## Tail length in unmulesed Australian Merino sheep

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## Tail length in unmulesed Merinos

- Why is tail length important?
- Studies with unmulesed sheep in the 1930s and 1940s



## Why is tail length important?

- Influences lifelong susceptibility to breech fly strike
- Influences degree of urine staining in ewes
- Influences dag formation in scouring sheep
- Influences rate of healing and risk of infection post-docking
- Influences rate of rectal prolapse in lambs
- May influence the rate of squamous cell carcinoma formation in the perineal region in older ewes



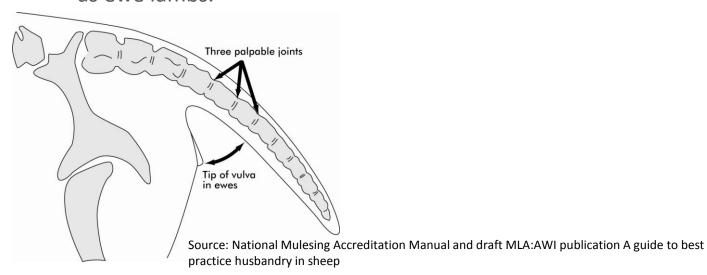
## Currently recommended tail length

#### Ewe lambs

 The recommended tail length for female sheep is to ensure the healed tail just covers the vulva. This usually means docking immediately below the third palpable joint or through the third joint space.

#### Male lambs

 Male lambs should have their tails docked to the same length as ewe lambs.



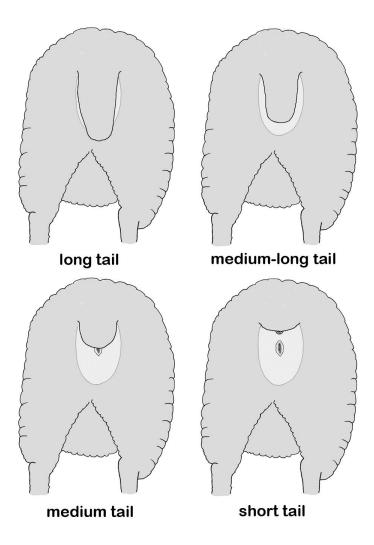


# Studies with unmulesed sheep in the 1930s and 1940s

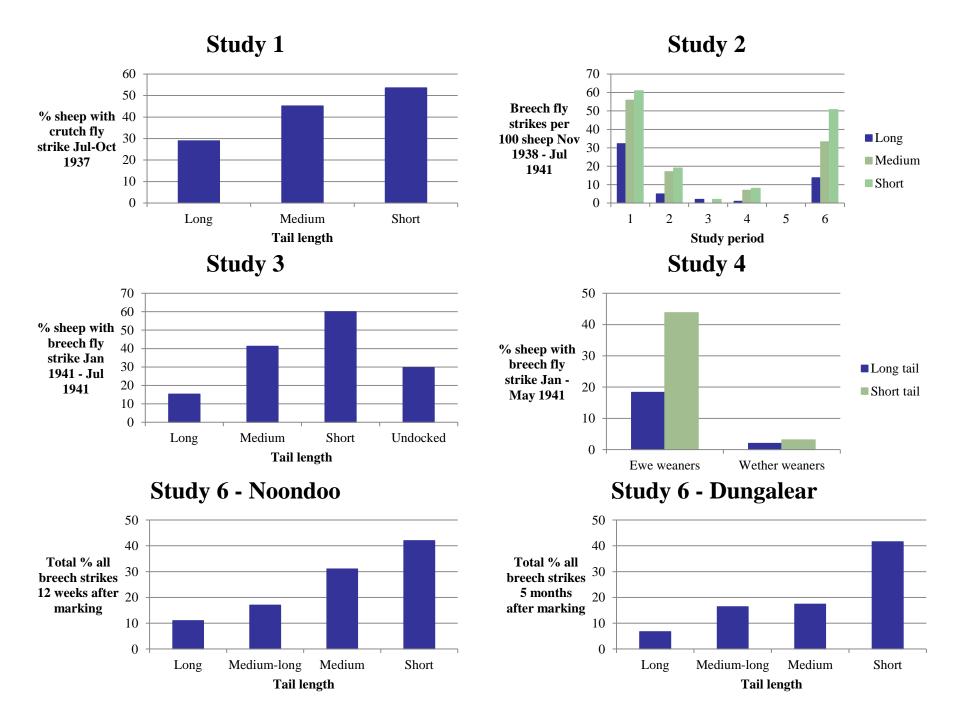
	Location	Year	Number of sheep	Gender	Reference
Study 1	Dungalear (near Walgett NSW)	1937	306	Ewes	Gill and Graham 1938; Gill and Graham 1939
Study 2	Gilruth Plains (near Cunnamulla, QLD)	1939	387	Ewes	Riches 1941; Riches 1942
Study 3	Gilruth Plains (near Cunnamulla, QLD)	1939	644	Not provided	Riches 1941; Riches 1942
Study 4	Gilruth Plains (near Cunnamulla, QLD)	1940	408	Ewes and wethers	Riches 1942
Study 5	Gilruth Plains (near Cunnamulla, QLD)	1941, 1943	392	Ewes and wethers	Johnstone 1944
Study 6	Five sites in NSW and QLD	1943-1945	9,135	Ewes and wethers	Graham and Johnstone 1947



