

# Dairy Herd Management

## Facial Recognition Technology Meets the Cattle Industry



By MAUREEN HANSON  
September 29, 2023

If you've flown internationally recently, you may have had a first-hand experience with facial recognition software.

Now that technology has found its way to the dairy parlor and the feedyard, according to a Texas-based start-up company called 406 Bovine. The company employs artificial intelligence and machine

learning using an application programming interface (API) to identify and create a database of individual animals that then can be recalled using facial identification.

Company founder Bryan Elliott conceived the idea when he was working as a ranch manager in Montana. He was frustrated with the loss of premiums when cattle lost their RFID tags, and wanted to come up with a more permanent, reliable way to identify animals and document their histories.

He said every animal has unique facial characteristics such as hair swirls, nose shape, and eye location. The 406 Bovine system requires a 3- to 5-second video of an animal's head, which is then downloaded into a private database via a smartphone app. Then when a manager wants to investigate an animal for any reason, a simple cell phone picture can cross-reference the animal in the database, along with its detailed management information.

The 406 Bovine founder stressed that the system is designed to integrate with existing cattle management software systems, not replace them. Depending on the software system in use, an animal's profile can include a vast array of management data, including vaccination records, breeding information, pen moves, and antibiotic treatment history.

The system is reliant on cell phone technology, using a fusion of cameras and depth sensors on smartphones. Once the database is downloaded, there is no need for Wi-Fi service to operate 406 Bovine. And because the system can utilize matching images taken up to 50 feet away, animals can be identified and investigated with minimal human disruption.

406 Bovine developers say their vision for the company is "to put the best technology possible into the hands of every livestock producer."

Source:

<https://www.dairyherd.com/news/education/facial-recognition-technology-meets-cattle-industry>