

Montana Department of Livestock

MILK & EGG BUREAU

FY 2021 ANNUAL REPORT



Figure 1: Dairy cows feeding in northwest Montana, MLIV Staff photo

Mission Statement

To protect the egg and dairy consumers of Montana from potentially harmful egg and dairy products by site inspections and product sampling ensuring that all products meet or exceed strict federal and state regulations and standards.

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MILK & EGG PROGRAM

OVERVIEW

The Milk and Egg Bureau's primary function is to ensure milk, milk products, and eggs that are produced, sold or manufactured in Montana meet the appropriate safety requirements and grade quality. The prevention of food borne illnesses and diseases transmitted by milk and eggs to the consuming public is a critical priority. This function is accomplished through on-site inspections done in cooperation with other State and Federal agencies, sampling, laboratory testing, and licensing. The program supervises the enforcement of associated regulations regarding milk and egg safety.



Figure 2: layers of a Montana producer, MLIV staff photo

AUTHORIZATION

This program's statutory functions are provided for under Montana Code Annotated, Title 81, Chapters 20, 21, and 22. Chapter 20 provides for poultry and egg inspection and licensing, Chapter 21 provides for dairy products regulation and licensing, and Chapter 22 provides for regulation, inspection, and licensing requirements of manufactured dairy products. In addition, the Administrative Rules of Montana, Title 32, provides the Department supplementary regulation authority. Chapters 8, 9, 10, and 12 provide milk and egg rules and procedures.

Furthermore, the Department has adopted the following:

- Pasteurized Milk Ordinance (PMO) which includes Grade A Condensed and Dry Milk Products and Condensed and Dry Whey
- Methods of Making Sanitation Ratings
- Single Service Container Standards
- Evaluation of Milk Laboratories
- USDA Egg Grading Manual
- USDA Milk for Manufacturing Purposes and its Production and Processing (guidance document)



Figure 3: milking sheep in northwest Montana, MLIV staff photo

MILK PROGRAM

The Milk and Egg Bureau licenses and monitors Montana's dairy producers, dairy processing plants, and bulk milk tankers and haulers that transport, sample and grade fluid milk for quality and safety. The Bureau, along with the Montana Veterinary Diagnostic Lab (MVDL) milk lab, also licenses laboratories and the people who sample, test, and distribute dairy products before they reach the consumer.

COVID-19 Pandemic Response

The pandemic presented multiple challenges to the bureau over the last year, but through careful travel planning and precautions, we were able to maintain our inspection schedules for both plants and farms. We did make use of the emergency provisions for delaying inspections for a State NCIMS rating that was due for a bulk tank unit (BTU – a group of dairies who all supply raw milk to the same plant), but otherwise our sanitarians were able to meet the NCIMS requirements for inspections (see below).

National Conference of Interstate Milk Shippers - NCIMS

Montana is a member of the National Conference of Interstate Milk Shippers (NCIMS). Participation is voluntary by member states and members must meet minimum compliance requirements. Members in good standing with the Conference may engage in interstate sales of dairy products unhindered by individual state's regulations. Compliance is verified by monitoring conducted by the U.S. Food and Drug Administration (FDA). Currently, all 50 states, US Territories, and several foreign countries participate in the NCIMS program. NCIMS members meet every two years and are a combination of Federal and State milk regulatory officials as well as dairy industry representatives. The following inspection and sampling requirements are performed to meet NCIMS standards:

GRADE A PLANTS (7 total)

Test or inspection	Number of tests, samples, or inspections	Frequency	Total number of tests or inspections performed
Milk samples of each product type	4 samples	Every 6 months	Varies depending on # of products
Plant inspection	1 inspection	Quarterly	28 yearly
Pasteurizer equipment tests	1 inspection	Quarterly	28 yearly
Vitamin analysis of each product type	1 sample	Annually	45 yearly est.
Water and coolant	1 sample	Every 6 months	14 yearly
Single service containers	4 samples	Every 6 months	Varies depending on # of molds

MANUFACTURING PLANTS* (GRADE B PLANTS - 12 total)

Samples or Inspection	Number or tests, samples, or inspections	Frequency	Total number of samples or inspections performed
Each product type sampled	4 samples	every 6 months	Varies depending on # of products
Plant inspection	1 inspection	every 6 months	24 yearly
Water sample	1 sample	every 6 months	24 yearly

*Grade B plants are not held to NCIMS standards, though the inspection schedule is similar.

