

**Table**  
**Number**   **Table Name**

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

Narrative

|                       |   |
|-----------------------|---|
| <a href="#">19.01</a> | Farms, Land in Farms, and Selected Items: 1997 and 2002                                     |
| <a href="#">19.02</a> | Farms and Land in Farms, by Counties: 2002  |
| <a href="#">19.03</a> | Number of Farms, Farm Acreage, and Farm Employment: 1980 to 2003                            |
| <a href="#">19.04</a> | Value of Crop and Livestock Sales: 1980 to 2003   |
| <a href="#">19.05</a> | Number of Farms, Farm Acreage, and Farm Employment, by Counties: 1993, 2001, 2002, and 2003 |
| <a href="#">19.06</a> | Value of Crop and Livestock Sales, by Counties: 1993, 2001, 2002, and 2003                  |
| <a href="#">19.07</a> | Acreage in Crop, Number of Crop Farms, and Value of Crop Sales: 1993, 2001, 2002, and 2003  |
| <a href="#">19.08</a> | Acreage in Crop, Number of Crop Farms, and Value of Crop Sales, by Counties: 2003           |
| <a href="#">19.09</a> | Specialty Crops, Fruits, and Vegetables: 2003   |
| <a href="#">19.10</a> | Sugarcane Acreage, by Type of Irrigation: 1993 to 2004                                      |
| <a href="#">19.11</a> | Livestock Inventory, 1984 to 2003, and by Geographic Areas, 2003                            |
| <a href="#">19.12</a> | Number of Livestock Operations and Value of Livestock Sales: 1993, 2001, 2002, and 2003     |
| <a href="#">19.13</a> | Number of Livestock Operations and Value of Livestock Sales, by Counties: 2003              |
| <a href="#">19.14</a> | Floriculture and Nursery Products, 1994 to 2004, and by Counties, 2001 to 2004              |
| <a href="#">19.15</a> | Floriculture and Nursery Products, by Commodity: 2004                                       |
| <a href="#">19.16</a> | Out-of-State Sales of Floriculture and Nursery Products: 2000 to 2004                       |
| <a href="#">19.17</a> | Agricultural Labor: Hired Workers on Farms by Type of Farm, 1993 to 2004                    |
| <a href="#">19.18</a> | General Excise Tax Base for Producing: 1993 to 2004   |
| <a href="#">19.19</a> | Agricultural Chemicals Used, Including Fertilizer: 1992, 1997, and 2002                     |
| <a href="#">19.20</a> | Aquaculture Industry Operations: 1970 to 2003   |
| <a href="#">19.21</a> | Aquaculture Operations, Acreage, Production, and Value, by Counties: 2002 and 2003          |

## Section 19

# AGRICULTURE

This section presents statistics on agricultural land, farms, crops, livestock, dairy products, poultry, and aquaculture. Related information appears in Sections 6 (land use), 12 and 15 (agricultural employment and earnings), and 22 (food processing).

Important sources for data on agriculture include the *United States Census of Agriculture*, most recently published for 2002, the annual report on *Statistics of Hawaii Agriculture* issued by the Hawaii Agricultural Statistics Service, and data compiled by the former Hawaiian Sugar Planters' Association, now the Hawaii Agriculture Research Center, and the Aquaculture Development Program of the Hawaii State Department of Agriculture. Agricultural data for earlier years are summarized in *Historical Statistics of Hawaii*, Section 13. National statistics appear in Section 17 of the *Statistical Abstract of the United States: 2004-2005*.

**Table 19.01-- FARMS, LAND IN FARMS, AND SELECTED ITEMS:  
1997 AND 2002**

| Item  | Unit    | 1997      | 2002      |
|---|---------|-----------|-----------|
| Farms   | number  | 5,473     | 5,398     |
| Land in farms   | acres   | 1,439,071 | 1,300,499 |
| Average size of farm                                      | acres   | 263       | 241       |
| Value of land and buildings: 1/                           |         |           |           |
| Average per farm  | dollars | 632,281   | 842,875   |
| Average per acre  | dollars | 2,405     | 3,507     |
| Estimated market value of all machinery and equipment: 1/ |         |           |           |
| Total   | \$1000  | 211,775   | 186,163   |
| Average per farm  | dollars | 38,709    | 35,568    |
| Farms by size:  |         |           |           |
| 1 to 9 acres  |         | 3,456     | 3,440     |
| 10 to 49 acres  |         | 1,417     | 1,309     |
| 50 to 179 acres   |         | 318       | 335       |
| 180 to 499 acres  |         | 139       | 146       |
| 500 to 999 acres  |         | 43        | 61        |
| 1,000 acres or more                                       |         | 100       | 107       |
| Total cropland  | farms   | 4,882     | 4,755     |
|   | acres   | 292,107   | 211,120   |
| Harvested cropland  | farms   | 4,594     | 4,522     |
|   | acres   | 100,094   | 109,461   |
| Irrigated land  | farms   | 2,241     | 2,231     |
|   | acres   | 76,971    | 69,194    |
| Market value of agricultural products sold                | \$1000  | 496,935   | 533,423   |
| Average per farm  | dollars | 90,798    | 98,819    |
| Crops, including nursery and greenhouse crops             | \$1000  | 401,411   | 445,356   |
| Livestock, poultry, and their products                    | \$1000  | 95,524    | 88,067    |
| Farms by value of sales:                                  |         |           |           |
| Less than \$2,500   |         | 1,638     | 1,407     |
| \$2,500 to \$4,999  |         | 743       | 714       |
| \$5,000 to \$9,999  |         | 797       | 916       |
| \$10,000 to \$24,999                                      |         | 989       | 1,056     |
| \$25,000 to \$49,999                                      |         | 535       | 506       |
| \$50,000 to \$99,999                                      |         | 323       | 314       |
| \$100,000 or more   |         | 448       | 485       |

Continued on next page.

**Table 19.01-- FARMS, LAND IN FARMS, AND SELECTED ITEMS:  
1997 AND 2002 -- Con.**

| Item                                       | Unit   | 1997    | 2002    |
|--|--------|---------|---------|
| Farm by type of organization:              |        |         |         |
| Family or individual                       |        | 4,583   | 4,629   |
| Partnership                                |        | 328     | 225     |
| Corporation                                |        | 497     | 472     |
| Operators by days worked off farm:         |        |         |         |
| Any  |        | 2,827   | 2,612   |
| 200 days or more                           |        | 1,566   | 1,661   |
| Operators by principal occupation:         |        |         |         |
| Farming                                    |        | 3,052   | 3,125   |
| Other                                      |        | 2,421   | 2,273   |
| Average age of principal operator          | years  | 55.0    | 56.5    |
| Total farm production expenses 1/          | \$1000 | 398,567 | 450,946 |
| Livestock and poultry:                     |        |         |         |
| Cattle and calves inventory                | farms  | 829     | 748     |
|  | number | 181,732 | 154,308 |
| Beef cows                                  | farms  | 625     | 578     |
|  | number | 93,711  | 83,277  |
| Milk cows                                  | farms  | 44      | 27      |
|  | number | 8,389   | 6,465   |
| Cattle and calves sold                     | farms  | 660     | 550     |
|  | number | 66,726  | 60,739  |
| Hogs and pigs inventory                    | farms  | 248     | 204     |
|  | number | 29,440  | 23,364  |
| Hogs and pigs sold                         | farms  | 190     | 158     |
|  | number | 38,066  | 33,231  |
| Broilers and other meat-type chickens sold | farms  | 9       | 17      |
|  | number | 478,672 | 881,112 |

Continued on next page.

