**UF/IFAS Panhandle Cattlemen's College**

Cattle production is evolving, with long-established multi-generational ranchers alongside a rising number of new producers with little to no background in the industry. Both groups face steep learning curves. Experienced cattlemen and women possess foundational knowledge but may struggle to adopt advanced skills and technology. In contrast, newcomers from other fields find technology more intuitive yet face challenges with basic field skills. Both applied skills and ongoing knowledge development are essential for productivity, profitability, and animal welfare. Proper training in livestock care is critical for responsible management and ensuring herd well-being.

According to the USDA, Florida ranks among the top 10 states for new producers, with 33.9% being new or beginning producers. Nationwide, inexperienced producers make up 26% of all operations. With limited production experience, this growing segment can lead to animal welfare, husbandry, and food safety issues. Poorly trained handlers and suboptimal facilities increase cattle stress, reduce handling efficiency, and diminish productivity (Grandin, 1998).

Simultaneously, a subset of experienced ranchers seek to adopt applied technologies to advance their management skills. These skills include the integration of artificial insemination (AI). AI is a powerful technique used in the cattle industry to enhance reproductive efficiency and improve genetic selection in cattle (Cortes-Beltran & Gonella, 2022), yet its adoption is weak. In an overview of current reproductive management practices by the USDA-NAHMS Beef 2017 survey, only 18.5% of heifers and 6.5% of cows received AI, and overall, only 11.6% of cow-calf operations in the U.S. utilize AI.

The **UF/IFAS Extension Panhandle Cattlemen's College (PCC)** addresses these issues in a comprehensive program designed to support cattle producers in the Southeast through experiential learning and to create a dynamic learning community.

**Educational Objectives:** The PCC was established to educate new/beginning cattle producers on applied skills essential for animal welfare and industry success while also providing an opportunity for experienced producers to adopt applied reproductive technologies, specifically AI. The program objectives are 1): create a hands-on learning platform that teaches cattle producers skills that will enhance practice change, 2) provide a learning environment for new/beginning producers to learn applied cattle handling/management skills in the field with repeated practice/application on live animals, and 3) develop a learning community/network of industry experts, professionals, program attendees to provide post-program support.

**Applied Skills include identifying sick animals, giving injections, assisting and identifying calving issues/dystocia intervention, , neonatal calf care, castration, processing cattle through a chute, loading cattle on a trailer, safe animal restraint, general cattle handling, putting in an ear tag, taking a blood sample, CIDR® insertion, giving a calf a bottle, etc.**

**Program Activities:** PCC is a three-day, hands-on cattle management field event with two training tracks: Chute Side Skills tract (CST) and Artificial Insemination track (AIT). Participants in the CST learn basic and advanced skills practiced on live cattle with repetition. Over the three days, CST participants learn skills they can tactically apply on live cattle to boost their overall knowledge of ensuring animal welfare and managing their herds.

The AIT focuses on reproductive management, with participants becoming certified as A.I. technicians through three days of in-cow practice. All participants (CST/AIT) complete the national Beef Quality Assurance (BQA) training and are certified. Furthermore, in alignment with the third objective, PCC cultivates networking among producers, industry professionals, agents, and state specialists through peer-to-peer knowledge transfer, developing producer collaborations, and facilitated informal discussions. Additionally, PCC hosts a hands-on Pasture Establishment class that walks through each step of preparing the field to plant and establish permanent pasture plantings and 16 webinars focused on beef cattle production topics (see attached support document for details).

**Teaching Methods:** The PCC is an innovative and effective hands-on program. Overall, the learning model focuses on creating a trifold support system that allows for confident, capable clientele after the training. This trifold system is actual practiced/learned skills, networked support with personal relationships, and the development of science-based knowledge that supports animal welfare and successful management. Industry partners and Extension professionals report successful networking and building strong collaborations. Continuing education is key to an industry's success, especially for new/beginning producers. The UF/IFAS Extension Panhandle Cattlemen's College employs diverse teaching methodologies to cater to various learning styles, including:

**Hands-On Training** – Providing experiential learning with livestock handling, cattle reproductive management, and veterinary practices that are mastered through repeated application on live cattle.

