

# Agriculture & Aquaculture



## Section 5

### **AGRICULTURE & AQUACULTURE**

This section includes statistics on agriculture and aquaculture. Statistics about farms are presented along with the value and distribution of farm and other land based herba-culture production. Fish catches and other aquaculture statistics are given.

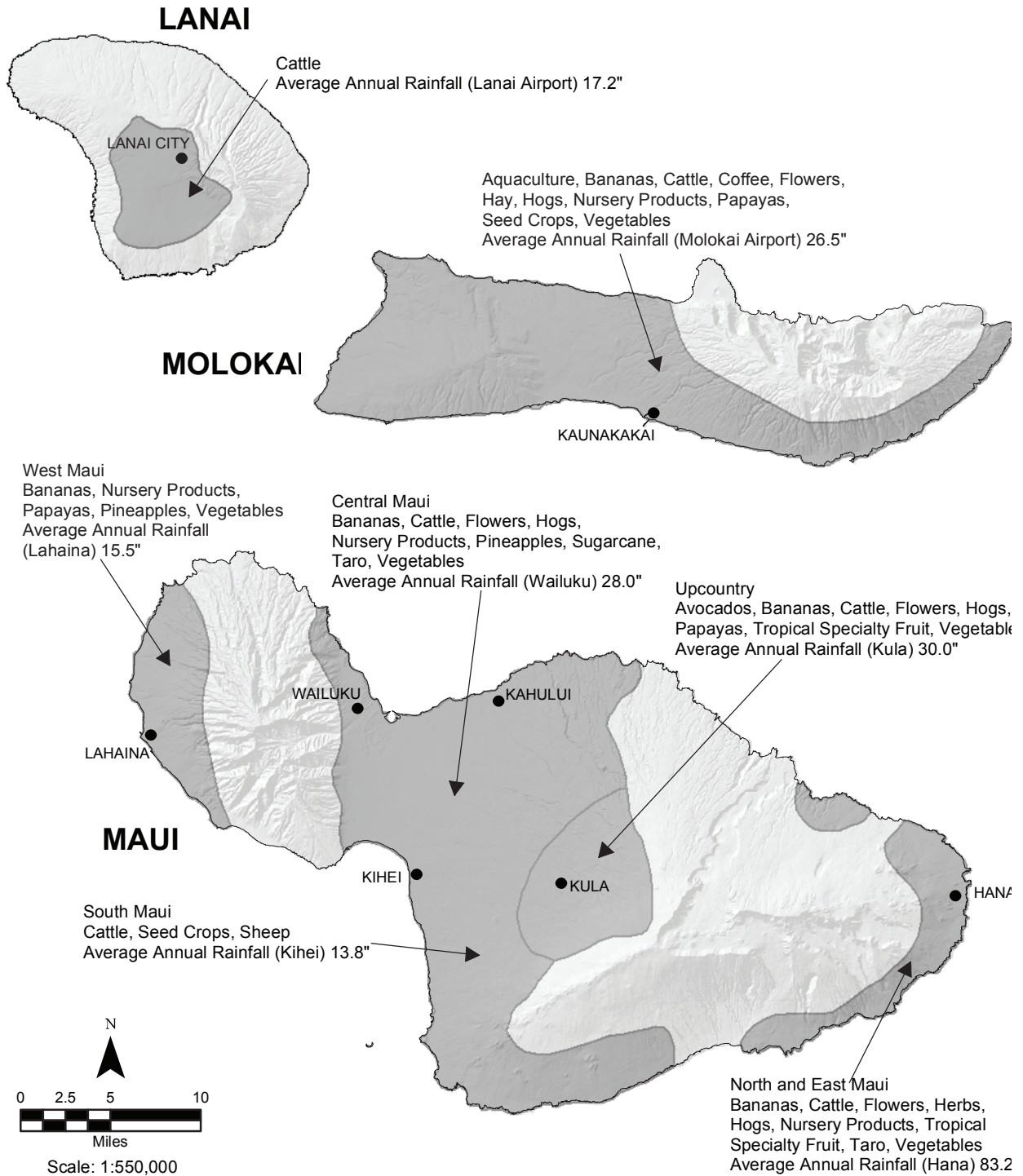
Agriculture remains an important element in Maui County's economy and land use patterns. Sugar and pineapple remain the largest crops, though the trend toward diversification of agriculture continues.

The pounds of fish landed State wide has generally been declining since 2000, although the pounds landed in Maui County has been up since 2003. Commercial aquaculture continues to grow in importance.