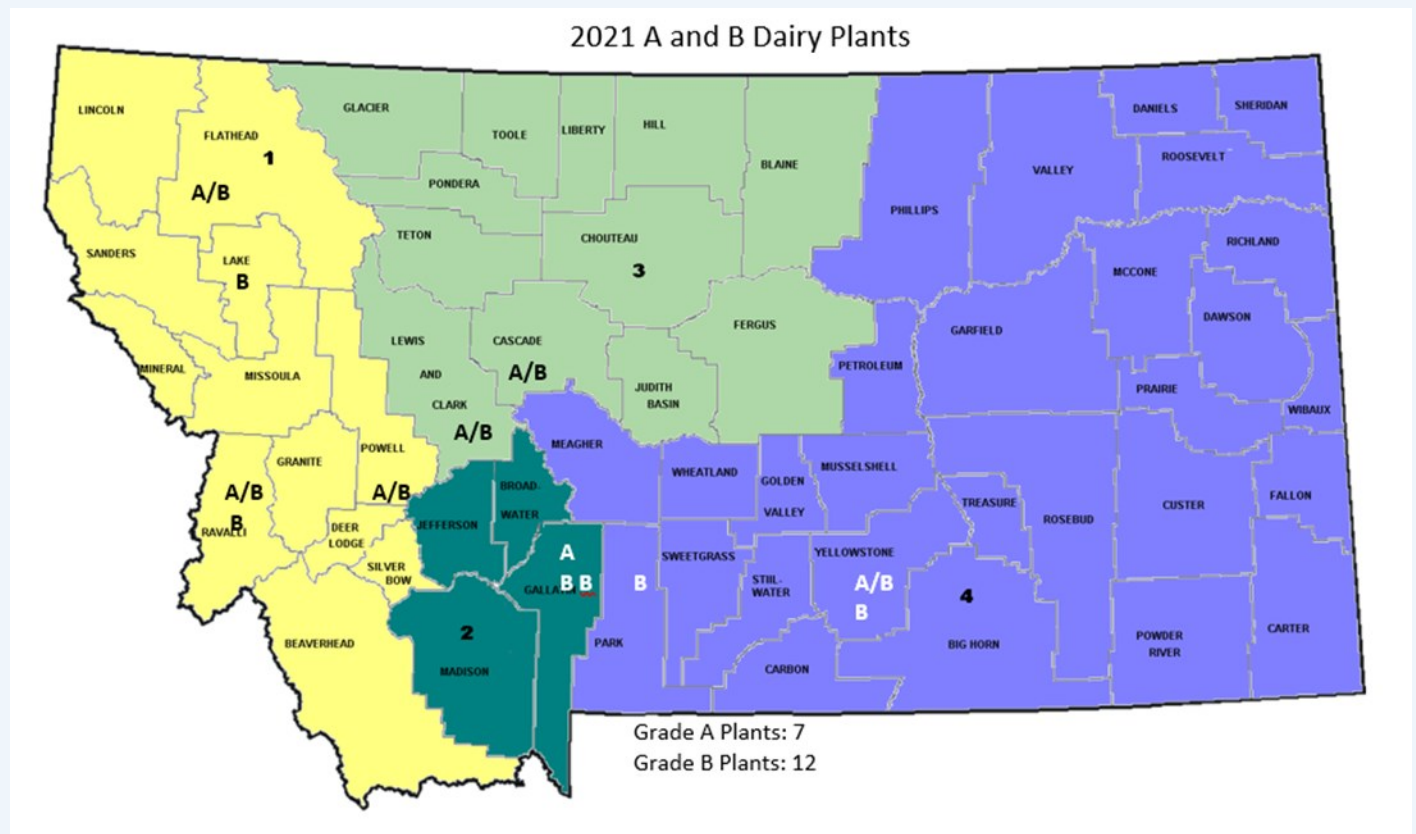


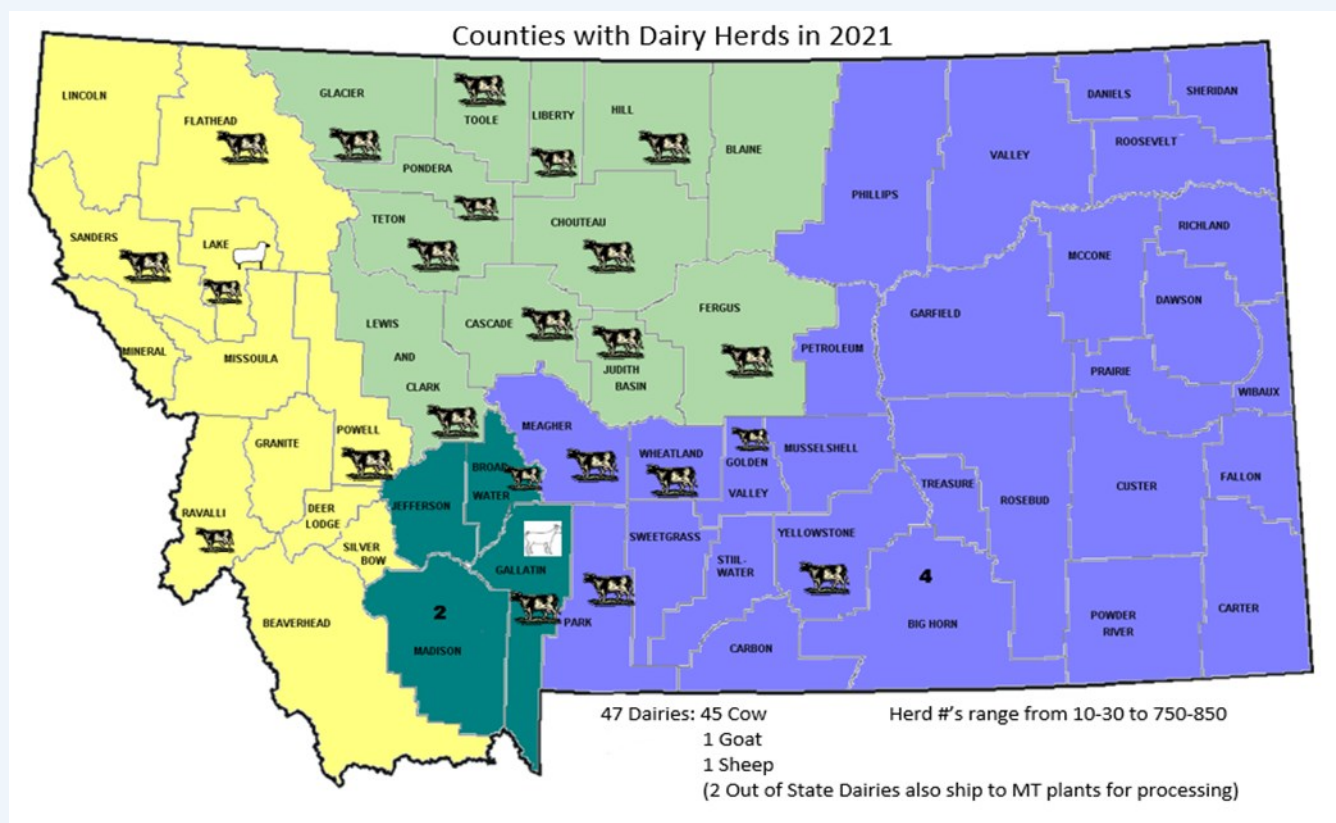
Figure5: MT Dairy plant locations provided by MLIV staff

The numbers displayed in Flathead, Choteau, Madison, and Big Horn counties designate the district number assigned by the bureau.

GRADE A PRODUCERS (47 total: 45 cow dairies, 1 sheep dairy, 1 goat dairy)

Samples or Inspection	Number of tests, samples, or inspections	Frequency	Total number of samples or inspections performed
Dairy Inspection	1 inspection	Every 6 months	94 yearly
Follow-up inspection for violations	As needed	As needed	Varies
Milk sample	4 samples	Every 6 months	376 yearly
Pesticide milk sample	1 sample	Annually	47 yearly
Well water sample	1 sample	Every 3 years	16 yearly (staggered)
Brucellosis Ring Test—cow only	1 sample*	Quarterly*	208 yearly*

*The five (5) dairies located in the Designated Surveillance Area (DSA) for brucellosis are tested at least twice each quarter.



.Figure 6: Producer counties and species provided by MLIV staff

The numbers displayed in Madison and Big Horn counties designate the district number assigned by the bureau.

GRADE A (Fluid Milk) GRADE B (Manufacturing Milk) Differences

PRODUCTS:

Grade A products are fluid milk products. This includes not only different varieties of milk (whole, skim, buttermilk, cream, flavored, etc.) but also yogurt, sour cream, and cottage cheese.

Grade B products are manufactured from milk such as butter, cheeses, condensed or evaporated milks, and ice cream products.

Grade A products must strictly be made from milk produced at Grade A licensed producers. Grade B products are also often made from Grade A milk or a combination of Grade A and Grade B milk.

PRODUCERS:

Grade A (Fluid Milk) producers must meet stringent standards for health and sanitation if their milk is to be consumed as a fluid or other Grade A product. Grade A producer facilities are tested and inspected frequently to PMO standards to ensure their production meets all requirements.

Grade B (milk for manufacturing) producers have less stringent quality standards for the milk they produce and their facilities and can only be utilized to make Grade B products. There are currently no Grade B producers licensed in Montana and milk for manufacturing dairy products is provided from Grade A licensed dairies.



