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 **University of Idaho Extension**

 **BUTTE COUNTY**

 **4-H MARKET**

 **LIVESTOCK**

 **SUPPLEMENT**

 **Age level (check one)**

 **\_\_\_\_ Junior (8-11)**

 **\_\_\_\_ Intermediate (12-14)**

 **\_\_\_\_ Senior (15-19)**

 **Years in livestock project\_\_\_\_\_**

**Year\_\_\_\_\_\_\_\_\_\_**

**This packet contains the following:**

* **Project Requirements #91941**
* **Beginning Planning and Record Sheet and Growth Chart**
* **Beef #91942**
* **Junior (91946), or Intermediate (#91947), or Senior insert (#91948), depending on age level)**

**You must also complete the 4-H Animal Project Record Book #91940 and the 4-H Involvement Report #91910**

Project Objectives

1. Learn and apply recommended principles of animal science.

2. Demonstrate knowledge of sound breeding, feeding, and management practices

3. Develop integrity, sportsmanship, decision making skills, and public speaking skills

4. Practice citizenship and leadership

5 explore career, job, and leisure opportunities.

Project Requirements

General Requirements (check as completed)

Individually identify each animal with ear tag and tattoo or notching

Weigh and provide primary care of market animal during a uniform county feeding period.

Beef about 150 days

Sheep about 60 days

Swine about 120 days

Goats about 60 Days

Give demonstration or illustrated talk on something leaned in this project Provide positive ownership of animal (check those items that apply)

Idaho brand inspection

Registration certificate (purebred animals)

Bill of sale

Species specific health requirements (Brucellosis, scrapes, etc.)

Exhibit:

All required record completed and submitted to County Extension Office

Exhibit project animals) at a community, county or other livestock show

Display performance data on exhibit or stall card

Participate in Fitting and Showing with market or breeding animal

County Requirements

Butte County livestock supplement (91960) includes Junior (91946), Intermediate (91947), and Senior (91943), as well as species specific Beginning Planning and Record Growth Charts. :

Beef (91942), Sheep (91943), Swine (91944) or Goat (91945)

Project Materials Required

(Members need these masters at the start of the project)

\_\_\_ Market Project Only:

\_\_\_ Record Book (91940)

Record Book Requirement Checklist

(Checked at conclusions of project)

\_\_ Attend a majority of project meetings

\_\_ All required Growth Charts and Breeding/Production Records (see reference numbers under Project Materials Required)

\_\_ Attach or include a copy of 4-H involvement Report (91910) per county guidelines

\_\_ Optional: 1 to 3 pages of projects pictures with written captions

\_\_ Species specific Beginning Planning & Record Sheet

**Junior**

\_\_ Junior Planning and Evaluation (91946)

\_\_ A written project experience

**Intermediate**

\_\_ Intermediate Planning and Evaluation (91947)

\_\_ A written project experience

**Senior**

\_\_ Senior Planning and Evaluation (91948)

\_\_ A written project experience

**Additional Requirements:**

* Must complete one livestock supplement book and one project record book per animal specie. All pages must be handwritten.
* - Illegible entries and lack of neatness will receive minimum points.
* \_ Booklet may be burst/cut apart and put into protector sheets. Use only the sheets pertinent to your specie that you are reporting but keep the others pages in your book and mark them “non-applicable” Penalty given for failure to include all pages in numbered order
* - Supplemental documentation can be included and is encouraged but bonus points will not be given for doing so.
* - A project focused experience must be written for every specie A

10% mandatory point deduction for failure to follow these instructions will be enforced.

