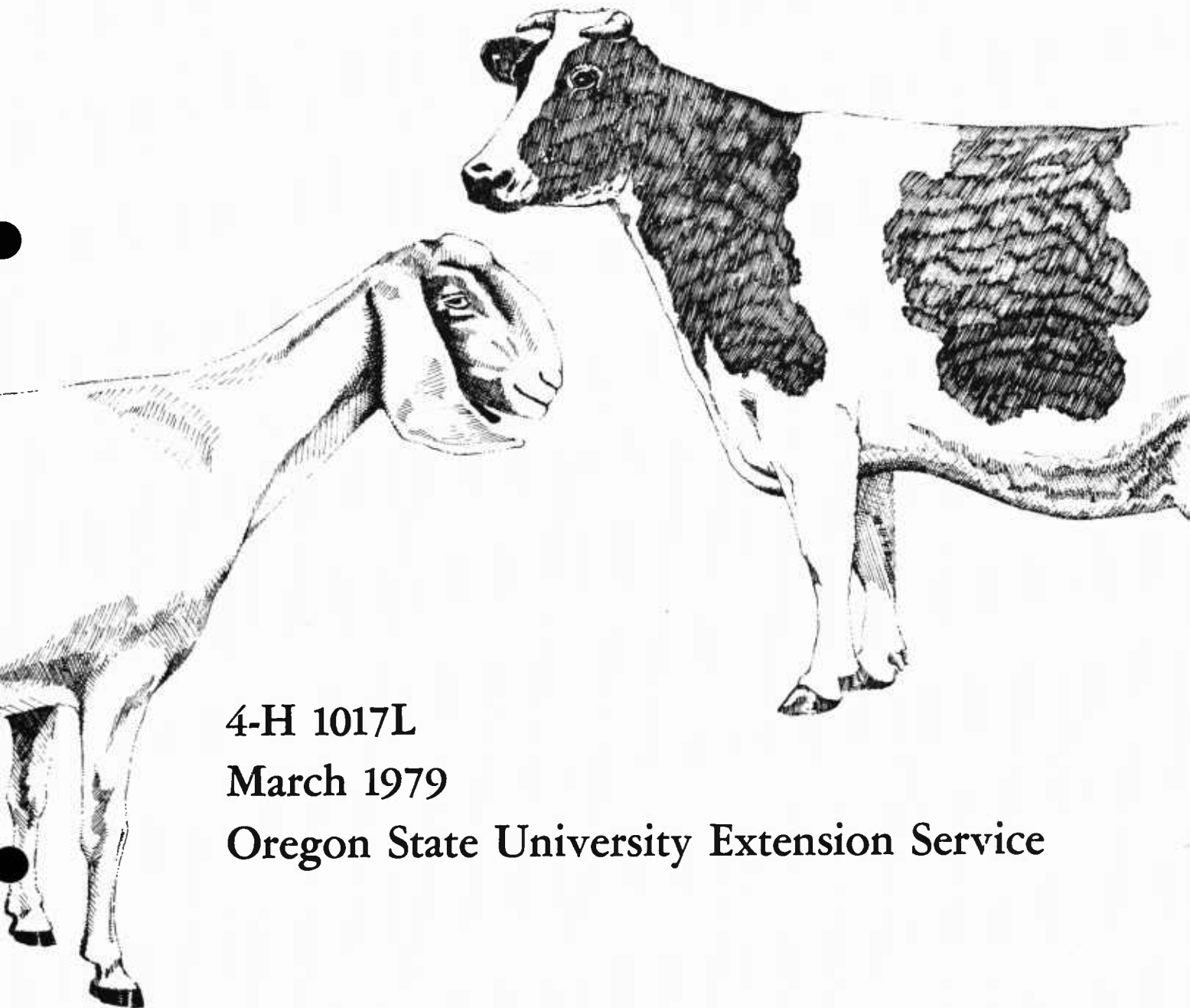


Oregon 4-H

Dairy and Dairy Goat Evaluation and Judging



4-H 1017L

March 1979

Oregon State University Extension Service

Contents

Why Evaluate Livestock	1	Mammary System	18
Dairy Cattle Evaluation	2	Dairy Character	21
General Appearance	4	Body Capacity	22
Mammary System	6	Evaluation and Judging Contests	23
Dairy Character	9	Procedure for Judging	23
Body Capacity	10	Entering a Judging Contest	24
Dairy Goat Evaluation	11	Reasons	25
Breed Standards	13	Outline for a Set of Reasons	25
General Appearance	15	Making Notes	26
		Presenting Reasons	27

Note to 4-H Leaders: This manual is designed to assist you in helping young people learn techniques and develop skills in evaluation of dairy cattle and goats. More important is that judging teaches the 4-H member to make decisions based on body conformation traits, *as the member sees and evaluates them*. Experienced judges will place animals differently. The only way a member can be completely wrong is to fail to make a decision. Encourage a positive approach based on each 4-H member's observation.

Leaders are encouraged to review this manual before sharing the information or making manuals available to members.

You may purchase copies of this manual for your members through your county Extension office.

In teaching decision-making to youth, it is important to keep learning active. To assist you we encourage you to:

- Obtain a copy of 4-H 0255L, *Leaders' Guide on Teaching Decision Making*.
- Read the *4-H Livestock Leaders' Guide*.
- Utilize slides available from the 4-H Audio Visual Library (through your county Extension office).
- Contact Breed Associations for literature and slides (addresses are in back of *Livestock Leaders' Guide*).
- Utilize tours, discussion, judging experiences, and other activities when appropriate.

Prepared by Dr. H. P. Adams, Extension Animal Science Specialist; Duane P. Johnson, Extension Specialist, 4-H—Youth; Ray Yost and Gary Schneider, county Extension agents; Jake Vanderstoel and Randy Dickman, 4-H leaders, with the assistance of the 4-H Development Committee, Animal Science; and reviewed by Tom Zurcher and Teresa Bosch.

Dairy goat illustrations were adapted from *The Illustrated Standard of the Dairy Goat*, by Nancy Lee Owen. Dairy Goat Journal, Box 1808, Scottsdale, Arizona 85252.

4-H seeks the participation of all youth and adults regardless of race, sex, handicap or national origin.

Dairy and Dairy Goat Evaluation and Judging

Why Evaluate Livestock

Visual appraisal (evaluation) is important in selecting livestock. While the modern breeder combines performance records with the live evaluation when selecting animals, the traits that indicate high production are important in selection.

Livestock evaluation and judging is an art developed through good teaching, patient study, and practice. To be a good evaluator and judge of livestock members must:

- Know the parts of the animal and their location.
- Know which parts are important for breeding stock or milk production and recognize the most desirable shape of each part.
- Visualize the “ideal” animal.
- Make critical observations and identify and compare the strong (good) and weak (bad) points of each animal.
- Develop a system of analyzing and examining animals so they will not overlook important points.

Everyone makes decisions. The fundamentals of judging (decision-making) are continually around us. In judging dairy animals, you’ll find that one animal may excel in some, but not all, desirable characteristics.

A judging experience involving dairy cows or goats develops what dairy experts call an “eye for cows” or an “eye for does.” This is the ability to evaluate an animal’s conformation in relation to production and longevity. These skills help young people develop the ability to make decisions on selection of animals that will stay in their herds and produce milk.

Type vs. production

Some traits we look for in type are not closely related to milk production. Therefore, in practice, dairy producers pay close attention to milk production records in selecting animals. Nevertheless, traits such as dairy character, size, and udder capacity are related to production; and strong feet and legs and a well-attached udder are necessary for longevity.

Many other type traits are poorly related to milk production, but do contribute to the appearance of the animal and the satisfaction of the owner.

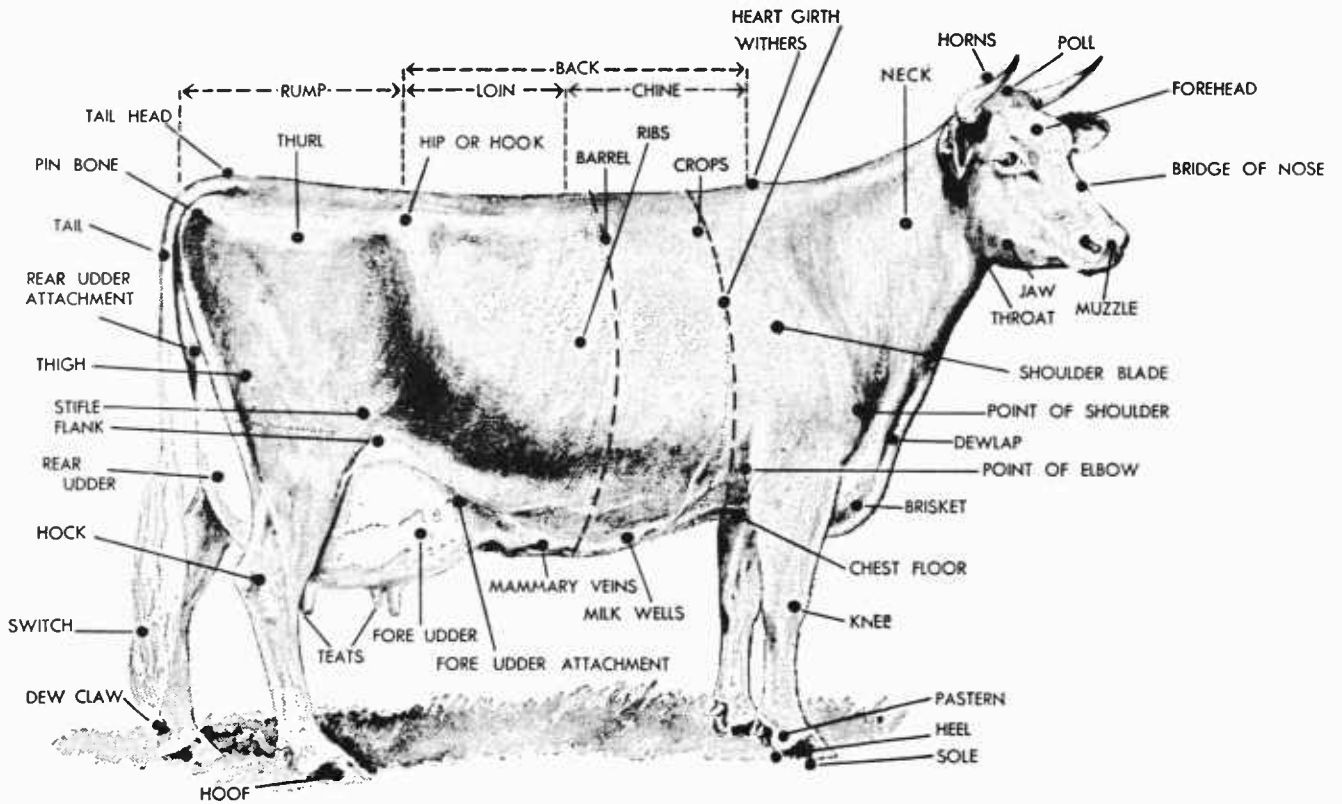
In commercial milk-producing dairy cattle herds, it is recommended that 90 percent of the selection basis be on milk production records and 10 percent be based on type or general appearance.

In goat herds, where the amount of milk produced is of primary importance, it is recommended that 75 percent of the selection basis be on production records and 25 percent be on type or general appearance.

