

Modoc County Annual Crop Report 2022

Deh2023



County of Modoc DEPARTMENT OF AGRICULTURE

202 W. 4th Street
Alturas, Ca. 96101
530-233-6401

Karen Ross, Secretary, California Department of Food and Agriculture, and Modoc County Board of Supervisors

It is my pleasure to present the 2022 Modoc County Annual Crop Report which is prepared under the provisions of Section 2279 of the California Food and Agricultural Code. This annual report provides a statistical description of Modoc County's agricultural production. All figures in the report represent gross returns only and do not reflect the net income of producers.

The total gross value of Modoc County agricultural receipts for 2022 totaled \$296,589,000. This represents an increase of \$56,450,000 from \$240,139,000 during the 2021 growing season.

This year the department staff elected to highlight our Modoc County Farm Advisors Projects and the Sheep Dog Trials that are held every year.

Modoc County wants to send gratitude to the Shasta County Department of Agriculture for assisting in managing the Modoc County Agricultural Department with training staff, providing extra help, and assistance in management decisions.

I want to extend my sincere appreciation for the efforts and cooperation of all the agricultural producers and partners who provided information for the 2022 Annual Crop Report. I would like to recognize the dedicated staff of the Modoc County Agricultural Department for their assistance in completing and producing the information for this publication.

In early October, Modoc County lost a valuable member of our community. This report is dedicated to the memory of Nicholas S. Macy. He will be missed.

Respectfully Submitted,

Heather L. Kelly

Modoc County Agricultural Commissioner/Sealer of Weights and Measures

Table of Contents

Field Crops	2
Vegetable & Specialty Crops.....	3
Seed Crops	4
Nursery Products.....	4
Fallow Land	4
Livestock	5
Apiary Products	6
Timber Products.....	6
Five Year Trend	7
Sustainable Agricultural Report	8
Organic Farming, Direct Marketing, & Other Services	9
Weights & Measures	10
Air Pollution	10
Water, Drought & Fire	11
UC Davis Farm Advisor Projects.....	12
Sheep Dog Trials.....	13

Photographs provided by: Debbie Cockrell, Marilyn Macy, Jenny Knap, Heather Kelly, and Alex Moreo

Field Crops

Crop	Year	Harvested Acres	Production/Acre	Total Production	Unit	Price/Unit	Total Value
Alfalfa Hay	2022	36,400	6.5	236,000	Ton	\$360	\$85,176,000
	2021	39,800	6.0	239,016		240	57,364,000
Forage/Grain Hay	2022	34,000	4.5	153,000	Ton	240	36,720,000
	2021	32,400	3.5	113,540		200	22,708,000
Meadow/Grass Hay	2022	1,680	6.0	10,080	Ton	420	4,234,000
	2021	2,000	6.5	12,948		300	3,884,000
Wheat	2022	5,000	3.0	15,000	Ton	265	3,975,000
	2021	5,100	2.75	14,118		270	3,812,000
Barley	2022	1,900	2.0	2,850	Ton	190	722,000
	2021	2,600	2.35	6,305		210	1,324,000
Mint	2022	1,500	85	127,500	Lb	25	3,188,000
	2021	1,700	80	139,045		23	3,198,000
Irrigated Pasture	2022	60,000*			Acre*	160	9,600,000
	2021	23,000			AUM	40	10,000,000
Rangeland (Private & Public)	2022	500,000			Acre	7	3,500,000
	2021	500,000			AUM	15	1,810,000

*Note: Calculations for irrigated pasture and rangeland have been updated to be calculated at a per-acre rate from an Animal Unit Month (AUM) rate. Irrigated pasture acreage increased due to unsprayed pastures and organic acreage that was not previous taken into consideration in previous crop reports. Wheat and Barley seed is included in their respective totals. Wheat and barley are sold as grain or seed depending on its quality at the time of harvest.

