

# “I Manage My Unit by Numbers”

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**Alexander and Angell ( Farms )Ltd**

## You Can't Manage What You Don't Measure !



- **Manage 72000 Broiler breeders**
- 4 sites and 31 houses in total.
- **Daily records**
  - **Feed consumption x male and female**
  - Water consumption; 1.8 : 1 feed to water
  - **Min /max temperature and Relative Humidity**
  - Total eggs laid and where laid – floor / nest
  - **Hatching quality % and reasons for failures**
  - Weight of sample of eggs ( 5 /7 days )

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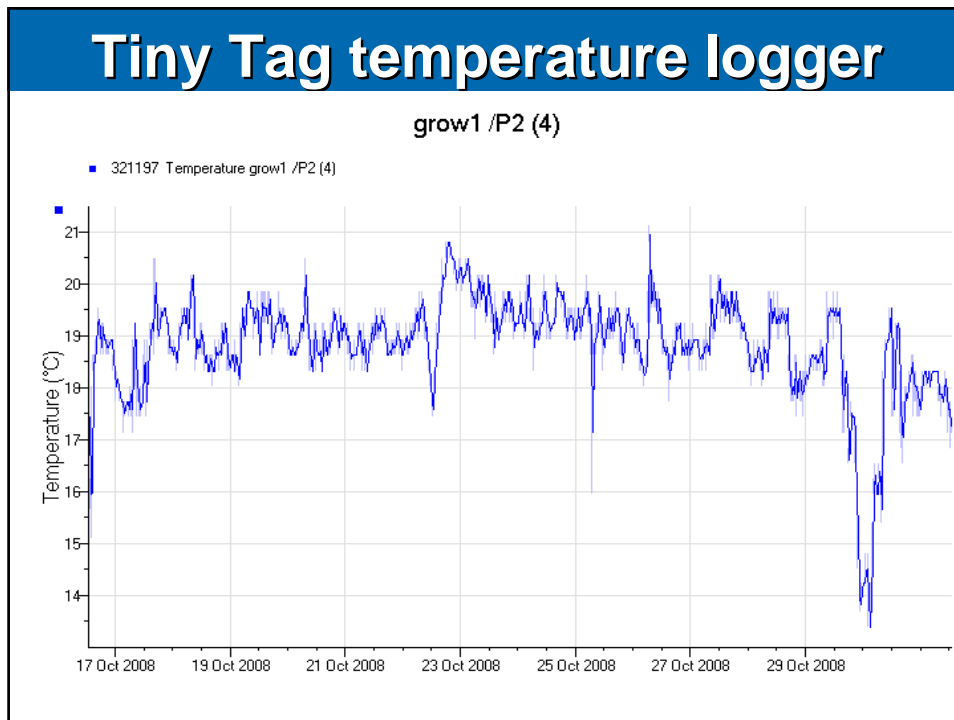


- **Weekly records**
  - **Bird weight from sample of males and females**
  - Incubate sample of eggs to check fertility %
- **Increased the level of recording occurring on the pig unit**

## The Next Steps.....

- **Change direction from being a multiplier to a commercial Breeder-Feeder with our own Within Herd Breeding programme**
- **Decide on sale weights and outlets**
- **Introduce recording and reporting system**
  - **Agrosoft - Winpig for breeding unit**
  - **'In house' recording and reporting**
    - Water consumption
    - **Temperature logger**

## Tiny Tag temperature logger



## The Next Steps.....

- Continue tattooing piglets with birth week number.



## The Next Steps.....

- Purchased trolley scales to measure weaning weight.



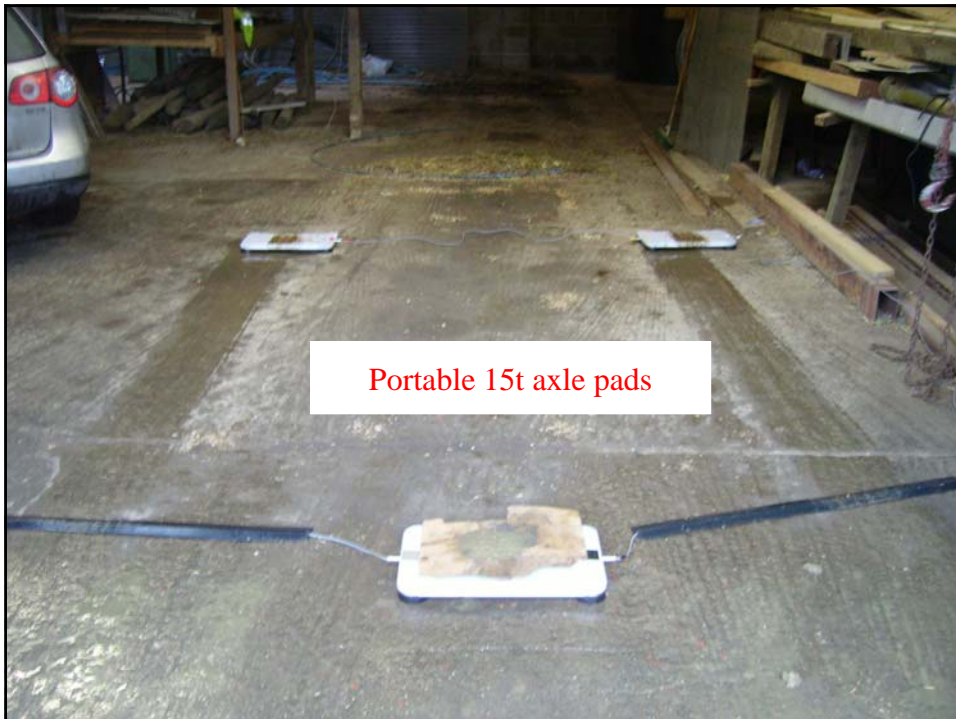
## The Next Steps.....

