Humans love trees. They shade our homes in summer, provide a convenient location for play or rest, and give us warmth in winter. In the 21st century, they remain a symbol of nature’s fertility and regeneration, especially in springtime, when bursting buds and blossoms remind us that a new season will soon prevail. Trees connect us to specific places, provide us with a sense of direction, and in some locales, where single species dominate the landscape, our community identity. Forested places can even evoke, as the eminent geographer Yi-Fu Tuan has observed, joy, fear, mystery, grief, tradition, and childhood memories.¹

Ironically the tree that perhaps most piqued the emotions of the 19th and 20th century American—the American chestnut—has all but disappeared from the North American landscape. The American chestnut was virtually lost to both field and forest during the first four decades of the 20th century, after an exotic fungus was introduced into this country on Asian chestnut nursery stock.² Before that time, the American chestnut played an extremely important role in the ecology, economy, and material culture of the eastern United States. From Maine to Mississippi, the American chestnut evoked memories of community gatherings, family picnics, holiday feasts, street vendors, small and big-game hunting, fence building, logging, shingle splitting, hog husbandry, and even moonshining.³ For residents of Appalachia, where the tree defined the pre-World War II landscape, the loss of the American chestnut even served as a metaphor for the passing of a self-sufficient, and largely forest dependent, way of life.⁴
American communities are still home to specific localities bearing the name chestnut, including streets, cemeteries, schools, churches, and post offices. Numerous mountains, ridges, hills, knolls, valleys, streams and ponds are also prefaced by the chestnut adjective, especially in areas where the trees were prevalent. Although some locales may have been home to only a single grove of trees, many areas possessed entire forests of the American chestnut. George Ramseur, who lived in southeast Tennessee during the 1930s, recalled that chestnut trees atop the Cumberland Plateau “were as common as the moon rising and sun setting.” Although the mountainous portions of Kentucky, West Virginia, North Carolina and Pennsylvania were also home to large numbers of American chestnuts, they could be found in lower elevations across much of their range. Chestnut Neck, New Jersey, for example, the colonial village that was also the site of an important Revolutionary War battle, got its name from the many chestnut trees that once grew in the township, even though the local terrain there is less than ten feet above sea level.

During the second half of the 19th century, especially in America’s largest cities, chestnut trees were planted along major thoroughfares, where they shaded urban pedestrians during warmer months and fed them during colder ones. In the summer of 1859, a New York Times writer editorialized that in some areas of Manhattan, where the wealthy “still own land by the block,” individuals were “planting avenues of chestnuts and elms.” In America’s first planned suburb, Baltimore’s Roland Park, native chestnut trees were even touted as a potential drawing card for future residents. A frequently posted advertisement in The Morning Herald during the mid-1890s announced that “The more you see of Roland Park, the more it grows on you. It is an improved piece of property with…beech and ash, sycamore and chestnut, which shade while they shelter—all are here, for they have been here for years and years.” Apparently, American Chestnuts were
a visible part of the Roland Park landscape for another decade, as evidenced by a 1902 article from the *Baltimore Sun* society pages: “Mr. and Mrs. William M. Ellicott gave a tea and chestnut hunting party yesterday afternoon to the instructors and pupils of the Arundel School at her residence, 106 Edgewood Road, Roland Park. An experienced raccoon hunter was engaged to climb and thresh the chestnut trees, and the nuts were eagerly gathered from the ground by the children, regardless of leaves and burrs falling upon their heads…”

Smaller townships also planted chestnuts trees within their community borders, as local residents perceived the trees as natural capital that might one day pay future dividends. In 1893, Maine tavern-keeper Samuel Farmer pleaded for his neighbors to invest in a chestnut orchard, citing the success of Temple, a town in the western part of the state that had imported numerous chestnut trees from Massachusetts during the late 1840s. “Forty-five years later,” proclaimed Farmer, “the trees are…over two feet in diameter, and in height and general size have outgrown all other trees in their vicinity. It is a valuable tree for timber, and is used for telephone poles, railroad poles, railroad ties, fence posts, sawed timber and plank.”

