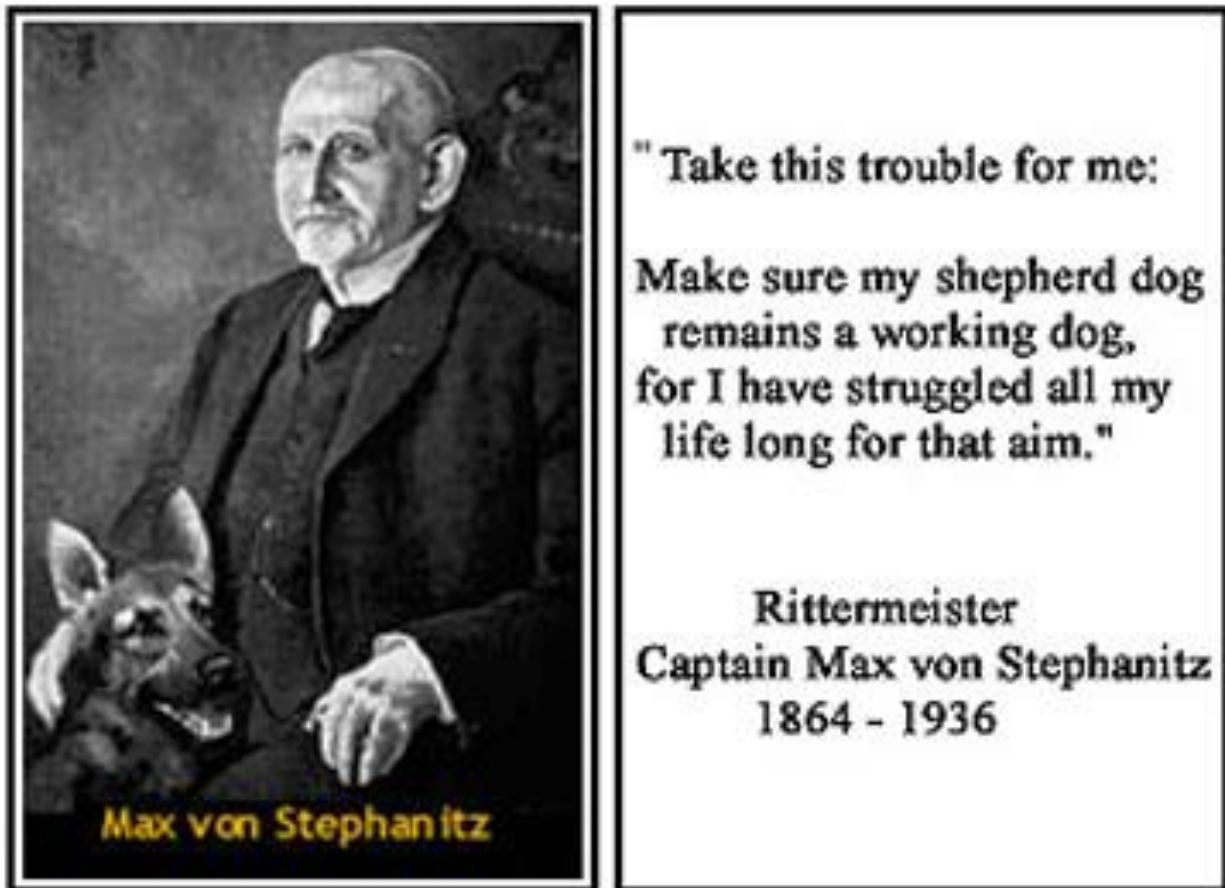


History of the German Shepherd Dog



In 2018, a genetic study found that, just prior to 1859, a broadly distributed European herding dog, the French Berger Picard, had given rise to the German Shepherd Dog and the five Italian herding breeds: the Bergamasco Shepherd, Cane Paratore, Lupino del Gigante, Pastore d'Oropa, and the Pastore della Lessinia e del Lagorai.¹



Max Emil Friedrich von Stephanitz (with Horand von Grafrath) - the founder of the German Shepherd Dog breed

Illustration of a German Shepherd from 1909

During the 1850s, attempts were being made to standardize dog breeds. Dogs were being bred to preserve traits that assisted in their job of herding sheep and protecting their flocks from predators. In Germany this was practiced within local communities, where shepherds selected and bred dogs. It was recognized that the breed had the necessary skills for herding sheep, such as intelligence, speed, strength and keen senses of smell. The results were dogs that were able to do such things, but that differed significantly, both in appearance and ability, from one locality to another.

