

# CAFRE Dairy Herd Mobility Management



# Why focus on improving cow mobility?

- Welfare issue- painful and stressful condition
- Cows more likely to be culled
- Milk yield loss- range 200-600 litres/lactation
- Fertility- longer to get in calf (20-40 days)
- Feeding behaviour- < DMI's for animals in early lactation/reduced feeding times
- HIDDEN COSTS!- Average case £323

**Lameness costs money!**

# Management strategies to improve cow mobility in the CAFRE Dairy Herd

- CAFRE dairy herd mobility scored on a monthly basis
- Cows with score 2 or greater are scheduled for foot trimming **ASAP**
- Specific hoof trimming crush
- Dairy staff trained in hoof trimming
- Zero tolerance policy to lame cows
- Preventative hoof trimming carried out at drying off
- Cows feet washed after every milking through the VINK footwash
- Both milking and dry cows are footbathed once per week (2% copper sulphate/2% commercial product (Healthy Hooves)
- Good walking surfaces for dairy cows
- Lame cows housed on straw to aid recovery/nearby paddock in summer



# Dairy Centre design features to reduce lameness



**Figure 1-** Pre/post calving straw pens



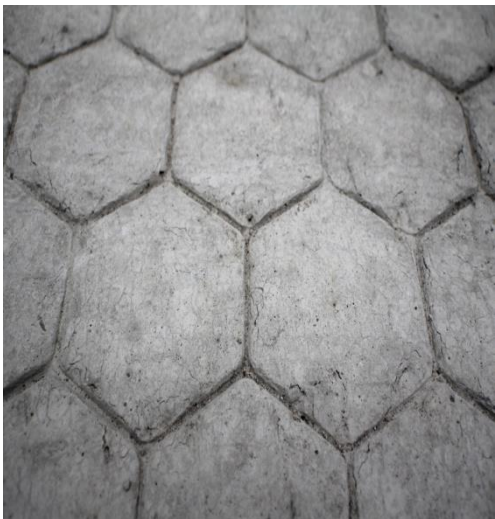
**Figure 2-** Specific hoof trimming facilities



