## TABLE OF CONTENTS

### SECTION 1. SCOPE AND APPLICATION
1.1 Framework for a Uniform Record System ................................................................. 3

### SECTION 2. PROGRAM SUMMARY
2.1 Evaluations and the ADGA Guidebook Article X ....................................................... 3
2.2 Standards for Uniform Evaluation .............................................................................. 3
2.3 Components of Linear Appraisal ............................................................................... 4
2.4 Linear Trait Framework ............................................................................................. 4
2.5 Structural/Functional Component Assessment .......................................................... 4
2.6 Major Scorecard Categories and Final Score Assessment ....................................... 4

### SECTION 3. AUTHORITY
3.1 ADGA Board of Directors and Council on Dairy Cattle Breeding Approval .......... 4

### SECTION 4. RESPONSIBILITY
4.1 Role of Linear Appraisal Staff and Herd Owners ....................................................... 4
4.2 Expectations for Linear Appraisers and Herd Owners .............................................. 4
4.3 Conformity Requirements to Procedures and Registry ............................................ 4

### 5.0 MEASUREMENTS & RECORD-KEEPING EQUIPMENT
5.1 Physical Measurements ............................................................................................ 4
5.2 Equipment ................................................................................................................. 4

### 6.0 BIOSECURITY
6.1 Responsibility of the Linear Appraiser ..................................................................... 5
6.2 Responsibility of the Herd ........................................................................................ 5
6.3 Infectious Disease .................................................................................................... 5
6.4 Appraiser Discretion ............................................................................................... 5

### 7.0 APPRAISAL SESSION GUIDELINES FOR APRAISERS AND HERD OWNERS
7.1 Arrival ....................................................................................................................... 5
7.2 Introduction/Explanation .......................................................................................... 5
7.3 Appraiser/Herd Owner Interaction .......................................................................... 5
7.4 Animal Preparation .................................................................................................. 5
7.5 Discussion Opportunities ........................................................................................ 5
7.6 Appraiser Explanations ............................................................................................ 5
7.7 Orientation to the Herd Owner ................................................................................. 5
7.8 Conflicts of Interest ................................................................................................ 5
7.9 Herd Condition ........................................................................................................ 5
7.10 Former Records ...................................................................................................... 5
7.11 Avoiding BiasedJudgement .................................................................................... 5
7.12 Identification Verification ...................................................................................... 5
7.13 Incorrect Identification .......................................................................................... 5
7.14 Not-In-Condition (NIC) and Cannot-Be-Controlled Determination ....................... 6
7.15 Lactation Status and NIC ...................................................................................... 6
7.16 Charges for NIC and CBC .................................................................................... 6
7.17 Appraisal Session Recalls ...................................................................................... 6
7.18 Per Day Stops & Animals Determinations ............................................................... 6
7.19 Eligible Animals Not Presented ............................................................................. 6
7.20 Abrupt Session Termination .................................................................................. 6
7.21 Session Termination Procedures ........................................................................... 6
8.0 HOST HERDS
8.1 Notifications by Transport Herds..................................................................................................................6
8.2 Presentation Requirements...........................................................................................................................................6
8.3 Host Herd Space Accommodations............................................................................................................................6
8.4 Transport Herd Scheduling Requirements..................................................................................................................6
8.5 Alternate Facilities.......................................................................................................................................................6

9.0 COVID-19 AND INFECTIOUS DISEASE OUTBREAK PRECAUTIONS & REQUIREMENTS
9.1 Consent to Abide by Guidelines..................................................................................................................................................7
9.2 CDC, State, and Local Health Department Guidelines..........................................................................................................................7
9.3 Masks & Physical Distancing....................................................................................................................................................7
9.4 Non-Handler & Site Guidelines.............................................................................................................................................7
9.5 Eligible Observers.....................................................................................................................................................................7
9.6 Handwashing, Food & Drinks....................................................................................................................................................7
9.7 Abrupt Session Termination.......................................................................................................................................................7
9.8 Cancellation Due to Infectious Diseases...............................................................................................................................7
9.9 Appraisal Fees In the Event of Cancellation............................................................................................................................7

10. DATA COLLECTION – SCORING – GENERAL RULES
10.1 Actual Measurements.........................................................................................................................................................8
10.2 Information Documentation.....................................................................................................................................................8
10.3 Evaluation Decisions.........................................................................................................................................................8
10.4 Final Score Relationship to Category Scores.......................................................................................................................8
10.5 Specific Rules for Does.........................................................................................................................................................8
10.6 Specific Rules for Bucks.........................................................................................................................................................8

11.0 DATA COLLECTION – SCORING GENERAL APPEARANCE
11.1 Appraising Animals on the Move.........................................................................................................................................8
11.2 Measurements Specific to Nigerian Dwarf Goats.................................................................................................................8
11.3 Height Measurements............................................................................................................................................................8-9
11.4 Rear Leg Set Evaluation.....................................................................................................................................................8
11.5 Rump Width Measurements....................................................................................................................................................9

12.0 DATA COLLECTION – SCORING DAIRY STRENGTH
12.1 Assessing Dairy Strength.......................................................................................................................................................9

13.0 DATA COLLECTION – SCORING BODY CAPACITY
13.1 Assessing Body Capacity.......................................................................................................................................................9

14.0 DATA COLLECTION – SCORING MAMMARY SYSTEMS
14.1 Dry Mammary System Eligibility........................................................................................................................................9
14.2 Udder Texture Considerations................................................................................................................................................9
14.3 Uneven Udder Evaluations.....................................................................................................................................................9
14.4 Over-Uddered Does...............................................................................................................................................................9
14.5 Mastectomy Does.......................................................................................................................................................................9
14.6 Twisted Udders.......................................................................................................................................................................9
14.7 Fore-Udder Evaluation............................................................................................................................................................9
14.8 Other Udder Considerations.....................................................................................................................................................9
14.9 Udder Depth Evaluation............................................................................................................................................................9
14.10 Rear Udder Arch Measurement.............................................................................................................................................10
14.11 Rear Udder Side View..........................................................................................................................................................10
14.12 Rear Udder Height.................................................................................................................................................................10
14.13 Teat Length Assessment.........................................................................................................................................................10

15.0 DATA COLLECTION – LINEAR APPRAISAL SCORING RANGE DEFINITIONS
15.1 Definition of Function and Descriptions of Score Levels..................................................................................................10-11
1.0 SCOPE & APPLICATION

1.1 This Standard Operating Procedure (SOP) is applicable to the systematic collection of data documenting evaluations for participants in ADGA’s Linear Appraisal Program. The application of these procedures is to provide the framework for a uniform, accurate record system to be used for (1) making farm management decisions; (2) educational programs and research, including the genetic evaluation of does and sires; (3) breed association(s); and (4) the promotion and sale of animals.

2.0 PROGRAM SUMMARY

2.1 Evaluations should be done in accordance with the latest version of the ADGA Guidebook, Article X, Linear Appraisal. All procedures are to be followed. Dairy goat herds evaluated with the linear appraisal system have been instrumental in developing the information needed for the genetic evaluation of linear traits and continue to provide the data for ongoing efforts in determining the relationship of the program areas to longevity and production.

2.2 Procedures outlined in this document are in addition to that document. The basic and minimum standards are to be uniformly followed. They ensure that evaluations will provide the accuracy, uniformity, and integrity essential to dairy goat type evaluation records.
2.3 The linear appraisal system evaluates individual type traits that affect structural and functional durability, to take advantage of the potential for genetic improvement through selection. There are three parts to the linear appraisal of an animal: linear traits, structural/functional characteristics, and major scorecard categories that includes a final score.