Total Field Crop Values

2022	640,480 Acres	\$147,115,000
2021	600,000 Acres	\$104,101,000

Vegetable & Specialty Crops

Crop	Year	Harvested Acres	Production/Acre	Total Production	Unit	Price/Unit	Total Value
Potato (Fresh/Chippers)	2022	3,700	475	1,757,500	CWT	\$11.00	\$19,333,000
	2021	6,900	500	3,472,000		9.25	32,116,000
Dry Onion (Dehydration)	2022	1,480	357	528,360	CWT	13.00	6,869,000
	2021	1,800	450	842,850		8.75	7,350,000
Garlic (Fresh/Seed)	2022	425	116	49,300	CWT	28.00	1,380,000
	2021	800	134	119,738		21.00	2,514,000
Horseradish	2022	900	3.0	2,700	Ton	500.00	1,350,000
	2021	600	2.5	1,493		500.00	746,000
Wild Rice	2022	3,500	840	2,940,000	Lb	1.00	2,940,000
	2021	3,800	1,500	5,723,940		0.70	4,007,000

Note: Some the above crops are pre-contracted with processors. Organic crop values are included.

Total Vegetable & Specialty Crop Values

2022	10,000 acres	\$31,872,000
2021	14,000 acres	\$46,733,000



Seed Crops

From year to year, Modoc County may grow alfalfa, triticale, barley, and spring/winter wheat seed. Acreages change every year due to available contracts, weather, and water availability. Seed crops are valued for quality and quantity. Prices vary from \$200.00/ton to \$400.00/ton depending on conventional or organic status. In 2022, no significant alfalfa or triticale seed was grown. Grain that may have been sold as seed is included in Field Crops.

Nursery Products

	Year	Total Value
Nursery*	2022	\$240,000
	2021	\$140,000

*Nursery stock includes that which is grown in Modoc County. This includes landscape trees, shrubs and bedding plants.

Fallow Land

	Year	Total Acres
Fallow Land*	2022	25,000
	2021	26,400

*We include fallow land as it is reflective of the rotational cropping system within Modoc County, which is dictated by a short growing season. Land is fallowed for several reasons: crop rotation, weather, and water availability provided by the Tulelake Irrigation District in the northern part of the county.

Modoc Cattle Country

Goose Lake

Livestock

	Year	Number of Head	Live Weight	Value/Unit	Total Value
Cow/Calf Pairs	2022	59,000 pair		\$1,800/pair	\$106,200,000
	2021	59,000 pair		1,200/pair	70,800,000
Cull Cows & Bulls	2022	3,165		1,000/head	3,165,000
	2021	4,915		800/head	3,932,000
Feeders & Misc. Cattle*	2022	8,842		590/head	5,217,000
	2021	9,254		850/head	7,866,000
Sheep/Lambs	2022	10,000	120 Lbs	1.85/Lb	2,220,000
	2021	10,000	120 Lbs	2.50/Lb	3,000,000

*Misc. cattle: Heiferettes, stag bulls, etc. Value of cow/calf pairs in county is based on pounds of gain for home county and for animals that pasture temporarily in the county. The sheep and lamb market struggled in 2022. The market was high in the spring and prices decreased in the fall. Prices varied from \$2.48 to a low of \$1.14. The cattle market was low in the spring for feeder cattle, however, pairs and bred cows held strong the entire year.

Total Livestock Values

2022 \$116,802,000

2021 \$85,598,000

Black Rock Desert

Apiary Products

	Year	Colony	Production Lbs/Colony	Price/Lb	Total Value
Honey	2022	3,880	15	\$4.12	\$240,000
	2021	3,731	25	2.65	247,000

Hive and honey production was extremely low due to drought and lack of bee drinking water; some hives saw honey production as low as ten (10) pounds of honey per hive. Bee yards and colony numbers have increased while the production value remained low due to drought.

Timber Products

	Year	Production	Total Value
Timber	2022	7,651 board feet	\$320,000
	2021	25,595 board feet	3,284,000
Christmas Tree	2022		1,420
	2021		1,500
Fire Wood and Pole Permits	Suspended 2022		0
	Suspended 2021		0

Timber volume decreased drastically due to the lack of timber sales in Modoc County on federal lands. Permits for firewood/poles were suspended due to fire; these permits are available at the U.S. Forest Service. There are fewer privately owned logging businesses and sawmills within the county. Timber sales have been on hold or canceled due to fire, weather/storm damage, or environmental impact or review reports.

