Sample Scenarios and Performance Data

Angus Bulls

Scenario

Rank these bulls in the order they should be selected as potential herd sires for use on a purebred Angus operation in the upper Midwest. This operation prefers to purchase bulls with indicators of early puberty. The top 20% of the female progeny will be retained as replacement heifers. Primary income from this operation comes from the sale of yearling bulls to commercial cattlemen who retain ownership of their calves and sell market steers on a grid that pays premiums for yield grade 2 and 3 cattle that grade choice or better. Feed and labor resources are adequate.

| No | Birth Date | Birth Weight | Weaning Weight | Yearling Weight | Milk | Scrotal | %IMF | REA |
|-------|--------------|-----------------|-------------------|--------------------|--------|---------|---------|-------|
| No. | DITITI Date | Weight | vveigni | vveigni | IVIIIK | Scrolar | 701IVIT | KEA |
| 1 | 9-04-05 | + 1.7 | + 37 | + 76 | + 27 | 30 | + .40 | + .35 |
| 2 | 9-11-05 | + 1.7 | + 37 | + 76 | + 27 | 30 | + .37 | + .30 |
| 3 | 11-03-05 | + 2.9 | + 52 | + 85 | + 20 | + .41 | + .45 | + .44 |
| 4 | 11-10-05 | + 2.6 | + 49 | + 77 | + 23 | + .43 | + .48 | + .46 |
| Breed | average EPDs | + 2.7 | + 35 | + 65 | + 17 | + .23 | + .01 | + .13 |

^{*}EPD stands for "Expected Progeny Difference" IMF stands for Intramuscular Fat REA stands for Ribeye Area

Limousin Heifers

Scenario

Rank these heifers in the order they should be selected as potential replacements for a purebred operation. Income is derived from the sale of yearling bulls to commercial producers to be used primarily as terminal sires. A few elite heifer calves are sold to 4-H and FFA members for exhibition at state and national shows. This operation retains the top 35% of its heifer calves, so even though growth and muscle are emphasized, maternal traits are still important.

| *EPDs |
|-------|
|-------|

| No. | Birth Date | Calving Ease | Birth | Weaning Weight | Yearling Weight | Milk |
|-------|--------------|--------------|-------|-------------------|--------------------|------|
| 1 | 4-01-05 | + 6 | - 1.3 | + 38 | + 68 | + 20 |
| 2 | 4-09-05 | + 3 | + 3.6 | + 37 | + 71 | + 22 |
| 3 | 4-09-05 | + 1 | + 3.2 | + 54 | + 91 | + 26 |
| 4 | 5-20-05 | + 13 | - 1.1 | + 33 | + 73 | + 18 |
| Breed | Average EPDs | + 6.68 | +1.8 | + 38 | + 71 | + 20 |

^{*}EPD stands for "Expected Progeny Difference"

Chiangus Heifers

Scenario

Rank these heifers in the order they should be selected as potential replacements for a two breed (Chiangus x Hereford) rotational crossbreeding system, located in the west. The top 20% of female progeny will be retained as replacements. All steer progeny and non-replacement females will be marketed at weaning as source and age verified cattle. Replacement heifers must be structurally correct females that excel in volume and fleshing ability. Feed resources are adequate, but labor at calving is limited.

| *EPDs |
|-------|
|-------|

| No. | Birth Date | Birth Weight | Weaning Weight | Yearling Weight | Milk |
|----------|-------------|-----------------|-------------------|--------------------|------|
| 1 | 9-04-05 | + 4.3 | + 50 | + 92 | + 13 |
| 2 | 9-14-05 | + 1.0 | + 49 | + 100 | + 14 |
| 3 | 9-18-05 | + 4.2 | + 47 | + 85 | + 10 |
| 4 | 9-30-05 | + 2.2 | + 54 | + 98 | + 15 |
| Breed av | verage EPDs | + 1.6 | + 33 | + 60 | + 11 |

^{*}EPD stands for "Expected Progeny Difference"

