

# Implementation of Buyers Own Index in PIGBLUP

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PIGBLUP contains an option to develop Selection Indices for Buyers of your seedstock. This allows you to use a buyers own economic situation to rank your animals specifically for this client.

The same options available for your own index are available for the index of your clients:

- \* Using your client's economic data
- \* Using weights for the EBVs provided by your client.

One can also use the buyer index option to study the effects of changes to any economic data on Index ranking without recalculating the EBVs.

As with herd and breed within herd, PIGBLUP allows you to install different clients within a breed. At the moment you have to install a client for every breed separately. There is no facility to copy his economic data from one breed to the other.

A default set of economic parameters is automatically installed when you install a new buyer. This default set has the following values. These values have to be adjusted to your clients situation. These default values are also in a breeders own index if they have not been changed.

Default economic parameters for buyers index.		PIGBLUP default	CLINIC97 default
Average Carcase Market Price	\$/kg	2.15	2.15
Premium for Aus-meat grid fat class cypher 0	\$	0.00	0.00
Premium for Aus-meat grid fat class cypher 1	\$	0.00	0.00
Premium for Aus-meat grid fat class cypher 2	\$	0.00	0.00
Premium for Aus-meat grid fat class cypher 3	\$	-0.15	-0.15
Premium for Aus-meat grid fat class cypher 4	\$	-0.25	-0.25
Premium for Aus-meat grid fat class cypher 5	\$	-0.50	-0.50
Cost per kg Feed in Feeder	\$/kg	0.24	0.24
Non-feed Costs per Day (e.g., Labor & Housing)	\$/pig/day	0.15	0.15
Number of Pigs Born Alive per litter,	n	10.20	10.50
Pre-weaning Mortality	%	21.00	10.00
Post-weaning Mortality	%	1.00	1.00
Average Daily Gain to Market Weight	gm/day	513.00	600.00
Mean p2 Fat Depth	mm	16.00	14.00
Is feed restricted in grow/finish to reduce P2 fat?	(Y/N)	N	N
Feed Conversion, (kg feed per kg live wt.)	kg/kg	3.50	2.50
Target Market Carcase Weight	kg	65.00	75.00
Dressing Percent	%	74.00	75.00
Percent of Boars sold (or used) as Terminal Sires	%	60.00	60.00

Percent of Boars sold (or used) as Maternal Sires	%	00.00	00.00
Percent of Boars sold (or used) as Slaughter Boars	%	40.00	40.00
Percent of Gilts sold (or used) as Replacement Gilts	%	20.00	20.00
Percent of Gilts sold (or used) as Slaughter Gilts	%	80.00	80.00

The next step is to tell the program which type of index the client is using: Supplied Weights or Economic Data. The final step before applying the index is to identify if the index should be standardised or not, **the default is YES**.

A run log file is created when the index is calculated. The Index program reads the EBV file from the breed directory (B0 .. BN) and calculates a new index which is stored in the breed\client directory. The breeders own index remains unchanged. Animals EBVs and Index can be selected, sorted and viewed in the usual way.

We have included a new feature in PIGBLUP. When you select a group of animals the program calculates the average weight given to each EBV when calculating the Index. This weight is a \$ value for each EBV and is retrospectively calculated from the EBVs and the \$Index of the selected animals. Therefore they might differ slightly from one selected group to another, eg. boars versus sows.

We use this new feature to let you work through a CLINIC97 data set which has been extracted from an overseas customer's data. The data contains recorded feed efficiency.

## Exercise

Identify changes in economic weights in the PIGBLUP \$Index as production parameters change.

These exercises should be done on the example Herd 'CLINIC97' which has been installed on each computer. EBVs have already been calculated and can be viewed in the normal way.

1. Keeping all other parameters constant change feed costs from 18c to 28c in steps of two cents.

	Feedcost per kg					
Traits	18	20	22	24	26	28
ADG						
BF						
FCR						
NBA						

2. Keeping all other parameters constant, change mean p2 Fat Depth from 10 to 22 mm

	Mean Backfat in Herd						
Traits	10	12	14	16	18	20	22
ADG							
BF							
FCR							
NBA							

3. Keeping all other parameters constant change % boars sold as Terminal Sires from 60 to 0% . 40% of boars are always sold as slaughter animals.

	Boars sold as Terminal Sires					
Traits	60	40	30	20	10	0
ADG						
BF						
FCR						
NBA						

4. Choose any other parameter and vary it within a reasonable range. Set the other parameters to their CLINIC97 default values.

Traits						
ADG						
BF						
FCR						
NBA						

Traits						
ADG						
BF						
FCR						
NBA						