**Table 19.01-- FARMS, LAND IN FARMS, AND SELECTED ITEMS:  
1997 AND 2002 -- Con.**

| Item                      | Unit  | 1997      | 2002    |
|---------------------------|-------|-----------|---------|
| Selected crops harvested: |       |           |         |
| Sugarcane for sugar       | farms | 13        | 2       |
|                           | acres | 31,483    | (D)     |
|                           | tons  | 2,873,712 | (D)     |
| Pineapples harvested      | farms | 27        | 34      |
|                           | acres | 12,992    | 10,211  |
|                           | tons  | 348,428   | 314,626 |
| Vegetables harvested      | farms | 657       | 633     |
|                           | acres | 6,549     | 6,554   |
| Land in orchards          | farms | 2,786     | 2,833   |
|                           | acres | 37,906    | 34,908  |

D Withheld to avoid disclosing data for individual farms.

1/ Data are based on a sample of farms.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *2002 Census of Agriculture, Vol.1, Part 11, Hawaii* (June 2004), table 1, pp. 6-7.

**Table 19.02-- FARMS AND LAND IN FARMS, BY COUNTIES: 2002**

| Item  | Unit    | Hawaii  | Honolulu | Kauai     | Maui      |
|---|---------|---------|----------|-----------|-----------|
| Farms   | number  | 3,216   | 794      | 565       | 823       |
| Land in farms   | acres   | 821,276 | 70,705   | 151,828   | 256,690   |
| Average size of farm                                      | acres   | 255     | 89       | 269       | 312       |
| Value of land and buildings: 1/                           |         |         |          |           |           |
| Average per farm  | dollars | 724,308 | 738,577  | 1,068,439 | 1,251,598 |
| Average per acre  | dollars | 2,822   | 8,358    | 3,989     | 4,112     |
| Estimated market value of all machinery and equipment: 1/ |         |         |          |           |           |
| Average per farm  | dollars | 23,981  | 37,543   | 66,074    | 58,849    |
| Farms by size:  |         |         |          |           |           |
| 1 to 9 acres  |         | 2,009   | 574      | 352       | 505       |
| 10 to 49 acres  |         | 818     | 152      | 127       | 212       |
| 50 to 179 acres   |         | 207     | 34       | 38        | 56        |
| 180 to 499 acres  |         | 90      | 15       | 21        | 20        |
| 500 to 999 acres  |         | 38      | 5        | 11        | 7         |
| 1,000 acres or more                                       |         | 54      | 14       | 16        | 23        |
| Total cropland  | farms   | 2,908   | 681      | 474       | 692       |
|   | acres   | 90,778  | 29,103   | 30,510    | 60,729    |
| Harvested cropland  | farms   | 2,791   | 656      | 426       | 649       |
|   | acres   | 55,529  | 13,757   | 11,771    | 28,404    |
| Irrigated land  | farms   | 908     | 545      | 316       | 462       |
|   | acres   | 9,041   | 13,703   | 19,595    | 26,855    |
| Market value of agricultural products sold                | \$1000  | 187,736 | 179,321  | 41,855    | 124,511   |
| Average per farm  | dollars | 58,375  | 225,845  | 74,080    | 151,289   |
| Crops, including nursery and greenhouse crops             | \$1000  | 143,924 | 149,050  | 35,737    | 116,645   |
| Livestock, poultry, and their products                    | \$1000  | 43,812  | 30,271   | 6,118     | 7,866     |

1/ Data are based on a sample of farms.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *2002 Census of Agriculture, Vol.1, Part 11, Hawaii* (June 2004), p.185.

**Table 19.03-- NUMBER OF FARMS, FARM ACREAGE, AND FARM  
EMPLOYMENT: 1980 TO 2003**

| Year    | Number of farms 1/ | Farm acreage 2/<br>(1,000) | Farm employment 3/           |                          |               |
|---------|--------------------|----------------------------|------------------------------|--------------------------|---------------|
|         |                    |                            | Self-employed farm operators | Unpaid family members 3/ | Hired workers |
| 1980    | 4,300              | 1,970                      | 3,400                        | 1,100                    | 10,550        |
| 1981    | 4,400              | 1,965                      | 3,100                        | 900                      | 10,500        |
| 1982    | 4,500              | 1,960                      | 2,600                        | 1,300                    | 13,000        |
| 1983    | 4,500              | 1,900                      | 2,500                        | 1,500                    | 13,000        |
| 1984    | 4,600              | 1,850                      | 2,200                        | 1,300                    | 11,800        |
| 1985    | 4,600              | 1,800                      | 2,200                        | 1,200                    | 10,600        |
| 1986    | 4,600              | 1,750                      | 2,050                        | 1,200                    | 9,700         |
| 1987    | 4,650              | 1,720                      | 2,600                        | 1,100                    | 10,700        |
| 1988    | 4,650              | 1,720                      | 2,600                        | 1,100                    | 10,300        |
| 1989    | 4,650              | 1,720                      | 2,400                        | 1,100                    | 9,800         |
| 1990    | 4,700              | 1,680                      | 2,500                        | 1,000                    | 9,600         |
| 1991    | 4,700              | 1,630                      | 3,100                        | 1,100                    | 9,600         |
| 1992    | 4,800              | 1,590                      | 3,100                        | 1,300                    | 9,500         |
| 1993    | 5,200              | 1,560                      | 2,800                        | 1,100                    | 8,700         |
| 1994    | 5,300              | 1,530                      | 2,700                        | 1,200                    | 8,100         |
| 1995    | 5,300              | 1,470                      | 2,700                        | 1,000                    | 7,300         |
| 1996    | 5,400              | 1,440                      | 2,700                        | 1,000                    | 7,400         |
| 1997    | 5,500              | 1,440                      | 2,700                        | 1,200                    | 7,000         |
| 1998    | 5,500              | 1,440                      | 2,700                        | 1,200                    | 7,400         |
| 1999    | 5,500              | 4/ 1,420                   | 3,000                        | 1,200                    | 7,600         |
| 2000    | 5,500              | 4/ 1,380                   | 3,100                        | 1,000                    | 7,800         |
| 2001    | 4/ 5,500           | 4/ 1,350                   | 3,300                        | 1,100                    | 7,400         |
| 2002 5/ | 4/ 5,500           | 4/ 1,320                   | 3,000                        | 1,100                    | 7,500         |
| 2003    | 5,500              | 1,300                      | (NA)                         | (NA)                     | 7,300         |

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

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

3/ Working 15 or more hours per week.

4/ Revised from previous *Data Book*.

5/ Beginning July 2002, estimates for self-employed and unpaid workers have been discontinued due to a change in the national labor statistics program. 2002 data are the average of January and April estimates.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.

