

THE INTRODUCTION OF CATTLE INTO COLONIAL NORTH AMERICA*

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The scarcity of data relative to the first importations of cattle into Colonial North America has lent obscurity to one of the most interesting phases of early American husbandry. In fact this paucity and incompleteness of information dealing with the introduction of cattle into what is now the United States of America has led many authors in the field of animal and dairy husbandry to an almost studied disregard of this primary stage in the development of our national livestock industry. When it is considered that the foundations of cattle husbandry were laid in every one of the thirteen original colonies and in the south and southwestern part of our present United States before any appreciable progress had been made in the systematic improvement of cattle in England and Continental Europe, the question of where our foundation animals came from should be of more than passing interest. Allen (2) in 1890 in his work, **American Cattle**, dealt briefly with colonial cattle importations. Bidwell and Falconer (6) in 1925 and Gray (25) in 1933 in their general histories of agriculture in the United States to 1860 have presented a considerable amount of information relative to early importations. It was with the hope of assembling, in one body, additional information on the introduction of cattle into Colonial North America that this review of literature was undertaken.

It is quite apparent that Colonial Americans were so busy making economic history that they failed to write sufficiently about it. Authentic records were, in many cases, incidental and are found in several fields. This has increased the difficulty of presenting data that are both complete and accurate. Quotations have been offered frequently in order that a better picture might be had of the actual conditions and circumstances surrounding many of the colonial cattle raising undertakings. It is hardly necessary to point out that this review of literature is incomplete. It is offered at this time, however, with the thought that it may be of some assistance to the teachers of courses in dairy cattle history.

During the period of discovery and colonization there were four possible paths of introduction of cattle into what is now the United States of America. First, from the West Indies to any portion of the Atlantic and Gulf of Mexico coast line. Second, from Mexico into southwestern areas and California. Third, from the French colonies of the St. Lawrence Valley into

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the area of the "Old Northwest." Fourth, directly from the colonizing European nations to the American colonies. Historical evidence supports the belief that all of these paths of entry were used.

INTRODUCTION OF CATTLE BY THE SPANISH

Encouraged by the glowing reports carried back to the Old World by Columbus in 1492, the Spanish throne decided to colonize the New World at once. To this purpose Columbus made a second voyage in 1493, carrying with him besides colonists, a large variety of agricultural seeds and plants, and the first shipment of domestic livestock destined to inhabit the New World. "Besides a few horses for cavalry service there were carried for breeding purposes mares, sheep, heifers and other animals. Vegetables, wheat, barley and other cereals were not forgotten nor the vine and fruit trees. All kinds of tools, too, that would be needed in a colony were included. At the Canary Islands they added to their stock calves, she-goats, ewes, pigs, chickens, seeds of oranges, lemons, and other garden plants, and most of all, sugar cane" (37). It was necessary for Columbus to carry these things to the new lands for, though "gloriously rich in some aspects of nature, the New World was notably poor in food plants and domestic animals" (8).

Whether the attempts to develop an animal industry in the New World were at once successful is not known. Because of the small size of sea-going ships during the sixteenth century, it is entirely possible that only a small number of cattle, or more correctly "neat cattle," were brought over at first. As the first shipment was made up of heifers and calves, it can be concluded that for the first few years there could not have been a large number of cattle for slaughter. Although we have no information that would lead one to believe the Spanish were large consumers of beef or dairy products, yet there was an immediate need for cattle above the numbers taken over, and their increase. In an attempt to fill this need, Columbus, in 1494, urged the Spanish King and Queen to authorize contractors to deliver to the new country cattle and beasts of burden annually, for which they might be paid by giving them Indian slaves (53). Whether or not this recommendation of Columbus' was adopted and followed to any great extent, we do not know. By 1512, however, stock-raising had become a fixed industry in the West Indies (8), and considerable numbers of cattle were being raised.

The Spanish took cattle from one island to another in the West Indies until they became quite common in the eyes of voyagers who had occasion to stop from time to time. Hakluyt (28) in relating the voyage of John Hawkins to the West Indies in 1565 said "The tenth day (of March) at night we departed from thence (the first island seen) and the fifteenth had sight of nine islands, . . . and the sixteenth of an island, called Margarita,

where wee were entertayned by the alcalde, and had both Beeves and sheepe given us. . . ." During this same voyage "The sixth of May aforesaide, we came to an yland called Curacao. . . . In this place we had trafique for hides, and found great refreshing both of beefe, mutton and lambs, where of there was such plentie, that saving the skinnes, we had the flesh given us for nothing. . . ."

"The increase of cattell in this yland is marveilous, which from a doozen of each sort brought thither by the governour, in 25 years he had a hundreth thousand at the least & of other cattel was able to kill without spoile of the increase 1500 yeerely, which he killeth for the skinnes, and of the flesh saveth only the tongues, the rest hee leaveth to the foule to devoure. And this I am able to affirme, not onely upon the Governours own report, who was first to bring the increase thither, which so remaineth unto this day, but also by that I saw my selfe in one field, where an hundred oxen lay one by another all whole, saving the skinne and tongue taken away. And it is not so marveilous a thing why they doe thus cast away the flesh in all the ylands of the West Indies, seeing the land is great, . . . the people fewe, having delicate fruites and meates ynough besides to feede upon, which they rather desire, . . . : for in S. Domingo an yland called by the finders thereof Hispaniola, is so great a quantitie of cattel, and such increase thereof that notwithstanding the daily killing of them for their hides, it is not possible to asswage the number of them, but they are devoured by wilde dogs, . . . that they eate and destroy 60,000 a yeere, and yet small lacke found of them."

These quotations give the impression that the cattle taken by the Spanish adventurers into the New World possessions were primarily for the purpose of furnishing hides, with beef tongues as a secondary consideration, or what might be termed a by-product of the hide-producing industry. In fact, hides seem to have been one of the leading export articles, not only of the West Indian Islands but of sixteenth century Mexico. More than one reference is made by Halkuyt to the hides produced, and to the Spanish dairies of Mexico. While these are perhaps the earliest references to dairies in the New World, the places referred to were probably not dairies but cattle ranches. Due to the fact that dairies existed as agricultural enterprises in England at that time, the English narrator probably used the term he associated with herds of cattle, without thought as to the marketable product produced.

In 1572 the cattle business was flourishing in New Spain (Mexico) and it is written that one man had 20,000 head (27). Hides were the chief source of income, but a certain amount of tallow was shipped. Oxen were used at this date to haul goods, some of which was transported 700 miles.

Sir Walter Raleigh's expedition, under Sir Richard Grenville, to the Atlantic coast of the New World stopped at Hayti in 1585 where it was

entertained by the Spanish (27). "Which banquet being ended, the Spanish in recompence of our courtesie, caused a great herd of white buls and kyne to be brought to gether from the mountaines, and appointed for every Gentleman and Captaine that would ride, a horse ready saddled, and then singled out three of the best of them, to bee hunted by horsemen after their manner . . . the next day wee played the Marchants in bargaining with them by way of trucke and exchange of divers of their commodities, as horses, mares, kine, buls, goates, swine, sheepe, bull-hides, sugar, ginger, pearle, tabacco, and such like commodities of the Ilands."

The reference made by the English visitors regarding the cattle on Hayti gives proof that the early English colonists had knowledge of the West Indies as a source of cattle. The fact that this group of colonists purchased cattle and other classes of livestock on this island may justify the statement that the first livestock brought to the eastern coast of North America by the English was of Spanish origin. As this group of colonists, who landed on Roanoke Island, was mysteriously lost, the history of this importation of livestock must remain unwritten forever. In 1616 the English who settled on Summer Isles, or the Bermudas, purchased cattle for their plantation from the Spaniards in the West Indies (50).

