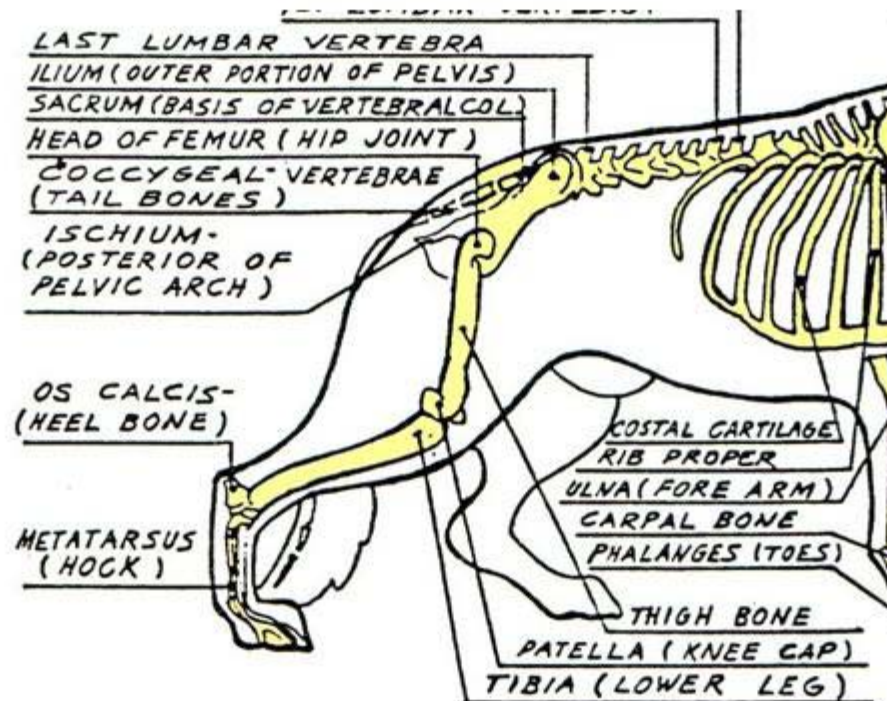


# Knowing the hind quarters



# Simple terminology of the bones of the hind quarters

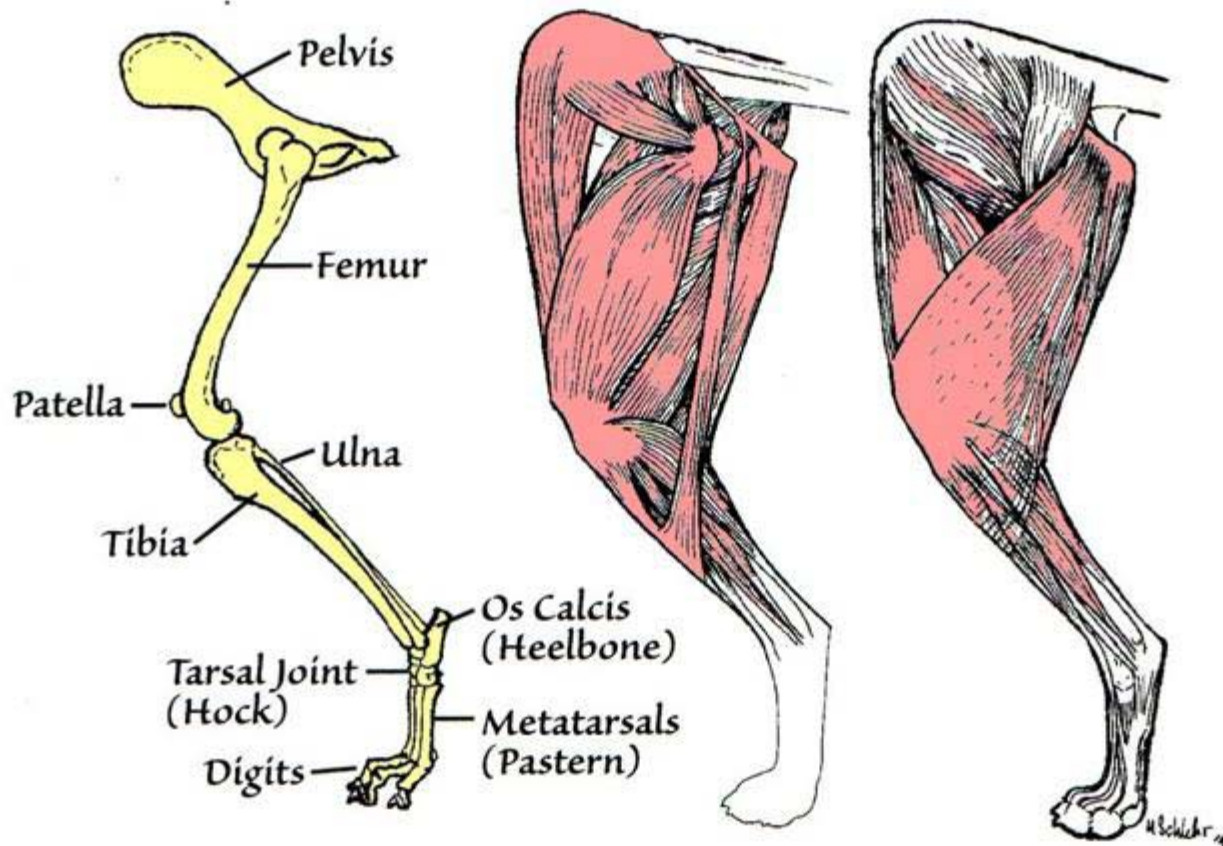