Steps in Learning to Judge

- Members must learn the names and location of all the parts of a cow or dairy goat. They do this by studying the Parts of the Dairy Cow, page 2 and Dairy Goat, page 11.
- Members must know how the ideal animal looks. Breed magazines and farm papers are useful for studying models and pictures of champions that approach the ideal in conformation. Judging a class of four animals is not only a comparison among them, but a comparison of each animal to the ideal.
- They should study the Unified Dairy Cow Score Card, page 3, or the ADGA Score Card, page 12, and learn the value of points for general appearance, dairy character, body capacity, and mammary system. They should learn the relative importance of the various parts of the anatomy.
- Good dairy judges will take every opportunity to judge and analyze cows and goats in comparison to the ideal. They decide on strong and weak points of conformation. Pictures and diagrams will serve this purpose almost as well as live animals.
- Judges train themselves to remember the animals they have judged. They will be able to use this knowledge to arrive at decisions in future experiences.

Dairy Cattle Evaluation



To analyze and discuss her strong and weak points, evaluators must know the parts of a dairy cow indicated in the drawing.

Unified Dairy Cow Score Card

Perfect
Score
30

Breed characteristics should be considered in the application of this card

1. GENERAL APPEARANCE

(All parts of a cow should be considered in evaluating a cow's general appearance.)

Breed Characteristics

HEAD—clean cut, proportionate to body; broad muzzle with large open nostrils; strong jaws; large, bright eyes; forehead broad and moderately dished; bridge of nose straight; ears medium-sized and alertly carried.

SHOULDER BLADES—set smoothly and tightly against the body.

BACK—straight and strong; loin broad and nearly level.

RUMP—long, wide, and nearly level from **HOOK BONES** to **PIN BONES**; clean-cut and free from patchiness; **THURLS** high and wide apart; **TAIL HEAD** set level with backline and free from coarseness; **TAIL** slender.

LEGS AND FEET—bone flat and strong, pasterns short and strong, hocks cleanly molded.

FEET—short, compact, and well-rounded with deep heel and level sole. **FORE LEGS** medium in length, straight, wide apart, and squarely placed. **HIND LEGS** nearly perpendicular from hock to pastern from the side view and straight from the rear view.

2. MAMMARY SYSTEM

30 (A strongly attached, well-balanced, capacious udder of fine texture indicating heavy production and a long period of usefulness.)

UDDER—symmetrical, moderately long, wide and deep, strongly attached, showing moderate cleavage divisions between halves, no quartering on sides; soft, pliable, and well-collapsed after milking; quarters evenly balanced.

FORE UDDER—moderate length, uniform width from front to rear and strongly attached.

REAR UDDER—high, wide, slightly rounded, fairly uniform width from top to floor, and strongly attached.

TEATS—uniform size, of medium length and diameter, cylindrical, squarely placed under each quarter, plumb, and well-spaced from side and rear views.

MAMMARY VEINS—large, long, tortuous (crooked), branching.

Because of the natural undeveloped mammary system in heifer calves and yearlings, less emphasis is placed on mammary system and more on general appearance, dairy character, and body capacity. A slight to serious discrimination applies to overdeveloped, fatty udders in heifer calves and yearlings.

3. DAIRY CHARACTER

20 (Evidence of milking ability, angularity, and general openness without weakness; freedom from coarseness, giving due regard to period of lactation.)

NECK—long, lean, and blending smoothly into shoulders; clean-cut throat, dewlap, and brisket; **WITHERS** sharp. **RIBS** wide apart; rib bones wide, flat, and long. **FLANKS** deep and refined. **THIGHS** incurving to flat and wide apart from the rear view, providing ample room for the udder and its rear attachment. **SKIN** loose and pliable.

4. BODY CAPACITY

20 (Relatively large in proportion to size of animal, providing ample capacity, strength, and vigor.)

BARREL—strongly supported, long and deep; ribs highly and widely sprung; depth and width of barrel tending to increase toward rear.

HEART GIRTH—wide chest floor, large, deep, well-sprung fore ribs, full at elbows.

100

TOTAL

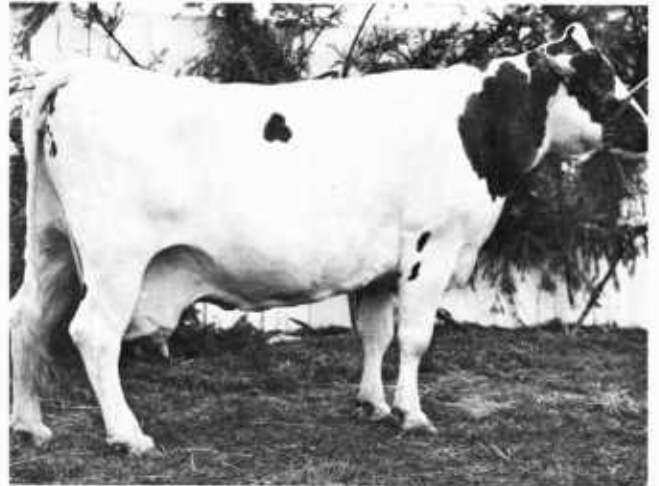
General Appearance

General appearance should be the first observation. All parts of a cow should be considered in evaluating general appearance. The animal must be an attractive individual with the harmonious blending of all parts to give impressive style and

carriage. Dairy refinement and femininity, showing strength, vigor, stretch, and upstandingness with size and conformation that make a smoothly blended dairy cow, are essential for a good, general appearance.



This cow has a strong top line and the vertebrae are clearly defined. The rump is free of excess tissue and is level from hips to pins. She stands squarely on her feet and legs as viewed from both the side and rear. She has a flat clean bone and is strong on her pasterns.



This cow is weak in the back and loin. She is low at the thurls and patchy over the hips and pin bones. The tailhead is coarse and heavy. She also lacks straightness of rear legs and is cow-hocked as viewed from the rear. The bone is coarse and puffy at the hock. The pasterns are weak and the feet lack depth of heel.

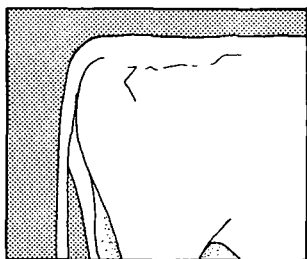


This cow's head is an example of excellent Holstein breed character. It is strong and of proper length and width, with a bright, attractive eye.

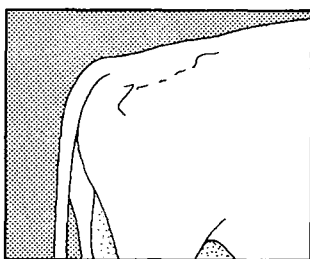


This cow's head is very coarse and plain. It dishes too much in the forehead and is too high at the poll. The eye is dull and the nostril too small.

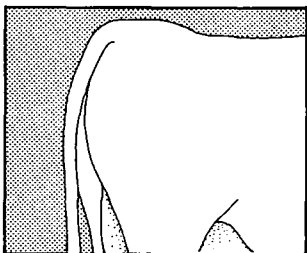
Types of rump conformation



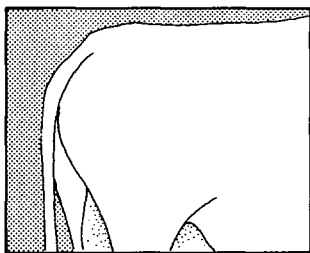
Ideal rump



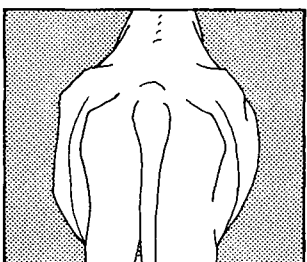
Sloping rump



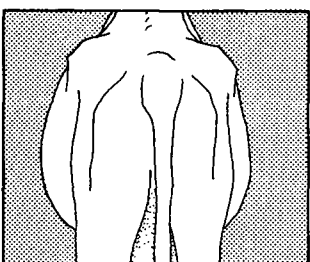
High tail head



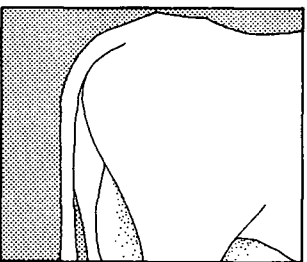
Low tail setting



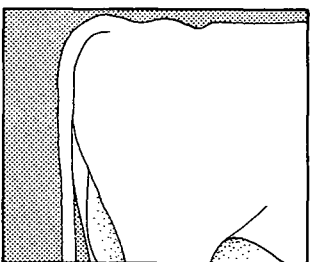
Ideal width of pin bones



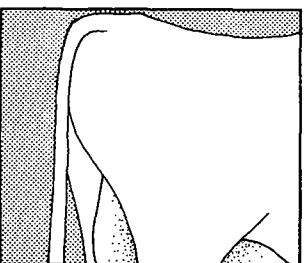
Narrow width of pin bones



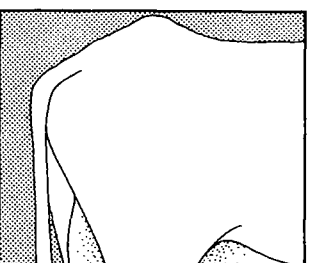
High pelvic arch



Uneven rump

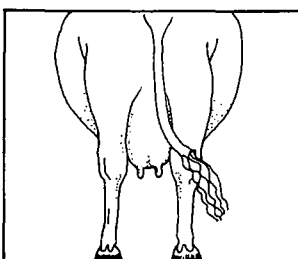


Rump sloping to low loin

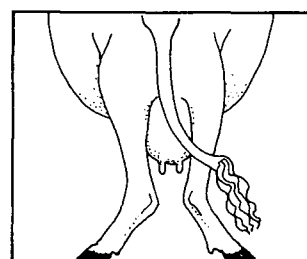


Extremely rough sloping loin

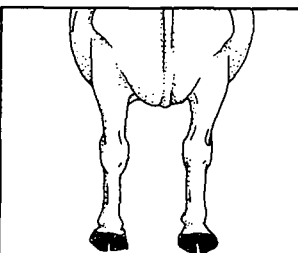
Kinds of feet and leg conformation



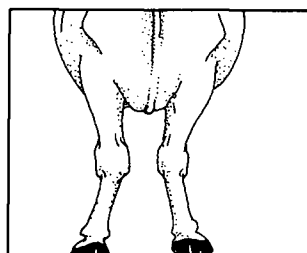
Strong, well set, hind legs



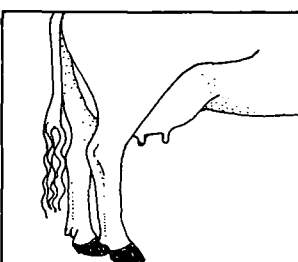
Sickled, cow hocked, toes out



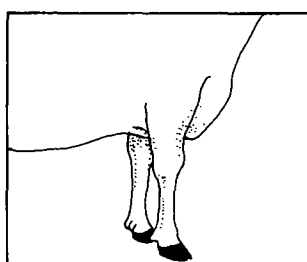
Ideal front view



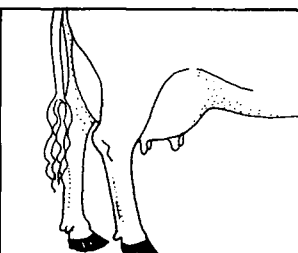
Lacking width of chest, toes out



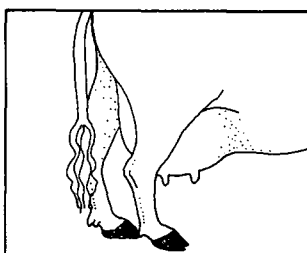
Legs too straight



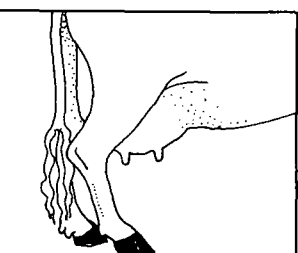
Ideal fore legs



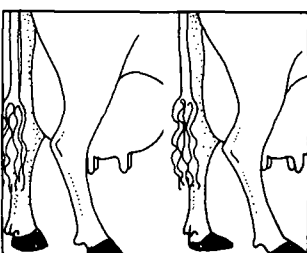
Ideal rear legs



Weak pastern



Weak, sickled



Depth of heel good-poor

Mammary System

The mammary system is the most important part of a cow. In a close placing, judges should rank the cow with best udder above the animal with which it is compared.

