

Shetland Sheep in History

Introduction

The history of Shetland sheep includes their country of origin, the Shetland Isles, and various other countries in which the breed has been established. These are the ones relevant to the FFSSA – Shetland, Britain, and Scotland, the Canadian importation, the founding of a pedigree registry in the United States, and the formation of a performance registry in the US. Resources include Shetland sheep history from printed material dating from 1791 and even earlier references, to material found on various sites online. The information presented includes that which is relevant to the preservation of the breed from well-established sources with some going quite extensively into detailing the breed and/or the wool of the sheep. The resources are somewhat in chronological order the reference section. Some papers are undated and therefore put at the end of the book section.

A Brief History

For the last several hundred years, the wool industry on Shetland was a prospering part of the economy of the Islands. However, the practice of crossing the native sheep with more modern introductions of Roman breeds, such as Cheviot and Scottish Blackface, had led to a marked deterioration in the wool clip for Shetland sheep as a whole. This prompted a group of Shetlanders to fear that if the quality of the wool deteriorated so as to be no better than that obtainable elsewhere in the world the Shetland Island hosiery industry would be at serious risk and was “of considerable importance in the context of agriculture in Shetland as a whole”. (Shetland Proceedings 2000) As a result, the Shetland Flock Book Society was established in 1927 with Dr. J.C. Bowie, then residing at Bixter, as its President. “T J Anderson agreed that [the sheep should be inspected] but added that sheep should be selected not just for wool but for other qualities also. Dr. Bowie (J C) was of the opinion that the *‘pure Shetland breed [is] not lost by any means’* but that there needed to be a standard whereby sheep were measured.” (Proceedings 2000) The Shetland Flock Book Society later changed its name to the Shetland Flock Book Trust, and remains today as the only Shetland sheep breed organization on the Shetland Islands.

While the establishment of the SFBS led to the recognition of Shetland sheep as a standardized breed, the numbers of pure-bred sheep on the Islands remained low. Crossbreeding for meat production remained the more economic choice for many crofters. And many left shepherding for better employment with the development of North Sea off-shore oil production. In 1977 The Rare Breed Survival Trust classified the colored Shetland Sheep as endangered. However, by 1985, the popularity of the breed on the mainland (Scotland and England), particularly with smallholders interested in the range of colours and the fineness of the wool, was such that they were reclassified as Category 5 (Above Numerical Guidelines). In the 1990s the classification of the breed was revised to a Minority Breed. In 2002 Shetland sheep were removed from the RBST list of supported breeds.

In 1985 the Shetland Sheep Breeders Group was formed to help breeders outside the Shetland Islands to maintain flocks conforming to the 1927 Breed Standard. The group then became responsible for

registering Shetland sheep on the mainland. The SSBG was initially a breeders group within the RBST, but since 1991 it has become a fully independent body. In October 2002 the Shetland Sheep Breeders Group changed its name to the Shetland Sheep Society.

Dailley Foundation Flock.

There is scanty information available regarding the importation of the Shetland sheep to Canada for the Dailley flock and photos are extremely scarce from the early years that are available for the public. What is known is as follows from actual letters from Col. Dailley to Benjie Hunter.

- In March 1979, Col. Dailley was directed to write to Benjie Hunter, after talking with Michael Rosenberg of the Rare Breeds Survival Trust, in order to find Shetland sheep to import into Canada. According to Marshall Watson who said, “At no time did RBST suggest that the breed was in danger”, but indicated that rare colors and patterns were not specifically bred for because of mill requirements on color and therefore were scarce (coloured varieties were considered ‘endangered’ by the RBST. Bowie, *The Ark* 1983). . Col. Dailley specifically asked Benjie Hunter in correspondence in 1979 the following, “I wish to make the point that we want unimproved stock and we are more interested in the fleece, especially with the variety of colors . . . you could give me the best possible advice about supplying Shetland sheep of a satisfactory standard and quality. Mr. Rosenberg said he could get two or three high quality rams unrelated . . .”
- All of the ewes and two of the rams came from Benjie Hunter’s flock (or were purchased by him and brought to his flock, this is unclear) and two of the rams were from Jim Johnson’s flock from Vidlin, as quoted in the *The Shetland Times*, Landwise, Feb. 1997 by Drew Ratter, under ‘The man behind it all’: The article states: “The sheep were selected by Benjie . . . to try to meet the requirements for color and so on, but at the same time, to represent good Shetland types. This seems to be reflected in the sheep which are found in the USA today, although some of the photos in the NASSA journal would lead one to wonder if some other blood has not sneaked in here and there. Not, I would hasten to add, in those pictured in Landwise this month!” (the ewes pictured in the Landwise article are what appears to be single coated, short fleeced Shetlands of Judy Colvin’s flock).
- The ewes were from the Nesting district (mid-East Mainland Shetland). Dr. Bowie states in a reprinted article in the October 2009 NASSA news: “When I discussed the appearance of double coated sheep in the USA with Benjie Hunter, his view was that the most likely reason for this happening was due to them being throwbacks from earlier crossing with Scottish Blackface sheep as the ewes all came from the Nesting district where much crossing had taken place in the past.” See also the Shetland Proceedings 2000 where this is noted, page 28.
- In 1983, Col. Dailley again wanted to import more Shetland sheep into Canada and wrote to Benjie, (dated Oct 22 1983):
“What I think I need is another 20 odd ewes from the West or North of the Island and in other words Hill sheep. Would you let me know if this would be possible to obtain about 20-30 Shetland ewes of high quality?” Col. Dailley did this because in the April 1983 issue of *The Ark*, the Rare Breeds Survival Trust magazine, there is an article by H.M.S. Bowie and Dr. S.H.U. Bowie stating, “In fact, the hardiness and thriftiness of the Shetland is such that it can survive in hill conditions where no other breed can exist – not even a Shetland cross. This means that the typical Shetland sheep is found more on the west and north of the islands than on the more sheltered east (note: the Nesting district is in the east part of Mainland Shetland). Nevertheless, on most hill land, evidence can be seen of characteristics which are atypical of purebred Shetlands. The most obvious is a broadening and lengthening of the tail, which today almost certainly means the use of a Cheviot ram to increase carcass weight.”
Bowie also further described in that article the wool of Shetland sheep: “Shetland sheep, like the Soay to which they are related, shed their fleeces annually. Their wool is of soft texture with a Bradford count of

up to 60, which is not excelled in any other British breed. The fleece is composed of wavy, close bunched fibers of average staple 8 cm (~3 1/4"). Average weight is 1 kg (2.2 lbs).”

- This new importation never happened due to Canadian restrictions.