2.4 Linear trait evaluation describes each of 13 primary traits and 1 secondary trait on a scale ranging from 1-50, that represents the biological range for a particular trait. The description does not set a certain point on a range as "ideal," nor are more points, fewer points, or mid-range points more desirable. Instead, these point scores objectively describe the condition of a trait. The evaluation of these traits represents the true "linear" portion of the program. It is the primary linear trait data, plus the animal's final score, that are used by ADGA from the USDA algorithm to develop sire summaries.

2.5 The structural/functional component of the appraisal program involves the assessment of the animal in 8 areas: head, shoulder assembly, front legs, rear legs, feet, back, rump, and udder texture. The appraiser will note, for each of these 8 areas, if it is Poor or Fair (both of which indicate a problem to the herd owner), Acceptable, Good Plus (+), Very Good, or Excellent as described in Section 17.1. This component will assist the owner in making management decisions about individual animals and promoting their herd.

2.6 The final component of the appraisal is the evaluation of the 4 (3 for a buck) major categories, General Appearance, Body Capacity, Dairy Strength, and Mammary System, as well as the assigning of a final score. As above, this component will assist in management decisions and promotion.

3.0 AUTHORITY

3.1 The ADGA Board of Directors and the Council on Dairy Cattle Breeding (CDCB) approves [2017] the data necessary from the linear appraisal program to ensure the flow of records for industry purposes including genetic evaluation programs.

4.0 RESPONSIBILITY

4.1 Linear Appraisal staff and herd owners, as well as persons in their employ, are individually and collectively responsible for adherence to program procedures.

4.2 There are certain expectations ADGA has for both Linear Appraisers and Member Herd Participants. There are many cross-over connections between members and appraisers, but while appraisers are on the farm for linear appraisal, they are employees of ADGA and are there for the sole purpose of appraising the herd. It is paramount that discussions only concern the animals in the herd being appraised. The appraisers should not be expected to discuss animals in other herds, give medical advice or diagnosis, give management recommendations, or discuss other herds or members. Courtesy is expected from all regarding the session. The appraisers have a schedule to keep so will not usually be able to stay for meals and visiting. If there are any problems, the Performance Programs Manager or Clerk shall be contacted immediately.

4.3 To participate in this dairy record keeping program, herdowners must agree to conform to these procedures, along with registry requirements.

5.0 MEASUREMENTS AND RECORD-KEEPING EQUIPMENT

5.1 Physical Measurements - Stature will be evaluated and rump width will be measured by the appraiser using ADGA Linear Appraisal Committee approved devices (See Appendix E), which belong to the appraiser. All animals with final score 93 or greater and any animal with miscellaneous code (MC) of 82 (over-height) will have an exact measurement recorded in inches. The appraiser must be consistent in measuring method. In the case of failure of the approved devices, other devices may be used in an emergency.

5.2 Equipment used for collection of type data by the appraiser includes:
   A. measuring device(s)
   B. digital camera + back-up disposable
   C. electronic field device (as available)
   D. field data sheets
6.0 BIOSECURITY

6.1 Every effort will be made by the appraiser to ensure reasonable biosecurity measures.

6.2 Reporting of specific issues of biosecurity within a herd is the responsibility of the herdowner and should be communicated to the appraiser or to the Performance Programs Manager prior to the session.

6.3 Appraisers have the right to decline scoring any animal with visible signs suspected as being a contagious disease [2022]. These animals will be designated on the linear appraisal worksheet as Not-in-Condition – Biosecurity Risk (NIC-BR). Animals designated as NIC-BR will not be counted toward the number of animals presented for purposes of calculating the final costs for the minimum stop and per animal fees as charged and adjusted at the ADGA office.

6.4 At the discretion of the appraiser, an appraisal session may be terminated if issues of contamination by infectious diseases, especially zoonotic diseases, are of concern.

7.0 SESSION GUIDELINES FOR APPRAISERS & HERD OWNERS

7.1 The appraiser shall arrive at the farm at the scheduled time or, if late arrival is anticipated, call the herd owner as far in advance as possible.

7.2 During the Linear Appraisal session, the appraiser will interact with the herd owner or handler in a positive manner providing brief comments while scoring to help the herd owner understand the process. The appraiser should give an opening explanation or introduction of the ADGA Linear Appraisal Program to the herd owner(s).

7.3 The appraiser will always be willing to explain why an animal was evaluated as it was. If questions are raised, it is not assumed judgment is being questioned. With the growth of the program, many breeders are still learning and are quite sincere in their desire to learn.

7.4 Udder instruction for owners: Does are best prepared by having them uddered to the point of functional capacity with consideration to udder texture, elasticity, and the doe's ease and comfort while on the move or at rest.

7.5 The appraiser shall proceed to appraise the herd allowing the breeder ample opportunity for discussion.

7.6 The appraiser shall make sure the owner can hear the explanations, speaking with sufficient volume and clarity, explaining observations carefully, particularly pointing out those faults or strengths that they suspect the owner may not have seen.

7.7 The appraiser shall direct most of their attention to the owner.

7.8 Appraisers should not evaluate animals judged by them within a two-week period prior to and a two-week period after the appraisal session, except at the discretion of the Performance Programs Manager in cases where no other appraiser is available.

7.9 The appraiser shall note the condition of the herd and not discriminate against herds that are not prepared (groomed, uddered properly, etc.) as much as others.

7.10 No test reports, former scores, records, or photos should be used by the appraiser in scoring.

7.11 The appraiser shall avoid giving their impression of a sire's strong or weak points when appraising offspring. Such comments may be interpreted as biased for or against daughters of that sire.

7.12 Tattoos (or approved EID) are to be read before scoring and must meet all the requirements of the ADGA animal identification (tattoo/EID) policy.

7.13 Any animal presented with an illegible or incorrect tattoo or EID cannot be scored. However, owners should be aware that these animals will be counted toward the number of animals presented for purposes of calculating the final costs for the minimum stop and per animal fees as charged and adjusted at the ADGA office.
7.14 The appraiser shall avoid discrimination against animals because of adverse weather, sickness, injury, or other similar conditions. If the appraiser is unable to place an accurate score on an animal because one or more of these conditions exists, or because the animal is uncooperative, the animal shall be ranked "Not in Condition" (NIC) on the score sheet. In all cases, the linear appraiser determines whether the animal is in sufficient condition to be appraised.

7.15 Appraisers are encouraged to employ the "Not in Condition" designation for does that have been dry for an extended period (that is, over 1 year), that are too newly fresh as a first freshener. Animals that cannot be controlled enough to evaluate will be marked (CBC). This is to be determined by the appraiser.

7.16 Animals marked Not in Condition (NIC) will not be counted toward the number of animals presented for purposes of calculating the final costs for the minimum stop and per animal fees as charged and adjusted at the ADGA office. Animals marked Cannot Be Controlled (CBC) will be counted toward the number of animals presented for purposes of calculating the final costs for the minimum stop and per animal fees as charged and adjusted at the ADGA office.

7.17 The appraiser has the option of recalling any animal in a herd for reconsideration during the time the herd is being evaluated. No score is final until the worksheet is signed by the appraiser.

7.18 The number of stops and animals to be appraised in one day will be determined by the Performance Program Manager in consultation with the appraiser.

7.19 When evaluating a particular breed group, if the appraiser believes there are more animals of that breed group on the premises, which are not being presented, the appraiser will:

A. Explain the rule and ask to evaluate those animals.

B. If the owner cannot explain the situation adequately and/or refuses to present, the incident is to be reported to the ADGA Performance Program Manager for further investigation.

C. The ADGA Performance Programs Manager will report any infractions to the Linear Appraisal Committee for action.

7.20 Appraisers can stop an appraisal session under situations where their personal safety is at risk. Documentation of such instances should be promptly submitted to the ADGA Performance Programs Manager or the ADGA office, for action and may result in the permanent loss of linear appraisal privileges for the herd owner at fault.

