## Chen COLNTY

## 2022 ANNUAL CROP \& LIVESTOCK REPORT

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September 15, 2023
Enclosed is the 2022 Annual Crop and Livestock Report for Glenn County, in accordance with Section 2279 and 2272 of the California Food and Agriculture Code.

Agriculture continues to stand as the top industry within the county. The gross production value of agricultural commodities for the year 2022 amounted to $\$ 581,950,000$. This reflects a notable $28 \%$ reduction compared to the gross agricultural production value of $\$ 808,720,000$ recorded in the previous year, 2021.

Almonds maintain their prominent position as the top commodity in Glenn County, commanding a value of $\$ 105,925,000$. However, this figure marks a substantial $54 \%$ decline from the 2021 total, primarily attributable to a $52 \%$ decrease in yield compared to the previous year. Dairy milk secures the second spot, with a value of $\$ 94,512,000$, reflecting a notable $37 \%$ increase from the 2021 reported figures. Rice, on the other hand, slips to third place, registering a value of $\$ 76,606,000$, representing a significant $51 \%$ decrease from the previous year's report. When considering the combined values of almonds, dairy milk, and rice, they collectively contribute $48 \%$ to the overall commodity value for the year 2022.

Additionally, rice acreage dropped $65 \%$ from last year's report, walnut price per ton decreased $41 \%$ from last year's report and table olive yields decreased by $64 \%$ from last year's report. At the end of this report, a detailed explanation on this incredibly tumultuous year is included.

The figures presented in this report represent gross receipts received by growers and should not be misconstrued as reflecting their net income. These values do not encompass the varied costs associated with production, marketing, or transportation.

I would like to extend my sincere appreciation to all the individuals, related agencies, and members of the agricultural industry who collaborated and provided valuable assistance in the development of this report. Their collective efforts were instrumental in its development. In particular, I would like to express my gratitude to Mirna Albarran-Jack for her pivotal role in this project. Mirna's dedication in requesting grower data, collecting values, designing the report, and overseeing the compilation of the 2022 Glenn County Crop \& Livestock Report has been truly commendable.

Respectfully submitted,


Marcie Skelton
Glenn County Agricultural Commissioner/Sealer of Weights \& Measures

## FRUIT \& NUT CROPS



## FIELD CROPS

| Commodity | Year | Bearing <br> Acreage | Yield Per Acre | Total | Unit | \$ Per Unit | Total Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alfalfa | 2022 | 8,929 | 6.71 | 59,914 | Ton | \$330 | \$19,772,000 |
|  | 2021 | 7,748 | 7.12 | 55,166 |  | \$230 | \$12,688,000 |
| Bean | 2022 | 362 | 1.30 | 471 | Ton | \$1,009 | \$475,000 |
|  | 2021 | 575 | 1.10 | 633 |  | \$1,069 | \$677,000 |
| Corn, Fodder | 2022 | 5,259 | 6.05 | 31,817 | Ton | \$269 | \$8,559,000 |
|  | 2021 | 9,859 | 6.55 | 64,576 |  | \$240 | \$15,498,000 |
| Corn, Silage | 2022 | 566 | 25.30 | 14,320 | Ton | \$72 | \$1,031,000 |
|  | 2021 | 518 | 23.05 | 11,940 |  | \$59 | \$704,000 |
| Cotton, Lint | 2022 | 1,510 | 3.00 | 4,530 | Bale | \$350 | \$1,586,000 |
|  | 2021 | 1,898 | 3.00 | 5,694 |  | \$350 | \$1,993,000 |
| Cotton, Seed | 2022 |  |  | 1,888 | Ton |  | \$755,000 |
|  | 2021 |  |  | 2,475 |  |  | \$990,000 |
| Hay, Other | 2022 | 1,553 | 4.09 | 6,352 | Ton | \$291 | \$1,848,000 |
|  | 2021 | 2,408 | 3.98 | 9,584 |  | \$186 | \$1,783,000 |
| Oats, Fodder | 2022 | 3,989 | 3.25 | 12,964 | Ton | \$190 | \$2,463,000 |
|  | 2021 | 4,621 | 3.04 | 14,048 |  | \$141 | \$1,981,000 |
| Rice | 2022 | 21,492 | 4.93 | 105,956 | Ton | \$723 | \$76,606,000 |
|  | 2021 | 61,120 | 5.26 | 321,491 |  | \$483 | \$155,280,000 |
| Wheat | 2022 | 6,638 | 3.52 | 23,366 | Ton | \$305 | \$7,127,000 |
|  | 2021 | 7,807 | 3.98 | 31,072 |  | \$190 | \$5,904,000 |
| Wheat, Silage | 2022 | 3,657 | 10.00 | 36,570 | Ton | \$35 | \$1,280,000 |
|  | 2021 | 5,205 | 10.00 | 52,050 |  | \$35 | \$1,822,000 |
| Miscellaneous | 2022 | 5,327 | Includes: Organic Corn, Organic Rice, Barley, Safflower, Straw, Sudan Grass, and Sorghum |  |  |  | \$3,205,000 |
|  | 2021 | 8,348 |  |  |  |  | \$3,218,000 |
| TALS | 2022 | $\begin{aligned} & 59,282 \\ & 110,107 \end{aligned}$ |  |  |  |  | \$124,707,000 |
| TOTALS | 2021 |  |  |  |  |  | \$202,538,000 |

