

## Breed specificity - Was Razor really a Pit Bull?

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### Abstract

After more than 10 years of legislative biting the debate of whether "Razor" is a pit bull still continues. Animal management still continues to have a grey area in determining the particular breed type of a dog. The release in June 2007 of a single nucleotide polymorphism (SNP) genetic test to determine breeds and mixtures of up to 120 breeds and mixtures of those breeds has had the owners of Razor quite excited. Currently the test is available only in the United States and Europe with trial work to validate the data for Australia underway. Will the test be able to distinguish genetically the pit bull terrier? Currently legislation seems difficult to legislate with states themselves somewhat confused by it all. What should be done about Breed Specific Legislation and has it provided councils with the answer to the dangerous dog problem? Feedback from councils has shown it not to be working with determining the breed proving very difficult and inconclusive. Is there a better way to tackle this issue? Insight into this new test will provide states a means of tackling the BSL question and provide answers into Razor and his pedigree. This test will force changes to be made to the current legislation.

### Introduction

Enacted by the Commonwealth Parliament in late 1991 Breed Specific Legislation (BSL) still continues in 2007 to raise questions as to whether it has been successful or not. The Queensland local government was the first state to enact the legislation in 2001 with other states following suit, at the time of this abstract only the Northern Territory, Tasmania and the ACT have no breed specific legislation.

### What breeds are banned?

The Commonwealth Legislation covers 5 breeds – the American Pit Bull Terrier (APBT), Perro de Presa Canario (Presa), Fila Brasileiro (Fila), Dogo Argentino (Dogo), Japanese Tosa (Tosa) but by far it is the APBT that remains top of the list. Only South Australia has the same legislation as the commonwealth with most states banning all these breeds except for the Presa Canario.

### Why is the pit bull such a problem area?

Breeds such as the Fila, Presa and Tosa are not a problem because numbers that enter the country and negligible and breed definition is clearly distinguishable. According to data from AQIS only one Presa has been imported into this country. The APBT clearly is the main problem and this arises from data from the United Kennel Club (UKC) where APBTs were the only breed used to create the American Kennel Club (AKC) American Staffordshire Bull Terrier (AST). Studbooks for the AKC were opened to the UKC APBTs officially for the last time in 1992. This clearly demonstrates that the Australian National Kennel Council (ANKC) American Staffordshire Terriers are descendants of dual registered AKC American Staffordshire and UKC APBTs. Confused? Well how do you think assessors and rangers feel trying to legislate BSL? Physically it is close to impossible to distinguish the APBT from the AST and thus virtually just guesswork when it comes to trying to determine APBT crossbreeds especially when relying solely on morphological traits with the De Fre vs Logan City Council case a classic

example.

### Can DNA determine breeds and mixtures of breeds?

The completion of the canine genome in late 2006 has opened the door to the origins of the dog and more importantly allowed science to make inroads into the genetic make up of the dog. What makes each breed so different and what are those differences? With 39 chromosomes packed with 2.5 billion letters the information from the canine genome has brought us a step closer to understanding differences between breeds such as phenotypic behaviour, disease and its evolutionary history.

DNA holds the key to being able to provide the answers to the question of breed and in 2007 saw a single nucleotide polymorphism (SNP) test developed with the ability to assess and determine the full pedigree of a dog. With bull breeds clearly distinguishable work is underway to make this test accessible to Australia.

The Canine Heritage Breed Test has the ability to detect the Top 38 breeds and mixture of these breeds and the Mars Wisdom Panel Test can detect the Top 130 breeds and mixture of these breeds. Can these tests be used to verify dogs in Australia? The excitement created by these tests certainly has the BSL world wagging their tails. How can the information be used to assist with animal management and can it provide animal behaviourists with insight into what makes a dog behave the way it does. The question that most people are asking is can it determine the breed of the APBT and tell us whether Razor is truly a pit bull or not? Will this test assist with BSL and hopefully make the legislation easier to legislate?

### About the Author

George Sofronidis B.Sc (Hons) is the Manager Animal Diagnostics – Companion Animals and has over 15 years of dedicated experience in molecular biology and the way it can assist in areas of animal management.

Following his initial work and research in forensic science at the Victorian Institute of Forensic Medicine he moved his focus into the area of animal reproduction and conservation, a career which has seen him work on some of Australia's most endangered mammals and research which has focused on the role of sperm competition and conservation genetics. George has worked at Monash University, Melbourne University and the Zoological Parks and Gardens Board. His strong appreciation for the benefits animals bring to our society saw George in 2000 establish Genetic Science Services, a company dedicated to animal DNA testing. Extensive experience in building and developing business relationships with animal enthusiasts both, domestic and livestock. George joined Genetic Technologies in April 2002 and continues to focus on educating breeders, farmers, vets, associations and pet owners on the benefits of DNA testing in particular the insight it brings to all animal enthusiasts.