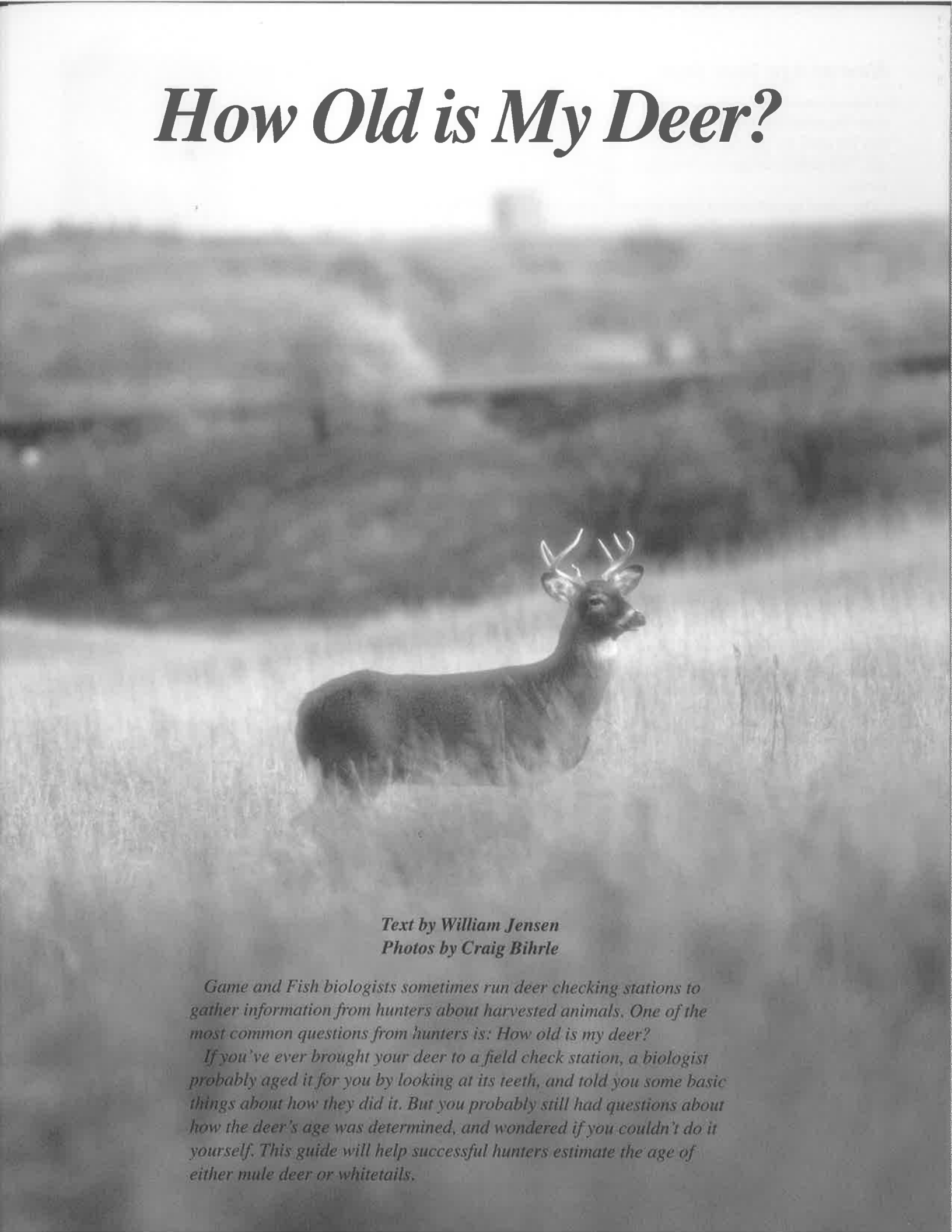
# *How Old is My Deer?*



***Text by William Jensen***
***Photos by Craig Bihrle***

*Game and Fish biologists sometimes run deer checking stations to gather information from hunters about harvested animals. One of the most common questions from hunters is: How old is my deer?*

*If you've ever brought your deer to a field check station, a biologist probably aged it for you by looking at its teeth, and told you some basic things about how they did it. But you probably still had questions about how the deer's age was determined, and wondered if you couldn't do it yourself. This guide will help successful hunters estimate the age of either mule deer or whitetails.*

# How to Age Your Deer

Deer in North Dakota are primarily born in late May and early June. Therefore, when most deer are harvested in November they are either six months, 1½ years, 2½ years, 3½ years, etc., in age. This guide is designed to block deer into these age categories.