- Record birth week at selection to calculate wean to sale adlwg



## The Next Steps.....

- However no information on pig performance through the system
- With help from the BPEX Innovation Fund, developed and tested the practicalities of using portable load cells.
- Teething problems as expected with any new practice, but now have a robust weighing protocol.

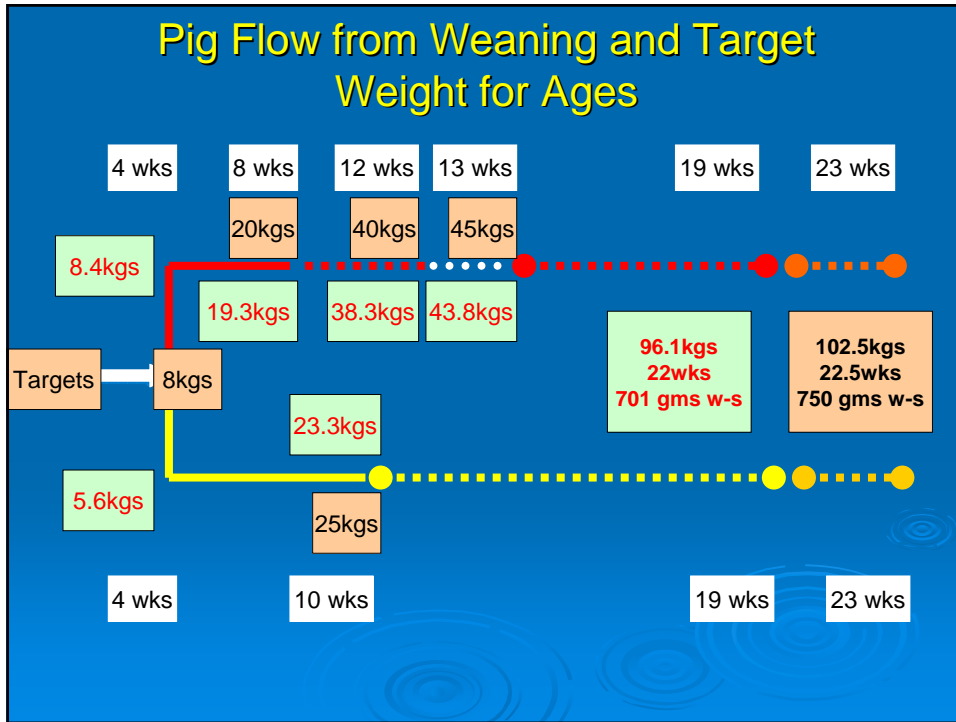




## The Next Steps.....

- **Now able to capture exit weights :-**
  - From flatdeck – grower house
  - From grower house – finisher house
  - From verandah – finishing house
- **With accurate information now available, able to calculate adlwg for each stage**
- **Advice sought from feed and genetics suppliers to set achievable weight for age targets**

