

Table
Number **Table Name**

(Click on the table number to go to corresponding table)

Narrative

20.01	Forest and Natural Area Acreage, by Island: June 30, 2012
20.02	Woodland on Farms, 1997, 2002, and 2007, and by County, 2007
20.03	Forest and Brushland Fires, by Cause of Fire: 2009 to 2011
20.04	Commercial Fishing: 2003 to 2012
20.05	Commercial Fish Catch, by Species: 2010 to 2012
20.06	Commercial Sea Landings, by Island: 2010 to 2012
20.07	Commercial Sea Landings, by Fishing Method: 2010 to 2012
20.08	Mineral Industries: 1982 to 2007
20.09	Nonfuel Mineral Production: 2007 to 2009

Section 20

FORESTRY, FISHERIES, AND MINING

This section presents data on forests and forest reserves, commercial fishing and fish populations, and mining and mineral products.

Important sources of data on these subjects are the *United States Census of Mineral Industries* and *Mineral Industry Surveys*, U.S. Census Bureau, *2007 Economic Census, Geographic Area Series*, Mining, and reports and records of the Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources and Division of Forestry and Wildlife. *Historical Statistics of Hawaii*, Section 14, summarizes the data for earlier periods. Comparable national statistics are reported in the *Statistical Abstract of the United States: 2012*, Sections 18.

**Table 20.01-- FOREST AND NATURAL AREA ACREAGE, BY ISLAND:
JUNE 30, 2012**

Island	Conservation district forest land		Natural areas	
	Forest reserve land 1/	Private forest land 2/	Number of areas	Acres
State total	642,675	328,742	20	123,432
Hawaii	444,155	106,745	8	94,954
Maui	68,220	53,180	5	18,543
Kahoolawe	-	-	-	-
Lanai	-	6,150	-	-
Molokai	11,690	-	2	2,950
Oahu	32,436	88,817	3	1,770
Kauai	86,174	73,850	2	5,215
Niihau	-	-	-	-

1/ State-owned and privately-owned lands under surrender agreement in forest reserve system.

2/ Private forest land within conservation district. The majority of these lands were previously in the forest reserve system.

Source: Hawaii State Department of Land and Natural Resources, Division of Forestry and Wildlife, records.

Table 20.02-- WOODLAND ON FARMS, 1997, 2002, AND 2007, AND BY COUNTY, 2007

[Acres]

Use	1997	2002	2007				
			State total	Hawaii	Honolulu	Kauai	Maui
Total	108,704	117,685	79,041	46,137	5,646	5,660	21,598
Pastured	31,844	41,467	22,570	12,791	(D)	103	(D)
Not pastured	76,860	76,218	56,471	33,346	(D)	5,557	(D)

D Withheld to avoid disclosing data for individual farms.

Source: U.S. Department of Agriculture, 2002 Census of Agriculture, Hawaii, (June 2004), p. 195.
 2007 Census of Agriculture, Hawaii, (February 2009), p. 240.

**Table 20.03-- FOREST AND BRUSHLAND FIRES, BY CAUSE OF FIRE:
2009 TO 2011**

Cause of Fire	Number of Fires			Acres burned		
	2009	2010	2011	2009	2010	2011
State total	8	11	2	8,079.1	3,521.9	1,228.0
Lightning	-	1	-	-	900.0	-
Campfire	-	2	-	-	2.1	-
Smoking	-	-	-	-	-	-
Debris burning	-	-	-	-	-	-
Arson	-	2	-	-	1,487.0	-
Equipment	-	-	1	-	-	1,153.0
Railroads	-	-	-	-	-	-
Children	-	-	-	-	-	-
Miscellaneous	8	6	1	8,079.1	1,132.8	75.0

Source: Hawaii State Department of Land and Natural Resources, Division of Forestry and Wildlife, Fire Management Program, *Annual Wildfire Summary Report* <<http://www.wildahinet.com/fmp/firedata.htm>> accessed May 10, 2012 and records.