The many uses for the American chestnut made it one of the country’s most favorite species, causing several contemporary writers to christen it “the perfect tree.” In 1915, when New England forester Philip L. Buttrick discussed the importance of the tree to the U.S. economy, he concluded that the American chestnut possessed “a greater variety of uses than almost any other American hardwood,” as the tree touched upon “every phase of our existence.” To bolster his argument, Buttrick noted that the tree “serves as a shade and ornamental tree in our parks and estates. Its wood is used in the building and decoration of our houses and the manufacture of our furniture. We sit down in chairs made of chestnut and transact our business at desks, ostensibly of oak, but generally of chestnut veneered with oak; we receive messages from the distance over
wires strung on chestnut poles. We sit in a railroad train and read newspapers into whose composition chestnut pulp has gone, while our train travels over rails supported on chestnut ties and over trestles built of chestnut pilings, along a track whose right of way is fenced by wire supported on chestnut posts. On the same train travels goods shipped in boxes and barrels made of chestnut boards and staves. Even the leather in our shoes is tanned in an extract made from chestnut wood…At last when the tree can serve us no longer in any other way, it even forms the basic wood…to make our coffins."\textsuperscript{13}

Perhaps the most pleasurable memories associated with the American chestnut involved our annual consumption of the nuts, which usually started in early October and continued through the coldest winter months. In urban areas along the eastern seaboard--from Washington DC to Boston, Massachusetts--the often motely dressed sidewalk vendors who roasted and sold chestnuts were seen as the true harbinger of the holiday season.\textsuperscript{14} By mid-November, the aroma from their small pushcarts was nearly inescapable, making it difficult for city dwellers to hold on to their spare change. In 1898, an anonymous reporter for \textit{The Boston Evening Transcript} commented on the sensual allure of the roasting chestnuts, stating wryly that “the incense” of the vendor’s trade was his best advertisement. “There are few who can permanently resist the sweet savor sent up by the chestnut roaster,” observed the writer. “They may wish the vender had a little cleaner hands and a little more wholesome attire, but one sense contends against the other, and at last they are likely to shut their eyes and the sense of smell triumphs.”\textsuperscript{15}

Chestnuts were equally important in rural areas during the winter season, feeding both the eyes and stomachs of those fortunate enough to live near the nut-bearing trees. In many parts of Appalachia, the nuts were less likely to be eaten than to be bartered or sold for much needed provisions at the cross-roads store or fed to livestock for winter fattening.\textsuperscript{16} But even in the most
remote areas of the tree’s native range, it would be difficult to find a single individual who did not taste a handful of chestnuts before year’s end. Northeast Alabama resident Marie Washburn recalled that as late as the 1920s, her family would attempt to maintain their annual store of chestnuts until Christmas day. “Well, as far back as I can remember we always had chestnuts to eat. And when I got big enough to go up to the field up there where they were, Daddy would have us picking them up. He’d sack them up and…try to hide them from us but we’d find them. And he’d say ‘now don’t eat them all up, we’ve got to have some for Christmas.’”

In late spring or early summer, depending upon the geographic location of the stand, the American chestnut again assaulted the senses of those living nearest the largest trees. After chestnut trees fully leaf out, they produce thousands of long delicate catkins that turn from green to white in a matter of several weeks. Accompanying the catkins is a strong pungent odor, which some commentators, among them Henry David Thoreau, found “disagreeable” and even “offensive.” Others were more kind, however, using adjectives ranging from “delicate” to “heavy” when describing the recognizable odor of the chestnut blossom. Visually, the blooming trees were a sight to behold, turning entire mountainsides a creamy yellow; and then, as the catkins began to release their pollen, a sugary white, that from a distance, resembled snow. Nineteenth century travel writers Wilbur Zeigler and Ben Grosscup, who spent considerable time exploring the mountains of western North Carolina, stated it was actually “the glory” of the chestnut blossom that was responsible for the trees “giving character to the landscape.” The prolific chestnut blossom was, not surprisingly, the impetus for the naming of dozens of mountains and ridges throughout the Appalachians, including Yellowtop Mountain, North Carolina, Whitetop Knobs, Tennessee, Yellow Mountain, Georgia, and Little Yellow Mountain, Virginia.
As an environmental history of the American chestnut, my research focuses on the relationship between humans and chestnuts in North America over the past ten thousand years, although the bulk of the forthcoming book surveys the period from European contact to the 20th century. For those unfamiliar with environmental history proper, the field of study emerged during the 1970s as the result of scholars from numerous disciplines wanting to better understand how historical forces shape attitudes toward the natural world, and how nature, overtime, shapes the lives of humans. The environmental history narrative is also known to general readers, as a number of scholars and journalists have recently applied the basic approach to their craft. Environmental history is found in the work of Michael Pollan, whose popular studies of foods like apples, corn and potatoes, demonstrate the ongoing interplay between plants and humans, nature and culture, over the last several centuries. Author Charles C. Mann has also been influenced by environmental history, as his best-selling 1493 pays considerable homage to Alfred C. Crosby and his ground-breaking book The Columbian Exchange: the Biological and Cultural Consequences of 1492. Only a handful of such studies have been devoted to a single plant species, however, among them David Taylor’s Ginseng: The Divine Root, which expertly chronicles the natural and human history of one of North America’s most important herbaceous plants.

