



Statistics of Hawaii Agriculture 2002

Cover: Top and center photos were taken at the College of Tropical Agriculture and Human Resources, University of Hawaii, Mealani Experiment Station at Waimea, Island of Hawaii. Photos courtesy of Glen Fukumoto. Bottom photo, Island of Oahu. Photo Courtesy of Dr. Calvin Lum, North Shore Cattle Company.

STATISTICS OF HAWAII AGRICULTURE 2002

March 2004

A Partnership Between the



Hawaii
Department of Agriculture
Agricultural Development Division

United States
Department of Agriculture
National Agricultural Statistics Service



HAWAII AGRICULTURAL STATISTICS SERVICE

1428 South King Street, Honolulu, Hawaii 96814-2512

Phone: (808) 973-9588 FAX: (808) 973-2909

<http://www.nass.usda.gov/hi/>

Donald A. Martin

State Agricultural Statistician

Steven P. Gunn

Deputy State Agricultural Statistician

Research/Agricultural Statisticians

Wendell Au
Regina Wong Hidano
Naomi Landgraf
Robert Miyake
Nils Morita
Ronald Nakamura
June Okamura
Arthur Osaki

Support Staff

Ungnam Ha
Carol Igawa
Joyce Jay
Karen Lee
Sandy Nakasone
Elyse Taka

Computer Programmer

Jan Yokogawa

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The National Association of State Departments of Agriculture (*NASDA*) is a nonprofit, nonpolitical organization comprised of the 50 State Departments of Agriculture. *NASDA* and *USDA-NASS* have a cooperative agreement for *NASDA* to employ enumerators in the collection of agricultural statistics.

Hawaii

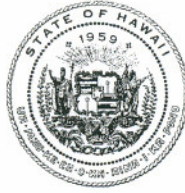
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Charlotte Branco
Barbara Demler
Soledad Francisco
Shirley Fuke
Lisa Hall
Steven Haraguchi
Charlene Rodrigues

Honolulu/Kauai

Leloy Banks
Larke Golaski
Lynn Larrua
Kay Redden

Maui/Molokai

Selma Aipa



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HONOLULU

LINDA LINGLE
GOVERNOR

MESSAGE FROM GOVERNOR LINDA LINGLE

Aloha!

Historically, there is no industry dearer to Hawai`i than agriculture. Hawai`i's farming heritage is as rich as the soil that has nourished our crops for centuries. While agriculture has changed dramatically over the years, it remains a cornerstone of our State's economy and, equally important, our way of life. There are more than 5,000 farms and ranches in Hawai`i, and tens of thousands of our residents trace their lineage through the agricultural industry.

Hawai`i's farmers have always provided some of the best commodities found anywhere in the world. Those who work the land to provide sustenance for our residents, also help keep the land green and vibrant, thus contributing immensely to the lure of the islands for millions of visitors. When it comes to aquaculture technology, Hawai`i is recognized as a national and world leader. Our aquaculture industry helps supply the demand for seafood without depleting natural resources.

As you study this publication from the Hawai`i Agricultural Statistics Service, keep in mind that numbers alone cannot begin to convey the importance of farming to our State. Agriculture in Hawai`i helps diversify and strengthen our economy, provides job opportunities for our residents, and contributes to our unique island lifestyle.

We all have a stake in Hawai`i's agricultural and aquacultural industries. I encourage everyone to lend their support.



Aloha,


LINDA LINGLE



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

As I have taken the reins of the Hawaii Department of Agriculture, I have made it a priority to foster greater partnerships with federal, state, industry, research and private entities to support and expand agribusiness in Hawaii. One of the best examples of long-term collaboration exists within the Hawaii Agricultural Statistics Service, which is a blend of federal and state employees working to gather and publish important statistics on agriculture in the state. There is a definite science to statistical reporting and we truly appreciate the cooperation of Hawaii's farmers who assist us each year, each month and in some cases each week with accurate data from their fields.

It is crucial that reliable data and information be gathered to not only measure our progress, but also to plan our future. Over the last decade diversified agriculture has greatly expanded, offsetting the decline of large pineapple and sugar plantations. And while pineapple and sugarcane are still the largest single crops grown, diversified agriculture continues to increase and is poised for greater expansion. It is encouraging that in 2002, record revenues were recorded for flower and nursery products, seed crops, aquaculture, tropical specialty fruit, and herbs. Moreover, farm level income rose by 2 percent over the previous year.

As for the future, the department is committed to create new opportunities in import replacement with locally grown produce. The strength of local farmers' markets indicate that local produce are valued by residents and the department is working to facilitate the establishment of a world-class farmers' market to showcase Hawaii products.

Developing new avenues to export our specialty products is also key in expanding agriculture. Through innovative marketing strategies and research, we can capitalize on Hawaii's reputation for quality food products around the world. Through pest management and development of plant quarantine protocols, we can overcome export barriers and develop markets for fresh commodities out of the state.

There is great optimism and promise for the future of agriculture in Hawaii. The work represented in this publication reflects that our agricultural and aquacultural industries are strong, vibrant and growing and will continue to contribute significantly to broadening our state's economy.



Aloha,

A handwritten signature in black ink that reads "Sandra Lee Kunimoto".

Sandra Lee Kunimoto
Chairperson, Hawaii Board of Agriculture





Hawaii Agricultural Statistics Service

"Fact Finding for Hawaii Agriculture"

United States Department of Agriculture - National Agricultural Statistics Service
Hawaii Department of Agriculture - Agricultural Development Division

A MESSAGE FROM THE STATE AGRICULTURAL STATISTICIAN

Most of the information in this publication is obtained by surveys of farmers and ranchers. We recognize the high frequency of our contact with farmers, and fortunately the vast majority understand that they are the very best source, often the only source, for the information required to meet specific data needs. The uses are many, but often the data are needed for developing marketing strategies, obtaining farm loans, writing business plans, testifying before local or state governing bodies, justifying claims for disaster relief, and evaluating and developing risk aversion plans. Supplemental information is provided by grower organizations and agribusiness firms. Without their vital cooperation and support on the many surveys conducted throughout the year, good statistics and these reports would not be possible. Several other state and federal agencies also contribute toward development of these statistics. We wish to express our appreciation to all the farmers and organizations who have so willingly and faithfully provided answers to our surveys.

This year NASS conducted the 2002 Census of Agriculture, and I want to thank all those who took time out from their busy schedules to complete and return the census form. The response from our farmers and ranchers was excellent. Conducted every 5 years, the census results will provide important information to those who serve Hawaii's agricultural industry. The results will be published in early 2004.

I am very fortunate to be associated with the excellent staff of HASS. Statisticians and support staff carefully collect, analyze, and publish the results of many surveys playing an important role in producing reliable, unbiased data for public and private decision makers. And of course this year the added census responsibilities.

Our corps of NASDA enumerators who are also on the "front line" interviewing farmers during peak survey periods deserve special recognition for their significant contribution.

We put all data published by this office on our web site at www.nass.usda.gov/hi. There you will find this book, our weekly crop-weather, numerous commodity releases issued throughout the year, as well as links to national and other state reports.

A handwritten signature in cursive script, reading "Donald A. Martin". The ink is dark and the signature is fluid.

Donald A. Martin
State Agricultural Statistician

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HAWAII AGRICULTURE 2002

Farm Revenue Hits 11 Year High

Farm level revenue for 2002 totaled \$535.9 million, 2 percent greater than the previous year. Year-over-year gains for sugarcane and pineapple, along with record highs for several of the “diversified” commodities lifted revenues to the highest level since 1991.

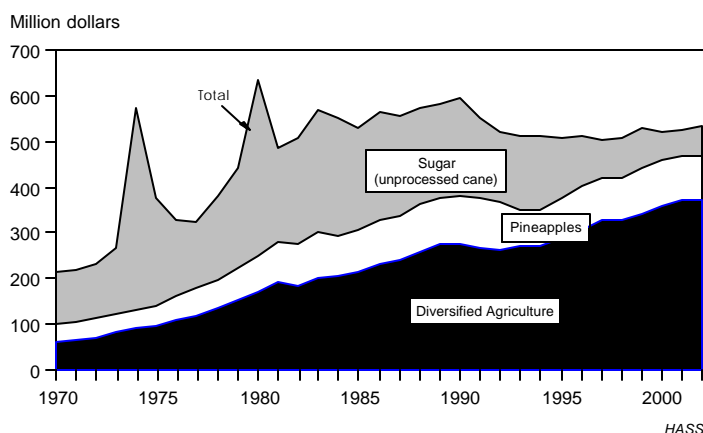
Highlighting gains for diversified agriculture were record years for flowers and nursery products, seed crops, aquaculture, and herbs. Among other commodities showing gains from 2001 were coffee, cattle, hogs, and selected vegetable crops. Some of the crops experiencing declines were bananas, milk, ginger root, eggs, macadamia nuts, and papayas. The aggregate total for diversified commodities (everything other than sugarcane and pineapple) was \$370.9 million, fractionally higher than the previous year. Drought and low prices were partially responsible for lower production of some crops, notably orchard crops.

The equivalent farm value for pineapple (does not include the processed value added by processing) increased to \$100.6 million, 4 percent above the previous year. Although production was slightly lower, more higher-valued fresh sales boosted revenue.

The equivalent value of sugarcane (does not include the processed value of raw sugar) was pegged at \$64.3 million, 11 percent above 2001, and the first year-over-year gain since 1998.

Farm level values shown in this publication are an important measure of production agriculture, but they don't truly reflect the total contribution of agriculture to the State and county economies. For a better understanding of the overall picture, refer to “Agriculture's Contribution to Hawaii's Economy-An Update” (CTAHR Economic Issues EI-3b, Feb. 2002), a publication prepared jointly by the College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, and the Hawaii State Department of Agriculture.

Cash Receipts of Agricultural Commodities, State of Hawaii, 1970-2002



Variable Weather Brings Some Relief

Variable weather combined with occasional downpours provided the State with some relief from the previous year's drought conditions. Warm, sunny days with passing showers and cool evening temperatures dominated the State's weather for 2002. Unlike last year, the frequent beneficial showers and occasional downpours kept pastures and non-irrigated orchards in generally good condition.

January-April

Westerly winds during the first two weeks in January brought warm, dry days with passing showers, and cool evening temperatures to all islands. A passing winter storm towards the end of the third week brought moderate to heavy showers and gusty winds during the remainder of the month. February experienced more variable weather with moderate to heavy showers when a low pressure trough stalled west of the islands at the beginning of the month. Despite warm, humid days, evenings were cool and wet, becoming cold at times. A cold front at the beginning of March brought strong trade winds and frequent thunder showers with cool evening and early morning temperatures. Variable weather returned during the second half of the month as a strong high pressure system brought moderate trade winds and scattered mountain showers during the evening and early morning hours. Variable weather and southerly winds occurred throughout April. Winds were gentle with generally sunny, dry conditions. Scattered, light showers fell mainly in the upper elevations, making heavy irrigation necessary for crop progress.

May-September

A high pressure system in the northeast brought variable weather throughout May. Days were mostly sunny with light to moderate showers in various locations. Showers became

heavy in Ka'u, causing farmers to use alternate routes. Despite excessive moisture with minor flooding, the rains were generally a welcome relief from basically dry weather. June brought more fair to good weather for agriculture. Days were mostly sunny with scattered, windward and mountain showers, while nights were cool and clear. Trade winds were breezy and cool. Regular spraying for insect and diseases was necessary for crop progress. Warm, sunny weather with passing showers benefitted agriculture in July. However, heavy irrigation was still necessary in areas not exposed to beneficial showers. Spraying for insects and diseases remained necessary. The remnants of tropical storm Douglas brought generally warm, humid weather during August. Winds were light with occasional strong gusts, becoming southerly at times. Light showers were confined mainly to windward and mountain areas. Leeward and south facing areas were dry. The drying of green areas caused a tremendous increase in Maui's Upcountry rodent population. Crop damage varied according to location. Close monitoring and restricted use of zinc phosphate baits were used to combat this problem. The remnants of Hurricane Fausto brought more hot, humid weather during September. Windward showers remained light, making heavy irrigation necessary. Pastures and orchards had adequate soil moisture. Fair weather returned briefly at mid-month, bringing cool trade winds and light to moderate showers. However, a northern cold front and low pressure system weakened trades and brought more hot, dry weather during the latter half of the month. Regular spraying became necessary to control insects and diseases. Rodents continued to plague Maui's farm areas, but less than in previous weeks. However, bird damage to young and mature plantings increased.

October-December

Weak winds and hot weather prevailed during the first week of October making heavy irrigation and regular spraying necessary. Except for light to moderate trade winds and slightly cooler temperatures, the second week remained dry with light scattered showers in the upper elevations. Unstable weather during the third week brought frequent clouds and moderate to heavy showers throughout the State. Irrigation was suspended in most areas, but regular spraying was necessary. Except for minor damage to delicate crops and isolated thunder showers, the rains were generally beneficial. Moderate trade winds and sunshine returned during the last week of October, allowing fields to dry and growers to resume farm activities. Light to moderate trade winds maintained dry weather throughout the first half of November. Windward and mountain showers were light. Crops were in mostly fair to good condition from the previous weeks' rains, but pastures were drying. A stalled frontal system over the central islands brought trade showers to windward and mountain areas. Oahu and Kauai received some heavy showers and strong winds. Banana trees in exposed areas suffered leaf shredding and toppling due to wet soil and gusty winds. Weak trade winds continued and brought more dry weather, during the month's last week. Windward and mountain showers were sporadic. Crop condition was mostly fair to good, but some areas were dry. A cold northern front and storm system brought various amounts of rainfall to all islands during the middle of December's first week. Showers benefitted all areas, but more rain was needed to maintain crop condition. Except for more weak trades and another passing storm at mid-month, the remainder of the 2002 weather picture was generally dry.

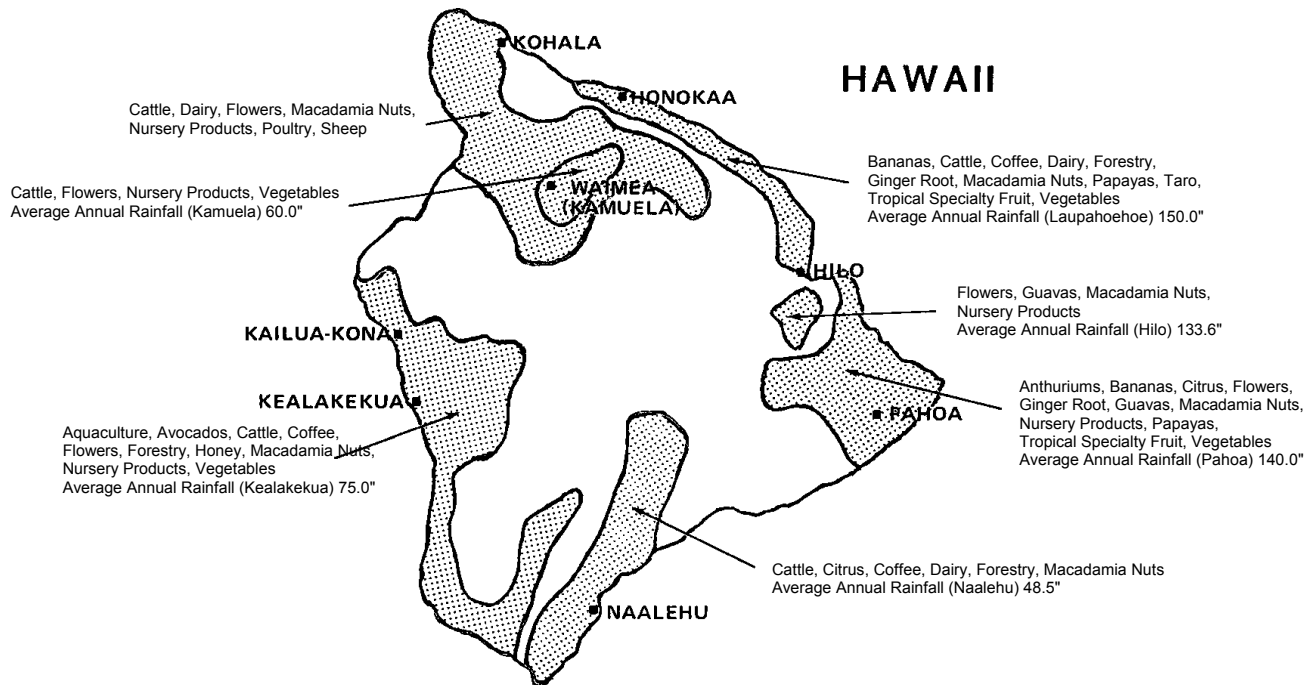
WEATHER: Precipitation, selected stations, State of Hawaii, 2002

STATIONS	Year & normal	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	% Annual normal
ISLAND OF HAWAII															
Hilo International Airport	Normal	9.1	12.9	13.7	12.9	10.0	6.6	9.5	10.9	7.4	11.0	13.8	15.8	133.6	
	2002	26.14	19.00	10.76	7.24	14.96	7.16	6.98	13.65	8.14	6.52	2.86	10.49	133.90	100.2
Kamuela (HI86)	Normal	6.6	6.0	7.9	6.9	4.0	2.2	3.7	4.1	2.2	3.3	5.8	7.3	60.0	
	2002	6.74	14.63	9.09	1.73	2.42	4.62	7.23	2.80	1.79	2.96	.88	3.03	57.92	96.5
Kealahou (HI84)	Normal	4.7	3.4	5.6	6.2	7.7	8.2	8.7	8.3	8.2	6.2	4.4	3.4	75.0	
	2002	1.96	4.55	1.15	1.60	7.33	5.66	1.94	6.37	4.69	3.74	1.41	.06	40.46	53.9
Laupahoehoe	Normal	13.5	13.2	19.5	18.9	11.7	6.2	10.0	12.4	6.9	9.3	13.6	14.8	150.0	
	2002	15.10	19.45	16.83	5.76	6.31	6.16	9.96	9.92	5.97	4.09	3.33	6.44	109.32	72.9
Pahala (HI85)	Normal	7.7	6.1	6.3	5.0	3.8	2.2	2.1	3.3	3.4	4.2	5.5	5.4	55.0	
	2002	22.50	2.39	2.09	7.91	12.82	.76	.55	.32	1.83	1.20	.11	1.59	54.07	98.3
Pahoa (HI83)	Normal	13.9	10.9	14.7	13.9	10.5	7.1	9.8	10.6	9.2	11.5	13.3	14.6	140.0	
	2002	24.25	13.51	10.57	4.43	12.36	8.17	7.76	12.63	10.72	7.91	2.11	13.06	127.48	91.1
ISLAND OF KAUAI															
Anahola (HI48)	Normal	6.8	4.4	6.0	4.6	3.2	1.6	2.5	2.5	2.0	5.1	5.4	5.9	50.0	
	2002	5.52	1.80	10.95	1.74	5.54	1.60	1.26	2.72	1.80	4.81	2.91	1.58	42.23	84.5
Hanalei (HI45)	Normal	11.3	10.1	14.0	12.7	8.1	5.3	8.6	6.3	4.7	7.0	12.2	9.7	110.0	
	2002	14.99	4.10	8.63	4.73	9.36	3.86	5.30	6.59	2.82	3.08	6.14	4.37	73.97	67.2
Omao (HI51)	Normal	6.9	4.5	5.5	5.2	4.2	3.4	4.7	4.6	3.7	4.7	5.9	6.7	60.0	
	2002	8.75	2.34	9.84	2.04	--	3.05	2.76	2.51	2.46	1.55	3.84	1.78	40.92	68.2
ISLAND OF MAUI															
Hana (HI61)	Normal	9.5	6.8	9.5	9.0	6.2	3.8	5.6	5.6	5.4	7.0	8.7	6.1	83.2	
	2002	16.53	3.03	6.41	2.80	--	1.19	--	--	.51	--	.76	--	31.23	37.5
Kula (HI65)	Normal	4.9	3.7	2.8	2.8	2.1	1.1	1.4	1.9	2.0	1.4	2.5	3.4	30.0	
	2002	4.15	.64	3.29	2.64	4.02	.53	.54	1.30	.20	5.82	.89	.24	24.26	80.9
Wailuku (HI66)	Normal	5.2	3.8	3.6	3.0	1.2	.4	.6	.7	.6	1.7	2.9	4.3	28.0	
	2002	--	3.05	2.25	1.12	2.26	.05	.56	.15	0	5.25	1.48	1.23	17.40	62.1
ISLAND OF OAHU															
Kahuku (HI09)	Normal	6.3	4.2	5.3	4.0	2.5	1.8	2.2	2.6	2.2	4.0	4.6	5.3	45.0	
	2002	6.49	1.82	2.07	4.04	6.53	1.41	1.04	.71	1.42	3.23	2.14	1.21	32.11	71.4
Waiialua (HI04)	Normal	5.6	3.9	3.8	2.8	1.7	.9	1.3	.8	1.1	2.7	4.2	5.0	33.8	
	2002	4.74	1.20	2.81	1.31	5.07	.19	.23	.50	.43	2.99	1.67	.19	21.33	63.1
Waianae (HI17)	Normal	3.8	2.3	2.5	1.6	.7	.3	.3	.7	.7	1.8	2.0	3.3	20.0	
	2002	3.28	.64	2.96	.48	2.35	0	0	.30	.31	3.63	.57	.07	14.59	73.0
Waimanalo (HI13)	Normal	8.1	4.9	5.6	4.9	3.1	1.5	1.7	2.0	1.8	4.3	4.9	7.2	50.0	
	2002	4.86	2.77	3.55	1.96	1.96	.91	.83	1.09	.90	2.64	1.88	.38	23.73	47.5

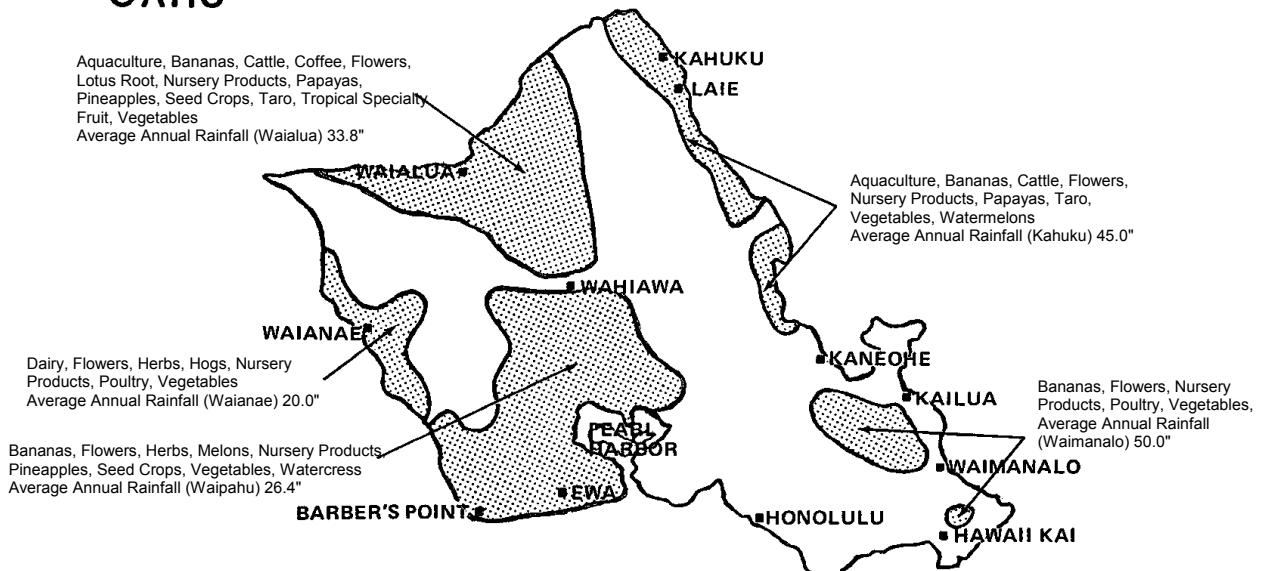
-- = Missing data; incomplete.

Source: U. S. Department of Commerce, National Oceanic and Atmospheric Administration. Most rainfall stations were selected from the National Weather Service's hydronet system of automated gages, and those data have not been quality controlled to date, and therefore are not certified by the National Weather Service.

MAJOR AGRICULTURAL AREAS, STATE OF HAWAII, 2002



OAHU



MAUI

LAHAINA
Bananas, Nursery Products, Papayas,
Pineapples, Vegetables
Average Annual Rainfall (Lahaina) 15.5"

WAILUKU
Bananas, Cattle, Flowers, Hogs, Nursery Products,
Pineapples, Sugarcane, Taro, Vegetables
Average Annual Rainfall (Wailuku) 28.0"

KAHULUI

KIHEI
Cattle, Seed Crops, Sheep
Average Annual Rainfall (Kihei) 13.8"

KULA
Avocados, Bananas, Cattle, Flowers, Hogs,
Papayas, Tropical Specialty Fruit, Vegetables
Average Annual Rainfall (Kula) 30.0"

HANA
Bananas, Cattle, Flowers, Herbs,
Hogs, Nursery Products, Tropical
Specialty Fruit, Taro, Vegetables
Average Annual Rainfall (Hana) 83.2"

Aquaculture, Bananas, Cattle, Coffee, Flowers,
Hay, Hogs, Nursery Products, Papayas,
Seed Crops, Vegetables
Average Annual Rainfall (Molokai Airport) 26.5"

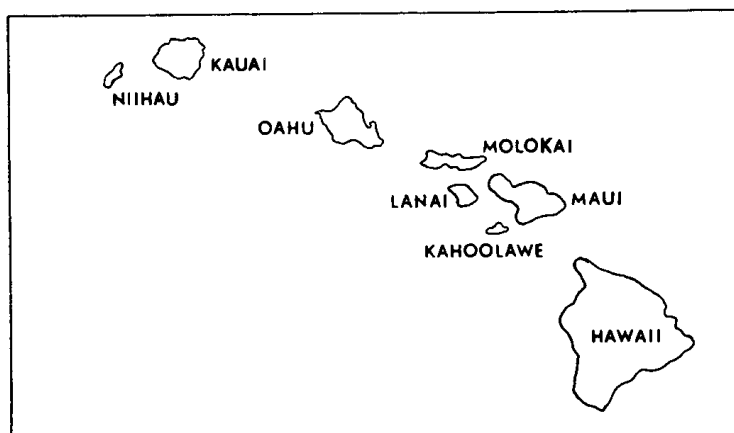
HANALEI
Bananas, Cattle, Guavas, Papayas,
Taro, Tropical Specialty Fruit
Average Annual Rainfall (Hanalei) 110.0"

KAPAA
Bananas, Cattle, Flowers, Nursery Products,
Vegetables
Average Annual Rainfall (Wailua) 84.2"

WAIMEA
Aquaculture, Banana, Cattle, Coffee,
Flowers, Hogs, Honey, Nursery Products,
Seed Crops, Sugarcane, Taro
Average Annual Rainfall (Kekaha) 22.4"

HANALEI

KAUAI



SUMMARIES

Top 20 commodities, State of Hawaii, 2001-2002

Commodity ¹	Rank		Value of production	
	2001	2002	2001	2002
	--- Number ---		--- 1,000 dollars ---	
Pineapples (fresh equivalent)	1	1	96,337	100,616
Sugarcane (unprocessed)	2	2	57,800	64,300
Seed crops	3	3	45,000	48,700
Macadamia nuts	4	4	33,040	29,640
Coffee	6	5	19,600	23,250
Milk	5	6	26,546	22,467
Cattle	7	7	18,007	18,719
Papayas	8	8	14,598	11,924
Algae	10	9	9,684	10,505
Tomatoes	12	10	9,275	9,625
Eggs	11	11	9,640	8,724
Bananas	9	12	10,640	8,385
Palms (potted)	14	13	8,280	7,719
Dendrobium, pots	16	14	6,683	7,336
Dracaena (potted)	13	15	8,443	5,333
Anthuriums	17	16	5,929	4,908
Hogs	18	17	4,514	4,788
Basil	19	18	3,520	4,750
Ginger root	15	19	8,100	4,320
Taro	20	20	3,392	3,294

¹ Floriculture categories include only growers with total sales of \$10,000 or more.

Farm values, State of Hawaii, 1983-2002

Year	Sugar (unprocessed cane)	Pineapples (fresh equivalent)	Diversified agriculture ¹	Total
	1,000 dollars			
1983	266,900	100,376	201,138	568,414
1984	256,200	89,928	204,389	550,517
1985	222,400	90,530	215,719	528,649
1986	233,800	99,720	231,197	564,717
1987	218,000	99,286	240,012	557,298
1988	209,900	107,402	256,660	573,962
1989	210,300	98,310	276,438	585,048
1990	213,800	106,365	275,789	595,954
1991	174,900	107,775	268,707	551,382
1992	153,700	102,100	264,427	520,227
1993	163,000	79,850	271,094	513,944
1994	160,100	78,890	273,826	512,816
1995	127,700	87,360	291,632	506,692
1996	108,100	95,914	307,329	511,343
1997	85,500	91,721	327,484	504,705
1998	² 87,300	92,776	329,886	² 509,962
1999	86,800	101,448	342,846	531,094
2000	² 62,200	101,530	² 358,170	² 521,900
2001	57,800	96,337	370,244	524,381
2002	64,300	100,616	370,937	535,853

¹ Aquaculture included beginning 1993.

² Revised.

Diversified agriculture ranked by value, State of Hawaii, 2001-2002

Commodity	Rank		Value of production			Percent of diversified agriculture	
	2001	2002	2001	2002	Year-to-year percent change	2001	2002
	--- Number ---		----- 1,000 dollars -----			----- Percent -----	
Flowers and nursery products	1	1	88,597	92,069	+4	23.9	24.8
Vegetables and melons ¹	2	2	62,043	61,659	-1	16.8	16.6
Seed crops	3	3	45,000	48,700	+8	12.2	13.1
Macadamia nuts	4	4	33,040	29,640	-10	8.9	8.0
Fruits (excluding pineapples)	5	5	30,190	25,210	-16	8.1	6.8
Aquaculture	7	6	22,200	25,180	+13	6.0	6.8
Coffee	8	7	19,600	23,250	+19	5.3	6.3
Milk	6	8	26,546	22,467	-15	7.2	6.1
Cattle	9	9	18,007	18,719	+4	4.9	5.0
Eggs	10	10	9,640	8,724	-10	2.6	2.4
Hogs	11	11	4,514	4,788	+6	1.2	1.3
Other livestock and crops			10,867	10,531	-3	2.9	2.8
Total			370,244	370,937	0	100.0	100.0

¹ Includes ginger root and herbs.