The data in this section comes mainly from the U.S. Census Bureau, the Hawai'i Agriculture Statistics Service, specific crop producers, and the Hawai'i State Department of Land and Natural Resources.

5.1.1

**AGRICULTURAL AREAS,  
MAUI COUNTY**



SOURCE: Hawai'i Agricultural Statistics Service, *Statistics of Hawaii Agriculture, 2003*.

## 5.1.2

**TENURE AND CHARACTERISTICS OF FARM  
OPERATORS AND TYPES OF FARM ORGANIZATION,  
MAUI COUNTY**

	1992	1997	2002
<b>Farms</b>	<b>850</b>	<b>806</b>	<b>823</b>
<b>Land In Farms (acres)</b>	<b>355,786</b>	<b>292,090</b>	<b>256,690</b>
<b>Tenure of Operator</b>			
Full Owners			
Farms	503	460	529
Acres	118,137	81,616	82,274
Part Owners			
Farms	159	137	115
Acres	225,867	188,649	135,661
Owned land in farms (acres)	141,136	140,909	102,342
Rented land in farms (acres)	84,731	47,740	33,319
Tenants			
Farms	188	209	179
Acres	11,782	21,825	38,755
<b>Operator Characteristics</b>			
Place of Residence			
On farm operated	577	536	623
Not on farm operated	219	215	200
Not reported	54	55	n/a
Principal Occupation			
Farming	456	372	434
Other	394	434	389
Days of Work Off Farm <sup>1</sup>			
None	298	290	413
Any	482	455	410
1 to 49 days	55	59	47
50 to 99 days	31	33	36
100 to 199 days	133	86	63
200 days or more	263	277	264
Not reported	70	61	n/a
Years on Present Farm			
2 years or less	44	42	46
3 or 4 years	136	47	66
5 to 9 years	171	171	189
10 years or more	360	406	522
Average years on present farm	13.1	14.3	15.3
Not reported	139	140	n/a

## 5.1.2

CONTINUED

	1992	1997	2002
<b>Operator Characteristics (cont.)</b>			
Age Group			
Under 25 years	2	7	4
25 to 34 years	44	24	26
35 to 44 years	259	182	108
45 to 54 years	221	270	310
55 to 59 years	50	107	117
60 to 64 years	62	59	82
65 to 69 years	74	45	54
70 years and over	138	112	122
Average age	52.6	53.0	55.0
Male			
Farms	737	681	659
Acres	318,121	275,346	241,920
Female			
Farms	113	125	164
Acres	37,665	16,744	14,770
<b>Type of Organization</b>			
Individual or Family (sole proprietorship)			
Farms	710	679	701
Acres	53,463	31,942	D
Partnership			
Farms	52	44	37
Acres	D	34,620	11,357
Corporation (family held)			
Farms	46	56	58
Acres	90,740	101,236	76,424
Corporation (other than family held)			
Farms	26	13	17
Acres	192,428	123,312	99,056
Other (cooperative, estate or trust, institutional, etc.)			
Farms	16	14	10
Acres	D	980	D

D: Withheld to avoid disclosing data for individual farms.

<sup>1</sup> Number of days of Work Off Farm revised 2002.

SOURCE: United States Department of Agriculture, National Agricultural Statistics Service, *2002 Census of Agriculture, various tables.*

## 5.1.3

## FARMS AND LAND IN FARMS, MAUI COUNTY

	1992	1997	2002
<b>Farms</b>	850	806	823
<b>Land in Farms</b>	355,786	292,090	256,690
Average size of farm (acres)	419	362	312
Median size of farm (acres)	NA	6	NA
<b>Estimated Market Value of Land and Buildings<sup>1</sup></b>			
Average per farm	1,118,184	818,342	1,251,598
Average per acre	2,671	2,258	4,112
<b>Estimated Market Value of All Machinery and Equipment<sup>1</sup></b>			
Average per farm	117,143	88,989	58,849
<b>Farms by Size</b>			
1 to 9 acres	505	468	505
10 to 49 acres	232	233	212
50 to 179 acres	60	48	56
180 to 499 acres	24	29	20
500 to 999 acres	3	5	7
1,000 acres or more	26	23	23
<b>Total Cropland</b>			
Farms	733	684	649
Acres	D	D	28,404
<b>Harvested Cropland</b>			
Farms	666	605	649
Acres	39,031	32,243	28,404
<b>Irrigated Land</b>			
Farms	541	480	462
Acres	61,549	35,031	26,855
<b>Market Value of Agricultural Products Sold (\$1,000)</b>	164,767	128,385	124,511
Crops, including nursery and greenhouse crops	153,285	116,084	116,645
Livestock, poultry, and their products	11,483	12,301	7,866
<b>Average Market Value of Agricultural Products Sold per Farm (\$)</b>	193,844	159,287	151,289

<sup>1</sup> Data are based on a sample of farms.

