### X-RAYS

Radiography is the main imaging diagnostic used to observe bone.

Electromagnetic waves are used to penetrate a body to create a picture.

More than 1 view is needed to appreciate the 3C structures present in the body. Examples of diagnoses that could be made via radiographic interpretation are chronic arthritis and fractures.

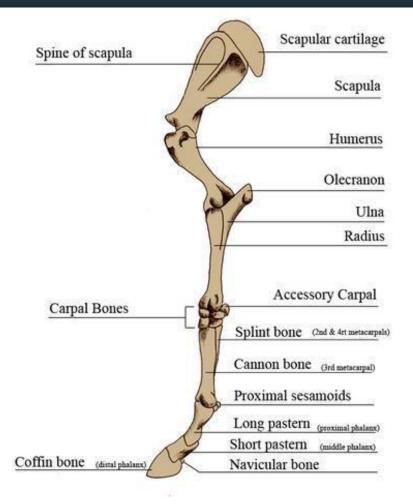
Due to the size of a horse, a portable X-ray machine is used.



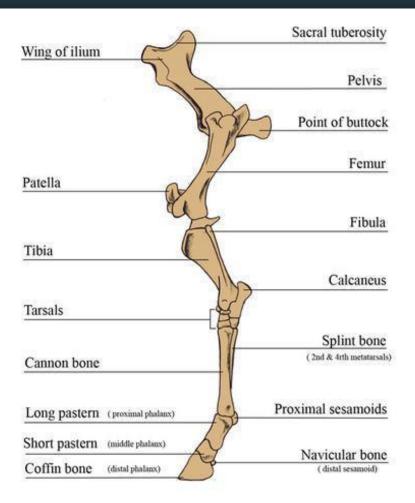
#### **Notable Points:**

- Turn your system on and calibrate it if needed.
- Input your patient's details when the animal is about to be sedated.
- Ensure that you and personnel are wearing lead aprons and this procedure is being done in a safe environment.
- REMEMBER: This procedure should have minimal stress on both the animal and relevant personnel.
- It is also important to note that one must be familiar with the normal anatomy of the animal, they wish to X ray.

#### The Forelimb



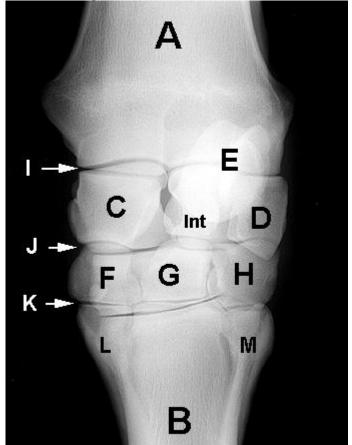
#### The Hindlimb

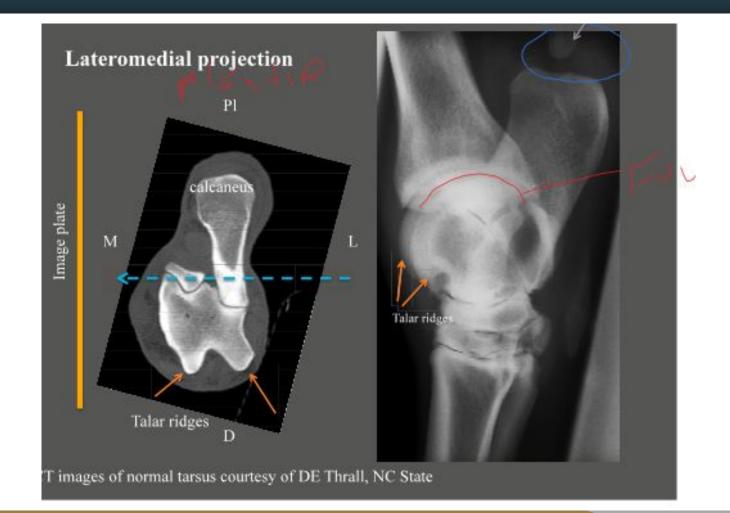


# The following video links explain taking an Xray for a horse's limb:

- The carpus: https://www.youtube.com/watch?v=W829mCi-JBw
- The fetlock: https://www.youtube.com/watch?v=u31r41vDX7o
- The tarsus: https://www.youtube.com/watch?v=PKF6vIcJAXY
- The foot: https://www.youtube.com/watch?v=mIBubgHvrbI

Examples of X rays of a horse's limb.





## EPC SOLUTIONS HOOVESANDHORSES.COM

Pastern-Joint Angle = 4.02 deg.

Dorsal Length = 9.59 cm. Foot Length = 10.03 cm.

P3 Descent = 0.80 cm.

Coffin-Joint Angle = 3.15 deg.

Navicular Angle = 26.57 deg.

Heel Angle = 12.60 deg.

Trimmed Hoof Angle = 57.60 deg.

True Hoof Angle = 53.28 deg.

Palmar Angle = 9.83 deg.

Bone Angle = 43.45 deg.

Prox HL Zone = 1.72 cm. Dist HL Zone = 1.43 cm.

Frog Apex to COR = 4.08 cm Frog Apex to P3 = 1.76 cm Frog Apex to Wh Line = 3.00 cm

P3 to COR = 5.84 cm

Trim COR to Toe = 76.73%

Sole Depth = 1.48 cm

Cup = 0.24 cm

FIGURE A