



When Christopher Columbus arrived in the Caribbean he entered a world that was almost empty of domesticated animals. The people of the Americas had no chickens, no pigs, no horses, and no cattle. In the entire Western Hemisphere, there were only four domesticated mammals and two kinds of fowl.

"I saw neither sheep nor goats nor any other beast, but I have been here but a short time, half a day; yet if there were any I couldn't have failed to see them... There were dogs that never barked... All the trees were as different from ours as day from night, and so the fruits, the herbage, the rocks, and all things."

—Christopher Columbus, 1492

The llama, the alpaca, the guinea pig and the Muscovy duck lived in South America. Turkeys could be found in parts of Mexico. Only the dog was widespread.

That was it. No large animals to ride or help with the farming. The Americas were filled with wild game and fish, but it was the domesticated livestock of Europe that changed the way people ate, how they lived and traveled, and even the surface of the land itself.

In the spring of 1493 Columbus made his triumphant return to Spain. Ferdinand and Isabella appointed him to found a mining and agricultural colony on the island of Hispaniola. These days the island is home to Haiti and the Dominican Republic.

In May of that year he set sail again from Spain. Instead of just the Niña, the Pinta, and the Santa María, he now had 17 ships, 1,200 men, 10 mares, 24 stallions, burros, sheep, and a full complement of cattle and pigs. The animals did well on Hispaniola because the local diseases did not affect them, there was an unlimited amount of feed, and few predators. They reproduced at an extraordinary rate and within 10 years they had taken up residence on most of the Caribbean islands.

Ironically, that first colony in the Caribbean was considered a failure because the explorers found no gold. But the domestic animals they brought with them ensured the future success of the Spanish colonies in the Americas.

The domestication of animals actually began with the reindeer and the dog. It wasn't until someone decided to stay put, grow crops, and live in one place that animals were bred in captivity and put to use. Most people assume that we domesticated animals for economic reasons: cattle were a

source of meat and milk; sheep were a source of wool. But that may not have been the only reason:

"If you go back to the archaeological record, on some of these animals, you realize that they had very important cultic, religious associations. Cattle, for example, were very strongly associated in their early stages of domestication with the lunar goddess cult, because of the lunar or moon-like arrangement of their horns, and so they became symbolic for cult purposes, and as a result of that, they were bred in captivity, as a way of getting more animals for the cult. When you go back to the early domestication of a chicken, you realize that people were not interested in the eggs or the meat, but in the innards, because they would use those innards for divination purposes, to tell the future."

—Daniel W. Gade

HOG HEAVEN

The pig was first domesticated from the wild boar in what is now Turkey about 10,000 years ago. They have been raised in Spain and Portugal for at least 2,000 years. After the bull, the pig is Spain's favorite cult animal.

To a great extent the pig's special place in Spanish society comes from its role as a symbol of Christian identity. For over 700 years, beginning in the year 711 and ending with their expulsion in 1492, Muslims occupied Spain. Christians ate pork, Muslims didn't. Eating pork was a way for Spanish Christians to assert their identity. The enormous selection of pork products in Spanish cuisine reflects this historical importance.

Pigs were the first to take on the Americas. They will eat just about anything organic and they convert one-fifth of what they eat into food for us. Spanish conquistadors seeded remote islands by leaving a family of pigs. The pigs would reproduce and be ready for dinner when the next group of Europeans stopped in.

In 1542, a Spanish explorer left the following message on an uninhabited island near Río de la Plata:

"In one of the islands of San Gabriel, a sow and a boar have been left to breed. Do not kill them. If there should be many, take those you need, but always leave some to breed."



The first pigs in North America came to Florida from Cuba with Hernando de Soto in 1539. Within three years his original herd of 13 pigs had become 700. They would wander off into the forest, care for themselves, and come home for dinner. Unfortunately for them, they were usually the dinner.

The pig was a poor man's bank. The farmer could bank on the fact that the little piglet he bought in the spring would be large enough to butcher by late autumn and feed his family during the winter. The remaining pork meat earned enough money to purchase another piglet for the spring, which continued the cycle. This may have been where the idea of the Piggy Bank came from.

