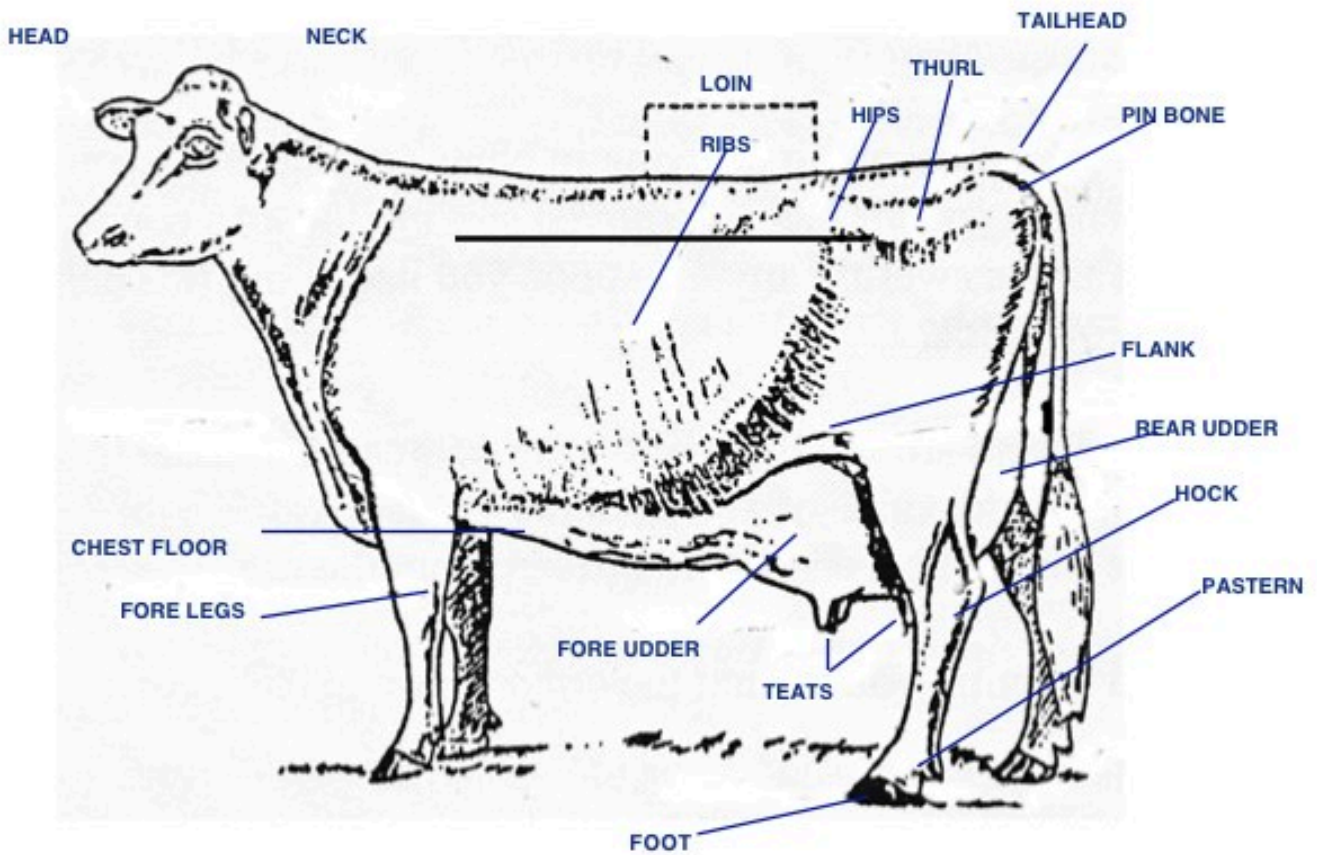


aAa[®]

Animal Analysis

A service of WEEKS ANALYSIS
Created & developed by W.A.Weeks



The **aAa** - Analysis System
“Teaching farmers to view their cows in a more meaningful way.”



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aAa - Analysis System

aAa - System. Teaching farmers to look at cows in a different way.

aAa stands for “*animal Analysis associates*” and it is a trademark for the American and Canadian sire selection program.

Understanding the Numbers

The sequence of the numbers indicates which characteristic the bull best transmits, followed by the second best and down to the characteristic that bull hardly or doesn't at all transmit to its daughters. The numbers do not indicate an order, because a bull that is primarily ranked a 5 (smooth) can be as good as a bull that has been ranked 4 (strong) etc.

