Healthy Hoof

Lameness diagnosis form

DairyNZ

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Section One: Farm History

This section should be completed with the famer prior to milking.

Farm overview

Date:_____ **Healthy Hoof Provider:**_____

Farm/Business name and contact details: _____

_____

Management structure:_____

Staff:_____

_____

Total effective Ha:_____ **Peak cows milked:**_____

Number of cows in each herd and how are the herds split?_____

_____

Breed:_____ **Annual milk production in kgMS:**_____

System type: *(circle one)*

1 (All grass self contained)

2 (Feed imported for dry cows. 4-14% total feed imported)

3 (feed imported to extend lactation. 10-20% total feed imported)

4 (feed imported for shoulders and dry cows. 20-30% total feed imported)

5 (imported feed used all year. 25-40%)

5+ (>40% total feed imported)

What is your wintering system?_____

_____

How do the cows flow through the shed and does this change e.g. wet weather, late in season?_____

_____

What is the longest period a person is required to cup cows continuously?_____

_____

Lameness overview

How would you describe the level of lameness on this farm?_____

_____

Do you keep lameness records:

☐ YES – all lame cows ☐ YES – lame cows treated with vet medicine ☐ NO

If yes – using what method and can it be accessed for analysing?_____

_____

How many lame cows did you have last season?_____ RECORDING / ESTIMATE

What was the maximum number of lame cows in your lame mob last season? _____

How many lame cows in your herd this season?_____

Is there a difference between herds?_____

What type of lameness is predominant in your herd?

Bruised or penetrated sole _____% of lame cows

White line _____% of lame cows

Footrot _____% of lame cows

Interdigital lesions _____% of lame cows

Other_____ , _____% of lame cows

What do you think is causing lameness on your farm?_____

_____

_____

What actions have you taken to reduce lameness?

This year:_____

_____

Previous years:_____

_____

Are there any barriers to reduce lameness on your farm?_____

_____

_____

_____

What is the length of the tracks to furthest paddock? *(tick one)*

☐ < 750m ☐ 750-1km ☐ 1-1.5km ☐ 1.5-2km ☐ >2km Actual

How do you manage the walking distance for cows? _____

_____

Grazing pattern (morning/night paddock): *(tick one)*

- ☐ Close day, far night
- ☐ Close night, far day
- ☐ 24 hour grazing but alternating close-far
- ☐ 12 hour random grazing
- ☐ 24 hour random grazing
- ☐ Other_____ e.g. for AMS

Grazing pattern (if more than one herd): *(tick one)*

- ☐ Herds alternate close and far paddocks
- ☐ Young herd mostly closer paddocks
- ☐ Older herd mostly closer paddocks
- ☐ Random
- ☐ Other_____

What is the material used on the surface of your tracks? _____

Where is this sourced from? _____

Is there a different material used near the yard? YES / NO

If yes: what is it and for what distance? _____

If the visit is on a dry day, describe the tracks on a wet day e.g. can stones be felt under foot, do any sections become slippery?

_____

_____

How regularly is gravel present on the yard concrete? _____

Do you notice it as you hose down? _____

Are the backing or top gates electrified? _____

Are the backing or top gates automated? ☐ No ☐ Fully automated ☐ Timer ☐ Pulse

Do you use a feed pad? _____

Feed face measurements/cow: _____

Guide: 700mm/cow if cows all fed at once.

Is the feed-pad used as stand-off pad? YES / NO

If yes, how often and for how long? _____

Area per cow when used as a stand-off pad (m^2)? _____

Guide: > 8m^2

Feed pad material: _____

_____

Section Two: Farm Infrastructure

This section should be completed prior to milking.

Type of dairy shed:

☐ Turn-style Rotary ☐ Internal Rotary ☐ Herring Bone (H/B) ☐ AMS / robotic

No. bails in dairy shed: _____

In-shed feeding: YES / NO

Tracks

What is the width of the races: Actual:_____ Effective: _____

Guide: 250 cows 6m. 350 cows 6.5m or approx 1m/50 cows up to max 7m.

Track gradient – overall contour of farm tracks?_____

E.g. flat, gentle slopes, occasionally steep, lots of steep

What is the walking surface like:_____

_____

What is the camber measurement (8% equals 8cm fall per 1m width):

First 200m: _____

Rest of track:_____

Guide: aim for 3-8%

What is the track drainage like for the first 200m?