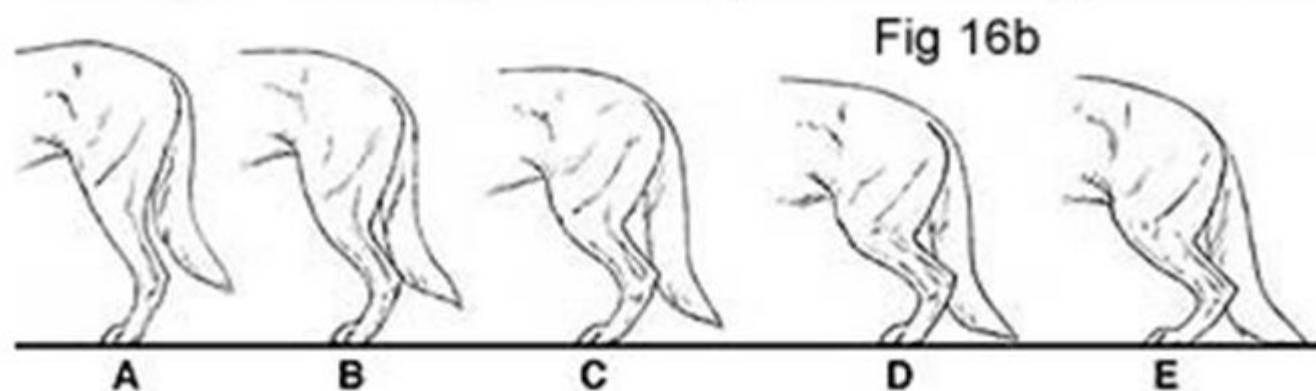
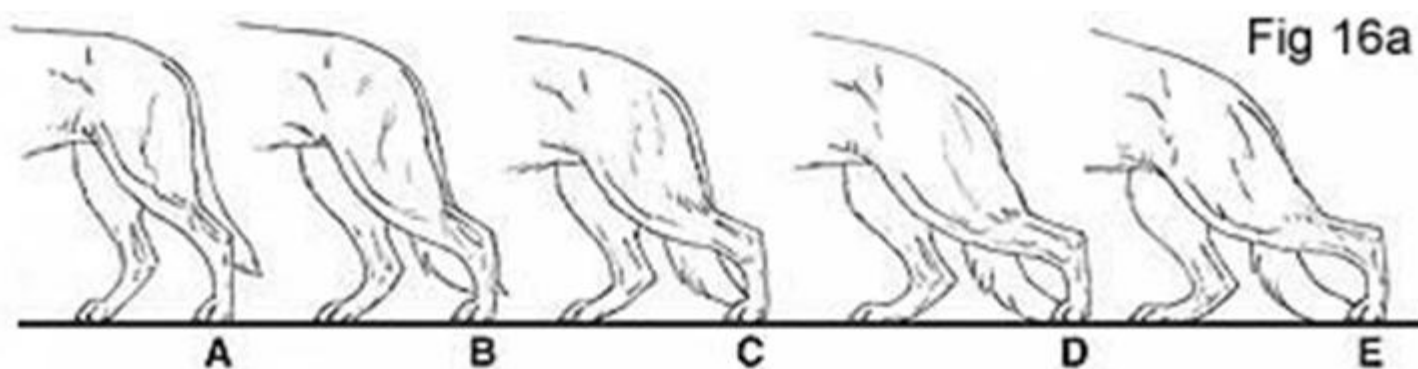


Fig. 1.21. The bones and muscles of the rear leg.