"There were some domesticated animals here in the Americas, but in fact, most people didn't have much protein. And so one can argue that the introduction of all of this livestock across the ocean benefited not just the Spanish colonists or the American colonists, the Europeans, but also the native people, and so enhanced their health, because the human body gets its protein most efficiently through animal protein."
—Daniel W. Gade

HOME ON THE RANGE OR IN THE OVEN

Today, cattle are raised all over the United States, but the cattle ranching stronghold is west of the Mississippi where the rainfall is too low for farming and there's no irrigation. Cattle ranching is the major rural activity in at least ten Western states; however, the idea did not originate there.

Southern Spain was the only place in Europe where open range cattle ranching on horseback was a tradition. Herding on horseback, branding cattle and driving beef to market were all developed during the Middle Ages by Spanish cattlemen.

The huge open ranges of the pampas, Mexico, Florida and the western plains of North America were just what the Spaniards understood, and they covered them with their cattle and horses. In a world with few natural predators and an endless food supply, their livestock multiplied at rates unimaginable in Europe.

The Spanish produced breeding herds in the Caribbean and Mexico, and by 1565, on ranches in Florida. Scottish Highlanders and black slaves from West Africa set up open cattle ranges in the Low Country of South Carolina. The Low Country farmers kept the cattle penned in small common pastures. They herded the animals on foot, using rawhide whips and dogs. In fact, the word, "cowboy" is the British word for a cattle herder.

"Remember that song 'Get Along, Little Dogie'? Well, the word *dogie* is believed to have come from West Africa. In Texas, it's used as a name for a small orphaned calf or a steer. That's what that word *dogie* means. Its origin goes back to the Carolina Low Country, and then ultimately to West Africa, because, in the Bambara language of West Africa, it means "small." So that was brought to the New World, and then to Texas, where it was used also."
—Daniel W. Gade

Most of the cattle in the Americas from the 1500s to the 1800s were probably at least half-wild. Freedom made them fast, lean and mean—what meat packers call "eight pounds of hamburger

on 800 lbs. of bone and horn." The Texas Longhorn, a direct descendant of the Spanish stock, was perfect for the dry conditions of the open range. Without much help from people, it defended itself, lived on little water, and survived the summer heat and winter blizzards. They were tough and could be driven long



distances to the slaughterhouse. But with the coming of the railroads in the 1860s, purebred cattle with a better quality of meat could be shipped to the

stockyards. The famed Texas Longhorn began to die out.

Ranching was the way the land was used. People weren't concerned about owning the land; they just needed to use the grass on the land—the right to graze was the important thing. In the cattle-raising tradition of northern England, land was not owned by individuals; it was set up as a common public area. The English carried the practice to the Americas, and laid out the Boston Commons in 1634 for pasturing cattle. Following the Civil War, some cattle owners had thousands of animals, but not one acre of land. In fact, in the western United States today, most ranching is done on public lands.

With the cattle came the plow, a tool unknown in the Americas. The plow was pulled by oxen. Since the time of its invention in Mesopotamia some 5,000 years ago, the plow allowed farmers in the Middle East and Europe to cultivate huge areas of land.

By contrast, Native Americans used a digging stick for farming, an efficient tool for planting small plots of corn or beans. It was useless, however, for turning over the matted, grassy sod of the plains.

"The American Indians developed some very high civilizations but they simply didn't have a power source. They didn't have gigantic animals to pull and haul things all around. In Peru, the Andean civilization that we think of as being the Incas did have the llama. But you cannot ride a llama. And llamas are very unhappy if you try to pack more than 100 pounds on them. The Mesoamerican civilizations, the Aztecs, and the Mixtecs, when they wanted to move something, they packed it on somebody's back, and the person took off with it."