**Figure 3-** Comfortable cubicles



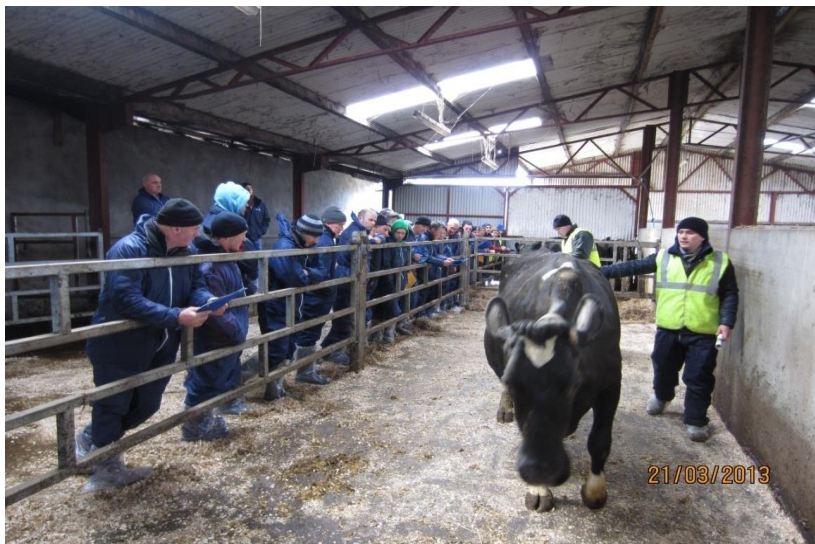
**Figure 4-** Vink hoof washer



**Figure 5-** Floors with good grip

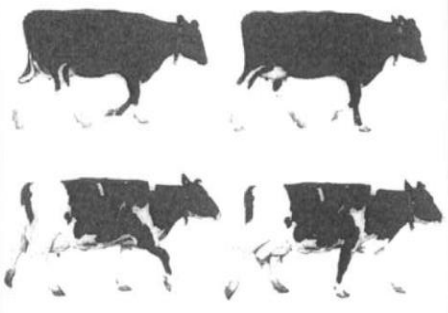


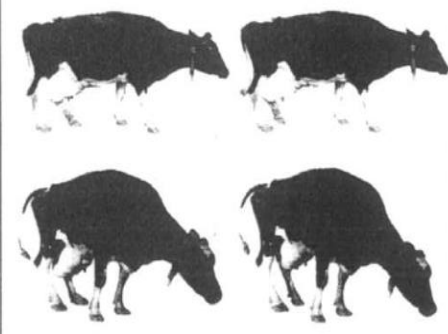
# Mobility scoring

- Early detection of lame cows is critical
- Mobility scoring is an early detection system based on a score of 0-3 (see chart over page)
- Aim is to detect animals scoring 2 & 3
- CAFRE dairy herd scored monthly
- Research has demonstrated cows which are detected early (score 2) have improved recovery rates



**Figure 6-** On farm mobility scoring demonstration

# DairyCo Mobility Score

Category of score	Score	Description of cow behaviour	Suggested action
<b>Good mobility</b> 	0	<p>Walks with even weight bearing and rhythm on all four feet, with a flat back.</p> <p>Long, fluid strides possible.</p>	<ul style="list-style-type: none"> <li>No action needed.</li> <li>Routine (preventative) foot trimming when/if required.</li> <li>Record mobility at next scoring session.</li> </ul>
<b>Imperfect mobility</b> 	1	<p>Steps uneven (rhythm or weight bearing) or strides shortened; affected limb or limbs not immediately identifiable.</p>	<ul style="list-style-type: none"> <li>Could benefit from routine (preventative) foot trimming when/if required.</li> <li>Further observation recommended.</li> </ul>
<b>Impaired mobility</b> 	2	<p>Uneven weight bearing on a limb that is immediately identifiable and/or obviously shortened strides (usually with an arch to the centre of the back).</p>	<ul style="list-style-type: none"> <li>Lame and likely to benefit from treatment.</li> <li>Foot should be lifted to establish the cause of lameness before treatment.</li> <li>Should be attended to as soon as practically possible.</li> </ul>
<b>Severely impaired mobility</b> 	3	<p>Unable to walk as fast as a brisk human pace (cannot keep up with the healthy herd) and signs of score 2.</p>	<ul style="list-style-type: none"> <li>Very lame.</li> <li>Cow will benefit from treatment.</li> <li>Cow requires urgent attention, nursing and further professional advice.</li> <li>Cow should not be made to walk far and kept on a straw yard or at grass.</li> <li>In the most severe cases, culling may be the only possible solution.</li> </ul>



12 month average Mobility Index (mobility index measures the proportion of the herd not lame)

- Milking cows 90%

\* Research carried out by AFBI on 57 dairy farms found that on average 1/3 of cows on these farms were lame, giving an average mobility index of 67%.

**Table 1-** Mobility index 2019/20

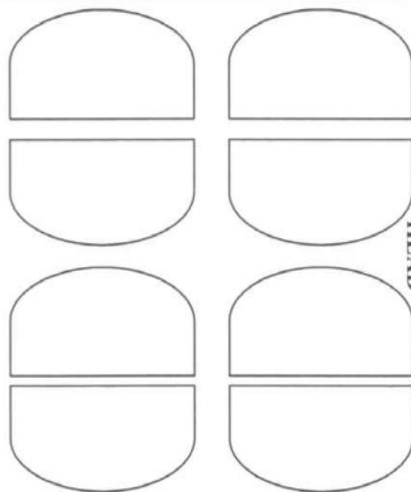
Month	Mobility Index (%)	Average score
November	91	0.76
December	90	0.87
January	-	-
February	89	0.83

➤All lame cows are recorded on a foot trimming report (see over page)

