Dear Dr. Weldy’s,

I have heard a lot of discussion concerning hand floating versus power floating my horse’s teeth. What should I know in order to make an informed opinion?

Dear Reader,

I’m glad you brought up this topic as it can be a confusing one. First, let’s go over some basic terminology. The word “float” in this case means to smooth and is a mason’s term referring to smoothing out mortar. Floating as it relates to equine dental work primarily involves smoothing off the sharp enamel points that arise on the sides of the premolars and molars. These points occur because horses’ teeth never stop erupting as long as they have root structure. As the horse grinds its food some of the chewing surface of the cheek teeth is worn off. The part of the tooth not worn off over time becomes a sharp point. Hand floating refers to the removal of these points with a manual rasp. Power floating relates to removal of the enamel points with a power tool attached to a spinning guarded disc.

Most equine veterinarians don’t just “float” teeth, they practice equilibration. Equilibration is the process of ensuring all the teeth are in contact and bear the same amount of pressure and wear. This distributes the wear that occurs during eating onto as many viable teeth as possible, thus allowing horses to live longer and more comfortably. This can be best accomplished with the horse sedated and a speculum to hold the mouth open. A bright light can then be used to illuminate the whole mouth so that a complete exam can be performed. Without sedation and a speculum, problems can be missed leading to poor dental alignment and health issues. While equilibration can be accomplished via hand floating, it can be a laborious procedure if tall teeth or other mal-alignments are present. Power dental instruments allow for more precise work in less time and with less stress for the horse.

While most of my equine dental procedures are accomplished with power instruments, hand floating can be adequate in some situations such as with yearlings whose teeth tend to be very soft. The enamel points can be removed quickly, but a thorough exam is still a must. One of the most common complaints about power tools in equine dentistry is that some dental practitioners remove too much tooth at one time and, in the process, heat the tooth up causing further damage. I have had the opportunity to examine horses who had been over corrected and lost way too much enamel. These horses find it difficult to chew properly for several weeks until their teeth erupt enough crown to correct the over correction. Power floating and equilibration require proper training and expertise to perform correctly. However, when done properly, both thermal damage and over correction are easily avoided. Sedation, a mouth speculum, light source and power instruments allow your veterinarian to perform the most comprehensive exam with the least stress while equilibrating your horse’s mouth.

-Dr. Wade Hammond