

SEMEX WEBINAR SERIES: **CALF & HEIFER REARING**



BY CATHERINE AGAR, THE WRITER MILKS 200 COWS NEAR SALFORD, ONTARIO, CANADA

With farm shows, meetings and conferences cancelled, I've watched a few agricultural webinars looking for practical information I can apply on-farm. Some were a disappointment, with choppy audio and in one case a panelist driving in his car, struggling with his phone while recording! It was cringe-worthy, as I waited for a crash that thankfully didn't come.

The Semex Webinar series is a great one with high quality speakers like Dr. Alex Bach who shared his advice and research on heifer rearing, and Pepe Ahedo from the heifer raising facility Rancho Las Nieves, both in Spain.

“You need a cow to complete 1.5 lactations to recover her rearing costs in Canada and 15% of heifers do not finish first lactation.”

Dr. Alex Bach

Calves should grow 850 grams to 1 kg per day in the first two months with the objective of getting to 22-23 months of age and 670 kg at calving. Every 70 kg of additional bodyweight at first calving translates to 1000 kg more milk in the first lactation.

Bach cautions against overfeeding milk to achieve those overall increases in weight. Too much milk can cause insulin resistance, effectively Type II diabetics that could result in ketotic cows. High volumes of milk fed twice per day will overwhelm the calf's system. He suggests for calves receiving two feedings daily, go with 6 litres total - it's the best combination of growth, cost management, and insulin frequency -

and starter intake will compensate for less milk.

Oat straw or grass chopped to 2 cm mixed with starter will increase intakes. Bach recommends to co-mingle calves at 21 days old. They learn from each other; when one eats the others will too, and they end up consuming more feed overall. If calves are sucking each other it indicates they are hungry.

Bach suggests a weaning schedule that reduces milk in steps and gives calves time to replace calories with feed. At day 49 reduce milk to 2 litres, twice per day and at day 63 eliminate one feeding. Allow the calf 10 days to 2 weeks on one feeding per day so weaning will occur at 10 to 12 weeks of age. Calves need to be eating 2 to 2.5 kg of solids at weaning.

Bach recommends introducing silage at 180 to 200 days, about 6.5 months of age. If introduced any earlier they do not eat enough and the result is feed that develops mold.

Bach recommends producers implement quality control in heifer rearing and cull any that have been sick. Repeat breeders have a higher chance of not finishing their first lactation.

An estimated 4-5% of heifers will abort - sell her instead of rebreeding - she also has a higher chance of not finishing her first lactation.

Aim for 400 days of age and 400 kg at breeding and use a chute and scale to ensure you are hitting the target.



Bach's webinar was followed two weeks later by the next in the Semex series, featuring Pepe Ahedo, from Rancho Las Nieves, raising dairy replacement heifers and having handled 60,000 calves over the past sixteen years. He quickly pointed out the challenging economics of a milk gross margin at half of what it was fifteen years ago based on a milk-to-feed price ratio, and dairy replacement heifer prices which were 50% higher at the time. We need to get heifer rearing right and Rancho Las Nieves has 1250 Standard Operating Procedures to ensure we achieve this, states Ahedo.

Rancho charges 2.726 Euros per day to raise the heifers of 109 clients resulting in an end cost of 1800 Euros per heifer.

Calves are vet checked when they arrive at an average age of 14 days old and an average weight of 42 kg. Rancho calculates a Body Index at entrance based on weight, height and age and 33% of calves have a negative index. Owners are given a report and charged a 20 Euro penalty for calves falling into a negative index.

Ahedo says those negative index calves are delayed 20 days to their first A.I. and they weigh 11 kg less than the best group.

Calves are moved by age and weight on the 45 hectares that is split into thirteen zones and 121 pens. Ahedo states that proper grouping by health and weight is crucial.

Calves are fed two bottles per day of three litres milk replacer plus starter. Eight calves are moved into super hutches at day 45 when they reach a weight of 66 kg and have an average daily gain of 0.77 kg. Calves are weaned at day 73. Rancho has a structured Delay Program and will hold back calves

from group changes that don't meet the minimum weight target. Ahedo says 44% need at least one delay and up to 3% of calves need as many as four delays.

Breeding starts at 390 days and on average females are bred at 425 days, or 14.17 months. Rancho feeds to 0% refusals and Ahedo suggests to aim for clean mangers but only for a maximum of 4-6 hours. Keep an eye on stocking density and have one headlock per heifer in the breeding pen.

Heifers are weighed nine times while at Rancho and at the time of exit receive a vet check, hoof trim, as well as weight and height recordings. Average age of first calving is 23.48 months, with only 5% calving over the age of 26 months; these females are typically slow growers or experienced an early embryonic death during pregnancy.

Ahedo says producers need to select for health and reproductive traits and he would like to see growth rate become a part of genomics.

After watching these webinars, I posted a detailed weaning schedule using a calendar and dry erase board in our barn where we mix the milk replacer. I'm on the lookout for more webinars with this type of practical advice!

This article was previously published in the November 2020 issue of Ontario Dairy Farmer.