

## Dentition and Aging of Animal

**Dentition** gives us information about teeth. Dentition indicates characteristics of teeth, types of teeth, location, arrangement and total number of teeth. By dentition we can also know the date of eruption of teeth.

**Aging-** Determination of approximate age of animal by teeth or any other body character.

Methods of ageing :

1. By date of birth
2. By teeth
3. By ring of horn

### Classification of teeth:

a. According to form, location and function-

1. **Incisor**----- I (absent in upper jaw of ruminant animal)
2. **Canine**-----C (absent in ruminant animal)
3. **Premolar**-----P
4. **Molar**-----M

b. According to duration of teeth in the mouth

1. **Temporary teeth or Deciduous or Milk teeth-** Silky white, small and absent of furrow.
2. **Permanent Teeth-** Grey color, large and present of furrow.

### Some terms related to dentition :

**Teeth:** It can be considered as part of the skeleton, but they are really a modified form of skin.

**Dental pad :** Ruminant animal has no incisor teeth in its upper jaw. In place of incisor teeth there is a strong hard muscular tissue which is known as dental pad.

**Full mouth :** When all permanent teeth are erupted.

**Broken mouth :** Aged animal with one or more teeth fallen.

**Gummers :** Aged animal which all teeth have fallen.

**Dental formula :** It indicates location, arrangement and total number of teeth of an animal.

Dental formula of ruminants:

$$\text{It is put thus} = \left( \frac{\text{I C P M}}{\text{I C P M}} \right) 2$$

$$\text{Temporary Formula} = \left( \frac{0 \ 0 \ 3 \ 0}{4 \ 0 \ 3 \ 0} \right) 2 = 20$$

$$\text{Permanent formula} = \left( \frac{0 \ 0 \ 3 \ 3}{4 \ 0 \ 3 \ 3} \right) 2 = 32$$

There is a relationship of permanent teeth with age of animal :

Eruption of Permanent teeth	Tropical cattle(Age)	Temperate cattle(Age)	Buffalo (Age)	Sheep & goat(Age)
1 <sup>st</sup> (central) pair	2-2.6 y	2 y	2.6 y	1-1.3 y
2 <sup>nd</sup> (medial) pair	3 y	2.6 y	3.6 y	1.9 y
3 <sup>rd</sup> (lateral) pair	4 y	3 y	4.6 y	2.3 y
4 <sup>th</sup> (corner) pair	4.6-5 y	3.6-4 y	5.6-6 y	2.9-3 y

There is a relationship of ring of horn with age of animal :

In case of zebu cattle 1<sup>st</sup> ring appears at 3 yrs of age

In case of taurus cattle 1<sup>st</sup> ring appears at 2 yrs of age

Therefore, Age of animal = 2 or 3 + Number of ring.

