ABBA Ultrasound Evaluation Guidelines

The American Brahman Breeders Association is currently gathering ultrasound carcass information for the generation of EPD’s for carcass traits from ultrasound data. For your ultrasound data to be included in the ABBA ultrasound evaluation, the following guidelines must be met:

1. Ultrasound images must be collected (scanned) by an Ultrasound Guidelines Council Approved Field Technician. A list of these technicians can be obtained from the ABBA Office or from the UGC Website at www.ultrasoundbeef.com.

2. Ultrasound data must be interpreted by either an UGC Lab Certified Technician or an UGC approved Centralized Ultrasound Processing (CUP) Lab. A list of these approved labs or lab technicians can be obtained from the ABBA Office or from the UGC Website at www.ultrasoundbeef.com. In order for the data to be valid it must sent directly from the UGC Certified Lab Technician or UGC Approved Lab to ABBA.

3. All animals must be on file (registered or performance only) with ABBA prior to submitting ultrasound data to ABBA.

4. Ultrasound Data Required:
   a. Percent IMF - Intramuscular Fat (00.0%)
   b. Ribeye Area (00.0 sq. inches)
   c. Rib Fat Thickness (0.00 inches)
   d. Rump Fat Thickness (0.00 inches)

5. In addition to actual ultrasound data ABBA requires the following information:
   a. ABBA registration number of each animal
   b. Brand/ID Number
   c. Date Scanned.
   d. Actual weight on the date scanned (or within 7 days of scanning)
   e. Technician Name (must be UGC Certified).
   f. Ultrasound Equipment used.
   g. Group Code (Group animals together that were treated similarly, ex. codes: 1, 2, etc.)
   h. Test Type (C= Central Test, D= Developing Heifer, F= Feed Lot, R= Ranch Test)
   i. Diet (0=Unknown, 1= 0% Concentrate, 2 = <50% Concentrate, 3= > 50% Concentrate)

6. Ultrasound carcass data must be collected between 334 – 487 days (11 – 16 months of age).

7. ABBA recommends that ALL animals in a given contemporary group be weighed and scanned.

8. Animals should be in good flesh and on an incline of nutrition at the time of scanning. Scanning under these conditions should allow animals to express potential genetic differences for marbling, ribeye area and fat thickness.
<table>
<thead>
<tr>
<th>Breeder Responsibility</th>
<th>Reason for responsibility</th>
<th>Technician Responsibility</th>
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<tbody>
<tr>
<td>- Provide a chute with sides that squeeze.</td>
<td>Cattle handling facilities for scanning should completely restrain the animal for best images collection and for safety of the animal handlers, ultrasound technician and the cattle.</td>
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<tr>
<td>- Provide a chute with drop down or removable side panels.</td>
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<td>- Blocking chutes are not suggested for best image collection.</td>
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<td>- The squeeze chute should be located under a roof that blocks direct sunlight and/or provides protection from rain or other inclement weather conditions.</td>
<td>The cattle handling facilities must block direct sunlight and provide protection from rain or other inclement weather conditions.</td>
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<tr>
<td>- Provide an electrical circuit that is dedicated and clean with a working grounded power signal (110v) to the chute - Turn off motors, electric fence chargers, etc. - Turn off all fluorescent lighting.</td>
<td>The cattle handling facilities must provide a chute-side, clean and grounded power signal (110v) to eliminate electrical interference between the animal and the ultrasound equipment.</td>
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<td>- Provide supplemental heating (portable space heater, etc.) for the scanning area. - Provide supplemental cooling (portable fan, etc) for the scanning area.</td>
<td>Ultrasound equipment doesn’t operate efficiently when the ambient air temperature falls below 45 degrees Fahrenheit or above 105 degrees Fahrenheit.</td>
<td>- Provide portable heating to keep the ultrasound equipment warm.</td>
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<tr>
<td>- May provide clippers with sharp blades to remove excess hair. - May provide a blower to remove excess dirt and debris before hair removal.</td>
<td>Length of hair coat can be no longer than ½ inch in the area scanned. Shorter hair provides excellent contact between the transducer, stand-off and the hide.</td>
<td>- Provide portable cooling to keep the ultrasound equipment cool.</td>
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<td>- Consult the Association Office or go to <a href="http://www.ultrasoundbeef.com">www.ultrasoundbeef.com</a> for an updated list of certified UGC Field Technicians.</td>
<td>Cattle must be scanned (or images collected) by an UGC Certified Field Technician.</td>
<td>- Attend and pass an UGC Field Certification.</td>
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| - Define only calves that are within a 60-day age window as a contemporary group.  
- Provide proper contemporary group information to the scanning technician for every animal at the time of scanning. | Ultrasound equipment and software used to collect and interpret ultrasound images must be approved by UGC. - Record equipment type (manufacturer, model number, and serial number), image capturing equipment, and name of interpretation software. | - Record all animal weights at the time of scanning.  
- Do not adjust any ultrasound data for the breeder.  
- All data will be adjusted by the Association. |
| - Provide scales for weighing all animals.  
- Animals must be weighed within 7 days of being scanned.  
- Provide ranch name, membership number, address, and telephone number to technician.  
- Provide technician with the registration number, brand, date of birth, and sire and dam registration number for all animals.  
- Provide the sex, diet code, test type and contemporary group code to the technician on day of scanning. | The development of body composition EPD's require that scanned animals be associated with a well-defined contemporary group. Animals born of the same sex, reared and managed together up until the time of scanning form a contemporary group. | Adjusting individual animal ultrasound measures to a common end point requires a set of adjusting formulas. Factors affecting the formula include age of dam and weight. Scanning results are sent directly to the respective breed association. |
| - Record equipment type (manufacturer, model number, and serial number), image capturing equipment, and name of interpretation software. |