# Pig Flow from Weaning and Target Weight for Ages



# Weekly movements

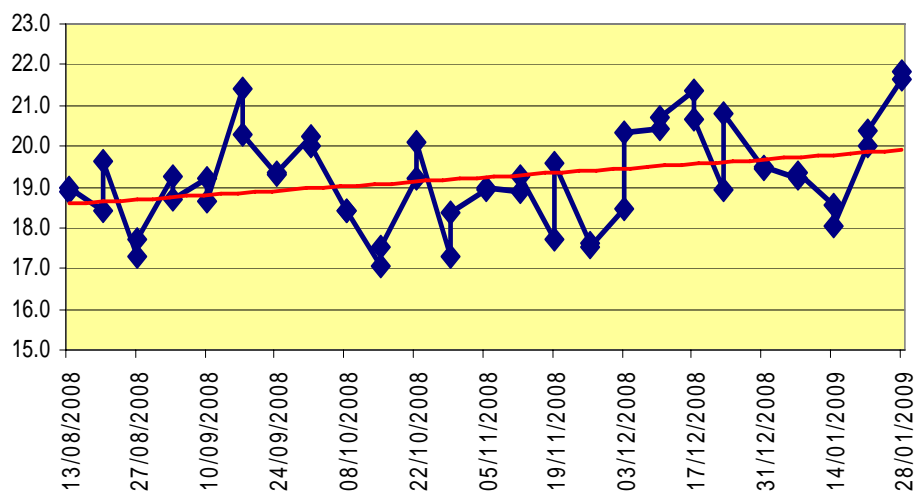
Microsoft Excel - Early growth.xls

Batch	Parous Date	Weaning Date	Gender	Number	Weaning Weight	Transfer date to Grower	Number	Transfer date to Finisher	Number	Transfer weight to Finisher	Days in Nursery	Weeks in Nursery	Gms per day in Grower	Days in Grower	Weeks in Grower	Days in Finisher	Weeks in Finisher	Gms per day from		
15	P	18-Jul	M	84	8.6	14-Aug	82	18.0	18-Sep	87	22.50	25	4	377	27	4	504	56	8	439
16	Q	25-Jul	F	84	7.9	21-Aug	82	17.50	24-Sep	77	25.50	25	4	34	5	63	9	63	9	445
17	Q	25-Jul	M	24	7.9	21-Aug	73	17.50	24-Sep	67	20.25	23	4	27	4	56	8	56	8	401
18	R	02-Aug	F	83	8.2	28-Aug	81	18.00	01-Oct	81	28.80	29	4	34	5	63	9	63	9	490
19	R	02-Aug	M	67	8.2	28-Aug	66	18.00	01-Oct	70	25.20	29	4	34	5	63	9	63	9	490
20	S	09-Aug	F	86	8.3	04-Sep	87	18.00	07-Oct	87	28.80	29	4	34	5	63	9	63	9	490
21	S	09-Aug	M	86	8.3	04-Sep	85	18.00	07-Oct	82	23.34	29	4	27	4	56	8	56	8	448
22	T	16-Aug	F	81	8.6	15-Sep	83	18.9	16-Oct	85	40.50	29	4	395	29	5	691	64	9	500
23	T	16-Aug	M	81	8.6	15-Sep	78	18.9	16-Oct	83	35.50	29	4	398	27	4	598	56	8	473
24	U	23-Aug	F	73	7.9	08-Sep	69	18.4	22-Oct	69	41.83	29	4	381	34	5	689	63	9	638
25	U	23-Aug	M	70	7.9	08-Sep	71	19.6	16-Oct	71	29.27	29	4	402	29	4	559	57	8	490
26	A	30-Aug	F	69	8.4	25-Sep	72	17.2	22-Oct	72	26.26	29	4	398	27	4	707	56	8	499
27	A	30-Aug	M	77	8.4	25-Sep	76	17.2	24-Oct	69	38.93	29	4	321	34	5	424	63	9	495
28	B	06-Aug	F	86	8.0	02-Oct	84	19.2	29-Oct	82	29.56	29	4	399	27	4	604	56	8	492
29	B	06-Aug	M	77	8.0	02-Oct	77	18.7	05-Nov	78	29.82	29	4	389	34	5	624	63	9	507
30	C	13-Aug	F	67	7.9	09-Oct	67	18.2	05-Nov	65	32.00	29	4	391	27	4	503	56	8	445
31	C	13-Aug	M	81	7.9	09-Oct	80	18.6	12-Nov	79	29.41	29	4	371	34	5	478	63	9	501
32	D	20-Aug	F	86	8.1	16-Oct	84	21.8	12-Nov	78	28.94	29	4	458	27	4	674	56	8	498
33	D	20-Aug	M	63	8.1	16-Oct	62	18.3	19-Nov	61	41.84	29	4	409	34	5	643	63	9	543
34	E	27-Aug	F	89	7.7	23-Oct	89	18.3	19-Nov	88	29.02	29	4	400	27	4	692	56	8	489
35	E	27-Aug	M	73	7.7	23-Oct	73	18.3	26-Nov	72	42.80	29	4	401	34	5	692	63	9	509
36	F	03-Sep	F	80	8.6	30-Oct	80	20.3	26-Nov	87	37.8	29	4	403	27	4	626	56	8	508
37	F	03-Sep	M	89	8.8	30-Oct	89	20.0	03-Dec	87	44.48	29	4	395	34	5	719	63	9	570
38	G	10-Sep	F	76	7.8	06-Nov	74	18.4	04-Dec	74	26.62	29	4	387	29	4	494	63	9	488
39	G	10-Sep	M	77	7.8	06-Nov	76	18.4	10-Dec	73	41.2	29	4	386	34	5	600	63	9	529
40	H	17-Sep	F	84	8.2	15-Nov	88	17.0	10-Dec	88	24.00	29	4	595	27	4	629	56	8	441
41	H	17-Sep	M	81	8.2	15-Nov	82	17.5	07-Dec	78	40.07	29	4	322	34	5	643	63	9	606
42	I	24-Sep	F	84	8.2	20-Nov	80	19.2	17-Dec	86	37.72	29	4	392	27	4	695	56	8	508
43	I	24-Sep	M	84	8.2	20-Nov	83	20.1	22-Dec	78	48.30	29	4	392	32	5	624	63	9	514
44	J	01-Oct	F	89	8.4	27-Nov	85	17.3	22-Dec	84	33.25	29	4	508	25	4	636	54	8	460
45	J	01-Oct	M	84	8.4	27-Nov	83	18.4	29-Dec	82	29.00	29	4	344	30	5	659	63	9	507
46	K	08-Oct	F	82	8.6	04-Dec	77	18.9	30-Dec	77	28.80	29	4	395	29	4	649	63	9	494
47	K	08-Oct	M	71	8.6	04-Dec	71	19.0	07-Jan	70	43.50	29	4	387	34	5	721	63	9	553
48	L	15-Oct	F	79	8.2	10-Dec	75	18.9	07-Jan	74	29.25	29	4	388	27	4	690	56	8	490
49	L	15-Oct	M	73	8.2	10-Dec	70	18.2	14-Jan	68	42.2	29	4	381	34	5	675	63	9	540
50	M	22-Oct	F	73	8.3	18-Dec	70	17.7	14-Jan	68	34.41	29	4	325	27	4	639	56	8	466
51	M	22-Oct	M	82	8.3	18-Dec	79	19.6	21-Jan	78	42.89	29	4	390	34	5	699	63	9	551
52	N	29-Oct	F	80	8.3	23-Dec	81	17.4	21-Jan	79	28.0	27	4	344	29	4	703	56	8	620
53	N	29-Oct	M	69	8.3	23-Dec	62	17.5	25-Jan	65	43.94	27	4	341	30	5	734	63	9	565
54	O	05-Nov	F	87	8.9	09-Jan	86	18.8	28-Jan	86	38.80	28	4	348	29	4	727	56	8	538

