INTRODUCTION

California is ranked as a top producer amongst 5 other states in the United States for dairy production. As on any livestock operation, feed is the number one cost to the farm. It is important to start young stock off strong as they begin to grow into the mature, high producing cattle we need to keep the industry at its peak operation.

This project was conducted at the California Polytechnic State University’s Dairy Operation to determine the amount of cost per pound of weight gain to feed a heifer calf from birth to 8 weeks of age.

HOW TO

• 22 Calves were weighed from birth to 8 weeks of age
• Weight tape was used
  • Placed at the hearth girth (Figure 1)
  • Tape was then pulled to take up the slack and read at the appropriate breed weight (Figure 2)
• Information was recorded on an Excel document and used to create calculations (Figure 3)

WEIGHT CALCULATIONS

To calculate the Average Daily Gain per Calf, the average from the weights in Figure 3 were calculated for each heifer, then they were divided by 56 days (equivalent to 8 weeks) as seen in figure 4

A total average was taken after the individual average weights were determined in order to find an Average ADG of the herd

Average ADG of the herd is 1.986 lbs.

FEED CALCULATIONS

- It was determined that the calves are fed 5 lbs of feed per day. Knowing that the calves are gaining at a rate of 1.986 lbs per day 1 was able to calculate the cost of feed per pound of weight gain
- The grain cost was determined to be about $9.50 per 50 lb bag, making the price per lb of grain $0.19

RESULTS

The Cal Poly Dairy spends roughly $0.48 on 1 pound of gain for the calves from birth to 8 weeks of age.

CONCLUSIONS

• The outcome of this project is important to the Cal Poly Dairy Operation. Knowing how much it costs to raise the heifers while they are in the hutches can help make improvements in calf care to become a more efficient dairy. Though this research proved to be successful, there is always room for improvement
• Improvements:
  • Obtain a scale to achieve more accurate weights
  • Weight tape is an approximate weight depending on size of girth
  • Tape also has potential for error if not properly trained on how to use it