

Hi, I'm George.
Follow me as I fetch the
details of my breed ancestry!
We will dig up important &
otherwise unknown health &
behavioural information while
learning all about who
I am.



BITSA™

Breed Identification

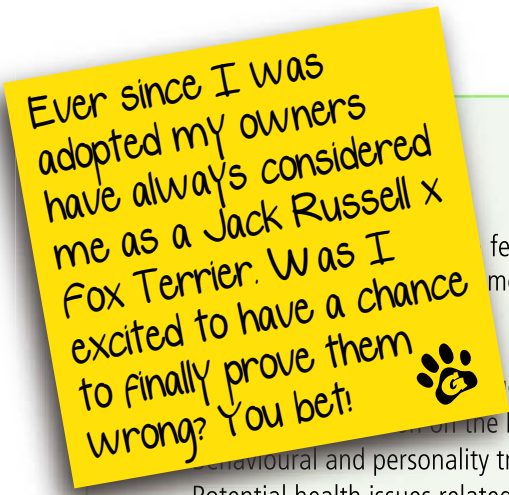
George's Dog Breed Specificity Report



Proud Owner	John Smith
Address	60-66 Hanover St Fitzroy VIC 3065 Australia
BITSA ID No	S0000000001
Date of Test	18 June 2008

www.bitsa.com.au

Ever since I was adopted my owners have always considered me as a Jack Russell x Fox Terrier. Was I excited to have a chance to finally prove them wrong? You bet!



fetch the inside world on George's breed history. Within these more about George than ever before. The Dog Breed Specificity

- Potential health issues related to each breed

We hope you have enjoyed your BITSA experience and gain a deeper understanding of George. Knowing the breed history can only strengthen this relationship, providing you with insights to enrich the way you interact, train and care for George.

The inside word on the DNA test

BITSA works by applying the latest DNA science to analyse hundreds of snippets of your dog's DNA where breed information is found. These snippets are then cross referenced against an extensive genetic database to provide a breed signature – or a series of breed signatures. These breed signatures indicate the make-up of breeds within your dog.

George's breed history is broken into the following categories

Primary breed

Significant amounts of this breed were discovered. A primary breed is most likely the breed of one or both of the parents.

Secondary breed

Moderate amounts of this breed were discovered. A secondary result typically indicates the parents of your dog were mixed-breeds themselves, or alternatively, can mean we have identified breeds that make up the grandparents of your dog.

Distant breed

Low amounts of this breed were discovered. A distant result means we found traces of the breed in your dog's ancestry, but we are unable to be more specific to the exact location in your dog's family tree. Typically, distant amounts are found in great grandparents, or further beyond.

Disclaimer: Each dog is unique and their physical and behavioural traits will be the result of multiple factors including genetics, training, handling and environment. The BITSA product has been designed solely to identify the genetic make-up of mixed breed dogs and no other purpose is intended, authorised or permitted. A number of generalisations and statements about your dog may or may not be correct. This report is intended to be an indicative guide to the most common traits or characterisation of various breeds based on breed standards and published breed information. Please contact Genetic Technologies for more information on Genotyping George.

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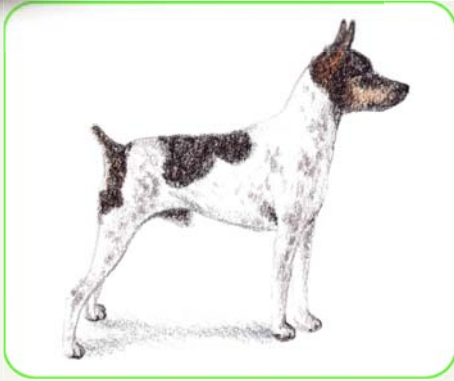
All these years I've been identified by my appearance, but my personality has always seemed a little different to the stereotype. Just goes to show that looks can be deceiving!



That George is one in a million – proof!

We've retrieved the following breed history for George.

Primary Amounts



Tenterfield Terrier

Secondary Amounts



Australian Cattle Dog

Distant Amounts

Woof! I sure have that characteristic Tenterfield energy and feistiness! I love digging and fetching balls with my family and friends. Try and hide the ball and I will dig it up no sweat!



