



The Spanish Centuries

On Sunday, May 8th, they doubled the Cape of Florida, which they called Cabo de Corrientes, because the water flowed here, and it had more force than the wind and would not allow ships to proceed even with all sails unfurled. . . . They sailed until they found two islands to the south at 27° N. One of them, which was at least a league in length, they named Santa Marta. They took on water there. On Friday, May 13th, they sailed along the edge of a bank, and reef of islands, until they came to the location of another island, which they named Pola, at 26° 30' N. Between the bank and reef of islands and the mainland, stands the great sea, like a bay. On Sunday, May 15, Whitsuntide, they ran along the coast of the islands for 10 leagues, up to two white islands. And to all of that island reef, and the small islands, they named it Los Mártires. . . . Wednesday, June 15, they went in search of the eleven small islands that they had left to the west. . . . On Tuesday, June 21, they reached the small islands that they named Las Tortugas. In a short period at night they took, on one of these islands 170 turtles and could have taken many more if they so desired. They also took fourteen sea wolves, many pelicans, and at least five thousand other birds. . . . On Sunday they reached Isla de Achecambéi by-passing Santa Pola and Santa Marta they arrived at Chequesca.

ANTONIO DE HERRERA Y TORDESILLAS, 1601





FIGURE 2. Juan Ponce de León. Courtesy of the Library of Congress.

IT WAS IN 1513 that South Florida emerged into the history of Western civilization, and into the information flow of natural history, as Juan Ponce de León worked his way down the Atlantic coast into and around South Florida (fig. 2). Sailing so as to avoid the onrush of the Florida Current and prevailing southeasterly winds, he stopped at a place he named Santa Marta. He continued south and westward along the string of islands he named Los Mártires, then up the Florida Gulf coast to Calos, back southward to islands he called Las Tortugas, and then back to Chequesca near Santa Marta (de Herrera 1730, Davis 1935, Fuson 2000). Ponce de León's itinerary and his anchorages were mostly in South Florida, at least as represented by Antonio de Herrera in the chapter's introductory quote. (The English version of the quote is from Fuson 2000.)

By the 1500s, Ponce de León's and de Herrera's century, it had been two millennia since Aristotle and Theophrastus had initiated the empirical study of nature; their descriptive work, philosophical underpinnings, classification approaches, and fanciful interpretations shaped Greek, Hellenistic, Islamic, and Roman thought and still influenced the knowledge

base of the 1500s (Cuvier 1830, Leroi 2014). But by then, natural history study had become a fully accepted component of European scholarship, allied principally to the utilitarian uses of plants and animals. Books and illustrated catalogues presented new facts, newly discovered plants and animals, and still-believed classical myths—a necessary inclusion so as not to offend medieval tradition. Leonhart Fuchs’s comprehensive plant descriptions of his *New Kreüterbuch* (*New Herbal*) of 1542 and Konrad Gessner’s zoological equivalent, *Historia Animalium* (*History of the Animals*) of 1551–1587, were among the more popular works of the time and remain honored today (Gmelig-Nijboer 1977, Jenkins 1978, Dressendörfer 2001). The *New Herbal* described and provided uses for over 500 plants, including for the first time illustrations of American species such as tobacco, corn, and prickly pear cactus.

Such information about the natural world came to matter greatly to nations, rulers, treasuries, commerce, and people. Plant-derived herbs and spices were an early incentive for Europeans to begin their explorations. Agriculture benefitted; by the time of their publication in the *New Herbal*, the American plants were already economically important. Physicians, herbalists, and apothecaries continued to create therapeutics from newly found plants and planted physic gardens in which to grow them. European physicians relied on animal anatomy and physiology to inform human medical practice. Clergy sought evidence for the great chain of natural being. The wealthy enjoyed wildlife for their hunting and falconry, and plants in their gardens. The 1500s saw the evolution and maturation of European Renaissance gardens, in large part based on newly rediscovered Roman gardens. Plants and animals indeed mattered.

