

Amy Christie – so much satisfaction seeing her young charges thrive.



Best practice with a great big dollop of compassion

Words by: **Anne Lee**

There's no luck factored into Amy Christie's plan for calf rearing on a grand scale – just absolute attention to best practice detail with a great big dollop of compassion and heartfelt caring for her young charges.

Amy is calf rearing division manager at Rakaia Island Dairies and over the coming calving period she will be responsible for more than 6000 newborn animals. They include 1700 replacement heifer calves; 950 Speckle Park sale calves that are contracted to go at 4 days old; Hereford cross calves sold at 100kg; and sale dairy heifers and Jersey cross bulls.

They're reared in a central, large dedicated calf rearing shed where up to 300 calves can be housed at a time.

Three of the four dairy units on the 2000ha Island also have calf sheds that are used as numbers build.

Getting the details right matters, Amy says.

"When you're working with the numbers we have here you only need to have one slip up and things could go downhill very fast in a big way.

"The key to success is attention to detail and instilling that in the whole team so we can prevent problems rather than react to them – prevention is better than cure every time."

Based on last season's results – Amy's

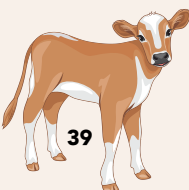
first season at the helm – the great training, systems and absolute dedication to the details works.

They had no cases of infectious scours and the only treatments needed were for navel infections and two cases of pneumonia.

"There's so much satisfaction in seeing them really thrive but that's never down to luck.

"Colostrum, recording, monitoring, treating the calf as an individual, hygiene, and housing all come together – it sets them up for success.

"It's about putting good systems in place and sticking to them so you don't get complacent, so those systems become habits."



Amy gets all eight to 12 members (some part-time) of her team together before calving for a full training day.

She'll also get the farm teams from the four dairy units on the Island together to explain how to handle the newborns, her expectations, and how they'll manage the colostrum and milk supply from the farm dairies.

NEWBORNS

Calves are picked up twice-a-day to ensure they get enough high-quality gold colostrum within the vital first 12 hours.

That pickup is the first encounter with humans for the infant animals and Amy emphasises the need to be gentle and calm with them.

"Picking up a newborn calf should be like giving them a firm hug – supporting them with one arm under the chest and the other around their back legs and backside.

"For the safety of calves and staff it's important not to rush and risk slipping."

Navels are sprayed with iodine and calves are placed in trailers adapted so they can be placed directly in rather than lifted over. They're placed on their feet onto non-slip rubber matting.

"Some, born on a wet cold day, may want to lie down so it's important not to overcrowd the trailer and then take it slowly coming back to the shed."

Calves are taken to the drop-off pen, which is clearly marked, and met by a member of the rearing team.

They're checked over, have their navels sprayed again, have their sex checked and then carefully placed in the pen they'll spend the next two or more weeks in.

COLOSTRUM – THE 3 QS

New calves are fed two litres of warm gold colostrum as soon as they arrive in the sheds.

"We're trying to get a good quantity of the highest quality gold colostrum into them within six to eight hours of being born – the three Qs – quickly, quality and quantity.

"Within 12 hours of birth they've lost 50% of their ability to absorb the immunoglobulins (IgG) which are so, so important for their immunity and growth.

light bulb MOMENT

- Colostrum – quickly, quality, quantity
- Hygiene – clean, clean, clean
- Housing – warm, dry, clean, ventilation but no drafts
- Attention to detail – do it well, plan, monitor
- Every calf is an individual – observe
- Avoid stresses – all of the above

"The guys at the shed know what we need and they milk into test buckets for us, test it and have it ready for us to collect.

"We test it again and the highest quality will go to those newborn calves coming in."

Amy prefers the glass Colostrometer for its ease of use but says being glass means extra care has to be taken not to break them. (see page 45 & 46 for more on colostrum testing)

"We make sure the colostrum we're testing is at room temperature so we get an accurate reading."

Gold colostrum is fed to all calves up until 24 hours old. Transition milk from milkings two to four is fed to calves over a day old.

"Transition milk is still high-quality

milk for our young calves, concentrated in the nutrients they need in those early few days."

They have 500l modified pods at each calf shed with metal lids to enable colostrum to be poured in and for ease of daily cleaning.

A tap at the bottom means no need for buckets to be dipped into them.

Amy says they use partitioned feeders for all pens in the shed so they know exactly how much each calf is drinking at each feed.

The aim is to teach newborns to use the feeders but if they're not up to it they'll be tube fed to ensure they're getting the full two litres within the six hour window since birth the team are targeting.

Another feed of high quality colostrum five hours later ensures the right intake within 12 hours.