Primary

The Miniature Fox Terrier, history suggests that the breed originated from England. Bred as a smaller replacement for "foxhunting terriers" were known and used for foxhole hunting, Miniature Fox Terriers have been known in Australia since the 1800s and were seen as very useful farm dogs, used for hunting foxes, cats and rabbits. By 1992, it became apparent that the 'Miniature Fox Terrier' wasn't suitable as the breeding line was entirely different. The name "Tenterfield Terrier" was derived from an Australian television program "Burkes Backyard" in which the host Don Burke, famously called these mini terriers the Tenterfield Terrier after the Australian town, Tenterfield, in New South Wales. Most recently, breeders have focused on developing breed standards with a view of reaching purebred status. The breeds that contributed to making the modern Tenterfield are thought to be breeds with a small physique including the Chihuahua, Whippet, Manchester Terrier, Miniature Pinscher and the Fox Terrier. Popular amongst the elderly and families with young children, the Tenterfield always displays a variety of characteristics suited to almost any owner. Bright and outgoing with a curious personality, Tenterfields are widely popular throughout Australia.

Dog Group - Terriers

The word terrier is Latin for terra, meaning earth. As the name indicates, the terrier's nature is to chase rodents and other small animals along the ground, or by their infamous constant digging. Their heritage was brought to life when commonly bred to be put into battle 'pit' grounds to fight and kill rats and in some cases, each other. They are known for their curious temperament and can often be quite cunning problem solvers. With a variety of long and short-legged breeds, terriers will keep you on your toes with their peculiar and bold sense of humour.

Coat

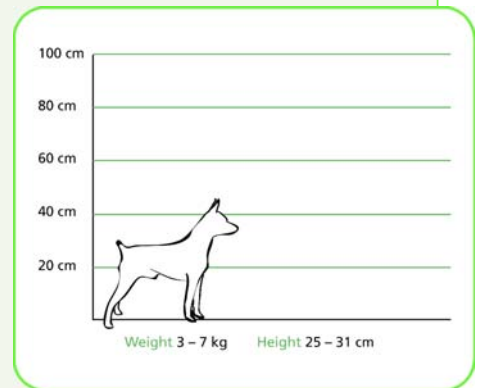
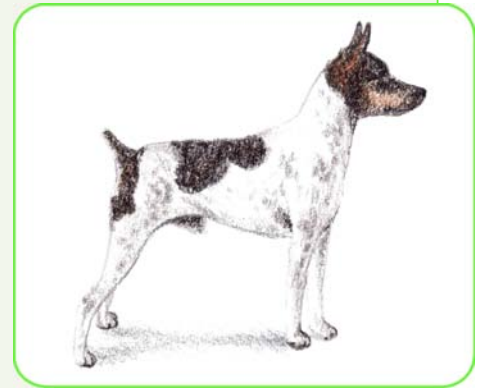
The Tenterfield Terrier has a single coat that is short and smooth.

Colour

The Tenterfield's coat is predominantly white, with markings of black, liver or tan in all tones. Tri-colour is usually white with black and tan markings. Brindle markings and pigmented skin is common in all varieties of the breed.

You should see the following traits in George

- Strong willed with stubborn tendencies
- Highly intelligent and takes very well to training
- Energetic, excitable and active
- Agile and fast moving
- Daily exercise required by means of a long walk, vigorous game or a play in a large outdoor environment
- Versatile and highly adaptable to different living conditions
- A loving and affectionate companion
- Loyal and devoted to its family
- Feisty nature (curbed through training and socialisation)
- Friendly towards other pets



People often comment on how smart I am. One look at the lead in my owner's hand & I know exactly what's going on! I love being outdoors and always work my hardest. No matter how far that ball is thrown, I'll have it back in no time! 🐾

Dog (Secondary)

was bred by 19th century Australian settlers to they required a hardy dog which could handle working conditions in Australia and the dogs didn't meet this requirement. It is generally Cattle Dog is the result of the crossing of the (and) with the Dingo, and a late infusion of Black and Tan Kelpie. First known as the Australian Heeler, blue coloured dogs proved to be the most popular among farm owners and drovers, and they became known as Blue Heelers or Queensland Heelers – titles that are still commonly used today.

Dog Group - Working

Just as the name says, working breeds are the hard workers of the canine world and are commonly used for their abilities to aid farmers with the movement of cattle. With a staggering amount of endurance, they increase the productivity of cattle transfer/control ten-fold by their abilities to stare, bark and nip at livestock. Whether herding or driving breeds, working dogs combine their natural instincts with their owner's command, to achieve their objectives. Very intelligent and devoted, they can work well independently or with their partners – this makes working dogs the richest of companions.

