On March 28, 2010, Farley an 8 month old miniature donkey was found out at pasture unwilling to bear weight on his right hind leg. In addition, there was a small amount of dried blood near his right hind foot. Farley has two other playmates and neither showed signs of injury.

It was decided that Farley needed to be looked at since it wasn't clear as to where the bleeding was coming from. When Dr. Stone evaluated Farley the following day he was bright eyed and full of spunk. However, on further examination it was determined that the dried blood had originated from the right hind toe. Farley was missing his entire hoof capsule, to our surprise! (Fig. 1) Our biggest concern at the time was the integrity of the underlying bone (coffin bone, P3) and the possibility of a deep infection or fracture.

Figure 1: Day 1, hoof capsule is missing and underlying soft tissue exposed.

Figure 2: Farley after a bandage change.

Radiographs of the foot revealed a suspicious area of bone (i.e. infection) along the margin. With this finding and the foot being grossly contaminated with dirt and debris, Farley was started on injectable antibiotic and a non-steroidal for pain. The foot was cleaned copiously with povidone solution and a foot bandage was applied.

Initially the foot bandage was changed daily. A wet to dry bandage was implemented during the first 14 days (Fig. 3). The wet part is gauze soaked in a 50% dextrose covered by a dry bandage. The concentrated dextrose solution helps to pull fluid (edema) from the tissue, and has anti-bacterial properties. When the bandage is removed the dry gauze will mechanically remove any dead tissue.

Figure 3: Day 14, the pink surface is a healthy bed of granulation tissue.

Figure 2: Week 5, there is a new layer of epithelium covering the granulation bed.

After 2 intensive weeks, bandage changes were decreased in frequency and a topical antibiotic (silver sulfadiazine) was applied to any exposed pink tissue (granulation tissue). Figure 4 is week 5 - at this point the foot is almost completely covered with epithelium (skin). Figure 5 shows the foot after 4 months of healing, revealing a completely regrown hoof capsule.

Figure 5: Month 4, a completely new hoof capsule.

Farley had a long road to complete recovery, and a lot of care and time was invested in his wound management. Despite the severe and debilitating nature of the injury early on, he is now back to full function as a professional grazer. He is a great example of what a great team a dedicated owner, a wonderful patient, and a caring veterinary team can make!