

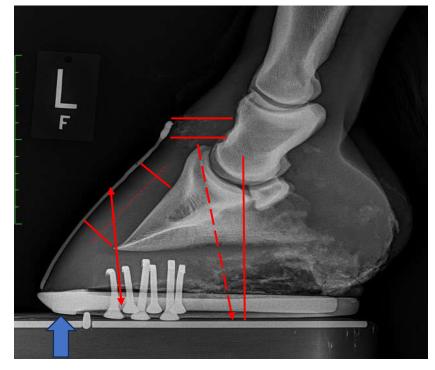
Foot of The Week of August 30, 2023 #1

LF Foot

The foot on this pre shoeing radiograph is going to be presented next week post shoeing. Not knowing when the foot was last shod takes away some information about the foot but we still have to evaluate for the here and now. First thing that hits my eye is the vertical P1 which is often indicative of a broken back P1-P3 axis (hoof-pastern axis), low palmar angle (PA). The next thing is the marker at the coronet, is it lined up with the

proximal extent of the condyle of P2? No. Next is the hoof-lamella zones (HL) which is pretty tight at the proximal aspect but gains width distally. This is best visualized in the L side of the HL which is the dermal lamina which is stretched dorsally (dotted red line), this is causing the sole corium to flatten out around the apex of P3. The apex of P3 has remolding but sole depth is good at the apex and at the wing. The shoe offers plenty of support but little in break-over mechanics. The wings of P3 are imposed on each other which indicates there is not a mediolateral tilt to the coffin joint.

What does the data say? The biggest value on the date sheet is the break-over distance (BO) (blue arrow) which is 38 mm dorsal to



the line of action of the apex of P3. This effects the dorsal displacement of the hoof as seen in the coronet-condyle (CC), proximal hoof-lamella (HLp) and distal hoof-lamella (HLd) zones. Note the shape of the dorsal wall as it relates to the line of action of P3 (double arrow). Mechanically this alters the cranial rotation of the foot which effects the PA and doesn't allow the line of action of the tendons (LOAT) to converge with center of rotation (COR) at the ground (dashed arrow) thus reducing the moment arm to the coffin joint. PH