

SECTION 19

FORESTS, FISHERIES, AND MINING

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

The most recent available statistics show 1.1 million acres of commercial forest in the State, most of it on the Big Island. Over 46,000 acres have been planted in eucalyptus and other species of trees by 1970. The volume of sawtimber reported in 1968 was 789 million board feet. Primary forest products harvested in 1969 had a value of \$281,000.

The commercial fish catch in 1970 exceeded 9.7 million pounds and had a value of \$3.6 million. *Aku* (Skipjack) accounted for almost a third of the total value.

The value of mineral production reached \$30 million in 1970, most of it in cement and stone.

Important sources of data on these subjects are the United States Census of Agriculture, United States Census of Mineral Industries, and reports of the Hawaii State Department of Land and Natural Resources Fish and Game Division and Forestry Division. Comparable Mainland statistics are reported in the *Statistical Abstract of the United States: 1970*, Sections 24, 25 and 26.

**Table 128.—AREA OF FOREST LAND, 1961, AND PLANTED FOREST, 1970
AND VOLUME OF SAWTIMBER, 1968, BY ISLAND**

Island	Forest land area, 1961 (1,000 acres)		Area of planted forest, to 1970 (acres) ³	Volume of sawtimber, 1968 (1,000 board feet) ⁴
	Total ¹	Commercial ²		
State total	1,981.6	1,088.9	46,469	788,931
Niihau	28.0	—	—	—
Kauai	223.0	136.7	4,736	37,316
Oahu	210.6	97.1	7,138	49,652
Molokai	82.9	23.6	2,732	4,204
Lanai	28.2	2.1	512	2,920
Kahoolawe	11.7	—	—	—
Maui	263.6	120.4	10,299	105,560
Hawaii	1,133.6	709.0	21,052	589,279

¹Includes commercial (1,088.9), unproductive (807.3), and productive-reserved (85.4).

²Includes Federal military (8.6), State (487.3), County (0.4), farmer-owned (365.9), and miscellaneous private (266.7).

³Chiefly Robusta Eucalyptus, other Eucalyptus, other hardwoods, and conifers.

⁴Includes Ohia (377,555), Koa (120,908), Eucalyptus (252,648), other hardwoods (19,778), and conifers (18,042).

Source: Hawaii State Department of Land and Natural Resources, Forestry Division, *Facts About Hawaii's Forests* (1969), and records.

Table 129.—PRIMARY FORESTRY PRODUCTS HARVESTED: 1958 TO 1969

Subject	Total	Sawlogs	Craftwood	Fuelwood	Posts	Treefern
Production:¹						
1958	—	405	510	1,300	65	100
1963	—	913		847	22	118
1967	—	3,925	196	720	7.1	143.5
1969	—	1,650	422	1,720	10	55
Value (\$1,000):						
1958	269	40	121	19	54	35
1963	230	149		19	23	39
1967	334	161	58	28	12	75
1969	281	86	98	54	16	27

¹Sawlogs and craftwood in 1,000 board feet, fuelwood in cords, posts in 1,000 pieces, and treefern in 1,000 cubic feet.

Source: U.S. Department of Agriculture, Pacific Southwest Forest and Range Experiment Station, *Forest Products Harvested in Hawaii—1967*, Res. Note PSW-179, and *Forest Products Harvested in Hawaii—1969*, forthcoming.

