



Landmark Anatomy Outside of the Hoof

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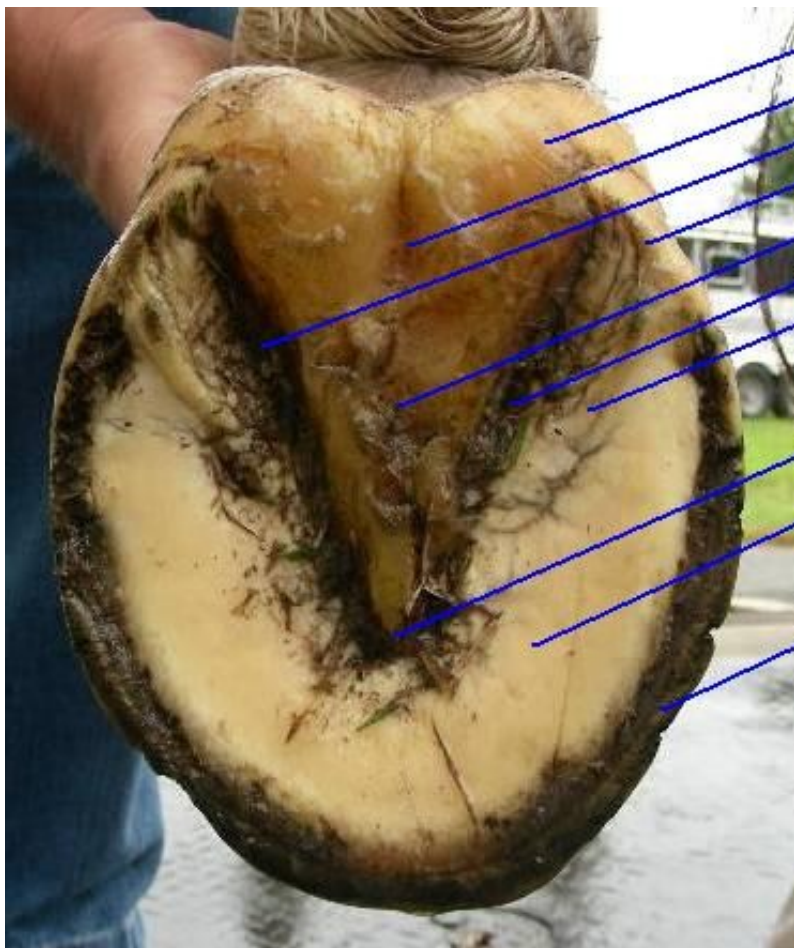
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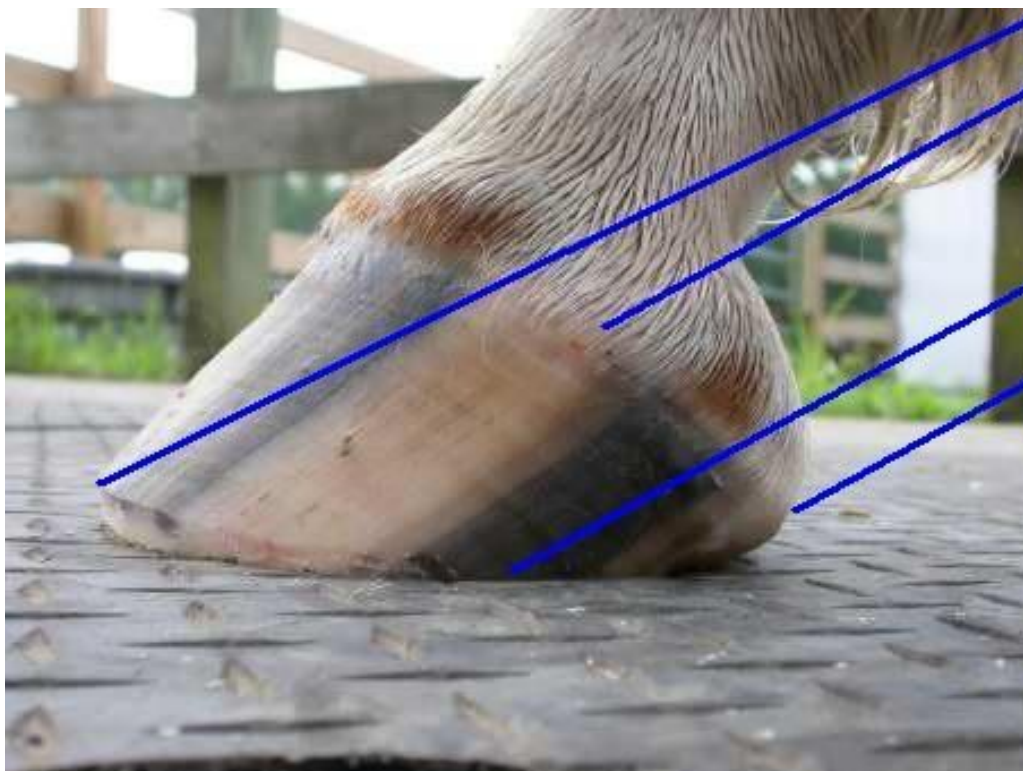
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- Bulb
- Central Sulcus
- Collateral Sulcus
- Heel Bar Triangle
- Frog
- Collateral Sulcus Bar
- Frog Apex
- Sole
- Wall



