



# Hormonal Implants on Stocker Heifers

**Jennifer Patterson** (jennifer.k.patterson@okstate.edu) OSU Extension Adair County Agriculture Educator – Stilwell, OK 74960

**Earl H. Ward** (earl.ward@okstate.edu) OSU Extension Area Livestock Specialist – Muskogee, OK 74401

**Scott Clawson** (scott.clawson@okstate.edu) OSU Extension Area Agriculture Economist – Muskogee, OK 74401

**Donna Patterson** (donna.patterson@okstate.edu) OSU Extension Rogers County Agriculture Educator – Claremore, OK 74017

## EXTENSION

### Needs Assessment

- Growth promoting implants have been used to boost beef production since their introduction in 1957 to increase weight gains and feed efficiency.
- The adaptation rate of using hormonal implants in beef production in OK is considerably low.

Only 9% of cow-calf producers with herds fewer than 100 cows implant their steer calves. Only 28% of operations that run stocker cattle along with their cow-calf operation implant their calves.

- By not utilizing this technology, beef producers in OK are not taking advantage of potential gain in production which could result in higher incomes.

### Program Goals

- To partner with a local beef producer on a demonstration showing the impact that hormonal implants have on beef production.
- To present the local data to beef producers in Adair County.
- Increase the knowledge that producers in Adair County OK have on implants, their impact on performance, and impact on financial returns.



Jennifer Patterson (Adair Co. Ag Educator), Donna Patterson (Rogers Co. Ag Educator), & Scott Clawson (OSU Extension Area Ag Economist) weighing, tagging, & implanting calves.



Adair County producer, Todd Snyder, partnered with OSU Extension by providing the heifers and facilities for the implant demonstration and as a stop for the 2023 Adair County Pasture Tour.

### Outreach Education & Impact

- We utilized the 2023 Adair County Annual Pasture Tour to discuss the results from this trial firsthand with the local producers.
- Information and results were presented at an Adair County Cattleman's dinner program as well as an OSU Extension newsletter and local newspaper.
- The information was a feature article in the Farm Talk Newspaper that is distributed to 10,000 people in at least 10 different states.
- Evaluations determined more than 80% of the participants evaluated had an increase in knowledge gained concerning the use of hormonal implants in beef cattle production.



Jennifer Patterson (Adair Co. Ag Educator) presenting information to the Adair County Cattleman's Association and answering questions about the use of hormonal implants.



Earl Ward (OSU Extension Area Livestock Specialist) and Jennifer Patterson (Adair Co. Ag Educator) leading discussion about the implant trial at the Snyder Ranch during the 2023 Adair County Annual Pasture Tour.

Handout given to producers who attended the 2023 Adair County Annual Pasture Tour. The handout gives information on the use of implants in beef production as well as the performance results from the local demonstration.

### OSU Extension Demonstration Summary Adair County 2023

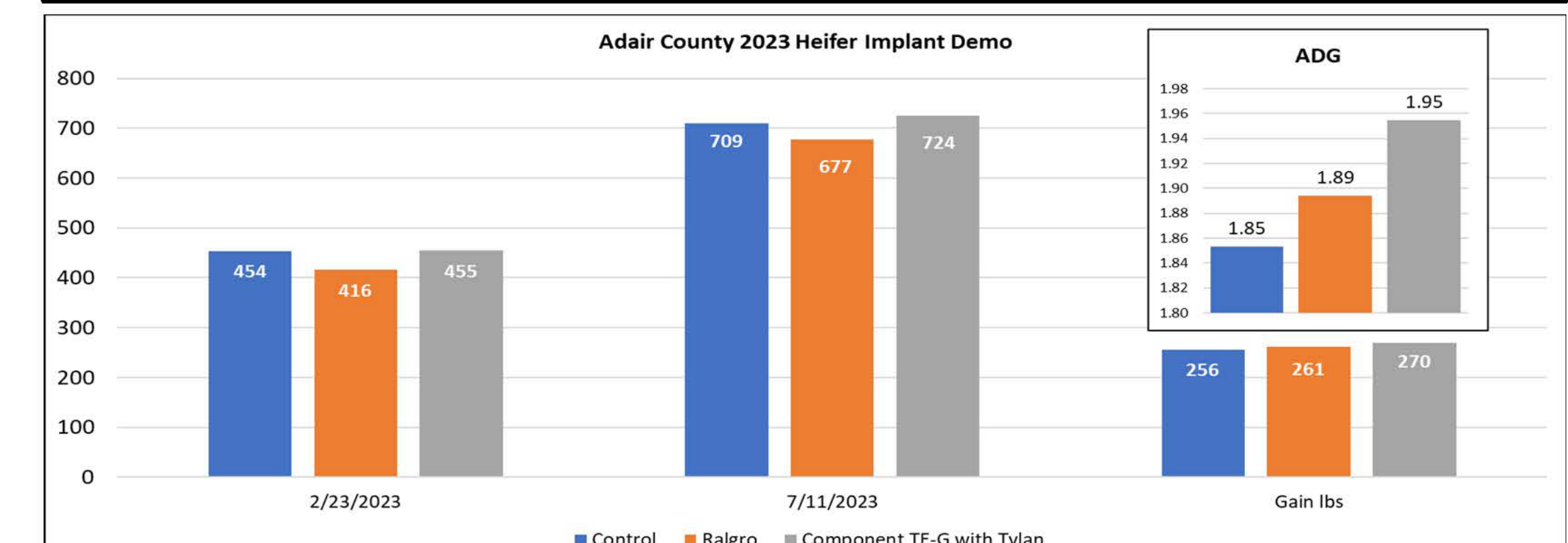
#### Hormonal Implants on Stocker Heifers

Jennifer Patterson, Todd Snyder, Earl H. Ward, Scott Clawson, & Donna Patterson

Growth promoting implants have been used to boost beef production since their approval by the Food and Drug Administration in the 1950's. Implants are approved for the use in beef cattle to increase weight gain and increase feed efficiency. There are three natural hormones (estradiol, progesterone, and testosterone) and two synthetic hormones (zeranol and trenbolone acetate) used in the beef cattle implants. Estradiol, progesterone, and zeranol are estrogenic hormones, which are hormones that affect female characteristics. Testosterone and trenbolone acetate are androgenic, which refers to hormones affecting the male characteristics.

February 23<sup>rd</sup>, 2023 100 heifers averaging 441.4 pounds were weighed, tagged and were either implanted with Ralgro (33 hd), implanted with Component TE-G with Tylan (33 hd), or left untreated as controls (34 hd).

All heifers were treated exactly the same, grazing the same pastures, and supplemented with 4 lbs of a supplement until they were weighed again at the end of the trial on July 11<sup>th</sup>, 2023.



	Economic Benefits per Head		
	Cost	Additional Gain	Additional Income*
Control	\$0.00	0	\$0.00
Ralgro	\$1.88	5.63	\$10.67
Component TE-G with Tylan	\$1.90	14.02	\$29.33

\*Calculated with the OK Weighted Average of Medium and Large 1-2 Heifers on July 14th, 2023 (\$222.75/cwt) minus the cost of the implant.

**Additional profit if all heifers were implanted:**  
Ralgro \$1067  
Component \$2933