## Tail lengths investigated

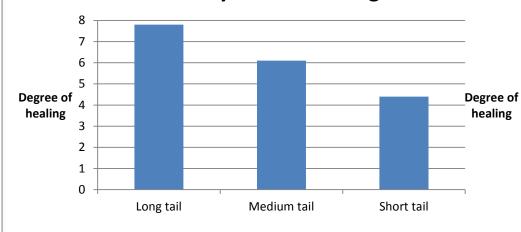




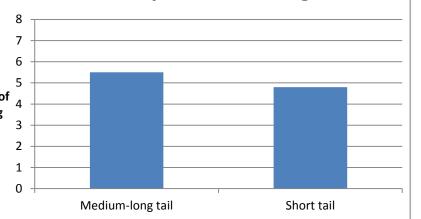


## Study 5

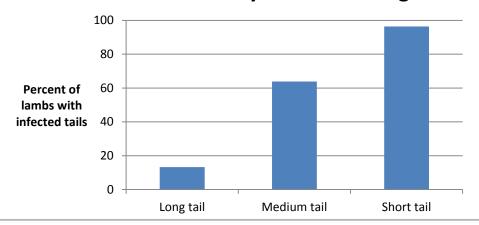
## Healing of tailing wounds in wether lambs 10 days after marking



## Healing of tailing wounds of ewe lambs 8 days after marking



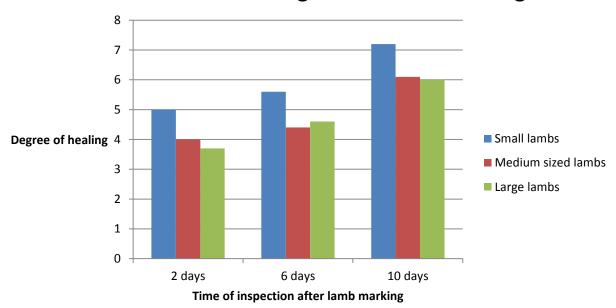
## Rate of infection of tailing wounds of wether lambs 6 days after marking





### Study 5

### Degree of healing of tailing wounds of small, medium sized and large lambs after marking



6 days after marking – 51.5% large lambs had infected tailing wounds compared to 28.5% small lambs



### The bottom line...

- The appropriate tail length for unmulesed sheep was extensively investigated in a series of research trials in the 1930s and 1940s.
- The best protection against breech fly strike was obtained by docking the tails of unmulesed sheep medium-long or long. Medium-long or long was the best length for the tails of both female and male sheep.
- Docking the tails of unmulesed sheep at the second joint or shorter resulted in an inferior result, with these sheep experiencing two to three times the rate of breech fly strike as sheep with the tails docked long or medium-long.
- Short and medium length tails took longer to heal than mediumlong or long tails and were more likely to be infected. Healing was also prolonged in older lambs, with higher rates of infection.



### Joint Blowfly Committee 1943

- "When docking lambs, the aim must be to cut the tail at the level that will bring the tip about ¼ to ½ inch below the tip of the vulva. As the lamb grows this relationship of tail-tip to vulva-tip will be closely maintained...
- Docking is an important operation, and none but careful workers should be allowed to do it...
- Under no circumstances should the cut be made below the bare skin on the under surface of the tail...
- The younger the lamb docked, and the longer the stump left, the more quickly the wound heals...
- When lambs are docked short a considerably larger wound results, healing is delayed, and the wound is much more likely to become infected. It is under these circumstances that the tails of recently docked lambs are most likely to become struck. There is this further advantage, therefore, in the longer tail."



### Recommended tail length

#### Ewe lambs

 The recommended tail length for female sheep is to ensure the healed tail just covers the vulva. This usually means docking immediately below the third palpable joint or through the third joint space.

#### Male lambs

 Male lambs should have their tails docked to the same length as ewe lambs.

