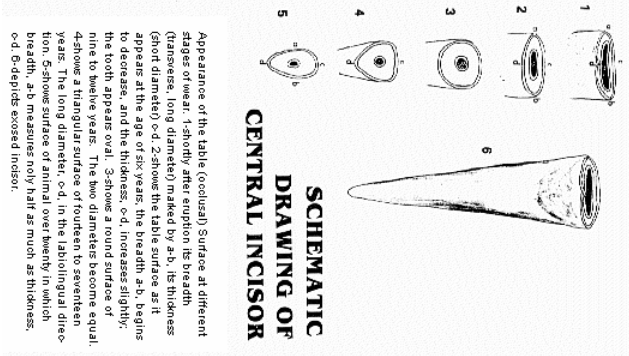
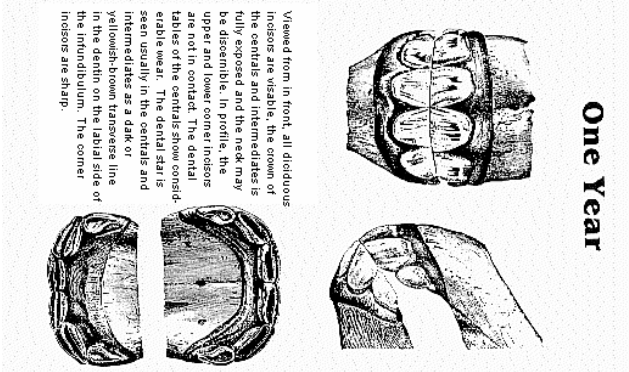


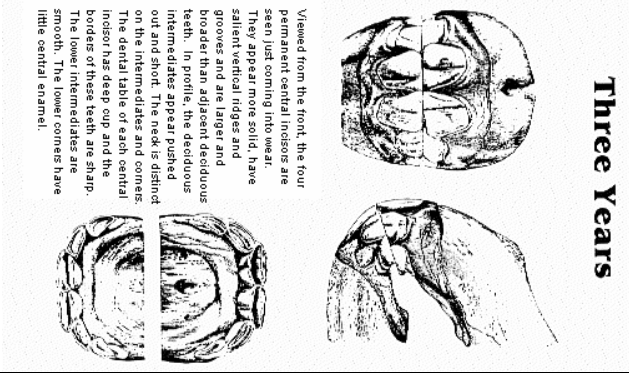
Describe Changes to the
Table of the Central Incisor
at eruption (birth to 2 weeks)
at 6 years
at 9-12 years
at 14-17 years
at 20 years