In 1539 cattle were taken from Mexico into the present boundaries of the United States (38) and in 1541, 500 cows were taken across the Rio Grande by Coronado. As early as 1598 a large number of cattle, 4,000 in fact, was taken from New Spain, or Mexico, into what is now New Mexico by Don Juan de Oñate (20). The town of Santa Fe was established in 1609 and the cattle business was planted firmly in that section of the country. In 1769 cattle were taken from Mexico into what is now the state of California, by Serra and Portolá (31), and these were the nuclei for large herds that showed the influence of Spanish ancestry for many, many years.

It seems evident that by this time the cattle had become so numerous in the Spanish possessions in the New World they had no monetary value except as a source of hides and perhaps as a means of sport. This, of course, was exclusive of their value as beasts of burden. No references have been found that would indicate that the Spanish in the West Indies were users of dairy products or eaters of beef, although they seemed to esteem the flesh of swine, and kept large droves of them. From the Cabeza (33) description of the American bison and a comparison with the Spanish cattle of that day, the latter must have been rather large animals with long, heavy horns, and comparatively coarse flesh.

Cattle were taken into Florida by the Spaniards about the time the first permanent settlements were effected. In volume one of the **Colonial Records of Spanish Florida** (14) much evidence is presented concerning the first importations of cattle into Florida. These cattle were shipped from the Spanish islands of the West Indies, and apparently were kept on islands

along the coast of Florida. This was necessary because of the difficulties which arose with the Indians. Since these islands were not very productive, and since hostile natives prevented extensive crop cultivation, the raising of cattle was a difficult task. It was not until conditions permitted the production of cattle on the mainland that the cattle population reached significant numbers.

It is evident that among the inducements offered the colonists was the promise of livestock, for in 1576 dissatisfied colonists who wished to return to Spain claimed that they had not been given the cattle of all kinds that had been promised them, including "Twelve head with the bull." That the cattle were taken into Florida previously, however, there can be no doubt as the following evidence which grew out of an investigation made in Madrid by Licentiate Gamboa on matters concerning Florida will show.

"On being asked what kinds of cattle, large and small, the said Adelantado brought to the said province, and how he divided it up, to whom he gave it, and under what conditions: this witness said that he remembers that the first year he brought a certain number of cows, mares, hogs and goats, and he thinks there were sheep likewise; whereof the goats and sheep were eaten and consumed, and the Indians killed the hogs. He also knows and saw that the said cows and all of the mares were consumed and eaten by the soldiers and the other people without anything remaining; and this witness knows and saw that afterwards the said Adelantado again brought to the said country a quantity of cows and hogs, and he knows not how many; and they multiplied and there was stock raising in the land, especially in hogs." The date of this inquiry was February 5, 1573. This witness had gone to Florida six years before, and if cattle were taken at that time the approximate date would have been 1567.

A second witness who claimed to have gone from Spain to Florida in 1566 testified as follows: "At the beginning, which was about two years after this witness went there, as many as twenty horses and mares were brought, and twelve cows, forty hogs, thirty goats and a few sheep, which were all consumed and eaten because of the famine and want that occurred; and the Indians killed the hogs. Afterward the said Adelantado again stocked the land, with eighty cows, one hundred hogs, and another hundred in Santa Elena, and about twenty goats; which was all for the Adelantado, and none of it had been distributed; at least this witness does not know it."

Another witness who had gone to Florida about 1566 testified as follows: "As soon as he arrived in the land, he saw there cows, mares, goats, hogs and sheep; but that he does not know the number, not how they were apportioned, further than that, in the straits they were in, everything was eaten, and the Indians killed and ate the hogs."

Since many of the first colonists were placed in or about the fort on the island of Santa Elena they complained bitterly because of the lack of agri-

cultural possibilities, and the extreme difficulties in growing livestock. Even at St. Augustine the farming opportunities were limited, partly because of the insects and partly because of a scarcity of suitable feed.

When one witness was "Asked if there are in the country any cattle and vegetables wherewith the said people can sustain themselves, he said that in St. Augustine there were left fifteen or sixteen mares and ten or twelve cows; that the said cattle cannot sustain themselves because the mosquitoes eat them and the Indians kill them; . . ."

From these testimonials it is evident that the establishment of the cattle industry in Florida was accompanied by many difficulties.

The cattle brought into Florida were, without doubt, from the Spanish West Indies. With an abundance of cheap cattle so close at hand it would have been out of the question to ship them from more distant points. Cattle from the West Indies also found their way into South Carolina (25).

The influence of the cattle of Spanish origin on the characteristics of the cattle of Southern United States has never been appreciated fully by most students of livestock history in this country. When it is remembered, however, that all of the first cattle introduced into the southwest, and into Louisiana and Florida, were of Spanish origin and that large numbers of this type of cattle were introduced into practically every coastal colony, it must be admitted that the early influence of Spanish cattle was indeed great. One of the main reasons why native cattle in the South differ somewhat in conformation and utility from those in the North may be attributed to the original Spanish cattle in the southern part of the United States. The large numbers of cattle found in Florida in the early part of the eighteenth century as pointed out by Gray (25) lend further weight to the belief that Spanish cattle contributed an influence to our present day cattle that should not be minimized.

INTRODUCTION OF CATTLE BY THE FRENCH

The French, who made their first permanent settlements along the St. Lawrence, brought cattle to the American Continent as early as the middle of the sixteenth century. Cartier, when he sailed on his second voyage to the New World in 1541, had with him cattle, goats, hogs and other beasts. These were taken for breeding purposes in the new country (21). While this may have been the first introduction of cattle into the St. Lawrence watershed, yet it is apparently a fact that cattle were taken into that part of the world even before Cartier made his second voyage. When Sir Humphrey Gilbert reached St. Johns, Newfoundland, in August 1583 he learned from a native of Portugal that over forty years before some Portuguese had placed on Sable Island both neat cattle and swine for breeding purposes, and that these animals had increased greatly in numbers. The informing Portuguese claimed to have been present when this project was accom-

plished (21). Other historians (45, 54) have mentioned these cattle but their explanations are that these cattle had escaped from a wrecked Spanish or Portuguese ship. It is entirely possible that these animals may have been placed on Sable Island by the Portuguese since their presence there would constitute a distinct aid, from the standpoint of food, to Portuguese fishing vessels. Parkman (45), however, cites evidence that "in 1518 the Baron de Léry made an abortive attempt at settlement on Sable Island, where the cattle left by him remained and multiplied."

In regard to these same cattle on Sable Island Governor Winthrop of Plymouth (54) recorded on June 24, 1635, the following interesting account: "Mr. Graves in the **James**, and Mr. Hodges in the **Rebecka**, set sail for the Isle of Sable for sea-horse (which are there in great numbers) and wild cows. Mr. John Rose, being cast ashore there in the (*Mary and Jane*) two years since, and making a small pinnace of the wreck of his ship, sailed thence to the French upon the main, being thirty leagues off, by whom he was detained prisoner, and forced to pilot them to the island, where they had great store of sea-horse teeth, and cattle, and store (of) black foxes; and they left seventeen men upon the island to inhabit it. . . . He saw about eight hundred cattle, small and great, and many foxes, whereof some were perfect black." On August 26 of the same year Winthrop wrote: "They returned from their voyage. They found upon the island sixteen Frenchmen, who had wintered there. . . . They had also killed many of the cattle, so as they found not above one hundred forty, and but two or three calves."

The French came to North America primarily to trade. Trapping for furs and trading with the Indians proved so remunerative that a permanent type of agriculture had little appeal. For several years the cattle that were kept supplied only some of the necessities of diet and had little commercial importance. Later, with the coming of the Jesuits, who had visions of a more self-sufficing New France, more attention was given to agriculture and stock-raising.

The first cattle brought into Canada by the French probably were of the type common to Brittany, for Cartier sailed from that region of France (45). Sanders (49) has written that "in 1620 a few cattle were landed at Quebec, and in 1665 Messers. Tracet and de Courcelle brought from France a small shipment described as black and brindle in color. These early selections were from Brittany, Normandy, and probably from the Island of Jersey, and their descendants to this day are not unlike the darker Jerseys in coloring." The present French-Canadian breed of cattle undoubtedly descended from the French types brought over by the early colonists.