The overall age structure of a hunted deer population is younger than most people think. During the fall of 1995, the Game and Fish Department operated 15 check stations in southeastern North Dakota. Of 790 deer aged at these check stations, 80 percent were 2½ years old or younger.

Antler and body size can indicate a deer's age, but physical characteristics are often misleading. **The number of antler points in no way corresponds to age**. Even if it did, it wouldn't help in aging does, which make up a considerable proportion of the harvest each year.

Antler size in bucks and physical development in both genders is greatly affected by diet and genetics, which may account for differences between animals of the same age taken from different locations.

Deer in eastern portions of the state, where row crops are more common, are often heavier bodied. Six-month-old deer (fawns) may at first appear older, and yearlings (1½ years old) may approach 140 pounds field dressed.

## It's All in the Teeth

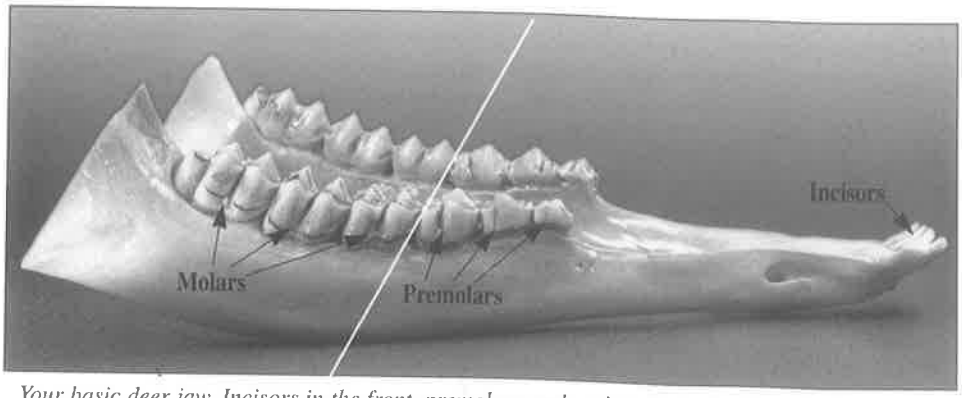
The science of aging deer is based on tooth development and wear.

Like humans, deer replace their "baby teeth" with permanent teeth at a relatively set rate. As surely as a 6-year-old child will soon lose her two front teeth, an 18-month-old buck will be in the process of losing its third premolar.

By the time a deer is 2½ years old, all permanent teeth are in. At this stage, estimating age is based largely on the rate of tooth wear. Diet and soil types may accelerate tooth wear, but generally, estimating the age of adult deer is straight forward until they reach age 5½. Beyond that, estimating age by tooth wear is less reliable.

## Tooth Identification Basics

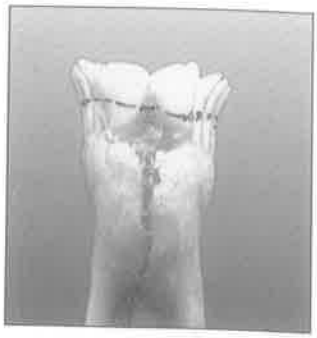
Whitetail and mule deer basically have two groups of teeth. The front teeth, or incisors, are used for collecting food. The back teeth or cheek teeth – molars and premolars – are used to chew and grind food. Between the incisors and molars is an open space along the jaw that has no teeth. ***(Note: In all photos, black line indicates the gum line.)***




*Your basic deer jaw. Incisors in the front, premolars and molars in the back, and a big space between.*