—Alfred W. Crosby

Bringing both cattle and the plow to the Western Hemisphere dramatically altered the landscape and the diet of the Americas. The oxen were strong enough to pull an iron plow across the plains. The plow transformed the grasslands into fields of wheat and corn. Cattle converted unfarmed grassland to food—meat

and milk. Native Americans had no animals that gave them this kind of protein.

In South America, cattle were crucial to colonial expansion. The extraordinary amount of meat that came from the cattle farms also made it possible for the Spaniards and their workers to concentrate on mining and not worry about a dependable supply of food. They never had to ask, "Where's the beef?" They knew it was just down the road.

Oxen powered the first sugar mills, transported miners and their equipment into the interior, and brought gold and silver back to the coasts for shipment to Spain.

Cattle ranching was perfect for the self-image that Americans were building. The cattle rancher was an entrepreneur, open to new technologies, attracted by upward social mobility, challenged to make life more efficient. The cowboy, free and independent, became an icon in American folklore but he picked up his vocabulary and style—everything from bronco to rodeo—from the Spanish. The cowboy represented by John Wayne as part of "real" American culture turns out to have been imported from Spain, the Scottish Highlands and West Africa.

PORK TO BEEF

In the Americas, pork was popular from the beginning. Marooned sailors, pirates and castaways living on the northern beaches of the island of Hispaniola used a native cooking technique, which consisted of a grating of green twigs placed over a pit of burning wood that had been dug into the sand. Their pork was cooked on top. The grating was called a *barbacoa*, and the men who used it were called buccaneers. Their cooking technique gave us the word *barbecue*.

During our colonial period, southern hospitality was more about barbecuing a whole piglet over a pit than serving tea. Farmers raised as many pigs as they could because pigs took very little time away from their main crops of cotton and tobacco.

During the 1800s beef started to replace pork as the meat of choice. In Europe steak was expensive—a sign of wealth. Successful immigrants to America ordered prime rib over pork chops as proof of their new status. Beef was touted as a healthy food.

Steaks, filets, ribs, roasts and stews all became an inexpensive part of the daily diet because of successful cattle ranching. Beef also fit into the American concept of efficient food preparation. A chopped beef patty cooks in minutes. Hamburgers became an American phenomenon.

THE NEW LANDSCAPE

European settlers shifted the balance of nature in the Western Hemisphere. Overgrazing by their livestock was probably the single most important factor. The European animals were a threat to the land because horses, cattle, sheep and goats climbed the slopes and destroyed the fragile network of plants and their roots. Overplowing the soil destroyed the protective ground cover.

Erosion occurred on the slopes; trees grew on the savannahs, and weeds and coarse grasses overtook the plains.

As early as 1580, overgrazing in Mexico was apparent. Cattle were starving in certain areas. Scrub palms took over the open grasslands. When the riches of the grasslands were gone, the increase in herds slowed and in some cases stopped completely. The history of this process is best known in Mexico, but evidence suggests that during the 16th and 17th centuries similar problems were occurring throughout the Americas.



EVERYONE SADDLES UP

It is one of those inexplicable twists of fate that sent the Spaniards to conquer the New World. They were the only people likely to show up with horses and of all the animals imported to the New World the horse was an essential element in Spain's conquest. For over 700 years, parts of Spain were under the control of the Moors who had come across the Mediterranean from North Africa. They were some of the most skilled horsemen in the world and they passed on their equestrian knowledge to the Spanish.

By 1492, the horse had become part of daily life in Spain and Portugal—and that held for all levels of society, not just for the nobles. Horses were easy to get, inexpensive, and the most efficient mode of transportation known to Europeans, which is why they were part of the cargo during Columbus's second voyage.

"You could go to the coast in your ship, but then you have to find a way to move up into the highlands. In both Mexico and Peru, the horse came into play. It provided that mobility, and a mounted horseman could sweep down on a foot soldier with great efficiency and speed, and discombobulate the soldier so much that it left him vulnerable to being killed. It was a very efficient way to kill the Indians. Thirdly, there was the psychological advantage of having a horse, because the native people of the New World had never seen an animal like that. To them, this was some kind of a mythic, supernatural being."