Timeline of important Shetland Sheep events in North America

Colonel Dailley imported a flock of inspected Shetland sheep into Canada in 1980. This flock included 28 ewes and 4 rams and were the basis of the North American Shetland flock until the importation of approved SFB or SSS semen from Britain in the 1990's. The sheep that were brought over were selected from Shetland Flock Book Society flocks according to the 1927 Shetland breed standard.

The North American Shetland Sheep Registry, NASSR, was formed in early 1991, with the backing of the American Minor Breeds Conservancy, as well as the Shetland Sheep Breeders Group of the Rare Breeds Survival Trust, RBST.

NASSR was incorporated as a nonprofit organization on December 13, 1993.

NASSR then became the North American Shetland Sheep Association, NASSA, when the bylaws were established on March 26, 1994.

The NASSA bylaws were revised on April 9, 1998.

In 2000, NASSA adopted the 1927 Flock Book Standard that is in use today.

In 2002, The Shetland Sheep Society, SSS, adopted Appendix A after working closely with the Shetland Flock Book Society on the research surrounding the 1927 standard. The Appendix was not intended to change the standard, but to clarify the intent and language of the original document. It was based on the research of photographs and documents found on Shetland, including an article published by Dr. James C. Bowie, the first President of the SFBS in a magazine called The Field.

In 2003, NASSA by-laws amended.

In 2009, the NASSA board unanimously adopted Appendix A.

In 2009, a group of Shetland sheep breeders met at the Wisconsin Sheep and Wool festival to discuss the formation of a new organization for the preservation of fine fleeced Shetland sheep.

In 2010, the Fine Fleece Shetland Sheep Association (FFSSA) was formed with the intention of preserving Shetland Sheep according to the 1927 Shetland Sheep breed standard as clarified by Appendix A. One of the goals was to gather micron information from the sheep and track that information in a database within parameters that would qualify them as being fine fleece Shetland sheep. Another goal was the education of members and the public regarding the historical Shetland sheep, what their wool was like, what the 1927 Shetland breed standard meant, and what the wool was traditionally used for.

A FFSSA logo was established in 2011.

FFSSA Bylaws were approved in 2012.

In 2012, a fleece grading chart was established, loosely based on Oliver Henry's grading chart at Jamison and Smith, and according to the Shetland wool micron data from Shetland, Britain, Scotland, Canada, and the United States. This chart was further refined over the next few years to include five grades of Shetland wool, three of which fall under the FFSSA guidelines to qualify as being performance registerable within FFSSA. The chart, which has micron categories, standard deviation ranges, typical crimps per inch, a fleece description for each grade, and a yarn usage category for each grade, is intended for both Shetland breeders and consumers of the Shetland wool.

FFSSA was incorporated as a nonprofit organization in 2014.

In 2014, a FFSSA performance registry was established to include sheep whose wool falls within grades 1-2 for rams and 1-3 for ewes, according to the FFSSA Shetland fleece grading chart.

Also, in 2014 the brand for FFSSA, Traditional 1927 ®, was established. This brand ensures that the Shetland wool products carrying Traditional 1927 ® have micron data that falls within grades 1-3 from the FFSSA grading chart.

Reference excerpts from book sections

A view of the ancient and present state of the Zetland Islands ..., Volume 1, By Arthur Edmondston. (1809).

"By a due degree of attention to these circumstances, the native Zetland sheep might be rendered a source of positive wealth. They are, of all others, the species best adapted to the climate of the country, and by a careful separation of the particular varieties, they might be made to yield as fine wool as any in the world."

The Journal of Agriculture (1831)

"The *Shetland sheep* are small handsome animals, with short fine fleeces. They are generally hornless, and their weight seldom exceeds 40 lb. Their fleeces weigh on an average about 2 lb. When properly dressed, the wool is of a pure and glossy white. The breed is very hardy, and feeds on sea-weed during the absence or deficiency of better food. " With respect to their wool," says Mr Bingley, " it is of a texture so soft and cottony, that it is adapted to the finest manufactures ; and, in some instances, has been found to rival even the Spanish wool *." Stockings fabricated from Shetland wool have been known to sell for six guineas a pair. The skin with the fleece on may be converted into a valuable fur, and in that condition has been sometimes exported from this country to China. It also forms excellent leather aprons. There appears to be two varieties of the Shetland sheep. Of these, the one which is considered as the native race, possesses the finest wool; but their number is now greatly diminished, and in some places they have been almost entirely supplanted by foreign breeds. The wool of this variety is coarse above, but soft and fine below. Of the Shetland sheep it has been observed : " They have three different successions of wool yearly, two of which resemble long hair, more than wool, and are termed by the common people *fors* and *scudda*. When the wool begins to loosen in the roots, which generally happens about the month of February, the hairs or *scudda* spring up; and when the wool is carefully plucked off, the tough hairs continue fast, until the new wool grows up about a quarter of an inch in length, then they gradually wear *off*; and when the new fleece has acquired about two months' growth, the rough hairs, termed *fors*, spring up, and keep root, until the proper season for pulling it arrives, when it is plucked off" along with the wool, and

separated from it at dressing the fleece, by an operation called *farcing*. The *scudda* remains upon the skin of the animal, as if it were a thick coat, a fence against the inclemency of the seasons, which provident Nature has furnished for supplying the want of the fleece. The wool is of various colours. The silver-grey is thought to be the finest; but the black, the white, the *mourat* or brown, is very little inferior; though the pure white is certainly the most valuable for all the finer purposes in which combing wool can be used ."

***Sketches and tales of the Shetland Islands* By Eliza Edmonston. 1856.**

Eliza's book contains a chapter on information on the knitters of Shetland.

"You will never see a Shetland woman without work of this kind in her hand,—whether with her keyshie of peats on her back, or seated on the sober pony, with which she goes often several miles to bring home dried moor-grass for fodder, or fish from the seaside,—whether talking to you, or paying or receiving a visit,—all the while she plies swiftly the knitting-pins or wires. The younger women, whose sight is still good, and whose fingers are supple, have always two pieces of worsted work in progress at a time,—the brown wool stocking for odd moments, or in the twilight, or when going about,—and the fine lace-like shawl or veil, for the long evenings, or half holiday in which the daughters of a family indulge themselves in turn. Socks for home use, or for sale, are always the work of the old women."

"The sheep of Shetland are of a peculiar breed, indigenous to the country. They are very small, and, of course, wild and hardy. Strangers, indeed, who see these little, odd-looking creatures, shy as deer, scampering along at a speed almost as great, can hardly be persuaded they are of the sheep genus at all."

