



Dairy Pipeline

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Strengthening Women in Agriculture through Hands-On, Engaging, Educational Programming

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We are helping to open doors for women in every facet of agriculture in Virginia. With approximately 36% of our state's primary farm operators being female, our goal is to bring additional programming to the women of agriculture. Just a few Ag facts for thought: Virginia has 43,225 farms across the state, with the average age of farmers being 58.5 years old; those 43,225 farms represent 7.8 million acres of Virginia land designated for agricultural use; the average farm size is roughly 181 acres. All agricultural enterprise is important—whether a large dairy, beef, or crop operation or a smaller urban agricultural business. A common need among all is an atmosphere dedicated to women to develop and refine their agricultural skills.

The Agriculture and Natural Resources lady agents of Virginia Cooperative Extension have joined forces to bring more programming to women across the state. Though the past year tested everyone in more ways than one, it has also given us the opportunity to approach problems in new ways. From the required transition to all virtual programming emerged the effort to grow the Women in Agriculture initiative.

The Virginia Women in Agriculture started out on a small scale a few years ago with a multiple

day Women in Agriculture Gathering conference. The yearly Gathering brought all sectors of Agriculture into one place to learn from both specialists and fellow women farmers. During COVID-19 we set our sights on growing BIGGER! First up was the Women in Agriculture Network which was born to foster female farmers through all virtual programming at a time that allowed participants to finish farm chores, get dinner made, and join us to network with other female farmers. This led to writing a grant proposal to host a hands-on cattle program in the fall of 2021. The Cattle WISE program will be offered in October 2021, to bring together women across the State working with cattle (dairy and beef). Women will have the opportunity to learn from other women in their fields about cattle handling, reproduction, and health. Learning how to correctly deliver a calf presenting with dystocia could mean life or death for both calf and mother. Dystocia can be the result of maternal/fetal disproportion, abnormal position during delivery, twins, uterine torsion, incomplete cervix dilation, or abnormal fetuses. This program will provide the tools to help deliver a calf when such a problem arises and a veterinarian is not available to assist. Participants will be taught about the importance of vaccine placement to ensure the highest value for your animal after processing, resulting in higher profit-margins. The program will also help women become comfortable with doing more on the farm by learning in a fun, stress-free environment how to change the oil, change a truck tire and back-up a number of different types of trailers. A goal of Cattle WISE is to teach women how to be comfortable in a male dominated field by strengthening their skills.

Additionally, several agents have been trained to offer Annie's Project programming in their counties. This group of lady Ag agents are ready to bring together women for an Empowering Women in Agriculture program. Participants of Annie's Project will learn how to strengthen their businesses, families, and communities over 6-8 weeks completing an 18-hour long course all taught by women for women.

To find out more about the exciting Women in Agriculture programming happening across the State (and maybe in your back yard) we have made it easy for you! Everything is listed on one website just click on the program you are interested in. We are offering virtual and in-person programming. Visit <https://sites.google.com/view/virginiawomeninagriculture/> to learn more.

It's what's for dinner: Beef on dairy management

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All dairy cattle are beef cattle. In fact, 6.4 million dairy animals were harvested in the U.S. in 2019, accounting for 21.1% of total U.S. beef production. Further, dairy animals that are managed and fed the same way as their beef counterparts will often grade USDA Choice or higher. However, a black and white hide is a dead giveaway to packers who know Holsteins typically have small, oblong ribeyes and larger frame sizes that do not hang well in the abattoir. Consequently, the profit fetched from a week-old Holstein or Jersey bull calf may barely cover the fuel cost to haul them to auction. Potential therein lies with "beef on dairy" – a management system in which dairy cows are artificially inseminated to beef bulls. This article explores potential strategies to turn a profit on otherwise unprofitable dairy calves through beef x dairy breeding and calf management.

Even though purebred dairy animals often marble as well as beef animals, drawbacks come when penciling out feed efficiency. Holstein market animals have greater energy requirements than beef animals, require more days on feed to reach finish, and are at a greater risk for metabolic issues. As such, adding carcass value to calves destined for culling is appealing for both dairy and beef operators. However, as more beef x dairy crosses enter the market, packers are likely to become more selective on carcass quality. Crossbred calves will need better ribeye size and shape, better muscling, and moderate frame sizes to stand out from purebred dairy animals. Most beef breed registries track expected progeny differences on ribeye area and marbling, so selecting beef bulls based upon more than just calving ease will produce higher value calves.

So, on which females should beef semen be used? Mature cows with low genetic merit, or cows that are consistent "problem breeders" are the best candidates to produce beef-cross calves. A producer utilizing sexed semen can establish how many replacements are needed the following year and decide from which animals the replacements should come based upon genetic merit. Then, the remaining animals can be bred to beef bulls. This will accelerate genetic improvement of the most valuable animals on the farm: high-producing cows and fertile replacement heifers.

Preparing a heifer calf for success as a future lactating cow begins when she hits the ground. The same is true for crossbred calves destined to be profitable feedlot animals. Therefore, establishing passive immunity by feeding quality colostrum within four hours of birth is critical. Failure to do so will produce animals more susceptible to calfhood sicknesses like bovine respiratory disease (BRD). Those calves are not only costly to treat but are inefficient growers and milkers later in life. As an example, a 2017 review in the Journal of Animal Science estimated that cattle treated for BRD returned

between \$50-\$250 less per head at slaughter than those never treated. Nevertheless, just like replacement calves, beef x dairy calves should double their weight by weaning. To achieve this, they should be fed a high protein starter grain, and either whole milk or high protein/fat (28/20) milk replacer for 6-8 weeks.

The market is still sorting out where exactly dairy x beef calves fit. In the meantime, a value-added program similar to [Virginia Cattlemen's Beef Quality Assurance](#) that incentivizes high-quality, consistent-looking, and pre-conditioned crossbreds could have both local and rippling effects for US dairy producers. Markets would likely respond to dairy x beef consistency by assigning higher values to those carcasses. As dairy x beef surges, dairy operators can begin to envision more of their animals in steakhouses rather than in between two buns.

Upcoming Events

Regular Women in Agriculture Meetings

Every 1st Tuesday @ 7:30 pm

State 4-H Dairy Quiz Bowl

June 12, 2021

Franklin County Livestock Show

June 12, 2021

June Dairy Month Poster Contest

Postmark Deadline June 15, 2021

June Dairy Month Baseball Game

June 17, 2021

Virginia Dairy Expo

July 9, 2021

Multi-Min Producer Meeting--Dayton

July 12, 2021

Franklin County DHIA Banquet

July 15, 2021

Virginia Cooperative Extension

Virginia Colored Breed Show

August 5, 2021

Mill Wheel Show Clinic

August 6, 2021

State 4-H/FFA Dairy Youth Field Day

August 6, 2021

Virginia Summer Holstein Show

August 7, 2021

Hokie Cow Classic

October 18, 2021

Cattle WISE for Dairy & Beef

October 22, 2021

If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Extension event, please discuss your accommodation needs with the Extension staff at your local Extension office at least 1 week prior to the event.



For more information on Dairy Extension or to learn about current programs, visit us at VT Dairy—Home of the Dairy Extension Program online at www.vtdairy.dasc.vt.edu.

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Visit Virginia Cooperative Extension: ext.vt.edu

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