D: Withheld to avoid disclosing data for individual farms.

NA: Not available.

SOURCE: United States Department of Agriculture, National Agricultural Statistics Service, *2002 Census of Agriculture, various tables*.

## 5.1.4

### NUMBER OF FARMS, FARM ACREAGE, AND FARM EMPLOYMENT, MAUI COUNTY

	2000	2001	2002	2003	2004	2005
Number of Farms <sup>1</sup>	800	850	850	850	850	850
Farm Acreage (1,000) <sup>2</sup>	280	270	260	260	260	260
Farm Employment <sup>3</sup>						
Self-employed farm operators	500	500	500	*	*	*
Unpaid workers <sup>4</sup>	150	150	150	*	*	*
Hired workers	2,000	1,800	2,250	1,650	1,850	1,700

\* Beginning July 2002, estimates for self-employed and unpaid workers have been discontinued due to a change in the National Lab or Statistics Program.

<sup>1</sup> Based on farm definition of \$1,000 or more of agricultural sales.

<sup>2</sup> Includes land not in crops and pasture, such as farm house lots, roads, woodlots, etc.

<sup>3</sup> Average of quarterly data.

<sup>4</sup> Includes family members and others working 15 or more hours per week.

SOURCE: Hawai'i Agricultural Statistics Service, *Statistics of Hawaii Agriculture 2005 (annual)*.

## 5.1.5

### LIVESTOCK: NUMBER OF OPERATIONS AND VALUE OF SALES, MAUI COUNTY

	2001	2002	2003	2004	2005
<b>Number of Livestock Operations, December 31</b>					
Cattle <sup>1</sup>	170	170	140	160	160
Hogs	60	60	50	50	60
Milk	4	D	6	6	6
Eggs	8	D	20	20	20
Honey	D	D	D	D	D
<b>Value of Livestock Sales (\$1,000)</b>					
Cattle <sup>2</sup>	2,438	2,588	2,266	2,932	2,729
Hogs <sup>3</sup>	829	838	897	859	880
Milk	D	D	D	D	D
Eggs	D	D	D	D	D
Aquaculture	D	D	D	D	D
<b>Total livestock &amp; Aquaculture sales<sup>4</sup></b>	6,002	6,054	6,106	6,510 r	8,448

D: Withheld to avoid disclosure of individual operations.

r: Revised from previous Data Book

<sup>1</sup> Includes beef, dairy, and dairy replacement operations.

<sup>2</sup> Excludes interfarm sales; includes out-of-state sales of slaughter cattle and feeder calves.

<sup>3</sup> Excludes interfarm sales; includes out-of-state sales of slaughter animals.

<sup>4</sup> Sum of individual commodities may not add to total. Includes sheep, wool, turkeys, horses, honey, beeswax, broilers and chickens.

SOURCE: Hawai'i Agricultural Statistics Service, *Statistics of Hawaii Agriculture 2005 (annual)*.

## 5.1.6

**CROPS:  
ACREAGE, NUMBER OF FARMS, AND VALUE OF SALES,  
MAUI COUNTY**

	2001	2002	2003	2004	2005
<b>Acres in Crop (1,000 acres)</b>					
Sugarcane	35.4	36.7	36.7	34.8	33.0
Pineapples (land used for pineapple)	9.1	9.1	5.9	5.5	D
Vegetables and melons (harvested acreage) <sup>1</sup>	1.2	1.1	1.1	0.9	1.0
Fruits (excluding pineapples)	0.3	0.4	0.5	0.5	0.5
Coffee	D	D	D	D	D
Macadamia nuts	D	D	D	D	D
All other crops <sup>2</sup>	2.1	1.5	1.8	1.9	2.3
<b>Number of Crop Farms</b>					
Sugar	1	1	1	1	1
Pineapples <sup>3</sup>	2	5	5	5	D
Vegetables and melons	100	100	95	107	107
Fruits (excluding pineapples)	193	204	285	260	258
Coffee	D	D	D	D	D
Macadamia nuts	D	D	D	D	D
Taro	25	25	25	25	20
Flowers and nursery products	150	155	160	180	180
<b>Value of Sales (\$1,000)</b>					
Sugar (unprocessed cane)	44,900	51,300	50,900	46,200	44,100
Pineapples (fresh equivalent)	27,115	29,624	30,441	27,977	D
Vegetables, ginger root, herbs, and melons	10,125	9,644	10,229	9,632	9,150
Fruits (excluding pineapples)	921	1,270	1,451	1,316 r	
Coffee (parchment)	D	D	D	D	D
Macadamia nuts (in-shell)	D	D	D	D	D
Taro	D	D	D	D	D
Seed crops	D	D	D	D	D
Flowers and nursery products <sup>4</sup>	9,898	11,106	11,236	9,535 r	11,716
Total crops <sup>5</sup>	118,262	130,395	128,043	129,200 r	138,483