" . . as the animals are chiefly valued for their wool"

"The Shetland sheep are of various colours, besides black and white. They are of almost every shade of brown and grey, and some are piebald. The wool is also of very different quality, even on the same animal, the finest being about the throat and back. Nevertheless, even the coarser portions have a velvety softness, quite peculiar. Several causes have been assigned for this distinguishing property, besides the exclusiveness of the breed. One is the scant but often highly aromatic pasture of the Shetland hills, and another, that the wool is never shorn, but *rooed*, that is, pulled with the fingers from the creature's back, lock by lock. It must be remembered, that sheep, like many other animals, yearly change their coating. Hence, as the season advances the wool becomes loose; the animal then rubs it along the heather, which acts as a comb; and, indeed, a fair wool harvest is often gained in this way by the poorer ownerless persons, who gather what is left among the stones and heath. At the time then, when the fleece becomes loose, which is in June, about a month after lambing time, the sheep are collected, and their wool plucked off by women, who are sufficiently tender in the operation, so that the rooing gives no pain, but is rather relief to the animal. There is, moreover, left on the skin, a considerable quantity of long hair, provided by nature for several species of animals in northern latitudes to protect them more completely from the inclemency of the weather, and this, it is obvious, would be totally removed were shears employed on the sheep."

"The wool being brought home, is carefully separated into its different colours and qualities. There is nothing of which the Shetland housewife is so proud, or takes so much care, as her stock of wool. The coarsest is set aside for the fisherman's socks and mittens ; a second quality is used for a sort of twilled blanketing, woven by some superannuated fishermen, in a very primitive handloom. This *claiih* (so it is called), if grey or mixed, is dyed with indigo, and makes very durable jackets and trousers ; if white, it is used for blankets and petticoats, or under-shirts for the men. The brown wool is almost entirely made into ladies' stockings, and the best of the grey into gentlemen's socks, of which a few pairs will always be found, on inquiry, in every cottage, awaiting an opportunity of sale."

“The spinning is all done by hand on a common lint-wheel. The staple of the wool is very short, and it is said, cannot, on that account, be so well managed by machinery. The same circumstance accounts also for the fact, that Shetland hose, however pleasant in wear, are not very durable.”

“The finest wool is not carded, but combed out, and then teased by the fingers. It is mixed with grease, or a little fine oil, and a few persons who are very expert can spin, from two ounces of raw wool, *six thousand yards* of three-ply thread,—a sufficient quantity to make a good sized shawl. This process is very tedious, and requires manipulation so nice, that very few persons ever attain the art in perfection. More usually a veil may be made of half an ounce, and a shawl of four or five ounces of wool. This will serve to explain, that unlike Berlin and other wools, which are sold by weight, and spun by machinery, the finer the thread of Shetland worsted, the more the labour; it is therefore disposed of by the cut or number of threads.”

“Shetland has been celebrated for beautifully fine plain knitting, for the last century at least, and produced gloves for ten shillings and sixpence, and stockings for two guineas a pair, knitted on wires as fine as a sewing needle.”

History - The Living Age, by Littell 1869

"The real Shetland wool, however is fast disappearing. The pure Shetland sheep are now only to be seen in the wilder and distant islands, as Yell and Unst; and the quantity of wool yielded by them (8 oz. the fleece) does not pay the cost of breeding. These sheep are, therefore, now being crossed with other kinds, especially with the black-faced Cheviots, whereby an equally hardy, but more fleshy and more wooly kind is obtained. The Shetland sheep are small, short-legged, and long-necked, and vary curiously in color, being white, black, brown, blue, and pie-bald."

History Second Shetland Truck System 1871, William Guthrie

This link is to a project gutenbergetext, a free online book. It is around a 3 mg download. Knitters and merchants were interviewed (as well as the fishing industry) and each interview is described in detail (the question and the answer to the question).

A couple of interesting tidbits:

Question 2297 - Shetland worsted (yarn) generally spun in North Yell and Unst. (Other sources have said that is where the best and finest Shetland wool was located)

Question 2332 – “the hardness and coarseness in English wool is not in Shetland wool.”

Question 2280 - all the Shetland wool underclothing is mentioned here!

The Orkneys and Shetland; Their Past and Present State (1883)

“Like the cattle, the sheep, which run wild over the Shetland scatholds, are Scandinavian in origin, though in all probability they had been imported long before the Viking horde had colonised the islands, as the bones of sheep, identical in species with the native breed still in existence, have been found amongst other animal

remains in the ruined brochs that are spread in such numbers, not only over the Orkneys and Shetland, but over the north of Scotland as well. They are said to be identical with the *argali*, or wild sheep, still found in Siberia. Both males and females, as a rule, have horns, though in the case of the ewes the horns, which are short and straight, are sometimes wanting. The fleece is a mixture of hair and wool, and in the case of the lambs of the fine-woolled variety a reddish tinge is said to be found at the bottom of the fleece. The breed has constantly been debased by crossing with other varieties, and in a report made to the Highland and Agricultural Society in the year 1790 by one John Tulloch, the number of kindly woolled sheep " was said not to exceed a thousand out of over one hundred thousand, then estimated to be the total number in the islands. What the actual number of the native sheep at the present day may be would be difficult to say, as in many places large tracts are under blackfaces, cheviots, and half-breds. Almost all shades of black, grey, fawn-coloured, and speckled are to be found, the most valued being a rich brown, known as *moorat* (*mo'-rautir*, yellow brown). About 10 lbs. a quarter, or less, will be their weight, and the mutton is nearly as good as Welsh, which is saying something. Almost as agile as goats, to which in some characteristics they bear a greater resemblance than to their more obese stupid-looking cousins of southern pastures, they have in some districts to be carefully kept from the corn when it is coming up, for which purpose each household takes its turn in supplying a watchman. Fond, like all animals, of salt, they are occasionally to be seen at low tide foraging amongst the seaweed, and have in Northmaven been even known to eat the salt fish spread out on the beach to dry. In former years the *erne*, or white-tailed eagle, was their great enemy, but nowadays ravens, hooded crows, and the greater black-backed gulls do most harm especially amongst the ewes heavy with young and the lambs themselves."

Modern sheep: breeds and management By William James Clarke (1907)

SHETLAND SHEEP.

"Another small breed of sheep is the Shetland. As its name would imply this breed, if it might be truly called a breed, is a native of the Shetland Islands, and from its silk-like fleece, the famous Shetland shawls are made.

Shetland sheep, whose wool is remarkable for its fineness and softness, are rarely sheared. Instead of being clipped in the ordinary way, their wool is plucked out by hand once a year.