In 1491, the year before Christopher Columbus came ashore in the West Indies, the natural range of the American chestnut included more than 400 thousand square miles, an area that today would fall within the borders of twenty-six states, two Canadian provinces, and the District of Columbia. This was, in essence, the modern range of the tree, a vast territory extending from
southern Maine to southeastern Michigan, from southeast Louisiana to southern Georgia. From there the trees could be found sporadically below the Atlantic fall line, in an area extending northward to the southern terminus of the Chesapeake Bay. At the beginning of the 16th century, the tree was the most dominant single tree species in the eastern forest, commonly reaching diameters of six feet or more in some parts of the Appalachians. The American chestnut influenced the lives of Native Americans throughout prehistory, providing both nutritional sustenance and warmth and shelter in the form of firewood and building timbers. Early European explorers and settlers would also make use of the trees and nuts, as numerous eyewitness accounts attest. These primary sources shed considerable light on the importance of the American chestnut during the early settlement of North America and provide additional evidence that the trees once inhabited areas outside their accepted historic range.

The first Europeans to observe chestnuts growing in North American forests were likely Spaniards, as they both explored and lay claim to areas where the trees were most commonly found. Francisco Cordillo and Pedro de Quejo, both Spanish slave raiders, may have seen the trees growing near the Atlantic coast after coming ashore north of Charleston in the summer of 1521, but is doubtful that they or their shipmates traveled far enough inland to observe living trees, as chestnuts had largely disappeared from the South Carolina coastline prior to the 16th century. 27 Returning to the area four years later, de Quejo and a crew of sixty sailed northward along the North Carolina coast, later entering the Chesapeake Bay, where chestnut trees would have been visible beyond the shoreline. 28 In 1525, Estêvão Gomes, a Portuguese pilot who served for the country of Spain, sailed northward along the shores of New England, a voyage that left behind little documentation but apparently influenced mapmakers for decades. According to
author Thomas Suárez, the map of North America drawn by cartographer Juan Bellero in 1554 contains considerable nomenclature from Gomes’s original voyage, including a reference to a “chestnut grove” along the coast of Maine.29

Fernández de Oviedo, who wrote the very first natural history of the New World, made several references to chestnuts in his recounting of the life of Lucas Vázquez Ayllón, the Spanish licentiate who, in 1526, attempted to establish the colony of San Miguel de Gualdape along the South Carolina coast. According to Oviedo--who based his narrative on the testimony of eye-witnesses--the forests near San Miguel possessed “many pine and oak trees…and chestnut trees, with small fruit.” In an earlier passage, Oviedo noted that the Indians were great archers who made “sturdy bows from the wood of chestnut trees, which were much more plentiful in the interior.” Although the Oviedo account was not published until the mid-1800s century, the original manuscript was written during the mid-16th century and remains one of the earliest mentions of chestnuts in North America.30 Of course it is more likely that the chestnuts observed by Ayllon were chinquapins due to their close proximity to the Atlantic coastline. British explorer John Lawson reported seeing chinquapins in a Sewee cabin along the Carolina coastline in 1701, stating that chestnuts were never found “near the Sea or Salt Water, tho’ they are frequently in such places in Virginia.”31

Probably the most well-known Spanish explorer to have encountered chestnuts during the 16th-century was Hernando de Soto, the conquistador, who from 1539-1542, traversed the southeastern United States in search of gold, silver, pearls, and other precious commodities.
Although there are four major chroniclers of the De Soto expedition, only two are purported to be from direct eyewitnesses, and both make specific reference to the American chestnut.

