



# Meat Messenger

North Dakota State Meat and Poultry Inspection Program

2020 Issue 2

## A Message from the Commissioner

Greetings,

Thank you to all those involved in the meat processing industry. North Dakota's meat processing plants play an important role by adding value to the livestock industry through providing safe, high-quality meat products for consumers. Our staff's role is to assist the industry by ensuring standards are followed for all those involved.

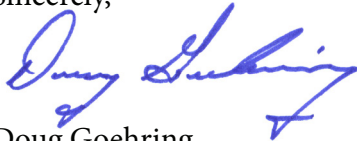
Earlier this year, Deputy Agriculture Commissioner Tom Bodine and Livestock Industries Division Director Dr. Andrea Grondahl visited with plant owners to discuss the inspection program and needs for the future. We also put out a survey in order to receive feedback on how we are doing. Then the COVID-19 situation hit and affected the food supply chain. We thank you all for your service and helping us to understand the extra demand that your businesses continue to experience due to this pandemic.



This helped us to develop the North Dakota Meat Processing Plant Cost-Share Program to help state-inspected and custom exempt meat processing plants upgrade their facilities and equipment to meet the increased demand. The state Emergency Commission unanimously approved \$1.3 million for the program with money from the coronavirus relief bill (CARES Act). The second round added another \$2.7 million from the CARES Act for the program and added eligibility for federal plants.

Just under \$2 million went to 48 state-inspected and custom exempt facilities and the result is an expected 42% increase in processing capacity. The remaining \$2.013 million went to federally inspected plants. We hope the funding will help to increase the local availability of beef and provide for your business needs into the future.

Sincerely,

A handwritten signature in blue ink that reads "Doug Goehring". The signature is fluid and cursive.

Doug Goehring

## Meat Messenger

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## Handling Butcher Waste

The very nature of operating a small slaughter facility generates butcher waste. There is a need to dispose of the viscera, bones, skulls, and unused organs and fat. Most plants used to pay for a company to pick up the waste and take it to a rendering plant, but the cost of that service has become unfeasible for many plants. What do you do with your butcher waste now?

The North Dakota Meat and Poultry Inspection Program (NDMPIP), in conjunction with the North Dakota Department of Environmental Quality - Solid Waste Division (NDDEQ) and NDSU Extension, developed a booklet which contains an overview of the options available for handling butcher waste.

The NDDEQ regulates the disposal of agricultural wastes, and they allow several options for disposal of butcher waste:

- Municipal Solid Waste Landfills
- Composting
- Incineration



Composting is gaining popularity, due to its relative low cost. Mary Keena with NDSU Extension has been working with many meat plants and ranchers on how to compost and how to apply for a compost permit. She also assists in nutrient management plans, which is the plan for what to do with the resulting compost or the materials from the incineration process.

The [Butcher Waste Disposal Options for Small Meat Plants Operating in ND](#) booklet provides guidance for handling butcher waste and resources for proper composting procedures. It is available on the NDMPIP webpage and has contact information for Mary Keena and NDDEQ.

## HRI Limitations Updated

FSIS is increasing the dollar limitation on hotels, restaurants, and similar intuitions to \$79,200 for meat products. Poultry products will remain at \$56,600. As a reminder, records of all transactions must be kept and retail HRI accounts cannot exceed 25% of all retail sales totals or the upper limit as set by FSIS. These values are for all sales occurring during the 2020 calendar year.

# Hanging Pork Carcasses

Hogs are usually cut up just a few days after slaughter, but what happens if the pork carcass is left to hang for a few extra days?

A study was done to evaluate the microbial quality effects of hanging pork carcasses for an extended period. To determine the effects, the researchers slaughtered 20 hogs, applied a hot-water intervention of 170-201°F water, then hung the carcasses up to 21 days at 31°F with an average relative humidity of 87.3%. The flank, shoulder and jowls were sampled every 7 days. Blade steaks were cut from hogs that were hung for 21 days and then packaged and sampled every week for 35 more days to determine microbial quality on packaged pork that was dry aged.

Jowls tended to collect water run off and did not dry quite as quickly, so they were much higher in bacteria and yeast, which might explain why jowls are highest incidence of Salmonella of pork

cuts. Spoilage occurs when the organoleptic properties (sight, smell, taste, texture) are not favorable and bacterial degradation of amino acids triggers slime formation.

Clean pork carcasses stored right about 32°F and less than 87% relative humidity, can be hung for 21 days and the meat can be vacuumed packaged for 35 more days without compromising microbial quality. The study was executed under extreme sanitary conditions, so less than perfect conditions may not meet the same shelf-life, but most plants can hang pork longer than the typical 3-7 days without significant microbial concerns. This may provide scheduling flexibility, but the ingoing carcass must be very clean and the cooler



must operate at close to 32°F to observe similar limited microbial growth.

Najar-Villarreal, Boyle, et al. (Dec, 2019). [Effect of Extended Hanging Time on the Microbial Quality of Pork Carcasses and Pork Blade Steaks]. "Meat and Muscle Biology 2020TM".

## COVID-19: How to Further Protect Your Employees and Customers

Meat plants have been hit particularly hard by the COVID-19 pandemic. Thankfully it has not hit small meat plants in North Dakota, but the general consensus is that working in colder environments and in close proximity to others puts meat plant operations at higher risk.