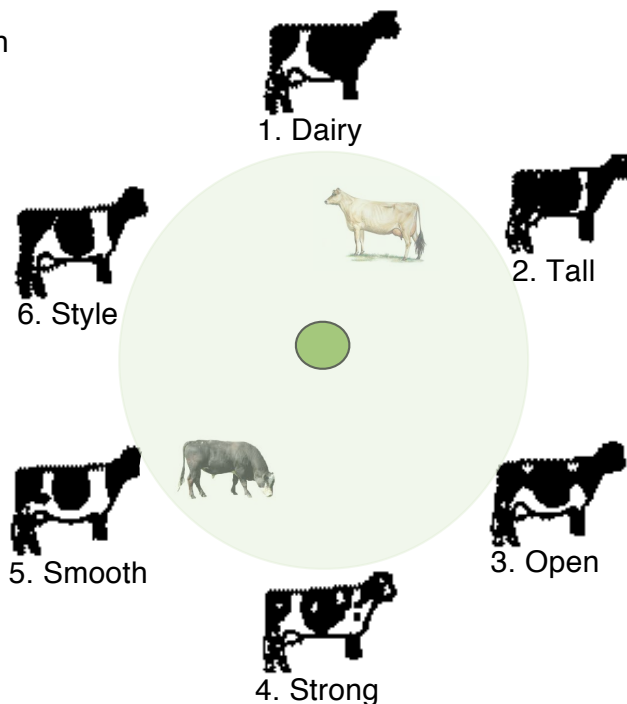
Alternatively the cows are ranked for what they most require as opposed to what they least need.

The purpose of the Triple-A-code is to search for one or several characteristics that a cow is either not or is insufficiently showing.

The subsequent encoding of the cow can then be compared against the offerings of several bulls. A bull with the most similar encoding to that of the cow should be the best supplement on the shortcomings of the cow, according to the Triple-A-System.

The triple-a code comprises six numbers each of which has the following meaning.

1. Dairy
2. Tall
3. Open
4. Strong
5. Smooth
6. Style



Don't Double Up

To explain the working of the Triple-A-System, it is easier to put the six numbers in a circle. On the outside of the circle the numbers 1 to 6 are evenly spaced.

The small centre circle represents the ideal cow which unites all types.

This ideal cow is dairy, but at the same time strong enough. Stylish but sufficiently large enough to calve easily. Has a strong udder cleft and harmoniously built.

We imagine a cow as a mixture of all the different types. A given point in the circle (Cow) is in this example situated close to 1 Dairy and 2 Tall. So for this cow to reach the middle of the circle a bull should be used for this cow that transmits type 4 Strong and 5 Smooth.

For bulls, we mostly use the first three numbers of the Triple-A-Code. By looking for one or two weak points of the cow, a bull can be selected that has these characteristics in the front of his Triple-A-Code.

By repeating this with 1 in front of the Triple-A-Code we produce a cow that is too dairy and will not produce trouble free for a long period of time. The main focus of the Triple-A-Code is therefore NOT to double up the numbers.

The Base is Compensation

In what is known in America as “The Golden Cross” Valiant x Elevation, the Triple-A-Codes matched exactly. The 4-2-3 code of Valiant formed the right combination with 1-5-6 of Elevation. Triple-A does not make preferences for the use of certain bulls. In America we see the system adopted over both large dairy operations in California as well as the smaller pedigree farms in Wisconsin. The purpose is to breed trouble free cows that through the balance of their build, **reach higher productions than what their pedigree index may predict.** This philosophy and method of breeding have made the Triple-A-System very popular in both North America and Europe.

How The System Works

A code 1 Cow Is:

A healthy cow with a large, wide head and muscular neck. She has a deep wide chest and too short back ribs, minimising her wedge shape. Her loins, hips, rump and thighs are muscled. Probably a low production cow, she should be mated with -----

A code 1 Bull:

This bull has flat, deep and open ribs. The head, neck, hips and thighs are refined and poor muscled. This type of bull transmits dairy-ness.

A code 2 Cow Is:

A shorter and wider type with hollow loins. The udder is rounder of shape and fleshier. The rear udder is wide but low attached. The fore udders are long. Teats are short and slightly cylinder shaped. The udder cleft is not strong enough. Usually a cow with low mastitis resistance. She should be mated with a -----

A code 2 Bull:

This bull has a high and strong top line. This type of bull breeds cows with high-attached rear udders and a good cleft. Udder quality is good..

A code 3 Cow Is:

Is a cow with a narrow rear end, narrow pin bones and a high tailhead. Rear legs are often coarse and slightly straight. Her rear end is narrow and because of that, her udder stands forward. This cow is likely to have calving and fertility problems. She should be mated with a -----

A code 3 Bull:

Has a broad rear end. He is wide between the thurls and pins. The bull has correct legs and feet. In general he has a refined bone structure and is able to breed cows with a longer fertile life...