☐ All well drained ☐ most ok ☐ some poor ☐ lots poor ☐ severe lack of drainage

Are there any obstructions on the race restricting cow flow?_____

_____

What are the corners on the race like?_____

What type of fences are used close to the dairy?_____

Guide: Wooden or pipe preferred. No wires within 20m of yard entry.

Is there a large open area before the yard?_____

Guide: Large areas can slow cow flow.

The intersection between the race and the yard

Is the entry to the yard straight with no sharp turns:_____

Drainage at the intersection:_____

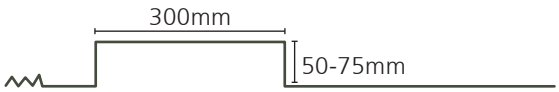
Is the entry race steep and/or slippery?_____

Guide: >10% consider steps

If a nib wall is present, is it rounded or square?_____

Dimensions of the nib at the edge of concrete:_____

Guide: nib wall - no level change from race to yard



Width of the entry gate compared to race:_____

Guide: gate = race width.

Does the yard entry allow cows to enter the yard without risk of injury:_____

Are there any obstacles in the entry to the yard e.g. steps, footbath, grating:_____

_____

Is there a temporary holding area and what is the surface of this like:_____

_____

Main yard

What shape is the main yard: _____

Yard area per cow: _____ *(circular = 3.14 x r^2; rectangle = length x width)*

Guide: Friesian 1.5m², Crossbreed 1.4m², Jersey 1.3m².

What is the gradient of the yard:_____

Guide: < 3%.

Are there any slippery areas on the yard? _____

If present – type of grooving:_____

Is there evidence of stones on the yard? _____

Height of the hock rail: _____

Guide: 500mm. If cows sit on the backing gate add another rail at 200mm.

Are there any obstructions on the yard or at the entrance that may injure cows and/or affect cow flow?

Draw a diagram of the shed and yard design highlighting the position of entry and exit races and the directional flow of cows at milking time.

On and off the platform

Refer to rotary design or herringbone design supplement

Section Three: Observe the dairy farm at milking time

This section should be completed as the cows are being brought in for milking and during milking time.

Cow flow on main part of track:

- ☐ Well spread out, gentle flow
- ☐ Some bunching, slow flow
- ☐ Whole herd bunching, hesitant
- ☐ Very poor flow

Is a dog used? YES / NO

If yes, what is the herds reaction to the dog:_____

Herd reaction to herdsperson (>200 m from shed):

- ☐ Positive – no bunching
- ☐ Some compaction and heads up
- ☐ Many heads up
- ☐ Severe – feet skidding, rear cows pushing each other

Cow flow on yard and at dairy

Compaction of herd in the yard at the beginning of milking

- ☐ Loose
- ☐ Mild compaction – no heads up
- ☐ Tight – some heads up
- ☐ Severe – many heads up

Does the herdsperson enter the yard to gather cows during milking?_____

Use of gates

	BACKING GATE	TOP GATE
Who is controlling the gate movements?		
Does the gate have a warning device e.g. alarm/water?		
How much time elapses after the cows are shut into the yard, until the first gate movement? *Guide: 15 minutes or 2 rows.*		
How long does the gate move forward in each advance? *Guide: 3-5 seconds.*		
What is the forward speed of your gate? *Guide: Round ≤ 12m/min. Rectangular ≤ 6m/min or Round ≤ 1m/5 sec. Rectangular ≤ 0.5m/5 sec*	_____ ROUND / RECTANGULAR	_____ ROUND / RECTANGULAR
What is the herds reaction to gate movement?		

Observation of the milking team

Are there any activities that may be disrupting cow flow? e.g. noise_____

_____

Are controls in a convenient position? YES / NO

Can the cows in the yard be easily seen? YES / NO

In a rotary shed

How far can the milker step back alongside the entry race to encourage a cow on to the platform?

_____ **m**

Guide: 2m.

What is the distance from the entry race to the steps up into yard?

_____ **m**

Guide: 2m.

On and off the platform: Herringbone design

Herringbone bail entry

The bail entry should allow cows to move freely into the bail area without fear or discomfort. It should allow 2-4 cows to queue in front of the milking bails.

