





SHASTA AGRICULTURE



SHASTA COUNTY

DEPARTMENT OF AGRICULTURE/WEIGHTS & MEASURES

PAUL KJOS

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TO: Karen Ross, Secretary

California Department of Food and Agriculture

The Honorable Board of Supervisors, County of Shasta County

Leonard Moty, District 2, Chairman Joe Chimenti, District I Mary Rickert, District 3 Steve Morgan, District 4 Les Baugh, District 5

Lawrence G. Lees, County Executive Officer,

I am pleased to submit, in accordance with Section 2279 of the California Food and Agricultural Code, Shasta County's Annual Crop and Livestock Report for 2018. This report summarizes the acreage, production, and gross values of agricultural commodities and livestock produced in Shasta County. It does not attempt to show county inventory, cost of production, or net return to growers.

The value of agricultural products produced in the county decreased slightly from the previous year to a total value of \$81,402,000. This represents a decrease of just under 4% from the previous reporting year.

The Livestock and Field Crops segments saw slight decreases while both Apiary and Nursery segments saw slight increases from the previous year. The Fruit & Nut Crop segment saw a decrease of over 33% in overall values, as a result of plummeting prices for walnuts.

The bright spot for the 2018 Crop and Livestock Report continues to be the bee production components of the Apiary industry. While values are down for both honey production and pollination services, increases in production and value of package bees, queens, and nuclei resulted in an overall segment increase. Shasta County's grass and timothy hay crops say overall values increase in spite of decreased acreage, due to increased yields in both sectors. Depressed cattle prices throughout the year led to an overall decrease in livestock value but increased numbers sold kept the value within 3% of the 2017 value.

I would like to thank the producers, agricultural business representatives, and public agencies that cooperated in supplying the data necessary to produce this report. I would also like to give special recognition to Agricultural Investigator John Ingram for his leadership in the development of this report.

Sincerely,

PAUL KJOS

Agricultural Commissioner

Mission Statement

The Shasta County Department of Agriculture/Weights and Measures is entrusted with the mission of promoting and protecting the agricultural industry of the County and its environment, ensuring the health and safety of the County's citizens, and fostering confidence and equity in the marketplace through education and the fair and uniform enforcement of laws, regulations, and ordinances enacted by the people of the State of California and the County of Shasta.

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Seasonal Aides

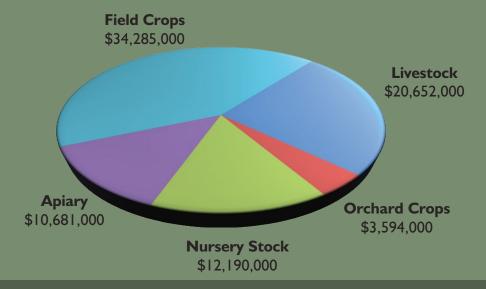
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Shasta County Livestock & Crop Summary

2018 TOTAL PRODUCTION VALUE: \$81,402,000



COMPARISON SUMMARY

| | 2018 | 2017 | 2016 | 2015 |
|-----------------------|--------------|--------------|--------------|--------------|
| LIVESTOCK | \$20,652,000 | \$21,927,000 | \$20,976,000 | \$27,884,000 |
| APIARY | 10,681,000 | 10,356,000 | 8,777,000 | 7,900,000 |
| FIELD CROPS | 34,285,000 | 34,800,000 | 33,023,000 | 33,034,000 |
| NURSERY STOCK | 12,190,000 | 12,181,000 | 14,347,000 | 6,579,000 |
| FRUIT & NUT CROPS | 3,594,000 | 5,474,000 | 4,010,000 | 5,518,000 |
| | | | | |
| TOTALS | 81,402,000 | \$84,738,000 | \$81,133,000 | \$80,915,000 |
| TIMBER | \$51,315,661 | \$39,645,935 | \$37,004,537 | \$37,454,055 |
| OTHER FOREST PRODUCTS | \$3,878,097 | \$2,251,605 | \$3,073,158 | \$9,681,694 |
| | | | | |

Totals may not add due to rounding.

