

Interviews with Norwegian dairy farmers with cow-calf contact systems

Juni Rosann E. Johansen – 18.02.22

Dairy cows and calves in Norway

- Small farms – average 29,3 dairy cows per farm (2020)
- Dairy cattle – 91,5% Norwegian red cattle (milk and meat)

Cow-calf contact:

- No requirements in conventional farming
- Calf should suckle for at least 3 days in organic farming
«With a shorter suckling period than one month, calves must be able to drink from an artificial teat until they are one month old»
- Recommendations about gradual separation of cow and calf to minimise stress



Media – Focus on cow-calf contact

- I started working with cow-calf-projects 2017
- GrazyDaisy from 2018 – interviews with farmers – found three farmers having cow and calf together
- Focus from animal welfare organisations
- Articles in farm magazines
- Facebook-group 2019 – 1400 members
- Discussions on social media – farmers seemed more negative before (2018)
- More and more farmers seem positive and interested



Samvær ku og kalv - forum for melkebønder

Privat gruppe · 1,4 k medlemmer



+ Inviter

Om Diskusjon Rom Emner Medlemmer Arrangementer Medier Flere



Skriv noe ...

Bilde/video

Om

Denne gruppa har som mål å fungere som et diskusjonforum og erfaringsutveksling for melkebønder som ønsker å få til en driftsform der ku og kalv... Se mer

I MELKEINDUSTRIEN SKILLES MOR OG KALV ETTER FØDSEL. DETTE MÅ FORBYS! ER DU ENIG?

I melkeindustrien blir kalven skilt fra moren raskt etter fødselen. Vi vet at dette er en stor følelsesmessig belastning, men hensynet til dyrene må vike... NOAH vil ha slutt på lidelsene til dyrene, vil du? Støtt oss ved å bli månedsgiver: www.dyrsrettigheter.no/medlem?f1=23r2

Også Mattilsynet har uttalt seg kritisk til hvordan kalvene behandles: "I mjølkeproduksjonen fratas fortsatt de fleste dyr muligheten til å utøve sterkt motivert atferd, som diing og morsomsorg. Kalvenes behov er et forsømt kapittel i mange nye fjøs. De utsettes ofte for ugunstig miljø, holdes sosialt isolert fra andre og er det eneste husdyret som føres restriktivt i speddyrperioden."

Les mer her: [https://landbruksdyr.no/.../ku-og-kalv-i-industrien/...](https://landbruksdyr.no/.../ku-og-kalv-i-industrien/)



**I melkeindustrien
skilles mor og kalv etter
fødsel. Dette må forbys!
Er du enig?**

NOAH for dyrs
rettigheter

Fantastiske nyheter! Et stort prosjekt om å ha ku og kalv sammen har fått tildelt forskningsmidler! Prosjektet handler om at melkekyr kan få være mor for kalven sin, og ledes av [Veterinærinstituttet](#) i samarbeid med bl.a. [TINE](#). Vanlig praksis i dag er å skille dem fra hverandre like etter fødsel, noe som er stikk i strid med dyrenes behov. Forskerne skal undersøke flere aspekter ved å ha ku og kalv sammen, blant annet tekniske løsninger i moderne fjøs, ku og kalv sammen på beite og langtidseffekter av samværet. Dyrevernalliansen har sammen med våre givere arbeidet i flere år for at morkua og kalven skal få være sammen, og vi er svært glade for å se at dette temaet nå blir prioritert slik at flere kalver får være med mamma i fremtiden ❤️

Les mer om saken her: <https://www.vetinst.no/.../tre-nye-forskningsprosjekter...>



Foto: Iselin L. Hatge



My PhD (aug 2020-aug 2023)

- Norwegian Centre for Organic Agriculture (Norsøk), Tingvoll, Norway
- PhD-candidate at the Norwegian University of Life Sciences, Ås, Norway

- Three cow-calf projects

SUCCEED (2020-2023), aim:

- *Establish science based and practically feasible methods to allow increased contact between cow and calf in dairy production*

Aim with my PhD:

- *Acquire new knowledge about dairy farming systems with cow-calf contact, with emphasis on cow-calf contact on pasture*



Preliminary titles for planned scientific articles

- 1. Co-author Johanssen, J. R. E. 2022.** *What has impact on farmers` decision to establish and sustain systems of prolonged cow-calf contact at their farms?*
- 2. Johanssen, J. R. E. et al. 2022.** *How do Norwegian dairy farmers with CCC-systems practice, experience and perceive the interrelationships between calf and cow and humans in the CCC-system?*
- 3. Johanssen, J. R. E. et al. 2022.** *Behaviour in dairy calves with and without their dams on pasture*
- 4. Johanssen, J. R. E. et al. 2023.** *Effects of dairy cow-calf contact on pasture on calf weight gain, cow milk yield and composition of milk*
- 5. Co-author Johanssen, J. R. E. 2023.** *Identification of dairy calf suckling behaviour by using automatic surveillance technology on pasture*

The interviews (with Ruralis)

- Okt 2020 - March 2021 (easy to find farmers!)
- 13 interviews (1 don't fit the criteria - 12 in my article)
- 17 interviewees (32-61 years old, 10 were in their 30s)
- I did 3 with ruralis, 7 alone, ruralis 2 alone
- 7 farm visits, 5 on Teams
- 53-131 minutes (average: 101 min)
- Audio recorded
- Transcribed on word (all by me) – 8 500-23 000 words
- Analyse Ruralis – Theory of planned behaviour
- Analyse by me – NVIVO, modified Grounded theory



Interview guide questions

- About the farmer, the farm, the housing, the animals
- Practice with cow calf from before, the beginning and until today
- About the change/why they started with cow-calf contact
- Questions about economy
- Benefits and challenges with cow-calf contact
- If they want any changes, what's important for cow-calf contact, advises for other farmers
- Obstacles and benefits for more farmers to have cow-calf contact



The farmers

- 4 organic and 8 conventional
- 2 with the welfare label
- 6 – free stalls and milking robot, 2 – free stalls and milking parlour, 4 with tie stalls
- 14-60 dairy cows – 8 farms with fewer than average (30) and 4 farms with more than average
- Milk quota: 75 – 420 tonnes
- Cow-calf since: 1995-1999: 3, 2015-2019: 9 (some a bit before this too)
- Calving time: All year: 7, spring: 1, autumn: 2, other: 2
- All of them had cow and calf together inside in cow area
- 7 also had cow and calf together outside on pasture



Focus in my article

- Wasn't sure about this before the interviews, but was thinking about practical solutions, benefits and challenges
- Published a report about this in 2021



- **Preliminary aim for the article:**

To explore and analyze how Norwegian dairy farmers with CCC-systems practice, experience and perceive the interrelationships between calf and cow and humans in the CCC-system.