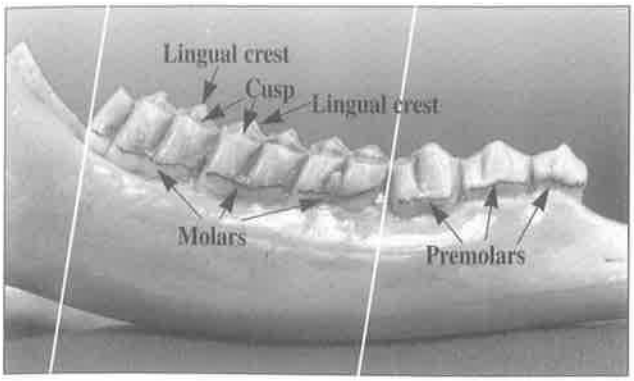
***Front Teeth (Incisors):*** These are the front teeth on a deer jaw. When a deer is 5-6 months old, the central two incisors are replaced. The rest of the front teeth – lateral incisors and canine teeth – are replaced during the 10th and 11th month. Unlike horses, deer do not have upper incisors.

*Front teeth of a six-month-old deer (fawn). Permanent incisors are emerging from below the middle two teeth.*

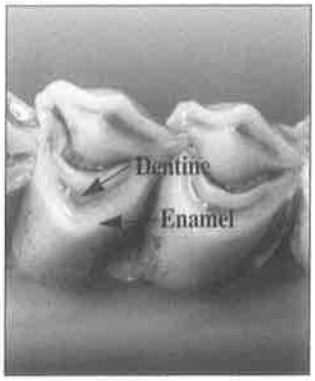


*Fawn jaw with permanent front teeth fully emerged, but not yet in final position.*

*Front teeth all permanently in place. Deer is at least 1½ years old.*




*Cheek teeth of a 2½-year-old deer. Premolars and molars are indicated. Each permanent premolar and molar has two* ***cusps*** *or* ***crowns****, except the third molar, which has three cusps. The cusps on the lower jaw form a ridge of sharp points on the side nearest the tongue, called* ***lingual crests****.*




*Each premolar and molar shows white and dark portions. The white portion is the* ***enamel****. The dark portion is* ***dentine****.*

### *Cheek Teeth*

**Premolars**: The first three teeth on each side of the jaw are called premolars. Deer grow two sets of premolars. The first set appear in fawns and last until the deer is about 1½ years old, when permanent adult premolars push out the baby premolar teeth. An important characteristic of the first set of premolars is that the third premolar has three **crowns** or **cusps**. When the permanent teeth come, all premolars have just two cusps.

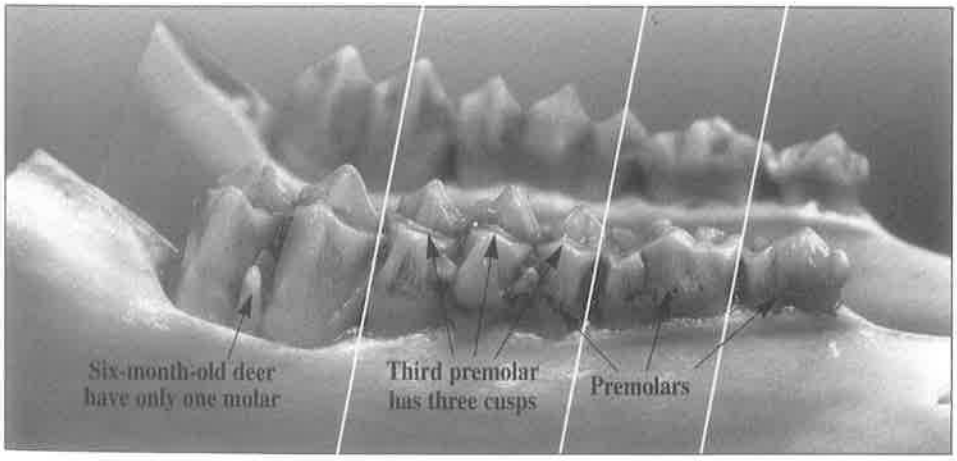
**Molars**: The four, fifth, and sixth cheek teeth are the molars. Deer only grow one set of molars. Generally, six-month-old deer have only one molar when they enter the fall hunting season. Therefore, six-month-old deer usually have only four cheek teeth. By 1½ years of age – the second fall – the second and third molar have erupted through the gum, though the last cusp of the third molar may still be below the gum line. All six molars and premolars are fully erupted by 2½ years.

