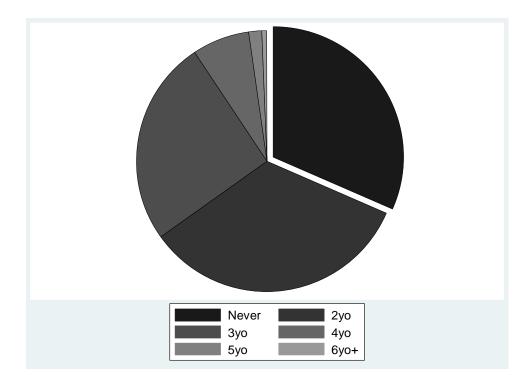
## The effect of 2-year-old training milestones on career length and racing success in a cohort of Thoroughbreds and Standardbreds in New Zealand JC Tanner, CW Rogers and EC Firth

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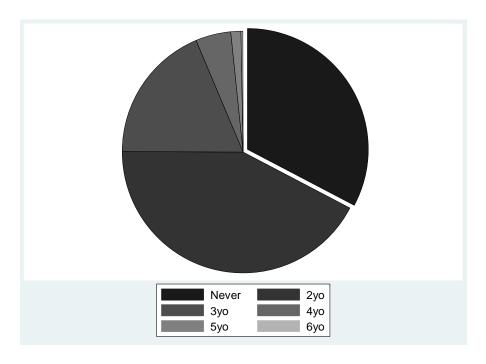
Funding: (NZRB2a) this project was funded by the New Zealand Racing Board \$27,000

In both the Thoroughbred and Standardbred industries in New Zealand, there has been a decline in the number of foals produced annually. The New Zealand racing industry gains revenue primarily from betting turnover, with which it funds stakes money and industry development. Thus, the industry requires that a certain number of horses must start in races each year. A horse that can enter training and go on to have a long and successful racing career is desirable for owners, trainers and racing administrators, but wastage studies have shown that many of the foals bred cannot achieve these goals. Early exercise has a positive effect on developing the musculo-skeletal system in young horses, and may assist in them sustaining a longer career. The aim of this study was to investigate the effect of 2-year-old training milestones on career length and success in Thoroughbred and Standardbred horses.

The study utilised data from the 2001 Thoroughbred and Standardbred foal crops. The three training milestones used were: registered with a trainer, trialled, and raced. The age at which horses first achieved each of the training milestones was described for both foal crops. In both Thoroughbreds and Standardbreds, approximately 32% of horses never achieved the first milestone of being registered with a trainer as shown in Figures 1 and 2.



**Figure 1**: Age at which horses were first registered with a trainer in the 2001/02 New Zealand Standardbred foal crop



**Figure 2**: Age at which horses were first registered with a trainer in the 2001/02 New Zealand Thoroughbred foal crop

Horses that reached the three milestones as 2-year-olds were compared with horses that reached the milestones as 3-year-olds or older. Both Thoroughbred and Standardbred horses that were registered with a trainer, trialled, or raced as 2-year-olds had significantly more races starts, and more years racing, than horses that achieved those milestones as 3-year-olds or older. Horses that were registered with a trainer, trialled, or raced as 2-year-olds were significantly more likely to win, or be placed (in the first 3) in a race, or earn money, than those that achieved the milestones as 3-year-olds or older. Horses that trialled and raced as 2-year-olds had increased earnings, when compared with those that first trialled and raced as 3-year-olds or older.

These results indicate that 2-year-old training milestones are positively associated with career length and success in Thoroughbred and Standardbred horses in New Zealand. Horses that achieve these training milestones as 2-year-olds are important to the industry as they have more race starts and years racing which should have a positive impact on numbers of horses starting in races. Approximately one-third of horses fail to achieve the first milestone representing a significant area of wastage and a potential area for future study.