Five Year Trend

Commodity	2018	2019	2020	2021	2022
Field Crops	\$75,772,000	\$84,510,000	\$88,573,000	\$104,101,000	\$147,115,000
Vegetable & Specialty Crops	29,939,000	45,427,000	26,873,000	46,733,000	31,872,000
Livestock	48,566,000	48,651,000	86,117,000	85,598,000	116,802,000
Seed Crops	52,000	33,000	46,000	36,000	N/A*
Nursery Products	310,000	318,000	400,000	140,000	240,000
Apiary Products	15,000	35,000	25,000	247,000	240,000
Subtotal	\$154,654,000	\$178,974,000	\$202,034,000	\$236,855,000	\$296,296,000
Timber Products	5,183,000	4,010,000	4,093,000	3,284,000	320,000
Total	\$159,837,000	\$182,984,000	\$206,127,000	\$240,139,000	\$296,589,000

*Seed Crop has been removed due to the inability to accurately split from grain sold as forage. No other seed was produced in 2022. Totals have been updated to be rounded to the thousandths. Timber products are presented separately per guidance provided by the National Agricultural Statistics Service.

Summary

Cattle and field crops have significantly increased due to drought, the war in Ukraine, and the lack of overall inventory of food like wheat for bread or beef for hamburgers.

There is a noticeable trend in the specialty cropping years of Modoc County. Every other year, the value of specialty crops increases or decreases based on the rotational crops and the availability of water.

Nursery businesses saw an increase due to the decrease in prices of wholesale plants and the ability to source wholesale trees and plants after having shortage due to COVID-19.

Modoc County continues to see an influx of commercial beekeepers. We anticipate honey production will continue to rise as more beekeepers place bees in Modoc County for quality forage and to increase hive health.

Sustainable Agricultural Report

Per California Food and Agriculture Code (CDFA) Section 2272, the Agriculture Report provides a brief account of efforts being made to exclude or eradicate exotic pests and best manage those that already exist in a manner most conducive to protecting our environment.

Pest Exclusion Program

Quarantine, Nursery, and Seed Inspection Services:

- Nursery & Warning Hold Inspections: 166
- Seed & Harvester Inspections: 20
- Weed-Free Straw Inspections: 2
- Quarantine Investigation: 1

Pest Detection Program

In 2022, Modoc County conducted two (2) Pest Detection surveys for CDFA. The department deployed 75 Spongy Moth (formerly known as Gypsy Moth) traps and 25 Shot Hole Borer Beetle traps. The surveys did not result in detections of either pest.

Zero Pest Detections

Pest Management and Eradication Program

The Modoc County Department of Agriculture is dedicated to managing noxious weeds and rodents. The Agricultural Department's aim is to eradicate several established noxious weeds including: Scotch thistle, yellow starthistle, Canadian thistle, perennial peppergrass, dyer's woad, Dalmatian toadflax, puncture-vine, squarrose, Russian, spotted and diffuse knapweeds, Mediterranean sage, and leafy spurge.

In 2022, we treated 401 acres by ground. We also hired a helicopter service and treated 155 acres. Additionally, we also host a program to eradicate yellow starthistle, of which, we treated 78 acres.

The Agricultural Department hosts the California label for the use of zinc phosphide on cabbage to control ground squirrels in Modoc County. The label is a FIFRA 24(c) Special Local Needs label and it expires in 2025..

Organic Farming, Direct Marketing, & Other Services

Organic

Modoc County has 60,000 acres of certified organic land. The 24 registered organic growers raise pasture, rangeland, vegetables, and grain. The gross income for organic agriculture is \$7,300,000.

Direct Marketing

Modoc County has two Certified Farmer's Markets: the Surprise Valley Farmer's Market and the Alturas Farmer's Market. Modoc County issued seven certified producer certificates.

The Modoc Harvest Food Hub provides customers with access to locally produced food from farms and ranches throughout Surprise Valley and Modoc County. When you choose to buy from the Hub, you can be assured you are receiving food that is locally grown using sustainable practices that are good for the soil, good for you, and good for our community. In 2022, the Hub's gross sales were \$138,000.

Exports

No USDA Phytosanitary or State Phytosanitary Certificates were issued in 2022.

