

CHAPTER XVIII

The Problem of the Horse and Other Domestic Animals

The Book of Mormon makes clear that both Jaredites and Nephites who lived in ancient times on this continent had domestic animals of various kinds. The earlier people, the Jaredites (c. 2000-300 B.C.), are reported to have had

all manner of cattle, of oxen, and cows, and of sheep, and of swine, and of goats, and also many other kinds of animals which were useful for the food of man. And they also had horses, and asses, and there were elephants and cureloms and cumoms; all of which were useful unto man, and more especially the elephants and cumoms. (Ether 9:18-19)

The Nephites (c. 600 B.C. - 400 A.D.) on the other hand tell us

that there were beasts in the forests of every kind, both the cow and the ox, and the ass and the horse, and the goat and the wild goat, and all manner of wild animals, which were for the use of men. (1 Nephi 18: 25; cf. Enos 21; Alma 5:59)

It is notable that the Nephites never speak of having or using the elephant; nor are swine spoken of by them except metaphorically (3 Nephi 7:8, "sow") and in connection with their equivalent of the Sermon on the Mount. (3 Nephi 14:6) We do not know what animals are meant by cureloms and cumoms in the Jaredite record. Apparently Moroni, the Nephite commentator, didn't either, because he seems to have transliterated the words, which course of action was followed also by the prophet Joseph Smith when he translated the Book of Mormon. The dog is mentioned in the Nephite account, but no mention is made of it in the Jaredite record.

It is not necessary for our purposes here to give a detailed account of domestic animals as used by the Jaredites and Nephites. Suffice it to say that the following representative domesticated animals were used by one or other of these peoples sometime during the period 2000 B. C. 400 A. D.: oxen, cows, sheep, swine, goats, asses, horses, elephants, cureloms, cumoms, and dogs. It would appear that the ancient American peoples used most all of the common domestic animals known among civilized peoples the world over. The use of the elephant by the Jaredites is a little unusual, but let us keep in mind that this large and noble animal is still domesticated in India and some other parts of Asia.

Now, what is the problem raised by the mention of the domestic animals noted above in the Book of Mormon? The problem is that modern scholars believe that most of the domestic animals (we except cureloms and cumoms because they are, as yet, unidentified) mentioned by the Nephite record did not exist in America during historic times, but were introduced on this continent (the elephants excepted) by Europeans after the advent of Columbus. That is to say, scientists have not as yet found the material remains or art representations of domestic animals which our Book of Mormon assumes were existent during historic periods. For examples of the views taken by recognized scientific authorities we may turn to the writings of Dr. William Berryman Scott, one of the foremost scientists in the field of the history of land mammals in the Western Hemisphere. In relation to swine and oxen he says:

No member of the civets, hyenas, hippopotamuses, *true swine*, giraffes, or *oxen* (as distinguished from bison) has ever been found in the Western Hemisphere.

There are several existing families . . . which have never found their way to the Americas, such as *true swine*, . . . *true oxen* and giraffes.¹

Dr. Scott says that "the only members of the ox-tribe which ever reached America are the various species of bison, which in this country are so generally misnamed 'buffaloes.' "² He admits the presence on this continent of four or five species of sheep (*Ovis*), i.e. wild sheep, and the "Rocky Mountain Goat," which he says is in reality a true antelope and a late migrant from Asia.³ He obviously does not mean that it came in historic times. Speaking of wild asses Scott reports that

no native members of the family are now found anywhere in the Western Hemisphere, but they were abundant in both northern and southern continents until the end of the Pleistocene.⁴

As for the horse, in which we are especially interested, Dr. Scott says:

The Pleistocene horses of North America all belonged to the genus *Equus*, but the True Horse, in the restricted sense, that is *Equus caballus*, has not been found anywhere in the Western Hemisphere....

Though it can hardly be doubted that the horse family passed through the greater part of its development in North America, yet the immediate ancestry of all existing species is to be sought in the Old World as the Pleistocene species of North and South America, all became extinct, leaving no descendants behind them. In the Pleistocene, every continent except Australia had its horses and it was only in the Western Hemisphere that they disappeared altogether.⁵

Dr. Scott, palaeontologist that he is, also admits the presence of true elephants in North and South America,⁶ but fossil evidence does not necessarily prove their presence in historic times. But Scott tells of the finding in 1929 of the skeleton of a mastodont in Ecuador which had probably been killed by Indians; indeed, they had seemingly roasted the flesh, making fires within the body-cavity of the large animal. The site, with its painted pottery, stone

implements, and the skeleton, was dated by Dr. Spillman of Quito as being near the time of Christ.⁷

Students of the Book of Mormon don't need to account to critics for the mention of dogs in its text for the very good reason that when the white man explored this continent after its discovery, he found that every Indian tribe had them. It is estimated that at least twenty distinct breeds were present in North and South America.⁸