"In the year 1790 a committee appointed by the Highland Society, of Scotland, prepared a report on Shetland sheep and wool and according to that report there were at that time not less than 100,000 sheep in the Shetland Isles and in all probability more. The report says further: "Their fleeces, which at an average do not produce above 1 lb. of wool each, are not worth at present above sixpence a pound; whereas the finest wool might fetch at least five shillings per pound. If the same breed were reared in the Hebrides and the Orkney Islands (where they would thrive equally well) wool might be produced in those neglected parts of Great Britain to the value perhaps of half a million." The report states that the finest wool was produced by the hardiest sheep, those which were never housed nor kept in any particular pasture and which in winter were at times so pinched for food that many of them were obliged to feed on the seaweed on the beach. The healthiest sheep, it was noticed, were those which lived on the hills entirely and never touched seaweed. It was not usual to shear or clip the sheep shades known locally as murrat and sheila. The ewes are generally hornless, but the rams are often horned. As mothers, the ewes are particularly careful of their lambs, and have usually an abundant supply of milk. The fine wool of the Shetland sheep is a very valuable asset to the owner, being always in demand at home for hand manufacture, and also for export to Scotland. The average weight of a fleece is about two pounds; it is not clipped, but pulled off by hand, and when taken at the proper time it peels off easily. This breed is used with great success for crossing purposes, especially if a better pasture be provided; and their deepmilking properties make them very valuable as mothers."

Shetland Sheep and Shetland Hosiery (1929)

“The Shetland hosiery industry is based upon the exceptionally fine quality of the wool of the Shetland sheep - wool which is much finer than any other British wool. It is a remarkable fact that good feeding tends to make the wool coarse, whereas the roughness of the land upon which the Shetland sheep feeds, together with the fact that it is neither shorn nor clipped, accounts for its particularly fine wool.”

“After ‘rooing’ the wool is taken home and is classified according to colour and quality, the finer wool being set aside for the making of hosiery and the coarser for weaving into tweed.”

“. . . at the same time, when one has regard to the exceptional quality (of Shetland garments), they are available at prices which are extremely reasonable, being at once comfortable and notable for extreme softness – a peculiarity of the Shetland wool – while they are particularly warm, yet light. Both Shetland tweed and Shetland hosiery provide wholly exceptional protection from colds, rheumatism and allied complaints and have won, therefore, constant recommendation from members of the medical community.”

Shetland: The Isles of Nightless Summer (1934)

“No matter what the colour or combination of colours may be, the wool is invariably short, curly and silky, and as soft as down to the touch. This wool is famous all over the world, and is so valued that unscrupulous people in other lands sell wool called “Shetland Floss” that was never within a thousand miles of Shetland.

“In the first place, the goods have earned their reputation by the fine, silky texture of the wool, which of course is obtained from the small breed of sheep peculiar to Shetland.”

“It (the sheep) is small, seldom looks really fat, has exceedingly fine, soft, curly wool and strangely enough, as already said, individuals differ greatly in colour.”

The Far-Flung Isles: Orkney and Shetland (1961)

“The delicate, silky wool is removed, bagged up to be cleaned and processed and spun into the fine yarn that is used by the island women to make those gossamer-like shawls and stoles the criterion of whose excellence is that they can be drawn through a wedding-ring.”

“Then it (a sheep) was deftly thrown on to its back and locked into position which what appeared to be a form of half-nelson and two, three, even four pairs of nimble hands set to work to remove the infinitely soft and delicate growth of wool.”

“Handfuls of this fine wool, finer than spun glass and no less lovely in its sheen, grew into little piles on the sun warmed turf alongside each picker. . . . wool such as this is too precious for the risk to be taken of having it blown away on a light breeze.”

“Asked how they obtained yarn fine enough to make patterns so delicate, Mrs. Priest explained. “It is taken from the neck of a Shetland sheep.” “Finer than Elizabeth’s hair (a single ply), I could hardly even see it! “But we use two yarns together,” she went on to explain, and there and then proceeded to take a second short length of the nigh-invisible yarn and with deft, twinkling fingers twisted the two together into one thread. It was still practically invisible!”

The Windswept Isles: Shetland and Its People (1977)

The true Shetland sheep is unmistakable. Small, almost dainty, with a neat head and a distinctive intelligent expression, it varies in colour from all shades of natural to moorit and Shetland black. Somehow able to subsist

on the bare hill grazing, the very sparseness of its diet is believed to produce finer wool. The original breed had short tails, the ewes light goat-like horns while those of the rams were heavy, curved but not spiral. In both Soay near Skye and Shetland, the sheep are the descendants of every early variety, . . . These Turbaries or peat sheep, found in midden heaps and in broch deposits, are slender-limbed, 22 inches at the shoulder but light and extraordinarily agile. From Neolithic times to the Middle Ages the Turbarie sheep formed the backbone of the Scottish woolen industry despite the fact that the breed gave less than a pound of fleece as contrasted with the Cheviot. The Shetland sheep can fetch twice as much, weight for weight, as Blackface wool although the fleece weight as 2 lbs is only about half that of heavier breeds.”

The Shetland Book (1978)

“The Shetland sheep has been evolved by natural selection under poor hill conditions and exposure, to be a small beast that can exist under very hard conditions. It has also been selected for fineness of wool and as long as the Shetland wool can fetch a price considerably higher than other wools, and as long as the hill grazings remain poor, the hill sheep are likely to be of a Shetland type. To improve the breed, a Flock Book was formed and the rams introduced by the Society have improved the stock. The Shetland breed have a small carcass of first quality mutton. Wherever pastures have been improved, the sheep stocks consist of Shetland-Cheviot crosses or pure Cheviot or pure Blackface, a bigger animal with a stronger heavier fleece capable of producing lambs suitable for the fat stock or store market. Probably not more than half the sheep in Shetland today are of the Shetland breed. If the Shetland breed is to continue on the hills of Shetland, it will have to prove its worth outside the island. Even today, it is doubtful if it is profitable to keep these sheep for wool only, and if the sheep on the hills are to produce lambs for sale outwith Shetland, they will have to prove themselves profitable. With the improving of hill grazing it is quite possible that the Shetland breed can be developed so as to be a mutton producer rather than a wool producer without entirely losing a relatively fine wool.”

The Northern Isles: Orkney and Shetland (1978)

“By the 1840’s in Shetland, crossing was also taking place. The sheep-stock of Fetlar was said to be more mixed than that of North Yell. In Aithsting and Sandsting, the native breed was beginning to be crossed with black- and white-faced rams. The rams were put to the ewes at the beginning of December.

“Already by 1814, however, Mr. Gifford of Busta had a mixture of Northumberland mugs and the black-face, with a dash of the Cheviot breed, all crossing with the native Shetland ewes and these crosses mingling with each other again.”