## Need to use records for analysis

- **Rearer – Finisher Herd**
  - Performance at each stage
  - Identify areas we can improve
  - Timely intervention if performance falls
- **Have improved:-**
  - Exit weight from nursery to grower

## T/F from Nursery into Grower

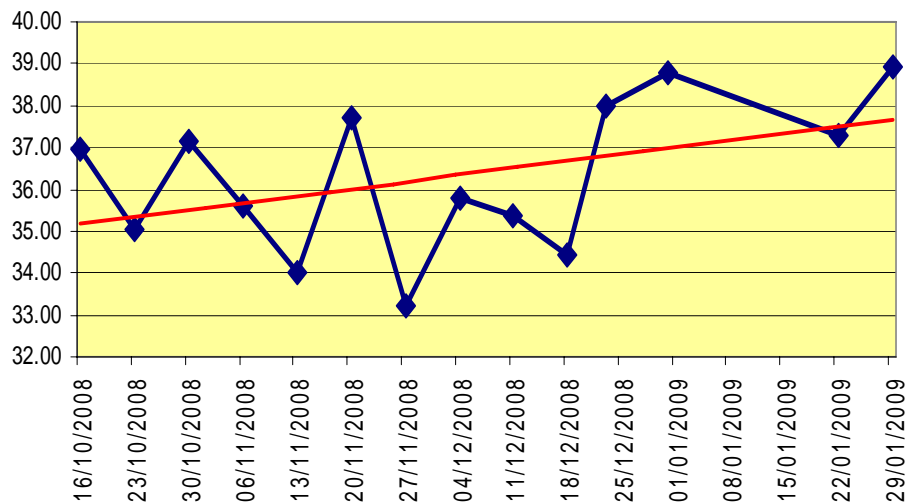


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  - Performance at each stage
  - Identify areas we can improve
  - Timely intervention if performance falls
- **Have improved:-**
  - Exit weight from nursery to grower
  - **Exit weight from grower to finisher**