Figure 7: Milking goats Stock Photo

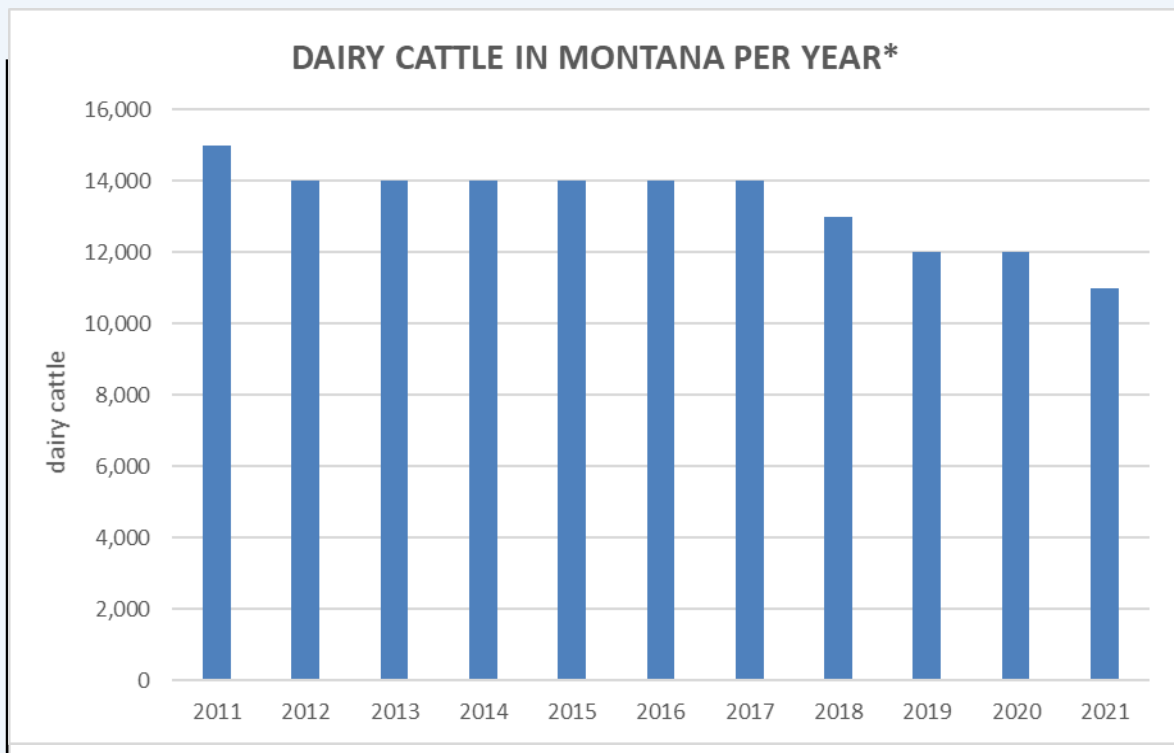


Figure 8: Number of dairy cows in Montana

*Data provided by USDA National Agriculture Statistics Service

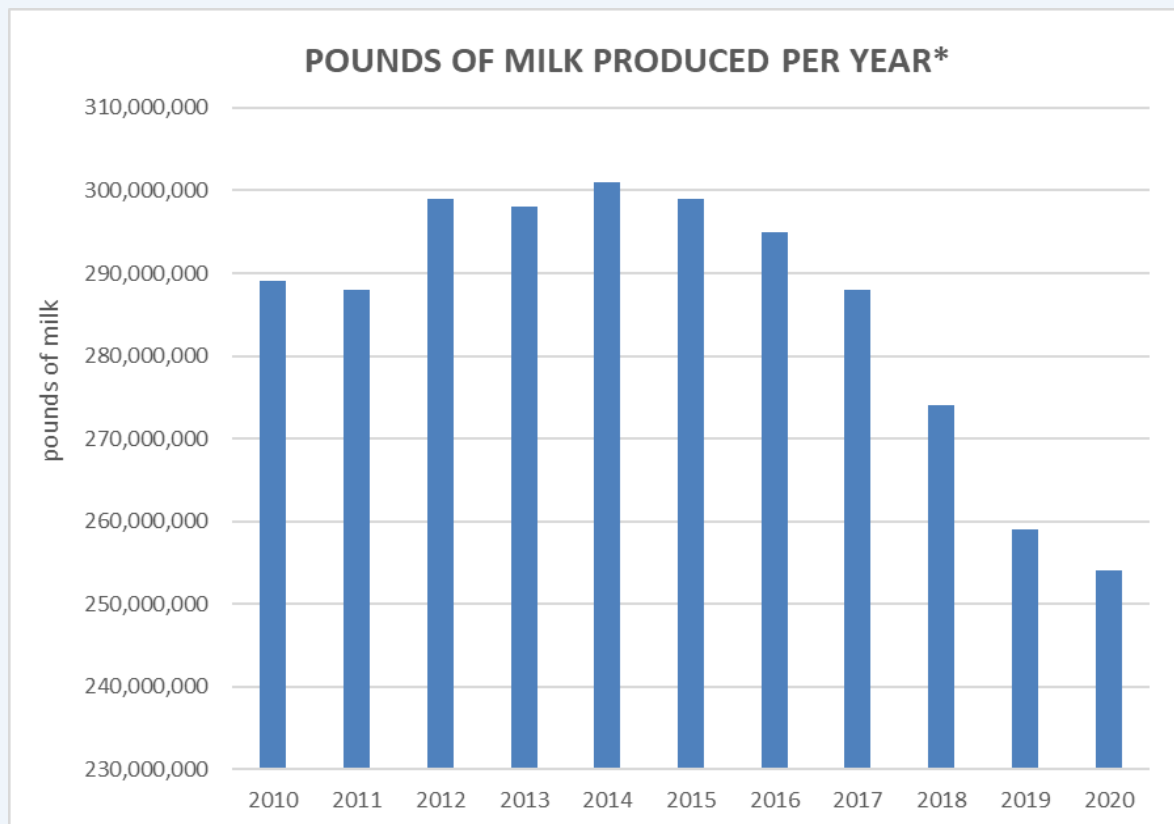


Figure 9: Milk Volume per year in Montana

*Data provided by USDA national Agriculture Statistics Service

DRUG RESIDUE VIOLATIONS

We had two (2) pool producers test positive for drug residue during the 2021 fiscal year which resulted in 68,656 pounds of milk disposed of (land applied) to prevent human/animal consumption.