Perhaps the most reliable of the two accounts is attributed to Rodrigo Ranjel, De Soto’s official secretary during the expedition. Based on Ranjel’s own personal diary, the story was also retold by Oviedo in his *Natural History of the Indias.*\(^3\) Ranjel’s first mention of chestnuts occurs very early on in the expedition—August 15, 1539—after De Soto and a smaller contingent of his army entered the Robinson Sinks area of northern Florida. In a “fair-sized village” that anthropologist Charles Hudson thinks was the Alachuan township of Cholupaha, Ranjel reported that the De Soto entourage saw “many small chestnuts, dried and delicious.” He also remarked that the small shrubs that bore them were “only two palms high,” which meant they were Allegheny chinquapins; the *Castanea* species that in northern Florida grows to a height of only one or two feet.\(^3\) Some botanists consider the Allegheny chinquapin of northern Florida a separate species, classifying it as *Castanea alnifolia.* Thomas Nuttall first described the species in 1817, remarking that the shrub could be as little as “12 inches high.”\(^3\) Today the small tree is commonly referred to as the Florida chinquapin and is found in dry, sandy soils across its range.

Ranjel did see larger chestnut trees during the expedition, however, and wanted readers to know that they were not uncommon in the new Spanish territory. In the very next sentence quoted above, Ranjel added that there were “other chestnuts in the land, which the Spaniards saw and ate, which are like those of Spain, and grow on as tall chestnut trees.” This statement is clearly a description of the American chestnut, perhaps the very first put to paper. Ranjel described the trees as “big and with the same leaf and burrs or pods (as Spanish chestnuts), and the nuts are rich and of very good flavor.”\(^3\)
Later in the expedition—on October 17, 1540—De Soto and his men observed “an abundance of chestnut bread made from chestnuts” at a large palisaded village along the Alabama River below Selma, Alabama. The chestnut bread was reportedly brought by messengers from the chiefdom of Mabila, a Mississippian township located somewhere in the vicinity of present-day Camden, Alabama. According to Ranjel, there “where many and good chestnuts” in the woodlands surrounding Mabila, a fact corroborated by naturalist William Bartram, who in the Fall of 1775, observed an “abundance of Chestnut” in the “vast open forest” that once comprised the Black-Belt region of Alabama.

The second eyewitness account of the De Soto expedition, and the very first chronicle available to the general public, is attributed to the Gentleman of Elvas, an anonymous Portuguese cavalier who reportedly survived the ordeal and later retold his story to Spanish publisher André de Burgos. When his *A True Account of the Travails Experienced by Governor Hernando De Soto* was published in Evora, Portugal in 1557, it was believed to be based on actual notes Elvas “kept during the expedition.” Although several scholars have rightly questioned the source of the narrative, it does provide more detail than the Ranjel account, especially regarding descriptions of the expedition route, including the crops, trees, and food supplies found near Native American villages. In the book’s final chapter, Elvas is quoted as saying, “Wherever there are mountains, there are chestnuts,” implying that the expedition members only observed the trees growing in higher elevations. In the very first English translation of the volume, published in 1609, English historian Richard Hakluyt translates the sentence as “Where There Be Mountaines, there be chestnuts: they are somewhat smaller than the chestnuts of Spaine.” However, in the
original Portuguese text, the phrase actually reads: “Onde a hi serras ha castanhas, sam algúna cosa mais meudas que as colharinhas d'Espanha.” According to Michael J. Ferreira, Associate Professor of Romance Philology and Linguistics at Georgetown University, this sentence translates into modern English as “Where there are mountains, there are chestnuts, although they are somewhat smaller than the colarinha chestnuts of Hispania.”

Ferreira finds it somewhat perplexing that the more conventional Portuguese term for mountains [montanhas] was not used by Elvas, especially if De Soto and his men did only observe the trees in upland areas. He also maintains that there is the very real possibility that a “typo” was made during the preparation of the volume, as the printer might have mistakenly replaced the letter “t” with the letter “s” during typesetting, since the two fonts are almost identical in 16th century typescript. Given that chestnut trees could be found in both lowlands and higher altitudes at the time of the De Soto entrada, the Portuguese expression for lands--terrass--was, in fact, a more appropriate choice of words. The use of the word serrass [mountain ranges], on the other hand, may simply imply that chestnuts were seen in their highest concentrations in high upland terrains, an observation that, in the 16th century Southeast, would not be entirely untrue. The mention of “colarinha” chestnuts by Elvas is less surprising, as the cultivar was common throughout central Portugal at the time, including the immediate area surrounding the town of Elvas. Colarinha chestnuts are identified today by their larger size and small hilus collar surrounding the base of each nut. Regarding “Hispania,” Elvas was referring not to Spain, but to the entire Iberian Peninsula, which obviously included the Kingdom of Portugal.
After De Soto’s death in 1542, the Spanish made additional *entradas* into the Southeast interior, where they continued to encounter and record the presence of chestnuts and chestnut trees. In August 1566, Florida’s governor Menéndez de Avilés ordered Captain Juan Pardo to lead an expedition into the backcountry in order to protect the Spain’s growing colonial interests there.