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## APIARY PRODUCTS

| Commodity | Year | Total | Unit | \$ Per Unit | Total Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Packaged | 2022 | 138,330 | nd, w | $\$ 37.10$ | \$5,132,000 |
| Bees | 2021 | 120,435 | Queen | \$37.50 | \$4,516,000 |
| Pollination | 2022 | Includes: Almond, Prune, Sunflower, and Vine Seed |  |  | \$27,708,000 |
|  | 2021 |  |  |  | \$29,832,000 |
| Queen Bees | 2022 | 391,200 |  | \$25.60 | \$10,015,000 |
|  | 2021 | 379,711 |  | \$24.00 | \$9,113,000 |
| Miscellaneous | 2022 | Includes: Beeswax and Honey |  |  | \$155,000 |
|  | 2021 |  |  |  | \$150,000 |
|  | 2022 |  |  |  | \$43,010,000 |
|  | 2021 |  |  |  | \$43,611,000 |

## SEED CROPS

| Commodity | Year | Bearing Acreage | Yield Per Acre | Total | Unit | \$ Per Unit | Total Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rice | 2022 | 2,717 | 9,860 | 26,789,620 |  | \$0.42 | \$11,252,000 |
|  | 2021 | 2,550 | 10,520 | 26,826,000 |  | \$0.29 | \$7,780,000 |
| Sunflowers | 2022 | 2,182 | 1,850 | 4,036,700 | Pound | \$1.72 | \$6,943,000 |
|  | 2021 | 2,691 | 841 | 2,263,131 |  | \$1.46 | \$3,304,000 |
| Vine Seeds | 2022 | $\begin{gathered} 691 \\ 1,380 \end{gathered}$ | Includes: Cucumber, Melon, Pumpkin, Squash and Watermelon |  |  |  | \$9,567,000 |
|  | 2021 |  |  |  |  |  | \$16,696,000 |
| Other Seeds | 2022 | 439 | Includes: Bean, Coriander, Kale, Onion, and Radish |  |  |  | \$1,071,000 |
|  | 2021 | 587 |  |  |  |  | \$1,907,000 |
| TOTALS | 2022 | 6,029 |  |  | $2$ |  | \$28,833,000 |
|  | 2021 | 7,208 |  |  |  |  | \$29,687,000 |

## LIVESTOCK \& POULTRY

| Commodity | Year | \# of Head Sold | Total Live Weight (cwt) | Value/cwt | Total Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Calves | 2022 | 4,158 | 22,869 | \$164 | \$3,751,000 |
|  | 2021 | 4,104 | 22,572 | \$137 | \$3,092,000 |
| Feeders | 2022 | 9,702 | 67,914 | \$148 | \$10,051,000 |
|  | 2021 | 9,576 | 67,032 | \$122 | \$8,178,000 |
| Cows and Bulls | 2022 | 2,971 | 41,594 | \$68 | \$2,828,000 |
|  | 2021 | 2,969 | 41,564 | \$60 | \$2,494,000 |
| Dairy Cattle | 2022 |  |  |  | \$23,925,000 |
|  | 2021 |  |  |  | \$20,250,000 |
| Sheep and Lamb | 2022 | 5,350 | Head | \$208 | \$1,113,000 |
|  | 2021 | 5,250 |  | \$210 | \$1,103,000 |
| Hogs and Pigs | 2022 | 550 | Head | \$167 | \$92,000 |
|  | 2021 | 550 |  | \$106 | \$58,000 |
| Miscellaneous | 2022 | Includes: Goats, Chickens, and Unspecified Game Birds |  |  | \$972,000 |
|  | 2021 |  |  |  | \$1,194,000 |
| TOTALS | 2022 |  |  |  | \$42,732,000 |
|  | 2021 |  |  |  | \$36,369,000 |

