments from mills . . . . .	7,795	8,622	8,899	9,718	9,740	9,606	9,074	8,728	9,143
Stocks at mills, end of year . . .	236	165	288	189	288	321	315	564	351
United States:									
Consumption, estimate . . . . .	6,468	10,088	11,507	12,303	12,245	12,241	12,125	11,381	11,634
Production . . . . .	3,142	4,239	4,924	5,300	5,427	5,523	5,997	6,206	6,424
Shipments from mills . . . . .	3,136	4,234	4,927	5,310	5,415	5,515	6,007	6,152	6,464
Stocks, end of year: At mills . . .	33	21	57	36	48	56	46	98	59
And in transit to publishers . . .	749	732	910	900	932	749	801	932	938
Producer price index (1982=100)	34.1	188.5	105.3	112.3	127.6	122.5	119.5	120.9	109.9

<sup>1</sup> Average for 11 months.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, monthly. Data from American Forest and Paper Association, Washington, DC, and Canadian Pulp & Paper Association.

**No. 1160. Recovered Paper Utilization and Recovery Rates: 1970 to 1994**

[In millions of short tons, except percent. Recovery rate is ratio of total recovered paper to new supply. Recovered paper utilization is the ratio of recovered paper consumption at paper and board mills to paper and board production. See *Historical Statistics, Colonial Times to 1970*, series L 175, for U.S. wastepaper consumption]

ITEM	1970	1980	1985	1988	1989	1990	1991	1992	1993	1994
Paper and board, production <sup>1</sup> . . . . .	51.7	63.6	68.7	78.1	78.4	80.3	81.1	84.6	86.6	90.5
Recovered paper consumption . . . . .	11.8	14.9	16.4	19.7	20.2	21.7	23.7	26.2	28.0	30.0
Recovered paper utilization rate (percent) . .	22.8	23.5	23.8	25.2	25.8	27.1	29.2	31.0	32.4	33.1
Other recovered paper uses <sup>2</sup> . . . . .	0.42	0.47	0.53	0.70	0.72	1.00	1.08	1.10	1.15	1.20
Recovered paper exports . . . . .	0.41	2.64	3.56	5.95	6.31	6.51	6.60	6.45	5.89	7.71
Total paper recovered . . . . .	12.6	17.9	20.4	26.2	27.1	29.1	31.2	33.6	34.9	38.6
Paper and board, new supply <sup>3</sup> . . . . .	56.0	67.2	76.1	85.5	85.2	86.7	84.9	88.1	91.4	95.4
Recovery rate (percent) . . . . .	22.4	26.7	26.8	30.6	31.8	33.6	36.8	38.1	38.2	40.5

<sup>1</sup> Excludes hard pressed board; includes construction paper and board, and wet machine board. <sup>2</sup> Estimated. <sup>3</sup> Excludes production of hard pressed board.

Source: American Forest and Paper Association, Washington, DC, *Statistics of Paper, Paperboard, and Woodpulp*, annual; and unpublished data.

## No. 1161. Selected Wood Products—Production and Consumption: 1970 to 1989

[See also *Historical Statistics, Colonial Times to 1970*, series L 151-190]

ITEM	Unit	1970	1975	1980	1984	1985	1986	1987	1988	1989
<b>PULPWOOD</b>										
Receipts, total	Mil. cords <sup>1</sup>	68.9	65.4	81.0	88.0	85.4	90.6	93.9	95.1	97.0
Softwood	Mil. cords <sup>1</sup>	52.4	49.3	60.2	62.9	60.2	63.3	65.3	65.8	67.1
Hardwood	Mil. cords <sup>1</sup>	16.5	16.2	20.8	25.2	25.1	27.3	28.6	29.3	29.9
Consumption, total	Mil. cords <sup>1</sup>	67.6	65.4	79.7	87.0	84.8	91.1	92.4	95.3	96.1
Softwood	Mil. cords <sup>1</sup>	51.3	48.9	58.8	62.0	59.7	63.1	64.2	65.9	66.3
Hardwood	Mil. cords <sup>1</sup>	16.3	16.5	20.9	24.9	25.1	28.1	28.2	29.4	29.7
Inventories <sup>2</sup>	Mil. cords <sup>1</sup>	6.6	6.6	6.7	5.2	5.1	4.7	5.6	5.3	5.8
<b>WOODPULP</b>										
Production	Mil. short tons	43.9	43.1	53.0	57.8	57.7	60.6	62.4	64.1	64.6
Consumption, <sup>3</sup> total	Mil. short tons	43.2	42.4	52.4	57.5	56.6	60.0	61.2	62.8	62.7
Own pulp	Mil. short tons	38.9	38.5	46.6	50.3	49.7	52.6	53.8	54.9	54.9
Purchased pulp	Mil. short tons	4.3	3.9	5.9	7.2	7.0	7.5	7.4	7.9	7.8
<b>PLYWOOD</b>										
Softwood:										
Production	Mil. sq. ft. <sup>4</sup>	14,149	15,706	15,483	18,865	19,341	20,363	22,312	22,233	20,919
Consumption, total	Mil. sq. ft. <sup>4</sup>	(NA)	(NA)	15,145	18,526	19,122	19,880	21,503	22,277	20,904
Value	Mil. dol.	949	2,582	2,995	3,080	3,237	3,483	3,513	3,734	
Hardwood:										
Production	Mil. sq. ft. <sup>5</sup>	1,904	1,280	1,311	1,185	1,016	1,088	1,256	1,217	1,213
Consumption, total	Mil. sq. ft. <sup>5</sup>	5,772	4,970	3,416	3,831	4,311	4,884	4,918	4,913	(NA)
Value	Mil. dol.	516	586	977	1,199	1,192	1,320	1,471	1,405	1,392

<sup>1</sup> Represents or rounds to zero. NA Not available.<sup>1</sup> Standard cords. 128 cubic feet roughwood bases.<sup>2</sup> As of Dec. 31.<sup>3</sup> In the manufacture of paper and board.<sup>4</sup> 3/8" basis.<sup>5</sup> Surface measure.Source: U.S. Bureau of the Census, *Current Industrial Reports*, series MA26-A, MA24-H, and MA24-F.

## No. 1162. Selected Timber Products—Imports and Exports: 1970 to 1993

ITEM	Unit	1970	1980	1985	1988	1989	1990	1991	1992	1993, prel.
<b>IMPORTS <sup>1</sup></b>										
Lumber, total <sup>2</sup>	Mil. bd. ft.	6,114	9,866	14,996	14,226	15,277	12,159	11,756	13,474	15,625
From Canada	Percent	96.0	97.5	97.6	97.5	91.3	98.5	98.3	98.3	97.6
Softwoods	Mil. bd. ft.	5,778	9,573	14,632	13,841	14,928	11,927	11,545	13,214	15,260
Value	Mil. dol.	434	1,826	2,898	2,939	2,875	2,534	2,507	3,310	4,787
Hardwoods	Mil. bd. ft.	337	293	364	386	349	232	210	260	335
Value	Mil. dol.	62	152	180	238	152	141	142	176	224
Logs, total	Mil. bd. ft. <sup>3</sup>	144	128	99	68	42	28	15	46	94
From Canada	Percent	79.6	97.4	81.8	91.9	61.5	67.5	74.5	88.9	77.7
Softwoods	Mil. bd. ft. <sup>3</sup>	107	114	71	56	24	18	9	40	86
Value	Mil. dol.	9	17	17	15	12	7	6	20	41
Hardwoods	Mil. bd. ft. <sup>3</sup>	38	13	28	12	18	10	6	7	8
Value	Mil. dol.	5	3	4	3	17	10	6	6	9
Paper and board <sup>4</sup>	1,000 tons	7,115	8,780	11,522	13,110	13,100	13,148	12,167	12,543	13,971
Value	Mil. dol.	1,039	3,418	5,698	8,002	8,330	8,427	7,929	7,899	8,527
Woodpulp	1,000 tons	3,518	4,051	4,466	4,938	5,105	4,893	4,997	5,029	5,413
Value	Mil. dol.	483	1,684	1,521	2,608	3,037	2,831	2,132	2,094	1,860
Plywood	Mil. sq. ft. <sup>5</sup>	2,049	1,235	1,817	1,698	1,955	1,687	1,457	1,776	1,798
Value	Mil. dol.	208	409	463	577	516	537	457	574	677
<b>EXPORTS</b>										
Lumber, total <sup>2</sup>	Mil. bd. ft.	1,243	2,494	1,945	4,527	4,243	3,802	3,997	3,603	3,385
To: Canada	Percent	21.7	25.3	23.7	17.6	15.6	18.1	15.1	17.3	17.4
Japan	Percent	30.8	26.0	32.1	34.5	38.1	33.5	30.5	30.9	36.3
Europe	Percent	24.1	23.8	15.1	20.5	16.6	19.1	19.6	21.2	15.9
Softwoods	Mil. bd. ft.	1,115	2,007	1,518	3,266	3,379	2,941	3,055	2,613	2,376
Value	Mil. dol.	163	789	497	1,143	1,404	1,336	1,358	1,363	1,372
Hardwoods	Mil. bd. ft.	128	487	427	1,261	863	861	942	990	1,008
Value	Mil. dol.	31	272	263	683	659	818	879	988	1,077
Logs, total	Mil. bd. ft. <sup>3</sup>	2,741	3,261	3,843	4,798	4,745	4,262	3,816	3,316	2,877
To: Canada	Percent	10.6	9.7	11.6	7.9	5.8	9.3	11.2	12.6	13.6
Japan	Percent	86.3	78.0	49.4	50.3	63.5	62.5	56.7	62.1	65.4
China: Mainland	Percent	2.7	27.8	23.4	9.6	8.5	9.7	7.1	4.6	
Softwoods	Mil. bd. ft. <sup>3</sup>	2,672	3,109	3,732	4,594	4,532	4,044	3,532	3,092	2,640
Value	Mil. dol.	320	1,452	1,169	2,090	2,176	2,170	1,870	1,925	2,237
Hardwoods	Mil. bd. ft. <sup>3</sup>	69	152	111	204	214	218	283	224	237
Value	Mil. dol.	36	129	91	160	223	251	234	238	253
Paper and board <sup>4</sup>	1,000 tons	2,817	5,214	4,071	5,691	6,300	6,796	8,331	8,971	9,126
Value	Mil. dol.	602	2,773	2,266	3,753	4,261	5,035	6,006	6,392	6,541
Woodpulp	1,000 tons	3,095	3,806	3,796	5,528	6,231	5,906	6,337	7,222	6,499
Value	Mil. dol.	464	1,652	1,354	2,915	3,513	3,156	2,800	3,114	2,389
Plywood	Mil. sq. ft. <sup>5</sup>	172	413	358	1,093	1,562	1,767	1,552	1,759	1,648
Value	Mil. dol.	16	108	86	247	292	338	295	366	401

NA Not available. <sup>1</sup> Customs value of imports; see text, section 29.<sup>2</sup> Includes railroad ties.<sup>3</sup> Log scale. <sup>4</sup> Includespaper and board products. Excludes hardboard. <sup>5</sup> 3/8" basis.Source: U.S. Foreign Agricultural Service, *Trade, Consumption, and Price Statistics: 1960-89*, forthcoming, and unpublished data.

**No. 1163. Fishery Products—Domestic Catch and Imports, Summary: 1970 to 1993**

[Live weight, in millions of pounds, except percent. 1979-1993 preliminary. For data on commercial catch for selected countries, see table 1404, section 30. See *Historical Statistics, Colonial Times to 1970*, series L 224-226, for domestic catch]

ITEM	1970	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>Total . . . . .</b>	<b>11,474</b>	<b>11,357</b>	<b>12,552</b>	<b>15,150</b>	<b>14,368</b>	<b>15,744</b>	<b>14,628</b>	<b>15,485</b>	<b>16,349</b>	<b>16,364</b>	<b>16,106</b>	<b>20,334</b>
For human food . . . . .	6,213	8,006	8,498	9,337	9,620	10,561	10,505	12,268	12,662	13,020	13,242	13,821
Finfish . . . . .	(NA)	6,139	6,303	6,991	7,087	7,919	7,786	9,735	10,120	10,186	10,297	10,796
Shellfish . . . . .	(NA)	1,867	2,195	2,346	2,533	2,642	2,719	2,533	2,542	2,834	2,945	3,025
For industrial use . . . . .	5,261	3,351	4,054	5,813	4,748	5,183	4,123	3,217	3,687	3,344	2,864	6,513
<b>Domestic catch . . . . .</b>	<b>4,917</b>	<b>6,482</b>	<b>6,438</b>	<b>6,258</b>	<b>6,031</b>	<b>6,896</b>	<b>7,192</b>	<b>8,463</b>	<b>9,404</b>	<b>9,484</b>	<b>9,637</b>	<b>10,467</b>
Percent of total . . . . .	42.8	57.1	51.3	41.3	42.0	43.8	49.2	54.7	57.5	58.0	59.8	51.5
For human food . . . . .	2,537	3,654	3,320	3,294	3,393	3,946	4,588	6,204	7,041	7,031	7,618	8,214
Finfish . . . . .	(NA)	2,516	2,348	2,273	2,240	2,769	3,306	4,897	5,747	5,564	6,182	6,746
Shellfish . . . . .	(NA)	1,138	972	1,021	1,153	1,177	1,282	1,307	1,294	1,467	1,436	1,468
For industrial use . . . . .	2,380	2,828	3,118	2,964	2,638	2,950	2,604	2,259	2,363	2,453	2,019	2,253
<b>Imports<sup>2</sup> . . . . .</b>	<b>6,557</b>	<b>4,875</b>	<b>6,114</b>	<b>8,892</b>	<b>8,337</b>	<b>8,848</b>	<b>7,436</b>	<b>7,022</b>	<b>6,945</b>	<b>6,879</b>	<b>6,469</b>	<b>9,867</b>
Percent of total . . . . .	57.2	42.9	48.7	58.7	58.0	56.2	50.8	45.3	42.5	42.0	40.2	48.5
For human food . . . . .	3,676	4,352	5,178	6,043	6,227	6,615	5,917	6,064	5,621	5,989	5,624	5,607
Finfish . . . . .	(NA)	3,623	3,955	4,718	4,847	5,150	4,480	4,838	4,373	4,622	4,115	4,026
Shellfish . . . . .	(NA)	729	1,223	1,325	1,380	1,465	1,437	1,226	1,248	1,367	1,509	1,581
For industrial use <sup>3</sup> . . . . .	2,881	523	936	2,849	2,110	2,233	1,519	958	1,324	890	845	4,260

NA Not available. <sup>1</sup> For univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.), the weight of meats, excluding the shell, is reported. <sup>2</sup> Excludes imports of edible fishery products consumed in Puerto Rico; includes landings of tuna caught by foreign vessels in American Samoa. <sup>3</sup> Fish meal and sea herring.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fishery Statistics of the United States*, annual; and *Fisheries of the United States*, annual.

**No. 1164. Fisheries—Employment, Fishing Craft, and Establishments: 1970 to 1992**

[In thousands. As of Dec. 31. 1979-92 preliminary. Data for employment and establishments exclude Alaska. See also *Historical Statistics, Colonial Times to 1970*, series L 254-261]

ITEM	1970	1980	1983	1984	1985	1986	1987	1988	1989 <sup>1</sup>	1990 <sup>1</sup>	1991 <sup>1</sup>	1992 <sup>1</sup>
<b>Persons employed in U.S. . . .</b>	<b>227</b>	<b>296</b>	<b>333</b>	<b>340</b>	<b>351</b>	<b>347</b>	<b>359</b>	<b>364</b>	<b>(NA)</b>	<b>(NA)</b>	<b>(NA)</b>	<b>(NA)</b>
Fishermen . . . . .	140	193	223	230	239	247	256	274	(NA)	(NA)	(NA)	(NA)
Shore workers <sup>2</sup> . . . . .	87	103	110	110	112	100	103	90	73	72	73	72
<b>Craft used . . . . .</b>	<b>88</b>	<b>113</b>	<b>127</b>	<b>127</b>	<b>130</b>	<b>128</b>	<b>393</b>	<b>3110</b>	<b>111</b>	<b>95</b>	<b>(NA)</b>	<b>(NA)</b>
Vessels, 5 net tons and over .	14	19	21	24	24	38	323	32	36	32	(NA)	(NA)
Motorboats . . . . .	72	93	105	102	104	88	368	378	75	63	(NA)	(NA)
Other boats . . . . .	2	1	1	1	2	2	32	(NA)	(NA)	(NA)	(NA)	(NA)
<b>Fishery shore establishments.</b>	<b>3.7</b>	<b>3.6</b>	<b>3.9</b>	<b>4.0</b>	<b>4.0</b>	<b>4.0</b>	<b>4.2</b>	<b>4.6</b>	<b>4.5</b>	<b>4.6</b>	<b>4.6</b>	<b>4.9</b>

NA Not available. <sup>1</sup> Estimated and excludes Mississippi River. Maryland and Virginia represent only Federal collected data. <sup>2</sup> Seasonal average for processors and wholesaling plants.

<sup>3</sup> Excludes Maryland and Virginia.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fishery Statistics of the United States*, annual; and *Fisheries of the United States*, annual.

