

Τηε Ιδεντιφιχατιον Οφ
Τηορουγηβρεδσ Ιν
Αυστραλια

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Consultant To The Australian Stud book

Some Australian Thoroughbred Statistics

- Second largest thoroughbred herd in world**
- 27,000 broodmares**
- Produces 18,000 foals annually**
- 380 thoroughbred racecourses**
- 30,000 racehorses in training**
- Imports 1,500 thoroughbreds annually**

Identification Of Thoroughbreds Born **Before 1 July 2003**

Based on

- **A Certificate Of Identification** incorporated into a Passport.
- **Freeze Brands** as part of the Certificate Of Identification.
- **DNA Typing**

Identification Of Thoroughbreds Born **After 30 June 2003**

Based on

- **A Microchip** implanted in the neck
- **A Freeze Brand** registered in the Stud Book's National Register Of Thoroughbred Brands.
- **The DNA Type** as before, no changes.

Overseas RFID Experience In Thoroughbreds.

- **England, Ireland and South Africa**
Microchips funded by racing authorities.
New foal crop micro-chipped annually.
- **Thailand and Korea**
Microchip racehorses on metropolitan racetracks only .

Stud Book Interest In Microchips

- **Stud Book Objective** paperless office
- **Stud Book Vision** Direct transfer of records from covering barn or foaling paddock to Stud Book .
- Only an **RFID system** could realise these things

Who Bears The Cost

- **Australian Racing Authorities**

- lacked need for a microchip backup.

- acknowledged their potential to racing.

- could not provide funds.

- **Australian Breeders**

- not willing to bear additional costs.

- unless racing authorities contributed.

Impasse !

Alternatives. Option 1

- **Replace freeze brands with microchips**

-replacement not acceptable in Australia.

-brands are part of our horsemen's culture

-rather we decided to upgrade their role

Details Of Freeze Brands

- **Freeze brands** applied six weeks before DNA samples taken.
- **National Register Of Thoroughbred Brands** is established to avoid interstate replication.
- **Digital Photography** introduced to record brands

Freeze Brands

Left Shoulder



Right Shoulder




Alternatives. Option 2

- **Replace Identification Certificates With Microchips**

An Identification Certificate is a written and illustrated description of a thoroughbred's natural white markings and hair whorls (cowlicks) together with any acquired markings such as scars, brands and tattoos.

ID Certificate for 2002 filly by KING'S BEST (USA) from LILLAFLICKA (AUS)

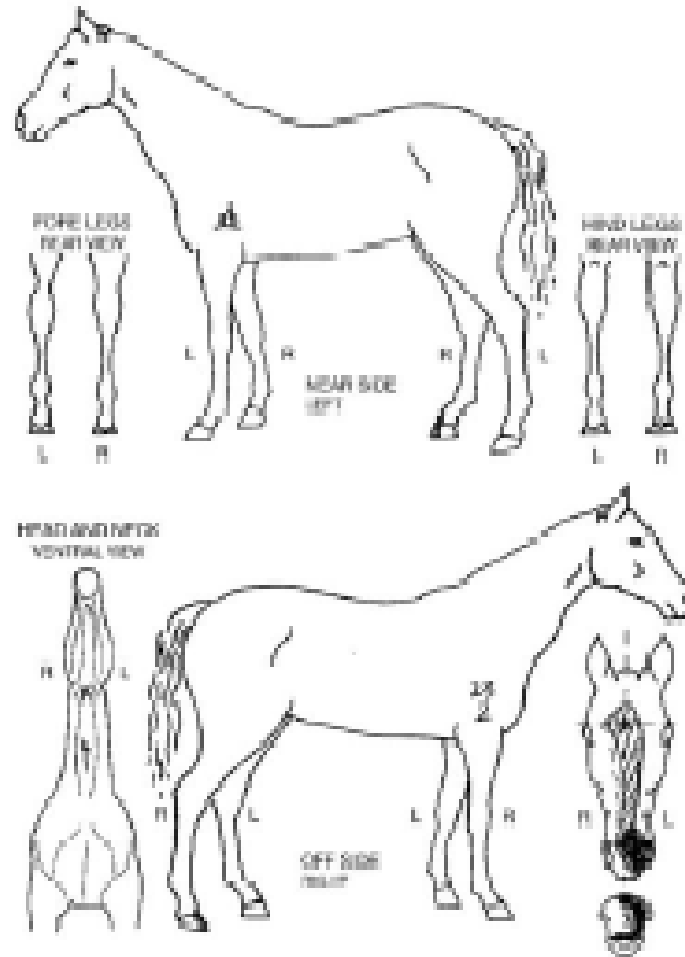
AUSTRALIAN STUD BOOK

ORIGINAL CONTRIBUTOR OR REGISTRAR Life No: AU500655517		YEAR OF BIRTH 2002
BREED From LILLAFLICKA (AUS) 1992 by KING'S BEST (USA) 2002		COLOUR GREY
BREED BY THE AUSTRALIAN STUD BOOK		SEX FEMALE
HEAD AND FACE Middle white, ear exposed, inner eyelid (inner border) flesh mark commencing with left nostril and upper lip. White throat. Feathered white middle third eyelid. White above third and left hand side. White upper third over right hand side.		
FEET All hoof black.		
NECK All—hoof black.		
LEFT LEG All—hoof black.		
RIGHT LEG Correct. Even and level. Hoof segmented.		
BODY		
BRANDS OR MARKS ACQUIRED Left Shoulder:  Right Shoulder: 21 over 2		

I, a veterinary surgeon, scanned the Australian Stud Book, certify to the correctness of the description on this certificate taken for the purpose of bloodtyping or identification.