r: Revised from previous Data Book.

D: Withheld to avoid disclosure of individual operations.

<sup>1</sup> Includes ginger root.

<sup>2</sup> Includes taro, seed corn, feed and forage crops (excluding pineapple feed products), and flowers, foliage and nursery products.

<sup>3</sup> Includes specialty pineapple.

<sup>4</sup> Flowers, foliage and nursery products.

<sup>5</sup> Total crop values are actual. Sum of individual commodities may not add to total. Forage crops and Forest products combined and included in total crop value.

SOURCE: Hawai'i Agricultural Statistics Service, *Statistics of Hawaii Agriculture 2005 (annual)*.

## 5.1.7

## SUGARCANE, MAUI ISLAND

	2001	2002	2003	2004	2005
<b>Number of farms<sup>1</sup></b>	1	1	1	1	1
<b>Acreage (1,000 acres)</b>					
In crop <sup>1</sup>	35.4	36.7	36.7	34.8	33.0
Harvested for sugar	15.1	16.5	15.7	16.9	16.6
<b>Yield per acre (tons)<sup>2</sup></b>					
Sugarcane	98.7	102.7	104.5	91.7	80.1
Raw Sugar 96°	12.68	13.04	13.14	11.8	11.6
<b>Production of cane for sugar (1,000 tons)</b>	1,491	1,694	1,641	1,549	1,329
<b>Farm price (dollars per ton)</b>	30.10	30.30	31.00	29.80	33.20
<b>Value of cane for sugar (\$1,000,000)<sup>3</sup></b>	44.9	51.3	50.9	46.2	44.1
<b>Mill Production (1,000 tons)</b>					
Raw Sugar 96°	191	216	206	199	193
Molasses <sup>4</sup>	72	74	75	65	57
<b>Average returns received (dollars per ton)<sup>5</sup></b>					
Raw Sugar 96°	352	354	368	346	342
Molasses <sup>4</sup>	49.00	50.10	35.30	27.10	60.00
<b>Value of production (\$1,000,000)</b>					
Raw Sugar 96°	67.2	76.5	75.8	68.9	66.0
Molasses <sup>4</sup>	3.5	3.7	2.6	1.8	3.4
Total	70.7	80.2	78.4	70.7	69.4

<sup>1</sup> At end of year.

<sup>2</sup> Yield and farm price may not compute due to rounding.

<sup>3</sup> Value of cane for sugar estimated by deducting processing and marketing costs from value of sugar and molasses. Processing costs based on toll charges by independent producers.

<sup>4</sup> Commercial.

<sup>5</sup> Derived from production and value. State and island prices may not compute exactly due to rounding.

SOURCE: Hawai'i Agricultural Statistics Service, *Statistics of Hawaii Agriculture 2005 (annual)*.