After accepting his official orders, Pardo and his men traveled northward from Santa Elena—a Spanish settlement located on the Carolina coast—toward the mountains of western North Carolina. Along the way, Pardo stopped at several Native American villages, including Cofitachequi, near present-day Camden, South Carolina, and finally, at Joara, a township located near Morganton, North Carolina, about fifty-five miles east of here. At Joara, Pardo and his men constructed Fort San Juan, a garrison considered to be the first European settlement in the interior United States. Excavations at the site reveal that at least one of the barracks was constructed using chestnut poles strategically placed around its exterior walls. A large chestnut plank was also found inside the structure, a badly decayed board measuring some 50 inches long and 10 inches wide. Covered with river cane matting, the board was most likely used by the Spanish soldiers as an interior bench. It also represents the first documented use of chestnut wood for lumber planking in all of North America.

Although upwards of thirty men were garrisoned at Fort San Juan over an 18-month period, Pardo was not, as he returned to Santa Elena almost immediately after his initial arrival. On September 1, 1567, Pardo began a second expedition to Joara, a journey that included overnight stays at several Native American villages along the route. According to eyewitnesses, as Pardo and his men arrived in each town, the Indians provided them with considerable provisions, as several villages possessed storerooms filled with “maize, beans, pumpkins, and chestnuts for two or three years ahead.” Among the eyewitnesses was Teresa Martín, a native Catawban who had
apparently married one of Pardo’s soldiers, Juan Martín de Badajoz, during the expedition. In testimony provided to Florida Governor Gonzalo Canço in 1600, Martín reported that the chestnuts given to Pardo and his men were “castaña apilado,” meaning they were “smoke-dried” over a smoldering fire.⁵⁰ This method of chestnut preservation, which had been perfected as early as the 11th century in Europe, not only extended the shelf-life of the nuts, but also the flour or meal made from them.⁵¹ Because the term castaña apilado is used consistently by Martín and other eyewitnesses of the Pardo expedition, we have reason to believe that chestnuts were, in fact, eaten year-round by Indians of the interior, consumed as an important foodstuff well beyond the fall and winter months.

In late September, when Pardo finally arrived at Fort San Juan, he found the fort partially abandoned, and his principal sergeant, Hernando Moyano de Morales, under attack at a distant location. With hopes of rescuing Moyano from hostile Indians, Pardo lead a foray of men over the Blue Ridge Mountains before stopping at the confluence of the French Broad and Nolichucky rivers in east Tennessee. Pardo’s notary, Juan de la Bandera, wrote that the men saw “very good land” during their ten-day journey, including “many chestnuts, walnuts, and quantities of other fruits.”⁵² After successfully rescuing Moyano, Pardo’s and his entourage chose a different return route along the eastern flank of Chilhowee Mountain, and by mid-October, was camped near the junction of Walden and Cove Creeks. There they were visited by three chiefs from the surrounding area, among them an individual named Otape Orata. According to anthropologist Charles Hudson, the word Orata translates as chief or headman, whereas Otape is the “Muskogean word referring to chestnut trees or a place where they may be found.”⁵³ Hudson thinks the village was located somewhere along the headwaters of the Little Pigeon River, near
the Great Smoky Mountains National Park, an area historically noted for its large and numerous chestnut trees.