## LIVESTOCK \& POULTRY PRODUCTS

| Commodity | Year | Total | Unit | \$ Per Unit | Total Value |
| :--- | ---: | :--- | :--- | :---: | ---: |
| Milk: All | 2022 | $3,580,000$ | Cwt | $\$ 26.40$ | $\$ 94,512,000$ |
|  | 2021 | $3,590,000$ |  | $\$ 19.20$ | $\$ 68,928,000$ |
| Wool | 2022 | 31,565 | Pound | $\$ 1.40$ | $\$ 44,000$ |
|  | 2021 | 28,350 |  | $\$ 2.15$ | $\$ 61,000$ |
| Miscellaneous | 2022 | Includes: Goat Milk and Eggs | $\$ 1,901,000$ |  |  |
|  | 2021 |  |  | $\$ 1,817,000$ |  |
| TOTALS | 2022 |  |  | $\$ 96,457,000$ |  |
|  | 2021 |  |  | $\$ 70,806,000$ |  |

## PASTURE \& RANGE

| Commodity | Year | Production | Unit | \$ Per Unit | Total Value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Pasture, | 2022 | 7,811 | Acre | $\$ 275$ | $\$ 2,148,000$ |
| Irrigated | 2021 | 9,527 |  | $\$ 265$ | $\$ 2,525,000$ |
| Rangeland | 2022 | 203,110 | Acre | $\$ 12.50$ | $\$ 2,539,000$ |
|  | 2021 | 213,110 |  | $\$ 12.50$ | $\$ 2,664,000$ |
| TOTALS | 2022 | 210,921 |  |  | $\$ 4,687,000$ |
|  | 2021 | 222,637 |  |  | $\$ 5,189,000$ |

## NURSERY PRODUCTS

| Commodity | Year | Bearing <br> Acreage | Total Value |
| :--- | :---: | :---: | ---: |
| Retail Nursery | 2022 | 136 | $\$ 2,453,000$ |
| Plants, and Sod | 2021 | 136 | $\$ 2,374,000$ |

## VEGETABLE CROPS

| Commodity | Year | Acreage | Per Acre | Total | Unit | \$ Per Unit | Total Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2022 | 800 | 41.1 | 32,880 |  | \$89 | \$2,926,000 |
| Processing | 2021 | 1,290 | 46.40 | 59,856 | Ton | \$83 | \$4,968,000 |
| Miscellaneous | 2022 | 50 | Includes: Farmers' Market Gardens, Pumpkins, Roadside Stands, and Strawberries |  |  |  | \$235,000 |
|  | 2021 | 50 |  |  |  |  | \$230,000 |
| TOTALS | 2022 | 850 | $5$ |  |  |  | $\begin{aligned} & \hline \$ 3,161,000 \\ & \$ 5,198,000 \end{aligned}$ |
|  | 2021 | 1,340 |  |  |  |  |  |

## TOP 10 LEADING COMMODITIES

| Commodity | 2022 Value |
| :---: | :---: |
| Almonds | \$105,925,000 |
| Dairy, Total Milk | \$94,512,000 |
| Rice | \$76,606,000 |
| Walnut | \$67,226,000 |
| Apiary Products | \$43,010,000 |
| Dairy Cattle | \$23,925,000 |
| Alfalfa | \$19,772,000 |
| Beef Cattle | \$16,630,000 |
| Pistachio | \$15,944,000 |
| Prunes | \$14,417,000 |

## TOTAL VALUE OF AG PRODUCTION

| Product | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ |
| :--- | ---: | ---: |
| Fruit and Nut Crops | $\$ 412,948,000$ | $\$ 235,910,000$ |
| Field Crops | $\$ 202,538,000$ | $\$ 124,707,000$ |
| Apiary Products | $\$ 43,611,000$ | $\$ 43,010,000$ |
| Seed Crops | $\$ 29,687,000$ | $\$ 28,833,000$ |
| Livestock and Poultry | $\$ 36,369,000$ | $\$ 42,732,000$ |
| Livestock and Poultry Products | $\$ 70,806,000$ | $\$ 96,457,000$ |
| Pasture and Rangeland | $\$ 5,189,000$ | $\$ 4,687,000$ |
| Nursery Products | $\$ 2,374,000$ | $\$ 2,453,000$ |
| Vegetable Crops | $\$ 5,198,000$ | $\$ 3,161,000$ |
| Total Agricultural Value | $\$ 808,720,000$ | $\$ 581,950,000$ |
|  | $\$ 13,000$ | $\$ 15,000$ |
| Christmas Trees | $\$ 7,000$ | $\$ 0$ |
| Timber | $\$ 20,000$ | $\$ 15,000$ |
| Total Timber Value | $\$ 808,740,000$ | $\$ 581,965,000$ |