“Cheviots are numerous in Fetlar, and the native breed, brought in from other isles, is crossed with them, though the hardiness of the native breed has to be maintained. The real Shetland tup was described as an odd-looking specimen, with large horns and a kind of small mane, and a beard like a billy-goat, called a waderlock.”

“Wool was a special commodity, and misappropriation was made easy by the special nature of the wool, which could be plucked or rooed with the fingers. The sheep were neither clipped with shears, nor washed. In Shetland in 1612, the illegal rooing of sheep was widespread, and to make sure that regulations were observed, rooing was made a public occasion, and the identification marks on wool sold, as also on hides and skins, were to be shown to the bailie. Such controls lasted a long time, and even in the nineteenth and twentieth centuries, estates were regulating the place where rooing should take place and the time when it should be done, the announcement sometimes being made by the beadle at the church door about the first of June.”

“Rooing allowed this short, fine wool to be got unmixed with hair, hence the high reputation of knitted goods from these islands.”

“Sheeps’ fleeces in Orkney did not usually weigh over 3 lbs Amsterdam weight, and were for the most part mixed with hair. A merk of good wool, about 1 ½ lbs, was the average. Orkney sheep, which were very short-tailed, and had horns, had coarser wool than the Shetland breed, coloured grey, dark tawny, black, and white. Shetland sheep were also small-tailed, and gave only about 1 to 1 ½ lbs of wool and 20 to 24 lbs of mutton. In colour they were white, black, grey, katmogit, . . . reddish-brown, moorit, black, white, shaela, or a silvery grey, grayish-brown or bluish-grey colour, or piebald. White-wooled sheep were rare. Fleeces in Bressay, Burra, and Quarff weighed out at 1 to 3 lb. A writer of the 1870s noted that Orkney fleeces were seldom over 1 ½ to 2 lb. The Orkney sheep themselves weighed about 4 to 6 lb a quarter. They had very short bodies and legs, long necks, 3 inch tails, and white or grey faces. Only a few had horns”

Traditional Life in Shetland (1978)

“As in the case of Shetland cattle, the progenitors of Shetland sheep were brought from Norway, and over the years there evolved a small race of sheep with an extremely fine wool. But the fineness of the wool was not fully appreciated, and no attempt was made to improve the breed nor even to keep it pure.”

“It was only at the end of the eighteenth century that a serious attempt was made to safeguard the quality of Shetland wool by paying strict attention to breeding. The committee of the Highland Society of Scotland awarded premiums for the best specimens of the breed which they insisted should be kept separate to prevent adulteration.”

Natural History of Shetland (1980)

“Shetland sheep are world renowned for their fine, soft wool. They are also small, very hardy, and produce good mutton. Only the rams have horns, and the breed has several primitive features which suggest an affinity with the even more primitive Soay sheep of St. Kilda. One of these is the short tail, another is the tendency for the fleece to be moulted annually, and a third is the occurrence of coloured wool.

The average fleece wt is about 2 lbs, and has increased ½ lb through selection during the past 40 years.”

“In the past there was a hairy variety of Shetland which may have been the result of Norse influence. This may survive as the ‘hardback’ on Foula. A similar method of inheritance of color in Orkney and Icelandic sheep suggests they have a common origin. Shetland sheep are not very different to Orkney ones, including the well-known seaweed eating animals of North Ronaldsay. However precise relationships are difficult to ascertain. For example, the range of fleeces from hairy to woolly was a common feature of primitive sheep, and provides the basis for selective breeding everywhere.”

The sheep were known to roo as early as 1619.

The Making of the Shetland Landscape (1985)

The scattalds of Shetland had always been overstocked with animals, and little consideration was given to their selective breeding. Although forward thinking men like Thomas Gifford of Busta had been crossing Northumberland mugs, Blackface and Cheviots with Shetland ewes in 1814, the majority of the landowners did not become involved in selective breeding until the end of the nineteenth century. By then Leicester, Cheviots, Blackface and half breeds were being reared, and major landowners began filling their parks with Shetland crosses. Although Cheviots were originally more profitable than the blackface, as the price margin of the wool between the two decreased Blackface sheep came to be viewed as the more profitable stock since they were hardier and less expensive than the Cheviots. A Blackface ram crossed with a Shetland ewe improved the quality of both the wool and the mutton.”

“Since 1839, Shetland wool and hosiery had been viewed as a luxury item . . .”

The Shetland Story (1988)

“The origin of this breed is not certain, although tradition has it that it was brought across to Shetland by Norse settlers. They may have interbred with the primitive Soay type of sheep believed to have existed there already. In Foula there are horned short-wooled ewes with grey bellies, but most Shetland sheep show few of the characteristics of the Soay breed today.

The Shetland sheep are small and fine-boned. The rams have short horns which will spiral as they grow older. But it is mainly the tail which will show us whether a sheep is an old Shetland purebred or not, as this breed has a short tail of only 13 vertebrae where most other have 20 or more.

The most striking characteristic of Shetland sheep is the fineness of their wool, indeed it is considered the finest wool known, and has a soft, silky touch.”

“The Shetland sheep look rather like goats, and have a similar agility.”

“As they were isolated the Shetland sheep were not crossed with other breeds until the end of the eighteenth century when several new breeds were brought to Shetland: Merino, Dutch, Scottish blackface, and (cut off print). During the nineteenth century the old Shetland sheep were (cut off printing) by the Cheviot and Blackface, and seem to have survived mostly (cut off print) hills of Papa Stour and Foula. The end result was a marked deterioration in the general quality of Shetland wool. This caused (cut off print), and in 1927 the Shetland Flock Book Society was founded. (cut off print) everybody realized the need to maintain the purebred Shetland sheep, it was considered uneconomic by modern standards. Therefore, took a long time for the tide to turn, and even in the 1970s the sheep were classified by the Rare Breeds Survival Trust as an endangered species.”

“The texture of the wool from Shetland sheep would make knitting a far more practical process than the weaving of wadmél – the thick woollen cloth that used to be made on most crofts. The original Shetland sheep are small and slight with extremely soft, light and fine wool which is ideal for knitting. Originally this wool was never shorn but pulled off when it was about to fall off naturally – a process known as ‘rooing’ in Shetlandic.”