**No. 1165. Fisheries—Quantity and Value of Domestic Catch: 1970 to 1993**

[1979-1993 preliminary. See also *Historical Statistics, Colonial Times to 1970*, series L 224-226, L 229, and L 310]

YEAR	QUANTITY (mil. lb. <sup>1</sup> )			Value (mil. dol.)	Average price per lb. (cents)	YEAR	QUANTITY (mil. lb. <sup>1</sup> )			Value (mil. dol.)	Average price per lb. (cents)
	Total	For human food	For industrial prod- ucts <sup>2</sup>				Total	For human food	For industrial prod- ucts <sup>2</sup>		
1970 . . . . .	4,917	2,537	2,380	613	12.5	1982 . . . . .	6,367	3,285	3,082	2,390	37.5
1971 . . . . .	5,018	2,441	2,577	651	13.0	1983 . . . . .	6,439	3,238	3,201	2,355	36.6
1972 . . . . .	4,806	2,435	2,371	748	15.6	1984 . . . . .	6,438	3,320	3,118	2,350	36.5
1973 . . . . .	4,858	2,398	2,460	937	19.3	1985 . . . . .	6,258	3,294	2,964	2,326	37.2
1974 . . . . .	4,967	2,496	2,471	932	18.7	1986 . . . . .	6,031	3,393	2,638	2,763	45.8
1975 . . . . .	4,877	2,465	2,412	977	20.0	1987 . . . . .	6,896	3,946	2,950	3,115	45.2
1976 . . . . .	5,388	2,775	2,613	1,349	25.0	1988 . . . . .	7,192	4,588	2,604	3,520	48.9
1977 . . . . .	5,271	2,952	2,319	1,554	29.5	1989 . . . . .	8,463	6,204	2,259	3,238	38.3
1978 . . . . .	6,028	3,177	2,851	1,854	30.7	1990 . . . . .	9,404	7,041	2,363	3,522	37.5
1979 . . . . .	6,267	3,318	2,949	2,234	35.6	1991 . . . . .	9,484	7,031	2,453	3,308	34.9
1980 . . . . .	6,482	3,654	2,828	2,237	34.5	1992 . . . . .	9,637	7,618	2,019	3,678	38.2
1981 . . . . .	5,977	3,547	2,430	2,388	40.0	1993 . . . . .	10,467	8,214	2,253	3,471	33.2

<sup>1</sup> Live weight. <sup>2</sup> Meal, oil, fish solubles, homogenized condensed fish, shell products, bait, and animal food.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fishery Statistics of the United States*, annual; and *Fisheries of the United States*, annual.

# Domestic Fisheries—Catch

703

## No. 1166. Domestic Fisheries—Catch, by Selected Ports: 1985 to 1993

[See *Historical Statistics, Colonial Times to 1970*, series L 236-253, for data on quantity and value of catch]

PORT	CATCH (mil. lb.)					VALUE (mil. dol.)				
	1985	1990	1991	1992	1993	1985	1990	1991	1992	1993
New Bedford, MA . . . . .	90.6	114.8	106.4	103.3	82.1	103.2	160.4	157.7	151.8	107.5
Dutch Harbor-Unalaska, AK . . . . .	106.3	509.9	731.7	736.0	793.9	21.3	126.2	130.6	194.0	161.2
Kodiak, AK . . . . .	96.1	272.5	287.3	274.0	287.4	65.8	101.7	96.9	90.0	81.5
Dulac-Chauvin, LA . . . . .	398.6	164.4	166.8	65.0	142.4	59.9	52.7	50.1	52.1	48.0
Empire-Venice, LA . . . . .	224.5	244.2	309.4	269.1	335.4	34.3	46.3	50.2	50.1	52.3
Gloucester, MA . . . . .	116.5	126.2	107.2	101.7	67.6	37.1	40.5	40.0	34.1	31.3
Petersburg, AK . . . . .	(NA)	67.5	90.3	81.0	110.2	(NA)	39.4	34.6	33.0	32.8
Cordova, AK . . . . .	(NA)	70.8	47.5	30.0	18.1	(NA)	36.8	19.5	17.0	10.7
Cape May-Wildwood, NJ . . . . .	30.3	69.2	93.1	93.9	95.0	18.1	34.4	40.1	34.9	36.2
Point Judith, RI . . . . .	56.8	58.7	64.7	66.7	60.4	28.0	32.2	37.5	36.6	35.2
Portland, ME . . . . .	36.1	48.9	63.4	59.2	86.1	17.2	31.7	44.1	43.6	49.1
Ketchikan, AK . . . . .	(NA)	52.6	68.5	70.0	100.6	(NA)	28.3	21.9	27.0	27.0
Beaufort-Morehead City, NC . . . . .	133.2	102.0	137.0	78.7	88.4	22.7	23.0	23.0	16.2	15.6
Cameron, LA . . . . .	673.6	232.6	288.4	246.0	323.1	29.9	20.6	26.3	26.5	27.4
Morgan City-Berwick, LA . . . . .	7.7	146.5	112.3	130.8	147.5	(NA)	19.7	9.4	14.3	13.0
Pascagoula-Moss Point, MS . . . . .	423.2	303.9	227.3	177.0	169.7	18.4	18.8	15.1	12.4	10.7
Los Angeles, CA . . . . .	150.3	158.5	141.5	94.9	99.8	32.5	21.3	17.4	14.6	13.7
Astoria, OR . . . . .	25.5	41.2	53.0	67.0	68.0	9.5	16.2	17.0	19.0	19.0
Port Hueneme-Oxnard-Ventura, CA . . . . .	19.9	39.4	52.0	18.7	39.9	5.4	12.5	14.0	10.7	10.3
Intercoastal City, LA . . . . .	(NA)	173.0	211.4	175.9	202.7	(NA)	7.6	12.0	10.4	11.0

X Not applicable.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual.

## No. 1167. Domestic Fish and Shellfish Catch and Value, by Species: 1985 to 1993

SPECIES	QUANTITY (1,000 lb.)				VALUE (\$1,000)		
	1988-92 5-year average	1985	1990	1993	1985	1990	1993
Total . . . . .	(X)	6,257,642	9,403,571	10,466,895	2,326,237	3,521,995	3,471,460
Fish, total <sup>1</sup> . . . . .	(X)	5,214,363	8,091,068	8,999,142	1,193,427	1,900,097	1,884,121
Cod: Atlantic . . . . .	80,859	82,823	95,881	50,503	35,140	61,329	44,956
Pacific . . . . .	453,996	120,275	526,396	482,799	18,556	91,384	116,172
Flounder . . . . .	347,282	195,718	254,519	599,180	129,121	112,921	135,598
Herring, sea; Atlantic . . . . .	104,642	57,133	113,095	109,645	2,968	5,746	6,511
Herring, sea; Pacific . . . . .	128,219	142,074	108,120	106,572	47,025	32,178	18,711
Menhaden . . . . .	1,931,671	2,739,401	1,962,160	1,983,319	100,680	93,896	103,258
Pollock, Alaska . . . . .	2,506,943	92,833	3,108,031	3,257,990	5,409	268,344	358,378
Salmon . . . . .	724,855	726,946	733,146	888,134	439,795	612,367	423,530
Shellfish, total <sup>1</sup> . . . . .	(X)	1,043,279	1,312,503	1,467,753	1,132,810	1,621,898	1,587,339
Clams . . . . .	137,159	150,551	139,198	147,752	128,349	130,194	138,030
Crabs . . . . .	537,548	337,632	499,416	604,437	203,044	483,837	510,494
Lobsters: American . . . . .	56,353	46,152	61,017	56,513	114,895	154,677	151,746
Oysters . . . . .	31,805	44,173	29,193	33,575	70,053	93,718	86,698
Scallops: Calico . . . . .	19,583	12,513	1,135	2 <sup>1</sup> 2,524	1,281		
Sea . . . . .	35,412	15,829	39,917	18,116	74,562	153,696	105,603
Shrimp . . . . .	337,347	333,691	346,494	292,887	472,850	491,433	412,896
Squid: Atlantic . . . . .	65,250	7,157	59,809	90,809	7,256	21,178	38,323
Pacific . . . . .	55,219	22,276	36,082	71,550	4,047	2,636	8,079

X Not applicable. <sup>1</sup> Includes other types of fish and shellfish, not shown separately.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual.

## No. 1168. Disposition of U.S. Domestic Catch: 1970 to 1993

DISPOSITION	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total . . . . .	4,917	4,877	6,482	6,258	6,031	6,896	7,192	8,463	9,404	9,484	9,637	10,467
Fresh and frozen . . . . .	1,595	1,744	2,621	2,242	2,487	3,157	3,813	5,585	6,501	6,541	7,288	7,744
Canned . . . . .	1,150	907	1,161	1,232	1,134	1,009	1,017	798	751	674	543	649
Cured . . . . .	71	55	96	70	60	89	86	128	126	119	100	115
Reduced to meal, oil, etc. . . . .	2,101	2,171	2,604	2,714	2,350	2,641	2,276	1,952	2,026	2,150	1,696	1,959

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fishery Statistics of the United States*, annual; and *Fisheries of the United States*, annual.

**No. 1169. U.S. Private Aquaculture—Trout and Catfish Production and Value:  
1988 to 1994**

[Periods are from Sept. 1 of the previous year to Aug. 31 of stated year. Data are for foodsize fish, those over 12 inches long]

ITEM	Unit	1988	1989	1990	1991	1992	1993	1994
<b>TROUT</b>								
Number sold . . . . .	Mil. . . . .	70.5	67.4	67.8	67.7	64.5	60.9	58.3
Total weight . . . . .	Mil. lb . . . . .	56.0	55.5	56.8	58.9	55.2	54.6	52.1
Total value of sales . . . . .	Mil. dol. . . . .	57.9	60.0	64.6	58.3	51.0	54.3	52.7
Average price received . . . . .	\$/lb. . . . .	1.03	1.08	1.14	0.99	0.92	0.99	1.01
Average weight . . . . .	Lb . . . . .	0.8	0.8	0.8	0.9	0.9	0.9	0.9
<b>CATFISH</b>								
Fish sold to processors . . . . .	Mil. lb . . . . .	295.1	341.9	360.4	390.9	457.4	459.0	(NA)
Avg. price paid by processors . . . . .	Cents/lb. . . . .	76.4	71.7	75.8	63.1	59.8	71.0	(NA)
Value . . . . .	Mil. dol. . . . .	225.5	245.1	273.2	246.7	273.5	325.9	(NA)
Processor sales . . . . .	Mil. lb . . . . .	149.6	176.3	183.1	199.8	231.3	233.5	(NA)
Avg. price received by processors . . . . .	Cents/lb. . . . .	220.8	211.2	224.0	208.6	200.3	218.7	(NA)
Value . . . . .	Mil. dol. . . . .	330.3	372.3	410.1	416.8	463.3	510.7	(NA)
Inventory (Jan. 1) . . . . .	Mil. lb . . . . .	5.3	8.8	8.1	9.4	9.6	11.6	9.5

NA Not available.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, USDA.

**No. 1170. Supply of Selected Fishery Items: 1980 to 1993**

[In millions of pounds. Totals available for U.S. consumption are supply minus exports plus imports. Round weight is the complete or full weight as caught. Data are preliminary]

ITEM	Unit	1980	1984	1985	1987	1988	1989	1990	1991	1992	1993
Tuna, canned . . . . .	Canned weight . . . . .	666	777	759	866	843	1,028	856	933	922	835
Shrimp . . . . .	Heads-off weight . . . . .	425	584	633	773	767	743	734	744	820	840
Clams . . . . .	Meat weight . . . . .	102	144	164	151	145	150	152	144	155	156
Salmon, canned . . . . .	Canned weight . . . . .	126	150	113	76	59	159	148	131	131	114
American lobster . . . . .	Round weight . . . . .	69	100	108	116	121	85	95	107	95	92
Spiny lobster . . . . .	Round weight . . . . .	127	153	154	151	139	89	89	85	81	76
Scallops . . . . .	Meat weight . . . . .	51	87	72	79	74	79	74	62	69	66
Sardines, canned . . . . .	Canned weight . . . . .	69	58	76	77	63	61	61	52	41	41
Oysters . . . . .	Meat weight . . . . .	71	84	90	92	78	66	56	47	50	48
Crab meat, canned . . . . .	Canned weight . . . . .	9	7	8	8	8	8	9	11	9	9
Snow crab . . . . .	Round weight . . . . .	54	23	45	29	30	58	37	60	88	66
King crab . . . . .	Round weight . . . . .	133	13	11	14	10	18	19	20	15	8

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual.

**No. 1171. Canned, Fresh, and Frozen Fishery Products: 1980 to 1993**

[Fresh fishery products exclude Alaska and Hawaii. Canned fishery products data are for natural pack only. See also *Historical Statistics, Colonial Times to 1970*, series L 338-357 (production data in cases) and L 358]

PRODUCT	PRODUCTION (mil. lb.)						VALUE (mil. dol.)					
	1980	1985	1990	1991	1992	1993	1980	1985	1990	1991	1992	1993
<b>Canned, 1 . . . . .</b>	<b>1,516</b>	<b>1,161</b>	<b>1,178</b>	<b>1,386</b>	<b>1,343</b>	<b>1,615</b>	<b>1,928</b>	<b>1,360</b>	<b>1,562</b>	<b>1,644</b>	<b>1,577</b>	<b>1,626</b>
Tuna . . . . .	602	545	581	593	609	619	1,144	821	902	877	888	904
Salmon . . . . .	200	159	196	196	152	199	376	228	366	413	293	307
Clam products . . . . .	77	117	110	129	126	116	66	109	76	84	88	90
Mackerel <sup>2</sup> . . . . .	38	15	23	9	5	(NA)	12	7	11	3	2	(NA)
Sardines, Maine . . . . .	20	20	13	14	17	14	32	38	17	19	25	25
Shrimp . . . . .	16	4	1	1	1	1	80	19	3	4	4	4
Crabs . . . . .	5	1	1	(Z)	(Z)	(Z)	19	2	4	(Z)	1	1
Oysters <sup>3</sup> . . . . .	(Z)	2	1	1	(NA)	(Z)	(Z)	2	1	2	(NA)	(Z)
<b>Fish fillets and steaks<sup>4</sup> . . .</b>	<b>202</b>	<b>246</b>	<b>441</b>	<b>473</b>	<b>449</b>	<b>409</b>	<b>261</b>	<b>440</b>	<b>843</b>	<b>1,021</b>	<b>912</b>	<b>829</b>
Cod . . . . .	31	57	65	71	65	54	43	89	132	180	158	131
Flounder . . . . .	49	69	54	48	46	35	87	157	154	147	120	100
Haddock . . . . .	17	8	7	8	5	4	29	19	24	30	19	17
Ocean perch, Atlantic . . . . .	7	2	1	1	1	1	9	3	1	1	3	2
Rockfish . . . . .	14	18	33	22	19	18	13	25	53	36	30	28
Pollock, Atlantic . . . . .	9	15	12	8	9	8	9	17	21	18	19	18
Pollock, Alaska . . . . .	(NA)	11	164	152	165	154	(NA)	24	174	206	205	179
Other . . . . .	74	66	105	163	139	135	71	106	284	403	358	354

NA Not available. Z Less than 500,000 pounds or \$500,000. <sup>1</sup> Includes other products, not shown separately. <sup>2</sup> Includes Jack and a small amount of Pacific mackerel. <sup>3</sup> Includes oyster specialties. <sup>4</sup> Fresh and frozen.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual.

**No. 1172. Summary of Mineral Operations: 1963 to 1992**

[Represents mineral operations only. Beginning 1967, excludes single unit establishments without paid employees.  
See also *Historical Statistics, Colonial Times to 1970*, series M 1-11]

ITEM	Unit	1963	1967	1972	1977	1982	1987	1992
Establishments . . . . .	Number .	38,651	28,579	25,269	31,359	42,241	33,617	30,828
With 20 or more employees . . . . .	Number .	5,499	5,682	5,312	6,632	(NA)	6,299	5,581
Including all operations in manufactures . . . . .	Number .	40,532	29,688	26,178	31,967	42,585	34,041	(NA)
Excluding oil and gas extraction . . . . .	Number .	19,290	13,330	11,680	13,520	12,267	10,707	9,951
Employees, total . . . . .	1,000 .	616	567	595	799	1,114	698	637
Production workers . . . . .	1,000 .	482	433	443	593	762	451	414
All other . . . . .	1,000 .	134	134	152	206	352	247	223
Worker-hours, production workers . . . . .	Million .	973	892	909	1,183	1,578	942	873
Worker-hours per production workers . . . . .	1,000 .	2.0	2.1	2.1	2.0	2.1	2.1	2.1
Payroll, total . . . . .	Mil. dol.	3,743	4,187	6,226	13,167	28,637	21,739	24,303
Wages, production workers . . . . .	Mil. dol.	2,680	2,888	4,250	9,082	18,030	12,443	13,874
Salaries, all other employees . . . . .	Mil. dol.	1,063	1,299	1,976	4,085	10,607	9,296	10,429
Cost of supplies, etc. . . . .	Mil. dol.	8,974	10,576	14,884	46,079	109,697	62,423	64,602
Value added in mining . . . . .	Mil. dol.	15,910	19,330	26,471	68,013	188,056	110,959	113,780
Metal mining . . . . .	Mil. dol.	1,418	1,557	2,382	3,504	3,215	4,610	7,180
Coal mining . . . . .	Mil. dol.	1,727	2,091	3,754	11,266	18,631	17,068	17,283
Oil and gas extraction . . . . .	Mil. dol.	11,020	13,394	17,612	48,587	159,937	80,049	79,700
Nonmetallic minerals mining . . . . .	Mil. dol.	1,745	2,288	2,723	4,656	6,273	9,233	9,619
Value of shipments and receipts . . . . .	Mil. dol.	18,804	22,784	36,319	96,375	250,000	157,964	162,339
Capital expenditures . . . . .	Mil. dol.	3,264	4,058	5,036	17,718	47,753	15,418	16,043

NA Not available. <sup>1</sup> See footnote 4, table 1176. <sup>2</sup> Includes purchased machinery installed. <sup>3</sup> See footnote 6, table 1176.

Source: U.S. Bureau of the Census, *Census of Mineral Industries*, 1972, 1977, 1982, 1987, and 1992.

