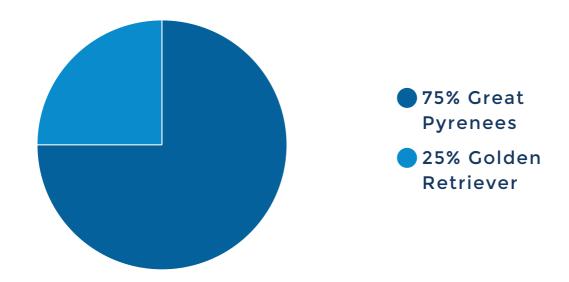


us about Cooper's ancestry...

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COOPER'S BREED BY PERCENTAGE



Exciting news, the results are in! Here's what makes Cooper so unique. Using the data generated from Cooper's DNA, our sophisticated computer algorithm performed over 17 million calculations! What you see here is Cooper's ancestry by percentage.

GREAT PYRENEES

THEY HAVE EXISTED FOR SEVERAL MILLENNIA.

- Intelligent, watchful, and generally calm dogs.
- Great Pyrenees seem to enjoy dog sports such as agility, tracking and competitive obedience as well as hiking, backpacking and carting.
- Independent spirit but responds well to a reward-based approach to training involving treats or favorite toys.
- Can be standoffish and wary with strangers and has a tendency to bark.

Height25 - 27 in

Weight (show)80 - 120 lb

Weight (pet)66 - 138 lb



DID YOU KNOW?

Rumor has it this breed is so old they are literally fossilized. Certainly many agree that they have existed for several millennia, possibly even dating as far back as 1800 BC. Their assumed direct ancestors include the Kuvasz, the Maremma Sheepdog and the Anatolian Shepherd. Eventually the breed was brought to Europe, and the Pyrenees mountains, where they were renowned as great herders. During the 1600s, Louis XIV declared these gentle and affectionate souls to be the Royal Dog of France. They were first brought to America in the early 19th century but numbers fell significantly after that. B. Senac-Lagrange and M. Dretzen are credited with eventually helping increase their population again. Which earns them a mountain of gratitude from us.

GOLDEN RETRIEVER

WHO DOESN'T LOVE THESE INTELLIGENT, KIND AND LOYAL DOGS?

- Happy-go-lucky, calm, or easy-going dogs, although some can be energetic or nervous.
- Usually friendly and are generally good family dogs.
- Enjoys sports such as hunting, tracking, agility and retrieving items such as floating toys that use the breed's swimming ability.
- Quite food motivated, which may make it easier to teach the Golden Retriever to drop retrieved items not intended for play.

Height20 - 24 in

Weight (show)55 - 70 lb

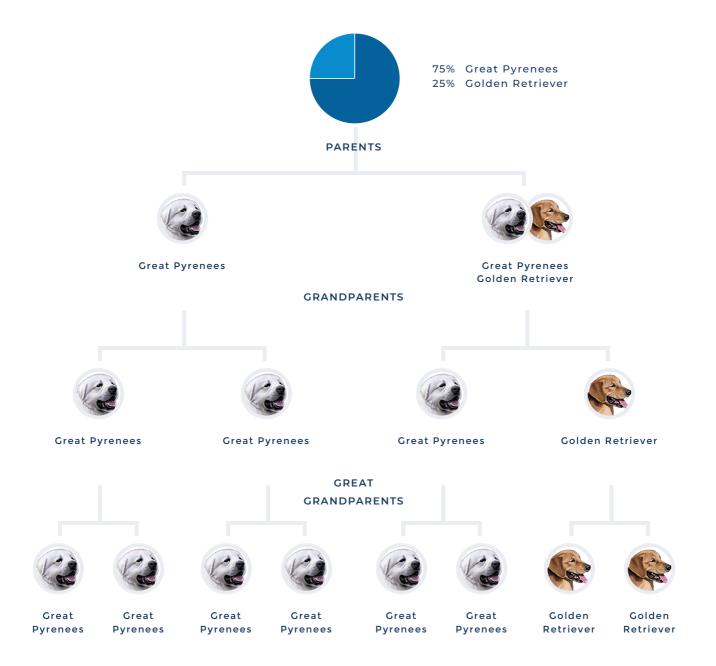
Weight (pet)46 - 80 lb



DID YOU KNOW?

Who doesn't love these intelligent, kind and loyal dogs? They're originally from 19th century Scotland, where they were bred as hunting dogs, retrieving game from land and water. Not many people know that one Sir Dudley Majoribanks, Lord of Tweedmouth, spent twenty years secretly developing the breed. They say he began with a yellow dog from Brighton and a Tweedwater Spaniel (now extinct). Later, he introduced Labrador Retrievers, Newfoundlands, Red Setters and Bloodhounds into the mix. Although first called 'Golden Flat Coats', the breed was eventually introduced to America, where they became known as Golden Retrievers. And just about everyone's favorite dog.

