

## 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 46,800 acres had been planted in eucalyptus and other species of trees by 1971. The volume of sawtimber reported in 1968 was 789 million board feet. Primary forest products harvested in 1969 had a value of \$331,000.

The commercial fish catch in 1973 exceeded 14 million pounds and had a value of \$5.7 million. *Aku* (Skipjack) accounted for more than half of the total value.

The value of mineral production reached \$33 million in 1973, most of it in cement and stone. The previous all-time high was \$30 million, recorded in 1969.

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: 1973*, Sections 24, 25, and 26.

**Table 245.—AREA OF FOREST LAND, 1961, AND PLANTED FOREST, 1971, AND VOLUME OF SAWTIMBER, 1968, BY ISLAND**

Island	Forest land area, 1961 (1,000 acres)		Area of planted forest, to 1971 (acres) <sup>3</sup>	Volume of sawtimber, 1968 (1,000 board feet) <sup>4</sup>
	Total <sup>1</sup>	Commercial <sup>2</sup>		
State total .....	1,981.6	1,088.9	46,849	788,931
Niihau .....	28.0	—	—	—
Kauai .....	223.0	136.7	4,849	37,316
Oahu .....	210.6	97.1	7,145	49,652
Molokai .....	82.9	23.6	2,781	4,204
Lanai .....	28.2	2.1	512	2,920
Kahoolawe .....	11.7	—	—	—
Maui .....	263.6	120.4	10,351	105,560
Hawaii .....	1,133.6	709.0	21,211	589,279

<sup>1</sup>Includes commercial (1,088.9), unproductive (807.3), and productive-reserved (85.4).

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

<sup>3</sup>Chiefly Robusta Eucalyptus, other Eucalyptus, other hardwoods, and conifers.

<sup>4</sup>Includes 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 246.—PRIMARY FOREST PRODUCTS HARVESTED: 1958 TO 1969**

Subject	Total	Sawlogs	Craftwood	Veneer logs	Fuelwood	Posts	Treefern
<b>Production<sup>1</sup>:</b>							
1958 .....	—	405	510	—	1,300	65.0	100
1960 .....	—	850	100	30	1,500	37.0	115
1963 .....	—		913	—	847	22.0	118
1967 <sup>2</sup> .....	—	3,925	196	—	720	7.1	143
1969 .....	—	1,650	422	1,056	1,720	10.1	55
<b>Average unit value (\$):</b>							
1958 .....	—	100	240	—	14.50	0.83	0.35
1960 .....	—	70	200	300	30.00	0.60	0.38
1963 .....	—		160	—	22.43	1.05	0.33
1967 .....	—	40	300	—	38.89	1.69	0.52
1969 .....	—	52	230	47	31.40	1.58	0.49
<b>Total value (\$1,000):</b>							
1958 .....	269	40	121	—	19	54	35
1960 .....	197	57	20	9	45	22	44
1963 .....	230		149	—	19	23	39
1967 .....	334	161	58	—	28	12	75
1969 .....	331	86	98	50	54	16	27

<sup>1</sup>Sawlogs, craftwood, and veneer logs 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—1969*, Research Note PSW-239 (1971), p.2.

246A largest reported trees . . . . 1974

Table 247.—COMMERCIAL FISHING: 1928 TO 1974

Years ended June 30	Fishing boats	Fishermen	Commercial fish landings	
			Pounds	Value (dollars)
1928 .....	949	1,530	11,727,803	1,410,089
1930 .....	923	1,557	9,252,926	1,076,452
1935 .....	881	2,078	10,898,617	901,630
1940 <sup>1</sup> .....	857	2,573	19,403,249	1,468,688
1945 .....	561	2,431	3,591,965	994,836
1950 .....	800	3,110	14,904,681	3,547,608
1955 .....	572	1,858	19,245,366	3,575,254
1960 .....	437	1,022	14,266,795	2,994,033
1961 .....	443	941	13,730,912	2,898,380
1962 .....	423	940	13,931,171	2,873,274
1963 .....	366	808	10,879,389	2,566,045
1964 .....	373	805	12,099,123	2,738,323
1965 .....	387	717	17,192,431	3,355,553
1966 .....	365	715	15,987,978	3,319,917
1967 .....	397	801	12,354,658	3,147,566
1968 .....	387	760	12,829,326	3,253,622
1969 .....	509	1,028	11,096,116	3,378,553
1970 .....	670	1,264	9,786,726	3,584,936
1971 .....	738	1,373	15,176,525	4,633,877
1972 .....	(NA)	1,544	15,577,302	5,536,385
1973 .....	(NA)	1,857	14,029,491	5,676,780
1974 .....	(NA)	(NA)	13,997,435	6,234,933

NA Not available.