The udder should be strongly and smoothly attached in the front, with a high, wide attachment in the rear. It should not extend below the hock. The teats should be of convenient size for milking

and squarely placed on the udder floor. Udder quality is determined by its softness, pliability, and fineness of texture.

Little emphasis should be placed on udders of calves and yearlings. As heifers approach freshening, more emphasis should be placed on udder characteristics.



A well-balanced udder of correct size and shape, strongly attached fore and rear, with squarely placed teats. A strong suspensory ligament holds the udder to the body wall and prevents injury to the udder.

Fore udder



Moderately high and firmly attached (young animal—fore udder)



Short



Bulgy or loose



Broken and/or very faulty

Rear udder



Narrow and pinched



Loosely attached and/or broken

Teat placement and shape



Wide front teats



Undesirable shape

Udder support and floor



Floor too low

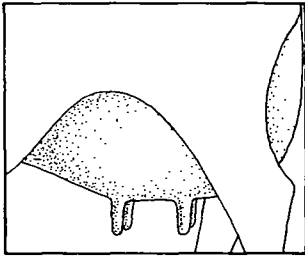


Tilted

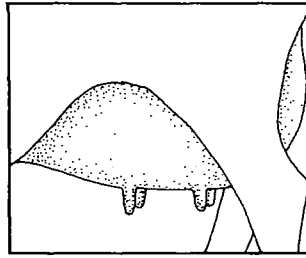


Broken suspensory ligament
and/or weak floor

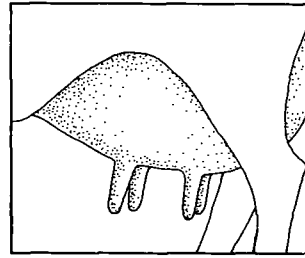
Some variations in types of udders and teats



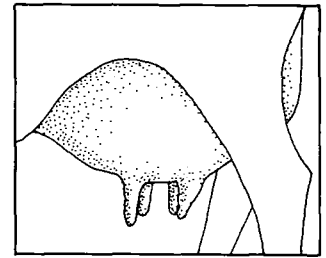
Excellent udder



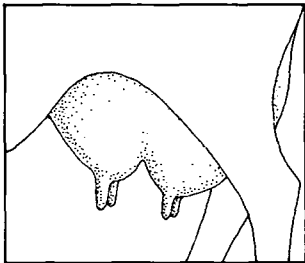
Desirable shape, teats too short



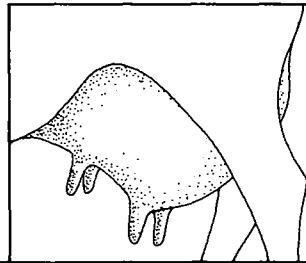
Teats well placed, but too long



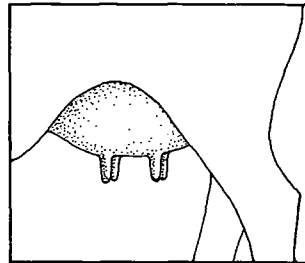
Udder funnel shaped, poorly shaped teats



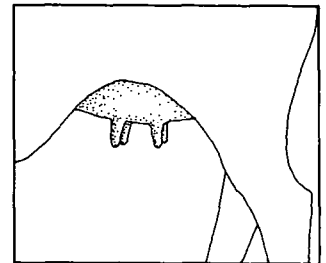
Udder severely cut up between quarters



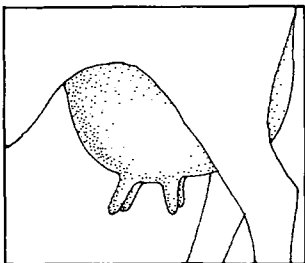
Pendulous rear quarters and light fore quarters



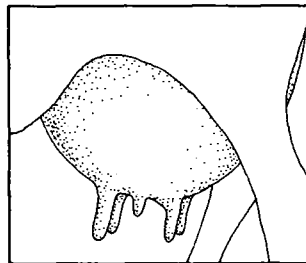
Small udder, not capacious



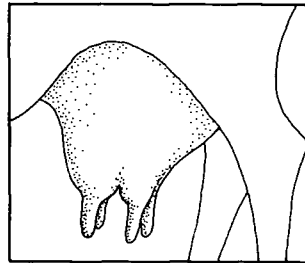
Underdeveloped udder



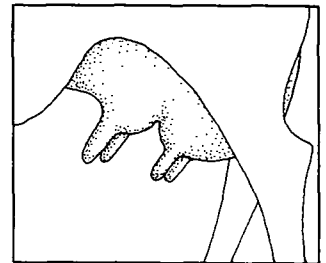
Poor teat placement; fore attachment weak; poorly shaped



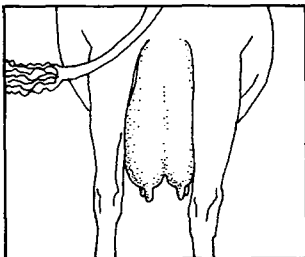
Poor balance, pendulous, five teats



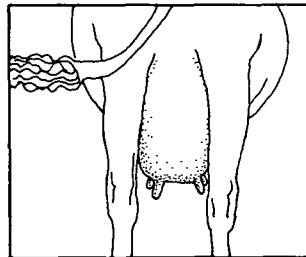
Pendulous, no rear udder, ill shaped



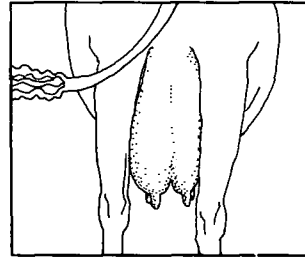
Tilted udder



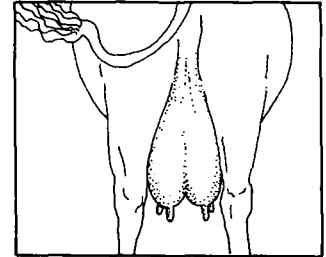
Excellent udder



Broken suspensory ligament



Ideal attachment



Low attachment

Dairy Character

Dairy character indicates the cow utilizes feed to produce milk and butterfat economically rather than to accumulate meat or fat. It is usually expressed by sharpness and cleanness over the shoulder, prominence of hips and bones, and flatness of thighs with a general openness throughout. The length and cleanness of neck and flatness of bone are also considered.

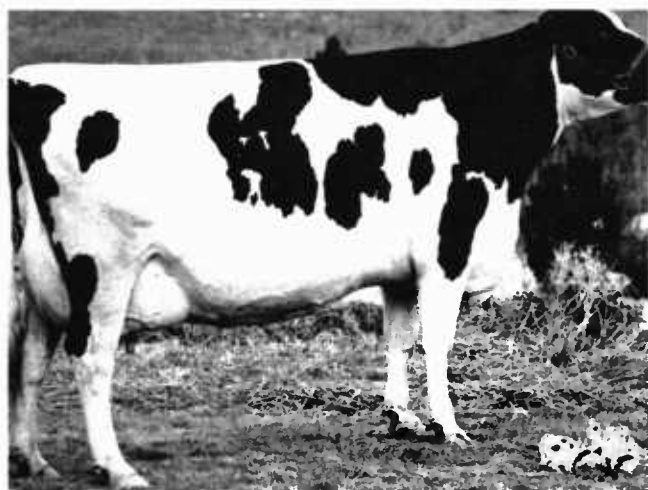
Viewed from the rear, the shoulders should be neatly joined, with the vertebrae clearly defined and above the shoulder blades. The crops should be full and smoothly blended with the shoulders. Viewed from the side and front, the shoulder should be deep and neatly laid in at the point of the shoulder.



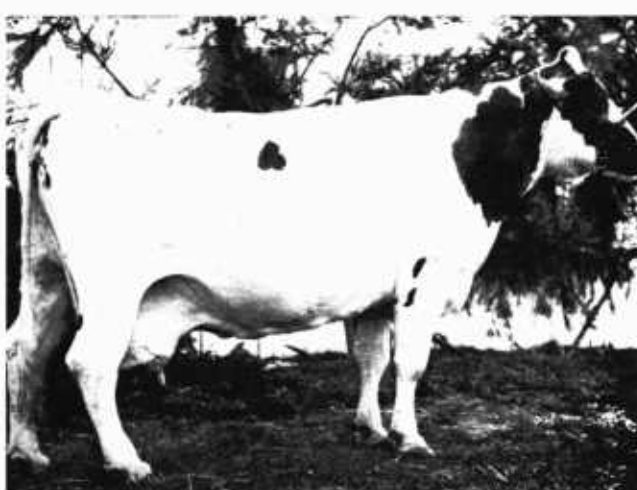
This cow is lacking in dairy character. She is heavy over the withers and open at the top of the shoulders. She is coarse and heavy over the rump. The tailhead is too high and prominent. She is also thick and heavy in the thighs.



This cow is sharp over the withers and full in the crops as viewed from the rear. Note the wide loin and rump. The tailhead is refined and lies neatly between the pin bones.



This cow shows excellent dairy character. Note the sharpness, openness, and lack of excess flesh. The vertebrae are well-defined with no excess tissue over the rump, hips, or pins.



This cow lacks dairyness and openness throughout. She is short and heavy in the neck, tight ribbed, and coarse and patchy over the hips, pins, and tailhead. She is also heavy in the throat, thick in the thighs, and coarse in bone.

Body Capacity

The term body includes the heart girth and barrel. The length of body, plus depth and width as determined by length and spring of ribs, governs overall body capacity. A large body combined

with strength and vigor is associated with the ability to utilize large quantities of feed, especially forage.



This cow is well balanced with great body capacity. She is a large cow with great depth of fore and rear ribs.



This cow is shallow bodied and lacks depth of rear rib and flank. She also lacks in spring of fore rib.