SUMMARY: Acreage in crop and total farm acreage, by counties, 1998-2002

Year	Sugarcane	Pineapples ¹	Vegetables and melons ^{2 3}	Fruits (excluding pineapples)	Coffee	Macadamia nuts	All other crops ⁴	Total farm acreage ⁵
1,000 acres								
State ⁶								
1998	67.6	21.0	6.6	7.6	7.4	20.2	15.9	1,440
1999	67.0	21.0	8.2	8.0	7.7	19.9	14.9	1,440
2000	60.0	20.7	6.4	7.1	7.9	18.4	7.3	1,440
2001	46.0	20.1	6.5	7.1	8.0	18.0	8.7	1,440
2002	47.5	19.1	6.8	6.5	7.2	18.0	8.2	1,440
Counties:								
Hawaii								
1998	0	*	2.1	4.8	2.8	⁷	2.0	870
1999	0	*	2.3	4.9	3.2	⁷	1.9	870
2000	0	*	1.8	4.1	3.3	⁷	1.7	870
2001	0	*	2.0	4.5	3.4	⁷	2.1	870
2002	0	*	1.8	4.3	3.5	⁷	2.4	870
Honolulu								
1998	0	11.4	2.8	1.6	⁷	⁷	11.0	80
1999	0	11.9	4.3	1.8	⁷	⁷	10.4	80
2000	0	11.6	3.1	1.7	⁷	⁷	2.6	80
2001	0	11.0	3.2	1.5	⁷	⁷	3.4	80
2002	0	10.0	3.6	1.0	⁷	⁷	2.7	80
Kauai								
1998	24.7	*	.1	.9	⁷	⁷	1.0	200
1999	23.7	*	.2	1.0	⁷	⁷	1.1	200
2000	23.1	*	.2	1.0	⁷	⁷	1.3	200
2001	10.6	*	.1	.8	⁷	⁷	1.4	200
2002	10.8	*	.3	.8	⁷	⁷	1.6	200
Maui								
1998	42.9	9.6	1.6	.3	⁷	⁷	1.9	290
1999	43.3	9.1	1.4	.3	⁷	⁷	1.5	290
2000	36.9	9.1	1.3	.3	⁷	⁷	1.7	290
2001	35.4	9.1	1.2	.3	⁷	⁷	1.8	290
2002	36.7	9.1	1.1	.4	⁷	⁷	1.5	290

* = Less than 50 acres.

¹ Land used for pineapple.

² Harvested acreage.

³ Includes ginger root.

⁴ Includes taro, seed corn, feed and forage crops (excluding pineapple feed products), flowers, foliage and nursery products.

⁵ Includes land not in crop and pasture such as farm house lots, roads, woodlots, etc.

⁶ Sum of county estimates may not add to State total due to rounding.

⁷ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARIES

SUMMARY: Number of crop farms, by counties, 1998-2002

Year	Sugarcane	Pineapples ¹	Vegetables and melons	Fruits (excluding pineapples)	Coffee	Macadamia nuts	Taro	Flowers and nursery products
State								
1998	4	15	880	1,515	610	800	180	745
1999	4	15	1,020	1,373	650	750	190	765
2000	3	15	580	1,254	670	650	185	735
2001	2	15	575	1,059	700	650	170	790
2002	2	15	600	1,099	710	650	150	805
Counties:								
Hawaii								
1998	0	5	432	912	600	²	100	355
1999	0	5	600	805	635	²	100	355
2000	0	5	250	705	650	²	85	335
2001	0	6	270	585	675	²	60	360
2002	0	6	270	593	680	²	50	380
Honolulu								
1998	0	2	280	186	²	²	11	205
1999	0	2	230	174	²	²	12	225
2000	0	2	160	162	²	²	15	205
2001	0	2	160	142	²	²	15	220
2002	0	2	175	149	²	²	10	220
Kauai								
1998	2	3	54	155	²	²	55	40
1999	2	3	45	143	²	²	65	35
2000	2	3	50	156	²	²	70	50
2001	1	5	45	139	²	²	70	60
2002	1	5	55	153	²	²	65	55
Maui								
1998	2	5	114	262	²	²	14	145
1999	2	5	145	251	²	²	13	150
2000	1	5	120	231	²	²	15	145
2001	1	2	100	193	²	²	25	150
2002	1	2	100	204	²	²	25	150

¹ Includes specialty pineapple.

² Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARIES

SUMMARY: Number of livestock operations and total number of farms, by counties, 1998-2002

Year	Cattle ¹	Hogs	Milk	Eggs	Honey	Total (non-duplicated) ²
State						
1998	830	250	50	55	29	5,500
1999	800	230	50	55	28	5,500
2000	800	230	50	55	33	5,500
2001	800	230	50	55	30	5,300
2002	800	230	50	55	29	5,300
Counties:						
Hawaii						
1998	480	80	27	26	18	3,300
1999	470	70	28	28	14	3,300
2000	470	70	28	28	17	3,300
2001	460	70	28	28	14	3,200
2002	460	70	28	28	16	3,200
Honolulu						
1998	50	80	10	17	³ 11	900
1999	60	70	10	15	³ 14	900
2000	60	70	10	15	³ 16	900
2001	60	70	10	15	³ 16	800
2002	60	70	10	15	³13	800
Kauai						
1998	120	40	8	4	³ 11	500
1999	100	30	8	4	³ 14	500
2000	100	30	8	4	³ 16	500
2001	110	30	8	4	³ 16	500
2002	110	30	8	4	³13	500
Maui						
1998	180	50	5	8	³ 3	800
1999	170	60	4	8	³ 3	800
2000	170	60	4	8	³ 3	800
2001	170	60	4	8	³ 3	800
2002	170	60	4	8	³3	800

¹ Includes beef, dairy, and dairy replacement operations.

² Based on farm definition of \$1,000 or more of agricultural sales.

³ Honolulu and Maui combined with Kauai to avoid disclosure of individual operations.

SUMMARIES

SUMMARY: Value of crop sales, by counties, 1998-2002

Year	Sugar (unprocessed cane)	Pineapples (fresh equivalent)	Vegetables, ginger root, herbs, and melons	Fruits (excluding pineapples)	Coffee (parchment)
<i>1,000 dollars</i>					
State					
1998	³ 87,300	92,776	51,149	24,530	24,700
1999	86,800	101,448	56,438	28,525	21,000
2000	³ 62,200	101,530	59,159	31,364	23,055
2001	57,800	96,337	62,043	30,190	19,600
2002	64,300	100,616	61,659	25,210	23,250
Counties:					
Hawaii					
1998	0	*	16,249	14,672	16,100
1999	0	*	18,569	15,546	9,300
2000	0	*	17,910	17,522	15,200
2001	0	*	17,743	18,724	13,175
2002	0	*	13,823	17,868	15,990
Honolulu					
1998	0	64,363	22,098	6,487	⁴
1999	0	73,123	27,419	8,534	⁴
2000	0	72,085	29,982	8,985	⁴
2001	0	69,222	32,601	7,538	⁴
2002	0	70,992	36,533	3,713	⁴
Kauai					
1998	³ 28,600	*	1,047	2,320	⁴
1999	26,600	*	931	3,389	⁴
2000	³ 18,500	*	1,446	3,755	⁴
2001	12,900	*	1,574	3,007	⁴
2002	13,000	*	1,659	2,415	⁴
Maui					
1998	58,700	28,413	11,755	1,051	⁴
1999	60,200	28,325	9,519	1,056	⁴
2000	³ 43,700	29,445	9,821	1,102	⁴
2001	44,900	27,115	10,125	921	⁴
2002	51,300	29,624	9,644	1,214	⁴

See footnotes at end of table.

Continued

SUMMARY: Value of crop sales, by counties, 1998-2002 -- Continued

Year	Macadamia nuts (in-shell)	Taro	Seed crops	Flowers and nursery products ¹	Total crops ²
<i>1,000 dollars</i>					
State					
1998	37,375	3,180	25,300	73,207	³ 420,634
1999	37,855	3,604	30,500	75,725	443,111
2000	29,500	3,710	³ 37,500	82,684	³ 431,482
2001	33,040	3,392	45,000	88,597	437,438
2002	29,640	3,294	48,700	92,069	449,482
Counties:					
Hawaii					
1998	⁴	627	⁴	39,153	121,676
1999	⁴	632	⁴	42,462	121,939
2000	⁴	506	⁴	47,499	128,161
2001	⁴	443	⁴	50,637	134,380
2002	⁴	415	⁴	47,491	125,388
Honolulu					
1998	⁴	⁴	⁴	23,743	124,630
1999	⁴	⁴	⁴	21,865	142,407
2000	⁴	⁴	⁴	24,001	145,784
2001	⁴	⁴	⁴	26,198	146,504
2002	⁴	⁴	⁴	31,524	154,065
Kauai					
1998	⁴	1,976	⁴	1,360	³ 49,512
1999	⁴	2,236	⁴	1,547	53,390
2000	⁴	2,520	⁴	1,266	³ 42,886
2001	⁴	2,258	⁴	1,864	38,292
2002	⁴	2,189	⁴	2,303	41,368
Maui					
1998	⁴	⁴	⁴	8,951	124,816
1999	⁴	⁴	⁴	9,851	125,375
2000	⁴	⁴	⁴	9,918	³ 114,651
2001	⁴	⁴	⁴	9,898	118,262
2002	⁴	⁴	⁴	10,751	128,661

* = Less than \$50,000.

¹ Flowers, foliage, and nursery products.² Total crop values shown for individual counties are actual. Sum of individual commodities may not add to total. Forage crops' and Forest product's value combined and included in total crop value.³ Revised.⁴ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARIES

SUMMARY: Value of livestock sales, total value of crop, livestock sales, aquaculture, and government payments, by counties, 1998-2002

Year	Cattle ¹	Hogs ¹	Milk	Eggs	Total livestock ²	Aquaculture	Total crops, livestock and aquaculture ³	Government payments ⁴
1,000 dollars								
State								
1998	16,861	5,235	33,293	11,220	72,708	16,620	⁵ 509,962	23
1999	16,806	5,072	31,270	10,803	69,881	18,102	531,094	820
2000	19,204	4,425	28,102	10,598	68,248	22,170	⁵ 521,900	11,927
2001	18,007	4,514	26,546	9,640	64,743	22,200	524,381	3,860
2002	18,719	4,788	22,467	8,724	61,191	25,180	535,853	1,911
Counties:								
Hawaii								
1998	11,312	420	⁶	⁶	20,846	13,383	155,905	NA
1999	12,363	569	⁶	⁶	22,531	13,377	157,847	NA
2000	14,138	475	⁶	⁶	26,079	16,009	170,249	NA
2001	13,438	465	⁶	⁶	25,878	16,198	176,456	NA
2002	14,152	560	⁶	⁶	27,648	17,329	170,365	1,116
Honolulu								
1998	514	3,451	21,838	8,193	36,189	2,100	162,919	NA
1999	551	3,143	23,300	7,821	36,917	2,333	181,657	NA
2000	556	2,637	19,387	7,471	31,920	2,985	180,689	NA
2001	604	2,848	18,920	6,666	30,958	2,815	180,277	NA
2002	553	2,960	14,401	6,184	25,901	4,179	184,145	167
Kauai								
1998	1,394	539	⁶	⁶	5,116	⁶	⁵ 54,879	NA
1999	1,027	466	⁶	⁶	4,543	⁶	59,731	NA
2000	1,280	378	⁶	⁶	3,853	⁶	⁵ 48,921	NA
2001	1,527	372	⁶	⁶	2,498	⁶	43,384	NA
2002	1,437	430	⁶	⁶	2,482	⁶	46,639	228
Maui								
1998	3,641	825	⁶	⁶	10,557	⁶	136,259	NA
1999	2,865	894	⁶	⁶	5,890	⁶	131,859	NA
2000	3,230	935	⁶	⁶	6,396	⁶	⁵ 122,041	NA
2001	2,438	829	⁶	⁶	5,409	⁶	124,264	NA
2002	2,577	838	⁶	⁶	5,160	⁶	134,704	400

NA = Not available.

¹ Excludes interfarm sales; includes out-of-State sales of slaughter cattle and feeder calves.

² Sum of individual commodities may not add to total. Includes sheep, wool, turkeys, horses, honey, beeswax, broilers, and chickens.

³ Total includes aquaculture beginning 1994.

⁴ Includes all government payments, such as Agricultural Conservation Program, Cattle Indemnity Payment Program, Dairy Indemnity Payment Program, Emergency Conservation Program, Forestry Incentives Program, Emergency Feed Program, wool payments, and sugar support.

⁵ Revised.

⁶ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

FOOD EXPENDITURES

U.S. Food Expenditures by families and individuals, selected years, 1929-2001

Year	Disposable personal income	Expenditures for food					
		At home ¹		Away from home ²		Total ³	
	<i>Billion dollars</i>	<i>Billion dollars</i>	<i>Percent</i>	<i>Billion dollars</i>	<i>Percent</i>	<i>Billion dollars</i>	<i>Percent</i>
1929	83.2	16.9	20.3	2.6	3.1	19.5	23.5
1934	52.7	11.1	21.1	1.7	3.2	12.8	24.3
1939	71.4	13.0	18.1	2.3	3.2	15.2	21.3
1944	148.3	22.1	14.9	5.1	3.4	27.2	18.4
1949	191.1	34.3	17.9	7.8	4.1	42.0	22.0
1954	264.5	42.4	16.0	9.3	3.5	51.7	19.5
1959	351.2	50.1	14.3	12.1	3.5	62.3	17.7
1964	463.0	55.5	12.0	15.7	3.4	71.2	15.4
1969	675.0	69.0	10.2	23.4	3.5	92.3	13.7
1974	1,072.3	107.3	10.0	38.5	3.6	145.8	13.6
1979	1,808.2	164.0	9.1	76.9	4.3	240.9	13.3
1984	2,887.6	224.0	7.8	121.9	4.2	345.8	12.0
1989	4,016.3	285.1	7.1	175.2	4.4	460.3	11.5
1994	5,165.4	339.1	6.6	217.2	4.2	556.3	10.8
1999	6,618.0	412.3	6.2	270.6	4.1	682.9	10.3
2001	7,417.3	440.4	5.9	298.4	4.0	738.9	10.0

¹ Food purchases from grocery stores and other retail outlets, including purchases with food stamps and WIC vouchers and food produced and consumed on farms (valued at farm prices) because the value of these foods is included in personal income. Excludes government-donated foods.

² Purchases of meals and snacks by families and individuals, and food furnished to employees since it is included in personal income. Excludes food paid for by government and business, such as donated foods to schools, meals in prisons and other institutions, and expense-account meals.

³ Total may not add due to rounding.

Source: Economic Research Service, U.S. Department of Agriculture.

RECORD HIGHS AND LOWS

Record highs and lows for selected items, State of Hawaii

Item	Unit	Record high		Record low		Year estimate started
		Quantity	Year ¹	Quantity	Year ¹	
Anthuriums						
Total sold	1,000 doz.	2,532	1980	216	1959	1959
Price ²	\$/doz.	9.09	1997	.73	1966	1959
Avocados						
Harvested	Acres	330	1986	90	1975	1946
Production	1,000 lbs.	1,600	1982	400	1996	1946
Price ²	¢/lb.	60.0	1999	6.1	1959	1946
Bananas						
Harvested	Acres	1,550	2000	550	1977	1946
Production	1,000 lbs.	29,000	2000	4,470	1983	1946
Price ²	¢/lb.	43.0	2002	4.6	1946	1946
Cabbage, Head						
Harvested	Acres	740	1947	370	1971	1946
Production	1,000 lbs.	15,750	1989	6,800	1953	1946
Price ²	¢/lb.	22.0	2001	3.0	1959	1946
Coffee						
Harvested	Acres	6,800	2000	1,650	1985	1946
Production	1,000 lbs.	18,496	1957	990	1982	1946
Price ²	¢/lb.	390.0	1989	17.8	1946	1946
Foliage, potted (indoor)						
Sales (value)	\$1,000	19,236	2001	171	1972	1972
Ginger Root						
Harvested	Acres	360	2001	11	1974	1946
Production	1,000 lbs.	18,000	2001	352	1974	1946
Price ²	¢/lb.	92.3	1982	16.2	1949	1946
Guavas						
Harvested	Acres	1,040	1990	60	1957	1955
Production	1,000 lbs.	24,300	1990	1,737	1957	1955
Price ²	¢/lb.	15.0	2002	3.1	1956	1955
Macadamia nuts						
Harvested	Acres	19,300	1995	830	1953	1946
Production	1,000 lbs.	58,000	1997	630	1946	1946
Price ²	¢/lb.	90.0	1988	15.2	1946	1946
Papayas						
Harvested	Acres	2,650	1985	320	1952	1946
Production	1,000 lbs.	80,500	1984	5,525	1947	1946
Price ²	¢/lb.	48.9	1997	3.2	1946	1946

See footnotes at end of table

Continued

RECORD HIGHS AND LOWS

Record highs and lows for selected items, State of Hawaii -- Continued

Item	Unit	Record high		Record low		Year estimate started
		Quantity	Year ¹	Quantity	Year ¹	
Pineapples						
Total in crop	Acres	76,700	1957	19,100	2002	1946
Production	1,000 tons	1,048	1955	320	2002	1950
Value (farm)	\$1,000	107,775	1991	29,700	1951	1950
Sugar³						
Harvested	Acres	145,000	1933	19,300	2001	1909
Yield/acre (sugar)	Tons/acre	12.76	2001	4.81	1910	1909
Production (raw sugar)	1,000 tons	1,234	1966	246	2001	1909
Price ² (sugar)	\$/Ton	633.00	1974	52.00	1940	1909
Taro						
Harvested	Acres	1,020	1948	320	1980	1946
Production	1,000 lbs.	14,195	1948	5,440	1983	1946
Price ²	¢/lb.	54.0	2002	3.1	1949	1946
Tomatoes						
Harvested	Acres	600	1950	150	1972	1946
Production	1,000 lbs.	17,500	2002	3,300	1972	1946
Price ²	¢/lb.	65.0	1990	9.1	1947	1946
Watermelons						
Harvested	Acres	870	1950	125	1979	1946
Production	1,000 lbs.	20,400	1995	1,130	1979	1946
Price ²	¢/lb.	26.0	2002	6.4	1955	1946
Cattle and calves						
Jan. 1 inventory	Head	249,000	1971	130,000	1946	1946
Production (lv. wgt.)	1,000 lbs.	64,750	1989	25,470	1953	1946
Price ²	\$/cwt.	57.50	1993	12.30	1946	1946
Hogs and pigs						
Dec. 1 inventory	Head	72,000	1965	24,000	2002	1960
Production (lv. wgt.)	1,000 lbs.	13,159	1978	5,425	2001	1960
Price ²	\$/cwt.	84.00	2002	29.50	1964	1960
Milk						
Marketings	Million lbs.	157.1	1988	65.2	1946	1946
Production per cow	lbs./cow	14,667	2002	8,750	1960	1960
Price ²	\$/cwt.	26.50	1999	6.75	1946	1946
Eggs						
Layers Dec. 1	Head	1,037,000	1974	302,000	1950	1950
Production	Million eggs	229.3	1979	117.5	2002	1958
Price ²	¢/doz.	90.6	1997	39.2	1968	1958

¹ In case of a tie, the most recent year was used.

² Prices are annual or crop-year average.

³ Primary data source, Hawaiian Sugar Planters' Association.

AGRICULTURE'S CONTRIBUTIONS TO HAWAII'S ECONOMY, 2000

If you inquire about the size of a condominium unit, one person might respond by stating the number of bedrooms, bathrooms, and associated parking stalls. Alternatively, another might state the square-foot area of its interior area and lanai. Both descriptions convey useful but different information.

Likewise, when we describe the contribution of agriculture to Hawaii's economy, we can portray it in several ways. The actual estimates may vary depending on what is defined as "agriculture" and on the methodology applied to develop the estimates. Here, we define agriculture as including farm production, forestry, fisheries, agricultural services, and food processing, as well as the related distribution margins (transportation, wholesale, and retail) used in delivering agricultural products and services. Then, we summarize and compare three measures of contribution--sales, value added (GSP), and employment--for three benchmark years: 1992, 1997, and 2000. (For more detail on this subject, see CTAHR publication EI-3, *Agriculture's Contribution to Hawaii's Economy--An Update*, available at <www.ctahr.hawaii.edu>).

Agriculture sales

Sales value is the most common measure of economic activities. It includes the farmgate value routinely reported by the Hawaii Department of Agriculture. Total agriculture sales (farm production, agricultural service, forestry and fisheries, and food processing) decreased from \$2.14 billion in 1992 to \$1.87 billion in 1997 but rebounded to \$1.94 value declined sharply by 10% annually during the 1992-2000 period, pineapple sales value remained stable at \$102 million after a slight decline in 1997. The continual decrease in sugarcane sales value is largely offset by the tremendous growth in sales value of diversified agriculture (including seed crops, coffee, macadamia nuts, fruits, vegetables, flowers, and nursery products), which increased at an annual rate of 3.8% between 1992 and 2000. Reflecting this trend, the sales value of diversified agriculture jumped from just over 50% of total farm production in 1992 to almost 70% in 2000. Diversified agriculture posted record high sales of \$357 million in 2000.

Value added--the contribution to GSP

An industry's gross state product (GSP) is the value added in production contributed by labor and property. It is equivalent to the value of production minus the value of intermediate goods that producers buy from other producers. Hawaii's economy as measured by total GSP decreased slightly at an annual rate of 0.8% during the 1992-1997 period, but it rebounded at a yearly rate of 1.7% from 1997 to 2000. Agriculture's GSP likewise decreased during the 1992-1997 period, at a higher annual rate of 2.3%, but it came back strongly from 1997 to 2000 with a robust annual rate of increase of 2.5%. During this latter period, agriculture's contribution to Hawaii's economy had a higher rate of growth than the other sectors combined. Agriculture,

including its distribution margins, contributes 3.1% of Hawaii's total GSP--a fairly constant share since 1992.

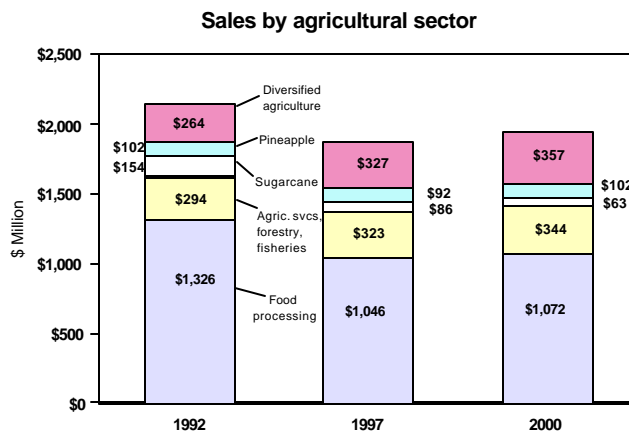
Agriculture's contribution to employment

Employment (the number of full and part-time jobs) provides another good indicator in measuring the contribution of an industry to the economy. In 1992, agriculture contributed 4.2% of total employment in the state, but it declined slightly to 3.7% in 1997, before reversing the trend and rising to 3.8% in 2000. When distribution margins are included, agriculture in 2000 contributed over 38,000 jobs, or 5.0% of the total statewide employment.

Alternate methodology

The U.S. Department of Agriculture's Economic Research Service (USDA-ERS) also estimates the impact of agriculture in Hawaii. ERS uses the national input-output table to assess the total economic activity (in terms of value added, employment, and output) in providing food, clothing, tobacco, flowers, and other agricultural products to the final consumers. By this measure, in 1997 the estimated total contribution of Hawaii's agriculture in terms of value added was \$4.72 billion and employment was 114,431 jobs; these correspond to 12.3% of Hawaii's total value added and 15.4% of state employment¹. These estimates are obviously higher than those presented above, primarily due to the much-expanded definition of agriculture used by ERS.

¹ Dr. William Edmondson, ERS-USDA, provided the 1997 estimates, the most recent available.



FARM FINANCIAL INDICATORS

Farm Business Balance Sheet, State of Hawaii, December 31, 1997-2001

	1997	1998	1999	2000	2001
<i>Thousand dollars</i>					
Farm assets	3,552,630	3,766,429	3,643,782	3,804,547	4,056,097
Farm debt ¹	250,756	264,786	257,846	264,360	274,957
Real estate	145,236	156,906	149,929	147,627	155,726
Nonreal estate	105,520	107,880	107,917	116,733	119,231
Equity	3,301,874	3,501,643	3,385,936	3,540,187	3,781,140
Ratio:					
Debt/equity	7.6	7.6	7.6	7.5	7.3
Debt/assets	7.1	7.0	7.1	7.0	6.8

¹Excludes debt for nonfarm purposes.

Source: Economic Research Service, USDA.

Farm Financial Indicators - value added to the Hawaii economy by the agricultural sector via the production of goods and services, 1998-2002

	1998	1999	2000	2001	2002
<i>Thousand dollars</i>					
Value of crop production	420,781	443,125	426,249	424,809	424,668
Value of livestock production	87,687	84,254	85,149	89,993	84,409
Services and forestry	32,019	32,718	33,845	34,429	34,552
Value of agricultural sector production ¹	540,487	560,097	545,243	549,231	543,629
less: Purchased inputs	188,486	190,761	192,423	196,939	190,242
Farm origin	39,738	37,113	35,466	38,342	38,597
Manufactured inputs	63,227	63,883	67,819	67,393	62,011
Other purchased inputs	85,521	89,765	89,138	91,204	89,634
plus: Net government transactions	(7,064)	(6,328)	(4,521)	(3,539)	(5,463)
Gross value added	344,936	363,008	357,341	348,753	347,924
less: Capital consumption	36,939	37,012	37,921	37,804	39,140
Net value added ¹	307,997	325,996	319,420	310,949	308,784
less: Payments to stakeholders	200,956	219,231	217,449	207,308	211,097
Employee compensation (total hired labor)	165,848	186,121	182,430	177,028	183,602
Net rent received by nonoperator landlords	14,693	12,952	13,947	11,039	10,125
Real estate and nonreal estate interest	20,415	20,158	21,072	19,241	17,370
Net farm income ¹	107,041	106,765	101,971	103,641	97,687

¹ Value of agricultural sector production is the gross value of the commodities and services produced within a year. Net value-added is the sector's contribution to the Hawaii economy and is the sum of the income from production earned by all factors-of-production. Net farm income is the farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development.

Source: Economic Research Service/USDA. E-Mail: rogers@ers.usda.gov. Revised: September 9, 2003.

2002 SUGAR AND SPECIALTY CROP HIGHLIGHTS

SUGAR

Sugar production for 2002 increased 10 percent from the previous year to 270,000 tons of 96° raw sugar. A 10 percent increase in acreage for harvest accounted for the higher production. Plantations were able to harvest 2.1 million tons of sugarcane from 21,300 acres for an average yield of 99.0 tons of sugarcane per acre. Sugar prices during 2002 increased 1 percent to \$355 per ton of 96° raw sugar, this resulted in a total value of \$95.9 million for raw sugar, a 11 percent increase from 2001.

COFFEE

Coffee production was estimated at 7.5 million pounds (parchment basis) for the 2002-03 season, down 6 percent from last season's harvest of 8.0 million pounds. Coffee farmers posted farm revenues of \$23.3 million (parchment basis) during the 2002-03 season, up 19 percent from 2001-02. Farm revenues got a boost from a 27 percent increase in the farm price to an average of \$3.10 per pound (parchment basis) that more than offset the decline in production.

Hawaii County coffee growers harvested 4.1 million pounds (parchment basis) of coffee during the 2002-03 season, their largest crop since the 1970-71 season. An extended harvesting period and increasing production from younger plantings were the main contributors to 2002-03's higher output.

Combined production from Kauai, Maui, and Honolulu counties totaled 3.4 million pounds, down 31 percent from the 2001-02 season. A reduction in harvested acreage, the alternate bearing nature of the tree, and a shortage of labor at harvesting all contributed to the lower output.

MACADAMIA NUTS

The 2002-2003 macadamia nut crop for Hawaii County is estimated at 52.0 million pounds net, wet-in-shell, 4.0 million pounds below last season's crop. Although rains in late 2001 and early 2002 raised expectations for a larger crop, a return to drought-like conditions in Kona growing areas and increased insect infestations contributed to the lower output. Favorable rains in early 2002 benefitted orchards that had suffered through several dry years. Unusually high incidences of Southern Green Stink Bug damage were reported in Kona, Ka'u, and Kohala, with some individual orchards incurring severe losses. Lower returns also added to the problem by discouraging some growers from properly maintaining orchards and harvesting nuts. Overall yields averaged 2,920 pounds per acre (net, wet in-shell), down 230 pounds from the previous season.

Total acreage in crop for the 2002-03 crop year was unchanged from the previous year at 18,000 acres. Virtually all acreage was harvested (17,800 acres), also the same as the previous year. There were an estimated 1.3 million macadamia nut trees on the 18,000 acres.

The farm price for net, wet in-shell macadamia nuts averaged 57.0 cents per pound for the 2002-2003 season, down 2.0 cents from the previous season's average, and the lowest since the 1978-79 crop. The farm value for the 2002-2003 crop is estimated at \$29.6 million, down 10 percent from the previous season. Increased foreign macadamia nut production continued to be cited as a factor in the downward pressure on grower prices.

**COFFEE: Number of farms, acreage, yield, marketings, price, and value,
by counties, 1998-2002**

Crop year ¹	Farms	Acreage		Yield ²	Marketings ³	Farm prices			Value of sales	Green production
		In crop	Harvested			Cherry	Parchment	All ⁴		
	<i>Number</i>	<i>----- Acres -----</i>		<i>--- 1,000 pounds ---</i>		<i>----- Cents per pound -----</i>			<i>1,000 dollars</i>	<i>1,000 pounds</i>
State										
1998-99	610	7,400	6,100	1.6	9,500			260.0	24,700	7,600
1999-00	650	7,700	6,400	1.6	10,000			210.0	21,000	8,100
2000-01	670	7,900	6,800	1.3	8,700			265.0	23,055	7,000
2001-02	700	8,000	6,300	1.3	8,000			245.0	19,600	6,400
2002-03	710	7,200	5,900	1.4	7,500			310.0	23,250	5,900
Counties:										
Hawaii										
1998-99	600	2,800	2,170	1.6	3,500	130.0	500.0	460.0	16,100	2,800
1999-00	635	3,200	2,400	1.2	3,000	70.0	360.0	310.0	9,300	2,400
2000-01	650	3,350	2,700	1.4	3,800	85.0	425.0	400.0	15,200	3,000
2001-02	675	3,430	2,850	1.1	3,100	85.0	425.0	425.0	13,175	2,500
2002-03	680	3,500	2,850	1.4	4,100	90.0	405.0	390.0	15,990	3,200
Honolulu/Kauai/Maui⁵										
1998-99	10	4,600	3,930	1.5	6,000			143.0	8,600	4,800
1999-00	15	4,500	4,000	1.8	7,000			167.0	11,700	5,700
2000-01	20	4,550	4,100	1.1	4,900			160.0	7,855	4,000
2001-02	25	4,570	3,450	1.4	4,900			131.0	6,425	3,900
2002-03	30	3,700	3,050	1.1	3,400			213.5	7,260	2,700

¹ Coffee harvesting occurs throughout the year in Hawaii. The main harvest normally begins in late summer and extends to the early part of the following year.

