

## READY FOR CALVING

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Winter and spring calving times are just around the corner. This article provides information on preparing for calving. Part of the information was taken from the OSU Calving Handbook (Zollinger & Hansen, 2003). The handbook is available free on line at: <http://oregonstate.edu/dept/animal-sciences/cschhand.pdf>.

### *Support Team and Proper Facilities*

It is always best to work with your veterinarian and other people with experience calving out cows. Make sure you have an established working relationship with you're support team prior to you needing "mid-night" help. Another must is proper calving facilities. A viable example, outlined in Figure 1, is a simple headcatch for the calving barn and a good calving area floor plan. A regular squeeze chute can be disastrous if a laboring cow goes down in it.

### *Pre-calving Checklist*

Don't wait until calving begins, set up ahead of time. Here is a partial list of what you should consider. Also, think back to previous years. What did you have to help you then? What did you not have that you wish you did? Go get your supplies together before the action starts.

- Ensure proper heifer weight gain
- Vaccinate heifers and cows for scours and enterotoxemia
- Give Vitamin A injection unless supplement is being fed



- When possible, use pastures for calving
- Calving lots should be clean and have not been used during the past 10 months
- Bring only springing heifers into the lot unless there is enough room to keep heifers scattered
- Gather equipment (tail rope, gloves, soap, lubricant, chains, bucket, disinfectant, navel dip, etc.)
- Be prepared to clean calving barn and stalls daily
- Be prepared to provide frozen colostrum if needed

### *Dystocia (calving difficulty)*

Dystocia accounts for major losses in the cow-calf business. We need to do all we can to cut back on this. The main problem is having a calf too big to deliver through the pelvis of the heifer or cow. There are several things managers can do to decrease the amount of calving difficulty; the role of bull selection, nutrition, and exercise is addressed below.

Bulls - To cut back on dystocia, you should use a bull that has the appropriate **birth weight** and **calving ease** attributes for your cows and heifers. You can choose new bulls based on genetics by using EPD (expected progeny differences) listed with their breed association. Alternatively, you can use a bull based on previous experience with that him as a sire of low birth weight, easy calving offspring. Since it is a bit late for that this year, lets look at a couple other factors influencing dystocia, and revisit the bull issue next newsletter.

Nutrition - Proper nutrition is essential for a successful reproductive program. Good heifer development helps the young bovine to be physically (size and strength) prepared to deliver a calf. Heifers should be at least 75% of their mature weight at calving (65% at breeding). Similarly, proper body condition helps the female to be energetically prepared for the calving event. Cows should be at a body condition score of 5 at calving (BCS, scale 1 – 9, emaciated – obese). Heifers should calve at BCS 6. It takes strength and endurance to carry the 100+ pounds of calf and associated membranes and fluids and deliver them in a timely fashion. It is not hard to imagine (or remember) a weak cow or underdeveloped heifer trying to make it through a difficult birthing process. Obese cows are also prone to calving difficulty due to fat filling up the birth canal and causing abnormal presentations.

If calving is coming up on you very soon, it may be too late this year to get females developed or to the proper body condition. So, what can be done now with respect to nutrition? Make sure the diet of the animal has the required protein and energy levels for late gestation females. It is a mistake to under feed these animals at this time in hopes that the calf will not grow to be too

big to delivered easily. In actuality, underfed cows and heifers become weak and unable to deliver smoothly, and calves are weak and have difficulty surviving the birthing process. Carefully controlled research trials show this to be true 99% of the time. That is, if in the past, managers were lucky enough to have observed easier calving on a year when they did not feed well, other factors were actually responsible for their success that year, not the feeding.

Low protein in the late gestation diet can also result in decreased calf vigor, delayed uterine involution, increased interval from calving to first estrus, and decreased conception rates following calving. Another negative result is poor colostrum production, which leads to poor immunity in calves throughout their lifetime.

Exercise – Research has shown that heifers and cows may benefit from moderate exercise prior to calving. It stands to reason that increased muscle tone in these animals would lead to easier calving. The difference in calving ease due to exercise depends on previous shape and condition of the cattle and the management system to which they were accustomed. Heifers and cows held in confinement benefited more than the females provided larger areas such as hillside pastures. Moderate exercise, if needed, could be accomplished simply by placing the hay feeder and the water trough at opposite ends of the field.