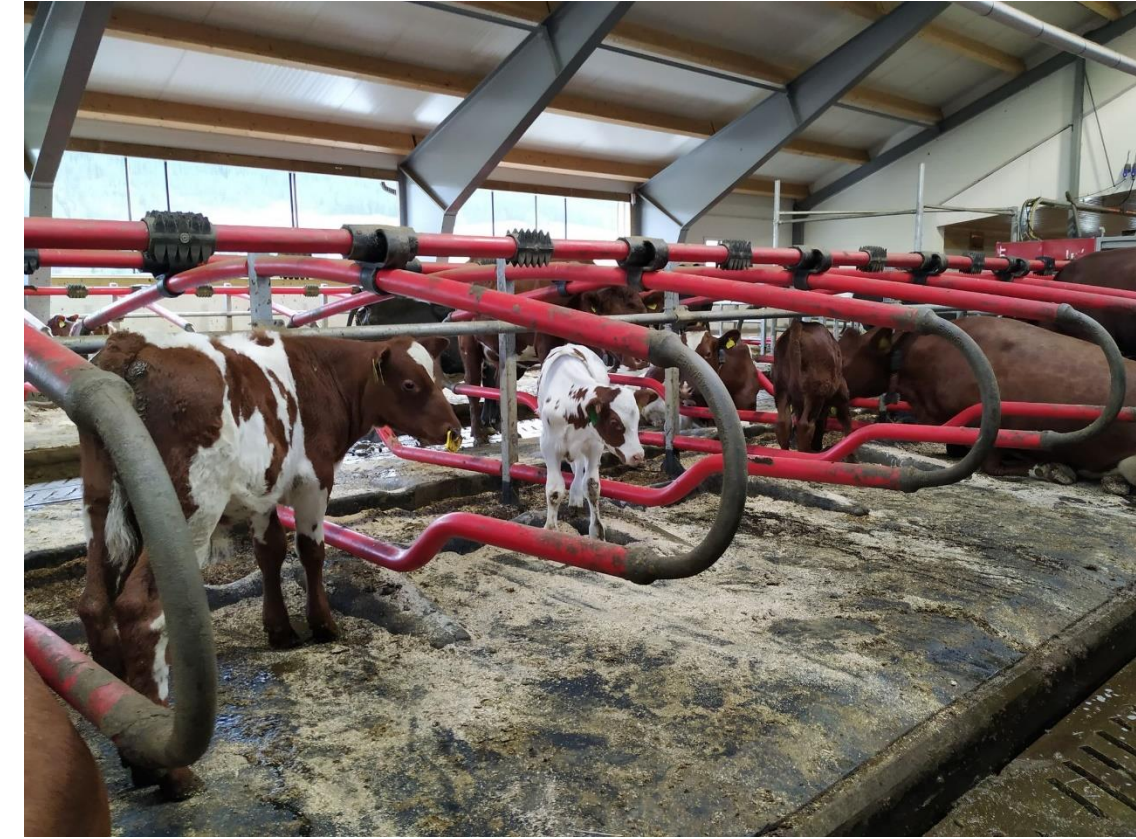
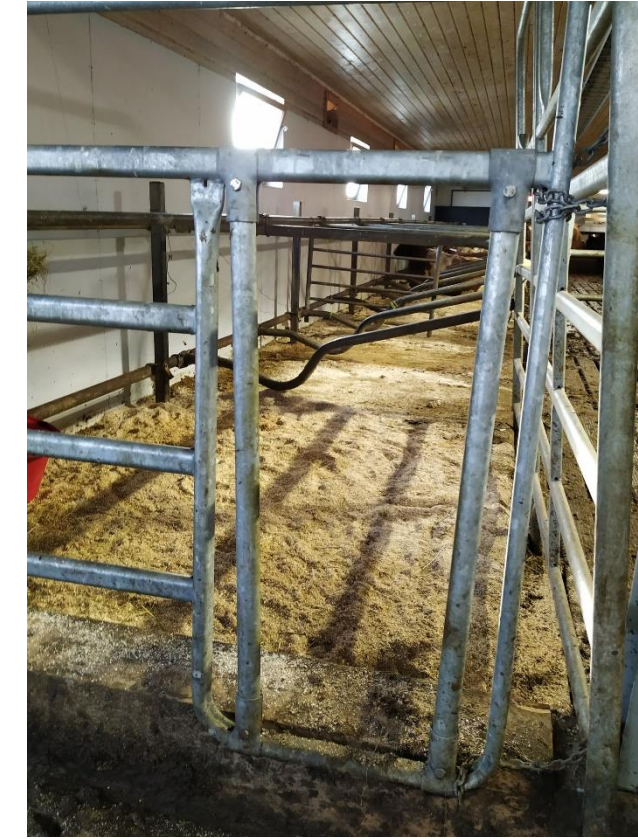
Farm 1

- Organic, 14 cows, free stall, milking parlour,
- Started cow-calf 2017 when they took over farm
- Mostly spring calving
- Preferably calvings and cow-calf together at pasture
- Calving pen
- Calf hide
- Together fulltime at least 3 months
- Gradual separation and weaning till 4 months



Farm 3

- Conventional, 53 cows, free stall, milking robot, spread calving
- Cow and calf together since 2019 – new free stall, more space
- Calving pen 4 days, welfare area for a period from a few days up till 2-3 weeks, depending on the milking, then free stall area
- Calf hide
- Together fulltime 10 weeks, 2 weeks with nose flap before separation
- (Not on pasture together yet)



