



QUESTIONABLE PHENOTYPIC TRAITS IN THE ROTTWEILER

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Controversy has broken out among Rottweiler fans. Differences of opinion between breeders across the world are becoming increasingly evident. Preferences are drifting apart when it comes to selecting stud dogs and bitches to breed from and judging dogs at shows, and it seems that two camps have emerged. A second type of Rottweiler has appeared alongside the type reflecting the traditional breed standard which has existed for decades. While the new type is prized by quite a few people, it must nevertheless, on closer inspection, be deemed problematic. The new Rottweilers have striking features – especially in the head area, but also in relation to their physique more generally – which have developed

due to exaggerated interpretations of the breed standard. The animals in question are not only poor exponents of the traditional breed standard – no, they are also susceptible to health risks which are both serious and avoidable. The next three sections of this text will describe the problematic traits alluded to above and sketch out a proposal for practicable counter-measures. But before moving on to look at specific issues in detail, let us first contemplate the difference between a healthy breed population and one which must already be considered threatened; this is a distinction which could become relevant for Rottweilers more quickly than any of us would likely care to acknowledge.

ROTTWEILERS IN ACTION

Looking at the breed as a whole – are Rottweilers in a good place now, or should alarm bells already be ringing? What criteria should be used to even start finding the answers to a question like this? Should we make targeted changes to how breeding strategies are applied to make sure we are exercising the power we have as breeders responsibly? This text sets out to provide answers to all three questions, albeit in a fragmentary fashion and focusing on a single major issue.

Speaking in very general terms, all is right in the world of Rottweilers ...

- ... when the vast majority of its representatives come quite close to the desired ideal type and are capable of performing the activities expected of the breed
- ... when health disorders occur only at normal levels
- ... when a high degree of biological fitness can be registered across a range of criteria (fertility, resilience to injury, life expectancy, and so on)
- ... when a relatively high level of genetic diversity is present within the population
- ... when the animals have the chance to live in circumstances conducive to their welfare

A genuine Rottweiler stands for a high ideal. With its particular physique, locomotion and behavioural characteristics, such a dog is predestined for a fulfilled life with a family, gratifying results in utility dog and tracking dog trials and successful service as a rescue dog, a police dog or in another important role. Being able to lead such happy and productive lives depends on numerous criteria: dogs must be eager to work, but also relaxed and able to calm themselves quickly. They must be capable of learning, and they need social skills, strength, physical stamina, mental resilience and exceptional agility in young years and later in life. And they must have not traits which stand in the way of achieving this. The author with a fit and agile Rottweiler that is even tempered at the same time



This brings us to the topic of the next two sections. Some anatomical characteristics are essential for the social behaviour, behaviour in action and versatility of the Rottweiler, but others are entirely incompatible with it. While this might initially sound like the beginning of a piece of architectural criticism, the anatomy of the Rottweiler's head is a rather critical issue for reasons which will be outlined below



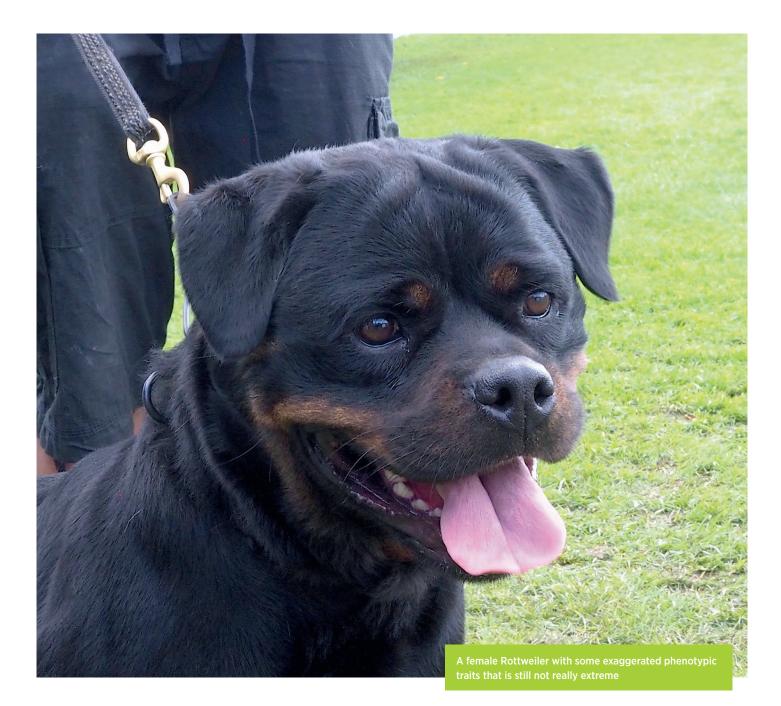
A male Rottweiler with some exaggerated phenotypic traits that is still not really extreme