The Jesuits, and the colonists who followed the paths of the religious trail blazers, brought cattle from the St. Lawrence Valley into the middle west. This did not occur until many years after the English and Spanish

had brought cattle to the Atlantic seaboard, but as foundation animals they exerted an influence on the early cattle of our present cornbelt area. Parkman (44) presents evidence which indicates that as early as 1649 the French had "fowls, swine, and even cattle" at Sainte Marie near the waters of Georgian Bay. Colonization occurred later at Detroit, and the area round about became populated, first by dependent Indians, followed by traders, and later by farmers and stock raisers. Carrier (13) points out that cattle were taken to Kaskaskia in 1712, and that Charlevoix, in 1721 found thriving settlements at these places with droves of "black cattle."

The first cattle that were taken into the lower Mississippi Valley by the French were, in most cases, of Spanish origin. In 1701 Iberville stopped at San Domingo and took on horses, cattle and swine for the new colony (Mobile) in Louisiana (29). On his first trip he had brought "a small number of bulls, cows, hogs, poultry, and turkey" (32). In 1703 four oxen were sent for in Havana (36). In 1704 there were 9 oxen, 14 cows and four bulls, and by 1708 there were 50 cows in milk, 40 calves, four bulls and 8 oxen (29). Cattle increased slowly in the French colony and many efforts were made, some which were successful, to obtain cattle from the Spanish islands near by. By 1724 there were 1100 cows, and 300 bulls in the colony (36), and by 1746 it was estimated there were 10,000 head of cattle in Louisiana (25). Here again the heavy influence of Spanish cattle in Colonial America must be acknowledged.

Hamilton in his book **Colonial Mobile** (29) has assembled much interesting information relative to the cattle population in the vicinity of that city. For example, he notes that in 1766 "there are from the highest to the lowest, on the east side of the Bay of Mobile, seventeen plantations, thirty-nine white men who can bear arms, thirty-two negroes of which twenty-nine are men grown, twenty-one women and children. In all, 124 souls and 2280 head of cattle." In another place he records that a man writing from Mobile in 1812 stated that he has "about 30 head of cattle and hundreds of hogs, the hogs wild." He also wrote that the cattle and hogs did well on his land with no expense. In 1814 when Andrew Jackson took over the territory in the vicinity of Mobile Bay, "There were a great many cattle east of the bay, the property of the Mobilians." This was the same area in which the census of 1766 revealed 2280 head of cattle. In the hundred years since Iberville first took cattle into that territory they had indeed made a very great increase. Similar development in cattle raising had taken place throughout the Gulf area before it became a part of the United States.

INTRODUCTION OF CATTLE BY THE DUTCH

While the English were colonizing Virginia and Massachusetts, and the Spanish were founding settlements in Florida and at Santa Fe, the Dutch had not been idle. In 1609 they established a trading post on the present site of Albany and by 1621 the settlement on Manhattan was started.

Four years elapsed before cattle were imported, but in **Narratives of New Netherlands** (52) it is stated that in November 1625 a ship arrived, and after unloading passengers "the cattle carried thither were removed upwards to a convenient place abounding with grass and pasture. Only two animals died on the passage. This gave great satisfaction to the freighter, who had managed the transportation so neatly."

The success of the first shipment of cattle led to further development along this line and by 1626 the colony had "increased to two hundred souls; and afterwards some ships, one with horses, the other with cows, and the third with hay; two months afterwards a fly-boat was equipped to carry sheep, hogs, wagons, ploughs and all other implements of husbandry. These cattle were, on their arrival, first landed on Nut Island, three miles up the river, where they remained a day or two." These cattle were taken later to Manhatas. "Being put out to pasture here, they throve well, but afterwards full twenty in all died. . . . But they went in the middle of September to meadow grass, as good and as long as could be desired" (52). By this same authority it was pointed out that the West India Company of New Netherlands agreed to transport cattle free of charge for those patrons who were founding colonies.

The few details available relative to the importations of cattle into New Netherlands might indicate that relatively few were imported directly from Holland. On the other hand the importations of these animals may have been such a common occurrence that they did not elicit comment from the Dutch historians. Nevertheless, cattle played an important role in the agriculture of New Netherlands.

Under the early Dutch system of colonial agriculture "the Company furnished the farmer a house, farming implements and tools, four horses together with four cows, sheep and pigs in proportion, the usufruct and enjoyment of which the husbandman should have during six years, and on the expiration thereof, return the number of cattle received. The entire increase remained with the farmer. The farmer was bound to pay yearly 100 guilders and 80 pounds of butter rent for the cleared land and bowverie" (43). Here we see the strong influence of the homeland occupations guiding the colonists in the choice of a livelihood and a medium of exchange. In Virginia tobacco was used for money. In New England debts could be paid in terms of cattle. To the dairy-minded Dutch, however, the giving up of their cows was like surrendering ownership of the mine from which the gold is taken; and so they kept the cows and paid their rentals with butter.

About 1640 a war broke out with the Indians. Before this conflict ended the Dutch had lost a great many of their cattle at the hands of the Indians, and it was several years before they recovered from this loss. In 1650 a resolution by the States General forbade the exportation of cows

from the colony except by permission of the Council. In that same year, however, Cornelis van Tienhoven, secretary of the colony wrote (presumably in Holland) "Cattle, such as horses, cows, hogs need not be sent from this place, in consequence of the great expense, as they can be got at a reasonable price from the Dutch, and principally among the English, who have plenty of them" (43). This would indicate at least a partial recovery from the losses suffered during the Indian war, and it would also point definitely to the fact that the Dutch and English were on trading terms.

"Prior to the end of the Dutch regime, Long Island had been settled rather extensively with English farmers from New England and had become quite heavily stocked with cattle. Johnson gives 1640 as the date of the beginning of the English settlements on Long Island, but that was the date a church was organized. There were apparently individual settlers there a few years earlier" (13). This authority does not give the source from which the cattle came. They may have been from New England or Virginia, or they may have been purchased from the Dutch at New Amsterdam; for it is known that the Dutch and English carried on inter-colonial commerce (9). Denton (17), however, states "The Island is plentifully stored with all sorts of English cattle" and this would lead one to believe that most of the cattle were purchased from the English colonies.

The growing tendency of the English cattle to dominate, even within what the Dutch considered their own boundaries, is shown in a report of the conditions existing in 1649 within the Dutch limits as far East as Stamford. ". . . their cattle, including cows and horses, are computed at thirty thousand; their goats and hogs cannot be stated. . . ." Also, "Flushing, which is a handsome village and tolerably stocked with cattle; the fourth and last isheemstee, which is superior to all the rest, for it is very rich in cattle" (43). A reason for the trend towards English cattle is contained in this paragraph from a report, written in 1649, on conditions in New Netherland. "The domestic cattle are here in size and other respects about the same as in Netherland, but the English cows and swine thrive and feed best, yea, appear to be better suited to this country than those from Holland; they require also less trouble, expense and attention, for it is not necessary to look so much after the inferior stock, such as swine, in winter; but if done in some sort, whenever there is deep snow, t'will be so much the better. Milch cows, also are much less trouble than in Holland, for, most of the time, or when necessity demands, a little hay is only occasionally thrown to them" (43).

The influence of Dutch cattle in New Jersey is indicated by the following quotation. "When the English gained control in 1665 and undertook systematically to settle that part of America, East Jersey was already stocked with excellent horses and cattle, the original breeds coming from Holland and Sweden. It was early discovered that the improved animals

from the continent did not stand the adverse conditions of those early days as well as did the less improved English breeds. For that reason many animals were purchased in New England and brought to New Jersey. The crossing of the two strains gave a good general purpose breed" (13). Here is a direct inference that the cattle of Holland and Sweden were of higher quality and accustomed to better treatment than the English cattle. It is inferred also that of all the different nationalities that colonized on the North American continent the Dutch were superior in the field of animal husbandry. The English coming into New Jersey were willing to lose the higher production possibilities of the Dutch cattle rather than improve their own husbandry practices to the point where the Dutch cattle might have compensated them for their efforts. At such a price was a low level of production purchased as a foundation for many generations of American dairy cattle! That the good qualities of the Dutch and Swedish cattle were not all lost, however, is carried in the following description of the cattle belonging to John Bartram about 1750 as it was recorded by William Darlington (16). "His cows were then returning home, deep-bellied, short-legged, having udders ready to burst; seeking, with seeming toil, to be delivered from the great exuberance they contained."

