

## Meeting Market Specifications for Cattle Part 1. Dentition Score

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One of the factors used for describing cattle for domestic or overseas markets is age. Age can be estimated from the dentition score which is the number of adult incisors (front teeth) that have erupted in the lower jaw. Dentition score is, at present, the only available practical, objective indicator of age for cattle.

Since it takes only a short time for adult incisors to progress from just showing through the gum to being fully exposed, for trading (AUSMEAT) purposes, eruption is assumed to have taken place as soon as one of an adult incisor pair can be observed through the gum.

However, estimating age by this method is only broadly accurate. Table 1 shows that there is a wide range of ages relating to each dentition score.

It may be seen from this table that, for most animals, the first two permanent teeth erupt between 22 and 29 months but that eruption can come as early as 20 months or as late at 31 months. For later teeth the eruption time can be even more spread out.



**Table 1.** An example of the timing of adult incisor eruption

Age in months	Number of adult incisors erupted			
	2	4	6	8
20-22	7	-	-	-
22-24	68	-	-	-
24-27	112	5	-	-
27-29	44	26	-	-
29-31	7	92	10	-
31-34	-	78	33	-
34-36	-	28	72	2
36-38	-	5	50	7
38-41	-	-	26	20
41-43	-	-	6	27
43-45	-	-	6	18
45-48	-	-	-	11
48-50	-	-	-	3
Total	238	234	203	88

Source: Adapted from Charles and Lampkin (1977)

The situation is further complicated by some breed differences and a tendency for higher planes of nutrition to lead to earlier eruption. Table 1 is derived from Zebu cattle under a relatively low plane of nutrition, as may be found on many NT properties.

Table 1 has been summarised in Table 2. This table shows the age range (in months) at which approximately 95% of cattle have achieved the various dentition scores.

**Table 2.** The 95% age range for the four dentition scores in Table 1

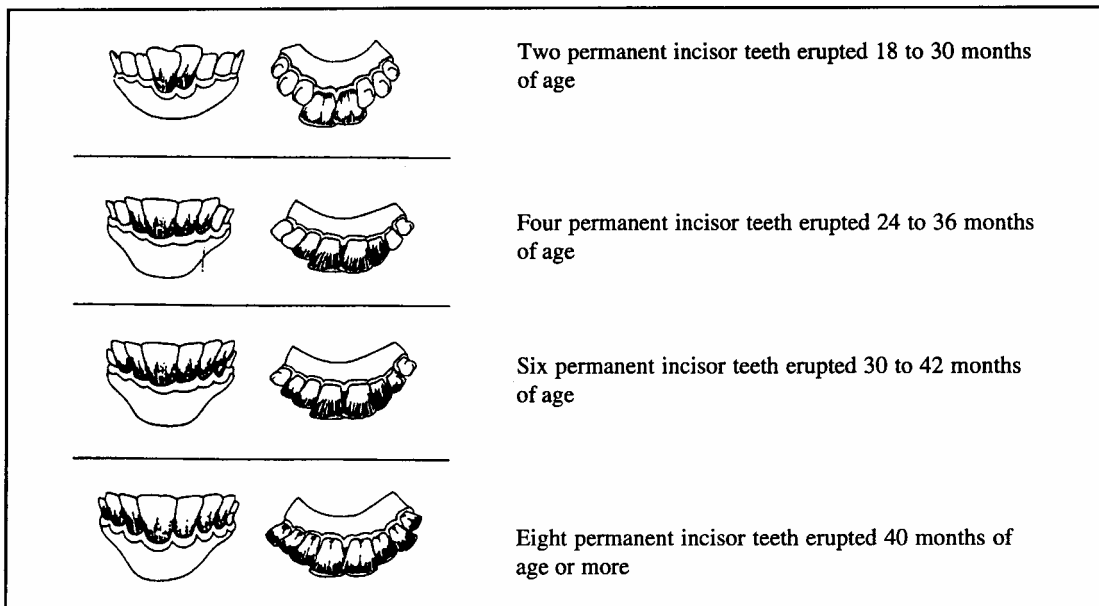
Dentition score	Age range (months)
0	birth-24
2	22-29
4	27-38
6	34-41
8	36-48

Table 3 shows the age range for animals with various dentition scores, as described in AUSMEAT's proposed national livestock language. There is broad agreement between tables 2 and 3 and the differences arise because values in Table 3 reflect the national herd whereas those in Table 2 are derived from zebu type cattle under a lower plane of nutrition, representative of many NT properties.

**Table 3.** The AUSMEAT national livestock language dentition score vs approximate age

Dentition score	Age range (months)
0	birth-20
2	18-30
4	24-36
6	30-42
8	>40

### AUSMEAT ERUPTION TIMES



It is important to remember that, in the Territory as elsewhere, the time of eruption of incisor teeth is only a broad guide to age in cattle. From one animal to another age at eruption can vary by several months.

Reference: Charles and Lampkin (1977) (Table 1)

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