



Aims of todays session

- Quick overview and history of deer in NZ
- Breeds of deer farmed in NZ
- Other breeds found in NZ
- Deer production
- Velvet... what the...?
- Harvesting velvet



Deer – what do you know?



Deer – what do you know?

- From the Cervidae family
- Browsing ruminant mammals
- Mating (aka "The Roar") occurs in autumn, so short-day breeders
- Generally have one off-spring
- Only males grow antlers, a new set each year

Deer in NZ



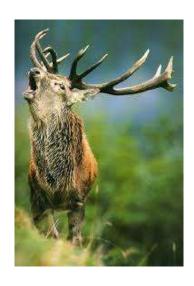
- Introduced into New Zealand initially for sport and venison in 19th C – after a shaky start deer thrived and became out of control
- Government culling programme was put into place in 1920's
- This was escalated after WW2 once ammunition and man power was more readily available
- 1960's saw hunting from helicopter, 1970's saw live capture from helicopter
- Farming in NZ has only been in the last 50 years



There are currently three breeds of deer commonly farmed in New Zealand and they are...



Red deer







Wapiti or Elk





Fallow deer

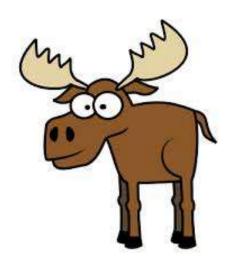




Other cervines found in NZ

As well as Reds, Wapiti and Fallows, other feral breeds in New Zealand can be found:

- Rusa
- Samba
- Sika
- White tail deer
- Moose....?





Why deer are farmed

Deer are produced for three main reasons...

- Velvet
- Vension
- Trophy / sport





Antlers are used (by deer!) for....

Antlers are produced by

- a) Males
- b) Females
- c) Both sexes





Antlers are used (by deer!) for....

Defence at mating

We remove antlers for safe handling and to prevent injury from fighting, as well as for velvet

Antlers are produced by

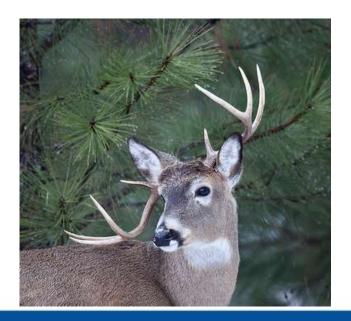
a) Males

Antler growth



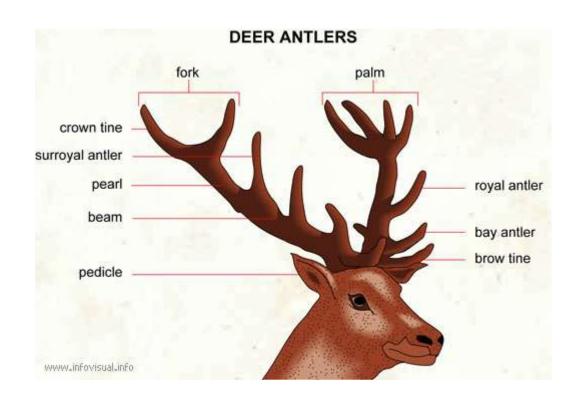
Antlers grow from pedicles on top of the stags skull.

A damaged pedicle will not grow a uniform or matched antler.





Parts of the antler







Antlers in velvet

- Are sensitive, very warm to the touch, boneless and covered in short, dense hair (hence the term velvet)
- Velvet also has very rich blood and nerve supplies

Velvet must ONLY be removed with pain relief!











After they are fully developed, antlers are

- Fully calcified, with <u>no</u> nerve or blood supply
- Sharp tipped weapons, driven by thickset, muscular necks

Antlers can be removed without pain relief







Velvet Growth Cycle









Late Aut / Winter: Antlers are discarded (cast) Spr/Sum:

AMAZING
growth!

6 wks to a full set





Aut:
Stags begin to
roar and use
antlers to fight for
the right to mate



Late Sum: Full growth is reached and begin hardening off





Velvet Growth patterns

- Male yearlings also called spikers
- Each year antlers increase in girth and length, and produce another set of tines



Velvet properties





Antler "buttons" are discarded 60

Aut:
The roar /
mating occurs
as normal

Spr: Antlers sprout





Late Sum:
A second
harvest may
be achieved



Mid sum: Velvet is harvested at peak growth







- Stags are peak growth are brought into the yards
- Some farmers sedate each animal
- Individually restrained
- Tourniquet is applied above the pedicle
- Local anaesthesia administered below the tourniquet
- Nick test is conducted
- Velvet is removed, usually with a hand saw



OTAGO

Velvet Harvesting

- Harvested velvet must be treated like a foodstuff
- Each antler is weighed, tagged and frozen.



Final word





Deer are high-stress animals, mainly because of they were very recently domesticated (50 years in NZ) and have come from feral stock.