It is unlikely that any cattle were imported directly from England as a basis for the early animal husbandry of New Jersey.

IMPORTATIONS BY THE SWEDES

Sweden's only attempt at colonization on the Atlantic coast was in 1638 (24). But it was not until 1640 that immigrants from Stockholm arrived with "cattle and implements of husbandry" (23). They settled in what is now the state of Delaware. Previous to this, in 1631, a Dutch ship, with colonists and cattle, had arrived on the Delaware river and a settlement was established, but it was destroyed by the Indians. Later cattle were imported from New Amsterdam and near-by territory and it is quite possible that cattle were purchased from the English in Virginia. At least this was suggested in the report of Governor Rising in 1654 (41). Although the Swedish influence as a colonial power lasted but a short time the influence of Swedish cattle was felt for a great many years. The people who came later into what is now Pennsylvania were glad to obtain good cattle from the Delaware Counties.

INTRODUCTION OF CATTLE BY THE ENGLISH

Although the quest for gold was the primary stimulus for English and Dutch explorations in the New World, they were willing to accept rich, productive land as a substitute for the precious metal. After the realization dawned that gold could not be dug out of every hill of the western hemisphere, groups in these respective countries turned their thoughts to the

serious consideration of colonization. Sweden, who wanted a home-made market for manufactured products, also decided to try her hand at colonization. So, at the beginning of the seventeenth century we find the zone of exploration, conquest and colonization shifting from the torrid to the temperate zone, and the white heat of the gold quest giving way to deliberate plans for the expansion of empires.

The first English colony was founded in 1607 at Jamestown in the present state of Virginia. By 1609 the colony was fairly well stocked with poultry, swine and sheep, and a few horses had been brought over. According to Captain John Smith (50) it was not until May 10, 1611, however, that cattle were first brought over from England. He also states that the next year, 1612, six ships bringing 100 "kyne" with other cattle arrived about the first day of August. While May 10, 1611, is the first date mentioned by Smith for the landing of cattle, Lord Delaware (47), who left the colony before the arrival of the ships on May 10 of that year stated in his *Relation* that "The cattell already there are much encreased, and thrive exceedingly with the pasture of that Country: The Kine all this last Winter, though the ground was covered most with snow, and the season sharpe, lived without other feeding than the grasse they found, with which they prospered well, and many of them readie to fall with Calve; Milke, being a great nourishment and refreshing to our people, serving also (in occasion) as well for Physicke as for Food, so that it is no way to be doubted, but when it shall please God that Sir Thomas Dale, and Sir Thomas Gates, shall arive in Virginia with their Extraordinary supply of one hundred Kine and two hundred swine. . . ."

There seems to be a discrepancy of one year's time between Smith and other chroniclers as to the exact date of the arrival of the first importation of domestic cattle into Virginia. It is possible that Delaware could have been mistaken were it not for the date of publication of his paper. Smith may also have been in error as to the date of the arrival of the six ships with 100 kine. He gives this date as August 1, 1612, while the records of Delaware (47), Hamor (30), and William Simmonds (40) indicate the date to have been 1611. Since these last three authorities wrote independently it is natural to conclude that they had the date listed correctly. If Delaware was correct in his statement that cattle were in Virginia before 1611 then we must conclude that the first importation was made in 1610.

Here it should be pointed out that there is some difficulty in distinguishing cattle from other domestic animals, when one is gleaning information from available literature. The terms "cattle," "cattell," or "cattel" were quite often used by early writers to include all kinds of domestic farm animals. Those of the bovine species were distinguished, quite often, from the others by the terms "neat," "horned," or "kyne."

The fact that the first colonists valued their animals highly is indicated

by the fact that they made careful preparation for their security and protection (50). The first cow stable was erected in Virginia in 1611 at the direction of Governor Dale (11).

Under the rule of Governor Dale the colony was brought to a fair degree of prosperity. In order to encourage the immigration of colonists certain very definite inducements were extended. Hamor (30) wrote regarding each colonist: "he shall be furnished with necessary tooles of all sorts, and for his better subsistence he shall have Poultry, and swine, and if he deserve it, a Goate or two, perhaps a cow given him." Although this livestock was loaned and not "given," this liberal policy on the part of Governor Dale was conducive to the rapid increase of livestock in Virginia, and the large number of domestic animals available was one of the chief inducements to families to come to America (1). That the preservation of the livestock was of greatest concern to the Plantation is shown in one of the provisions of the Martial Code enforced by Governor Dale. "No man shall dare to kill or destroy any bull, cow, calfe, mare, horse, colt, goate, swine, cocke, henne, chicken, dogge, turkie, or any tame cattle or Poultry of what condition soever. . ." (11).

Little is written about the special uses of cattle during the early days of the Virginia Plantations. It is known, however, that they were used as draft animals, for in 1614 Hamor (30) indulged in the hope that the following year three or four plows would be set to work, there being a sufficient number of steers at that time to draw them. Smith (50) in 1619 wrote of the need for men who could build and make carts and plows, and for skillful men who could train cattle to draw them. Mention is also made of the fact that in 1622 Captain Nuse shared with the starving members of the Colony his own portion of milk and rice, indicating the use of milk as a food for adults as well as for children.

In spite of the great interest in livestock, however, cattle seem to have multiplied slowly. By 1616 there was a total of only 144 head of cows, heifers, heifer calves, steers and bulls in Virginia (48) and in 1617 the number had decreased to 128. Argall, the Governor, sought to obtain an ample supply of winter feed for the livestock by prohibiting the use of hay in the preparation of tobacco for sale. When Argall fled the colony in March, 1619, however, all the *public* livestock had been killed except six goats; and when Sir George Yeardley took charge he had to make provision for supplying newcomers with cattle. In 1619 Sir Edwin Sandys proposed to the Virginia Company of London that 20 heifers be sent over, at a freight cost of ten pounds per heifer, to the colony for every 100 tenants. This would have amounted to 60 head in that year (1). On June 25, 1619, a shipment of corn (probably not *Zea mays*) and cattle was landed safely. By 1620 the total number of cattle in Virginia was estimated at 500 head. The twenty-second of November, 1621, a ship arrived from Ireland with

people, provisions, and cattle; and it is recorded in that year that 80 head of cattle were brought into Virginia (50).

There is much confusion as to the number of shipments of cattle leaving England and the number arriving in the colony. Losses of ships and of cattle were not unusual in those days and it is not possible to determine the exact number of cattle imported. From 1619 to 1622 there was a great deal of interest in the export cattle business to the colony. While it is noted that the Company required that cattle should be fine and spring from English breeds, yet it is a fact that many of the cattle came into Virginia from Ireland. Only female cattle were wanted at this time as there was a sufficient number of steers and bulls in the colony. A cow was valued in the colony at 15 pounds Sterling, and it cost 10 to 12 pounds Sterling to ship a heifer from England to Virginia. It is interesting to note that it cost only two pounds less to bring over a heifer than to bring over a man (11).

Whether by importations or by good husbandry, or a combination of the two, the number of cattle in Virginia had increased to 2000 by 1627. This estimate by Captain John Smith (50) included cows, bulls and oxen, and in 1629 this same authority recorded that in this year several people estimated the cattle population at about 5000 "kine, calves, oxen and bulls." As late as 1629, however, the Council of Virginia ordered that no healthy female cattle be killed unless they were non-breeders (26).