Pesticide Use Enforcement

- Restricted Materials Permits: 185
- Operator Identification Permits: 17
- Private Applicators Licenses: 168
- Enforcement Actions: 0

Migrant Housing

Modoc County provides two migrant housing centers: the Newell Migrant Center and the Castlerock Farmworker Center. The Newell Migrant Center is federal- and state-subsidized family housing for farm labor and housed 45 families in 2022. The Castlerock Farmworker Center is a facility rented by producers for foreign and domestic farm labor housing and housed 91 individuals.

Weights & Measures

Modoc County Department of Agriculture works closely with the California Department of Food & Agriculture Division of Measurement Standards (CDFA DMS) to enforce weights and measures requirements. Ensuring fair competition for the industry and accurate value comparison for consumers is the primary function of the program.



<u>Registered Devices</u>	
Retail Fuel Meters	131
Livestock Scales	75
Retail Scales	28
Truck Scales	16

Air Pollution

The Modoc County Air Pollution District is governed by the Modoc County Board of Supervisors. It has three (3) projects that were continuous from the 2020 and 2021 Project Years. The county did not receive any new funding from the Carl Moyer Memorial Air Quality Program (Carl Moyer); however; the county received funding for the FARMER’S program.

The Carl Moyer Program provides grant funding for cleaner–than–required engines, equipment, and other sources of air pollution.

The FARMER’s Program provides funding through local air districts for agricultural harvesting equipment, heavy-duty trucks, agricultural pumps, tractors, and other agricultural equipment.

Reach out to the Modoc County Air Pollution Control District housed with the Department of Agriculture for more information.

Water, Drought & Fire

“2022 was the third in the consecutive year so significant drought. Inflow into Upper Klamath Lake is a critical metric for water availability in the Klamath Project, which includes a portion of Modoc County within the Tulelake Irrigation District. During water-year 2022 (October 1, 2021 – September 30, 2022), Upper Klamath Lake inflow was the fourth lowest within forty years. This followed on the heels of 2021 and 2022, which were the second and sixth-lowest years of inflow over forty years. During the irrigation season, surface water availability for the Klamath Project was limited to less than 90, 000 acre-feet, which is around 25 percent of the demand.”

—Paul Simmons, Klamath Water User Association, Director

Did You Know?

Modoc County has three (3) Watermaster Service Areas (WSAs), three (3) commercial agriculture irrigation districts, and 15 groundwater basin areas.

Water Master Service Areas

Ash Creek—17 Linear Miles

Water Rights Holders:

23 Lassen County

12 Modoc County

North Fork Pit River—43 Linear Miles

Water Rights Holders:

3 Lake County

21 Modoc County

Surprise Valley—44 Linear Miles

Water Rights Holders:

183 Modoc County

Agricultural Irrigation Districts

South Fork Irrigation District

60 Linear Miles

Services South of Alturas to Likely

Tulelake Irrigation District

243 Linear Miles

Services Modoc, Siskiyou, and Klamath County

Hot Springs Valley Water District

5 Linear Miles

Services South of Alturas to Canby

Groundwater Basins – 15 Total

Big Valley Groundwater Basin & Tulelake Sub Basin have been deemed as medium priorities by the state.

Drought

All 58 counties had extreme drought declarations in California.

Fire

In 2022, Modoc County fire activity decreased. The Barnes Fire consumed 5,843 acres and the S2 Fire burned less than 500 Acres.

UC Davis Farm Advisor Projects

Meadow Monitoring in the Warner Mountains

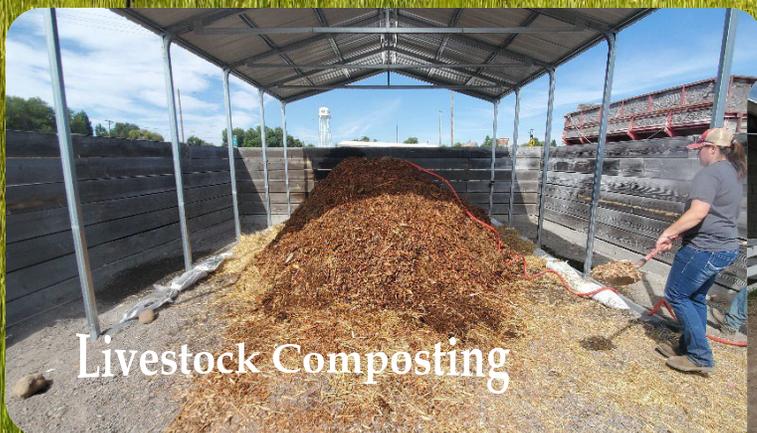
University California Cooperative Extension (UCCE) annually monitors plots that are paired with long-term monitoring sites in the Warner Mountains. They have been monitoring these sites since 2015 to assess modern grazing management practices and evaluating the monitoring methods.

