Aging White-tailed Deer

Fawn
- Body about as long as tall (square)
- Short neck and compact nose
- Buck fawns’ heads may have visible antler nubs or “buttons”

Adult Doe
- Body longer than tall (rectangle)
- Long neck and elongated nose

These bucks from Washington County, New York demonstrate typical differences in body and antler size between yearlings and 2.5 and 3.5 year old bucks. Photos courtesy of QDMA.

<table>
<thead>
<tr>
<th></th>
<th>Yearling Buck</th>
<th>Older Buck</th>
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<tbody>
<tr>
<td>Body Size</td>
<td>similar to adult doe</td>
<td>larger than adult doe</td>
</tr>
<tr>
<td>Legs</td>
<td>appear long and skinny</td>
<td>thicker chest makes leg appear stocky</td>
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<tr>
<td>Muscles</td>
<td>often not clearly defined</td>
<td>well defined in shoulders and thighs</td>
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<tr>
<td>Body Shape</td>
<td>slender, belly tucks up</td>
<td>belly flat or even sagging</td>
</tr>
<tr>
<td>Antlers</td>
<td>thin, spread narrower than ear tips</td>
<td>spread as wide or wider than ear tips</td>
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Tooth & Jaw Anatomy

- 3-cusped milk premolar
- 2-cusped adult premolar
- 3 Incisors, 1 Canine
- 3 Premolars
- 3 Molars
- Enamel
- Dentine
- Lingual crest
- Secondary crest

Definitions:
- Cusps – The points or projections on the surface of a tooth.
- Dentine – The soft dark brown inner core of the tooth.
- Enamel – The hard, white, outer coating of the tooth.
- Lingual Crests – The tooth ridges adjacent to the tongue.
- Secondary Crests – Crests in the interior of the tooth.
- Milk Teeth – Deciduous, primary teeth; will be replaced by adult teeth.

Fawns have a noticeably shorter jaw than adults and do not have a full set of teeth. Fawns have less than 6 teeth along the side of their jaw (premolars and molars).
At 1½ years old, yearling deer have 6 teeth along the side of their jaw and may be at any one of three stages of replacing the 3 milk teeth (premolars). The 3rd molar is not fully erupted and shows no dentine. These three examples illustrate what you may see among yearling deer.

In the first yearling stage, all milk premolars are present, showing substantial dentine from wear. The 3rd premolar is 3-cusped. This yearling stage may be mistaken for an older deer.

In the second yearling stage, milk premolars are being replaced by adult premolars. In this photo, the 3rd premolar is now a partially erupted, 2-cusped adult tooth.

In the last stage, all adult premolars are fully erupted with very little or no wear showing on crests. The 3rd premolar is 2-cusped. The 3rd molar is not fully erupted and has no dentine showing from wear.

Deer that are 2½ years old or older have 6 adult teeth along the side of their jaw. Generally, as deer age, the tooth enamel wears down exposing more dentine, and the lingual crests become more blunt. Aging by wear patterns becomes less precise for deer above 3½ years old.

In the 2½ years stage, slight wear on 2nd and 3rd premolars. 1st molar dentine of lingual crest is not wider than enamel on either side of it and lingual crests are sharp. 3rd molar is fully erupted and shows dentine from wear.

In the 3½ years stage, 1st molar dentine of lingual crest is wider than enamel on either side and lingual crests are moderately blunt. 2nd molar dentine of lingual crest is not wider than its enamel and lingual crests still sharp.

In the 4½ years stage, both 1st and 2nd molars have wider dentine than enamel on lingual crests and lingual crests of both are blunted. 3rd molar dentine of lingual crest is not wider than its enamel. More wear on premolars and overall height of teeth is diminishing.

In the > 5½ years stage, dentine of lingual crests of all three molars is wider than their enamel. Secondary crests on molars are becoming progressively worn until teeth are cup-shaped.