Despite the efforts of De Soto, Pardo, Menéndez, and others, the Spanish would eventually lose their strategic foothold on the American Southeast, thereby allowing the English to establish permanent settlements along the Atlantic coast. The first of these settlements was at Roanoke Island, the English colony founded by Sir Walter Raleigh in 1584. Although there was a brief expedition to Roanoke a year earlier, on August 17, 1585, Sir Ralph Lane and more than a hundred colonists were left on the island to maintain a small fort and develop closer ties with the neighboring Algonquin Indians. Among them was Thomas Harriot, an historian and ethnographer assigned to make a detailed record of the natural resources to be claimed by the future colony of Virginia. Although a second group of colonists would be left at Roanoke in 1587 (the so-called Lost Colony), Harriot departed the island in the summer of 1586, when Sir Francis Drake, who had just returned from sacking the Spanish town of St. Augustine, arrived and offered the colonists safe passage back to England. By 1587, Harriot was in Ireland, writing *A Brief and True Report of the New Founde Land of Virginia*, a short treatise summarizing his explorations of Roanoke Island and the surrounding mainland. Published in 1558, Harriot’s *A Briefe and True Report* states that American chestnuts were indeed among the foodstuffs regularly consumed by both the North Carolina Algonquians and first English colonists. In fact, the full title of the section containing the reference to chestnuts reads: “Suche Commodities as Virginia is known to yeelde for victuall and sustenance of mans life, usually fed upon by the natural inhabitants: as also by us during the time of our abroad.” The
first commodity listed under the heading “Of Fruites” is the American chestnut, which Harriot explains, was found “in diverse places great store: some they use to eat rawe, some they stamp and boile to make spoon meat, and some being sodden they make such a manner of dowe bread as they use for their beans.” According to Harriot, the Algonquians had two ways of preparing chestnuts beyond simply eating them raw: they could turn them into a polenta-like porridge by adding the ground chestnuts to boiling water; or they could add water to the ground chestnut meal to make a dough mixture that could be later cooked over hot coals. Although there are few if any eyewitness accounts from the early colonial period describing the precise method of preparing chestnut bread, the end product most likely resembled a Middle Eastern flatbread, as leavening agents are mostly absent in chestnut flour.

Nearly a half-century later, Captain John Smith, the first governor of the Jamestown Colony, also makes mention of chestnut bread, implying it was prepared for native elites and for special occasions. In his well-known 1612 publication *A Map of Virginia*, Smith wrote that chestnuts were “boyled [for] four hours” in order to yield “a broth and bread for their chiefe men, or for their greatest feasts.” Smith is also the first English writer to specifically mention chinquapins, and in doing so, reveals the Algonquin origins of the word. Smith noted that the Virginia colony possessed “a small fruit growing on little trees, husked like a Chestnut, but the fruite most like a very small acorne. This they call *Chechinquamins*, which they esteeme a great daintie.” Nineteenth century anthropologist William Gerard thought the origin of the term chinquapin derived from the Powhatan word for “rattle-nut” (*chitshi-kwe-men*) as the nuts were often “used by the Indians in their squash-shell rattles.” According to Gerard, the change of the suffix *min* to *pin*, “occurred at the beginning of the last quarter of the 17th century.” Captain Smith was apparently impressed with the flavor of American chestnuts, noting that they were often
preferred over European varieties. “In some parts,” wrote Smith, “were found… Chestnuts whose wild fruit equalize the best in France, Spaine, Germany, or Italy,” especially for individuals who “had tasted them all.” Smith also observed that chestnuts were “dried to keep” and suggested the preservation method allowed the nuts to “live a great part of the year.”

Samuel de Champlain was another early European observer of American chestnuts, as he recorded seeing groves of the trees during his numerous excursions across the St. Lawrence River Valley during the early 17th century. On July 14, 1609, as Champlain traveled along the lake he would later name after himself, he made note of a place along the eastern shoreline that possessed “many chestnut trees.” Historians have deduced that Champlain’s chestnut grove was located near Burlington Bay, just south of Winooski River, as the species was reported to inhabit the area as late as the mid-19th century. Six years later, as Champlain made his way around the southeastern end of Lake Ontario, the French explorer reported seeing another large grove of chestnut trees in the area, near what is today the Sandy Creek State Forest in Oswego County, New York. As it was the first week of October, Champlain remarked that the chestnuts there were still in their burrs, and after sampling the nuts, declared them “of good flavor.” The location of the trees is also documented in Champlain’s map of 1632, which was published in his *Voyages de la Nouvelle France Occidentale Dicte Canada Faits par le Sr. de Champlain* [Voyages to Western New France, called Canada, Made by Sieur de Champlain, Paris: Claude Collet, 1632]. The book contains descriptions of specific locations depicted visually on the map, all of which are identified by the letters A through Z, and numbers 2 through 95. Represented by the number “93,” Hudson’s chestnut forest [*Bois des Chastaigniers*] is shown north and east of the area where the Salmon River flows into Lake Ontario.
Perhaps the most endearing reference Champlain makes to the American chestnut is found in his engraved map of 1612, which was published the following year in his book *The Voyages of Samuel de Champlain*. Ostensibly drawn to depict the territory and settlements of New France, the Champlain map contains a decorative cartouche of North American plants, including the American chestnut.⁶⁷ According to museum curator Victoria Dickenson, Champlain created the cartouche to illustrate the nuts and berries “that figured among the food or medicinal plants of the Aboriginal inhabitants,” as well as document the things the explorer “ate, might have dried and sketched, or even attempted to bring back to France to be planted in Old World gardens.”⁶⁸

