

DEVELOPING A SCHEME FOR SCREENING BACKS & HIPS

Dr Karen Hedberg BVSc

In the French Bulldog we may face two significant structural bone problems – **hemivertebrae** and **hip dysplasia**. Whilst responsible breeders have accepted hip and back X-rays we still need to develop the breed average for the hips and determine what is acceptable for spines

Hemivertebrae

These are vertebrae that have not developed properly and as a result of being misshapen, can result in instability of the vertebral column (the back). When the back is unstable, pinching of the spinal cord and disc protrusion can occur. Many brachycephalic and/or screw tail breeds have hemivertebrae, with French Bulldogs having a high incidence.

The vast majority of French Bulldogs have at least 2-3 hemivertebrae but do not have significant problems. Hemivertebrae in the lumbar area and the last 2-3 vertebrae of the thoracic area (T10-T13) are more likely to cause problems in later life.

When screening, what we are looking for is the position of the hemivertebrae and whether they are causing any deviations of the spine, either away from a straight line (head to tail) or severe kinking of the spine resulting in pinching or narrowing of the spinal cord.

The best way to view the back is with two views, one lateral from the shoulders to the tail, and the other in the anterior/posterior view i.e. of the dog on its back.

For assessing hemivertebrae, the English have a type of scheme that has been functioning for some time. The scoring is as follows:-

Any hemivertebrae in T1-T7 (T = thoracic) - score 1 point for each abnormal vertebrae

Any hemivertebrae between T8 - T11 - score 2 points for each abnormal vertebrae

Any hemivertebrae affecting T12, T13 - score 3 points for each abnormal vertebrae

No comment has been made of lumbar hemivertebrae by the UK veterinarian who reads the UK X-rays. However these are highly undesirable as they are inherently unstable.

It has been suggested (by the UK Veterinarian) that one should not breed with backs that score over 10. Also, the suggested advice (from the same UK source) is to never breed from any dog or bitch with hemivertebrae at T12 or T13.

While I can understand the suggestions have merit, I would suggest for the present that we only record and note where the hemivertebrae occur and score the animals and record the figures. It is not suggested that we remove these animals from the breeding pool at this stage.

Hip dysplasia

Hip dysplasia is considered a significant problem in the breed and we need to screen for this. The best view is an anterior/posterior view i.e. of the dog stretched out on its back with the legs parallel.

At this stage we are developing a breed average for hips. Over time the data collected

via the hip grading scheme should establish the reasonable ranges to select for breeding purposes. Again I suggest we are presently gaining knowledge of the hip status of the entire breed. I would not be too hard at this stage unless there are obvious serious problems ie arthritis, excessive shallowness of socket with associated excessive looseness of ligaments.

Both x-rays can fit on a large plate with the screen divided along the long axis. Half the plate can be of the lateral view of the spine, the other half can be a vertical view of the hips and spine. Dogs should be screened over 12 months of age.

The two schemes should be considered simultaneously. Significant problems in both areas would be enough to suggest strongly that one should not breed with the animal.

Grading

Dr R S Wyburn OAM BVMS DVR PhD FACVSc MRCVS
Australasian Veterinary Radiology Service
PO Box 841
Margaret River WA 6285

The X-rays required for grading by Dr Wyburn will be a lateral and ventro-dorsal of the thoracic and lumbar spine (two X-ray plates).

Fees Hips \$90 Spine \$50 Hips and Spine \$120

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