The vast majority of deer in North Dakota are 2½ years old or younger. To determine the age of animals in older age classes we need to look more closely at tooth wear.

## *Through the Ages*

While it is possible to determine whether a deer is a fawn by looking at its incisors or front teeth, it is the cheek teeth, specifically those of the lower jaw, that harbor the most reliable clues.

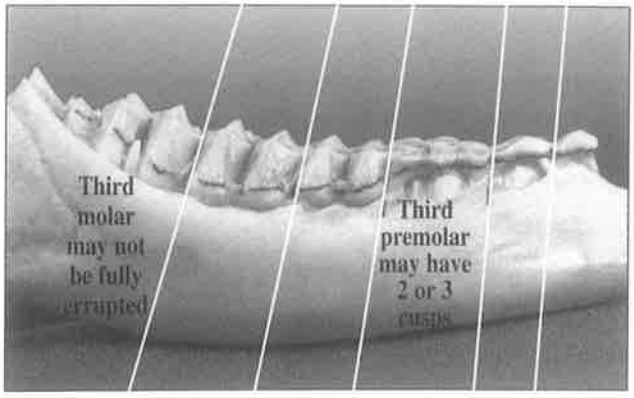
To get a good look at the cheek teeth (premolars and molars), you need to cut back the lip and cheek skin. If you plan to have the head mounted, let your taxidermist skin out the head and remove the jaw for you.



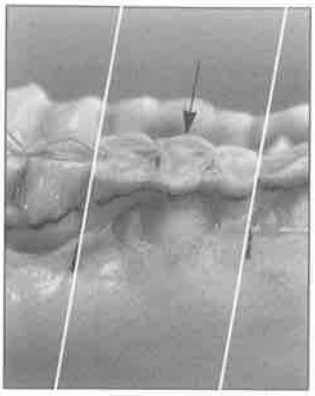

*Six Months*

**Six Months:** The nose or muzzle of the deer appears short or stubby, when compared to older deer. The central two incisors may still be erupting. Incisors may appear twisted as they emerge through the gum. Generally, there are only four cheek teeth showing. The third premolar has three cusps.

**1½ Years**: All permanent front teeth are in. Six cheek teeth are visible in the lower jaw. The third premolar may still have three cusps, or the permanent third premolar may now be in (two cusps). Third molar may still be erupting through the gum. Lingual crest of molars have sharp points. **Inset:** Extremely worn third premolar may fool people into thinking deer is older. Actually, this tooth is lost after 1½ years and replaced with a permanent two-cusped premolar.