—Daniel W. Gade

The natives of the Caribbean thought that a horse's favorite food was a Caribbean native. And the Indians of Chile were terrified of the Spanish horses—they believed that the horse and its rider were one animal. The horse changed the battle odds.

The horse first evolved in the Americas around 55 million years ago, and wild horses had existed continuously in the Americas until, for reasons that are not clear, they died out between 8,000 and 10,000 years ago. When they were brought



back by the conquistadors as domesticated animals, they were taken to Mexico, Peru and Chile to take part in those conquests. Some got loose and returned to the wild. When the Spanish arrived on the Argentine Pampas thousands of wild horses had already covered those grasslands—they had also become a source of food for the Indians who lived there.

Vasquez de Espinosa, at the start of the 1600s, writes of the wild horse:

“They are in such numbers that they cover the face of the earth and when they cross the road it is necessary for travelers to wait and let them pass, for a whole day or more, so as not to let them carry off tame stock...”

By the end of the 1500s, horses were grazing throughout the Western Hemisphere—everyone, including the Native Americans, was “saddling up.” If you could catch a wild horse you could own one.

Before the Spanish horses came to the Americas the great grasslands from Canada to Chile had few human inhabitants. It was not an easy place to farm and the Plains animals were difficult to hunt. The horse changed the Plains Indians into great buffalo hunters. Starting in the middle of the 1700s and continuing for over a century, the Arapaho, Blackfoot, Comanche, Crow, Dakota, and Sioux rode their horses on a great adventure, extending their range and their power.

In North America, horses were not fenced in. Often the only evidence of a connection between a horse and a human was a collar with a hook at the bottom. The hook would catch on



fences as the horse tried to leap over and get at the crops. For the most part, fences in the early colonies were not for keeping livestock in, but for keeping wild animals out.

Early settlers tended to live on isolated farms—they had to travel large distances for everyday needs. Being able to have your own horse in exchange for the simple act of catching it was a great gift to the frontiersman. The horse became the common carrier for the common man. There were more horses both wild and tame in the western hemisphere than anywhere else on earth. Their numbers shaped early European societies in the Americas more firmly and more permanently than the discovery of gold.

By 1600 one of the cheapest foods in the Americas was meat; the Spanish-American settlers were probably consuming more meat per person than any other large group of people in the world. In fact, the Europeans in America have rarely experienced any form of famine. For almost 500 years Americans have been the best-fed people in the world, a fact that has motivated more people to migrate to America than all the religious and ideological forces combined.

TO LEARN MORE

NATURE AND CULTURE IN THE ANDES

BY DANIEL W. GADE

PUBLISHED BY UNIVERSITY OF WISCONSIN PRESS

THE COLUMBIAN EXCHANGE: BIOLOGICAL AND CULTURAL CONSEQUENCES OF 1492

BY ALFRED W. CROSBY

PUBLISHED BY GREENWOOD PUBLISHING GROUP, INC.

GERMS, SEEDS AND ANIMALS: STUDIES IN ECOLOGICAL HISTORY

BY ALFRED W. CROSBY

PUBLISHED BY M.E. SHARPE, INC.

LICENSE TO GRILL

BY CHRIS SCHLESINGER, JOHN WILLOUGHBY, DOC WILLOUGHBY

PUBLISHED BY WILLIAM MORROW & CO.

THRILL OF THE GRILL: TECHNIQUES, RECIPES, AND DOWN-HOME BARBECUE

BY CHRIS SCHLESINGER, JOHN WILLOUGHBY,

VINCENT LEE (PHOTOGRAPHER)

PUBLISHED BY WILLIAM MORROW & CO.



BURT WOLF * WHAT WE EAT

A 13-PART SERIES FOR PUBLIC TELEVISION IS UNDERWRITTEN

BY **CONAGRA FOODS**

AND

DISTRIBUTED BY AMERICAN PUBLIC TELEVISION.

WKNO PUBLIC BROADCASTING

IS THE PRESENTING STATION.