**No. 1173. Gross Domestic Product (GDP) in Mining: 1980 to 1992**

[In millions of dollars, except percent. For definition of gross national product, see text, section 14. For 1947-86, based on 1972 Standard Industrial Classification (SIC); for 1987, estimates are shown first based on the 1972 SIC and then on the 1987 SIC. Estimates thereafter based on 1987 SIC]

MINING INDUSTRY	1980	1985	1986	1987	1988	1989	1990	1991	1992
<b>Current dollars, total . . . . .</b>	<b>112.6</b>	<b>130.6</b>	<b>82.7</b>	<b>83.0</b>	<b>87.9</b>	<b>84.2</b>	<b>103.1</b>	<b>92.0</b>	<b>85.2</b>
Metal mining . . . . .	4.4	2.5	2.5	2.6	4.8	5.2	6.2	6.3	6.3
Coal mining . . . . .	13.6	13.8	14.0	12.5	12.5	12.9	12.7	12.4	13.1
Oil and gas extraction . . . . .	89.1	108.4	59.5	60.8	63.2	58.8	76.9	66.1	58.5
Nonmetallic minerals, exc. fuels . . . . .	5.5	5.9	6.7	7.2	7.3	7.4	7.2	7.1	7.3
<b>Constant (1987) dollars, total . . . . .</b>	<b>79.9</b>	<b>83.3</b>	<b>83.0</b>	<b>83.0</b>	<b>94.2</b>	<b>83.3</b>	<b>91.8</b>	<b>92.3</b>	<b>89.0</b>
Metal mining . . . . .	1.6	2.5	2.9	2.6	4.3	5.0	6.6	7.7	8.0
Coal mining . . . . .	10.1	11.3	13.0	12.5	13.8	14.8	15.3	15.5	16.7
Oil and gas extraction . . . . .	61.8	63.2	60.2	60.8	69.0	56.2	62.9	62.2	57.2
Nonmetallic minerals, exc. fuels . . . . .	6.4	6.3	6.9	7.2	7.1	7.3	7.0	6.9	7.1

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, October 1994.

**No. 1174. Mining and Primary Metal Production Indexes: 1970 to 1994**

[1987=100. See also *Historical Statistics, Colonial Times to 1970*, series M 68-71]

INDUSTRY GROUP	1970	1980	1985	1986	1988	1989	1990	1991	1992	1993	1994
<b>Mining . . . . .</b>	<b>100.4</b>	<b>110.0</b>	<b>109.0</b>	<b>101.0</b>	<b>101.3</b>	<b>100.0</b>	<b>102.0</b>	<b>100.2</b>	<b>98.9</b>	<b>98.2</b>	<b>99.8</b>
Coal . . . . .	67.2	90.2	96.3	97.1	103.1	107.0	112.2	108.2	108.2	102.9	112.0
Anthracite . . . . .	274.1	169.6	132.8	120.8	115.6	96.3	103.2	72.7	66.1	(NA)	(NA)
Bituminous . . . . .	66.0	89.7	96.1	96.9	105.0	105.8	113.3	109.4	105.8	(NA)	(NA)
Oil and gas extraction . . . . .	104.8	112.1	111.9	102.0	99.7	96.0	96.8	95.9	93.2	93.0	92.9
Metal mining . . . . .	129.5	108.8	91.3	95.2	120.3	140.5	153.1	153.7	163.8	162.4	159.4
Iron ore . . . . .	194.4	149.4	104.9	84.4	119.4	122.5	117.9	118.3	116.3	115.7	122.5
Nonferrous ores . . . . .	111.5	95.0	86.4	99.1	120.5	144.1	160.2	160.8	173.3	171.7	166.4
Copper ore . . . . .	123.2	93.1	86.9	91.2	113.7	120.0	126.8	131.1	141.9	143.3	145.4
Primary metals, manufacturing . . . . .	<b>115.2</b>	<b>110.8</b>	<b>101.8</b>	<b>93.7</b>	<b>108.7</b>	<b>107.2</b>	<b>106.5</b>	<b>98.7</b>	<b>101.9</b>	<b>106.9</b>	<b>114.5</b>
Nonferrous metals . . . . .	77.1	92.5	98.5	97.3	103.1	101.7	99.5	96.1	97.6	101.0	109.3
Copper . . . . .	135.2	94.7	99.8	99.1	100.1	98.9	102.2	110.0	124.8	135.3	137.5
Aluminum . . . . .	107.8	138.7	104.7	90.9	117.6	120.5	121.0	123.2	120.5	110.5	98.6
Iron and steel . . . . .	148.2	126.0	104.5	90.8	112.7	111.2	111.5	100.5	105.1	111.4	118.3

NA Not available.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

## No. 1175. Mineral Production, 1990 to 1994,

[Data represent production as measured by mine shipments, mine sales, or marketable production,

	MINERAL	Unit	PRODUCTION QUANTITY				
			1990	1992	1993	1994	
1	Total mineral production . . . . .	(X)	(X)	(X)	(X)	(X)	
2	<b>Mineral fuels.</b> . . . . .	(X)	(X)	(X)	(X)	(X)	
3	Coal: Bituminous and lignite. . . . .	Mil. sh. tons . . . . .	1,026	998	945	(NA)	
4	Pennsylvania anthracite . . . . .	Mil. sh. tons . . . . .	4	3	4	(NA)	
5	Natural gas (wet) . . . . .	Tril. cu. ft. . . . .	18.6	18.7	19.3	19.7	
6	Petroleum (crude) . . . . .	Mil. bbl. . . . .	2,685	2,625	2,499	(NA)	
7	Uranium <sup>2</sup> . . . . .	Mil. lb. . . . .	8.9	5.6	3.1	(NA)	
8	<b>Industrial minerals</b> . . . . .	(X)	(X)	(X)	(X)	(X)	
9	Abrasive stone <sup>3</sup> . . . . .	Metric tons . . . . .	3,709	1,732	(Z)	(NA)	
10	Asbestos (sales) . . . . .	1,000 metric tons . . . . .	(D)	15.6	13.0	10.0	
11	Asphalt and related bitumens (native) <sup>4</sup> . . . . .	Mil. metric tons . . . . .	25	25	(NA)	(NA)	
12	Barite, primary, sold/used by producers . . . . .	1,000 metric tons . . . . .	430	326	315	340	
13	Boron minerals, sold or used by producers . . . . .	1,000 metric tons . . . . .	1,094	1,009	1,055	560	
14	Bromine, sold or used by producers . . . . .	1,000 metric tons . . . . .	177	171	177	197	
15	Calcium chloride (natural) . . . . .	1,000 sh. tons . . . . .	(D)	(D)	-	-	
16	Carbon dioxide, natural (estimate) . . . . .	Mil. cu. ft. . . . .	75.6	72.8	78.9	83.6	
17	Cement: Portland . . . . .	Mil. sh. tons . . . . .	3.3	2.9	3.0	4.0	
18	Masonry . . . . .	(X)	1,000 metric tons . . . . .	42,904	40,237	41,074	42,300
19	Clays . . . . .	Mil. metric tons . . . . .	631	595	599	596	
20	Diatomite <sup>5</sup> . . . . .	1,000 metric tons . . . . .	630	726	770	740	
21	Feldspar <sup>6</sup> . . . . .	1,000 metric tons . . . . .	64	51	60	50	
22	Fluorospar, finished shipments . . . . .	1,000 metric tons . . . . .	47.0	54.1	44.0	46.5	
23	Garnet (abrasive) . . . . .	(X)	1,000 metric tons . . . . .	(NA)	(NA)	(NA)	(NA)
24	Gemstones (estimate) . . . . .	Mil. sh. tons . . . . .	16.4	16.3	17.4	19.1	
25	Gypsum, crude . . . . .	Mil. cu. meters . . . . .	87	94	96	96	
26	Helium <sup>7</sup> . . . . .	Mil. sh. tons . . . . .	17.5	16.1	18.7	19.1	
27	Lime, sold or used by producers . . . . .	1,000 metric tons . . . . .	109	85	88	96	
28	Mica, scrap & flake, sold/used by producers . . . . .	1,000 sh. tons . . . . .	795	719	675	750	
29	Peat, sales by producers . . . . .	1,000 metric tons . . . . .	576	541	569	610	
30	Perlite, processed, sold or used . . . . .	Mil. metric tons . . . . .	46.3	47.0	35.0	41.0	
31	Phosphate rock (marketable) . . . . .	1,000 metric tons . . . . .	1,713	1,705	1,506	1,425	
32	Potash (K <sub>2</sub> O equivalent) sales . . . . .	1,000 metric tons . . . . .	443	481	469	485	
33	Pumice & pumicite, producer sales . . . . .	1,000 metric tons . . . . .	(D)	(D)	(D)	(D)	
34	Pyrites . . . . .	Mil. metric tons . . . . .	36.9	34.8	38.7	38.6	
35	Salt, common, sold/used by producers . . . . .	Mil. metric tons . . . . .	852	858	895	949	
36	Sand & gravel, sold/used by producer . . . . .	Mil. metric tons . . . . .	829	834	869	922	
37	Construction . . . . .	Mil. metric tons . . . . .	26	25	26	27	
38	Industrial . . . . .	1,000 metric tons . . . . .	9,156	9,379	8,959	9,100	
39	Sodium carbonate (natural) (soda ash) . . . . .	1,000 metric tons . . . . .	349	337	322	300	
40	Sodium sulfate (natural) . . . . .	Mil. metric tons . . . . .	1,110	1,055	1,167	1,196	
41	Stone <sup>8</sup> . . . . .	Mil. metric tons . . . . .	1,109	1,054	1,116	1,195	
42	Crushed and broken . . . . .	1,000 metric tons . . . . .	1,118	1,061	1,235	1,070	
43	Dimension . . . . .	1,000 metric tons . . . . .	3,676	2,600	1,904	2,700	
44	Sulfur: Frasch mines (shipments) . . . . .	1,000 metric tons . . . . .	1,267	997	(D)	972	
45	Talc, and pyrophyllite, crude <sup>9</sup> . . . . .	1,000 metric tons . . . . .	94	85	94	(NA)	
46	Tripoli . . . . .	1,000 metric tons . . . . .	209	190	190	190	
47	Vermiculite concentrate . . . . .	1,000 metric tons . . . . .	(X)	(X)	(X)	(X)	
48	Industrial minerals, undistributed . . . . .	(X)	(X)	(X)	(X)	(X)	
49	<b>Metals</b> . . . . .	Metric tons . . . . .	(D)	(D)	(D)	(D)	
50	Antimony ore and concentrate <sup>10</sup> . . . . .	Metric tons . . . . .	(D)	(D)	(D)	(D)	
51	Bauxite (dried) . . . . .	1,000 metric tons . . . . .	1,590	1,760	1,800	1,840	
52	Copper <sup>11</sup> . . . . .	Metric tons . . . . .	294	330	331	330	
53	Gold <sup>2</sup> . . . . .	Metric tons . . . . .	57.0	55.6	56.3	57.0	
54	Iron ore, <sup>14</sup> <sup>15</sup> . . . . .	1,000 metric tons . . . . .	497	407	362	365	
55	Lead <sup>2</sup> . . . . .	1,000 metric tons . . . . .	1,000	139	137	132	
56	Magnesium metal <sup>16</sup> . . . . .	1,000 metric tons . . . . .	(D)	(D)	(D)	(D)	
57	Manganiferous ore <sup>15</sup> <sup>17</sup> . . . . .	1,000 metric tons . . . . .	562	64	(D)	(D)	
58	Mercury <sup>18</sup> . . . . .	Metric tons . . . . .	62	50	37	40	
59	Molybdenum <sup>19</sup> . . . . .	1,000 metric tons . . . . .	0.3	6.7	2.5	(NA)	
60	Nickel <sup>20</sup> . . . . .	Kilograms . . . . .	5,930	6,470	6,500	6,500	
61	Palladium metal . . . . .	Kilograms . . . . .	1,810	1,840	1,800	1,800	
62	Platinum metal . . . . .	Metric tons . . . . .	2,121	1,804	1,645	1,400	
63	Silver <sup>2</sup> . . . . .	1,000 metric tons . . . . .	(D)	(D)	(D)	(D)	
64	Titanium concentrate: Ilmenite <sup>15</sup> . . . . .	1,000 metric tons . . . . .	(D)	(D)	(D)	(D)	
65	Tungsten ore and concentrate <sup>20</sup> . . . . .	Metric tons . . . . .	(D)	(D)	(D)	(D)	
66	Vanadium <sup>21</sup> . . . . .	Metric tons . . . . .	(D)	(D)	(D)	(D)	
67	Zinc mine production <sup>2</sup> . . . . .	1,000 metric tons . . . . .	515	523	488	540	
68	Metals, undistributed . . . . .	(X)	(X)	(X)	(X)	(X)	

- Represents zero. D Withheld to avoid disclosing individual company data. NA Not available. X Not applicable.

<sup>2</sup> Less than half the unit of measure. <sup>14</sup> 2 gal. bbl. <sup>2</sup> Recoverable content of ores, etc. <sup>3</sup> Includes grindstones, oilstones, whetstones, and deburring media. Excludes grinding pebbles, and tubemill liners. <sup>4</sup> Contains bituminous limestone and sandstone, and gilsonite. Includes road oil, 1989-92. Value excluded from industrial minerals, 1989-92. <sup>5</sup> Value included in "Industrial minerals, undistributed." <sup>6</sup> Includes aplite, 1992-93. <sup>7</sup> 1980, crude and refined; thereafter, refined only. <sup>8</sup> Excludes abrasive stone, bituminous limestone and sandstone, and ground soapstone, all included elsewhere in table; 1993 excludes dimension stone. State ranks based on publishable data. Includes calcareous marl and slate.

## and Principal Producing States, 1994

Value in millions of dollars. See *Historical Statistics, Colonial Times to 1970*, series M 13-37 for selected values

PRODUCTION VALUE (mil. dol.)				Principal producing States ranked by quantity, 1993
1990	1992	1993	1994	
141,741	(NA)	(NA)	(NA)	(X) 1
108,422	(NA)	(NA)	(NA)	(X) 2
22,274	(NA)	(NA)	(NA)	(NA) 3
133	(NA)	(NA)	(NA)	(NA) 4
31,658	32,571	(NA)	(NA)	(NA) 5
53,772	(NA)	(NA)	(NA)	(NA) 6
140	(NA)	(Z)	(NA)	(NA) 7
21,022	20,496	(NA)	(NA)	(NA) 8
(Z) <sup>9</sup>	(Z)	(Z)	(NA)	(NA) 9
3,480	2,794	(NA)	5	CA, VT 10
16	20	19	13	(NA) 11
436	339	373	370	NV, GA, MO 12
173	170	123	157	CA 13
(^)	(^)	(X)	(X)	AR, MI 14
-	-	(X)	(X)	(NA) 15
3,683	3,500	3,916	4,155	CA, TX, PA 17
225	195	229	264	FL, IN, TX 18
1,620	1,482	1,488	1,597	GA, AL, TX 19
138	141	150	162	CA, NV, OR 20
28	29	31	30	NC, VA, OK 21
(^)	(^)	(^)	(^)	IL, VT 22
7	5	4	5	ID, NY 23
53	66	58	52	(NA) 24
100	101	107	118	OK, IA, TX 25
113	187	189	191	KS, WY 26
902	950	977	996	OH, MO, AL 27
6	5	4	5	NC, GA, NM 28
19	17	17	18	FL, MI, MN 29
17	16	17	19	NM, AZ, CA 30
1,075	1,058	759	902	FL, NC, ID 31
303	334	286	274	NM 32
11	15	12	14	OR, NM, CA 33
(^)	(^)	(^)	(^)	(NA) 34
827	803	894	906	LA, TX, NY 35
3,686	3,766	3,988	4,293	(NA) 36
3,249	3,341	3,534	3,835	CA, MI, OH 37
436	425	454	458	IL, NJ, CA 38
836	836	734	650	WY, CA 39
34	26	(D)	25	CA, UT 40
5,822	5,775	5,987	6,731	(NA) 41
5,591	5,594	5,770	6,731	TX, PA, FL 42
231	181	217	(^)	GA, WI, MA 43
335	159	101	135	LA, TX 44
31	31	(D)	32	MT, TX, VT 45
3	3	4	(NA)	(NA) 46
19	15	15	(D)	SC, VA 47
504	478	212	136	(NA) 48
12,442	11,537	11,876	(NA)	(NA) 49
(^)	(^)	(^)	(^)	ID 50
(^)	(^)	(^)	(^)	AL, GA 51
4,311	4,179	3,636	4,382	AZ, UT, NM 52
3,650	3,662	3,841	3,843	NV, CA, UT 53
1,741	1,732	1,643	1,700	MN, MI 54
491	308	249	286	MO, AL, ID 55
433	360	377	(D)	(NA) 56
(^)	(^)	(^)	(^)	SC 57
(^)	0.4	(D)	(D)	NV 58
348	209	165	215	AZ, CO, TX 59
(NA)	(^)	(^)	(NA)	(NA) 60
22	18	25	25	MT 61
27	21	21	21	MT 62
329	229	227	192	NV, AZ, ID 63
(^)	(^)	(^)	(^)	FL, CA 64
(^)	(^)	(^)	(^)	CA 65
(^)	(^)	(^)	(^)	ID 66
847	674	497	549	AL, TN, NY 67
242	156	306	113	(NA) 68

<sup>9</sup> For 1991-92, production quantity, talc only; 1989-92 <sup>10</sup> Comprises value of items that cannot be disclosed. <sup>11</sup> Antimony content.<sup>12</sup> Included with "Metals, undistributed." <sup>13</sup> Dried equivalent. <sup>14</sup> Represents shipments; includes byproduct ores.<sup>15</sup> Gross weight. <sup>16</sup> For 1980-85, magnesium chloride for magnesium metal included in "Metals undistributed," canvass for magnesium chloride for magnesium metal discontinued in 1986. <sup>17</sup> 5 to 35 percent manganiferous ore. <sup>18</sup> 1986-89, mercury produced as the primary product only; thereafter, mercury produced as a byproduct of gold ores only. <sup>19</sup> Content of concentrate. <sup>20</sup> Content of ore and concentrate. <sup>21</sup> Tungsten content.