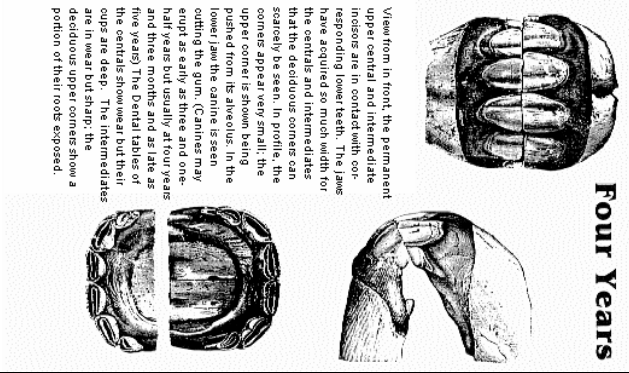
Describe Teeth at 1 year



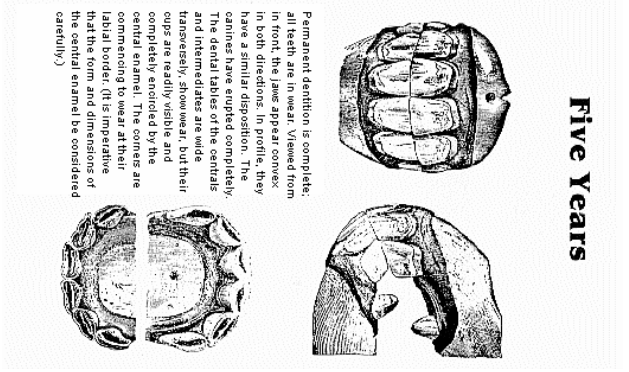
Describe Teeth at 3 years



Describe Teeth at 4 years



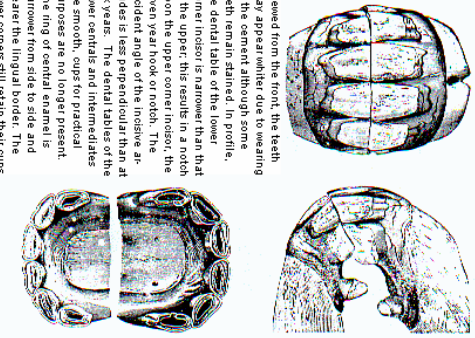
Describe Teeth at 5 years



Middle California Region USPC Teeth

Describe Teeth at 7 years

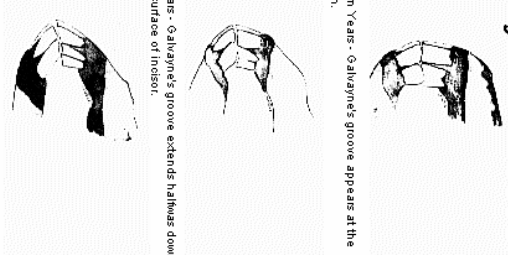
Seven Years



Viewed from the front, the teeth may appear whiter due to wearing of the cement although some teeth remain stained. In profile, the dental table of the lower corner incisor is narrower than that of the upper; this results in a notch upon the upper corner incisor, the seven year hook or notch. The incident angle of the incisive arcades is less perpendicular than at six years. The dental tables of the lower centrals and intermediates are smooth, cups for practical purposes are no longer present. The ling of central enamel is narrower from side to side and nearer the lingual border. The lower corners still retain their cups.

Describe changes to Galvayne's Groove at 9-10 years
at 15 years
at 20 years

Profile of Upper Corner Incisor Galvayne's Groove



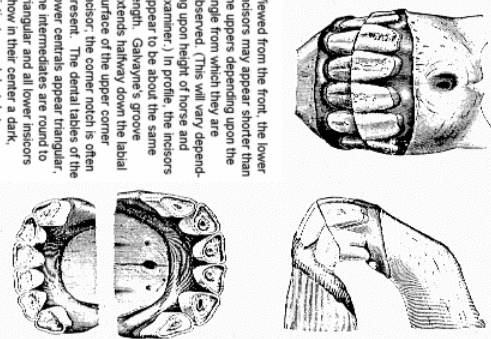
Nine to Ten Years - Galvayne's groove appears at the gum margin.

Fifteen Years - Galvayne's groove extends halfway down the labial surface of incisor.

Twenty Years - Galvayne's groove extends the entire length of the labial surface.

Describe Teeth at 15 years

Fifteen Years



Viewed from the front, the lower incisors may appear shorter than the uppers depending upon the angle from which they are observed. (This will vary depending upon height of horse and examiner.) In profile, the incisors appear to be about the same length. Galvayne's groove extends halfway down the labial surface of the upper corner incisor. The corner notch is often present. The dental tables of the lower centrals appear triangular, the intermediates are round to triangular and all lower incisors show in their center a dark, distinct, round dental star.

What is meant by the Cup
On which teeth are they found?

CUP = A dark brown to black U shaped cavity situated on the biting surface of each INCISOR. The cup is present in every erupting incisor and is worn away by the time the horse is 8 years. The flat mark left after the cup is worn away is no longer a cup. It will become the enamel spot.

What are the Canine Teeth and where are they located?
Are they found in mares or male horses?

CANINE TEETH: The small pointed teeth, usually found in pairs, one on the upper jaw and one on the lower jaw on each side of the mouth (4 in all). They are in the empty space behind the last (corner or lateral) incisor. They are usually found in male horses. They do not help the horse eat but may help in stallion fights.

Middle California Region USPC Teeth

What is the Dental Star?

DENTAL STAR: First appears as a dark yellow-brown line on the biting surface of each incisor. The dental star runs crosswise between the disappearing cup and the front of the tooth. Since the cups first disappear from the central incisors that is where the first dental stars appear. The first dental star will appear on the lower central incisor at 8 years and by the time the horse is 15 they will be round, well defined and on all the lower central incisors.

What is the Enamel Spot?

ENAMEL SPOT: The visible cup in an incisor is the top part of a cone-like cavity in the tooth. The walls and bottom of this cavity are made of enamel. As the tooth wears down and grows out, the cup itself disappears, but its bottom becomes exposed (visible). The bottom is whiter and harder than the rest of the tooth –this is the enamel spot. Because of its hardness, this spot is raised and first has a dark mark at its center- the remaining hollow of the worn off cone. In most cases the enamel spots disappear by 15 or 16 leaving the round spot –the Dental Star.

What is the Galvayne's Groove?

GALVAYNE'S GROOVE: A longitudinal groove most often appearing on the outside surface of the upper corner incisor. Usually resembling a dark line. Galvayne's groove appears by the time a horse is 10 years. (Don't confuse with food stains – lightly scratch with fingernail- it will be an indentation).

What is a Hook?

At what age do they appear?

Where do they appear?

HOOK: When a horse reaches the age of 7, a hook or similar downward projection may be seen on each of the upper corner incisors. Occurring because of the uneven wear of these teeth. The hooks level off by 9, and may reappear at age 11. Although a common reference point the hook does not appear in all horses.

What are Incisors?

How many in each jaw?

What are they called?

INCISORS: They are the front CUTTING teeth. Looking at the horse from the front -4 teeth in the center (2 in the top jaw and 2 in the bottom) = **Central Incisors**. The next 4 teeth – 1 on each side of the central incisors = **Intermediate Incisors**. The **Corner Incisors** are on either side of the intermediate incisors – 2 in each jaw for 4 in all. Therefore, there are 6 incisors in each jaw - = 12 in all.

Middle California Region USPC Teeth

What does the term IN WEAR mean?