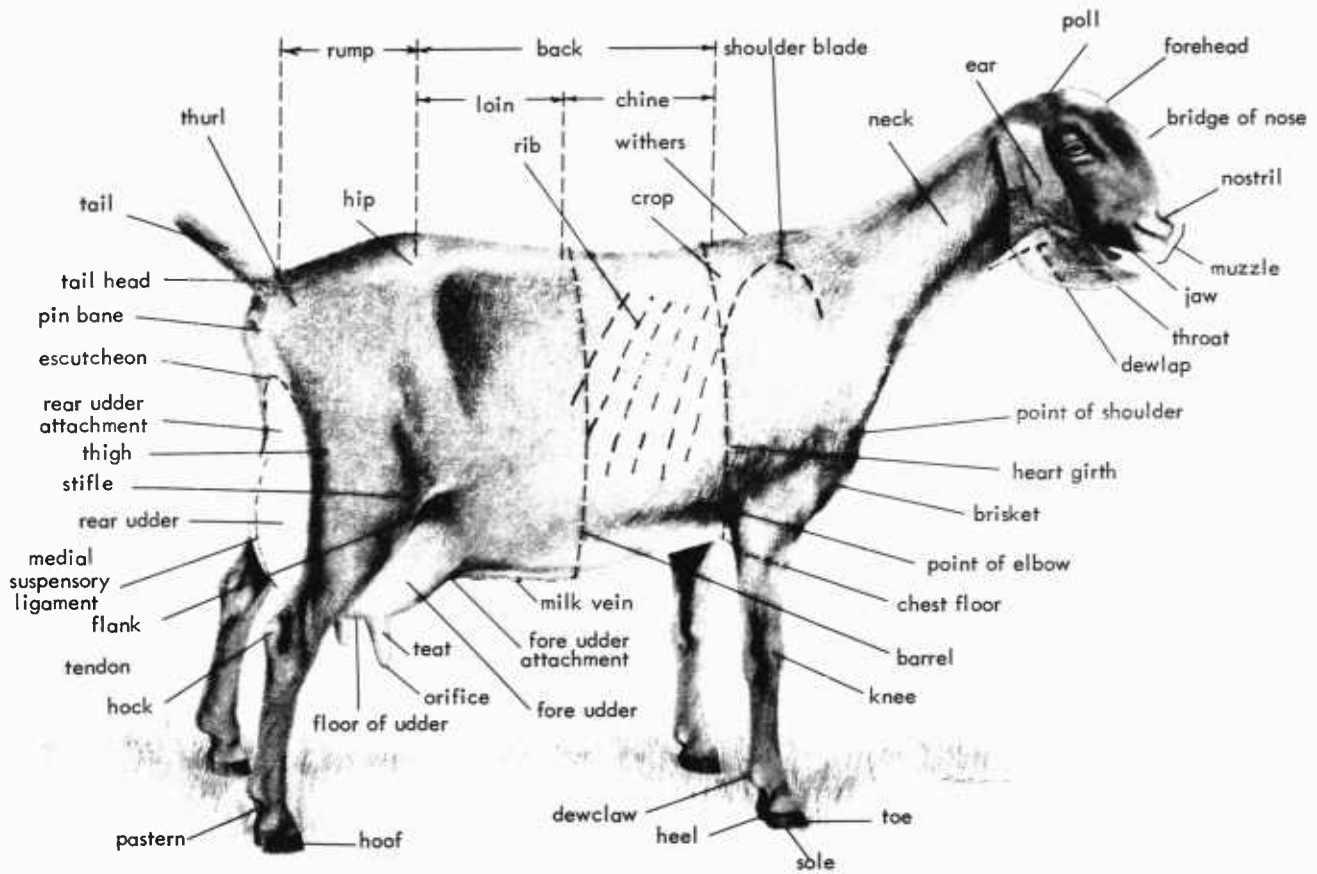


This cow stands very close, is narrow in the chest and weak through the heart. Such cows are often frail, and lack strength and body capacity.



This cow is wide in the chest, strong in the front, and stands on straight legs. The swollen brisket results from her closeness to calving.

Dairy Goat Evaluation



To analyze and discuss strong and weak points, members must know the parts of a dairy goat.

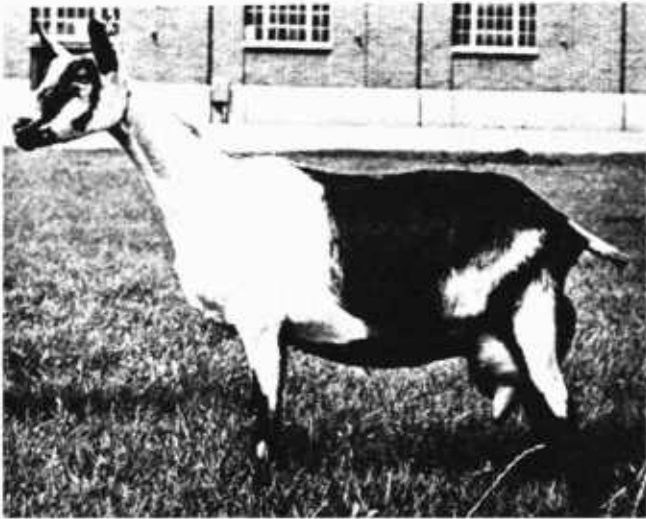
ADGA Standard Dairy Goat Score Card

<i>Perfect Score</i>	<i>Ideals of type and breed characteristics must be considered in using this card</i>
30	<p>1. GENERAL APPEARANCE (Attractive individuality revealing vigor; femininity with a harmonious blending and correlation of parts; impressive style and attractive carriage; graceful walk.) Breed Characteristics HEAD—medium in length, clean-cut; broad muzzle with large, open nostrils; lean, strong jaw, full, bright eyes; forehead broad between the eyes; ears medium-sized, alertly carried (except Nubians). SHOULDER BLADES—set smoothly against the chest wall and withers, forming neat junction with the body. BACK—strong and appearing straight with vertebrae well defined. LOIN—broad, strong, and nearly level. RUMP—long, wide, and nearly level. HIPS—wide, level with back. THURLS—wide apart. PIN BONES—wide apart, lower than hips, well defined. TAIL HEAD—slightly above and neatly set between pin bones. TAIL—symmetrical with body. LEGS—wide apart, squarely set, clean-cut and strong with forelegs straight. HIND LEGS—nearly perpendicular from hock to pastern. When viewed from behind, legs wide apart and nearly straight. Bone flat and flinty; tendons well defined. Pasterns of medium length, strong, and springy. Hocks cleanly moulded. FEET—short and straight, with deep heel and level sole.</p>
30	<p>2. MAMMARY SYSTEM (A capacious, strongly attached, well-carried udder of good quality, indicating heavy production and a long period of usefulness.) UDDER—long, wide, and capacious; extended well forward; strongly attached. REAR UDDER—high and wide. Halves evenly balanced and symmetrical. FORE UDDER—carried well forward, tightly attached without pocket, blending smoothly into body. TEXTURE—soft, pliable, and elastic; free of scar tissue; well-collapsed after milking. TEATS—uniform, of convenient length and size, cylindrical in shape, free from obstructions, well apart, squarely and properly placed, easy to milk.</p>
20	<p>3. DAIRY CHARACTER (Animation, angularity, general openness, and freedom from excess tissue, giving due regard to period of lactation.) NECK—long and lean, blending smoothly into shoulders and brisket, clean-cut throat. WITHERS—well defined and wedge-shaped with the dorsal process of the vertebrae rising slightly above the shoulder blades. RIBS—wide apart; rib bone wide, flat, and long. FLANK—deep, arched, and refined. THIGHS—incurving to flat from the side; apart when viewed from the rear, providing sufficient room for the udder and its attachments. SKIN—fine textured, loose, and pliable. Hair fine.</p>
20	<p>4. BODY CAPACITY (Relatively large in proportion to the size of the animal, providing ample digestive capacity, strength, and vigor.) BARREL—deep, strongly supported; ribs wide apart and well sprung; depth and width tending to increase toward rear of barrel. HEART GIRTH—large, resulting from long, well-sprung foreribs; wide chest floor between the front legs, and fullness at the point of elbow.</p>
100	TOTAL

Breed Standards

French Alpine

The Alpine dairy goat is a medium- to large-size animal, alertly graceful, and the only breed with upright ears that offers all colors and combination of colors giving them distinction and individuality. The hair is medium to short. The face is straight. A roman nose, Toggenburg color and markings, or all-white is discriminated against.



In does, one type of ear has no advantage over the other.

The “gopher ear” is described as follows: an approximate maximum length of 1 inch, but preferably not existent. Very little or no cartilage. The end of the ear must be turned up or down. This is the only type of ear which will make *bucks* eligible for registration.

The “elf ear” described as follows: an approximate maximum length of 2 inches is allowed, the end of the ear must be turned up or turned down and cartilage shaping the ear is allowed. Any color or combination of colors is acceptable, with no preferences. The hair is short, fine, and glossy.

Nubian

The Nubian is a relatively large and graceful dairy goat. The head is the distinctive breed characteristic, the facial profile between the eyes and the muzzle being strongly convex. The ears are



LaMancha

The LaMancha is a relatively new breed of dairy goat. The LaMancha face is straight with the ears being the distinctive breed characteristic. There are two types of American LaMancha ears.

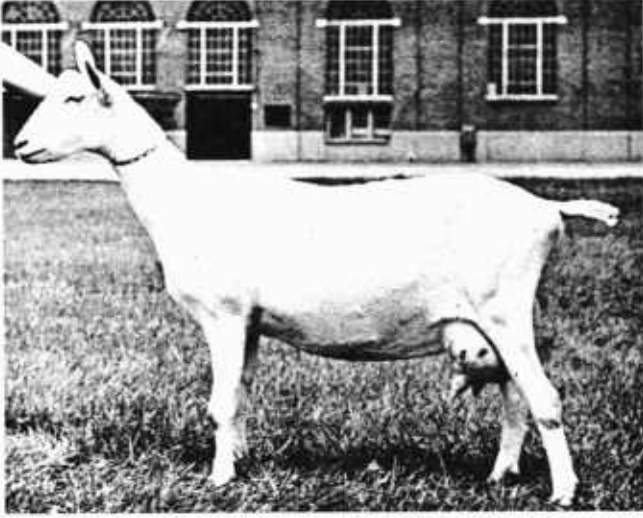


long (extending at least one inch beyond the muzzle when held flat along the face), wide, and pendulous. They lie close to the head at the temple and flares slightly out and well forward at the rounded top, forming a “bell” shape. The ears are not thick, with the cartilage well defined. The hair is short, fine, and glossy.

Any color or colors, solid or patterned, is acceptable.

Saanen

The Saanen Dairy Goat is medium to large in size with rugged bone. Does should be feminine, however, and not coarse. Saanens are white or

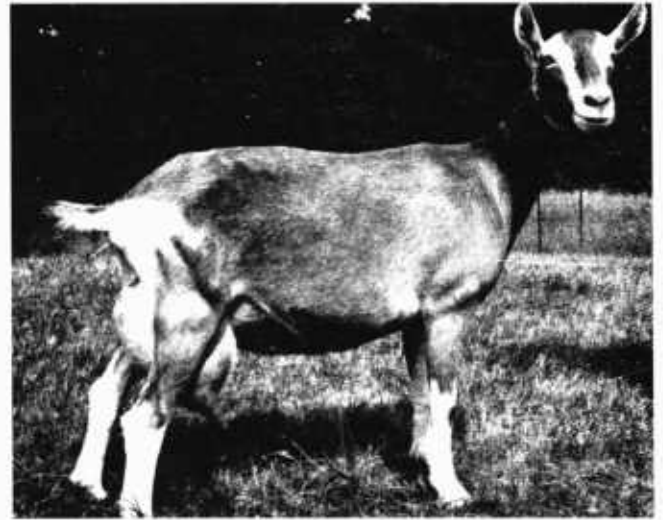


light cream in color, with white preferred. Spots on the skin are not discriminated against. Small spots of color on the hair are allowable, but not desirable. The hair should be short and fine, although a fringe over the spine and thighs is often present. Ears should be straight or dished. A tendency toward a roman nose is discriminated against in judging.

Toggenburg

The Toggenburg is of medium size, sturdy, vigorous, and alert in appearance. The hair is short

or medium in length, soft, fine, and lying flat. Their color is solid varying from light fawn to dark chocolate with no preference for any shade. Distinct white markings are as follows: white ears with dark spot in middle; two white stripes down the face from above each eye to the muzzle; hind legs white from hocks to hooves; forelegs white from knees downward with dark lien (clock) below knee acceptable; a white triangle on either side of the tail; white spot may be present at root of wattles or in that area if no wattles present. Varying degrees of cream markings instead of pure white acceptable, but not desirable. The ears are erect and carried forward. Facial lines may be dished or straight, never roman.



General Appearance

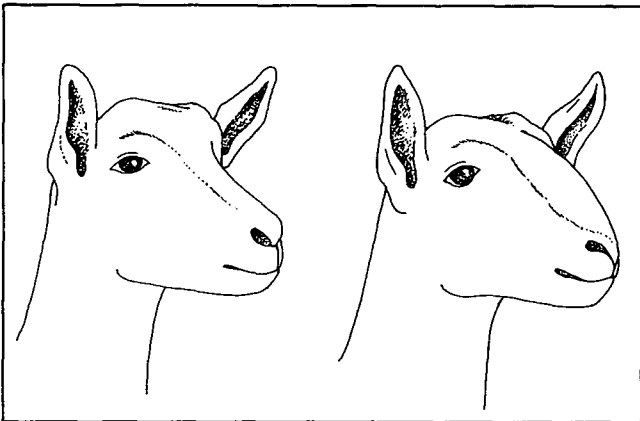
Breed characteristics, topline, feet, and legs should be considered in evaluating dairy goat's general appearance. The animal must be an attractive individual with the harmonious blending of all parts to give impressive style and carriage.

