



TARLETON STATE UNIVERSITY
DAIRY CATTLE CDE

PEDIGREE SCENARIO

You are an Agricultural Science Teacher assisting a new FFA member in purchasing a dairy heifer. Most people told you to visually inspect the heifer for the characteristics that will make her a good show heifer. You have found 4 heifers that will work for the show ring and can purchase any of the 4 for the same price.

Most of the heifer sellers indicate that the TPI (Type Production Index) is a good way to measure genetic merit of an animal and they will pay more for a heifer with a higher TPI. The student that you are assisting will want to sell the heifer after showing her and you would expect to get more for a heifer with a higher TPI.

Rank the four heifer pedigrees based on TPI and remember the reliability (%R) affects the total score.

DO NOT WRITE ON ANY PEDIGREE PAGES



TARLETON STATE UNIVERSITY DAIRY CATTLE CDE

PEDIGREE #1

| | | | | | | | | | |
|---------------|----------|-------------------|-------|------------|-------|----------------|---------|----------|-------|
| | | | | | | TPI | | | 1111 |
| | | TSU 122345 | | | | | | | |
| | | NLD 159659231 | | | | 100% RHA-NA TV | | | |
| | | | | | | | | 6/22/17 | |
| | | MACE | YIELD | EVALUATION | | | | | |
| | | PTA | +1400 | M | +102 | F | +85 | P | 88 %R |
| | TPI | | | | +0.18 | %F | +0.10 | %P | 0%US |
| TSU 3492 | + 2459 | PTA | .600 | NM | +1.5 | PL | 3.5 | SCS | |
| | | MACE | YIELD | EVALUATION | | | | | |
| NLD 159659231 | | PTA | +1.4 | T | +1.3 | UDC | +2.5 | FLC | 68 %R |
| | 4/9/20 | | | ----- | | | | | |
| | | MACE | YIELD | EVALUATION | | | | | |
| | | PTA | +1532 | M | +96 | F | +63 | P | 81 %R |
| | 3/2023 | | | | +0.18 | %F | +0.08 | %P | 0%US |
| | | PTA | +569 | NM | +1.3 | PL | 3.47 | SCS | |
| | | MACE | YIELD | EVALUATION | | | | | |
| | | PTA | +1.37 | T | +1.25 | UDC | +2.37 | FLC | 77 %R |
| | 3/2023 | | | ----- | | | | | |
| | | | | | | TPI | | | 2121 |
| | | FRISCO'S 123456 | | | | | | | |
| | | USA 17121078 | | | | 100% RHA-NA TV | | | |
| | | | | | | 2-06 87 VEVVV | GMD DOM | 12/15/16 | |
| | | PTA | +2300 | M | +110 | F | +90 | P | 73 %R |
| | | | | | +0.06 | %F | +0.05 | %P | |
| | | PTA | .700 | NM | -0.03 | PL | +3.5 | SCS | |
| | | PTA | +1.5 | T | +0.59 | UDC | +0.01 | FLC | 74 %R |
| | | | | ----- | | | | | |
| | | | | | | TPI | | | +1265 |
| | | OKLAHOMA 125663 | | | | | | | |
| | | NLD 159659231 | | | | 100% RHA-NA TV | | | |
| | | | | | | | | 6/30/15 | |
| | | MACE | YIELD | EVALUATION | | | | | |
| | | PTA | +1396 | M | .68 | F | +63 | P | 87 %R |
| | CTPI | | | | +0.18 | %F | +0.08 | %P | 0%US |
| TSU 9102 | + 2610 | PTA | .652 | NM | +1.0 | PL | 3.48 | SCS | |
| | | MACE | YIELD | EVALUATION | | | | | |
| USA 17121078 | | PTA | +1.37 | T | +1.52 | UDC | +2.5 | FLC | 88 %R |
| | 10/10/19 | | | ----- | | | | | |
| | | MACE | YIELD | EVALUATION | | | | | |
| | | PTA | +2300 | M | +111 | F | +89 | P | 89 %R |
| | 3/2023 | | | | +0.06 | %F | +0.04 | %P | |
| | | PTA | +600 | NM | -0.03 | PL | 3.16 | SCS | |
| | | MACE | YIELD | EVALUATION | | | | | |
| | | PTA | +1.46 | T | +0.59 | UDC | -0.02 | FLC | 91 %R |
| | 3/2023 | | | ----- | | | | | |
| | | | | | | TPI | | | +620 |
| | | MILK MACHINE 2256 | | | | | | | |
| | | USA 17121078 | | | | 100% RHA-NA TV | | | |
| | | | | | | 2-06 87 VEVVV | GMD DOM | 3/11/16 | |
| | | PTA | +1000 | M | .90 | F | .15 | P | 57 %R |
| | | | | | +0.07 | %F | +0.05 | %P | |
| | | PTA | +633 | NM | -0.03 | PL | 3.5 | SCS | |
| | | PTA | +1.5 | T | +0.60 | UDC | +0.02 | FLC | 55 %R |
| | | | | ----- | | | | | |
| | | MACE | YIELD | EVALUATION | | | | | |
| | | PTA | +1000 | M | .90 | F | .15 | P | 57 %R |
| | | | | | +0.07 | %F | +0.05 | %P | |
| | | PTA | +633 | NM | -0.03 | PL | 3.5 | SCS | |
| | | PTA | +1.5 | T | +0.60 | UDC | +0.02 | FLC | 55 %R |
| | | | | ----- | | | | | |
| | | MACE | YIELD | EVALUATION | | | | | |
| | | PTA | +1000 | M | .90 | F | .15 | P | 57 %R |
| | | | | | +0.07 | %F | +0.05 | %P | |
| | | PTA | +633 | NM | -0.03 | PL | 3.5 | SCS | |
| | | PTA | +1.5 | T | +0.60 | UDC | +0.02 | FLC | 55 %R |
| | | | | ----- | | | | | |