<sup>1</sup>Calendar year.

Source: Hawaii State Department of Land and Natural Resources, *Report to the Governor, 1971-1972*, pp. 43-44; *Commercial Fish Landings for Fiscal Year—July, 1972 through June, 1973*; *Commercial Fish Landings for Fiscal Year—July, 1973 through June, 1974*; and records.

**Table 248.—COMMERCIAL FISH LANDINGS, BY SPECIES AND ISLAND: JULY 1, 1972  
TO JUNE 30, 1973**

Island and species	Pounds caught	Value (dollars)
Total landings .....	14,029,491	5,676,780
ISLAND		
Hawaii .....	1,099,308	562,712
Maui .....	749,001	206,519
Lanai .....	14,545	8,077
Molokai .....	27,879	15,797
Oahu .....	11,827,357	4,767,669
Kauai .....	311,401	116,006
SPECIES <sup>1</sup>		
Sea catch, total <sup>2</sup> .....	14,014,927	5,668,569
Aku (Skipjack) .....	10,630,439	3,002,415
Ahi (Yellowfin) .....	612,129	482,399
Akule .....	603,360	263,886
Ahi (Bigeye) .....	456,261	732,024
Hahalalu .....	219,606	90,300
Opelu .....	174,091	113,382
Mahimahi .....	106,501	89,378
Opakapaka .....	94,072	85,724
Stripe Marlin .....	78,448	63,101
Kahala .....	64,486	41,154
Ono .....	64,460	25,908
Crab (Kona) .....	62,515	96,452
Pacific Blue Marlin .....	55,607	728
Uku .....	51,672	36,781
Ulaula Koae (Onaga) .....	36,775	64,567
Pond catch .....	14,564	8,211

<sup>1</sup>Shown separately for all species over 50,000 pounds or \$50,000.

<sup>2</sup>Includes species not shown separately.

Source: Hawaii State Department of Land and Natural Resources, Division of Fish and Game, *Commercial Fish Landings for Fiscal Year—July, 1972 through June, 1973* (September 1973).



Table 249.—MINERAL OPERATIONS: 1909 TO 1967

Kind of operation and year	Establishments	Employees	Payroll (\$1,000)	Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
<b>Mineral industries only:</b>						
1958 .....	20	421	1,724	4,550	5,847	704
1963 .....	44	315	1,658	4,909	6,525	520
1967 .....	12	200	1,600	5,000	5,500	1,800
<b>Including operations in manufactures:</b>						
1909 .....	6	43	14	16	21	(NA)
1919 .....	5	151	95	202	251	(NA)
1954 .....	13	171	598	1,266	1,778	193
1958 .....	24	445	1,820	4,887	6,207	704
1963 .....	49	339	1,758	5,677	7,462	520
1967 .....	18	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing figures for individual companies.

NA Not available.

Source: U.S. Bureau of the Census, *Census of Mineral Industries, 1963*, MIC63(2)-10, table 1, and *Census of Mineral Industries, 1967*, MIC67(2)-10, table 1.

(1960-1974)

**Table 250.—MINERAL PRODUCTION: 1947 TO 1973**  
 (Production as measured by mine shipments, sales, or marketable production, including consumption by producers.)

Year	Quantity (1,000 short tons)		Value (\$1,000)			
	Cement	Stone	Total	Cement	Stone	Other minerals <sup>1</sup>
1947 .....	—	786	1,705	—	1,471	234
1950 .....	—	696	1,775	—	1,555	220
1955 .....	—	1,414	3,592	—	2,884	708
1960 .....	21	3,535	9,254	571	6,443	2,240
1965 .....	294	5,172	20,835	8,297	9,353	3,185
1966 .....	329	5,079	21,253	9,046	9,482	2,725
1967 .....	262	4,100	16,936	7,360	7,207	2,369
1968 .....	346	5,211	23,225	9,254	11,273	2,698
1969 .....	390	6,534	29,539	10,544	16,059	2,936
1970 .....	406	6,331	28,965	10,334	15,538	3,093
1971 .....	386	6,056	28,107	10,627	14,357	3,123
1972 .....	415	5,005	28,074	11,116	13,494	3,464
1973 <sup>2</sup> .....	469	7,180	35,147	13,750	18,466	2,931

<sup>1</sup>Chiefly sand and gravel; pumice, pumicite, and volcanic cinder; and lime.

<sup>2</sup>Revised.

Source: U.S. Bureau of Mines, *Minerals Yearbook* (annual) and "The Mineral Industry in Hawaii," *Mineral Industry Surveys* (annual preliminary and advance summary reports).