HEAD AND BODY PROPORTIONS

Dogs noted for their striking stature, conspicuously long hair or conspicuously short legs are often given rather dubious looks. But the debates on such potentially questionable characteristics are very low key indeed in comparison with the controversy engendered by brachycephalic breeds. Dogs belonging to brachycephalic breeds have short, wide, rather spherical-looking heads and muzzles that are short in relation to the length of the cranial region. Reliable scientific measurements showing the extent of this effect can be achieved only through X-rays or when measuring the prepared skulls of dead animals. Pugs and English bulldogs are the most obvious exponents of brachycephalic breeds, and both assuredly count among the pedigree breeds that attract the greatest levels of scepticism and are increasingly seeing breeders come under pressure. And for understandable reasons. Individual dogs belonging to breeds with brachycephalic head shapes can have breathing difficulties and problems with their nervous systems attributable to deformation, and these dogs suffer. In this light, many authors speak of a Brachycephalic Syndrome or more specifically of Brachycephalic Obstructive Airway Syndrome (BOAS). Logically enough, these symptoms become all the more obvious

during hot summer weather or strenuous efforts. But even in everyday life, being the keeper of a brachycephalic dog can create difficulties. Some airlines refuse to transport such dogs, for example, out of a fear that they might be more likely than others to come to harm or to die as a result of the strain of travel. To be absolutely clear, not all individuals belonging to even the most brachycephalic of breeds are affected by such difficulties, but only a proportion or as good as none of them as for example in the Boxer. The topic as a whole is, nevertheless, complicated and controversial – and not only politically.

In its traditional form, honed over decades, the Rottweiler is about as far removed from brachycephaly as a cow is from playing the piano. With its considerable vigour, it belongs at the more moderate and sprightly end of the spectrum of molossoid dog breeds. For many years, this statement was quite unconditionally true, but in light of recent developments, it has, worryingly, become rather less so. A group of Rottweilers with FCI-recognised pedigrees representing a new and frankly rather dubious type of dog has now come into existence. It will be discussed below in four steps.



Step 1: Description of individual undesirable phenotypic traits in the head area – initially described separately

Dogs and bitches with one or more of the following traits are now increasingly being seen:

- Heads that appear to be incredibly wide (broad) while at the same time also being rather short; in exceptional cases, the head can appear even wider than it is long.
- Excessively voluminous heads; these are naturally also very wide
- Bulging in the cranial region which makes the head look practically balloon-shaped in a side-on view
- Very, very marked stops
- Greatly accentuated frontal grooves
- Muzzles which are too short in relation to the cranial region, and often also too narrow
- Round eyes

- Not enough volume in the foreface immediately below the eyes
- Underdeveloped zygomatic arches
- Flat cheeks and pronounced masticatory muscles
- Divergent transitions from the upper skull to the muzzle in the sense that the bridge of the nose rises to the tip of the snout, while the cranium has the usual shape
- Loose skin in the throat region; an excessive number of skin folds on the cranium, an excessive number of skin folds on the cheeks; heavy-set lips; corners of lips heavy and open; generally weak connective tissue
- Misaligned teeth
- Unnaturally loud breathing noises



A male Rottweiler that might not be perfect, but surely doesn't show any exaggerations

Step 2: An exploration of the combined effect of undesirable phenotypic traits in the head area