## No. 1176. Mineral Industries—Summary: 1987 and 1992

["N.e.c." means not elsewhere classified. See also *Historical Statistics, Colonial Times to 1970*, series M1-12]

MINERAL INDUSTRY	1987					1992					Value added in mining <sup>4</sup> (mil. dol.)	Value of shipments and receipts <sup>5</sup> (mil. dol.)	Capital expenditures (mil. dol.)				
	Establishments, total	All employees		Production workers <sup>3</sup>		Value added in mining <sup>4</sup> (mil. dol.)	Value of shipments and receipts <sup>5</sup> (mil. dol.)	Establishments		All employees		Production workers <sup>3</sup>					
		Number <sup>1</sup> (1,000)	Payroll <sup>2</sup> (mil. dol.)	Number <sup>1</sup> (1,000)	Wages (mil. dol.)			Total	With 20 or more employees	Number <sup>1</sup> (1,000)	Payroll <sup>2</sup> (mil. dol.)	Number <sup>1</sup> (1,000)	Hours <sup>6</sup> (mil.)	Wages (mil. dol.)			
All industries . . . . .	33,617	698	21,739	451	12,443	110,959	157,964	30,828	5,581	637	24,303	414	873	13,874	113,780	162,339	16,043
Metal mining . . . . .	1,027	44	1,354	34	952	4,610	6,852	1,063	273	53	2,113	42	89	1,542	7,180	10,327	1,574
Iron ores . . . . .	51	7	224	6	166	768	1,362	40	18	9	348	7	15	274	985	1,715	53
Copper ores . . . . .	61	14	405	11	283	1,301	2,150	62	35	15	550	12	25	405	1,730	2,935	516
Lead and zinc ores . . . . .	39	2	58	1	40	176	268	44	24	3	113	2	5	86	287	472	22
Gold and silver ores . . . . .	372	13	423	10	305	1,814	2,261	428	116	19	827	16	33	601	3,641	4,453	(D)
Ferroalloy ores, except vanadium .	58	1	46	1	24	61	110	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Metal mining services . . . . .	268	3	81	2	60	176	251	303	38	3	120	3	6	92	263	357	(D)
Miscellaneous metal ores . . . . .	236	5	162	4	99	374	559	186	42	4	155	3	5	84	274	396	58
Coal mining . . . . .	3,905	163	5,567	129	4,251	17,068	25,955	3,086	1,239	134	5,438	108	227	4,197	17,283	26,984	1,899
Bituminous coal and lignite mining .	3,507	158	5,410	124	4,125	16,679	25,347	2,642	1,155	128	5,247	103	216	4,051	16,792	26,269	1,869
Anthracite mining . . . . .	107	2	41	2	32	109	206	76	19	2	47	1	2	30	97	161	4
Coal mining services . . . . .	291	4	116	3	94	280	402	368	65	5	145	4	9	116	394	554	26
Oil and gas extraction . . . . .	22,910	378	11,961	206	5,283	80,049	112,363	20,877	2,686	344	13,526	187	391	5,992	79,700	111,518	11,423
Crude petroleum and natural gas .	10,203	199	7,510	69	2,154	67,955	76,518	9,388	1,017	174	8,409	64	131	2,601	66,297	72,298	9,850
Natural gas liquids . . . . .	714	13	433	10	320	4,025	24,750	591	197	13	532	9	18	360	4,246	27,206	619
Oil and gas field services . . . . .	11,993	167	4,018	127	2,809	8,069	11,095	10,898	1,472	157	4,585	114	242	3,031	9,156	12,014	955
Drilling oil and gas wells . . . . .	2,591	55	1,318	46	1,012	2,549	3,626	2,129	450	48	1,371	38	81	982	2,516	3,584	289
Oil, gas exploration services . . . . .	1,917	17	452	13	311	771	1,096	1,489	85	14	462	8	19	238	742	980	182
Oil, gas field services, n.e.c . . . . .	7,485	95	2,248	69	1,486	4,748	6,373	7,280	937	96	2,753	68	143	1,811	5,899	7,451	484
Nonmetallic mining . . . . .	5,775	113	2,858	83	1,956	9,233	12,795	5,802	1,383	106	3,226	77	166	2,144	9,619	13,510	1,147
Dimension stone <sup>7</sup> . . . . .	149	1	25	1	18	65	86	171	17	1	31	1	2	22	79	101	5
Crushed and broken stone <sup>8</sup> . . . . .	2,002	44	1,082	33	754	3,465	4,768	2,142	664	42	1,222	31	68	840	3,670	5,071	430
Sand and gravel <sup>8</sup> . . . . .	2,750	33	772	24	551	2,320	3,139	2,678	440	30	889	21	47	594	2,321	3,160	262
Clay and related minerals <sup>8</sup> . . . . .	197	10	272	7	165	827	1,249	200	100	10	320	8	17	211	935	1,400	87
Chemical and fertilizer minerals . . . . .	148	16	501	12	336	1,999	2,772	156	76	15	564	10	22	347	2,071	3,017	308
Nonmetallic minerals, services . . . . .	177	2	45	1	32	119	165	175	14	2	47	1	3	35	128	170	14
Miscellaneous <sup>8</sup> . . . . .	352	7	162	5	101	438	616	280	72	5	154	4	8	96	415	590	42

D Withheld to avoid disclosure. NA Not available. <sup>1</sup> Excludes proprietors and firm members of unincorporated concerns. <sup>2</sup> Gross earnings paid to all employees on payroll. <sup>3</sup> Represents employees up through the working foreman level engaged in manual work. Includes development and exploration workers. <sup>4</sup> Computed by subtracting cost of supplies, minerals received for preparation, purchased fuel and electric energy, contract work, and purchased machinery from the value of shipments and capital expenditures. <sup>5</sup> Represents value of shipments of primary and secondary products of the industry and amount received for services performed for other establishments on a contract, fee, or other basis. <sup>6</sup> Excludes paid vacations, holidays, and sick leave; includes actual overtime hours (not straight-time equivalent). <sup>7</sup> Excludes data for dimension stone quarries operated in conjunction with dressing plants. <sup>8</sup> Excludes data for mining included in establishments classified in manufacturing industries.

Source: U.S. Bureau of the Census, *Census of Mineral Industries: 1987*, and *1992*, final industry series reports.

## No. 1177. Nonfuel Mineral Commodities—Summary: 1994

[Preliminary estimates. Average price in dollars per metric tons except as noted]

MINERAL	MINERAL DISPOSITION				Average price per unit (dollars)	Employment (number)
	Unit	Production	Exports	Net import reliance <sup>1</sup> (percent)		
Aluminum . . . . .	1,000 metric tons	5,000	1,300	31	7,300	2 <sup>0</sup> .65
Antimony (contained) . . . . .	Metric tons . . . . .	37,000	4,000	62	45,000	2 <sup>1</sup> .60
Arsenic . . . . .	Metric tons . . . . .	-	100	100	19,400	2 <sup>0</sup> .50 (NA)
Asbestos . . . . .	1,000 metric tons	10	21	95	28	4 <sup>5</sup> 31 (NA)
Barite . . . . .	1,000 metric tons	340	10	82	1,450	4 <sup>3</sup> 8 (NA)
Bauxite and alumina . . . . .	1,000 metric tons (D)	1,150	99	3,500	4 <sup>1</sup> 5-18	35
Beryllium (contained) . . . . .	Metric tons . . . . .	200	20	( <sup>2</sup> )	191	2 <sup>2</sup> 225
Bismuth (contained) . . . . .	Metric tons . . . . .	(D)	140	(D)	1,500	4 <sup>8</sup> 324
Boron (B <sub>2</sub> O <sub>3</sub> content) . . . . .	1,000 metric tons	560	550	( <sup>2</sup> )	362	900
Bromine (contained) . . . . .	1,000 metric tons	197	20	-	287	9 <sup>3</sup> 6.2
Cadmium (contained) . . . . .	Metric tons . . . . .	3,000	490	50	2,020	2 <sup>1</sup> 0.03
Cement . . . . .	1,000 short tons . . . . .	80,007	599	12	90,492	56.22
Chromium . . . . .	1,000 metric tons . . . . .	11 <sup>9</sup> 1	28	75	387	4 <sup>1</sup> 2 <sup>1</sup> 10 (NA)
Clays . . . . .	1,000 metric tons . . . . .	42,300	4,400	( <sup>2</sup> )	37,900	2 <sup>2</sup> 250 (NA)
Cobalt (contained) . . . . .	Metric tons . . . . .	11,600	1,300	79	7,800	2 <sup>1</sup> 2.60 (NA)
Columbium (contained) . . . . .	Metric tons . . . . .	-	160	100	3,700	2 <sup>1</sup> 0.8
Copper (Mine, contained) . . . . .	1,000 metric tons	2,380	680	14	2,800	13,500
Diamond (industrial) . . . . .	Million carats . . . . .	149.1	110	17	181	14 <sup>0</sup> .62 (NA)
Diatomite . . . . .	1,000 metric tons	596	104	( <sup>5</sup> )	494	4 <sup>2</sup> 72 (NA)
Feldspar . . . . .	1,000 metric tons	740	12	( <sup>5</sup> )	738	4 <sup>1</sup> 00 (NA)
Fluor spar . . . . .	1,000 metric tons	170	20	88	455	180 (NA)
Gallium (contained) . . . . .	Kilograms . . . . .	-	(NA)	(NA)	11,500	395 (NA)
Garnet (industrial) . . . . .	Metric tons . . . . .	46,500	10,000	( <sup>5</sup> )	50,400	100-2000 (NA)
Gemstones . . . . .	Million dollars . . . . .	66.3	1,550	98	3,536 (NA)	1,000
Germanium (contained) . . . . .	Kilograms . . . . .	310,000	(NA)	(NA)	125,000	15 <sup>1</sup> ,060 (NA)
Gold (contained) . . . . .	Metric tons . . . . .	330	140	( <sup>5</sup> )	310	16 <sup>3</sup> 89.00 (NA)
Graphite (crude) . . . . .	1,000 metric tons	19	100	40	40	4 <sup>1</sup> 7 <sup>1</sup> 603 (NA)
Gypsum (crude) . . . . .	1,000 short tons . . . . .	17,300	100	30	2,600	4 <sup>6</sup> .80 (NA)
Indium . . . . .	Metric tons . . . . .	-	(NA)	(NA)	140	19 <sup>1</sup> 35.00 (NA)
Iodine . . . . .	Metric tons . . . . .	2,000	1,000	58	4,800	2 <sup>7</sup> .13 (NA)
Iron ore (usable) . . . . .	Million metric tons	57.0	4.0	18	69.3	2 <sup>1</sup> 72.5-74.0 (NA)
Iron and steel scrap (metal) . . . . .	Million metric tons	76.4	8.3	( <sup>5</sup> )	69.6	4 <sup>2</sup> 2 <sup>1</sup> 25.00 (NA)
Iron and steel slag (metal) . . . . .	1,000 metric tons	19,000	4	1	19,000	6.70 (NA)
Lead (contained) . . . . .	1,000 metric tons	365	30	17	1,500	2 <sup>3</sup> 36.3 (NA)
Lime . . . . .	1,000 short tons . . . . .	17,300	80	( <sup>1</sup> )	17,400	4 <sup>5</sup> 7.50 (NA)
Magnesium compounds . . . . .	1,000 metric tons	380	50	37	600 (NA)	600
Magnesium metal . . . . .	1,000 metric tons	194	48	( <sup>5</sup> )	152	2 <sup>4</sup> 1.48-1.53 (NA)
Manganese (gross weight) . . . . .	1,000 metric tons	-	23	100	2 <sup>5</sup> 695 (NA)	2 <sup>2</sup> 4.20 (NA)
Mercury . . . . .	Metric tons . . . . .	27,400	400	(D)	1,550	2 <sup>8</sup> 180.00 (NA)
Mica, scrap and flake . . . . .	1,000 metric tons	96	6	14	111	4 <sup>5</sup> 1 (NA)
Molybdenum (contained) . . . . .	Metric tons . . . . .	40,000	30,000	( <sup>5</sup> )	18,000	2 <sup>9</sup> .70 (NA)
Nickel (contained) . . . . .	Metric tons . . . . .	-	7,570	66	131,000	306,089 (NA)
Nitrogen (fixed)-ammonia . . . . .	1,000 metric tons	13,050	200	18	16,000 (NA)	4 <sup>3</sup> 125 (NA)
Nonrenewable organics . . . . .	Million metric tons (NA)	(NA)	(NA)	(NA)	(NA)	2,500 (NA)
Peat . . . . .	1,000 short tons . . . . .	660	23	49	1,300 (NA)	42.60 (NA)
Perlite . . . . .	1,000 metric tons	610	24	8	660 (NA)	431.15 (NA)
Phosphate rock . . . . .	1,000 metric tons	41,000	3,400	2	42,000 (NA)	42.20 (NA)
Platinum-group metals . . . . .	Kilograms . . . . .	8,300	90,000	91	127,000 (NA)	324.00 (NA)
Potash (K <sub>2</sub> O equivalent) . . . . .	1,000 metric tons	1,425	400	74	5,390 (NA)	433,128 (NA)
Pumice and pumicite . . . . .	1,000 metric tons	485	18	24	637 (NA)	428.22 (NA)
Salt . . . . .	1,000 metric tons	39,500	700	19	47,400 (NA)	434,112.00 (NA)
Silicon (contained) . . . . .	1,000 metric tons	390	30	39	640 (NA)	3544.1 (NA)
Silver (contained) . . . . .	Metric tons . . . . .	1,400	1,600	(NA)	4,000 (NA)	16 <sup>5</sup> .30 (NA)
Sodium carbonate (soda ash) . . . . .	1,000 metric tons	9,100	2,900	( <sup>5</sup> )	6,314 (NA)	436,98.00 (NA)
Sodium sulfate . . . . .	1,000 metric tons	610	85	14	712 (NA)	37114.00 (NA)
Stone (crushed) . . . . .	Million short tons	1,195	5	-	1,198 (NA)	43845.00 (NA)
Sulfur (all forms) . . . . .	1,000 metric tons	11,300	850	16	13,450 (NA)	77,000 (NA)
Talc . . . . .	1,000 metric tons	972	165	( <sup>5</sup> )	944 (NA)	47-350 (NA)
Thallium (contained) . . . . .	Kilograms . . . . .	-	(NA)	100	800 (NA)	285 (NA)
Tin (contained) . . . . .	Metric tons . . . . .	11 <sup>1</sup> ,900	2,700	84	46,000 (NA)	2 <sup>4</sup> 2.46 (NA)
Titanium dioxide . . . . .	1,000 metric tons	1,250	344	( <sup>5</sup> )	1,110 (NA)	2 <sup>3</sup> 910.95 (NA)
Tungsten (contained) . . . . .	Metric tons . . . . .	(D)	-	94	74,000 (NA)	40 <sup>5</sup> (NA)
Vermiculite . . . . .	1,000 metric tons	190	5	12	215 (NA)	230 (NA)
Zinc (contained) . . . . .	1,000 metric tons	540	390	41	41 <sup>1</sup> ,350 (NA)	2346.4 (NA)
Zirconium (ZrO <sub>2</sub> ) content . . . . .	Metric tons . . . . .	(D)	18,587	(D)	(D) (D)	42 <sup>2</sup> 00 (NA)

<sup>1</sup> Represents or rounds to zero.Consumption. <sup>2</sup> Price per pound.Refinery production. <sup>3</sup> Price per metric ton.Secondary production. <sup>4</sup> Net exporter.Withheld to avoid disclosure. <sup>5</sup> Metal, vacuum-cast

ingot.

Estimated consumption.

Granulated pentahydrate borax in bulk, f.o.b. mine.

Estimated consumption.

Bromine. <sup>8</sup> Secondary production.

First reduction quality.

Zone refined.

Cents per kilogram, bulk, purified

Imports per carat.

Employment at calcining plants.

99.97% indium, per kilogram.

Pellets. Cents per long ton unit of iron.

Delivered, No. 1 Heavy Melting composite price.

Cents per pound.

Estimated manganese content.

46%-48% Mn metallurgical ore, per unit contained Mn, c.i.f. U.S. ports.

Secondary industrial production.

Price per 76-pound flask.

Dealer price of platinum. <sup>29</sup> Price per kilogram.

London Metal Exchange cash price.

F.o.b. gulf coast.

Price of rhodium.

Rhodium price was \$810 for 1994 and \$1,066 for 1993.

Ferrosilicon, 50% Si.

Quoted year-end price, dense, bulk, f.o.b. Green River, WY.

Quoted price, bulk, f.o.b. works, East, per short ton.

Elemental sulfur, f.o.b. mine and/or plant.

Rutile, list, year-end.

Price per unit W03 (7.93 kilograms of contained tungsten per unit).

All forms.

Price for imported zircon, f.o.b. U.S. east coast.

<sup>1</sup> Calculated as a percent of apparent consumption.<sup>2</sup> Refinery production.<sup>3</sup> Price per metric ton.<sup>4</sup> Net exporter.<sup>5</sup> Metal, vacuum-cast ingot.<sup>6</sup> Cents per kilogram, bulk, purified<sup>7</sup> Estimated consumption.<sup>8</sup> Secondary production.<sup>9</sup> Turkish, chromite price.<sup>10</sup> Zone refined.<sup>11</sup> First reduction quality.<sup>12</sup> Price of troy ounce.<sup>13</sup> Columbite price.<sup>14</sup> Value of imports per carat.<sup>15</sup> Employment at calcining plants.<sup>16</sup> Quoted year-end price, dense, bulk, f.o.b. Green River, WY.<sup>17</sup> Price of flake imports.<sup>18</sup> Includes employment at calcining plants.<sup>19</sup> Quoted year-end price, dense, bulk, f.o.b. Green River, WY.<sup>20</sup> O.i.f. value, crude, per kilogram.<sup>21</sup> Lake Superior pellets. Cents per long ton unit of iron.<sup>22</sup> Delivered, No. 1 Heavy Melting composite price.<sup>23</sup> Cents per pound.<sup>24</sup> Year-end price.<sup>25</sup> Estimated manganese content.<sup>26</sup> 46%-48% Mn metallurgical ore, per unit contained Mn, c.i.f. U.S. ports.<sup>27</sup> Secondary industrial production.<sup>28</sup> Dealer price of platinum. <sup>29</sup> Price per kilogram.<sup>30</sup> London Metal Exchange cash price.<sup>31</sup> F.o.b. gulf coast.<sup>32</sup> Price of rhodium.<sup>33</sup> Rhodium price was \$810 for 1994 and \$1,066 for 1993.<sup>34</sup> Price of K20, muriate.<sup>35</sup> Vacuum and open pan, bulk, pellets and packaged, f.o.b. mine and plant.<sup>36</sup> Quoted year-end price, dense, bulk, f.o.b. Green River, WY.<sup>37</sup> Quoted price, bulk, f.o.b. works, East, per short ton.<sup>38</sup> Elemental sulfur, f.o.b. mine and/or plant.<sup>39</sup> Rutile, list, year-end.<sup>40</sup> Price per unit W03 (7.93 kilograms of contained tungsten per unit).<sup>41</sup> All forms.<sup>42</sup> Price for imported zircon, f.o.b. U.S. east coast.

