

Production Scenario Problems

Breeding Gilt Class

Performance Yorkshire Gilts

Number	SPI	MLI	TSI	NBA	LWT	Days	BF	LEA	LBS
1	97.2	100.9	110.2	-.25	+1.06	-0.39	+.03	+.03	+.4
2	117	119.3	104.9	+.93	+4.17	-2.98	-.02	+.14	+.66
3	110.3	114	111	+.87	+4.8	-1.98	-.02	+.11	+.77
4	109.2	121	114	+.72	+.39	-2.2	-.01	+.10	+.81

Rank these gilts as they will be kept as replacements in a purebred Yorkshire herd that produces replacement gilts for multiplier herds that produce F1, Duroc x York females for a large confinement farrow to finish operation. The male littermates will be sold on a percent lean basis. These gilts and all of their offspring will be kept on confinement.

Questions:

1. Which gilt would you expect to be more profitable for you in producing the male littermates that will be sold on a percent lean basis? **2** *Most desirable BF and LEA*
2. Which gilt would you expect to produce offspring that take the least number of days to reach 250 lbs. **2** *Negative Days is the key*
3. Which gilt on paper would be the best suited for this specific operation? **2** *SPI/MLI along with Days, BF, and LEA combine to make the most suited gilt*
4. Which gilt would you expect to wean the lightest litters? **1** *Lowest LWT*
5. Which gilt would you expect to raise the offspring that would lightest muscle with the most fat? **1** *Least desirable LEA (smallest) and least desirable BF (highest)*

Official Placing

2-4-3-1

5-2-5

Performance Spotted Gilts

Number	Days to 250 lb	BF	21 Day Lt. Wt.	NBA
1	-2.9	+.04	+1.6	+.10
2	-2.1	-.04	+1.8	+.10
3	-2.0	-.03	+1.6	+.45
4	+2.6	-.03	+1.6	+.10

Rank the gilts as they should be kept in a herd that profits mainly from the sale of seedstock to owners of terminal crossbreeding programs (Spot Boars are crossed on Chester White X Yorkshire females). Your customers raise all hogs in total confinement and operate farrow-to-finish operations. All offspring are marketed on a value based system.

Questions:

1. Which gilt would you expect to produce offspring that would reach 250 lbs. more quickly? **1** *Most negative days to 250lbs*
2. Which gilt would you expect to produce leaner offspring? **2** *Most negative BF*
3. Which gilt would be more profitable to you as a producer who sells pigs at weaning? **2** *Highest 21 Day Lt. Wt.*
4. Which gilt would you expect to produce offspring that would not excel on on a value-based system? **1** *Due to most positive (least desirable) BF*
5. Which gilt would be expected to produce the slowest growing offspring? **4** *Most positive (least desirable) Days to 250lbs.*

Official Placing

2-3-4-1

4-4-4

Breeding Ewe Class

Performance Columbia Ewes

Number	% Lamb Crop	Maternal Milk	60-Day Weight	120-Day Weight	Grease Fleece Weight
1	+13.0	+3.1	+0.3	+6.0	+0.4
2	+16.7	-1.6	-0.5	-2.2	+0.8
3	+1.1	+2.4	+1.7	+4.0	+0.2
4	-10.4	-0.9	-1.1	-3.7	-0.9

Rank the ewes as they should be used in a commercial terminal crossbreeding program. Feeder lambs are sold after weaning in the commercial operation, and wool sales do contribute significantly (25%) to the commercial income.

Questions:

1. Which ewe would prove to be the most valuable in producing feeder lambs? **3** *Highest 60 Day weight*
2. Which ewe would you expect to produce offspring that would produce more total pounds of wool? **2** *Highest Greece Fleece Weight*
3. Which ewe would you expect to produce heavier lambs at 120 days? **1** *Highest 120 day weight*
4. Which ewe would least likely fit this scenario? **4** *Most negative 60 day weight & grease fleece weight*
5. Which ewe would you expect to be the most prolific? **2** *Highest % lamb crop*

Official Placing

1-3-2-4

2-4-4

Performance Polled Dorset Ewes

Number	Birth Type	Maternal Milk	Growth & Milk	120 Day Weight
1	TW	.35	1.50	3.9
2	TW	.33	1.50	3.8
3	TRP	.35	1.35	3.8
4	TW	.35	1.40	3.0

You are a breeder of Polled Dorset sheep and sell mostly to other seedstock producers. Your flock has a reputation for being strong in both maternal and growth traits. However, additional value lies with breed type and structural correctness. Your primary customer base looks to get additional growth from your seedstock without sacrificing maternal strength. Rank these ewes as replacements to your flock.