**Table 19.04-- VALUE OF CROP AND LIVESTOCK SALES: 1980 TO 2003**

[Thousands of dollars]

| Year | All crops and livestock | Crops      |                          |                            |             | Livestock |
|------|-------------------------|------------|--------------------------|----------------------------|-------------|-----------|
|      |                         | All crops  | Sugar (unprocessed cane) | Pine-apples (fresh equiv.) | Other crops |           |
| 1980 | 634,101                 | 552,877    | 385,100                  | 76,596                     | 91,181      | 81,224    |
| 1981 | 489,502                 | 401,348    | 207,500                  | 89,745                     | 104,103     | 88,154    |
| 1982 | 507,268                 | 428,860    | 230,800                  | 94,364                     | 103,696     | 78,408    |
| 1983 | 568,414                 | 481,926    | 266,900                  | 100,376                    | 114,650     | 86,488    |
| 1984 | 550,517                 | 463,502    | 256,200                  | 89,928                     | 117,374     | 87,015    |
| 1985 | 528,649                 | 445,826    | 222,400                  | 90,530                     | 132,896     | 82,823    |
| 1986 | 564,717                 | 481,312    | 233,800                  | 99,720                     | 147,792     | 83,405    |
| 1987 | 557,298                 | 469,565    | 218,000                  | 99,286                     | 152,279     | 87,733    |
| 1988 | 573,962                 | 485,293    | 209,900                  | 107,402                    | 167,991     | 88,669    |
| 1989 | 585,048                 | 493,261    | 210,300                  | 98,310                     | 184,651     | 91,787    |
| 1990 | 595,030                 | 506,586    | 213,800                  | 106,365                    | 186,421     | 88,444    |
| 1991 | 551,382                 | 464,139    | 174,900                  | 107,775                    | 181,464     | 87,243    |
| 1992 | 520,227                 | 431,958    | 153,700                  | 102,100                    | 176,158     | 88,269    |
| 1993 | 506,475                 | 421,593    | 163,000                  | 79,850                     | 178,743     | 84,882    |
| 1994 | 503,780                 | 427,150    | 160,100                  | 78,890                     | 188,160     | 76,630    |
| 1995 | 493,385                 | 421,089    | 127,700                  | 87,360                     | 206,029     | 72,296    |
| 1996 | 495,688                 | 428,671    | 108,100                  | 95,914                     | 224,657     | 67,017    |
| 1997 | 488,159                 | 420,360    | 85,500                   | 91,721                     | 243,139     | 67,799    |
| 1998 | 493,342                 | 420,634    | 87,300                   | 92,776                     | 240,558     | 72,708    |
| 1999 | 512,992                 | 443,111    | 86,800                   | 101,448                    | 254,863     | 69,881    |
| 2000 | 499,730                 | 431,482    | 62,200                   | 101,530                    | 267,752     | 68,248    |
| 2001 | 502,181                 | 437,438    | 57,800                   | 96,337                     | 283,301     | 64,743    |
| 2002 | 1/ 514,136              | 1/ 453,200 | 64,300                   | 100,616                    | 1/ 288,284  | 1/ 60,936 |
| 2003 | 524,991                 | 466,254    | 64,400                   | 102,849                    | 299,005     | 58,737    |

1/ Data have been revised from previous year *Data Book*.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.



**Table 19.05-- NUMBER OF FARMS, FARM ACREAGE, AND FARM EMPLOYMENT, BY COUNTIES: 1993, 2001, 2002, AND 2003**

| County or island and year | Number of farms 1/ | Farm acreage 2/ (1,000) | Farm employment 3/           |                          |               |
|---------------------------|--------------------|-------------------------|------------------------------|--------------------------|---------------|
|                           |                    |                         | Self-employed farm operators | Unpaid family members 4/ | Hired workers |
| State total:              |                    |                         |                              |                          |               |
| 1993                      | 5,200              | 1,560                   | 2,800                        | 1,100                    | 8,700         |
| 2001                      | 5/ 5,500           | 5/ 1,350                | 3,300                        | 1,100                    | 7,400         |
| 2002 6/                   | 5/ 5,500           | 5/ 1,320                | 3,000                        | 1,100                    | 7,500         |
| 2003                      | 5,500              | 1,300                   | (NA)                         | (NA)                     | 7,300         |
| Hawaii:                   |                    |                         |                              |                          |               |
| 1993                      | 3,000              | 920                     | 1,800                        | 650                      | 3,300         |
| 2001                      | 5/ 3,250           | 5/ 840                  | 1,950                        | 550                      | 2,650         |
| 2002 6/                   | 5/ 3,250           | 5/ 830                  | 1,700                        | 600                      | 2,450         |
| 2003                      | 3,250              | 820                     | (NA)                         | (NA)                     | 2,750         |
| Honolulu:                 |                    |                         |                              |                          |               |
| 1993                      | 900                | 90                      | 550                          | 300                      | 2,300         |
| 2001                      | 5/ 850             | 5/ 70                   | 550                          | 250                      | 2,300         |
| 2002 6/                   | 800                | 5/ 70                   | 550                          | 250                      | 2,100         |
| 2003                      | 800                | 70                      | (NA)                         | (NA)                     | 2,150         |
| Kauai:                    |                    |                         |                              |                          |               |
| 1993                      | 450                | 200                     | 200                          | 100                      | 1,050         |
| 2001                      | 5/ 550             | 5/ 170                  | 350                          | 150                      | 650           |
| 2002 6/                   | 5/ 600             | 5/ 160                  | 250                          | 100                      | 750           |
| 2003                      | 600                | 150                     | (NA)                         | (NA)                     | 750           |
| Maui:                     |                    |                         |                              |                          |               |
| 1993                      | 850                | 350                     | 300                          | 100                      | 2,050         |
| 2001                      | 850                | 5/ 270                  | 500                          | 150                      | 1,800         |
| 2002 6/                   | 850                | 5/ 260                  | 500                          | 150                      | 2,250         |
| 2003                      | 850                | 260                     | (NA)                         | (NA)                     | 1,650         |

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

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

3/ Sum may not add to state totals due to rounding.

4/ Working 15 hours or more per week.

5/ Revised from previous *Data Book*.

6/ Beginning July 2002, estimates for self-employed and unpaid workers have been discontinued due to a change in the national labor statistics program. 2002 data are the average of January and April estimates.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual) and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.