TARLETON STATE UNIVERSITY
DAIRY CATTLE CDE

PEDIGREE #2

| | | | | | | | | | | |
|--|--|--|--|--|--|--|--|---------------|-------|----------------------------------|
| | | | | | | | | | | TPI |
| | | | | | | | | DFA 123WC | | +1800 |
| | | | | | | | | NLD 159659231 | | 100% RHA-NA TV |
| | | | | | | | | | | 11/25/12 |
| | | | | | | | | MACE | YIELD | EVALUATION |
| | | | | | | | | PTA | +1325 | M +102 F +85 P 99 %R |
| | | | | | | | | | | 3/2023 |
| | | | | | | | | | | TPI |
| | | | | | | | | + 2901 | | |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +0.18 %F +0.10 %P 0%US |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +652 NM +1.5 PL 3.5 SCS |
| | | | | | | | | MACE | YIELD | EVALUATION |
| | | | | | | | | PTA | +4 | T +2 UDC +3.2 FLC 62 %R |
| | | | | | | | | | | 3/2023 |
| | | | | | | | | | | ----- |
| | | | | | | | | | | CTPI |
| | | | | | | | | | | +1665 |
| | | | | | | | | | | GOLDEN'S 322663 |
| | | | | | | | | | | USA 17121078 |
| | | | | | | | | | | 100% RHA-NA TV |
| | | | | | | | | | | 2-06 87 VEVVV |
| | | | | | | | | | | GMD DOM |
| | | | | | | | | | | 2/1/13 |
| | | | | | | | | PTA | +300 | M +111 F +90 P 74 %R |
| | | | | | | | | | | 3/2023 |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +0.06 %F +0.05 %P |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +600 NM -0.03 PL +3.5 SCS |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +1.8 T +0.59 UDC +0.02 FLC 76 %R |
| | | | | | | | | | | 3/2023 |
| | | | | | | | | | | ----- |
| | | | | | | | | | | TPI |
| | | | | | | | | | | +1252 |
| | | | | | | | | | | 99 14455 |
| | | | | | | | | | | NLD 159659231 |
| | | | | | | | | | | 100% RHA-NA TV |
| | | | | | | | | | | 7/7/14 |
| | | | | | | | | MACE | YIELD | EVALUATION |
| | | | | | | | | PTA | +1396 | M .68 F +63 P 65 %R |
| | | | | | | | | | | 3/2023 |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +0.18 %F +0.08 %P 0%US |
| | | | | | | | | | | PTA |
| | | | | | | | | | | .652 NM +1.0 PL 3.48 SCS |
| | | | | | | | | MACE | YIELD | EVALUATION |
| | | | | | | | | PTA | +1.37 | T +1.52 UDC +2.5 FLC 66 %R |
| | | | | | | | | | | 3/2023 |
| | | | | | | | | | | ----- |
| | | | | | | | | | | CTPI |
| | | | | | | | | | | +888 |
| | | | | | | | | | | WOOD'S 6655 |
| | | | | | | | | | | USA 17121078 |
| | | | | | | | | | | 100% RHA-NA TV |
| | | | | | | | | | | 2-06 87 VEVVV |
| | | | | | | | | | | GMD DOM |
| | | | | | | | | | | 5/21/16 |
| | | | | | | | | PTA | +255 | M +90 F +.15 P 57 %R |
| | | | | | | | | | | 3/2023 |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +0.07 %F +0.05 %P |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +652 NM -0.03 PL 3.5 SCS |
| | | | | | | | | | | PTA |
| | | | | | | | | | | +1.3 T +.5 UDC -.01 FLC 55 %R |
| | | | | | | | | | | 3/2023 |