Book of Fair Isle Knitting (1988)

“Plain knitting, mainly in the form of stockings, has been an important and continuous thread in much of the history of Shetland. The wool for this knitting came from the small but sturdy breed of Shetland sheep, which are capable of withstanding both the islands’ harsh climate and limited moorland pasture. “

“The sheep of the Shetland Islands are of a peculiar and indigenous breed – very small, very wild, and very hardy . . . The animal is distinguished also by a soft, fine, short wool, of a variety of shades of colour, from a black to a light brown or a silvery grey; some are even piebald. Two circumstances are supposed to cause its silky softness, besides peculiarity of breed: first, the coarse but often aromatic pastures; and secondly, the mode in practice of pulling the wool from the animal, instead of shearing it.”
– *anonymous resident of Shetland, 1861*

“Although the soft wool produced by Shetland sheep is too weak for weaving, it is excellent for knitting. Given the fineness of the wool and the handsome array of its natural hues, it was inevitable that sooner or later the women of Shetland would take up the art of knitting (only rarely did the men knit, which is still true today). The first recorded evidence of Shetland knitting dates to the sixteenth century; by the seventeenth century the craft was practiced everywhere in the islands.

During the seventeenth and eighteenth centuries, hand-knitted hosiery became the islands’ main manufacture. According to the Statistical Account of 1791-1799, the island knitters spun ‘excellent linen yarn, and discover[ed]

much dexterity in manufacturing their fine soft wool into stockings, gloves, nightcaps, and other wearing apparel.”

Knitting By The Fireside And On The Hillside (1994)

“Prophet Smith, a native Shetlander, addressing a Summer School run by the Education Department of the International Wool Secretariat in 1958, claimed that the most likely connection was with the mountain sheep of Northern Norway, and stated that: “Cut off for long periods from cross-breeding with other strains, the Shetland sheep slowly developed into an independent breed.”

“There is however no doubt that the wool from these sheep is one of the finest wools produced in Britain.

David Loch, the ardent promoter of the Scottish woolen industry, stated in 1780:

Zetland . . . produces sheep with the best wool, not inferior to that of Spain, from which I have often had stocking manufactured much finer than any of the kind I ever saw; which were beautiful beyond description. The wool has a very short staple, is light, soft, silky and extremely warm but not hard wearing. The fineness of the wool is dependent on the part of the animal from which it is taken – the area around the neck providing the very finest wool. By this means (rooing) the wool was plucked from the sheep and was said to aid the fineness of the fleece by leaving the longer, coarser hairs on the sheep and by not blunting the fine ends with clippers.”

“Of greater and more lasting success than the SWIA was the Shetland Flock Book Society formed in 1926 by Dr. Bowie, a medical practitioner, and some progressively minded stockmasters, notably Mr. Andrew Tait. This group of men set about the long overdue task of saving the Shetland breed of sheep from extinction. The purity of native Shetland wool which had given cause for concern as far back as the days of Sir John Sinclair, continued to do so, as constant cross-breeding and the breeding of cross-bred sheep with Shetland ‘types’ diminished the purity of the native Shetland breed, threatening to make it extinct. As the average fleece from a Shetland sheep was considerably lighter than that of the blackface or Cheviot sheep, . . . The Flock Book Society endeavored to protect the Shetland breed from extinction by breeding flocks of rare purity of conformation, colour, and quality of fleece. Premiums were given by the Department of Agriculture for Scotland for the breeding of high quality tups, which along with the help from the Flock Book Society, led to an increase in the number of pedigree tups being used for breeding. Prophet Smith . . . felt that in addition to the work of the Flock Book Society, the holding of shows . . . helped raise the standards as they were an ideal opportunity for displaying high quality breeds . . . This Society, so necessary with the ever-increasing numbers of sheep being bred on the islands, did much valuable work, and is still in existence to date.”

SSS Newsletter Feb 2004 Origin of Shetland Sheep by Dr. S.H.U. Bowie

“There is archaeological evidence that sheep of Soay type were in Shetland before the Vikings arrived and this is supported by the presence of the variety with gulmoget markings. Whatever the origin of present-day sheep there can be no doubt that they evolved in relative isolation in Shetland and were essentially landrace when investigated by the Royal Highland and Agricultural Society for Scotland in 1790 and the exceptional fineness of their wool became widely known. However, it is less well known that in 1328 their wool was already so highly regarded that 22 cwt. of ‘specially fine wool’ was donated to the then Pope (A.T. Cluness, The Shetland Isles, 1951).

During the Norse Period and well into the 16th century the Shetland dialect was Norn which was essentially of Norse origin. Even then the sheep were known for the fineness of their wool and 462 years later this was affirmed by the RHASS. However, by then cross breeding was taking place in order to produce bigger sheep for the meat market and by the early 20th century the quality of the wool yield had decreased such as to endanger the woolen industry. This was a motivating force in the setting up of the Shetland Flock Book Society in 1927.

Whether the early sheep introduced to Shetland from Norway had wool of similar fineness of sheep that had evolved in relative isolation in the Islands for a millennium may well remain a mystery. What is known is that the Shetland is one of the finest wool breeds in the world and as such it should be conserved.”

British Breeds and Their Wool (unknown date)

Ryder and Stephenson

Pg 39

“The Shetland breed of the Shetland Isles is one of the smallest breeds in Britain. It is a hardy sheep noted for its soft, fine wool and good mutton. The Shetland is said to be akin to some of the breeds of Scandinavia, but it has some more primitive features also found in the prehistoric brown Soay sheep as well as similar fine wool that suggest a place for it in an intermediate position between Soay and the remaining breeds of this group (white-faced, horned hill breeds). One primitive feature is the short tail, another is the strong tendency for the fleece to be moulted annually, and a third is the tendency to grow colored wool. Although Shetland sheep with white wool are common today, the predominant color of the past, moorit (moor red), is also found as well as other shades of brown, fawn, black, and grey. The fleece weight is only 3 lb and staple length 3-4 in., but the quality is as high as 56-58s. Much of the wool is hand-knitted in the isles into the well-known Shetland scarves and other woollens (Smith, 1961). The tendency to moult led to the practice of pulling the wool (known as rooing) in the past, so that the fleece would not be lost, but because it is quicker the sheep are often clipped today (see also Ryder, 1966b)”

Ryder and Stephenson (unknown paper/book excerpt)

“Woolly primitive domestic sheep, such as the Soay and Shetland, have a moderate difference in diameter between the primaries and secondaries, and are thus comparable with the generalized medium type, discussed earlier, found in the Middle East in the first and second century A.D.”

“The British breeds of the Middle Ages were regarded as fine wools, but they appear to have been very similar to the medium-woolled sheep of the Middle East that have been described above (Ryder, 1964b). Among the modern breeds the Soay and Shetland sheep still appear to grow this type of fleece as the primary fibres form a group with a diameter of about 40 microns while the secondary fibres show a diameter of about 20 microns.”