² Average yields based on parchment equivalent marketings and harvested acreage.

³ Expressed in parchment equivalent pounds. Coffee marketed in cherry form was converted to an equivalent parchment weight and added to parchment marketings.

⁴ Represents an average farm price for parchment equivalent sales. Obtained by dividing farm revenues from the sale of cherry and parchment coffee by total marketings (parchment equivalent basis).

⁵ Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

GINGER ROOT, KAWA

Hawaii's ginger root farmers harvested 14.4 million pounds during the 2001-02 season, down 20 percent from the previous season's revised estimate of 18.0 million pounds. Farm prices declined 33 percent to an average of 30.0 cents per pound during the 2001-02 season, and total farm revenues were pegged at \$4.3 million, down 47 percent from the 2000-01 season.

Untimely rains in the major growing areas along the eastern side of Hawaii island was a major reason for the decline in production during the 2001-02 season. Growers also indicated that an influx of foreign ginger into the U.S. market led to a drop in local farm prices to a level that a few farmers said it was uneconomical to harvest. The overall average of 30.0 cents per pound for the entire 2001-02 crop was the lowest since the 1970-71 season.

GINGER ROOT: Acreage, yield, production, price, and value, State of Hawaii, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
1998	360	50.0	18,000	40.0	7,200
1999	350	46.0	16,100	50.0	8,050
2000	270	50.0	13,500	66.0	8,910
2001	360	50.0	18,000	45.0	8,100
2002	320	45.0	14,400	30.0	4,320

GINGER ROOT: U.S. imports, 1998-2002

Year	Unground (including fresh)	Ground	Sweet	Candied	Total
					1,000 pounds
1998	30,375	563	1,816	1,512	34,265
1999	33,679	669	2,059	2,000	38,406
2000	41,140	825	2,845	2,080	46,890
2001	39,682	2,255	2,649	2,151	46,737
2002	44,306	2,244	3,315	3,017	52,882

Source: Foreign Agricultural Trade of the United States, Economic Research Service, U.S. Department of Agriculture.

KAWA: Number of farms, acreage, production, price, and value, State of Hawaii, 2000-2002

Year	Farms	Acreage ¹		Total sales ³	Farm price ⁴	Value of sales
		Total ²	Harvested			
	Number	----- Acres -----		1,000 pounds	Dollars per pound	1,000 dollars
2000	50	80	5	85	1.40	119
2001	65	70	35	450	1.30	585
2002	55	50	15	60	1.15	69

¹ Includes kava inter-planted with another crop.

² As of December 31.

³ Fresh weight basis. Dried kava ('awa) sales were converted to a fresh weight basis by multiplying by five. Includes all types of sale, including organic.

⁴ Represents average farm price for fresh sales.

HERBS, SEED CROPS

FRESH HERBS: Production, price, and value, State of Hawaii, 1998-2002

Year	Basil			Parsley	Chinese parsley (Cilantro)	Other herbs ¹	All herbs
	Sweet (Italian)	Asian	Total				
Production - 1,000 pounds							
1998	1,200	500	1,700	125	75	500	2,400
1999	1,500	600	2,100	190	90	520	2,900
2000	1,600	500	2,100	220	80	500	2,900
2001	1,500	650	2,150	330	100	620	3,200
2002	2,000	1,000	3,000	300	300	550	4,150
Farm price - dollars per pound							
1998	1.90	.90		2.05	2.70	2.20	
1999	2.00	.70		2.00	2.15	2.70	
2000	2.00	.80		2.00	3.00	2.20	
2001	2.00	.80		2.00	2.10	2.45	
2002	1.95	.85		1.70	1.50	2.30	
Farm value - 1,000 dollars							
1998	2,280	450	2,730	256	203	1,100	4,289
1999	3,000	420	3,420	380	194	1,404	5,398
2000	3,200	400	3,600	440	240	1,100	5,380
2001	3,000	520	3,520	660	210	1,519	5,909
2002	3,900	850	4,750	510	450	1,265	6,975

¹ Includes spearmint, dill, and other miscellaneous herbs. Also includes small amounts of basil and parsley for which an individual total could not be obtained or published separately in order to avoid disclosure of individual operations.

SEED CROPS: Number of farms, acreage, outshipments, and value, State of Hawaii, 1998-2002

Crop year ¹	Farms	Acreage				Total outshipments of seed	Value ²		
		Total	Nursery	Seed increase	Grow-out or observation		Total	Seed corn	Other seed crops
	<i>Number</i>	<i>Acres</i>				<i>1,000 pounds</i>	<i>1,000 dollars</i>		
1998-99	8	3,070	1,120	1,870	80	5,000	25,300	24,620	680
1999-00	8	2,450	1,045	1,300	105	3,500	30,500	28,700	1,800
2000-01 ³	7	2,900	655	2,130	115	4,800	37,500	36,400	1,100
2001-02	7	3,100	730	2,240	130	5,600	45,000	43,900	1,100
2002-03	7	3,500	750	2,600	150	6,100	48,700	47,500	1,200

¹ Seed crops are grown year-round in Hawaii with the main season from November to June.

² Value is based on sales or gross operational budgets.

³ Revised.

SUGARCANE

SUGARCANE: Number of farms, acreage, yield, production, price, and value, by counties, 1998-2002 ¹

Year	Farms ²	Acreage		Yield per acre		Production of cane for sugar	Farm price ³	Value of cane for sugar ⁴
		In crop ²	Harvested for sugar	Sugarcane ³	Raw sugar 96°			
	<i>Number</i>	<i>----- 1,000 acres -----</i>		<i>----- Tons -----</i>		<i>1,000 tons</i>	<i>Dollars per ton</i>	<i>Million dollars</i>
State								
1998	4	67.6	30.3	90.0	11.66	2,727	32.00	⁵ 87.3
1999	4	67.0	35.4	81.7	10.38	2,892	30.00	86.8
2000	3	60.0	30.2	78.3	9.97	2,365	26.30	62.2
2001	2	46.0	19.3	97.3	12.76	1,878	30.80	57.8
2002	2	47.5	21.3	99.0	12.67	2,109	30.50	64.3
Counties:								
Kauai								
1998	2	24.7	11.3	83.5	10.29	944	30.30	⁵ 28.6
1999	2	23.7	13.9	66.0	8.08	917	29.00	26.6
2000	2	23.1	12.9	58.2	7.03	751	24.70	18.5
2001	1	10.6	4.2	92.1	13.04	387	33.40	12.9
2002	1	10.8	4.8	86.5	11.40	415	31.30	13.0
Maui								
1998	2	42.9	19.0	93.8	12.48	1,783	32.90	58.7
1999	2	43.3	21.5	91.9	11.86	1,975	30.50	60.2
2000	1	36.9	17.3	93.3	12.18	1,614	27.10	43.7
2001	1	35.4	15.1	98.7	12.68	1,491	30.10	44.9
2002	1	36.7	16.5	102.7	13.04	1,694	30.30	51.3

¹ Primary data source, Hawaii Agricultural Research Center.

² At end of year.

³ Yield and farm price may not compute exactly due to rounding.

⁴ Value of cane for sugar estimated by deducting processing and marketing costs from value of sugar and molasses.

⁵ Revised.

SUGAR: Production of raw sugar and molasses, price, and value, by counties, 1998-2002 ¹

Year	Mill production		Average returns received ²		Value of production		
	Raw sugar 96°	Molasses ³	Raw sugar 96°	Molasses ³	Raw sugar 96°	Molasses ³	Total
	----- 1,000 tons -----		----- Dollars per ton -----		----- Million dollars -----		
State							
1998	354	118	368	23.50	130.3	2.8	133.1
1999	368	137	352	13.30	129.5	1.8	131.3
2000	301	102	309	27.20	93.1	2.8	95.9
2001	246	86	351	49.70	86.4	4.2	90.6
2002	270	90	355	49.40	95.9	4.4	100.3
Counties:							
Kauai							
1998	117	33	366	24.50	42.8	.8	43.6
1999	113	38	351	13.70	39.7	.5	40.2
2000	91	31	305	29.60	27.8	.9	28.7
2001	55	14	349	53.00	19.2	.7	19.9
2002	54	16	359	45.90	19.4	.7	20.1
Maui							
1998	237	85	369	23.10	87.5	2.0	89.5
1999	255	99	352	13.20	89.8	1.3	91.1
2000	210	71	311	26.20	65.3	1.9	67.2
2001	191	72	352	49.00	67.2	3.5	70.7
2002	216	74	354	50.10	76.5	3.7	80.2

¹ Primary data source, Hawaii Agricultural Research Center.² Derived from production and value. State and county prices may not compute exactly due to rounding.³ Commercial.

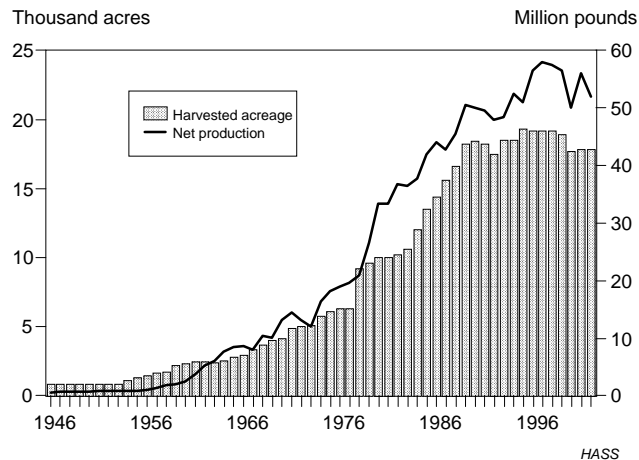
MACADAMIA NUTS

MACADAMIA NUTS: Number of farms, acreage, yield, production, moisture, price, and value, State of Hawaii, 1998-2002 crop years

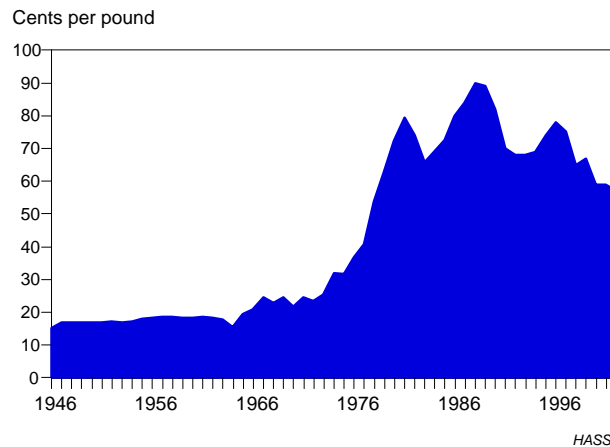
Crop year ¹	Farms	Acreage		Yield per acre ³	Production ⁴		Average moisture		Farm prices ⁴		Farm value ⁸
		In crop	Harvested ²		Gross ⁵	Net ⁶	Entire crop	Purchases only	Gross ⁷	Net	
	<i>Number</i>	<i>----- Acres -----</i>			<i>---- 1,000 pounds ----</i>		<i>----- Percent -----</i>		<i>Cents per pound -----</i>		<i>1,000 dollars</i>
1998-99	800	20,200	19,200	3.0	66,000	57,500	20.5	20.8	57.0	65.0	37,375
1999-00	750	19,900	18,900	3.0	64,000	56,500	19.3	19.3	59.1	67.0	37,855
2000-01	650	18,400	17,700	2.8	56,000	50,000	21.0	21.0	52.7	59.0	29,500
2001-02	650	18,000	17,800	3.1	62,000	56,000	21.2	21.9	53.3	59.0	33,040
2002-03	650	18,000	17,800	2.9	58,000	52,000	20.8	20.7	51.1	57.0	29,640

¹ Season begins July 1st and ends June 30th of the following year. ² Called bearing acreage prior to 1993-94 crop year. ³ Net production divided by acreage harvested. ⁴ Wet in-shell basis, delivered to processors. ⁵ Gross pounds delivered for processing. ⁶ Gross pounds delivered for processing less total spoilage. ⁷ Farm value divided by gross production. ⁸ Net production multiplied by net farm price.

MACADAMIA NUTS: Harvested Acreage and Net Production, State of Hawaii, 1946-2002 Seasons



MACADAMIA NUTS: Net Wet-in-shell Farm Prices, State of Hawaii, 1946-2002 Seasons



FLORICULTURE AND NURSERY PRODUCTS

Grower sales of Hawaii's flower and nursery products totaled a record \$92.1 million in 2002. Wholesale value was 4 percent higher than the \$88.6 million value for 2001. Orchids, lei flowers, and potted flowering plant categories registered increases in 2002.

Hawaii county, with \$47.5 million in sales, ranked number one in 2002. Honolulu farmers registered sales of \$31.5 million, 20 percent higher than 2001. Maui county sales totaled \$10.8 million, 9 percent higher than last year. Kauai sales, pegged at \$2.3 million, were 24 percent higher than 2001.

FLORICULTURE AND NURSERY PRODUCTS: Value of grower sales, by counties, 1998-2002

Year	Cut flowers ¹	Orchids ²	Lei flowers	Foliage ³	Potted flowering plants	All other nursery products ⁴	Unspecified sales ⁵	Total
<i>1,000 dollars</i>								
State								
1998	15,176	15,790	3,485	⁶ 15,403	3,892	17,982	1,479	73,207
1999	16,517	17,166	4,051	16,055	4,421	15,978	1,537	75,725
2000	16,297	18,106	3,615	18,295	5,044	19,850	1,477	82,684
2001	14,566	20,650	3,928	20,380	5,010	22,838	1,225	88,597
2002	12,859	22,448	4,314	16,898	5,725	28,535	1,290	92,069
Counties:								
Hawaii								
1998	11,410	9,114	1,022	⁶ 11,612	1,676	3,715	604	39,153
1999	12,588	10,015	1,697	12,754	2,011	2,718	679	42,462
2000	12,592	10,319	1,140	15,757	2,120	4,859	712	47,499
2001	11,194	11,954	1,213	17,885	2,394	5,467	530	50,637
2002	9,182	13,326	1,180	14,211	2,030	6,967	595	47,491
Honolulu								
1998	774	5,839	1,258	⁶ 3,331	1,387	10,745	409	23,743
1999	745	5,741	1,210	2,601	1,063	10,119	386	21,865
2000	680	6,515	1,098	1,940	1,609	11,832	327	24,001
2001	502	7,330	1,384	2,116	1,351	13,195	320	26,198
2002	486	7,895	1,446	2,214	2,514	16,649	320	31,524
Kauai								
1998	138	⁷	⁷	⁷	⁷	1,090	132	1,360
1999	133	411	⁷	72	118	696	117	1,547
2000	99	245	⁷	55	194	560	113	1,266
2001	314	255	⁷	⁷	130	1,020	145	1,864
2002	296	246	⁷	⁷	69	1,547	145	2,303
Maui								
1998	2,854	⁷	⁷	⁷	⁷	5,763	334	8,951
1999	3,051	999	⁷	628	1,229	3,589	355	9,851
2000	2,926	1,027	⁷	543	1,121	3,976	325	9,918
2001	2,556	1,111	⁷	⁷	1,135	4,866	230	9,898
2002	2,895	981	⁷	⁷	1,112	5,533	230	10,751

¹ Cut orchids included in "Orchids" category. ² Excludes orchids used for lei flowers. ³ Includes potted, cut, and unfinished. Beginning 1998, Landscape foliage included with "All other nursery products". ⁴ Includes bedding plants, plant rentals, sod, trees, and any other nursery products not elsewhere classified. Sum of county estimates may not add to State total due to rounding. ⁵ Includes grower sales greater than \$999 but less than \$10,000 which were not categorized. ⁶ Unfinished foliage, 1998 included in "All other nursery products". ⁷ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1998-2002 ¹

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
CUT FLOWERS				
Anthuriums - dozens				
1998	75	11,285	834	6,301
1999	68	11,500	1,019	6,725
2000	64	NA	1,010	7,357
2001	61	NA	876	5,929
2002	60	NA	756	4,908
Birds of Paradise - dozens				
1998	24	2,285	66	495
1999	25	5,650	86	566
2000	26	NA	101	690
2001	27	NA	97	676
2002	22	NA	80	573
Carnations, miniature - bunches				
1998	5	115	47	124
1999	4	75	51	131
2000 ³				
2001 ³				
2002 ³				
Chrysanthemums, pompon - bunches				
1998	6	265	196	358
1999	4	250	251	588
2000	4	NA	206	415
2001	4	NA	217	447
2002	4	NA	225	469
Ginger, pink - dozens				
1998	52	3,075	92	530
1999	47	3,465	82	464
2000	46	NA	81	542
2001	45	NA	67	460
2002	38	NA	61	463
Ginger, red - dozens				
1998	63	4,860	142	794
1999	61	3,380	157	748
2000	53	NA	137	750
2001	57	NA	140	820
2002	52	NA	138	936

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1998-2002 ¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
Gingers, other - dozens				
1998	30	830	18	144
1999	27	1,085	30	221
2000	26	NA	28	216
2001	23	NA	20	128
2002	22	NA	24	172
Heliconias - dozens				
1998	56	5,775	56	664
1999	58	4,860	72	613
2000	54	NA	65	671
2001	53	NA	66	672
2002	47	NA	71	662
Proteas - stems				
1998	28	8,015	2,996	1,738
1999	33	8,345	2,518	1,677
2000	25	NA	1,915	1,392
2001	28	NA	1,342	1,177
2002	23	NA	1,337	1,050
Roses⁴ - stems				
1998				
1999				
2000	9	NA	5,144	2,057
2001 ³				
2002³				
Other cut flowers - dozens				
1998	38	NA	NA	4,028
1999	31	NA	NA	4,784
2000	32	NA	NA	2,207
2001	45	NA	NA	4,257
2002	47	NA	NA	3,626

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1998-2002 ¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
ORCHIDS				
Cymbidiums, cut - flowers				
1998	12	315	418	216
1999	12	335	537	337
2000	10	NA	509	315
2001	10	NA	383	218
2002	10	NA	389	211
Dendrobiums, sprays - dozens				
1998	59	2,970	419	2,864
1999	49	2,610	378	2,608
2000	49	NA	340	2,335
2001	49	NA	385	2,926
2002	51	NA	461	3,225
Oncidiums, sprays - dozens				
1998	32	485	58	580
1999	31	355	47	463
2000	37	NA	56	536
2001	36	NA	60	590
2002	31	NA	60	576
Other orchids, sprays⁵ - dozens				
1998	4	NA	NA	52
1999	6	NA	NA	28
2000	10	NA	NA	119
2001	9	NA	NA	28
2002	13	NA	NA	203
Dendrobiums, potted⁶ - pots				
1998	63	NA	1,107	6,069
1999	72	NA	942	5,640
2000	74	NA	1,065	6,528
2001	76	NA	1,155	6,683
2002	76	NA	1,357	7,336
Phalaenopsis, potted - pots				
1998	20	NA	221	1,178
1999	21	NA	205	1,169
2000	24	NA	143	1,030
2001	29	NA	161	1,055
2002	26	NA	123	818
Other orchids, potted - pots				
1998	57	NA	951	4,831
1999	61	NA	1,551	6,921
2000	75	NA	1,561	7,243
2001	80	NA	2,148	9,150
2002	79	NA	2,220	10,079

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1998-2002 ¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
LEI/INDIVIDUAL BLOOMS				
Carnations - blooms				
1998	9	NA	6,800	448
1999	7	NA	5,600	397
2000	6	NA	5,400	377
2001	6	NA	5,600	387
2002	6	NA	8,100	614
Dendrobiums - blooms				
1998	28	NA	28,900	855
1999	27	NA	21,700	673
2000	26	NA	19,900	615
2001	27	NA	23,700	732
2002	25	NA	26,400	803
Pikake - strands				
1998	5	NA	55.6	128
1999	7	NA	82.5	222
2000	8	NA	77.8	270
2001	8	NA	62.0	140
2002	9	NA	82.0	241
Plumerias - blooms				
1998	9	NA	23,800	601
1999	10	NA	45,000	931
2000	12	NA	21,700	538
2001	13	NA	29,300	664
2002	14	NA	25,200	608
Tuberose - blooms				
1998	6	NA	19,500	912
1999	6	NA	20,400	959
2000	7	NA	22,100	987
2001	6	NA	29,200	1,405
2002	6	NA	31,200	1,516
Vanda, Miss Joaquim - blooms				
1998	9	NA	10,900	292
1999	7	NA	11,300	396
2000	7	NA	14,000	503
2001	6	NA	7,900	332
2002	5	NA	5,700	240
Other lei/individual - blooms				
1998	NA	NA	NA	249
1999	NA	NA	NA	473
2000	NA	NA	NA	325
2001	NA	NA	NA	268
2002	NA	NA	NA	292

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1998-2002 ¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
FOLIAGE				
Potted, primarily for indoor or patio use ⁷				
1998	74	5,035	NA	14,617
1999	65	5,265	NA	15,002
2000 ⁸				
2001 ⁸				
2002 ⁸				
Potted, dracaena ⁹				
1998				
1999				
2000	31	NA	NA	6,648
2001	32	NA	NA	8,443
2002	31	NA	NA	5,333
Potted, palms ⁹				
1998				
1999				
2000	44	NA	NA	8,434
2001	45	NA	NA	8,280
2002	42	NA	NA	7,719
Potted, hanging baskets ⁹				
1998				
1999				
2000	16	NA	NA	123
2001	15	NA	NA	129
2002	16	NA	NA	177
Potted, other ⁹				
1998				
1999				
2000	39	NA	NA	1,880
2001	32	NA	NA	2,384
2002	29	NA	NA	2,140

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1998-2002 ¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
Ti leaves, cut - leaves				
1998	41	2,585	6,000	412
1999	45	2,575	5,900	468
2000	37	NA	2,100	161
2001	39	NA	4,700	432
2002	40	NA	5,900	587
Other greens, cut				
1998	35	NA	NA	374
1999	22	NA	NA	224
2000	32	NA	NA	347
2001	32	NA	NA	215
2002	24	NA	NA	207
Unfinished foliage stock (for further growing on)				
1998 ¹⁰				
1999 ¹⁰				
2000	12	NA	NA	702
2001	8	NA	NA	497
2002	12	NA	NA	735
POTTED BEDDING/GARDEN				
Impatiens, New Guinea				
1998 ¹⁰				
1999 ¹⁰				
2000	11	NA	104	129
2001	10	NA	131	192
2002	11	NA	135	194
Impatiens, other				
1998 ¹⁰				
1999 ¹⁰				
2000	8	NA	169	103
2001	10	NA	279	158
2002	11	NA	263	143
Other bedding/garden				
1998 ¹⁰				
1999 ¹⁰				
2000	30	NA	NA	2,502
2001	29	NA	NA	2,548
2002	29	NA	NA	3,242

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1998-2002 ¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
POTTED FLOWERING PLANTS				
Anthuriums - pots				
1998	15	NA	113	321
1999	24	NA	144	495
2000	28	NA	182	677
2001	25	NA	177	673
2002	25	NA	133	602
Bromeliads - pots				
1998	8	NA	88	423
1999	14	NA	112	626
2000	18	NA	111	593
2001	18	NA	138	588
2002	14	NA	191	764
Chrysanthemums - pots				
1998	5	NA	127	573
1999	4	NA	159	677
2000	6	NA	178	738
2001	5	NA	176	737
2002	5	NA	150	652
Poinsettias - pots				
1998	30	NA	263	1,012
1999	30	NA	332	1,233
2000	31	NA	334	1,292
2001	35	NA	328	1,273
2002	31	NA	365	1,393
Other potted flowering plants				
1998	27	NA	NA	1,563
1999	26	NA	NA	1,390
2000	30	NA	NA	1,744
2001	34	NA	NA	1,739
2002	30	NA	NA	2,314

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1998-2002 ¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
PLANT RENTALS				
1998	45	NA	NA	4,715
1999	32	NA	NA	3,226
2000	37	NA	NA	3,374
2001	42	NA	NA	3,098
2002	46	NA	NA	3,800
LANDSCAPE PLANTS				
1998 ¹⁰				
1999 ¹⁰				
2000	98	NA	NA	10,601
2001	110	NA	NA	12,996
2002	111	NA	NA	16,231
OTHER NURSERY PRODUCTS ¹¹				
1998				13,267
1999				13,113
2000				3,141
2001				3,846
2002				4,925
UNSPECIFIED SALES ¹²				
1998				1,479
1999				1,537
2000				1,477
2001				1,225
2002				1,290
TOTAL				
1998	745			73,207
1999	765			75,725
2000	735			82,684
2001	790			88,597
2002	805			92,069

NA = Not available. ¹ Beginning 1992, includes only producers having total sales of \$10,000 or more. ² Number for each individual flower item is count of those having sales of that item during each year; "Total" is unduplicated count. ³ Included with "Other cut flowers". ⁴ Prior to 2000, included with "Other cut flowers". ⁵ Includes cattleyas, vanda hybrids, phalaenopsis, and paphiopedilums. ⁶ Includes in bud/bloom and community pots. ⁷ Includes hanging baskets. ⁸ Beginning 2000, separated into "Dracaena", "Palms", "Hanging baskets", and "Other". ⁹ Prior to 2000, included with "Potted, primarily for indoor or patio use". ¹⁰ Included with "Other nursery products". ¹¹ Includes other flowers or nursery products not elsewhere classified. ¹² Beginning 1992, includes sales of growers greater than \$999 but less than \$10,000 which were not categorized.

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms and growing area, by counties, 1998-2002

Year	Farms	Greenhouse ¹	Artificial shade	Natural shade	Open field	Total area
	<i>Number</i>	<i>----- 1,000 square feet -----</i>	<i>----- Acres -----</i>			
State						
1998	745	2,810	24,200	9	2,050	2,679
1999	765	2,910	25,695	15	2,040	2,712
2000	735	3,235	25,180	7	2,060	2,719
2001	790	3,175	26,660	9	2,355	3,049
2002	805	2,690	29,055	10	2,685	3,424
Counties:						
Hawaii						
1998	355	1,975	19,620	9	1,155	1,660
1999	355	1,970	21,450	15	1,015	1,568
2000	335	2,425	20,675	6	920	1,456
2001	360	2,265	22,010	9	1,055	1,621
2002	380	1,875	23,175	10	1,475	2,060
Honolulu						
1998	205	480	3,810	0	415	514
1999	225	485	3,360	0	465	553
2000	205	395	3,480	0	495	584
2001	220	370	3,625	0	580	672
2002	220	325	4,800	0	515	633
Kauai						
1998	40	75	295	0	45	53
1999	35	90	265	0	85	93
2000	50	70	340	1	130	140
2001	60	115	295	0	155	164
2002	55	90	395	0	170	181
Maui						
1998	145	280	475	0	435	452
1999	150	365	620	0	475	498
2000	145	345	685	0	515	539
2001	150	425	730	0	565	592
2002	150	400	685	0	525	550

¹ Glass or glass substitute structure.

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Out-of-State sales, State of Hawaii, 1998-2002 ¹

Commodity	1998	1999	2000	2001	2002
<i>1,000 dollars</i>					
Anthuriums, cut	9,795	10,685	10,600	8,800	7,700
Birds of Paradise	945	710	980	860	740
Cymbidiums	130	110	100	150	140
Dendrobiums, sprays	3,820	2,875	3,395	3,500	3,400
Oncidium		270	545	510	490
Foliage, cut:					
Ti leaves	475	400	670	710	680
Other cut greens	1,070	845	1,060	1,480	1,520
Foliage, potted	12,220	12,785	13,525	15,800	10,400
Ginger, red	810	875	1,010	560	600
Gingers, other	800	890	830	590	580
Heliconias	955	970	1,400	1,020	1,040
Potted orchids:					
Dendrobiums	4,360	4,120	3,850	4,900	4,500
Phalaenopsis		285	655	630	500
Other orchids	6,485	5,395	6,285	7,200	8,900
Proteas	2,405	2,130	1,930	1,560	1,620
Unfinished potted foliage stock	400	355	270	270	310
Mixed assortment of cut flowers				1,260	1,200
All other flowers and nursery products	2,510	2,245	2,345	2,300	2,700
Total	47,180	45,945	49,450	52,100	47,020

¹ Based on F.O.B. island value. Includes both wholesale and retail sales. Does not include sales of cut flowers, leis, etc., purchased within the State and hand carried out.

DENDROBIUM ORCHIDS: Sales and value, State of Hawaii, 1998-2002 ¹

Year	Individual blossoms		Cut sprays		Potted plants				Total value
	Number sold	Value	Number sold	Value	In bud/bloom		Community pots		
					Number sold	Value	Number sold	Value	
	<i>Million blooms</i>	<i>1,000 dollars</i>	<i>1,000 dozens</i>	<i>1,000 dollars</i>	<i>1,000 pots</i>	<i>1,000 dollars</i>	<i>1,000 pots</i>	<i>----- 1,000 dollars -----</i>	
1998	28.9	855	419	2,864	1,025	5,663	82	406	9,788
1999	21.7	673	378	2,608	816	5,119	126	521	8,921
2000	19.9	615	340	2,335	941	5,590	124	938	9,478
2001	23.7	732	385	2,926	1,035	6,013	120	670	10,341
2002	26.4	803	461	3,225	1,227	6,614	130	722	11,364

¹ Includes only producers with total sales of \$10,000 or more.

2002 FRUIT HIGHLIGHTS

● AVOCADO

Hawaii County's 2002 avocado crop totaled 700 thousand pounds, up 17 percent from 2001. Weather conditions were sunny and relatively dry in most of the major growing areas. As a result, large commercial farms that have irrigated fields experienced average to good yields. Many of the smaller farms with unirrigated plantings, however, reported experiencing relatively poor yields. Also contributing to the higher output was a 9 percent increase in harvested acreage to 250 acres. Farm prices averaged 56.0 cents per pound in 2002, down 2 percent from the 57.0 cents per pound average of 2001. The lower farm price was the result of an increase in market supply as local production and imports from the U.S. mainland both increased in 2002. Farm revenues totaled \$392 thousand in 2002, up 15 percent from the previous year and the highest total in 11 years.



● BANANAS

In 2002, Hawaii County's banana output was pegged at 19.5 million pounds, down 30 percent from the previous year and declining for the second consecutive year. A large reduction of Cavendish banana acreage caused a sharp decline in both supply and revenue for the year. Banana Bunchy Top Virus (BBTV) remains a concern for growers. Last September the disease was found again in Kailua-Kona on Hawaii County after undergoing an eradication effort. In January 2003, the virus was confirmed in Pukalani, the first incidence for Maui County. Growers on Kauai and Honolulu counties continued to monitor and rogue infected plantings to control the disease. Weather for 2002 was favorable with no major wind damage to orchards. Total acreage as of February 2003 was 1,440 acres, 220 acres less than February last year. Harvested acreage totaled 1,300, down 190 acres from a year earlier. Banana sales is valued at \$8.4 million in 2002, falling 21 percent from 2001.

