

Montana Department of Livestock

# **MILK & EGG BUREAU**

## **FY 2020 ANNUAL REPORT**



### **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.



## TABLE OF CONTENTS

MILK AND EGG PROGRAM.....	3
Overview.....	3
Authorization.....	3

### MILK PROGRAM

COVID-19 Pandemic Response.....	4
National Conference of Interstate Milk Shippers (NCIMS).....	4
Licensing charts, sampling information, plant and producer maps.....	4-7
Grade A and Grade B Differences.....	7
Charts for number of milking cows in Montana and volume of milk produced.....	8
Drug Residue Violations.....	9
Additional requirements of the Dairy Program.....	9
Dairy Inspectors.....	10
Press release.....	10
Dairy farm attrition.....	10

### EGG INSPECTION PROGRAM

COVID-19 Pandemic Response.....	11
Shell Egg Program.....	11
USDA Shield Egg Grading.....	12
Shell Egg Surveillance.....	12
Resident and Fee Grading Charts.....	13
United Egg Producers (UEP) Audits.....	14
Additional Requirements of the Egg Program.....	14
License total charts.....	14

### FUNDING AND STAFF

Overview.....	15
Meet our Staff.....	15
Looking Forward.....	16



# 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, MDOL 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, 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)





## **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 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**

In March, the Milk and Egg Bureau, like nearly every other business and State agency, was forced to rapidly adjust how we do business with impending spread of COVID-19. On March 20<sup>th</sup>, we notified our producers to expect reduced farm visits and inspections due to travel restrictions and passed along pertinent information regarding health and safety measures they could take for dairy employees. In April we were granted approval for an exception to the NCIMS program requirements for inspections and testing (see below) through June. At the time of this writing, the Bureau was slowly reinstating farm inspections, allowing ample time between farm visits and still limiting travel to locations nearest the Sanitarians. In addition, the Bureau has been making efforts to alert producers to federal programs offering assistance for production losses due to the pandemic.

### **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 or samples	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 or samples	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

