Determining the Age of Cattle by Their Teeth

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During recent years there has been increased interest in showing steers in Florida youth shows by age groups rather than by weight groups.

It is often difficult for an exhibitor to learn the exact birth date of calves produced in commercial herds. It is also possible that a calf has changed hands several times before being purchased by the prospective exhibitor. An ability to determine approximate age by dental examination is definitely an asset. The proof of age should rest with the exhibitor in any case of doubt.

For years cattlemen have examined the teeth of cattle as a means of general age determination. This knowledge is a valuable asset to the cattlemen, especially when purchasing commercial cows.

Differences in the teeth exist among individual cattle and herds. Factors such as nutritional background, inheritance and geographical location account for these differences. Despite individual differences, when the age of an animal is not known, examination of the teeth serves as the best method of age determination.

Incisors

Cattle have eight incisors or biting teeth. They are located in the lower jaw. The incisor teeth meet with the dental pad of the upper jaw. Ruminants do not have upper incisors.

Calves may be born with or without teeth; however, by the end of the first month after birth all eight temporary incisors, or "baby" teeth, have appeared. Temporary incisors or "baby" teeth are much smaller than the permanent incisors.
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The second pair of permanent incisors are in full wear at a relatively early three years of age. The third permanent pair of incisors erupt and are in full wear six or seven months later. The fourth pair (corners) erupt as the animal approaches four years, and all of the teeth are in wear at 4 1/2 years of age.

Age determinations past 4 1/2 years are less accurate and are determined by the wear on the apex surface of the incisor teeth. The center pair show wear at five, second pair at six, third pair at seven and the corners at eight years of age. Evidence of wear becomes more distinct and the teeth obtain a triangular shape with continued wear. It is very difficult to determine age of cattle by examination of teeth when they are more than eight years old.

**Incisors Are Identified As Follows:**

- The middle pair are identified as the central incisors.
- The pair next to the central incisors are identified as the middle incisors.
- The pair next to the middle incisors are designated as the lateral incisors.
- The pair next to the laterals are known as the corner incisors.

Eruption of the first permanent incisors (central) occurs when the animal is 19 to 20 months of age. This eruption is a gradual process. The temporary or "baby" teeth become loosened and the gums are usually swollen. Quite frequently the permanent incisors begin appearing while the temporary teeth are still in their settings. They usually come in at an angle, the upper outside corner of the tooth being higher than the inside corner (see fig. 5).

**Age-14 months**. All four pairs of teeth are temporary and firmly in place. The teeth are short, broad and usually have a bright ivory color. The teeth often touch on the inside corners at the top of the teeth. Note the spreading that is usually present between the two center incisors. Steers with mouths similar to Figure 2 are exhibited in the younger class in Florida shows.

![Figure 1.](image1)

**Age-17 months**. All teeth are temporary and set rather loosely in the jaw, especially the two center incisors. The teeth appear longer and more narrow than those in Figure 2. The teeth may or may not be touching at the upper corners. There is often a yellow or off-white discoloration of the teeth near the base at the gum line. Steers with dental structures similar to Figure 3 are shown in the intermediate class.

![Figure 2.](image2)

**Age-19 to 20 months**. Note the eruption of the first permanent incisor tooth (Figure 4). Both temporary incisors may or may not be present when this permanent tooth erupts. The permanent incisors will usually erupt at an angle and straighten into a definite pattern with continued growth. A steer with this tooth pattern is shown in the older class.

![Figure 5.](image3)

**Age-21 months**. Both center incisors are evident, but they may or may not be in a straight line with the inside corners touching (Figure 5). These steers are shown in the older class.

The following drawings and descriptions should assist cattlemen and youth exhibitors in determining the age of cattle. However, constant practice and examination of a large number of cattle of known age is necessary to establish proficiency.
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Figure 3.

**Age-23 months**. The permanent center incisors are in place and the inside corners are in line. These steers are also shown in the older class. The dental structure in Figure 6 is approaching the maximum limits for eligibility to show where dental classifications are used.

Figure 5.

**Age-28 months**. The second pair of permanent incisors have erupted but are not in wear. Steers with mouths similar to Figure 7 are too old to compete in Florida shows.

Figure 6.

**Molars**

It is difficult to use the premolars for age determination, since their growth pattern is rather erratic (Figure 8). The first pairs of permanent molars appear around five months of age. The center molars appear at 12 to 18 months, and are often used as a guide to split the younger and the intermediate classes when there is some doubt about the pattern of the incisors. The posterior, or third pair of permanent molars, appear between 24 and 30 months. The third pair of molars are often used to supplement the incisor pattern when steers approach the maximum limits of the older class.
### Table 1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Age Range</th>
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</thead>
<tbody>
<tr>
<td>Premolars: 1, 2, 3</td>
<td>Permanent Molars</td>
</tr>
<tr>
<td>Temporary - Birth to 1 mo.</td>
<td>4-5 to 6 mo.</td>
</tr>
<tr>
<td>Permanent - 2 to 3 1/2 yrs.</td>
<td>5-1 to 1 1/2 yrs.</td>
</tr>
<tr>
<td></td>
<td>6-2 to 2 1/2 yrs.</td>
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