7.21 Whenever an appraisal session is not completed, the appraiser should sign the linear appraisal worksheet and leave a copy with the herd owner, just as they would for a completed session.

8.0 HOST HERDS

8.1 Host herds shall be notified which transport herds are signed up to be at the host herd’s stop. The host herd must give permission to transport herds to be at the session.

8.2 One introductory/educational presentation will be given at the start of a session stop. Herd owners wanting to see a presentation must be present at the start of the session. In cases where a host stop is a full day, a second presentation may be offered in the afternoon.

8.3 Host herds must have ample room to accommodate multiple trailers.

8.4 Transport herds should be present before their session starts so that the appraisal session is not delayed. If many animals are being appraised at the stop, the host should contact all transport herds to develop a detailed schedule for the session. Any plan to stagger herds should be scheduled based on the guideline that the appraiser will score about 8 animals per hour. Transport herds must arrive at the host farm 30 minutes before their scheduled start time. All herds must understand that start times are estimates intended to best ensure the appraiser can continuously score animals during the session.
8.5 When multiple herds are scheduled at a stop, they are encouraged to assemble at facilities which allow herds to spread out, such as a fairground or horse arena.

9.0 HUMAN INFECTIOUS DISEASE OUTBREAK PRECAUTIONS AND REQUIREMENTS (2022)

9.1 Upon application for Linear Appraisal, Herd Owners must agree to abide by the following guidelines:

9.2 Guidelines provided by the CDC and State and Local Health Departments will be consulted for current recommendations regarding transmission avoidance.

9.3 If an appraisal session needs to be cancelled and documentation is provided verifying that cancellation is due to human infectious disease, any prepaid stop charges and animal fees will be credited to the account(s) of the herd owner(s). However, the initial application fee will be retained by ADGA to offset some costs associated with the appraisal trip. (2022)

10.0 DATA COLLECTION – SCORING - GENERAL RULES

10.1 Actual measurements will be taken periodically throughout the session for those traits that can be quantified for calibration purposes.

10.2 All data and information must be documented on field data sheets or on the handheld data recorder. Missing data must be verified.

10.3 All evaluation of animals with differences between sides of the goat due to health or injury will be done using the unaffected side. Other differences will be averaged, or in the case of udder depth and medial, the functional-appearing half will be used.

10.4 The Final Score must conform to a calculation based on the Linear Appraisal Category Scores and the category values listed in the ADGA scorecard. After completion of the session, the Linear Appraisal Report shall not be added to or changed by anyone, except by proper review and action by the PPM or automated programming [2022].

10.5 Does

A. A doe must have freshened at least once (as allowed only under 14.2) to be scored Excellent.

B. A first freshener may be scored Excellent if she has been in milk for 365 days or more and is in milk at the time of appraisal. The appraiser will record a Final Score of 89 and note that a higher score may be given if verification of lactation length is confirmed by Performance Programs Manager. Verification must be confirmed by official DHI records, offspring registration or other verifiable information.

C. Springing does that have never freshened or does that have never been milked regularly may not be evaluated regardless of their proximity to freshening. Springing does under two years of age may be scored in the Young Stock Program, when that program resumes.

D. Linear and Structural categories will be evaluated without adjusting for stage of lactation or number of lactations. These adjustments will be accounted for in the final categories. An exception is made if the doe is 6 or fewer weeks fresh - the appraiser may evaluate the dorsal process when scoring rump structural category with this information. Age adjustment applies only to animals seven (7) years and older when scoring the major categories and determining final score [2022].

E. Does with a general or breed specific disqualification cannot be Excellent in the major category that corresponds to that disqualification code or in the overall final score.
10.6 Bucks

A. Bucks must be 2 years of age or older before a final score of Excellent (90 or greater) can be awarded.

   B. Bucks with a general or breed specific disqualification cannot be Excellent in General Appearance or in overall Final Score.

11.0 DATA COLLECTION – SCORING GENERAL APPEARANCE

11.1 All animals being scored must be observed on the walk or as they come to rest when appropriate for the trait.

11.2 Stature and rump width on Nigerian Dwarf goats will be evaluated on a linear scale.

11.3 Height

   A. Dairy goats are to be measured at the highest point of their withers. The front legs shall be set as squarely as possible underneath the withers. The rear legs shall be set so that when an imaginary line is drawn from the pin bone to the ground, it passes through the hock.

   B. The handler shall have on hand on the goat’s collar and the other hand not touching the goat. The head shall be held up alertly, but not stretched up to artificially reach a minimum height or pushed down to artificially remain under a maximum height.

   C. The goat shall be measured on a solid, level surface. The measuring device should have a base so that it may sit squarely on the ground. The device shall be placed parallel to the goat’s front leg. The device shall have a crossbar to extend over the withers. It is important that the crossbar be as level as possible, and that the entire device be held as straight as possible to obtain the most accurate measurement. Horizontal and vertical levelness should be ensured.

   D. Measurements for miniature breeds are to be to the nearest ¼ inch.

   E. If over-height for a miniature breed, the General Appearance category and Final Score should reflect that, and Miscellaneous Code 82 assigned. Reference SOP 10.5E and SOP 10.6B [2022]

   F. Mature (4 years of age and older) animals of any breed under minimum breed standard for height, that are otherwise exceptional in type could be Excellent overall and in the General Appearance category. Reference Code MC83. [2022]

11.4 Rear leg side view should be evaluated as the animal comes to a stop.

11.5 Rump width should be measured from the rear between the thurls, measuring from the top, outermost portion of the bone, not in the hollow. Use a crosspiece indicating levelness of measurement.

12.0 DATA COLLECTION – SCORING DAIRY STRENGTH

12.1 Dairyness is to be assessed primarily as a visual evaluation (from side view) by the appraiser, using the “Dairyness” description from the LA Handbook as a guide (from coarseness to extreme sharpness). The appraiser has the option of handling animals to clarify their placement within the linear range. Round-boned, coarse animals that lack angularity can only score Fair and Poor in the final category score for Dairy Strength.
13.0 **DATA COLLECTION – SCORING BODY CAPACITY**

13.1 Goats with a narrow, pinched heart girth, overall frailness, short ribs, or ribs that are close together, resulting in a short, cramped body may only be rated Fair or Poor in the final category for Body Capacity.

14.0 **DATA COLLECTION – SCORING MAMMARY SYSTEMS**

14.1 Does with dry mammary systems are eligible to receive a mammary score in the Excellent range.

14.2 A dry milker cannot receive an Excellent rating for udder texture. Unless deemed necessary for overall Mammary scoring by the appraiser, only does considered for FS93 and above will be evaluated for udder texture and **MUST** be re-presented milked out [2022].

14.3 All evaluation of does with differences between halves of their udders due to health or injury will be done using the unaffected side. In the case of udder depth and medial, the functional-appearing half will be used.

14.4 The appraiser may request that over-udderred does be milked by the owner to allow a more accurate evaluation.

14.5 Does with a bilateral mastectomy will not be scored.

14.6 Twisted udders will be evaluated 3 dimensionally so that side profile and rear view are considered.

14.7 Fore-udder evaluation considers the extension of udder forward of the teats, the extension of the lateral and the width across the lateral without regard to position of udder on the body wall.

14.8 Goats with short, bulgy, or loose fore udders; low, narrow, loose, or pinched rear udders; and udders that are tilted, twisted or pendulous may be considered for a rating of Fair or Poor in Mammary.

14.9 Udder Depth, viewed at eye level, is evaluated as the vertical distance between the floor of the udder and the point of hock. For miniature breeds, this, along with medial suspensory ligament will be evaluated at ½” increments – see scale Appendix A - Measurements.