To combat these differences, the Phylax Society was formed in 1891 with the intention of creating standardised development plans for native dog breeds in Germany. The society disbanded after only three years due to ongoing internal conflicts regarding the traits in dogs that the society should promote; some members believed dogs should be bred solely for working purposes, while others believed dogs should be bred also for appearance. While unsuccessful in their goal, the Phylax Society had inspired people to pursue standardising dog breeds independently.

With the rise of large, industrialized cities in Germany, the predator population began to decline, rendering sheepdogs unnecessary. At the same time, the awareness of sheepdogs as a versatile, intelligent class of canine began to rise. Max von Stephanitz, an ex-cavalry captain and former student of the Berlin Veterinary College, was an ex-member of the Phylax Society who strongly believed dogs should be bred for working. He admired the intelligence, strength and ability of Germany's native sheepdogs, but could not find any one single breed that satisfied him as the perfect working dog.

In 1899, Von Stephanitz was attending a dog show when he was shown a dog named *Hektor Linksrhein*. Hektor was the product of few generations of selective breeding and completely fulfilled what Von Stephanitz believed a working dog should be. He was pleased with the strength of the dog and was so taken by the animal's intelligence, loyalty and beauty, that he purchased him immediately. After purchasing the dog, he changed his name to Horand von Grafrath and Von Stephanitz founded the Verein für Deutsche Schäferhunde (Society for German Shepherd Dogs). Horand was declared to be the first German Shepherd Dog and was the first dog added to the society's breed register. In just a few decades of the Verein für Deutsche Schäferhunde's establishment, the breed became one of the world's most popular and numerous, a position it has maintained to this day. By 1923, the Verein für Deutsche Schäferhunde claimed 50,000 dues-paying members in more than 500 branches in Germany alone.

Horand became the center-point of the breeding programs and was bred with dogs belonging to other society members that displayed desirable traits and with dogs from Thuringia, Franconia and Wurttemberg. Fathering many pups, Horand's most successful was *Hektor von Schwaben*. Hektor was inbred with another of Horand's offspring and produced *Heinz von Starkenburg, Beowulf* and *Pilot*, who later fathered a total of eighty-four pups, mostly through being inbred with Hektor's other offspring. This inbreeding was deemed necessary in order to fix the traits being sought in the breed. Beowulf's progeny also were inbred and it is from these pups that all German Shepherds draw a genetic link. It is believed the society accomplished its goal mostly due to Von Stephanitz's strong, uncompromising leadership and he is therefore credited with being the creator of the German Shepherd Dog.

During the first half of the twentieth century, the Shepherd Dog came to be strongly identified with Imperial and Nazi Germany, because of the breed's association with purity and militarism. Adolf

Hitler acquired a German Shepherd named "Prinz" in 1921, during his years of poverty, but he had been forced to lodge the dog elsewhere. However, she managed to escape and return to him. Hitler, who adored the loyalty and obedience of the dog, thereafter, developed a great liking for the breed. German Shepherds were also used widely as guard dogs at Nazi concentration camps during the Holocaust.

Etymology



Sable German Shepherds. Female (left), male (right).

The breed was named *Deutscher Schäferhund* by von Stephanitz, literally translating to "German Shepherd Dog". The breed was so named due to its original purpose of assisting shepherds in herding and protecting sheep. At the time, all other herding dogs in Germany were referred to by this name; they thus became known as *Altdeutsche Schäferhunde*, or Old German herding dogs.

The direct translation of the name was adopted for use in the official breed registry; however, at the conclusion of World War I, it was believed that the inclusion of the word "German" would harm the breed's popularity, due to the anti-German sentiment of the era. The breed was officially renamed by the UK Kennel Club to "Alsatian Wolf Dog", after the French region of Alsace bordering Germany. This name was also adopted by many other international kennel clubs.