Suffolk Ewe Lambs

Scenario

Rank these ewes in the order you would select them for a purebred Suffolk operation in the Western part of the U.S. Primary income is from the sale of range rams to cross on whitefaced ewes. This operation is known for sheep that excel in multiple births, performance and muscling.

| | | | Expected Progeny Differences | | | | | | |
|---|----------|---------|------------------------------|--------|---------|-------|--|--|--|
| | | Birth | % Lamb | 60 Day | 120 Day | Codon | | | |
| _ | Ewe No. | Date | Crop | Weight | Wt. | 171 | | | |
| | 1 | 1-31-06 | -5.4 | -0.8 | +2.0 | QR | | | |
| | 2 | 2-06-06 | +4.6 | +1.2 | +2.0 | RR | | | |
| | 3 | 2-20-06 | +6.5 | +2.6 | +2.8 | RR | | | |
| _ | 4 | 2-27-06 | +10.2 | +3.0 | +5.9 | RR | | | |
| | Breed Av | erage: | +2.0 | +1.0 | +1.9 | | | | |

Corriedale Ewe Lambs

Scenario

Rank these ewe lambs as replacements for a registered Corriedale sheep operation whose primary income is from the sale of rams and ewes to other seedstock producers. The owner of this flock desires to improve the performance and Scrapie resistance of his sheep, while maintaining their fleece quality.

| Ewe No. | Birth Date | Born/Raised | Adjusted 120 Day Weight | Fleece Spinning Count* | Codon 171 |
|---------|---------------|-------------|-------------------------------|------------------------------|--------------|
| 1 | 2-08-06 | S/S | 120 | 50's | QR |
| 2 | 2-23-06 | Tw/Tw | 122 | 54's | RR |
| 3 | 2-26-06 | Tw/S | 116 | 54's | RR |
| 4 | 2-28-06 | Tw/S | 112 | 56's | QQ |

^{*}Fleece Spinning Count – defines the wool fiber diameter. The range can be from less than 36 to greater than 80. An 80 represents a very fine diameter, whereas a 36 is coarse. All animals in this class fall within acceptable spinning counts to meet breed standards.

Duroc Breeding Gilts

Scenario

Rank these gilts as you would select them as replacements for a purebred Duroc operation that sells boars to commercial farrow to finish operations. All hogs not retained as replacements or sold as boars are marketed on a lean-value basis. All hogs are housed in confinement.

| | E | xpected Prog | eny Differenc | es | | |
|----------|-------------------------|----------------------------|--------------------------|----------|---------------------------|---------------------------|
| Gilt No. | Number Born Alive | 21-day Litter Weight | Days to 250 pounds | Back Fat | Maternal Line Index | Terminal Sire Index |
| 1 | + 0.35 | + 2.61 | - 2.5 | - 0.06 | 109 | 118 |
| 2 | - 0.02 | + 1.58 | + 0.3 | - 0.07 | 102 | 104 |
| 3 | + 0.21 | + 2.82 | - 1.2 | - 0.06 | 111 | 114 |
| 4 | + 0.07 | + 0.14 | - 1.1 | - 0.02 | 101 | 106 |
| Breed | | | | | | |
| Average | + 0.03 | + 0.78 | - 1.11 | - 0.01 | 103.6 | 105.3 |

Commercial Gilts

Scenario

Rank these gilts as they should be selected for replacements in a commercial operation that utilizes Yorkshire boars to produce crossbred show pigs for youth exhibitors. All progeny not marketed as show pigs will be fed to market weight and sold on a lean value basis. This swine herd is managed as a total confinement operation.

| | Days to 250 | 21-d Litter | Number Born | | | | |
|--|-------------|-------------|-------------|-----------|--|--|--|
| Gilt No. | lbs | Wt. | Alive | Dam's SPI | | | |
| 1 | 149 | 130 | 8 | 101 | | | |
| 2 | 138 | 151 | 10 | 110 | | | |
| 3 | 140 | 153 | 10 | 112 | | | |
| 4 | 151 | 127 | 7 | 103 | | | |
| *SPI stands for sow productivity index | | | | | | | |