14.10 Rear Udder Arch is measured at the area of width where height is assessed. If the udder is carried too far forward, rear udder arch may need to be evaluated as the animal moves. If the arch still has the look of a point at center-top, it will evaluate at a 19 or under. Once rounded, the score is 20 or over.

14.11 Rear Udder Height:

A. Is not scored on bucks and escutcheon height is not scored on youngstock.

B. For mature does, as ADGA recognizes multiple-sized breeds with different body frames, absolute measurement is not the most accurate assessment of the trait. This trait will be scored on the height in relation to the body rather than be based on conversion of a measurement to the linear score. The Rear Udder Height linear trait is scored by the appraiser by visually assessing the halfway spot between the base of the pelvic arch and the point of hock. This point, called the midpoint, is a score of 10 on the linear scale. The three-quarter mark above the hock is a score of 30 on the linear scale [2022]. Top of milk secretory tissue in relation to the hock ½=10 points, 5/8=20 points, ¾= 30 points, 7/8=40 points, at pelvic arch= 50 points [2022].

14.12 Rear Udder Side View: Scoring ranges from 0 (when the udder cannot be viewed behind the leg) to +4 (extremely rounded, bulging or protruding beyond the vulva) [2022].
14.13 Teat Length (TL) is assessed at eye level or from a distance that allows accurate evaluation and is the length of the teat from the base where it meets the udder where teat diameter is assessed, to the end of the teat when evaluated from the rear. It is a visual assessment converting inches to a scale for the purpose of data collection started in 2015. The distance can be assessed at side profile should it be necessary.

15.0 DATA COLLECTION - LINEAR APPRAISAL SCORING RANGE DEFINITIONS

15.1 Definition of FUNCTION: The ability to be productive, relative to age, without significant detriment to strength, soundness, dairy form, or mobility into reasonable maturity.

A. 59 and below = Poor. Animals in this category demonstrate an inability to function. A Poor animal possesses severe structural defects in multiple categories inhibiting productivity at any stage of maturity.

B. 60-69 = Fair. Animals in this category demonstrate an inability to sustain function through maturity or a loss of function with maturity. A Fair animal possesses serious structural defects significantly limiting longevity and productivity.

C. 70-79 = Acceptable. Animals in this category demonstrate form conducive to adequate longevity and productivity. An Acceptable animal possesses moderate defects related to function. The defects may be attributed to immaturity in younger animals or undesirable wear in more mature animals yet evidence a minimal standard of longevity and productivity.

D. 80-84 = Good Plus. Animals in this category demonstrate the potential for or evidence of commendable lifetime performance. A Good Plus animal may display immaturity in structural trait characteristics or age-related wear at the current appraisal yet indicates a tendency towards full productivity. A Good Plus animal may also display full productivity yet still possess minor defects preventing advancement to a higher category. Regardless, the defects set relatively marginal limitations on the ability of the animal to sustain function over an extended period.

E. 85-89 = Very Good. Animals in this category demonstrate form indicative of the ability to function at a high level over an extended period. A Very Good animal possesses conformation and dairy quality enabling superior lifetime performance. Younger animals in this category excel in most if not all structural categories permitting them to perform at a high level respective to their stage of maturity. More mature animals in this category display form indicating a high level of function over a long productive life coupled with only minor primarily age-related defects. Exceptional younger animals in this category are not eligible for a higher score in accordance with Section 10.5.B

F. 90 and above = Excellent.

1. 90: Animals at this score demonstrate exceptional qualities in many categories and have proven their functionality and productivity into at least their second lactation or have milked 365 days in their first lactation.

2. 91: Animals at this score are exceptional overall and are extremely correct as evidenced by ease of movement with full function and productivity. Animals in advanced maturity are maintaining a high level of function although may start showing some age-related defects.
3. **92**: Animals at this score are more extreme in some of their exceptional traits resulting in greater productivity and function. This includes a higher degree of structural correctness, style, and balance evidenced on the move and at rest.

4. **93**: Animals are approaching or have reached their full maturity at this score and exhibit a combination of exceptional characteristics including desirability of dairy form, structural correctness, strength, and capacity. Animals at this elite score are moving with ease and balance while maintaining a mammary system that is exceptional in its structure, functionality, and productivity.

5. **94**: Animals at this score have exceptional movement, smoothness, and correlation of parts and exhibit exceptional qualities in all categories. Animals at this score are expected to demonstrate a high level of functionality and productivity appropriate to their advancing level of maturity.

6. **95 to 100**: Animals scoring in this elite category will possess traits exceeding all other levels of excellence previously established in the Excellent range, approaching even greater perfection in the minor traits and with few age-related changes. Demonstrating extremely high functionality and apparent productivity, this score requires verifiable evidence of production.

### 16.0 DATA COLLECTION – HIGH SCORE VERIFICATION PROCEDURES

#### 16.1
When an animal is considered for a Final Score meeting or exceeding **93**, the appraiser will record trait breakdowns and structural category scores and assign a maximum final score of **93** that day. A high score verification form will be completed. All category scores shall contain the numerical score that was used to calculate the Final Score, i.e., FS: E 93 GA: E 93 DS: E 92 BC: E 94 MA: E 93 to be included on the high score verification form. The LA worksheet left with herd owner must have the customary letter scores and the owner will not be made aware of the potential higher score. [2022]

#### 16.2
For assigning a Final Score of **94** or greater, the appraiser will also submit the following unposed digital photographs for the verification/archival procedure. Photos of the animal will be taken immediately after assigning the Final Score on a hard, level surface. Photos required of high-scoring animals are: One side-view, Oblique, Front, Top, and Udder Full and Udder Milked Out. A video will no longer be required.

#### 16.3
The appraiser will obtain a signature from the owner releasing the photos for use in the verification/archival process if not already on file with the original application. Photos of Verification Animals shall remain the property of ADGA.

#### 16.4
The appraiser will then contact the Performance Programs Manager as soon as possible and identify the animal under consideration. The appraiser will also submit the following information/data to the Performance Programs Manager within 10 days of the session.

A. Digital photos

B. Complete breakdown of animal
   1. Linear Breakdown
   2. Structural Category Scores
   3. Remarks, Defects, Miscellaneous coding

C. Registration number, number of lactations, freshening date, number of hours of milk, and any other extenuating circumstances that might affect score (mastitis, scar tissue, injury).
D. Numerical Breakdown of Category Scores and Final Score
   (1) Does: FS, GA, DS, BC, MA
   (2) Bucks: FS, GA, DS, BC

16.5 Upon initial notification of the animal under consideration, the Performance Programs Manager will randomly select two Senior Appraisers to review the data. They will confer with the on-farm appraiser and reach a simple majority opinion and notify the Performance Programs Manager of the results within thirty (30) days from the date the material is mailed from the office.

16.6 Possible outcomes from the Verification Procedure are:
   A. Score of greater than 94 verified and certified – new Final Score assigned from category average and official.
   B. Score (94) verified and category score average not certified – Final Score remains at initially assigned score of 94 with category scores of Excellent.

16.7 The owner will be notified of a decision to raise the score from 94 to the higher value immediately by letter from the Performance Programs Manager.