Eventually, the appendage "wolf dog" was dropped, after numerous campaigns by breeders who were worried that becoming known as a wolf-dog hybrid would affect the breed's popularity and legality. The name Alsatian remained for five decades, until 1977, when successful campaigns by dog enthusiasts pressured the British kennel clubs to allow the breed to be registered again as German Shepherds. The word "Alsatian" still appeared in parentheses as part of the formal breed name and was only removed in 2010.

Popularity



An example of a male German Shepherd

When the accepted registrations in 1919, 54 German Shepherds were registered. By 1926 this number had grown to over 8,000. The breed gained international recognition after the end of World War I. Returning soldiers spoke highly of the breed and animal actors Rin Tin Tin and Strongheart popularised the breed further. The first German Shepherd Dog registered in the United States was *Queen of Switzerland*. Her offspring suffered from defects as the result of poor breeding, which caused the breed to suffer a decline in popularity during the late 1920s.

Popularity increased again after the German Shepherd *Sieger Pfeffer von Bern* became the 1937 and 1938 Grand Victor in American Kennel club dog shows, only to suffer another decline at the conclusion of World War II, due to anti-German sentiment, Popularity increased gradually until 1993, when they became the third most popular breed in the United States. As of 2016, the German Shepherd is the second most popular breed in the US. Additionally, the breed is typically among the most popular in other registries. The German Shepherd Dog's physique is very well suited to competing in shows and competitions, such as agility trials.

Health



A nine-week-old German Shepherd puppy

Many common ailments of the German Shepherd are a result of the inbreeding practiced early in the breed's life. One such common ailment is hip and elbow dysplasia which may cause the dog to

experience pain later on in life and may cause arthritis. A study conducted by the University of Zurich found that 45% of the police working dogs were affected by degenerative spinal stenosis, although a small sample size was used. The Orthopedic Foundation for Animals found that 19.1% of German Shepherd are affected by hip dysplasia. There are, however, ways to help prevent hip dysplasia, including getting a pup from a good breeder, keeping it on a healthy diet, and limiting the amount of jumping or rough play. German Shepherds have low frequency of ear infections, since this breed is well-known for hyperactivity of its cerumen-producing glands.¹ According to a recent survey in the UK, the median life span of German Shepherds is 10.95 years, which is normal for a dog of their size.

Degenerative myelopathy, a neurological disease, occurs with enough regularity specifically in the breed to suggest that the breed is predisposed to it. A very inexpensive DNA saliva test is now available to screen for degenerative myelopathy. The test screens for the mutated gene that has been seen in dogs with degenerative myelopathy. A small study in the UK showed 16% of young asymptomatic GSDs to be homozygous for the mutation, with a further 38% being carriers.¹ Now that a test is available the disease can be bred out of breeds with a high preponderance. The test is only recommended for predisposed breeds but can be performed on DNA samples from any dog, collected through swabbing the inside of the animal's cheek with a sterile cotton swab. Prospective German Shepherd buyers can now request the test from the breeder or buy from a breeder who is known to test their dogs.

Additionally, German Shepherds have a higher than normal incidence of Von Willebrand disease, a common inherited bleeding disorder, and exocrine pancreatic insufficiency (EPI), a degenerative disease of the pancreas. It is estimated that 1% of the UK GSD population suffers from this disease. Treatment is usually provided in the form of pancreatic supplements taken with food.

Skeletal health and supplementation

Musculoskeletal disorders are debilitating conditions that are often associated with genetic makeup, malnutrition, and stress-related events. Some breeds like the German shepherd, are predisposed to a variety of different skeletal disorders, including but not limited to: canine hip dysplasia, Cauda equina syndrome, and osteoarthritis. These conditions can be a result of poor breeding or induced by intense exercise and poor diet.

Canine hip dysplasia (CHD) is an orthopedic condition resulting from abnormal development of the hip joint and surrounding tissue causing the instability and partial dislocation of the hip joint, resulting in pain, inflammation, lameness, and potentially osteoarthritis of the joint. German shepherds are genetically predisposed to CHD and the University of Veterinary Medicine in Germany found its prevalence estimated to be approximately 35% of veterinary cases associated with the disorder.

Osteoarthritis is one of the main contributors of musculoskeletal pain and disabilities that commonly affect German shepherds. Mechanical stress, oxidative damage and inflammatory mediators combine to induce the gradual degeneration of the articular cartilage in the joint, resulting in reduced muscle mass, pain, and locomotion.