● GUAVAS

Hawaii County processed guava utilization in 2002 totaled 9.7 million pounds compared to 15.3 million pounds processed in 2001. Output was lower with limited sales and reduced yields. Hawaii County growers reported growing other crops and abandoning guava orchards due to lower prices. Total acreage was down 70 acres to 640, and harvested was 60 acres below to 550 in 2002. Reduced guava sales lowered value 33 percent from the previous year to \$1.5 million.

● PAPAYAS

Fresh papaya utilization totaled 42.7 million pounds in 2002, 18 percent below last year and declining after three consecutive years of increase. Fresh fruit accounted for virtually all utilization with 93 percent of the total. Outshipments made up 50 percent of the total output. Processed papaya utilization increased 7 percent in 2002 to 3.2 million pounds. Processed papayas accounted for 7 percent of papaya utilization compared to 5 percent last year. The State's harvested 2002 papaya acreage was down 230 acres to 1,720 acres mainly due to smaller acreage on Hawaii County. Growers planted mainly Rainbow and Kapoho varieties.

● PINEAPPLES

Fruit harvested for fresh sales totaled 234 million pounds in 2002, up 6 percent from the 2001 total. Fresh sales accounted for 37 percent of the total pineapple production. Processed pineapple utilization totaled 406 million pounds in 2002, down 5 percent from 2001. About 63 percent of the State's pineapple crop was processed during the year.

MARKET SUPPLY: FRESH FRUITS

MARKET SUPPLY: Fresh market fruits, State of Hawaii, 1998-2002 ^{1 2}

Commodity		1998 ³	1999	2000	2001	2002	Hawaii market share 2002
		----- 1,000 pounds -----					Percent
Apples:	Inshipments		15,588	14,915	13,622	11,802	
Avocados:	Inshipments		616	825	952	1,197	
	Hawaii	500	600	640	600	700	37
Bananas:	Inshipments		8,484	9,055	6,321	8,211	
	Hawaii	21,000	24,500	29,000	28,000	19,500	70
Cantaloupe melons:	Inshipments		8,334	8,877	9,641	8,349	
	Hawaii ⁴						
Grapefruit:	Inshipments		1,992	1,930	1,713	1,753	
Grapes:	Inshipments		7,541	8,546	7,145	8,543	
Honeydew melons:	Inshipments		4,125	4,448	2,698	2,334	
	Hawaii ⁴						
Lemons:	Inshipments		2,937	3,492	3,321	3,259	
Limes:	Inshipments		881	882	935	1,092	
	Hawaii ⁴						
Nectarines:	Inshipments		2,053	2,074	2,016	2,345	
Oranges:	Inshipments		7,714	12,109	11,017	12,683	
	Hawaii ⁴						
Papayas:	Hawaii ⁵	14,470	18,075	24,100	26,355	21,490	
Pears:	Inshipments		4,001	3,944	3,423	3,216	
Pineapples:	Hawaii	42,000	46,800	34,700	39,800	37,200	
Tangerines:	Inshipments		1,262	856	649	875	
	Hawaii ⁴						
Watermelons:	Inshipments		2,531	2,804	2,065	2,216	
	Hawaii	15,800	11,400	12,600	10,500	11,300	84
All other fruits:	Inshipments		8,824	10,639	11,463	12,429	
	Hawaii	3,474	6,556	5,416	6,056	9,907	44
Unspecified fruits:	Inshipments ⁶		14,000	13,000	8,366	11,248	
Total:	Inshipments		90,883	98,396	85,347	91,552	
	Hawaii	97,244	107,931	106,456	111,311	100,097	52
	All		198,814	204,852	196,658	191,649	

¹ Excludes pineapples, guavas, papayas, and passion fruit used for processing, and quantities shipped out-of-State.

² Inshipment data was provided by the Market Analysis and News Branch of the State Department of Agriculture.

³ Inshipment data not available.

⁴ Data not shown separately to avoid disclosure of individual operations but combined and included with "All other fruits".

⁵ Fresh intrastate sales only. Excludes mainland and foreign fresh sales.

⁶ Inshipment of "Unspecified fruits" were prorated based on the amount of known fruits imported into the State.

TROPICAL SPECIALTY FRUIT

TROPICAL SPECIALTY FRUIT: Number of farms, acreage, number of trees, production, price, and value, State of Hawaii, 1998-2002 ¹

Crop	Farms ²	Acreage		Number of trees		Utilized production ³	Farm price ³⁴	Value of sales
		In crop	Harvested	Total	Bearing			
<i>Number ----- Acres ----- 1,000 pounds Dollars per pound 1,000 dollars</i>								
Longan								
1998 ⁵								
1999 ⁵								
2000	40	40	10	2,300	500	24	4.02	94
2001	35	90	30	4,700	1,500	37	3.05	111
2002	40	120	35	6,600	1,900	46	3.20	147
Lychee								
1998	75	245	60	13,200	3,200	157.2	1.96	308.5
1999	80	275	45	12,900	3,100	86.0	2.81	242.0
2000	90	300	50	15,200	3,700	5	5	5
2001	85	305	65	16,400	4,300	5	5	5
2002	90	330	95	15,500	5,000	77.0	2.64	203.0
Mango								
1998 ⁵								
1999	80	240	85	11,200	4,600	162.0	1.02	166.0
2000	105	250	100	12,000	5,500	207.0	.93	193.0
2001	70	255	185	11,100	8,200	242.0	.86	209.0
2002	80	260	200	10,700	7,100	377.0	.92	348.0
Rambutan								
1998	50	180	70	9,800	4,700	139.2	3.03	421.5
1999	60	205	70	9,400	3,500	113.0	2.88	326.0
2000	70	225	85	9,800	5,000	220.0	2.98	656.0
2001	60	245	100	12,500	6,400	205.0	3.01	618.0
2002	55	270	145	13,200	6,800	257.0	3.01	773.0
Starfruit								
1998	25	25	25	1,900	1,900	37.1	.97	36.0
1999	25	20	15	1,800	1,700	96.0	.66	63.0
2000	30	20	15	1,800	1,700	107.0	.64	69.0
2001	40	20	15	2,000	1,900	69.0	1.06	73.0
2002	50	25	15	2,100	1,800	63.0	1.51	95.0
Other								
1998	--	350	85	23,900	5,000	376.1	--	402.9
1999	--	170	55	8,900	3,700	189.0	--	243.0
2000	--	125	50	6,700	3,400	169.0	--	309.0
2001	--	155	65	8,900	5,100	188.0	--	297.0
2002	--	165	70	10,900	4,800	142.0	--	194.0

See footnotes at end of table.

Continued

TROPICAL SPECIALTY FRUIT

TROPICAL SPECIALTY FRUIT: Number of farms, acreage, number of trees, production, price, and value, State of Hawaii, 1998-2002 ¹ -- Continued

Crop	Farms ²	Acreage		Number of trees		Utilized production ³	Farm price ^{3,4}	Value of sales
		In crop	Harvested	Total	Bearing			
	<i>Number</i>	<i>----- Acres -----</i>				<i>1,000 pounds</i>	<i>Dollars per pound</i>	<i>1,000 dollars</i>
Total								
1998	130	800	240	48,800	14,800	709.6	--	1,168.9
1999	140	910	270	44,200	16,600	646.0	--	1,040.0
2000	145	960	310	47,800	19,800	727.0	--	1,321.0
2001	145	1,070	460	55,600	27,400	741.0	--	1,308.0
2002	160	1,170	560	59,000	27,400	962.0	--	1,760.0

-- = Not applicable. ¹ Tropical specialty fruits include: abiu, atemoya, breadfruit, caimito, canistel, cherimoya, durian, jaboticaba, jackfruit, langsat, longan, loquat, lychee, mango, mangosteen, persimmon, poha, rambutan, rollina, sapodilla, soursop, starfruit, white sapote, and other fruits. If not shown separately, then combined and included in "Other" category. ² A farm may grow more than one type of fruit. Total farms is an unduplicated count; excludes home use. ³ Includes fresh and processed utilization when applicable. ⁴ Beginning 2001, price shown reflects average prices received as sold by farmers (loose, packed, etc.), excluding any value added through processing. Prior to 2001, prices for fresh sales were adjusted to prepacked equivalent. ⁵ Data not shown separately to avoid disclosure of individual operations but combined and included with "Other".

TROPICAL SPECIALTY FRUIT: Number of farms, acreage, production, and value, by counties, 1998-2002

Island	Farms	Acreage		Utilized production ¹	Value of sales
		In crop	Harvested		
	<i>Number</i>	<i>----- Acres -----</i>		<i>1,000 pounds</i>	<i>1,000 dollars</i>
State ²					
1998	130	800	240	709.6	1,168.9
1999	140	910	270	646.0	1,040.0
2000	145	960	310	727.0	1,321.0
2001	145	1,070	460	741.0	1,308.0
2002	160	1,170	560	962.0	1,760.0
Counties:					
Hawaii					
1998	80	315	3	3	3
1999	85	375	110	256.0	397.0
2000	85	405	135	329.0	651.0
2001	80	515	180	351.0	736.0
2002	90	585	250	417.0	1,008.0
Honolulu/Kauai/Maui ⁴					
1998	50	485	3	3	3
1999	55	535	160	390.0	643.0
2000	60	555	175	398.0	670.0
2001	65	555	280	390.0	572.0
2002	70	585	310	545.0	752.0

¹ Includes fresh and processed utilization when applicable.

² Specialty pineapple excluded beginning 1998.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

⁴ Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

PINEAPPLES

PINEAPPLES: Number of farms, acreage, production, disposition, price, and value, State of Hawaii, 1998-2002 ¹

Year	Farms	Acreage used for crop	Production (fresh weight)	Disposition		Farm price		Value of production (fresh weight)
				Processed (fresh weight)	Fresh market	Processed ²	Fresh market ³	
	<i>Number</i>	<i>1,000 acres</i>		<i>1,000 tons</i>		<i>Dollars per ton</i>		<i>1,000 dollars</i>
1998	15	21.0	332	221	111	131	575	92,776
1999	15	21.0	352	230	122	126	594	101,448
2000	15	20.7	354	232	122	130	585	101,530
2001	15	20.1	323	213	110	129	626	96,337
2002	15	19.1	320	203	117	136	624	100,616

¹ Includes specialty pineapple.

² Estimate to reflect value of fresh fruit delivered processing plant door based on average contract prices of independent growers.

³ Estimate to reflect value at wholesale establishments for local sales and shipper dock for mainland and foreign sales.

PINEAPPLES: Fresh market sales, processed value, and total value, State of Hawaii, 1998-2002

Year	Fresh market sales		Processor value of canned fruit and juice production ³	Total value: Fresh market and processed ⁴
	Quantity ¹	Value ²		
	<i>1,000 tons</i>		<i>Million dollars</i>	
1998	111	63.8	81.3	145.1
1999	122	72.5	72.3	144.8
2000	122	71.4	60.8	132.2
2001	110	68.9	67.7	136.6
2002	117	73.0	71.0	144.0

¹ Market Analysis and News Branch of the State Department of Agriculture. Includes all destinations.

² Value FAS shipping point for outshipments, delivered wholesalers local sales.

³ Value of canned fruit and juices and by-product shipped out-of-State and sold within State.

⁴ Pineapple Growers Association of Hawaii.

PINEAPPLES: Outshipments of fresh pineapples, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
	<i>1,000 pounds</i>												
1998	12,109	11,237	17,451	13,841	13,248	14,618	18,926	16,245	12,498	16,518	15,532	17,695	179,918
1999	13,564	12,237	18,052	16,603	18,477	18,805	20,645	13,305	15,929	16,490	17,700	15,388	197,195
2000	14,692	14,022	18,769	21,214	21,773	22,782	17,877	17,040	13,197	16,451	16,718	14,806	209,341
2001	13,864	13,519	16,254	16,276	19,480	17,541	18,073	14,212	9,901	12,671	12,307	16,058	180,156
2002	14,978	11,978	16,610	16,898	20,524	20,126	20,448	13,534	14,044	15,032	16,997	15,574	196,744

Source of outshipment data: Market Analysis and News Branch of the State Department of Agriculture.

AVOCADOS: Number of farms, acreage, yield, production, price, and value, State of Hawaii, 1998-2002

Year	Farms	Acreage ¹		Yield per acre ²	Production	Farm price	Value of sales
		In crop	Bearing				
	<i>Number</i>	<i>----- Acres -----</i>		<i>----- 1,000 pounds -----</i>		<i>Cents per pound</i>	<i>1,000 dollars</i>
1998	95	330	240	2.1	500	52.0	260
1999	120	360	230	2.6	600	60.0	360
2000	130	360	220	2.9	640	58.0	371
2001	140	360	230	2.6	600	57.0	342
2002	140	370	250	2.8	700	56.0	392

¹ At end of year.

² Production divided by bearing acreage.

BANANAS: Distribution of harvested acreage by yield, State of Hawaii, 2001-2002

Stratum: Yield per harvested acre	Variety							
	Hawaii Apple ¹				Cavendish and others ²			
	Harvested acres		Average yield		Harvested acres		Average yield	
	2001	2002	2001	2002	2001	2002	2001	2002
<i>Pounds</i>			<i>----- Pounds -----</i>				<i>----- Pounds -----</i>	
Over 30,000	3	3	3	3	150	3	30,700	3
20,001 - 30,000	³ 116	³ 122	³ 25,000	³ 24,200	677	³ 510	24,000	³ 23,600
10,001 - 20,000	135	147	14,400	11,100	26	108	12,100	17,700
10,000 and Under	349	341	5,400	4,300	37	72	3,600	6,600
Overall Average Yield	600	610	11,200	9,500	890	690	23,900	28,300

¹ Includes Dwarf Hawaii Apple and Apple bananas, formerly called Brazilian.

² Includes Chinese, Williams, Valery, Grand Nain, Bluefields, Dwarf Bluefields, and other bananas. Previous publications provide a breakdown for Bluefields.

³ Over 30,000 pounds per acre combined with 20,001-30,000 pounds per acre to avoid disclosure of individual operations.

BANANAS

BANANAS: Number of farms, acreage, yield, production, price, and value, by counties, 1998-2002

Year	Farms	Acreage		Yield per acre ³	Utilized production	Farm price	Value of sales
		In crop ¹	Harvested ²				
Number		----- Acres -----		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ⁴							
1998	200	1,600	1,420	14.8	21,000	35.0	7,350
1999	210	1,760	1,420	17.3	24,500	35.0	8,575
2000	210	1,710	1,460	19.9	29,000	36.0	10,440
2001	200	1,660	1,490	18.8	28,000	38.0	10,640
2002	210	1,440	1,300	15.0	19,500	43.0	8,385
Counties:							
Hawaii							
1998	50	740	665	16.7	11,100	31.0	3,430
1999	45	830	650	18.2	11,800	32.5	3,819
2000	45	815	665	21.4	14,200	34.5	4,927
2001	50	790	730	23.0	16,800	37.5	6,302
2002	50	815	740	20.4	15,100	42.0	6,340
Honolulu							
1998	75	715	655	13.1	8,600	38.0	3,268
1999	85	785	670	16.9	11,300	35.5	4,039
2000	80	760	685	19.7	13,500	35.5	4,826
2001	75	710	645	15.7	10,100	37.5	3,768
2002	70	460	440	7.5	3,300	44.0	1,459
Kauai							
1998	40	60	50	10.0	500	42.5	212
1999	40	60	50	10.2	510	42.5	218
2000	45	60	50	11.0	550	43.0	236
2001	45	75	55	9.5	520	45.5	237
2002	50	80	60	9.2	550	46.5	256
Maui							
1998	35	85	50	16.0	800	55.0	440
1999	40	85	50	17.8	890	56.0	499
2000	40	75	60	12.5	750	60.0	451
2001	30	85	60	9.7	580	57.5	333
2002	40	85	60	9.2	550	60.0	330

¹ As of February following year, i.e., acreage data shown for 2002 is as of February 1, 2003.

² Acreage reflects quarterly average during the year.

³ Utilized production divided by acreage harvested.

⁴ Sum of county estimates may not add to State total due to rounding.

BANANAS: Production, acreage, and price, State of Hawaii, 1998-2002

Year	Fresh utilization ¹													Acreage	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average	In crop	Harvested

----- 1,000 pounds ----- Acres -----

All Bananas

1998	1,196	1,096	1,261	1,359	1,516	1,943	2,163	2,117	2,112	2,095	2,063	2,079	21,000	1,600	1,420
1999	1,739	1,743	1,968	1,714	2,124	2,090	2,323	2,500	2,363	2,151	1,820	1,965	24,500	1,760	1,420
2000	2,148	2,221	2,583	2,371	2,442	2,620	2,553	2,350	2,638	2,465	2,603	2,006	29,000	1,710	1,460
2001	2,145	2,025	2,390	2,285	2,480	2,520	2,530	2,620	2,490	2,295	2,175	2,045	28,000	1,660	1,490
2002	1,445	1,315	1,450	1,415	1,490	1,815	1,740	2,025	1,695	1,725	1,640	1,745	19,500	1,440	1,300

Hawaii Apple ²

1998	344	345	388	367	308	281	322	367	385	390	397	506	4,400	660	510
1999	487	442	418	392	398	402	360	386	390	429	403	393	4,900	700	530
2000	410	438	496	479	407	447	440	445	454	458	518	508	5,500	735	550
2001	425	495	615	565	635	630	560	590	565	565	475	580	6,700	760	600
2002	505	455	500	460	495	495	540	470	465	480	450	485	5,800	715	610

Cavendish and Others ³

1998	852	751	873	992	1,208	1,662	1,841	1,750	1,727	1,705	1,666	1,573	16,600	940	910
1999	1,252	1,301	1,550	1,322	1,726	1,688	1,963	2,114	1,973	1,722	1,417	1,572	19,600	1,060	890
2000	1,738	1,783	2,087	1,892	2,035	2,173	2,113	1,905	2,184	2,007	2,085	1,498	23,500	975	910
2001	1,720	1,530	1,775	1,720	1,845	1,890	1,970	2,030	1,925	1,730	1,700	1,465	21,300	900	890
2002	940	860	950	955	995	1,320	1,200	1,555	1,230	1,245	1,190	1,260	13,700	725	690

Farm price for fresh market

Cents per pound

All Bananas ⁴

1998	36.0	38.5	37.5	38.0	37.5	35.5	34.5	33.5	33.0	32.5	33.5	34.5	35.0
1999	37.0	38.5	38.0	37.5	35.0	33.5	32.5	33.0	33.0	33.5	36.5	35.0	35.0
2000	36.0	38.5	37.5	39.0	37.5	34.5	33.0	32.0	33.0	36.5	36.5	38.0	36.0
2001	38.5	42.0	40.0	38.0	40.5	37.5	37.0	36.0	36.0	36.0	35.0	39.5	38.0
2002	43.0	45.0	45.5	45.0	46.0	42.5	41.5	39.0	41.5	43.5	43.5	42.5	43.0

Hawaii Apple ²

1998	49.5	49.5	49.0	49.0	50.0	53.0	53.0	51.0	50.5	50.0	49.5	48.5	50.0
1999	48.0	47.5	47.0	47.0	47.5	47.5	47.5	48.0	47.5	47.5	48.0	48.0	47.5
2000	46.5	46.5	46.0	47.5	47.0	47.0	47.0	47.5	47.5	47.0	46.5	47.5	47.0
2001	50.0	50.0	51.0	51.0	51.5	50.5	50.0	50.5	51.0	51.0	50.0	50.0	50.5
2002	49.5	50.5	49.5	49.0	50.5	51.0	51.0	50.5	51.5	51.5	51.5	49.5	50.5

Cavendish ⁵

1998	30.0	33.5	32.5	33.5	34.0	32.5	31.0	29.5	28.5	28.5	29.5	30.0	30.5
1999	32.5	35.0	35.5	34.5	31.5	30.0	29.5	30.0	30.0	29.5	33.0	31.5	31.5
2000	33.5	36.0	35.5	36.5	35.5	31.5	30.0	28.0	30.0	34.0	34.0	34.5	33.0
2001	36.0	39.0	36.0	34.0	36.5	33.5	33.0	32.0	31.5	31.5	30.5	35.5	34.0
2002	39.5	41.5	42.5	42.5	43.5	39.5	37.0	35.5	37.5	40.5	41.0	39.5	39.5

¹ Monthly production rounded to the nearest 5,000 pounds beginning 2001. ² Includes Dwarf Hawaii Apple and Apple bananas, formerly called Brazilian. ³ Includes Chinese, Williams, Valery, Grand Nain, Bluefields, Dwarf Bluefields, and other bananas. Previous publications provide a breakdown for Bluefields. ⁴ Includes Bluefields, Dwarf Bluefields, and other bananas. ⁵ Includes Chinese, Williams, Valery, and Grand Nain.

PAPAYAS

PAPAYAS: Number of farms, acreage, yield, utilization, price, and value, by counties, 1998-2002¹

Year	Farms ²	Acreage ²		Yield per acre ³	Utilized produc- tion	Utilization		Price per pound			Value of utilized production
		In crop	Harvested			Fresh	Processed	Fresh	Processed ⁴	All	
<i>Number ----- Acres ----- ----- 1,000 pounds ----- ----- Cents ----- 1,000 dollars</i>											
State											
1998	262	3,555	2,120	18.8	39,900	35,600	4,300	35.0	3.0	31.6	12,589
1999	222	3,500	1,940	21.9	42,400	39,400	3,000	40.2	3.0	37.6	15,929
2000	236	2,845	1,650	33.0	54,500	50,250	4,250	31.6	3.0	29.4	16,007
2001	221	2,860	1,950	28.2	55,000	52,000	3,000	27.9	3.0	26.5	14,598
2002	164	2,320	1,720	26.7	45,900	42,700	3,200	27.7	3.0	26.0	11,924
Counties:											
Hawaii											
1998	208	2,715	1,640	18.9	31,050	26,750	⁵ 4,300	31.1		27.2	8,439
1999	168	2,595	1,415	20.1	28,455	25,455	⁵ 3,000	36.3		32.8	9,327
2000	174	2,005	1,130	33.8	38,200	33,950	⁵ 4,250	29.7		26.8	10,223
2001	158	2,385	1,635	26.5	43,290	40,290	⁵ 3,000	25.1		23.6	10,216
2002	122	2,050	1,540	25.4	39,080	35,880	⁵ 3,200	25.2		23.4	9,135
Honolulu											
1998	23	525	300	18.3	5,485	5,485	0	55.1		55.1	3,022
1999	22	550	335	24.7	8,265	8,265	0	52.3		52.3	4,322
2000	34	510	335	34.4	11,515	11,515	0	34.7		34.7	3,996
2001	29	330	225	41.9	9,425	9,425	0	38.3		38.3	3,613
2002	21	155	110	45.5	5,005	5,005	0	40.0		40.0	2,002
Kauai											
1998	21	245	135	15.3	2,065	2,065	⁵	⁶ 33.5		⁶ 33.5	⁶ 1,128
1999	22	285	145	32.8	4,760	4,760	⁵	⁶ 40.1		⁶ 40.1	⁶ 2,280
2000	23	275	160	24.7	3,945	3,945	⁵	⁶ 37.4		⁶ 37.4	⁶ 1,788
2001	24	105	70	24.2	1,695	1,695	⁵	⁶ 33.7		⁶ 33.7	⁶ 769
2002	13	70	50	22.2	1,110	1,110	⁵	⁶ 43.4		⁶ 43.4	⁶ 787
Maui											
1998	10	70	45	28.9	1,300	1,300	0	⁶		⁶	⁶
1999	10	70	45	20.4	920	920	0	⁶		⁶	⁶
2000	5	55	25	33.6	840	840	0	⁶		⁶	⁶
2001	10	40	20	29.5	590	590	0	⁶		⁶	⁶
2002	8	45	20	35.3	705	705	0	⁶		⁶	⁶

¹ Sum of county estimates may not add to State total due to rounding.

² Average of monthly estimates.

³ Utilized production divided by acreage harvested.

⁴ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

⁵ Kauai combined with Hawaii to avoid disclosure of individual operations.

⁶ Maui combined with Kauai to avoid disclosure of individual operations.

PAPAYAS: Acreage, utilization, outshipments, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres¹													
1998	1,735	1,740	1,750	1,775	2,175	2,460	2,440	2,420	2,310	2,240	2,215	2,185	2,120
1999	2,190	2,135	2,100	2,145	2,155	2,025	2,035	2,025	1,615	1,620	1,605	1,635	1,940
2000	1,635	1,675	1,655	1,655	1,670	1,585	1,330	1,610	1,725	1,690	1,695	1,875	1,650
2001	1,870	1,845	2,025	2,025	2,025	2,035	2,020	1,955	1,940	1,920	1,920	1,825	1,950
2002	1,830	1,925	1,930	1,935	1,935	1,725	1,680	1,610	1,500	1,500	1,490	1,580	1,720
Utilization (fresh and processed) - 1,000 pounds													
1998	3,395	2,910	2,995	3,605	3,790	3,160	3,620	3,420	2,770	3,200	3,335	3,700	39,900
1999	3,310	3,155	3,315	3,475	3,655	3,440	3,490	3,705	3,695	3,835	3,785	3,540	42,400
2000	3,310	3,575	4,655	5,185	5,325	5,245	5,375	4,445	3,510	4,290	4,585	5,000	54,500
2001	5,065	4,045	4,670	4,740	5,150	5,230	4,370	4,325	4,390	5,185	4,435	3,395	55,000
2002	3,445	3,450	3,540	3,320	3,615	3,620	4,245	4,655	3,705	4,165	4,285	3,855	45,900
Total fresh papaya utilization - 1,000 pounds													
1998	2,875	2,655	2,845	3,375	2,995	2,685	3,095	2,785	2,495	3,165	3,250	3,380	35,600
1999	2,975	2,985	3,155	3,260	3,365	3,215	3,225	3,315	3,480	3,520	3,565	3,340	39,400
2000	3,175	3,440	4,610	4,700	4,625	4,425	4,665	3,860	3,355	4,255	4,430	4,710	50,250
2001	4,930	4,040	4,600	4,380	4,530	4,745	3,985	4,190	4,105	4,940	4,330	3,225	52,000
2002	3,345	3,310	3,375	2,995	3,210	3,285	3,915	3,745	3,585	4,035	4,135	3,765	42,700
Intrastate fresh papaya utilization - 1,000 pounds													
1998	1,020	1,130	1,025	1,310	1,160	945	1,210	1,155	1,040	1,415	1,499	1,561	14,470
1999	1,405	1,390	1,305	1,500	1,645	1,410	1,385	1,475	1,610	1,695	1,720	1,535	18,075
2000	1,560	1,730	2,255	2,185	2,060	1,880	1,925	1,835	1,685	2,170	2,465	2,350	24,100
2001	2,890	2,120	2,425	1,955	1,870	2,320	1,845	2,125	2,215	2,325	2,345	1,920	26,355
2002	1,860	1,670	1,885	1,655	1,770	1,825	1,795	1,735	1,665	1,990	1,885	1,755	21,490
Outshipments of fresh papayas - 1,000 pounds													
1998	1,855	1,525	1,820	2,065	1,835	1,740	1,885	1,630	1,455	1,750	1,751	1,819	21,130
1999	1,570	1,595	1,850	1,760	1,720	1,805	1,840	1,840	1,870	1,825	1,845	1,805	21,325
2000	1,615	1,710	2,355	2,515	2,565	2,545	2,740	2,025	1,670	2,085	1,965	2,360	26,150
2001	2,040	1,920	2,175	2,425	2,660	2,425	2,140	2,065	1,890	2,615	1,985	1,305	25,645
2002	1,485	1,640	1,490	1,340	1,440	1,460	2,120	2,010	1,920	2,045	2,250	2,010	21,210
Farm price for fresh market sales (to all markets) - cents per pound													
1998	31.6	38.9	50.2	43.2	33.4	40.4	36.5	31.8	35.9	30.0	23.8	26.8	35.0
1999	29.5	35.5	41.1	44.2	44.7	44.3	43.7	44.4	39.9	37.0	35.1	42.7	40.2
2000	44.9	44.8	38.8	39.6	26.7	25.7	36.3	34.5	30.2	22.7	21.0	21.0	31.6
2001	23.8	26.9	30.0	31.7	28.3	28.5	30.0	27.7	27.3	26.0	26.5	28.9	27.9
2002	29.4	29.5	28.3	30.2	30.4	28.3	27.9	27.5	26.9	24.9	25.3	26.1	27.7

¹ Total is average of monthly data.

GUAVAS

GUAVAS: Number of farms, acreage, farm production, price, and value, by counties, 1998-2002

Year	Farm production					
	Farms	Acreage		Utilized Production	Farm price ²	Value of sales
		In crop ¹	Harvested			
	<i>Number</i>	<i>----- Acres -----</i>		<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
State						
1998	125	890	710	14,600	12.2	1,781
1999	130	870	630	10,700	12.0	1,284
2000	130	800	680	15,900	12.9	2,051
2001	110	710	610	15,300	14.1	2,157
2002	85	640	550	9,700	15.0	1,455
Counties:						
Hawaii						
1998	120	430	320	7,100 ₃	12.2 ₃	866 ₃
1999	125	430	240	3	3	3
2000	120	340	240	3	3	3
2001	100	260	170	3	3	3
2002	80	200	110			
Honolulu/Kauai/Maui ⁴						
1998	5	460	390	7,500 ₃	12.2 ₃	915 ₃
1999	5	440	390	3	3	3
2000	10	460	440	3	3	3
2001	10	450	440	3	3	3
2002	5	440	440			

¹ Includes planting intentions.

² State average grower price. Equivalent F.O.B. plant, county of production.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

⁴ Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

GUAVAS: Farm production, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
<i>1,000 pounds</i>													
1998	971	658	900	809	679	504	855	1,150	1,849	3,154	1,912	1,159	14,600
1999	487	286	819	480	279	491	633	735	1,468	2,216	1,962	844	10,700
2000	963	905	1,011	494	855	681	805	862	1,085	3,092	3,065	2,082	15,900
2001	1,434	501	363	646	1,032	1,041	1,244	1,385	2,236	1,761	2,298	1,359	15,300
2002	693	507	425	525	514	1,016	497	228	832	1,868	1,820	775	9,700

2002 VEGETABLE, MELON, AND TARO HIGHLIGHTS

VEGETABLES AND MELONS

The farm value of vegetables and melons was estimated at a record high \$50.4 million in 2002, up 5 percent from 2001. Tomato growers led all individual vegetables and melons in farm value with a record high \$9.6 million in 2002, up 4 percent from 2001. Increases in production and farm prices enabled watermelon farmers to move from last year's fourth spot to second in 2002 on farm revenues of \$2.9 million, a 17 percent increase. Head cabbage growers were third with farm revenues estimated at \$2.7 million in 2002, down 1 percent from 2001 as farm prices declined 5 percent.