Commodity
Alfalfa
Barley
Beans
Corn, Fodder
Corn, Silage
Cotton, Lint
Cotton, Seed
Hay, Other
Oats, Fodder
Rice, Paddy
Sugar Beets
Wheat
Wheat, Silage
Tomatoes, Processing
Almond
Almond Hull
Oranges
Olives, Oil
Olives, Table
Pecan
Pistachio
Prune (dry)
Walnut
Packaged Bees
Pollination
Queen Bees
Alfalfa Seed
Ladino Clover
Rice (seed)
Sunflower seed
Vine seed
Other seed 177 acres

Calves
Feeders
Cull Cows \& Bulls
Dairy Cattle
Sheep and Lamb
Hogs and Pigs
Misc. Livestock (Goats/Chickens/

Milk, All
Wool
Pasture, Irrigated
Rangeland
Nursery
Year Total**

1972 Total Production
133,000 tons (19,800 acres)
11,800 tons ( 14,800 acres) 931 tons (1,330 acres) 18,000 tons ( 6,300 acres) 48,400 tons ( 2,200 acres)
*
6,000 tons (4,000 acres)
*
128,000 tons ( 45,000 acres)
121,000 tons (4,950 acres)
29,900 lbs. (18,800 acres)
*
3,280 tons ( 5,752 acres)
*
3,420 tons (2,096 acres)
*
2,690 tons (1,263 acres)
*
*
4,940 tons (4,187 acres)
2,150 tons ( 3,259 acres) 114,000 lbs.
*
65,800 each
299,000 lbs. (822 acres)
885,000 lbs. (3,000 acres)
*
*
*
177 acres
see Livestock and Poultry see Livestock and Poultry see Livestock and Poultry
*
73,300 head
9,300 head

1,302,000 cwt.
654,000 lbs.
36,000 acres
141,000 acres
122 acres
*No correlating values between 1972 and 2022
**Totals will not add to above values listed
Current and past Crop Reports dating back to 1910 can be found at:
https://www.countyofglenn.net/dept/agriculture/agricultureweights-measures/agriculture-programs/crop-report-statistics

2022 Total Production
59,914 tons ( 8,929 acres)
(419 acres)
471 tons (362 acres)
31,817 tons (5,259 acres)
14,320 tons (566 acres)
4,530 bales ( 1,510 acres)
1,888 Tons
6,352 tons ( 1,553 acres)
12,964 tons (3,989 acres)
105,956 tons ( 21,492 acres)
*
23,366 tons (6,638 acres)
36,570 tons ( 3,657 acres)
32,880 tons ( 800 acres)
35,063 tons ( 68,750 acres)
43,829 Tons
*
10,020 tons ( 4,985 acres)
7,180 tons ( 3,819 acres)
720 tons ( 692 acres)
3,989 In-shell tons (2,590 acres)
7,002 tons ( 3,303 acres)
80,898 tons ( 41,700 acres)
138,330 lbs.
*
391,200 Each
*

$26,789,620$ lbs. ( 2,717 acres)
$4,036,700 \mathrm{lbs} .(2,182$ acres)
(691 acres)
(439 acres)
4,158 Head
9,702 Head
2,971 Head
15,000 Head
5,350 Head
550 Head

$31,565 \mathrm{lbs}$.
7,811 Acres
203,110 Acres
136 Acres

## EXPORTS BY COUNTRY

In 2022, the Glenn County Department of Agriculture issued 4,014 USDA Phytosanitary Certificates for products exported to 65 countries. Products exported included shelled and in-shell nuts (almonds and walnuts), rice, animal feed, and various seeds for propagation.