**Table 19.06-- VALUE OF CROP AND LIVESTOCK SALES, BY COUNTIES:  
1993, 2001, 2002 AND 2003**

[Thousands of dollars]

| County or island and year | All crops and livestock | Crops      |                          |                               |                | Livestock |
|---------------------------|-------------------------|------------|--------------------------|-------------------------------|----------------|-----------|
|                           |                         | All crops  | Sugar (unprocessed cane) | Pine-apples 1/ (fresh equiv.) | Other crops 1/ |           |
| State total:              |                         |            |                          |                               |                |           |
| 1993                      | 506,475                 | 421,593    | 163,000                  | 79,850                        | 178,743        | 84,882    |
| 2001                      | 502,181                 | 437,438    | 57,800                   | 96,337                        | 283,301        | 64,743    |
| 2002                      | 510,418                 | 2/ 449,482 | 64,300                   | 100,616                       | 284,566        | 2/ 60,936 |
| 2003                      | 524,991                 | 466,254    | 64,400                   | 102,849                       | 299,005        | 58,737    |
| Hawaii:                   |                         |            |                          |                               |                |           |
| 1993                      | 166,309                 | 140,610    | 39,000                   | (3/)                          | 101,610        | 25,699    |
| 2001                      | 160,258                 | 134,380    | -                        | (3/)                          | 134,380        | 25,878    |
| 2002                      | 155,486                 | 2/ 128,261 | -                        | (3/)                          | 128,261        | 2/ 27,225 |
| 2003                      | 160,020                 | 132,779    | -                        | (3/)                          | 132,779        | 27,241    |
| Honolulu:                 |                         |            |                          |                               |                |           |
| 1993                      | 162,086                 | 119,906    | 29,700                   | 54,923                        | 35,283         | 42,180    |
| 2001                      | 177,462                 | 146,504    | -                        | 69,222                        | 77,282         | 30,958    |
| 2002                      | 179,770                 | 2/ 153,719 | -                        | 70,992                        | 82,727         | 2/ 26,051 |
| 2003                      | 182,329                 | 157,728    | -                        | 73,023                        | 84,705         | 24,601    |
| Kauai:                    |                         |            |                          |                               |                |           |
| 1993                      | 46,145                  | 42,143     | 31,600                   | (3/)                          | 10,543         | 4,002     |
| 2001                      | 40,790                  | 38,292     | 12,900                   | (3/)                          | 25,392         | 2,498     |
| 2002                      | (D)                     | 2/ 40,848  | 13,000                   | (3/)                          | 27,848         | 2/ (D)    |
| 2003                      | (D)                     | 45,102     | 13,500                   | (3/)                          | 31,602         | (D)       |
| Maui:                     |                         |            |                          |                               |                |           |
| 1993                      | 131,935                 | 118,934    | 62,700                   | 24,890                        | 31,344         | 13,001    |
| 2001                      | 123,671                 | 118,262    | 44,900                   | 27,115                        | 46,247         | 5,409     |
| 2002                      | (D)                     | 2/ 130,372 | 51,300                   | 29,624                        | 49,448         | 2/ (D)    |
| 2003                      | (D)                     | 130,644    | 50,900                   | 29,826                        | 49,918         | (D)       |

1/ County data may fail to add exactly to State total.

2/ Revised from previous *Data Book*.

3/ Less than \$50,000.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.

**Table 19.07-- ACREAGE IN CROP, NUMBER OF CROP FARMS, AND VALUE OF CROP SALES: 1993, 2001, 2002, AND 2003**

| Subject                                   | 1993    | 2001   | 2002      | 2003    |
|---|---------|--------|-----------|---------|
| Acreage in crop (1,000 acres):            |         |        |           |         |
| Sugarcane                                 | 132.2   | 46.0   | 47.5      | 47.8    |
| Pineapples (land used for pineapple)      | 22.0    | 20.1   | 19.1      | 16.0    |
| Vegetables and melons (harvested acreage) | 5.3     | 6.5    | 6.8       | 6.4     |
| Fruits, excluding pineapples              | 6.9     | 7.1    | 1/ 6.6    | 6.4     |
| Coffee                                    | 7.0     | 8.0    | 7.2       | 7.3     |
| Macadamia nuts                            | 20.1    | 18.0   | 18.0      | 18.0    |
| All other crops                           | 5.3     | 8.7    | 8.2       | 9.0     |
| Number of crop farms:                     |         |        |           |         |
| Sugar                                     | 35      | 2      | 2         | 2       |
| Pineapples                                | 20      | 15     | 1/ 25     | 25      |
| Vegetables and melons                     | 510     | 575    | 600       | 570     |
| Fruits (excluding pineapples)             | 787     | 1,059  | 1,099     | 1,426   |
| Coffee                                    | 580     | 700    | 710       | 715     |
| Macadamia nuts                            | 650     | 650    | 650       | 650     |
| Taro                                      | 190     | 170    | 150       | 150     |
| Flowers and nursery products              | 662     | 790    | 1/ 870    | 795     |
| Value of crop sales (\$1,000):            |         |        |           |         |
| Sugar (unprocessed cane)                  | 163,000 | 57,800 | 64,300    | 64,400  |
| Pineapples (fresh equivalent)             | 79,850  | 96,337 | 100,616   | 102,849 |
| Vegetables and melons                     | 34,645  | 62,043 | 61,659    | 64,173  |
| Fruits (excluding pineapples)             | 22,173  | 30,190 | 1/ 25,267 | 26,819  |
| Coffee (parchment)                        | 6,525   | 19,600 | 23,250    | 24,070  |
| Macadamia nuts (in shell)                 | 32,980  | 33,040 | 1/ 30,210 | 32,330  |
| Taro                                      | 2,760   | 3,392  | 3,294     | 2,700   |
| Seed Crops 2/                             | 9,600   | 45,000 | 1/ 48,145 | 50,470  |
| Flowers and nursery products              | 69,513  | 88,597 | 1/ 95,715 | 97,686  |

1/ Revised from previous *Data Book* .

2/ Seed crops have been included in this table, replacing field crops of previous years.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.

**Table 19.08-- ACREAGE IN CROP, NUMBER OF CROP FARMS, AND VALUE OF CROP SALES, BY COUNTIES: 2003**

| Subject                                    | Hawaii | Honolulu | Kauai  | Maui   |
|--|--------|----------|--------|--------|
| Acreage in crop (1,000 acres):             |        |          |        |        |
| Sugarcane                                  | -      | -        | 11.1   | 36.7   |
| Pineapples (land used for pineapple)       | (1/)   | 10.1     | (1/)   | 5.9    |
| Vegetables and melons (harvested acreage)  | 1.6    | 3.4      | 0.3    | 1.1    |
| Fruits, excluding pineapples               | 4.1    | 1.0      | 0.8    | 0.5    |
| Coffee                                     | 3.6    | (D)      | (D)    | (D)    |
| Macadamia nuts                             | (D)    | (D)      | (D)    | (D)    |
| All other crops                            | 2.5    | 2.8      | 1.9    | 1.8    |
| Number of crop farms:                      |        |          |        |        |
| Sugar                                      | -      | -        | 1      | 1      |
| Pineapples                                 | 11     | 2        | 7      | 5      |
| Vegetables and melons                      | 230    | 190      | 55     | 95     |
| Fruits (excluding pineapples)              | 746    | 179      | 216    | 285    |
| Coffee                                     | 690    | (D)      | (D)    | (D)    |
| Macadamia nuts                             | (D)    | (D)      | (D)    | (D)    |
| Taro                                       | 40     | 15       | 70     | 25     |
| Flowers and nursery products               | 375    | 210      | 65     | 145    |
| Value of crop sales (\$1,000):             |        |          |        |        |
| Sugar (unprocessed cane)                   | -      | -        | 13,500 | 50,900 |
| Pineapples (fresh equivalent)              | (D)    | 73,023   | (D)    | 29,826 |
| Vegetables, ginger root, herbs, and melons | 14,235 | 37,213   | 2,495  | 10,229 |
| Fruits (excluding pineapples)              | 19,881 | 3,748    | 1,739  | 1,451  |
| Coffee (parchment)                         | 15,200 | (D)      | (D)    | (D)    |
| Macadamia nuts (in shell)                  | (D)    | (D)      | (D)    | (D)    |
| Taro                                       | 335    | (D)      | 1,760  | (D)    |
| Seed crops                                 | (D)    | (D)      | (D)    | (D)    |
| Flowers and nursery products               | 50,819 | 32,349   | 3,203  | 11,315 |

D Withheld to avoid disclosure of individual operations.