The combined category of Other Vegetables and Melons continued to make double-digit percentage gains in farm revenues. Farm value was estimated at \$16.2 million, up 36 percent. This category contains over 60 individual vegetables and includes such high-valued crops as sprouts, taro leaves, ethnic vegetables, baby vegetables, and salad mix greens.

Production of vegetables and melons totaled 96.5 million pounds in 2002, up 2 percent from 2001. Leading all vegetables and melons for the fourth consecutive year were tomatoes (field-grown and greenhouse tomatoes combined) with a record-tying harvest of 17.5 million pounds in 2002. Head cabbage growers were second with production estimated at 13.0 million pounds in 2002, up 4 percent from 2001. Watermelons remained third with a harvest of 11.3 million pounds, up 8 percent from 2001.

The category of Other Vegetables and Melons had a record-high combined production of 17.6 million pounds in 2002, up 43 percent from 2001. Increased production of specialty melons and cantaloupes were mainly responsible for the overall boost.

TARO

Hawaii County taro production is estimated at 6.1 million pounds for 2002, down 5 percent from 2001. The combined farm price for poi and Chinese taro increased 2 percent from 2001 to a new record-high average of 54.0 cents per pound in 2002. Total farm revenues declined 3 percent to \$3.3 million in 2002 as the drop in production more than offset the increase in farm prices.

Poi taro acreage in 2002 decreased 5 percent from the previous year to total 400 acres. Chinese taro acreage, on the other hand, saw an increase of 50 percent to 30 acres.

Taro for processing totaled 5.8 million pounds in 2002, down 6 percent from the previous year. The bulk of all processed taro, and taro in general, is made into poi and yields across the State were hampered by factors such as adverse weather conditions, pests, and disease. Compounding all these problems that were hampering the supply of poi taro, farmers also saw the demand for their product decline following the tragic events of September 11, 2001. Poi sales slowed as fewer tourists visited the State and the local economy began to slowdown.

MARKET SUPPLY: FRESH VEGETABLES

MARKET SUPPLY: Fresh market vegetables, State of Hawaii, 1998-2002 ¹

Commodity		1998 ²	1999	2000	2001	2002	Hawaii market share 2002
		----- 1,000 pounds -----					Percent
Beans, snap:	Inshipments		185	591	285	515	
	Hawaii	900	1,000	1,200	1,100	900	64
Bittermelon:	Inshipments		53	53	31	38	
	Hawaii	350	550	300	250	200	84
Broccoli:	Inshipments		5,943	5,285	4,822	4,882	
	Hawaii	350	300	400	550	550	10
Burdock:	Inshipments		41	41	38	51	
	Hawaii	200	250	180	150	3	
Cabbage, Chinese:	Inshipments		114	281	178	234	
	Hawaii ⁴	6,700	6,400	6,200	6,000	5,700	96
Cabbage, head:	Inshipments		498	899	1,151	341	
	Hawaii	15,300	14,300	14,600	12,500	13,000	97
Cabbage, mustard:	Inshipments		93	72	112	205	
	Hawaii	1,500	1,600	1,500	1,600	1,400	87
Carrots:	Inshipments		11,667	12,505	11,550	11,628	
	Hawaii ³						
Cauliflower:	Inshipments		1451	1,337	1,171	1,152	
	Hawaii	130	3	3	3	3	
Celery:	Inshipments		5,022	5,259	4,961	4,830	
	Hawaii	1,300	1,300	1,100	1,150	1,100	19
Corn, sweet:	Inshipments		1,648	1,271	966	771	
	Hawaii	1,100	1,700	2,400	1,900	2,400	76
Cucumbers:	Inshipments		721	729	282	616	
	Hawaii	6,000	5,800	5,700	5,300	5,400	90
Daikon:	Inshipments		--	4	--	5	
	Hawaii ⁴	2,450	2,300	2,750	2,800	2,100	100
Dasheen:	Inshipments		48	87	74	66	
	Hawaii ³						
Eggplant:	Inshipments		445	489	211	616	
	Hawaii	1,300	1,500	1,200	1,000	750	55
Ginger root:	Inshipments		286	155	6	5	
	Hawaii	18,000	16,100	13,500	18,000	14,400	100
Lettuce ⁵ :	Inshipments		12,719	13,728	11,366	9,336	
	Hawaii	1,700	1,500	1,300	1,200	1,200	11
Lotus root:	Inshipments		50	51	40	72	
	Hawaii ³						
Onions, dry:	Inshipments		16,093	16,460	17,752	17,611	
	Hawaii	3,500	3,400	4,300	5,400	2,100	11

See footnotes at end of table.

Continued

MARKET SUPPLY: FRESH VEGETABLES

MARKET SUPPLY: Fresh market vegetables, State of Hawaii, 1998-2002 ¹ -- Continued

Commodity		1998 ²	1999	2000	2001	2002	Hawaii market share 2002
		----- 1,000 pounds -----					Percent
Onions, green:	Inshipments		170	263	240	180	
	Hawaii	1,500	1,700	1,500	1,400	1,500	89
Parsley, American:	Inshipments		25	17	26	52	
	Hawaii	125	190	220	330	300	85
Peas, Chinese:	Inshipments		381	344	335	381	
	Hawaii ³						
Peppers, green:	Inshipments		1,804	1,948	1,910	1,912	
	Hawaii	3,000	3,000	2,800	3,100	3,200	63
Potatoes:	Inshipments ⁶		35,702	40,474	40,132	39,126	
	Hawaii ³						
Potatoes, sweet:	Inshipments		1,239	1,366	1,551	1,303	
	Hawaii	1,900	2,900	2,500	1,800	2,300	64
Pumpkins:	Inshipments		1,144	1,426	393	121	
	Hawaii	550	450	170	400	400	77
Radish:	Inshipments		--	6	1	1	
	Hawaii	150	130	100	150	100	99
Romaine:	Inshipments		5,023	6,337	6,412	7,492	
	Hawaii	3,300	2,700	2,000	2,000	1,800	19
Squash, Italian:	Inshipments		979	1,188	847	1,187	
	Hawaii	1,500	1,900	2,200	1,800	1,400	54
Squash, oriental:	Inshipments		--	4	2	35	
	Hawaii	240	600	600	500	250	88
Taro:	Inshipments		1,491	1,293	1,200	749	
	Hawaii ⁴	300	300	200	200	300	29
Tomatoes:	Inshipments		3,973	3,340	2,995	3,290	
	Hawaii	10,200	16,800	16,500	17,500	17,500	84
Watercress:	Inshipments		10	10	51	184	
	Hawaii	980	970	970	860	800	81
All other vegetables:	Inshipments		18,856	20,937	16,329	16,459	
	Hawaii	10,401	12,710	10,980	11,470	13,850	46
Unspecified vegetables:	Inshipments ⁷		23,000	21,000	14,000	17,569	
Total:	Inshipments		150,874	159,250	141,420	143,015	
	Hawaii	94,926	102,350	97,370	100,410	94,900	40
	All		253,224	256,620	241,830	237,915	

-- = Negligible.

¹ Inshipment data was provided by the Market Analysis and News Branch of the State Department of Agriculture.

² Inshipment data not available.

³ Data not shown separately to avoid disclosure of individual operations but combined and included with "All other vegetables".

⁴ Fresh market only.

⁵ Processed lettuce, both local production and inshipments, are included in "All other vegetables".

⁶ For processing and fresh market.

⁷ Inshipment of "Unspecified vegetables" were prorated based on the amount of known vegetables imported into the State.

SNAP BEANS

SNAP BEANS: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	200	4.5	900	82.0	738
1999	200	5.0	1,000	88.0	880
2000	210	5.7	1,200	91.0	1,092
2001	210	5.2	1,100	97.0	1,067
2002	180	5.0	900	97.0	873
Counties:					
Hawaii/Kauai ²					
1998	85	2.9	250	80.0	200
1999	85	3.2	270	84.2	227
2000	75	4.7	350	94.4	330
2001	75	3.2	240	91.1	219
2002	50	3.0	150	98.0	147
Honolulu					
1998	20	7.5	150	81.0	122
1999	25	6.4	160	98.0	157
2000	65	4.6	300	98.0	294
2001	80	4.5	360	104.3	375
2002	75	3.9	290	107.5	312
Maui					
1998	95	5.3	500	83.2	416
1999	90	6.3	570	87.0	496
2000	70	7.9	550	85.0	468
2001	55	9.1	500	94.6	473
2002	55	8.4	460	90.0	414

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Hawaii to avoid disclosure of individual operations.

SNAP BEANS: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres ¹													
1998	14	13	19	21	21	21	15	15	17	21	20	17	200
1999	18	19	17	17	18	22	20	17	18	18	20	17	200
2000	17	26	22	25	20	19	15	13	15	18	14	17	210
2001	14	18	17	25	18	19	15	19	15	16	19	15	210
2002	16	17	15	15	14	18	12	15	19	14	17	17	180
Production - 1,000 pounds													
1998	52	73	119	72	84	75	70	98	73	66	72	46	900
1999	72	66	89	73	94	88	78	65	98	97	103	77	1,000
2000	107	104	111	105	117	110	106	101	87	83	80	89	1,200
2001	97	73	97	131	101	82	103	109	83	70	79	75	1,100
2002	60	55	76	94	70	105	55	86	75	74	71	79	900
Farm price - cents per pound													
1998	112.8	85.8	74.9	76.8	86.4	75.1	67.5	57.4	86.9	91.5	86.6	115.9	82.0
1999	100.2	103.6	93.4	101.1	84.0	66.2	77.8	85.6	83.4	80.7	87.3	102.3	88.0
2000	162.3	90.5	72.1	80.1	73.1	71.1	72.1	78.0	89.4	98.7	111.5	103.9	91.0
2001	104.8	108.2	100.5	83.3	74.4	87.1	94.7	99.7	102.9	102.7	104.7	116.1	97.0
2002	106.4	106.1	101.9	90.2	90.0	91.9	83.5	94.3	104.5	99.1	102.1	98.3	97.0

¹ Sum of monthly data exceeds total because harvest period longer than 1 month.

CHINESE CABBAGE

CHINESE CABBAGE: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	380	20.8	7,900	19.0	1,501
1999	330	22.7	7,500	19.0	1,425
2000	320	22.5	7,200	21.0	1,512
2001	320	21.9	7,000	23.0	1,610
2002	340	20.0	6,800	24.0	1,632
Counties:					
Hawaii					
1998	270	20.7	5,600	19.0	1,064
1999	220	23.2	5,100	19.0	969
2000	225	22.2	5,000	20.7	1,035
2001	210	23.8	5,000	22.8	1,140
2002	200	24.0	4,800	23.0	1,104
Honolulu/Kauai/Maui ²					
1998	110	20.9	2,300	19.0	437
1999	110	21.8	2,400	19.0	456
2000	95	23.2	2,200	21.7	477
2001	110	18.2	2,000	23.5	470
2002	140	14.3	2,000	26.4	528

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

CHINESE CABBAGE: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres													
1998	34	39	35	31	32	29	33	28	32	32	28	27	380
1999	30	33	29	29	29	27	30	26	26	21	22	28	330
2000	27	28	28	26	25	28	24	26	26	28	25	29	320
2001	23	24	25	25	28	26	25	19	28	31	35	31	320
2002	26	26	31	28	36	28	31	27	27	26	27	27	340
Processing and fresh market:													
Production - 1,000 pounds													
1998	752	781	608	704	714	576	700	578	632	649	624	582	7,900
1999	623	676	595	551	610	600	668	614	628	651	696	588	7,500
2000	760	608	640	644	630	544	533	590	653	574	454	570	7,200
2001	605	533	765	650	741	556	541	446	418	557	609	579	7,000
2002	614	611	651	579	494	504	545	564	446	576	604	612	6,800
Farm price - cents per pound													
1998	23.7	17.7	15.6	16.7	15.7	16.2	19.6	20.0	22.0	17.8	19.6	23.2	19.0
1999	22.2	17.1	15.0	16.2	18.2	18.9	18.4	20.1	22.6	19.4	20.9	18.4	19.0
2000	20.7	15.8	14.6	14.8	17.5	22.2	28.4	24.4	23.8	21.4	25.0	27.1	21.0
2001	29.6	25.2	22.5	18.5	17.5	19.0	17.5	23.5	30.3	28.4	25.4	22.9	23.0
2002	23.8	19.7	17.7	17.9	18.5	23.7	26.8	26.9	30.0	29.7	29.8	25.3	24.0

HEAD CABBAGE

HEAD CABBAGE: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	600	25.5	15,300	18.0	2,754
1999	550	26.0	14,300	18.0	2,574
2000	540	27.0	14,600	19.0	2,774
2001	500	25.0	12,500	22.0	2,750
2002	540	24.1	13,000	21.0	2,730
Counties:					
Hawaii/Honolulu/Kauai ²					
1998	320	25.0	8,000	18.0	1,440
1999	340	25.3	8,600	18.2	1,565
2000	350	26.6	9,300	19.4	1,804
2001	330	23.8	7,850	23.0	1,806
2002	370	23.5	8,700	21.2	1,844
Maui					
1998	280	26.1	7,300	18.0	1,314
1999	210	27.1	5,700	17.7	1,009
2000	190	27.9	5,300	18.3	970
2001	170	27.4	4,650	20.3	944
2002	170	25.3	4,300	20.6	886

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

HEAD CABBAGE: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres													
1998	54	52	56	50	50	48	50	49	47	48	48	48	600
1999	49	56	50	48	44	42	41	41	42	44	47	46	550
2000	51	44	50	44	41	48	41	42	46	46	40	47	540
2001	49	44	46	41	46	43	48	42	42	31	31	37	500
2002	45	47	51	46	48	48	47	44	42	40	40	42	540
Production - 1,000 pounds													
1998	1,126	1,256	1,272	1,240	1,404	1,234	1,314	1,266	1,338	1,384	1,249	1,217	15,300
1999	1,223	1,221	1,518	1,135	1,118	1,016	1,112	1,124	1,193	1,295	1,162	1,183	14,300
2000	1,258	1,227	1,401	1,287	1,263	1,326	1,236	1,250	978	1,231	1,169	924	14,600
2001	1,005	925	1,234	980	1,103	1,165	1,164	1,179	1,085	1,094	668	898	12,500
2002	1,036	1,010	1,134	944	1,070	1,205	1,106	1,188	1,138	1,055	948	1,166	13,000
Farm price - cents per pound													
1998	21.6	19.9	16.8	16.3	16.4	16.5	16.1	17.0	18.0	16.3	18.7	23.1	18.0
1999	22.0	18.3	14.0	15.0	15.8	17.7	20.6	20.7	19.1	16.8	20.7	16.8	18.0
2000	19.6	17.7	14.9	15.2	15.8	18.2	18.4	19.0	20.2	23.1	22.5	26.4	19.0
2001	25.8	26.3	26.8	23.4	20.9	16.6	16.5	18.1	20.8	22.1	25.6	24.3	22.0
2002	27.5	25.3	24.7	20.5	19.2	18.1	16.7	17.2	17.8	19.7	24.2	22.3	21.0

CELERY: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	50	26.0	1,300	28.0	364
1999	50	26.0	1,300	29.0	377
2000	50	22.0	1,100	31.0	341
2001	50	23.0	1,150	32.0	368
2002	50	22.0	1,100	33.0	363
Counties:					
Hawaii					
1998	30	27.7	830	29.4	244
1999	25	32.0	800	31.5	252
2000	25	30.0	750	32.4	243
2001	25	26.0	650	33.2	216
2002	25	24.0	600	35.0	210
Maui					
1998	20	23.5	470	25.5	120
1999	25	20.0	500	25.0	125
2000	25	14.0	350	28.0	98
2001	25	20.0	500	30.4	152
2002	25	20.0	500	30.5	153

¹ Sum of county estimates may not add to State total due to rounding.

CELERY: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres													
1998	4	4	5	4	5	4	4	4	4	4	4	4	50
1999	4	4	4	4	5	4	4	4	5	4	4	4	50
2000 ¹													
2001 ¹													
2002 ¹													
Production - 1,000 pounds													
1998	96	108	112	125	130	112	113	123	99	99	95	88	1,300
1999	107	105	102	106	108	99	99	103	116	109	125	121	1,300
2000 ¹													
2001 ¹													
2002 ¹													
Farm price - cents per pound													
1998	28.1	27.7	27.0	28.5	28.8	28.5	28.4	27.8	28.1	25.2	30.3	26.6	28.0
1999	28.1	30.3	30.5	29.1	29.7	28.6	29.3	29.0	28.9	27.6	28.8	28.7	29.0
2000 ¹													
2001 ¹													
2002 ¹													

¹ Data not shown separately beginning 2000.

SWEET CORN

SWEET CORN: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	400	2.8	1,100	57.0	627
1999	450	3.8	1,700	58.0	986
2000	440	5.5	2,400	55.0	1,320
2001	440	4.3	1,900	64.0	1,216
2002	610	3.9	2,400	54.0	1,296
Counties:					
Hawaii/Kauai ²					
1998	120	3.4	410	49.6	203
1999	180	4.6	830	52.3	434
2000	155	6.6	1,020	43.3	442
2001	170	5.0	850	59.4	505
2002	270	4.1	1,100	46.6	513
Honolulu					
1998	240	2.2	520	59.0	307
1999	215	2.9	630	62.0	391
2000 ³	285	4.8	1,380	63.6	878
2001 ³	270	3.9	1,050	67.7	711
2002 ³	340	3.8	1,300	60.2	783
Maui					
1998	40	4.3	170	69.0	117
1999	55	4.4	240	67.0	161
2000 ³					
2001 ³					
2002 ³					

¹ Sum of county estimates may not add to State total due to rounding. ² Kauai combined with Hawaii to avoid disclosure of individual operations.

³ Maui combined with Honolulu to avoid disclosure of individual operations.

SWEET CORN: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres													
1998	20	19	20	42	37	44	54	39	32	32	38	23	400
1999	15	14	30	30	31	46	52	51	38	47	49	47	450
2000	31	20	28	38	41	41	39	49	38	43	42	30	440
2001	35	17	26	33	46	40	39	45	35	40	46	38	440
2002	33	29	45	47	62	55	49	49	52	46	70	73	610
Production - 1,000 pounds													
1998	65	58	54	149	107	97	129	97	96	81	104	63	1,100
1999	32	20	88	90	132	198	202	212	153	201	159	213	1,700
2000	176	134	144	172	232	241	274	265	222	240	175	125	2,400
2001	98	46	120	163	217	220	197	241	122	107	184	185	1,900
2002	133	90	140	169	190	269	210	215	167	177	340	300	2,400
Farm price - cents per pound													
1998	53.5	51.9	53.2	55.4	56.6	51.3	57.8	64.1	63.5	62.1	56.0	54.2	57.0
1999	55.8	60.4	72.5	59.2	62.1	43.3	45.9	58.9	54.0	62.3	63.8	67.4	58.0
2000	50.2	60.2	78.3	56.5	57.3	54.6	41.3	49.0	64.6	64.8	55.0	55.0	55.0
2001	67.9	73.9	65.8	58.3	76.7	62.3	60.0	60.7	60.4	59.3	62.9	65.4	64.0
2002	62.7	66.0	58.4	58.0	49.4	46.3	48.6	57.5	64.5	52.0	41.7	62.3	54.0

CUCUMBERS: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	480	12.5	6,000	42.0	2,520
1999	470	12.3	5,800	43.0	2,494
2000	400	14.3	5,700	44.0	2,508
2001	370	14.3	5,300	44.0	2,332
2002	390	13.8	5,400	46.0	2,484
Counties:					
Hawaii/Kauai ²					
1998	50	14.0	700	39.7	278
1999	45	14.4	650	39.6	257
2000	40	17.5	700	42.2	295
2001	30	19.0	570	46.1	263
2002	30	21.3	640	45.2	289
Honolulu					
1998	260	9.2	2,400	51.0	1,224
1999	280	10.2	2,850	49.0	1,397
2000	200	12.5	2,500	49.0	1,225
2001	185	12.1	2,240	44.7	1,001
2002	180	12.2	2,200	50.7	1,115
Maui					
1998	170	17.1	2,900	35.1	1,018
1999	145	15.9	2,300	36.5	840
2000	160	15.6	2,500	39.5	988
2001	155	16.1	2,490	42.9	1,068
2002	180	14.2	2,560	42.2	1,080

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Hawaii to avoid disclosure of individual operations.

CUCUMBERS: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres ¹													
1998	42	37	33	44	43	44	46	44	42	39	40	44	480
1999	41	36	42	42	39	32	41	41	44	43	48	48	470
2000	35	34	34	35	35	31	31	32	32	33	36	36	400
2001	33	31	33	31	25	32	31	31	29	32	32	30	370
2002	35	36	35	33	33	33	34	34	35	36	36	33	390
Production - 1,000 pounds													
1998	391	320	453	574	522	514	647	568	499	501	482	529	6,000
1999	557	429	537	588	456	352	538	547	477	482	448	389	5,800
2000	470	464	530	553	536	504	488	408	413	476	391	467	5,700
2001	436	447	503	510	460	498	488	447	366	455	366	324	5,300
2002	348	359	434	457	447	558	499	507	437	395	456	503	5,400
Farm price - cents per pound													
1998	48.4	45.0	52.5	39.9	46.2	38.1	35.9	38.4	38.1	39.9	40.2	46.9	42.0
1999	47.0	49.2	42.1	38.1	39.0	54.8	38.4	36.7	37.4	39.7	53.1	47.7	43.0
2000	52.1	51.3	42.5	51.1	39.7	35.2	33.9	38.2	45.1	44.7	47.9	46.9	44.0
2001	43.7	46.7	46.2	43.6	40.0	41.0	42.6	42.4	44.2	44.5	43.4	52.6	44.0
2002	58.3	57.4	54.8	43.3	41.2	35.3	36.7	44.1	47.0	42.7	50.2	49.6	46.0

¹ Sum of monthly data exceeds total because harvest period longer than 1 month.

DAIKON

DAIKON: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	300	10.0	3,000	31.5	945
1999	300	9.0	2,700	28.0	756
2000	350	8.9	3,100	28.0	868
2001	330	9.7	3,200	28.0	896
2002	250	10.0	2,500	30.0	750
Counties:					
Hawaii					
1998	200	8.5	1,700	30.0	510
1999	220	8.2	1,800	26.5	477
2000	250	8.4	2,100	26.5	557
2001	230	9.6	2,200	26.3	579
2002	185	9.5	1,750	28.0	490
Honolulu/Kauai/Maui ²					
1998	100	13.0	1,300	33.5	435
1999	80	11.3	900	31.0	279
2000	100	10.0	1,000	31.1	311
2001	100	10.0	1,000	31.7	317
2002	65	11.5	750	34.6	260

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

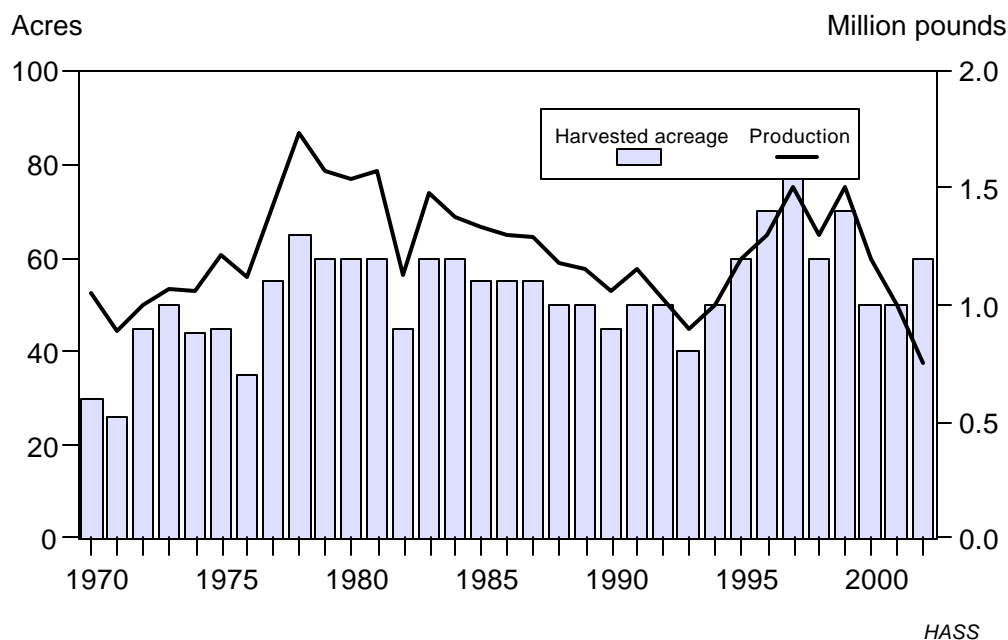
EGGPLANT: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	60	21.7	1,300	81.0	1,053
1999	70	21.4	1,500	76.0	1,140
2000	50	24.0	1,200	70.0	840
2001	50	20.0	1,000	66.0	660
2002	60	12.5	750	73.0	548
Counties:					
Hawaii/Kauai/Maui ²					
1998	15	30.0	450	75.1	338
1999	20	20.0	400	70.0	280
2000	10	23.0	230	63.9	147
2001	15	16.0	240	85.0	204
2002	10	11.0	110	90.9	100
Honolulu					
1998	45	18.9	850	84.1	715
1999	50	22.0	1,100	78.2	860
2000	40	24.3	970	71.4	693
2001	35	21.7	760	60.0	456
2002	50	12.8	640	70.0	448

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

EGGPLANT: Acreage and Production, State of Hawaii, 1970-2002



LETTUCES

LETTUCES (HEAD, SEMI-HEAD): Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	170	10.0	1,700	48.0	816
1999	170	8.8	1,500	49.0	735
2000	150	8.7	1,300	50.0	650
2001	140	8.6	1,200	50.0	600
2002	120	10.0	1,200	57.0	684
Counties:					
Hawaii					
1998	110	11.3	1,240	45.0	558
1999	90	11.0	990	46.0	455
2000	95	9.7	920	44.0	405
2001	85	10.5	890	43.0	383
2002	75	10.9	820	50.0	410
Honolulu/Kauai ²					
1998	45	9.0	405	57.8	234
1999 ³	80	6.4	510	54.9	280
2000 ³	55	6.9	380	64.6	245
2001 ³	55	5.6	310	70.1	217
2002 ³	45	8.4	380	72.0	274
Maui					
1998	15	3.7	55	42.7	23
1999 ³					
2000 ³					
2001 ³					
2002 ³					

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Honolulu to avoid disclosure of individual operations.

³ Maui combined with Honolulu and Kauai to avoid disclosure of individual operations.

LETTUCES (HEAD, SEMI-HEAD): Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres													
1998	14	17	14	17	14	14	15	14	13	13	12	13	170
1999	10	14	14	14	17	15	16	13	15	12	16	14	170
2000	14	13	15	10	14	12	13	12	12	11	12	12	150
2001	14	13	14	13	12	12	11	9	11	10	10	11	140
2002	11	12	11	10	11	10	10	11	8	8	9	9	120
Production - 1,000 pounds													
1998	139	150	153	216	167	131	143	129	119	114	111	128	1,700
1999	118	120	150	147	164	134	146	127	98	94	102	100	1,500
2000	107	114	126	112	122	125	115	111	99	91	87	91	1,300
2001	97	101	127	115	114	100	94	103	93	97	92	67	1,200
2002	94	83	123	124	112	104	96	106	96	91	79	92	1,200
Farm price - cents per pound													
1998	49.1	49.1	48.2	46.8	50.9	48.8	46.3	47.1	45.6	47.8	47.6	47.7	48.0
1999	46.9	50.1	45.9	49.5	49.2	49.0	46.9	49.6	49.3	54.5	49.6	50.3	49.0
2000	76.9	48.0	47.2	47.2	47.3	46.8	46.1	47.5	48.1	47.2	48.3	51.1	50.0
2001	50.0	49.9	49.4	49.4	47.2	48.7	50.3	50.1	52.1	50.8	51.2	53.2	50.0
2002	57.2	50.7	55.0	61.8	59.9	61.4	55.0	54.3	54.5	56.0	57.6	58.5	57.0

DRY ONIONS

DRY ONIONS: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	270	13.0	3,500	73.0	2,555
1999	310	11.0	3,400	67.0	2,278
2000	340	12.6	4,300	71.0	3,053
2001	300	18.0	5,400	75.0	4,050
2002	200	10.5	2,100	96.0	2,016
Counties:					
Hawaii/Honolulu/Kauai ²					
1998	35	14.3	500	37.5	188
1999	120	4.2	500	43.2	216
2000	150	10.7	1,600	61.7	987
2001	150	21.7	3,250	63.3	2,057
2002	70	10.9	760	73.0	555
Maui					
1998	235	12.8	3,000	78.9	2,367
1999	190	15.3	2,900	71.1	2,062
2000	190	14.2	2,700	76.5	2,066
2001	150	14.3	2,150	92.7	1,993
2002	130	10.3	1,340	109.0	1,461

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

DRY ONIONS: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres													
1998	14	11	16	37	45	36	21	23	22	13	21	11	270
1999	11	11	29	51	52	42	21	21	13	17	24	18	310
2000	5	9	56	59	28	32	25	21	43	35	17	10	340
2001	10	33	28	29	29	30	16	20	21	25	15	44	300
2002	10	16	19	20	20	19	22	10	10	15	23	16	200
Production - 1,000 pounds													
1998	129	138	299	607	611	534	227	279	186	179	158	153	3,500
1999	112	131	332	332	436	394	307	355	204	217	351	229	3,400
2000	61	97	880	771	422	667	337	296	241	241	166	121	4,300
2001	108	165	927	1,355	568	848	418	289	263	135	188	136	5,400
2002	53	101	179	150	157	167	202	137	137	188	408	221	2,100
Farm price - cents per pound													
1998	143.4	142.9	142.2	76.7	45.2	37.5	39.3	49.7	48.2	70.0	110.7	122.6	73.0
1999	129.5	134.8	110.5	65.6	42.3	34.6	36.4	51.6	67.5	71.7	75.6	86.0	67.0
2000	105.7	126.9	89.7	64.6	51.7	56.6	57.3	64.4	56.7	71.8	94.6	108.5	71.0
2001	113.5	93.1	73.9	68.0	81.5	58.1	55.4	73.0	98.9	113.3	109.0	110.9	75.0
2002	109.8	85.3	81.7	93.5	75.3	72.2	80.2	103.0	105.1	107.1	111.2	110.4	96.0

GREEN ONIONS

GREEN ONIONS: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	180	8.3	1,500	86.0	1,290
1999	190	8.9	1,700	85.0	1,445
2000	150	10.0	1,500	86.0	1,290
2001	120	11.7	1,400	89.0	1,246
2002	125	12.0	1,500	89.0	1,335
Counties:					
Hawaii/Kauai ²					
1998	25	5.0	125	90.5	113
1999 ³	45	6.2	280	94.9	266
2000 ³	25	8.0	200	99.0	198
2001 ³	20	10.0	200	89.0	178
2002³	30	6.7	200	105.2	210
Honolulu					
1998	140	8.9	1,250	84.5	1,056
1999	145	9.8	1,420	83.0	1,179
2000	125	10.4	1,300	84.0	1,092
2001	100	12.0	1,200	89.0	1,068
2002	95	13.7	1,300	86.5	1,125
Maui					
1998	15	8.3	125	96.5	121
1999 ³					
2000 ³					
2001 ³					
2002³					

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Hawaii to avoid disclosure of individual operations.