Head and Neck

The ideal head is well balanced, of medium length, with a clean-cut broad muzzle. Large, open nostrils reflect a strong constitution and a good

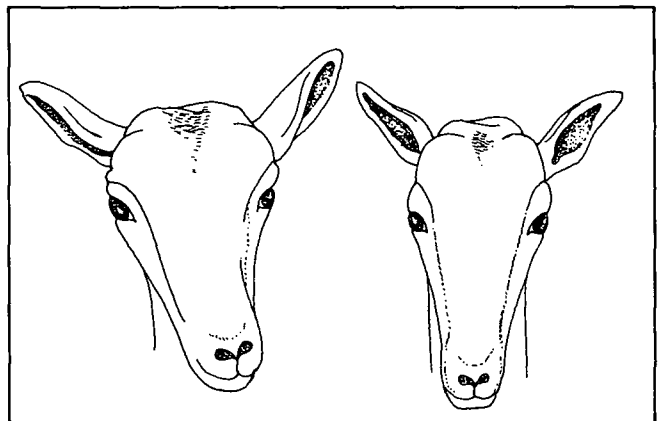
respiratory system. A lean, strong jaw indicates the strength necessary to consume large quantities of feed. A wide forehead showing fullness between large, bright eyes often signifies good temperament, health, and vigor. Many breed characteristics are evident in the head.

Wattles (short cylindrical appendages), either singly or in a pair, may be present on the neck, throat, or jaw. They appear to be nonfunctional and are of no consequence in evaluation.



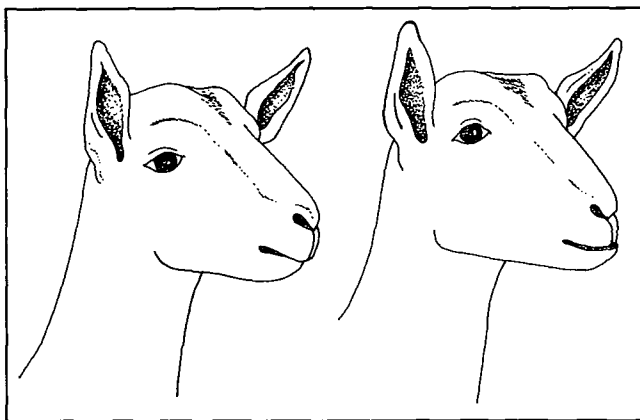
The Dish Face is acceptable in Saanens and Toggenburgs. The nose should be straight, only the forehead curves.

The Roman Nose is considered a fault in all breeds but the Nubian. The Anglo-Nubian should have a full Roman nose (see breed standard).



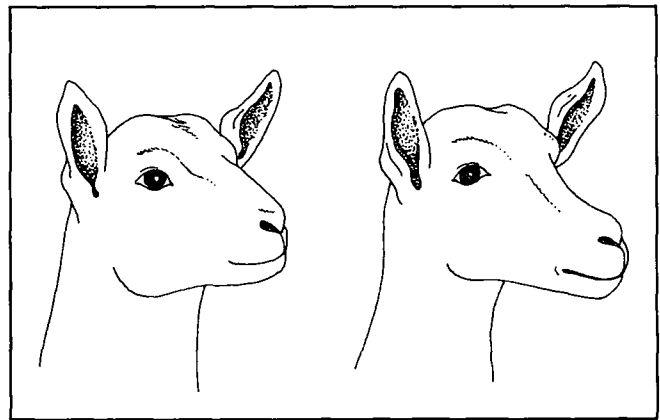
The Wry Face has a twisted or off center muzzle which may cause narrowing of the nasal passages and poor tooth alignment.

A Narrow Weak Face and Muzzle lacks strength and character. It may display restricted nostrils.



An Overshot Jaw is a short lower jaw. The lower incisors do not meet the center of the upper dental pad preventing proper biting and chewing. Food consumption may be limited.

An Undershot Jaw is an excessively long lower jaw. The lower incisors extend beyond the center of the upper dental pad and may interfere with mastication.



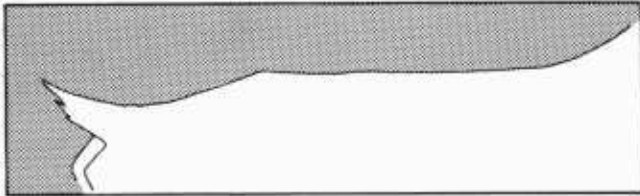
A Short Coarse Head is a "common" head without dairy character.

A Pinched Face has a narrowed jaw and muzzle which lacks the strength necessary for a life-time of heavy feeding. Drooping lips indicate slack muscle tone.

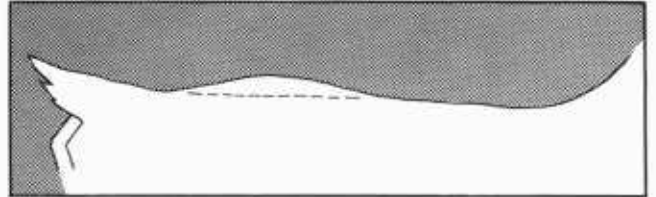
Topline

The back and rump are referred to as the topline. The back must be strong since it supports the muscles which carry the weight of the digestive

organs and of the young during pregnancy. The spinal column protects the vital nerve center within the spinal cord.



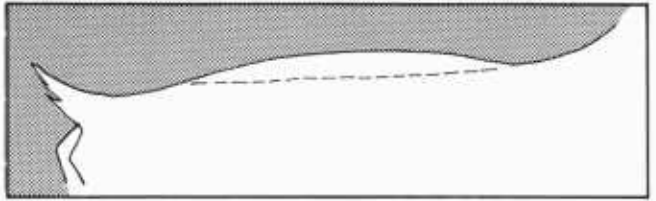
The Ideal Back is straight and strong with clearly defined vertebrae. The loin should be broad and level.



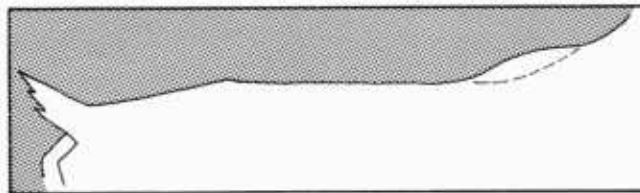
A Roached Loin may indicate weakness caused by an upward curvature of the spine.



A Sway Back is the result of a sag at the junction of the chine and loin.



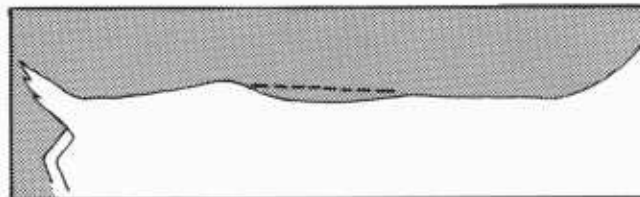
A Roached Back is caused by vertebrae that bow upward at the junction of the chine and loin.



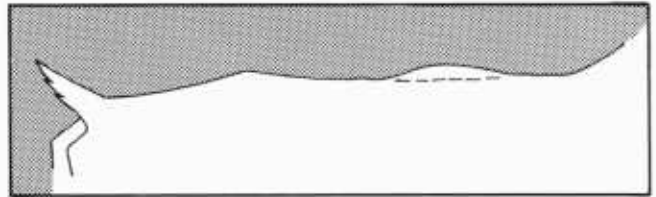
High Withers may confuse the novice. When they are high the back may appear to dip. This may be only an illusion.



A Sag in The Chine reflects weakness of the spine.



A Sag in the Loin exerts pressure on the vertebrae and may make a level rump appear raised.

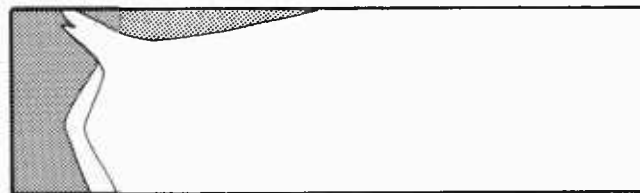


A Roached Chine is not as serious as a sag but it interferes with the alignment of the vertebrae.

Rump

The length and width of the rump influences the length and width of the udder (see udder attachments), as the rump structure provides sup-

port for the roof of the udder. A rump that is steeply tilted and bound by a narrow pelvic girdle (hips and pins) hinders normal kidding.



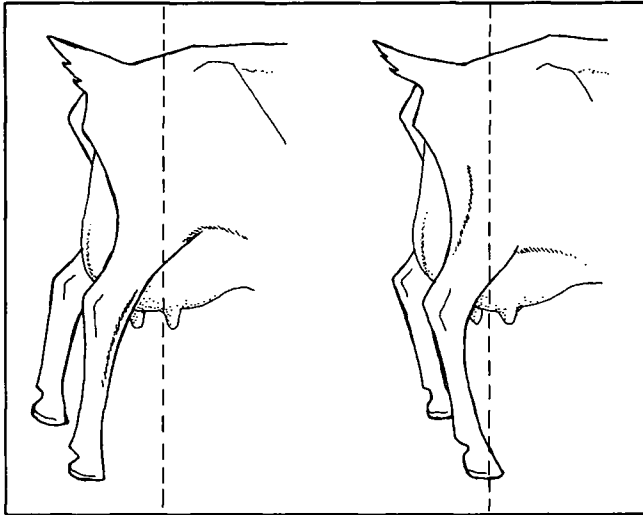
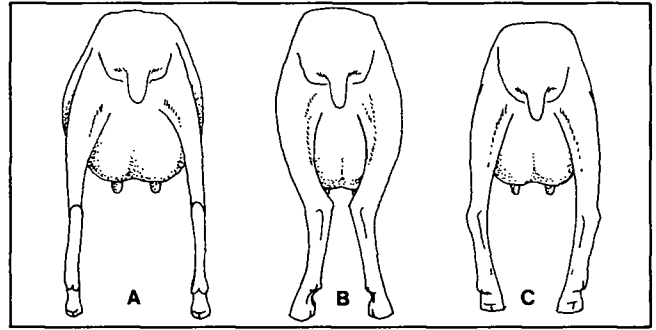
Level rump



Steep rump

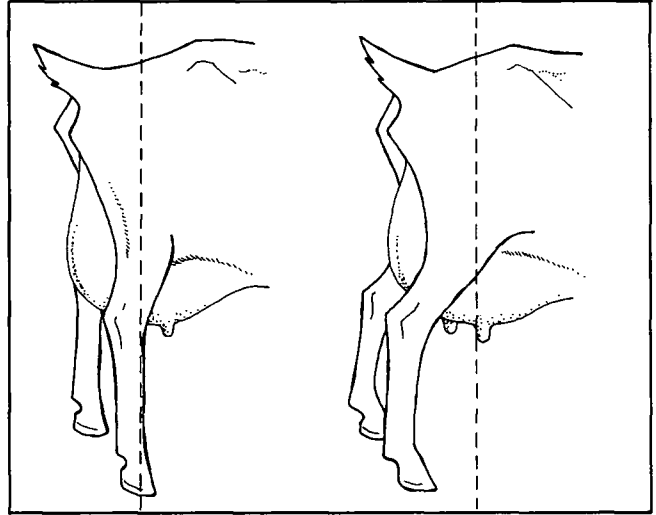
Legs, feet, and pasterns

The ideal set of rear legs (A) will provide ample space for the udder and its attachments. Rear legs which are *Cow-hocked* or *Close at the Hock* (B) may push the udder forward or force it to hang at a side angle, weakening the rear attachment and increasing the chance of injury. Bow legs (C) set the leg at an awkward angle, adding pressure to the outer hock and pastern.