1/ Less than 50 acres.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.

**Table 19.09-- SPECIALTY CROPS, FRUITS, AND VEGETABLES: 2003**

[Data shown for crops with sales in excess of \$1,000,000]

| Crop                     | Acreage harvested | Yield per acre (1,000 lb.) | Production (1,000 lb.) | Farm price (cents per lb.) | Value of sales (\$1,000) |
|--------------------------|-------------------|----------------------------|------------------------|----------------------------|--------------------------|
| Specialty crops:         |                   |                            |                        |                            |                          |
| Coffee (2003-04)         | 5,900             | 1.4                        | 8,300                  | 290.0                      | 24,070                   |
| Ginger root              | 150               | 40.0                       | 6,000                  | 90.0                       | 5,400                    |
| Fresh herbs              | (X)               | (X)                        | 4,200                  | (X)                        | 7,245                    |
| Seed crops (2003-04)     | 4,080             | (X)                        | 6,420                  | (X)                        | 50,470                   |
| Macadamia nuts (2003-04) | 17,800            | 3.0                        | 60,000                 | 61.0                       | 32,330                   |
| Fruits:                  |                   |                            |                        |                            |                          |
| Bananas                  | 1,350             | 16.7                       | 22,500                 | 41.0                       | 9,225                    |
| Papayas                  | 1,565             | 27.2                       | 42,600                 | 30.7                       | 13,069                   |
| Vegetables:              |                   |                            |                        |                            |                          |
| Cabbage, Chinese         | 310               | 21.6                       | 6,700                  | 23.0                       | 1,541                    |
| Cabbage, head            | 500               | 25.2                       | 12,600                 | 22.0                       | 2,772                    |
| Corn, sweet              | 830               | 3.0                        | 2,500                  | 51.0                       | 1,275                    |
| Cucumbers                | 410               | 14.4                       | 5,900                  | 48.0                       | 2,832                    |
| Onions, dry              | 330               | 10.0                       | 3,300                  | 84.0                       | 2,772                    |
| Onions, green            | 130               | 12.3                       | 1,600                  | 90.0                       | 1,440                    |
| Peppers, green           | 220               | 15.0                       | 3,300                  | 61.0                       | 2,013                    |
| Taro                     | 1/ 420            | (X)                        | 5,000                  | 54.0                       | 2,700                    |
| Tomatoes                 | 560               | 31.3                       | 17,500                 | 58.0                       | 10,150                   |
| Watermelons              | 450               | 26.4                       | 11,900                 | 24.0                       | 2,856                    |

X Not applicable.

1/ Acreage in crop.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.

**Table 19.10-- SUGARCANE ACREAGE, BY TYPE OF IRRIGATION:  
1993 TO 2004**

| Year | Total cane land | Irrigated cane land |                    | Unirrigated cane land |
|------|-----------------|---------------------|--------------------|-----------------------|
|      |                 | Drip                | Furrow or overhead |                       |
| 1993 | 121,322         | 74,557              | 11,595             | 35,170                |
| 1994 | 98,413          | 68,547              | 10,753             | 19,113                |
| 1995 | 81,957          | 62,462              | 8,416              | 11,079                |
| 1996 | 68,816          | 56,147              | 7,511              | 5,158                 |
| 1997 | 67,820          | 55,585              | 7,115              | 5,120                 |
| 1998 | 67,585          | 55,828              | 6,620              | 5,137                 |
| 1999 | 60,758          | 51,234              | 4,602              | 4,922                 |
| 2000 | 43,821          | 43,821              | -                  | -                     |
| 2001 | 50,410          | 50,410              | -                  | -                     |
| 2002 | 47,476          | 47,476              | -                  | -                     |
| 2003 | 47,733          | 47,733              | -                  | -                     |
| 2004 | 43,465          | 43,465              | -                  | -                     |

Source: Hawaii Agriculture Research Center, records.

**Table 19.11-- LIVESTOCK INVENTORY, 1984 TO 2003, AND BY  
GEOGRAPHIC AREAS, 2003**

[In thousands]

| Year and geographic area | All cattle and calves 1/ | Milk cows 1/ | Hogs and pigs 2/ | Chickens (excluding broilers) 2/ | Bee colonies |
|--------------------------|--------------------------|--------------|------------------|----------------------------------|--------------|
| 1984                     | 221                      | 12           | 47               | 1,195                            | 9            |
| 1985                     | 209                      | 11           | 55               | 1,210                            | 9            |
| 1986                     | 199                      | 12           | 50               | 1,185                            | 9            |
| 1987                     | 203                      | 12           | 47               | 1,212                            | 9            |
| 1988                     | 212                      | 12           | 43               | 1,217                            | 9            |
| 1989                     | 205                      | 11           | 39               | 1,216                            | 9            |
| 1990                     | 215                      | 11           | 36               | 1,183                            | 10           |
| 1991                     | 200                      | 10           | 34               | 1,213                            | 10           |
| 1992                     | 178                      | 11           | 35               | 1,109                            | 9            |
| 1993                     | 165                      | 11           | 33               | 1,012                            | 9            |
| 1994                     | 175                      | 11           | 35               | 981                              | 9            |
| 1995                     | 178                      | 11           | 34               | 933                              | 8            |
| 1996                     | 174                      | 10           | 28               | 876                              | 8            |
| 1997                     | 172                      | 10           | 29               | 863                              | 9            |
| 1998                     | 180                      | 9            | 29               | 747                              | 8            |
| 1999                     | 173                      | 9            | 28               | 721                              | 8            |
| 2000                     | 164                      | 8            | 26               | 722                              | 7            |
| 2001                     | 150                      | 8            | 27               | 659                              | 8            |
| 2002                     | 152                      | 7            | 24               | 625                              | 7            |
| 2003                     | 151                      | 7            | 23               | 600                              | 7            |
| GEOGRAPHIC AREAS: 2003   |                          |              |                  |                                  |              |
| Hawaii County            | 113.0                    | (D)          | 2.2              | (D)                              | (NA)         |
| Honolulu County          | 8.8                      | 3.3          | 13.5             | 482                              | (NA)         |
| Kauai County             | 10.4                     | (D)          | 2.0              | (D)                              | (NA)         |
| Maui County              | 18.8                     | -            | 5.3              | (D)                              | (NA)         |

NA Not available.

D Withheld to avoid disclosing data for individual operations.