16.8 Digital Cameras and/or memory cards will be provided by ADGA.

17.0 DATA COLLECTION – MISCELLANEOUS CODES
17.1 Miscellaneous Codes can be found in Appendix A.
17.2 Descriptive Coding is used to provide additional information to the herd owner regarding specific traits and can be used in any category.
17.3 When a miscellaneous code is considered functional in its effect, the trait must be coded Acceptable, Fair or Poor. A functional code should be used only if the trait is 70% or less than ideal.
17.4 Caution should be used when applying codes 75 or 76 to very young (yearling) or very old animals and only after direct examination of the teeth and dental pad. Position of contact of the incisor teeth with the dental pad may change before and during permanent incisor eruption in younger goats (yearlings) or with shifting or missing incisors in goats of advanced age.
17.5 The 02 - stale code may be applied to does whose apparent evidence of function is significantly influenced by extended, as indicated by body condition, state of udder involution, etc. This code may be used only for does more than 305 days in milk or for does with current lactation initiated by abortion. ADGA guidebook definition of an aborted doe is a doe that has given birth to a kid or fetus at less than 141 days of gestation. The 04 code is used for an abnormal kidding.
17.6 Record all pertinent data on a field data sheet. Functional codes should be listed in order of importance. Descriptive traits are circled on owner sheets and prefaced with a ‘9’ on final worksheets.
17.7 Functional miscellaneous codes only will be published in the Performance Volumes, ADGA Genetics web site, and approved media.

18.0 YOUNG STOCK - Suspended until further notice
   A. Springing does under 2 years of age may be scored in the Young Stock Program.
   B. Linear traits evaluated will be stature, strength, dairyness, rump angle, rump length, rear legs – side view, and escutcheon arch. Stature and rump width will be recorded in actual measurements in inches; the remaining traits will be scored in the 1 to 50-point range like the adult program.
   C. Structural/functional categories and scoring are the same as the adult program minus mammary categories.
   D. Final score will be a category rating and not a number.
As of the 2020 Annual Meeting of the ADGA Board of Directors, the Young Stock Program is suspended. The BOD has directed that a review be conducted by a Young Stock Evaluation Program Task Force, which will bring recommendations for approval to the ADGA Board of Directors.

19.0 REPORTS and RECORDS

19.1 Completed appraisal reports on all animals evaluated shall be mailed or sent to the Performance Programs Clerk within ten (10) days of completion of the assignment.

19.2 Reports of any irregularities concerned with appraisal found during herd visits should be included in reporting.

19.3 Retention of records:
   A. Field Sheets – until December 31st of the year of appraisal as verified received by the ADGA office.
   B. Photos – 5 years
   C. Verification Documentation – 5 years
   D. Program Evaluations – 10 years

19.4 Appraisers will provide a photograph release form for any photographs taken for use in the Linear Appraisal Program other than those used in the High Score process.

20.0 QUALITY CONTROL (QC) AND QUALITY ASSURANCE (QA)

Purpose - To ensure the program and staff have performance monitored and feedback provided, the ADGA Performance Programs Manager or an individual designated by the ADGA Association Manager or ADGA Board of Directors, will conduct a self-audit of selected areas of ADGA Linear Appraiser program performance, at both the field and office levels, on an annual basis. In particular, they will inspect those areas for which non-conformities may have been identified on a repetitive basis, to determine whether plans for meeting performance requirements are effective. Results will be the subject of discussion between the ADGA Performance Programs Manager and the ADGA Linear Appraisal Committee to identify those issues that require improved performance.

21.0 REFERENCES


22.0 APPENDICES

A. Miscellaneous Codes and Measurement Standards .......................... 14-15
B. High Score Verification Form .......................................................... 16-17
C. ADGA Dairy Goat Scorecard ........................................................... 18
D. Linear Appraisal Education Program .............................................. 19
E. Measuring Devices ....................................................................... 19
F. Forms for Groups Wishing to Host a Refresher ............................... 20-25
### APPENDIX A. MISCELLANEOUS CODES

<table>
<thead>
<tr>
<th>REMARKS</th>
<th>DEFECTS</th>
<th>DEFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Status</td>
<td>General Appearance (cont’d)</td>
<td>Miscellaneous</td>
</tr>
<tr>
<td>01 Dry</td>
<td>C. Back and Rump</td>
<td></td>
</tr>
<tr>
<td>02 Stale</td>
<td>40 Low front end</td>
<td>77 Total blindness -DQ**</td>
</tr>
<tr>
<td>03 Springing</td>
<td>41 Weak chine</td>
<td>78 Naval hernia – DQ**</td>
</tr>
<tr>
<td>04 Atypical Lactation</td>
<td>42 Weak loin</td>
<td>79 Abnormal testicles – DQ**</td>
</tr>
<tr>
<td>B. Condition</td>
<td>43 Roached back</td>
<td>80 Overmature for age</td>
</tr>
<tr>
<td>05 Not in Condition</td>
<td>44 High dorsal process (&gt;6 weeks fresh)</td>
<td>81 Overly refined bone</td>
</tr>
<tr>
<td>06 Extremely Under Conditioned</td>
<td>45 Thurls too low</td>
<td>82 Over Height Nigerian</td>
</tr>
<tr>
<td>07 Extremely Over Conditioned</td>
<td>46 Asymmetrical rump</td>
<td>83 Under Minimum height</td>
</tr>
<tr>
<td>08 Enlarged joints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09 Extremely restricted motion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Head</td>
<td>DEFECTS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>73 Crooked Face – DQ** (only on bucks)</td>
<td></td>
</tr>
<tr>
<td>A. Feet and Legs</td>
<td>74 Weak Jaw</td>
<td></td>
</tr>
<tr>
<td></td>
<td>75 Overshot Jaw</td>
<td></td>
</tr>
<tr>
<td>10 Spread Toes</td>
<td>76 Undershot Jaw</td>
<td></td>
</tr>
<tr>
<td>11 Shallow heels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Front feet turn out</td>
<td>E. Breed Characteristics</td>
<td></td>
</tr>
<tr>
<td>13 Turned-over feet</td>
<td>70 Nose incorrect for breed</td>
<td></td>
</tr>
<tr>
<td>14 Weak pasterns</td>
<td>71 Color/markings incorrect for breed</td>
<td></td>
</tr>
<tr>
<td>15 Bowed front legs</td>
<td>72 Ears incorrect for breed</td>
<td></td>
</tr>
<tr>
<td>16 Crooked front legs</td>
<td>82 Over-height maximum for breed – DQ**</td>
<td></td>
</tr>
<tr>
<td>17 Front legs turn out</td>
<td>83 Under-height minimum for breed</td>
<td></td>
</tr>
<tr>
<td>18 Straight stifles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Bowed rear legs</td>
<td>Mammary System</td>
<td></td>
</tr>
<tr>
<td>20 Hocks turn in</td>
<td>A. Udder Support</td>
<td>99 Excluded from Sire Eval</td>
</tr>
<tr>
<td>21 Abnormal foot growth</td>
<td>50 Udder tilted</td>
<td></td>
</tr>
<tr>
<td>22 Bowed pasterns</td>
<td>51 Udder twisted</td>
<td></td>
</tr>
<tr>
<td>23 Front legs too far forward</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Front End Assembly</td>
<td>52 Udder lacking size</td>
<td></td>
</tr>
<tr>
<td>30 Out at elbow</td>
<td>53 Undesirable udder texture</td>
<td></td>
</tr>
<tr>
<td>31 Open shoulder</td>
<td>54 Unbalanced udder</td>
<td></td>
</tr>
<tr>
<td>32 Winged shoulder</td>
<td>55 Blind udder half**</td>
<td></td>
</tr>
<tr>
<td>33 Too prominent - point of shoulder</td>
<td>67 Congested udder</td>
<td></td>
</tr>
<tr>
<td>34 Weak/ narrow shoulder assembly</td>
<td>68 Blemished udder (injury, trauma, ailment)</td>
<td></td>
</tr>
<tr>
<td>35 Shallow chest floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 Tilted chest floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>56 Teats too short</td>
<td></td>
</tr>
<tr>
<td></td>
<td>57 Teats too long</td>
<td></td>
</tr>
<tr>
<td></td>
<td>58 Teats lack delineation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>59 Abnormal teat placement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 Abnormal teat shape</td>
<td></td>
</tr>
<tr>
<td></td>
<td>61 Extra teats - DQ**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>62 Teats point out</td>
<td></td>
</tr>
<tr>
<td></td>
<td>63 Blind teat - DQ**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>64 Double Teat - DQ**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>65 Double Orifice - DQ** (only on bucks)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>66 Leaking or misplaced orifice</td>
<td></td>
</tr>
</tbody>
</table>