TSU 2038

NLD 159659231 100% RHA-NA TV

2/14/18

MACE YIELD EVALUATION
PTA +1400 M +98 F +65 P 78 %R 3/2023

PTA +0.18 %F +0.08 %P 0%US

PTA +580 NM +1.4 PL 3.47 SCS

MACE YIELD EVALUATION
PTA +1.4 T +1.5 UDC +2.37 FLC 81 %R 3/2023

TSU 7382

USA 17121078 100% RHA-NA TV

6/28/19

2-06 87 VEVVV GMD DOM
PTA +2300 M +95 F +89 P 88 %R 3/2023

PTA +0.06 %F +0.04 %P

PTA +622 NM -0.03 PL 3.16 SCS

PTA +1.50 T +0.59 UDC -0.05 FLC 84 %R 3/2023

99 14455

NLD 159659231 100% RHA-NA TV

7/7/14

MACE YIELD EVALUATION
PTA +1396 M .68 F +63 P 65 %R 3/2023

PTA +0.18 %F +0.08 %P 0%US

PTA .652 NM +1.0 PL 3.48 SCS

MACE YIELD EVALUATION
PTA +1.37 T +1.52 UDC +2.5 FLC 66 %R 3/2023

WOOD'S 6655

USA 17121078 100% RHA-NA TV

5/21/16

2-06 87 VEVVV GMD DOM
PTA +255 M +90 F +.15 P 57 %R 3/2023

PTA +0.07 %F +0.05 %P

PTA +652 NM -0.03 PL 3.5 SCS

PTA +1.3 T +.5 UDC -.01 FLC 55 %R 3/2023



TARLETON STATE UNIVERSITY
DAIRY CATTLE CDE

PEDIGREE #4

| | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|------------------|-------|----------------|-------|-----|-------|-----|-------|--------|
| | | | | | | | | | | | | TPI | | | | | | |
| | | | | | | | | | | MILLER 366 | | +1255 | | | | | | |
| | | | | | | | | | | NLD 159659231 | | 100% RHA-NA TV | | | | | | |
| | | | | | | | | | | | | 6/8/17 | | | | | | |
| | | | | | | | | | | MACE | YIELD | EVALUATION | | | | | | |
| | | | | | | | | | | PTA | +1400 | M | +102 | F | +85 | P | 90 %R | 3/2023 |
| | | | | | | | | | | PTA | | | +0.18 | %F | +0.10 | %P | 0%US | |
| | | | | | | | | | | PTA | .600 | NM | +1.5 | PL | 3.5 | SCS | | |
| | | | | | | | | | | MACE | YIELD | EVALUATION | | | | | | |
| | | | | | | | | | | PTA | +1.4 | T | +1.3 | UDC | +2.5 | FLC | 69 %R | 3/2023 |
| | | | | | | | | | | ----- | | | | | | | | |
| | | | | | | | | | | GOLDEN PRIDE 985 | | CTPI | | | | | | |
| | | | | | | | | | | USA 17121078 | | +1885 | | | | | | |
| | | | | | | | | | | 2-06 87 VEVVV | | GMD DOM | | | | | | |
| | | | | | | | | | | | | 3/29/17 | | | | | | |
| | | | | | | | | | | PTA | +2300 | M | +110 | F | +90 | P | 75 %R | 3/2023 |
| | | | | | | | | | | PTA | | | +0.06 | %F | +0.05 | %P | | |
| | | | | | | | | | | PTA | .700 | NM | -0.03 | PL | +3.5 | SCS | | |
| | | | | | | | | | | PTA | +1.5 | T | +0.59 | UDC | +0.01 | FLC | 80 %R | 3/2023 |
| | | | | | | | | | | ----- | | | | | | | | |
| | | | | | | | | | | JKL 6895 | | TPI | | | | | | |
| | | | | | | | | | | NLD 159659231 | | +965 | | | | | | |
| | | | | | | | | | | | | 100% RHA-NA TV | | | | | | |
| | | | | | | | | | | | | 4/11/13 | | | | | | |
| | | | | | | | | | | MACE | YIELD | EVALUATION | | | | | | |
| | | | | | | | | | | PTA | +1396 | M | .68 | F | +63 | P | 87 %R | 3/2023 |
| | | | | | | | | | | PTA | | | +0.18 | %F | +0.08 | %P | 0%US | |
| | | | | | | | | | | PTA | .652 | NM | +1.0 | PL | 3.48 | SCS | | |
| | | | | | | | | | | MACE | YIELD | EVALUATION | | | | | | |
| | | | | | | | | | | PTA | +1.37 | T | +1.52 | UDC | +2.5 | FLC | 88 %R | 3/2023 |
| | | | | | | | | | | ----- | | | | | | | | |
| | | | | | | | | | | MM 658 | | CTPI | | | | | | |
| | | | | | | | | | | USA 17121078 | | +1252 | | | | | | |
| | | | | | | | | | | 2-06 87 VEVVV | | GMD DOM | | | | | | |
| | | | | | | | | | | | | 11/11/12 | | | | | | |
| | | | | | | | | | | PTA | +1120 | M | +90 | F | +15 | P | 57 %R | 3/2023 |
| | | | | | | | | | | PTA | | | +0.07 | %F | +0.05 | %P | | |
| | | | | | | | | | | PTA | +634 | NM | -0.03 | PL | 3.5 | SCS | | |
| | | | | | | | | | | PTA | +1.4 | T | +0.60 | UDC | +0.02 | FLC | 55 %R | 3/2023 |