## T/F @ 12 weeks from Grower to Finishing

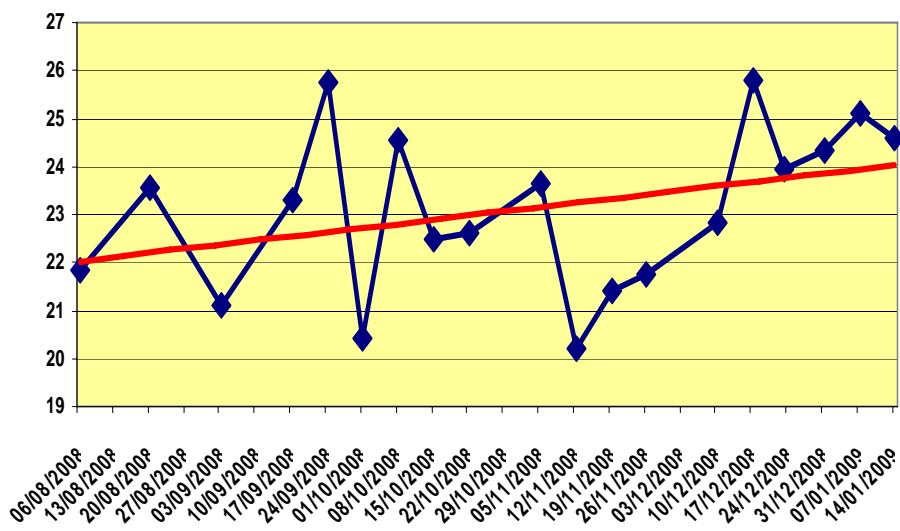


## Need to use records for analysis

- Rearer – Finisher Herd
  - Performance at each stage
  - Identify areas we can improve
  - Timely intervention if performance falls
- **Have improved:-**
  - Exit weight from nursery to grower
  - Exit weight from grower to finisher
  - **Our management of the smaller, streamered pigs**

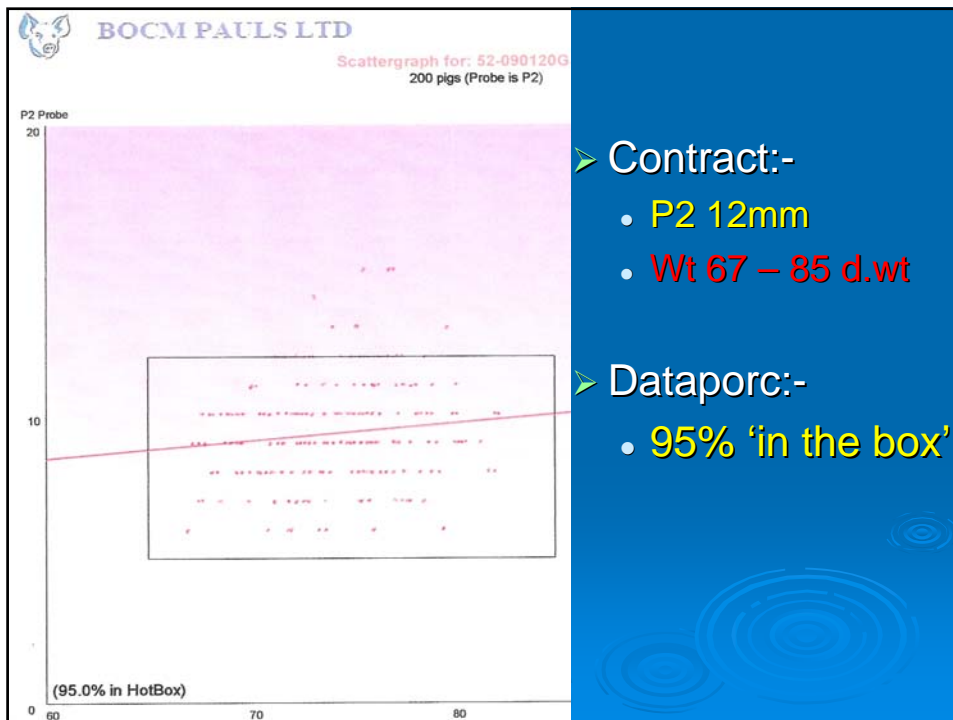


## T/F @ 10 weeks from Verandah to Finishing



## Individually weighing pigs pre sale allows us to:-

- Gather knowledge of pig growth and within pen weight variation
- Select pigs for the appropriate contract and maximise our income



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- **Select pigs to reduce stocking density and improve pen clearance**

## Individually weighing pigs pre sale allows us to:-

- Gather knowledge of pig growth and within pen weight variation
- Select pigs for the appropriate contract and maximise our income
- Select pigs to reduce stocking density and improve pen clearance
- **Select the slower growing pig**