At the height of calving there can be 90-100 calves arriving daily but that doesn't mean any shortcuts can be taken.

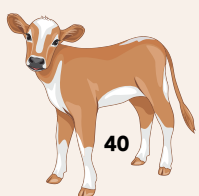
Slow drinkers are identified early so they can be managed together, especially when they go outside onto calfeterias.

Having the same people stay with specific pens and sheds means they know their calves and quickly pick up if a calf is behaving differently.

Calves are anaesthetised by the vet at a week old for disbudding.



Pellet feeders are cleaned and refreshed daily.



They're ear tagged and EIDD and the ear notch is taken for DNA parentage testing at the same time. During the peak of calving that happens twice a week.

"I ear tagged every calf last year – which was a bit tough on my wrists but we didn't have any infections at all.

"We dip each tag in disinfectant before it's put in and make sure the tag goes into the ear between the two veins, so you don't get a lot of bleeding where infection can get in."

Calves are fed twice-a-day with two litres per feed for five days and then once-a-day with four litres.

"We start hand feeding them the small pellets when they're two days old, just slipping a couple of pellets into their mouths as they come off the milk feeder.

"It gets them used to the taste and texture. We'll have a few pellets in the pellet feeder from then and we'll see them start disappearing in the next couple of days.



Straw available ad lib.

"We never leave pellets that haven't been eaten in there for more than a day – it's important they're fresh and the calves eat plenty of them to help develop the rumen and to ensure they get the coccidiostat needed to prevent coccidiosis."

They have straw available too although it's important calves don't fill up on that rather than getting enough pellets.

Fresh, clean water is available ad lib and piped to each pen.



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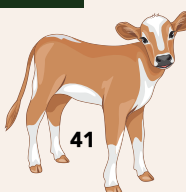
Sheds

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Part 1 - Picking up and handling calves

www.youtube.com/watch?v=DBaUyCkDy0s

More than 4000 calves go through the sheds at Rakaia Island but every one is an individual and some even get a name.

HOUSING AND HYGIENE

Keeping calves warm and dry is imperative and the sheds have good drainage to stone filled soak holes ensuring the ground underneath bedding is always dry.

Bedding is totally removed annually, the ground sprayed with Virkon and a layer of hydrated lime spread to restore the pH balance before wood chips are laid as bedding and another Virkon spray.

Pens are sprayed weekly and when calves move outside pens are rested for a couple of days, sprayed, dusted with hydrated lime and topped up with new wood chips.

The sheds are well ventilated but there are no drafts down at calf level.

The team cleans pellet feeders and water troughs twice-a-day.

“Hygiene is absolutely key – if it’s not clean enough for you to drink out of it’s not clean enough for a calf.”

The main shed has a reticulated milk line and pump so milk can be pumped under pressure directly to each pen.

It’s hooked up to an 8000l tank on a trailer, filled at the farm dairies, and then positioned at the shed.

It’s cleaned with an alkali wash and all

pods are scrubbed and cleaned with hot water daily.

“We also have 2000l pods to take milk to the sheds at the other dairy units but those sheds don’t have a milk line built in.”

Last season was the first time Amy used milk powder for calves from four weeks old.

To avoid any stress through the change from vat milk to milk from powder, Amy says they make the change gradually and will go from a 25:75 ratio of milk powder to vat milk to 50:50 and then 75:25.

“We make sure we’re not making the change while anything else is going on because we don’t want to load them with stresses.”

They move out of the sheds from about two weeks old although that can be weather dependent.

The first stage junior calf paddocks have purpose-built calf shelters with wood chip bedding that’s topped up to keep it dry and clean at all times.

“We’ll be watching the weather too over that transition to powdered milk, especially this year as we need to make the change a little earlier because we have more calves to feed with more sale animals.”

Details for any treatments are recorded in folders and transferred to MINDA for replacement animals.

Whiteboards around the sheds note details for each pen and are updated daily with calves’ ages and treatments.

They get a 7-in-1 vaccine for leptospirosis and clostridial diseases at four weeks with booster at eight weeks, a salmonella vaccination at six weeks and booster at 10 weeks.

They start on a monthly drenching regime from October using an albendazole and levamisole oral combination with monthly selenium and vitamin B12 injections too.

Once they’ve graduated out of the junior calf paddocks but prior to weaning Amy starts training them to graze as their mums do, up to a wire.

“While they’re drinking their milk, we’ll run pellets along in the fresh break to entice them.”

In May, Amy had 820 remaining rising one-year-olds on the Island with 450 to winter there.

“It’s time to start thinking about the next group now. It’s so rewarding, I do love it.”

