

Pig or Peccary? Swine in the New World and The Book of Mormon

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Abstract: Although no true swine exists in the paleontological record of the western hemisphere, the perceived issue of the mention of swine within the text of the Book of Mormon may not be as complex as it seems. Understanding of the scientific entomology and classification at the time of translation and an exploration of the importance and acknowledgment of the species by ancient American civilizations, it seems this purported anachronism can actually be historically substantiated by Peccary, native to the American continent. Many scholars including John Sorenson, Matt Roper, Brant Gardner, and others have previously explored this possibility. I aim to not only reinforce this interpretation but also to present compelling evidence that, within the historical context of 1830, referring to peccaries as swine was not only appropriate but also the most logical choice. By examining linguistic, scientific, and cultural factors of the time, I seek to elucidate why 'swine' remains the most fitting term within the narrative of the Book of Mormon.

The Book of Mormon mentions several animals, some of which are not traditionally believed to have existed in the New World at the time the events of the Book of Mormon took place. While critics tend to sensationalize and ridicule the inclusion of the larger fauna, such as horses, ongoing research challenges these assumptions. A 2022 study in Mexico found remains of two species of horses in layers of soil dating to the time of Christ, the method of dating remains based on the layer of strata in which they are found is the same method used in dating dinosaur fossils. On Wrangell Island in Alaska, remains of mammoths were discovered which date to only 4000 years ago. A far cry from the previously assumed 10,000 years ago.

Unlike Horses and Elephants however, Swine presents an interesting case, while discussed less frequently than the larger creatures, the paleontological record presents no evidence of any species of true swine native to the western hemisphere.

This particular fauna is mentioned only twice within the Book of Mormon. They are mentioned once in the Jaredite record, during the reign of King Emer, among the many animals and possessions of the people during a time of great prosperity. In the Nephite record, they are mentioned only once as well. In 3 Nephi 14:6 Christ uses language similar to that which he used to instruct his disciples in Jerusalem, with His sermon on the mount, instructing the Nephites to “neither cast ye your pearls before swine”. This choice of metaphor assumes the Nephites' familiarity with swine; otherwise, Christ, being a perfect teacher, would have selected a different, more relatable animal. Their absence from mention throughout the remainder of the text is likely due to the adherence of the Nephites to the Law of Moses.

It is also interesting to note the differences in context with the mention of swine between these two civilizations. The Jaredites, who left Mesopotamia before the law of Moses was established described swine as “useful for the food of man” (Ether 9:18) while in the Nephite record, they are regarded with disgust in the famous words of Christ, consistent with the views of those who follow the law of Moses.



A Collared Peccary, common in the American Southwest and throughout Mexico. Sometimes called Javelina or “Skunk Pigs”

As members of the church of Jesus Christ of Latter-day Saints, we believe the Book of Mormon to be true. As President Russel M. Nelson has stated “It is not a definitive work on ancient American agriculture or politics.” “It is not a textbook of history, although some history is found within its pages” The Book of Mormon is indeed an ancient record of certain groups of people.

If we assert that the Book of Mormon is indeed true, and an ancient record translated by divine power, we must then address the mention of swine within its pages, although no member of the true swine family exists, to our current understanding, in the western hemisphere prior to European colonization.

Possible answers include a loanword adaptation, either ancient or modern. Given that Mormon, a Nephite, made the abridgment of 3 Nephi and the same word was also used by the Jaredites, it seems more likely that this would be an example of linguistic borrowing occurring during the 1830 translation. This means that if a word or in this case an animal that Joseph Smith was unfamiliar with, instead of using the word utilized by the ancient civilizations would replace it with a word he and his readers would be more familiar with. This is a common practice in translated works. It is also possible that as the Jaredites explored the new world they discovered an unknown animal that to them seemed to be a pig and called it by the word in their language for such an animal as swine. and then later Nephite civilizations borrowed the name which they had given the creature.

In Ether 9:18-19 we find a list of several animals useful to man.

18 And also 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.

19 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 cureloms and cumoms.

The mention of swine here is significant but I would like to draw your attention to the last creatures mentioned. Cureloms and Cumoms are animals which to this day remain mysteries, Logic dictates that because a loan shift was not applied to these creatures to bring them into the understanding of the 19th century, it is probable that each of the other species mentioned must be what is said, if not, they must be reasonably close or understood to be the same in the biological understanding of the 19th century.