**Category and/or Final Scores may be affected if any of these codes are noted on a particular animal.**
### LINEAR SCALE - STATURE

<table>
<thead>
<tr>
<th>Standard Inches</th>
<th>Miniature Inches</th>
<th>Linear Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 26&quot;</td>
<td>17&quot;</td>
<td>5</td>
</tr>
<tr>
<td>27&quot;</td>
<td>18&quot;</td>
<td>10</td>
</tr>
<tr>
<td>28&quot;</td>
<td>19&quot;</td>
<td>15</td>
</tr>
<tr>
<td>29&quot;</td>
<td>20&quot;</td>
<td>20</td>
</tr>
<tr>
<td>30&quot;</td>
<td>21&quot;</td>
<td>25</td>
</tr>
<tr>
<td>31&quot;</td>
<td>22&quot;</td>
<td>30</td>
</tr>
<tr>
<td>32&quot;</td>
<td>23&quot;</td>
<td>35</td>
</tr>
<tr>
<td>33&quot;</td>
<td>24&quot;</td>
<td>40</td>
</tr>
<tr>
<td>34&quot;</td>
<td>25&quot;</td>
<td>45</td>
</tr>
</tbody>
</table>

### LINEAR SCALE - RUMP WIDTH

<table>
<thead>
<tr>
<th>Standard Inches</th>
<th>Miniature Inches</th>
<th>Linear Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 5&quot;</td>
<td>4.5&quot;</td>
<td>5</td>
</tr>
<tr>
<td>5.5&quot;</td>
<td>4.75&quot;</td>
<td>10</td>
</tr>
<tr>
<td>6&quot;</td>
<td>5&quot;</td>
<td>15</td>
</tr>
<tr>
<td>6.5&quot;</td>
<td>5.25&quot;</td>
<td>20</td>
</tr>
<tr>
<td>7&quot;</td>
<td>5.5&quot;</td>
<td>25</td>
</tr>
<tr>
<td>7.5&quot;</td>
<td>5.75&quot;</td>
<td>30</td>
</tr>
<tr>
<td>8&quot;</td>
<td>6&quot;</td>
<td>35</td>
</tr>
<tr>
<td>8.5&quot;</td>
<td>6.25&quot;</td>
<td>40</td>
</tr>
<tr>
<td>9&quot;</td>
<td>6.5&quot;</td>
<td>45</td>
</tr>
</tbody>
</table>

### LINEAR SCALE - UDDE DEPTH

<table>
<thead>
<tr>
<th>Standard Inches</th>
<th>Miniature Inches</th>
<th>Linear Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ -2&quot;</td>
<td>-1&quot;</td>
<td>5</td>
</tr>
<tr>
<td>-1½&quot;</td>
<td>-¾&quot;</td>
<td>10</td>
</tr>
<tr>
<td>-1&quot;</td>
<td>- ¼ &quot;</td>
<td>15</td>
</tr>
<tr>
<td>0&quot;</td>
<td>0&quot;</td>
<td>15</td>
</tr>
<tr>
<td>2&quot;</td>
<td>1&quot;</td>
<td>25</td>
</tr>
<tr>
<td>3\½&quot;</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>4&quot;</td>
<td>2&quot;</td>
<td>35</td>
</tr>
<tr>
<td>5&quot;</td>
<td>2½&quot;</td>
<td>40</td>
</tr>
<tr>
<td>6&quot;</td>
<td>3&quot;</td>
<td>45</td>
</tr>
</tbody>
</table>

### LINEAR SCALE - MEDIAL

<table>
<thead>
<tr>
<th>Standard Inches</th>
<th>Miniature Inches</th>
<th>Linear Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1&quot;</td>
<td>-¾&quot;</td>
<td>5</td>
</tr>
<tr>
<td>0&quot;</td>
<td>0&quot;</td>
<td>15</td>
</tr>
<tr>
<td>1&quot;</td>
<td>½&quot;</td>
<td>25</td>
</tr>
<tr>
<td>2&quot;</td>
<td>1&quot;</td>
<td>35</td>
</tr>
<tr>
<td>3&quot;</td>
<td>1½&quot;</td>
<td>40</td>
</tr>
<tr>
<td>3&quot;</td>
<td>1¾&quot;</td>
<td>45</td>
</tr>
</tbody>
</table>

### LINEAR SCALE - TEAT DIAMETER

A very narrow teat, ½" (standard) ¼" (miniature) or less in diameter, is assigned 5 or less points; a teat that is intermediate in diameter 1½" (standard) ¾ " (miniature) is assigned 25 points; and a teat that is very wide 2½" (standard) 1¼" (miniature) or more in diameter is assigned 45 or more points. A difference of ½" (standard) ¼" (miniature) in teat diameter, plus or minus, results in a difference of 10 points.

### LINEAR SCALE - TEAT LENGTH

<table>
<thead>
<tr>
<th>Standard Inches</th>
<th>Miniature Inches</th>
<th>Linear Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0&quot;</td>
<td>2.5&quot;</td>
<td>50</td>
</tr>
<tr>
<td>4.5&quot;</td>
<td>2.25&quot;</td>
<td>45</td>
</tr>
<tr>
<td>4.0&quot;</td>
<td>2.0&quot;</td>
<td>40</td>
</tr>
<tr>
<td>3.5&quot;</td>
<td>1.75&quot;</td>
<td>35</td>
</tr>
<tr>
<td>3.0&quot;</td>
<td>1.5&quot;</td>
<td>30</td>
</tr>
<tr>
<td>2.5&quot;</td>
<td>1.25&quot;</td>
<td>25</td>
</tr>
<tr>
<td>2.0&quot;</td>
<td>1.0&quot;</td>
<td>20</td>
</tr>
<tr>
<td>1.5&quot;</td>
<td>0.75&quot;</td>
<td>15</td>
</tr>
<tr>
<td>1.0&quot;</td>
<td>0.5&quot;</td>
<td>10</td>
</tr>
<tr>
<td>0.5&quot;</td>
<td>0.25&quot;</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix B. ADGA HIGH SCORE VERIFICATION FORM

**NAME:**

**DATE:**

**ADGA ID:**

### Required Photos:
- [ ] Side View (either side)
- [ ] Front End
- [ ] Top
- [ ] Oblique
- [ ] Rear View with Milk
- [ ] Rear View Milked Out

<table>
<thead>
<tr>
<th>Reg. ID</th>
<th># Lactations</th>
<th>Fresh Date</th>
<th>Hours in Milk</th>
<th>GA</th>
<th>DS</th>
<th>BC</th>
<th>MA</th>
<th>FS</th>
<th>Projected Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments/Extenuating Circumstances**

________________________________________________________________________

________________________________________________________________________

Appraiser Signature: ______________________________________ DATE: ____________

Send with Photos to Performance Programs Manager along with LA worksheet for the herd. There is no need for a herd owner signature.

**Office Use:**

**Results of Verification:**
- [ ] Verified & Certified, Official Score: ________
- [ ] Verified Only, Official Score: 93E

**2nd Appraiser**

Signature: ______________________________________

DATE: ____________

**3rd Appraiser**

Signature: ______________________________________

DATE: ____________

Performance Programs Manager Signature:

________________________________________________________________________

DATE: ____________
VERIFICATION PHOTO TYPES – Appendix B
(continued)

SIDE VIEW (EITHER SIDE)

TOP VIEW

UDDER FULL & UDDER MILKED OUT

OBlique View

FRONT VIEW
The goal of the Unified Scorecard is to aid in the selection of the type of dairy goat that can function efficiently over a long productive lifetime.

