

THE ZYGOMATIC ARCH AND MUZZLE CORRELATION OF THE ROTTWEILER HEAD

by Steve Wolfson



While ring stewarding for a recent US sieger show, the ADRK judge commented to me that most of the dogs and bitches were faulty in the heads and muzzles. Asking him for clarification on his comment he replied, "They don't have enough zygomatic arch". Discussing this topic further, we both agreed that it was becoming problematic for us in America.

To appreciate the significance of judge's comments, one must revisit the section of the standard concerning the head, blueprint of Rottweiler head morphology. It is specific in this area stating, "**Zygomatic arch and stop well developed with strong upper and lower jaws...Muzzle is broad at base**". (1)

The Rottweiler head is unique; there is no other like it. The standard acknowledges this by describing in detail the many impressive features of the Rottweiler head. These three elements, the shortened broad muzzle, strong stop and zygomatic arch are anatomically correlated. The broad muzzle with strong zygomatic arch, so typical of the breed and a major factor in its popularity, is now becoming infrequent. Today, we see most Rottweilers with the correlation of the zygomatic arch and muzzle appearing incorrectly. With greater frequency, both dogs and bitches in the show ring are shallow in the zygomatic arch and because of that, lack correct width of muzzle at the base.

There is a fine balance between these elements. Changing the balance specified in the standard for the zygomatic arch and muzzle alters the symmetry and therefore, the **uniqueness** of the Rottweiler head.

It is important to know where the zygomatic arch is located on the Rottweiler head. **Fig.1** shows the arrow marking the zygomatic arch. Visually, it is connected to the lower orbit of the eye.

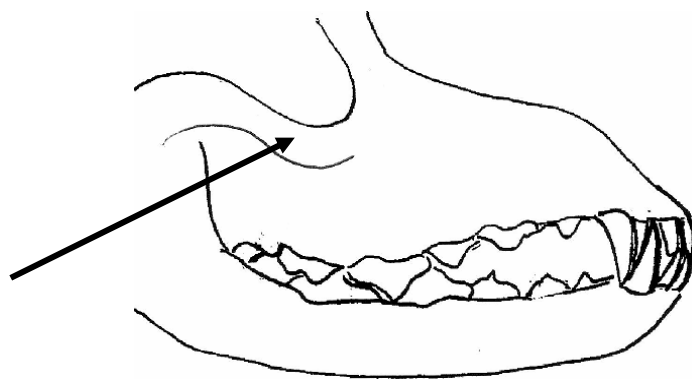


Fig. 1

When the zygomatic arch is shallow (also known as “lack of fill under the eye”), the muzzle at the base is narrow. A broad muzzle requires a strong zygomatic arch. Conversely, accompanying a strong zygomatic arch is a broad muzzle at the base . They are correlated.

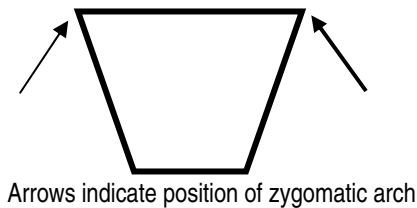


Fig. 2

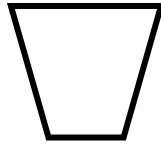


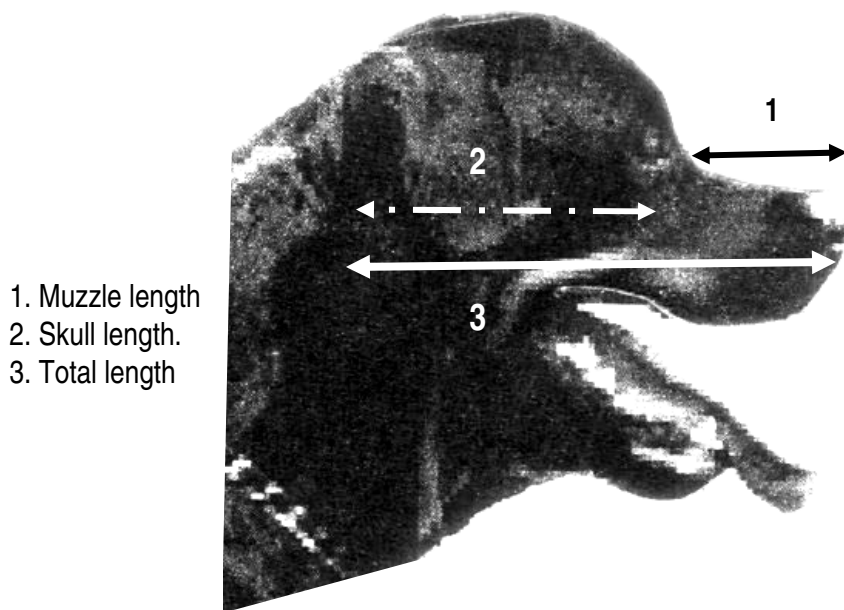
Fig. 3



Fig. 4

There are three different shapes (see above figures) of muzzles presently appearing in the gene pool. Only **Fig. 2** is correct for the Rottweiler. The correct muzzle should be wedge shaped, forming a wide based triangle, as in **Fig.2**. Lately, we are seeing both a conical shape (**Fig.3**) and a rectangular shape muzzle (**Fig.4**). These muzzles types, **Fig.3-4** are incorrect.