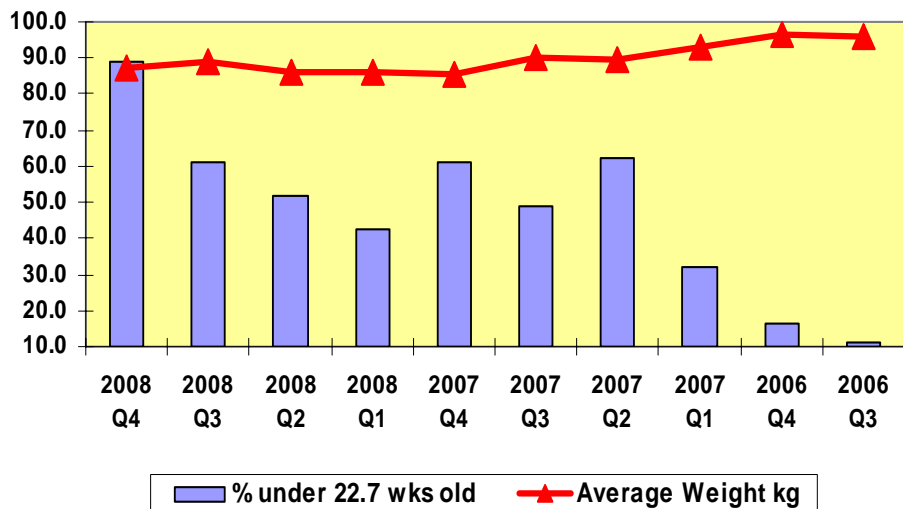


## Weekly Ages at Sale

Microsoft Excel - Age to Slaughter.xls

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
1	DWG1 is daily gain from birth																										
30	Older Than	34.7				0.0	0.1	0.1				0.0	0.3	0.4	0.9												
31																											
32																											
33	Slaughter House		Totals	Totals	Totals	Totals	Totals	Totals	Totals	Totals	Totals	Totals	Totals														
34	Or Less	15.7																									
35		16.7																									
36		17.7	1	1	11			1																			
37		18.7	9	37	12			1	2	2	9	1	10	1													
38		19.7	85	239	84	19	5	51	25	81	23	23	5														
39		20.7	226	672	217	159	122	210	175	177	82	33	17														
40		21.7	391	773	554	314	321	353	370	530	252	55	36														
41		22.7	246	514	742	523	640	662	664	573	379	204	122														
42		23.7	31	129	649	490	583	496	517	399	474	392	195														
43		24.7	8	68	186	217	564	288	357	245	437	423	467														
44		25.7	2	18	191	133	161	95	179	116	388	338	449														
45		26.7		8	67	67	123	38	72	46	214	201	218														
46		27.7	1	4	28	19	43	17	38	25	70	160	240														
47		28.7		10	8	12	5	10	7	24	88	139															
48		29.7			5	4	11	4	1	6	14	51	51														
49		30.7			1	1	3	2	1	3	10	10	38														
50		31.7			1	4	1		2	4	13	6	12														
51		32.7			3	2	2	2		3	4	4	11														
52		33.7	1			1					2	4	8														
53	Or More	34.7				1	2			1	6	7	18														
54	Number Filled		931	2400	2461	1963	2693	2092	2311	2194	2293	1967	2957														
55	Average Weight		87.8	82.5	83.3	88.9	85.9	85.8	88.1	88.7	82.8	86.3	85.9														
56	Average Age		21.6	21.7	22.9	23.3	23.2	23.8	23.4	22.8	24.2	25.2	25.8														
57	Daily Gain		614	603	578	546	545	556	588	563	552	542	529														
58																											
59	Assuming		28	wearing	wearing																						
60	Assuming		7.75	Kg	wearing	Kg	wearing	weight																			
61																											
62	Weeks from weaning		17.6	17.7	18.9	19.3	19.7	19.8	19.4	18.9	20.2	21.2	21.8														
63	Growth from weaning		88.2	78.7	81.5	78.2	78.1	77.9	82.4	81.8	85.8	88.5	88.2														
64	Daily gain from weaning		691	676	632	691	680	615	628	624	686	593	575														
65																											
66			2008 Q1	2008 Q4	2008 Q3	2008 Q2	2008 Q1	2007 Q4	2007 Q3	2007 Q2	2007 Q1	2006 Q4	2006 Q3														
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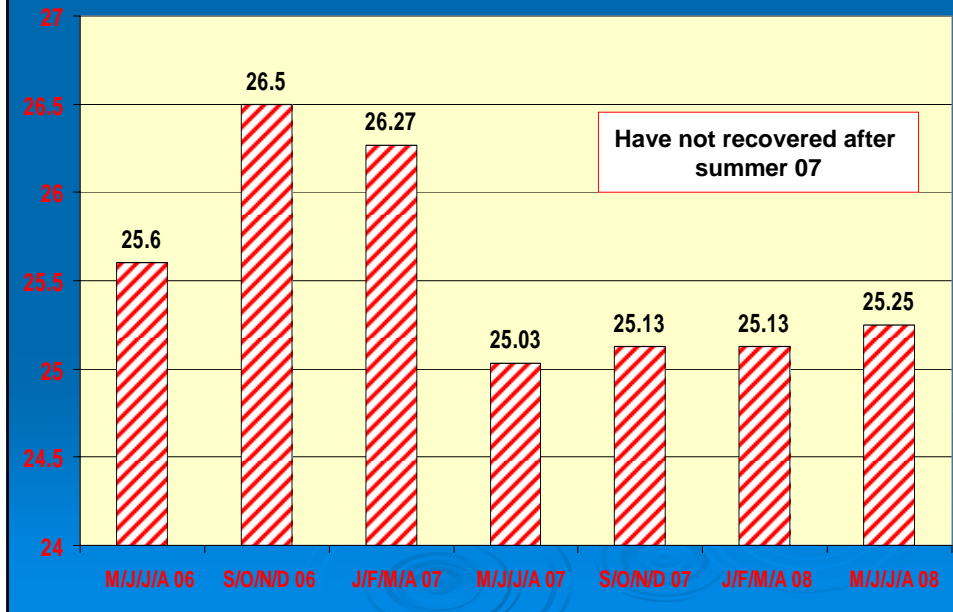
## Sale weight and age