In Wear: A tooth is said to be “in wear” when it makes contact with its corresponding tooth (e.g.: when the central incisor on the top meets the central incisor on the bottom). A tooth is useful to a horse only when it bites (incisors) or grinds (molars) against another tooth.

**What is a Molar Tooth?
How many are there?
Where are they located?**

The Molars: Are the last 3 grinding teeth on both sides of each jaw. Therefore, 6 on the top jaw and 6 on the bottom = 12 molars.

**What are the Pre-molar teeth?
How many are there?
Where are they located?**

Pre Molars: The pre-molars include the wolf tooth and the first 3 cheek teeth (grinding teeth right in front of the molars). Therefore, 3 pre-molars on each side of top and each side of bottom jaw = 12 pre molars.
If the horse has wolf teeth – they are small and found in front of the pre-molars on the TOP jaw only.

**How many teeth does a female horse have?
A male horse?**

Female Horse: 36 teeth
Male Horse: 40 teeth (4 canine teeth additional)
Add 2 teeth for wolf teeth if present to either male or female horse.

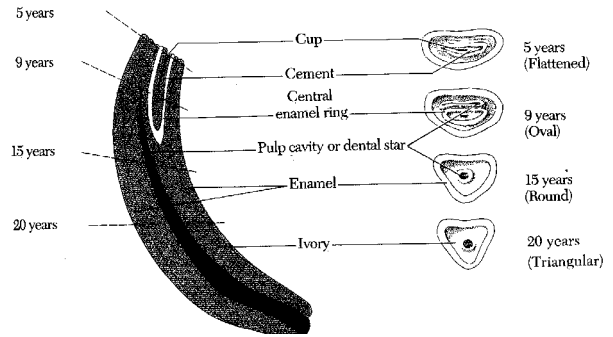
Age a horse to 5 years

By 2 weeks: Baby central incisors erupting thru gums
By 6 weeks: Baby intermediate incisors erupting
By 6 to 8 months: Baby corner incisors erupt
By 1 year full mouth: temporary corner incisors not in full wear (full wear by 2 years)
@ 2 ½ years: permanent central incisors erupt
@ 3 years: intermediate incisors erupt
@ 4 ½ years: corner incisors erupt
@ 4 to 5 years: canines come in
@ 5 years: horse has full mouth

Middle California Region USPC

Teeth

Correlation of tooth components to age and shape



What is Cement?

Cement: Is the relatively soft material that

1. covers the outside of the tooth
2. connects the tooth to the jawbone below the gums surface
3. fills the inside of the incisor's cups

What is Dentin?

Dentin: the bone like material that makes up the greater part of the tooth below the enamel

What is enamel?

Enamel: The calcium rich material that forms a thin layer over the incisor teeth and is complexly folded into the horses molar teeth, the hardest tissue of the body.

What is the pulp?

Pulp: The living tissue at the heart of the tooth, including the nerves and the blood vessels.

Middle California Region USPC Teeth

What is the crown of the tooth?

Crown: The part of the tooth that emerges above the gums.

What are the milk teeth?

Milk teeth: these are the deciduous (fall out) baby teeth of a young horse – there are 24. 12 incisors, 12 pre molars – (when the pre-molars fall out, these are called caps). The Molars at the back of the jaws never fall out they are permanent.

**What are common terms for:
Overbite
Underbite**

**Overbite = Parrot mouth
Underbite = Sow mouth**

**What is a caudal hook?
What is a possible cause?**

Caudal Hook: Sharp hooks can develop on the first or last cheek tooth, when an under bite or overbite causes uneven meeting of the top and bottom jaws. Front hooks are often caused when top jaw is in front of the bottom jaw. This forces the bottom back molars out of contact and the horse may get lower jaw back molar hooks.

**What are Ramps?
What are possible causes?**

Ramps: these are typically pre molars that slope like a ski jump. They may occur when the upper front pre molar baby teeth is retained, preventing normal growth of permanent pre molar. The opposing pre molar (lower jaw) grows unopposed becomes uneven and develops a ramp –this can scrape the tongue or cheek.

Middle California Region USPC Teeth

What is a wave mouth?

Wave mouth: occurs when 2 or more teeth in a jaw are high, creating a series of rising and lowering grinding surfaces in a wave like pattern. This can occur because of missing teeth or hooks or ramps. Delay in shedding baby teeth can start a wave mouth.

What is a step mouth?

Step Mouth: A step mouth occurs when one or more teeth are longer than the rest – creating a step. This usually occurs because the tooth on the opposite jaw is missing. Allowing the tooth opposite it to grow unopposed. This can seriously hamper chewing. The tooth can be cut to the tooth line.

What damage can cribbing do to the teeth?

Cribbing: cribbing or wood chewing can cause the incisors to wear unevenly, resulting in an offset bite (where the front incisors do not line up). Cribbing also causes the incisor teeth to be worn down earlier than usual. Severe cribbing can inflame the gum line and even break teeth.

How can you tell if your horse has an abscessed tooth?

The horse will have bad breath and he may have swelling in the jaw as well as be off his feed. The abscess is usually at the root of the tooth.

Do horses get cavities?

Not usually – their teeth are much stronger than humans