

Eight Things to Keep in Mind When Raising Jersey Heifers

Because they are handled less, adolescents on the dairy farm—heifers that have been weaned but are not yet milking—can be overlooked. But the way you manage these animals contributes as much to the bottom line as the way you manage baby calves and milking cows. Caring for these future queens in the same careful manner as you did when they were born paves the way for them to be superstars in the milking string.

Dairy producers who are adding Jerseys to Holstein or other-breed herds, can be better positioned to capitalize on brown cow advantages when they consider a few breed differences:

- Jerseys mature earlier than Holsteins
- Jerseys can be fed and bred to calve younger than Holsteins
- If possible, group Jerseys and Holsteins separately in mixed breed herds. If this is not an option, group them by maturity rather than age and size.

The following tips have been gleaned from nutritionists who specialize in Jerseys and resources at the American Jersey Cattle Association. This is the second article in a series designed to help you raise Jerseys. For the first article, on Jersey calves, read the November 2020 *Jersey Journal*.

1

Feed Them Well from the Onset

It is a realistic goal to have Jersey calves weigh 2-3 times

their birth weight by day 56. With an average birth weight of 60 lbs., Jerseys should weigh 120-180 lbs. at this point. This equates to a daily gain of 1.1 lbs. For tips on getting here, read the first article on raising Jersey calves.

The value of early growth is that it comes largely from lean tissue gains and not fat. As animals age, gains begin to shift from lean tissue accretion to body fat reserves.

As well, make sure you have a stellar program for transitioning calves to group housing. Moving them too soon will cause them to stagnate and rumen development to slow. How do you know when they are ready? They have been eating calf starter for a good month.

2

Develop a Targeted Growth System

Establish a targeted growth system so you have benchmarks from which to evaluate performance of your individual herd.

A simple but effective approach is to weigh a group of mature cows in the herd and establish benchmarks from there. Multiply this number by 0.85 to determine target weight for heifers after their first calving and by 0.55 for heifers at breeding time. Set a desired target for age at first calving and then subtract nine months to establish a target for breeding age. Then develop diets and management protocols to achieve these goals.

An example for Jerseys might look as

follows:

Body weight at maturity: 1,000 lbs.

Body weight after first calving: 850 lbs. (1,000 x .85)

Age at first calving: 22 months

Body weight at breeding age (third estrus following puberty): 550 lbs. (1,000 x .55)

Age at first breeding: 11-12 months

3

Group Appropriately in Mixed Herds

Because Jerseys mature early and begin to accrue body fat at a younger age than Holsteins, carefully consider how you will group animals if you have a mixed herd. Ideally, Jerseys should be managed separately.

Many times, this is not practical, and heifers are typically grouped by age or body size. This practice groups earlier-maturing Jerseys with later-maturing Holsteins. In this setup, Jerseys may become over-conditioned very quickly.

If grouping by breed is not possible, group by maturity. This will mean you will have relatively small Jerseys managed with much larger Holsteins. Though Jerseys are aggressive eaters and known to be able to hold their own at the feed bunk, you will still need to monitor behavior to ensure your Jerseys are getting enough food.

As well, if you group breeds together, make sure you have at least the minimum amount of bunk space recommended for each animal. For this protocol to work, you will need to be generous with bunk space.



4 Think Long and Hard About Limit Feeding

The practice of limit feeding—feeding once a day and having feed run out before the next day—is not effective when Jerseys are grouped with Holsteins and adequate bunk space is not maintained. From a psychological standpoint it is ineffective for Jerseys as well. It doesn't take one long to recognize Jerseys are very "oral" and need to have something to do or eat. If not, they will become bored and you will observe more tongue rolling, which is an abnormal behavior.

5 Adopt a Practical Approach to Heifer Weighing

Develop a practical and labor efficient system to weigh heifers. This program will likely look different on every farm. Find a method that works for you. Otherwise, you will not adopt the practice.

Weigh heifers at routine events, such as birth, weaning, vaccinations, breeding, calving and such. Calculate daily gains at each opportunity.

Use RFID tags. The entire management chain is easier with the technology. Though measuring girth with a tape measure can work for just a few animals, it is not practical for herds of any size. Invest in tools such as electronic scales and systems to record growth measurements to help you get the job done accurately and efficiently.

6 Monitor Body Condition

Don't skip the heifer pens or pastures on your daily checks. Evaluate heifers with the same scrutiny as your baby calves and milking cows. Because they are smaller, they may lose body condition quickly. Or, they may become too fat because they mature more quickly. Pay particular attention to Jersey heifers at puberty when they are about 9-10 months old. Be ready to adjust diet if you see body scores increase above 3.5 on a five-point scale. Likewise, be aware of heifers losing condition during cold weather.

7 Pay Attention to Ventilation and Water Quality

Two management practices that are often overlooked for heifers are ventilation and water quality. Ventilation systems which bring in fresh air and push out stale, bad air around the clock are ideal, especially in the winter. Respiratory disease can result in permanent damage to lungs and impair future production and longevity.

Test drinking water on a regular basis for sodium, sulfates, nitrates, and magnesium, among others, and fix problems. As well,

provide fresh, clean water at a location away from feed. Nothing will cause bacteria levels to increase faster than warm water contaminated with feed.

8 Consider Forage Choices for Post-Weaned Heifers

Pay special attention to the forages used in the feeding program for post-weaned heifers. Weaned calves tend to sort alfalfa hay, eating leafy tops and leaving stems. This sets them up for digestive issues. Younger heifers do best on finer-stemmed grass and legume forages. As heifers mature, they can adapt to a wider variety of forages and small grain silages or summer annuals.

Be mindful too about making sudden shifts to fermented feeds. Slow and steady is always best when making changes in any ration to avoid digestive issues. Do not feed heifers wet forages that have fermented in the range of 30% dry matter as they may



spoil in the bunk.

Forage sources are regional. What is readily available in one area, may be very costly or unavailable in another.

In Summary

As a dairy farmer, it is in your best interest to raise well-grown heifers that will pay their way sooner rather than later. For Jerseys, this can begin far sooner than other dairy breeds, often as early as 20 months-of-age. Learn how to manage them and you can reap the brown cow rewards.

To get worksheets and other pertinent information on raising Jersey heifers, download the booklet, "Every Jersey Heifer, A Quality Heifer," published by the American Jersey Cattle Association at https://www.usjersey.com/Portals/0/AJCA/2_Docs/QualityHeiferBrochure.pdf.

Additional useful resources can be found in this booklet as well.

Or, watch a YouTube video on raising Jersey heifers, presented by National All-Jersey Inc. as one of four webinars on Jersey nutrition at <https://www.youtube.com/watch?v=Gfz0kX61cm0>.

Additional Resources

- Pro-Dairy Program Worksheets (Cornell University College of Agriculture and Life Sciences): <https://prodairy.cals.cornell.edu/business-management/resources/>
- University of Wisconsin-Madison Dairy Management Tools: <https://dairymgt.info/tools.php#Heifers>
- Calf Track Program Worksheets (Pennsylvania State University): <https://extension.psu.edu/calftrack-calf-management-system>
- Dairy Herd Management Calf and Heifer Resource Center: <https://www.dairy-herd.com/resources/calf-heifer>