We may conclude that after about 1630 there were few importations of cattle into Virginia, except perhaps the occasional purchase of an outstanding breeding animal. This conclusion is based on the fact that by 1633 the youthful Plymouth colony in New England was buying cattle from the Virginians (18). Governor Winthrop of the Massachusetts Bay colony (54) recorded on August 3, 1636, that "Samuel Mavarick, who had been in Virginia near twelve months, now returned with two pinnaces, and brought some fourteen heifers, and about eighty goats." This is only one of many cases where definite records exist of exportations of cattle from Virginia. In 1631 it was ordered that each 20th calf, pig and kid should be given as a tithe to the religious minister (26). In 1649 there were 30,000 "head of Cattell, and an infinite number of Hogges," in Virginia (12) and in 1655 cattle were so plentiful that one cow was being offered as a bounty to the Indians for the bringing in of lots of eight each of wolf heads (26).

Smith (50) recorded that by 1629 there was a tendency to change from tobacco culture to a pastoral type of agriculture. "Jamestown is yet their chiefe seat, most of the wood destroyed, little corne there planted, but all converted into pasture and gardens. . . . Here most of their cattle doe feed, their Owners being . . . about their plantations. . . . Here in the winter they have hay for their cattell: but in other places they browze upon wood, and the great huskes of their corne, with some corne in them doth keepe them well."

Due to the difficulty of fencing, a large number of cattle ran at large and became wild. These cattle, however, could not be hunted without a license. Because of the range conditions existing, little provision was made for winter feeding and during the winter of 1673 it was estimated that 50,000 cattle perished because of the severity of the weather (11).

Although the first cattle taken into Virginia were under the strict supervision of the Company one should not be led to believe that the raising of cattle was entirely a public trust. As plantations increased in number, private herds came into being and increased both in number and size; and while it is estimated that the number of wild cattle, some of which were ear marked or branded, exceeded the number of tame cattle, yet there were several large herds kept in inclosures, and a few contained over 100 head each (11). From this time forward the increase in the number of cattle in Virginia continued until the beginning of the Revolutionary War.

The Plymouth Colony, although founded in 1620, did not import any "neat" cattle until four years later. We have Governor Bradford's statement (9) that in 1624 "Mr. Winslow came over, and brought a perty good supply, and the ship came on fishing, a thing fatall to this plantation. He brought 3 heifers and a bull, the first beginning of any cattle of that kind in the land. . . ." Faulkner (22) in commenting on this said "cattle were brought in as early as 1624 and formed the basis of rapidly increasing herds and successful dairying." Bradford (9) records further that in 1625 the factors of the colony from Plymouth, England, sent a shipment of cattle, cloth and other goods, in the custody of Mr. Allerton and Mr. Winslow, who were to sell them at their discretion. He further comments that "the cattle were the best goods, for the other being ventured ware, were neither at the best (some of them) nor at the best prices."

The idealistic system upon which the Plymouth Colony was founded did not function to the satisfaction of the colonists and in 1627 it was decided that goods and property should be divided among the members. "And first accordingly the few cattle which they had were divided, which arose to this proportion; a cow to 6, persons or shares, and 2 goats to the same, which were first equalized for age and goodness, and then lotted for; . . ." (9).

Captain John Smith (50) in commenting upon the founding of Salem, Massachusetts, in 1629 wrote: "In the yeare 1629, about March, six good ships are gone with 350 men, women and children: . . . Also 150 head of cattell, as horses, mares, and neat beasts; 41 goats. . . ." In discussing the islands at the mouth of the Charles River, Smith stated: "In the Isles you may keepe your hogs, horse, cattell, conies or poultry and secure for little or nothing." Thus did the colonists utilize this provision of nature to fence their livestock. He also recorded that in the summer of 1630 another ship arrived with twenty "cattell" and forty or fifty passengers. Bradford mentions a shipment of "kattle" brought over by Mr. Allerton and Mr.

Hatherby in 1630 and sold. A ship, the **White Angel** arrived at Sauco June 27, 1631, with "cows, goats, and hogs, and many provisions" (54). The record shows also that on July fourteenth of the same year the **Friendship**, of Barnstable, arrived at Plymouth and landed "eight heifers, a calf and five sheep." She had been at sea eleven weeks. On July 22 the **White Angel** that had arrived at Sauco nearly a month before landed 21 heifers at Plymouth.

Cattle importations hit a full stride in the 1630's, and the following are only a few of the recordings by Winthrop (54) relative to the bringing in of cattle. October 29, 1630; Mr. Goffe's ship "brought out twenty-eight heifers, but brought but seventeen alive."

June 12, 1632; The **James** arrived from London. "She brought sixty-one heifers and lost forty."

May, 1633; the **William and Jane** arrived . . . with thirty passengers and ten cows or more."

July 24, 1633; "A ship arrived from Weymouth, with about eighty passengers and twelve kine. . . ."

September 4, 1633; "The **Bird** arrived bringing some cattle."

October 10, 1633; The **James** arrived at Salem, "having been but eight weeks between Gravesend and Salem." She brought some sixty cattle.

It should not be supposed that the importation of cattle was without hazards. For example, Winthrop (54), reported the arrival of the **Mayflower** and the **Whale** at Charles Town harbor, July 1, 1630, with most of their cattle dead. The **Handmaid** arriving at Plymouth, October 29, 1630, lost 10 of 28 cows. The following are also reported by Winthrop:

October 29, 1630. Mr. Goffe's ship "brought out twenty-eight heifers, but brought but seventeen alive."

September 6, 1630. "The wolves did much hurt to calves and swine between Charles River and Mistick."

September 30, 1630. "The wolves killed six calves at Salem."

June 12, 1632. The **James** arrives from London. "She brought sixty-one heifers and lost forty."

On the other hand a few ships made the crossing without the loss of a single animal.

Winthrop (54) recorded at least 12 ships that brought cattle to the Massachusetts colonies during the years 1630-32. During 1633-34 at least 270 head of cattle were imported. He also reported the arrival of a ship from Texel, North Holland, in 1635 that brought 63 heifers.

It is interesting to note this early importation of Dutch cattle into the English colonies. It is reasonable to assume that the cattle introduced from Holland were similar to the ancestors of our present-day Holstein-Friesians. It is also interesting to speculate as to the possible relationship of the cattle of those early importations to our present breeds. One should bear in mind

that those early importations took place almost 250 years before the establishment of any of the registry associations for the maintenance of pure breeds of dairy cattle in the United States. We must go back to the time when cattle were designated as "black," "horned," "hornless," "short-horned," "middle horned," or "long horned" (3, 10, 15, 55). As these designations mean little to us to-day it is necessary for us to associate the cattle with the area from which they were shipped. Such a method is both reasonable and helpful.

It is logical to assume that cattle shipped from Plymouth and Barnstable came from the surrounding Devonshire area. In this area the Devon breed of cattle was developed. As there is no record of any mass movement of cattle to or from Devonshire during or following the colonization of North America it may be concluded that the first cattle brought to the New England colonies were of an inheritance similar to the Devon breed that was later developed and improved in Devonshire. The fact that Devon cattle have always been rather popular in the New England States adds further to the belief that the first cattle imported were of the Devon type.

The cattle that were shipped to the New England colonies from Virginia probably were of mixed origin. The first cattle brought to Virginia were of English origin. A little later Irish cattle of superior quality were brought in; and still later, when trade routes via the West Indies were established, Spanish cattle were imported by the Virginians. The result of importing from these various sources is presented well by Bruce (11) who, in writing of the Virginia cattle as they appeared in the seventeenth century, said, "from the variety of colors distinguishing the horned cattle entered in the appraisements, it would be inferred that there were no distinct breeds in the colony, the original ones having become by repeated crossings so confused in blood as to represent no separate types except in an extremely modified form." From this statement it is reasonable to conclude that the cattle shipped from Virginia into the Massachusetts colonies were of mixed inheritance and were, quite likely, inferior to the cattle imported from Devonshire and Holland.