In the two and a half centuries that followed Ponce de León’s first visit, during which Spain held Florida, European natural history experienced the full flowering of its Age of Enlightenment. By the mid-1600s, scientific academies had been formed in England and France. Books were illustrating new plants and animals (Raven 1942, Frängsmyr et al. 1983, Koerner 1999). In the late 1600s, John Ray introduced expeditionary natural history exploration, reliance on personal observation over ideology, and a workable species concept (Jenkins 1978). In the late 1700s, Thomas Pennant wrote the influential *British Zoology* (Pennant 1776–1777). North America saw its first extensive natural history explorations in the early 1700s, which

fed into European syntheses such as the 36 volumes of Georges-Louis Leclerc, Comte de Buffon's, *Histoire Naturelle* (*Natural History*) (Jenkins 1978). Also in the 1700s, organizing the natural world became tractable through the hierarchical naming scheme of Carl von Linné (Jenkins 1978, Blunt 2004, Kohler 2006).

Having an organizational framework to categorize the living world launched explorations to secure type specimens of not-yet-named plants and animals, ushering in one of the great eras of natural history discovery as naturalists scoured their home regions, toured on their own, and accompanied government expeditions. The era's icon was Joseph Banks, who personally participated in exploring Newfoundland and Labrador in 1766 and the Pacific with James Cook in 1768–1777 and afterward essentially managed British natural history. The appetite for natural history information was immense (Corsi and Hoquet 2018, Allen 2010).

Practical results from these natural history excursions remained important. Botanical gardens were established to receive exotic plants so as to naturalize them in support of agriculture and decorative horticulture. Banks, as long-term president of the Royal Society, helped internationalize natural history by encouraging expeditionary collecting, influencing the deployment of exploring botanists around the world, arranging for their materials to end up back in Kew Gardens, organizing their subsequent dispersal to other gardens, and connecting practitioners in various countries. The flow of information, including new natural history information, coming into exploring European countries was no less than a deluge.

Spain too went to considerable lengths to document her colonies. Explorers like Ponce de León, governors and other government officials, clergy, wealthy settlers, and shipwreck survivors brought back to the homeland travel tales, novel plants and animals, minerals, native people, geographic information, observations, interpretations, and recommendations. Soon after Ponce de León's first voyage, in 1520, Pietro Martire d'Anghiera (known in English as Peter Martyr) was installed as Chronicler of the Indies and a member of the powerful Indies Council (Jackson 1954). Writing in Latin, his work describing Spain's new world was internationally accessible. Martire d'Anghiera wrote while early explorers were still alive and so was privileged to access their reports first or secondhand. He and successor chroniclers captured the flow of information from the

New World describing and redescribing its colonial history, geography, and resources.

Spain sponsored its first governmental natural history engagement as early as 1570–1577, dispatching court physician, naturalist, and medical botanist Francisco Hernández de Toledo to New Spain. There he studied Mexican plants, animals, their indigenous uses, local medicine, and diseases. His descriptions and illustrations encompassed over 3000 Mexican plants. The content of his writings were much republished, proving hugely influential in the development of European medicine and natural history. By the 1700s, in concert with the expansion of European interest in natural history, Spain increased her exploratory missions to investigate natural resources and in 1755 created her own royal botanical garden to receive plants from abroad. Yet despite Spain's early and continuing interest in documenting her colonies, as far as is known, it took 88 years after the fact for some of Ponce de León's South Florida account even to be published, by Chronicler Antonio de Herrera.

In writing up Ponce de León's account, de Herrera becomes South Florida's first natural history recorder, and he was one of the more prolific, widely read, and influential of the colonial Spanish historians (Jackson 1954, Fuson 2000, Cuesta Domingo 2016). Antonio de Herrera y Toresdillas was born in 1549 of a noble family, becoming an aid to Philip II who made him Chief Chronicler of the Americas in 1596. To this two years later was added the office of Chief Chronicler of Castile. In these positions he had at his disposal archival materials kept by both the Council of Castile and Council of the Indies.

What Chronicler de Herrera chose to extract from Juan Ponce de León's archived logs and reports supported his own motivations. His *Descripción de las Indias*, which included Ponce de León's story, was meant to be the geographical underpinning for his Spanish colonial history, known today as *Décadas*. So his account of the itinerary, and the first recorded natural history of South Florida, mostly consisted of coastal geography. Some of de Herrera's reportage also incorporated information that had accumulated after Ponce de León's trip, including latitudes and by-then-settled place names.

Undoubtedly Juan Ponce de León was more observant of the nature he encountered in South Florida than what was shared by de Herrera.