Although we know that Champlain both ate and sketched chestnuts, there is little evidence that he or other European explorers took the trees or nuts back to Europe. Most botanists thought the American trees to be identical, if not closely related to the European chestnut, and would continue to do so for at least another two centuries. And because Europeans believed the American nuts to be smaller, there was an additional incentive not to transport the trees across the Atlantic. Europeans had been cultivating chestnuts in orchard settings for centuries, and possessed long-held cultural beliefs regarding the trees proper growth and management. Nonetheless, the American trees were certainly a welcomed resource that, in the short-term, provided them with a predictable and familiar form of nutritional sustenance.

The American chestnut appears to have actually expanded its range during the second half of the 17th century, even increasing its presence in some parts of New England and the Mid-Atlantic. This was due, in part, to the natural spread of the trees into newly disturbed areas caused by
summer and winter storms, as well as the general clearing of woodlands (formerly void of chestnut) by both European colonists and Native Americans. The virtual elimination of the beaver in New England and parts of the Mid-Atlantic as a result of the European fur trade also positively impacted the American chestnut, as the ubiquitous beaver dam and pond had been responsible for diminishing some of the tree’s habitat. Heavier annual rainfall amounts also increased the number and size of chestnut trees in forests along the Atlantic seaboard, which were beginning to recover from more than a century of severe and periodic droughts. Abandoned Native American agricultural lands was another reason for the increase in the number of chestnut trees in eastern forests, as diseases like smallpox, measles, and influenza—which were introduced by into North America by Europeans during the 16th and 17th centuries—eliminated as much as 90% of the native population in some areas.

Of course the impact of colonial settlement on North American forests varied from region to region, occurring first in New England and the Mid-Atlantic, and later in the Southeast. In general, wooded areas were cleared first along the coast, and then gradually westward or northward toward the fall line. In heavily cultivated agricultural areas, such as the Chesapeake Tidewater, land clearance did not happen all at once, as nearly 80% of the interior woodlands remained intact prior to 1740. While this percentage would certainly change over the next several decades, beyond the coastal settlements the American chestnut did not seem to be adversely impacted by forest clearance for another half-century. In the interior backcountry, upland forests witnessed few dramatic changes prior to the mid-1700s, providing additional opportunities for explorers and settlers to observe chestnut trees in their native splendor. In the Appalachians, the American chestnut would continue to flourish over large swaths of territory,
including high-altitude areas largely void of human settlement. In many locales, old-growth stands of chestnut remained essential habitat for a variety of big and small game animals, including elk, deer, bear, turkey, grouse, passenger pigeon, and several species of squirrels. As colonial settlement moved westward, these animals, in turn, provided nutritional sustenance to literally tens of thousands of individuals, as well as predictable incomes for pioneer settlers and fur traders alike. Chestnut timber and chestnuts would also remain important fixtures throughout the frontier period, and help build a nation that appeared--at least in the late 18th century--to possess an inexhaustible supply of natural resources.
ENDNOTES


5. A July 2012 search of the Geographic Names Information System (GNIS), the Federal Government’s database of U.S. geographic nomenclature, revealed 1,167 chestnut place names in the tree’s native range c. 1800. Several place names were eliminated due to duplication or as a result of an obvious reference to the surname Chestnut. The national GNIS database does not list roads or boulevards in the official repository, so streets are not included in the above tally. A July 2012 Google search of “Chestnut Street” (with apostrophes) yielded 9,250,000 results. For a more scholarly discussion of chestnut place names and their distribution in the U.S., see Songlin Fei, “The Geography of American Tree Species and Associated Place Names,” Journal of Forestry 105 (March 2007): 89-90, Fig. 5.


