

Steer Frame Score

- The frame score of your steer will allow you to determine the target weight range for your steer at the fair.
- Frame score is determined by the hip height and age of the animal.
- Hip height is measured at the point of the hip (see Hip Height handout)
- For example: If a steer was 10 months old and the hip height measured 49 inches, the steer would be a frame score 6. Based on Figure 2 in the Hip Height handout, the steer should weigh between 1250 and 1350 pounds at the fair.
- See the Hip Height handout to determine the frame score and finished weight range of your steer.

Getting Started on Feed

- Reduce stress as much as possible during the transition from purchase/weaning to the new environment. This will reduce the potential of health problems.
- Only feed fresh, high-quality feeds.
- Good quality hay should be fed to start the calf. A grass-legume mix works best.
 - Hay should be fed alone for the first 3-4 days in the new environment.
- Protein in the diet should be maintained at 13-15%.
- Once the calf is acclimated to the new environment, grain may be introduced.
 - Grain should be limited to 1% of body weight to start.
 - Grain should be increased gradually. This is required to avoid digestive upset.
- While starting your calf on feed, calves should have full access to hay
- Clean the feed bunk daily to remove old feed.
- “Fines,” such as dust and powder should be minimized
- Feed on a regular schedule, recommended that the animal is fed twice a day.
- Fresh, clean water should be provided at all times.
- Closely observe your show calf to watch for any health issues that may arise.

Calf Rations

- Feeding programs are divided into 2 phases, growing and finishing.
- Mineral supplements should be fed per instructions.
- Growing Phase
 - Lower in energy – calves need to grow, not fatten
 - Usually gains will range from 1.5 to 2.5 pounds per day.
 - Hay-based ration with limited concentrates (grain).
 - Grain limited to 1% of body weight



- Finishing Phase
 - Higher in energy – calves need to fatten
 - Gains will be greater than 2.5 pounds per day.
 - Grain-based ration with limited hay.
 - Grain fed from 2 to 2.5% of body weight.
- Amounts to feed
 - Growing steer (600 – 800 pounds)
 - + Grain is limit fed between 1 to 1.5 pounds per 100 pounds of body weight
 - + Full feed hay
 - + Example: 600 pound steer
 - Consumes approximately 2.5% of body each day on a dry matter basis
 - $600 \times 0.025 = 15$ pounds of dry matter
 - Approximately 18 pounds as fed per day
 - Grain: 6 to 9 pounds per day
 - $600 \text{ lbs} / 100 = 6 \times 1 \text{ lb} = 6 \text{ lbs.}$
 - $600 \text{ lbs} / 100 = 6 \times 1.5 \text{ lb} = 9 \text{ lbs.}$
 - Hay: Full feed
 - Equates to 9 to 12 pounds per day
 - Finishing steer (850 – 1300 pounds)
 - + Grain fed at 2 to 2.5 pounds per 100 pounds of body weight
 - + Limit feed hay
 - + Example: 900 pound steer
 - Consumes approximately 2.5% of body each day on a dry matter basis
 - $900 \times 0.025 = 22.5$ pounds of dry matter
 - Approximately 27 pounds as fed per day
 - Grain: 18 to 22.5 pounds per day
 - $900 \text{ lbs} / 100 = 9 \times 2 \text{ lb} = 18 \text{ lbs.}$
 - $900 \text{ lbs} / 100 = 9 \times 2.5 \text{ lb} = 22.5 \text{ lbs.}$
 - Hay: Limited
 - Equates to 4 to 9 pounds per day

Average Daily Gain

- Pounds of gain your feeder calf must gain to reach your estimated final weight.
- Example:
 - Current steer body weight: 700 pounds
 - Estimated final weight: 1300 pounds
 - Days until show: 200 days



- Estimated average daily gain:
 - + Gain: $1300 - 700 = 600$ pounds gain
 - + $600 \text{ pounds} / 200 \text{ days} = 3$ pounds of gain per day

Step-Up Rations

- The table presents an example of the hay vs. grain over 45 days of step-up rations.
- The feedlot industry conducts step-up rations over a 21 to 28 day period.
- It is not recommended to conduct a series of step-up rations shorter than 21 days.
- It is not recommended to increase the amount of grain more than 10% of the ration at any time.
- The amount of feed should be increased as the calf grows.
 - Estimated calf weights are calculated using the projected average daily gain.
 - Start weight: 700 pounds
 - Average daily gain: 2.5 pounds per day
 - Length of feeding: 30 days
 - Approximate calf weight: 770 pounds
 - + $30 \text{ days} \times 2.5 \text{ pounds per day} = 70$ pounds of gain
- Mineral supplements should be fed at all times. Mineral supplements can be fed in multiple forms:
 - Lick tubs – includes protein, energy, minerals, and vitamins
 - Cake supplement – includes protein, energy, minerals, and vitamins
 - Loose – tends to include only vitamins and minerals
 - Mixed in the ration – loose mineral and vitamin supplement mixed with the concentrate

| Day | % Hay | % Grain |
|-----|-------|---------|
| 1 | 100 | — |
| 5 | 90 | 10 |
| 10 | 80 | 20 |
| 15 | 70 | 30 |
| 20 | 60 | 40 |
| 25 | 50 | 50 |
| 30 | 40 | 60 |
| 35 | 30 | 70 |
| 40 | 20 | 80 |
| 45 | 15 | 85 |

Other Considerations

- If your steer is gaining too much weight, especially when approaching your target weight, you can reduce the amount of concentrate being fed.
 - Increasing the forage back into the ration will allow the steer to continue to grow, but reduce the energy (TDN) content of the diet.
 - Decreasing the amount of concentrate by 5 to 10% at each step-down will enable adequate continued growth and minimize digestive upset
 - Final diets at the end may contain 60-70% concentrate and 30 to 40% forage.
 - This will be especially important for late fairs. One way to reduce the potential for finishing your steer too early is to increase the time between step-up rations.



- Instead of every 5 days as indicated in the table, increase the time between 7 and 10 days. This will reduce average daily gain, but will decrease the potential of finishing early.
- Determining the number of days until your fair after weighing your steer will let you more accurately determine the average daily gain your steer needs to achieve. Setting up a feeding plan for your steer will help by making sure your steer does not gain too much weight and be overly finished for the fair.
- It is also important to note that as the summer nears and the temperatures rise, calves may reduce feed intake. It is especially critical during the hot summer months to provide clean, fresh water to maintain feed intake.
- If you have more than one steer per pen and are feeding them together, observing your steer to ensure grain consumption is needed. One way to ensure that all steers consume their allotment of grain is to feed the grain separately. This will also lower the chances of one steer eating all of the grain or increase the chances of observing if one steer has gone off feed.
- Keep records of all steer information. Records can include weight, ration ingredients, amount fed each day, which days you increased grain inclusion, and health status.