



Outcomes from Selection Index Review

Angus Australia has undertaken a comprehensive review of the selection indexes that are calculated for animals within the Angus BREEDPLAN genetic evaluation during 2014.

Why has the review of the selection indexes been undertaken?

The selection index review has been conducted as part of the routine maintenance of the Angus BREEDPLAN genetic evaluation, with the selection indexes having last been reviewed in 2008.

The purpose of the selection index review was to evaluate whether the selection indexes being calculated were appropriate for current Angus production systems and to ensure that the economic parameters being used in the calculation of the selection indexes reflected current costs and returns.

It is normal industry practise to review the selection indexes every 5 – 6 years to maintain the relevance of the selection indexes being calculated.

What process was undertaken to review the selection indexes?

The selection index review process can broadly be described as:

1. Extensive Industry Consultation

The first stage of the selection index review was the facilitation of a comprehensive industry consultation process by Angus Australia to collect feedback on the key considerations to the breeding direction of the Angus breed over the next 10 years.

The consultation process, titled “Setting the Breeding Direction of the Angus Breed”, included liaison with producers running Angus seedstock and commercial enterprises, feedlots, processors, semen companies, researchers and private consultants. Over 300 beef producers provided feedback as part of the consultation process, representing a seedstock and commercial breeding herd of over 105,000 females and 17,500 bull sales annually.

The consultation process was conducted during September and involved a nationwide series of nine workshops across Australia, coupled with an online survey, and individual one on one consultations.

2. Development of draft selection indexes

Following the “Setting the Breeding Direction of the Angus Breed” consultation process, Angus Australia staff, in association with the Angus Australia Breed Development Committee developed draft selection indexes for consideration by members of Angus Australia.

3. Feedback and review of draft selection indexes

The draft selection indexes were presented to Angus Australia members during late October for review. Feedback was collected via an online webinar presentation, coupled by one on one consultations with individual Angus Australia members.

As a result of the feedback received during the review process, a number of further modifications were made to fine tune the selection indexes, prior to final approval of the new selection indexes by the Angus Australia Breed Development Committee.

What selection indexes will now be calculated?

Four new selection indexes will now be calculated for animals within Angus BREEDPLAN, being the Angus Breeding Index, Domestic Index, Heavy Grain Index and Heavy Grass Index.

The most significant change is the introduction of the Angus Breeding Index, which is a general purpose selection index that is not specific to a particular production system or market end-point, but identifies animals that will improve overall profitability in the majority of commercial grass and grain finishing beef production systems.

The Domestic, Heavy Grain and Heavy Grass selection indexes are specific to beef operations targeting a defined production system and market endpoint.

What are the major differences between the new selection indexes and those calculated previously?

The new selection indexes replace the Short Fed Domestic, Heavy Grass Fed Steer, Long Fed / CAAB and Terminal selection indexes.

Relative to the previous indexes:

- All economic and production parameters utilised in the compilation of the selection indexes have been updated to reflect the costs and returns within current Angus production systems.
- Increased emphasis has been placed on eating quality and tenderness to favour animals with superior meat quality.
- Greater emphasis has been placed on maternal attributes, reflecting the importance of the female breeding herd in a self replacing beef enterprise.

The Terminal Index will no longer be published as feedback received during the industry consultation process suggested that it was no longer of relevance. Producers previously using the Terminal Index to assist with selection decisions are encouraged to use the Angus Breeding Index, coupled with the individual EBVs of particular importance to their breeding program.

When will the new selection indexes be implemented?

The new selection indexes will be implemented as part of the December 2014 Angus BREEDPLAN analysis, with the results of this analysis scheduled for release in the first week of December.

Will the selection indexes for individual animals be different?

With the introduction of new selection indexes, it is expected that the selection index values calculated for individual animals will be different to those calculated previously.

In particular, the selection indexes have been adjusted so that the average selection index of the 2013 drop calves for each of the four new selection indexes is +100. This will better align the different selection indexes.

It is also expected that the ranking of some animals may be different with the introduction of the new selection indexes.

What if the new selection indexes are not consistent with my breeding objective?

While four standard selection indexes will now be calculated within Angus BREEDPLAN, members also have the option of customising a selection index for their specific breeding program.

A customised selection index can be developed in one of two ways:

- Setting up a username and password on the BreedObject website (www.breedobject.com) and completing a short questionnaire.
- Utilising the services of an approved BreedObject consultant to develop an index using an expanded questionnaire. Contact staff at Angus Australia for further details and pricing.

Are further changes likely to occur to the selection indexes?

As part of the industry consultation process, a number of suggestions were made as to possible improvements that could be made to the calculation and display of the selection indexes, including:

- Display of selection indexes in percentile band units, rather than \$ units
- Investigation of sub-indexes to break the whole chain selection index values into values for the different components of the production chain
- Calculation of accuracy values for selection indexes
- Review of economic modelling used in the calculation of the selection indexes

The merits of these suggestions will now be considered by staff at Angus Australia, in association with the Angus Australia Breed Development Committee as part of the ongoing improvement to the Angus BREEDPLAN genetic evaluation.

The Animal Genetics & Breeding Unit (AGBU) at the University of New England has also indicated that a new version of BreedObject software should be available for use during 2015, which will be reviewed once available.

Future Considerations for the Angus Breed

During the industry consultation process, Angus Australia also asked members for feedback on the key considerations for the Angus breed over the next 10 years, resulting in some very constructive suggestions and discussion.



The key themes from this discussion have now been collated by Angus Australia staff and will be presented for consideration to the Board of Directors of Angus Australia at a Board Workshop on November 27th.

Further Information

For further information regarding the review of the selection indexes that are calculated within Angus BREEDPLAN, please contact either Angus Australia's Breed Development & Innovation Manager, Carel Teseling on (02) 6773 4602 or via email carel@angusaustralia.com, or Angus Australia's Education, Extension & Youth Manager, Andrew Byrne on (02) 6773 4618 or via email andrew@angusaustralia.com.au.

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