Milk is sampled by a licensed sampler/hauler at each dairy as they collect the milk for transport to a dairy plant for processing. One of the tests run on each sample is for drug residue from antibiotics used to treat routine veterinary concerns. Producers are very careful not to include a drug treated cow in the regular milking, but errors do happen, and this is usually the cause of adulterated milk.

As required by the Pasteurized Milk Ordinance (PMO), the violator of the positive drug residue test has the monetary responsibility for all adulterated milk caused by the violator's positive drug residue. This requires the violating producer to reimburse all non-violating producers for their milk, hauling costs and disposal expenses.

The violating producer's Grade A license is suspended, and no milk sales are allowed until an investigation as to the cause of the violation is completed by a dairy sanitarian. Once an official sample of their milk demonstrates the milk safe and is free of drug residue, their license is reinstated, and milk shipments may resume.

Follow-up investigations and sampling are completed as soon as possible after the violation, to minimize the time of the dairy license suspension. Multiple residue violations within 12 months may result in a permanent license revocation.

MILK HAULER AND SAMPLER LICENSES ISSUED (88 total)

Type of license	Test or inspection frequency	Renewal basis
Milk and Cream Grader/Weigher/Sampler & Hauler (test)	1 initially	once/year
Milk & Cream Tester (test)	1 initially	once/year
Dairy Plant Samplers (test)	1 initially	once/year
Bulk Milk Tank Trucks (inspection)	1 initially	once/year
Milk Distributor (inspection)	1 initially	once/year



Figure 10: Stock photo

ADDITIONAL REQUIREMENTS OF THE DAIRY PROGRAM:

- To maintain at least two survey officers for compliance with NCIMS
- Inspect, license and conduct testing of products from Single Service Container Plants (makers of milk jugs and cartons). Review raw material applications for safety
- Monitor dairy sell-by dates in plants or retail locations
- Monitor retail sales for dairy products offered for sale
- Maintain annual license program for producers, dairy plants, milk graders, milk weighers, milk haulers, milk samplers and dairy distributors
- Conduct construction plan reviews for new/remodeling of dairy processing or production facilities
- Perform water and coolant system construction reviews, collect and sample these systems for safety
- Inspect trucks and tankers used to haul raw milk and other milk products between farms and plants

DAIRY INSPECTORS

- Inspectors must have a minimum of a Bachelor of Science degree and maintain current Montana Sanitarian Registration
- State Survey Rating Officers and Sampling Surveillance Officers for Interstate Milk Shipping (IMS) must maintain FDA certification for rating dairy farms, dairy processing plants, single service manufacturing, and bulk milk haulers
- Inspectors also participate in the FDA Dairy Equipment Review Committee to accept new dairy equipment

DAIRY FARM ATTRITION

FY 2021 saw the loss of five (5) Montana dairies. Though most were smaller operations their loss will still be felt by their communities and those who worked for and with them. Dairies in Toole, Ravalli, Fergus, Lake, and Lewis and Clark Counties closed their doors, disbursing more than 200 dairy cows and sheep in state, out of state and to slaughter. The reasons for closure are varied, but the Bureau wishes to thank these producers for their years of hard work and their contributions to Montana's dairy industry. We wish them all the best for the future.

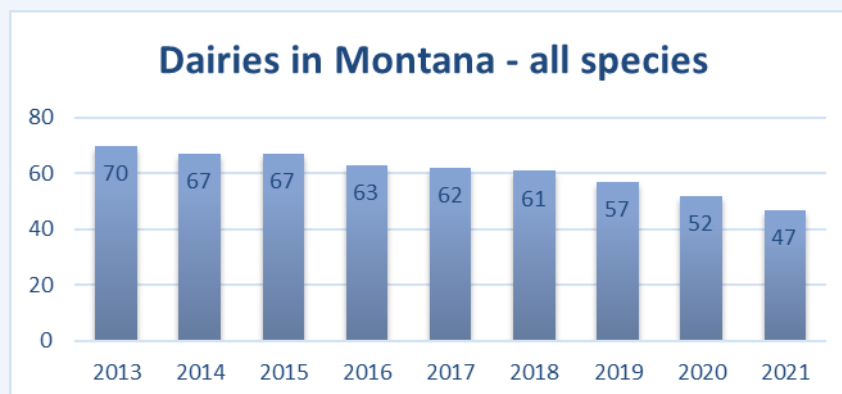


Figure 11: Number of dairies in Montana, all species Provided by MLIV staff

EGG INSPECTON PROGRAM

COVID-19 Pandemic Response

Along with the milk program, the egg inspections were affected by the COVID-19 pandemic. Aside from a few on-site visits, our sanitarians completed all shell egg surveillance work (pg. 12) via “desk audits”, in which the producer is interviewed by telephone. We have been instructed to resume physical visits beginning July 1, 2021.