A code 4 Cow Is:

Is usually a cow that has a long narrow head and a light lower jaw. Characteristic is the narrow chest and a long back rib. A pink udder with attachment faults, both front and rear. This cow often has a deep udder because of reduced blood circulation. Usually more health problems, she should be mated with -----

A code 4 Bull:

Has a broad chest, a lot of body length and a beautiful deep rib. He is able to breed healthy cattle with a long life.

A code 5 Cow Is:

A cow with more height than width and a narrow high top line. Usually long pointy teats, a higher attached rear udder and a short fore udder. Udder quality is good. Usually less trouble with mastitis. She should be mated with -----

A code 5 Bull:

A bull with more width than height, particularly broad in the loins, lots of capacity and deep in the flanks. This bull breeds cows with good teat placements and teat shape. Rear udders are wide, fore udders are long.

A code 6 Cow Is:

A cow that has a broad sloping rump, usually a fine bone structure and sickled legs. A code 6 cow usually is hollow in the neck and lets her head hang down. This type of cow does not score very high on shows. She should be mated with -----

A code 6 Bull:

A bull with powerful, straight legs and strong claws, that are round in shape and with steep foot angle. This is usually a bull with the ability to correct rumps and strengthen the loins. This bull breeds alert heads and show appeal.

Evaluation - AND - Analysis

This is not a comparison of which is better:

Production & Type Evaluation or aAa[®] Analysis

It is instead a look at how they are different.

The following table clarifies how both, support in different ways, the dairyman's goal of breeding profitable cattle and the breeding company's goal of selling semen.

Both farmers and breeding companies can both achieve their goals, when Evaluation & Analysis are used together, rather than in isolation.

EVALUATION Scores - Indexes - Linear	ANALYSIS aAa
1 For SELECTED TRAITS only. Positive or Negative Good or Bad	1 For ALL QUALITIES Added or needed in first to last order from left to right.
2 Looks Individually at Single Traits Does not consider inter-relationships	2 Considers Relationships & Functions of all traits and qualities. One to Another
3 Measures for Degree or Extent Showing how much good or bad	3 Determines the Reason - Nature or Cause of what evaluation measure as good or bad.
4. Profiles How Average Daughter Looks After mating occurs	4 Identifies what is needed or added by a cow and bull. Prior to Mating
5 Indicates Where Leg + or - Front Udder + or - Milk + or -	5 Explains Why Straight Legs: shallow feet - Needs 3 uneven feet - Needs 5 square thurls - Needs 6 Bulgy Udder: meaty - Needs 2 spread - Needs 3 swollen - Needs 4 Low Yield: saddle loin - Needs 1 shallow chest - Needs 4 slabby rib - Needs 5
6 Sorts the BEST COWS TO KEEP & BEST BULLS TO CONSIDER	6 Assists in Determining which cow and which bull to mate to each other
7 Different Basis & Standard for each country & Breed	7 Same Basis & Standard All Countries - All Breeds
EVALUATION Identifies which are the GOOD BULLS	ANALYSIS Shows how GOOD BULLS are DIFFERENT
Use Evaluation to decide if bulls are good enough for your cows.	Use Analysis to get ABOVE AVERAGE DAUGHTERS from selected bulls.



#1 DAIRY

Ample will to milk.
Fast milk let down
More milk for size.



#2 TALL

Faster Growth
High Udder
(for easy care & modern milking).



#3 OPEN

Room for the Udder
Added Calving Ease
Long Breeding Life



#4 STRONG

Larger Mature Size
Healthy Udder, Feet, Legs & Lungs



#5 SMOOTH

More Appetite
Less Injury to teats and legs
Easy Milking



#6 STYLE

Less Foot Trimming
More durable bones.
Attentive Character

aAa® Analysis numbers help prevent these problems.

	#1 DAIRY	#2 TALL	#3 OPEN	#4 STRONG	#5 SMOOTH	#6 STYLE
HEAD	Bully	Short		Small	Narrow	Plain
NECK	Short	Thick				U Neck
FORELEGS	Buckled	Short		Small	Spindle	
CHEST				Shallow	Narrow	
LOIN	Saddle	Low	Easy	Roached	Narrow	Flat
RIBS	Shallow		Tight		Slabby	
FLANKS	Heavy	Flat	Tucked		Shallow	
F. UDDER		Meaty	Spread	Swollen	Short	
R. UDDER	Meaty	Low	Pinched		Narrow	
TEATS		Short		Pointed	Long	
HIPS	Close	Low	Tight			
THURLS			Narrow			Square
PINS	Patchy		Close		Narrow	Droopy
TAILHEAD	Forward	Cocky	High			Flat
HOCKS	Heavy		Close	Sick	Narrow	Open
PASTERNS		Down		Swollen	Stiff	Small
FEET			Shallow	Pointed	Uneven	Spread

aAa[®] Analysis Numbers

For a **BULL** - are in the order he **SIRES** them.

