Breeding values:
your tool for looking under the hood of your next sire

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1. Why breeding values matter

1.1 What influences an animal’s performance?
1.2 Looking under the hood
1.1 What influences an animal’s performance?

Remember: the basics have not changed.

- Feed
- Age
- Damage
- Disease
- Parasites
- GENES

Disease Parasites
1.2 Looking under the hood

We can’t see many profit drivers. That’s what breeding values are for.
1. Summary

Breeding values help remove non-genetic factors that impact the way a bull looks on sale day.
2. How breeding values help with buying bulls

2.1 Estimated breeding values
2.2 Available traits
2.3 Compare two bulls
2.3 Designing a breeding objective
2.4 Linking your business to genetics
2.1 Estimated breeding values

- Sire performance
- Dam performance
- Own performance
- Sibling performance
- Heritability
- Correlated traits
- Environment
- DNA
2.2 Available traits

**Fertility**
- Days to calving

**Calving ease**
- Calving ease daughters

**Growth traits**
- 400 day weight
- Mature cow weight

**Carcase traits**
- Carcase weight
- Intramuscular fat

**Temperament**
- Flight speed
## 2.3 Compare two bulls

<table>
<thead>
<tr>
<th>400 day weight</th>
<th>Bull A</th>
<th>Bull B</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBV</td>
<td>+36</td>
<td>+24</td>
</tr>
<tr>
<td>Accuracy</td>
<td>65%</td>
<td>67%</td>
</tr>
<tr>
<td>Percentile</td>
<td>15%</td>
<td>60%</td>
</tr>
<tr>
<td>Breed average</td>
<td>+26</td>
<td>+26</td>
</tr>
</tbody>
</table>

Bull A vs Bull B  
36 – 24 = 12kg  
12/2 = 6kg

Bull A will have progeny that are on average 6kg heavier than progeny from Bull B.
2.4 Designing a breeding objective

- Environment
- Target market
- Herd performance
- Profit drivers
Matching production traits with EBVs is a key step to find the right bulls for you!
2. Summary

Writing a breeding objective helps you work out which breeding values to use.
3. Kara Knudsen
4. Next steps

4.1 The genetics one-stop-shop
4.2 Short courses and other resources
4.1 A new one-stop-genetics shop
4.2 Short courses and other resources

- bredwell fedwell
- mla.com.au/events
- Breeding EDGE Workshop
- mla.com.au/events
- TBTTS
- tbts.une.edu.au
- SBTTS
- sbts.une.edu.au
5. Sneak peek

5.1 Selecting a high-performing sire
5.1 Selecting a high-performing sire
5. Summary

Do your homework before going to the sale.
Breeding values: your tool for looking under the hood of your next sire

1. Breeding values help remove non-genetic factors that impact the way a bull looks on sale day.

2. Writing a breeding objective helps you work out which breeding values to use.

3. Do your homework before going to the sale.
ACCELERATE
YOUR PRODUCTIVITY WITH GENETICS
better breeding values ➔ better progeny ➔ better performance