What is the lead-in breast rail height? A_____m

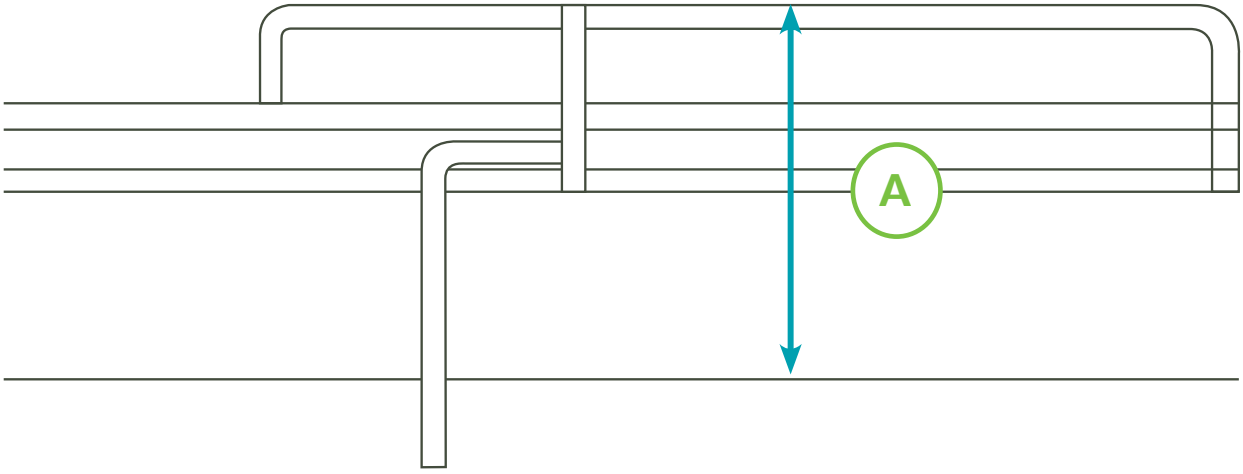
Guide: 900mm-1000mm

How is the last cow in each row held in place? _____

Is there a nib wall/bar at the edge of the pit? YES / NO

Is the concrete surface slippery? YES / NO

Key herringbone measurements



Herringbone head gate

The head gate should separate cows easily, be aligned with the angle at which cows are standing to be milked and allow the cows to exit freely without fear of injury.

What type of head gate is used? pendulum / scissor / curtain / swing

Does the head gate align with the angle at which cows stand to be milked? YES / NO

Herringbone exit

The exit should be able to hold a minimum of half a row of cows, be constructed using non slip concrete and be free of obstacles/distractions that will interrupt flow.

What is the area of herringbone exit concrete? _____

Guide: at least ½ a row of cows at 2m²/cow.

Describe the angle of turn at the exit? _____

How far is the distance from the head gate to end wall/barrier? _____ **m**

Guide: 3m

Is the concrete surface slippery? YES / NO

How steep is the slope at the exit? _____ **%**

Guide: >10% consider steps

Are there any obstacles or distractions in the exit area? YES / NO

Does the exit race go away from bail area without going past the main yard? YES / NO

On and off the platform: Rotary design

Rotary bail entry – bridge

The entry should allow cows to move freely on to the platform without fear. It should allow 2 cows to queue in single file in front of the platform and be fitted with an auto stop mechanism to prevent crush injury.

What is the width at the start of the entry race leading to the platform? **K** _____mm