**No. 1178. Value of Domestic Nonfuel Mineral Production: 1980 to 1994**  
 [In millions of dollars]

AREA	1980	1990	1992	1993	1994	Principal minerals in order of value
<b>U.S. <sup>1</sup></b>	<b>25,140</b>	<b>33,452</b>	<b>32,012</b>	<b>1 31,912</b>	<b>1 34,209</b>	(X)
<b>Northeast . .</b>	<b>1,581</b>	<b>2,479</b>	<b>2,308</b>	<b>2,451</b>	<b>2,536</b>	(X)
N.E. . .	268	446	423	424	427	(X)
ME . . .	37	55	56	60	58	Sand and gravel (construction), cement (portland), and stone (crushed and broken).
NH . . .	25	36	42	37	40	Sand and gravel (construction), stone (crushed and broken), and stone dimension.
VT . . .	43	87 <sup>2</sup>	60 <sup>2</sup>	53 <sup>2</sup>	48	Stone (dimension), stone (crushed and broken), and sand and gravel (construction).
MA . . .	91	128	147	160	157	Stone (crushed and broken), sand and gravel (construction), and stone (dimension).
RI . . .	6	18	21 <sup>2</sup>	23 <sup>2</sup>	27	Sand and gravel (construction), stone (crushed and broken), and sand and gravel (industrial).
CT . . .	66	122	97	91	97	Stone, sand, and gravel (construction), & sand and gravel (industrial).
M.A. . .	1,313	2,033	1,885	2,027	2,109	(X)
NY . . .	496	773	766	852	871	Salt, Stone (crushed and broken), and sand and gravel (construction).
NJ . . .	149	229	240	262	274	Stone (crushed and broken), sand and gravel (construction), and sand and gravel (industrial).
PA . . .	668	1,031	879	913	964	Stone (crushed and broken), cement (portland), and lime.
<b>Midwest . .</b>	<b>6,610</b>	<b>7,163</b>	<b>7,261</b>	<b>7,357</b>	<b>7,906</b>	(X)
E.N.C. . .	2,930	3,483	3,762	3,875	4,145	(X)
OH . . .	562	733	742	851	893	Stone (crushed and broken), sand and gravel (construction), and salt.
IN. . .	288	428	477	473	517	Stone (crushed and broken), cement (portland), and sand and gravel (construction).
IL . . .	443	667	734	734	770	Stone (crushed and broken), sand and gravel (construction), and cement (portland).
MI. . .	1,485	1,440	1,587	1,504	1,621	Iron ore (usable), cement (portland), & sand and gravel (construction).
WI . . .	152	215	222	313	344	Stone (crushed & broken), sand & gravel (construction), & copper.
W.N.C. . .	3,680	3,680	3,499	3,482	3,761	(X)
MN . . .	1,762	1,482	1,364	1,299	1,352	Iron ore (usable), sand and gravel (construction), and stone (crushed and broken).
IA . . .	252	310	391	398	426	Stone (crushed and broken), cement (portland), and sand and gravel (construction).
MO . . .	1,054	1,105	897	855	1,003	Stone (crushed and broken), cement (portland), and lead.
ND . . .	22	25	26	25	26	Sand and gravel (construction), lime, and sand and gravel (industrial).
SD . . .	228	319	301	337	322	Gold (lode), cement (portland), and sand and gravel (construction).
NE . . .	80	90	115	126	137	Cement (portland), stone (crushed and broken), and sand and gravel (construction).
KS . . .	262	349	405	442	495	Stone (crushed and broken), salt, and Helium (Grade-A).
<b>South . .</b>	<b>7,320</b>	<b>9,291</b>	<b>8,560</b>	<b>8,578</b>	<b>9,309</b>	(X)
S.A. . .	3,454	5,132	4,651	4,689	5,146	(X)
DE <sup>2</sup> . .	2	10	9	2 <sup>10</sup>	2 <sup>9</sup>	Magnesium compounds, sand and gravel (construction).
MD . . .	186	368	339	314	324	Stone (crushed and broken), cement (portland), and sand and gravel (construction).
VA . . .	305	507	462	465	514	Stone (crushed and broken), cement (portland), and lime.
WV . . .	106	133	112	149	176	Stone (crushed and broken), cement (portland), and sand and gravel (industrial).
NC . . .	380	586	596	617	705	Stone (crushed and broken), phosphate rock, and sand and gravel (construction).
SC . . .	195	450	247	391	415	Stone (crushed and broken), cement (portland), and gold (lode).
GA . . .	771	1,504	1,346	1,432	1,535	Clay, stone (crushed and broken), and cement (portland).
FL . . .	1,509	1,574	1,440	1,311	1,468	Phosphate rock, stone (crushed and broken), and cement (portland).
E.S.C. . .	1,030	1,692	1,640	1,564	1,696	(X)
KY . . .	204	359	401	388	431	Stone (crushed and broken), lime and cement (portland).
TN . . .	394	663	576	510	577	Stone (crushed and broken), zinc, and cement (portland).
AL . . .	328	559	543	562	576	Stone (crushed and broken), cement (portland), and lime.
MS . . .	104	111	120	104	112	Sand and gravel (construction), clay, and cement (portland).
W.S.C. . .	2,836	2,467	2,269	2,325	2,467	(X)
AR . . .	293	381	404	347	392	Bromine, stone (crushed & broken), & sand & gravel (construction).
LA . . .	584	368	309	232	328	Salt, sulfur (Frasch), and sand and gravel (construction).
OK . . .	224	259	253	298	338	Stone (crushed and broken), cement (portland), and sand and gravel (construction).
<b>West . .</b>	<b>1,735</b>	<b>1,459</b>	<b>1,303</b>	<b>1,448</b>	<b>1,409</b>	Cement (portland), stone (crushed and broken), and magnesium metal.
<b>9,629</b>	<b>14,512</b>	<b>13,858</b>	<b>13,424</b>	<b>14,354</b>	<b>(X)</b>	
Mt . . .	7,223	10,380	10,154	9,736	10,482	(X)
MT . . .	280	573	539	484	492	Gold (lode), copper, and cement (portland).
ID . . .	522	375	306	274	343	Phosphate rock, gold (lode), and sand and gravel (construction).
WY . . .	761	911	951	856	781	Soda ash, clay, and helium (Grade-A).
CO . . .	1,265	377	385	399	440	Sand and gravel (construction), cement (portland), and gold (lode).
NM . . .	766	1,103	871	804	914	Copper, potash, and sand and gravel (construction).
AZ . . .	2,471	3,085	3,166	2,776	3,323	Copper, sand and gravel (construction), and cement (portland).
UT . . .	764	1,335	1,348	1,314	1,428	Copper, gold (lode), and magnesium metal.
NV . . .	394	2,621	2,588	2,829	2,761	Gold (lode), sand and gravel (construction), and diatomite.
Pac . . .	2,406	4,132	3,704	3,688	3,872	(X)
WA . . .	207	483	469	505	556	Sand and gravel (construction), magnesium metal, and stone (crushed and broken).
OR . . .	152	205	214	226	253	Stone (crushed and broken), sand and gravel (construction), and cement (portland).
CA . . .	1,872	2,771	2,346	2,440	2,497	Cement (portland), sand and gravel (construction), and gold (lode).
AK . . .	115	577	526	378	429	Zinc, gold (lode), and sand and gravel (construction).
HI . . .	60	106	149	139	137	Stone (crushed and broken), cement (portland), and sand and gravel (construction).

X Not applicable. <sup>1</sup> Includes undistributed not shown separately. <sup>2</sup> Partial data only.

Source: U.S. Bureau of Mines, *Annual Reports, and Mineral Commodities Summary*, annual.

## No. 1179. Mineral Industries—Gross Assets and Capital Expenditures: 1977 to 1992

[In millions of dollars]

INDUSTRY AND YEAR	END OF YEAR GROSS VALUE OF DEPRECIABLE ASSETS					CAPITAL EXPENDITURES					
	Total <sup>1</sup>	Buildings and other structures	Machinery and equipment	Mineral exploration and development <sup>1</sup>	Mineral land and rights <sup>1</sup>	Total <sup>1</sup>	New buildings and other structures	New machinery and equipment	Used buildings and other structures	Used machinery and equipment	Mineral exploration and development <sup>1</sup>
Mineral industries: <sup>2</sup>											
1977.....	44,664	6,099	33,068	2,625	2,871	6,802	785	5,068	30	399	520
1982.....	94,613	10,228	73,419	5,036	5,930	13,472	1,229	10,551	78	937	677
1987.....	84,286	9,314	64,143	5,034	5,795	4,869	349	3,234	88	797	401
1992.....	(NA)	(NA)	(NA)	(NA)	(NA)	6,193	(NA)	(NA)	(NA)	(NA)	(NA)
Crude oil, nat. gas:											
1977.....	94,414	(NA)	(NA)	(NA)	(NA)	10,916	571	2,269	14	93	7,969
1982.....	233,052	(NA)	(NA)	(NA)	(NA)	34,281	1,967	5,550	20	215	26,529
1987.....	(NA)	(NA)	(NA)	(NA)	(NA)	10,549	590	3,176	18	218	6,548
1992.....	(NA)	(NA)	(NA)	(NA)	(NA)	9,850	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available. <sup>1</sup> Excludes data for mineral exploration and development, and mineral land and rights portions for mining service industries and natural gas liquids industry. <sup>2</sup> Excludes crude petroleum and natural gas.

Source: U.S. Bureau of the Census, *Census of Mineral Industries*, 1987 and preliminary summary for 1992.

## No. 1180. Mineral Industries—Employment, Hours, and Earnings: 1992 to 1994

ITEM	Unit	1992	1993	1994	ITEM		Unit	1992	1993	1994
					Avg. weekly hours . . . . .	Avg. weekly earnings . . . . .				
All mining:										
All employees . . . . .	1,000 .	635	611	605	Avg. weekly hours . . . . .	No . . . . .	43.8	43.8	44.1	
Production workers . . . . .	1,000 .	448	432	431	Avg. weekly earnings . . . . .	Dol. . . . .	614	619	622	
Avg. weekly hours . . . . .	No . . . . .	43.9	44.3	44.7						
Avg. weekly earnings . . . . .	Dol. . . . .	638	647	666						
Metal mining:										
All employees . . . . .	1,000 .	127	109	114	All employees . . . . .	1,000 .	53	50	51	
Production workers . . . . .	1,000 .	103	97	92	Production workers . . . . .	1,000 .	42	40	41	
Avg. weekly hours . . . . .	No . . . . .	44.0	44.4	45.2	Avg. weekly hours . . . . .	No . . . . .	42.9	43.1	43.6	
Avg. weekly earnings . . . . .	Dol. . . . .	755	766	802	Avg. weekly earnings . . . . .	Dol. . . . .	655	659	703	
Coal mining:										
All employees . . . . .	1,000 .	127	109	114	Nonmetallic minerals, except fuels:					
Production workers . . . . .	1,000 .	103	97	92	All employees . . . . .	1,000 .	102	101	101	
Avg. weekly hours . . . . .	No . . . . .	44.0	44.4	45.2	Production workers . . . . .	1,000 .	76	76	76	
Avg. weekly earnings . . . . .	Dol. . . . .	755	766	802	Avg. weekly hours . . . . .	No . . . . .	44.9	46.1	46.5	
Oil and gas extraction:					Avg. weekly earnings . . . . .	Dol. . . . .	551	585	608	
All employees . . . . .	1,000 .	353	351	339						
Production workers . . . . .	1,000 .	228	229	222						

Source: U.S. Bureau of Labor Statistics, *Bulletin* 2370 and *Employment and Earnings*, March and June issues.

## No. 1181. Selected Mineral Products—Average Prices: 1970 to 1994

[Excludes Alaska and Hawaii, except as noted. See *Historical Statistics, Colonial Times to 1970*, series M 96, M 139, M 209, M 248, and M 262, for bituminous coal, crude petroleum, iron ore, lead, and aluminum, respectively]

YEAR	Tantalum (dol. per lb.) <sup>1</sup>	Copper, electro- lytic <sup>2</sup> (cents per lb.)	Plati- num <sup>3</sup> (dol./ troy oz.)	Gold (dol./ fine oz.)	Silver (dol./ fine oz.)	Lead <sup>4</sup> (cents per lb.)	Tin (New York) <sup>5</sup> (cents per lb.)	Zinc <sup>6</sup> (cents per lb.)	Sulfur, crude <sup>7</sup> (dol./ metric ton)	Bitumi- nous coal <sup>8</sup> (dol./ short ton)	Crude petro- leum <sup>8</sup> (dol./ bbl.)	Natural gas <sup>8</sup> (dol./ 1,000 cu. ft.)
1970.....	9.15	58	133	36	1.77	16	174	15	922.41	6.26	3.18	0.17
1975.....	18.32	64	164	161	4.42	22	340	39	944.20	19.23	7.67	0.44
1980.....	126.37	101	677	613	20.63	43	846	37	89.06	24.52	21.59	1.59
1981.....	99.51	84	446	460	10.52	37	733	45	111.48	26.29	31.77	1.98
1982.....	49.95	73	327	376	7.95	26	654	39	108.27	27.14	28.52	2.46
1983.....	30.60	77	424	424	11.44	22	655	41	87.24	25.85	26.19	2.59
1984.....	37.44	67	357	361	8.14	26	624	49	94.31	25.51	25.88	2.66
1985.....	33.68	67	291	318	6.14	19	596	40	106.46	25.10	24.09	2.51
1986.....	23.74	66	461	368	5.47	22	383	38	105.22	23.70	12.51	1.94
1987.....	27.08	83	553	478	7.01	36	419	42	89.78	23.00	15.40	1.67
1988.....	47.37	121	523	438	6.53	37	441	60	85.95	22.00	12.58	1.69
1989.....	44.93	131	507	383	5.50	39	520	82	86.62	21.76	15.86	1.69
1990.....	38.06	123	467	385	4.82	46	386	75	80.14	21.71	20.03	1.71
1991.....	36.70	109	371	363	4.04	34	363	53	71.45	21.45	16.54	1.64
1992.....	34.42	107	356	345	3.94	35	402	58	48.14	20.98	15.99	1.74
1993.....	(NA)	92	370	361	4.30	32	350	46	31.86	20.56	14.24	1.97
1994, prel.	(NA)	108	400	389	5.30	36	358	46	45.00	(NA)	(NA)	

NA Not available. <sup>1</sup> Dollars per pound of tantalum content. <sup>2</sup> Domestic market prices for wirebar, 1970, 1975-77; prices for cathode thereafter.

<sup>3</sup> Average annual dealer prices. <sup>4</sup> 1970, New York prices; beginning 1975, nationwide delivered basis.

<sup>5</sup> Straits tin through 1975; thereafter, composite price. <sup>6</sup> Prime western. Beginning 1975, delivered price. <sup>7</sup> F.o.b. works.

<sup>8</sup> Average value at the point of production. Source: U.S. Energy Information Administration, *Annual Energy Review*.

Source: Except as noted, U.S. Bureau of Mines, *Mineral Facts and Problems*, 1980 edition; and *Mineral Commodity Summaries*, annual.

**No. 1182. Principal Fuels, Nonmetals, and Metals—U.S. Production, as Percent of World Production: 1980 to 1993**

MINERAL	WORLD PRODUCTION				PERCENT U.S. OF WORLD				
	Unit	1980	1985	1990	1993	1980	1985	1990	1993
Fuels: <sup>1</sup>									
Coal	Bil. sh. ton . . .	4.2	4.8	5.2	(NA)	20	18	20	(NA)
Petroleum (crude) . . .	Bil. bbl . . .	21.7	19.6	22	(NA)	14	17	12	(NA)
Natural gas (dry, marketable) . . .	Tril. cu. ft . . .	53.1	62	74.3	(NA)	37	26	24	(NA)
Natural gas plant liquids . . .	Bil. bbl . . .	1.4	1.5	1.8	(NA)	43	38	32	(NA)
Nonmetals:									
Asbestos . . . . .	1,000 metric tons	4,699	4,249	4,003	2,775	2	1	(D)	(NA)
Barite . . . . .	1,000 metric tons	7,495	6,067	5,633	4,890	27	11	8	6
Feldspar . . . . .	1,000 metric tons	3,202	4,039	5,456	6,009	20	16	12	13
Fluorspar . . . . .	1,000 metric tons	5,006	4,979	5,131	4,031	2	1	1	1
Gypsum . . . . .	Mil. metric tons .	78	87	100	103	14	15	15	15
Mica (incl. scrap) . . . . .	1,000 metric tons	228	255	215	190	46	49	51	46
Nitrogen, (fixed) - ammonia . . . . .	Mil. metric tons .	74	91	97	91	20	14	13	14
Phosphate rock, gross wt. . . . .	Mil. metric tons .	144	149	162	132	38	34	29	27
Potash (K <sub>2</sub> O equivalent) . . . . .	Mil. metric tons .	28	29	28	(NA)	8	4	6	(NA)
Sulfur, elemental . . . . .	Mil. metric tons .	55	54	58	52	22	22	20	21
Metals, mine basis:									
Bauxite . . . . .	Mil. metric tons .	89	84	109	106	2	1	(D)	(NA)
Columbian concentrates (Nb content) . . . . .	1,000 metric tons	15	15	15	31	(NA)	-	(NA)	-
Copper . . . . .	7,405	7,988	9,017	9,352	16	14	18	19	
Gold . . . . .	Metric tons .	1,219	1,532	2,133	2,330	2	5	14	14
Iron ore . . . . .	Mil. metric tons .	891	861	982	989	8	6	6	6
Lead <sup>2</sup> . . . . .	1,000 metric tons	3,470	3,431	3,353	2,926	17	12	15	12
Mercury . . . . .	Metric tons . . . . .	6,806	6,136	4,523	2,563	16	9	12	(NA)
Molybdenum . . . . .	1,000 metric tons	111	98	128	95	62	50	48	39
Nickel <sup>2</sup> . . . . .	1,000 metric tons	779	813	965	899	2	1	(Z)	(NA)
Silver . . . . .	1,000 metric tons	11	13	16	14	9	9	13	12
Tantalum concentrates (ta content) . . . . .	Metric tons . . . . .	544	315	400	(NA)	(NA)	-	(NA)	(NA)
Titanium concentrates:									
Ilmenite . . . . .	1,000 metric tons	3,726	3,457	4,072	3,579	14	(D)	(D)	(NA)
Rutile . . . . .	1,000 metric tons	436	373	481	464	(D)	(D)	(D)	(NA)
Tungsten <sup>2</sup> . . . . .	1,000 metric tons	52	47	43	30	5	2	14	(NA)
Vanadium <sup>2</sup> . . . . .	1,000 metric tons	37	30	31	29	12	(D)	(D)	10
Zinc <sup>2</sup> . . . . .	1,000 metric tons	5,954	6,758	7,184	6,895	6	4	8	7
Metals, smelter basis:									
Aluminum . . . . .	1,000 metric tons	15,383	15,398	19,292	19,816	30	23	21	19
Cadmium . . . . .	1,000 metric tons	18	19	20	19	9	8	8	6
Copper . . . . .	1,000 metric tons	7,649	8,630	9,472	9,352	14	14	15	19
Iron, pig . . . . .	Mil. metric tons .	514	499	532	989	12	9	9	6
Lead <sup>3</sup> . . . . .	1,000 metric tons	5,430	5,641	5,763	2,926	23	20	23	12
Magnesium <sup>4</sup> . . . . .	1,000 metric tons	316	325	354	284	49	42	39	47
Raw Steel . . . . .	Mil. metric tons .	717	718	771	725	14	11	12	12
Tin <sup>5</sup> . . . . .	1,000 metric tons	251	193	223	193	1	2	(NA)	5
Zinc . . . . .	1,000 metric tons	6,049	6,786	7,060	7,177	6	5	5	5

- Represents or rounds to zero. D Withheld to avoid disclosing company data. NA Not available. Z Less than half the unit of measure. <sup>1</sup> Source: Energy Information Administration, *International Energy Annual*. <sup>2</sup> Content of ore and concentrate. <sup>3</sup> Refinery production. <sup>4</sup> Primary production; no smelter processing necessary. <sup>5</sup> Production from primary sources only.

