Hormone growth promotants in the NT

Results from Hayfield PDS

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A joint initiative of:
Proudly supported by:

- FutureBeef
- MLA
- Northern Territory Government
- Hayfield Station
- Elanco
Contents

• ABCs of HGPs
• Hayfield Station
• Trial design
• Growth results
• $$$
• HGP loss
Do you currently use HGPs?
HGP use in the NT
If you don’t use HGPs, why not?
Why not using HGPs?

- Market
- Opposed to hormones in food products
- Lack of benefit/cost
- Practicality
- Other
HGPs boost growth!
Active ingredients

**Androgens**
Testosterone propionate
Trenbolone acetate (TBA)

**Oestrogens**
Oestradial 17B
Oestradial benzoate
Formulation

**Vs.**

- **Silicone rubber**
  - Oestrogen
  - Compudose® products

- **Compressed pellet**
  - Combination of oestrogen and androgen

Source: Elanco
Poll

What type of HGP product do you use?
Functional pay-out period

Compressed pellet implants

Silicone rubber coated implants

Source: Hunter (2009)
Principles of HGPs

- Better base growth = better response to HGPs
- Once you start, don’t stop
- Use more shorter acting implants

Questions, comments?

Type your questions here anytime

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Why a HGP trial?

- NT growth responses?
- Response during dry?
- Better response just over wet?
- Shorter acting versus longer acting better?
Hayfield HGP trial design

Compared:

• **400D** (at weaning R1)
• **2x200D** (1\textsuperscript{st} at weaning R1, 2\textsuperscript{nd} at end of dry)
• **Wet season 200D** (at end of dry)
• **No HGP**
Hayfield Station
Hayfield Station
### Descriptive statistics

<table>
<thead>
<tr>
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<th>2010 cohort</th>
<th>2011 cohort</th>
</tr>
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<tbody>
<tr>
<td>Number inducted</td>
<td>471</td>
<td>492</td>
</tr>
<tr>
<td>Weaning wt (kg)</td>
<td>197</td>
<td>234</td>
</tr>
<tr>
<td>Dry ADG (kg/day)</td>
<td>-0.02</td>
<td>-0.05</td>
</tr>
<tr>
<td>Wet ADG (kg/day)</td>
<td>0.36</td>
<td>0.49</td>
</tr>
<tr>
<td>Annual ADG (kg/day)</td>
<td>0.21</td>
<td>0.30</td>
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ADG = Average Daily Gain
So what did we find?

ALL HGP strategies resulted in significantly higher growth than the NO HGP group BUT, no HGP strategy was significantly better than the other.
12% - 18% growth response!
Questions, comments?

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Which HGP strategy won on $$?
What about whole of life?

Weight advantage of HGP groups in July 2012

Still a significant effect of HPG
Hygiene and placement critical!
HGP loss was an issue

2010 HGP loss:

- 400D & Wet season 200D
  - 7% Lost HGP
  - 93% HGP present

- 2x200D
  - 78% HGP present
  - 19% Lost 1 HGP
  - 3% Lost both
2011 HGP loss data

2x200D
- 38% Lost second HGP
- 8% Both HGPs present
- 52% Lost first HGP

400D
- 91% HGP present
- 9% Lost HGP

Wet season 200D
- 75% HGP present
- 25% Lost HGP
Correct implantation pays $$!

<table>
<thead>
<tr>
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<th>400D</th>
<th>2x200D</th>
<th>Wet Season 200D</th>
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</thead>
<tbody>
<tr>
<td>Cost of implanting ($)</td>
<td>6.80</td>
<td>17.60</td>
<td>13.80</td>
</tr>
<tr>
<td>Lost $weight gain per steer ($)</td>
<td>22.50</td>
<td>19.80</td>
<td>19.80</td>
</tr>
<tr>
<td>Total opportunity cost per steer ($)</td>
<td>29.30</td>
<td>37.40</td>
<td>33.60</td>
</tr>
</tbody>
</table>

More money in your back pocket!
Summary points

• 10-15% growth advantage of a HGP achievable
• The real pay out of the HGP happened over the wet season
• The dry season growth advantage paid for the HGP itself
• 2x200D strategy will not give a better return when growth is limited over the dry
Summary points

• Wet Season 200D as good as 400D in R1
• Extra musters to implant HGPs need careful thought
• The weight advantage was maintained after the HGP stopped acting
• Should consider effect of HGP when determining whether steers will blow out over wet
Qs still to be answered

- Other HGP strategies – implanting calves, combination implants,
- Whole of life – would re-implantation of lighter steers have been worth it?
- What are the major causes of HGP loss?
Questions, comments?

Type your questions here anytime

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