The question must then be asked, to what animal are these ancient civilizations referring? There seems to be an obvious answer. The Peccary is a pig-like ungulate of the family Tayassuidae (New World pigs), which looks, sounds, and acts like true, Old-World pigs. Native to the American continent are two species, the collared peccary and the white-lipped peccary, the collared being the more common of the two. They stand about twenty inches tall at the shoulder and grow to about three feet long, their compact build, distinct snout, and bristly coat are all extremely reminiscent of true Old-World swine.

Among the areas where these creatures are common, they are known by other names. Most frequently as Javelina, and perhaps only slightly less frequently as “Skunk pigs”, while some even refer to them even today simply as “pigs” Most people, no matter where they are from, upon first encountering these creatures are surprised to learn they are not in fact “pigs” this misunderstanding is not new. At the time of the translation of the Book of Mormon, referring to them as swine was perfectly acceptable within the scientific community. In addition to swine being a scientifically acceptable term in 1829, it is completely believable that the Jaredites, having traveled from Babylon would see these distant relatives of both true swine and hippos and call them what they look like: Pigs. Although they would likely have been the first to do this, they would not be the last.

As Europeans began to explore the new world many of them described animals, we can only assume are peccaries, often referring to them as wild pigs or even wild swine. In fact, the common name, Javelina, comes from the Spanish “jabali” which means “wild pig”.

Christopher Columbus wrote about them during his very first voyage "I set out to see the island. ... and found it very large and level, with some fields sown with a kind of bean which has an agreeable taste when boiled. I saw cotton trees and shrubs of the kind of rose most of which had no flower. Among these trees I observed some 'herbaco', and of this, too, they had a great quantity. There was much 'aloe' and amaranths, and all these trees and shrubs are as different from those of Juana as day is from night. But above all, I have already said, there are great numbers of wild pigs."

Given that Columbus was likely exploring the Caribbean islands at the time, the species most fitting this description would be peccaries. As established, there is no evidence of true swine in the western hemisphere, making peccaries the probable subjects of Columbus's encounters.

A soldier and conquistador of Hernando De Cortez named Bernal Díaz del Castillo wrote of the expeditions years "When they arrived on the coast of Cozumel and were disembarking, some soldiers who had gone out hunting, for there were wild pigs on the island" Cozumel is an island off the eastern coast of the Yucatan peninsula in what was then "New Spain"

Another Spanish historian Fernández de Oviedo y Valdés, Gonzalo wrote. "But in this island, and in the others which I have mentioned, they eat wild swine. I say that it is certain, because they find so many bones and feet of wild swine that have been killed and eaten, that there is no room for doubt. And from this and from what I have said it is proved that there are wild swine in all these lands."

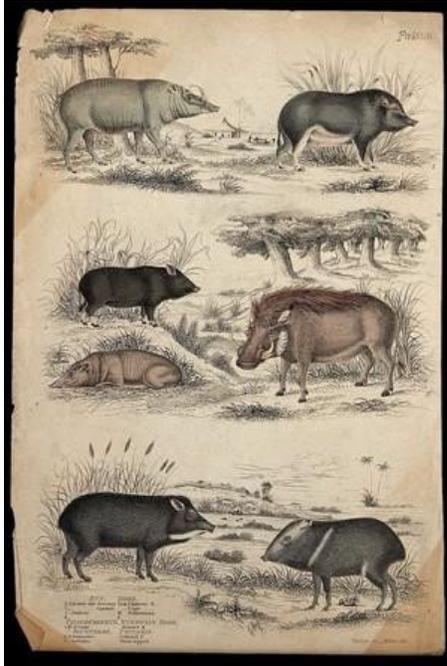
The first Scientific description of the animals would be given in 1547 in Brazil and described them as, not surprisingly, "wild pigs."

As European explorers and settlers continued to encounter and describe animals resembling wild pigs in the New World, it was not until 1817 that a pivotal moment occurred in zoology. The French zoologist Anselme Gaëtan Desmarest laid the foundation for classifying the genus *Tayassu*, marking a significant step toward understanding and differentiating these species from the traditional concept of 'sus' or swine. While the understanding of the relationship between these two genera was still evolving, it was during this time that the scientific community may have started to comprehend that javelina were not true pigs or swine. However, this understanding would not fully develop for many more years.