Table 20.04-- COMMERCIAL FISHING: 2003 TO 2012

[Fiscal year ending June 30. Represents the total sea catches of all licensed commercial fishers.
Excludes pond catches, The Aquaculture and Development Program, Department of Agriculture, surveys pond harvest market information]

Year	Number of commercial fishermen	Commercial fish catch		
		Pounds landed	Pounds sold	Value to primary producers (dollars)
2003	3,434	24,054,939	(1/)	(1/)
2004	2,971	22,230,489	(1/)	(1/)
2005	3,248	24,876,316	(1/)	(1/)
2006	3,137	24,636,892	(1/)	(1/)
2007	3,220	26,563,127	(1/)	(1/)
2008	3,196	33,310,542	(1/)	(1/)
2009	3,557	28,065,282	(1/)	(1/)
2010	3,373	29,164,222	(1/)	(1/)
2011	3,691	31,455,425	(1/)	(1/)
2012	3,992	31,714,435	(1/)	(1/)

1/ Due to revisions to the commercial fishing report forms in October 2002, licensed commercial fishers no longer report ex-vessel landing values. The latter information is collected from a fish dealer reporting system. The Division of Aquatic Resources is developing an application to integrate the fishing and fish dealer reporting systems to summarize landings with ex-vessel landing value information. Therefore, only total landings reported by commercial fishers are available at this time.

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, *Commercial Fish Landings for Fiscal Year* (annual) and records.

Table 20.05-- COMMERCIAL FISH CATCH, BY SPECIES: 2010 TO 2012

[Fiscal year ending June 30, pounds landed, excludes pond catches. Due to revisions to the commercial fishing report forms in 2002, data may not be comparable to previous years]

Species	2010	2011	2012
Total catch	29,164,222	31,455,425	31,714,435
Tunas	17,066,495	18,801,218	19,489,965
Aku (skipjack)	842,972	439,044	981,378
Tombo	982,317	1,213,205	1,708,294
Bigeye (ahi)	12,293,460	13,766,508	12,793,182
Yellowfin (ahi)	2,910,195	3,371,689	3,998,714
Billfishes	4,913,195	5,062,601	4,864,717
Blue marlin	1,060,700	1,021,614	1,167,446
Shortnose spearfish	242,253	502,072	426,149
Striped marlin	406,315	774,696	750,970
Swordfish	3,173,909	2,725,657	2,480,836
Miscellaneous pelagic species	5,209,892	5,510,850	5,652,200
Mahimahi	1,469,554	2,001,806	1,793,330
Monchong	621,885	454,445	674,127
Ono	725,930	781,064	734,217
Opah	1,808,524	1,596,252	1,787,878
Walu	563,637	631,777	621,579
Deep bottom fishes	396,800	474,381	363,736
Ehu	24,882	24,522	25,912
Hapuupuu	11,110	8,212	9,898
Opakapaka	109,557	147,096	104,740
Uku	125,142	126,294	101,713
Ulaula (onaga)	59,408	67,755	53,234
Akule/opelu	724,968	738,696	537,827
Akule	408,846	452,710	258,831
Opelu	316,074	282,068	241,827
Jacks	43,035	46,046	53,036
Inshore fishes	396,073	470,252	399,139
Sharks	259,992	214,001	217,666
Mako	207,366	167,119	135,970
Lobsters	23,182	11,640	9,362
Crabs	54,636	41,522	23,065
Shells	(NA)	(NA)	(NA)
Shrimps	(1/)	(1/)	7,141
Seaweeds	12,028	13,573	17,353
Unclassified / miscellaneous	63,926	70,645	79,228

1/ Due to low level of fishermen reporting and to preserve confidentiality, data for these species are pooled under miscellaneous.

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, *Commercial Fish Landings, State of Hawaii—Fiscal Years 2010-2012* and records.

Table 20.06-- COMMERCIAL SEA LANDINGS, BY ISLAND: 2010 TO 2012

[Fiscal year ending June 30, pounds landed]

Island	2010	2011	2012
State total	29,164,222	31,455,425	31,714,435
Hawaii	2,867,404	2,674,953	2,675,361
Maui	679,976	734,809	851,748
Lanai	13,634	13,108	7,723
Molokai	34,119	39,497	42,375
Oahu	24,774,566	27,232,594	27,312,244
Kauai and Niihau	794,523	760,464	824,984

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, records.