³ Maui combined with Hawaii and Kauai to avoid disclosure of individual operations.

GREEN ONIONS: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres													
1998	16	15	14	14	15	16	15	15	15	14	16	15	180
1999	15	15	15	16	16	15	24	15	13	15	15	16	190
2000	14	14	13	12	12	13	12	12	11	12	12	13	150
2001	10	10	8	10	10	10	11	11	9	10	10	11	120
2002	9	9	10	10	11	12	11	11	12	10	10	10	125
Production - 1,000 pounds													
1998	129	124	114	117	123	128	125	126	125	120	139	130	1,500
1999	140	143	139	138	132	143	150	142	141	142	149	141	1,700
2000	118	122	123	109	126	140	129	128	114	123	127	141	1,500
2001	127	123	119	144	135	121	121	123	102	96	88	101	1,400
2002	114	90	111	121	109	121	145	142	133	125	134	155	1,500
Farm price - cents per pound													
1998	91.3	88.0	90.2	95.8	89.2	86.6	79.2	79.0	76.5	82.1	85.5	88.7	86.0
1999	86.5	85.8	87.0	83.9	79.8	78.8	88.3	87.4	84.9	85.5	85.3	86.0	85.0
2000	92.7	92.8	87.8	90.1	86.3	83.4	81.4	82.1	83.2	82.6	82.2	88.3	86.0
2001	89.7	90.3	88.0	88.6	84.3	85.6	86.6	88.5	89.3	91.5	92.0	97.3	89.0
2002	98.0	91.5	94.7	92.9	89.4	88.1	82.7	85.5	89.8	86.8	87.6	85.5	89.0

GREEN PEPPERS

GREEN PEPPERS: Acreage, yield, production, price, and value, State of Hawaii, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
1998	170	17.6	3,000	50.0	1,500
1999	200	15.0	3,000	53.0	1,590
2000	200	14.0	2,800	55.0	1,540
2001	210	14.8	3,100	60.0	1,860
2002	215	14.9	3,200	59.0	1,888

GREEN PEPPERS: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres ¹													
1998	21	18	16	11	14	10	20	19	25	21	20	23	170
1999	19	20	19	19	17	17	19	18	22	19	18	18	200
2000	24	20	20	20	19	19	17	18	16	17	16	16	200
2001	17	17	17	18	18	18	19	18	17	17	17	17	210
2002	17	17	17	18	18	18	18	18	18	17	19	20	215
Production - 1,000 pounds													
1998	235	192	248	251	249	257	293	177	307	253	256	282	3,000
1999	231	231	276	247	197	258	251	264	228	260	278	279	3,000
2000	246	238	259	285	212	216	218	222	202	212	214	276	2,800
2001	265	267	254	240	261	259	274	272	251	250	248	259	3,100
2002	264	262	283	271	271	264	266	277	271	256	267	248	3,200
Farm price - cents per pound													
1998	54.2	57.8	51.0	49.6	58.6	47.0	51.4	43.5	46.5	45.6	47.8	48.6	50.0
1999	46.2	44.0	46.1	54.7	58.1	55.3	60.5	48.5	46.5	51.6	62.9	59.4	53.0
2000	59.1	58.4	55.9	66.4	54.4	52.6	51.2	51.0	45.6	51.1	51.7	56.6	55.0
2001	61.5	67.2	75.4	64.8	63.4	54.9	54.2	55.9	53.8	54.2	58.2	57.2	60.0
2002	62.9	57.4	64.5	62.9	62.3	60.8	56.1	53.1	55.1	55.2	57.9	60.1	59.0

¹ Sum of monthly data exceeds total because harvest period longer than 1 month.

ROMAINE

ROMAINE: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	220	15.0	3,300	38.0	1,254
1999	240	11.2	2,700	37.0	999
2000	190	10.5	2,000	43.0	860
2001	190	10.5	2,000	45.0	900
2002	150	12.0	1,800	47.0	846
Counties:					
Hawaii/Honolulu ²					
1998	110	12.7	1,400	43.4	608
1999	145	11.0	1,600	40.4	646
2000	135	10.4	1,400	44.0	616
2001	135	10.7	1,450	47.3	686
2002	120	12.1	1,450	48.2	699
Maui					
1998	110	17.3	1,900	34.0	646
1999	95	11.6	1,100	32.0	352
2000	55	10.9	600	40.7	244
2001	55	10.0	550	38.9	214
2002	30	11.7	350	42.0	147

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu combined with Hawaii to avoid disclosure of individual operations.

ROMAINE: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres													
1998	22	24	22	19	17	19	16	15	17	15	16	18	220
1999	21	23	27	27	24	24	23	20	13	11	14	13	240
2000	22	21	18	14	17	12	11	13	13	14	18	17	190
2001	19	22	21	24	15	14	10	9	12	11	17	16	190
2002	17	15	16	14	14	10	9	9	8	9	12	17	150
Production - 1,000 pounds													
1998	313	325	305	352	290	269	232	259	259	215	252	229	3,300
1999	312	264	348	324	239	250	196	153	124	160	179	151	2,700
2000	201	202	236	219	214	129	115	105	119	129	116	215	2,000
2001	238	264	194	285	179	154	114	104	94	99	152	123	2,000
2002	155	181	215	184	173	123	124	114	113	123	120	175	1,800
Farm price - cents per pound													
1998	37.2	25.9	29.6	42.8	42.6	48.0	46.0	40.3	39.3	38.8	32.1	36.0	38.0
1999	34.9	29.8	30.1	34.4	40.0	43.7	39.4	39.2	40.4	42.4	40.6	41.6	37.0
2000	40.9	42.7	38.9	41.0	43.1	41.4	41.2	40.1	42.2	43.8	44.3	54.5	43.0
2001	45.4	48.1	43.8	44.3	43.1	42.6	44.1	45.4	44.7	43.2	46.9	46.7	45.0
2002	41.4	50.6	58.0	51.6	45.9	44.5	42.3	43.5	44.5	44.9	44.3	43.5	47.0

SWEET POTATOES

SWEET POTATOES: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	190	10.0	1,900	56.0	1,064
1999	340	8.5	2,900	63.0	1,827
2000	260	9.6	2,500	60.0	1,500
2001	220	8.2	1,800	50.0	900
2002	300	7.7	2,300	43.0	989
Counties:					
Hawaii/Honolulu/Kauai ²					
1998	125	9.2	1,150	55.5	638
1999	270	8.5	2,300	63.8	1,467
2000	195	9.6	1,880	60.0	1,128
2001	170	8.4	1,420	47.3	672
2002	205	8.0	1,650	39.8	657
Maui					
1998	65	11.5	750	56.8	426
1999	70	8.6	600	60.0	360
2000	65	9.5	620	60.0	372
2001	50	7.6	380	60.0	228
2002	95	6.8	650	51.1	332

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

ITALIAN SQUASH

ITALIAN SQUASH: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	170	8.8	1,500	49.0	735
1999	180	10.6	1,900	45.0	855
2000	180	12.2	2,200	47.0	1,033
2001	160	11.3	1,800	50.0	900
2002	175	8.0	1,400	46.0	644
Counties:					
Hawaii/Honolulu/Kauai ²					
1998	120	8.6	1,030	48.5	500
1999	110	10.5	1,150	45.3	521
2000	115	10.6	1,220	45.3	553
2001	100	10.0	1,000	50.0	500
2002	100	7.7	770	47.0	362
Maui					
1998	50	9.4	470	50.0	235
1999	70	10.7	750	44.5	334
2000	65	15.1	980	49.0	480
2001	60	13.3	800	50.0	400
2002	75	8.4	630	44.8	282

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

TARO: Number of farms, acreage, marketings, price, and value, by counties, 1998-2002

Year	Farms	Acreage in crop ¹			Marketings			Farm price			Value of sales
		Poi taro	Chinese taro	Total	Fresh	Processed	Total	Poi taro	Chinese taro	All	
											1,000 dollars
	Number	----- Acres -----			----- 1,000 pounds -----			----- Cents per pound -----			
State											
1998	180	400	90	490	300	5,700	6,000	53.0	53.0	53.0	3,180
1999	190	420	80	500	300	6,500	6,800	53.0	53.5	53.0	3,604
2000	185	430	40	470	200	6,800	7,000	53.3	45.3	53.0	3,710
2001	170	420	20	440	200	6,200	6,400	53.2	50.0	53.0	3,392
2002	150	400	30	430	300	5,800	6,100	54.2	51.2	54.0	3,294
Counties:											
Hawaii											
1998	100	90	70	160	250	850	1,100	61.0	53.0	57.0	627
1999	100	100	80	180	200	900	1,100	61.0	53.2	57.5	632
2000	85	80	40	120	200	700	900	61.6	45.3	56.2	506
2001	60	70	20	90	150	650	800	60.4	48.9	51.5	443
2002	50	60	20	80	200	550	750	61.4	48.4	55.3	415
Honolulu/Maui ²											
1998	25	80	15	95	50	1,050	1,100	52.4	53.5	52.5	577
1999	25	90	*	90	100	1,300	1,400	52.4	54.9	52.6	736
2000	30	100	*	100	*	1,300	1,300	52.6	³	52.6	684
2001	40	100	*	100	50	1,250	1,300	53.0	57.3	53.0	691
2002	35	90	10	100	60	1,190	1,250	54.6	67.2	55.2	690
Kauai											
1998	55	230	5	235	*	3,800	3,800	52.0	³	52.0	1,976
1999	65	230	*	230	*	4,300	4,300	52.0	³	52.0	2,236
2000	70	250	*	250	*	4,800	4,800	52.5	³	52.5	2,520
2001	70	250	*	250	*	4,300	4,300	52.5	³	52.5	2,258
2002	65	250	*	250	40	4,060	4,100	53.4	³	53.4	2,189

* = Less than 5,000 pounds.

¹ Survey conducted in November each year. Does not include acreage used primarily for leaf production.

² Maui combined with Honolulu to avoid disclosure of individual operations.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

TOMATOES

TOMATOES: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	300	34.0	10,200	55.0	5,610
1999	420	40.0	16,800	47.0	7,896
2000	500	33.0	16,500	52.0	8,580
2001	580	30.2	17,500	53.0	9,275
2002	580	30.2	17,500	55.0	9,625
Counties:					
Hawaii/Honolulu/Kauai ²					
1998	145	30.3	4,400	61.2	2,693
1999 ³					
2000 ³					
2001 ³					
2002 ³					
Maui					
1998	155	37.4	5,800	50.3	2,917
1999 ³					
2000 ³					
2001 ³					
2002 ³					

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

TOMATOES: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres ¹													
1998	44	43	46	40	30	22	13	11	9	25	57	46	300
1999	48	48	38	37	41	37	33	32	38	41	45	50	420
2000	49	49	43	50	58	56	33	40	42	47	44	48	500
2001	48	47	61	64	60	49	49	47	44	50	55	60	580
2002	60	60	61	62	62	51	53	48	48	46	55	56	580
Production - 1,000 pounds													
1998	853	1,060	1,264	1,196	880	915	139	153	150	781	1,287	1,522	10,200
1999	1,413	1,493	1,599	1,423	1,386	1,650	1,339	1,582	1,007	1,436	1,182	1,290	16,800
2000	1,138	1,318	1,208	1,347	1,423	1,414	1,252	1,372	1,173	1,381	1,727	1,747	16,500
2001	1,423	1,316	1,402	1,394	1,453	1,805	1,547	1,502	1,577	1,463	1,283	1,335	17,500
2002	1,370	1,431	1,553	1,412	1,460	1,491	1,543	1,534	1,481	1,383	1,352	1,490	17,500
Farm price - cents per pound													
1998	51.4	47.7	54.9	51.6	57.9	48.2	65.0	75.2	73.8	58.2	57.5	58.5	55.0
1999	56.6	45.1	42.1	48.7	51.4	50.1	43.3	39.1	48.5	38.3	51.9	52.0	47.0
2000	46.4	43.9	46.8	56.0	49.9	45.8	43.0	46.0	64.9	59.8	62.1	52.0	52.0
2001	58.8	63.2	61.6	55.6	56.6	51.5	43.5	49.7	43.7	45.9	55.3	54.7	53.0
2002	64.3	48.3	55.5	57.0	59.5	57.3	51.8	48.5	42.4	51.2	58.7	66.7	55.0

¹ Sum of monthly data exceeds total because harvest period longer than 1 month.

WATERMELONS

WATERMELONS: Acreage, yield, production, price, and value, by counties, 1998-2002

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1998	790	20.0	15,800	21.0	3,318
1999	570	20.0	11,400	21.0	2,394
2000	560	22.5	12,600	25.0	3,150
2001	520	20.2	10,500	24.0	2,520
2002	550	20.5	11,300	26.0	2,938
Counties:					
Hawaii/Kauai ²					
1998	5	14.0	70	21.0	15
1999 ³	10	20.0	200	21.2	42
2000 ³	5	40.0	200	25.0	50
2001 ³	5	24.0	120	24.0	29
2002 ³	30	10.0	300	33.3	100
Honolulu					
1998	775	20.1	15,590	21.0	3,274
1999	560	20.0	11,200	21.0	2,352
2000	555	22.3	12,400	25.0	3,100
2001	515	20.2	10,380	24.0	2,491
2002	520	21.2	11,000	25.8	2,838
Maui					
1998	10	14.0	140	21.0	29
1999 ³					
2000 ³					
2001 ³					
2002 ³					

¹ Sum of county estimates may not add to State total due to rounding. ² Kauai combined with Hawaii to avoid disclosure of individual operations.

³ Maui combined with Hawaii and Kauai to avoid disclosure of individual operations.

WATERMELONS: Acreage, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or
Harvested acres ¹													
1998	*	0	0	37	85	143	173	160	125	60	16	*	790
1999	*	3	6	23	149	132	83	72	55	35	12	*	570
2000 ²													
2001 ²													
2002 ²													
Production - 1,000 pounds													
1998	*	0	0	900	2,207	2,530	3,075	3,886	2,518	570	114	*	15,800
1999	66	42	44	523	2,147	2,040	1,662	2,206	1,827	785	50	8	11,400
2000 ²													
2001 ²													
2002 ²													
Farm price - cents per pound													
1998	0	0	0	32.7	26.3	20.8	18.7	19.0	17.8	21.6	23.6	0	21.0
1999	18.8	25.1	27.6	30.4	25.8	20.8	18.4	18.2	17.0	23.9	29.1	25.0	21.0
2000 ²													
2001 ²													
2002 ²													

* = Less than minimum amount to be estimated.

¹ Sum of monthly data exceeds total because harvest period longer than 1 month. ² Beginning 2000, data not shown separately.

OTHER VEGETABLES

OTHER VEGETABLES: Acreage, yield, production, price, and value, State of Hawaii, 1998-2002

Crop and year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
Bittermelon					
1998	35	10.0	350	80.0	280
1999	40	13.8	550	74.0	407
2000	20	15.0	300	85.0	255
2001	15	16.7	250	80.0	200
2002	20	10.0	200	90.0	180
Broccoli					
1998	110	3.2	350	50.0	175
1999	75	4.0	300	50.0	150
2000	100	4.0	400	60.0	240
2001	155	3.5	550	65.0	358
2002	150	3.7	550	68.0	374
Burdock					
1998	15	13.3	200	160.0	320
1999	20	12.5	250	150.0	375
2000	15	12.0	180	150.0	270
2001	15	10.0	150	145.0	218
2002¹					
Cabbage, mustard					
1998	140	10.7	1,500	40.0	600
1999	140	11.4	1,600	39.0	624
2000	130	11.5	1,500	43.0	645
2001	130	12.3	1,600	50.0	800
2002	130	10.8	1,400	51.0	714
Cauliflower					
1998	10	13.0	130	60.0	78
1999 ¹					
2000 ¹					
2001 ¹					
2002¹					

See footnotes at end of table.

Continued

OTHER VEGETABLES

OTHER VEGETABLES: Acreage, yield, production, price, and value, State of Hawaii, 1998-2002 -- Continued

Crop and year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
Pumpkins					
1998	50	11.0	550	20.0	110
1999	45	10.0	450	39.0	176
2000	15	11.3	170	45.1	77
2001	35	11.4	400	41.0	164
2002	80	5.0	400	40.0	160
Radish					
1998	15	10.0	150	59.0	89
1999	15	8.7	130	60.0	78
2000	10	10.0	100	63.0	63
2001	15	10.0	150	60.0	90
2002	10	10.0	100	55.0	55
Squash, Oriental (Hyotan and Togan)					
1998	15	16.0	240	37.0	89
1999	30	20.0	600	36.0	216
2000	25	24.0	600	37.0	222
2001	20	25.0	500	35.0	175
2002	10	25.0	250	41.0	103

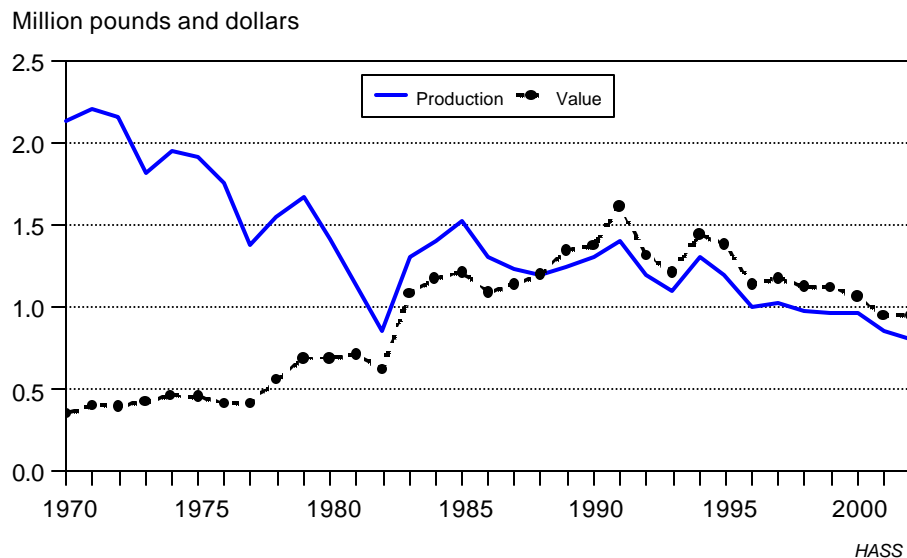
¹ Data not shown separately to avoid disclosure of individual operations.

PROCESSED CHINESE CABBAGE AND DAIKON, WATERCRESS

PROCESSED CHINESE CABBAGE AND DAIKON: Quantity processed, price, and value, State of Hawaii, 1998-2002

Year	Chinese cabbage			Daikon		
	Quantity processed	Farm price	Value of sales	Quantity processed	Farm price	Value of sales
	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
1998	1,200	19.0	228	550	30.5	168
1999	1,100	19.0	209	400	27.7	111
2000	1,000	21.0	210	350	28.0	98
2001	1,000	23.0	230	400	28.0	112
2002	1,100	24.0	264	400	30.0	120

WATERCRESS: Production and Farm Value, State of Hawaii, 1970-2002



WATERCRESS: Acreage, production, price, and value, State of Hawaii, 1998-2002

Year	Acreage in crop	Production	Farm price	Value of sales
	<i>Acres</i>	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
1998	35	980	115.0	1,127
1999	35	970	115.0	1,116
2000	35	970	110.0	1,067
2001	35	860	110.0	946
2002	35	800	118.0	944

2002 CATTLE, MILK, AND HOG HIGHLIGHTS

CATTLE

Cattle marketings, during 2002, totaled 35.0 million pounds, live weight. The 11 percent increase over 2001 was the result of an increase in the average live weight of cattle and calves marketed. When compared with the previous year, more cattle weighing 500 pounds or more, and fewer calves weighing less than 500 pounds were marketed. 2002 Exports totaled 42,000 head and accounted for nearly 70 percent of all cattle and calves sold. The majority of animals exported were calves weighing less than 500 pounds, live weight. Local commercial slaughter, during 2002, dipped 9 percent from 2001 to 11,600 head.

The combined annual average price ranchers received for all cattle and calves marketed decreased 6 percent to \$53.50 per hundredweight. This decrease resulted from the combined effect of exports returning a lower average price and an increase in the number of lower priced heavier cattle marketed in 2002 than in 2001. However, cash revenues for 2002 increased 4 percent from 2001 to a total of \$18.7 million, a direct result of heavier cattle and calves sold. Inventory of cattle and calves on Hawaii County ranches totaled 150,000 head on January 1, 2003, a decrease of 1 percent from 2002, but unchanged from 2001. Hawaii County, which accounts for about 75 percent of the State's total, recorded a 1 percent decrease in inventory to 112,000 head.

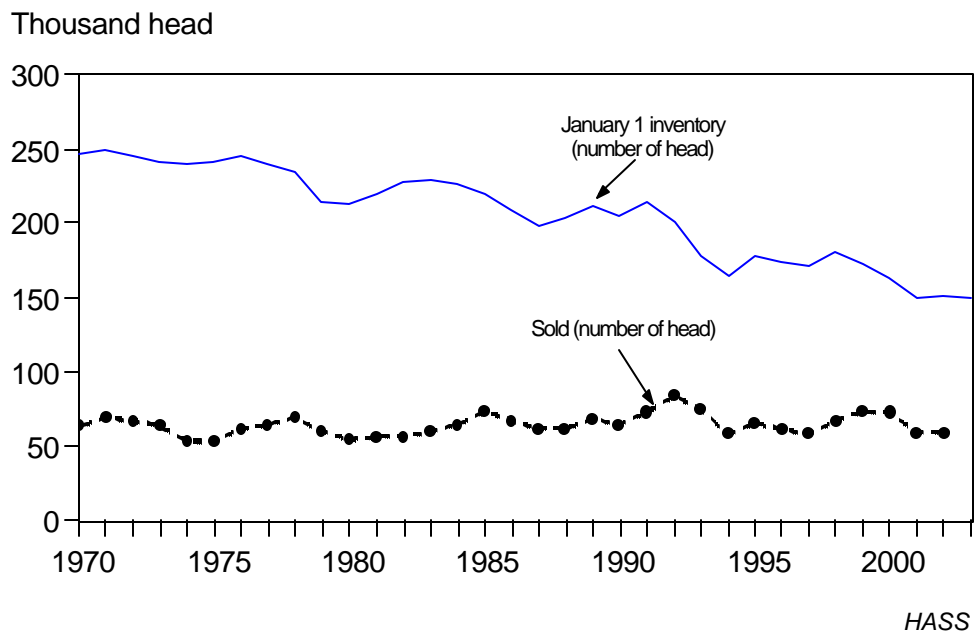
MILK

Hawaii County's dairy cows produced 96.8 million pounds of milk in 2002, compared to 105.8 million pounds produced a year earlier. About 63 percent of the milk was produced in the Honolulu county and the remainder in Hawaii County. Statewide revenues for milk sold at the farm level during the year totaled \$22.5 million, 15 percent below the 2001 receipt, and the fourth year of decline. Producers received an average \$23.60 per hundredweight for milk delivered to the processors, \$1.90 less than a year ago. Milk cows were down 900 head to 6,600 head in 2002. The number of milk cows have decreased in Honolulu county but increased in Hawaii County. The annual average output per cow was 14,667 pounds compared to 14,107 pounds produced in 2001.

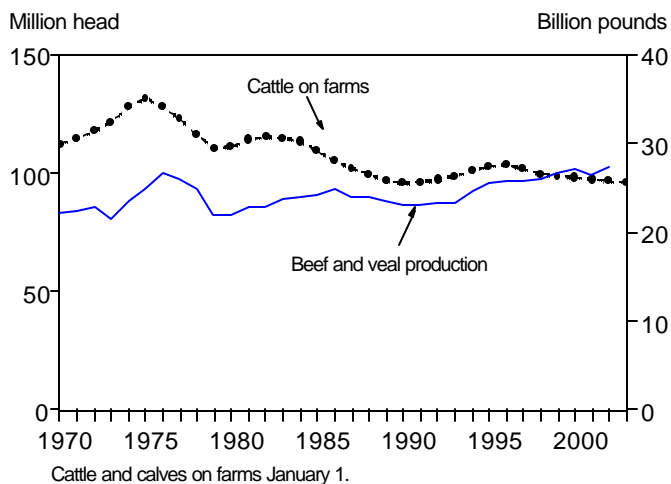
HOGS AND PIGS

Hog marketings, during 2002, increased 5 percent to 5.7 million pounds, while the number of hogs marketed decreased 3 percent to 30,000 head. The average price farmers received for their hogs and pigs increased 1 percent to \$84.00 per hundred pounds, resulting in a 6 percent increase in cash receipts to \$4.8 million during 2002. The total number of hogs and pigs on hand in the State on December 1, 2002 was 24,000 head, 3,000 head fewer than in 2001. The share of hogs and pigs in Honolulu County, at 12,800 head, declined to under 55 percent of the State's inventory.

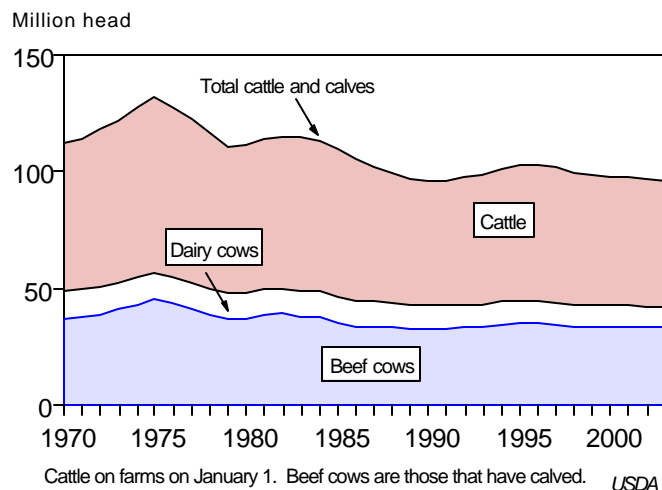
Cattle Inventory and Marketings, State of Hawaii, 1970-2003



U.S. Cattle Numbers and Beef Production



U.S. Cattle on Farms



CATTLE AND CALVES: January 1 inventory by sex classes and weight, by counties, 1999-2003

Year	All cattle and calves	All cows and heifers that have calved			Heifers 500 pounds and over				Steers 500 lbs. and over	Bulls 500 lbs. and over	Steers, heifers, and bulls under 500 lbs.
		Total	Beef cows	Milk cows	Total	Beef cow replacements	Milk cow replacements	Other			

1,000 head

State ¹

1999	173	95	86	9	25	16	4	5	8	5	40
2000	164	93	84	9	24	14	4	6	8	4	35
2001	150	88	81	7	18	10	3	5	6	4	34
2002	152	85	78	7	20	10	3	7	8	4	35
2003	150	85	79	6	21	12	3	6	7	5	32

Counties:

Hawaii

1999	119.8	65.8	63.9	1.9	16.1	11.8	1.1	3.2	5.1	3.5	29.3
2000	114.4	65.4	63.4	2.0	16.5	10.9	1.4	4.2	5.2	3.0	24.3
2001	110.1	66.6	64.0	2.6	12.5	7.3	1.9	3.3	3.6	3.4	24.0
2002	113.6	64.6	61.6	3.0	13.9	8.1	1.7	4.1	4.4	3.4	27.3
2003	112.0	63.9	60.8	3.1	14.6	9.4	1.6	3.6	4.3	3.9	25.3

Honolulu

1999	13.4	7.2	2.0	5.2	3.2	.8	2.1	.3	.3	.2	2.5
2000	12.8	7.7	2.1	5.6	2.2	.4	1.6	.2	.2	.2	2.5
2001	9.4	5.5	.8	4.7	1.7	.2	1.3	.2	.1	.1	2.0
2002	8.4	4.9	1.2	3.7	1.6	.2	1.2	.2	.4	.1	1.4
2003	8.8	5.3	2.0	3.3	1.6	.3	1.0	.3	.4	.2	1.3

Kauai

1999	10.6	4.9	4.2	.7	1.8	.8	.3	.7	1.1	.3	2.5
2000	10.5	4.9	4.1	.8	1.8	.7	.2	.9	1.1	.3	2.4
2001	10.8	5.0	5.0	*	1.7	.9	0	.8	1.1	.3	2.7
2002	9.7	4.5	4.5	*	1.5	1.0	0	.5	1.2	.3	2.2
2003	10.4	5.4	5.4	*	2.0	1.2	0	.8	1.0	.4	1.6

Maui

1999	29.2	17.0	16.1	.9	4.2	2.4	.6	1.2	1.6	.7	5.7
2000	26.3	14.9	14.8	.1	3.5	2.1	.4	1.0	1.3	.5	6.1
2001	19.7	11.1	11.1	*	2.1	1.3	.2	.6	1.1	.5	4.9
2002	20.3	11.0	11.0	*	3.0	1.1	0	1.9	1.8	.5	4.0
2003	18.8	10.6	10.6	*	2.5	1.4	0	1.1	1.0	.6	4.1

* = Less than 50.

¹ Sum of county estimates may not add to State total due to rounding.

CATTLE

CATTLE AND CALVES: Number of operations, number and pounds sold, price, and value, by counties, 1998-2002

Year	Operations	Number sold ^{1 2}	Pounds sold (live weight) ³	Farm price (live weight) ⁴	Value of sales ²
	<i>Number</i>	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
State					
1998	830	67	40,060	42.10	16,861
1999	800	74	38,070	44.10	16,806
2000	800	73	39,840	48.20	19,204
2001	800	59	31,520	57.10	18,007
2002	800	59	34,960	53.50	18,719
Counties:					
Hawaii					
1998	480	48.6	26,934	42.00	11,312
1999	470	56.7	27,736	44.60	12,363
2000	470	55.0	28,660	49.30	14,138
2001	460	45.0	22,957	58.50	13,438
2002	460	45.1	26,402	53.60	14,152
Honolulu					
1998	50	2.0	1,650	31.20	514
1999	60	2.0	1,522	36.20	551
2000	60	1.9	1,748	31.80	556
2001	60	1.9	1,522	39.70	604
2002	60	1.6	1,288	42.90	553
Kauai					
1998	120	4.0	3,035	45.90	1,394
1999	100	3.3	2,272	45.20	1,027
2000	100	4.1	2,725	47.00	1,280
2001	110	4.3	2,785	54.80	1,527
2002	110	4.2	2,744	52.40	1,437
Maui					
1998	180	12.4	8,441	43.10	3,641
1999	170	12.0	6,540	43.80	2,865
2000	170	12.0	6,707	48.20	3,230
2001	170	7.4	4,256	57.30	2,438
2002	170	8.1	4,526	56.90	2,577

¹ Includes custom slaughter for home use on farms where produced and out-of-State sales of cattle and calves, but excludes inter-farm sales.