Farm 5

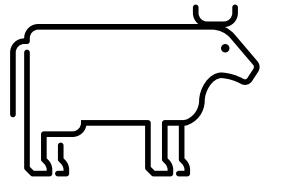
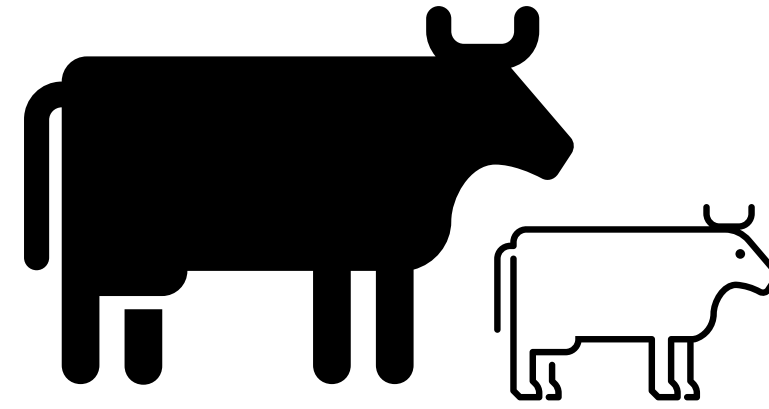
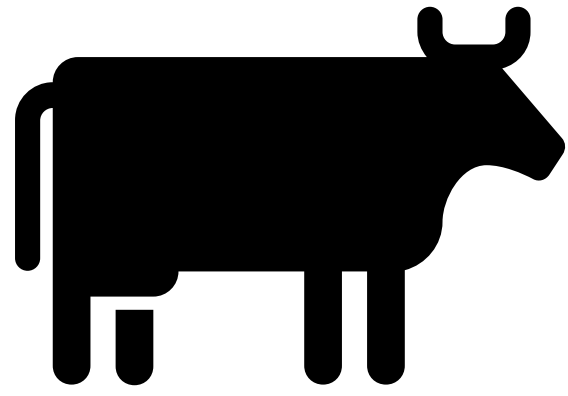
- Organic, 25 cows, free stall, milking robot, calving sep-march
- Cow and calf together since 2018
- Alone in calving pen 2-5 days
- Fulltime with mum in free stall till 4 weeks
- 2-4 calves are moved to pen with nurse cow
- Fenceline contact with dam for some days
- Suckle until weaning at 12 weeks
- (Not on pasture together)



Farm 6

- Conventional, 18 cows, tie stall, calvings autumn
- Father had cow-calf together since late 90s, son continued 2019
- Preferably calvings and cow-calf together on pasture
- Calving pen
- Together fulltime 4 weeks (some a bit longer) – calves loose in tie stall – opened to an own room and a corner with straw
- Then together a period after milking morning av evening till 8 weeks, then a period evening till weaning 9 weeks





