

“Virginia Producers Lead the Way for Certification and Use of Mobile Processing Unit,” *Stockman Grass Farmer*, August 2022

by Christine E. Black

Virginia State University (VSU) has developed an online butchery course with a hands-on component that certifies farmers to bring a Mobile Processing Unit (MPU) unit to their farms, butcher on-site, and then sell USDA-inspected lamb and goat meat at farmers’ markets and in stores. Brand new to the state, the mobile unit will allow farmers to process their animals on their own farms or at neighboring farms.

The program is being well-received with 20 participants completing the first course in December of 2021, and 22 more producers scheduled to complete the course in April of 2022.

With an increasing backlog in processing over the past two years, the course and unit have generated a lot of interest among producers in Virginia and other states as well. The unit has been used for training with some slaughter of research animals. In order to lease the unit from VSU, producers who have taken the certification course will need to file for a grant of inspection. Now, the first producer in Virginia has received a grant of inspection to begin using the unit on his Hanover County farm. A second producer in Fluvanna County has an application pending.

Paul Boulden, Jr. of Studley Farm in Hanover County, along with his cousin, completed the first course offered. Boulden noted that Virginia has 11 processing facilities in the state, and the Mobile Processing Unit now makes 12.

“Processing has been very tight,” Boulden said. “The ability to have the unit come to the farm is a tremendous asset.” Boulden has requested that the unit be brought to his farm this spring. Once farmers have completed and passed the five-module course and the two day in-person modules, they become certified. Then producers must apply for a grant of inspection for their site.

The grant of inspection is filed with the USDA Food Safety and Inspection Service (FSIS). In addition to filing, producers must have a complete sanitation standard operating procedure, including potable water; a plan for wastewater, offal, blood, and hide disposal; and a pest management plan. The VSU certification course provides a packet with required forms and guidance on completing them. Some requirements for the grant of inspection are required assignments, completed during the program. Finally, some elements for the grant of inspection have already been completed by VSU, and producers use what the University has already completed, according to VSU Professor and Small Ruminant Specialist Dr. Dahlia O’Brien. “We provide guidance during this process,” O’Brien said.

Once producers get a grant of inspection, Unit Coordinator Wallace Brousseau delivers the 40-foot all-aluminum gooseneck trailer to the farm. The trailer has an 8’6” interior ceiling height and is 8’6” wide and has a roof structure sufficient to support an overhead rail system. All

surfaces are washable with sealed seams, and a floor sloped to drains. The unit has a rear ramp door and a winch for rear door operation and to move loads up the ramp to the rail system.

With insulated walls, floors, and ceiling, the unit includes two sinks with hot and cold water -- one which is a hand washing station and the other a three-bay sink. It has a 100-gallon water holding tank and electrical outlets suitable for use in wet environments. It has a built-in 8-foot-deep walk-in cooler. The final cost was 138,139 dollars.

Supplies and equipment also include stainless steel tables; digital scale head; knives, hard hats, butcher aprons, gloves; gambrels and hooks; cutting boards; meat totes with covers; first aid kits; table top scale; vacuum sealer; meat saw; and meat grinder.

“The state has never had a Mobile Processing Unit; we’ll be piloting the process with the state,” said Boulden, who raises cattle, pigs, sheep, and goats. He has four other farmers lined up to use the unit while it is on his farm. The cost to lease the unit for four days is 100 dollars with up to 30 animals slaughtered and processed during this time plus a 15 dollar per head unit maintenance fee. Year one is a feasibility study to determine if the project will break even on supplies and diesel/fuel costs to travel to various sites. Researchers will review these costs after the first year of operation, O’Brien said.

A producer can kill up to 30 animals in the four days if the producer slaughters 15 on day one, hangs overnight and fabricates on day two; slaughters on day three, hangs overnight and fabricates on day four. If the producer has fewer animals (less than 15), he or she can slaughter on day one, hang longer and fabricate on day four, according to Brousseau and O’Brien.

The unit is limited by the space of the on-board cooler. If there is access to an additional cooler and a bigger team, then more animals could be slaughtered, O’Brien said. At current capacity, if the unit operates 48 weeks at 30 animals per week, it could process a total of approximately 1,440 sheep and goats in a year.

