

Introduction

An ability to estimate the age class of deer is useful both when selecting deer for culling and when recording cull data. The aim of this guide is to suggest indicators which may help both during the selection process and for confirmation after culling. This guide links to the Ageing by Teeth and Cull planning guides.

Reasons for Ageing

- To select animals for culling and confirm age afterwards
- ◆ To provide information on population structure and assess the impact of culling
- ♦ To provide information for cohort analysis

Accuracy

It is not always possible or necessary to age wild deer precisely. Generally it is sufficient to be able to identify four age classes:

- ♦ young (< I year)</p>
- ♦ yearling (> I year and <2)</p>
- ♦ adult (2 years +)
- ♦ old

It is possible to gain an impression of the age (in years) of adult deer using tooth eruption and wear, but accuracy is not good and from the point of view of managing wild populations there is little to be gained from knowing whether an adult is within one or two years of a specific age (see Ageing by Teeth guide)

Ageing from a distance

The appearance of live deer can give clues as to their age, even from some distance away. Deer behaviour changes with age and this may also give useful clues. Tables I and 2 give some of the main indicators of age which may be visible from a distance.

Age assessment at a distance:

- is more accurate if based on a combination of features rather than relying on one character in isolation
- is easier on open ground rather than in woodland where decisions may have to be based on a brief glimpse
- is easiest in groups of animals since it is possible to compare each individual with the others
- is easiest with the larger deer species
- is more likely to be accurate when using binoculars/telescopes

Table 1. Appearance

Part of body	Young	Adult
Size	Shorter and less massive than adults	Usually get bigger as they mature but can appear smaller again in old age
Coat change	Usually change their coat first	Usually change coat later. Timing of moult may also be affected by condition
How head is held	Tend to carry their head high	When not alert may carry their head lower, closer to the line of their back
Shape of head/face	Tend to have relatively big eyes and ears. Eyes are dark. Face is usually short and stubby	Depends on species but usually have longer faces. May have lighter coloured iris in eyes
Coloration of face	Varies between individuals but usually not grey.	Older deer may have a "grizzled" look to their face and ears, may be greyer in colour (but very variable)
Facial expression	"Innocent", alert look	May have "severe" or "serious" expression
Antlers	First head usually simple knobs or spikes (commonly not in roe), 2nd and 3rd heads in larger deer may be distinctive. Usually cast later than adults	Generally more massive with thicker beam(not necessarily in roe) Oldest often cast first if in good condition
Neck	Appears longer and thinner - be careful in the rut when even young male deer get thicker necks. Neck rises from back with little or no dip	Appears shorter and thicker. Neck may have pronounced dip where it joins the back – animals in poor condition may also show this.
Belly/back	Usually have taut belly with little sag. Straight back line	May have saggy belly. Back line may dip, especially in females. Most apparent in larger species
Rump	Usually narrower and less well filled than adult	Usually broad and well filled – very old or animals(especially males) in poor condition may appear younger as they lose weight
Depth of chest	Depth of chest seems less than length of legs	Greater apparent depth of chest, may seem more than length of legs, especially males of larger species

Table 2. Behaviour

Part of body	Young	Adult
General	Tend to move more, to move more randomly and play more. Generally curious. Dependent young often close at heel with mother.	Tend to make more deliberate, purposeful movements
Feeding	May rush out incautiously onto feeding area, often earlier than older deer	Tend to come out of cover later and go in earlier
Reaction to danger	May spot danger, react, then ignore it May approach suspicious object or run away then return	More alert to threat unless very old. May "stare out" possible danger then react positively if danger is confirmed.
Rut	Usually defer to older animals. Usually in middle of group or towards rear. Very rarely lead group.	Usually involved in rut (unless in poor condition or low in hierarchy) but will not necessarily succeed in mating
Hierarchy	Invariably defer to older animals	Position depends on individual deer, dominant animals and herd leaders are usually mature but not necessarily old.

Ageing culled animals

When the animal is culled it is usually possible to use clues from the carcass to help corroborate the age estimated before shooting, see Table 3.

Table 3

Part of carcass	Young	Adult
Skeleton	Sternum and pubic symphysis are relatively easy to cut/saw. Central suture of skull is simple	Older animals are tougher to process in the larder. Central suture of skull is often raised and may be more intricate or fused
Antlers	Tend to be less heavy and more simple in structure (not so marked in roe or muntjac) Pedicles tend to look longer/narrower with coronets at right angle to pedicle	Tend to be heavier and more complex— but beware abnormalities, "going back" in very old animals and wide variance in Roe/Muntjac. Pedicles tend to be shorter with coronets at outward sloping angle to the beam of the antler
Teeth(see Ageing by Teeth guide)	Adult tooth eruption incomplete, third pre-molar has three pairs of cusps. In young adults teeth are high, sharp and not worn	Tooth eruption complete, third pre- molar does not have three pairs of cusps. In old age teeth may be very worn and/ or animal may be "broken mouthed"

Further Info

Putman, R. (2005) Selection of animals for culling: age and condition. Project report RP41 for Deer Commission for Scotland.