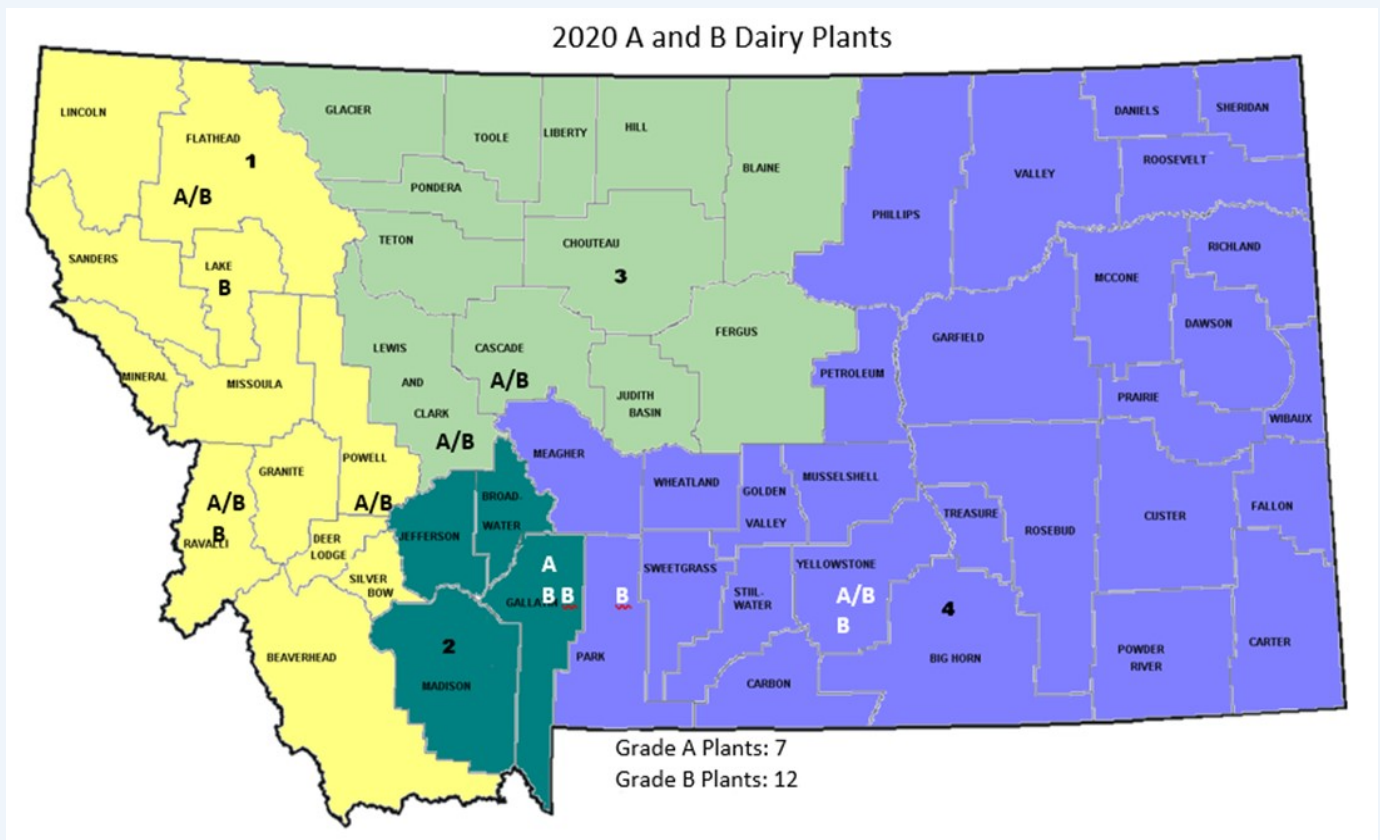


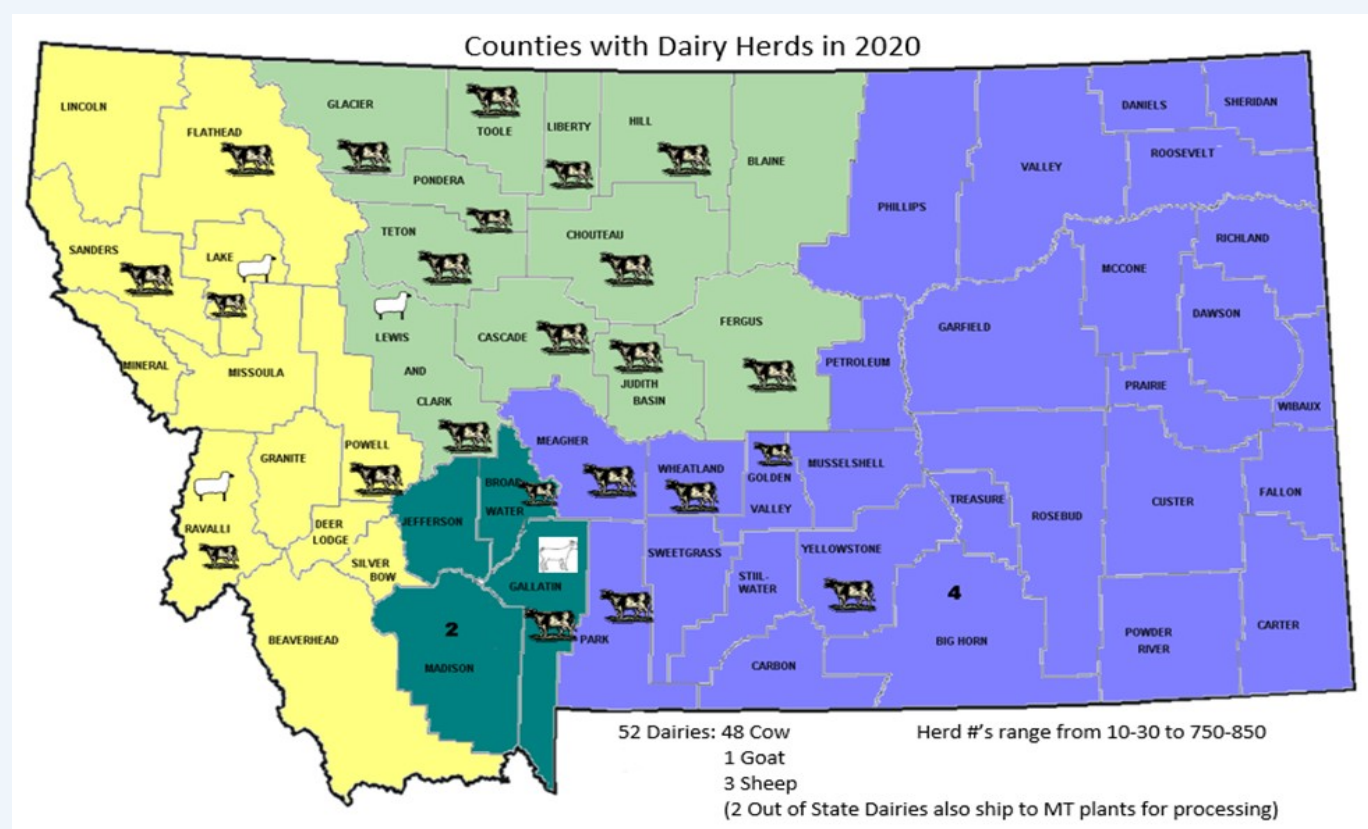
Figure5: MT Dairy plant locations provided by MDOL staff