**All Market Beef complete this page (#91942) Beef beginning planning record sheet**

**Beef- Beginning Planning and Record Sheet**

Youth Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Weigh-in Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Location/Premises \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Animal Tag Number:\_\_\_\_\_\_\_\_\_\_\_\_\_Weight:\_\_\_\_\_\_\_\_\_\_\_\_Hip Height:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Animal Tag Number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hip Height:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Animal Breed:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Estimate the correct finished weight for the animal by determining the approximate Frame Score and proper finish for that score. Find the animal age at the left column and the hip height in that row to determine approximate Frame Score. These are projections for the average cattle. Actual weights will vary due to muscling, body length, and condition.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Age (months | Frame Score 4 | Frame Score 5  | Frame Score 6 | Frame Score 7 |
| 6  | 40.8 | 42.9 | 44.9 | 46.9 |
| 7 | 42.1 | 44.1 | 46.1 | 48.1 |
| 8 | 43.2 | 45.2 | 47.2 | 49.3 |
| 9 | 44.3 | 46.3 | 48.3 | 50.3 |
| 10 | 45.3 | 47.3 | 49.3 | 51.3 |
| 11 | 46.2 | 48.2 | 50.2 | 52.2 |
| 12 | 47.0 | 49.0 | 51.0 | 53.0 |
| 13 | 47.8 | 49.8 | 51.8 | 53.8 |
| 14 | 48.5 | 50.4 | 52.4 | 54.4 |
| 15 | 49.1 | 51.1 | 53.0 | 55.0 |
| 16 | 49.6 | 51.6 | 53.6 | 55.6 |
| Est. Finish Weight. | 1050-1174lbs  | 1175- 1250 lbs | 1251-1350 lbs | 1351- 1485lbs |

**Estimate of Required Average Daily Gain**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Est. Finish Weight | Beginning Weight | Total Required Gain | Divided By | Days in Feeding per. | Required daily gain |
| Animal 1 |  |  |  | / |  |  |
| Animal2 |  |  |  | / |  |  |

**Conformation/Usefulness Evaluation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Trait | Low | Fair | Average | Good | Excellent |
| Total Muscling | 1 | 3 | 5 | 7 | 9 |
| Total Trimness | 1 | 3 | 5 | 7 | 9 |
| Growth/Frame | 1 | 3 | 5 | 7 | 9 |
| Structure/Balance | 1 | 3 | 5 | 7 | 9 |

**All Market Beef complete this page (#91942) Beef beginning and record sheet**

**Market Beef Growth Chart**

*To achieve Success with your 4-h Market Beef project it is important that you know the period. The chart below enables you to plot the predicted growth curve (immediately after the initial weigh-in) and then plot the actual weight of your animal at various times during the feeding period to determine if you are “on target”.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1400lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1300lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1200lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1100lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  1000lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 900lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 800lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 700lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 600lbs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Initial | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 |

Initial weigh-in date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Initial Animal Weight:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Number of Days in feeding period:\_\_\_\_\_\_\_\_\_ Estimated Final Weight;\_\_\_\_\_\_\_\_\_\_

*1. Mark the initial weight at the appropriate location on the left-hand side of the table.*

*2. Mark the estimated final weight at the appropriate location for the number of days in the feeding period.*

*3. Connect these two points with a straight line. This is your predicted rate of growth.*

*4. Record your animal’s weight in the table below and the chart above each time it is weighed during the feeding period. Connect this point with the previous actual weight. Is the actual growth curve above or below your predicted growth line? Why?*

**Progressive Project Weight Record**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Weigh Date |  |  |  |  |  |  |  |  |  |
| Days since last weight |  |  |  |  |  |  |  |  |  |
| Current Weight |  |  |  |  |  |  |  |  |  |
| A.D.G ( since last weight |  |  |  |  |  |  |  |  |  |
| Over All A.D.G |  |  |  |  |  |  |  |  |  |

Tracking animal weight can tell you where your animal is compared to your goal. After each weigh day ask yourself, do you need to feed more grain or hay?