- Toe
- Coronet band
- Quarters
- Heel



Inside the Hoof

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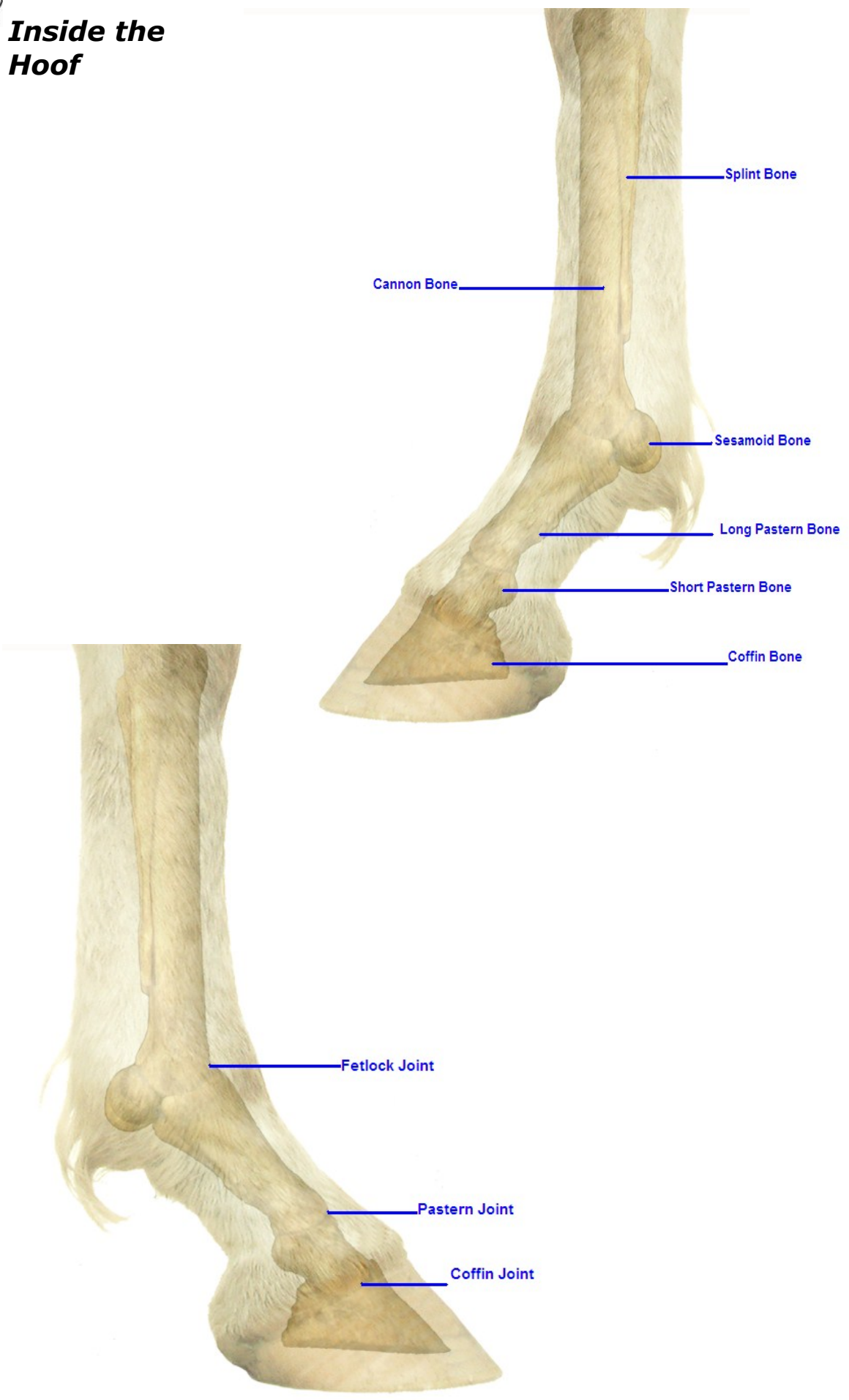
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Coffin Bone