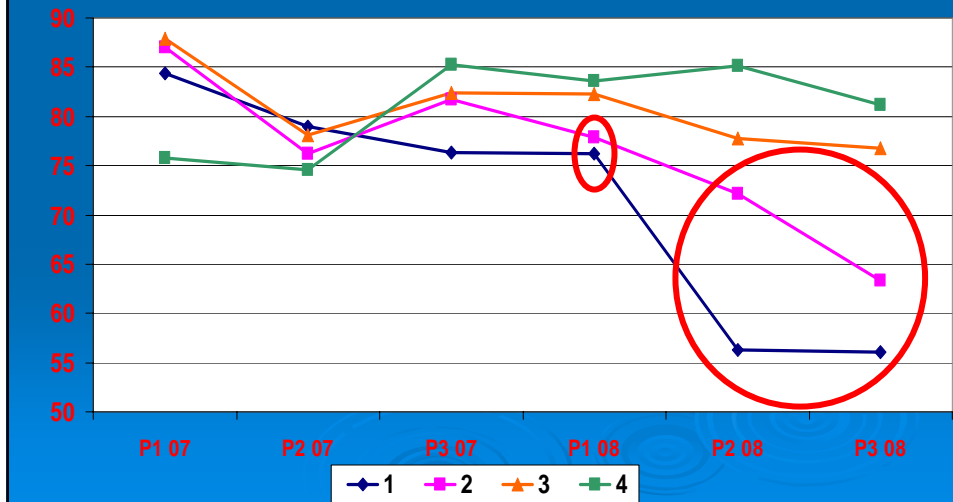
## Need to use records for analysis

- Rearer – Finisher Herd
- **Breeding Herd**
  - Overall performance and action sheets
  - Individual sow records allows us to use it for in depth analysis
  - Identify areas we can improve
  - Timely intervention if performance falls