If the conformation faults listed in Step 1 occurred only in isolated cases and independently of each other, there would be no need for any action. But the reality is, worryingly, that these faults are typically seen in combination in the majority of cases. And the whole is more than the sum of the parts, as Gestalt theoreticians - and others before and after them - have stressed and substantiated since the beginning of the twentieth century; the principle still holds true today. When a generous selection of the characteristics described above are found in a single animal, the overall result is unmistakeable - and, by and large, rather dysmorphic - and it creates a very particular impression on the observer. We find ourselves looking, in such cases, at a kind of "Bully-Rottweiler", an animal with a very different expression from the regular Rotti as we knew them from the postwar period up to the present. This is not to deny that four-legged individuals with these exaggerated molossoid characteristics existed 50 years ago. But back then, they were barely visible amid the masses of Rottweilers that we could describe - in the most positive sense of the word - as moderate.

Step 3: Risk assessment in relation to the complex of traits of concern in the head area

The issues thrown up by the type of dog described in Step 2 as a "Bully Rottweiler" is not merely a matter of aesthetics. The risks are greater than that. Severe functional impairments could potentially arise, and the fitness of dogs could end up being compromised. Reports of dogs with breathing difficulties that have abruptly keeled over sideways, their consciousness clouded, are alarm signals that deserve to be taken seriously. We cannot overlook red flags pointing in the direction of discomfort, suffering and premature ageing without making ourselves culpable. The dogs and their health must be our absolute priority.

But the welfare of the dogs is not all that is at stake: the position of breeders could also become difficult. If the proportion of individuals with "Bully-Rottweiler-Syndrome" in the overall population continues to rise, it is possible that scientists and politicians could classify the Rottweiler as a brachycephalic breed. And if that came about, the breeding associations and kennel clubs would not have a leg to stand on. Tight restrictions or even bans on breeding could follow. Rottweilers do not, in any case, have an unblemished reputation in every quarter; if the breed were also to be dragged into the controversy raging on brachycephalic features, its long-term existence could be threatened. In dedicating ourselves to the cause of moderate and sprightly Rottweilers, we can improve the future outlook of the breed as a whole.

Step 4: Links between these insights into head traits and characteristics of the musculoskeletal system

Up to now, we have focused mostly on the heads of Rottweilers and courted controversy by deriving the term "Bully Rottweiler" from a particular head shape. This head type can be, but is not always, accompanied by additional severe faults: an excessively molossoid, heavy, and thick-set overall appearance, sluggish movements, a lack of agility, overly thick bones, and loose skin all over the body. If an individual like this is exercised in leisure time and in sporting or service contexts and encouraged to jump every now and again, it suffers more "wear and tear" than an ordinary Rottweiler. Neither the dog nor the owner are well served by this - and we are omitting the question of the dog's life-expectancy entirely here. Changing Rottweilers from active leisure time partners to listless caged animals would flagrantly violate the principle of animal protection. In that light, taking measured and levelheaded action to prevent the undesirable "Bully Rottweiler" type from becoming more widespread - at least in its most extreme forms - is a task every responsible individual and club should step up to. While more radical approaches might seem to offer more rapid routes to addressing the problem, moving too quickly would be a fatal blunder. The last section, just below, explains why this would be the case.

SCOPE FOR ACTION

What should be done? Only three significant action areas from the considerable range of options that have already been realised or may be realised in the future will be discussed here. The vast majority of the members of ADRK, the Allgemeiner Deutscher Rottweiler-Klub e.V, recently recognised the necessity to alter several formulations in the breed standard to ensure the Rottweiler stays what it was always intended to be. The idea behind this move was not to change the ideal type in any way, but to clarify the long-standing conception off the ideal by describing it more pithily and giving more emphasis to key points. With the cooperation of the VDH and the FCI, the changes to the breed standard have now been officially recognized and were published on 24 July 2018. The International Federation of Rottweiler Friends (IFR) is also backing the implementation of the new standard. Most of the changes to the breed standard relate to efforts to avoid any kind of exaggeration in its implementation. For the sake of completeness, all of the innovations in the new standard will be listed here.