## Several degrees of hind angulation, both posed and unposed



Dog A has insufficient hind angulation and will show a short stride and stilted gait. Dog B shows a degree which is acceptable in a working dog, although it will not provide a roomy trot. **Dog C has ideal angulation**, enough for beautiful movement, but not so much that power is compromised. Dog D is excessively angulated, but still sound. It will show a beautiful gait at the trot, but may not be quite so powerful in jumping or galloping. **Dog E is over-angulated** and sickle hocked, and will show faulty propulsion and clumsy maneuverability.

The upper and lower thigh bones will be ideally angulated at about 95 degrees, the same as the shoulder. The standard suggests that the angle should approximate 120 degrees, but this must refer to the angle achieved at the stifle of the leg when drawn in a show stance.

Unfortunately, I find this not a particularly accurate way of measuring. Most dogs, once they learn to pose and are comfortable standing like this, will "settle" down in the hind quarters, showing a lower thigh which is more level with the ground than it normally would be and increasing the angle of the hock, altering the parallel relationship with the upper thigh (Fig 13). A skilled handler can make a dog look far more angulated than it really is.

Far better to measure the dog when it is standing naturally, unposed, with both hind legs together. The actual orientation of the leg bones are then far easier to see.

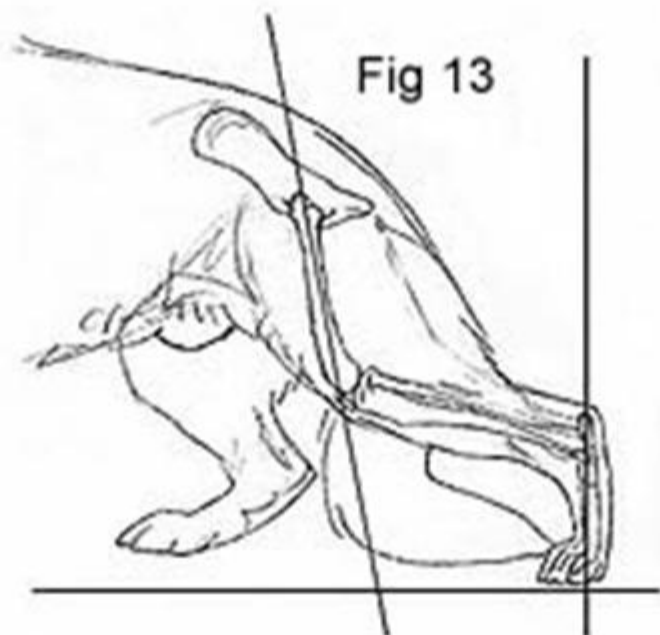




Fig 18



Fig 19

Cow hocks, where the hocks point towards each other to some degree, can be caused by two conditions, one sound, the other unsound, (or less sound).