<table>
<thead>
<tr>
<th>POINTS</th>
<th>Senior Doe</th>
<th>Junior Doe</th>
<th>Buck</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. GENERAL APPEARANCE</td>
<td>An attractive framework with femininity (masculinity in bucks), strength, upstandingness, length, and smoothness of blending throughout that create an impressive style and graceful walk.</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>Head &amp; Breed Characteristics - clean-cut and balanced in length, width, and depth; broad muzzle with full nostrils; well-sculpted, alert eyes; strong jaw with angular lean junction to throat; appropriate size, color, ears, and nose to meet breed standard.</td>
<td>5</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Front End Assembly - prominent withers arched to point of shoulder with shoulder blade, point of shoulder, and point of elbow set tightly and smoothly against the chest wall both while at rest and in motion; deep and wide into chest floor with moderate strength of brisket.</td>
<td>5</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Back - strong and straight with well-defined vertebrae throughout; taller at withers than hips, and level chine with full crops into a straight, wide loin; wide hips smoothly set and level with chine and loin</td>
<td>5</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Rump - strongly wide and flat as in front profile through the stifle to cleanly molded hocks, nearly perpendicular from hock to strong, yet flexible pattern of medium length; strong feet with tight toes, pointed directly forward; deep heels with sole nearly uniform in depth from toe to heel.</td>
<td>15</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Legs, Pasterns &amp; Feet - bone flat and strong throughout leading to smooth, free motion; front legs with clean knees, straight, wide apart and squarely placed; rear legs wide apart and straight from the rear and well angulate in side profile through the stifle to cleanly molded hocks, nearly perpendicular from hock to strong, yet flexible pattern of medium length; strong feet with tight toes, pointed directly forward; deep heels with sole nearly uniform in depth from toe to heel.</td>
<td>20</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>B. DAIRY STRENGTH</td>
<td>Long bone pattern throughout. Openness and angularity with strong yet refined and clean bone structure, showing enough substance, but with freedom from coarseness and with evidence of milking ability giving due regard to stage of lactation (of breeding season in bucks)</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Neck - long, lean, and blending smoothly into the shoulders; clean-cut throat and brisket with adequate width of chest floor to support maintenance of body functions.</td>
<td>4</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Withers - prominent and wedge-shaped with the dorsal process arising slightly above the shoulder blades.</td>
<td>6</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Ribs - flat, flinty, wide apart, and long; lower rear ribs should angle to flank.</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Flank - deep, yet arched and free of excess tissue.</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Thighs - in side profile, moderately incurving from pinbone to stifle; from the rear, clean and wide apart, highly arched and out-curving into the escutcheon to provide ample room for the udder and its attachment.</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Skin - thin, loose, and pliable with soft, lustrous hair.</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>C. BODY CAPACITY</td>
<td>Relatively large in proportion in size, age, and period of lactation of animal (of breeding season for bucks), providing ample capacity, strength, and vigor.</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Chest - deep and wide, yet clean-cut, with well sprung foreribs, full in crops and at point of elbow.</td>
<td>4</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Barrel - strongly supported, long, deep, and wide; depth and spring of rib tending to increase into a deep yet refined flank</td>
<td>9</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>D. MAMMARY SYSTEM</td>
<td>Strongly attached, elastic, well-balanced with adequate capacity, quality, ease of milking, and indicating heavy milk production over a long period of usefulness.</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>Udder Support - strong medial suspensory ligament that clearly defines the udder halves, contributes to desirable shape and capacity, and holds the entire udder snugly to the body and well above the hocks. Fore, rear, and lateral attachments must be strong and smooth.</td>
<td>13</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Fore Udder - wide and full to the side and extending moderately forward without excess non-lactating tissue and indicating capacity, desirable shape, and productivity.</td>
<td>5</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Rear Udder - capacious, high, wide, and arched in to the escutcheon; uniformly wide and deep to the floor; moderately curved in side profile without protruding beyond the vulva.</td>
<td>7</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Balanced, Symmetry &amp; Quality - in side profile, one-third of the capacity visible in front of the leg, one-third under the leg, and one-third behind the leg; well-rounded with soft, pliable, and elastic texture that is well collapsed after milking, free of scar tissue, with halves evenly balanced.</td>
<td>6</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Teats - uniform size and of medium length and diameter in proportion to capacity of udder, cylindrical in shape, pointed nearly straight down or slightly forward, and situated two-thirds of the distance from the medial suspensory ligament on the floor of each udder-half to the side, indicating ease of milking.</td>
<td>4</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>TOTALS</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Appendix D. LINEAR APPRAISAL EDUCATION PROGRAM

**Definition:** A Linear Appraisal Education Program is a training program for breeders, youth, and possible future linear appraisers taught by an active linear appraiser or other person trained and authorized by ADGA to do so. The program consists of either one-half day or one full day of instruction. A full day will include all content; a half-day program will include content items 1-9.

**Content:**
1. Definition and discussion of the purpose of the linear appraisal program.
2. Discussion of eligibility, guidelines and rules of the program.
3. Description and discussion of the linear traits and how they are measured (using illustrations, photographs and applicable data collection sections of the Linear Appraisal Standard Operating Procedures [SOP]).
4. Description and discussion of the structural categories (using illustrations, photographs and applicable data collection sections of the Linear Appraisal Standard Operating Procedures [SOP]).
5. Explanation of the procedure used to obtain the major category scores and the final score, using the Scoring Range Definitions and miscellaneous codes and remarks.
6. Discussion of costs and the scheduling options (Individual, hosting, sire groups, special session?)
7. How should a herd owner prepare for a linear appraisal session? What is expected of the appraiser?
8. Discussion of linear appraisal information as it appears on a performance pedigree and on the genetics website. Discussion of trait averages by breed and how to use performance data in a breeding program.
9. Summary and questions
10. Exercises with 4-6 live animals. Several breeds should be represented by at least 3 does in milk and 1-2 young stock to illustrate data collection procedures and range (as possible) for the linear traits and structural categories. No official scores will be assigned at a Linear Appraisal Education Program.

**How to Arrange for a Linear Appraisal Education Program:** Any person or group wishing to conduct a Linear Appraisal Education Program should first contact the ADGA Performance Programs Manager to make arrangements for the time, fees, expense and to discuss needed facilities and equipment. If an instructor is available, the local group should secure local arrangements and set appropriate registration fees. It is strongly suggested that Linear Appraisal Education Programs be widely advertised so as many interested people as possible may attend.

Appendix E. MEASURING DEVICES

**Stature:**
- Ketchum Measuring Tape with level and crosspiece
- ADGA Measuring Stick

**Rump Width:**
- Ruler
- Gaging 8" Digital Calipers
Appendix F. Linear Appraisal Refresher Planning Guidelines

Description of Event:
A 2–3-day event to provide continuing education to ADGA Linear Appraisers, focusing on improvement in any problem areas and discussing program enhancements and the Standard Operating Procedures.

Dates: Dates for the Linear Appraisal refresher are fixed as the Friday and Saturday before President’s Day, with the potential of a training day held for appraiser trainees, as needed, on the Thursday before.

Future Dates:
2021 February 11-13, 2021
2022 February 17-19, 2022
2023 February 16-18, 2023

Refresher participants are advised to consider these dates each year when planning their breeding program.

Times:
Approximately 8AM – 5PM both Friday and Saturday
Possibility of committee meeting in evening hours
Training day, or other potential activities may be scheduled for the Thursday prior.