Change Number 1 Concerning "Brief Historical Summery": "Rottweiler breeders aim at a dog of abundant strength, black coated with clearly defined rich tan markings, whose powerful appearance does not lack nobility and which is exceptionally well suited to being a companion, service, rescue and working dog."

The Rottweilers' role as a rescue dog has been integrated into the standard for the first time; while Rottweilers have always made excellent rescue dogs, this had, astonishingly, previously never been mentioned.

Change Number 2 Concerning "Behaviour / Temperament": "He reacts to his surroundings with great alertness and at the same time even-tempered."

This simple clarification underscores the calm, even temperament of Rottweilers when they are given adequate attention.

Change Number 3 Concerning "Skull":

"Of medium length, relatively broad between the ears. Forehead line moderately arched as seen from the side. Occipital bone well developed without being conspicuous."

This has been stated more precisely than before to guard against the misconception that a Rottweiler skull which is extremely wide (broad) from ear to ear is well-formed.

Change Number 4 Concerning "Stop": "Stop relatively strong. Frontal groove not too deep."

Exaggerated stops are undesirable. Overly deep frontal grooves are disfiguring and associated, moreover, with health risks.

Change Number 5 Concerning "Muzzle": "The ratio between the length of the muzzle and the length of the

skull is about 1 to 1,5."

This is a formal codification of a principle the ADRK has been preaching for years. The quoted sentence makes particularly good sense when read in combination with Change No. 8 (see below) in the part of the text dealing with faults.

Change Number 6 Concerning "Tail":

"In natural condition, strong, level in extension of the upper line; while paying attention, when exited or while moving it can be carried upward in a light curve; at ease may be hanging. While positioned along the leg, the tail reaches approximately to the hocks or is a bit longer."

A somewhat more apposite description which should not be overinterpreted.

Change Number 7 Concerning "Faults / Head":

"Hound-type head. Narrow, light, too short, long, coarse or excessively molossoid head; excessively broad skull, lack of stop, too little stop or too strong stop. Very deep frontal groove."

The clarifying comments on these points serve to document that these features are definitively considered undesirable and unworthy of promotion, but that judges have considerable leeway to view them in the overall context of the remaining characteristics of a dog. Change Number 8 Concerning "Faults / Foreface": "Long, pointed or too short muzzle (any muzzle shorter than 40 percent of the length of the head is too short)"

The ambiguity in the old formulation has been eliminated and replaced with a clear statement. The percentage is given as a point of reference. It is not intended to suggest that exact measurements are always reliable or useful. Skilled experts will often form a more valid picture by carefully reflecting on the evidence of their own eyes.

Change Number 9 Concerning "Faults / Bite": "Molars of the underjaw not standing in one line."

It is not always easy to check this in every situation, but the basic idea has not become any less significant over the years.

Change Number 10 Concerning "Faults / Ears": "Set on too low or too high, heavy, long, slack or turned backwards. Also flying ears or ears not carried symmetricaly."

A simple clarification prompted by the experiences of recent years.

Change Number 11 Concerning "Faults / Forequarters": "Narrow, crooked or not parallel standing front legs."

Breeders should do their utmost to combat functional impairments.

Change Number 12 Concerning "Severe Faults / General Appearance": "Too molossoid type and heavy general appearance."

This sentence is self-explanatory. Rottweilers are burly, but also relish being active. As such, they should never be extremely heavy and muscle-bound.

Change Number 13 Concerning "Severe Faults / General Appearance": "Skin at the head strongly wrinkled, strong wrinkles in the area of the forehead, the muzzle and the cheeks, strong dewlap."

These attributes cannot be reconciled with the ideal breed standard.

Change Number 14 Concerning "Severe Faults / Gait": "Sluggish action while trotting."

A utility dog must be able to move efficiently and with ease. Significant limitations in this respect should have a strongly negative influence on the evaluation of these dogs.

Change Number 15 Concerning "Disqualifying Faults / Tail": "Kink tail, ring-tail, with strong lateral deviation, natural bobtail."

Faults counted as disqualifying faults in the breed standard should, in the opinions of both ADRK and VDH, lead to dogs being disqualified at shows and excluded from breeding – even if this is not quite provided for in the FCI regulations. A strong, undocked tail helps Rottweilers execute a huge variety of movements. Natural bobtails do not meet this standard and occur only very rarely.