The native sheep of the Hebrides, Orkney, and Shetland (unknown date)

Evelyn Simak

“The most important attribute of the breed is its wool. It has a Bradford count of 56/60, the fleece is composed of wavy close bunched fibres of average length 5 to 10 cms, which ideally should have 4 crimps per cm. The average fleece weight under hill conditions is 1 kg (2 lbs). In June-July the fleece usually loosens and is lost if not removed either by shearing or ‘rooing’. Natural shedding, however, does not always occur and retention of the fleece is normal in crossbred animals”

Shetland (unknown date)

Days of Change

“as late as 1839 Christian Ployen spoke of seeing many cattle but few sheep in his travels through Shetland. The 1840's, however, saw rising prices for sheep and wool, and Shetland was now in a position to benefit. Blackface and Cheviot sheep were imported from Scotland to graze on the best pasture and used for crossing with native Shetland ewes to give greater wool yield and carcass weight. While a Shetland sheep produced a fleece of 2 lb weight, a cross sheep often produced 5 lb.”

The Wools of Britain (unknown date)

Pg 29-30

“Shetland. This is the name given to wool from the sheep inhabiting those very northerly groups of Isles, the Orkney and Shetland Islands. The wool is a specialty type and is short-stapled, but very soft in handle. It is not graded into specific types but remains under its own description. Its uses are limited to knitwear fabrics and yarns; shawls and neckcloths made from it are much prized because of the softness and durability. Much of this wool is, of course, hand-processed within the Islands.”

The Ark magazine – the monthly journal of the Rare Breeds Survival Trust

Dec. 15, 1976 - Front cover picture

1976 (ad in paper is dated 1976)? Breed of the month

“The most valuable characteristic of the Shetland sheep was the remarkable fineness of the wool. Probably no other wool was so fine, so light, so soft and warm. The fleece weighted about 2 ½ lb, and the wool was mixed with hairs, which were dressed out. The growth of the hair in the spring caused the wool to rise, so that if it were not pulled at that time it would be lost.”

“Attempts to rear the Shetlands in the better soil and climate of the mainland resulted in rapid deterioration of the wool.”

“ . . . few pure Shetland sheep were to be found by the beginning of the twentieth century.”

“The wool is still the finest produced by any British breed of sheep with a Bradford count of 56-60, but the quality varies even within the Shetland Islands and it is well known the softest wool is produced on the damp moor pastures. Wool from sheep in North Mavean traditionally is considered to be the finest.”

“There is no doubt that foreign blood has been introduced into the native sheep stock of the Shetland Islands from time to time and that many of the sheep carry varying amounts of this blood . . .”

1978/1979 (ad in paper is dated for a Feb 1979 show)

“The structure of the Shetland fleece was suited to the traditional woolen industry. The wool was of high quality, being up to (cut off print) the Bradford count, but at the same time some of the fibres were coarser thus giving greater strength to the final product. The staple length is 3-4 inches.”

“The Shetland is a small sheep. Adult ewes weigh about 80 lb. Ewes are hornless but rams have smooth, light, rounded horns. The profile of the face is straight, or may be slightly ‘dished’. The ears are small and alert. The wool is found in a variety of colours, . . .”

1980 Breed of the Month

“Dickson’s wise counsel given 135 years ago is as relevant now as it was then. He stated that “some of the wool is so fine as almost to resemble silk and none in the world is of such fine texture . . . No question can, therefore, arise as to the propriety of keeping the present breed quite pure.”

March 1982

Shetland Sheep and wool by Dr. M. L. Ryder.

“The more recent sequence in hand processing in Shetland involved prior sorting into the different colours as well as into coarser qualities for tweeds and finer sorts for knitting yarns. In hairy varieties such as the Foula hardback, the coarsest part was the neck, since these animals had a mane, but in the woolly variety the neck

wool is the finest and this was kept for lace shawls.”

March 1983

Shetland Sheep by H.M.S. Bowie and Dr. S.H.U. Bowie

“In Shetland, support recently given by the Shetland Islands Council to encourage the breeding of top quality rams is also likely to go some way to fulfilling the aims of the Shetland Flock Book Society, which was established in 1927.”

“The main reason for this article is that in discussions with owners of Shetland sheep, most admit that they have little knowledge of the conformation of Shetland sheep and do not understand what Mr. Rosenberg (RBST) meant when he said he was trying to achieve ‘the ultimate in Shetland characteristics’ (Urquhart, 1981). Shetland sheep have evolved in the Island over a millennium or more and have become fully established as a breed with unique characteristics.

In understanding the present day status of Shetland sheep it is important to realize first of all that the majority of the sheep of Shetland are still of the Shetland breed. Crossing has taken place over a hundred years or more with other breeds, including Cheviot, Blackface, Southdown, Border Leicester and Merino.”

“This means that the typical Shetland sheep is to be found more on the west and north of the islands than on the more sheltered east. Nevertheless, on most hill land, evidence can be seen of characteristics which are atypical of purebred Shetlands. The most obvious is a broadening and lengthening of the tail, which today almost certainly means the use of a Cheviot ram to increase carcass weight.”

“Shetland sheep, like the Soay to which they are related, shed their fleeces annually. Their wool is of soft texture with a Bradford count of up to 60, which is not excelled in any other British breed. The fleece is composed of wavy, close bunched fibers of average staple 8 cm (~3 ¼”). Average weight is 1 kg (2.2 lbs).”

“White sheep number many thousands, but all other coloured varieties can be considered ‘endangered’ as defined by the Rare Breeds Survival Trust. In other words, there are less than 1500 breeding females, while for some of the older types, such as the catmogit, there are probably fewer than 100. It is important to maintain the unique range of colours available, but in so doing every encouragement should be given to breeders to maintain ‘the ultimate in Shetland characteristics’. This should be done not because the breed is at risk, but because it must be one of the most interesting and rewarding to keep anywhere in the British Isles.”

Sept. 1984

Shetland Sheep in Canada by Col. Dailley (this is in a NASSR/A news)

July 1989

Multihorned Shetland sheep by Dr. S.H.U. Bowie

June 1987

Shetland's Native Farm Animals by Dr. S.H.U. Bowie (this is in a NASSR/A news)

“The fleece is composed of wavy close bunched fibres (staples) of average length 5 to 10 cm (2-4”) which ideally should have 4 crimps per cm (9 to 10 per inch). The average weight of a fleece under Shetland hill conditions is 1 kg (2 lb), but in the case of park fed animals could be up to 1.5 kg (3 lb)”

“Sixty years ago there were many sheep of both sexes with hair along the middle of tier backs, from head to tail, and sometimes so thick on the neck as to form a mane. This is known in Shetland as ‘scadder’ and as Dickson stated it is not shed at the same time as the wool. It remains after the sheep has been rooed and acts a sa

protection against heavy rain and gradually falls out as the new wool grows. Sheep with scadder were already being bred out early this century and, as shearing has replaced rooing, wool and hair get mixed so reducing the quality of the fleece. This has resulted in such animals becoming quite rare.”