# Greenmount Campus Foot trimming report

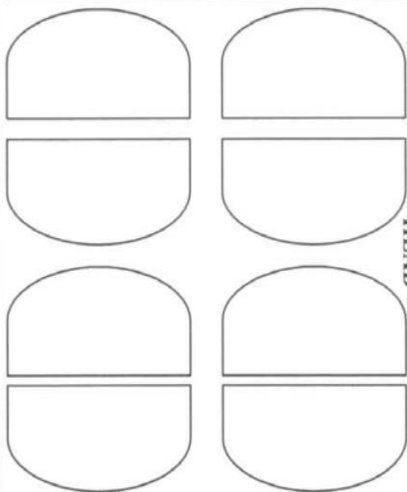
Date \_\_\_\_\_

Cow no \_\_\_\_\_ Date \_\_\_\_\_



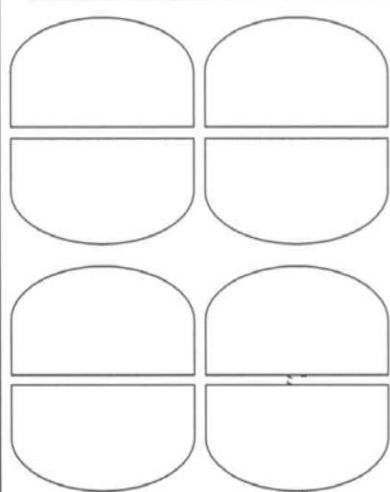
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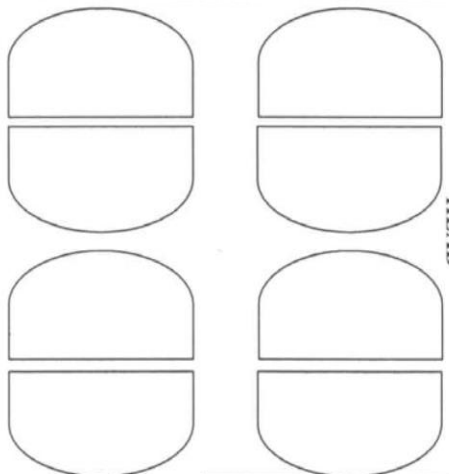
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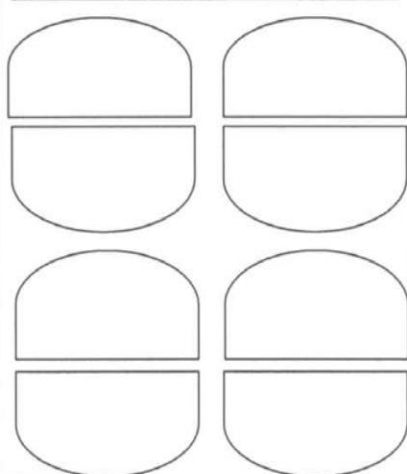
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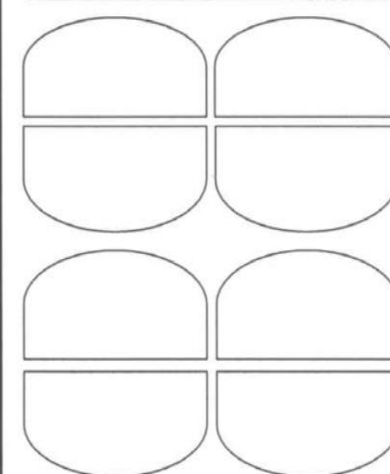
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Cow no \_\_\_\_\_ Date \_\_\_\_\_



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Cow no \_\_\_\_\_ Date \_\_\_\_\_



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## Severity

1= mild/slight  
2= moderate  
3= severe

## Diagnosis

U ulcer

△ Digital Dermatitis

--- white line disease

I interdigital growth

F foul

L Laminitis

LL acute laminitis

☆ toe necrosis

◀ Sole bruising

# Double sole

○ Bulb infection

H Heel erosion

⚡ foreign body ie stones

⊕ Burst at heel

A Abscess

FI Fissures

B bandage

S shoe

N needs treated again

## Sample

Cow no 7

Outer  
claw

1 U

Left rear

Left front

3 F

Inner  
claw

Right rear

Right front

2 L

HEAD



There are 4 key areas to consider in terms of footbathing which are:

- Footbath design
- Calibration of footbath
- Frequency of footbathing
- General management

## **Greenmount Dairy Centre footbathing**

- Split footbath design

-Dimensions

- 3.7m long
- 81cm wide
- 24cm step in on entry
- Internal depth 18cms

- Calibration

8 \* 14 litre buckets per side = 112 litres/side (total 224 litres)

112 litres @ 2% copper sulphate = 2.24kg & 2% commercial product (Healthy Hooves) = 2.24L

Assume 1 litre of treatment solution required per cow

Footbath holds 224 litres which is 224 cow passes