### GRADE A PRODUCERS (52 total: 48 cow dairies, 3 sheep dairies, 1 goat dairy)

Samples or Inspection	Number of tests of samples	Frequency	Total number of samples or Inspections performed
Dairy Inspection	1 inspection	Every 6 months	106 yearly
Follow-up inspection for violations	As needed	As needed	Varies
Milk sample	4 samples	Every 6 months	424 yearly
Pesticide milk sample	1 sample	Annually	52 yearly
Well water sample	1 sample	Every 3 years	18 yearly (staggered)
Brucellosis Ring Test—cow only	1 sample*	Quarterly*	232 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 MDOL staff

### MILK HAULER AND SAMPLER LICENSES ISSUED (103 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



## 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



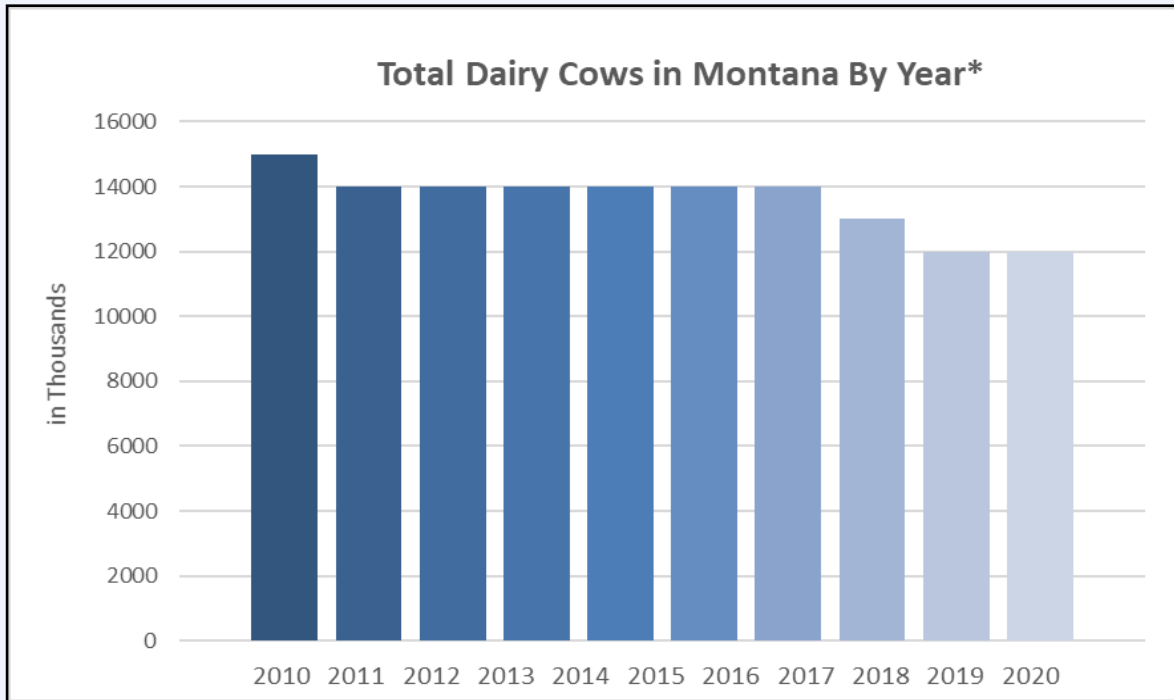


Figure 8: Number of dairy cows in Montana

\*Data provided by USDA National Agriculture Statistics Service

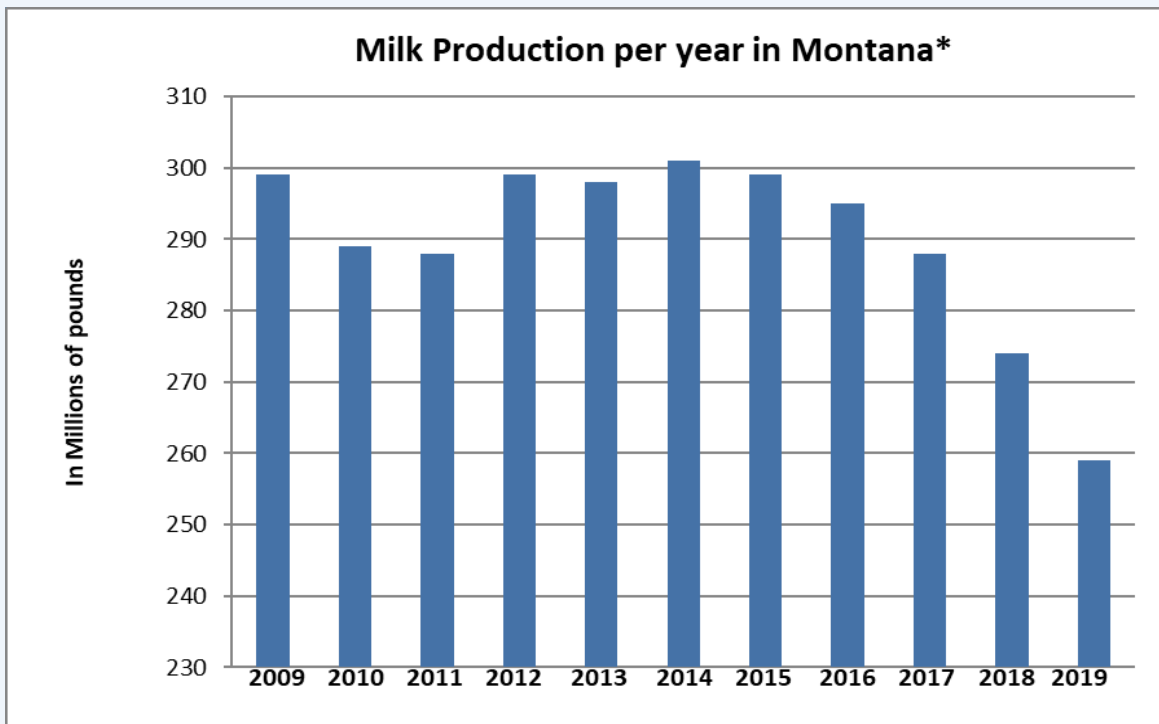


Figure 9: Milk Volume per year in Montana

\*Data provided by USDA national Agriculture Statistics Service



## DRUG RESIDUE VIOLATIONS

We had zero (0) pool producers test positive for drug residue during the 2020 fiscal year which resulted zero pounds of milk disposed of (land applied) to prevent human/animal consumption. There was one (1) vertically integrated producer who did have a positive sample, but they use their own milk and, therefore, the milk in question never left their farm.

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 and official sample of their milk demonstrates the milk safe and is free of drug residue.

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.



Figure 10: Stock photo

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

## **PRESS RELEASE**

In May 2020 the Bureau circulated a press release in response to numerous inquiries regarding sharing or giving away raw products from milk to cheese. Temporary food supply shortages played a part in spurring consumers toward alternate food sources, however, the Bureau wanted to reassure consumers that pasteurized products were and are still plentiful as well as remind them of the potential dangers of ingesting raw dairy products. The full release can be found here: <http://liv.mt.gov/Newsroom/departments-of-livestock-promotes-consumption-of-pasteurized-milk>.

## **DAIRY FARM ATTRITION**

FY 2020 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, Gallatin and Lewis and Clark Counties closed their doors, disbursing more than 550 dairy cows 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.



# EGG INSPECTON PROGRAM

## **COVID-19 Pandemic Response**

Along with the milk program, the egg inspections were affected by the COVID-19 outbreak. In mid-March, the Sanitarians were instructed to stop physical visits to farms for the purpose of shell surveillance. They were instructed to instead use “desk audits”, in which the producer is interviewed via telephone.

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.

At the time of this writing, no changes have been made to these protocols.



Figure 11: Candling an egg during grading, MDOL 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 Inc. 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. There was no fee grading completed in FY 2020 as there were no direct exports to Canada.