“At the end of the 19th century sheep with scadder were regarded as the ‘oldest type’ and were almost certainly the dominant variety referred to by the Highland and Agricultural Society in 1790. Their gradual breeding out took place mainly under the influence of Shetland spinners and knitters who favoured the fine-wooled animals . . .”

Nov 1988 – Front cover picture

January 1990

The Shetland Sheep Story by Dr. Stanly Bowie, chairman of the SSBG and Alastair Dymond, Chief Executive of the RBST, explain the background and significance of the exciting step into independence for the Shetland sheep.

“It was agreed that the group would operate to the breed standard set by the Shetland Flock Book Society in 1927 . . .”

“The main objective of the group is to assist mainland breeders to maintain flocks that conform to the breed standards and at the same time to preserve the many colours and markings that are characteristic of the breed.’

“Another, and very important, aim is to assist breeders in appreciating wool quality – for which the breed is famous – and to enable them to estimate wool fibre diameter rather than make subjective judgments of Bradford Quality Number, or wool handle.”

“It is realized that many of the sheep that have come from the Islands may not be purebred, and in order to improve the quality of flocks, a rigorous system of ram inspection has been implemented.”

“This sheep offers an almost unique combination of potentially commercial attributes: supreme wool (the finest wool of any indigenous breed); coloured wool (spinners and weavers appeal); commercial fat lamb production when crossed with finishing rams and “explosive hybrid vigor”

November 1990

Shetland wool characteristics by S.H. U. Bowie (this is reprinted in NASSA documents)

Online Information

British Wool characteristics

(per British Wool Marketing Board) pg 136-137

Shetland

Fineness: 56-60

Avg fleece wt: 2-3 lbs

Avg length of staple: 4”

Main Uses: Specialty Shetland yarns

A Survey of European primitive breeds of sheep

M. L. Ryder

Ann. Genet. Sel. Anim., 1981, 13 (4), 381-418

M. L. Ryder – is a scientist who puts ancient Shetlands in the woolly (generalized medium wool) and medium hairy sheep types. For comparison, he puts the Scottish Blackface in the long hairy type. He did several decades of work classifying sheep and wool. Listed below are in the 1960-1990 range.

Medieval Sheep and Wool Types

M.L. Ryder

Perth 12th- 14th cent

There were four unspun wools from Perth comprising one hairy medium fleece 25 mm (1 in) long, and three hairy fleeces, two of which were 40 mm (1.6 in) long, and the other 60 mm (2.4 in) long. These lengths are the same as found among staples from Baynard's Castle, London, but are shorter than the modern woolly Shetland fleece, and only half the length of hairy Shetland wool.

Rare Breeds and the Fleece Evolution of British Sheep

M. L. Ryder

A.R.C. Animal Breeding Research Organization, Edinburgh, Scotland

Pg 120-129

In depth paper on wool types.

British medieval sheep and their wool types

ML Ryder

“The white-faced, horned, hill group tends to comprise old breeds that are horned in the rams only. The wool is generally coarse, but not hairy. The Shetland breed is the most primitive member of this group and has a finer fleece.”

Oliver Henry, wool classer at Jamison and Smith Wool Brokers, Lerwick Shetland

Their wool is most distinctive, being of a very fine fibre quality (prone to tenderness because of climatic and feeding conditions), a very soft silky handle (feel). Being a small animal the fleece only weighs 1 - 1.5 Kilos on typical hill ground, but can increase in weight on a richer, greener pasture. Staple length is approximately 10 cm, with usually a wavy tight crimp.

In the Shetland Proceedings 2000 (page 28):

“ . . . 1920, J W M’Gillivray noted that in one area of Shetland where it was claimed were the hardiest of Shetland sheep crofters systematically crossed with a Blackface once every seven years breeding back to pure bred Shetland tups during the intervening period. He suggested that Shetland sheep could be very much improved by selection and better feeding without crossing and recommended the setting up of a flock book. In M’Gillivray’s view the purest of Shetland sheep were to be found in the West Mainland and in the North Isles.”

NASSA News Oct 2009 issue, Dr. S.H.U. Bowie

“When I discussed the appearance of double coated sheep in the USA with Benjie Hunter, his view was that the most likely reason for this happening was due to them being throwbacks from earlier crossing with Scottish

Blackface sheep as the ewes all came from the Nesting district (mid-East side) where much crossing had taken place in the past.”

Bibliography

- Balneaves, E. (1977). *The Windswept Isles: Shetland & Its People*. Great Britain: Butter & Tanner.
- Berry, R. J., & Johnston, J. L. (1980). *The New Naturalist; The Natural History of Shetland*. London, England: Collins.
- Christman, C. J., Sponenberg, D. P., & Bixby, D. E. *A Rare Breeds Album of American Livestock*.
- Cluness, A. T. (1978). *The Shetland Book*. Shetland Times Limited.
- Fenton, A. (1978). *The Northern Isles: Orkney and Shetland*. Edinburgh, Scotland: John Donald Publishers Ltd.
- Hogg, G. (1961). *The Far-Flung Isles: Orkney & Shetland*. London, England: Robert Hall Ltd.
- Knox, S. A. (1985). *The Making of the Shetland Landscape*. Edinburgh, Scotland: John Donald Publishers Ltd.
- MacDiarmid, H. (1939). *The Islands of Scotland*. London, England: B.T. Basford Ltd.
- McKinley, M. (1929, March 8). *Shetland Sheep and Shetland Hosiery, A Glimpse into an Interesting Industry. Town and Country News (Shetland Archives)*, p. 92.
- Nicolson, J. R. (1978). *Traditional Life in Shetland*. London, England: Robert Hale.
- Schei, L. &. (1988). In *The Shetland Story* (pp. 136-145, 149-151). London, England: DJ Batsford Ltd.
- Starmore, A. (1988). *Book of Fair Isle Knitting*. Mineola, New York: Dover Publications, Inc.
- Tudor, J. R. (1883). *The Orkneys and Shetland; Their Past and Present State*. London, England; Kirkwall; Lerwick, Shetland: Edward Stanford.
- William Moffatt, F. (1934). *Shetland: The Isles of Nightless Summer*. London, England: Heath Cranton Limited.