Signature: *Josephine SVA* Date: 02 / 06 / 02
 Name of Veterinary Surgeon: J. METZGER, D.V.S., M.R.C.V.S.
 Place of examination: THE JAMES COOK STATE HALL, SYDNEY

OFFICIAL IDENTIFICATION CERTIFICATE



Certificates Of Identification (Strengths)

- **Cannot be modified.**(Unlike brands or tattoos)
- **Traditionally hold a special role.**
- **Can** be very effective for identifying horses.
- **Main component** of international passports.

Certificates Of Identification.

Weaknesses

- Some **18%** of thoroughbreds have **no white markings.**
- **DNA types cannot be modified.**
 - **accepted as final arbiter of identification.**
 - **replaced special role of Id. certificates**

Certificates Of Identification.

Issues

- **Cannot be computerised.**
- **Technology is archaic, labour and time costly.**
- **Id. certificate checking and replacement costs escalating.**
- **Funds saved by dropping the Id certificates almost enough to purchase microchips**

The Stud Book Proposal

Mandatory Requirements

- **#Microchip**
- **#Freeze brand**
- **#Brand must be in the National Register**
- **DNA type**

on each horse's website record.

Non Mandatory

- ***Certificate Of Identification**

- ***Passport**

***provided at request & expense of owners**

Acceptance Of The Proposal

- **Breeders accepted the proposal on **commercial** and **convenience** grounds.**
- **Concern** at racing officials operational level, (**new technology** and **running two systems** in parallel), recognised change was inevitable.
- **Tacit **support**** at planning level because of the long term **advantages**.

Australian Preparations. Learning From :-

The South African Experience

- **High standard of professionalism in field operations..**
- **South African field procedures the benchmark for Australians.**
- **With 2500 foals and 12 racing and training centres logistics were simple by comparison with Australia.**

Australian Preparations. Learning From : -

The English Experience

- **Weatherbys first to microchip an entire foal crop.**
- **Decentralised, veterinarians held stocks of Weatherbys' microchips stocks, allocating them as needed.**
- **Given changes (control orientated) this system was applied in Australia**

Value Of Overseas Experience To The Australian Stud Book

- **Field operation** experience invaluable.
- **Distribution, inventory control and chain of custody** experience of limited applicability.
- **Numbers involved, distances, geographical spread and limited funds** called for innovative but simple changes in Australia..

The Platform Already In Place

- A widely used Stud Book **website**
- An efficient **scheduling system** for identifying and sampling foals.
- An experienced **IT support group** familiar with the Stud Book
- A **public awareness** of RFID technology

Distribution & Inventory Control

- System of **DNA kits** each pre-assigned to a specific horse already in place.
- Veterinarians asked to accept. (1) inclusion of a pre assigned microchip in the kit.(2) no margins for error if accident occurs. (3) the risk of inconvenience.
- Resolved distribution and inventory control issues.

Microchips. Chain Of Custody

- Means a **computerised tracking system**
- Records **all handlers and users**. Records **despatches and usage** on a batch and day basis,
- Programs can target any **person** or any **horse associated** with the microchip within seconds of inquiring.

Duration Of The Program Of Introduction

- Processing **one foal crop per year** means that
- Racing Authorities and the Stud book have **time to plan and prepare** user programs.
- **By August 2010** all horses **less than 8 years old** will carry a microchip.
- Program to be **accelerated** for **racehorses**.
- And on larger stud farms.

Realising The Potential Of Microchips

- **Microchip codes** are available to the public.
- **Website records** accessed by **microchip code**.
- **At horse side a hand held pre-programmed computer will display the horse's name on receiving the microchip code via a link to the scanner.**

Yearling And Weanling Sales

- **Between 4000 and 6000 weanlings and yearlings are sold by auction.**
 - **Identification was a major undertaking**
 - **Will be a certain task of seconds with a scanner and pre-programmed computer.**
- “Yearling by Danehill from Zabeel Princess. Lot 145 on Monday 10 May”.**

At The Racecourse

- **“ Prince Darius carries No. 1 saddle cloth in race 5”**
- **On arrival at the course**
- **In the pre race parade or mounting yard.**
- **In the swabbing box**

At The Training Centre

- **No.1 special grass track.**
 - “ **Beau Vite, 04.30hrs, trainer Frank McGrath”**
- **Randwick swimming pool.**
- -“ **Bonecrusher, 11.15hrs, trainer Frank Ritchie”**

On The Stud Farm.

- **By August 2012 50% of our broodmare herd will be younger than 10 years but more than 50% will carry microchips.**
- **Transport of broodmares**
- **Checking new arrivals.**
- **In the Covering Yard. (Breeding Barn).**
- **Returning key events directly horse side to Stud Book**

The National Livestock Identification System (NLIS)

- **Australia's system of livestock identification and traceability. Based on RFID devices.**
- **Cattle industry, Federal and State Government are committed to implementing the scheme for cattle over the next few years. Sheep will be next. NLIS will eventually include all livestock.**
- **The thoroughbred industry leads the way in the Australian equine field**