CHAPTER 2

RACING TWO YEAR OLD HORSES

Introduction

2.1 Animal welfare organisations were also concerned that some horses are being trained and racing before they were physically fit to do so. This practice results in the retirement from racing of many horses because of injury. Specifically, RSPCA and ANZFAS considers that the majority of two year old horses are too young and physically immature to race.

2.2 All thoroughbreds have their "birthdays" on 1 August each year. Thus a horse foaled in December will be "one" in the following August, at the age of seven months, and "two" a year later, at the age of nineteen months.

2.3 This issue is a major concern for animal welfare organisations because the racing of two year old thoroughbreds is a popular and growing part of the racing industry. For example, feature races such as the Golden Slipper attract large prize money. The racing clubs support and promote this type of racing. The races are over shorter distances and the chances of success by either the very expensive prize yearlings of the previous year or conversely the unknown "battler" lend glamour and excitement.

2.4 Much of the discussion on indicators of physical maturity in horses concentrates on the epiphysial plates. These are cartilage structures at the end of the major bones in the leg. With maturity the plate becomes part of the bone. The closure of these plates occurs between twenty-three and twenty-nine months. Opinions vary as to whether complete closure should be a precondition for the strenuous exercise involved in training and racing.

Views on the Racing of Two Year Olds

2.5 The Australian and New Zealand Federation of Animal Societies has called for a complete ban on two year old racing. RSPCA, however, believes that there should be tighter regulations governing such racing and that x-ray examination of the epiphysis should be a precondition for commencement of racing.

2.6 According to ANZFAS, the racing of a physically immature horse increases the chances of injury due to an under-developed skeletal system. Many yearlings and two year olds have open epiphysial lines which means the shaft of the bone, the diaphysis, and the two ends of the bone, the epiphyses, have not fused. According to ANZFAS, this skeletal immaturity increases the risk of injury to the horse because the optimum strength of the bone has not been attained.

2.7 The ANZFAS submission referred to the results of a study involving more than 70,000 horses published in 'The Horses Digest', in which Dr George Maylin (Cornell University, USA), stated:

> Two year olds fracture far more often than three year olds, the older the horse, the better his chance of survival. Outlawing the racing of young horses would significantly reduce fractures and breakdowns in a race.[1]

2.8 ANZFAS maintains that the large prizemoney involved in the racing industry pressures trainers and owners to have a horse competing as quickly as possible. The animal's readiness for such arduous exercise may not be properly considered. Two year old horses therefore face a greater and an unacceptable risk of physical injury as undue stress is placed on developing bones and cartilage. According to ANZFAS such stress can lead to arthritis and other ailments.

2.9 According to ANZFAS' submission:

> The decision to break the horse in may be a decision to break the horse down. Most well-muscled, well grown yearlings are skeletally immature, resulting in a horse where the flesh (muscle) is willing but the skeleton is weak (immature bones, ligaments, and connective tissue). Many horses skeletally are not mature until 4.5 years of age ... Horses with closed epiphysial lines, taking other factors into account, are ready to be broken, educated and raced ... Horses with epiphysial lines should be spelled; otherwise the stresses of breaking-in and education could cause epiphysitis, shin soreness, splints, fractures, poor development and chronic lameness.[2]

2.10 On these matters, the submission of RSPCA (NSW) lodged with the Committee stated:

> Enormous pressures, related entirely to financial investment and return, are placed upon the industry to produce animals of potential racing ability which enter training at a younger and younger age. This obviously produces serious and often permanent damage. These injuries range from fractures involving sesamoids and epiphysial plates through periostitis, bursitis and low grade degenerative changes within joints.[3]

2.11 This view was also supported by RSPCA (Vic) in its evidence to the Committee.[4]

2.12 The Australian Conference of Principal Racing Clubs, and particularly Dr J. Bourke, Chief Veterinary Steward of the Victoria Racing Club, stated that closure of the plates is not a sure indicator of maturity. The Australian Equine Veterinary Association also maintains that some strain on the horse in training actually encourages closure of the plates and skeletal development generally.

2.13 Dr Bourke prefaced his views on the question of the racing of two year olds with the following statement:

> Racing, like any form of vigorous athletic activity in any species - be it man, or greyhounds or standard breeds - is associated with wear and tear. We must accept that.[5]

2.14 Dr Bourke went on to describe two research projects which he had conducted which failed to demonstrate any clear correlation between rate of injury, termination of racing career and age at commencement of racing. Dr Bourke carried out a study on the matter in the 1960s with a Dr Mason from the Veterinary School in Werribee. The study involved 100 two year olds. Epiphysis were x-rayed and the horses classified according to the extent to which the epiphysis was open or closed. The horses were then monitored over the next few years to see how they fared. Dr Bourke referred the Committee to two major findings from the study:

> When those horses that commenced hard training and racing with distal radial epiphysis open were compared with the

intermediate and the closed ones, there was an increased incidence of a condition called carpitis.[6] On the other hand, at the end of the two-year-old racing season, a greater percentage of the horses that had started racing with an open epiphyses were sound than of the horses that had raced with intermediate and closed epiphyses.[7]

2.15 His conclusion was that "the results were equivocal."[8]

2.16 Dr Bourke told the Committee that in subsequent years he studied the racing histories of larger groups of two year olds. For example, he compared groups of horses that had commenced racing as two year olds and others that started as three year olds. He added:

> I was unable to demonstrate any significant difference whatsoever in the length of racing careers of horses that commenced at racing at two, commenced racing at three, commenced racing as early two-year-olds, commenced racing as late two-year-olds.[9]

2.17 Dr Bourke also explained the results of a study he carried out on two year olds that had started racing early in Adelaide and then went on to race in Victoria. He told the Committee that his research indicated that there " was no difference whatsoever in the average length of racing life." He told the Committee:

> Under Australian conditions, the average male horse, or the average gelding, in particular, races for between three and four seasons. The average female horse races between two and three seasons.[10]

2.18 The Committee notes, and considers significant the evidence provided by the Australian Equine Veterinary Association (AEVA) on this question. The AEVA submission, as well as evidence from Dr Basset, referred to Dr Bourke's research and expressed general agreement with its conclusions. However, Dr Basset registered concern about horses being wasted before they begin racing. Dr Basset told the Committee:

> It is a problem. Keeping a horse is a costly matter, so people want to get a return as soon as they can. And they want to see their horse performing as soon as it can. So there is

> pressure on those horses beyond the track and being trained. A lot of them do not even get to the racetrack. Problems occur during training.[11]

2.19 According to Dr Basset, some two year olds are "quite mature enough to race", but others are not. He recommended that horses be x-rayed so that the epiphysial plates can be examined. There should be a check on whether calcification has occurred at the growing plates in the bones of the horse. This would indicate that "the horse's skeletal structure is mature".[12] Dr Basset thought that blood tests and examination for degeneration of joint fluids were also useful ways on checking on the condition of the horse.

2.20 Dr Basset stated that trainers should be educated to be able to ascertain the "maturity' of the horse as well as be able to identify the early signs of wear and tear being caused by immaturity.

2.21 The theme of education figured prominently in the arguments of the Australian Equine Veterinary Association. While supporting the continuation of two year old races, the AEVA submission stated:

> This Association believes that the veterinary profession and the Race Clubs have a leadership role to play in reducing the wastage that does occur in stress injuries. Education and research are necessary to remove any doubts about this popular facet [two year old racing] of the racing industry.[13]

2.22 The Australian Equine Veterinary Association's submission went on to outline the main themes for any educational program for trainers of two year olds:

> The education of trainers involved in racing two year old horses should emphasise the development of bone and tendon, and the effects that load and speed have on these structures. The young equine athlete can cope with a load [jockey] on its back at slow speed without damage resulting but as the speed under load increases plastic deformity can occur. The trainer who is aware of the possible changes can prevent damage by stressing without ever straining the young horse. This is achieved by careful observation and having veterinary surgeons carry out tests ... The mistaken belief that

> the bigger the horse the better the horse has led breeders and trainers to force feed their young charges high protein and energy diets to encourage growth. Recent research has proved that this can cause unbalanced skeletal growth and actual deformity. Further education and research on the topics of feeding the growing horse must be encouraged to ensure the welfare of the two year old racehorse.[14]

2.23 Reflecting their different views on the severity of the problem, the major animal welfare organisations recommended different measures to safeguard the welfare of two year old horses. RSPCA (NSW) recommended:

> Veterinary certification be required as to the closure of the epiphysial growth plates before training of the animal commences.[15]

2.24 When asked whether the racing of two year old races should be banned, Dr Wirth of RSPCA (Vic) answered:

> I think that there should be some scheme whereby the horses that are allowed to race at about that age are certified fit to do so. I think the veterinary profession is quite capable of doing so. ... certifying that they [the horses] are mature.[16]

2.25 ANZFAS, however, takes a different approach. The Federation recommends that the racing of two year old horses should be immediately banned. It also maintains that the horse's readiness to commence training should be determined according to its physical maturity, as determined by veterinary examination including the use of X-ray and having regard to the degree of closure of the epiphysial line. Such examination should not be conducted prior to the horse reaching the full term of 3 years of age.[17]

Conclusions

2.26 The Committee considers that the welfare of racing two year olds would be improved by requiring veterinary certification of maturity.

2.27 The Committee recognised that the readiness of any individual horse for racing cannot necessarily be determined simply through an

examination of the epiphysial plates. Nevertheless, the Committee considers that this and other procedures will enable a more reliable assessment of a horse's readiness for racing.

ENDNOTES

1. *Evidence,* Australian and New Zealand Federation of Animal Societies, p. S 8589, quoting G. Maylin, 'Animals Agenda', *The Horses Digest,* 1988, p. 15.
2. *Evidence,* Australian and New Zealand Federation of Animal Societies, pp. S 8589-90, quoting T.J. Hancroft, 1979, p. 60.
3. *Evidence,* RSPCA New South Wales, pp. S 8199-200.
4. *Evidence,* RSPCA Victoria, p. 9007.
5. *Evidence,* Australian Conference of Principal Racing Clubs, p. 8967.
6. *ibid.*
7. *ibid.*, p. 8968.
8. *ibid.*
9. *ibid.*
10. *ibid.*, p. 8969.
11. *Evidence,* Australian Equine Veterinary Association, p. 8919-20.
12. *ibid.*
13. *Evidence,* Australian Equine Veterinary Association, p. S 8312.
14. *ibid.*, p. S 8313.
15. *Evidence,* RSPCA New South Wales, p. S 8194.
16. *Evidence,* RSPCA Victoria, p. 9007-8.
17. *Evidence,* Australian and New Zealand Federation of Animal Societies, p. S 8590.