1/ As of January 1 of the following year.

2/ As of December 1.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.

**Table 19.12-- NUMBER OF LIVESTOCK OPERATIONS AND VALUE OF LIVESTOCK SALES: 1993, 2001, 2002, AND 2003**

| Subject                                  | 1993   | 2001   | 2002      | 2003   |
|--|--------|--------|-----------|--------|
| Number of livestock operations, Dec. 31: |        |        |           |        |
| Cattle 1/                                | 850    | 2/ 750 | 2/ 750    | 750    |
| Hogs                                     | 350    | 230    | 2/ 210    | 210    |
| Milk                                     | 60     | 2/ 30  | 2/ 30     | 30     |
| Eggs                                     | 55     | 2/ 75  | 2/ 80     | 80     |
| Honey                                    | 18     | 30     | 2/ 30     | 29     |
| Value of livestock sales (\$1,000):      |        |        |           |        |
| Cattle 3/                                | 26,860 | 18,007 | 2/ 18,326 | 17,192 |
| Hogs 3/                                  | 6,293  | 4,514  | 4,788     | 4,345  |
| Milk                                     | 32,035 | 26,546 | 22,467    | 21,449 |
| Eggs                                     | 15,005 | 9,640  | 2/ 8,852  | 9,396  |
| Honey                                    | 828    | 606    | 2/ 1,057  | 1,131  |

1/ Includes beef, dairy, and dairy replacement operations.

2/ Revised from previous *Data Book* .

3/ Excludes interfarm sales; includes out-of-state sales of slaughter cattle and feeder calves.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.



**Table 19.13-- NUMBER OF LIVESTOCK OPERATIONS AND VALUE OF LIVESTOCK SALES, BY COUNTIES: 2003**

| Subject                                  | Hawaii | Honolulu | Kauai | Maui  |
|--|--------|----------|-------|-------|
| Number of livestock operations, Dec. 31: |        |          |       |       |
| Cattle 1/                                | 440    | 50       | 120   | 140   |
| Hogs                                     | 60     | 70       | 30    | 50    |
| Milk                                     | 14     | 6        | 4     | 6     |
| Eggs                                     | 37     | 15       | 8     | 20    |
| Honey                                    | 14     | (D)      | (D)   | (D)   |
| Value of livestock sales (\$1,000):      |        |          |       |       |
| Cattle 2/                                | 13,811 | 203      | 912   | 2,266 |
| Hogs 2/                                  | 440    | 2,594    | 414   | 897   |
| Milk                                     | (D)    | 13,502   | (D)   | (D)   |
| Eggs                                     | (D)    | 6,789    | (D)   | (D)   |

D Withheld to avoid disclosure of individual operations.

1/ Includes beef, dairy, and dairy replacement operations.

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

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.

**Table 19.14-- FLORICULTURE AND NURSERY PRODUCTS, 1994 TO 2004,  
AND BY COUNTIES, 2001 TO 2004**

| County and year    | Number of farms | Growing area  |                             |  |                            |                    | Wholesale value (\$1,000) |
|--------------------|-----------------|---------------|-----------------------------|--|----------------------------|--------------------|---------------------------|
|                    |                 | Total (acres) | Green-house (1,000 sq. ft.) | Artificial shade structure (1,000 sq. ft.) | Natural shade area (acres) | Open field (acres) |                           |
| State total:       |                 |               |                             |  |                            |                    |                           |
| 1994               | 660             | 2,290         | 3,770                       | 21,600                                     | 18                         | 1,690              | 67,005                    |
| 1995               | 705             | 2,698         | 3,770                       | 24,215                                     | 15                         | 2,040              | 68,175                    |
| 1996               | 690             | 2,212         | 2,820                       | 23,405                                     | 10                         | 1,600              | 68,870                    |
| 1997               | 670             | 2,158         | 2,805                       | 23,885                                     | 10                         | 1,535              | 66,655                    |
| 1998               | 745             | 2,679         | 2,810                       | 24,200                                     | 9                          | 2,050              | 73,207                    |
| 1999               | 765             | 2,712         | 2,910                       | 25,695                                     | 15                         | 2,040              | 75,725                    |
| 2000               | 735             | 2,719         | 3,235                       | 25,180                                     | 7                          | 2,060              | 82,684                    |
| 2001               | 790             | 3,049         | 3,175                       | 26,660                                     | 9                          | 2,355              | 88,597                    |
| 2002               | 870             | 3,648         | 3,030                       | 30,415                                     | 10                         | 2,870              | 95,715                    |
| 2003 1/            | 865             | 3,890         | 2,540                       | 27,465                                     | 16                         | 3,185              | 95,601                    |
| 2004               | 920             | 3,874         | 2,625                       | 26,495                                     | 6                          | 3,200              | 94,525                    |
| Counties, 2001:    |                 |               |                             |  |                            |                    |                           |
| Hawaii             | 360             | 1,621         | 2,265                       | 22,010                                     | 9                          | 1,055              | 50,637                    |
| Honolulu           | 220             | 672           | 370                         | 3,625                                      | -                          | 580                | 26,198                    |
| Kauai              | 60              | 164           | 115                         | 295  | -                          | 155                | 1,864                     |
| Maui               | 150             | 592           | 425                         | 730  | -                          | 565                | 9,898                     |
| Counties, 2002:    |                 |               |                             |  |                            |                    |                           |
| Hawaii             | 420             | 2,180         | 2,210                       | 24,125                                     | 10                         | 1,565              | 49,870                    |
| Honolulu           | 230             | 709           | 330                         | 5,055                                      | -                          | 585                | 32,106                    |
| Kauai              | 65              | 193           | 90                          | 495  | -                          | 180                | 2,633                     |
| Maui               | 155             | 566           | 400                         | 740  | -                          | 540                | 11,106                    |
| Counties, 2003: 1/ |                 |               |                             |  |                            |                    |                           |
| Hawaii             | 395             | 2,408         | 1,895                       | 21,295                                     | 16                         | 1,860              | 50,206                    |
| Honolulu           | 230             | 701           | 230                         | 5,035                                      | -                          | 580                | 31,092                    |
| Kauai              | 80              | 180           | 65                          | 360  | -                          | 170                | 3,067                     |
| Maui               | 160             | 601           | 350                         | 775  | -                          | 575                | 11,236                    |
| Counties, 2004:    |                 |               |                             |  |                            |                    |                           |
| Hawaii             | 425             | 2,415         | 1,990                       | 20,850                                     | 6                          | 1,885              | 50,455                    |
| Honolulu           | 235             | 656           | 260                         | 4,580                                      | -                          | 545                | 31,658                    |
| Kauai              | 80              | 234           | 90                          | 310  | -                          | 225                | 2,865                     |
| Maui               | 180             | 569           | 285                         | 755  | -                          | 545                | 9,547                     |

1/ Data have been revised from previous year *Data Book*.

Source: Hawaii Agricultural Statistics Service, *Hawaii Flowers & Nursery Products, Annual Summary*, various issues. See also <<http://www.nass.usda.gov/hi/flower/flower.pdf>> accessed June 17, 2005.