² Sum of county estimates may not add to State total due to rounding.

³ Excludes custom slaughter for use on farms where produced.

⁴ Prices are equivalent delivered slaughterhouse for sales on county of production and delivered shipper's dock for interisland and out-of-State sales.

Year	Number sold ¹	Pounds sold (live weight) ²	Farm price (live weight)	Value of sales
	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
1998	27	23,660	37.30	8,825
1999	21	17,400	36.00	6,264
2000	27	22,360	38.20	8,542
2001	17	14,720	41.30	6,079
2002	21	19,000	41.40	7,866

² Excludes custom slaughter for use on farms where produced.

Year	Number sold ¹	Pounds sold (live weight) ²	Farm price (live weight)	Value of sales
	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
1998	40	16,400	49.00	8,036
1999	53	20,670	51.00	10,542
2000	46	17,480	61.00	10,663
2001	42	16,800	71.00	11,928
2002	38	15,960	68.00	10,853

² Excludes custom slaughter for use on farms where produced.

Year	Inventory beginning January 1	Calf crop	Inshipments	Marketings	Farm slaughter	Deaths	Inventory January 1 following year
<i>1,000 head</i>							
1998	180	73	*	67	1	12	173
1999	173	73	*	74	1	7	164
2000	164	69	*	73	1	9	150
2001	150	66	*	59	*	5	152
2002	152	63	*	59	1	5	150

* = Less than 500.

Year	Total	Cattle ¹	Calves ²	Steers	Heifers
			<i>1,000 head</i>		
1998	44	4	40	25	19
1999	57	4	53	33	24
2000	51	5	46	30	21
2001	46	4	42	27	19
2002	42	4	38	25	17

² 499 pounds or less.

CATTLE

CATTLE: Commercial slaughter and farm price, State of Hawaii, 1998-2002 ¹

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
------	------	------	------	------	-----	------	------	------	------	------	------	------	------------------

Number of head² - 1,000 head

1998	1.6	1.7	1.7	1.6	1.5	1.5	1.7	1.4	1.5	1.5	1.2	1.2	18.2
1999	1.2	1.3	1.5	1.4	1.4	1.4	1.5	1.8	1.5	1.5	1.5	1.5	17.5
2000	1.4	1.3	1.4	1.4	1.8	1.6	1.6	1.5	1.3	1.3	1.2	1.1	17.0
2001	1.2	1.1	1.3	1.2	1.0	1.1	1.0	1.2	.8	1.1	.6	1.0	12.7
2002	1.1	.9	1.0	.9	1.0	.9	1.1	1.1	.9	1.0	1.0	.8	11.6

Pounds slaughtered, dressed weight²³ - 1,000 pounds

1998	861	897	945	872	808	821	892	782	806	822	673	684	9,862
1999	674	662	766	712	706	768	784	915	742	733	732	753	8,946
2000	699	671	738	713	894	831	809	781	693	693	632	658	8,810
2001	663	614	724	636	534	621	551	684	475	604	384	527	7,016
2002	548	444	521	509	500	472	554	603	495	548	524	428	6,146

Average farm price, dressed weight - cents per pound

1998	67.0	65.0	63.5	64.5	64.0	64.5	61.5	66.0	62.5	64.0	65.5	63.5	64.5
1999	63.5	63.5	62.5	64.0	63.5	63.5	62.5	61.5	60.5	61.0	60.5	60.5	62.0
2000	61.5	62.5	60.5	63.0	60.0	62.0	62.0	61.5	61.5	64.0	64.5	61.5	62.0
2001	63.5	61.0	61.5	61.0	63.5	64.5	64.5	65.5	68.0	67.5	67.5	67.5	64.5
2002	63.5	65.0	63.5	65.0	67.5	65.5	63.0	64.5	63.0	62.5	68.0	71.0	65.0

¹ Includes custom slaughter for home use.

² Sum of monthly estimates may not add to annual total due to rounding.

³ To convert dressed weight to live weight, divide dressed weight by 0.549 or multiply by a factor of 1.8215.

CATTLE: Local marketings and farm price, State of Hawaii, 1991-2002 ¹

Year	Steers and heifers			Cows		
	Marketings (dressed weight)	Average price		Marketings (dressed weight)	Average price	
		Live weight ²	Dressed weight		Live weight ²	Dressed weight
	1,000 pounds	----- Cents per pound -----		1,000 pounds	----- Cents per pound -----	
1991	20,951	51.4	93.5	4,257	34.4	62.5
1992	15,354	49.9	91.0	5,065	33.7	61.5
1993	4,805	46.4	84.5	5,065	34.7	63.0
1994	3,818	47.6	87.0	4,478	32.9	60.0
1995	2,596	49.3	89.5	4,529	29.8	54.5
1996	3,777	47.3	86.0	5,486	27.5	50.0
1997	3,762	47.1	86.0	5,029	28.8	52.5
1998	4,337	45.6	83.0	6,282	27.2	49.5
1999	2,980	44.8	81.5	4,620	27.6	50.0
2000	5,308	44.3	80.5	4,501	27.4	50.0
2001	2,692	50.9	92.5	3,060	28.7	52.5
2002	5,595	47.8	87.0	2,846	29.0	53.0

¹ Excludes out-of-State shipments.

² To convert live weight to dressed weight, divide live weight by 0.549 or multiply by a factor of 1.8215.

MILK

MILK: Number of operations, number of milk cows, production, sales, price, and value, by counties, 1998-2002

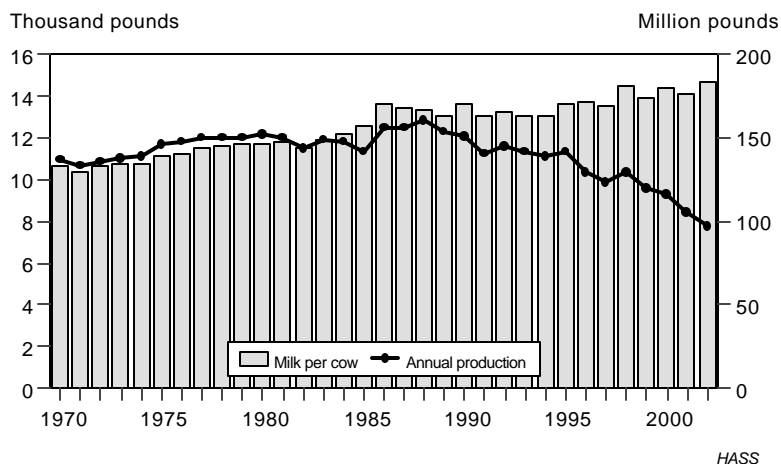
Year	Operations ¹	Annual average milk cows	Milk per cow	Production ²	Sold ²	Average price	Value of sales
----- Number -----			Pounds	----- Million pounds -----		Dollars per hundredweight	1,000 dollars
State							
1998	50	8,900	14,494	129.0	126.3	26.36	33,293
1999	50	8,600	13,919	119.7	118.0	26.50	31,270
2000	50	8,100	14,358	116.3	114.7	24.50	28,102
2001	50	7,500	14,107	105.8	104.1	25.50	26,546
2002	50	6,600	14,667	96.8	95.2	23.60	22,467
Counties:							
Hawaii/Kauai/Maui ³							
1998	40	3,800	12,868	48.9	46.5	24.63	11,455
1999	40	2,900	11,655	33.8	32.3	24.70	7,970
2000	40	2,900	13,138	38.1	36.6	23.80	8,715
2001	40	3,000	11,300	33.9	32.4	23.55	7,630
2002	40	3,100	11,484	35.6	34.3	23.52	8,066
Honolulu							
1998	10	5,100	15,706	80.1	79.8	27.37	21,838
1999	10	5,700	15,070	85.9	85.7	27.20	23,300
2000	10	5,200	15,038	78.2	78.1	24.80	19,387
2001	10	4,500	15,978	71.9	71.7	26.40	18,916
2002	10	3,500	17,486	61.2	60.9	23.65	14,401

¹ Includes commercial, licensed dairies as well as farms with only a few cows.

² Difference between "Production" and "Sold" is milk used on farms for human consumption, fed to calves or other uses.

³ Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

MILK: Production and Milk per Cow Annual Basis, State of Hawaii, 1970-2002



MILK: Number of cows, milk production, price, and milk fat, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
------	------	------	------	------	-----	------	------	------	------	------	------	------	------------------

Average number of milk cows on hand during month - 1,000 head

1998	9.1	9.0	9.0	8.9	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.7	8.9
1999	8.7	8.6	8.6	8.6	8.5	8.5	8.5	8.6	8.6	8.6	8.6	8.5	8.6
2000	8.4	8.4	8.5	8.5	8.5	8.3	8.2	8.0	7.9	7.7	7.7	7.5	8.1
2001	7.7	7.7	7.5	7.5	7.5	7.6	7.5	7.4	7.4	7.4	7.3	7.4	7.5
2002	6.7	6.7	6.7	6.8	6.7	6.7	6.7	6.4	6.4	6.5	6.6	6.6	6.6

Average monthly production per all cows in herd - pounds

1998	1,100	1,110	1,280	1,325	1,400	1,320	1,350	1,215	1,100	1,125	1,090	1,150	14,494
1999	1,150	1,095	1,280	1,255	1,295	1,260	1,260	1,200	1,080	1,035	1,000	1,060	13,919
2000	1,095	1,070	1,200	1,210	1,330	1,275	1,305	1,250	1,150	1,130	1,090	1,175	14,358
2001	1,170	1,115	1,345	1,295	1,295	1,250	1,240	1,205	1,055	1,095	1,025	1,025	14,107
2002	1,210	1,150	1,300	1,295	1,315	1,210	1,270	1,235	1,170	1,140	1,120	1,195	14,667

Milk production - million pounds

1998	10.0	10.0	11.5	11.8	12.3	11.6	11.9	10.7	9.7	9.9	9.6	10.0	129.0
1999	10.0	9.4	11.0	10.8	11.0	10.7	10.7	10.3	9.3	8.9	8.6	9.0	119.7
2000	9.2	9.0	10.2	10.3	11.3	10.6	10.7	10.0	9.1	8.7	8.4	8.8	116.3
2001	9.0	8.6	10.1	9.7	9.7	9.5	9.3	8.9	7.8	8.1	7.5	7.6	105.8
2002	8.1	7.7	8.7	8.8	8.8	8.1	8.5	7.9	7.5	7.4	7.4	7.9	96.8

Average price for milk sold to plants - dollars per hundredweight

1998	25.93	26.08	26.09	26.11	26.04	24.49	25.12	26.72	26.60	27.77	27.87	28.32	26.36
1999	28.40	29.20	28.80	25.20	25.30	25.30	25.10	25.50	25.60	27.80	26.90	25.10	26.50
2000	23.80	23.90	23.50	24.40	24.70	24.80	25.20	24.70	24.70	24.70	24.60	25.00	24.50
2001	25.90	24.50	25.00	24.90	25.50	25.80	26.20	26.00	26.10	26.40	25.80	24.10	25.50
2002	24.00	24.10	23.70	23.80	23.70	23.40	23.30	23.30	23.30	23.50	23.70	23.40	23.60

Average milk fat for milk sold to plants - percent

1998	3.38	3.38	3.37	3.39	3.37	3.34	3.40	3.46	3.49	3.52	3.54	3.51	3.43
1999	3.52	3.45	3.44	3.49	3.48	3.41	3.47	3.45	3.53	3.54	3.53	3.57	3.49
2000	3.58	3.53	3.47	3.52	3.45	3.42	3.38	3.43	3.46	3.50	3.50	3.46	3.47
2001	3.46	3.45	3.43	3.36	3.41	3.38	3.39	3.42	3.43	3.45	3.52	3.50	3.43
2002	3.48	3.46	3.40	3.45	3.45	3.49	3.47	3.49	3.46	3.49	3.52	3.51	3.47

HOGS

HOGS AND PIGS: December 1 inventory by classes and weight, State of Hawaii, 1998-2002

Year	All hogs and pigs	Breeding	Market				
			Total	Under 60 lbs.	60-119 lbs.	120-179 lbs.	180 lbs. and over
1,000 head							
1998	29	5	24	10	7	4	3
1999	28	5	23	9	7	4	3
2000	26	5	21	10	6	3	2
2001	27	6	21	9	6	4	2
2002	24	5	19	8	5	4	2

HOGS AND PIGS: December 1 inventory by class, by counties, 1998-2002

Year	All hogs and pigs	Breeding	Total market	Year	All hogs and pigs	Breeding	Total market
<i>1,000 head</i>				<i>1,000 head</i>			
Counties:							
Hawaii				Kauai			
1998	2.1	.3	1.8	1998	3.5	.4	3.1
1999	2.2	.5	1.7	1999	2.6	.3	2.3
2000	4.0	.8	3.2	2000	1.8	.3	1.5
2001	4.4	.7	3.7	2001	2.0	.4	1.6
2002	2.8	.3	2.5	2002	2.1	.3	1.8
Honolulu				Maui			
1998	18.3	3.3	15.0	1998	5.1	.8	4.3
1999	18.4	3.4	15.0	1999	4.8	1.1	3.7
2000	15.0	3.0	12.0	2000	5.2	1.1	4.1
2001	14.8	3.0	11.8	2001	5.8	1.7	4.1
2002	12.8	2.8	10.0	2002	6.3	1.6	4.7

**HOGS: Number of operations, number and pounds sold, price, and value,
by counties, 1998-2002**

Year	Operations	Number sold ¹	Pounds sold (live weight) ²	Farm price (live weight)	Value of sales
	<i>Number</i>	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
State ³					
1998	250	35	6,300	83.10	5,235
1999	230	35	6,300	80.50	5,072
2000	230	31	5,580	79.30	4,425
2001	230	31	5,425	83.20	4,514
2002	230	30	5,700	84.00	4,788
Counties:					
Hawaii					
1998	80	2.8	528	79.50	420
1999	70	3.8	734	77.50	569
2000	70	3.3	617	77.00	475
2001	70	3.3	574	81.00	465
2002	70	3.7	691	81.00	560
Honolulu					
1998	80	23.4	4,132	83.50	3,451
1999	70	22.1	3,880	81.00	3,143
2000	70	18.9	3,296	80.00	2,637
2001	70	18.9	3,390	84.00	2,848
2002	70	18.0	3,446	85.90	2,960
Kauai					
1998	40	3.5	634	85.00	539
1999	30	3.5	575	81.00	466
2000	30	2.9	491	77.00	378
2001	30	3.2	456	81.50	372
2002	30	3.3	528	81.50	430
Maui					
1998	50	5.3	1,006	82.00	825
1999	60	5.6	1,111	80.50	894
2000	60	5.9	1,176	79.50	935
2001	60	5.6	1,005	82.50	829
2002	60	5.0	1,035	81.00	838

¹ Excludes interfarm sales; includes custom slaughter for home use; includes direct sales on farms to consumers. Excludes live hogs brought in for immediate slaughter.

² Excludes custom slaughter for use on farms where produced and interfarm sales.

³ Sum of county estimates may not add to State total due to rounding. Sales and value data are for the 12-month period, December of the previous year through November of the following year.

HOGS

HOGS: Commercial slaughter and farm price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
------	------	------	------	------	-----	------	------	------	------	------	------	------	------------------

Number of head^{1 2} - 1,000 head

1998	3.3	2.8	3.0	3.1	3.1	3.1	3.3	2.9	2.2	3.1	2.8	3.7	36.5
1999	2.8	2.9	3.0	3.1	2.9	3.0	3.1	2.9	3.0	2.9	2.9	3.6	36.0
2000	2.9	2.8	3.0	2.7	3.2	3.2	2.7	3.1	2.8	3.0	2.9	3.6	35.8
2001	2.9	2.6	2.8	2.8	3.1	3.0	3.1	3.3	2.5	2.8	2.8	3.2	34.9
2002	2.7	2.5	2.6	2.7	2.8	2.6	2.8	2.8	2.4	2.6	2.6	3.1	32.1

Pounds slaughtered, dressed weight^{1 2 3} - 1,000 pounds

1998	491	419	455	470	472	452	504	440	336	465	434	540	5,477
1999	437	422	459	464	429	458	488	465	454	456	443	552	5,525
2000	440	407	467	414	490	504	428	486	437	464	441	556	5,531
2001	437	408	432	429	460	470	458	490	379	446	446	486	5,340
2002	415	391	423	419	450	412	433	461	374	428	397	489	5,092

All hogs, average farm price, dressed weight⁴ - cents per pound

1998	110.5	111.0	111.0	111.0	108.0	110.5	109.5	111.5	111.5	111.5	112.5	110.5	111.0
1999	108.5	108.0	107.0	107.0	105.0	106.5	107.0	106.5	107.5	107.5	106.0	106.5	107.5
2000	106.0	106.0	105.0	105.0	105.5	105.5	105.0	106.0	105.5	108.0	105.5	112.0	106.0
2001	110.5	110.5	111.5	110.0	110.5	111.5	111.0	110.5	110.5	110.5	111.0	113.5	111.0
2002	111.5	113.5	111.5	111.5	111.0	111.5	113.5	111.5	112.5	110.0	113.0		112.0

Market hogs, average farm price, dressed weight⁴ - cents per pound

1998	113.0	113.0	113.5	113.5	113.5	113.5	114.0	114.0	113.5	114.0	114.5	112.0	113.5
1999	110.5	109.5	110.5	110.0	108.5	110.5	109.5	110.0	109.0	109.5	108.5	109.0	110.0
2000	109.0	109.0	108.0	109.0	109.0	109.0	109.0	110.0	110.0	111.5	110.0	115.5	109.5
2001	114.5	114.5	114.5	113.0	114.0	114.5	115.0	114.0	114.5	114.0	114.5	116.0	114.5
2002	115.5	116.0	116.5	115.5	115.0	115.5	116.0	116.5	116.5	115.0	117.5		116.0

¹ Excludes non-inspected farm slaughter; includes custom slaughter and live hog inshipments from the mainland for slaughter.

² Sum of monthly estimates may not add to annual total due to rounding.

³ To convert dressed weight to live weight, divide dressed weight by 0.75 or multiply by a factor of 1.3333.

⁴ Annual average price is for the 12-month period, December of the previous year through November of the following year.

HOGS AND PIGS: Inventory and disposition, State of Hawaii, 1998-2002

Year	Inventory December 1 previous year	Annual pig crop	Inshipments ¹	Marketings ¹	Farm slaughter	Deaths	Inventory December 1
1,000 head							
1998	29	39	*	35	1	3	29
1999	29	39	*	35	1	4	28
2000	28	36	*	31	1	6	26
2001	26	37	*	31	1	4	27
2002	27	32	*	30	1	4	24

* = Less than 500 head.

¹ Excludes live hogs brought in for immediate slaughter.

2002 POULTRY AND EGG HIGHLIGHTS

Egg production for 2002 totaled 117.5 million eggs, 9 percent below the 129.4 million eggs produced in 2001. This was the twelfth consecutive year of decline and the lowest since 1958. The average number of layers on hand during 2002 was 539,000, the lowest since 1960 and the fourteenth consecutive year of decline. Cash receipts from egg sales during 2002 was \$8.7 million, 10 percent below 2001. The total number of egg-type chickens on hand in Hawaii, on December 1, 2002, was 625,000 birds, 5 percent below 2001. The 625,000 birds consisted of 523,000 layers and 102,000 non-laying pullets. The 523,000 layers was 6 percent less than a year ago.

CHICKENS: December 1 inventory by class, by counties, 1998-2002

Year	All chickens (excluding broilers)	Number of layers			Non-laying pullets		Other chickens (excluding broilers)
		Hens 1 year +	Pullets under 1 year	Total	Over 3 months	Under 3 months	
Thousands							
State							
1998	747	408	199	607	77	63	*
1999	721	404	184	588	70	63	*
2000	722	435	174	609	56	57	*
2001	659	373	181	554	50	55	*
2002	625	381	142	523	44	58	*
Counties:							
Hawaii/Kauai/Maui ¹							
1998	146	82	58	140	0	6	*
1999	153	92	56	148	0	5	*
2000	152	95	53	148	0	4	*
2001	146	77	65	142	0	4	*
2002	130	89	37	126	0	4	*
Honolulu							
1998	601	326	141	467	77	57	*
1999	568	312	128	440	70	58	*
2000	570	340	121	461	56	53	*
2001	513	296	116	412	50	51	*
2002	495	292	105	397	44	54	*

* = Less than 500.

¹ Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

POULTRY

EGGS: December 1 number of operations, number of layers, production, price, and value, by counties, 1998-2002 ¹

Year	Operations	Average number of layers	Average production per layer	Production ²	Average price ³	Value of sales
	<i>Number</i>	<i>1,000 birds</i>	<i>Eggs</i>	<i>Million eggs</i>	<i>Cents per dozen</i>	<i>1,000 dollars</i>
State ⁴						
1998	55	632	244	154.4	87.2	11,220
1999	55	615	242	149.0	87.0	10,803
2000	55	604	237	142.9	89.0	10,598
2001	55	588	220	129.4	89.4	9,640
2002	55	539	218	117.5	89.1	8,724
Counties:						
Hawaii/Kauai/Maui ⁵						
1998	38	140	245	34.6	105.0	3,027
1999	40	143	240	34.4	104.0	2,982
2000	40	150	239	35.9	104.5	3,127
2001	40	148	222	32.9	108.5	2,974
2002	40	126	229	28.9	105.5	2,540
Honolulu						
1998	17	492	244	119.8	82.1	8,193
1999	15	472	243	114.6	81.9	7,821
2000	15	454	236	107.0	83.8	7,471
2001	15	440	219	96.5	82.9	6,666
2002	15	413	215	88.6	84.0	6,184

¹ Annual number of layers, egg production, sales, price, and value are for the 12-month period, December of the previous year through November of the following year.

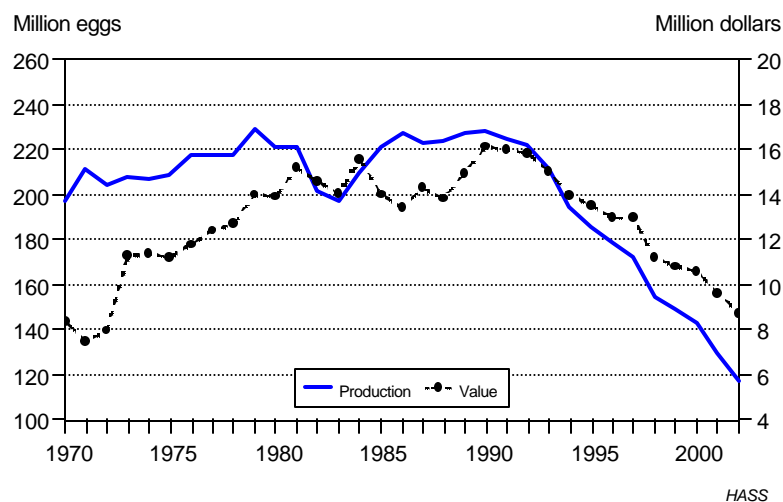
² Home consumption less than 0.5 million eggs included.

³ Equivalent delivered processing plant.

⁴ Sum of county estimates may not add to State total due to rounding.

⁵ Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

EGGS: Production and Value of Sales, State of Hawaii, 1970-2002



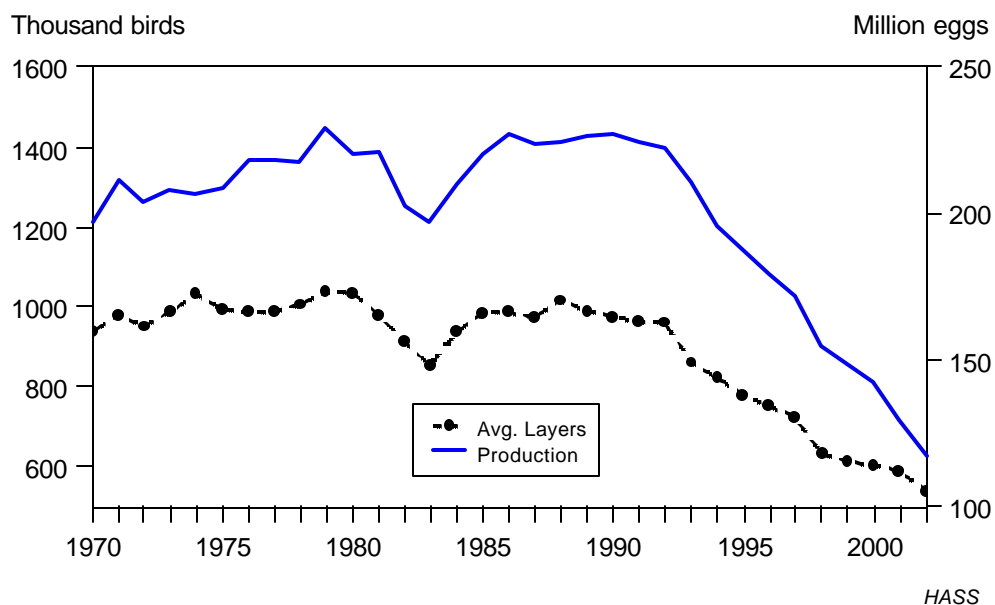
EGGS: Number of layers, production, and price, State of Hawaii, 1998-2002

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average ¹
Average number of layers on hand during month - 1,000 layers													
1998	673	638	642	638	616	600	581	601	629	632	623	604	632
1999	614	629	641	643	630	622	604	606	599	594	598	580	615
2000	580	596	615	615	607	610	603	607	604	612	621	616	604
2001	615	609	613	602	595	591	564	561	561	560	563	552	588
2002	547	538	543	545	524	532	540	538	537	537	534		539
Egg production² - million eggs													
1998	13.5	12.0	13.3	12.8	13.2	12.7	12.6	13.0	12.7	12.7	12.5	12.8	154.4
1999	12.7	11.8	13.3	13.1	13.1	12.5	12.2	11.9	11.9	12.1	11.6	12.1	149.0
2000	12.2	11.1	12.8	12.5	12.6	11.8	12.2	12.0	11.0	11.3	11.3	11.7	142.9
2001	11.7	10.3	11.5	11.4	11.3	10.9	10.9	10.4	9.8	9.7	9.8	10.3	129.4
2002	10.0	9.0	10.3	10.1	9.9	9.6	10.0	9.6	9.1	9.8	9.8		117.5
Average farm price³ - cents per dozen													
1998	92.0	93.0	93.5	91.5	85.5	83.0	83.0	84.5	82.0	82.0	83.5	88.0	87.2
1999	86.5	88.0	87.0	87.5	88.5	86.5	87.5	84.0	87.0	87.5	85.5	89.5	87.0
2000	89.5	91.0	90.5	90.5	91.5	88.5	90.0	88.0	86.5	85.5	86.5	88.0	89.0
2001	89.0	89.0	89.5	88.5	88.5	89.5	89.5	90.0	90.0	90.5	91.0	90.5	89.4
2002	90.5	90.0	89.0	88.0	88.0	88.0	89.0	89.0	88.0	89.5	89.5		89.1

¹ Annual data are for the 12-month period, December of the previous year through November of the following year.

² Sum of monthly estimates may not add to annual total due to rounding.

³ Equivalent delivered processing plant.

CHICKENS: Production and Average Number of Layers, State of Hawaii, 1970-2002

SPECIAL STATISTICS

! AQUACULTURE

! AGRICULTURAL LABOR

! FERTILIZER CONSUMPTION



AQUACULTURE: Number of operations, production, and value, by counties, 1998-2002

Year	Number of operations	Production			Value				
		Shellfish ¹	Finfish	Algae	Shellfish	Finfish	Algae	Other ²	Total
----- 1,000 pounds -----									
----- 1,000 dollars -----									
State									
1998	105	700.4	218.0	1,324.7	4,959.9	958.0	8,294.9	2,406.9	16,619.7
1999	100	996.0	215.0	1,193.0	6,393.0	1,010.0	7,883.0	2,816.0	18,102.0
2000	85	1,190.0	440.0	1,268.0	7,677.0	2,302.0	8,447.0	3,744.0	22,170.0
2001	80	1,166.0	467.0	--	7,464.0	2,404.0	9,684.0	2,648.0	22,200.0
2002	70	1,378.0	542.0	--	8,212.0	2,683.0	10,505.0	3,780.0	25,180.0
Counties:									
Hawaii									
1998	44	485.3	44.8	³	3,647.5	³	³	1,476.4	13,382.5
1999	42	475.0	86.0	1,022.0	3,513.0	562.0	7,473.0	1,829.0	13,377.0
2000	37	450.0	³	1,035.0	3,571.0	³	7,953.0	³	16,009.0
2001	33	425.0	³	--	3,061.0	³	9,021.0	³	16,198.0
2002	26	269.0	³	--	3,050.0	³	9,627.0	³	17,328.0
Honolulu									
1998	46	³	130.5	³	1,013.4	³	³	279.5	2,099.6
1999	44	222.0	114.0	³	1,370.0	408.0	³	241.0	2,333.0
2000	35	359.0	72.0	³	2,123.0	349.0	³	³	2,985.0
2001	32	304.0	95.0	--	1,843.0	491.0	³	³	2,815.0
2002	30	414.0	³	--	2,351.0	³	³	³	4,180.0
Kauai									
1998	3		³			³		³	³
1999	4	³	³	³	³	³	³	³	³
2000	4	³	³		³	³		³	³
2001	4	³	³		³	³		³	³
2002	4	³	³		³	³		³	³
Maui									
1998	12	³	³	³	³	³	³	³	³
1999	10	³	³	³	³	³	³	³	³
2000	9	³	³	³	³	³	³	³	³
2001	11	³	³	--	³	³	³	³	³
2002	10	³	³	--	³	³		³	³

-- Not applicable.

¹ Some shellfish products sold by pieces, pounds not given.