Coat

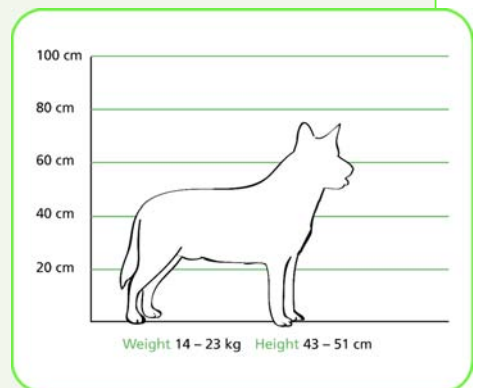
Australian Cattle Dogs have a smooth double coat with a short dense undercoat. The outer coat is close, each hair straight, hard and lying flat so that it is rain resistant.

Colour

The Australian Cattle Dog has either a blue or red coat. For blue the colour is blue mottled or blue speckled, with or without other markings. For red the colour is of a good even red speckle all over, including the undercoat (neither white nor cream), with or without darker red markings on the head.

You could see the following traits in George

- Intelligent and good for training
- Responds well to consistent obedience training
- Robust working dog
- Stubborn, tenacious and independent
- Loyal to owner
- Untiring with lots of energy
- Requires constant mental and physical stimulation
- Excitable when playing with children with the tendency to play rough (curbed with training)
- Requires daily exercise by means of long runs and/or vigorous activities
- Requires space and room



I'm one of a kind - You won't find another personality quite like mine! Affectionate, easily trained and playful, but above all, I always put my family first. What more could you want?!

George's traits?


make up George. Below we have summarised all of the traits consistent with these breeds and given them a 'Paws' rating you can expect to see.

Trait	Australian Cattle Dog	Tenterfield Terrier	Average
Watchdog ability – Ability and tendency to vocally guard property and possessions			
Energy level – The intensity, frequency and persistence of activity			
Mouthiness – Tendency to nip, chew and play-bite (soft, harmless biting)			
Intelligence – Level of decision making, intelligence and concentration			
Playfulness – Tendency to enjoy games and activities			
Tendency to bark or howl – Need to have and regularity of vocalisation			
Ease of training – Willingness and capability to be trained			
Friendly towards strangers – Ability to interact with and respond to strangers			
Dog friendly – Likelihood to be friendly with other dogs (social factors may impact)			
Protection ability – Tendency to physically guard and defend the owner			
Potential for weight gain – Tendency to overeat and indulge during feeding			
Predatory tendencies – Natural desire to hunt and chase			
Wanderlust – Level and propensity for having a free spirit (to run free)			
Ease of being at home – Disposition of dog to be left unattended at home			
Sensitivity – Ability to respond to environment (low sensitivity, tolerant and resilient)			
Vigour – Head strong and vigorous in every pursuit			
Affectionate with family – Likelihood to be affectionate with family (social factors may impact)			

Low levels of trait

Medium levels of trait

High levels of trait

This information allows us to be one step ahead, with not only my Vet but my owners now aware of future health concerns. After we recieved this information we sent off for a PRA test, & luckily my results were clear. My owner also knows to give me a nice soft bed to prevent hip problems and to watch out for signs of deafness. 


Concerns for George

certain genetic health problems, such as hip displasia. This that breed composition will develop those diseases, but by you and your vet are now better placed to identify

Health Conditions	Australian Cattle Dog	Tenterfield Terrier
Natural Bob Tail	-	Prone
Progressive Retinal Atrophy* - Eye condition	Prone	-
Hip Dysplasia - Degenerative hip joint disease	Prone	-
Deafness - Loss of hearing	Prone	-

These health conditions are for reference purposes only. They are not intended as a diagnosis and any diagnosis of these symptoms should be carried out by a qualified vet.

** If you would like information on Genotyping George please contact Genetic Technologies.*

Here are some activities that really get my tail wagging! I love digging, I can find anything you hide! Obstacle courses are great fun too. No course is too hard for me! 