**Table 19.15-- FLORICULTURE AND NURSERY PRODUCTS, BY  
COMMODITY: 2004**

[Shown for commodities with value of sales over \$500,000 and growers with total sales of  
\$10,000 or more]

| Commodity                  | Number of farms having sales | Number sold    |        | Value of sales (\$1,000) |
|----------------------------|------------------------------|----------------|--------|--------------------------|
|                            |                              | Unit           | Number |                          |
| Selected cut flowers:      |                              |                |        |                          |
| Anthuriums                 | 59                           | 1,000 dozens   | 617    | 4,665                    |
| Ginger, red                | 55                           | 1,000 dozens   | 124    | 957                      |
| Heliconias                 | 59                           | 1,000 dozens   | 69     | 820                      |
| Proteas                    | 32                           | 1,000 stems    | 1,921  | 1,416                    |
| Orchids:                   |                              |                |        |                          |
| Sprays: Dendrobiums        | 50                           | 1,000 dozens   | 453    | 3,194                    |
| Sprays: Oncidiums          | 29                           | 1,000 dozens   | 60     | 705                      |
| Potted: Dendrobiums        | 80                           | 1,000 pots     | 1,243  | 6,748                    |
| Potted: Oncidiums          | 42                           | 1,000 pots     | 457    | 3,066                    |
| Potted: Phalaenopsis       | 31                           | 1,000 pots     | 166    | 966                      |
| Lei or individual flowers: |                              |                |        |                          |
| Dendrobiums                | 26                           | Million blooms | 21.2   | 593                      |
| Plumerias                  | 13                           | Million blooms | 16.0   | 513                      |
| Tuberoses                  | 7                            | Million blooms | 28.2   | 1,302                    |
| Foliage:                   |                              |                |        |                          |
| Potted, dracaena           | 29                           | (X)            | (NA)   | 5,735                    |
| Potted, palms              | 48                           | (X)            | (NA)   | 7,322                    |
| Ti leaves, cut             | 41                           | 1,000 leaves   | 7,200  | 669                      |
| Potted flowering plants:   |                              |                |        |                          |
| Anthuriums                 | 28                           | 1,000 pots     | 164    | 879                      |
| Bromeliads                 | 11                           | 1,000 pots     | 131    | 582                      |
| Poinsettias                | 32                           | 1,000 pots     | 328    | 1,414                    |
| Plant rentals              | 45                           | (X)            | (NA)   | 3,385                    |
| Landscape plants           | 126                          | (X)            | (X)    | 18,519                   |

X Not applicable.

NA Not available.

Source: Hawaii Agricultural Statistics Service, *Hawaii Flowers & Nursery Products, Annual Summary*, (June 9, 2005), pp. 3-9. See also <<http://www.nass.usda.gov/hi/flower/flower.pdf>> accessed June 17, 2005.

**Table 19.16-- OUT-OF-STATE SALES OF FLORICULTURE AND NURSERY PRODUCTS: 2000 TO 2004**

[Thousand of dollars. 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.]

| <b>Type</b>                     | <b>2000</b> | <b>2001</b> | <b>2002</b> | <b>2003</b> | <b>2004</b> |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|
| Total sales                     | 49,450      | 52,100      | 47,870      | 1/ 50,940   | 47,515      |
| Anthuriums, cut                 | 10,600      | 8,800       | 7,700       | 8,500       | 6,475       |
| Dendrobiums, sprays             | 3,395       | 3,500       | 3,400       | 3,600       | 3,900       |
| Foliage, potted                 | 13,525      | 15,800      | 10,700      | 11,000      | 11,300      |
| Heliconias                      | 1,400       | 1,020       | 1,040       | 1,200       | 1,200       |
| Dendrobiums, potted             | 3,850       | 4,900       | 4,510       | 4,590       | 4,600       |
| Proteas                         | 1,930       | 1,560       | 1,620       | 1,800       | 1,715       |
| Other flowers, nursery products | 14,750      | 16,520      | 18,900      | 1/ 20,250   | 18,325      |

1/ Revised from previous *Data Book* .

Source: Hawaii Agricultural Statistics Service, *Hawaii Flowers & Nursery Products, Annual Summary*, (June 9, 2005), p. 14. See also <<http://www.nass.usda.gov/hi/flower/flower.pdf>> accessed June 17, 2005.

**Table 19.17-- AGRICULTURAL LABOR: HIRED WORKERS ON FARMS, BY TYPE OF FARM, 1993 TO 2004**

[Figures are averages based on January, April, July, and October surveys]

| Year | Hired workers 1/ | Hired workers by type of farm |           |       |
|------|------------------|-------------------------------|-----------|-------|
|      |                  | Sugar                         | Pineapple | Other |
| 1993 | 8,700            | 2,500                         | 1,400     | 4,800 |
| 1994 | 8,100            | 2,300                         | 1,300     | 4,500 |
| 1995 | 7,300            | 1,700                         | 1,200     | 4,400 |
| 1996 | 7,400            | 1,400                         | 1,200     | 4,800 |
| 1997 | 7,000            | 1,200                         | 1,300     | 4,500 |
| 1998 | 7,400            | 1,200                         | 1,200     | 5,000 |
| 1999 | 7,600            | 1,200                         | 1,300     | 5,200 |
| 2000 | 7,800            | 1,000                         | 1,200     | 5,600 |
| 2001 | 7,400            | 800                           | 1,200     | 5,500 |
| 2002 | 7,500            | 900                           | 1,300     | 5,400 |
| 2003 | 7,300            | 700                           | 1,200     | 5,300 |
| 2004 | 7,400            | 700                           | 1,200     | 5,500 |

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

Source: Hawaii Agricultural Statistics Service, *Hawaii Agricultural Labor*, Quarterly, various issues.

**Table 19.18-- GENERAL EXCISE TAX BASE FOR PRODUCING:  
1993 TO 2004**

[In \$1,000. Data are on a cash basis accounting. "Producing" refers to the raising and production of agricultural products in their natural state, the production of natural resource products, fishing, and aquaculture]

| <b>Year 1/</b> | <b>Amount</b> | <b>Year 1/</b> | <b>Amount</b> | <b>Year 1/</b> | <b>Amount</b> |
|----------------|---------------|----------------|---------------|----------------|---------------|
| 1993           | 474,861       | 1997           | 505,557       | 2001           | 499,896       |
| 1994           | 467,174       | 1998           | 478,201       | 2002           | 522,418       |
| 1995           | 457,538       | 1999           | 501,501       | 2003           | 543,561       |
| 1996           | 479,009       | 2000           | 519,272       | 2004           | 550,949       |

1/ Calendar year in which reported, including "prior years" reports. Income received in December is reported the following January, hence these annual totals generally refer to an "income year" ended November 30.

Source: Hawaii State Department of Taxation, "General Excise and Use Tax Base" (annual tabular release).

