

Senepol History

Crossbreeding Specialist

In the 1800s N'Dama Cattle were imported to the Caribbean Island of St. Croix from Senegal, West Africa. The N'Dama, a *Bos taurus* breed, was well suited for the Caribbean because of its heat tolerance, insect and disease resistance, and its ability to thrive on poor quality forage.

By 1889 Henry C. Nelthropp's Grenard Estates was one of the largest N'Dama breeders with over 250 head, which he maintained as purebreds. Nelthropp's son, Bromley, wanted to develop cattle that would combine the traits needed for superior levels of production in the Virgin Islands' tropical environment. Attempts to import higher producing cattle from temperate regions had failed; the cattle having broken down quickly from heat and nutritional stress. In 1918, Red Poll genetics were introduced to the Nelthropp's N'Dama stock to improve milking ability, fertility and make them polled. This blending of genetics proved quite successful, and formed the foundation of the Senepol breed.



As more Red Poll influence was added, strict selection pressure was applied for:

- 1) red color, good conformation & early maturity
- 2) no horns
- 3) gentle, pet-like disposition
- 4) definite heat tolerance

In the 57 years since the Nelthropp herd was dispersed to local breeders, the development of the Senepol breed on St. Croix has been continued by four primary herds. From their beginnings, the island herds maintained genetic records, which grew into the Senepol breed registry. On-farm performance testing began in the mid-1970s with the establishment of the Virgin Islands BCIA. In 1977 a plane carrying 22 Senepol left for the U.S. mainland, 29 years later, the Senepol Cattle Breeders Association recognizes over 500 breeders and more than 60,000 animals in database. Today Senepol can be found thriving in 21 states and around the world in such countries as Australia, Paraguay, Colombia, Argentina, Panama, Canada, Dominican Republic, Ecuador, Nicaragua, Puerto Rico, Venezuela, Mexico, Philippines, Zimbabwe, Brazil, and wherever tropically adapted production is needed.



HYBRID VIGOR (HETEROSIS)

In USDA research Senepol crosses have expressed more heterosis than any combination of British x British, or British x continental crosses. Also see the Senepol heterosis effect on Senepol x *Bos indicus* composite that compared carcass quality and gain. (See Figure 3)

Figure 3: Complementary effect of Senepol on *Bos indicus* composite breeds to improve carcass quality

Sire's Breed	Dam's Breed	Av. Hot Carcass Wt. (lbs.)	Quality Grade			Yield Grade			
			Grading Choice	Grading Select	Grading Standard	Avg. Yield Grade	Yield Grade 1/2	Yield Grade 3	Yield Grade 4
Senepol x Simbrah		702	89%	11%	0%	2.7	67%	33%	0%
Simbrah x Simbrah		702.1	32%	52%	16%	2.4	80%	20%	0%
Red Angus x Simbrah		686	62%	36%	2%	2.7	69%	24%	7%

Source: R.A. Brown Ranch, Throckmorton, Texas

COMPOSITE BREEDS

Senepol complement many breeds and help to bring their advantageous traits to areas where heat tolerance is a requirement. Senepol Cattle Breeders Association registers several Senepol-based composite breeds. Seneford and Senegus are just two! Senepols are also included in composite trademark breeds such as Bent Tree Farms "South Poll"; Rob Brown Ranch's "Hotlander" and a Mexican breed, "Tropicarne".



Advantage Senepol & Development

The isolation and challenges of developing a beef breed on the small remote island of St. Croix have proven to be great assets in the development of the Senepol breed.



IN THE PASTURE

Senepols are great for grass fed beef, their grazing ability, gentle nature and tender beef genes are needed components for a successful grass fed beef program. Great browsers, easy keeping Senepol will thrive where forage can be found.



Figure 2: Carcass characteristics of Senepol and Angus sired calves

	Angus	Senepol
Live Wt. (lb/hd)	1284	1239
Hot Carcass Wt. (lb/hd)	796	767
Average Yield Grade	2.5	2.4
Yield Grade (% 2's or better)	76	79
Quality Grade (% Choice)	91	89
Rib Eye Area (sq. in.)	13.3	12.8
Rib/cwt. (sq. in./cwt.)	1.7	1.7
Back Fat (in.)	0.36	0.29
Kidney Fat (%)	1.7	1.9

Source: Kerr Center, Oklahoma (data reprinted from Progressive Farmer)

IN THE FEEDLOT

In the early 1990s Senepol breeders from across the country collectively placed thousands of head of Senepol cross steers on feed in an effort to collect carcass and tenderness data.

Jim Barron's Spur Headquarters Ranch fed over 2000 F1 Senepol cross steers between October 1990 and May 1993. The collective averages for all steers were 146 days on feed, ADG of 3.62 lbs./day and average dry matter conversion of 6.74 (lbs. feed/lb. gain). Senepol steers continue to prove their ability to perform in the big feedlots and on farm finishing programs.

SENEPOL ON THE RAIL GET THE BEST OF BOTH WORLDS!

Senepol provide industry leading carcass quality. . . and, USDA proven Heat Tolerance!

