

# Kangaroo Gait in Ewes

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## Summary

A gait abnormality appeared in heavily lactating ewes in Fairlie, South Canterbury. They showed difficulty in fore feet placing and knuckling of fetlocks. Hind feet were placed under the body with shortened steps. A bounding action was apparent if the animals were hurried. Some affected ewes showed ketonaemia.

## Introduction

I would rather that what I have to say be termed "prelude to discussion" than "presenting a paper". I will give a description of the condition called here "kangaroo gait" in ewes, and perhaps we can come up with a better term and not have another "milk fever" or "ryegrass staggers". Hopefully some of you here will recognise the condition and have more specific ideas as to aetiology, prophylaxis and treatment.

## Background Information

### Location

Four miles north of Fairlie township in the Fairlie basin.

### Soil Type

Roughly classified as light and stoney; more technically Ashwick Silt Loam.

### Stocking Rate

On 920 acres there are running —

1. over 2,500 breeding ewes
  - 1500 Border/Romney (Coopworth). The Border ram was put into a Romney flock in 1972 and since continued with Coopworth rams.
  - 1000 Border/Merino. Replacement hoggets purchased yearly at the autumn Tekapo sale.
2. Hoggets
  - 500 Coopworth
  - 300 Border/Merino
3. Rams
4. Small Suffolk Stud
5. 50 head Beef Cattle, weaners to 18 month old.

### Basic Management

Most ewes leave the property culled as five year olds. The rams go out on 20th April — i.e. Coopworth, and Down ram to Border/Merino ewes with the Coopworth pulled in after three weeks leaving Down rams only. Lambing then commences on 12th-15th September which is average for the district.

### Minerals

Adequate selenium is used. The farm was involved in investigations into hogget ill thrift in the 1950's and had close contact with farm advisors of the then Department of Agriculture. Paradontal disease has also been investigated on the property. Cobalt is applied with all super-

phosphate used, and sulphur sometimes. Small, possibly minimal amounts of lime are applied.

### Lambing Percentage

130% in this year 1976.

### Fat Lambs

Regularly 70% or better go to works in first draft, off mothers at 12 weeks averaging 13 kg.

## The Problem

A locomotary abnormality, presumably neuro-muscular, as seen in the film\* is present. There is difficulty in placing the front feet with knuckling over of the fetlock joints. There is a concurrent or compensatory placing of the hind feet under the body with shortened steps when unhurried, but with a bounding action if pressed. Always older ewes are affected and these are running at 4-5 per acre in mobs of about 150 in approximately 30 acre paddocks.

There are more cases in hard springs (late or poor) with about 20 cases this particular year (1976). The ewes are always high producers, i.e. would wean twins in above average condition, in spite of their affliction. The lambs are particularly active and hound the mother when she is on her feet. There are many cases of mother swapping and burgling.

The condition has been observed over many years by the farmer — earlier in his own Romney ewes, 15 years ago when he observed the condition "backstage" while on a field day at Ashley Dene Farm, near Burnham.

Immediate neighbours see the condition in Romney, Coopworth, Perendale and Dorset ewes. I have been asked to look at the condition in a Coopworth ewe at Albury 10 miles south of Fairlie and the local Noxious Weeds Inspector claims to have seen the condition in Southland!

The condition is first seen as early as 2-3 weeks after lambing — these ewes are unable to muster for docking. It has never been observed before lambing.

The condition lasts till weaning and up to one month post-weaning in the more severe cases.

No specific treatment has ever been tried apart from preferential treatment in way of the best paddock. Extreme cases lapse into permanent recumbency and are euthanased by the farmer who considers they have become arthritic.

No record has been made of the condition recurring in the same ewe in subsequent years. After consulting the Lincoln Animal Health Laboratory blood samples were taken from 11 control and 9 affected animals. The results are given in Table 1. The significance of the ele-

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\* A Kodak "Super 8" movie film of some affected ewes was screened.

vated phosphate is not known. The ketones present in the serum of 4 of the 9 affected animals may indicate a negative energy balance due to heavy lactation.

*Table 1. Summary of Results  
(Units are in mol per litre)*

	Control	Affected	Normal Range
	(Average of 11)	(Average of 9)	
Calcium	2.47	2.41	2.0 — 3.0
Magnesium	0.84	0.80	0.8 — 1.2
B U N	12.50	11.90	5 — 20
Phosphate	2.00 (4 elevated)	2.02 (5 elevated)	1.1 — 2.3
Ketones	11 normal	4 elevated 5 normal	

\* "Specimens for Laboratory Examination" (1975), Ministry of Agriculture and Fisheries

## Addendum

Mr D.M. West, Massey University reported that he had encountered lactating ewes with a similar gait in the Manawatu. In his opinion the gait was in response to joint pain, particularly in the forelimbs. A degenerative arthritis and osteoporosis were found on x-ray. The proposed pathogenesis was a severe mineral drain during lactation in ewes heavily stocked, poorly fed and feeding twins. This resulted in the degenerative changes in the bones and joints.

Mr M.E.A. Cartridge, Waikari reported seeing a similar gait in ewes with oxalate poisoning.