Typical influences in average daily game (A.D.G) can be feed water, weather and illness. Ask yourself is the A.D.G normal? What caused the problem

**Junior Planning and Evaluation Insert**

**All Juniors complete this page (#91940) Junior Planning and Record Sheet**

Planning and Evaluating Your Project

In order to carry out a livestock project it is necessary to plan ahead for that project. The following tables ask for planning information that will help you complete your project; columns are provided to record information on up to three animals. After the project is complete, it is good to be able to compare what actually happened with what you had planned.

|  |  |
| --- | --- |
| Animal Tags | Animal Names |
|  |  |
|  |  |
|  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Animal #1 |  | Animal #2 |  | Animal #3 |  |
|  | Planned | Actual | Planned | Actual | Planned | Actual |
| Breed of An. |  |  |  |  |  |  |
| Sex of Animal |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Animal #1 |  |  | Animal #2 |  |  | Animal #3 |  |  |
|  | Planned | Actual | Difference | Planned | Actual | Difference | Planned  | Actual | Difference |
| Ex. Purchased Weight (3 head) | 600 | 675 | +75 | 700 | 725 | +25 | 800 | 750 | -50 |
| Purchased weight of animals (lbs) |  |  |  |  |  |  |  |  |  |
| Purchase price of animals ($) |  |  |  |  |  |  |  |  |  |
| Final Weight of Animals (lbs) |  |  |  |  |  |  |  |  |  |
| Market Value of Animal ($) |  |  |  |  |  |  |  |  |  |
| Amount of Feed |  |  |  |  |  |  |  |  |  |
| Feed Cost |  |  |  |  |  |  |  |  |  |

**Vaccines Given**

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |

**In Feed Ingredients**

**All Juniors Complete this page (#91946) Junior Planning and Record Sheet**

Feed is most often the largest expense incurred in the production of livestock. On the following table list the ingredients in you ration.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |

**Equipment that you own**

|  |  |
| --- | --- |
| Feed Equipment  | Show Equipment |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Project Objectives**

(Examples of items to be listed include breaking animal to lead, animal injuries, or illnesses and ect)

|  |  |
| --- | --- |
| Date: | What was observed? |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Intermediate Planning and Evaluation Insert**

**All Intermediates complete this page (#91947) Intermediate Planning and Evaluation**

*Planning and Evaluating your project*

*In order to carry out a livestock project it is necessary to plan ahead for that project. The following tables ask for a planning information that will help you to complete your project; columns are provided to record information on up to three animals. After the project is complete, it is good to be able to compare what actually happened with what you had planned.*

|  |  |
| --- | --- |
| Animal Tags | Animal Names |
|  |  |
|  |  |
|  |  |

Please circle one: Market / Breeding

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Animal #1 |  | Animal #2 |  | Animal #3 |  |
|  | Planned | Actual | Planned | Actual | Planned | Actual |
| Breed of An. |  |  |  |  |  |  |
| Sex of Animal |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Animal #1 |  |  | Animal #2 |  |  | Animal #3 |  |  |
|  | Planned | Actual | Difference | Planned | Actual | Difference | Planned  | Actual | Difference |
| Ex. Purchased Weight (3 head) | 600 | 675 | +75 | 700 | 725 | +25 | 800 | 750 | -50 |
| Purchased weight of animals (lbs) |  |  |  |  |  |  |  |  |  |
| Purchase price of animals ($) |  |  |  |  |  |  |  |  |  |
| Final Weight of Animals (lbs) |  |  |  |  |  |  |  |  |  |
| Market Value of Animal ($) |  |  |  |  |  |  |  |  |  |
| Vaccines/implants (yes/no) |  |  |  |  |  |  |  |  |  |
| Amount of Feed |  |  |  |  |  |  |  |  |  |
| Feed Cost |  |  |  |  |  |  |  |  |  |

**Vaccines**

If vaccines were used, list the disease they provided protection against (use proper quality assurance injection sites)

|  |  |
| --- | --- |
| Date: | Target Disease  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**All Intermediates complete this page (#91947) Intermediate Planning and Evaluation**

**Feed and Ration Plan**

Feed is most often the largest expense incurred in the production of livestock. On the following table list the ingredients in the daily rations fed at the start and end of your project. In formulating rations, you also need to know the type of feed (concentrate, roughage, pasture) and pounds of each feed ingredient you have used in your ration.

|  |  |  |
| --- | --- | --- |
| Daily Feed Ration at Start of Project |  | Daily Feed Ration at End of Project |
|  | Type | Pounds |  | Type | Pounds |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Pounds fed per day |  |  | Total Pounds fed per day  |  |  |

