



**School of Animal Sciences**  
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## Genetics: Are you getting the most out of them?

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When I was younger “proof” day was an exciting time. We waited by the fax machine—and later awaited emails—to check for new bulls on the proof list. We were impatient to see if we may have already had some daughters out of those bulls or what bull we should use next on mating our herd. Now that we have more information (and more reliable information), proof day often comes and goes without notice for most. While there are still official proof days three times a year, genomic predictions happen every week.

Although the quarterly excitement is gone, a massive amount of information is readily available—and more important than ever. Every producer can use this information to make their operation more efficient and sustainable. Learning how to use this information is critical to maintaining a top herd. Even if you don’t think about genetics in your herd, the information is being used to influence the future cows on your farm. Someone is making this decision for you.

The first thing that you should do is evaluate the status of your herd. Where does production stand? What are the components, livability, and morbidity? These are all things that you keep track of already—even if only through the co-op.

Once you know where your herd is, then you can set some written goals for improvement. In order to have cows that will live long, be trouble free, and profitable it is important that the goals be specific to your particular farm and management style. They should be achievable and there should be short-term and long-term goals (again, specific to your farm). You are free to solicit outside advice on establishing these goals, but they should be driven by your desires for your farm.

NOW, you can begin to manage your genetics to reach these goals. Do you need more components, lower somatic cell counts, or smaller cows? These are all achievable through genetic improvement. Do you need cows that can be milked by robots, do they need to milk faster or slower? Do you need a cow that can graze or one that emits less methane? These are all things that genetics can address. Work with a genetic consultant, but make sure you are working with one that listens to what you want for your specific farm. Every dairy farm is different, which is one of things that makes dairy farms great!

Using genetics is a long-term investment, not a quick fix. It is not something that can change your herd overnight, but that can make long term improvements in your herd. The nice thing is that no matter what your management style is, genetics can be used to improve your bottom line. Most dairy cows today are capable of making a lot of milk, but some cows do it with less feed, less sickness, and less inputs. These are the cows that are the most profitable for your farm. Once you

get a handle on your herd's genetic progress you can add in beef on dairy matings on the bottom of your herd and better manage heifer inventories. Utilizing available genetics data on these beef bulls will also better position you to have a more desirable calf to market. In times where margins are slim, it may be these little things that keep your farm profitable. Use genetics to manage your farm and take control of the future of your herd.

## Grant opportunities for Virginia dairy producers

*Authored by Christina Petersson-Wolfe, Associate Professor & Extension Dairy Scientist—Milk Quality & Milking Management, School of Animal Sciences, Virginia Tech; [milk@vt.edu](mailto:milk@vt.edu)*

There is a fantastic grant opportunity for farm infrastructure improvements and precision technologies. Each selected farm will receive up to \$200,000 towards their improvement plan. The article below was published in the Virginia Dairyman last month and contains all of the pertinent details. The deadline is fast approaching and although this is a busy time of year with field work, I encourage you to brainstorm how this could benefit your operation. Don't let this opportunity slip by!

The **Southeast Dairy Business Innovation Initiative (SDBII)** is a Tennessee based program that has expanded, with support from USDA-AMS, to offer grants focused on value-added dairy businesses in the southeast region. Dairy producers in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia and Puerto Rico are eligible to apply for the program which provides subawards to current and prospective value-added dairy businesses across the Southeast. Areas of focus include precision technology investment, farm infrastructure improvement, specialty processing equipment investment, exploration of alternative

revenue, transition planning, and business management.

### **The request for proposal (RFP) and application for the following grant opportunities are available:**

- Beginning processor (\$30,000 max; will reopen summer of 2023)
- Specialty equipment investment (\$300,000 max; will reopen summer of 2023)
- Farm infrastructure improvement (\$100,000 max; **closing June 2, 2023**)
  - A total of \$3.2M in award funding will be available in this category and it is estimated that 32 grant awards will be funded under this call.
- Precision technology and management grant (\$200,000 max; **closing June 2, 2023**)
  - A total of \$2.13M in award funding will be available in this category and it is estimated that at least 10 grant awards will be made.