# PEST EXCLUSION 

| Terminal Inspections | Shipments Inspected | Rejections |
| :---: | :---: | :---: |
| Postal | 0 | 0 |
| Truck | 14 | 0 |
| Other | 10 | 0 |

## pest eradication

| Pest | Scientific Name | Control Agent | Locations |
| :---: | :---: | :---: | :---: |
| Canada Thistle | Cirsium arvense | Mechanical | 1 |
| Dyer's Woad | Isatis tinctorial | Chemical/Mechanical | 1 |
| Perennial Pepperweed | Lepidium latifolium | Chemical/Mechanical | 32 |
| Plumeless Thistle | Carduus acanthoides | Mechanical | 3 |
| Russian Knapweed | Acroptilon repens | Chemical | 2 |
| Silverleaf Nightshade | Solanum elaeagnifolium | Chemical/Mechanical | 11 |
| Hoary Cress | Cardaria draba | Chemical/Mechanical | 2 |
| Purple Starthistle | Centaurea calcitrapa | Chemical/Mechanical | 5 |
| Diffuse Knapweed | Centaurea diffusa | Chemical/Mechanical | 1 |
| Klamath Weed | Hypericum perforatum | Chemical/Mechanical | 4 |
| Tree of Heaven | Ailanthus altissima | Chemical/Mechanical | 2 |

GLENN COUNTY YEARLY RAINFALL 1922-2022


Total rainfall recorded Oct. 1st through Sept. 30th.
The 100 year average of rainfall is 18.17 inches per year; 2021-2022 recorded 14.39 inches.
*Data obtained from the California Nevada River Forecast Center, as recorded at the Orland location.

# A RECOUNT OF 2022 AND THE IMPACTS FELT BY AGRICULTURE IN GLENN COUNTY 

For historical reference, this additional information is included to help explain the difficult year that Glenn County's agricultural industry experienced. Occurrences with significant impacts to Glenn County agriculture are illustrated below.

The year began in a drought status, as in the two previous years. On February 24, 2022, there were sustained freezing temperatures ranging between 23.1-29.8 F from 1:00am until 7:00am. The almond trees had bloomed by this date, pollination was complete, and nutlets were beginning to form. Frost protection was used as available, but many growers reported the temperatures were too cold, for too long for the frost protection to work. It was predicted that $60 \%$ loss would occur, the reported loss reflected in this report is a $52 \%$ decrease in yield.

During the week of April 11, 2022, Glenn County experienced sustained morning temperatures ranging from $31.6-31.96^{\circ}$ F. Growers feared losses in walnuts, olives (table and oil), cherries and boysenberries. Most significantly, table olive production was reduced by $64 \%$ from the previous year. These freeze events met the criteria for a disaster declaration and this request was sent to the California Governor's Office of Emergency Services.

The biggest impact of the year was the drop in planted rice acres due to significant irrigation reductions occurring from irrigation districts who source from the Sacramento River. The Bureau of Reclamation, announced late winter 2022, water would be curtailed due to the historically low level of Lake Shasta. Growers were given very tough options to review as they entered, what would normally be, their spring planting season. Some growers chose to retain their small water allocations for their permanent crops, sell to neighbors or back to the water district. Regardless of the choice made, the result was a landscape like many have not experienced before. With an approximate 40,000-acre reduction of planted rice in 2022, the entire county felt the impacts. Rice grown was largely planted east of the Sacramento River, where irrigation is primarily sourced from Lake Oroville and was not curtailed. Some ground west of the Sacramento River was planted and watered using wells; there were many accounts of these fields requiring much more water than normal, due to the surrounding dry conditions.

In their paper titled, "Continued Drought in 2022 Ravages California's Sacramento Valley Economy", Daniel Sumner and William Matthews, of the Department of Agriculture \& Resource Economics, at UC, Davis, summarized the possible effects the regional drought related rice impacts will have on Butte, Colusa, Glenn, Placer, Sacramento, Sutter, Tehama, Yolo, and Yuba counties. A few excerpts from their report are included below:

- "The drought in 2022 is likely to reduce the direct farm and ranch value output in the Sacramento Valley by about $\$ 950$ million. The losses will cost the Sacramento Valley about 5,000 direct on farm jobs and reduce the value added generated from farming and ranching by about $\$ 560$ million."
- "A fuller accounting, however, takes account of the impact of lost farm production including on farm processing, marketing, transport, and related downstream implications."
- "Projecting the 2022 drought impacts to on farm production are likely to cause a loss of about 14,300 jobs and a loss of about $\$ 1.315$ billion in economic contribution in the Sacramento Valley."

While walnut yields remained consistent with the previous year, the quality of the harvested nuts was affected by a pre-harvest heatwave, followed by early rains during the harvest season. The issues were discovered during the harvest, drying, and grading processes; many of the walnut meats were moldy, shriveled, and a much darker grade than is desirable. This, along with market impacts, resulted in the prices dropping significantly for walnut producers.

As the year closed, significant rainfall was starting to occur, giving strong signs the drought could be ending.