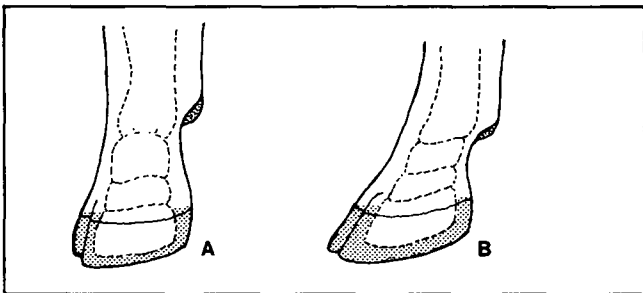
The Ideal Rear Leg, when viewed from the side, is nearly perpendicular from the hock to the pastern with an incurving thigh and cleanly molded hock.

The Sickle Hocked Leg is deeply curved at the hock and thigh joint. This increases strain on the pastern, hip, and back of the heel. The result is a scuffing walk.



Post Legs are too straight in the stifle with little or no angulation at the hock and stifle joint.

Weak Pasterns allow the legs to settle too far towards the rear, exerting pressure on all of the leg muscles.



The Ideal Foot (A) is short and straight with a deep heel and level sole. *The Ideal Pastern* is constructed to absorb the shock of weight change. It joins the hoof smoothly, is of medium length, strong, and upright.

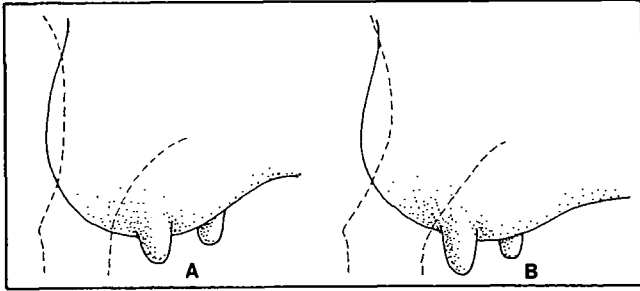
Weak or Poorly Formed Pasterns (B) force the muscles to maintain balance and alignment. They cause excessive wear at the heel. The toe overgrows and the foot becomes long and flat.

Mammary System

The mammary system is the most important part of a goat. In a close placing, evaluators should rank the dairy goat with the better udder ahead of the goat it is being compared to. The udder should be strongly attached in the front with a high, wide attachment in the rear. It should not extend below

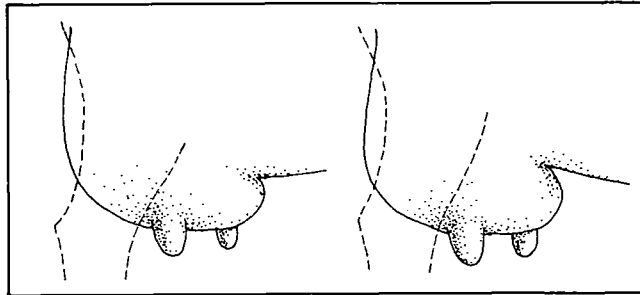
the hock. The teats should be of convenient size for milking and squarely placed on the udder floor. Udder quality is determined by its softness, pliability, and fineness of texture. The accompanying illustrations show the ideal and undesirable traits in the udder.

Attachments



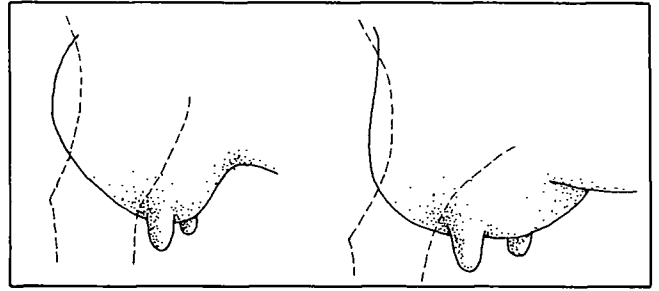
A sloping rear udder floor suggests a *Loose Rear Udder Attachments (A)*. The udder may hang too far forward.

The Ideal Fore-udder Attachment (B) blends smoothly with the body, and is securely bound on either side. It slopes gently with a gradual upward curve.



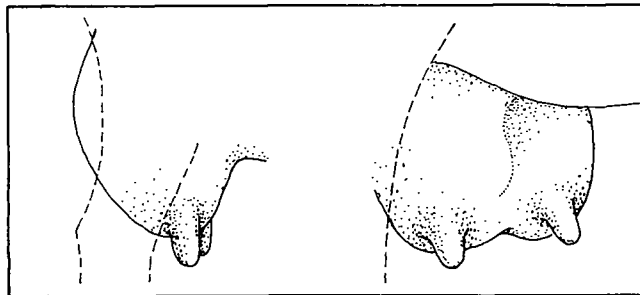
The Fore-udder which cuts back to its point of attachment places weight forward of its attachments.

A Bulging Fore-udder is a symptom of a loose attachment.

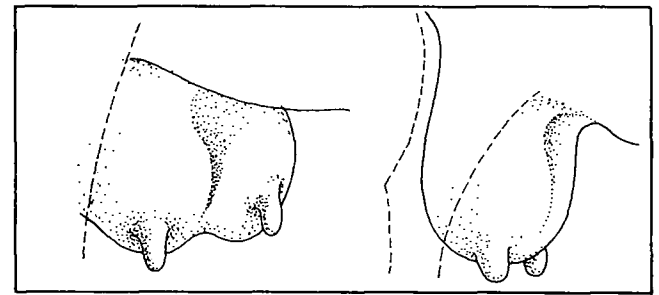


A sloping floor in the fore-udder suggests a *Loose or Weak Fore-udder Attachment*.

A loose *Fore-udder Attachment* may occur before the front begins to drop. A groove may be felt between the udder and the body wall.



As the fore-udder support begins to detach from the body wall an *indentation forms in front of and between the halves of the udder*. The front of the udder floor will slope downward and the udder may hang too far to the rear.



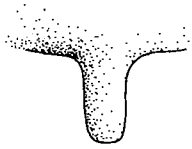
A *Broken Fore-udder Attachment* allows the inner edges of the roof of each gland to shift out and down, creating a "Pocket" at the front of the udder. The platelike edges of the udder roof may be seen and felt at sloping angles on either side of the "pocket."

The udder that has broken away in all of its attachments will have a short productive life.

Teats

The size, shape, and placement of the teats determines the ease and efficiency of milking. Poorly formed teats are subject to injury and infection.

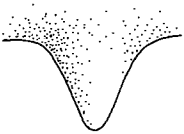
The Ideal Teats are uniform, of convenient length and size, cylindrical, free from any obstructions, well apart, squarely placed, and easy to milk.



Bottle-shaped teats



Funnel-shaped teats



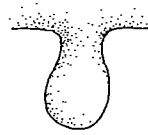
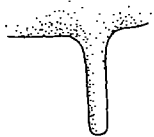
Pointed teats



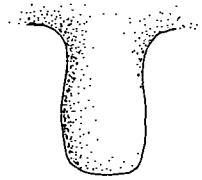
Teats that are not clearly separated from the udder



Pencil-shaped teats



Bulbous teats



Large, thick teats



Very small teats



Teats that are too close together



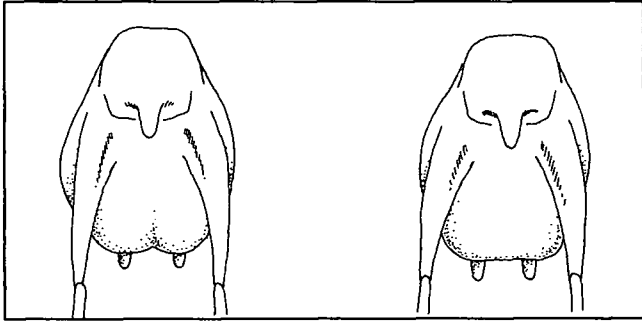
Teats that point sideways may indicate that the udder's central attachment is weak.



Teats that are uneven in size may present problems during milking.

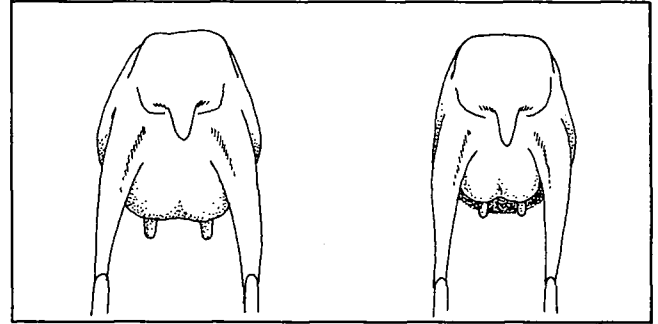
Udder shape

The shape of the udder determines its capacity, area of attachment and susceptibility to injury.



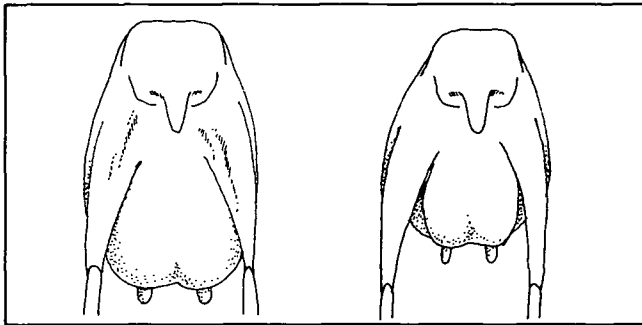
The Ideal Udder has a slight cleft between the halves to allow for expansion during the first flush of freshening. *The Ideal Rear Udder* is deep, wide, capacious, and strongly attached.

An Udder Without A Cleft or space between the halves could be injured by the mild swelling present before and after freshening.



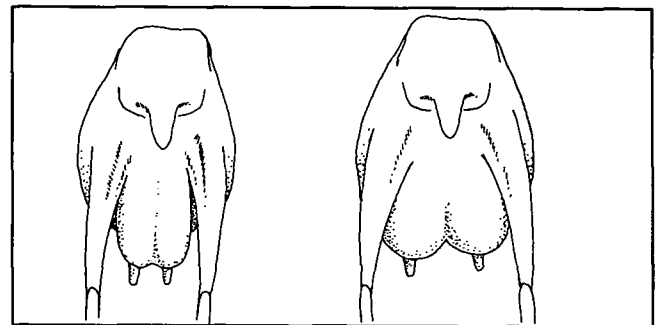
The Rear Udder Which is Wide With Moderate Depth has ample capacity.

A Shallow Rear Udder limits its production.



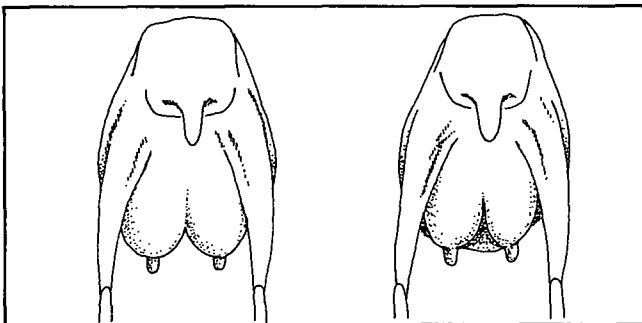
The Rear Udder That is Too Deep, below the hock, is bulky and subject to injury.

A Moderately Wide Rear Udder.



A Narrow Rear Udder reduces the area of attachment and decreases productive capacity. It often accompanies a narrow rump and closely spaced legs.