The peccary, American cousin of the wild boar

An illustration from 1830 hinting that Americans believed peccary to be a member of the "swine" family



An 1835 illustration in which the caption reads "Sus, Hogs" and then identifies both the collared peccary and the white-lipped peccary

Fast forward to the year 1828, only one year prior to the translation of the Book of Mormon, and a curious absence is noted in the English Dictionary, the words, peccary, javelina, and even the genus *Tayassu* developed 11 years previous are all absent from the language signaling the limited awareness or recognition of the true classification of the animals within the prevailing vocabulary of the time.

In 1830, a lithograph was published describing peccaries as "an American cousin of the wild boar." Demonstrating the continued belief that the two species were related. Another lithograph from 1835 features 7 different species of ungulates which it names in the footnote under the title "Sus, Hogs" Included among them are both the collared and white-lipped peccary. emphasizing the recognition of these American ungulates within the category traditionally associated with swine.

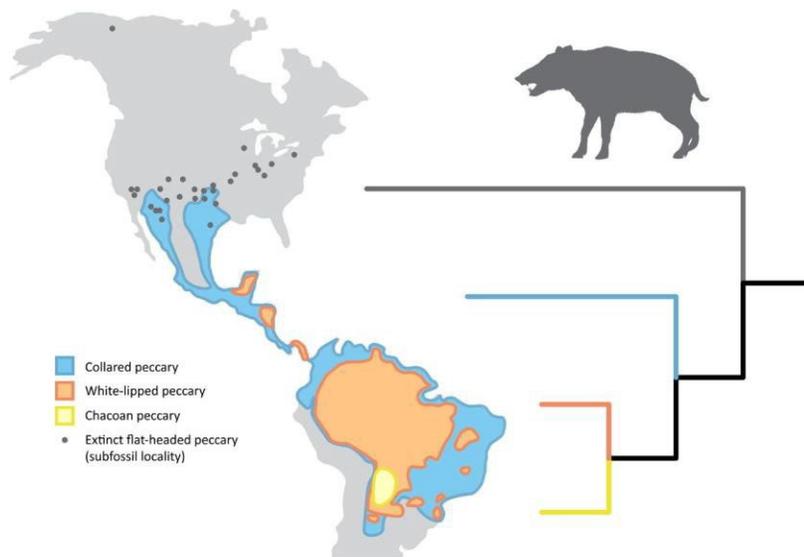
Moving forward in time, the persistence of terminology remains evident. Even as late as 1858, educational



A textbook illustration titled "pigs" which includes peccary and capybara, neither of which are classified today as true swine

materials in America continued to refer to Javelina, a species within the *Tayassu* genus, as 'pigs'. A book titled "History of the Earth and Animated Nature" by Oliver Goldsmith, features an illustration which includes alongside the wild boar, the Chinese sow, and the Babyrussa not only the Peccary but even the capybara, which is a rodent. The hand-colored engraving, which is marked plate plate 38, is titled: "Pigs" The juxtaposition of diverse species under the umbrella term 'pigs' highlights the fluidity and adaptability of language in the face of evolving scientific knowledge.

This historical evidence underscores the persistent application of the term 'pigs' in the broader understanding of pig-like animals during the early to mid-19th century. Consequently, when the Book of Mormon was translated in 1829, the use of the term "swine" instead of "peccary" would have been perfectly acceptable given the scientific understanding of the time.



Map illustrating the ranges of surviving peccary species and fossil sites of the extinct flat-headed peccary

For many years there has remained debate surrounding the topic of the geography of the Book of Mormon. Variations of two different models remain most prominent, the Heartland model, and the Mesoamerican model. Some followers of the Heartland model, such as Rian Nelson, incorrectly believe that the mention of swine within the text affirms their geographic bias. However, the opposite is actually true. During the Pleistocene epoch, a species called the flat-headed peccary did indeed inhabit the regions of the Northeastern United States, where heartlanders believe these events took place.

Although, by insisting the Book of Mormon swine must be the flat-headed peccary, they force swine into the same dilemma as that of elephants and horses. This is because contemporary scholarship currently holds that the flat-headed peccary went extinct at the end of the ice age, 11,000 years ago and well before Book of Mormon times.

Now, it is completely possible that further research may discover that certain members of this species survived in the region far beyond historical understanding, a phenomenon we are currently seeing with both the horse and the mammoth. However, in the case of swine-like creatures, this problem only exists if one insists on a heartland setting, as while the flat-headed peccary is long extinct, the collared peccary remains common to this day in the American Southwest, Mexico, and even as far south as regions of Brazil. Additionally, the white-lipped peccary enjoys a healthy population in some regions of Mesoamerica and inhabits a large range in South America. Asserting that the presence of swine in the Book of Mormon substantiates Heartland model assertions lacks logical coherence and ignores the current archeological landscape.