TOTAL VALUE OF AGRICULTURAL PRODUCTS 2008-2018



Livestock Production

| ITEM | YEAR | NO. HEAD | TOTAL LIVEWEIGHT | UNIT | AVG/UNIT | TOTAL |
|------------------------|--------------|------------------|---------------------|--------------|----------------------|------------------------------|
| CATTLE & CALVES | | | | | | |
| Calves and Yearlings | 2018 2017 | 11,500 11,100 | 74,750 72,150 | cwt cwt | 135.69 142.84 | \$10,143,000 \$10,306,000 |
| Culled Cattle | 2018 2017 | 2,300 2,500 | 28,750 31,250 | cwt cwt | 52.75 64.98 | 1,517,000 2,031,000 |
| Breeding Stock | 2018 2017 | 2,600 2,800 | | head head | 1,664.00 1,475.00 | 4,326,000 4,130,000 |
| Stocker/Pasture Cattle | 2018 2017 | 8,800 8,800 | 11,440 11,440 | cwt cwt | 128.25 136.50 | 1,467,000 1,562,000 |
| TOTAL CATTLE | 2018 2017 | | | | | \$17,453,000 \$18,029,000 |
| SHEEP & LAMBS | 2018 2017 | 2,200 2,200 | 2,640 2,662 | cwt cwt | 152.50 161.25 | 403,000 429,000 |
| SWINE All Classes | 2018 2017 | 800 800 | 1,800 1,800 | cwt cwt | 61.25 62.50 | 110,000 113,000 |
| OTHER LIVESTOCK* | 2018 2017 | | | | | 2,686,000 3,356,000 |
| TOTAL LIVESTOCK | 2018 2017 | | | | | \$20,652,000 \$21,927,000 |

^{*}Fish, Poultry, Goats, Livestock Products, Alpacas etc.





Forest Products

| ITEM | YEAR | PRODUCTION | UNIT | TOTAL |
|--------------------------|--------------|--------------------|------------------------------------|------------------------------|
| TIMBER | 2018 2017 | 161,058 140,284 | million bd. ft. million bd. ft. | \$51,315,661 \$39,645,935 |
| MISC. FOREST PRODUCTS | 2018 2017 | | | \$3,878,097 \$2,279,077 |

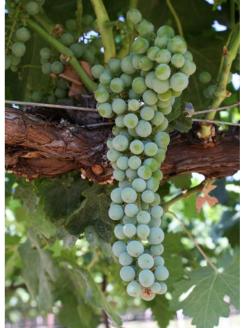
^{*}Cull Logs, Pulp Chips & Hardwood Logs, Wood Produced Fuel Chips, Poles & Pilings, Misc. Small Sawlogs, Misc. Conifer Species.

Fruit & Nut Crops

| CROP | YEAR | HARVESTED ACRES | PER ACRE | TOTAL | UNIT | AVG/ UNIT | TOTAL |
|--------------------------------|--------------|--------------------|-------------|----------------|------------|--------------------------|----------------------------|
| WALNUTS | 2018 2017 | 1,300 1,300 | 1.4 1.4 | 1,820 1,820 | ton ton | \$1,637.00 \$2,594.00 | \$2,979,000 \$4,721,000 |
| MISC CROPS* | 2018 2017 | | | | | | 112,000 271,000 |
| WINE GRAPES Black and White | 2018 2017 | 170 170 | 2.6 2.5 | 442 425 | ton ton | 1,137.00 1,135.00 | 503,000 482,000 |
| TOTAL ORCHARD CROPS | 2018 2017 | | | | | | \$3,594,000 \$5,474,000 |

^{*}Apples, Olives, Stone Fruit, Pistachios, Berries etc.







Field Crops

| | \/ - | HARVESTED | PER | | | AVG/ | |
|-------------|-------------|-----------|-------|-----------|------|--------|--------------|
| CROP | YEAR | ACRES | ACRE | TOTAL | UNIT | UNIT | TOTAL |
| WILD RICE | 2018 | 5,800 | 1,465 | 8,497,000 | lb | \$.66 | \$5,608,000 |
| | 2017 | 5,800 | 1,526 | 8,850,800 | lb | \$.69 | \$6,107,000 |
| MINT | 2018 | 700 | 86 | 60,200 | lb | 19.64 | 1,182,000 |
| | 2017 | 700 | 104 | 72,800 | lb | 19.95 | 1,452,000 |
| MISC CROPS* | 2018 | | | | | | 979,000 |
| | 2017 | | | | | | 886,000 |
| HAY | | | | | | | |
| Grass | 2018 | 3,500 | 5.0 | 17,500 | ton | 245.00 | 4,288,000 |
| | 2017 | 3,800 | 4.1 | 15,580 | ton | 245.00 | 3,817,000 |
| Alfalfa | 2018 | 3,000 | 6.0 | 18,000 | ton | 203.00 | 3,654,000 |
| | 2017 | 3,500 | 6.5 | 22,750 | ton | 224.00 | 5,096,000 |
| Other Hay | 2018 | 11,000 | 2.7 | 29,700 | ton | 174.00 | 5,168,000 |
| | 2017 | 13,000 | 2.7 | 35,100 | ton | 124.00 | 4,352,000 |
| Timothy Hay | 2018 | 2,800 | 6.2 | 17,360 | ton | 297.00 | 5,156,000 |
| | 2017 | 3,200 | 5.5 | 17,600 | ton | 275.00 | 4,840,000 |
| PASTURE | | | | | | | |
| Irrigated | 2018 | 28,000 | | | acre | 140.00 | 3,920,000 |
| | 2017 | 28,000 | | | acre | 140.00 | 3,920,000 |
| Improved | 2018 | 100,000 | | | acre | 14.00 | 1,400,000 |
| | 2017 | 100,000 | | | acre | 14.00 | 1,400,000 |
| Rangeland | 2018 | 293,000 | | | acre | 10.00 | 2,930,000 |
| | 2017 | 293,000 | | | acre | 10.00 | 2,930,000 |
| TOTAL | 2018 | | | | | | \$34,285,000 |
| FIELD CROPS | 2017 | | | | | | \$34,800,000 |