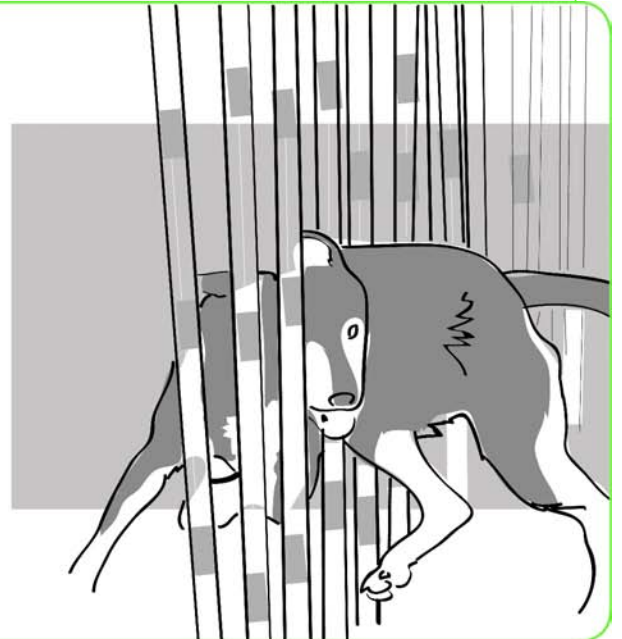
breed history, here's some games and activities to play with nature of his make-up. Have fun!

Create and allocate a sandpit or patch of dirt George can dig in. In front of him, bury toys and treats and let him go and dig up to find his reward. Challenge George by eventually burying treats in his absence.



Follow the Leader

Form a miniature obstacle course in a yard or house and call for George to follow you. Every time he completes a difficult task, such as, walking up a set of stairs or jumping over a challenging roadblock, offer him a treat as a reward. Vary your pace from jog to walk and it will make George require more concentration and physical exertion.



Finally, BITSA has confirmed what my owners never knew but always wanted to find out! My structure graph highlights my primary and secondary breeds, though a lot of my ancestry (close to 20%) still remains a mixture of various breeds. I'm very proud of this. After all, variety is the spice of life!



...uch of an individual's genome came from each cluster, population or breed.
 ... particular breed indicates that your dog is approximately 100% of that breed.
 ... particular breed indicates that the breed identified is a primary breed, that is, approximately 50%
 ... particular breed indicates that the breed identified is a secondary breed, that is, approximately 25%
 ... dog is of that breed.
 A Q value of 0.089 to 0.099 for a particular breed indicates that the breed identified is a distant breed, that is, a trace amount of your dog may be of that breed.

Q values of less than 0.089 for a particular breed may indicate trace amounts of that breed but may also be due to sharing of markers between dogs of similar ancestry.



George's Structure Graph

- Tenterfield Terrier Q=0.53
- Australian Cattle Dog Q=0.27
- Fox Terrier Q=0.07
- Maltese Q=0.07
- Papillon Q=0.07
- Pomeranian Q=0.07
- Chihuahua Q=0.07
- Kelpie Q=0.07
- American Staffordshire Terrier Q=0.07
- Shiba Inu Q=0.06
- Weimaraner Q=0.06
- Pointer Q=0.06
- Silky Terrier Q=0.06
- Rhodesian Ridgeback Q=0.06
- Great Dane Q=0.06
- Greyhound Q=0.06
- Border Collie Q=0.06
- Australian Terrier Q=0.05
- Dalmatian Q=0.05
- Daschund Q=0.05
- Siberian Husky Q=0.05
- Golden Retriever Q=0.05
- Bull Terrier Q=0.05
- Boxer Q=0.05
- Beagle Q=0.05
- Basset Hound Q=0.04
- Bichon Frise Q=0.04
- Shih Tzu Q=0.04
- Tibetan Spaniel Q=0.04
- Bull Mastiff Q=0.04
- Chow Chow Q=0.04
- Scottish Terrier Q=0.04
- Poodle Q=0.04
- Dogue De Bordeaux Q=0.03
- German Shorthaired Pointer Q=0.03
- Italian Greyhound Q=0.03
- Rottweiler Q=0.03
- German Shepherd Q=0.03
- Labrador Q=0.03
- Dobermann Q=0.03
- Neopolitan Mastiff Q=0.02
- Boston Terrier Q=0.02
- Curly Coated Retriever Q=0.02
- Alaskan Malamute Q=0.02
- West Highland White Terrier Q=0.02
- Cavalier King Charles Spaniel Q=0.02
- Australian Shepherd Q=0.02
- Cocker Spaniel Q=0.02
- Cairn Terrier Q=0.01
- Whippet Q=0.01
- Pug Q=0.01
- Jack Russell Terrier Q=0.01
- Bulldog Q=0.01
- Irish Setter Q=0.01
- English Springer Spaniel Q=0.01
- Staffordshire Bull Terrier Q=0.01
- Koolie Q=0

Please Note: Only Q values of over 0.090 are statistically significant and are reported as a breed detected.