## 5.1.8

**VEGETABLES, MELONS AND TARO,  
ACREAGE, PRODUCTION AND VALUE,  
MAUI COUNTY**

Commodity	2000	2001	2002	2003	2004	2005
<b>HARVESTED ACREAGE<sup>1</sup></b>						
Beans, snap	70	55	55	65	45	45
Cabbage, head	190	170	170	165	175	200
Celery	25	25	25	20	10	D
Corn, sweet	D	D	D	D	D	D
Cucumbers	160	155	180	180	185	195
Lettuce	D	D	D	D	D	D
Onions, dry	190	150	130	145	125	125
Onions, green	D	D	D	D	D	D
Peppers, green	D	D	D	D	D	D
Romaine	55	55	30	35	30	35
Squash, Italian	65	60	75	85	75	90
Sweet potatoes	65	50	95	60	50	70
Tomatoes	D	D	D	D	D	D
Watermelon	D	D	D	D	D	D
Other Vegetables & Melons <sup>2</sup>	495	490r	355	350	250	230
<b>Total Vegetables &amp; Melons</b>	<b>1,315</b>	<b>1210r</b>	<b>1,115</b>	<b>1,105</b>	<b>945</b>	<b>990</b>
Taro (acreage in crop) <sup>3</sup>	100	100	100	100	75	75
<b>PRODUCTION (1,000 pounds)</b>						
Beans, snap	550	500	460	550	230	170
Cabbage, head	5,300	4,650	4,300	4,600	4,800	4,500
Celery	350	500	500	500	300	D
Corn, sweet	D	D	D	D	D	D
Cucumbers	2,500	2,490	2,560	2,850	3,300	2,780
Lettuce	D	D	D	D	D	D
Onions, dry	2,700	2,150	1,340	2,125	1,150	1,550
Onions, green	D	D	D	D	D	D
Peppers, green	D	D	D	D	D	D
Romaine	600	550	350	450	400	600
Squash, Italian	980	800	630	1,080	760	650
Sweet potatoes	620	380	650	660	600	580
Tomatoes	D	D	D	D	D	D
Watermelon	D	D	D	D	D	D
Other Vegetables & Melons <sup>2</sup>	6,625	6,405	5,005	3,335	2,580	2,825
<b>Total Vegetables &amp; Melons</b>	<b>20,225</b>	<b>18,425</b>	<b>15,795</b>	<b>16,150</b>	<b>14,120</b>	<b>13,655</b>
Taro (marketings) <sup>3</sup>	1,300	1,300	1,250	1,100	800	850

## 5.1.8

CONTINUED

Commodity	2000	2001	2002	2003	2004	2005
<b>VALUE (\$1,000)</b>						
Beans, snap	468	473	414	495	216	166
Cabbage, head	970	944	886	1,044	1,478	1,233
Celery	98	152	153	140	89	D
Corn, sweet	D	D	D	D	D	D
Cucumbers	988	1,068	1,080	1,206	1,690	1,290
Lettuce	D	D	D	D	D	D
Onions, dry	2,066	1,993	1,461	2,080	1,995	2,429
Onions, green	D	D	D	D	D	D
Peppers, green	D	D	D	D	D	D
Romaine	244	214	147	176	204	324
Squash, Italian	480	400	282	585	418	364
Sweet potatoes	372	228	332	336	330	377
Tomatoes	D	D	D	D	D	D
Watermelon	D	D	D	D	D	D
Other Vegetables & Melons <sup>2</sup>	3,297	3,570	4,098	3,295	2,477	2,207
<b>Total Vegetables &amp; Melons</b>	<b>8,983</b>	<b>9,042</b>	<b>8,853</b>	<b>9,357</b>	<b>8,897</b>	<b>8,390</b>
Taro <sup>3</sup>	684	691	690	605	441	481

D Not reported to avoid disclosure of individual operations.

r Revised from previous Data Book.

<sup>1</sup> For most vegetables and melons, cumulative acreage harvested (e.g., one acre planted and harvested three times during the year would equal three harvested acres). For lotus root, watercress and taro, average acreage in crop during the year.

<sup>2</sup> The total minus the items shown separately.

<sup>3</sup> Oahu combined with Maui and Molokai to avoid disclosure of individual operations.

SOURCE: Hawai'i Agricultural Statistics Service, *Statistics of Hawaii Agriculture 2005* (annual).

### 5.1.9

## FLORICULTURE AND NURSERY PRODUCTS, MAUI COUNTY

*Number of farms and growing area*

	Number of Farms	Greenhouse (1,000 sq ft)	Artificial Shade (1,000 sq ft)	Natural Shade (Acres)	Open (Acres)	Field Total (Acres)
<b>State Total</b>						
2002	870	3,030	30,415	10	2,870	3,648
2003	865	2,540	27,465	16	3,185	3,890
2004	920	2,620r	26,560	0r	3,160	3,830
2005	955r	2,095r	27,015r	0r	3,320r	3,988r
2006	930	2,180	25,115	0	3,425	4,052
<b>Maui/Molokai</b>						
2002	155	400	740	0	540	566
2003	160	350	775	0	575	601
2004	180	285	750	0	530r	554
2005	185r	265r	795r	0	525r	549r
2006	185	270	725	0	510	533

r: Revised from previous Data Book

SOURCE: Hawai'i Agricultural Statistics Service, *Hawaii Flowers and Nursery Products (annual, 2006)*, *Statistics of Hawaiian Agriculture (annual)*.