^{*} Grain, Seed, Vegetables, Garlic etc.







| ITEM | YEAR | PRODUCTION | UNIT | AVG/UNIT | TOTAL |
|-----------------------|--------------|------------|----------|----------|------------------------------|
| HONEY | 2018 | 48,283 | lb | 3.61 | \$174,000 |
| | 2017 | 144,928 | lb | 1.96 | \$285,000 |
| QUEENS | 2018 | 209,236 | ea | 25.73 | 5,384,000 |
| | 2017 | 219,845 | ea | 24.28 | 5,339,000 |
| POLLINATION | 2018 | 18,056 | colonies | 194.57 | 3,513,000 |
| | 2017 | 18,423 | colonies | 192.87 | 3,464,000 |
| MISC APIARY PRODUCTS* | 2018 2017 | | | | 1,610,000 1,268,000 |
| TOTAL APIARY PRODUCTS | 2018 2017 | | | | \$10,681,000 \$10,356,000 |

^{*} Includes Package Bees, Beeswax, Nuclei and Medicinal Bees





Shasta County's - 2018 Agricultural Export Trade Partners

International trade is a vital component of Shasta County's agricultural economy, with strawberry nursery plants and timber for poles being the majority of products exported. There were over 250 certificates issued to ship commodities produced here around the world. Shasta County exported agricultural commodities to the following twenty-nine countries in 2018.

Albania
Guatemala
Mozambique
Argentina
Haiti
Panama
Canada
India
Singapore
China

Indonesia
Spain
Cyprus
Jordan
Sri Lanka
Dominican Republic
Korea, Republic of
Tunisia
Ecuador
Kuwait

Ukraine
Finland
Lebanon
United Kingdom
Germany
Mexico
Uruguay
Greece
Morocco



Nursery Stock

| CROP | YEAR | TOTAL | AVG/ UNIT | UNIT | TOTAL |
|------------------------|--------------|------------------|--------------|----------------|------------------------------|
| NURSERY STOCK* | 2018 2017 | | | | \$11,957,000 \$11,978,000 |
| CHRISTMAS TREES | 2018 2017 | 16,373 13,798 | each each | 14.25 14.69 | 233,000 203,000 |
| TOTAL NURSERY STOCK | 2018 2017 | | | | \$12,190,000 \$12,181,000 |

^{*} Strawberry Nursery Stock, Ornamentals







Direct Marketing & Organic Farming

Direct Marketing Program

Direct marketing allows the sale of agricultural products from producers and certified producers within the state directly to consumers or to individuals, organizations, or entities that later sell or distributes the products directly to end users. This all takes place while maintaining sufficient regulatory control to ensure that the agricultural products are of acceptable quality and that the selling activities are conducted honestly and fairly.

Certified Farmers' Markets - 7

Certified Producers - 50

Certified Farmers' Markets

Tuesday Churn Creek Market Saturday Redding Market Palo Cedro 50 Mile Market Wednesday Burney Market Sunday Turtle Bay Market

Thursday Anderson Market
The Market, Grown & Made

Registered Organic Program Organic Products

Fruits, Vegetables, Nuts, Grains, Seed Crops, Nursery Stock, Pasture, Rangeland, Hay, Wild Rice Number of Farms

rms Acres

8,651







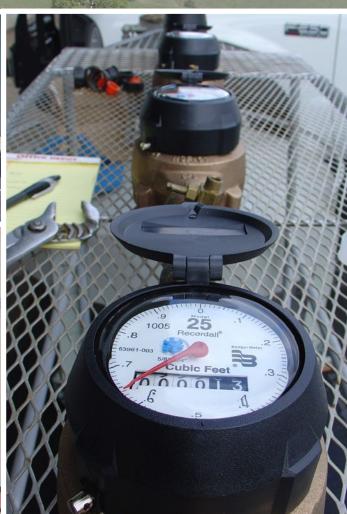
Weights and Measures

REGISTERED DEVICES 2018:

| Computing/Electronic | 444 | Hopper Scale | I | LPG Stationary Meters | 67 |
|----------------------|-----|------------------------|------|-----------------------|-------|
| Hanging/Spring Scale | 26 | Wire/Cordage/Rope | 37 | LPG Vehicle Meters | 29 |
| Monorail/Meat Beam | 3 | Тахі | 20 | Electric Meters | 2313 |
| Livestock | 32 | Retail Water Dispenser | 13 | Vapor Meters | 2258 |
| Vehicle Scales | 52 | Retail Motor Fuel | 2867 | Water Meters | 1252 |
| Railroad Scales | 2 | Wholesale Fuel | 20 | | |
| Platform Scale | 95 | Vehicle Meters | 66 | Total Devices | 9,597 |