Source: Except as noted, U.S. Bureau of Mines, *Annual Reports*, and *Mineral Commodity Summaries*, annual.

**No. 1183. Federal Strategic and Critical Materials Inventory: 1980 to 1994**

[As of Dec. 31. Covers strategic and critical materials essential to military and industrial requirements in time of national emergency]

MINERAL	QUANTITY <sup>1</sup>				VALUE (mil. dol.) <sup>2</sup>				
	Unit	1980	1985	1990	1994	1980	1985	1990	1994
Tin . . . . .	1,000 metric ton . . . . .	200	185	169	145	3,158	2,324	962	684
Silver . . . . .	1,000 troy oz . . . . .	139,500	136,006	92,151	59,507	2,288	801	374	158
Cobalt . . . . .	Mil. lb . . . . .	41	53	53	52	1,020	590	443	561
Bauxite <sup>3</sup> . . . . .	1,000 lg. ton . . . . .	14,333	17,957	18,033	16,549	583	871	888	191
Manganese <sup>4</sup> . . . . .	1,000 sh. ton . . . . .	5,130	4,470	4,017	2,792	599	520	962	468
Tungsten <sup>5</sup> . . . . .	Mil. lb . . . . .	97	87	82	82	817	369	253	178
Zinc . . . . .	1,000 sh. ton . . . . .	380	378	379	360	317	268	483	307
Titanium . . . . .	1,000 sh. ton . . . . .	43	48	37	37	432	405	402	221
Platinum . . . . .	1,000 troy oz . . . . .	466	466	453	453	215	154	186	131
Chromium <sup>6</sup> . . . . .	1,000 sh. ton . . . . .	804	854	1,074	1,149	773	836	917	837
Diamonds; Stones . . . . .	Carat 1,000 . . . . .	19,224	12,549	7,777	6,457	349	336	267	533
Industrial, bort . . . . .	Carat 1,000 . . . . .	23,693	22,001	17,353	4,012	73	39	16	3

<sup>1</sup> Consists of stockpile and nonstockpile grades and reflects uncommitted balances. <sup>2</sup> Market values are estimated trade values of similar materials and not necessarily amounts that would be realized at time of sale. <sup>3</sup> Consists of abrasive grade, metallic grade Jamaica, metallic grade Suriname, and refractory. <sup>4</sup> Consists of chemical grade, dioxide battery natural, dioxide battery synthetic, electrolytic, ferro-high carbon, ferro-med, carbon, ferro-silicon, and metal. <sup>5</sup> Consists of carbide powder, ferro, metal powder, and ores and concentrates. <sup>6</sup> Consists of ferro-high carbon, ferro-low carbon, ferro-silicon, and metal.

Source: U.S. Defense Logistics Agency, *Statistical Supplement, Stockpile Report to the Congress* (AP-3).

No. 1184. Federal Strategic and Critical Materials—Summary: 1990 to 1994

ITEM	Unit	Tin	Silver	Cobalt	Bauxite	Mang- anese	Tungsten	Zinc	Titanium	Platinum	Chromium	DIAMONDS	
												Stones	Indus- trial bort
Production:													
1990.....	1,000 metric tons.	13.2	2.1	1.2	(D)	-	(D)	263	24.7	2,740	101	-	3 490.0
1992.....	1,000 metric tons.	8.8	1.8	1.6	(D)	-	(D)	272	28.310	102	-	-	3 495.0
1993.....	1,000 metric tons.	7.2	1.6	1.6	(D)	-	(D)	240	28,300	92	-	-	3 4105.0
1994.....	1,000 metric tons.	7.4	1.4	1.6	(D)	-	(D)	240	8,300	91	-	-	108.0
Imports:													
1990.....	1,000 metric tons.	33.8	3.4	6.4	12,987	307	6.4	723	1.1	2125,354	346	411.0	485.4
1992.....	1,000 metric tons.	27.3	5.0	5.8	11,372	247	2.5	740	0.7	2132,006	324	49.8	497.3
1993.....	1,000 metric tons.	33.7	3.8	5.9	11,936	232	1.7	805	2.2	2153,165	330	5.2	4133.0
1994.....	1,000 metric tons.	34.0	3.6	7.3	11,200	280	3.6	800	5.0	160,000	281	3.0	140.0
Export:													
1990.....	1,000 metric tons.	0.7	1.8	1.3	64	70	0.1	128	515.8	255,044	16	41.7	471.0
1992.....	1,000 metric tons.	1.9	1.8	1.4	68	13	(6)	120	58.0	257,830	18	45.6	483.6
1993.....	1,000 metric tons.	2.6	1.7	0.8	92	16	(6)	52	57.9	278,521	21	43.4	4107.0
1994.....	1,000 metric tons.	2.7	1.6	1.3	150	12	(6)	50	9.0	90,000	28	1.0	110.0
Consumption:													
1990.....	1,000 metric tons.	745.5	4.4	7.6	84,570	497	8.4	992	923.2	2117,043	445	49.8	4112.7
1992.....	1,000 metric tons.	743.6	4.1	6.5	84,863	438	7.1	1,035	944.2	2110,900	422	44.3	4121.9
1993.....	1,000 metric tons.	744.2	3.3	6.5	84,633	389	7.1	1,148	915.1	2122,700	470	41.9	4146.0
1994.....	1,000 metric tons.	46.0	4.0	7.2	3,500	430	8.4	1,220	16.0	127,000	387	2.0	181.0
Net Import reliance:													
1990.....	Percent .....	71.0	(10)	84.0	98	100	81.0	41	(11)	88	71	95.0	13.0
1992.....	Percent .....	80.0	(10)	75.0	100	100	86.0	30	(D)	87	76	98.0	19.0
1993.....	Percent .....	84.0	(10)	79.0	100	100	82.0	45	(D)	89	74	95.0	18.0
1994.....	Percent .....	84.0	(10)	79.0	99	100	94.0	41	(D)	91	75	95.0	17.0
Stocks, end of year:													
1990.....	1,000 metric tons.	17.3	9.2	3.2	2,300	379	1.1	87	3.3	230,324	126	(NA)	(NA)
1992.....	1,000 metric tons.	10.7	10.1	1.8	2,300	276	0.7	75	1.9	225,338	118	(NA)	(NA)
1993.....	1,000 metric tons.	10.9	11.2	1.5	1,000	302	0.6	78	2.9	220,782	104	(NA)	(NA)
1994.....	1,000 metric tons.	10.0	8.4	3.1	2,200	325	0.4	75	4.0	20,000	100	(NA)	(NA)
World production:													
1990.....	1,000 metric tons.	218.1	16.5	42.4	109,042	26,108	51.8	7,158	100.8	2291,015	12,959	(12)	458.5
1992.....	1,000 metric tons.	178.4	14.7	27.1	101,145	21,608	37.5	7,227	38.6	2281,438	10,993	(12)	448.8
1993.....	1,000 metric tons.	178.2	14.1	22.2	105,550	21,757	29.5	6,895	37.0	2250,718	10,001	(12)	450.4
1994.....	1,000 metric tons.	180.0	14.0	22.0	110,000	21,000	21.0	6,700	31.0	250,000	9,400	(12)	50.0

- Represents or rounds to zero. D Withheld to avoid disclosure of individual company data. NA Not available. <sup>1</sup> Production from scrap or secondary production. <sup>2</sup> Kilograms. <sup>3</sup> Manufactured diamond bort, grit, and powder and dust. <sup>4</sup> Million carats. <sup>5</sup> All metal forms. <sup>6</sup> Less than 50 metric tons. <sup>7</sup> Apparent demand. <sup>8</sup> Includes alumina. <sup>9</sup> Reported consumption. <sup>10</sup> Net importer; however, changes in unreported investor stocks preclude calculation of a meaningful net import reliance. <sup>11</sup> Net exporter. <sup>12</sup> Included with bort production; data not separable.

Source: U.S. Bureau of Mines, *Annual Reports*, and *Mineral Commodity Summaries*, annual.

### No. 1185. Selected Mineral and Metal Products—Quantity and Value of Imports and Exports: 1990 to 1993

[Imports represent imports for consumption. Exports include shipments under foreign aid programs. Import and export data are not necessarily comparable to prior data due to change in tariff schedule to Harmonized System]

PRODUCT	Unit	QUANTITY				VALUE (mil. dol.)			
		1990	1991	1992	1993	1990	1991	1992	1993
<b>IMPORTS</b>									
Petroleum (crude) <sup>1</sup>	Mil. bbls.	2,222	2,124	(NA)	(NA)	43,833	37,123	(NA)	(NA)
Gem stones: Diamonds	Mil. carats.	7.5	8.5	9.4	11.5	3,955	3,992	4,144	5,096
Ores and concentrates:									
Chromium ( $\text{Cr}_2\text{O}_3$ content)	1,000 metric tons	134	94	99	123	22	15	15	17
Copper	1,000 metric tons	91.5	60.8	102.1	37	131	69	125	46
Iron	Mil. metric tons	18.1	13.3	12.5	14	560	437	396	421
Tungsten	1,000 metric tons	6.4	7.8	2.5	1.7	31	43	16	8
Metals:									
Aluminum	1,000 metric tons	960	1,025	1,156	1,836	1,597	1,428	1,501	2,147
Cobalt <sup>2</sup>	1,000 metric tons	6.0	6.4	5.3	5.4	107	158	246	166
Copper refined ingots, etc	1,000 metric tons	262	289	289	343	675	685	660	669
Gold (refined bullion)	Metric tons	65	147	141	130	795	1,722	1,568	1,495
Iron and steel products (major)	Mil. metric tons	17.8	16.2	17.4	20.0	11,612	11,962	10,977	(NA)
Platinum group <sup>3</sup>	Metric tons	125	126	132	153	1,906	1,743	1,484	1,311
Silver (refined bullion)	Metric tons	2,698	2,525	2,662	2,183	437	339	341	297
Zinc: Blocks, pigs, slabs	1,000 metric tons	632	549	644	724	992	620	784	699
<b>EXPORTS</b>									
Fuels:									
Bituminous coal	Mil. sh. tons	95.3	98.4	(NA)	(NA)	4,464	4,588	(NA)	(NA)
Petroleum (crude)	Mil. bbls.	8.0	2.7	(NA)	(NA)	198.6	54.1	(NA)	(NA)
Nonmetallic minerals:									
Gem stones: Diamonds	Mil. carats	1.2	1.8	1.9	1.6	1,433	1,383	1,362	1,499
Nitrogen compounds (maj.)	Mil. metric tons	11.9	13.9	12.8	11.5	(NA)	(NA)	(NA)	(NA)
Phosphatic fertilizers <sup>4</sup>	Mil. metric tons	9.2	11.5	10.3	9.2	1,515	1,974	(NA)	(NA)
Metals:									
Aluminum: Ingots, slabs, crude	1,000 metric tons	684	793	604	400	1,169	1,274	843	541
Plates, sheets, bars, etc	1,000 metric tons	419	489	534	571	1,278	1,384	1,416	1,346
Gold (refined bullion)	Metric tons	141	174	257	658	1,719	2,039	2,877	7,611
Iron and steel products (major)	Mil. metric tons	4.7	6.6	4.7	4.5	4,665	5,753	5,374	4,848
Magnesium <sup>5</sup>	1,000 metric tons	51.8	55.2	52	39	164	150	132	103
Molybdenum <sup>6</sup>	Metric tons	180	88	74	52	2	1	1	1
Silver (refined bullion)	Metric tons	736	787	911	705	120	115	126	100
Scrap exports:									
Aluminum	1,000 metric tons	537	461	295	212	719	542	300	211
Iron and steel	Mil. metric tons	11.7	9.5	9.4	10	1,653	1,253	1,113	1,341

NA Not available. <sup>1</sup> Source: U.S. Bureau of the Census, *U.S. Imports for Consumption and General Imports*, *TSUSA Commodity and Country*, FT 246, annual; and *U.S. Exports, Schedule B Commodity and Country*, FT 446, annual; 1989 and 1990, *U.S. Exports of Merchandise and U.S. Imports of Merchandise* compact discs, December issues. <sup>2</sup> Includes unwrought metal, waste and scrap. <sup>3</sup> Unwrought and semimanufactured. <sup>4</sup> Superphosphates and ammonium phosphates. <sup>5</sup> Metal and alloys, scrap, semimanufactured forms. <sup>6</sup> Metals and alloys, crude and scrap.

Source: Except as noted, U.S. Bureau of Mines, *Minerals Yearbook*, and *Annual Reports*.

### No. 1186. Mineral Industries—Lost Workday Injuries and Fatalities: 1993

(Excludes office workers. Lost workday injuries are nonfatal occurrences that result in days away from work, days of restricted work activity or a permanent disability. Data for all years includes injuries to independent contractors at mine sites. Rates for the noncoal industries are based only on employment and hours worked by mine employees. See also *Historical Statistics, Colonial Times to 1970*, series M 271-286)

ITEM	Coal mining	Quarrying; related industries <sup>1</sup>	Metal mining <sup>2</sup>	Sand and gravel mining	Nonmetal mining
Injuries, total	8,375	3,208	1,741	1,126	965
Fatal.	47	19	14	13	5
Rate per million work-hours:					
Fatal	0.20	0.15	0.16	0.23	0.10
Nonfatal	36.0	24.9	19.9	19.9	19.1
Fatalities per 1,000 employed <sup>3</sup>	0.35	0.30	0.32	0.40	0.19

<sup>1</sup> Includes cement. <sup>2</sup> Nonmetal mines exclude extraction of Frasch process sulfur. <sup>3</sup> Average number of persons at work each day mines were active.

Source: U.S. Mine Safety and Health Administration, Denver, CO, unpublished data.