| | | | | | | | | | | | | |
|------|-------|------------|-------|-----|-------|-----|-------|--------|--|---------------|--|----------------|
| | | | | | | | | | | | | TPI |
| | | | | | | | | | | TSU 2000 | | +3048 |
| | | | | | | | | | | NLD 159659231 | | 100% RHA-NA TV |
| | | | | | | | | | | | | 2/28/20 |
| MACE | YIELD | EVALUATION | | | | | | | | | | |
| PTA | +1352 | M | +90 | F | +65 | P | 86 %R | 3/2023 | | | | |
| PTA | | | +0.18 | %F | +0.08 | %P | 0%US | | | | | |
| PTA | +596 | NM | +1.4 | PL | 3.47 | SCS | | | | | | |
| MACE | YIELD | EVALUATION | | | | | | | | | | |
| PTA | +1.4 | T | +1.3 | UDC | +2.37 | FLC | 84 %R | 3/2023 | | | | |

| | | | | | | | | | | | | |
|-----|-------|----|-------|-----|-------|-----|-------|--------|--|---------------|--|----------------|
| | | | | | | | | | | | | TPI |
| | | | | | | | | | | TSU 5020 | | +2833 |
| | | | | | | | | | | USA 17121078 | | 100% RHA-NA TV |
| | | | | | | | | | | 2-06 87 VEVVV | | GMD DOM |
| | | | | | | | | | | | | 8/9/18 |
| PTA | +1325 | M | +123 | F | +90 | P | 72 %R | 3/2023 | | | | |
| PTA | | | +0.06 | %F | +0.04 | %P | | | | | | |
| PTA | +667 | NM | -0.03 | PL | 3.16 | SCS | | | | | | |
| PTA | +1.54 | T | +0.59 | UDC | +0.01 | FLC | 79 %R | 3/2023 | | | | |



TARLETON STATE UNIVERSITY
DAIRY CATTLE CDE
PEDIGREE SOLUTION

| | <u>AVG %R</u> | <u>TPI</u> | <u>POINTS</u> | <u>Rank</u> | <u>Placing</u> |
|--------------------|---------------|------------|---------------|-------------|---------------------------|
| PEDIGREE #1 | 79.0 | 2459 | 1943 | <u>4</u> | 4 - 3 - 2 - 1 |
| | 90.0 | 2610 | 2349 | | |
| | | | <u>4292</u> | | |
| PEDIGREE #2 | 79.5 | 2901 | 2306 | <u>3</u> | Cuts 3 - 2 - 4 |
| | 86.0 | 2555 | 2197 | | |
| | | | <u>4504</u> | | |
| PEDIGREE #3 | 77.0 | 3143 | 2420 | <u>2</u> | |
| | 77.5 | 2743 | 2126 | | |
| | | | <u>4546</u> | | |
| PEDIGREE #4 | 85.0 | 3048 | 2591 | <u>1</u> | |
| | 75.5 | 2833 | 2139 | | |
| | | | <u>4730</u> | | |