Carcass performance is vital to the beef industry and continued consumer demand for beef. Our ability to predict carcass traits is tied to collecting actual carcass records. Genomics and ultrasound can help increase accuracy in unproven animals, but high accuracy EPDs cannot be obtained without actual carcass records on progeny. Despite their importance, carcass records are extremely rare and furthermore, several of the most used sires have no progeny with carcass records.

Since Genomically Enhanced EPD’s were first published in 2012, progeny equivalents for carcass traits have seen only marginal improvement. This is because we have too few animals with actual carcass phenotypes and corresponding genotypes to train the panels.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Genomic Progeny Equivalents</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calving Ease</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Mat. Calving Ease</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Birth Weight</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Weaning Weight</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Yearling Weight</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>Milk</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>Stayability</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>Marbling</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Ribeye Area</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Back Fat</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Recently, the ASA Board of Trustees passed a directive to put significant effort into collecting sire-identified carcass phenotypes with accompanying genotypes. This serves two purposes: increase the overall number of carcass records reported annually and better train the genomic panels to more accurately predict carcass traits.
Eligibility

Seedstock operations and their customer’s cow herds will have access to this program. Any terminal calf with a known sire is eligible.

Criteria for this research project:

1. Retained ownership or access to carcass records is required.
2. Terminal calves have some SimGenetic influence in breed makeup.
3. Terminal calves are sired by or grand-sired by high-use sires.
4. The ability to gather DNA using a Tissue Sampling Unit (TSU) provided by the ASA.

Genotyping Progeny

The ASA will cover genotyping costs of terminal calves with carcass phenotypes at ASA discretion.

Carcass Data Requirements

Minimum Data Requirements to Participate.

1. Contemporary groups with 2 or more sires
2. At least 2 calves from each sire
3. Sires must be in the ASA database
4. Birth date for each calf
5. Estimated breed composition of cow herd
6. Feedlot entry weight and date
7. Harvest date
8. Feedlot treatment records
9. Individual carcass records must come from feedlot or packing plant

Additional Helpful Information:

1. DNA on all possible sires
2. Birth and weaning weights
3. Feedlot ID and pen location

How to Participate

1. Identify the groups of calves that would fit the requirements of this research project.
2. Contact the ASA to ensure records and animals will apply and obtain directions for DNA/data collection.
3. Submit the necessary data files to ASA at carcdata@simmgene.com.