When observing Rottweiler muzzles, you will notice that exhibits who fall into categories Fig.3-4 posses a shallow zygomatic arch. Conversely, Rottweilers possessing correct zygomatic arch also have the correct muzzle width at the base specified in the standard (**Fig.2**).



To properly maintain the zygomatic arch and muzzle correlation, it is necessary to retain the correct skull to muzzle ratio of 3/2 or 60/40. The skull must be measured to asses the ratio specified in the standard. It cannot be done visually.

With a strong zygomatic arch and correct width of muzzle at the base, comes good width of the topskull. However, the reverse is not always true. Often a dog will have good width between the ears but not possess strong zygomatic arch or width of the muzzle at the base. Below are illustrations of strong zygomatic arch and correct width of the muzzle at the base.



Fig. 5

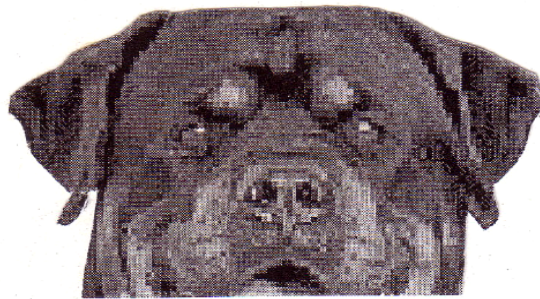


Fig. 6



Fig. 7



Fig. 8

It is also valuable to show heads with shallow zygomatic arch for comparison. (Fig.9-12). Note the topskulls are correct in skull to muzzle ratio (except fig.12) and width from ear to ear, but are incorrect for stops and zygomatic arch.



Fig. 9



Fig. 10



Fig. 11



Fig. 12

Fig 9 Shallow zygomatic arch and stop

Fig 10 Shallow zygomatic arch and almost no stop .

Fig 11 Some zygomatic arch but not correct for width of muzzle at the base

Fig 12 Shallow zygomatic arch and stop, long in muzzle

What is the significance for this correlation? Does this really matter one way or the other? The significance is great and important when you consider how a shallow zygomatic arch and narrow muzzle impacts on the breed type of the Rottweiler. The Rottweiler is a masculine, working breed and its head is its icon. This softening effect i.e., from the powerful, robust masculine appearance for the muzzle and upper jaw that the standard specifies, to the shallow, narrow based muzzle is feminizing and affects the breed negatively. From the standard:

GENERAL APPEARANCE:

The ideal Rottweiler is a medium large, robust and powerful dog, black with clearly defined rust markings. His compact and substantial build denotes great strength, agility and endurance. Dogs are characteristically more massive throughout with larger frame and heavier bone than bitches. Bitches are distinctly feminine, but without weakness of substance or structure. (2)

This is the general blueprint for the appearance of the Rottweiler and more importantly, how the standard wants to accentuate it. Although the standard mentions that bitches should be distinctly feminine, these words are included to safeguard against reversal of sex characteristics in dogs and bitches, rather than providing an excuse for softness of appearance, since it reiterates, **“without weakness of substance or structure”**.

Both Subtle and Profound

The departure from the full zygomatic arch and wide based muzzle is both subtle and profound. It is subtle, since alterations in breed type do not occur abruptly, but over long periods. Some years will transpire before we begin to notice that something has changed. Unfortunately, this has already taken place and its effects are being demonstrated in the show ring. Now, when a newcomer to the breed sees the exhibits in the show ring, he or she is inclined to identify the exhibits present as correct. If the observable head type is shallow in the zygomatic arch and the muzzle is cone shaped, then what is seen is thought to be typical. There is no basis for comparison. For example, a dog enters the ring that is very close to the standard. However, in many ways, all the other dogs entered are lacking in breed type. The unknowledgeable judge and spectator may look upon the correct specimen as incorrect simply because it does not conform to the rest of the bunch; it stands apart. The ribbon goes to the specimen that best conforms to the group.

Since changes in type can be irreversible, it is profound because this subtle alteration can be disastrous for the breed. Once fundamental changes in head type make their way into the gene pool, finding the stud dog, or brood bitch that has the great head type specified in the standard becomes rare and perhaps impossible. We wake up to discover what once was, is no more. The dogs that had the right stuff are no longer in the gene pool, they are long gone and their genes are not retrievable.

A Wake Up Call



Where are the masculine, powerful heads spelled out in the standard? How did the strong zygomatic arch and full, powerful muzzle, so typical of the Rottweiler head, begin to fade from view? This change certainly did not happen overnight. It occurred as a metamorphosis, slowly over the years. Many breeders placed their accents for a breeding program on areas other than type or not placing accents in a hierarchical order; they took a detour.

It is easier to breed for reasonably good Rottweiler gait, great hips, health clearances, great toplines, or other specific areas. Type however, is fundamental, most difficult to attain and infuse into a breeding program. If that were not true, then all breeders would have type perfectly set in their dogs. All dogs in the show-ring and out would be reasonably uniform in type. Currently, they are not.

How can we avoid this trend, a dramatic negative shift in the zygomatic arch and muzzles? First, be knowledgeable about the standard. Read it and learn it verbatim. Understand what type is and what it is not. Be most critical of your own dogs without making excuses or rationales. Set fundamental goals that are long term and lasting. Set type as your first priority.

(1-2) The American Rottweiler Club standard