



## Q&A FROM A HORSE DENTIST

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### The Five (W's?) of Wolf Teeth *(Who, What, Where, When and Why)*

Wolf teeth are common in both light and heavy horses today and are generally a shallow rooted tooth.

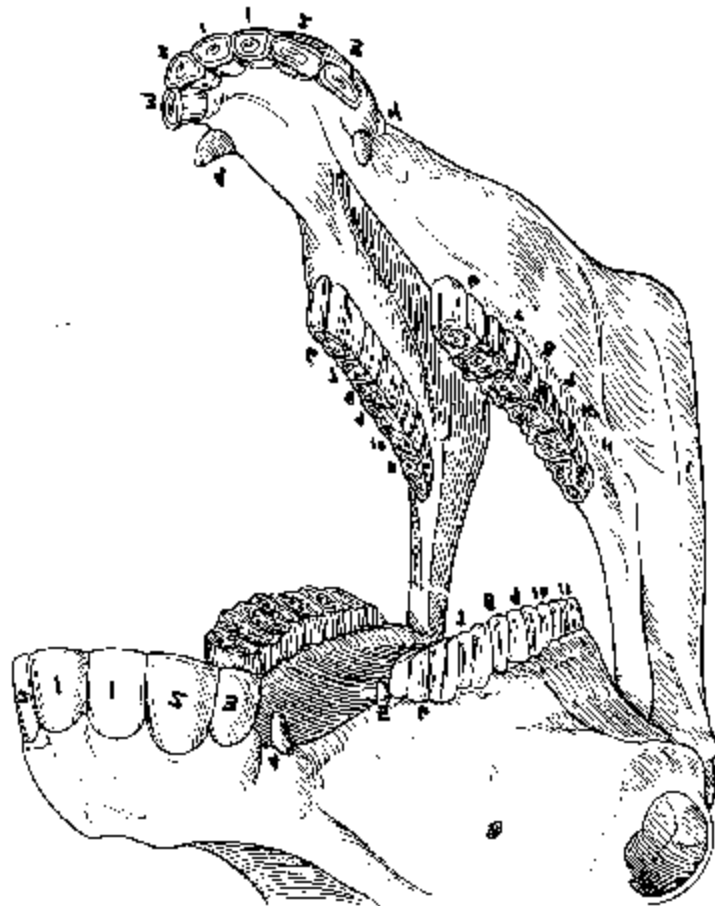
Officially, wolf teeth are of various sizes, shapes and descriptions. They can range from tooth pick to full molar size

(generally between a .22 caliber to a .357 caliber). They are located in the diastema which is the inter-dental space between the incisors and the molars (bars);

generally, on the top (maxilla) just in front of the first molar. To the equine dentist they sit just in front of the upper #6 tooth and known as the first pre-molar. To the rider, the wolf tooth is generally just behind and above where the bit sits in their horse's mouth and the reason for some annoying riding behaviors.

Because of the tooth's location they can easily brake off or fractured by constant or repeated pressure from the bit.

Approximately seventy-five percent of all horses, male and female alike, have at least one wolf tooth. Wolf teeth are often times confused with canine teeth. *[Note: canine teeth are a well rooted tooth, located just behind the incisors and are used by stallions for fighting. Canines are also known to be fighting teeth, bridle teeth or tusks. There are a small percentage of mares known to have full blown canines. Canines are not removed because of the unique type and placement of their roots. Since very few, if any domestic horses require their use,*