**Inventory**

All material items you used to complete your projects should be listed. Depreciable items should be worth less money at the end of the year. Any items purchased during the year should be included as expense and listed on the Ending Inventory with a depreciated value ( NOT in beginning inventory).

|  |  |  |
| --- | --- | --- |
| Equipment, feed, animals( on-hand) and miscellaneous items descriptions.  | Value at beginning of the year | Value at the end of the year |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Total Beginning Value  |  |  |
| Total Ending Value |  |  |
| Change in the value +/1 |  |

**Senior Planning and Evaluation Insert**

**Seniors only complete this page (#91948) Senior Planning and Evaluation**

Planning and Evaluating your project

In order to carry out a livestock project, it is necessary to plan ahead for that project. The following tables as for planning information that will help you complete your project; columns are provided to record information on up to three animals. After the project is completed, it is good to be able to compare what actually happened with what you had planned.

|  |  |
| --- | --- |
| Animal Tags | Animal Names |
|  |  |
|  |  |
|  |  |

Circle one: Market / Breeding

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Animal #1 |  | Animal #2 |  | Animal #3 |  |
|  | Planned | Actual | Planned | Actual | Planned | Actual |
| Breed of Animal |  |  |  |  |  |  |
| Sex of Animal |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Animal #1 |  |  | Animal #2 |  |  | Animal #3 |  |  |
|  | Planned | Actual | Difference | Planned | Actual | Difference | Planned  | Actual | Difference |
| Ex. Purchased Weight (3 head) | 600 | 675 | +75 | 700 | 725 | +25 | 800 | 750 | -50 |
| Purchased weight of animals (lbs) |  |  |  |  |  |  |  |  |  |
| Purchase price of animals ($) |  |  |  |  |  |  |  |  |  |
| Final Weight of Animals (lbs) |  |  |  |  |  |  |  |  |  |
| Market Value of Animal ($) |  |  |  |  |  |  |  |  |  |
| Vaccines/implants (yes/no) |  |  |  |  |  |  |  |  |  |
| Amount of Feed |  |  |  |  |  |  |  |  |  |
| Feed Cost |  |  |  |  |  |  |  |  |  |

**Inventory**

*All material items you used to complete your project should be listed. Depreciable items should be worth less money at the end of the year. Any items purchased during the year should be included as an expense and listed on the Ending Inventory with a depreciated value (NOT in beginning Inventory). Give an idea of depreciation schedule.*

|  |  |  |
| --- | --- | --- |
| Equipment, feed, animals(on-hand) and miscellaneous items descriptions.  | Value at beginning of the year | Value at the end of the year |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Total Beginning Value  |  |  |
| Total Ending Value |  |  |
| Change in the value +/1 |  |

**Feed Ration Plan**

**Seniors only complete this page (#91948) page 2-6 Senior planning and evaluation**

*If the beginning and ending rations are done on a computer, insert a copy of the computer rations instead of completing the tables below.*

|  |  |
| --- | --- |
| Calculating the Beginning Ration | Animals weight at beginning of feed period :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Ingredient | (A)lb | (B) (C)Dry Matter | (D) (E)Protein | (F) (G)ME | (H) (I)Calcium | (J) (K)Phosphorous |
|  |  | % | lb | % | lb | % | lb | % | lb | % | lb |
| Ex. Alfalfa | 10 | 90 | 9 | 23 | 2.07 | 1.23 | 11.07 | 1.8 | 162 | .35 | .032 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Total: |  |  |  |  |  |  |  |  |  |  |  |
| Anim. Req. |  |  |  |  |  |  |  |  |  |  |  |
| Difference |  |  |  |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| Calculate the Ending Ration | Animals weight at end of feed period :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Ingredient | (A)lb | (B) (C)Dry Matter | (D) (E)Protein | (F) (G)ME | (H) (I)Calcium | (J) (K)Phosphorous |
|  |  | % | lb | % | lb | % | lb | % | lb | % | lb |
| Ex. Alfalfa | 10 | 90 | 9 | 23 | 2.07 | 1.23 | 11.07 | 1.8 | 162 | .35 | .032 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Total: |  |  |  |  |  |  |  |  |  |  |  |
| Anim. Req. |  |  |  |  |  |  |  |  |  |  |  |
| Difference |  |  |  |  |  |  |  |  |  |  |  |

