Fenceline Weaning —
A Healthier Way to Break the Bond

Weaning calves from cows nose-to-nose reduces calf stress and sets the stage for post-weaning health and performance.

One weaning practice that continues to gain favor with both researchers and producers is fenceline-weaning, a management system in which calves and cows are separated but can still see, hear, and smell one another.

For producers who have the space and a sturdy separation fence, this simple practice can pay off in healthy calves that continue a close-to-normal growth rate and weight gain. Calves are calmer during weaning because momma is close by and they are familiar with their environment and diet.

Basically the fenceline-weaning process goes like this: Cows and calves are maintained together for several days in a pasture with ample feed resources. Calves are held here with dams so they can acclimate, and find feed and water before separation occurs.

Once separated the calves stay put, while the cows are moved to an adjoining pasture or trap. Ideally, the pairs are kept separate by a high-tensile electric wire or woven wire fence with an electric wire until the bawl subsides, typically around five days.

In a fenceline-weaning system, calves and cows have nose-to-nose contact. The result is a less-stressed calf that bawls and fence-walks less, and has the potential to maintain weight – all while gently and unabruptly breaking the bond with its mother.

One of the keys to this practice is calves remain in a familiar environment with the same feeding routine, grass, and water. They still have visual contact with their dams, so the only change they undergo is no longer being able to nurse. Minimizing change – and stress – for calves is a big plus to post-weaning health.

Changing the stress level of weaning

Health is the number-one reason why Shaw Cattle Co., Caldwell, Idaho, has weaned all calves on green grass, and as many as possible through a fenceline-weaning system, for the last 20-some years.

This family-run Angus, Hereford, and Red Angus seedstock operation, located some 45 miles west of Boise, includes Greg and Cleo Shaw, sons Tucker and Sam and their families. They annually market some 325 head of registered bulls and a top cut of replacement heifers through their production sale to both seedstock and commercial customers.

Greg says that the health of their calves was why they started weaning only on green grass and through a fenceline at every opportunity.

“We’ll wean 400 to 500 head of calves and not doctor but one or two calves. Before [in a drylot], we would always have an outbreak of sick calves at about seven to 10 days after we weaned. You could easily doctor five to 10 percent of them.”

He believes, “Fenceline-weaning definitely changes the stress level of weaning. From a health standpoint, there is a very big benefit.”

Greg Shaw,
Shaw Cattle Co., Idaho

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Sam points out that from 85 to 90 percent of the Shaw calf crop is the result of either artificial insemination or embryo transfer. They have a lot invested, so setting
calves back performance-wise isn’t an option for them.

**Separation by fence**

The Shaws carry out fenceline-weaning by, first, putting cows and calves together in a pasture, where the calves will remain after separation. They leave the pairs together in this pasture for three to four days.

After the initial warm-up period, the pairs are parted so they only have nose-to-nose contact through the fence. Greg says it only takes about four to five days to wean, and when they move the cows to a different location, neither calves nor cows want to go back to the fence.

The Shaws believe that fenceline-weaning works efficiently largely because a calf’s environment doesn’t change. “If you move cows and calves to a strange place, and then split them, the calves tend to want to go back to where they last nursed,” Greg explains.

While this practice is fairly simple, the Shaws do recommend having in place “an awfully good fence” with which to separate. They use a tight five-wire fence with one middle electric wire to keep calves from reaching through. The electric wire also keeps calves from bunching up and pushing against the separation fence, the most important barrier in the fenceline system.

The Shaws report that, initially, both cows and calves will be noisy and “stir up” easily. That’s why Sam says this: “When we wean them, we stay away for three to four days because every time you go out there, it stirs them up. If they’re out grazing, they’ll go right back to each other.”

These ranchers do keep an eye on the cows and calves from a safe distance, however, and if there is an occasional straggler they’ll pull and wean them elsewhere.

They also recommend that calves have a good water source. “Be sure the water is situated where the calves will easily find it,” Greg advises, and choose your weather for weaning. While hot weather isn’t usually an issue for them, he adds, “Shade for calves would for sure be nice if you weaned in hot weather.”

**Health and performance benefits**

The Shaw family’s method of low-stress weaning helps avoid calf sickness, a leading factor in reduced weight gain and carcass quality.

Data compiled though the Texas Ranch to Rail program shows calves that suffer post-weaning sickness have lower average daily gains, reduced feed efficiency, and lower carcass quality grades.