**Table 19.19-- AGRICULTURAL CHEMICALS USED, INCLUDING FERTILIZER:  
1992, 1997, AND 2002**

[Data are based on a sample of farms]

| Chemicals used  | Unit                | 1992    | 1997    | 2002    |
|---|---------------------|---------|---------|---------|
| Any fertilizer, manure or chemical used 1/  | farms               | 4,476   | 4,531   | 4,586   |
| Commercial fertilizer 2/  | farms               | 4,028   | 4,051   | 4,326   |
|   | acres on which used | 200,723 | 133,927 | 127,996 |
|   | \$1,000             | 30,574  | 25,653  | 17,791  |
| Agricultural chemicals  | farms               | 3,853   | 3,834   | 3,627   |
|   | \$1,000             | 20,396  | 17,187  | 16,134  |
| Sprays, dusts, granules, fumigants, etc., to control -- Insects on hay and other crops 3/ | farms               | 1,790   | 1,604   | 1,840   |
|   | acres on which used | 53,593  | 34,673  | 41,616  |
| Nematodes in crops  | farms               | 489     | 350     | 275     |
|   | acres on which used | 15,587  | 11,086  | 8,169   |
| Diseases in crops and orchards  | farms               | 1,018   | 1,033   | 800     |
|   | acres on which used | 21036   | 33,343  | 30,824  |
| Weeds, grass, or brush in crops and pasture   | farms               | 2,820   | 2,685   | 2,820   |
|   | acres on which used | 178,422 | 122,576 | 101,258 |
| Chemicals used for defoliation or for growth control of crops or thinning of fruit        | farms               | 157     | 184     | 216     |
|   | acres on which used | 40,292  | 15,184  | 26,378  |

1/ Data for 1997 exclude lime and manure.

2/ Expense data for 1997 exclude lime.

3/ Data for 1997 include treatment of crops, including hay, but not other land.

Source: U.S. Department of Agriculture, *1997 Census of Agriculture, Hawaii*, (March 1999), p. 23 and U.S. Department of Agriculture, *2002 Census of Agriculture, Hawaii*, (June 2004), p. 32.

**Table 19.20-- AQUACULTURE INDUSTRY OPERATIONS: 1970 TO 2003**

| Year | Number of operations, Dec. 31 | Acreage, Dec. 31 | Production (1,000 lb.) | Value (\$1,000) |
|------|-------------------------------|------------------|------------------------|-----------------|
| 1970 | 2                             | 193              | 20                     | 11              |
| 1971 | 2                             | 193              | 17                     | 17              |
| 1972 | 2                             | 193              | 18                     | 23              |
| 1973 | 3                             | 203              | 34                     | 34              |
| 1974 | 4                             | 213              | 41                     | 136             |
| 1975 | 10                            | 234              | 82                     | 178             |
| 1976 | 14                            | 235              | 94                     | 210             |
| 1977 | 25                            | 246              | 123                    | 281             |
| 1978 | 25                            | 320              | 178                    | 525             |
| 1979 | 23                            | 493              | 246                    | 1,531           |
| 1980 | 37                            | 575              | 320                    | 1,655           |
| 1981 | 41                            | 547              | 338                    | 1,868           |
| 1982 | 44                            | 643              | 551                    | 2,625           |
| 1983 | 42                            | 496              | 345                    | 1,605           |
| 1984 | 47                            | 474              | 441                    | 2,300           |
| 1985 | 48                            | 465              | 583                    | 2,780           |
| 1986 | 44                            | 444              | 1,015                  | 3,549           |
| 1987 | 45                            | 437              | 1,689                  | 6,263           |
| 1988 | 44                            | 477              | 1,170                  | 5,560           |
| 1989 | 46                            | 479              | 1,264                  | 6,835           |
| 1990 | 53                            | 489              | 1,452                  | 9,241           |
| 1991 | 71                            | 595              | 1,207                  | 6,884           |
| 1992 | 83                            | 615              | 1,272                  | 7,134           |
| 1993 | 90                            | 640              | 1,296                  | 7,469           |
| 1994 | 105                           | 605              | 990                    | 9,036           |
| 1995 | 107                           | 635              | 1,410                  | 13,307          |
| 1996 | 117                           | 695              | 1,992                  | 15,656          |
| 1997 | 110                           | (NA)             | (NA)                   | 16,600          |
| 1998 | 105                           | (NA)             | 2,243                  | 16,620          |
| 1999 | 100                           | (NA)             | 2,404                  | 18,102          |
| 2000 | 85                            | (NA)             | 2,898                  | 22,170          |
| 2001 | 80                            | (NA)             | (NA)                   | 22,200          |
| 2002 | 70                            | (NA)             | (NA)                   | 25,180          |
| 2003 | 85                            | (NA)             | (NA)                   | 27,650          |

NA Not available.

Source: Hawaii State Department of Land and Natural Resources, Aquaculture Development Program (1970-1997), records and Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual) and <[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> (1998-2003) accessed April 8, 2005.



**Table 19.21-- AQUACULTURE OPERATIONS, ACREAGE, PRODUCTION,  
AND VALUE, BY COUNTIES: 2002 AND 2003**

| Subject                | State total | Hawaii | Honolulu | Kauai | Maui |
|------------------------|-------------|--------|----------|-------|------|
| 2002                   |             |        |          |       |      |
| Number of operations   | 70          | 26     | 30       | 4     | 10   |
| Production (1,000 lb.) | (D)         | (D)    | (D)      | (D)   | (D)  |
| Shellfish 1/           | 1,378       | 269    | 414      | (D)   | (D)  |
| Finfish                | 542         | (D)    | (D)      | (D)   | (D)  |
| Algae                  | (X)         | (X)    | (X)      | -     | (X)  |
| Value (\$1,000)        | 25,180      | 17,328 | 4,180    | (D)   | (D)  |
| Shellfish              | 8,212       | 3,050  | 2,351    | (D)   | (D)  |
| Finfish                | 2,683       | (D)    | (D)      | (D)   | (D)  |
| Algae                  | 10,505      | 9,627  | (D)      | -     | (D)  |
| Other 2/               | 3,780       | (D)    | (D)      | -     | (D)  |
| 2003                   |             |        |          |       |      |
| Number of operations   | 85          | 31     | 40       | 4     | 10   |
| Production (1,000 lb.) | (D)         | (D)    | (D)      | (D)   | (D)  |
| Shellfish 1/           | 1,312       | 572    | 349      | (D)   | (D)  |
| Finfish                | 397         | (D)    | (D)      | -     | (D)  |
| Algae                  | (X)         | (X)    | (X)      | -     | (X)  |
| Value (\$1,000)        | 27,650      | 19,639 | 4,674    | (D)   | (D)  |
| Shellfish              | 9,719       | 5,508  | 2,096    | (D)   | (D)  |
| Finfish                | 1,740       | (D)    | (D)      | -     | (D)  |
| Algae                  | 11,848      | 10,923 | (D)      | -     | (D)  |
| Other 2/               | 4,343       | (D)    | (D)      | (D)   | (D)  |

D Not shown to avoid disclosure of individual operations, but combined and included in the state total.

X Not Applicable.

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

2/ Nonfood products: ornamental fish, seedstock, other. Items not sold by weight.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and  
<[http://www.nass.usda.gov/hi/stats/t\\_of\\_c.htm](http://www.nass.usda.gov/hi/stats/t_of_c.htm)> accessed April 8, 2005.