### 5.1.10

## FLORICULTURE AND NURSERY PRODUCTS, BY COMMODITY, MAUI COUNTY

*Value of grower sales (\$1,000)*

Commodity	2002	2003	2004	2005	2006
Cut Flowers <sup>1</sup>	2,807	2,962	2,530	2,838r	2,785
Orchids <sup>2</sup>	1,007	1,629	918	991r	992
Lei Flowers	D	1,114	880	1,249r	1,294
Foliage <sup>3</sup>	D	365	450	482	657
Potted Flowering Plants	1,283	1,044	1,274	1,621	1,536
All Other Nursery Products <sup>4</sup>	5,769	3,902	3,268	4,419	4,652
Unspecified Sales <sup>5</sup>	240	220	215	310r	360
Total	11,110	11,236	9,535	11,910r	12,276

r: Revised from previous Data Book.

D: Data not shown separately to avoid disclosure of individual operations.

<sup>1</sup> Cut orchids included in "Orchids" category.

<sup>2</sup> Excludes orchids used for lei flowers.

<sup>3</sup> Includes potted, cut and unfinished. Beginning 1998, landscape foliage included with "all other nursery products."

<sup>4</sup> Includes bedding plants, plant rentals, sod, trees, and any other nursery products not elsewhere classified.

<sup>5</sup> Includes grower sales greater than \$999 but less than \$10,000 which were not categorized.

SOURCE: Hawai'i Agricultural Statistics Service, *Hawaii Flowers and Nursery Products (annual, 2006)*, *Statistics of Hawaiian Agriculture (annual)*.

### 5.1.11

## FRUITS: VALUE OF SALES, MAUI COUNTY

1,000 dollars (Fresh weight basis)

	Pineapples	Other	Total
<b>Maui/Moloka'i/Lāna'i</b>			
1997	28,295	1,136	29,431
1998	28,413	1,051	29,464
1999	28,325	1,056	29,381
2000	29,445	1,102	30,547
2001	27,115	921	28,036
2002	29,624	1,270	30,894r
2003	30,441r	1,451	31,892r
2004	27,977	1,316r	29,450
2005	D	2,038	D
2006	D	1,895	D

D Not reported to avoid disclosure of individual operations.

r: Revised from previous Data Book.

SOURCE: Hawai'i Agricultural Statistics Service, *Statistics of Hawaii Agriculture 2006* (annual).

### 5.1.12

## BANANAS, MAUI COUNTY

	1998	1999	2000	2001	2002
<b>Maui/Moloka'i/Lāna'i</b>					
Number of Farms	35	40	40	30	40
Acreage in crop	85	85	75	85	85
Acreage harvested	50	50	60	60	60
Yield per acre (1,000 lbs. harvested)	16.0	17.8	12.5	9.7	9.2
Fresh utilization (1,000 pounds)	800	890	750	580	550
Farm price (cents per pound)	55.0	56.0	60.0	58.0	60.0
Value of sales (\$1,000)	440	499	451	333	330

SOURCE: Hawai'i Agricultural Statistics Service, *Statistics of Hawaii Agriculture 2004* (annual).

## 5.1.13

### AGRICULTURAL TOURISM BY COUNTY, 2000 AND 2003

County	Total Farms		Ag-Tourism Activity		(\$1,000) Value of Ag-Tourism		Farms Planning Ag-Tourism Activities	
	2000	2003	2000	2003	2000	2003	2000	2003
Maui	800	800	31	43	7,288	6,772	16	37
Hawai'i	3,300	3,300	60	89	8,875	12,562	47	65
Honolulu	900	900	19	31	7,777	8,586	15	23
Kaua'i	500	500	16	24	2,103	5,949	6	20
<b>State</b>	<b>5,500</b>	<b>5,500</b>	<b>126</b>	<b>187</b>	<b>26,043</b>	<b>33,869</b>	<b>84</b>	<b>145</b>

Note: Ag-tourism is a commercial enterprise on a working farm conducted for the enjoyment, education, and/or active involvement of the visitor, generating supplemental income for the farm. Activities such as producing and selling products directly from the farm, operating a bed and breakfast, conducting educational farm tours, offering horseback riding, festivals, concerts, and many other on-farm activities qualify as ag-tourism.

SOURCE: Hawai'i Agricultural Statistics Publication, *Hawaii Ag-Tourism*, October 18, 2004.

