



## The Cost of Keeping an Open Replacement Heifer

Hannah Baker, State Specialized Extension Agent II – Beef Cattle and Forage Economics

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While the act of expanding the beef cow herd has hardly begun, thoughts of how to rebuild and plans for the future are starting to be made by cattle producers across the country. One question that arises every year but will be more thought-provoking in the coming years as producers begin rebuilding, is what to do with weaned heifers. Should they be retained or sold at weaning? Retaining heifers is expensive, but in this current market, so is buying replacements. Either way, it is important to select females that will be dependable, consistent, and longevous. Investing in the solid foundation of a herd is important for long-term profitability.

With the value of female cattle expected to rise in the coming years as expansion begins, it is worth putting pencil to paper to see if raising replacements would be more economic than purchasing. If the cost of developing and breeding a heifer is lower than the purchase price of a bred heifer, then a potential profitable investment has been made and vice versa. Other variables should also be considered such as biosecurity risks and the genetics of the herd when deciding to either raise replacements or bring in outside replacements. Such a decision is based on the goals of each operation with neither option being superior to the other. For the purpose of this report, the decision to develop heifers as replacements and breed them as yearlings will be used in the economic example.

Raising replacement heifers is labor intensive, time consuming, and costly. After investing so much into that heifer, it is expected that she will be bred and have a calf by her second birthday. But if she doesn't, is she still worth keeping after all that has been invested in her? How long would it take for her to pay for herself if she only missed that first year?

The cost to develop heifers in 2024 can be expected to vary from operation to operation. For this example, the cost of \$1,817 per heifer will be used. (*Visit the "Replacement Heifer Cost Estimation Tool" for a further breakdown of these costs <https://rrec-ona.ifas.ufl.edu/about/directory/staff/hannah-baker/>*). When deciding to keep an open replacement heifer to breed the next year, revenue is foregone (opportunity cost) from selling her as an open replacement (Table 1: year two), and annual costs are incurred from having to "house" her for another year. Even with current calf prices, if she has a calf every year after that first year, it is estimated that it will take seven to eight years for her to pay for the cost of

developing her and for her to start returning a profit. Lower calf prices would cause it to potentially take even longer.

This goes for keeping any open cow. If she does not have a calf every 365 days, she is incurring extra costs and not providing a consistent stream of revenue, hence, a long-term negative effect on profit. She could still provide a source of revenue that year if sold as a cull cow or even as a replacement depending on her age and body condition. Especially in today’s market with cull cows bringing well over a dollar per pound, an open heifer or cow could potentially provide an opportunity to mitigate or ease the loss of not selling a calf from her. In conclusion, we should strive to always apply the three “E’s” when trying to make profitable decisions about investing, managing, and marketing: “Is this decision efficient, effective, and economical?”

**Table 1. Number of Years for a Return to Be Made from an Open Heifer**

Year	Expenses Description	Expenses	Revenue	Return to Expenses (Profit)
1	<i>development year expenses</i>	\$(1,817)	\$0	\$(1,817)
2	<i>annual expenses + opportunity cost + development year expenses</i>	\$(3,266)	\$0	\$(3,266)
3	<i>annual expenses + remaining development year expenses</i>	\$(3,857)	\$1,300	\$(2,557)
4		\$(3,148)	\$1,300	\$(1,848)
5		\$(2,439)	\$1,300	\$(1,139)
6		\$(1,730)	\$1,300	\$(430)
7		\$(1,021)	\$1,300	\$279
8	<i>annual expenses</i>	\$(519)	\$1,300	\$709

\*Revenue was uniformly calculated for each year using the price of a 500-pound calf at \$2.60/lb.  
 \*Annual expenses were estimated at \$591/head and were kept the same each year for the simplicity of the example; however, annual expenses should be expected to fluctuate across operations and year to year based on commodity prices.  
 \*Annual expenses in this example do not include fixed expenses such as equipment depreciation, taxes, or loan payments.

### Upcoming Events

Oct. 8, 11:00 – 11:45 a.m. Join us for the Ona Highlight ‘Probiotic Supplementation for Beef Females’ with Dr. Philippe Moriel. See our website calendar (link below) to register for the Zoom broadcast or register to attend in person by calling 863-735-1001.

Oct. 10, 8:00 a.m. – 3:00 p.m. UF/IFAS Range Cattle REC Field Day. Learn about faculty and student research, visit field sites, and enjoy a steak lunch. Registration, \$30 (ends 10/8).  
<https://rcrec-2024-fd.eventbrite.com>

Oct. 24. Pasture, Rangeland, Forage PRF Insurance 2024 Workshop. Join us at the Center in Ona to learn how to evaluate and mitigate forage risk. See all 7 locations & dates the program is being offered: <https://prfinsurance.caes.uga.edu/>

Oct. 24, 5:40 – 8:00 p.m. Managing Cattle Enterprises for Success. The second meeting of three. Topic: Beef Cattle Nutrition. Location: Polk Co. Learn more and register, on Eventbrite at <https://www.eventbrite.com/e/planning-your-cattle-management-calendar-registration-944332623297>.

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UF/IFAS Range Cattle REC - 3401 Experiment Station Rd., Ona - <http://rcrec-ona.ifas.ufl.edu/>