**No. 1187. Net U.S. Imports of Selected Minerals and Metals as Percent of Apparent Consumption, 1980 to 1994, and by Major Foreign Sources**

[Percent, based on net imports which equal the difference between imports and exports plus or minus Government stockpile and industry stock changes]

MINERAL	1980	1990	1992	1993	1994	Rank of major foreign sources, 1990-93
Columbium . . . . .	100	100	100	100	100	Brazil, 66%; Canada, 25%; Germany 4%
Manganese . . . . .	98	100	100	100	100	Rep. of So. Africa, 24%; France, 13%; Brazil, 12%
Mica (sheet) . . . . .	100	100	100	100	100	India, 64%; Belgium, 18%; China, 3%
Strontrium . . . . .	100	100	100	100	100	Mexico, 92%; Germany, 6%
Bauxite <sup>1</sup> . . . . .	94	98	100	100	99	Australia, 36%; Jamaica, 20%; Guinea, 18%
Asbestos . . . . .	78	90	95	95	95	Canada, 98%; Rep. of South Africa, 1%
Platinum group . . . . .	87	88	87	89	91	Rep. of So. Africa, 47%; Russia, 15%; U.K., 14%.
Tantalum . . . . .	90	86	85	85	86	Germany, 27%; Australia, 21%; Canada, 8%
Cobalt . . . . .	93	84	75	79	79	Zambia, 26%; Zaire, 19%; Canada, 16%
Chromium . . . . .	91	71	76	74	75	Rep. of So. Africa, 43%; Turkey, 15%; Zimbabwe, 9%
Tungsten . . . . .	53	81	86	82	84	China, 45%; Bolivia, 9%; Peru, 7%
Nickel . . . . .	76	64	59	63	66	Canada, 51%; Norway, 15%; Australia, 10%
Tin . . . . .	79	71	80	84	84	Brazil, 25%; Bolivia, 24%; China, 23%
Barite . . . . .	44	71	52	70	82	China, 72%; India, 19%; Mexico, 5%
Potash . . . . .	65	68	68	72	74	Canada, 91%; Israel, 3%; former U.S.S.R., 3%
Antimony . . . . .	47	51	60	62	62	China, 60%; Mexico, 10%; Rep. of So. Africa, 10%
Cadmium . . . . .	55	46	52	61	50	Canada, 37%; Mexico, 18%; Australia, 8%
Selenium . . . . .	59	46	48	39	39	Canada, 41%; Japan, 14%; Philippines, 13%
Zinc . . . . .	60	241	230	245	41	Canada, 60%; Mexico, 13%; Peru, 6%
Gypsum . . . . .	35	36	31	31	30	Canada, 71%; Mexico, 22%; Spain, 5%
Iron ore . . . . .	25	21	12	14	18	Canada, 53%; Brazil, 21%; Venezuela, 21%
Iron and steel . . . . .	13	13	13	15	21	EEC <sup>3</sup> , 31%; Canada, 21%; Japan, 15%
Sulfur . . . . .	14	15	20	12	16	Canada, 61%; Mexico, 31%
Copper . . . . .	16	3	2	7	14	Canada, 41%; Chile, 15%; Mexico, 13%
Aluminum . . . . .	( <sup>4</sup> )	( <sup>4</sup> )	1	19	31	Canada, 75%; Russia, 6%; Venezuela, 5%
Silver . . . . .	7	(NA)	(NA)	(NA)	(NA)	Mexico, 29%; Canada, 25%; Peru, 10%
Mercury . . . . .	27	(D)	(NA)	(D)	(D)	Canada, 78%; Germany, 20%
Titanium . . . . .	32	( <sup>4</sup> )	(D)	( <sup>4</sup> )	( <sup>4</sup> )	Japan, 43%; former U.S.S.R., 36%; China, 14%
Vanadium . . . . .	35	(D)	(D)	(D)	(D)	Canada, 24%; EC, 20%; So. Amer. & Mexico, 16%

D Withheld to avoid disclosure. NA Not available. <sup>1</sup> Includes alumina. <sup>2</sup> Effect of sharp rise in exports of concentrates. If calculated on a refined zinc-only basis, reliance would be about the same as pre-1990 level; 1990, 64%; 1991, 61%; and 1992, 64%. <sup>3</sup> European Economic Community. <sup>4</sup> Net exports.

Source: U.S. Bureau of Mines, *Mineral Commodity Summaries*; import and export data from U.S. Bureau of the Census.

**No. 1188. Federal Offshore Leasing, Exploration, Production, and Revenue: 1980 to 1993**

[See source for explanation of terms and for reliability statement]

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992	1993
Tracts offered . . . . .	Number . . . . .	483	15,754	10,926	33,376	11,013	10,459	16,800	9,618	10,164
Tracts leased . . . . .	Number . . . . .	218	667	640	1,856	1,049	825	676	204	336
Acres offered . . . . .	1,000 . . . . .	2,563	87,029	59,762	85,366	60,096	56,788	80,288	52,380	55,070
Acres leased . . . . .	1,000 . . . . .	1,134	3,512	45,075	10,040	5,580	4,263	3,416	1,021	1,714
Bonus paid for leased tracts . . . . .	Bil. dol. . . . .	4.2	1.5	0.5	1.2	0.6	0.6	0.4	0.1	0.1
New wells being drilled:										
Active . . . . .	Number . . . . .	191	195	142	116	123	120	64	104	129
Suspended . . . . .	Number . . . . .	739	348	265	289	361	266	249	180	133
Wells completed . . . . .	Number . . . . .	9,638	12,285	12,736	12,827	12,938	13,167	13,184	13,209	13,181
Wells plugged and abandoned.	Number . . . . .	8,057	10,487	12,373	13,164	13,846	14,677	15,430	16,348	16,709
Revenue, total <sup>1</sup> . . . . .	Bil. dol. . . . .	6.4	5.2	2.9	3.4	2.8	3.3	2.8	2.5	2.6
Bonuses . . . . .	Bil. dol. . . . .	4.2	1.5	0.5	1.2	0.6	0.6	0.4	0.1	0.1
Oil and gas royalties <sup>1</sup> . . . . .	Bil. dol. . . . .	2.1	3.6	2.3	2.1	2.1	2.6	2.3	2.3	2.5
Rentals . . . . .	Bil. dol. . . . .	(Z)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	(Z)
Production, value <sup>2</sup> . . . . .	Bil. dol. . . . .	13.1	22.2	14.6	12.9	13.0	16.5	14.2	14.5	15.8
Crude oil . . . . .	Bil. dol. . . . .	4.8	9.6	5.6	4.2	4.4	5.9	5.2	5.3	4.9
Condensate . . . . .	Bil. dol. . . . .	0.4	1.0	0.7	0.7	0.8	1.1	1.1	1.0	1.0
Natural gas . . . . .	Bil. dol. . . . .	7.9	11.5	8.1	7.9	7.8	9.5	7.9	8.2	9.9
Production: <sup>2</sup>										
Crude oil . . . . .	Mil. bbls. . . . .	259	352	325	279	260	274	263	301	307
Condensate . . . . .	Mil. bbls. . . . .	19	37	41	41	45	51	52	52	55
Natural gas . . . . .	Bil. cu. . . . .	4,641	4,000	4,425	4,310	4,200	5,093	4,516	4,685	4,533

Z Less than \$50 million. <sup>1</sup> Includes condensate royalties. <sup>2</sup> Production value is value at time of production, not current value.

Source: U.S. Dept. of the Interior, Minerals Management Service, *Federal Offshore Statistics*, annual.

**No. 1189. Petroleum Industry—Summary: 1980 to 1993**

[Includes all costs incurred for drilling and equipping wells to point of completion as productive wells or abandonment after drilling becomes unproductive. Based on sample of operators of different size drilling establishments]

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992	1993
Crude oil producing wells (Dec. 31)	1,000...	548	647	620	612	603	602	614	594	584
Daily output per well	Bbl.	15.9	13.9	13.5	13.5	12.6	12.2	12.1	12.1	11.7
Completed wells drilled, total	1,000...	56.93	57.88	28.71	25.58	22.82	26.23	24.56	19.82	20.85
Crude oil	1,000...	30.50	33.14	15.33	12.53	9.76	11.53	11.36	8.22	7.70
Gas	1,000...	15.13	12.97	7.08	7.58	8.57	9.86	8.67	7.59	8.65
Dry	1,000...	11.30	11.76	6.30	5.48	4.49	4.83	4.53	4.01	4.49
Average depth per well <sup>1</sup>	Feet	4,773	4,637	4,762	5,051	4,925	5,043	5,100	5,445	5,668
Average cost per well <sup>1</sup>	\$1,000...	368	349	280	355	362	384	421	383	427
Offshore	\$1,000...	3,024	4,073	2,896	3,112	3,197	3,112	3,550	3,223	3,250
Average cost per foot <sup>1</sup>	Dollars	77.02	75.35	58.71	70.23	73.55	76.07	82.64	70.27	75.30
Crude oil production, total	Mil. bbl.	3,146	3,275	3,047	2,979	2,785	2,685	2,707	2,625	2,499
Value at wells	Bil. dol.	67.9	78.9	46.9	37.5	44.1	53.8	44.7	42.0	35.5
Average price per barrel	Dollars	21.59	24.09	15.40	12.58	15.86	20.03	16.54	15.99	14.24
Refinery input of crude oil	Mil. bbl.	4,934	4,381	4,692	4,848	4,891	4,895	4,855	4,909	4,969
Imports: Crude oil	Mil. bbl.	1,926	1,168	1,706	1,869	2,133	2,151	2,111	2,223	2,472
Refined petroleum products	Mil. bbl.	603	681	731	840	809	775	500	471	(NA)
Import value	Bil. dol.	78.7	53.5	43.5	42.6	51.9	63.8	53.5	54.8	55.0
Export value	Bil. dol.	7.9	9.9	7.5	7.1	7.5	9.2	9.7	9.1	7.6
Operable refineries	Number	319	223	219	213	204	205	202	199	187
Capacity (Jan. 1)	Mil. bbl.	6,566	5,716	5,683	5,811	5,712	5,683	5,723	5,731	5,519
Output	Mil. bbl.	5,352	5,019	5,339	5,498	5,539	5,570	5,933	6,050	(NA)
Utilization rate	Percent	75.4	77.6	83.1	84.7	86.6	87.1	86.0	87.9	91.4
Proved reserves	Bil. bbl.	29.8	28.4	27.3	26.8	26.5	26.3	24.7	23.7	23.0

NA Not available. <sup>1</sup> Source: American Petroleum Institute, *Joint Association Survey on Drilling Costs*, annual.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review*, *Petroleum Supply Annual*; U.S. *Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*.

**No. 1190. Natural Gas—Financial Performance Measures: 1985 to 1993**

[LT = Long term. S&P = Standard & Poor's]

ITEM	1985	1986	1987	1988	1989	1990	1991	1992	1993
Producer segment, majors:									
Average adjusted stock price	28.24	34.82	37.01	41.64	51.79	49.20	50.01	48.50	57.50
S&P bond rating	AA-	A+	A	AA-	AA	AA	AA	AA	AA
LT debt as a percent of invested capital	32.06	31.51	28.33	30.54	30.35	27.76	29.19	30.10	28.85
Times interest earned ratio	5.09	3.41	3.76	4.42	4.32	5.07	4.04	3.93	4.80
Rate of return on common equity (%)	14.30	10.34	10.64	17.67	18.56	17.78	12.54	9.05	13.74
Price/earnings ratio	7.35	10.47	11.69	9.11	10.65	9.98	15.15	15.14	16.40
Market/book value ratio	1.18	1.31	1.69	1.65	1.99	1.92	2.01	2.07	2.38
Producer segment, independents:									
Average adjusted stock price	14.66	14.52	12.33	12.84	17.34	15.14	12.01	11.93	14.53
S&P bond rating	A-	BBB+	BBB	BBB	BBB-	BBB-	BBB-	BB+	BB+
LT debt as a percent of invested capital	47.39	59.03	61.13	73.47	68.00	63.00	55.87	53.93	52.21
Times interest earned ratio	0.36	-0.56	0.52	0.91	1.59	1.46	1.21	1.46	1.23
Rate of return on common equity (%)	-10.39	-15.08	-7.85	-1.69	6.51	1.93	-1.17	1.99	1.21
Price/earnings ratio	6.78	22.07	15.70	17.96	16.45	23.75	31.28	21.50	29.61
Market/book value ratio	1.23	1.45	1.96	1.84	2.32	2.63	2.05	1.85	2.18
Pipeline segment, w/Columbia:									
Average adjusted stock price	19.68	19.97	17.96	20.52	27.84	23.76	20.10	23.49	26.26
S&P bond rating	BBB-	BBB-	BBB-	BBB	BBB	BBB	BBB-	BB+	BB+
LT debt as a percent of invested capital	53.35	57.20	52.92	52.29	52.99	53.24	55.91	54.61	50.39
Times interest earned ratio	1.89	0.83	1.75	1.44	1.79	1.65	1.00	1.74	2.33
Rate of return on common equity (%)	6.32	-3.93	7.97	6.18	8.63	7.47	1.01	6.23	10.97
Price/earnings ratio	10.94	13.00	12.04	13.42	14.66	16.00	17.36	13.18	16.57
Market/book value ratio	1.11	1.30	1.31	1.28	1.51	1.55	1.52	1.53	1.86
Average adjusted stock price	17.69	19.94	18.84	18.66	23.29	21.21	20.53	22.78	26.06
S&P bond rating	BBB+	BBB+	A	A	A	A	A	A	A
LT debt as a percent of invested capital	44.21	45.04	44.27	47.30	46.31	47.28	48.62	48.83	46.46
Times interest earned ratio	2.81	2.67	3.01	2.51	2.49	2.04	1.95	2.42	3.07
Rate of return on common equity (%)	8.55	11.41	12.19	10.35	12.35	9.17	7.17	4.09	11.07
Price/earnings ratio	8.42	12.74	11.96	10.16	12.01	12.69	15.15	14.38	14.48
Market/book value ratio	1.29	1.48	1.48	1.36	1.49	1.51	1.47	1.56	1.75

Source: U.S. Energy Information Administration, *Natural Gas 1994: Issues and Trends*.

**No. 1191. World Crude Oil Production: 1980 to 1993**

[In thousands of barrels]

COUNTRY	1980	1985	1988	1989	1990	1991	1992	1993
Total <sup>1</sup> . . . . .	59,599	53,981	58,662	59,773	60,471	60,105	60,255	60,070
Algeria . . . . .	1,106	1,037	1,040	1,095	1,175	1,230	1,217	1,190
Kuwait . . . . .	1,656	1,023	1,492	1,783	1,175	190	1,029	1,872
Libya . . . . .	1,787	1,059	1,175	1,150	1,375	1,483	1,483	1,377
Saudi Arabia . . . . .	9,900	3,388	5,086	5,064	6,410	8,115	8,438	8,198
United Arab Emirates . . . . .	1,709	1,193	1,565	1,860	2,117	2,386	2,325	2,241
Indonesia . . . . .	1,577	1,325	1,342	1,409	1,462	1,592	1,566	1,507
Iran . . . . .	1,662	2,250	2,240	2,810	3,088	3,312	3,429	3,650
Nigeria . . . . .	2,055	1,495	1,450	1,716	1,810	1,892	1,982	2,050
Venezuela . . . . .	2,168	1,677	1,903	1,907	2,137	2,375	2,334	2,377
Canada . . . . .	1,435	1,471	1,616	1,560	1,553	1,548	1,598	1,678
Mexico . . . . .	1,936	2,745	2,512	2,520	2,553	2,680	2,668	2,671
United Kingdom . . . . .	1,622	2,530	2,232	1,802	1,820	1,797	1,825	1,909
United States . . . . .	8,597	8,971	8,140	7,613	7,355	7,417	7,171	6,847
China . . . . .	2,114	2,505	2,730	2,757	2,774	2,835	2,838	2,911
U.S.S.R. (former) . . . . .	11,706	11,585	11,978	11,625	10,880	9,887	8,388	7,297

<sup>1</sup> Includes countries not shown separately.Source: U.S. Energy Information Administration, *Monthly Energy Review*.**No. 1192. World Natural Gas Production: 1984 to 1992**

[In quadrillion Btu's]

REGION AND COUNTRY	1984	1985	1986	1987	1988	1989	1990	1991	1992 <sup>1</sup>
World total. . . . .	58.33	60.62	61.89	64.93	68.07	70.56	72.00	73.96	74.27
North America . . . . .	21.54	20.80	20.13	20.88	21.87	22.34	22.99	23.37	23.76
Canada . . . . .	2.61	2.98	2.77	3.00	3.47	3.67	3.72	4.18	4.56
United States . . . . .	17.93	16.91	16.47	17.05	17.52	17.78	18.36	18.28	18.31
Central and South America . . . . .	1.78	1.84	1.86	1.82	2.04	2.21	2.22	2.22	2.21
Western Europe . . . . .	6.03	6.25	6.26	6.59	6.28	6.47	6.47	7.56	7.60
Eastern Europe . . . . .	21.31	23.11	24.54	25.61	27.08	27.96	28.34	28.04	26.85
Middle East . . . . .	2.10	2.50	2.76	3.18	3.53	3.87	3.89	3.89	4.31
Africa . . . . .	1.91	1.97	1.99	2.23	2.32	2.53	2.60	2.82	2.92
Far East and Oceania . . . . .	3.66	4.16	4.35	4.63	4.96	5.18	5.48	6.06	6.62

<sup>1</sup> Preliminary.Source: U.S. Energy Information Administration, *International Energy Annual*.**No. 1193. Domestic Motor Gasoline Supply: 1980 to 1994**

[In 1,000 barrels per day, except as noted]

ITEM	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Supply <sup>1</sup> . . . . .	6,579	6,831	7,034	7,206	7,336	7,328	7,235	7,188	7,268	7,476	7,592
Production . . . . .	6,506	6,419	6,752	6,841	6,956	6,963	6,959	6,975	7,058	7,360	7,291
Net imports . . . . .	140	381	326	384	405	369	342	297	294	247	354
Stocks (mil. bbl.) <sup>2</sup> . . . . .	261	223	233	226	228	213	220	219	216	226	211

NA Not available. <sup>1</sup> Production plus net imports less net increase in primary stocks. <sup>2</sup> End of year, includes motor gasoline blending components.Source: U.S. Energy Information Administration, *Monthly Energy Review*.**No. 1194. Natural Gas Plant Liquids—Production and Value: 1970 to 1993**[Barrels of 42 gallons. See also *Historical Statistics, Colonial Times to 1970*, series M 143-146]

ITEM	Unit	1970	1980	1985	1987	1988	1989	1990	1991	1992	1993
Field production <sup>1</sup> . . . . .	Mil. bbl . . .	606	576	587	582	595	564	566	606	621	634
Pentanes plus . . . . .	Mil. bbl . . .	197	126	103	106	111	113	112	118	121	122
Liquefied petroleum gases . . . . .	Mil. bbl . . .	400	441	479	474	483	451	454	488	500	512
Natural gas processed . . . . .	Tril. cu. ft. . .	19	15	13	13	13	13	15	16	16	16

<sup>1</sup> Includes other finished petroleum products, not shown separately.Source: Through 1975, U.S. Bureau of Mines, *Minerals Yearbook*; thereafter, U.S. Energy Information Administration, *Energy Data Reports, Petroleum Statement Annual, Petroleum Supply Annual*, and *Natural Gas Annual*.