5.1.14

**AGRICULTURAL THEFT AND VANDALISM,  
BY COUNTY**

County	Crop	Livestock	Chemical/ Fertilizer	Machinery/ Equipment	Other Property	Total
<b>Number of Theft Incidents, by Type of Theft</b>						
Maui	17	16	17	71	113	234
Hawai'i	724	187	59	157	447	1,574
Honolulu	1,973	51	40	336	92	2,492
Kaua'i	186	30	11	44	168	439
Total	2,900	284	127	608	820	4,739
<b>Amount of Loss Due to Theft, by Type of Theft (\$1,000)</b>						
Maui	66	5	9	169	80	329
Hawai'i	196	213	12	153	60	634
Honolulu	218	7	31	506	36	798
Kaua'i	82	37	3	11	52	185
Total	562	262	55	839	228	1,946
<b>Number of Vandalism Incidents, by Type of Vandalism</b>						
Maui	117	0	3	40	287	447
Hawai'i	126	34	19	51	264	494
Honolulu	17	9	0	53	54	133
Kaua'i	3	18	1	25	32	79
Total	263	61	23	169	637	1,153
<b>Amount of Loss Due to Vandalism, by Type of Vandalism (\$1,000)</b>						
Maui	952	0	1	101	106	1,160
Hawai'i	40	48	1	45	58	192
Honolulu	5	241	1	273	48	568
Kaua'i	29	10	1	46	13	99
Total	1,026	299	4	465	225	2,019
<b>Number of Trespassing Incidents</b>						
Maui	1,850					
Hawai'i	32,021					
Honolulu	4,227					
Kaua'i	1,534					
Total	39,632					
<b>Number and Level of Prosecution of Theft, Vandalism, and Trespassing Incidents</b>						
	<u>Reported to Police</u>	<u>Arrested</u>	<u>Convicted</u>			
Maui	177	5	3			
Hawai'i	655	86	13			
Honolulu	206	10	6			
Kaua'i	199	18	12			
Total	1,237	119	34			

SOURCE: United States Department of Agriculture, National Agricultural Statistics Service, *Hawai'i Agricultural Theft & Vandalism, October 18, 2005.*

## 5.1.15

## FARM INCOME AND EXPENSES, MAUI AND KALAWAO COUNTIES

(in \$1,000.00)

Income and Expenses	2001	2002	2003	2004	2005
<b>Cash receipts from marketings (\$000)</b>	114,539	125,438	125,651	125,878	128,329
Cash receipts: livestock and products	5,090	5,001	4,880	5,326	5,210
Cash receipts: crops	109,449	120,437	120,771	120,552	123,119
<b>Other income</b>	1,149	1,578	1,898	2,290	2,417
Government payments	402	402	344	424	721
Imputed and miscellaneous income received <sup>1</sup>	747	1,176	1,554	1,866	1,696
<b>Total production expenses</b>	118,213	117,380	121,028	127,375	136,587
Feed purchased	2,217	2,224	2,224	2,523	2,299
Livestock purchased	610	557	607	646	772
Seed purchased	2,652	3,177	3,202	3,216	3,332
Fertilizer and lime (incl. ag. chemicals 1978-fwd.)	12,022	11,225	12,099	13,891	17,949
Petroleum products purchased	5,173	4,958	5,959	6,948	9,450
Hired farm labor expenses <sup>2</sup>	51,500	52,193	52,208	54,927	53,222
All other production expenses <sup>3</sup>	44,039	43,046	44,729	45,224	49,563
<b>Value of inventory change</b>	(170)	477	163	(215)	234
Value of inventory change: livestock	161	(187)	300	(112)	391
Value of inventory change: crops	0	0	0	0	0
Value of inventory change: materials and supplies	(331)	664	(137)	(103)	(157)
<b>Total cash receipts and other income</b>	115,688	127,016	127,549	128,168	130,746
less: Total production expenses	118,213	117,380	121,028	127,375	136,587
<b>Realized net income</b>	(2,525)	9,636	6,521	793	(5,841)
plus: Value of inventory change	(170)	477	163	(215)	234
<b>Total net income including corporate farms</b>	(2,695)	10,113	6,684	578	(5,607)
less: Net income of corporate farms	(1,997)	8,060	2,773	(1,335)	(5,202)
plus: Statistical adjustment	0	0	0	0	0
<b>Total net farm proprietors' income</b>	(698)	2,053	3,911	1,913	(405)
plus: Farm wages and perquisites	53,031	53,009	49,834	59,993	61,914
plus: Farm supplements to wages and salaries	9,137	9,001	9,361	8,692	8,720
<b>Total farm labor and proprietors' income</b>	61,470	64,063	63,106	70,598	70,229

<sup>1</sup> Consists of the value of home consumption and other farm related income components, such as machine hire and custom work income and income from forest products (1978 to present).