21. U.S.G.S., Geographic Names Information System (GNIS). Accessed July 15, 2011. The town of Castanea, Pennsylvania derives its name from the Latin term for chestnut, *castanea*, which is also part of the tree’s scientific name, *Castanea dentata*. The ridges above the town were home to large numbers of chestnut trees and the town’s train depot also served as a major transfer point for chestnuts shipped to major cities along the east coast.


30. Gonzalo Fernández de Oviedo y Valdés, *Historia General y Natural de las Indias, Islas y Tierra Firme del Mar Océano*, Volume II, Part II, Madrid, Spain: *Real Academia de la Historia*, 1853, pp. 631, 629. The translations in the quoted text were made by Donald E. Davis, with the assistance of Ms. Liliana Silva, a native Spanish speaker.


36. ibid., p. 568.


41. Ferreira, personal communication, April 11, 2012.

42. Ferreira, personal communication, April 14, 2012.

43. According to Ferreira, “it was not uncommon at the time to have such typos: between the author and the text were the editor (Andrés de Burgos) and, at least, one assistant,” personal communication, June 6, 2012. Dr. González-Seoane of the *Instituto da Lingua Galega*, Santiago de Compostela, Spain, similarly thinks “terras” was likely the intended word-choice in the Elvas manuscript, González-Seoane to Ferreira, personal communication, April 13, 2012.

45. Ferreira, personal communication, June 6, 2012.


47. Lee Ann Newsom, “Wood Remains from Structures 1 and 5 at the Berry Site,” in Robin A. Beck, David G. Moore, and Christopher Rodning, *Joara and Fort San Juan*, pp. 89-90, 94-95, Figs. 77, 78, Table 1. It is my own assertion that the sawn chestnut plank was used as a bench inside the structure. Archaeologists working at the site have not, to date, ventured an informed guess as to its primary use.

49. Ross, “With Pardo and Boyano,” p. 277. Ross’s source for the quote is a 1600 document entitled *Ynformacion hecha de Oficio ante Don Gonzalo Mendez de Canço, Gobernador de las Provincias de la Florida, Sobre la situación de la Florida, Sobre le Situación de la Fama y sus Riquezas y de la Publicación de Yngleses* that was copied from the original and is found in the *Archivo de General Indias* in Seville, Spain (AGI 54-5-9), Fol. 17. Historian Woodbury Lowery also deposited a hand-written copy of the document in the Library of Congress during the early 20th century. I have utilized the copy transcribed by Lowery, “Spanish Settlements in the United States, 1522-1803,” Library of Congress, Manuscript Division, Container 5, Teresa Martín to Don Gonzalo Mendez de Canço.

50. Martín Alonso Pedraz, *Encyclopedia del Idioma: Diccionario Histórico y Moderno de la Lengua Española (Siglos XII al XX)*, Vol. I, Madrid, Spain: Aguilar, 1958, p. 420. According to Alonso, the adjective “apilado” refers specifically to chestnuts that have been “secada al humo”—“smoke dried.” I am deeply indebted to Paul E. Hoffman for sharing this source as well as his expert advice in translating several relevant portions of the Canço letters.


59. ibid., p. 57.


62. ibid.


64. William Henry Harrison Murray, *Lake Champlain and its Shore*, Boston, MA: De Wolfe, Fisk and Company, 1890, p. 216. Further evidence that Champlain was in the Burlington Bay area comes from the 19th century physician Clinton Hart Merriam, who noted that it was possible to see Red squirrels swim “easterly” across Lake Champlain in that general vicinity “in years


71. Grace Somers Bush, “Forests Before and After the Colonial Encounter,” in Philip D. Curtin, Grace S. Brush, George W. Fisher, eds., Discovering the Chesapeake: History of an Ecosystem, Baltimore, MD: John Hopkins University Press, 2001, pp. 47, Fig. 3.1, 51-52, Fig. 3.2.

Environmental historian Gordon G. Whitney maintains that “the earliest phases of forest clearance on the East Coast were extremely slow,” and that much of the landscape “required at least a hundred years to clear 50% of the land,” From Coastal Wilderness to Fruited Plain: A History of Environmental Change in Temperate North America from 1500 to the Present, Cambridge, UK: Cambridge University Press, 1996, p. 153.