Due to the nature of the Shielded Egg Grading program, our two Resident USDA egg graders continued work as usual through the pandemic and practiced self-quarantine outside of work.



Figure 12: Candling an egg during grading, MLIV staff photo

Shell Egg Program

The Shell Egg program is a cooperative agreement between the USDA and the State, conducted in conjunction with the State egg grading inspections. Grading of eggs is checked quarterly at locations with flocks of 3,000 or more hens as well as at the Montana Egg Plant, LLC in Great Falls. The purpose of the inspection service is to verify that eggs are graded, stored, and packaged and labeled properly and ensures that only quality eggs are being marketed to consumers while inedible product is properly disposed. Montana has a growing number of egg producers with flocks greater than 3,000 hens, including many cage-free, organic, and non-GMO egg producers. Each sanitarian or grader must be certified by USDA for Shell Egg Surveillance.

The Shell Egg Umbrella



Resident Grading done at the
Montana Egg Plant, USDA Shield applied

Fee Grading done at the farm, USDA Shield applied

Shell Egg Surveillance for producers with flocks
over 3,000 who pack their own eggs.

USDA Shield Egg Grading

Since 2011, the Department has operated under an agreement with USDA to conduct egg grading services in the State under USDA authority. This allows State employees, certified as USDA egg graders, to apply the USDA grade shield. This certifies that eggs are processed, packaged, stored, and invoiced to meet USDA Standards in in-state plants and qualify the eggs for interstate and international markets.

Resident USDA egg grading is performed at the Montana Egg, LLC plant located in Great Falls for those producers who choose to sell their eggs through that facility, or for a fee, (Fee Grading), producers can also request USDA Fee egg grading at their private facility. Though there has been no fee grading completed in the last few years due to more producers moved to the Montana Egg, LLC plant, the program remains available to producers.

The ability to provide USDA grading services in Montana has opened national markets for eggs produced in the State, plus periodic exports to Canada. This program is fully funded with industry user fees.

Shell Egg Surveillance

Shell Egg Surveillance is an unannounced inspection conducted by a USDA surveillance licensed grader on egg producers with caged flocks over 3,000 hens who choose to pack and market their own eggs. They are visited on a quarterly basis to ensure compliance with USDA rules. Samples of eggs are selected and graded to B standards according to the inventory on hand, checking at least one sample for each size packed. Cooler temperatures, invoices, disposition of inedible product, identification of restricted eggs, and carton labeling are also verified.

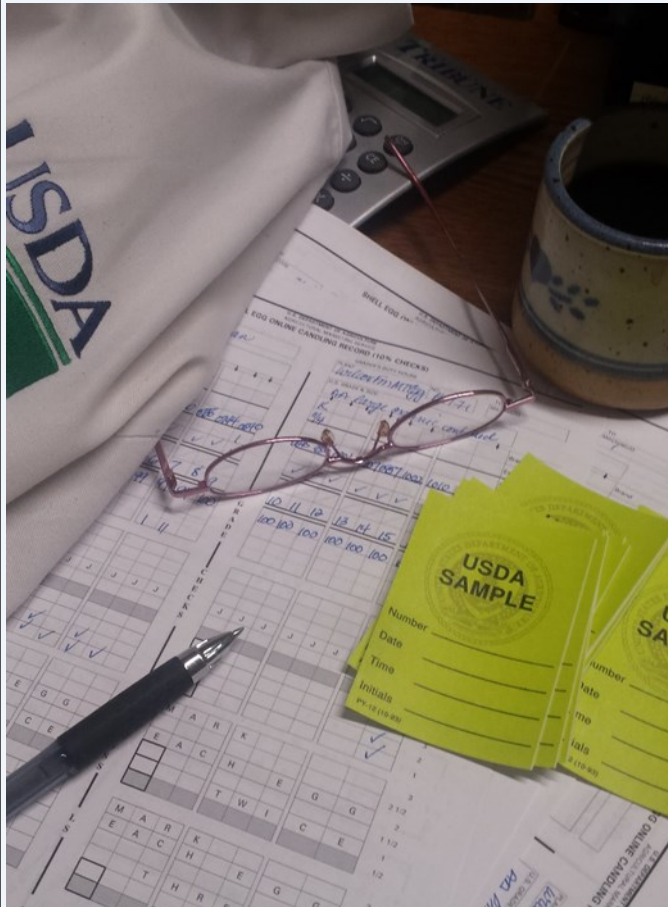


Figure 13: USDA egg sampling paperwork, USDA photo



Figure 14: washed eggs in a plant MLIV staff photo

USDA EGG RESIDENT GRADING VOLUME (Montana Egg LLC Plant, Great Falls)