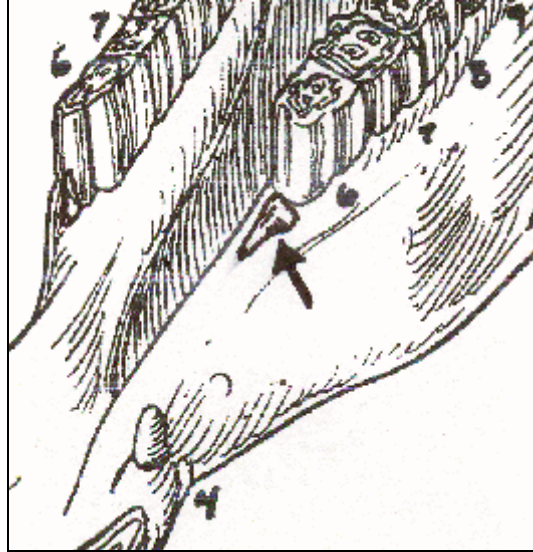
The number 5 tooth in this illustration is the typical location of the wolf tooth, however they have also been found on the bottom sitting just in front of the first molar. The number 4 tooth is the location of the canine tooth.

*they are burred down during the annual dental equilibration in order to make biting easier.]*

Most bits are designed to work off the horse's cheek, tongue, bars and pallet providing opportunity for bits and wolf teeth to regularly collide. They are extracted for this reason. Over the years, removing wolf teeth has mistakenly been believed to be the job of everyone from farriers to horse trainers. I've heard of wolf tooth removal methods ranging from using a hammer and screwdriver to securely encasing the tooth with a wrench, tweaking the tooth quickly to the side (before the horse could react) breaking the tooth off, leaving shards of tooth fragments to later cause riding problems.

There are three common scenarios associated with wolf teeth and riding problems. First, a fractured wolf tooth is generally left with a sharp edge and with a shallow root they can cause significant pain to the horse when bumped by the bit. Second, remaining fragments of a fractured wolf tooth can act as slivers just under the skin, although no longer visible I can imagine they would be quite painful. Third, wolf teeth sometimes never erupt through the skin. They lay just under the dermis, although parallel to the pallet or along the bars (instead of perpendicular). They also act like a sliver and painful when bumped with the bit.

These are referred to as hidden wolf teeth as in this illustration. Each scenario, causes extreme pain to the horse every time the bit is pulled into or past the tooth. It is easy to understand, when a rider puts pressure on his horse to perform and a wolf tooth is bumped by the bit, he can expect a variety of undesirable reactions. Some as mild as head tossing or mouthing the bit; other reactions come as aggressive resistance to turn one way or the other.



Hidden wolf tooth

Uncommon wolf teeth are located on the mandible or the jaw and also causes a horse discomfort by simply putting a bit in a horse's mouth. These teeth are quite commonly broken off unknowingly by constant pressure of the bit and leave an irritating fracture in the travel path of the bit.

Wolf teeth generally erupt at 6-18 months of age and can be extracted anytime after eruption. No one seems to have a conclusive theory on why horses have wolf teeth. Paleontologists theorize that the wolf tooth is the remnants of tertiary (3<sup>rd</sup>) root of a vestigial (degenerate) tooth of the prehistoric horse that is no longer functional tooth.

Let me close by clearing up a few myths associated with wolf teeth. Wolf teeth do not fall out on their own. At a certain age they do have a nerve and blood supply. Wolf teeth can and do cause riding problems if not properly removed. Wolf teeth removed with a hammer and screwdriver is not the proper way and very dangerous. The palatine artery lies beside the upper wolf teeth, if severed, could be life threatening and the fragile skull structure in young horses could be compromised by the slip of a hammer, screwdriver or wrench.

Proper removal of wolf teeth during your routine dental maintenance and prior to extensive training can make the learning process go much quicker and easier, provide confidence knowing the tooth was extracted properly and completely. Remember, all undesirable actions are compensatory to any point of pain and attributes to a horse's balance and ability to perform. If you are experiencing undesirable behaviors while riding your horse, have a certified equine dentist take a look, to get the answer '*straight from your horse's mouth*'.

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If you have a question about your horse's teeth and how they might relate to his health or performance call

1-306-763-0386, 1-403-936-5394, 1-208-420-2701 or e-mail [mackequine@sasktel.net](mailto:mackequine@sasktel.net).