**Expert Lectures and Panel Discussions** – Featuring presentations from industry leaders and researchers.

**Peer-to-Peer Learning Networks** – Encouraging knowledge exchange among cattle producers through mentorship and discussion groups. This continues after formal learning is completed and is vital to program sustainability.

**Decision Support Tools and Case Studies** – Utilizing data-driven models and real-life case studies to enhance problem-solving skills.

**Continuing Education –** Hosted as field days, interactive webinars, and online modules, the CE expands accessibility to educational materials through digital platforms but also hosts training in the field.

**Results:** Over three-years, 267 certifications have been issued to 192 individual participants (some participants have completed both tracks). Continued educational programs under the PCC programmatic umbrella include webinars (16) and a pasture field day, which reached an additional 6,927 producers. Topics included beef cattle management, transitioning from marketing cattle to beef, financial management and enterprise budgets, cool-season forages, and reproductive management. This program has generated $46,150 in revenue enhancement

***Program Highlights***
**A.I. Technician Certifications - 41**
**Chute Side Track Certifications - 68**
**Beef Quality Assurance Certification - 158**
**Revenue Enhancement - $46,150**
**Continued Education Attendance - 6,927**

and program support. Portions of these funds have been used to support graduate students, purchase AI equipment to co-op with participants, fund international agent travel, and more. More so,  PCC has been presented at state, national, and international professional conferences.

Post-program survey data (34% response rate) indicated that 100% of participants reported knowledge gain, 92% of participants implemented change and utilized skills learned to increase the profitability of their operation, 42% are applying the skills they learned to other herds, 95% are teaching others skills they learned, and 100% increased the profits of their operation from learned skills. Currently, there is a waitlist for program tracks into 2026.

**Impact Statement:** Graduates of PCC represent 192 cattle producers from 6 states and manage 9,200 head of cattle. Documented actual practice changes are supported by producers demonstrating skills learned in their operation and helping their neighbors. Through an increase in understanding of herd health, animal welfare, integration of technologies, and general management, the current economic impact of the program is $1,811,880. BQA-certified producers and class participants know to produce beef that will be efficient in growth and overall productivity, properly administer injections, record and adhere to withdrawal times for injection, all resulting in increased carcass integrity, maintain their herd's health and well-being, and be able to provide effective/humane care for their herds.

Participant testimonials report successfully aiding in major dystocia issues on-farm, which resulted in saving both the mother and calf's lives, increasing overall profits, assisting their neighbors in routine herd health practices, performing AI in their own herds, performing AI commercially for other producers for a fee, and teaching other skills they learned at PCC. Participants report they leave confident and capable of caring for their herds.

While no economic indicators for animal welfare, personal confidence, and safety exist, the cattle industry considers them invaluable.

**Evaluation:** Producers are provided with a detailed survey on their experience participating in the PCC. Evaluation tools are decimated at the end of the field day, and follow-up surveys are distributed six months after the event. This best captures the program's short—and long-term outcomes. Graduates also demonstrate skills learned in their operations, thus supporting practice changes. This shows the impact of the program and the educational materials developed.

**Initiatives: Sustainable Cattle Production Practices** – Encouraging sound and economically viable cattle management. This is achieved through Beef Quality Assurance (BQA) training and hands-on practical training. Additional topics covered include:

**Herd Health and Biosecurity** – Implement disease prevention strategies and best practices for herd health. Adhere to best management practices to ensure food safety standards are upheld.

**Animal Welfare and Husbandry** – Providing learned skills for handling cattle safely and efficiently to provide care and management needs for cattle—ability to identify and intervene when the animal's health, safety, or well-being is compromised.

**New Reproductive Technologies in Cattle Production** – Introducing precision agriculture, genetics, and livestock reproductive management tools to improve herd management.