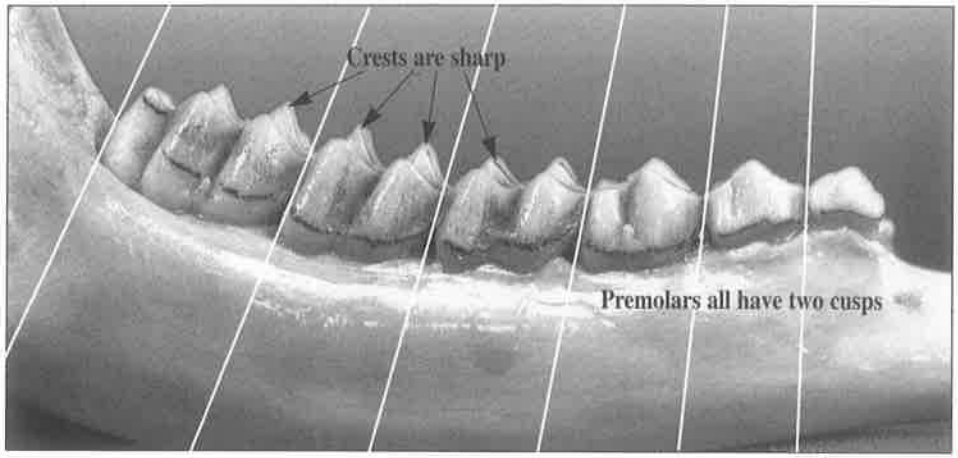



*1½ Years*



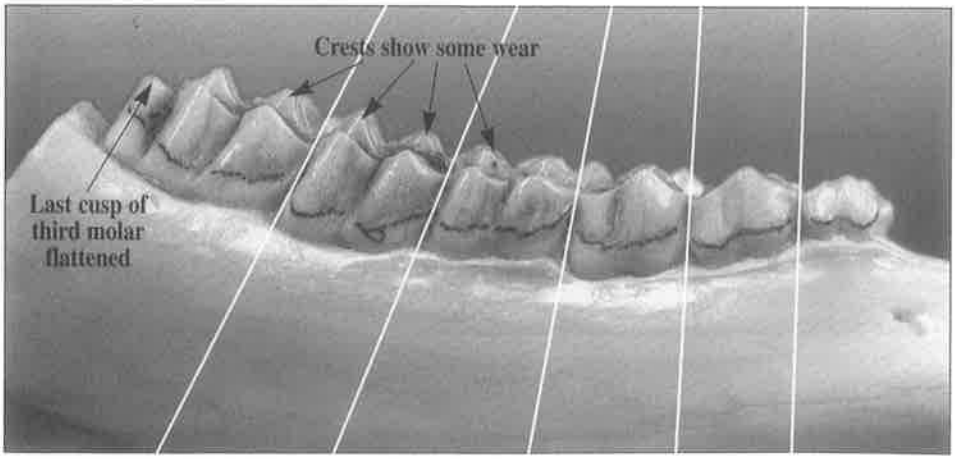
*Inset*

**2½ Years**: All permanent premolars and molars are in place. Look closely at the fourth cheek tooth (first molar). The cusps are sharp and show little or no wear; enamel (white portion) of the lingual crest shows well above the dentine (brown portion). The enamel portion of the cusp is wider than the dentine. Some wear on third cusp of sixth cheek tooth (third molar).

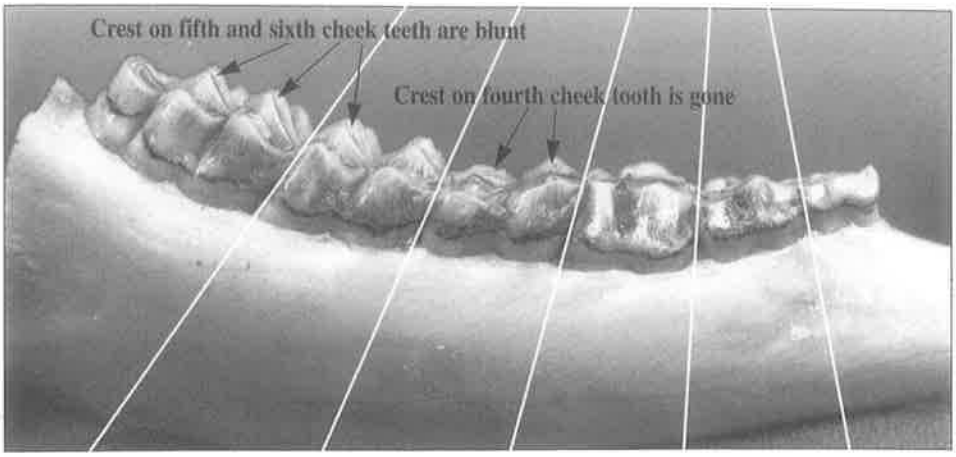



*2½ Years*

**3½ Years:** Lingual crests of cheek teeth show some wear and cusps are starting to become blunt. Dentine now thicker than enamel on cusp of fourth cheek tooth (first molar). Dentine of fifth cheek tooth (second molar) usually not as wide as enamel. Last cusp of sixth cheek tooth is flattened.