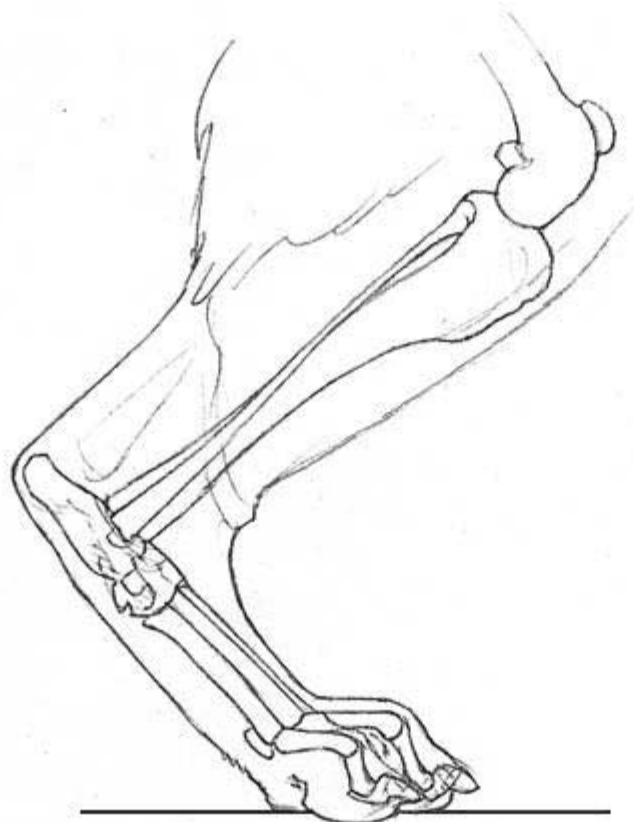
It can occur either because of a slight turning out of the entire leg from the hip, or because of twisting of the hock and stifle joints.

In the first, the dog may stand slightly wide behind, with toes and stifles pointing slightly outward, and hocks slightly inward.

This is common, and perfectly normal, as the long bones are straight in relation to each other.

How comfortable do you feel standing with your feet pointing straight ahead? However, the dog moves normally, the feet