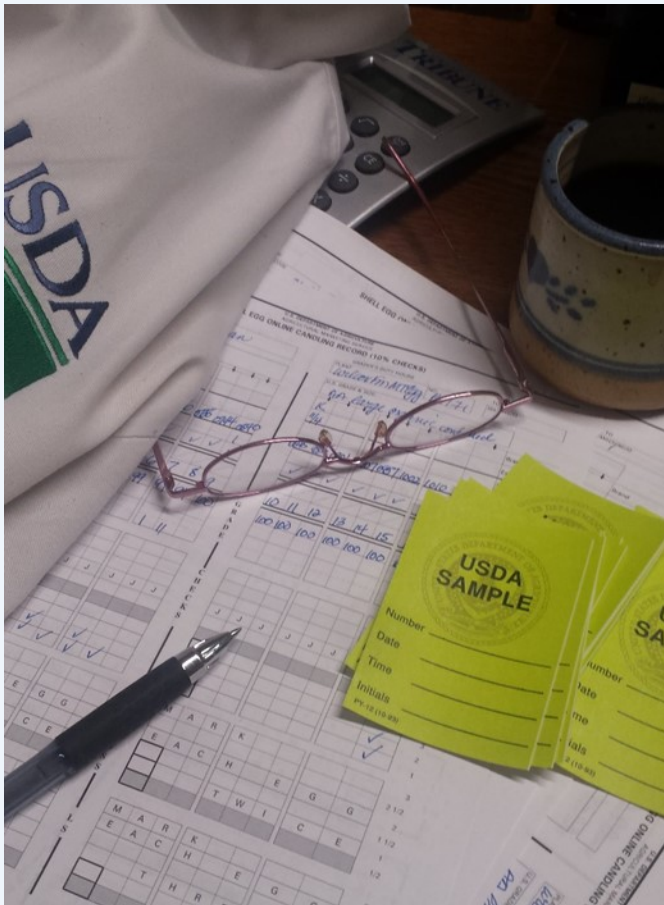


Figure 12: USDA egg sampling paperwork, MDOL staff photo

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.

Producers with caged flocks over 3,000 hens who choose to pack and market their own eggs are visited on a quarterly basis. Samples of eggs are selected and graded to B standards according to the inventory on hand, at least one sample for each size packed. Cooler temperatures, invoices, disposition of inedible product, identification of restricted eggs, and carton labeling are also checked to ensure compliance with USDA rules.



