

## AGRIC-BIOFORMATICS

### Startup AgBoost brings genetic profiling to cattle producers

There is a big change ongoing in the nation's cattle industry. It is called genetic profiling.

Producers want to know that they are sending the best quality beef cattle to the sale barn. Grocers want to know the beef they are selling is from genetically superior cattle.

And consumers are demanding it.

An Oklahoma City-based startup, Agric-Bioformatics, recently launched a new online tool called AgBoost that brings genetic profiling and "big data" access for breeding and marketing decisions to small and medium cattle producers.

Founded in 2013 by Sean Akadiri, CEO, Agric-Bioformatics was created with small producers in mind as a way to help them compete in a changing cattle industry.



"One of the many challenges that producers are facing is how do they improve their productivity," Akadiri said. "How do they produce more with less? And that has to do with having animals that have better genetics."

The AgBoost platform was developed and beta-tested with support from cattle producers, industry and research institutions, Akadiri said.

One of those who used the AgBoost software during a six-month beta test was Brian Freking, an Ada-based Extension Educator with Oklahoma State University. Freking, 48, manages his own herd of 25 cattle in LeFlore County.

"AgBoost tells you where you can start focusing on making improvements in your herd," Freking said.

Consumer demands for beef quality and food sourcing are driving the industry toward genetically assisted selection and cattle management, Freking said.

"We are going to start seeing sales based on genetics rather than just taking them to the sale barn and getting an average price for them," Freking said. "That mom and pop cattle operation has gotten by for years on averages. They are going to start looking at discounts on cattle that don't perform well."

AgBoost recently dropped the 'beta' label and is now a commercial genetic profiling product. You can check out the platform and sign up for a free trial at [ag-boost.com](http://ag-boost.com).

AgBoost starts with a genetic testing kit through which producers submit hair samples from individual animals to Agric-Bioformatics' testing partner. After testing is completed, the company delivers a full genetic profile of each animal back to a producer's individual AgBoost page.

Data can be accessed in real time from any computing device anywhere in the world. The platform also provides a host of related information, including breeding suggestions, valuation and forecasting, lineage tracking and nutritional recommendations.

“The big producers have the expertise to get this information, break it down and get some insight into ways to use this data to make decisions,” Akadiri said. “But for the small producers, one of the things we are trying to do is to create a tool that will allow them to be more efficient and improve animal welfare but also help them be more selective in which heifers to hold back for breeding, for example.”

AgBoost offers three levels of use, from bronze (free) to silver and gold. Producers using the genetic tracking gold level with less than 50 head of cattle will pay 50 cents per head per month, plus a one-time cost of the genetic test kits.

“We provide the sample kits and the producer puts hairs follicles pulled from the tail of the cattle and sends it off to our partner lab,” Akadiri said. “Once the test is complete the result is available on AgBoost. The platform does all the work for you. It helps you selectively make meaningful decisions.”

The AgBoost software visually showcases different characteristics of each cattle profile, from carcass characteristics to fertility to animal health and more. Weather and market information also are easily accessible on the AgBoost platform.

“With our platform, gone are the days where you will be making decisions just by looking at your animals,” Akadiri said. “The way to improve anything, you have to measure.”

Akadiri worked with animal experts from OSU and Iowa State University during development of AgBoost. A development project is ongoing with the University of Nebraska.

The AgBoost platform was produced with funding from i2E Inc., and the Oklahoma EPSCoR, as well as investment from friends and family, Akadiri said.

“The thing I like about Sean and his system is he is trying to make it user friendly for the younger generation and using technology to make improvements,” beta tester Freking said.

This isn't your granddad's cattle industry any more.

[Read the article in the 9-1-17 Oklahoman](#)

[Watch the video](#)

[Go to the Agric-Bioformatics website](#)