Devil's Garden Colt Challenge

UCCE pairs 4-H and FFA youth with wild horses and they compete in the Devil's Garden Colt Challenge. This competition includes halter, showmanship, and an obstacle course that is held six months after the horses are paired with the participants. It supports adult mentorships, youth development, and places horses into homes, which, in turn, supports wild horse management and rangeland health.

Livestock Mortality Composting

UCCE is researching livestock mortality composting at the Intermountain Research and Extension Center testing the limits of composting routine livestock death loss in Modoc County. This is a demonstration site that aids in changing current composting regulations to allow for on-farm composting of routine livestock deaths and offal from on-farm butchering.



Livestock Composting



Colt Challenge

Warner Mountain Grass Plot

Sheep Dog Terms

Go by - go to the left of livestock

Away - go the right of livestock

Wait/Lay down - Stop

Walk up - Move closer to livestock.

That'll do - Stop working

Sheep Dog Trials



Modoc County has become one of the premier sheepdog trial locations in the United States. Each year, there are six to eight sheepdog trials and two to three sheepdog training clinics attracting people from all over the West. The Modoc District Fair holds a popular sheepdog competition at the annual fair in August in Cedarville.



In addition to these local trials, the 2015 and 2018 National Sheepdog Finals were held in Modoc County near Alturas. The National Sheepdog Finals brings participants and spectators from all over the U.S. and Canada to our community. The National Sheepdog Finals are anticipated to return to Modoc County in September of 2025.

5 That'll Do Photography.com



**2018 National
SHEEPDOG FINALS**
September 24th thru 29th
www.sheepdogfinals.org

Modoc County Board of Supervisors

District 1

Ned Coe

District 2

Vacant

District 3

Kathie Rhoads, Vice-Chair

District 4

Elizabeth Cavasso

District 5

Geri Byrne, Chair of the Board

Department of Agriculture/ Weights and Measures Staff

Agricultural Commissioner/Sealer of Weights & Measures

Vacant

Deputy Agricultural Commissioner/Sealer of Weights & Measures

Vacant

Agricultural Biologist & Weights & Measures Inspector II

Jolene Moxon

Auto and Equipment Mechanic-Weed Abatement Coordinator

Curtis Leslie

Noxious Weed Eradication Team

Ryan Abernethy

Dwayne Chapman

Brandon Duran

Zachary Grim

Joshua Hayes

Floyd McKee

Alex Moreo

Donald Seago

Agricultural Technician I

Caitlyn Davis

Support Services Administrator

Bonnie Bunyard

In remembrance of Nicholas (Nick) S. Macy.
Macy's Flying Service owner and spray pilot (1956-2023).

High Flight

Oh! I have slipped the surly bonds of Earth
And danced the skies on laughter-silvered wings;
Sunward I've climbed, and joined the tumbling mirth
Of sun-split clouds, - done a hundred things
You have not dreamed of - wheeled and soared and swung
High in the sunlit silence. Hov'ring there
I've chased the shouting wind along, and flung
My eager craft the footless halls of air...
Up, up the long, delirious burning blue
I've topped the wind-swept heights with easy grace
Where never lark, or ever eagle flew -
And, while with silent, lifting mind I've trod
The high untrespassed sanctity of space,
Put out my hand, and touched the face of God.

By, John Gillespie Magee Jr.



The Modoc County Department of Agriculture

would like to thank all the contributors to the

2022 Crop Report

Thank You!

Your support is much appreciated.



Modoc County—2022 Annual Crop Report

<http://www.co.modoc.ca.us/>