An Udder With a Moderate Cleft reduces capacity.



A Severe Cleft

A Split, Bologna, or Funnel Udder reduces the amount of secreting tissue and inconveniences the milker.

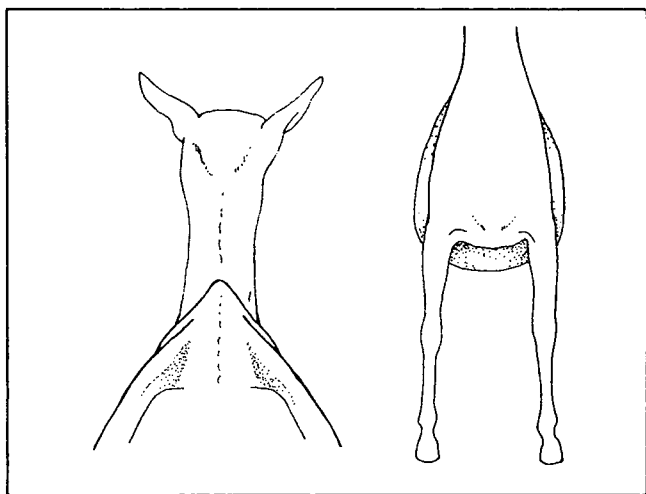
An unbalanced udder indicates a deficiency and loss of milk yield, milking is more difficult. A slightly unbalanced udder is acceptable as few udders are perfectly balanced. A seriously unbalanced udder is one that has one side half the size of the other.

Dairy Character

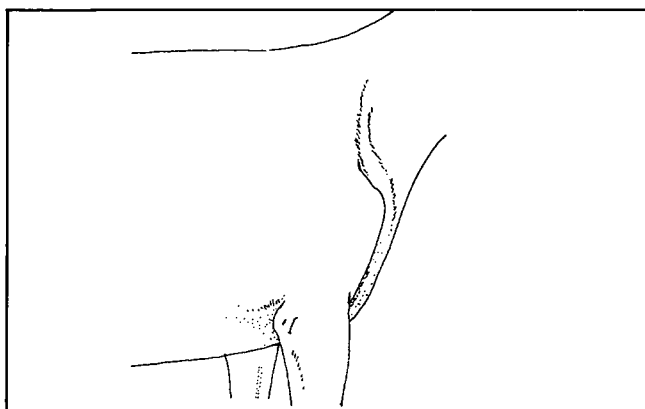
Dairy Character indicates the goat utilizes feed to produce milk and butterfat economically rather than meat or fat. It is expressed by sharpness and cleanness over the shoulder, prominence of hips and pin bones, and flatness of thighs with a general openness throughout. The length and cleanness of neck and flatness of bones are also considered. The skin should be fine textured, loose and pliable.

The ideal shoulder is set smoothly against the chest wall and withers forming a neat junction with the body. The blade should be long with ample width beginning at the withers and tapering

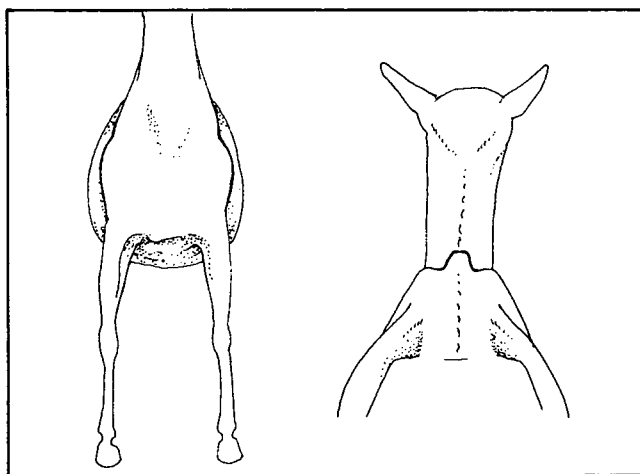
toward the point. The blade is attached by muscles only. The shoulder has a strong affect on gait and ease of movement as it supports weight, absorbs concussion, and propels the forelegs (see sketch of the musculature of the forelegs). Weak shoulders will cause excessive fatigue in walking and standing, thus shortening productive life. All shoulder faults increase markedly with age. Slight concessions may be given older goats but deviations in young stock should be criticized. The goat should be observed while walking and standing as laziness or settling of the point may occur when not in motion.



The Ideal Shoulder blends smoothly.

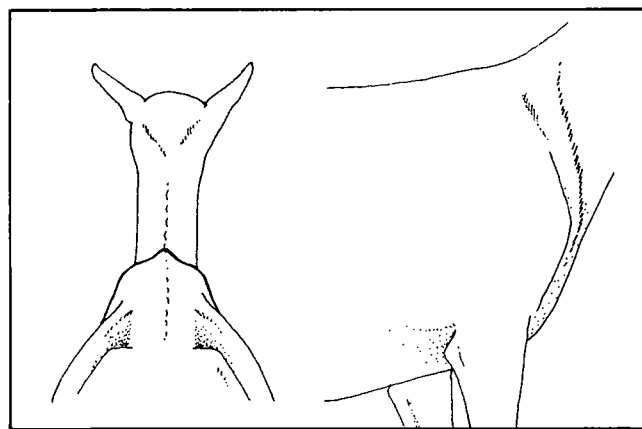


As the shoulder attachment weakens, the joint of the humerus and blade settles forward producing a *Prominent Point*.



Winged Shoulders are the result of a loose shoulder blade attachment.

An Open or Loaded Shoulder may be the result of faulty bone structure, poor muscle tone, or excess fat.

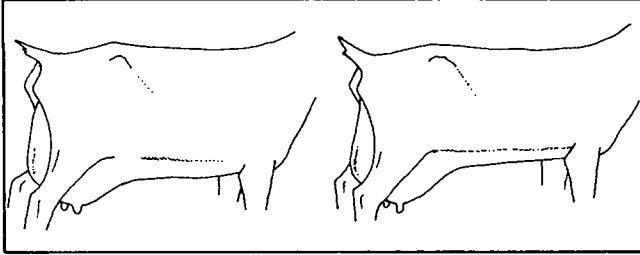


Coarse Shoulders may be tightly attached but do not blend well. They indicate a heavy skeleton and poor dairy quality.

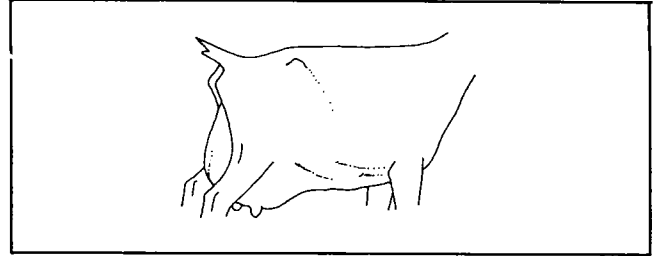
Body Capacity

The term body includes the heart girth and barrel. The length of body, plus depth and width as determined by length and spring of ribs, governs overall body capacity. A large body combined

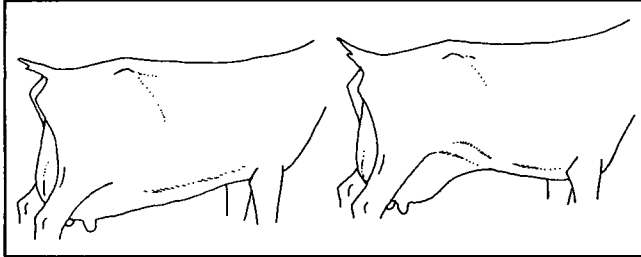
with strength and vigor is associated with the ability to utilize large quantities of feed, especially forage.



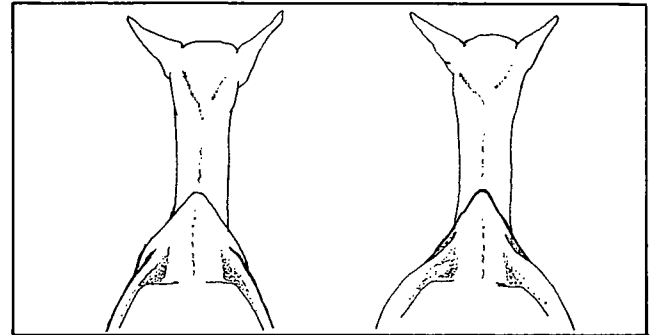
A Body With Moderate Capacity has adequate rib length. *A Shallow Body* reduces capacity.



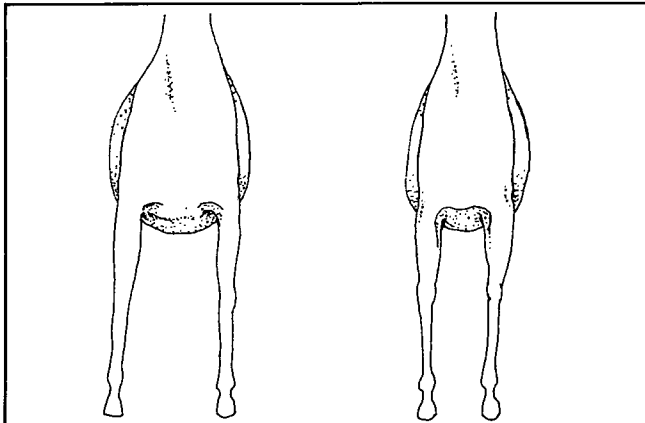
A Closely Coupled or Short Body with tight ribbing.



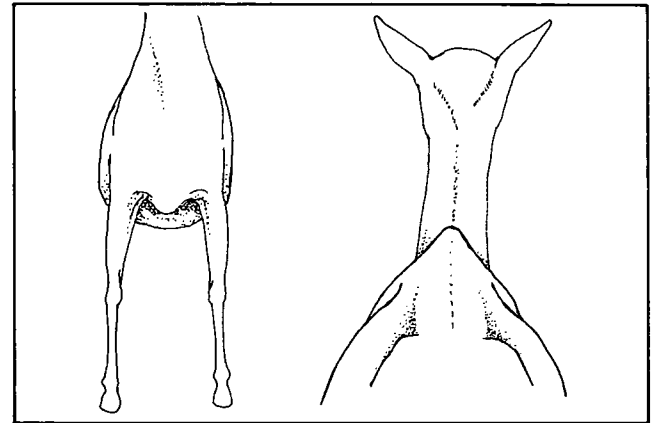
Pinched or short Fore Ribs diminish heart girth. A short fore rib creates the illusion of a longer rear rib. *A Body With Short Rear Ribs* may also have a shallow flank.



The Flat Sided or Slabby Body is evident in a rear view. *A Deficiency In The Crops, or poorly sprung fore ribs,* hinders lung action.



The Ideal Chest is broad and strong with a wide floor and arched fore ribs. *A Pinched Narrow Chest* with slab sided ribs limits lung capacity and crowds the heart.



A Chest Floor Which Slopes Steeply Upward on either side of the sternum restricts lung capacity. The spring of the ribs is best viewed from the rear. *The Ideal Body* is deep and wide.

Evaluation and Judging Contests

Evaluating and judging animals is a valuable experience for every boy and girl. Through evaluation and judging, they learn to:

- Obtain up-to-date information.
- Make accurate observations.
- Weigh and balance for comparison.
- Arrive at a conclusion which is a judgment.
- Make selection of animals on sound principles.

In evaluating animals judges should apply these principles as they carefully analyze and weigh the points of the animals they are judging against the standard or ideal type. Remember, the 4-H evaluator is making a judgment and may not agree with

the official judge, but should be able to defend his or her opinion.

Before starting to evaluate livestock, members should try to make a mental picture of the ideal animal. They can do this by recalling the most desirable features of the best animals they have seen, and thinking of them as belonging to one animal. Pictures of ideal animals are available through breed associations.