Winthrop (54) recorded a shipment of cattle from Ipswich, and they were, no doubt, of the Essex and Suffolk type. He also noted a shipment from Gravesend and Southampton, and thus Hampshire and Kent made their contributions.

As the population of Massachusetts grew in numbers and the herds increased it became necessary for each man to enlarge his land holdings to take care of his livestock. "And no man thought he could live, except he had cattle and a great deal of ground to keep them; all striving to increase their stocks" (9). The Governor of Plymouth wrote in 1638, "It pleased God, in these times, so to bless the cuntry with such access and confluence of people into it, as it was therby much inriched, and catle of all kinds stood

at a high rate for diverce years to-gether. Kine were sold at 20 li and some at 25 li. a peace, yea, sometimes at 28 li. A cow-calfe usually at 10 li. A milch goate at 3 li, and some at 4 li. And femall kids at 30 s. and often at 40 s. a peece. By which means the anciente planters which had any stock begane to grow in their estats." Similar conditions prevailed in the Massachusetts Bay colony also, and in 1633, in writing of conditions Governor Winthrop (54) said: "They spent much in tobacco and strong waters, etc., which was a great wealth to the commonwealth, which, by reason of so many foreign commodities expended, could not have subsisted to this time, but that it was supplied by the cattle and corn, which was sold to new comers at very dear rates, viz., corn at six shillings the bushel, a cow at £20,—yea some at £24, some at £26,—a mare at £35, an ewe goat at 3 or £4; and yet many cattle were every year brought out of England, and some from Virginia." On November 17, 1636, he again wrote that "cattle were grown to high rates;—a good cow, £25 or £30; a pair of bulls or oxen, £40. Corn was now at 5 s the bushel, . . ."

People continued to flow into New England steadily and Winthrop recorded that in 1638 at least 3,000 people came over to the Massachusetts Bay Colony. The importation and raising of cattle brought prosperity to a height previously unknown in that part of the New World.

The law of supply and demand recognizes no territorial integrity, however, and we find that as a result of the great stimulus to stock raising an over-supply of cattle soon was in evidence. It may be that cows being priced from 25 to 28 pounds per head attracted shipments from across the ocean, as we know it did from Virginia. And so we read in Governor Bradford's History of the Plymouth Plantation (9) that in 1640 many began to fear a drop in the price of cattle. "And this was not a vaine feare; for they fell indeede . . . and that so suddenly, as a cove that but a month before was worth 20 li., and would so have passed in any payments, fell now to 5 li. and would yield no more; and a goate that wente at 3 li., or 50 s. would not yield but 8. or 10 s. at most. all men feared a fall of cattle, but it was thought it would be by degrees; and not from the highest pitch at once to the lowest, as it did, which was greatly to the damage of many, and the undoing of some." The same conditions prevailed throughout the Massachusetts Colonies (54).

This crash ended the commercial shipments of cattle from England to the colonies in New England. Their low value in the colonies was not equal to the cost of shipping cows from England to America. When prices recovered the New England demand was supplied from other colonies. By 1645 cows were selling at 30 pounds sterling and many were shipped from Virginia to the English colonies to the north (7).

Because of the comparatively late dates of the colonization of Maryland and Pennsylvania there is little question but that they obtained their cattle

from their neighbors to the east or to the south. Carrier (13) says, "The agricultural foundation laid by the early Dutch and Swedish settlers in New Jersey, New York and Delaware was of great value to Penn's followers. Here were excellent draft horses, oxen, Dairy cows and swine in numbers to supply all newcomers who possessed the necessary means to buy them." Cornelius Bon wrote in 1684, "I have a cow which gives plenty of milk" (35) indicating the availability of good cows. William Penn wrote in 1681 that newcomers "may as soon as they come buy cows more or less, as they want, or are able, which are to be had at easy rates" (41).

Rhode Island and Connecticut both probably obtained their first cattle from the neighboring English or Dutch colonists. There is no doubt of this in the case of Connecticut, and little doubt in the case of Rhode Island.

Although both the Dutch and the English had established forts or trading posts on the Connecticut River at an earlier date, the first real effort to found a permanent settlement was made in 1635. John Winthrop recorded (54) that on October 15, 1635, "about sixty men, women and little children, went by land towards Connecticut with their cows, horses and swine, and, after a tedious and difficult journey, arrived safely there." This is substantiated by Johnston (34) who writes that "In October of the same year (1635) a party of sixty persons, including women and children, largely from Newton, made the overland march and settled where Hartford now stands. Their journey was begun so late that the winter overtook them before they reached the river; and, as they brought their cattle with them, they found great difficulty in getting everything across the river by means of rafts." In Winthrop's history under the date of April 1, 1636, the following statement is found: "Those of Dorchester, who had removed their cattle to Connecticut before winter, lost the greater part of them this winter; yet some, which came late, and could not be put over the river, lived very well all the winter without any hay. The people also were put to great straits for want of provisions. They ate acorns, and malt, and grains. They lost near £2,000 worth of cattle." There is a further statement recorded on May 15, 1636, to the effect that "Mr. Hooker, pastor of the church of Newtown, and most of his congregation, went to Connecticut. His wife was carried in a horse litter; and they drove one hundred and sixty cattle, and fed of their milk by the way."

Less has been found relative to the introduction of cattle into Rhode Island. According to Carrier (13), among the early settlers were men of means who possessed livestock. In all probability some of these men went from the Massachusetts colonies and took cattle with them. Because of the strong feeling in Massachusetts against the Rhode Island group, however, there was little commerce between them. It is entirely possible that cattle were obtained from Virginia, or from the Dutch in the near-by colony of New Netherland. The fact that the dairy cattle of Rhode Island received

more than local notice at a very early date as being of very superior quality, would indicate a strong infusion of the Dutch cattle characteristics. In fact, before breeds of cattle were established in this country the "Rhode Island Cow" was well known as an excellent producer. The butter and cheese produced in that colony became known throughout the world and was an important item in the extra-territorial trade of the colony. William Douglass (19), in commenting upon the dairy industry of Rhode Island in the middle of the eighteenth century states: "The most considerable farms are in the Narraganset Country. Their highest Dairy of one Farm; *communibus annis* milks about 110 cows, cuts about 200 Load of Hay, makes about 13,000 wt. of Cheese, besides Butter; and sells off considerably in Calves and fatted Bullocks. A farmer from 73 milch Cows in five Months made about 10,000 wt. of Cheese; besides Cheese in a Season, one Cow yields one Firkin of Butter, 70 to 80 wt. In good Land they reckon after the rate of 2 Acres for a milch Cow." While the "Rhode Island Cow" does not exist as a breed at the present time she was the foundation of the commercial dairy cows, and contributed much to the profitableness of the dairy industry in the New England States.

According to Pirtle (46) the early "New Hampshire cattle were from the 'large yellow' Danish cattle." Allen (2) has pointed out that in 1631, 1632 and 1633 Captain John Mason imported cattle from Denmark for the Danish colonists in New Hampshire.

North Carolina was settled largely by people who left other English colonies in search of religious freedom, cheap land or security from persecution (4).

The first attempt at organized colonization was made in 1660 when a stock Company sent people from New England who settled near the mouth of what is now known as the Cape Fear River. These people had English Cattle on their plantations (42). The settlement was later abandoned and a portion of the cattle probably was left there. In 1664 an expedition was financed by people of Barbados, and a colony was established at Charles Town. Some cattle were raised here also but the enterprise failed. Whether these settlers took cattle into Carolina or appropriated those already there is a question that may be debated. They found cattle there, however, as is shown in this narrative of the first impression obtained upon arrival in 1664.