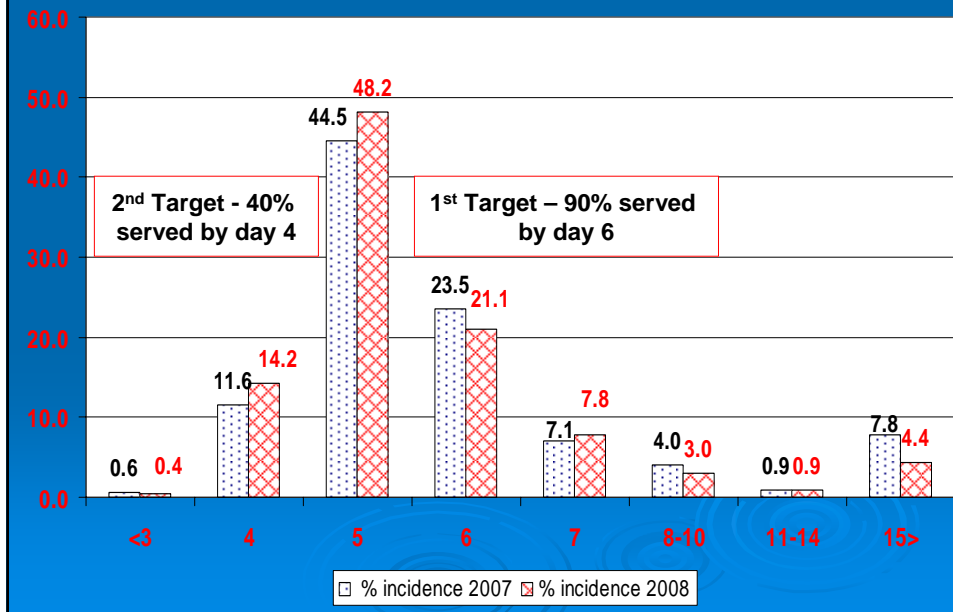
## Pigs weaned / sow / year



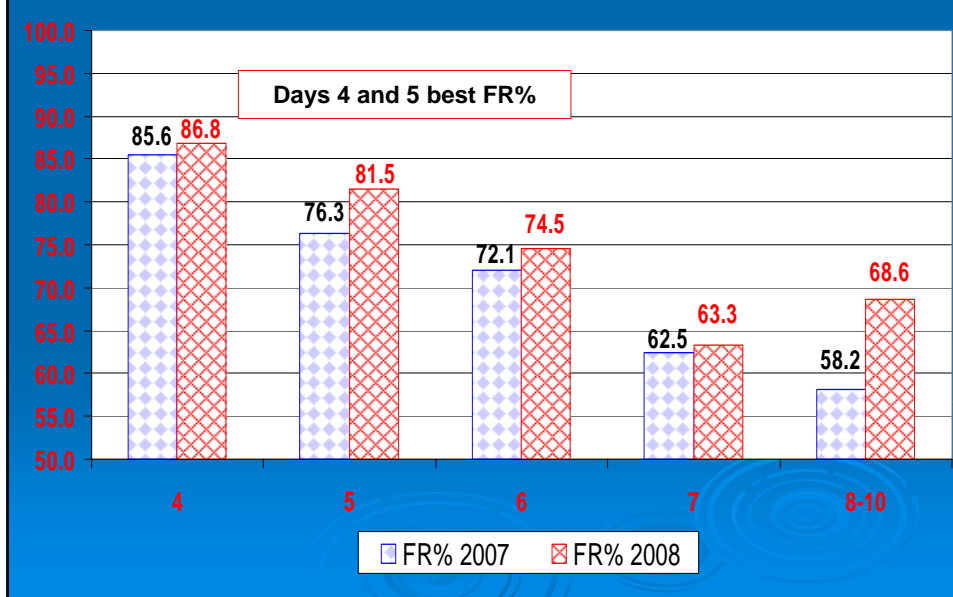
## Analysis identified gilt and 2<sup>nd</sup> parities now under achieving



## Extended Wean to Oestrus interval



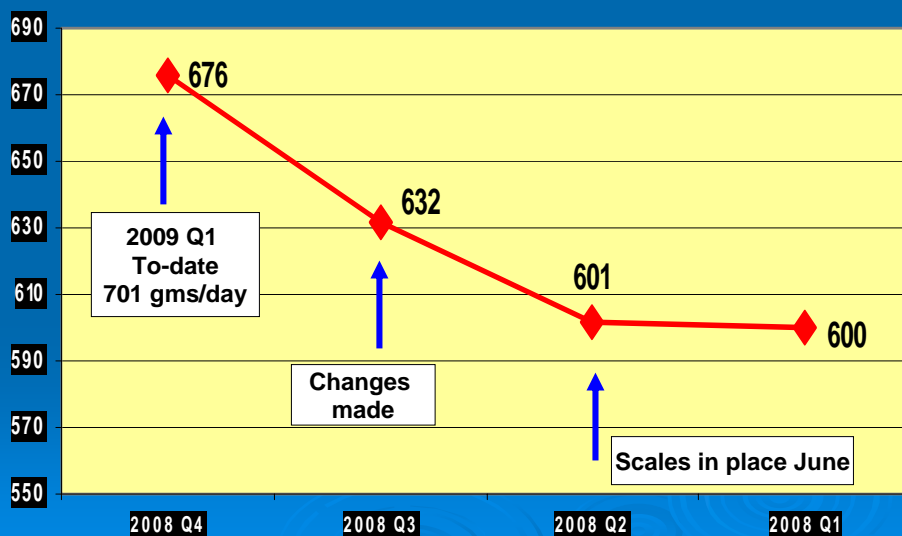
## FR% associated with WOE



## You Can't Manage What You Don't Measure !

- By measuring, analysing and implementing changes in the finishing we know we have:-
- Improved growth rate in the nursery
- Improved growth rate in the grower
- Improved growth rate of our small 'second stream' pigs in the verandah
- Improved growth rate of the 'second stream' in finishing

## Adlwg: Wean to Sale



## You Can't Manage What You Don't Measure !

- By using and analysing reports from the Agrosoft 'Winpig' breeding programme we have:-
  - Identified areas where we do well
  - And identified areas targeted for improvement

## Summary

### “I Manage My Unit by Numbers”

- Without 'numbers' from the pig business I would be 'stabbing in the dark' when deciding what, where and how to improve performance.
- The time used for recording and analysing the information is a worthwhile investment and in my opinion, absolutely necessary for the continuous improvement of the unit