COOPER'S FAMILY TREE



COOPER'S HEALTH RESULTS

SAMPLE ID: T204697

We have tested Cooper's DNA for the following important genetic health conditions. The results can be seen below. For more detailed information on each of these diseases, please log into your account and review your comprehensive health results.

MULTIDRUG SENSITIVITY (MDR1)



CLEAR

Cooper has no copies of the MDR1 mutation and should not be affected by the disorder due to this genetic cause.

EXERCISE-INDUCED COLLAPSE (EIC)



CLEAR

Cooper has no copies of the EIC mutation and should not be affected by the disorder due to this genetic cause.

COOPER'S TRAITS

SAMPLE ID: T204697

Furnishings	Cooper does not carry any copies of the gene for 'furnishings' (which would give them a fuzzy beard and eyebrows). This means they probably have smooth, short facial hair. Did you know you can often get 'furnished' and 'unfurnished' dogs within the same breed?
Coat Color Subtypes Genotype: at/at m/ m h/h sp/sp	Cooper carries two copies of the gene for white spotting as opposed to one, which means they'll probably have a significant amount of white in their coat. Did you know some breeds that people think are white (like say Dalmatians or white Boxers) actually just have two copies of the white spotting gene?
Leg Length Genotype: DD	Cooper's legs should be relatively long in length, based on this marker (though there can be other genes that affect leg length). Did you know different dogs can have different leg lengths even if they are the same breed?
Tail Length Genotype: CC	Cooper likely was born with a long tail - although the exact length can vary from dog to dog. Long tails are sometimes known as 'coffee table clearers'. (If you've ever seen a long-tailed dog get excited near one, you'll know exactly why.)
Base Pigment Color Genotype: B/B	Cooper carries the gene for the 'expression' of black pigment. This means that even though their overall coat color may not be black, they are still able to make black pigment. They will also likely have black around their eyes, a black nose, and may even have black pads on their feet.
Ear Carriage Genotype: CC	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Cooper probably has 'drop' or floppy ears. This type of ear is dominant, needing only one copy of the gene to show it. That's why it's so common in mixed breed dogs. Common breeds with drop ears include hounds, Labrador, Poodle and spaniels.
Coat Length and Type Genotype: TT CC	Cooper's coat is probably on the long side. The exact length of a dog's coat is down to several factors so it can vary. Did you know long hair is actually a recessive trait and results from inheriting two 'broken' copies of the gene that tells hairs to stop growing and shed?
Coat Color Main Possibilities Genotype: at/at E/e KB/ky,kbr/ky I/wt	Cooper appears to be mostly dark in color (either black or brown) or dark with 'tiger' striping (called 'brindle'). The brindle likely covers most of their body except for a dark 'saddle-shaped' area over their back. (If it's the latter, congratulations, by the way. This is seriously rare.)

IDEAL WEIGHT

SAMPLE ID: T204697

Based on our findings, we've calculated that Cooper's ideal, adult weight should be:

86 lbs - 135 lbs

We've factored everything we know about Cooper in predicting a healthy, adult weight. However environmental factors such as the nutrition of Cooper's mom during pregnancy and nursing, Cooper's nutrition during critical growth months, illness/parasites/ticks/fleas, and exercise levels can affect the actual weight of Cooper.

CALCULATING WEIGHT

Our weight-predictive algorithm uses a combination of the following to calculate Cooper's ideal, adult weight:

- The published weight ranges of more than 200 purebred dogs.
- The observed weights of purebred dogs, each with an ideal Body Condition Score, from the Banfield® Pet Hospital database.
- Breeds the WISDOM PANEL™ test analysis has identified that reflect a dog's true heritage and genetic complexity.
- A genetic algorithm based on mixed-breed data that calculates the contribution of each set of chromosomal genetic markers.

ENVIRONMENTAL EFFECTS ON WEIGHT

A dog's early life is very important in determining how they will grow and develop. They can fail to reach their ideal weight for a number of reasons, including the diet of their mother during pregnancy and nursing (as well as their own diet as puppies). Illness and disease can play a part too, as can having parasites like roundworms or fleas and ticks. For dogs who are adopted after they are fully-grown, it may be harder to find the historical background on these factors.

Maintaining a healthy weight is a key factor in Cooper having a long and healthy life.





STATEMENT OF AUTHENTICATION

Owner's Name: Rod Allrich

Dog's Name: Cooper

Sample Id: T204697

Date: November 7, 2019

This certifies the authenticity of Cooper's canine genetic background as determined, following the careful analysis of more than 1800 genetic markers, by the WISDOM PANEL™ Canine DNA Test. The purebred breed signature matches included in the analysis are those that were detected in the last three generations of Cooper's ancestry using the Wisdom Health proprietary breed detection algorithm.