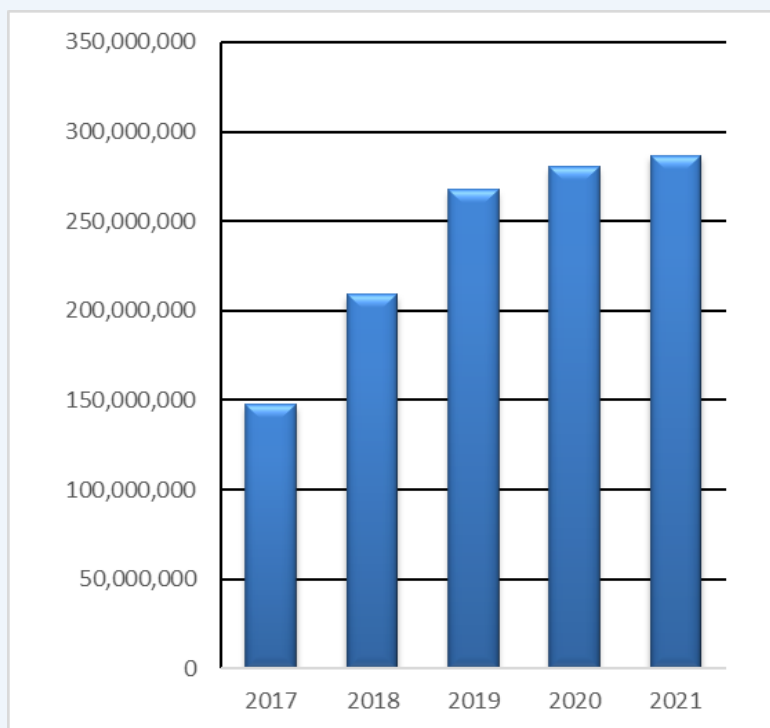


Figure 15: Egg volume from MT Egg Plant provided by MLIV employees

USDA FEE GRADING (Eggs for Export from USA inspected at farm of origin)

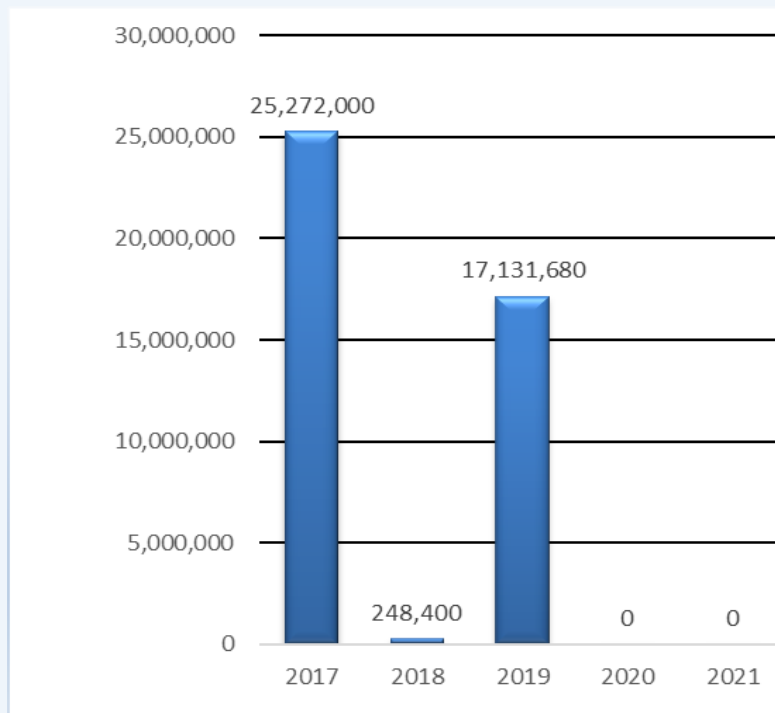


Figure 16: Egg volume from farms for export provided by MLIV employees

The United Egg Producers (UEP) Audits

The United Egg Producers (UEP) animal welfare audits are a voluntary certification, conducted annually on producers with flocks of 3,000 or more caged hens. The purpose of the audit is to verify humane conditions used to raise caged hens used for egg production. The conditions must meet specific criteria set up by UEP and the audits are usually conducted by a USDA certified State sanitarian. User fees for this service fund this program. Traditionally, a UEP certified sanitarian completes the audits and providing an in-state auditor gives egg producers economical access to this certification. Due to the retirement of our last UEP certified sanitarian, the 2020 inspections were completed by USDA staff who also trained one of our sanitarians to get certified. Ten (10) inspections were done in the fall of 2020 with all producers passing. Our sanitarian completed training in July 2021 and will complete the fall 2021 audits.



