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## An overview of the New Zealand Thoroughbred Industry

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### ABSTRACT

The New Zealand thoroughbred industry is internationally-competitive in terms of performance; however, the current economic situation means that the foal crop is declining. Stakes have increased in recent years but increasing costs that are common to all primary industries are also a key issue for the breeding and racing industry.

**Keywords:** thoroughbred, breeding, racing, New Zealand.

### INTRODUCTION

The New Zealand thoroughbred industry includes both breeding and racing arms. The peak body is New Zealand Thoroughbred Racing, while the organisation of racing and gambling across thoroughbreds, standardbreds (harness) and greyhounds is under the control of the New Zealand Racing Board. Breeders' interests are represented by the New Zealand Thoroughbred Breeders' Association.

A report prepared by IER in (2004) assessed the impact of the racing industry on the economy; the value-added contribution of thoroughbred racing and breeding to the gross domestic product (GDP) as around \$1,100mn or 1% of GDP.

Table 1 summarises key statistics around the numbers of horses racing within a season and the races run, while Table 2 provides data on the scale of the breeding industry. While stakes paid increased steadily through the early years of the decade, they are set to decline in the current season. The number of foals produced has decreased by more than 20% since the mid-1990s, reflecting the economics of breeding horses for sale. This is mainly an issue for small breeders, as the larger studs have the resilience associated with scale.

### New Zealand in the international context

In terms of international scale, the New Zealand Thoroughbred industry ranks around eleventh in the numbers of horses starting in races each season, and around eighth in the number of foals produced. Table 3 and 4 provide comparisons of Thoroughbred racing and breeding on an international scale. The data cover flat racing only although in some countries, notably Great Britain, Ireland and France, there are also large numbers of Thoroughbred jumping races.

**TABLE 1:** The New Zealand Thoroughbred racing industry. Source: New Zealand Thoroughbred Racing Fact Book (2009).

Season	Horses raced	Races run	Total stakes paid (prize-money)	
			\$NZ million	% of 1999-2002
Mean of 1999-2002	5,528	2,836	\$32.3	100
2002-03	5,469	2,810	\$35.0	108
2003-04	5,564	2,791	\$36.2	112
2004-05	5,706	2,817	\$37.2	115
2005-06	5,642	2,855	\$39.7	123
2006-07	5,566	2,863	\$49.4	153
2007-08	5,576	2,970	\$56.2	174
2008-09	5,826	3,088	\$58.4	181
2009-10	NA	NA	\$51.7	160

**TABLE 2:** The New Zealand Thoroughbred breeding industry. Source: New Zealand Thoroughbred Breeders' Association (Personal Communication).

Breeding season	Stallions covering 10 or more mares	Mares served	Foals produced	
			Number	% of 1994-95
2003-04	218	6,903	4,683	89
2004-05	204	6,848	4,509	86
2005-06	192	6,558	4,522	86
2006-07	201	6,623	4,349	83
2007-08	177	6,476	4,126	78

New Zealand has an excellent reputation as a breeding ground for high-class Thoroughbreds that compete internationally. In this respect, a number of stallions shuttle from the Northern Hemisphere to New Zealand each season. Fifteen moved in the 2009 breeding season. Hence exports are a feature of the New Zealand industry, with the local breeding industry only being sustainable as a result of the international demand for New Zealand horses, with 62% of exports being shipped to Australia, 11% to Hong Kong and 14% to Singapore in 2007-08 season. Table 4 summarises data for exports and the sales receipts from the national yearling sales series held each year in January-February.

International recognition is a critical feature of the ongoing demand for New Zealand Thoroughbreds. In this respect, New Zealand Thoroughbred Marketing is an industry group that champions the New Zealand horse on the international scene. As this must be backed with data, and the performance of New Zealand-bred horses in the international arena is critically important. In this respect, the recent success of New Zealand horses in major Group 1 events in Dubai, Hong Kong and Australia, and the positioning of a number of New Zealand-bred horses on the international classifications are of particular importance. The international classifications raise an important issue; horses can only be ranked in respect of their performance against other horses; hence international competition is critical to ensure adequate benchmarking. Therefore the international governing bodies maintain an International Cataloguing Standard (IRPAC, 2009). New Zealand racing is listed in Part 1 alongside the other principal breeding and racing countries; as a result, New Zealand must maintain a register of *black-type* racing. These are the best races across age groups of 2- and 3-year-old, and older horses, and across sex (of females only or unrestricted), that are selected, and defined as black-type races (classified as Group 1, 2, 3 and listed). However the credibility of the New Zealand system must be backed by the international performance of these horses against

**TABLE 3:** Comparison of the scale of international thoroughbred racing for 2007 with prize-money for 2008. Source: IRPAC, 2009.