While there is no evidence that the inhabitants of the American northeast interacted with peccary during Book of Mormon times, Olmec and Mayan art prominently features these animals, and it is clear that these creatures played important roles in these ancient American societies.

The Olmec, recognized as one of the earliest complex societies in Mesoamerica, and believed by many faithful scholars to have had some relation to the Jaredites, portrayed these creatures often in their art. It is clear they frequently interacted with these animals, utilizing them for food and some scholars believe that they may have attached some religious significance to them.



A stone sculpture of a peccary dated to the Middle Preclassic (1000 to 700 B.C.), found at the Agua Fenix site

When thinking of the Jaredites, we tend to think only of the righteous people, and it is difficult to think of these worshipers of the One True God attaching religious significance to an animal that would violate the law of Moses. It is essential to recognize that among the Jaredite culture, apostate religions and groups not only existed but thrived. It is plausible that within these groups, these creatures could have even been seen as deities. Among the righteous, including the people of King Emer, who recorded in Ether 9:18 that “swine... were useful for the food of man”, we must remember the Jaredites departed Mesopotamia long before the law of Moses was instituted, and would not follow the same dietary or cultural laws as the Israelites and Nephites. Prior to the law of Moses, even back to Adam, animal sacrifices to the One True God had been conducted. It wasn't until the Law of Moses was instituted that we have any record of a requirement for it to be of certain species, and the laws of what we now call Kosher did not yet exist. Because of this, the Jaredites could have eaten and even sacrificed these animals without any contradiction in their faith and worship.

The Maya, a name given collectively to numerous civilizations and cultures of Mesoamerica contemporary to the Nephites, such as the Quiché, Yucatec, and the Tz'utujil, also incorporated peccaries into their food and worship, we find evidence of this in their artwork and even their written mythologies. Frequent depictions of peccaries suggest the Maya's acknowledgment of the importance of these animals in their society, extending beyond food. Among the Quiche, the Popol Vuh speaks of a “grandfather peccary” who served as a companion of the hero twins as they defeated the deities of the underworld. Among the Yucatec Maya, one of their deities, Itzamna, rides the constellation Gemini, depicted as a peccary in the transition from day to night. These mythologies and many others featuring the peccary were common among groups which the Nephites would have referred to as Lamanites. Meanwhile, the faithful Nephites would have obviously avoided incorporating the peccary into their worship, and, at least prior to the visitation of Christ, would have refrained from even eating swine, or peccary, which would have violated the law of Moses, due to its combination of a split hoof and non-cud-chewing nature. However, their familiarity with peccaries was undeniable, considering the practices of other Mesoamerican groups and the prevalence of the species within the region. Because of this, Christ's reference to them as 'swine' would have been easily understood by the Nephites in the context of Jewish law. The prevalence of the animals in the false traditions of the Lamanites may have also served to further enhance their disdain for the species, seeking to differentiate themselves from those who hunted, ate, and worshiped the animals.



Pottery depicting the Yucatec Mayan deity Itzamna riding the peccary Gemini (200-450 AD)

In conclusion, the mention of swine in the Book of Mormon, often perceived as an anachronism, can easily be explained with the peccary. The evolution of scientific understanding, linguistic adaptations, and historical evidence collectively point to the likelihood that the swine referred to in the ancient text are, in fact, the New World pigs known as peccaries. The ongoing debate about the geography of the Book of Mormon, particularly the contrasting heartland and Mesoamerican models, finds yet another instance in which the heartlanders display their ignorance of the ancient landscape. The archeological record of these ungulates aligns with the cultural practices of ancient Mesoamerican civilizations, such as the Olmec and Maya as well as their Jaredite and Nephite subparts. Furthermore, the persistence of terminology in the early 19th century, suggests that the use of any other name may have been inappropriate given the scientific understanding of the day. Recognizing the peccary as a viable candidate sheds light on the Book of Mormon's connection to the cultural and historical landscape of the ancient Americas. While challenges may persist in unraveling some other complexities of this ancient record, the examination of the mentioned swine proves to be one of many instances where what critics claimed was an anachronism, is in fact evidence. If Joseph had written the Book of Mormon, he would not have

included swine, as hunter and farmer, he knew they were not native to the continent, nor was he familiar with the peccary. The mention of swine contradicts the prevalent mindset of the day, further authenticating the Book of Mormon as an ancient text.

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