Guide: 1200mm

What is the width of the race at the platform edge? **L** _____mm

Guide: 900mm

What is the length of the entry race? **M** _____mm

Guide: 2500mm

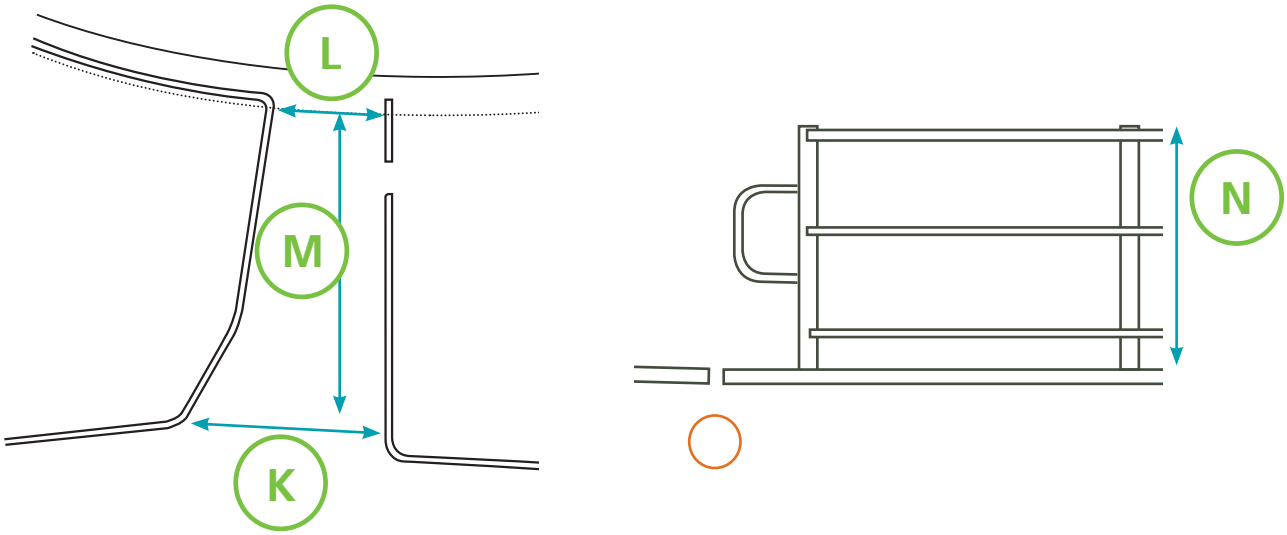
Does it allow at least two cows to be lined up? YES / NO

What is the entry race fence height? **N** _____mm

Guide: 1200mm

Is it likely to injure cows? YES / NO

Key rotary bail entry measurements



Rotary bail area

The bail should allow the largest animals to stand comfortably in the milking position and provide safe, milking access. If feed troughs are used they should be positioned below the height of the breast rail.

If present, what is the feeder trough height? _____ **mm**

Guide: measured to the bottom of the feeder is 200mm lower than the breast rail.

What is the bail length, measured rump rail to breast rail? _____ **mm**

Guide:1500mm-1650mm. Depends on cow size.

Is the platform surface slippery? YES / NO

Rotary exit

The exit design should incorporate warning devices that prepare cows for exit off the platform. The exit area should be large enough for the cow to exit safely and turn comfortably.

What is the signally device 1? _____

What is the signally device 2? _____

What is the distance from the platform edge to yard fence? **P** _____m

Guide: > 3m

What is the exit width at 1.5m from platform edge? **Q** _____m

Guide: 2500mm

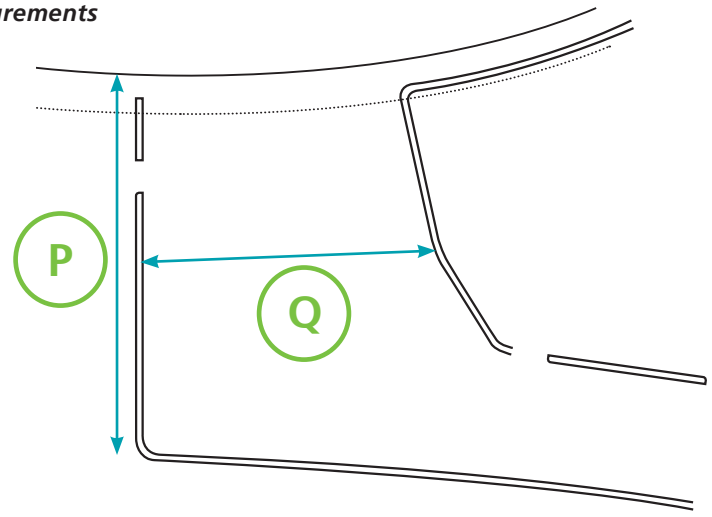
Is the exit/turn around surface slippery? YES / NO

Are there any obstacle or distractions in the exit area? YES / NO

What is the condition of the end of the exit race to main race? _____

_____

Key rotary exit measurements



Notes

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