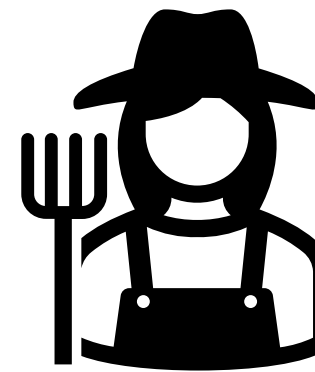
Maternal
behaviour

Learning

Separation and
weaning

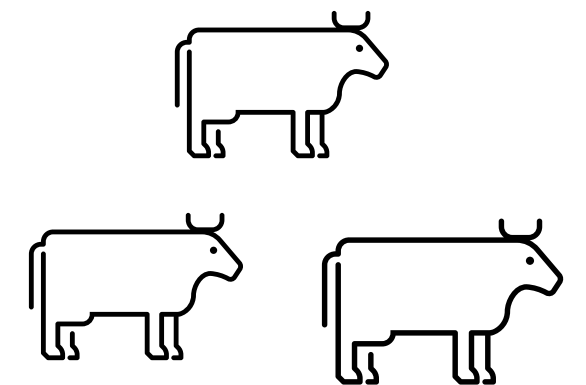
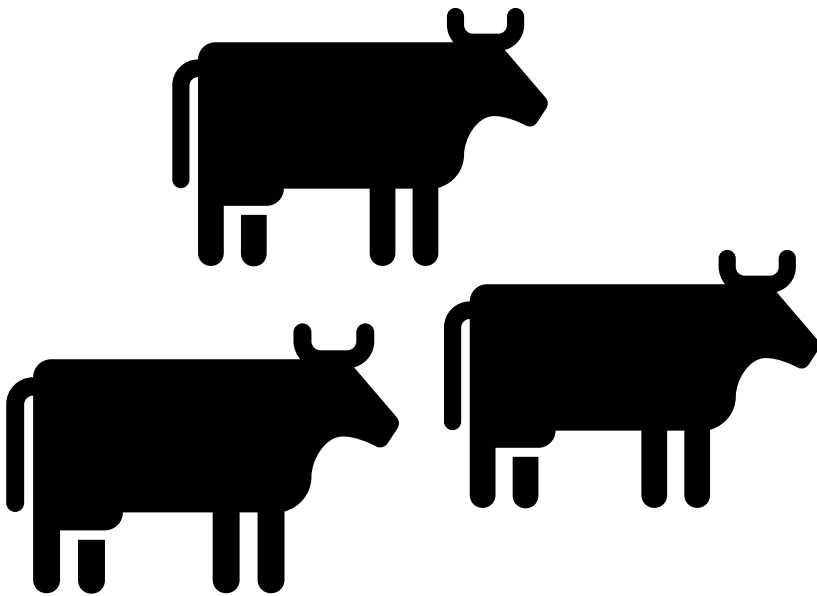
Aggressive
behaviour

Handling



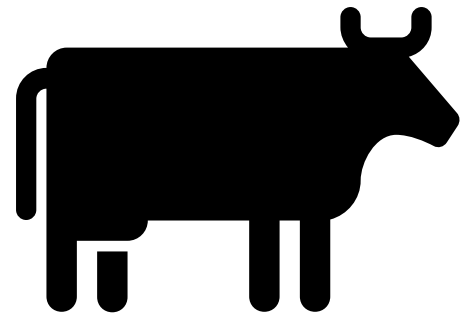
Natural
behaviour

Animal
welfare



Major themes/codes from the interviews for the article

More themes from NVIVO



Cows behaviour against the farmer/humans

Relationship between cow and the farmer/human

Relationship between the cow and the calf

Cows maternal behaviour

Positive feelings around the cow-calf system

Work environment

Work focus

Natural behaviour

Animal welfare on the farm

Methods for separation and weaning

Separation at different time points

Early separation

Later separation

Practical solutions cow-calf contact

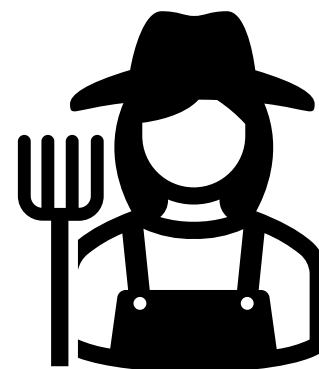
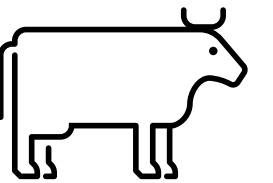
Cow-calf on pasture

Calves learning

Suckling, sucking, drinking milk

Colostrum after calving

Handling of calves



Colostrum

- Half of farms – gave colostrum always or most often from bottle
- Some told that they measured quality and had frozen colostrum from older cows if needed
- Other half – more focused on observing and maybe help calves to suckle – gave from bottle when they felt it was needed for different reasons

Citation:

- 5W: *«All the extra work, I don't know, you have better control, but it also works incredibly well just to put the effort into getting the calf to drink from the mother it has, it also works well..»*