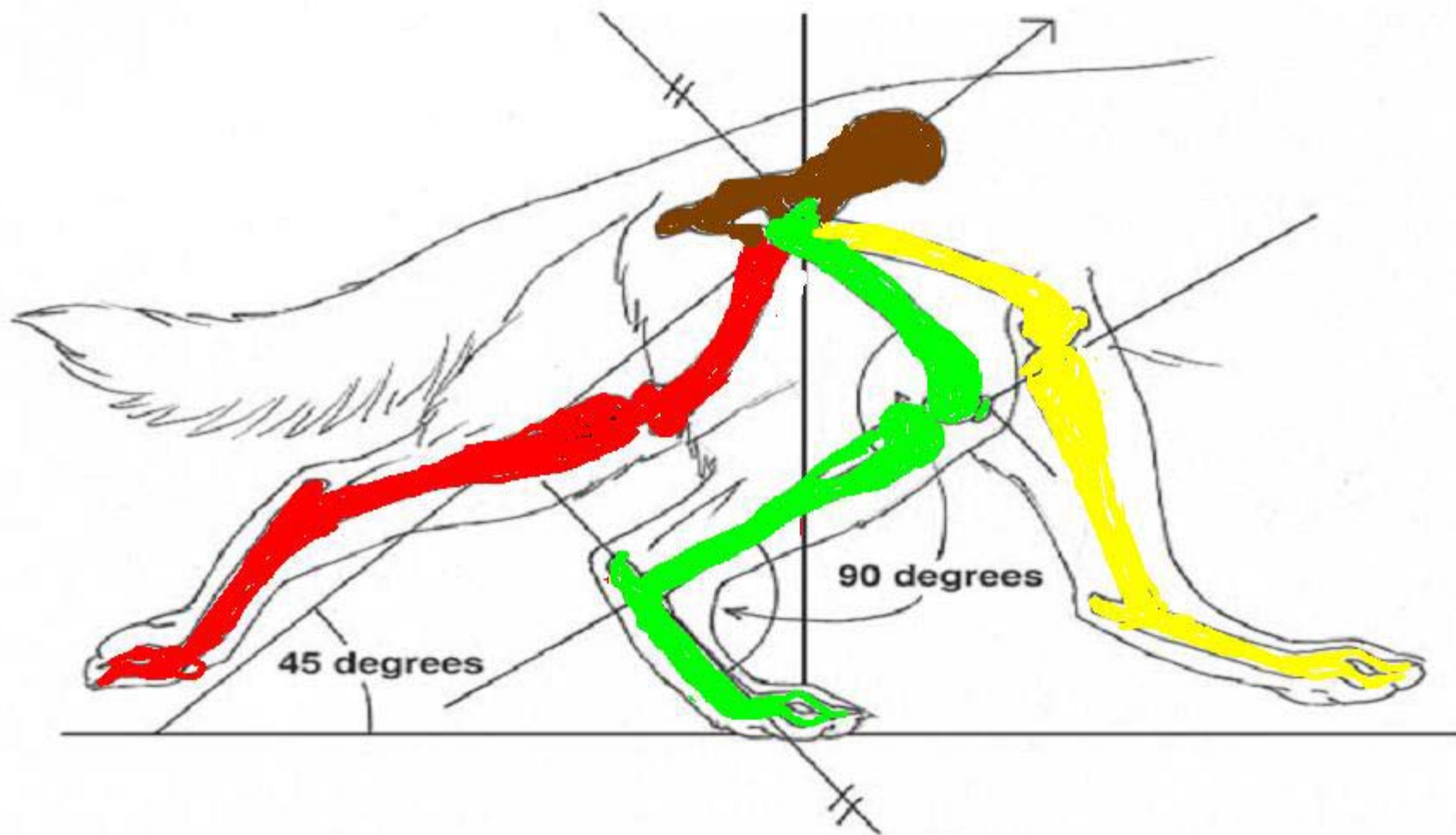




**Strong, arched, thickly padded paws are just as important in the rear as they are in the front**, because of the huge amount of force being transferred from the ground through the leg. The hind paw even delivers some propulsion of its own. Strongly arched toes are pulled forward as the foot drives back, stretching the tendons and gathering energy which is released when the foot leaves the ground, allowing a strong, snapping follow-through. The hind paw is generally somewhat smaller than the fore paw, reducing the point of contact, concentrating power and increasing traction.

Without powerful running gear in the rear, a dog's ability to work long hours, cover ground quickly and efficiently,...

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# **Why has over angulation become enemy no. 1 of our German Shepherd?**

I am calling it enemy no. 1 as most complaints breeders - including myself receive - are from pet owners –  
**my puppy is walking funny, my puppy is hopping, my puppy gets tired and sits down too much .....**

Puppies are then taken to the Vet who immediately tells the owner, the puppy has hip dysplasia and the puppy needs surgery and the costs are in the vicinity of R 8000 to 12 000.

**This is already so scary for the pet owner and the first thing going through the puppy owners' mind is:**

I should not have bought a German Shepherd

we were warned

(either by non-German Shepherd owners, by  
trainers, by Vets by other ignorant people)

**As a matter of interest:**

**German Shepherds have a low incidence of cranial cruciate rupture and disease when compared with other common breeds of similar size. It is postulated that this is due to the increased flexion of the stifle that alters the functional tibial plateau angle.**

**This is when the breeder receives the call .....**

## How do we react?

Every breeder has a different approach in how to deal with it, that is fine, as long as it is being dealt with in a professional and rational manner. Too many times I have been contacted by upset pet owners telling me breeders are not sympathetic to this problem.

The answer most frequently given by breeders is:

**Give it time they will grow out of it!!!**

This reply can be given  
**TO THE KNOWLEDGEABLE BUT NOT TO THE LAYMAN.**

## **And how should we react?**

Our reaction should be like a call to 911:

Know your questions to calm the person down and try to make sense of what he is trying to tell you.



The pet owner needs education, comfort, sympathy  
and above all sound advice.

The responsibility starts when mating a pair. The breeder has to know his lines with regard to any faults.

I personally can live with the fault of a short croup, provided the lay is good and the thighs are broad. (we all know to improve on the length of the croup is a mega task).

Over angulation however is a fault which should not be acceptable to any breeder.

It leads to very negative publicity and has an adverse effect on the marketability of our breed..

In the judges reports

we are now using the following terminology  
with regard to the structure of the hind quarter:

**Well-angulated, very well angulated,  
extremely angulated and over angulated hindquarter.**

**We as responsible breed supervisor** m u s t make sure that over angulation (loose hocks) is not becoming a problem like in Germany where drastic measures have been introduced.

It is interesting that in the breed ring we do not seem to have such a problem (which has been confirmed by most judges)

So why does this problem manifests itself in the pet Market?

Is it that the new puppy owner has not received information with regard to raising the puppy from the breeder?

Is it that the new puppy owner is not aware how important the environment actually is?

Is it that the new puppy owner is not aware how important the diet is?

Here again it is important that the BreedSupervisors are knowledgeable in order to help the breeder and the new puppy owner.

Sonia and myself have taken on this mammoth task to compile a comprehensive package with regard to the raising of a healthy puppy.