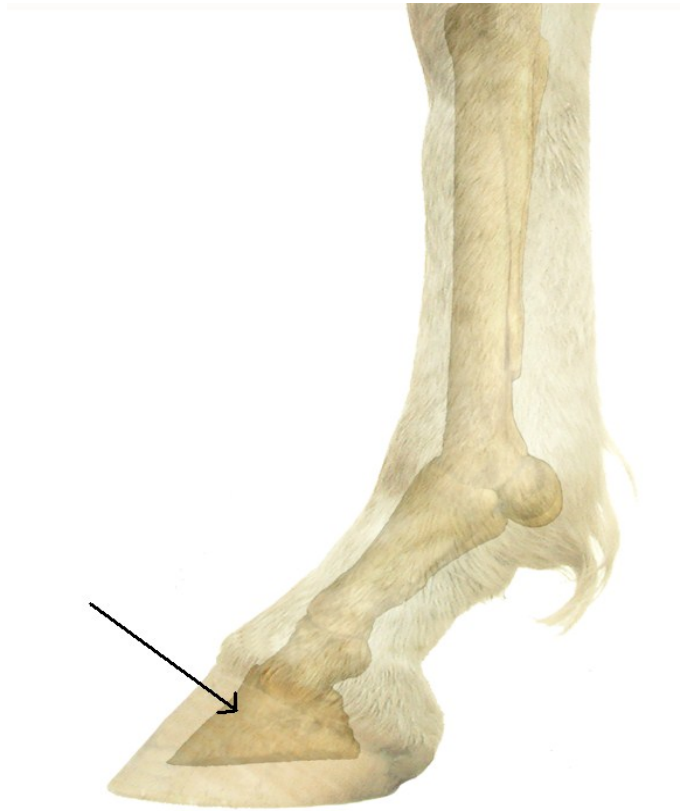
The coffin bone is different from any other bone in the horse's body.

The triangular shape is very strong.

This is the only bone that is covered by corium instead of periosteum*.

Corium produces horn. More about that later.

[*But the coffin bone does have a periosteum, it just does not react like the periostia in other skeletal structures, it does not become enlarged when injured.]



Navicular Bone

The navicular bone is situated in the back of the coffin bone and helps the deep digital flexor tendon to change direction from the horizontal connection on the coffin bone to the more upright direction of the bones above the coffin bone. Picture on right: This is how the navicular bone sits at the back of the coffin bone and below the short pastern bone