The three points of measurement while deciding on the ratio between skull and muzzle are not always easily to be found in practice. Is the marking zero in the right position?

Now that the changes to the standard have been explained, hopefully convincingly, the question as to how to the priorities underlying them can best be pursued to bring about practical improvements to the situation remains to be clarified. The points given the most consideration need to shift somewhat so that exaggerated interpretations of the standard no longer lead to success at the highest levels. Training for judges will be essential in this regard, but working hard to convince people at every level will be even more important. Will the breeders, people in the market for a puppy and judges who have developed a preference for Rottweilers with foreshortened heads in recent years stick to their preference for this particular type of dog once they have been made aware of the associated risks and side effects? Nobody can predict that with any certainty. But awareness campaigns are certainly worth attempting.

Whether measuring and measurements will prove useful is also a question that will remain open until efforts have progressed further. In the direct sphere of influence of ADRK, a head template is used in breeding suitability testing. While the bottom of the rigid template cannot follow the contours of the head being measured exactly, it can provide some useful information. Point zero on the template is positioned at the frontal edge of the dog's eyes. Muzzle length (measured to the front of the nose) and cranial length (measured to the occipital protuberance) can then be read off the template. While that may sound good in theory, it does not always work out so well in practice. The discussion as to the exact point which should be identified as zero for the purposes of the template (the corner of the eye or the lens?) is still ongoing. And try attempting to replicate picture-perfect images of wellpositioned templates with slightly impatient dogs; afterwards, you will realize why boundless optimism on the subject of head measurements in Rottweilers would be misplaced. Those responsible for overseeing breeding have, however, made considerable progress towards agreeing on a standard in recent weeks and months. Statistics gathered before 2018 cannot, however, be relied on in any meaningful sense: the measurement methods used were simply too divergent. How successful future measurement approaches will be remains to be seen. Empirical verification of the 40:60 muzzle to cranial length ratio could lead to progress. Or perhaps simple estimation of muzzle lengths could prove useful. One rule of thumb which seems generally sound is that a dog's muzzle should be no shorter than nine centimetres and a bitch's no

shorter than eight centimetres. This in dogs with the typical traits of their respective genders.

To some extent, these problems are home-made. And this time, it is not the judges who must take the blame. Print media, social networks and television exert enormous influence on our moods and feelings. We crave what is special, extravagant and innovative and neglect what is normal. Redesigned Rottweilers with extreme characteristics fit all too well into this picture. Magazines for dog lovers even shorten the muzzles of Rottweilers in their advertising using Photoshop to make the overall impression more stocky and imposing. A pretty background, and the money rolls in, ker-ching! And what has our own PR done to counteract this trend? Practically nothing. Kennel Club magazines and breed association Facebook pages could be more attractive, and they should be more attractive. We must present great pictures of average Rottweilers with unspectacular head and body proportions again and again, in high quality and on glossy backgrounds, in ways that kindle emotions. We must use magazines and Internet-based media to tell exciting stories. Then the current craze for animals with these exaggerated features would gradually die down.

In the struggle against Juvenile Laryngeal Paralysis and Polyneuropathy (JLPP), a monogenic autosomal recessive disorder, the mistake is being made - to a worrying extent - that carriers are not being bred often enough even though their pairing with homozygous normal ("clear") dogs is unproblematic. While this approach flies in the face of biology, it seemingly enables higher prices to be realised for puppies. This is definitely harmful for the development of the breed as a whole: too much genetic diversity is being lost in this way, and with it too much health and fitness and too much life expectancy. If all Rottweilers with overly short muzzles were radically excluded from breeding from one day to the next, this would prove similarly problematic. However well intended, such a step would be an unfortunate step backwards in terms of the overall health of the breed. Tackling the problem slowly and over a lengthy period of time with measured selection pressure represents the best option. This would preserve valuable genetic diversity to the greatest possible extent, as well as leaving room - within acceptable boundaries - for personal preferences. And it would assure our favourite breed a fantastic future.