In scientific work carried out in a 2003 University of California at Davis study, Dr. E.O. Price’s research indicated that fenceline-weaning reduces the negative effects of separation on calf behavior and growth rate. This research found

<table>
<thead>
<tr>
<th>Weeks after weaning</th>
<th>Non-weaned (pasture) a</th>
<th>Fence-line (pasture) b</th>
<th>Complete separation (pasture)</th>
<th>Complete separation, used to hay (drylot)</th>
<th>Complete separation, not used to hay (drylot)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>44 lbs.</td>
<td>47 lbs.</td>
<td>30 lbs.</td>
<td>23 lbs.</td>
<td>20 lbs.</td>
</tr>
<tr>
<td>10</td>
<td>143 lbs.</td>
<td>110 lbs.</td>
<td>91 lbs.</td>
<td>79 lbs.</td>
<td>82 lbs.</td>
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</tbody>
</table>

Table 1

Pounds gained in weeks relative to weaning by method

a – not weaned at all during 10-week trial

b – 7 days of fence-line exposure to cows, then completely separated


In scientific work carried out at the University of California-Davis, Dr. E.O. Price’s research indicates that fenceline-weaning reduces the negative effects of weaning on calf behavior as well as growth rate. As Price’s work points out, calves totally separated from their dams did not compensate for their early losses in weight gain even after 10 weeks – an important point to note, especially in short-term (45-to-60-day) weaning and backgrounding systems, where there is insufficient time to regain reduced performance.
Plan Ahead for Weaning

Fenceline-weaning may not always be an option, but putting good health programs in place and planning ahead for weaning can help alleviate stress and benefit lifetime calf performance.

Shaw Cattle Co., for example, has a comprehensive health management plan for their three-breed herd. Calves receive their first 5-way modified-live virus (MLV) vaccine at branding and are given an 8-way. They're preconditioned two to three weeks prior to weaning, and are boostered for respiratory disease then and again at two weeks post-weaning.

Additionally, at the request of their customers, the Shaws ear notch every calf at branding to test for any PI (persistently infected) carriers of BVD virus. “Our bull customers started asking for it because they’re testing a lot more of their own calves,” Sam Shaw confirms.

The Shaws have also made bunk-breaking calves on green grass a regular practice, especially for spring-born calves. Greg Shaw says it’s a “big plus” to have calves acclimated to eating from a bunk. “Calves will fill up the first day they go into a drylot,” he confirms, basically alleviating this stress.

In addition, New Mexico State University’s Clay Mathis offers these tips for minimizing stress during one of the most stressful events in a calf’s life:
- If fenceline contact isn’t practical, move cows far enough that they cannot hear the calves bawling. Be sure to move the cows to a new location, not the calves.
- If weaning in a drylot or corral, place feed bunks, hay, or water troughs along the fence to minimize perimeter walking.
- Don’t castrate, dehorn, or brand calves at weaning. These practices should be completed at least three weeks before weaning and preferably prior to three months of age.

<table>
<thead>
<tr>
<th>Year</th>
<th>Weaning wt. (lbs.)</th>
<th>7-day post-weaning wt. (lbs.)</th>
<th>Difference</th>
</tr>
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<tbody>
<tr>
<td>2006</td>
<td>468</td>
<td>484</td>
<td>16</td>
</tr>
<tr>
<td>2007</td>
<td>520</td>
<td>524</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 2

Source: NMSU Corona Range Livestock Research Center

continued from page 11

that, in the post-weaning phase, fenceline-weaned calves exhibited fewer signs of distress, such as reduced appetite and resting, and higher levels of walking and vocalization, versus their traditionally weaned counterparts. Furthermore, fenceline contact with dams at weaning minimizes reductions in weight gain so calves continue a close-to-normal growth rate (see Table 1 on pg. 11).

Data from a study conducted at the New Mexico State University (NMSU) Corona Range Livestock Research Center also shows favorable results. Calves there were fenceline-weaned for seven days in 2006 and 2007. During those times, calves gained weight, with minimal outward signs of stress (see Table 2).

While it may be impossible or impractical to fenceline-wean calves in all situations, planning ahead to help alleviate weaning stress can prove beneficial. For example, in past years the Shaws ran spring-calving cows on mountain meadows. While they weren’t able to fenceline-wean these calves, they prepared them for the weaning process through preconditioning practices, and weaned on green grass instead of in a traditional dry-lot setting.

Recently this family has relocated a good portion of pastures closer to home which will allow them to fenceline-wean nearly 100 percent of their calves from here out – an opportunity they welcome to help protect the health and post-weaning performance of their calf crop and the genetics in which they’ve invested.

The separation fence is the most important barrier in the fenceline weaning system. Shaw Cattle Co. uses a tight five-wire fence with one middle electric wire to keep calves from reaching through, bunching up, and pushing through to the other side.