Inasmuch as scientists have not found many material remains of domestic animals which are spoken of in the Book of Mormon and which would be expected to exist in historic times (2000 B.C. - 400 A.D.), one wonders when their prehistoric types met extinction. In a recent article, Jim J. Hester has provided convenient tables with radiocarbon dating for the probable time of extinction of many animals, but unfortunately these tables do not provide data on most of the specific animals in which we are here interested. He says:

Most herding animals, such as the Columbian mammoth, horse, camel, and bison, as well as the dire wolf rapidly became extinct about 8,000 years ago. The dates suggest a southward withdrawal from the Great Plains by the mammoth and a partial contemporaneity of Clovis elephant hunters [note!] in southern Arizona with Folsom bison hunters on the Plains.⁹

From what has been said thus far, the student of the Book of Mormon has probably gathered, at least in part, the nature of the problem involving domestic animals mentioned in its text. We simply do not have at present much solid scientific evidence to back up what is said about the existence of such animals in historic times. But let it be emphasized that the problem is complex, and negative evidence is not necessarily fatal to Book of Mormon claims. We shall have to wait patiently for the evidence. Truth can always afford to wait its vindication. And let us keep in mind that archaeologists have not yet excavated many

true Book of Mormon sites. Moreover, who knows what kind of evidence regarding the use of domestic animals may turn up in such places? And who knows what evidence might turn up if scientists would only "excavate" amongst the huge stores of materials yet awaiting careful investigation in the musty old storerooms in our great museums in this and other countries?

Now, in spite of the paucity of evidence relating to the presence of domestic animals on the Western Hemisphere during historic times, the fact remains that Book of Mormon students have some reasons to rejoice over future prospects of scientific investigation in this field. Not too many years ago few scientists thought that early man on this hemisphere could really be proved contemporaneous with the horse, mammoth, mastodon and elephant. But today few scientists would question the association of early man with these animals. Anyone who will take the trouble to investigate the literature as we have will be convinced of the fact. Our good friend and colleague on the *Improvement Era* staff, Dr. Franklin S. Harris, Jr., has done an effective job of documenting the evidence in his handy brochure, *The Book of Mormon Message and Evidences*.¹⁰ A. L. Kroeber even goes so far as to suggest that Indian tribes, when better equipped and organized, may have put an end to horses, mastodons, camels, and mammoths. In a given terrain they may have brought this about in a few centuries.¹¹ It has been pointed out by Kirk Bryan that "most vertebrate paleontologists concede that the now extinct vertebrates may have survived to within a very short time ago."¹² Dr. Harris cites the zoologist, Ivan T. Sanderson, as saying:

There is a body of evidence both from the mainland of Central America and even from rock drawings in Haiti itself tending to show that the horse may have been known to man in the Americas before the coming of the Spaniards.¹³

M. F. Ashley Montagu relates some traditions about the mammoth and then says:

There is even a possibility that in certain parts of the country the mammoth may have lingered on up to as recently as five hundred years ago. In several conversations with the writer, Professor William Berryman Scott, the doyen of American paleontologists, has given it as his opinion that, had the first of the Spanish discoverers of America penetrated into the interior, it is quite possible that they might have met with the living mammoth. Another distinguished American paleontologist, whose special interest is the horse, is, I understand, of the opinion that the horse never became extinct in America.¹⁴

Studies undertaken by our graduate students of pictographs of horses drawn by Indians on cliffs in remote areas give some reason to believe that proof may shortly be forthcoming showing that the horse existed in the United States, if in small numbers, before the coming of Columbus. But such pictograph material has to be studied with great caution and conclusions drawn with extreme care. Latter-day Saint scholars, above all, must not be hasty in drawing conclusions without ample proofs.

As may be surmised, the problem of demonstrating the use of domestic animals among ancient American peoples is the most difficult scientific problem faced by Book of Mormon scholars at the present time. But offhand, it seems incredible to believe that thousands or millions of these civilized peoples would live without the use of ordinary domestic animals.

¹ *A History of Land Mammals in the Western Hemisphere* (Revised Ed.), pp. 128, 302 italics ours. New York. The Macmillan Co., 1937.

² *Ibid.*, p. 308.

³ *Ibid.*, pp. 309, 312.

⁴ *Ibid.*, p. 398. By Pleistocene is meant the geological age just prior to our own.

⁵ *Ibid.*, pp. 403-404.

⁶ *Ibid.*, pp. 236, 274.

⁷ *Ibid.*, p. 261.

⁸ See *Encyclopedia Britannica*, Vol. 7, p. 542. 1963.

⁹ "Late Pleistocene Extinction and Radiocarbon Dating," *American Antiquity*, Vol. 26, No. 1 (July, 1960), p. 58.

¹⁰ Second Edition, 1961. See discussion and extensive footnotes, pages 87-92. We are indebted to Dr. Harris for permission to cite his material.

¹¹ Harris, *op. cit.*, p. 89.

¹² *Science*, 93, 507 (May 30, 1941). As quoted by Harris, p. 89.

¹³ *Op. cit.*, p. 91.

¹⁴ As quoted by Harris, *op. cit.*, p. 92