DELICIOUS, TENDER BEEF

Senepol beef has produced some of the industry's best Warner-Bratzler shear force tenderness values in university and USDA studies. The study "Genetic Effects on Tenderness in Heat Tolerant Composite Cattle Breeds" showed that including tropically adapted *Bos taurus* breeds, such as Senepol, in the development of composites may effectively reduce tenderness problems in heat tolerant cattle.

DNA for the Tenderness Gene shows Senepol compares with Angus, Red or Black, and is superior to Brahman crosses and continental breeds.

NO FADS

The isolation of St. Croix sheltered the Senepol breed from the fads and fancies that have constantly assaulted the U.S. purebred industry. Senepol never subscribed to the "short-fat-compact" school of thought, which led to dwarfism. Nor were they participants in the frame race. While other breeds chased certain fads, only to turn and race just as fast in the opposite direction, Senepol's route was characterized by continued selection for animals that could perform and reproduce under the harsh St. Croix environment.

TREMENDOUS SELECTION PRESSURE

Until Senepol cattle came stateside in 1977, there was little or no seedstock market. The Senepol breed existed to harvest St. Croix's native forage and convert it into beef for people of the Virgin Islands. Genetic records were kept, as were calving intervals and production records. For decades only the sons and daughters of the most consistent and efficient cows were kept as replacements. It was this intense selection pressure that provided the founding generations of the Senepol breed.

NO "GENETIC TRASH"

A selection for superior levels of performance has led to problem-free, linebred cattle. This provides for greater consistency and uniformity in Senepol-sired offspring, and helps cattlemen get what they pay for when they select Senepol as a source of complementary traits.



St. Croix is the largest and Southernmost of the U.S. Virgin Islands. It is located roughly 1200 miles Southeast of Miami, Florida.



Senepol Production Assets

**100%
Bos Taurus**
•
No Brahman
•
No Zebu

HEAT TOLERANCE

Below, (Figure 1) USDA research establishes the cooler temperatures maintained by Senepol compared to Brahman, Angus and Hereford cows while grazing during the summer months in Florida. The same study revealed that F1 Senepol calves (both Hereford sired out of Senepol cows, and Senepol sired out of Hereford cows) maintained rectal temperatures almost identical to full-blood Senepol.

Senepol possess Heat Tolerance, and they pass it on in crossbreeding programs.



In the heat of the day, this Senepol bull is grazing & checking cows.

DISEASE & INSECT RESISTANCE

USDA research indicates that Senepol have greater immune response when compared to other beef breeds.

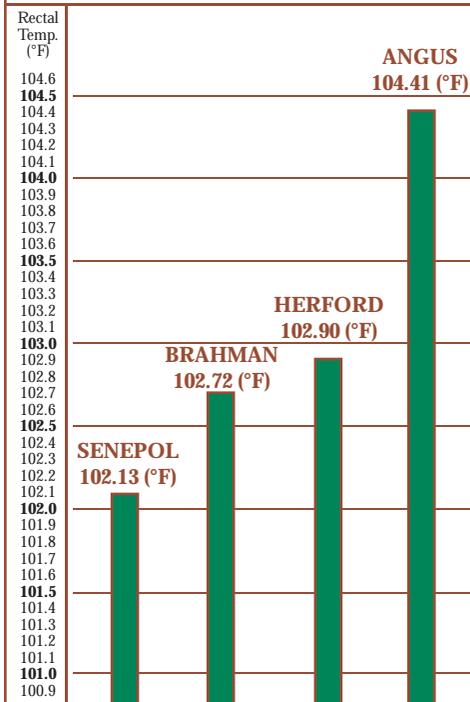
Tick count in an Australian study showed less ticks on Senepol than on any other breed, even Brahman and Santa Gertrudis. Pinkeye and cancer eye is virtually never seen in Senepol. Horn fly count in a North Carolina State University study showed in a mixed herd of

Angus cows and Senepol cross Angus cows that Angus had 82% of the fly count and Senepol crosses had 18% of the fly count. This study also showed Senepols' comfort level was high, resulting in clean udders for nursing calves.

This is due greatly to the N'Dama influence in Senepol, and the inherent insect and disease resistance that they contribute. It is also aided by generations of natural selection being applied to the Senepol breed on St. Croix.



Figure 1: A comparison of mean rectal temperatures as measured in different breeds of cattle at the USDA Subtropical Research Station, Brooksville, FL during the summer of 1988.



CALVING EASE & CALF VIGOR

A huge advantage Senepols offer is tremendous calf vigor. Breeders everywhere are proud of the increased survival of Senepol-sired calves because they jump up and nurse quickly.

Senepol birth weights from the 2003 birth year shows male calves average 78 lbs at birth and female calves average 74 lbs. With a long, slim profile at birth, Senepols rank as a top calving ease breed.



Senepol calving ease gets you live calves with calf vigor.

MATERNAL EFFICIENCY

Senepol cows are moderate in size and have excellent foraging ability. Adult cows average 1,000 to 1,200 lbs. and consistently wean off 50% or better of their body weight while maintaining an efficient calving interval.

LONGEVITY

Every cattleman who visits St. Croix for the first time is amazed at the number of 15-20-year-old cows that are still in production. Often overlooked, perhaps no characteristic is as meaningful to the overall profitability of a cow/calf operator as longevity.

