## **Economics of Automatic Calf Feeding Systems Budget Worksheet** Jenn Bentley, Dairy Specialist, and Kristen Schulte, Farm Management Specialist, Iowa State University Extension Name: Brand of Feeder: Address: ISU Annual Value to Quality of Life = **EXTENSION** Annual Value of Software = Phone: DAIRY TEAM **Variables Instructions or Reference Values** Units **Calf Inventory and Financial Information** Heifers, Yearly Total no. heifers Typically 45 to 48 percent of cow herd **Bulls, Yearly Total** no. bulls Typically 45 to 48 percent of cow herd Veal, Yearly Total no. veal calves Feeding station can feed 15-20 yeal calves **Number of Feeders Needed** no. feeders Feeder can feed 50 to 60 calves Estimated Cost of Automatic Calf Feeding Housing total\$ Include value for remodel or new building Estimated Cost per Automatic Calf Feeding Feeder \$ per feeder Range of \$2 to 28,000 per station, used \$5500 **Estimated Cost of Optional Computer and Program** \$ per system Range of \$0 to \$5000 Years of Useful Life Typical range of 7 to 15 years years Value of Feeder after Useful Life \$ per feeder Typical range of 10% to 20% purchase price Interest Rate of Money Value of owned or borrowed money Insurance Rate per \$1,000 Value Typical rate is 0.5% per 1,000 investment Increased Insurance Value of Feeder System \$ per farm Value of facility over current system **Feed Intake Changes** Milk Replacer Cost per Pound of DM Typical range of \$1.20 to \$2.10 per pound \$ per pound Pasturized or Whole Milk Cost per cwt. \$ per cwt. Typical range of \$13.00 to \$23.00 per cwt Current Milk Replacer Intake pounds per day Typical range of 1 to 3 pounds per day Anticipated Milk Replacer Intake pounds per day Typical range of 1.05 to 3.3 pounds Current Pasturized/Whole Milk Intake quarts per day Typical range of 4 to 6 quarts Anticipated Pasturized/Whole Milk Intake quarts per day Typical range of 4 to 13 quarts per day Current Days on Milk no. days Typical range of 6 to 8 weeks Current Number of Days in Weaning Stage no. days Typical range of 7 to 14 days Anticipated Days on Milk no. days Typical range of 6 to 8 weeks Antcipated Days in Indvidual Starter Pen Stage no. days Typical range of 1 to 14 days Anticipated Number of Days in Weaning Stage no. days Typical range of 7 to 14 days Anticipated Dump Milk per Day quarts per day Typical range of 0 to 2 quarts per day Calf Starter Cost per Pound of DM \$ per pound Typical range of 0.18 to 0.34 per pound Current Total Calf Starter Intake, Pounds of DM pounds per calf Average total feed intake of 90 pounds Anticipated Total Calf Starter Intake, Pounds of DM pounds per calf Anticipated increase of 10 to 20 percent **Labor Changes** Current Feeding Labor Time Per Day minutes per calf Typical range of 5 to 10 minutes per day Anticipated Feeding Labor Time Per Day minutes per calf Typical range around 1 minute per day Anticipated Calf Labor Management Per Day minutes per calf Typical range 4-9 minutes Labor Rate for Feeding Calves \$ per hour Typical range from \$8 to \$15 per hour Increased Hours for Record Management hours per day Include feeder report analysis Reduced Hours for Labor Management hours per day Include hiring, training, overseeing, ect. Labor Rate for Records and Labor Management \$ per hour Typical range from \$12 to \$25 per hour **Calf Health Changes Current Calf Treatment Rate** % calves Typical range of 10 to 20 percent Anticipated Calf Treatment Rate % calves Anticipated change of -5 to 5 percent Cost of Treatments per Calf including labor \$ per calf Typical range of \$2 to \$12 per calf **Utility and Supply Changes** Anticipated Change in Electricity and Maintenance \$ per year Anticipated increase of electricity use Anticipated Change in Supplies and Repairs \$ per year Include cleaning and feeding supplies The authors have used their best judgement and shall not be liable for any use of this software decision-making aid.