"We viewed the Cape-land, and judged it to be little worth, the Woods of it shrubby and low, the Land sandy and barren; in some places Grass and Rushes, and in other places nothing but clear sand; a place fitter to starve Cattel in our judgment, than to keep them alive; yet the Indians, as we understand, keep the English Cattle down there, and suffer them not to go off the said Cape, as we suppose, because the Countrey-Indians shall have no part with them, and as we think, are fallen out about them, who shall have the greatest share. They brought aboard our Ship very good and fat Beef

several times, which they could afford very reasonable;” And as a forecast of their own feelings at a later date they found a discouraging note which they answered thus—“Whereas there was a Writing left in a Post at the Point of Cape Fair River, by those New England-men that left Cattel with the Indians there, the Contents whereof tended . . . to the disparagement of the Land” (39).

That the land did have livestock possibilities, however, is indicated by the description written in 1666 by Robert Horne. “The Marshes and Meadows are very large from 1500 to 3000 Acres, and upwards, are excellent food for Cattle, and will bear any Grain being prepared; some Cattle both great and small, which live well all the Winter, and keep their fat without Fodder;” But Cattle were not to be had easily as is indicated by this selection from a letter written by Governor Sayle and Council (39), Sept. 9th, 1670.

“Wee have received some cowes and hoggs from Virginia, but at an imoderate rate, considering the smalnesse of their growth. . . . If yor Honors had a small stoke in Bermuda from thence may be transported to this place a very good breed of large Cowes, Hoggs and Sheep at farr easier rates.” Definite progress was made, however, and Henry Brayne stated, in a letter to Lord Ashley, dated November 9, 1670, that he had “6 head of Cattle that my people have milk enough twice a day and that he had “there alsoe 7 hoggs,” three sheep, 6 geese, 8 turkeys and twelve chickens (51).

By 1622 the Carolinas were becoming “Cattle Country” and dairying was not unknown.

In Thomas Ashe’s description of Carolina in 1682 he wrote “The great encrease of their Cattel is rather to be admired than believed; not more than six or seven years past the Country was almost destitute of Cows, Hogs and Sheep, now they have many thousand Head.” And he also wrote that “The Cows the Year round brouzing on the sweet Leaves growing on the Trees and Bushes, or on the Wholesome Herbage growing underneath; They usually call them home in the Evening for their Milk, and to keep them from running wild” (39).

In the same publication, in Wilson’s account of Carolina in 1682 we find that “Neat Cattle thrive and increase here exceedingly, there being particular Planters that have already seven or eight hundred head, and will in a few years in all probability, have as many thousands, unless they sell some part;”

Because of the low cost of production due to year around pasture it was the expression of Wilson that—“many judicious Persons think that Carolina will be able to supply those Northern Collonys, with salted Beef for their Shipping, cheaper than they themselves with what is bred amongst them; for, considering that all the Woods in Carolina afford good Pasturage, and the small Rent that is paid to the Lords Proprietors for Land, an Ox is raised at almost as little expence in Carolina as a Hen is in England.”

Archadle (39) was also enthusiastic about the livestock possibilities of the Carolinas for he wrote that "so advantageously is the Country scituated, that there is little or no need of Providing Fodder for Cattle in the Winter; so that a Cow is grassed near as cheap as a Sheep here in England. . . ."

The place of Cattle and livestock and dairy products in the economy of the Carolinas is set forth in the letters of Thomas Newe (39) written in 1682.

"Severall in the Country have great stocks of Cattle and they sell so well to new comers that they care not for killing, which is the reason provision is so dear in the Town, whilst they in the Country are furnished with Venison, fish, and fowle, by the Indians for trifles, and they that understand it make as good butter and cheese as most in England." And in speaking of the circumstances of the first settlers who came to the Carolinas, Newe continued—"few of them having wherewithall to purchase a Cow, the first stock whereof they were furnished with, from Bermudas and New England, from the latter of which they had their horses which are not so good as those in England, but by reason of their scarcity much dearer, an ordinary Colt at 3 years old being valued at 15 or 16 *lis.* as they are scarce, so there is but little use of them yet, all Plantations being seated on the Rivers, they can go to and fro by Canoo, or Boat as well and as soon as they can ride, the horses here like the Indians and many of the English do travail without shoes. Now each family hath got a stock of Hogs and Cows, which when once a little more encreased, they may send of to the Islands cheaper than any other place can, by reason of its propinquity, which trade alone will make it far more considerable than either Virginia, Maryland, Pensilvania, and those other places to the North of us."

By 1728 cattle were apparently plentiful near the Virginia-Carolina line for they were found roaming at large and subsisting on natural feeds throughout the winter season (4).

South Carolina was colonized for the primary purpose of producing tropical and semi-tropical plants of economic value. The ideal grazing conditions and the extremely light winters obtaining in that area, however, caused cattle raising to become the principal occupation at an early date. Cattle were purchased from Barbados, the Bermudas, Virginia and New York. The cattle from Virginia were small and high in price. Those from New York were large and very heavy milkers, and the colonists preferred them to the cattle from Virginia or Barbados. As an indication of the development of the cattle industry Governor Nicholson of Maryland in 1695 spoke of the "vast flocks of cattle" in the Carolinas, and Nairne wrote that South Carolina had more "black cattle" than any other English colony (25).

The continuous reference to black cattle by many of Gray's authorities (25) has led him to the conclusion that most of the southern cattle of colonial and post-Revolutionary days were black and descendants of the early Spanish cattle. If this is true, the foundation for our southern cattle probably

had few of the qualities so greatly desired in a dairy animal. This may explain in part the low production of the average cow of the southeastern part of the country.

It is entirely possible, however, that Gray was mistaken when he concluded, because of the numerous references to "black cattle," that most of the cattle of colonial America were black in color. A more plausible explanation of the term "black cattle" is contained in the following statement by Cadwallader John Bates (5) who, because of his familiarity with the history of livestock improvement, may be accepted as a good authority. "So prevalent was the black colour in the North of England and the South of Scotland that bulls, cows, and oxen were given the generic name of 'black cattle.' Originally the Scottish thieves appear to have called the 'black cattle' they were driving off, their 'blackmail' or 'black-rent'; the terms being afterwards applied to the money paid them for foregoing these exactions in kine." Because the designation "black cattle" was in such common usage in England during the seventeenth century it is quite possible that the term was not truly descriptive of the color of the American cattle population of that day. That the greater portion of the cattle in the southeastern part of the Colonial North America was of Spanish origin can scarcely be questioned, but to say that they were black is perhaps imposing upon the available historical evidence.

According to Carrier (13) the foundation cattle of Georgia were purchased in South Carolina. It is quite probable also that cattle from Florida found their way into Georgia.

SUMMARY

The data contained in the literature reviewed, points to the fact that cattle were imported directly to Virginia, Massachusetts, New York, New Hampshire, Delaware, and possibly southern New Jersey, from the colonizing European countries. Many cattle, however, were brought into the southwest, the Gulf area, Florida and the southeast from the Spanish possessions in the West Indies and from Mexico. It also appears that many cattle containing at least some Spanish inheritance were shipped into Virginia, Delaware, New Jersey, and Massachusetts.

The initial mass importations of cattle from Europe into the North American colonies ceased about 1640. From that date to the American Revolution the cattle needs of the colonies were taken care of through inter-colonial trade, or through trade with the Spanish colonies in the Western Hemisphere. A few cattle from the French Colonies in the St. Lawrence River Valley found their way into the "Old Northwest."

The cattle improvement era did not start in England until many years after the initial period of importations into America had closed, and in America there was no basic work in cattle improvement during that period.

American breeders waited for the English and European stockmen to supply the superior breeding stock which was so necessary in grading up the common cattle that by 1800 had increased to several million head.

From 1640 to 1800 there was only an occasional animal imported and the only real possibility for general improvement of the milch cows lay in selection from within the existing cattle population.

From 1800 to 1860 there were few attempts to protect the "purity" of the improved cattle which were being imported from time to time. The efforts made in the past 80 years to improve cattle in general, and particularly dairy cattle, have not been sufficient to eliminate all of the influence of the cattle that were bred in America for the first 250 years. To be convinced of this fact one needs only to travel through the southeastern part of the United States—the oldest cattle country in our nation.