² Non-food products: ornamental fish, seed stock, other. Items not sold by weight.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

LABOR

AGRICULTURAL LABOR: Workers on farms, annual and quarterly averages, State of Hawaii, 1998-2002 ¹

Year	Total farm employment			Hired workers by type of farm		
	Self-employed farm operators	Unpaid workers ²	Hired workers ³	Sugar	Pineapple	Other
1998	2,700	1,200	7,400	1,200	1,200	5,000
1999	3,000	1,200	7,600	1,200	1,300	5,200
2000	3,100	1,000	7,800	1,000	1,200	5,600
2001	3,300	1,100	7,400	800	1,200	5,500
2002	⁴3,000	⁴1,100	7,500	900	1,300	5,400
January	2,900	1,000	7,800	800	1,200	5,800
April	3,000	1,200	7,200	800	1,250	5,150
July	⁴	⁴	7,300	800	1,450	5,050
October	⁴	⁴	7,600	1,000	1,200	5,400

¹ Averages are based on data collected from the January, April, July, and October surveys.

² Includes family members and others working 15 or more hours per week.

³ Sum of hired workers by type of farm may not add to hired workers total due to rounding.

⁴ Beginning July 2002, estimates for self-employed and unpaid workers have been discontinued due to a change in the national labor statistics program.

AGRICULTURAL LABOR: Annual average number of workers on farms, by counties, 1998-2002 ¹

Year	Self-employed farm operators	Unpaid workers ²	Hired workers	Year	Self-employed farm operators	Unpaid workers ²	Hired workers
Counties:							
Hawaii				Kauai			
1998	1,750	650	2,550	1998	200	100	800
1999	1,850	600	2,400	1999	250	100	900
2000	1,800	550	2,700	2000	300	50	950
2001	1,950	550	2,650	2001	350	150	650
2002	³1,700	³600	2,450	2002	³250	³100	750
Honolulu				Maui			
1998	450	250	2,100	1998	350	150	1,950
1999	500	300	2,100	1999	450	200	2,200
2000	500	200	2,200	2000	500	150	2,000
2001	550	250	2,300	2001	500	150	1,800
2002	³550	³250	2,100	2002	³500	³150	2,250

¹ Averages are based on data collected from the January, April, July, and October surveys.

² Includes family members and others working 15 or more hours per week.

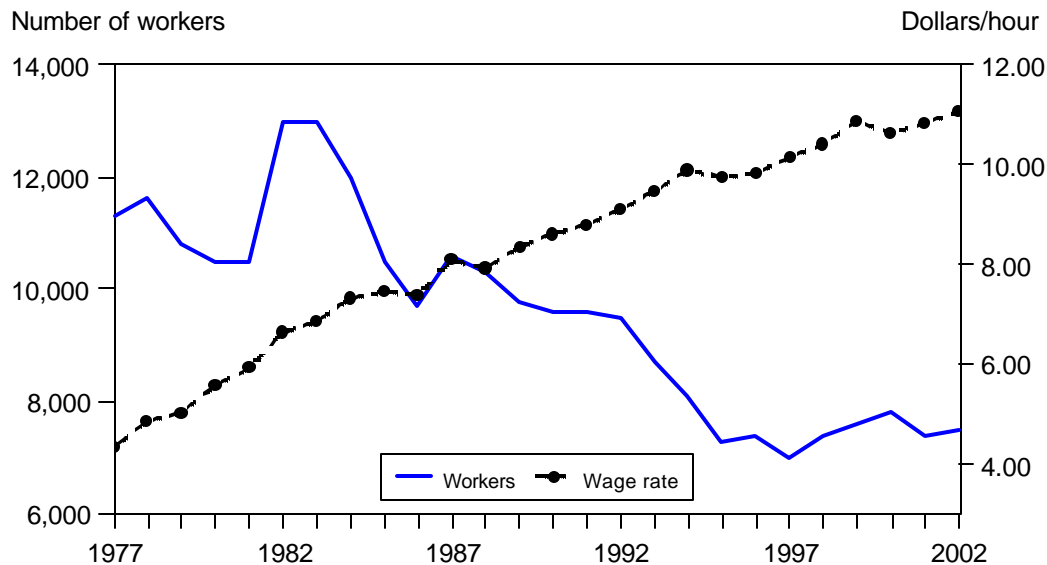
³ Beginning July 2002, estimates for self-employed and unpaid workers have been discontinued due to a change in the national labor statistics program.

**AGRICULTURAL LABOR: Wage rates by type of work, annual and quarterly averages,
State of Hawaii, 1998-2002**

Year	Type of work performed			
	All farms		Farms with 1-9 workers	
	Field/livestock	All hired workers	Field/livestock	All hired workers
1998	8.97	10.41	7.27	8.03
1999	9.38	10.87	¹ 7.71	¹ 8.57
2000	9.05	10.62	¹ 7.68	¹ 8.59
2001	9.29	10.83	8.15	8.70
2002	9.42	11.07	8.26	9.66
January	9.33	10.90	8.01	8.78
April	9.43	11.14	8.36	10.32
July	9.67	11.29	8.76	9.46
October	9.32	11.02	8.14	10.05

¹ Revised.

**Hired Work Force and Average Wage Rate,
State of Hawaii, 1977-2002**



Number of workers is average of January, April, July, and October surveys, except 1981 January and April, 1982-83 July and 1984 July and October.

HASS

FERTILIZER

FERTILIZER: Commercial consumption, State of Hawaii, 1998-2002

Type	Year ending June 30				
	1998	1999	2000 ¹	2001 ²	2002 ²

Consumption of fertilizers by class - Short tons of material

Total fertilizer	112,762	98,103	90,000	90,000	90,000
Total dry single-nutrient	29,275	25,470	23,366	23,366	23,366
Total dry multiple-nutrient	33,924	29,514	27,076	27,076	27,076
Fluid single-nutrient	26,350	22,925	21,031	21,031	21,031
Fluid multiple-nutrient	18,943	16,481	15,119	15,119	15,119
Total single-nutrient	55,625	48,394	44,397	44,397	44,397
Total multiple-nutrient	52,868	45,995	42,196	42,196	42,196
Total N	17,333	15,080	13,834	13,834	13,834
N in multi-nutrients	6,990	6,081	5,579	5,579	5,579
Total available P ₂ O ₅	5,890	5,125	4,701	4,701	4,701
Available P ₂ O ₅ in multi-nutrients	5,776	5,025	4,610	4,610	4,610
Total K ₂ O	13,381	11,641	10,680	10,680	10,680
K ₂ O in multi-nutrients	9,276	8,071	7,404	7,404	7,404
Total plant nutrients	36,604	31,845	29,215	29,215	29,215
Average analysis	33.7	33.7	33.7	33.7	33.7
Total in multi-nutrients	19,177	19,177	17,593	17,593	17,593

Selected single-nutrient materials - Short tons of material

Nitrogen solutions	18,783	16,341	14,991	14,991	14,991
Urea	2,554	2,222	2,038	2,038	2,038
Ammonium sulfate	15,744	13,697	12,566	12,566	12,566
Secondary and micronutrients	4,269	3,714	3,407	3,407	3,407

Consumption of multiple-nutrient fertilizers - Short tons of material

N-P-K	46,382	40,353	37,019	37,019	37,019
N-P	6,485	5,642	5,176	5,176	5,176

¹ An estimate of the total tonnage for 2000 was set equal to 92% of the 1999 tonnage based on information provided by industry representatives. The total tonnage was proportioned into the tonnage for the individual materials and grades in the same ratio as in the original TVA estimate. The specific materials and grades reported are based on a TVA estimate from about 1989 that have been carried forward and adjusted each year.

² An estimate of the total tonnage for 2001-2002 was set equal to 100% of the 2000 tonnage. The total tonnage was proportioned into the tonnage for the individual materials and grades in the same ratio as in the original TVA estimate. The specific materials and grades reported are based on a TVA estimate from about 1989 that have been carried forward and adjusted.

Source: The Association of American Plant Food Control Officials and the Fertilizer institute.

DEFINITION OF TERMS

AGRICULTURE entails all operations performed on a "farm" in connection with planting, growing, and harvesting of crops; raising and feeding of livestock and poultry, and management. All operations in connection with preparation of farm products for market where the preparation does not alter the form of the product and transportation to the first delivery point. In Hawaii, the first delivery point is defined as the processing plant or packinghouse door or other receivers' establishment for marketings on the island of production. For off-island marketings, the first delivery point is generally the shipper's warehouse.

FARM is a place with estimated (or expected) annual sales of agricultural products of at least \$1,000.

CROP PRODUCTION is the estimated amount of crop harvested and transferred at the first delivery point. Production estimates of vegetables and fruits include the quantity for fresh market and processing use.

ACREAGE IN CROP is the total acreage standing in a specific crop regardless of age or condition unless it has been declared abandoned by the operator.

ACREAGE HARVESTED is the total area harvested or partially harvested during the reporting period. A permanent or semi-permanent planting that was harvested for only a portion of the year is counted in its entirety. Acreage lost before maturity due to natural or economic factors is not included. Acreage harvested and planted repeatedly during the year is counted each time.

YIELD is the average production per acre of merchantable quality harvested and sold or utilized. This is derived by dividing total production by harvested acres.

LIVESTOCK OPERATION is defined as a place that has one or more head of the species on hand at any time during the year. It does not have to meet the definition of a farm.

LIVESTOCK PRODUCTION is the estimated amount of livestock and livestock products sold. This includes allowance for amounts used on farms where produced.

FARM PRICE is a computed price to value agricultural production which may or may not reflect the average price at which actual transfer of ownership took place but which is comparable with the definition of "agriculture". See "agriculture" for the definition of pricing point.

MARKET SUPPLY includes pounds of product sold in Hawaii to both Armed Forces and civilians (outshipments excluded). Direct inshipments to the Armed Forces are excluded.

SAMPLING METHODS AND ESTIMATION

The Hawaii Agricultural Statistics Service uses a variety of sampling techniques to produce current agricultural statistics about crops, livestock, prices, farm labor, and other information relating to the agricultural economy.

Data is collected, summarized and estimates are prepared. These estimates then pass through the Agricultural Statistics Board of the U. S. Department of Agriculture where, for major items, Hawaii estimates become part of National totals and enter the official data base for agriculture. National and State estimates are published according to a schedule set one year in advance.

The Hawaii Agricultural Statistics Service conducts many of its surveys by virtually complete **ENUMERATION** of certain parts of the population. This is unusual compared to procedures in other states but is feasible in Hawaii due to the relatively small size of certain categories of the farm universe or the extreme concentration of ownership.

LIST SAMPLING is a common means of data collection. Lists of farm operators are well suited for the low cost collection of information by mail. Supplementary information is included within the frame that allows the use of efficient stratified sample designs. A major disadvantage of this method is the constant change in the list frame which can never be perfect. In Hawaii, cattle, hog, macadamia nut and coffee surveys are examples of stratified list sample designs.

AREA FRAME SAMPLING can be used alone or in conjunction with the list frame. The frame consists of an aggregation of identifiable units of land or segments which may be sampled. The frame is complete and does not suffer the type of deterioration over time as does a list frame.

MULTIPLE-FRAME SAMPLING is the use of two frames. It takes advantage of the best attributes of the area frame and the list frame, produces unbiased estimates and allows measurement of the sampling error.

OBJECTIVE YIELD SURVEYS provide information from direct counts, measurements and weights of the crop made from small plots in a probability selection of sample fields.

ADMINISTRATIVE DATA is used in addition to producer surveys to establish final production and marketings. These include processor receipts, slaughter, vacuum cooler volume, and inspections. Unloads at Honolulu and wholesale prices as reported by the Market Analysis and News Branch, are an important check data source.

REPORTS ISSUED

Title and Description	Release date
CROPS	
AVOCADOS: Annual summary of acreage, yield, production, farm price, and value	May
BANANAS:	
- Monthly report on sales, farm price, and production forecast	Last week of the month
- Annual summary of acreage, yield, production, farm price, and value	May
COFFEE:	
- Preliminary season estimates of acreage, yield, production, farm price, and value	December
- Final season estimates of acreage, yield, production, farm price, and value	August
FRUITS:	
- Annual summary of fresh and processed fruit production, acreage, farm price, and value	September
- Annual summary of tropical specialty fruits - acreage, production, and value	August
GINGER ROOT: Annual summary of acreage, yield, production, farm price, and value. Planting intentions for next season	August
GUAVAS: Annual summary of acreage, yield, production, farm price, and value	June
HERBS: Annual summary of fresh production, farm price, and value	August
KAWA: Annual summary of acreage, sales, farm price, and value	March
MACADAMIA NUTS:	
- Preliminary season estimates of acreage, yield, production, farm price, and value	January
- Final season estimates of acreage, yield, production, farm price, and value	July
PAPAYAS: Monthly report of acreage, utilization, and farm price	Mid-month
PINEAPPLES: Annual summary of acreage, production, farm price, and value	February
SEED CROP: Annual summary of acreage, outshipments of seed, and value	October
SUGARCANE: Estimates of acreage and production for all major U.S. producing areas	August-November
TARO:	
- Quarterly report of taro milled for poi	Jan., Apr., Jul., Oct.
- Annual summary of acreage, production, and farm prices for Chinese and wetland taro varieties	April
VEGETABLES:	
- Monthly report of acreage, sales, and farm price for selected major vegetables and melons. Includes forecast of production and harvested acreage	Second week of month
- Annual summary of acreage, production, and value for all vegetables and melons	July
FLORICULTURE AND NURSERY PRODUCTS	
FLORICULTURE AND NURSERY PRODUCTS: Annual summary of area, production, and value	June
POINSETTIAS: Fall report of plant inventory and past year sales	October
LIVESTOCK	
LIVESTOCK REVIEW: Monthly hog and cattle slaughter, cattle outshipment, pasture conditions, number of milk cows and milk production, number of layers and egg production, and farm prices	Last week of month
CATTLE: Annual summary of inventory and calf crop as of January 1	February
HOGS: Annual summary of inventory and pig crop as of December 1	January
HONEY: Annual summary of colonies, production, yield, farm price, and value	February
OTHER PUBLICATIONS	
AQUACULTURE: Annual summary of operations, production, and value	September
CROP WEATHER: Weekly comments on weather and crop conditions. Rainfall data for selected stations	First working day of week
FARM LABOR: Quarterly report on number of workers by type and average wage rates	Feb., May, Aug., Nov.
STATISTICS OF HAWAII AGRICULTURE: A statistical summary of the State's agricultural sector	October

To order: Any of the above reports may be obtained by contacting the Hawaii Agricultural Statistics Service, 1428 South King Street, Honolulu, HI 96814-2512, (808) 973-9588.

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USDA - WAOB Room 4419 South Building 1400 Independence Ave., SW, Stop 3812 www.usda.gov/oce/waob/index.htm Washington, D.C. 20250-3812	202-720-5447 FAX: 202-690-1805	E-mail: rbridge@oce.usda.gov Internet:	
Small Farm Program: USDA - CSREES 1400 Independence Ave., SW, Stop 2215 Washington, D.C. 20250-2215	1-800-583-3071 FAX: 202-690-3162	E-mail: smallfarm@reeusda.gov Internet: www.reeusda.gov/smallfarm/	
Farmer Direct Marketing Initiative: USDA - AMS - Transportation & Marketing Marketing Services Branch 1400 Independence Ave., SW Room 2646 Washington, D.C. 20250	202-720-8317 FAX: 202-690-0031	E-mail: Errol.Bragg@usda.gov Internet: www.ams.usda.gov/directmarketing/	
National specialists are available to answer your question by phone or E-mail. See these Internet sites for telephone numbers and E-mail addresses:			
Statistics from USDA, NASS	Internet: www.usda.gov/nass/nassinfo/speccomm.htm		
Economists in USDA, ERS	Internet: www.ers.usda.gov		

2002 AGRICULTURAL CENSUS

National Agricultural Statistics Service (NASS)

Census Contact: Janet Allen, (202) 690-8122, janet_allen@nass.usda.gov

NASS Customer Service: (800) 727-9540, nass@nass.usda.gov

NASS To Release Preliminary Census Data on February 3, 2004

- WHAT'S COMING OUT? - The U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) will begin releasing data on the Nation's largest information-gathering project for agriculture — the 2002 Census of Agriculture — on February 3, 2004. Historical Highlights of the United States and all 50 States for 2002 and earlier census years will be available for the following data items:

- Farms
- Land in farms
- Farms by size categories
- Total cropland
- Irrigated land
- Farms by value of sales categories
- Farms by type of organization
- Principal operator by days of work off farm
- Principal operator by primary occupation

Selected Operator Characteristics data by race, gender, and national origin will also be available on February 3. Data items include:

- Sex of operator
- Primary occupation
- Place of residence
- Days worked off farm
- Years on present farm
- Age group categories
- Race
- Living on an American Indian reservation
- Number of persons living in household of:
 - principal operator
 - second operator
 - third operator

- FINAL CENSUS DATA TO FOLLOW - Complete tabulated census of agriculture data for the U.S., States, and the 3,000 plus counties, comparable to previous censuses, will be made available in Spring 2004. A census redesign on new computer systems will require some additional time to provide detailed data for a more complete census picture than has been previously possible.
- NEW ITEMS - New on the 2002 Census of Agriculture are information on: operator characteristics on multiple (up to 3) operators per farm; production contracts/landlord shares; computer and Internet use; more detailed farm-related income; and new commodities (bison, elk, llamas, deer, emus, and ostriches).
- KEY DATA ITEMS - Other key data items collected and tabulated include: land use and ownership; acres irrigated; crop acreage and quantities harvested; livestock and poultry inventories; value of products sold; participation in Federal farm programs; market value of land and buildings; number of hired farm workers; and the structure of U.S. farming and ranching operations.
- REPORTS - All reports will be available free through the NASS website at www.usda.gov/nass/. To order a printed copy of any NASS report, call the NASS Order Desk at 1-800-999-6779. For additional information on the census of agriculture, call the NASS Hotline at 1-800-727-9540. Subscribe to receive e-mailed news releases and announcements on the census and survey results at the NASS Homepage and click on News and Coming Events.

STATE STATISTICAL OFFICES

TO REQUEST DATA FROM THE OTHER STATISTICAL OFFICES, WRITE: (STATE) AGRICULTURAL STATISTICS SERVICE.

ALABAMA

H. L. Vanderberry
P.O. Box 240578
Montgomery 36124
(334) 279-3555

IDAHO

D. G. Gerhardt
P.O. Box 1699
Boise 83701
(208) 334-1507

MINNESOTA

M. A. Hunst
P.O. Box 7068
St. Paul 55107
(651) 296-2230

NEW YORK

S. C. Ropel
1 Winners Circle
Albany 12235
(518) 457-5570

SOUTH DAKOTA

C. D. Anderson
P.O. Box 5068
Sioux Falls 57117
(605) 330-4235

ALASKA

S. M. Benz
P.O. Box 799
Palmer 99645
(907) 745-4272

ILLINOIS

B. E. Schwab
P.O. Box 19283
Springfield 62794
(217) 492-4295

MISSISSIPPI

T. L. Gregory
P.O. Box 980
Jackson 39205
(601) 965-4575

NORTH CAROLINA

R. M. Murphy
P.O. Box 27767
Raleigh 27611
(919) 856-4394

TENNESSEE

D. K. Kenerson
P.O. Box 41505
Nashville 37204
(615) 781-5300

ARIZONA

S. A. Manheimer
3003 N. Central Ave.
Suite 950
Phoenix 85012
(602) 280-8850

INDIANA

G. Preston
1435 Win Hentschel
Blvd. Suite B105
West Lafayette 47906
(765) 494-8371

MISSOURI

G. Danekas
P.O. Box L
Columbia 65205
(573) 876-0950

NORTH DAKOTA

D. A. Hartwig
P.O. Box 3166
Fargo 58108
(701) 239-5306

TEXAS

R. O. Roark
P.O. Box 70
Austin 78767
(512) 916-5581

ARKANSAS

B. F. Klugh
10800 Financial Center
Pkwy Suite 110
Little Rock 72211
(501) 296-9926

IOWA

J. K. Sands
833 Federal Bldg.
210 Walnut St.
Des Moines 50309
(515) 284-4340

MONTANA

P. Stringer
10 West 15th Suite 3100
Helena 59626
(406) 441-1240

OHIO

J. E. Ramey
P.O. Box 686
Reynoldsburg 43068
(614) 728-2100

UTAH

R. Kestle
P.O. Box 25007
Salt Lake City 84125
(801) 524-5003

CALIFORNIA

V. Tolomeo
P.O. Box 1258
Sacramento 95812
(916) 498-5161

KANSAS

E. J. Thiessen
P.O. Box 3534
Topeka 66601
(785) 233-2230

NEBRASKA

W. Hamlin
P.O. Box 81069
Lincoln 68501
(402) 437-5541

OKLAHOMA

B. L. Bloyd
P.O. Box 528804
Oklahoma City 73152
(405) 522-6190

VIRGINIA

K. L. Barnes
P.O. Box 1659
Richmond 23218
(804) 771-2493

COLORADO

R. R. Picanso
P.O. Box 150969
Lakewood 80215
(303) 236-2300

KENTUCKY

L. E. Brown
P.O. Box 1120
Louisville 40201
(502) 582-5293

NEVADA

M. J. Owens
P.O. Box 8880
Reno 89507
(775) 972-6001

OREGON

J. A. Goodwin
1735 Federal Bldg.
1220 S. W. Third Ave.
Portland 97204
(503) 326-2131

WASHINGTON

R. Garibay
P.O. Box 609
Olympia 98507
(360) 902-1940

DELAWARE

C. L. Cadwallader
2320 S. Dupont Hwy.
Dover 19901
(302) 698-4537

LOUISIANA

A. D. Frank
P.O. Box 65038
Baton Rouge 70896
(225) 922-1362

NEW HAMPSHIRE¹

A. R. Davis
P.O. Box 1444
Concord 03302
(603) 224-9639

PENNSYLVANIA

M. Tosiano
2301 N. Cameron St.
Rm. G-19
Harrisburg 17110
(717) 787-3904

WEST VIRGINIA

D. King
1900 Kanawha Blvd. E
Charleston 25305
(304) 345-5958

FLORIDA

J. D. Witzig
P.O. Box 530105
Orlando 32853
(407) 648-6013

MARYLAND

N. Bennett
50 Harry S. Truman
Pkwy. Suite 202
Annapolis 21401
(410) 841-5740

NEW JERSEY

B. L. Cross
P.O. Box 330
Trenton 08625
(609) 292-6385

PUERTO RICO

A. M. Cruz
P.O. Box 10163
Santurce 00908
(787) 723-3773

WISCONSIN

R. J. Battaglia
P.O. Box 8934
Madison 53708
(608) 224-4848

GEORGIA

D. S. Abbe
355 East Hancock Ave
Suite 320
Athens 30601
(706) 546-2236

MICHIGAN

D. D. Kleweno
P.O. Box 26248
Lansing 48909
(517) 324-5300

NEW MEXICO

D. C. Nelson
P.O. Box 1809
Las Cruces 88004
(505) 522-6023

SOUTH CAROLINA

R. A. Graham
P.O. Box 1911
Columbia 29202
(803) 765-5333

WYOMING

D. W. Coulter
P.O. Box 1148
Cheyenne 82003
(307) 432-5600

¹ Includes Connecticut, Maine, Massachusetts, Rhode Island, and Vermont.

COOPERATIVE EXTENSION SERVICE COUNTY OFFICES AND USDA FARM SERVICE AGENCIES

Cooperative Extension Service
Hawaii County Office
875 Komohana St.
Hilo, HI 96720
(808) 959-9155

Cooperative Extension Service
Kamuela Office
67-5189 Kamamalu St.
Kamuela, HI 96743
(808) 887-6183

Cooperative Extension Service
Kona Office
79-7381 Mamalahoa Hwy
Kealahakua, HI 96750-7911
(808) 322-4892

Cooperative Extension Service
Maui Office
310 Kaahumanu Ave. Bldg. 214
Kahului, HI 96732
(808) 244-3242

Cooperative Extension Service
Molokai Office
PO Box 394
Hoolehua, HI 96729
(808) 567-6929

Cooperative Extension Service
Kauai County Office
3060 Eiwa St. Rm 210
Lihue, HI 96766
(808) 274-3471

Cooperative Extension Service
Wahiawa Office
910 California Ave.
Wahiawa, HI 96786
(808) 622-4185

Cooperative Extension Service
Kaneohe Office
45-260 Waikalua Rd. Rm 101
Kaneohe, HI 96744
(808) 247-0421

Cooperative Extension Service
Pearl City Office
962 2nd St.
Pearl City, HI 96782
(808) 453-6050

Cooperative Extension Service
Oahu County Office
1955 E West Rd. Ag Science 217
Honolulu, HI 96822
(808) 956-7138

USDA Hawaii County FSA Office
Room 219 & 221 Federal Bldg.
154 Waiianuenue Ave.
Hilo, HI 96720
(808) 933-8381

USDA Maui County FSA Office
Millyard Plaza
210 Imi Kala St. Suite 207
Wailuku, HI 96793
(808) 244-3100

USDA Kauai County FSA Office
Watumull Bldg.
4334 Rice St. Rm 103
Lihue, HI 96766
(808) 245-9014

USDA Honolulu County FSA Office
99-193 Aiea Heights Drive Suite 114
Aiea, HI 96701
(808) 483-8609

INDUSTRY ASSOCIATIONS

ANTHURIUM

Hawaiian Anthurium Industry
Association
P.O. Box 4755
Hilo, HI 96720

AQUACULTURE

Hawaii Aquaculture Association
Aquaculture Development Program
1177 Alakea St. Rm 400
Honolulu, HI 96813
(808) 587-0030

AVOCADO

Hawaii Avocado Association
P.O. Box 925
Kealahou, HI 96750
(808) 322-7873

AWA (KAWA)

Association for Hawaiian Awa
P.O. Box 636
Pepeekeo, HI 96783
(808) 965-8394

Hawaii Awa Council
P.O. Box 216
Kurtistown, HI 96760
(808) 968-6837

BANANA

Hawaii Banana Industry Association
421 Lama St.
Hilo, HI 96720
(808) 981-0805

BEEKEEPERS

Big Island Beekeepers Association
HC 1 Box 5296
Keaau, HI 96749
(808) 982-6431

Hawaii Beekeepers Association
3081 G Paty Drive
Honolulu, HI 96822
(808) 988-7203

CATTLE

Hawaii Beef Industry Council
91-2002 Fort Weaver Rd
Ewa Beach, HI 96706
(808) 672-5042

COFFEE

Kona Coffee Council
P.O. Box 2077
Kealahou, HI 96750
(808) 937-9533

Kona Pacific Farmers Cooperative
P.O. Box 309
Captain Cook, HI 96704
(808) 328-2411

Hawaii Coffee Association
75-5629 Kuakini Hwy Suite R #648
Kailua Kona, HI 96740
(808) 328-9120

CROP IMPROVEMENT

Hawaii Crop Improvement Association
P.O. Box 520
Waialua, HI 96791
(808) 637-0100

EGG

Hawaii Egg Producers Association
C/O 850 Davies Pacific Center
841 Bishop St. Suite 850
Honolulu, HI 96813
(808) 522-5133

FARM (General)

Hawaii Farm Bureau Federation
2343 Rose St.
Honolulu, HI 96819
(808) 848-2074

FLOWERS & NURSERY

Big Island Association of Nurserymen
P.O. Box 4365
Hilo, HI 96720

Big Island Dendrobium Growers
Association of Hawaii (BIDGA)
P.O. Box 4153
Hilo, HI 96720
(808) 966-7610

Dendrobium Orchid Growers
Association of Hawaii (DOGAH)
P.O. Box 1324
Wahiawa, HI 96786
622-4185

Hawaii Association of Nurserymen
1833 Kalakaua Ave Suite 211
Honolulu, HI 96815
(808) 951-0055

Hawaii Export Nursery Association
P.O. Box 11120
Hilo, HI 96721
(808) 969-2088

Hawaii Florists and Shippers
Association
P.O. Box 5640
Hilo, HI 96720
(808) 959-0621

Hawaii Landscape & Irrigation
Contractors Association
1833 Kalakaua Ave Suite 211
Honolulu, HI 96815
(808) 951-0055

Hawaii Orchid Growers Association
P.O. Box 2152
Keaau, HI 96749
(808) 982-9298

Hawaii Tropical Flower Council
P.O. Box 4306
Hilo, HI 96720

INDUSTRY ASSOCIATIONS - Continued

FLOWERS & NURSERY - Continued

Hawaii Tropical Flowers Foliage Association
41-969 Mahiku Pl.
Waimanalo, HI 96795
(808) 259-7826

Hawaii Turfgrass Association
1833 Kalakaua Ave. Suite 211
Honolulu, HI 96815
(808) 955-3504

Landscape Industry Council of Hawaii
P.O. Box 22938
Honolulu, HI 96823

Maui Flower Growers Association
P.O. Box 684
Hana, HI 96713
(800) 805-2758

Protea Growers Association of Hawaii
P.O. Box 425
Kula, HI 96790
(808) 878-1218

West Hawaii Orchid Growers Association (WHOGA)
P.O. Box 1540
Kailua-Kona, HI 96745
(808) 329-8455

FOREST

Hawaii Forest Industry Association
P.O. Box 10216
Hilo, HI 96721
(808) 933-9411

MACADAMIA NUT

Hawaii Macadamia Nut Association
P.O. Box 2092
Keaau, HI 96749
(808) 965-5444

MILK

Fresh Milk Industry of Hawaii
P.O. Box 190
Hawi, HI 96719
(808) 889-5838

ONION

Maui Onion Growers Association
P.O. Box 148
Kula, HI 96790
(808) 878-2917

ORGANIC PRODUCE

Hawaii Organic Farmers Association
P.O. Box 6863
Hilo, HI 96720
(808) 969-7789
Toll Free (877) 674-4632

Hawaii Papaya Industry Association
P.O. Box 537
Pahoa, HI 96778
(808) 965-8699

PINEAPPLE

Pineapple Growers Association of Hawaii
1116 Whitmore Ave.
Wahiawa, HI 96786
(808) 621-3201

PORK

Hawaii Pork Industry Association
C/O Hawaii Food Products
94-403 Ukee St.
Waipahu, HI 96797
(808) 676-9100

POULTRY

Hawaii Fryer's Council
C/O Pacific Poultry Co.
1818 Kanakanui St.
Honolulu, HI 96819
(808) 841-2828

TARO

Kauai Taro Growers Association
P.O. Box 427
Hanalei, HI 96714
(808) 826-6202

TROPICAL FRUITS

Hawaii Tropical Fruit Growers
P.O. Box 1582
Hilo, HI 96721
(808) 961-6660

VEGETABLE

Maui Farmer's Cooperative Exchange
970 B Lower Main St.
Wailuku, HI 96793
(808) 242-9767

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- Fruits: Watermelon, Jefts Farm, Kunia, Oahu island, courtesy of the Market Development Branch, Hawaii Department of Agriculture, page 37.
- Vegetables: White stem cabbage, Pak Choy. Photo courtesy of HASS staff, page 48.
- Special Statistics: Farmer's open market, on the Island of Oahu, courtesy of HASS staff, page 87.