4-H dairy evaluators should learn all the parts of these animals and be able to identify them. This will add to the vocabulary useful, understandable livestock terms that will be needed in giving reasons.

When the members master these things, they are ready to start placing classes.

Procedure for Judging

The following is a list of instructions for you to give to members as a procedure for judging:

Develop a system as you learn to judge. When you first see a class, get a good comparison of the general appearance of the animals.

You can do this better from a distance of about 25 feet, or far enough away to see all animals at one time. Become skilled in placing classes from a distance and handle the animals only to check your observations. From this distance, study the class from the rear, the front and the side.

Using a side view, study size and scale, length of body, length of rump, length and straightness of leg, conformation of udder, and something about the skeletal structure and overall balance.

Using a rear view observe the width of the top, width of the rump, strength of rear attachment of udder, and gain an indication of sharpness of body.

Using a front view, check the trimness in the brisket and neck, width of chest, and soundness of the front legs.

The walking view gives you an indication of skeletal structure, as well as strength of back, length, depth, and balance of body, strength and correctness of legs and feet.

Compare the animals with your "ideal" and decide which one is more like the ideal. Then compare each animal with the others. As you compare the animals in the class, look at the same part of all animals. For example, decide which animal has the

more correct legs by looking at the legs of all animals. Analyze the class and divide the animals into three pairs: a top pair, a middle pair, and a bottom pair. Your first impression is usually best.

To simplify judging, make the easiest placing first—pick the top animal or the bottom animal or any pair of animals.

Remember, it takes both careful observation and proper handling to do the best job of determining the degree of condition. Study individual animals at close range and handle each one to help you make comparisons of natural fleshing texture of udder and flatness of bone.

If you want to handle the animal, approach from the side and be sure the animal sees you approach. Handle each animal the same way. Excessive handling is not necessary.

When you have completed your visual and handling evaluation, write your notes or reasons.

Learn to study the whole animal carefully, looking especially at the parts which are economically important and make your placings accordingly. A keen judge of livestock is orderly, never haphazard.

In any contest, *Do your own work*. Depend on your own judgment and not someone else's. If you want other people to have confidence in you, you must have confidence in yourself. You can improve your judging ability only by making your own decisions.

Entering a Judging Contest

This section lists the instructions, you, the leader, can outline for your 4-H members:

In an evaluation contest, you will judge classes of dairy cattle or goats and occasionally dairy and other agricultural products.

In most evaluation contests, four animals or products are used in each class. They are numbered 1, 2, 3, 4. Looking at cattle and goats from the rear, number 1 is on the left and number 4 is on the right.

The way you place your animals will influence your score. If you miss one pair or two pairs or make other placing errors, your score is determined in proportion to the seriousness of the error.

In many evaluation activities, you will have the opportunity to give reasons (explain your placings to the judge). The judge will score you on organization, presentation, and accuracy of your reasons. Detailed information on reasons can be found in the "reasons" section of this guide.

In most 4-H Evaluation Contests, you will be given a card for each class. (This card is illustrated, right.)

Write in your name, address, the class name, and correct placings as illustrated (2341). Be sure each card you turn in is marked. Always follow the instructions of your group leader.

When your group leader asks that cards be turned in, check your placing to be sure your card is marked correctly, and that it is identical to the placing you have in your notes.

No. <u>12</u>	
4-H JUDGING CARD	
Name <u>Bill Jones</u>	1234
Address <u>Rt. 1 Box 84</u>	1243
<u>Daingland, Ore.</u>	1324
Club <u>DAM + DEES</u>	1342
<u>4-H Club</u>	1423
Leader <u>Mr. Adams</u>	1432
County <u>Benton</u>	2134
Class <u>Holstein Cows</u>	2143
	2314
	2341 <input checked="" type="checkbox"/>
	2413
	2431
	3124
	3142
	3214
	3241
	3412
	3421
Placing score	4123
	4132
Reasons score	4213
	4231
	4312
Total score	4321
OSU 3315	

Reasons

Evaluators should give reasons to compare the differences in the animals they evaluated. Reasons may be oral or written. The same principles apply to both. Reasons should be impressive, accurate, and sincere. Manner during presentation should be confident. Reasons should be brief; place emphasis on the main points. The prime point evaluators should make is *why* they placed one animal over the other. When comparing two animals, comparative terms are used. An example is: number 4 has a higher, wider rear udder attachment than number 2. Through comparison, they tell “why” one animal is better than another animal. Adjectives like “more” and “better” are to be avoided.

Four essentials of speaking

Leaders should instruct members on these essentials of speaking:

- Have something to say (knowledge).
- Say it as though you mean it (self assurance).
- Give attention to your appearance.
- Speak slowly and clearly.

Giving reasons orally

When evaluators give reasons orally it helps them:

- Think clearly.
- State thoughts precisely.

- Improve their poise and confidence.
- Develop their memory.

Eyes help

Dairy evaluators in contests should look the judge straight in the eye when giving oral reasons. Eyes are most useful in telling your meaning. They help you keep the interest of the person or audience to whom you are speaking.

Think of the animals

Members will be less likely to forget their reasons when they are thinking of the animals. Reasons should not be memorized. However, evaluators should train themselves to hold a mental picture of the animals and remember the strong and weak points of each.

Organizing reasons

The organization of reasons is determined by how easily the evaluator can place the class. There are many different systems of organizing reasons. The system presented here is logical and easily understood. Listed below is a basic outline for a set of reasons, followed by comments on specific topics. The following section presents an outline for member's use in giving reasons.

Outline for a Set of Reasons

In giving reasons (written or oral), a class of four animals is divided into three pairs: a top pair, a middle pair and a bottom pair. The basic outline for an entire set of reasons for a placing of 4-1-2-3 is as follows:

1. Give name of class and how you placed it.

Top pair

2. Reasons for placing 4 over 1.
3. Advantages of 1 over 4 (if there are any).

Middle pair

4. Reasons for placing 1 over 2.
5. Advantages of 2 over 1 (if there are any).

Bottom pair

6. Reasons for placing 2 over 3.
7. Advantages of 3 over 2 (if there are any).

Concluding statement

8. Reasons for placing 4 last.
9. For these reasons I placed this class 4, 1, 2, 3.

Making Notes

Good evaluators will mentally visualize a class of animals. Notes of what was observed are helpful in remembering each animal in the class.

Evaluators should make short, simple notes using comparative terms, listing main points of comparison first, then adding details of each pair.

A useful way for evaluators to take notes is shown below.

Notes may be taken on cards or on note paper. Put the name of the class at the top. List your placing next. Make a note of one or two characteristics

of each animal to help you remember it. Follow this with your placing using fractions for the top, middle, and bottom pairs. For example, if your placing is 4-1-2-3, the fraction 4/1 shows that 4 is placed over 1. The fraction 1/4 would indicate the advantage of 1 over 4 even though you placed 4 higher. There might be additional points about an animal you wish to mention, so note them.

A sample 4-H Reasons Card is shown on page 27. Comparative phrases should be used on this card, then incorporated into complete sentences for the oral presentation.

Livestock Judging Notes

Class: Holstein Cows

Placing: 4-1-2-3

1. Black Cow

2. Large Cow

3. White Cow

4. Best Udder Cow

4/1 Udder —higher attached
wider in rear
more surface veins
capacity

Body —larger
greater stretch
greater length of body
open ribbed
more overall dairy quality

Advantages: 1/4

Leg —superior in cleanness at hocks
quality of firmness of bone
straighter of pasterns

1/2 Udder —more depth and capacity

Body —smoother topline and rump
greater width between hooks and
thurls

Legs —straighter legs

Advantages:

2/1 more dairy-like
more height and width of rear udder

2/3 desirable breed character
higher general quality
greater capacity of udder
balanced udder
well-developed forequarters
broader/stronger attached rear udder

Criticisms of 3:

Lack of quality/capacity
slightly better than average udder

4-H REASONS CARD

Contestant's name or number 12
 CLUB Dan + Does COUNTY Benton
 CLASS Holstein Cows GRADE 8

PLACING: First	<u>4</u>	Placing score
Second	<u>1</u>	Reason score
Third	<u>2</u>	Total
Fourth	<u>3</u>		

REASONS (list only main points):

I place 4 over 1 because:
4 has higher, wider rear udder attachment; more udder capacity; greater openness showing dairy character
Advantage: 1 over 4 - stronger pasterns - greater depth of heel

I place 1 over 2 because:
1 over 2: greater length and strength of topline; greater body capacity; stronger pasterns
 (OVER)

greater depth of heel
Advantage: 2 over 1 - fuller through the crops, smoother shoulder

I place 2 over 3 because:
2 over 3: more upstanding, greater udder capacity, stronger fore udder attachment, greater width of rump and width through pin bones, more openness of rib and flatness of bone showing dairy character.

I place 3 last because:
3 lacks size and body capacity, lacks strength of top line; fore udder attachment weak. I find 3 an easy bottom in this class.

For these reasons I place this class of Holstein Cows - 4, 1, 2, 3

OSU 3313

Presenting Reasons

Oral

In giving oral reasons the member's opening statement should be "I placed this class of Holstein Cows 4, 1, 2, 3."

The second step in giving oral reasons is to give a comparative presentation of the placings as follows: "I place 4 over 1 because 4 has a higher, wider, rear udder attachment. The udder is showing more capacity. The 4 cow has greater openness of ribbing, showing more dairy character than the number 1 cow."

"1 has advantage over number 4 in that she is stronger in her pasterns and shows greater depth of heel."

"I place 1 over 2 as 1 has greater length and strength of topline. She shows greater body capacity as seen in her greater depth of heart girth

and spring of rib. 1 also has an advantage over 2 in feet and legs as evidence of the strength of her pasterns and greater depth of heel."

"I placed the number 2 cow over number 3 because number 2 is more upstanding, has greater udder capacity, and is much stronger in the fore udder attachment. The number 2 cow shows greater width of rump and more width through the pin bones. It is more desirable to see greater openness of ribs and the flatness of bones which shows dairy character in the number 2 animal."

"I place number 3 last because she lacks size and body capacity, and lacks the strength of topline. Her fore udder attachment is weak. For these reasons, I find number 3 is an easy bottom in this class. Even though 3 is last, I do commend her for having cleanly molded hocks."

“For these reasons, I placed this class of Holstein Cows 4, 1, 2, 3.”

Notice in the above example that short, complete, clear sentences are used. Oral reasons should be given in short sentences rather than phrases. A principle to keep in mind is if a statement isn't grammatical, it isn't correct in a set of reasons.

Written

When writing reasons, members should follow the same basic idea as outlined for oral reasons, remembering the following points:

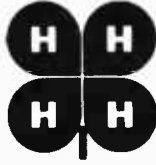
- Write or print neatly.
- Use short, complete sentences or phrases.
- Spell words correctly.
- Bring a clipboard and pencil to the contest. Pencils allow corrections when they are needed and a clipboard is handy to hold cards and use while writing.

Evaluating Reasons

The following outline will allow members to evaluate their reasons:

How Good Are Your Reasons? The value of your reasons will be determined by:

Content. What did you say? *Accuracy.* Be truthful and accurate. Inaccurate statements have no place in reasons. *Emphasis.* Stress the major differences more than the lesser ones. *Comparison.* Always compare animals to each other. *Completeness.* Bring out all major differences in your reasons. *Terms.* Use correct terms. Improper terms weaken reasons. *Delivery.* Organize your reasons in an easy to follow, logical order. Use eye contact and tell your reasons in a pleasing, confident, clear voice.



Extension Service, Oregon State University, Corvallis, Henry A. Wadsworth, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U. S. Department of Agriculture, and Oregon counties. Extension invites participation in its programs and offers them equally to all people, without discrimination.