***To calculate the nutrients in each feed ingredient, follow these steps***

1. ***Column C= Multiply value in Column A by value in Column B***
2. ***Column E= Multiply value in Column C by value in Column D***
3. ***Column G= Multiply value in Column C by value in Column F***
4. ***Column I= Multiply value in Column C by value in Column H***
5. ***Column K= Multiply value in Column C by value in Column J***

***The nutritional requirements for your project animal are in Table 1, 2, 3, 4, 5 on pages 3-4. Difference between total nutrients provided by the ration fed and the animal’s daily requirements.***

***lb or #= pounds; ME- metabolize able energy; Meat= mega calories.***

***Note: Average values for the nutrient composition of various feeds can be found on Table 5 on page 4.***

***Seniors only complete this page***

**Nutrient Requirements**

*For feed values see Table 6 on page 4.*

**Table 1. Beef minimum nutrient requirements for 3 pounds/day gain.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Weight (lb) | Dry Matter (lb/day) | Protein (lb/day) | ME (Mcal) | Calcium (lb/day) | Phosphorus (lb/day) |
| 700 | 18.0 | 2.01 | 20.9 | .081 | .041 |
| 800 | 19.9 | 2.07 | 23.2 | .080 | .044 |
| 900 | 21.7 | 2.13 | 25.2 | .078 | .046 |
| 1000 | 23.6 | 2.19 | 27.5 | .076 | .047 |
| 1100 | 25.3 | 2.25 | 29.4 | .066 | .050 |
| 1200 | 27.6 | 2.25 | 32.1 | .066 | .053 |
| 1300 | 29.9 | 2.31 | 34.7 | .066 | .053 |
| 1400 | 32.2 | 2.35 | 37.4 | .066 | .053 |

 **Table 3. Sheep minimum nutrient requirements for .75 pound/day gain.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Weight (lb) | Dry Matter (lb/day) | Protein (lb/day) | ME (Mcal) | Calcium (lb/day) | Phosphorus (lb/day) |
| 50 to 70 | 2.9 | .42 | 3.4 | .015 | .007 |
| 71-100 | 3.3 | .44 | 4.4 | .017 | .008 |
| 101 to 140 | 3.3 | .40 | 4.4 | .015 | .008 |

**Table 4. Swine Minimum nutrient requirements for 1.8 pounds/day gain.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Weight (lb) | Dry Matter (lb/day) | Protein (lb/day) | ME (Mcal) | Calcium (lb/day) | Phosphorus (lb/day) |
| 22 to 44 | 2.1 | .38 | .09 | .015 | .007 |
| 45 to 110 | 4.2 | .63 | 6.19 | .025 | .021 |
| 110 to 240 | 6.9 | .090 | 10.19 | .035 | .028 |

**Table 5. Goat Minimum nutrient requirements for .33 pound/day gain.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Weight (lb) | Dry Matter (lb/day) | Protein (lb/day) | ME (Mcal) | Calcium (lb/day) | Phosphorus (lb/day) |
| 22 | 1.98 | .15 | 1.79 | .007 | .005 |
| 44 | 2.51 | .19 | 2.28 | .009 | .006 |
| 66 | 2.97 | .23 | 2.70 | .009 | .006 |
| 88 | 3.41 | .26 | 3.10  | .011 | .008 |
| 110 | 3.81 | .29 | 3.46 | 0.13 | .009 |
| Maintenance\* | 2.51 | .23 | 2.73 | .009 | .006 |
| Late pregnancy\* | 3.80 | .41 | 4.15 | .013 | .009 |
| Doe: low milk production(4.4lb)\* | 3.80 | .53 | 5.19 | .018 | .012 |
| Doe: medium milk production (8.8lbs)\* | 3.80 | .83 | 7.65 | .026 | .018 |
| Doe: High milk production (13.2lb)\* | 3.80 | 1.13 | 10.11 | .035 | .025 |