REFERENCES

- (1) Abstracts of Proceedings of the Virginia Company of London, vol. 1, p. 22. Virginia Historical Society, Richmond, Virginia. 1888.
- (2) ALLEN, LEWIS F. American Cattle. Orange Judd Co., New York. 1890.
- (3) BAILEY, J., AND CULLEY, G. Agriculture in the County of Northumberland. London, third edition. 1805.
- (4) BASSETT, JOHN SPENER. The Writings of "Colonel William Byrd." Doubleday, Page & Co., New York. 1901.
- (5) BATES, CADWALLADER JOHN. Thomas Bates and The Kirklevington Shorthorns. Robert Redpath, Newcastle Upon Tyne, p. 26. 1897.
- (6) BIDWELL, PERCY WILLS, AND FALCONER, JOHN I. History of Agriculture in the Northern United States to 1860. Carnegie Institution, Washington, D. C. 1925.
- (7) BISHOP. History of American Manufactures, vol. 1, p. 431. Cited by Philip A. Bruce, Economic History of Virginia in the Seventeenth Century, p. 333.
- (8) BOURNE, EDWARD GAYLORD. American Nation, vol. 3. Spain in America. Harper & Brothers, New York and London. 1904.
- (9) BRADFORD, WILLIAM. History of Plymouth Plantation 1608-1646. Chas. Scribner's Sons, New York, 1923. (Reproduced under the auspices of the American Historical Association.)
- (10) BROWN, ROBERT. Treatise of Rural Affairs. Oliphant and Balfour, Edinburgh. 1811.
- (11) BRUCE, PHILIP A. Economic History of Virginia in the Seventeenth Century. The Hamilton Co., New York. 1895.
- (12) BULLOCK, WILLIAM. Virginia, Impartially Examined. Printed by John Hammond, London, p. 7. 1649.
- (13) CARRIER, LYMAN. The Beginnings of American Agriculture. McGraw-Hill Book Co., New York. 1923.
- (14) CONNOR, MRS. JEANNETTE M. (THURBER). Colonial Records of Spanish Florida, vol. 1. (Fla. Hist. Soc. Pub. No. 5.)
- (15) CULLEY, GEORGE. Observations on Livestock. London. 1807.
- (16) DARLINGTON, WILLIAM. Memorials of John Bartram and Humphrey Marshall, p. 50. Philadelphia. 1849.
- (17) DENTON, DANIEL. A Brief Description of New York. The Burrows Brothers Co. 1902. Reprinted from the original edition of 1670.

- (18) DEVRIES. *Voyages from Holland to America*, p. 64. Cited by Philip A. Bruce.
- (19) DOUGLASS, WILLIAM. *An Historical Account of the British Settlements in America*. Vol. II, p. 100. Daniel Fowle, Boston. 1750.
- (20) DUFFUS, R. L. *The Santa Fe Trail*, Longmans, Green & Co., New York. 1930.
- (21) *Early English and French Voyages. Original Narratives of Early American History*. Edited by J. F. Jameson. Chas. Scribner's Sons, N. Y. 1906. Original source: Hakluyt.
- (22) FAULKNER, H. U. *American Economic History*. Harper & Bros. 1935.
- (23) FERRIS, BENJAMIN. *Original Settlements on the Delaware*, p. 52. Wilmington. 1846.
- (24) FISHER, SYDNEY G. *The Quaker Colonies*. Yale University Press. 1921.
- (25) GRAY, LEWIS C. *History of Agriculture in Southern U. S. to 1860*. Carnegie Institution. 1933.
- (26) HENNING, WILLIAM WALLER. *Statutes at Large of the Laws of Virginia*, vol. 1, p. 395. R. & W. & A. Bartow, New York. 1823.
- (27) HAKLUYT, RICHARD. *The Principal Navigations, Voyages, Traffiques, and Discoveries of the English Nation*. E. P. Dutton & Co., New York, vol. 6.
- (28) HAKLUYT, RICHARD. *The Principal Navigations, Voyages, Traffiques, and Discoveries of the English Nation*. E. P. Dutton & Co., New York, vol. 7.
- (29) HAMILTON, J. P. *Colonial Mobile*, p. 38. Houghton Mifflin Co., New York. 1910.
- (30) HAMOR, RALPH. *A True Discourse of the Present State of Virginia*. London. 1614.
- (31) HUNT, R. D., AND SANCHEZ, NELLIE. *A Short History of California*, Thos. Crowell Co., New York. 1929.
- (32) IBERVILLE, LE MAYNE. *Historical Journal (French Historical Collections, New Series 110)*. Cited by J. P. Hamilton.
- (33) INMAN, HENRY. *The Old Santa Fe Trail*. Crane & Co., Topeka, Kan., p. 2. 1898. Original Source Narrative of Alvar Hunez Cabeza de Vaca.
- (34) JOHNSTON, ALEXANDER. *Connecticut. American Commonwealth Series*. Houghton, Mifflin & Co., New York, p. 22. 1887.
- (35) KUHN, OSCAR. *The German and Swiss Settlement of Colonial Pennsylvania*.
- (36) LA HARPE. *Journal Historique* 81. Cited by Gray. *History of Agriculture in Southern U. S. to 1860*.
- (37) LAS CASAS. *Historia*, Vol. 1, p. 497; Vol. 2, p. 3. Cited by Bourne Edward Gaylord. *Spain in America*. Harper Bros. 1904.
- (38) LOWERY, WOODBURY. *The Spanish Settlements within the Present Limits of the United States*. 1513-1561.
- (39) *Narratives of Early Carolina*. William Hilton's Relation, 1664. Original Narratives of Early American History. Edited by Alexander S. Salley, Jr. Chas. Scribner's Sons, New York. 1911.
- (40) *Narratives of Early Virginia*, p. 203. Original Narratives of Early American History. Chas. Scribner's Sons, New York. 1907.
- (41) *Narratives of Early Pennsylvania, West New Jersey, and Delaware*. Edited by A. C. Myers. Chas. Scribner's Sons, New York. 1912. (Footnote citation, p. 7.)
- (42) *North Carolina Colonial Records* vol. 1. Raleigh, North Carolina. 1886.
- (43) O'CALLAGHAN, E. B. *Documents Relating to the Colonial History of the State of New York*, Vol. 1. Albany. 1856.
- (44) PARKMAN, FRANCIS. *The Jesuits in North America*. Little, Brown & Co., Boston, p. 366. 1895.
- (45) PARKMAN, FRANCIS. *Pioneers of France in the New World*. Little, Brown & Co., Part 1, p. 212. 1876.

- (46) PIRTLE, T. R. History of the Dairy Industry. Majonnier Bros. Co., Chicago, Ill.
- (47) Relation of Lord Delaware. Printed by William Hall, London, 1611. Contained in Narratives of Early Virginia, pp. 209-214. Original Narratives of Early American History. Chas. Scribner's Sons, New York. 1907.
- (48) ROLFE, JOHN. Relation of the State of Virginia, 15th Century. Virginia Historical Register. MacFarlane and Fergusson, Richmond. 1848.
- (49) SANDERS, ALVIN HOWARD. The Taurine World. National Geographic Magazine, 58, No. 6: 591-710. 1925.
- (50) SMITH, CAPTAIN JOHN. Travels and Works, vol. 2, p. 658. Edited by Edw. Arber and A. G. Bradley. Published by John Grant, Edinburgh. 1910.
- (51) South Carolina Historical Society. Collections, vol. V. Charleston, South Carolina. 1897.
- (52) VAN WASSENGER, NICHOLAS. Historich Verheal. Cited in Narratives of New Netherland. Chas. Scribner's Sons, New York. 1909.
- (53) WINSOR, JUSTIN. Christopher Columbus, p. 281. Houghton, Mifflin and Company, New York. 1892.
- (54) WINTHROP, JOHN. Winthrop's Journal. Original Narratives of Early American History, vol. 1. Chas. Scribner's Sons, New York. 1908.
- (55) YOVATT, W. Cattle (American Edition). C. M. Saxton, New York. 1851.