<sup>2</sup> Consists of hired workers' cash pay and perquisites, employers' contributions for social security and medicare, and payments for contract labor, machine hire, and custom work.

<sup>3</sup> Consists of repair and operation of machinery; depreciation, interest, rent and taxes; and other miscellaneous expenses including agricultural chemicals (1969-77).

SOURCE: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce.

## 5.2.1

### SEA LANDINGS BY PORT OF LANDING

*Pounds landed in year ending June 30*

Port of Landing	2000	2001	2002	2003	2004	2005
Maui County	649,074	582,994	478,392	570,104	682,546	662,075
Maui	NA	NA	437,866	531,966	631,456	601,291
Moloka'i	NA	NA	27,490	16,931	27,417	38,007
Lāna'i	NA	NA	13,036	21,207	23,673	22,777
O'ahu	22,021,639	16,913,820	16,906,835	19,642,889	18,171,533	20,609,869
Hawai'i	3,903,622	2,952,061	3,232,526	3,301,645	2,656,106	3,023,055
Kaua'i & Ni'ihau	865,863	718,876	536,714	655,153	598,823	581,068
<b>Total</b>	<b>27,440,198</b>	<b>21,167,751</b>	<b>21,154,467</b>	<b>24,169,791</b>	<b>22,109,008</b>	<b>24,876,067</b>

NA: Not available

SOURCE: State of Hawai'i, Department of Land and Natural Resources, Division of Aquatic Resources, *Commercial Marine Landings Summary Trend Report*, fiscal year reports.

## 5.2.2

### SEA LANDINGS BY AREA FISHED, MAUI COUNTY

*Pounds landed in year ending June 30*

Area Fished	2002	2003	2004	2005
Kawai (Moloka'i) Channel	56,271	88,482	64,471	53,551
Penguin Bank	119,450	99,370	96,100	114,401
Kealaikahiki Channel	54,210	38,700	52,567	54,645
'Alenuihāhā Channel	14,728	17,524	35,194	28,664
'Au'au, Kalohi & Pailolo Channels	22,638	27,512	27,281	29,753
'Alalākeiki Channel	55,266	68,789	58,483	68,394
Moloka'i	43,975	41,501	41,860	71,074
Lāna'i	70,131	70,949	76,396	123,190
Kaho'olawe	41,101	38,909	49,195	38,431
Mākena - Hāna	23,730	32,916	95,443	31,053
Hāna - Kahului	144,426	152,478	207,475	170,076
Honolua - Lahaina	7,446	5,075	6,498	3,911
Lahaina - Mākena	41,423	90,312	35,229	88,457

SOURCE: State of Hawai'i, Department of Land and Natural Resources, Division of Aquatic Resources, *Commercial Marine Landings Summary Trend Report*, fiscal year reports.

### 5.2.3

## SEA LANDINGS BY FISHING METHOD AND SPECIES GROUPS, STATE OF HAWAI'I

*Pounds landed in year ending June 30*

	2001	2002	2003	2004	2005
<b>Fishing Method</b>					
Aku Pole & Line	978,315	791,557	934,867	756,803	737,156
Longline	12,672,461	13,787,143	16,645,599	14,868,196	17,793,249
Deep Bottom Handline	632,030	523,462	589,494	493,413	585,510
Tuna Handline	2,393,194	2,377,744	1,972,716	1,606,830	1,712,098
Trolling	2,819,250	2,457,275	2,573,442	3,076,786	2,570,333
All Other	1,672,501	1,217,286	1,453,673	1,306,980	1,477,721
Total	21,167,751	21,154,467	24,169,791	22,109,008	24,876,067
<b>Species Group</b>					
Tunas	13,202,981	13,406,002	15,477,156	12,674,644	14,127,639
Bill & Swordfish	2,470,013	2,746,488	2,513,032	2,832,430	4,423,863
Misc. Pelagic	3,056,208	3,076,613	3,992,052	4,627,789	4,143,233
Deep Bottom	641,540	532,646	577,772	516,570	608,260
Akule/Ōpelu	1,211,092	752,753	961,577	577,423	923,669
Inshore	261,388	293,917	281,193	244,053	272,449
All Other	324,529	346,048	367,009	336,099	376,954
Total	21,167,751	21,154,467	24,169,791	21,809,008	24,876,067

SOURCE: State of Hawai'i, Department of Land and Natural Resources, Division of Aquatic Resources, *Commercial Marine Landings Summary Trend Report*, fiscal year reports.