Work time and focus

- Different opinions about if they used more, as much og less time in the barn when they had cow and calf together
- Several meant they used the time in a different way
- All agreed they used less time with calf feeding, but several talked about using more time on observing, moving animals, manual milkings, and so on
- Several said the work was easier, more flexible

Citations:

- 5W: *«We use the time in a different way. You often walk around with a plank, which you are going to place somewhere. We spend more time on that. Making adjustments in the barn, moving animals here and there, observe them. But before you went around carrying buckets, heated milk, emptied buckets and all that»*
- 11W: *«Instead of having to stand holding the bottle for the calf, I can stand I watch them enjoy themselves together»*
- 9M: *«I'm a bit lazy too. Because it's considerably less work, and soon it doesn't matter at all what time I go to the barn»*
- 5M: *«I trust that the cow takes care of her calf, she is the one that spends a lot of time, she can spend the whole day on her calf»*

Work environment

- All of the farmers talked about the well-being they felt themselves when cow and calf were together
- They talked about it being pleasant, cozy, it felt good, about being proud, satisfied, having good conscience, that they were happy with it, it was motivating, nicer environment in the barn, some said it was very interesting, very exiting, very fun, they had faith in this

Citations:

- 12M: *«It's nice to see that the animals are doing well, and to watch a cow and a calf enjoying themselves and caring for each other, it's a joy for me»*
- 2W: *«The biggest benefit of having cow and calf together is well-being for the cow, for me and for the calf»*
- 10M: *«You can not put a calculation on well-being, but I will go to my barn every day, and I thrive when the animals are doing well»*

Cows maternal behaviour

- Generally cows have good maternal instincts and are good mothers
- Some cows can seem stressed, don't understand or don't care about their calves
- Some farmers said the cows usually just need some time to calm down or to understand the situation
- Can be differences between primiparous cows and multiparous cows, and cows that have been separated early from their calves before

Citations:

- M10: *«She came to her calf, and then you saw that face and the eyes and the body of that cow, it was absolutely amazing, it was, the eyes shone and the body, it showed a happiness that I had not seen before»*
- *«The most important thing for a cow is to be allowed to be the mother of her calf»*



Relation between cow and farmer

- Farmers experience that cows want to protect their calves
- Important for the farmer to know the animals, feel safe around them
- The farmer may have to handle the animals differently, behave differently
- Several farmers have experienced one or a few cows showing aggression to protect their calves – short time after calving
- Higher risk with primiparous cows – don't know the farmer that well, can be more stressed after calving
- More risky with other people around the animals - don't know them well, like family and employees
- Good temperament on the cows – more important when they are with calves

Citations

- 5W: *«You always take into account that there is a mother and an offspring there, it's just that in normal dairy farming this idea has not been there, you have to take it into account and read the animals»*
- 3W: *«I probably think that as long as you have the temperament you have on dairy cows today, this is going very well. But the temperament of the cow is very important when they are with the calves, for you to be able to have a safe workplace»*

Handling of calves

- Some said that the calves can become a bit wilder when they are with the cows on pasture
- Several talked about the importance of handling the calves when they are with the cows
- Some focused on handling them in the calving pen the first days, some talked about spending time handling them the whole period when they were with the cows, some talked about spending more time handling them after separation
- Handling of the calves gives calm, tame animals later
- Individual differences among the calves, also influenced by how the cow are

Citations:

- 5W: *«I don't think they are any less tame now than when they were alone in the calf boxes»*
- 4W: *«You don't get to imprint them in the same way as when they are not with their mothers, if you have a cow that are very shy, she often transmits this to her calf»*

Calves learning

- Several farmers talked about calves learning from the cows
- They learn early how to eat roughage, silage, to graze, eat concentrates, drink water. Becomes ruminants early
- Learn the lives of the cows, learn how to behave, learn the cow area, the automatics in the barn, lying cubicles, and so on
- Some talked about calves also learning from other calves
- One farmer said it's individual when a calf starts to eat roughage and concentrates regardless of if they are with the cows or not

Citations:

- 6MF: *«When the cow is together with the calf, the calf learns to graze much earlier, only after a few days it actually begin grazing»*
- 5W: *«They kind of learn the life of the cow, they are accustomed to the cow area, when they come there later again before they are calving themselves, they have already grown up there, so it's ok then»*

