

# Market Animal Budget Plan



**LARIMER COUNTY**  
 COLORADO STATE UNIVERSITY  
 EXTENSION

Made by Kenzie Kimmel, Adams County 4-H – Adapted for Larimer County 4-H

How much should I spend on my project animal(s) this year? How many project animal(s) should I purchase this year? By completing the following worksheet, you will learn to make informed decisions about how much your project will cost and how you can strive for profit. This worksheet is modeled based on market values of animals rather than typical 4-H Livestock Sale income which can be significantly higher than market value. It is important for 4-Hers to recognize the realities of producing market animals in today’s industries, as well as the importance of securing a buyer.

**1. Complete a separate Market Animal Budget Plan for each species you plan to raise:**

This market plan is for \_\_\_\_\_

- 2. Estimate how much money you will need to spend to build or improve animal housing for your market animal this year and list it on the budget table under “Expenses - Animal Housing Improvements – Total Expense” (A)**
  
- 3. Estimate how much money you will need to spend on new animal equipment your market animal this year and list it on the budget table under “Expenses - New Animal Equipment – Total Expense” (B)**
  
- 4. List the number of market animals of that specie you intend to have. (C)**
  
- 5. Estimate how much money you will need to spend on health care for your market animal this year and list it on the budget table under “Expenses - Health Care – Total Expense” (D and E)**
  
- 6. Calculate how much feed your animal will need using averages provided below or by using your own numbers:**

_____	x	_____	=	_____ lbs_
(How much weight your animal needs to gain)		(Average Feed efficiency rate – see the last page)		(Total Feed: How much feed you will need)

7. Calculate how much of that feed is grain/concentrate vs. Hay/roughage, then list both in the budget table under “Feed Expenses” (F) & (K):

_____ x _____ = _____ lbs		
Total Feed	(Percent of feed that should be grain)	Pounds of grain per animal (F)
_____ x _____ = _____ lbs		
Total Feed	(Percent of feed that should be hay/roughage)	Pounds of hay per animal (K)

8. Calculate the price per pound of a feed labeled for your market animal (remember, some bagged feeds are complete ration feeds that include roughage, others are only concentrates and roughage must be supplied separate). You will have to research the cost of these feeds. List your values in the budget table under “Feed Expenses” (G)&(L).

_____ ÷ _____ = \$ _____		
Cost of bag of concentrate/grain feed	Pounds of feed in bag	Cost per pound of concentrate (G)
_____ ÷ _____ = \$ _____		
Cost of bale of hay/forage	Pounds of feed in bale	Cost per pound of hay/forage (L)

9. Calculate your estimated income based on market values and ideal sell weight provided below and list that income in the budget table (N-O).

_____ x _____ = \$ _____		
Sell Weight	Average market value	Market Value Income Animal 1 (N)
_____ x _____ = \$ _____		
Sell Weight	Average market value	Market Value Income Animal 2 (if applicable) (O)

10. Calculate how much money you have available to purchase project animals and still “break even” (expenses are equal to income):

_____ - _____ = \$ _____		
Total Income	Total Expense	Funds available for animal purchase (at break even point)

Estimated Project Expenses:					
Expense Type		Pounds/units needed per animal	Price per pound/ unit	Number of Animals	Total Expense
Animal Purchase Cost(s)		Follow instructions on the worksheet to learn what price you should consider purchasing animals based on your estimated expenses and income			
Animal Housing Improvements		n/a	n/a	n/a	(A) from #2 \$ _____
New Animal Equipment	(halters, clippers, trailer etc.)	n/a	n/a	n/a	(B) from #3 \$ _____
Health Care	(vaccinations etc.)	n/a	(D) avg. Vaccination costs per animal _____	_____ (C)	(E) calculated from #4 and #5 \$ _____ (D) x (C) = Total (E)
Feed (per animal)	Grain/ Concentrates	_____ (F) from #7	_____ (G) from #8	_____ (C)	(J) calculated from #4, #7, and #8 \$ _____ [(F)x(G)] x (C) = Total (J)
	Hay/Roughages	_____ (K) from #7	_____ (L) from #8	_____ (C)	(M) calculated from #4, #7, and #8 \$ _____ [(K)x(L)] x (C) = Total (M)
Total Expenses					\$ _____ (add column together- (A+B+E+J+M) = Total Expenses
Estimated Project Income: (Market Value)					
Animal Market Sale Value	Animal 1			(N)	\$ _____
	Animal 2 (if applicable)			(O)	\$ _____
Total Income (Market Value)					\$ _____ (N+O) = Total Income

Species	Feed Efficiency (how many lbs. of feed required to gain 1 lb.)	Average daily gain (how many lbs. Animal will gain per day)	How much weight your animal needs to gain: (Buy or weigh in weight- sell weight)	Percent of feed that should be grain/concentrate :	Percent of feed that should be hay/roughage :	Avg. Market value (from last 3 years at Jr. Livestock Sale LC Fair)
Sheep	4lbs feed:1 lb gain	.75lbs	Avg. 130lbs – ex. start weight 50lbs → 80lbs gain	75% = .75	25% = .25	\$1.33/lb
Beef	6lb feed: 1lb gain	2.80lbs	Avg. 1250lbs - ex. start weight 825lbs → 425lbs gain	75% = .75	25% = .25	\$1.09/lb
Goat	7.5lb feed: 1lb gain	.33lbs	Avg. 70lbs ex. start weight 30lbs → 40lbs gain	70% = .70	30% = .30	\$2.28/lb
Swine	4lb feed: 1lb gain	1.8lbs	Avg. 270lb – ex. start weight 60lb → 210lbs gain	100% = 1	0% = 0	\$.28/lb

## Reflect/Apply Questions

1. What is your budget for buying market animals this year if you want to at least break even (calculation #10) (this may be zero or low for 4-H projects using market value)?

\$ \_\_\_\_\_

2. How many market animals do you plan to buy/raise this year? \_\_\_\_\_
3. Do you plan to spend above your break-even budget for market animals this year? And if so, what are your plans to increase your income above market value?
4. What are some differences between larger scale livestock producers and 4-H producers that makes it possible for larger scale producers to make profit on market price?
5. Why do you think most 4-H animals sold at 4-H Livestock auctions tend to sell for 4x-20x higher than market value? How might this be affected this year?
6. There is opportunity to increase market livestock project profits in 4-H; mark which of these practices are ETHICAL/Good Practices with an E, and those that are UNETHICAL/Poor Practices with a U.  
E/U
  - a. \_\_\_\_\_ Meet requirements to sell 1 animal at ADCO Fair 4-H Livestock Sale
  - b. \_\_\_\_\_ Feed my animal less or poor quality food (kitchen garbage etc.) to reduce my costs
  - c. \_\_\_\_\_ Spend less on my project animal when I purchase it, or breed/produce my own market animal
  - d. \_\_\_\_\_ Purchase a sick or small/runt animal because it is cheaper
  - e. \_\_\_\_\_ Secure at least one buyer BEFORE Fair who plans to attend the livestock sale (or private treaty) to purchase my animal