

# Pedicle Initiation - Velvet



TIKANA  
SOUTHLAND NEW ZEALAND  


# Pedicle Initiation - Velvet

- Develops from the periosteum of the frontal bone - antlerogenic periosteum
- Start to grow when the deer approaches puberty (usually around 5-7 months of age). Increasing testosterone levels.
- Time of initiation affected by body-weight and nutrition

# Pedicle Initiation - Velvet

- Spring 2015 notable lack of pedicle formation
- Tikana weaners wintered inside for 90 days
- Diet grass baleage + deer nuts
- Weighed in – 1<sup>st</sup> week June
- Weighed out – 1<sup>st</sup> week September

# 2015 – winter growth

<b>Tikana Bull Calves</b>	<b>2015</b>	<b>Average last 9 years</b>
Average weight end winter	114kg	133kg
Average winter growth rate	70gms/day	170gms/day

# 2015 – winter diet

<b>Tikana Bull Calves</b>	<b>Crude Protein (as % DM)</b>	<b>ME MJ/kgDM</b>
Deer Nuts 0.5kg/day	15.5%	12.9
Pasture Baleage 2kg DM	9.4%	8.3

# 2015 – winter diet

<b>Tikana Bull Calves</b>	<b>Crude Protein (as % DM)</b>	<b>ME MJ/kgDM</b>
Deer Nuts 0.5kg/day	15.5%	12.9
Pasture Baleage 2kg DM	9.4%	8.3
Required for growth	14 – 16%	9 - 12
Required for pedicle initiation	18 – 20%	



# Effect on spike production



# Effect on spike production

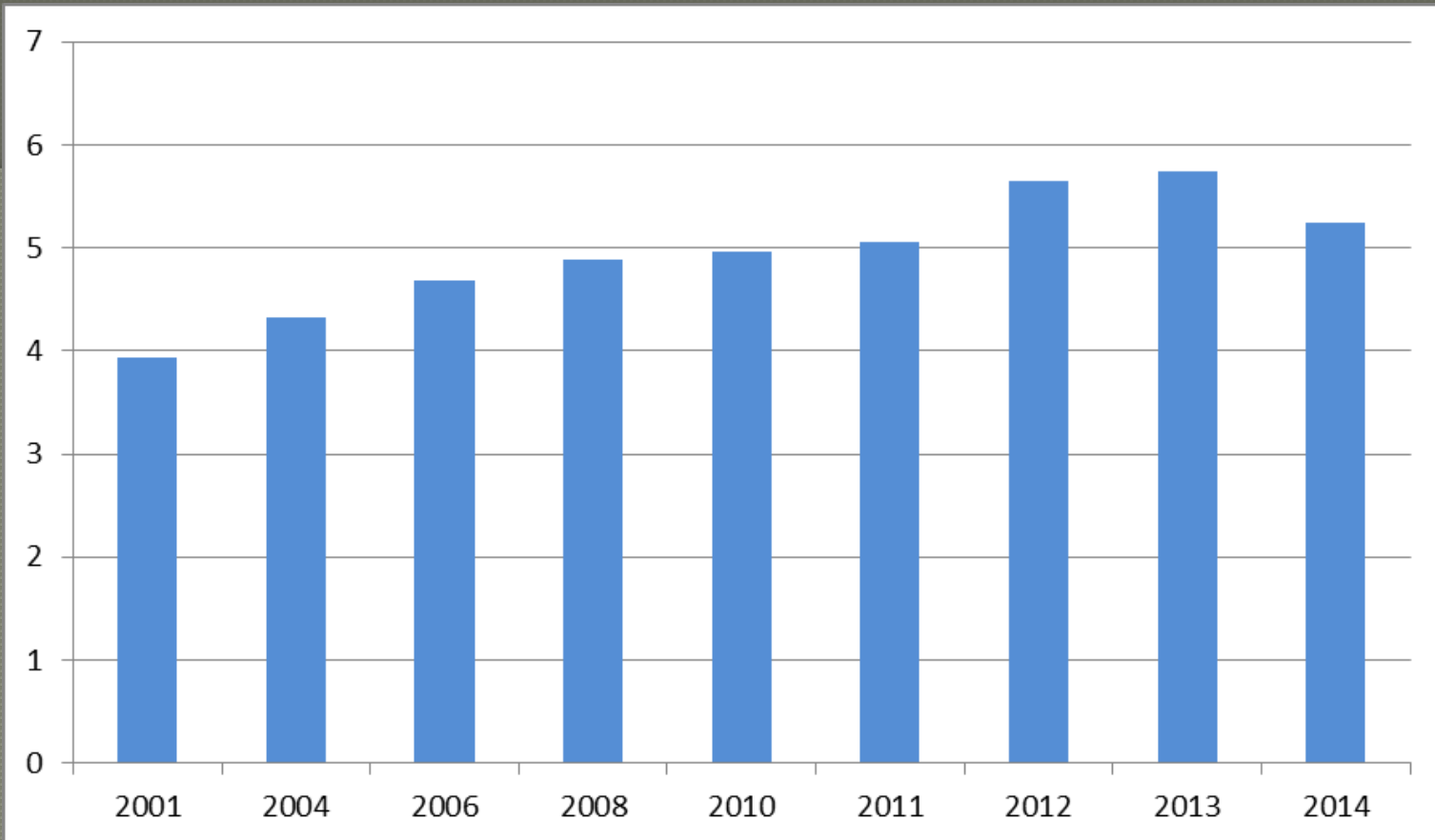
	2013 born	2014 born	2015 born
Total average spiker velvet	1.63kg	1.40kg	1.63kg
Median date spiker 1 <sup>st</sup> cut	2 <sup>nd</sup> December	17 <sup>th</sup> December	14 <sup>th</sup> November



# Effect on velvet at 2 year old



# Effect on velvet at 2 year old



# Conclusion

Quality of winter feed in year 1 affects:-

- Time of pedicle initiation
- Weight of spiker velvet?
- Weight of velvet at 2 years?
- Weight of velvet at 3 years??

# Lessons Learnt

Test Baleage – don't rely on eye-ometer

Monitor growth – weigh mid winter

# Winter Growth v's Feed Quality

<b>Tikana Bull Calves</b>	<b>Crude Protein (as % DM)</b>	<b>ME MJ/kgDM</b>	<b>Winter Growth Rate</b>
Required for growth	14 – 16%	9 - 12	
Required for pedicle initiation	18 – 20%		
Baleage 2014 born	9.4%	8.3	70gms/day
Baleage 2015 born	18.9%	9.6	204gms/day
Baleage 2016 born	18.4% 20.7%	10.6 9.7	272gms/day