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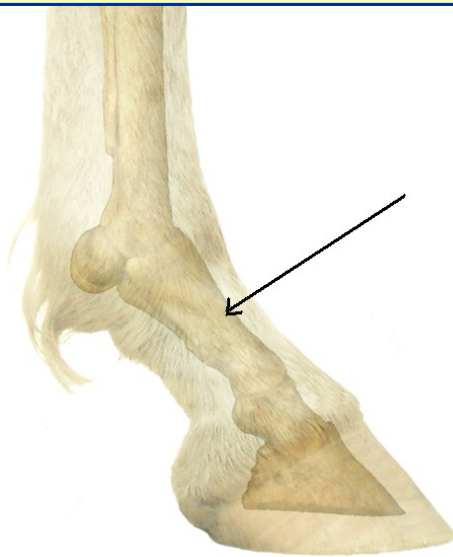
Short Pastern Bone

The short pastern bone sits partially in the hoof capsule. It connects the coffin bone with the long pastern bone. The coffin joint (connection between the coffin bone and the short pastern bone) can only move in two directions (back and forth), and the forward movement is restricted by the extensor process of the coffin bone (more about the extensor process when we talk about the coffin bone).



Why is this important?

How all the joints move will have far reaching importance when we assess later how to balance a hoof medio-laterally.



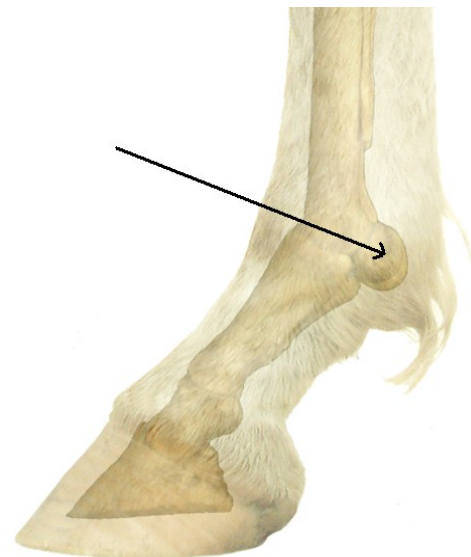
Long Pastern Bone

The long pastern bone forms the fetlock joint together with the cannon bone and the sesamoid bones.

Sesamoid Bone

The sesamoid bones help the tendons in the back of the hoof to make the turn and to run smoothly up the leg.

[These sesamoid bones are also known as the proximal sesamoids, while the navicular bone is known as the distal sesamoid. Both, the distal and the proximal sesamoid bones help the deep digital flexor tendon in changing directions.]

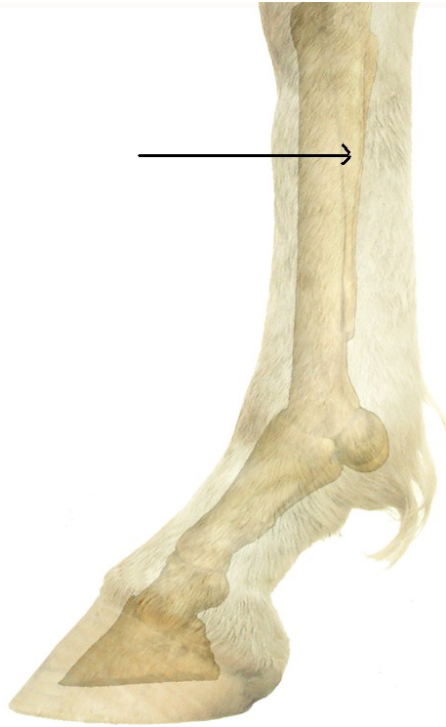


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Cannon Bone

The cannon bone forms on the lower end the fetlock joint with the long pastern bone. On the upper end it forms the carpal joint (knee) with an array of smaller bones.



Splint Bones

The splint bones are remnants from the development of the horse from a four-toed wood dweller to a one-toed open range animal. They are attached on both sides of upper end of the cannon bone and have no bony connection on their lower end.

Why is this important?

You need to be able to describe every structure in the hoof to your client. You yourself need to be very clear about the terms for all parts of the hoof as well as the skeletal structures (bones) and the skeletal hinges (joints), as these play a huge role in the future applications of your trim paradigm.

Pictures courtesy of Todd Merrell

Outside of the Hoof pictures HoofcareUnLtd.