AGBU
ANIMAL GENETICS AND BREEDING UNIT
A joint unit of NSW DPI and UNE

Pig Genetics Info

PBSELECT
The online PIGBLUP service

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What is PBSELECT?

PBSELECT is an automated e-mail service that provides Estimated Breeding Values (EBVs) for important traits affecting the profitability of pork production. PBSELECT combines EBVs of individual traits into an economic index ($Index). Pigs should be selected on the $Index. This information enables pork producers to better select replacement stock on farm. PBSELECT also provides genetic and environmental trends.

PBSELECT does not include all features that are part of the PIGBLUP program. However, upgrading to PIGBLUP is possible at a later stage.

Who should use PBSELECT?

Producers who select some or all replacement stock on farm and have an electronic herd recording system in place should use PBSELECT to make better use of available data. Selection decisions may be based on litter size only. However, the benefits from using PBSELECT will be greater if growth rate and backfat are recorded as well. Please note, it is not necessary to record the performance of all growing pigs on farm.

How does PBSELECT work?

Data recorded on farm is exported by the herd recording system into a data file format that is suitable for PBSELECT. The format of this file is based on the PIGBLUP data format. This data file is then sent via e-mail to the specific e-mail address of PBSELECT at a time convenient to the producer. The analyses commence automatically when new data arrive at the PBSELECT server. After a few minutes the results are then returned via e-mail as an archive. This archive includes a number of files that can be viewed on the producers computer with a standard web browser. In addition, a file containing EBVs and the $Index is returned, which can be read back into the herd recording system. Information about EBVs and the $Index can then be viewed together with other information available in the herd recording system.

PBSELECT results explained

Estimated Breeding Values (EBVs).

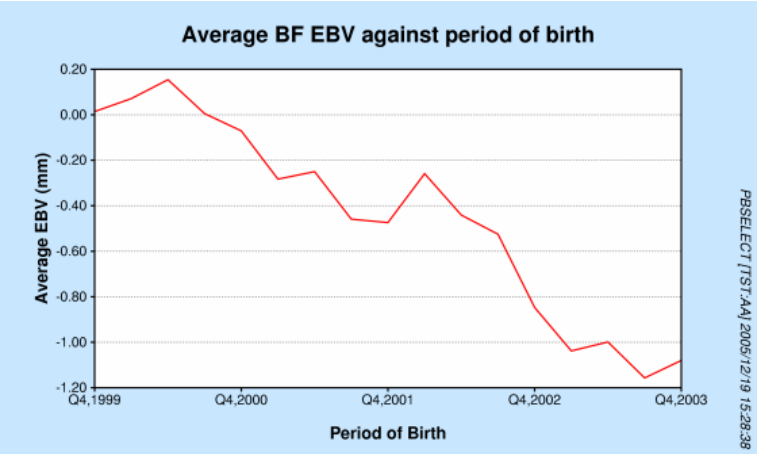
Estimated Breeding Values (EBVs) provide information about the (estimated) genetic merit of an animal for individual traits like growth rate, backfat or litter size. The EBVs are shown in the unit of each trait (ie. g/day, mm or piglets). PBSELECT only shows EBVs for pigs that are of interest to the producer. These are parents and young animals that are eligible for selection.

$Index

The costs of production and payment grids are incorporated into the $Index to weigh EBVs for individual traits with their respective economic importance. The $Index is expressed in dollars per litter. Selection decisions should be based on the $Index.

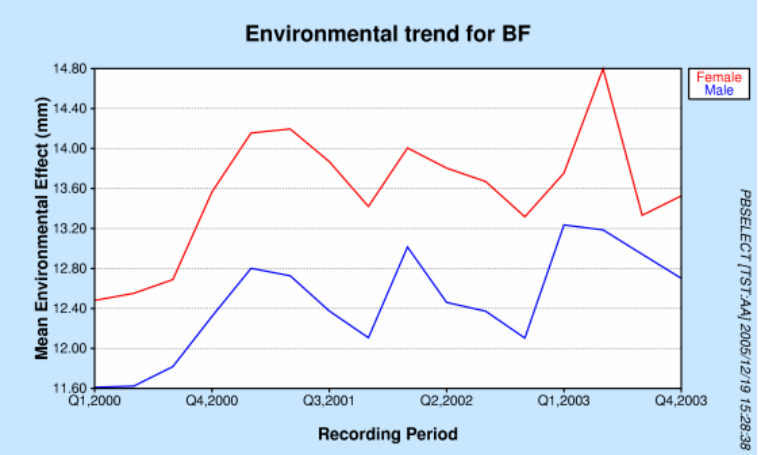
Genetic trends

Genetic trends show the change in average EBVs of animals against their period of birth. The example below shows a graph for backfat (BF) from PBSELECT. Backfat has been reduced genetically by 1.2 mm over 4 years in this example.



Environmental trends

Environmental trends show the changes in performance due to changes in the environment (management, housing, feeding, disease status) over time. This information is useful to evaluate changes in management on farm. The environmental trend below shows that females had a higher backfat measurement than males. There were some changes between quarters, but overall the environmental trend has stayed relatively stable.



Further questions?

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Australian Pork

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