Location of Event:
A location will be determined the year before the refresher, and will take into consideration, in this order:
1) Availability of animals to evaluate
   a. Does in milk
   b. Variety of breeds
   c. Animals with traits relevant to the year’s focus
2) Facility adequate to the needs (see separate section for list).
3) Hotels, event venue and restaurants conveniently located to each other and to an airport in order to minimize travel time during a busy event.
4) Relative cost of air fares to nearest airport.
5) If possible, try to identify alternating geographical sites so that committee members from all areas of the country will have the opportunity to participate.

Application to Host Refresher:
Parties interested in hosting a Linear Refresher session will complete an application detailing the suitability of the potential site and host group for the purpose.
Applications will be due by September 1st of the year prior to the event (E.g., by September 1, 2020 for the Feb 11-13, 2021 refresher). At the time of application, a local host coordinator will be identified.

Coordinators:
The ADGA Performance Programs Manager, LA committee chair(s) and the local host person will all play a role in coordinating the refresher.
Local Host Reimbursement or Possible Compensation:

Local hosts may be compensated, which can possibly include, but is not limited to, a reduction in hosting or LA fees and mileage for transporting animals and other expenses as pre-arranged. The committee will present an educational overview of the Linear Appraisal program to the host group members at the event. Since the needs and expectations of each refresher will vary, the terms will be determined thru communication between the Performance Programs Manager and the local coordinator.

Attendees:

- All appraisers
- Committee members
- Extra personnel as needed to handle animals
- Invited trainees, if applicable
- Attendees will be expected to share hotel rooms, unless other arrangements are made.

Agenda and Objectives:

- The agenda will be determined by the committee chair(s) and the PPM, and made available to all participants prior to the event.
- The PPM determines the areas that need focus based on an analysis 2 months prior to refresher. (approximately by mid-December)
- The main focus will be on the areas identified by the above analysis. Other areas of focus will be determined by the previous years’ committee/appraiser discussions and decided on by the committee chair(s) and the PPM.
- A separate committee agenda will also be created.

Specific Planning Areas

Budget:

- Room cost, how many needed?
- Rental cars, determine how many and who will rent them
- Mileage reimbursement for people providing animals
- Facility cost
- Lunch/snacks cost

Who: Chair(s), PPM and local coordinator. Committee needs to let organizers know if they will attend. Local coordinator is contact person for facility, and will provide local hotel and restaurant info. PPM will finalize hotel reservations.

When: 2-3 month prior to event (Nov – Dec)

Meals:

- Try to use hotel that has a full breakfast (a consideration choosing hotel)
- Lunch should be either 1) provided at site or 2) there need to be nearby restaurants
- Beverages and snacks available on site

Who: Local coordinator for lunches on site and beverages/snacks, PPM will make restaurant reservation.

When: At least 2 weeks prior to refresher. February 1st at latest.
Security, Biosecurity:
- Identify a person who will be responsible for this, make sure herd owners are kept informed, have hand wash & disinfecting items available with all animal events.
- Care must be taken for biosecurity between animals of different herds.
- Milking sanitation, milk disposal: responsibility of animal owners, but must be coordinated with facility if needed.
- Security needed for items and animals that are left on site.
- Safety concerns for people and animals. Contact facility for contact information, emergency numbers and procedures.
- Location and provision of first aid.

Who: Local coordinator, can consult with knowledgeable committee members.

When: Prior to event.

Animals:
- Milkers of several breeds, ND if possible.
- 30 needed, dairy clipped if possible, to evaluate mammary traits.
- Animals selected based on focus areas.
- Range of scores needed
- Fewest herdowners as possible

Who: Local coordinator work with committee chair(s)

When: ~ 2 weeks prior, fine-tune the evening before if possible. All owners bring animals should be confirmed by February 1st.

Agenda:
- Agenda finalized by committee chair(s)
- PPM will bring or arrange for materials as needed (audio-visual, boards, measuring devices, etc.).
- Finalized agenda sent to committee
- Speakers assigned to their topics

Who: Chair(s) finalize agenda, PPM arrange for equipment/materials

When: ~ January 1st

Presenters:
- Speakers assigned to various presentations on the agenda
- Identify moderators for group discussions
- Identify appraisers to provide leadership in each focus area

Who: Committee chair(s), PPM

When: Dec 15 – Jan 1st
Format:
- Round Robins to demonstrate range of traits
- Stacking Exercises
- Peer scoring
- Rapid Scoring
- Group tasks
- Other

Who: Performance Programs Manager

When: In conjunction with agenda planning and animal selection

Audio/Visual Requirements:
- Projector and compatible laptop(s)
- Extension cords
- Check with presenters as to their requirements
- Possibly a screen or area to project the presentations

Who: Local coordinator, PPM and chair(s)

When: 2 weeks prior (February 1st)

Staffing:
- Committee members and PPM
- All appraisers
- Select local participants for animal handling

Who: Committee members must notify chairs if they will attend, Local coordinator will select local helpers with approval from chair(s) and PPM

When: Committee members notify chair(s) 2-3 months prior to event (Dec 15)

Housekeeping:
- Cleaning before and after event as needed
- Need to clean animal waste and garbage during the event
- Supplies for clean-up needed, shovels, brooms, garbage cans, recycling containers, wheelbarrows?
- Possible need for shavings in animal work areas

Who: Committee, work with local coordinator to determine needs

When: Day of the event, but plan ahead for supplies
Refresher Timeline:

**Day Prior:**
- Airport pickup
- Copy meeting materials if needed
- Possibly an evening committee meeting

*Who:* PPM will coordinate rental cars and airport pickup, committee members and appraisers will help as needed with transportation.

*When:* As people arrive

**Refresher Days:**
- Set up for animal housing
- Set up for animal work areas
- Biosecurity materials in place, instruct participants in use
- Tables and chairs as needed
- Classroom area and audio visual set up
- Food/beverage area set up

*Who:* Committee, local hosts take care of animals and animal housing, local coordinator to advise with set up

*When:* Day of event

**After Event:**
- Coordinate airport drop off
- Hotel checkout
- Relay outcome to committee
- Feedback on improvement for next time
- Evaluation against criteria
- Thank you to host
- Invoices for animal transport, lunch, snacks and beverages, misc.

*Who:* PPM, chair(s), all participants can provide feedback, all participants should thank host group

Venue Criteria and Host Application

**Criteria for Linear Refresher:**
- Animal working area must have space for at least 5 animal stations operating at once
- An area for trailer parking, and possibly for owners working with animals in trailer area
- Water available
- Seating for 20+ people for discussion
- Classroom area if possible, might be able to use hotel conference room, depending on proximity to venue
- Restrooms, heat, electricity
Host application process:
- A completed application to host a linear appraisal session will be submitted, by the host person or group, to the PPM and the committee chair(s) on or before September 1st of the year prior to the event.
- All relevant information must be provided at the time of the application.

Application to Include:
- Name, phone number and email of the contact person
- Location of venue and description of:
  - Trailer parking
  - Animal working area
  - Animal pens/housing area
  - Options for climate control
  - Cost and terms of contract
  - Availability of restrooms and classroom
  - Is there an area to provide drinks and snacks to participants
  - Availability of audio/visual equipment or hook ups, screen
  - Is the facility insured for liability? Is there a cost to ADGA?
  - Is there a possible alternate location in the case of a health or safety emergency?

- Availability of Animals:
  - How many does in milk are available?
  - Are Nigerian Dwarves available?
  - How many different breeds?
  - Bucks? (normally less than 6 needed)
  - How many different owners?

- Locations/options for hotels & restaurants
  - Distance from Airport to possible hotels, are there shuttles?
  - Distance from potential hotels to venue.
  - List of potential hotels.
  - How many and what types of restaurants are nearby