**Conditions leading to Lameness in Cows**

 **Digital dermatitis**- earliest lesions are reddened circumscribed area typically on the bottom of the pastern (just above the division of the toes around the heels) on the rear feet and may have hairs matted or erect around the edges to form a rim. This extremely painful disease can occasionally be seen in the front feet or on the front of the rear feet. Cows may stand on their ‘tip toes’ while trying to relieve the pain of weight on the heels.

**Foot rot**

Foot rot is a contagious, infective disease seen most often in confinement cattle. The organism responsible for foot rot (Fusobacterium necrophorum) originates in the gastrointestinal tract and is shed into the environment by feces. It is characterized by a necrotic lesion in the interdigital skin (between the claws) which may extend into the soft tissues of the foot causing swelling and lameness.

**Laminitis**

Laminitis or founder, is caused by a disturbance in blood flow in the corium which leads to a breakdown of the dermal-epidermal junction of the hoof. This is followed by laminar separation and allows the coffin bone in the foot to become misplaced which compresses soft tissues and sets the stage for sole or toe ulcers (perforations).

Cattle with chronic laminitis (slipper foot) usually have overgrown, disfigured hooves. The coronary band is covered with a rough fringe of horn and the hoof appears rippled. Since the outside claw of the rear foot is most often affected, cows tend to stand cow-hocked. Abnormal growth in chronic cows can lead to abnormal wear which predisposes the cow to many other lameness problems such as sole ulcers, white line disease and abscesses.

**Sole ulcers,** the result of necrosis, expose the corium and can dehabilitate a cow.

**White line** disease or subsolar abscesses which can cause acute lameness. Most of the time with white line disease an abscess will occur in the heal leading to severe destruction of the joints and tendons. This is many times confused with foot rot but the swelling is confined to the heal of single claw not both claws as in foot rot. Often, acutely lame cows show pain in all feet and stand with their front or hind feet extended forward.