2018 Sustainable

During the course of 2018, 8 "A" rated pests were intercepted. An "A" rated pest is one of known economic or environmental detriment. Significant pest interceptions included a first ever Oriental Fruit Fly, Scotch Thistle, Diffuse Knapweed, Skeleton Weed, Dagger Flower, Gray Pineapple Mealybug, Pacific Mealybug, and Pineapple Mealybug.

Pest Exclusion

| Inspection Type | Premise Visited | Shipments Inspected | Rejections | Pest Interceptions |
|-----------------|-----------------|---------------------|------------|--------------------|
| Post Office | 137 | 316 | 0 | 0 |
| Parcel Service | 224 | 2075 | 19 | 19 |
| Gypsy Moth | 8 | 8 | 0 | 0 |
| Truck | 37 | 290 | 0 | 0 |

Pest Detection

In July 2018, Shasta County Department of Agriculture staff trapped an Oriental Fruit Fly in one of the routine pest detection traps deployed throughout the county. The find was in SW Redding. A second fly was trapped in August. These represent the first exotic fruit flies ever detected in the County.

With assistance of California Department of Agriculture staff, county personnel deployed a total of 429 traps to determine if a breeeding population and infestation was present and the extent of any infestation. The result of six months of negative finds in the traps was that the two isolated finds were unrelated and no infestation was declared. How they arrived in the County and where they originated was never determined.

| Тгар Туре | Number of Traps Deployed |
|--|-----------------------------|
| Jackson Trap Mediterranean Fruit Fly Melon Fruit Fly Oriental Fruit Fly | 165 57 57 |
| Delta Trap Gypsy Moth | 300 |
| Japanese Beetle Trap Japanese Beetle | 80 |
| Glassy-winged Sharpshooter | 300 |
| Light Brown Apple Moth | 190 |
| European Grapevine Moth | 19 |

Pest Eradication

Pest

Ailanthus, Canada Thistle, Chinese Wisteria,
Dalmation Toadflax, Diffuse Knapweed, Marlahan
Mustard, Mediterranean Sage, Musk Thistle, Oblong
Spurge, Perennial Pepperweed, Scotch Broom,
Scotch Thistle, Skeletonweed, Spotted Knapweed,
Squarrose Knapweed, Stinkwort.

Agent/Mechanism

Integrated Vegetation Management

Scope of Program

528 sites spread over 40,934 acres throughout the County

Agriculture Report

Pest Management – Biological Control

Pest

Yellow Starthistle, Centaurea solstitialis



Agent/Mechanism

Flower Weevil - Larinus curtus, Seed Weevil - Bangasternus orientalis, Hairy Weevil Eustenopus villosus, Gall Fly - Urophora sirunaseva, Peacock Fly - Chaetorellia australis, YST Rust Fungus - Puccinia jaceae var solstitialis

Bull Thistle, Cirsium vulgare



Gall Fly - Urophora stylata

Spotted Knapweed, Centaurea maculosa



Gall Fly - Urophora quadrifasciata, Gall Fly - Urophora affinis, Lesser Knapweed Weevil Larinus minutus, Root Moth - Agapeta zoegana, Root Boring Weevil – Cyphocleonus achates, Seedhead Weevil - Bangasternus fausti, Seedhead Fly - Terellia virens

Squarrose Knapweed, Centaurea squarrosa



Lesser Knapweed Weevil - Larinus minutus, Bronze Rootborer – Sphenoptera jugoslavica

Purple Loosestrife, Lythrum salicaria



Leaf Beetles - Galerucella calmariensis, Galerucella pusilla, Seed Weevil - Nanophyes Marmoratus, Root Weevil - Hylobius transversovittatus

Puncture Vine, Tribulus terrestris



Seed Weevil - Micolarinus lareynii, Stem Weevil - Micolarinus lypriformis

St. Johnswort, Hypericum perforatum



Klamath Weed Beetle - Chrysolina sp.

Red Gum Lerp Psyllid, Glycaspis brimblecombei



Psyllid Parasitoid Wasp - Psyllaephagus bliteous