There is no cost for the inspector, and the HACCP plan created and submitted previously by VSU for the unit is submitted with all individual producer applications. Therefore, there is no cost to producers for these services.

Provided by the VSU College of Agriculture, the program trains producers to be their own butchers. In addition to taking the unit to and from the farm of the person leasing the MPU, the coordinator also liaises with the Virginia Department of Agriculture and Consumer Services (VDACS) to schedule the inspector, and ensures that all paperwork (slaughter logs and calibration logs) is completed and all procedures are conducted to remain in compliance.

Paul Boulden, who will be the first producer to lease the unit, said that the unit has the potential to serve underserved communities.

“For instance, Dr. O’Brien is from Jamaica, and she can’t get goat meat here,” Boulden said. “My cousin is from Tehran, and he has a very hard time finding lamb in the grocery store. Boulden added that the ground lamb he offers at farmers’ markets sells out in a day. “Everything that comes out of this unit will have a USDA stamp,” Boulden said. “I think there will be incredible demand for it.”

Logan and Emilie Tweardy of Shirefolk Farm in Fluvanna County, Virginia, were among the first participants to complete the course and expect a grant of inspection for their site soon.

“The course was great and covered butchering, labeling, marketing, and many other topics, and I especially liked that they focused on marketing,” Tweardy said. “I would have liked to have done this year one on our farm.” The Twardys raise pastured poultry, including broiler chickens, Thanksgiving turkeys, laying hens, and have been raising sheep for three years. Farmers’ markets are their main sales outlet.

“I can’t say enough good things about the course,” Tweardy said.

Producers in other states have shown interest in the unit for sheep and goats. There has also been interest in developing units for swine, poultry, and cattle. An Arkansas farmer has asked about its use for buffaloes, and a Washington state company is making one for use with cattle. In addition, two female producers in South Carolina want to take their farm to the next level by having a restaurant on their farm and process there, O’Brien said.

“With these Virginia producers leading the way, they will encourage others,” O’Brien said.

Non-Virginians may take the course, but they would not be able to lease the unit out-of-state. The modules covered in the certification program are useful for anyone thinking about designing and building their own mobile unit or processing facility. It covers Hazard Analysis Critical Control Point (HACCP), the science of red meat processing, wastewater management, on-farm composting, marketing, and value-added production.

“All the federal regulations are the same,” Brousseau said. “Of all we teach wastewater is the only section that would be different in another state. Everything else applies across state lines.”

If producers would like a unit like this in their state, O’Brien recommends working with a land grant institution or Cooperative Extension Agent to develop a plan and do a needs assessment among possible patrons and discuss possible funding sources. Secondly, she advises meeting with the state’s Department of Agriculture to discuss and determine the level of support for mobile processing units in the state.

“It will easier to develop if the Department of Agriculture is involved from the beginning,” O’Brien said. “And they will provide insights into design so that the unit will pass inspections, especially if USDA/ state inspection is desired.”

If producers want to put one of these units on their farm permanently, they would need a grant of inspection, potable water, electrical hook-up/diesel for a backup generator, composting facility, handling system, sewage for wastewater disposal with a plan approved by the local health department or Department of Environmental Quality. While the unit cost for VSU was \$139,000, the estimated cost now may be about \$200,000 with equipment and supplies, said O’Brien.

Purchasing the unit and equipment was and has been slow because researchers and developers were working within an institution, a university, with protocols to follow and

approvals that took time, according to O'Brien. Another major challenge has been finding a qualified coordinator with experience in processing livestock as well as having a good understanding of what needs to be done to remain compliant, so users of the unit are able to do inspected slaughter and processing. A third major challenge has been convincing producers that they will be able to slaughter and process on the MPU under inspection and will be able to sell the meat.

The current biggest challenge is waiting on grants of inspection.

"We are eager to get started and to be a resource to the sheep and goat producers of the state," O'Brien said.

The MPU and course were developed by VSU Professor and Small Ruminant Specialist Dr. Dahlia O'Brien and Dr. Stephan Wildeus, VSU Research Associate Professor, with collaboration from the Virginia Department of Agriculture and Delaware State University. Wallace Brousseau, VSU Extension Associate, is the Unit Coordinator. Funded by the United States Department of Agriculture (USDA), the unit's design was completed in 2016 in cooperation with Delaware State University and Virginia Department of Agriculture and Consumer Services (VDACS).