**Table 20.07-- COMMERCIAL SEA LANDINGS, BY FISHING METHOD:
2010 TO 2012**

[Fiscal year ending June 30, pounds landed]

Fishing method	2010	2011	2012
All methods	29,164,222	31,455,425	31,714,435
Aku pole and line	(1/)	(1/)	369,116
Longline	22,369,598	24,795,513	24,558,662
Handline	2,096,754	2,127,947	2,194,537
Trolling	2,989,823	2,853,215	3,357,958
Net	603,915	649,912	461,751
Trap	82,978	89,234	40,021
All other methods	1,021,154	939,604	732,390

1/ Due to low level of fishermen reporting and to preserve confidentiality, data for these species are pooled under all other methods.

Source: Hawaii State Department of Land and Natural Resources, Division of Aquatic Resources, *Commercial Fish Landings, State of Hawaii--Fiscal Years 2010-2012* and records.

Table 20.08-- MINERAL INDUSTRIES (NAICS 21): 1982 TO 2007

[Includes establishments with payroll. Statistics based on the North American Industry Classification System (NAICS) which replaced the Standard Industrial Classification (SIC) system used in Economic Censuses prior to the 1997 Economic Census]

Subject	1982	1987	1992	1997	2002	2007
Number of establishments	12	9	7	7	8	8
With 20 employees or more	4	4	4	2	1	4
All employees						
Number (1,000) 1/	0.2	0.2	0.2	0.1	0.1	0.2
Annual payroll (million dollars)	3.8	7.4	9.4	5.6	7.3	9.6
Production, development, and exploration workers						
Number (1,000) 1/	0.1	0.2	0.2	0.1	0.1	0.1
Annual hours (millions)	0.2	0.4	0.4	0.2	0.2	0.3
Annual wages (million dollars)	2.6	5.7	8.1	4.7	5.1	7.9
Value added (million dollars)	9.7	23.5	27.3	22.0	20.7	49.0
Total cost of supplies (million dollars)	5.9	10.4	11.3	(D)	6.6	12.9
Total value of shipments and receipts for services (million dollars)	12.8	31.1	33.7	33.3	25.6	55.4
Capital expenditures (million dollars)	2.7	2.8	4.8	(D)	1.7	6.4

D Withheld to avoid disclosing data for individual companies.

1/ For pay period including March 12.

Source: U.S. Census Bureau, *1987 Census of Mineral Industries, Geographic Area Series, Pacific States*, MIC87-A-9 (October 1990), Hawaii table 1; *1992 Census of Mineral Industries, Geographic Area Series, Pacific States*, MIC92-A-9 (May 1996), Hawaii table 1; *1997 Economic Census, Mining, Geographic Area Series, Hawaii*, EC97N21A-HI (May 2000), table 1; *2002 Economic Census, Mining, Geographic Area Series, Hawaii*, EC02-21A-HI (April 2005), table 1; 2007 Economic Census, Sector 21: EC0721A2: Mining: Geographic Area Series: Detailed Statistics for the State or Offshore Areas: 2007 <http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=04000US15&-fds_name=EC0700A1&-ds_name=EC0721A2&-_lang=en> accessed May 26, 2010.

Table 20.09-- NONFUEL MINERAL PRODUCTION: 2007 TO 2009

[Production as measured by mine shipments, sales, or marketable production (including consumption by producers), Data are rounded to no more than three significant digits; may not add to totals shown]

Minerals	2007 1/	2008 1/	2009
QUANTITY (1,000 METRIC TONS)			
Gemstones	(NA)	(NA)	(NA)
Sand and gravel (construction)	1,850	1,640	1,130
Stone (crushed)	8,800	7,410	5,920
VALUE (\$1,000)			
Total	165,251	163,951	115,451
Gemstones	151	151	151
Sand and gravel (construction)	24,100	29,800	14,300
Stone (crushed)	141,000	134,000	101,000

NA Not available.

1/ Revised from previous *Data Book*.

Source: U.S. Geological Survey, Minerals Information, "2009 Minerals Yearbook, Hawaii 2009 [Advance Release]" (May 2013) <<http://minerals.er.usgs.gov/minerals/pubs/state/hi.html>> accessed May 20, 2013.