Figure 13: washed eggs in a plant MDOL staff photo



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

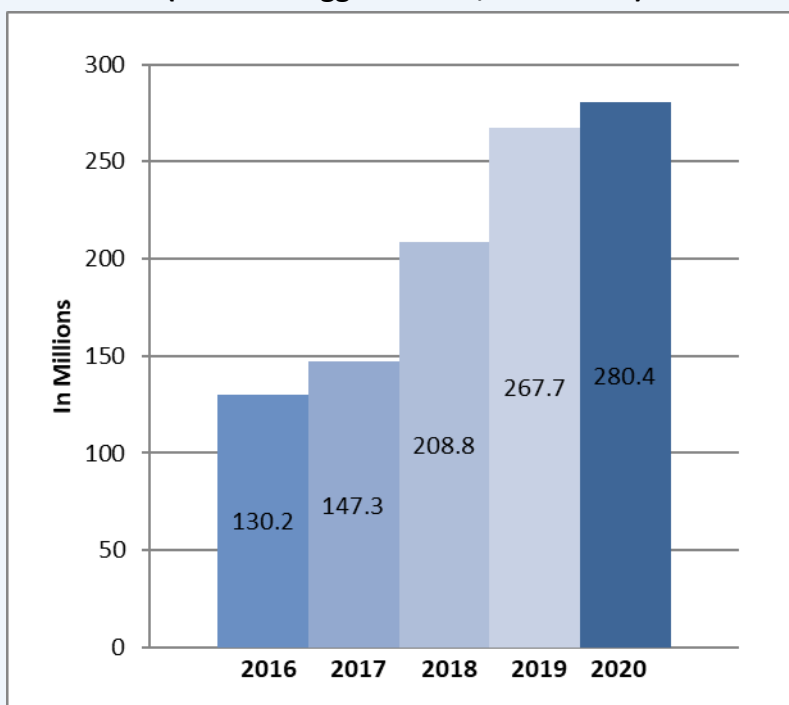


Figure 14: Egg volume from MT Egg Plant provided by MDOL employees

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

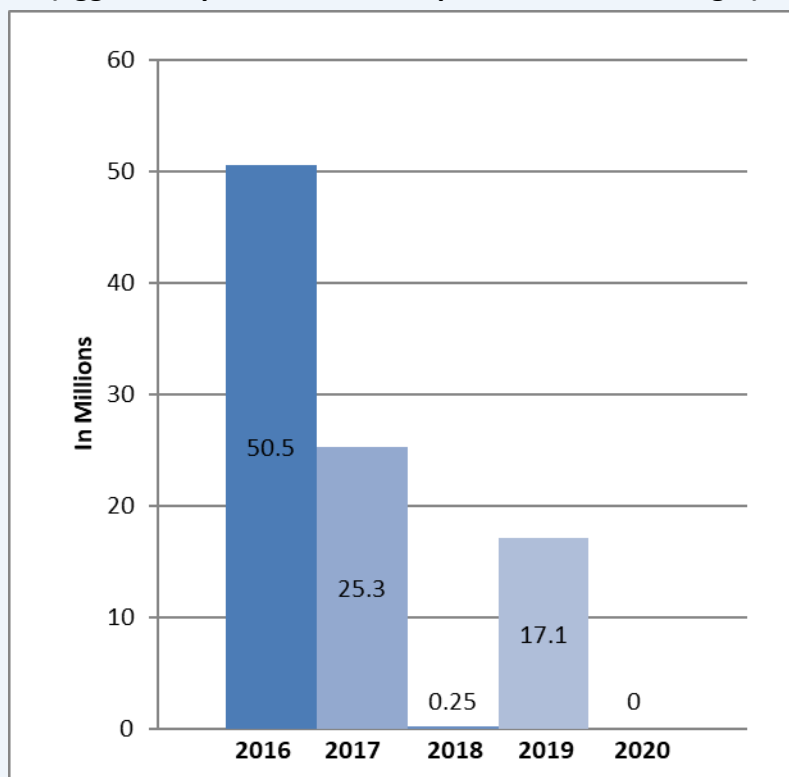


Figure 15: Egg volume from farms for export provided by MDOL employees



## 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 conducted by a USDA certified State sanitarian. User fees for this service fund this program. Providing an in-state auditor gives egg producers economical access to this certification. Seven (7) inspections were done in the fall of 2019 with all producers passing inspection.

### Additional Requirements of the Egg Program

- Perform Shell Egg Surveillance work performed each quarter
- Inspect each wholesale outlet twice per year
- USDA Resident Egg Grader is fully certified by USDA
- 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 (61 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 (44 total)

Egg Dealer (license)	1 initially	as needed	Varies
----------------------	-------------	-----------	--------



Figure 16: Egg transfer equipment in action, MOBA webpage



## **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 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 which are earmarked revenue funds. 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.

### **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 junior 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 grew up in the Flathead Valley on a dairy farm with all the associated horses, chickens, cats and dogs that a farm dweller gets to have. She started college majoring in Chemistry/Environmental Studies, but halfway through, got homesick for the farm, and switched to Agriculture, graduating from MSU in Agronomy. She has three grown children, and in her spare time likes to ski, hike, and knit. She is an aspiring crazy cat lady.

**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 a native of Helena and a graduate of Capital High School. She obtained an AAS in Equine Management from Central Wyoming College but went to work in lending. After 14 years it was time for a change of pace, and she came to the Department of Livestock in 2013 in the Animal Health Division 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 two (2) busy boys.



**Retirements:** January 1, 2020 marked a new era for the Milk and Egg Bureau with the retirement of not one, but two, long term employees.

**Dan Turcotte** served with the Bureau for nearly 30 years as a Registered Sanitarian and State Rating Officer, and as part time Bureau Chief for the last 12 years of his tenure. His other career highlights include time as a Quality Control Manager in Meat processing, a laboratory chemist and consultant for environmental monitoring and county sanitarian. Dan lives in Billings with his wife, Lugene, and will be “working on all those projects that have been piling up”. **Roy Hall** had over 30 years of service with the Bureau working in north-central Montana. Roy is a U.S. Marine Corps and a Vietnam Veteran who lives and farms with his wife, Nancy, in the Sun River Valley west of Great Falls. They will be working the farm, focusing on forage production.

The Department of Livestock and, particularly, the remaining Milk and Egg Bureau staff, give a hearty ‘thank you’ to both Dan and Roy for their years of service, knowledge, and comradery, and we wish them all the best in retirement!

### LOOKING FORWARD

As we move into 2021 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, MDOL Staff Photo