### **To be eligible to apply for one of these grants, the project must satisfy at least one of these conditions:**

- Allows the diversification of dairy product markets to reduce risk and develop higher value uses for dairy products
- Allows the promotion of business development that diversifies farmer income through processing and marketing innovation
- Encourages the use of regional milk production
- Increases efficiency and profitability of dairy farms in the Southeast

### **Subawards will be made to prospective or current dairy businesses focused on one or more of the following areas:**

- Beginning Processor and/or Specialty Equipment Investment Grant
  - Diversify dairy product markets to reduce risk and develop higher uses for dairy products

- Promote business development that diversifies farmer income through processing and marketing innovation
- Encourage the use of regional milk production
- Value-chain and commodity innovation and facility and process updates for dairy process
- Product development, packaging, and marketing of dairy products
- Precision Technology and Management Grants
  - Improve animal health, well-being, and/or performance
  - Enhance labor efficiency
  - Reduce energy costs or environmental impact (i.e. carbon-footprint or GHG emissions)
  - Increase utilization of the farm's land base
- Farm Infrastructure Improvement Grants
  - Improvements to existing facilities to reduce the impact of heat stress and seasonal milk production swings
  - Investments in raw milk storage, cooling capacity, and/or transportation efficiency
  - Modernization and improvements to milk harvest
  - Improvements to feed and forage management and storage opportunities
  - Improvements to animal housing and environments
  - Water, waste, and manure management improvements
  - Investments to improve farm business structure

### **Fundable projects**

Dairy businesses may apply for funding to modernize, specialize and/or to transition to grazing on their farms. On the processing side, this can include funding to improve or add value chain and commodity innovation, facility and process updates for dairy processors, and/or improve or add dairy product development, packaging and marketing. On the farm side, this

can include funding to improve animal or farm efficiency, reduce labor costs or improve employee well-being, encourage use of best-management practices, and reduce carbon-footprint and GHG emissions. Some examples of how funds may be used include hiring an independent consultant to develop planning documents for the dairy business such as a feasibility study, business plan or marketing plan that will be useful in determining the likelihood of success or to develop a food safety plan. Funds may also be used to attend training to acquire skills needed to develop or market dairy products (for example, Western Kentucky University's cheese-making short course or Ohio State's Dairy 101: Introduction to Dairy Processing and Management short course). Funds for training may include registration fees, transportation (the lower of business class airfare or mileage at the IRS standard mileage rate) and lodging (at current rates in the continental United States "CONUS Rates"). On the processing side (Specialty Equipment Investment Grant), funds may be used to purchase specialty equipment such as pasteurizers, cheese presses, and labelers. Funds may also be used to get product development help and services in recipe development, sensory evaluation, packaging considerations or shelf-life studies from sources such as the University of Kentucky's Food Systems Innovation Center. For the farm side (Farm Infrastructure and Improvement Grant and Precision Technology and Management Grants), funds may be used to purchase wearable technologies, robotic milkers or feeders, heat abatement equipment, resting area improvements (new stall loops, new stall bases), harvest or feed implements, etc.

### **Important details**

- Precision Technology and Management Grants as well as Farm Infrastructure Improvement Grants require a 25% match based on eligible grant items. Construction costs cannot be used as matching funds.
- Recipients will be reimbursed in full following

a receipt of a paid invoice and approval by the SDBII Accounting Specialist.

- Monies granted cannot be used towards previous purchases, but down payments on allowable expenses can be used as matching funds.
- A progress report will be due 6 months after the project start date. A second report is required upon completion of the 12-month grant period. Final report is due by August 31, 2024.
- Equipment purchased as part of an SDBII Grant with a per unit fair-market value of \$5,000 or more will be subject to an in-person audit on a yearly basis for the duration of the equipment's useful life.

This is a very exciting grant opportunity for our region of the country and we are committed to helping you write successful grant proposals. Successful proposals will be thorough, well-thought out and well-written.

For more information, refer to:

<https://valueadded dairy.tennessee.edu/sdbii/>.

Please reach out to your Dairy Extension Agent or Dr. Christina Petersson-Wolfe ([milk@vt.edu](mailto:milk@vt.edu)) to help plan your project.

## Upcoming Events

### 20<sup>th</sup> Hokie Cow Classic

May 15, 2023 (Blacksburg, VA)

**Deadline for SDBII Applications:** Farm Infrastructure Improvement Grant and the Precision Technology & Management Investment Grant

June 2, 2023

### Franklin County Youth Livestock Show with Dairy

June 10, 2023

### Southwest VA 4-H Tractor Club Silent Auction

June 15-17, 2023 (Abingdon, VA)

### Southwest VA 4-H Tractor Club Raffle

June 17, 2023 (Abingdon, VA)

### Managing Milk Price & Risk Using Futures and Options Markets

June 26, 2023 (Rocky Mount, VA)

### Farmer CPR and First Aid Beginner Classes

June 29, 2023 (Rocky Mount, VA)

### Southast Dairy Youth Retreat

July 9 - July 12, 2023 (Statesville, NC)

### State 4-H / FFA Dairy Youth Field Day

August 3, 2023 (Harrisonburg, VA)

*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 VTDairy—Home of the Dairy Extension Program online at [www.vtdairy.dasc.vt.edu](http://www.vtdairy.dasc.vt.edu).



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