Questions:

1. Which ewe best combines growth and maternal characteristics? **1** *Maternal milk and Growth & Milk is tied as highest, along with highest 120 day weight*
2. Which ewe would you expect to produce lambs that would reach heavier weights at 120 days? **1** *Highest 120 day weight*
3. Which ewe would you expect to wean the lightest lambs? **3** *Lowest Growth & Milk*
4. Which ewe would least likely fit this scenario? **3** *Growth and Maternal traits are the lowest*
5. Which ewe is a triplet? **3** *Birth type is TRP(triplet)*

Official Placing

1-2-4-3

4-2-4

Beef Bull Class

Performance Limousin Bulls

Number	BW	WW	YW	M	SC	Frame Score
1	2.9	19	33	3	-0.1	7.4
2	-1.3	8	20	8	0.3	6.8
3	1.3	12	18	6	0.3	7.3
4	3.2	18	32	11	0.4	6.7
Breed Averages	1.81	38.61	73.08	19.77	0.35	N/A

Rank these Bulls as they should be used on a commercial operation in the Midwest as terminal sires bred to 1,500 lbs., black, blady, mature cows. Feed resources and labor are abundant. A retained ownership program will feed all steer calves to market at 14 to 16 months of age, when they will be sold on a formula which rewards “red meat yield.” The remaining heifer calves will be sold after an on-farm backgrounding program.

Questions:

1. Which bull would be expected to produce heavier calves at market time? **1 Highest YW**
2. Which bull would be expected to produce more valuable heifer calves? **4 Highest M and largest SC(scrotal circumference contributes to heifer fertility)**
3. Which EPD would have less importance with an abundant feed and labor scenario? **A you will have plenty of labor to pull heavy calves**
 - a. BW
 - b. WW
 - c. YW
 - d. M
4. Which bull will best spread growth from birth to yearling weight? **1 Most gap between BW & YW**
5. Which bull would be expected to produce the lightest calves at weaning? **2 Lowest WW**

Official Placing

4-1-3-2

3-4-4

Beef Heifer Class

Performance Simmental Heifers

Number	BW	WW	YW	MM	CW	Marb	REA
1	-0.9	+22	+39.8	+5	-0.3	+.19	-.56
2	+4.8	+40.1	+54.2	+7.8	+1.1	0	+.1
3	+1.7	+44	+61	+9.5	+5.4	+.03	+.20
4	+7.4	+41.5	+55	+12.6	+4.6	-.22	+.23
Breed Average	1.5	33.2	58.1	4.9	-1.1	0.10	

Rank these females as they would be used in a purebred Simmental herd that focuses on the production of purebred bulls to be sold into commercial herds as terminal sires. These bulls will be utilized in the sand hills of Nebraska. Feed and labor are limited.

Questions:

1. Which EPD would prove to be the most important when the scenario says that feed and labor are limited? **A** *High BW will cause dystocia(calving difficulty) and with limited labor, there will be no one to pull calves*
 - a. BW
 - b. WW
 - c. YW
 - d. MM
2. Which heifer would probably prove to be detrimental to a limited feed and labor scenario? **4** *High BW and high Milk(not enough feed to support maintenance, growth and milk)*
3. Which heifer would be expected to produce bulls that would be more profitable as a sire of cattle that will be sold on carcass merit? **3** *Highest Marb. and 2nd highest REA. The highest REA bull also has the least desirable Marb.*
4. Which heifer would you expect to sire the largest calves at birth that could result in calving problems in this scenario? **4** *Highest BW*
5. Which heifer best spreads her growth from birth to yearling weight? **3** *Most gap between BW and YW*

Official Placing

3-2-1-4

4-4-5