Table 130.—COMMERCIAL FISH LANDINGS: 1926 TO 1970

Subject ¹	Pounds	Value (dollars)	Value per lb. (cents)
1926 ²	8,784,004	(NA)	(NA)
1930	9,252,926	1,076,452	11.6
1940	19,403,249	1,468,688	7.6
1950	14,904,681	3,547,608	23.8
1960	14,266,795	2,994,033	21.0
1961	13,730,912	2,898,380	21.1
1962	13,931,171	2,873,274	20.6
1963	10,879,389	2,566,045	23.6
1964	12,099,123	2,738,323	22.6
1965	17,192,431	3,355,553	19.5
1966	15,987,978	3,319,917	20.8
1967	12,354,658	3,147,566	25.5
1968	12,829,326	3,253,622	25.4
1969	11,096,116	3,378,553	30.4
1970	9,786,726	3,584,936	36.6
ISLANDS: 1970			
Hawaii	768,848	310,778	40.4
Maui	749,897	179,566	23.9
Lanai	13,131	5,823	44.3
Molokai	13,397	6,598	49.2
Oahu	7,935,323	2,976,094	37.5
Kauai	306,130	106,077	34.7
SPECIES: 1970 ³			
Sea catch	9,766,983	3,574,521	36.6
Aku (Skipjack)	5,704,127	1,149,566	20.2
Ahi (Bigeye)	729,672	683,370	93.7
Akule	696,692	253,369	36.4
Ahi (Yellowfin)	586,574	361,113	61.6
Stripe Marlin	330,275	212,670	64.4
Hahalalu	271,953	101,982	37.5
Opelu	184,271	94,195	51.1
Pacific Blue Marlin	150,306	52,117	34.7
Ulua	93,203	42,901	46.0
Kahala	86,165	30,085	34.9
Mahimahi	73,876	60,409	81.8
Opakapaka	72,730	48,813	67.1
Uku	50,673	27,964	55.2
Other species	736,466	455,967	61.9
Pond catch	19,743	10,415	52.8

NA Not available.

¹Years ended June 30, except for calendar year 1940.

²Earliest year available.

³Shown separately for all species over 50,000 pounds in 1970. Value per pound ranged from 6.8¢ for *pui* (eel) and 14.7¢ for *kala* to \$1.47 for *ulaula koae* (onaga) and \$1.59 for *opae* (shrimp).

Source: *Report of the Fish and Game Commission... 1927*, p. 4; *Report of the Board of Commissioners of Agriculture and Forestry* for 1930 (p. 109), 1940 (p. 42), and 1950 (p. 56); *Report of the Department of Agriculture and Conservation* for 1960 (p. 113) and 1961 (p. 117); *Annual Report to the Governor, Department of Land and Natural Resources* for 1962 (p. 23), 1962-1964 (pp. 27 and 33), 1964-1966 (p. 41), 1966-1967 (p. 47), 1967-1968 (p. 44), 1968-1969 (p. 42), and 1969-1970 (p. 44). Data for 1940, 1960 and 1961 have been revised.

Table 131.—MINERAL OPERATIONS: 1909 TO 1970

Year	Establishments	All employees		Value of shipments and receipts (\$1,000)		Value added in mining (\$1,000)	Capital expenditures (\$1,000)
		Total	Payroll (\$1,000)	Total ¹	Mineral industries only		
1963	49	339	1,758	7,462	6,525	5,677	520
1958	24	445	1,820	6,207	5,847	4,887	704
1954	13	171	598	1,778	(NA)	1,266	193
1919	5	151	95	251	(NA)	202	(NA)
1909	6	43	14	21	(NA)	16	(NA)

Year	Value of mineral production (\$1,000)				Quantity produced	
	Total	Cement	Stone	Other	Cement ²	Stone ³
1970(est.)	30,113	10,517	15,995	3,601	2,126	6,600
1969	29,539	10,544	16,059	2,936	2,075	6,534
1968	23,225	9,254	11,273	2,649	1,841	5,211

NA Not available.

¹Including operations in manufacturing (5 establishments in 1963).

²Thousand 376-pound barrels.

³Thousand short tons.

Source: U.S. Bureau of the Census, *Census of Mineral Industries, 1963. Area Statistics: Hawaii*, MIC63(2)-10, table 1, and U.S. Bureau of Mines, "The Mineral Industry of Hawaii in 1970," *Mineral Industry Surveys*, December 1970.