Feeding a well-balanced diet designed for large breeds like the German shepherd to ensure adequate growth rates and proper maintenance of musculoskeletal health is essential. Dietary energy levels should be monitored and controlled throughout all life stages and activity levels of the German

shepherd to assist in the prevention and treatment of musculoskeletal disorder symptoms. Several dietary factors play a crucial role in maintaining skeletal health and are described as follows:

Appropriate calcium levels are vital in developing a strong skeletal system and aid in preventing orthopaedic diseases like Canine Hip Dysplasia. Furthermore, the ratio of calcium and phosphorus must be balanced and at a recommended ratio of 1.2:1 to ensure proper bone development and structure. Imbalances in calcium and phosphorus levels can result in various skeletal complications.¹ Excess phosphorus can produce lesions in bones whereas excessive calcium can lead to hypocalcaemia and result in excess bone deposition, interfering with normal bone development. In extreme circumstances of insufficient calcium intake, bone resorption can occur due to the body withdrawing calcium deposits from the skeletal frame as a last resort to fulfill dietary needs.

Omega-3 fatty acids such as eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), have been shown to be highly effective in the prevention of cartilage catabolism in *in vitro* models, suggesting that its supplementation in food could aid in decreasing the symptoms of osteoarthritis in German shepherds. Furthermore, EPA and DHA inhibit key regulators of the inflammatory process and suppress their activation which can help alleviate pain and reduce inflamed joints associated with many skeletal disorders. Ensuring an appropriate ratio of omega-3 to omega-6 fatty acids of approximately 5:1 is very important for inflammation processes. Animals source, specifically marine life such as fish, krill, and mussels, and plant sources such as flaxseed, soybean and canola oil, are particularly rich in omega-3 fatty acids.

Glucosamine is an amino-monosaccharide that naturally occurs in all tissues, particularly in articular cartilage of joints and from the biosynthesis of glucose. Natural synthesis of glucosamine occurs in the extracellular matrix of articular cartilage in joints. However, as a result of damage to the joint or cartilage, there is decreased ability to synthesize glucosamine resulting in the deterioration of the joint, and supplementation is required. Clinical trials of long term administration of glucosamine in German Shepherds have reduced symptoms of degenerative joint disease and accelerated cartilage healing. Anti-inflammatory effects of glucosamine are believed to contribute to the reduction of pain, promote joint recovery and mobility, and prevent further cartilage degradation. Similarly, chondroitin supplementation is proposed to have comparable results in inhibiting degradative enzymes within the cartilage matrix to reduce the effects of osteoarthritis, but further research is required to assess long term benefits.

Vitamins such as A and D also have crucial roles in bone development and maintenance by regulating bone and calcium metabolism.¹ Adequate levels should be incorporated into a German shepherd diet to promote a healthy musculoskeletal system.

In popular culture[



Strongheart, one of the earliest canine stars (1921)

German Shepherds have been featured in a wide range of media. In 1921 Strongheart became one of the earliest canine film stars, and was followed in 1922 by Rin Tin Tin, who is considered the most famous German Shepherd. Both have stars on the Hollywood Walk of Fame. Batman's dog Ace the Bat-Hound appeared in the Batman comic books, initially in 1955, through 1964. Between 1964 and 2007, his appearances were sporadic.

A German Shepherd named Inspector Rex is the star of an Austrian Police procedural drama program of the same name, which won many awards, where German Shepherd Rex assists the Vienna *Kriminalpolizei* homicide unit. The show was aired in many languages.

Kántor (Cantor) was a famous and very successful police dog in Hungary in the 1950s and early 1960s. After his death his story was popularized by a two-volume novel by Rudolf Szamos, titled *Kántor, the detective* (Kántor nyomoz) and *Kántor in the metropolis* (Kántor a nagyvárosban). The novel wasn't entirely historically accurate. In 1975 a television miniseries titled [Kántor] was also created, which was only very loosely based on the actual dog's story, setting the events more than a decade after the real Kántor died. Nonetheless it became one of the staple productions of Hungarian television history, making German Shepherds the most popular dog breed in the country ever since