## No. 1195. U.S. Petroleum Balance: 1980 to 1993

[In millions of barrels]

ITEM	1980	1985	1988	1989	1990	1991	1992	1993
<b>Petroleum products supplied . . . . .</b>	<b>6,242</b>	<b>5,740</b>	<b>6,308</b>	<b>6,324</b>	<b>6,201</b>	<b>6,101</b>	<b>6,234</b>	<b>6,291</b>
New supply of products . . . . .	6,249	5,676	6,290	6,270	6,259	6,110	6,206	6,316
Production of products . . . . .	5,765	5,363	5,849	5,874	5,934	5,933	6,050	6,182
Crude input to refineries . . . . .	4,934	4,381	4,835	4,891	4,894	4,855	4,909	4,969
Oil, field production . . . . .	3,146	3,275	2,979	2,779	2,685	2,707	2,625	2,499
Alaska . . . . .	592	666	738	684	647	656	627	577
Lower 48 States . . . . .	2,555	2,608	2,241	2,095	2,037	2,050	1,997	1,922
Net imports . . . . .	1,821	1,094	1,807	2,081	2,112	2,068	2,194	2,441
Imports (gross excluding SPR) <sup>1</sup> . . . . .	1,910	1,125	1,845	2,112	2,142	2,111	2,223	2,472
SPR <sup>1</sup> imports . . . . .	16	43	19	20	10	-	4	5
Exports . . . . .	-105	75	57	52	40	42	32	36
Other sources . . . . .	33	12	57	32	98	80	90	28
Natural gas plant liquids (NGPL), supply . . . . .	577	604	593	563	574	613	628	664
Other liquids . . . . .	253	378	418	420	465	466	513	550
Net imports of refined products . . . . .	484	313	441	396	326	177	156	134
Imports . . . . .	578	523	681	656	598	500	471	461
Exports . . . . .	94	210	240	260	272	323	315	327
Stock withdrawal, refined products . . . . .	-7	64	17	53	-59	-10	28	-24
Ending stocks, all oils . . . . .	1,392	1,519	1,597	1,581	1,621	1,617	1,592	1,647
Crude oil and lease condensate . . . . .	358	321	330	341	323	325	318	335
Strategic Petroleum Reserve (SPR) <sup>1</sup> . . . . .	108	493	560	580	586	569	575	587
Unfinished oils . . . . .	124	107	100	(NA)	(NA)	(NA)	(NA)	(NA)
Gasoline blending components . . . . .	17	33	39	(NA)	(NA)	(NA)	(NA)	(NA)
Pentanes plus . . . . .	(NA)	8	7	(NA)	(NA)	(NA)	(NA)	(NA)
Finished refined products . . . . .	785	557	562	580	712	724	(NA)	(NA)
<b>PRODUCT TYPE SUPPLIED</b>								
<b>Total products . . . . .</b>	<b>6,242</b>	<b>5,740</b>	<b>6,326</b>	<b>6,324</b>	<b>6,201</b>	<b>6,101</b>	<b>6,234</b>	<b>6,291</b>
Finished motor gasoline . . . . .	2,407	2,493	2,678	2,675	2,641	2,623	2,660	2,729
Distillate fuel oil . . . . .	1,049	1,047	1,140	1,152	1,103	1,066	1,090	1,110
Residual fuel oil . . . . .	918	439	5,030	500	449	423	401	394
Liquefied petroleum gases <sup>2</sup> . . . . .	414	584	604	609	568	616	642	633
Pentanes plus, other liquids, etc. . . . .	1,454	1,155	1,369	1,378	1,431	1,365	70	72
Crude oil . . . . .	(NA)	22	15	10	9	7	5	4

- Represents zero. NA Not available. <sup>1</sup> SPR=Strategic Petroleum Reserve. (See table 956.) <sup>2</sup> Includes ethane.Source: U.S. Energy Information Administration, *Petroleum Supply Annual*.

## No. 1196. Crude Petroleum and Natural Gas—Production, by State: 1985 to 1993

[See also *Historical Statistics, Colonial Times to 1970*, series M 138, M 142, and M 147-161.]

STATE	CRUDE PETROLEUM						NATURAL GAS MARKETED PRODUCTION <sup>1</sup>					
	Quantity (mil. bbl.)			Value (mil. dol.)			Quantity (bil. cu. ft.)			Value (mil. dol.)		
	1985	1990	1993	1985	1990	1993	1985	1990	1993	1985	1990	1993
<b>Total <sup>2</sup> . . .</b>	<b>3,274</b>	<b>2,685</b>	<b>2,499</b>	<b>78,884</b>	<b>53,772</b>	<b>35,611</b>	<b>17,270</b>	<b>18,594</b>	<b>19,305</b>	<b>43,343</b>	<b>31,658</b>	<b>39,185</b>
AL . . . . .	22	18	19	579	387	308	107	135	388	398	373	956
AK . . . . .	666	658	577	10,655	10,086	8,141	321	403	430	236	554	611
AR . . . . .	19	10	10	443	222	150	155	175	196	393	360	551
CA . . . . .	424	322	293	8,386	5,732	3,548	491	363	316	1,653	857	753
CO . . . . .	30	31	29	758	722	481	178	243	401	517	377	646
FL . . . . .	11	6	6	(NA)	(NA)	(NA)	11	6	7	26	15	15
IL . . . . .	30	20	17	795	467	288	1	1	(Z)	4	1	1
IN . . . . .	5	3	3	134	73	51	(Z)	(Z)	(Z)	1	(Z)	
KS . . . . .	75	59	50	1,939	1,359	798	528	574	686	671	893	1,238
KY . . . . .	8	5	6	201	124	99	73	75	87	174	169	198
LA . . . . .	508	148	139	5,387	3,409	2,349	5,014	5,242	5,166	13,355	9,587	11,052
MI . . . . .	27	20	14	726	458	235	132	140	205	475	420	487
MS . . . . .	31	30	23	796	630	336	144	95	81	456	167	139
MT . . . . .	30	20	17	734	429	250	52	50	55	125	90	84
NE . . . . .	7	5	5	163	119	75	2	1	2	6	2	4
NM . . . . .	79	66	68	2,028	1,472	1,118	905	965	1,409	2,370	1,629	2,512
NY . . . . .	1	(Z)	(Z)	25	9	-	32	25	21	106	55	51
ND . . . . .	51	39	31	1,307	849	478	73	52	60	138	93	110
OH . . . . .	15	8	8	361	196	140	182	155	137	560	393	337
OK . . . . .	163	117	97	4,256	2,690	1,598	1,936	2,258	2,050	4,930	3,548	3,859
PA . . . . .	5	2	2	114	54	35	150	178	132	474	417	359
TX . . . . .	889	674	619	23	15,060	10,022	6,053	6,343	6,250	14,097	9,939	13,059
UT . . . . .	41	23	22	773	524	385	83	146	225	293	249	398
WV . . . . .	4	2	2	86	43	34	145	178	176	558	568	467
WY . . . . .	129	103	88	3,061	2,169	1,284	417	736	779	1,252	856	1,549

NA Not available. Z Less than 500 million cubic feet or less than \$500,000. <sup>1</sup> Excludes nonhydrocarbon gases.<sup>2</sup> Includes other States not shown separately. State production does not include State offshore production.Source: U.S. Energy Information Administration, *Energy Data Reports*, *Petroleum Supply Annual*, *Natural Gas Annual*, and *Natural Gas Monthly*.

**No. 1198. Liquefied Petroleum Gases—Summary: 1980 to 1993**

[In millions of 42-gallon barrels. Includes ethane]

ITEM	1980	1990	1992	1993	ITEM	1980	1990	1992	1993
<b>Production . . . . .</b>	<b>561</b>	<b>638</b>	<b>720</b>	<b>850</b>	<b>Consumption. . . . .</b>	<b>538</b>	<b>568</b>	<b>629</b>	<b>633</b>
At natural gas plants . . . . .	441	456	500	634	Ethane <sup>1</sup> . . . . .	164	186	209	217
At refineries . . . . .	121	182	222	216	Propane <sup>1,2</sup> . . . . .	298	335	378	367
Imports . . . . .	79	68	57	70	Butane (incl. isobutane) <sup>2</sup> . . . . .	76	47	42	49
Refinery input . . . . .	85	107	172	179	Stocks, Dec. 31. . . . .	116	98	98	117
Exports . . . . .	9	14	18	16					

<sup>1</sup> Reported consumption of ethane-propane mixtures have been allocated 70 percent ethane and 30 percent propane.<sup>2</sup> Reported consumption of butane-propane mixtures have been allocated 60 percent butane and 40 percent propane.Source: U.S. Energy Information Administration, *Petroleum Supply Annual*.**No. 1199. World Coal Trade: 1980 to 1991**

[In millions of short tons]

COUNTRIES	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Exporting countries, total<sup>1</sup> . . . . .</b>	<b>277.2</b>	<b>292.0</b>	<b>284.5</b>	<b>332.9</b>	<b>370.2</b>	<b>376.3</b>	<b>383.0</b>	<b>415.0</b>	<b>423.5</b>	<b>440.2</b>	<b>434.6</b>
United States . . . . .	88.7	106.5	78.2	82.0	93.2	85.5	79.6	94.9	100.8	105.8	109
Australia . . . . .	46.6	48.8	62.3	82.2	96.6	101.3	111.9	109.8	108.5	116.9	132.5
South Africa . . . . .	30.7	30.5	32.7	40.9	49.8	50.1	46.9	47.4	51.6	54.5	52.7
Soviet Union . . . . .	26.2	23.0	22.8	22.8	26.5	36.9	39.1	46.0	43.9	42.7	31
Germany <sup>2</sup> . . . . .	13.8	11.2	11.5	12.4	10.5	7.9	6.9	5.5	5.9	6.0	3.9
Canada . . . . .	16.1	16.6	18.6	26.8	30.3	28.6	29.5	35.0	36.1	34.2	37.6
Poland . . . . .	34.6	30.6	38.7	47.2	39.7	37.9	34.2	35.5	31.8	61.8	19.8
China . . . . .	4.2	5.1	6.8	7.7	8.6	10.9	14.4	16.2	16.9	19.1	20.7
<b>Importing countries, total<sup>1</sup> . . . . .</b>	<b>277.2</b>	<b>292.0</b>	<b>284.5</b>	<b>332.9</b>	<b>370.2</b>	<b>376.3</b>	<b>383.0</b>	<b>415.0</b>	<b>423.5</b>	<b>440.2</b>	<b>434.6</b>
Western Europe/Mediterranean . . . . .	126.9	126.5	112.9	132.4	152.3	149.0	145.6	146.2	154.7	172.1	180.6
Japan . . . . .	75.6	86.5	82.8	96.2	103.0	99.6	100.2	111.6	111.7	113.9	123.5
Eastern Europe . . . . .	34.8	37.0	39.7	39.9	39.1	45.4	44.9	45.1	39.6	30.6	21.9
Canada . . . . .	17.4	17.3	16.7	20.3	16.1	14.7	15.8	19.3	15.1	15.7	13.7

<sup>1</sup> Includes areas not shown separately. <sup>2</sup> Represents United Germany beginning, 1990.Source: U.S. Energy Information Administration, 1975-84, *Outlook for U.S. Coal Imports*; thereafter, *Annual Prospects for World Coal Trade*.

**No. 1200. Coal and Coke—Summary: 1970 to 1993**

[Includes coal consumed at mines. Demonstrated coal reserve base for United States on Jan. 1, 1992, was an estimated 476 billion tons. Recoverability varies between 40 and 90 percent for individual deposits; 50 percent or more of overall U.S. coal reserve base is believed to be recoverable. See also *Historical Statistics, Colonial Times to 1970*, series M 93-126]

ITEM	Unit	1970	1980	1985	1989	1990	1991	1992	1993
<b>Coal production, total<sup>1</sup></b>	<b>Mil. sh. tons ..</b>	<b>613</b>	<b>830</b>	<b>884</b>	<b>981</b>	<b>1,029</b>	<b>996</b>	<b>998</b>	<b>945</b>
Value .....	Mil. dol.	3,882	20,453	22,277	21,330	(NA)	(NA)	(NA)	(NA)
Anthracite production .....	Mil. sh. tons ..	9.7	6.1	4.7	3.3	3.5	3.4	3.5	3.6
Bituminous coal and lignite: <sup>2</sup>									
Number of mines .....	Number .....	5,601	5,598	4,547	3,429	3,243	2,846	2,746	2,475
Production .....	Mil. sh. tons .....	603	824	879	977	1,026	993	995	945
Value, total .....	Mil. dol. ....	3,774	20,196	22,061	21,260	22,274	21,598	(NA)	(NA)
Average per ton .....	Dollars .....	6.26	24.52	25.10	21.76	21.71	21.75	21.03	19.85
Exports .....	Mil. sh. tons .....	72	92	93	101	106	109	103	75
Value .....	Mil. dol. ....	961	4,627	4,465	4,287	4,510	4,619	(NA)	(NA)
Imports .....	1,000 sh. tons .....	36	1,194	1,952	2,851	2,699	3,390	3,803	(NA)
Method of mining:									
Underground .....	Mil. sh. tons .....	339	337	350	394	425	407	407	351
Surface .....	Mil. sh. tons .....	264	487	529	587	605	589	590	594
Percent of total prod. ....	Percent .....	43.8	59.1	60.2	59.8	58.7	59.1	59.1	(NA)
Consumption <sup>3</sup> .....	Mil. dol. ....	(Z)	30	70	(NA)	(NA)	(NA)	(NA)	(NA)
Electric power utilities .....	Mil. sh. tons .....	523	703	818	890	896	888	892	928
Industrial .....	Mil. sh. tons .....	320	569	694	767	774	772	780	814
Productivity average: <sup>4</sup>									
Daily employment .....	1,000 .....	140	225	169	131	131	121	110	101
Days worked .....	Number .....	228	210	204	269	271	274	280	280
Tons per worker:									
Per day .....	Sh. tons .....	18.84	16.32	23.13	31.75	32.90	35.18	37.71	(NA)
Per year .....	Sh. tons .....	4,296	3,427	4,719	6,795	7,106	7,880	(NA)	(NA)
Production, by State:									
Alabama .....	Mil. sh. tons .....	21	26	28	28	29	27	26	25
Illinois .....	Mil. sh. tons .....	65	63	59	59	60	60	60	41
Indiana .....	Mil. sh. tons .....	22	31	33	34	36	32	31	29
Kentucky .....	Mil. sh. tons .....	125	150	152	167	173	159	161	156
Montana .....	Mil. sh. tons .....	3	30	33	38	38	38	39	36
Ohio .....	Mil. sh. tons .....	55	39	36	34	35	31	30	29
Pennsylvania .....	Mil. sh. tons .....	90	93	71	71	71	65	68	60
Virginia .....	Mil. sh. tons .....	35	41	41	43	47	42	43	39
West Virginia .....	Mil. sh. tons .....	144	122	128	154	169	167	162	131
Wyoming .....	Mil. sh. tons .....	7	95	141	172	184	194	190	210
Other States .....	Mil. sh. tons .....	44	140	161	182	187	181	189	(NA)
World production .....	Mil. sh. tons .....	3,295	4,103	4,779	5,252	5,214	4,952	4,975	(NA)
<b>Coke production<sup>5</sup> .....</b>	<b>Mil. sh. tons ..</b>	<b>66.5</b>	<b>46.1</b>	<b>28.4</b>	<b>28.1</b>	<b>27.6</b>	<b>24.1</b>	<b>23.4</b>	<b>23.2</b>
Oven coke <sup>6</sup> .....	Mil. sh. tons .....	65.7	46.1	28.7	33.0	27.6	24.0	23.0	(NA)
Value of product at plant .....	Mil. dol. ....	2,193	6,029	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Coke and breeze .....	Mil. dol. ....	1,899	4,784	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Avg. market value per ton .....	Dollars .....	28	103	103	(NA)	(NA)	(NA)	(NA)	(NA)
Coal carbonized .....	Mil. sh. tons .....	96.5	66.7	41.1	41.4	38.9	33.9	32.4	31.6
Average value per ton .....	Dollars .....	12.47	56.26	54.30	47.50	47.73	48.88	47.9	47.4
Yield of coke from coal .....	Percent .....	69.1	69.2	69.8	79.8	71.0	71.0	(NA)	(NA)

NA Not available. <sup>2</sup> Less than \$500,000. <sup>1</sup> Includes bituminous coal, lignite, and anthracite. <sup>3</sup> Includes some categories not shown separately. <sup>4</sup> Data for 1970 are for mines producing 1,000 short tons or more per year; thereafter, data are for all mines. <sup>5</sup> Prior to 1980, excludes screenings or breeze; thereafter, includes beehive coke and other nonrecoverable coke-oven operations.

Source: 1970, U.S. Bureau of Mines, *Minerals Yearbook*; thereafter, U.S. Energy Information Administration, *Coal Industry, annual; Annual Energy Review*, and *Quarterly Coal Report*, and unpublished data.

**No. 1201. Uranium Concentrate ( $U_3O_8$ ) Industry—Summary: 1980 to 1993**

[Middle demand case. See table 969. See also *Historical Statistics, Colonial Times to 1970*, series M 266-267]

ITEM	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Production .....	1,000 sh. tons ..	21.9	5.6	6.8	6.5	6.5	6.9	4.4	4.0	2.8	3.1
Net imports ( $U_3O_8$ ) .....	1,000 sh. tons ..	-1.1	3.2	6.4	7.5	6.4	5.6	12.1	9.8	12.3	(NA)
Utility and Suppliers inventories ( $U_3O_8$ equivalent) .....	1,000 sh. tons ..	54.4	168.3	166.2	164.5	159.1	154.9	45.6	36.70	(NA)	(NA)
Price (1988 dol./lb. $U_3O_8$ ):											
Long-term contract price .....	Dollars .....	41.4	24.7	19.3	18.5	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Spot market price .....	Dollars .....	45.0	17.0	18.1	17.3	14.5	14.2	(NA)	(NA)	(NA)	(NA)
Delivered price .....	Dollars .....	39.9	233.6	231.9	219.6	225.7	227.8	(NA)	(NA)	(NA)	(NA)
Capital expenditures (1988 dollars) .....	Mil. dol. ....	1,107	37	29	63	36	35	(NA)	(NA)	(NA)	(NA)
Employment .....	1,000 .....	19.9	2.4	2.1	2.0	2.10	1.6	1.3	1.0	0.7	0.4

NA Not available. <sup>1</sup> Includes natural  $U_3O_8$  (uranium oxide), natural  $UF_6$  (uranium hexafluoride), natural  $UF_6$  under usage agreement,  $UF_6$  at enrichment suppliers, enriched  $UF_6$  and fabricated fuel. <sup>2</sup> Average U.S. contract prices and market price settlements.

Source: U.S. Department of Energy, *Domestic Uranium Mining and Milling Industry*, annual, and *Uranium Industry*, annual.