To provide further assistance, a "Meat Processing Facility COVID-19 Playbook" is available at <https://www.unmc.edu/healthsecurity/education/programs/docs/Playbook.pdf>. The book has resources and management plans to help provide more protections for engineering controls, administrative controls, personal protective equipment recommendations and community education. North Dakota does not have mandates on how you must operate and apply protections, so it is up to each business to make the decisions that they see fit.



# What are Custom Exempt Meat Brokers?

This spring, the NDDA sent a letter of information to every meat plant. An interpretation was made that allows for custom exempt meat plants to operate as a broker or agent. What does that mean?

An agent simply means that a customer can hire the custom exempt meat plant to go out and find an animal, buy the animal for that customer, and slaughter and process that animal on behalf of the customer. That means anyone can simply call the local butcher, request a half beef and the butcher can fill that order. The customer can pay the butcher directly for the animal and the processing.

The stipulation is that the sale of the animal is still on a live basis. The butcher may use the customer's money to pay the producer directly, and the documentation must provide evidence that the sale was prior to slaughter. The customer is the new owner of the animal; the butcher was simply acting as a middleman. This interpretation does not negate the custom exempt regulations; it simply allows for the custom exempt butcher to facilitate the sale of a live animal on behalf of someone else. The sales must be based on live animal weight or price per head and the customer should still be afforded the opportunity to physically observe

their particular animal.

Butchers probably know which producers make the best beef, so acting as a broker or agent to bring better beef to their customers is a nice service and rewards both the rancher and the butcher.

The NDDA also maintains a voluntary local foods map and promotes it to the public. Butchers may be listed on the map as meat brokers if desired. If you have more questions, feel free to call or email Nathan Kroh at [nkroh@nd.gov](mailto:nkroh@nd.gov) or 701-328-4767.

## Clean Faster and Better



Cleaning is a part of the business. It is critically important for food safety and customer satisfaction.

Improperly cleaned equipment harbors bacteria, which at the very least will reduce product shelf-life and flavor, and potentially make someone sick or worse.

Cleaning does require labor and time, reducing fabrication time. Developing better cleaning methods should reduce cleaning time and increase production, resulting in more profit.

1. Dry clean first. Scrape meat scraps and debris from

- table tops first, using rubber scraper to remove as much contamination as possible.
2. Pre-rinse everything with lukewarm water. Hot water too soon will actually cook the proteins and make it more difficult to clean.
  3. Use an alkaline solution with a brush. Alkaline solutions cut through and lift fat. Using proper chemicals will save time and labor. Cloths and sponges do not provide much scrubbing action and usually contaminate surfaces with more bacteria.
  4. Rinse with hot water ~189°F, if possible.
  5. Sanitize with a chemical solution and let drip dry. An inexpensive solution is 100-200 ppm chlorine from bleach. Bacteria can double every 30 minutes, so a single bacterium

could potentially grow to 536,000,000 within 15 hours, which should emphasize the need to sanitize.

Fats, proteins and minerals (very present in meat) are the most difficult to clean, so using proper tools and chemicals is important. Alkaline cleaners should be between 8 and 11 pH. Following the directions on the bottle is always recommended.

Jones, William, Jean Weese, Joseph Cordray, Peter Brown, and Charles Ande. "Sanitation and Handling Practices for Fresh Meat Processing and Retailing" Alabama Cooperative Extension System (2003): 3-4. Web. 23 June 2020 <<https://ssl.acesag.auburn.edu/pubs/docs/A/ANR-0380/ANR-0380-archive.pdf>>

# Meet our Newest Meat Inspector



Riley Francis is our newest meat inspector. She started in April 2020 and serves the northeast area.

She is originally from Pontiac, IL, and moved to North Dakota in 2008. She went to Mayville State University where she played three collegiate sports and graduated with a degree in biological sciences.

Riley's family runs a registered shorthorn cow/calf operation in Adams, ND. She also loves to play with her puppy Jinx, her future cattle dog, ride horses and workout. She loves to travel and even spent six months on a cow/calf operation in Russia during 2014.

## Classified Ads

We are always looking for industry related items to advertise in the Meat Messenger. We post sale and want ads FREE. Contact Nathan Kroh (701-328-4767) at [nkroh@nd.gov](mailto:nkroh@nd.gov) with product description and contact information.

Smokehouses- 500 lbs. capacity each. Call for information and details.

Globe Meat Slicer- functioning, but needs minor work. Call for information and details.

New one-quart plastic containers with lids: - \$20 per lot of 50.

Please contact Calvin or Alex for more information at 701-743-4451. Located in Parshall.

Berkel 812 Automatic Slicer. New Blade, used little. \$2500 or best offer.

Budget ½ ton Chain Hoist: 3 Phase. \$700 or best offer.

Braising Kettle: Natural gas, needs work. \$500 or best offer.

Maple Valley Locker: Contact Dustin 701-437-3311 Please call for pictures or inquiries.

Wanted-Carcass Rail: 50 ft. of overhead carcass rail for small animal slaughter facility. Call Fred at 701-429-8066 if you have rail for sale.

Two Freezers with Double Glass Retail Display Doors - Each freezer is about 4 ft. wide with two pull open doors. For more information or pictures, contact Greg at S&K Processing at 701-839-6488.

### What would you like to read in the next issue?

The Meat Messenger is your newsletter. If you like the content, please feel free to share this issue with your employees, your livestock producers and customers. We welcome any questions, comments, or suggestions for future topics. Please contact **Nathan Kroh** at [nkroh@nd.gov](mailto:nkroh@nd.gov) or 701-328-4767.

## **Meat Messenger**

North Dakota Department of Agriculture  
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