Calves – Suckling, sucking, drinking milk

- Several talked about it being important that the cow and the calf are alone the first days in a calving pen to make a strong bond
- Some said that when they get this time together, it's unusual that the calves are suckling other cows, others said that the calves can suckle from other cows if they are hungry, or that they do it more when they are bigger, or when the cows don't want the calf – it's no problem for the calf to find other cows to suckle

Citations:

- 11W: *«It's very important that they actually get the first days to bond, because it's actually so solid that bond, that it takes quite a lot for the calf to go suckle a neighbour cow»*
- 5M: *«As long as the calf has an udder to drink from it's happy, it doesn't matter who it is»*
- 10M: *«Calves that are together with their mums for two months, they never show abnormal sucking on each other»*
- 10M: *«The calf does not drink himself to death, no calves are stupid»*

Cow-calf together on pasture

- Some farmers prefer that the cows calves outside and to have cow and calf together on pasture – more natural behaviour, more space, less infection pressure, less work
- Calves can run away from the pasture but it's not a problem – they come back
- It can some times be hard to find calves after calving outside – one farmer said that they used to search alot for the calves but they stopped with this because if they just waited, the calves showed up within a few days
- Some of the farmers didn't have cows and calves together at pasture – two of them didn't want to because the cows was on forest pastures were they didn't feel it was suitable or safe for calves

Citations:

- 6MF: *«I really like to have the animals outside on pasture for as long as possible. Before, the calves had to stay inside, while the cows was outside, but now there is no problem, we don't need extra fences for the calves, because they are together with their mothers who takes care of them»*
- 5W: *«We are lucky that we don't do this in the summer, we only have them together inside the barn in controlled forms»*

Animal welfare with cow and calf together

- Important that the animals are doing well
- Farmer who wanted to be a good example
- Animal welfare being the mainstay of the farm history



Citations:

- 5W: *«I feel like the animal welfare here is better now, or, I don't know, they had it very well when we separated them early too, actually»*
- 7M: *«We believe it's better animal welfare that the calf are together with the cow, this is our way of interpreting animal welfare, because it's a bit of a soluble concept, but that the cow can somehow express her natural needs. This is a natural need, and when you see how they handle the calf, both after calving and how they follow up in the free stall, they call for the calf, it comes and drinks from the mother, it's natural instinct, a need which is being covered, the mother role, so that is what we think is good animal welfare»*

Cow-calf – Natural behaviour

- Natural behaviour in relation to animal welfare, and when cow and calf are together – this is natural
- Important to express natural behaviour



Citations:

- 9M: *«It's more natural. There is no one who can take care of the calf better than its mother»*
- 5W: *«I think it works stronger on those who don't have a clue really, because we who have a clue, we have not felt that the calves had pain in their pens either, they have everything they need, and they grow and eat, and they're really doing fine. It's just that the last dimension of natural behavior is not there. I don't get very sad if I see a calf pen, with nice calves, it's perfectly fine , but I think that it's even more pleasant that it works with a calf together with a cow»*

Separation and weaning

- Some talked about that separation is a challenge with vocalisations for several days. Can be diarrheah and drop in weight gain for calves
- Others said they found good methods for separation and weaning that worked well for both cow and calf
- Different opinions about how the cows and calves react after separation, different methods and at different time points
- Individual variations among the cows, some vocalize alot, others don't vocalize
- One said when the cows vocalize – they stop because they loose their voice, another said they stop because they give up
- Early separation – one farmer said the cows did'nt react if the calves are taken early from them. Another farmer said that the cows became sad and apatic after early separation

Citations:

- 11W: *«It can be a bit noisy at weaning, but it has to do with how you do it, so I have found a method that actually works quite well, for the calf it's not a problem, but the mum, some mothers can make a little noise for a day or something, but now I do it successively and then they are so tired of those bullies that are fooling around with them when they are 3 months old, so they are happy to get rid of them, because they can see them, they pass them and sniff at them every day»*

Questions,
feedback,
discussion?