For a **COW** - are in the order she **NEEDS** them

Qualities that bulls add and cows need in mating are shown ONLY with aAa Analysis numbers on the chart below.

aAa Analysis numbers help enhance these solutions.

	#1 Dairy	#2 Tall	#3 Open	#4 Strong	#5 Smooth	#6 Style
HEAD	Refined	Long		Laerge	Wide	Fancy
NECK	Long	Lean				Blended
FORELEGS	Even	Long		Large	Sturdy	
CHEST				Deep	Wide	
LOIN	Dairy	High	Firm	Level	Broad	Arched
RIBS	Long		Open		sprung	
FLANKS	Refined	Arched	Down		Deep	
F. UDDER		Elastic	Firm	Health	Smooth	
R. UDDER	Full	High	Roomy		Wide	
TEATS		Ample		Plumb	Short	
HIPS	Broad	High	Out			
THURLS			Wide			Central
PINS	Sharp		Open		Wide	Level
TAILHEAD	Refined	Neat	Flat			Level
HOCKS	Refined		Open	Healthy	Wide	Neat
PASTERNS		Erect		Healthy	Springy	Large
FEET			Deep	Short	Even	Rounded

Bull studs purchase and publish the aAa[®] Analysis of bulls so you can select what your cows need.

How aAa began...

aAa® Animal Analysis originated in the United States in the late 1940's and early 1950's. Created and developed by William A. "Bill" Weeks, North Clarendon, Vermont, this dairy cattle breeding guide is also sometimes known as "WEEKS ANALYSIS", "Triple A" or "Round & Sharp Analysis". Bill's phrase, "Sire The Need", captures the essence of aAa. For over 50 years, Animal Analysis has continued to assist dairy producers in breeding better animals by siring the need.

Prior to 1950, Bill Weeks was a classification inspector with the Holstein Association of America. He had a keen eye and interest in the physical form and function of dairy cattle. An enthusiastic student of pedigrees, Bill was a passionate stockman. A dairyman his entire life, he maintained a small, select homebred herd of dairy cows on his Vermont farm while developing aAa. Together with his father Amhurst Weeks, also a Vermont Master Breeder, they bred and developed an exceptional herd of Holsteins under the name of "Skyway". Many leading breeder farms of that era purchased Skyway cattle. Skyway Valla Vista Double is easily recognized as the sire of Paclamar Bootmaker.

While a classifier, Bill observed that too often, when a bull bred a cow, the resulting offspring was not as good as the mother. He searched for a way to better understand and explain the breeding results he encountered every day. Why are offspring often not of acceptable quality when an acceptable quality cow is mated with a quality bull? And why do nice quality animals sometimes come from below average parents? He found that the pairing of animals in mating is important.

During the development of Weeks Analysis dairy producers were primarily using bulls by natural service. Bill noticed the sharp bull sired his best offspring when he was mated with cows that were more round and the sharp cow produced her best offspring when she was mated with a rounder bull. With this realization, Bill created the round/sharp analysis where he showed whether a cow needed or a bull could add round or sharp in the front-end, udder and rear-end.

The development of the round/sharp analysis concept was for Bill, initially, a personal matter, not created in order to form a company or organization. He developed this breeding guide to improve his own dairy herd based on observations and knowledge. When that brought results, he was asked by others to do the same for them. This is how WEEKS ANALYSIS grew as a service to help breed better cows for dairy producers. These same results are responsible for the continued growth of Animal Analysis today.

Bill Weeks began providing analysis of dairy cattle to farmers in 1950 under the name Analyzed Holstein Friesian Cows. Results led to its early adoption by leading breeders of all dairy breeds and use within other species as well. In 1953, this breeding guide was identified by the registered trademark aAa®, which stands for Animal Analysis Associates. By that time other individuals, enthusiastic about the results they saw, had joined Weeks, as aAa® approved Analyzers, in sharing his breeding guide with dairy producers by showing which qualities cows and heifers lacked and more importantly by explaining why those qualities were needed.

aAa in New Zealand...

Samen NZ is the only breeding organisation in New Zealand to publish aAa codes in their sire catalogue and actively promotes the use of aAa.