Figure 17: Checking yolks for color and quality; MLIV staff photo

Additional Requirements of the Egg Program

- Act as a Liaison for egg producers with >3,000 hens for FDA Salmonella Enteritis monitoring/elimination program
- License small independent producers with <3,000 hens as egg graders so they may provide their eggs for retail resale
- License Egg Dealers (businesses who bring eggs into Montana for retail sale)

• LICENSED EGG GRADER (62 total)

License (requirements)		Inspection frequency	Inspections/year
Grader/Candler (inspection & test)	1 initially	as needed for <3,000 hens	Varies
	1 initially	quarterly for >3,000 hens	16 producers x 4 = 64 yearly

• LICENSED EGG DEALER (47 total)

Egg Dealer (license)	1 initially	as needed	Varies
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FUNDING AND STAFF

OVERVIEW

The Milk and Egg Program performs its mission through two full-time Sanitarians stationed in Northwest and Northcentral Montana. Sanitarians are also certified with USDA to conduct shell egg grading and/or shielded egg grading. The Bureau also has one full-time and one part-time USDA certified Resident Graders stationed at the Montana Egg Plant in Great Falls for USDA Resident and Fee grading of shell egg products. These positions are fully funded by user fees. In addition, a part-time office/program manager is based in the Helena office. The acting Bureau Chief is Dr. Martin Zaluski who also serves as the Animal Health Division Administrator and State Veterinarian.

The Milk Program is fully funded by dairy producer fees. The Shell Egg program conducts inspections for the DOL program and is fully funded by a contract with USDA-AMS for the Department to perform the quarterly inspections of shell egg producers. All funds are categorized as State Special Revenue.



Figure 18: Egg transfer equipment in action, MOBA webpage

MEET OUR STAFF

Rosemary Hickey, Registered Sanitarian, State Rating Officer, Districts 1 & 2: Rosemary began her career with the Milk and Egg Bureau in 1997. She grew up in Butte and holds BS degrees in Microbiology and Medical Technology from the University of Montana. She worked in research labs prior to employment with the MDOL. She has two children: her favorite son, Emiliano, a senior at MSU and her favorite daughter, Taleah, a senior at Polson High School. Rosemary enjoys reading, walking, dancing, cultural events and mostly, being a mom.

Alex Dachs, Registered Sanitarian, Districts 3 & 4 and USDA Egg Grader: Alex grew up in the Flathead Valley of Montana and now resides in Great Falls. He graduated from MSU and received a B.S. in Cell Biology and Neuroscience. He worked previously as a Sanitarian and then as a Planner for Cascade County. He loves being outdoors golfing, skiing, hiking, hunting, fishing, relaxing on the lakes and rivers, enjoying the beautiful landscapes and observing the wildlife of Montana.

Elaine Hartman, USDA Shell Egg Grader: Elaine Hartman grew up in the Flathead Valley, her parents operated a dairy farm. She graduated from Montana State University with a major in Agriculture and minor specialty in Chemistry. She has three grown children, and one grandchild, and enjoys gardening, skiing and knitting in her spare time.

"When my mom took me to visit my aunts, they always knew where to find me, in the chicken house looking for pullet eggs. They would smile if they knew I work with eggs every day."

Terry Cavin, USDA Shell Egg Grader: Terry grew up on a farm in southwest Iowa and moved to Montana in 1978. He started with the USDA Soil Conservation Service in 1980 and worked in Hamilton, Plains, and Great Falls before transferring to the Department of Defense and Missile Engineering in 2002. He retired in 2012 and shortly thereafter joined the Department of Livestock at the Montana Egg, LLC plant in Great Falls.

Darcy Alm, Office Manager: Darcy is native to Helena and just recently returned to the family ranch where she grew up. She earned an AAS in Equine Management from Central Wyoming College but worked in lending for 14 years. She came to the Department of Livestock in 2013 in the Animal Health Bureau and moved to the Milk and Egg Bureau in 2015. Her off duty interests include horseback riding, snowmobiling, and obstacle course races. She lives outside of Helena with her husband, Chris, and their two (2) busy boys.

LOOKING FORWARD

As we move into 2022 and beyond, the Milk and Egg Bureau is dedicated to helping our producers provide Montana with the freshest and healthiest milk and egg products available as well as bringing new producers, cheesemakers, and other artisans into the market. Testing and licensing new egg candlers/ graders is a year-round task that ensures our retail outlets have farm fresh eggs available for purchase at their pleasure and we frequently receive calls from goat, sheep and dairy cow owners interested in establishing dairies to sell milk, cheese, and other pasteurized goods.

Continued loss of dairy farms is likely to be a continued challenge for the state, but the sector for artisan cheeses and other premium products remains strong and is likely to grow. We are also excited about egg production which is also likely to grow in the coming years. We truly value the friendships and honor the dedication of our Montana milk and egg producers past, present, and future.



Figure 17: Happy Eggs come from Montana Egg LLC, Great Falls, MT, MLIV Staff Photo