**\*These requirements are based on a 132lb goat; requirements for your goat may vary.**

**Nutrient Requirements Cont’d.**

**Seniors only use this page**

Table 6. List of Feeds

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Feed | Dry Matter % | Protein % | ME Mcal/lb | Calcium % | Phosphorus % |
| Alfalfa, high quality | 90 | 23 | 1.23 | 1.80 | .35 |
| Alfalfa, medium quality | 90 | 19 | 1.01 | 1.50 | .22 |
| Alfalfa, low quality | 90 | 17 | .97 | 1.40 | .24 |
| Grass/Alfalfa  | 90 | 15 | .93 | .90 | .29 |
| Brome grass pasture, early | 34 | 18 | 1.30 | .50 | .30 |
| Fescue pasture, early | 29 | 14.5 | 1.13 | .51 | .37 |
| Corn silage | 33 | 8.1 | 1.19 | .23 | .22 |
| Alfalfa silage | 30 | 23 | 1.23 | 1.80 | .35 |
| Barely | 89 | 11 | 1.51 | .06 | .39 |
| Corn | 89 | 10 | 1.49 | .03 | .29 |
| Wheat | 89 | 11.3 | 1.55 | .07 | .36 |
| Beet Pulp | 92 | 10.1 | 1.30 | .61 | .10 |
| Cottonseed meal | 93 | 41 | 1.39 | .21 | 1.16 |
| Soybean meal | 89 | 49.9 | 1.49 | .30 | .68 |
| Whole cottonseed | 92 | 23 | 1.71 | .21 | .64 |
| Beef finisher\* | 88 | 12.5 | 1.27 | .87 | .41 |
| Swine Grower ration\* | 90 | 18 | 1.33 | .60 | .50 |
| Swine finisher ration\* | 90 | 14 | 1.35 | .60 | .50 |
| Sheep grower ration\* | 90 | 11.6 | 1.22 | .42 | 021 |

***\*If your tag differs from these complete feeds, use your tag values and use 1.4 ME Mcal/lb.***

**Financial Summary**

***Seniors only complete this page***

$\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (+or-) $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Income Expenses Change in Inventory Gross profit or loss*

*$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_= $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

 *Gross Profit or loss “Blue sky”/ support money\* Net Profit or loss*

*\*”Blue sky”/support money is any amount received above the actual market value of that animal.*

**Production Efficiency**

**Average Daily Gain:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_divided by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ divided by\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Total lb gained # of animals fed # of days in feed period Average daily gain*

**Feed consumed per pound of gain:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_divided by\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*lb feed consumed Total lb gained lb of feed/ lb of gain*

**Feed cost per pound:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_divided by\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Total feed costs Total lb gained feed cost/ lb of gain*

***Note: Members having more than one animal may opt to add pages and figure the production efficiency of each animal individually.***

**Alternate Expenses and Revenue page**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date (Mo./Day) | Animals, feeds, and miscellaneous items. Description (number, weight, etc.) | Pounds if fed | Cost of items purchased | Income from items sold |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
|  | Total pounds of feed fed |  |  |  |
| Total of current year expenses | $ |  |
| Total of current year income |  | $ |

\*Carry totals to Senior Planning and Evaluation page 5.

If you need more room for your record of Expenses and Income, make a copy of this page.

**Optional Feed Cost and Use Record**

*(For optional use only with Junior Planning and Evaluation, #91946, Feed Ingredients)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date (Mo./Day) | Feed ItemExamples: Pasture/Hay/Grain/Supplement | Quantity (pounds) | Cost/pound | Total Cost |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
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| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
|  | Total quantity of feed and total cost of feed |  | $ |

**Optional Feed Cost and Use Record**

*(For optional use only with Junior Planning and Evaluation, #91946, Feed Ingredients)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date (Mo./Day) | Feed ItemExamples: Pasture/Hay/Grain/Supplement | Quantity (pounds) | Cost/pound | Total Cost |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
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| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
| / |  |  | $ | $ |
|  | Total quantity of feed and total cost of feed |  | $ |