Visualizing The Beardie Standard Fronts and Rears Cynthia Mahigian Moorhead

The Bearded Collie standard states, in its section on Forequarters:

The shoulders are well laid back at an angle of approximately 45°; a line drawn from the highest point of the shoulder blade to the forward point of articulation* approximates a right angle with a line from the forward point of articulation to the point of the elbow.

There are two principle forequarter angles, then:

(1) First, there is that angle which we take into consideration as "the layback." This simply means that a line drawn from point "d" ("the highest point of the shoulder blade") to point "a" ("the forward point of articulation"*) will form an approximate 45° angle with respect to an imaginary horizontal line. The "d-a" line should run midway – longwise – through the scapula, or shoulder blade. The resultant angle is labeled "X."

(2) Second, there is that angle which we view as a dog standing "well under itself," and which we usually call the "front angulation." This means that a line drawn from point "d" ("the highest point of the shoulder blade") to point "a" ("the forward point of articulation") will form an approximate 90° angle with respect to another line drawn from point "a" to the point of the elbow, parallelling the axis of the humerus, or upper arm. This angle is labeled "Y."

It is important to note that these are two different an gles, and represent different measurements; it is very easy to become confused in conversation when strictly correct terminology is not always used. In simplest terms,"front angulation" refers to the angle at which the scapula and humerus meet; ideally this should be approximately 90°. "Layback" is the angle set of the scapula; ideally at about 45°.

Two other "lines" of interest can be easily seen in the illustration: (1) Most of a Beardie's weight is supported by its forequarters (approximately 60%); this weight-bearing is distributed along a "vertical center of gravity." This "line" intersects the axis of the shoulder and the center of the heel pad as it touches the ground when the dog is at ease. (The axis of the shoulder is that "pivot" point which remains stationary when the pull of the muscles controlling forward movement is equalized with the pull of the muscles controlling backward move ment in the forequarters.) (2) As with many other long haired breeds, it is often difficult to immediately visually evaluate the forequarters angulation in a Beardie. A useful tool, therefore, for judges and other observers is the "visual approximation" of the center of gravity, shown here as the dotted line "d-e," which runs from the highest point of the shoulder, in line with the rear of the elbow joint, and to the ground slightly behind the heel pad as shown. Only when the front assembly approaches the ideal will these points align themselves properly, thereby giving a quick visual checkpoint from which to begin assessment.

Two final considerations:

(1) Although the length of the scapula ("a-b") should ideally equal the length of the humerus ("a-c"), the actual angle of the attachment of the radius-ulna, or lower arm, is relatively unimportant so long as the bones are straight and vertical when viewed from side or front. An appropriate upper structure will, in fact, make an appropriate lower structure more or less "automatic ally."

2) The Beardie standard calls only for pasterns which are "flexible

without weakness," without requiring any specific slope as some standards do. The pastern is moderately sloped in order to put the heel pad directly under the center of gravity, as well as to provide additional length of reach of foreleg and to increase the gripping power and leverage of the foot. It also functions as a shock absorber.

The combination of these components makes up the front assembly, which is responsible for providing the Beardie's primary balance and directional control. Front action is referred to as "reach."

As with forequarters, proper Beardie **hindquarters** are dependent on several and various angles, most easily viewed in diagrams. The standard states:

The hind legs are powerful and muscular at the thighs with well bent stifles. The hocks are low.

(1) First, there is the angle of the pelvis which delineates the "croup." The pelvis should be sloped at an angle of about 30° (line "r-s") with respect to an imaginary horizontal line, as shown by angle "P." For an excellent dis cussion of the croup, see Tom Davies' discussion in last issue, Vol. 12, No. 1, pages 4–5.

(2) Second, there is that angle made by the axis of the femur, or upper leg, intersecting the pelvic slope (line "t-u") at about 90°. This is what is commonly referred to as the "rear angulation," and is labeled angle "Q."

(3) There is the angle at the stifle joint, near "u", where the stifle – consisting of two bones, the tibia and fibula – articulates with the femur. (This angle may measure about 115°, and represents what is commonly meant by the phrase "a good bend of stifle.") The overall length of the stifle should at least equal the length of the femur.

(4) Then, there is that angle at the hock "joint," where it joins the lower end of the stifle. This is labeled angle "Z" and ideally should measure 45°. The standard calls for bones below the hocks to be "perpendicular to the ground," and for the hind feet to "fall just behind a perpendicular line from the point of buttock [line "A"] when viewed from the side." Note that this diagram is just a bit off according to that statement. To attain what that actually says would require an even longer stifle and correspondingly lower hock. On the other hand, this drawing does seem to look about right to me. Bear in mind, however, that it is the combination of the long stifle and low hock ("hocks well let down") that produces the typical Beardie leverage, and helps allow for the necessary "drive," or forward propulsion, of "a real working dog."

In order for movement to be balanced, and therefore most efficient, front and rear angulation must be the same. For that reason, where the ideal is not attainable, it is actually preferable to have a dog with a front and rear which are equally "off," rather than well-angulated at one end and not at the other. If the front and rear do not move with the same efficiency (i.e., if the reach and drive are not equal), the dog will be unbalanced and forced to compensate some how in his movement. These compensations represent weaknesses, and therefore are both undesirable and sub ject to breakdown. For an excellent discussion of what these compensations and/or weaknesses may be, see *Beardie Basics* (Rieseberg & McKinney) pp. 16–23.

*"Articulation" means "juncture" or "joint" in this case, of the shoulder blade with the humerus.

