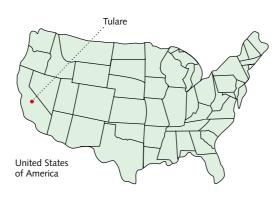
A GPS system in the cattle truck and measuring the protein content of calves' blood to alert producers to the importance of feeding sufficient colostrum. For Joost Teunissen, rearing 20,000 calves a year in the US mainly means checking up on people.

**11** ave you ever been in a maternity unit in a hospital and seen how sterile everything is there? Why do vou think it's that clean there? I often point out to producers how important hygiene is in the calving shed. If hygiene in the calving shed is not good, I am the first who notices the number of sick calves."

Joost Teunissen is a man of clarity. The 42-year-old calf-rearer from Tulare settled in the US state of California 15 years ago. "If I notice that I am getting more and more calves from a particular producer that quickly go down with

diarrhoea, I pay him a visit to check on the hygiene surrounding calving and colostrum feeding. The best way is to discuss the problems and come up with solutions."

Every year, Teunissen rears more than 20,000 calves from birth to four months for 15 local producers. He gained a lot of experience of rearing calves in the Netherlands before he decided to go and rear heifer calves in the US for a prearranged fee. "You don't need as much capital here to set up a calf-rearing enterprise as you do to start a dairy enterprise," he explains why he started



with raising calves. "Also, large producers are keen to contract out the rearing of the youngest calves, because it is very labour intensive, so that they can concentrate on the dairy unit."

## Calf theft

Joost keeps the calves outdoors in wooden pens. There are three calves to each pen. "Plastic pens get too hot in the sun and, in any case, the wooden pens we have now are much cheaper. My people can put together a pen for three calves from timber costing just \$70." Joost talks about 'my people' because his



Joost Teunissen: "I have noticed that many calves are born dehydrated"

calf rearing now provides work for 40 employees. "I find that I spend 70% of my time managing and checking up on people, and 30% on the calves."

His staff consists mainly of Mexican workers. One person is responsible for picking up calves from the dairy units every day. "The driver has the highest annual salary here," says Joost, with no hesitation. "But then he also has a lot of responsibility. He has to make sure that the calves he picks up actually get here

- many thefts take place during transit." Joost explains that the theft of calves is lucrative, and is often done very cleverly. "Heifer calves are worth \$500 on average. Situations are known where the person driving the calves arranges to meet a friend halfway through the journey to swap good calves for freemartin calves - calves that are the product of twin births. The ear numbers are exchanged, and nobody notices anything until the calves have to be inseminated and turn out to be infertile."

The calves going to Joost are therefore branded with the farm's mark before being transported. Digital photographs are also taken of each calf. "In addition, I have installed a GPS system so that I can monitor the driver's route and loading time."

Every day Joost takes delivery of new calves aged from birth to seven days. When they arrive he gives them an ear tag and they get a dose of artificial

colostrum, which is high in protein. Calves that do not look healthy are given an electrolyte mixture.

"I have noticed that many calves are born dehydrated," says Joost. "The reason for this is that producers feed a lot of salts and minerals when the cows are dry in order to prevent milk fever. But because of this, more and more calves are born dehydrated, and the calves' bones are also much softer."

## Pasteurised milk

When the calves arrive, the rearer takes random blood samples to determine the blood protein value. "This means that I can check whether the calves have had sufficient colostrum. If a farm worker is dealing with 10 new-born calves in one night, you can easily imagine that a calf might get missed every now and then. By discussing the blood values with the farm manager, he can take any measures that are necessary. Measuring these values gives you an extra monitoring opportunity."

Joost quickly recognises calves that have not had sufficient colostrum. "They are much more susceptible to diarrhoea, and their growth gets off to a much slower start."

For the first 14 days the calves get three litres of artificial milk twice a day. After that they are strong enough to go onto a mixture of half artificial milk and half pasteurised milk. The pasteurised milk is milk Teunissen buys in from a few dairy farms. It is milk that is not suitable to send to the factory. This milk is pasteurised in a large tank. "Adding pasteurised milk reduces our costs," explains Joost. "Also, the calves grow well on real milk."

## Milk powder

He certainly watches costs carefully, but he does not skimp on feed. Each calf gets milk for 60 days, and during that period consumes 25 kilogrammes of milk powder. "I don't believe in shortening the length of time on milk for calves. If you skimp on calf feeding, you will see the difference when they get older. I don't believe that calves begin to take feed earlier if they are given less milk. We provide a cereal mix right from day one, and it is only after 20 days that you notice them really starting to take some of it."

After two weeks, the calves are dehorned, but Joost does not bother with removing

## Rearing 20,000 calves a year

Joost Teunissen: "If hygiene in the calving shed is not g ood, I see a lot of of sick calves"