Country	Number of foals	Starters in flat races	Flat races run	Total prize-money (\$ US million, 2008)
USA	36,071	67,930	51,132	\$1,165
Japan	7,516	24,143	17,476	\$1,220
Australia	18,255	31,419	19,382	\$421
France	5,384	8,726	4,156	\$335
Great Britain	5,839	11,323	5,659	\$158
Canada	2,632	7,482	5,057	\$127
Hong Kong	Nil	1,154	726	\$98
Ireland	12,633	3,458	958	\$84
Argentina	7,538	11,123	6,101	\$64
Singapore	NIL	1,099	704	\$41
New Zealand	4,338	5,489	2,734	\$40
South Africa	3,246	6,567	3,883	\$31
Macau	Nil	768	737	\$23

**TABLE 4:** Data for exports and sales receipts from the national yearling sales series held each year in January-February. Source: New Zealand Thoroughbred Breeders' Association (Personal communication).

Season	Number of horses exported	Estimated value of exports (\$NZ million) <sup>1</sup>	New Zealand yearling sales aggregate (\$NZ million)	Average (and median) prices of yearlings (\$NZ 000s)
2001-02	1,914	\$115	\$55	
2002-03	1,763	\$115	\$47	
2003-04	1,782	\$115	\$60	
2004-05	1,806	\$120	\$70	
2005-06	1,831	\$125	\$66	
2006-07	1,888	\$130	\$81	\$79 (\$50)
2007-08	1,670	\$145	\$113 <sup>2</sup>	\$95 (\$52)
2008-09	1,578	\$130	\$75	\$63 (\$30)
2009-10	NA	NA	\$94	\$83 (\$42)

<sup>1</sup>Ex customs data for private sales

<sup>2</sup>The season in which equine influenza hit the Australian racing industry

international competition. In most countries, black-type races are around 3 to 5% of the flat races run.

### Features of the industry

The international Thoroughbred population is essentially closed with concern about inbreeding (Vaez Torshizi *et al.*, 1998) and the loss of genetic variation. However as noted by Gaffney and Cunningham (1988) "despite intense directional selection, especially on the male side, and the generally high heritabilities of various measures of racing performance, winning times of classic races have not improved in recent decades". Their analysis revealed that this was not due to insufficient genetic variance in the Thoroughbred

**TABLE 5:** Supply chain wastage in the New Zealand Thoroughbred industry calculated on a foal crop of 4,000. Source: McCarthy (2009).

Attribute	Number	Percentage
Source		
Mares bred	6,200	
Foal crop	4,000	91
Imports	410	9
Event		
Deaths and exports before branding	156	4
Net exports	1,345	30
Horses never registered with a trainer	981	22
Horses that go into work with a trainer	1,928	44
Fate		
Suffer a career-ending physical event	329	
Suffer a physical event requiring a lengthy spell	609	
Voluntarily retired – predominantly due to poor performance	607	
Never suffer a physical event requiring a spell	383	

population as a whole. In this respect, it is estimated that 10 founder females account for 72% of maternal lineages, while one founder stallion is responsible for 95% of paternal lineages (Hill *et al.*, 2001, 2002). There is speculation that this is a major contributor to *supply chain wastage*, a major concern within the Thoroughbred industry. For example a production of 4,000 foals in New Zealand requires the mating of more than 6,000 mares with a further 10% of foals being imported. Table 5 provides a summary of supply chain wastage calculated on a foal crop of 4,000.

**ACKNOWLEDGEMENTS**

Thanks are due to Mr Michael Martin, Chief Executive of the New Zealand Thoroughbred Breeders’ Association for helpful inputs into this paper.

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