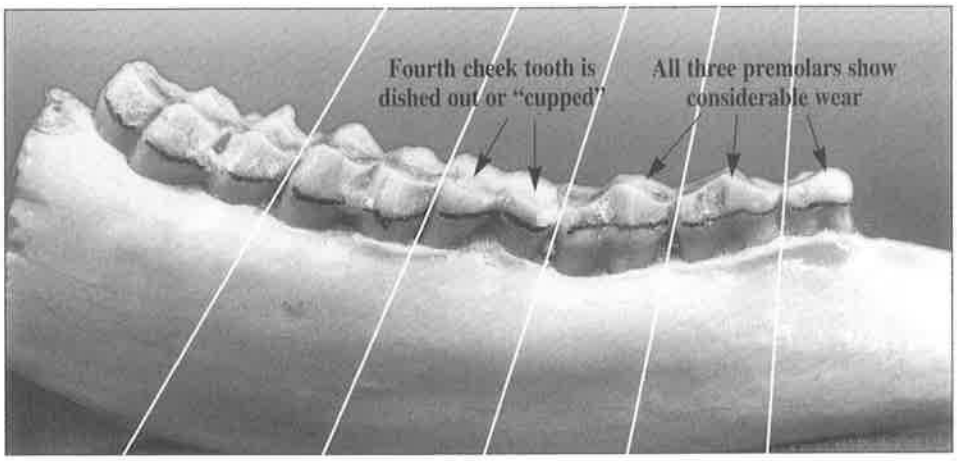



*3½ Years*



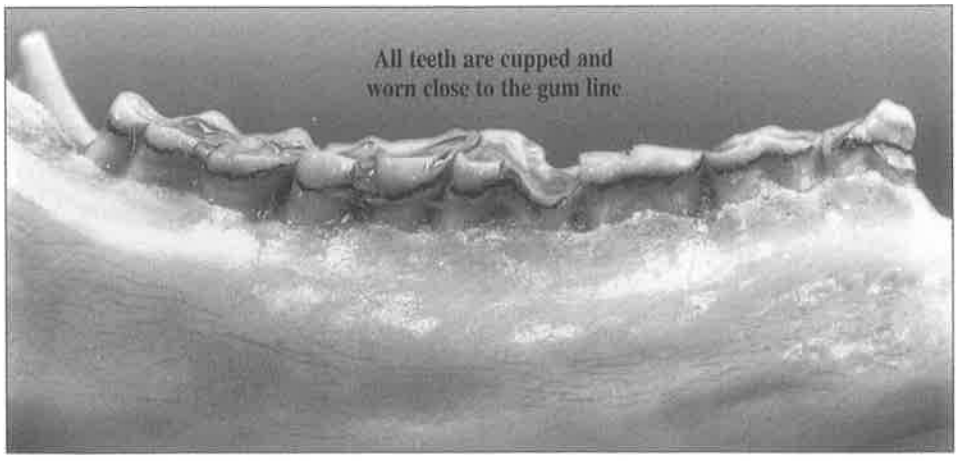

*4½ Years*

**4½ Years**: Lingual crest of fourth cheek tooth (first molar) is gone. Crest of cusps on fifth and sixth cheek teeth (second and third molar) are blunt. Dentine of fourth cheek tooth now twice as wide as enamel. Dentine of fifth cheek tooth wider than enamel.




*5½ Years*

**5½ Years and Older**: In most hunted deer populations, less than two percent of the animals are more than five years of age. Accurately aging these deer by tooth wear is usually more of a guessing game than a science. In general, deer close to 5½ years of age will show considerable wear on the premolars, and the first cusp of the fourth cheek tooth (first molar) will be dished out or show signs of "cupping."




*9½ Years*

**9½ Years**: By 9½ years, all cheek teeth are cupped and worn nearly to the gum line.

***WILLIAM JENSEN** is a biologist with the Department's natural resources division.*