Pecan: Beyond Thanksgiving Pie to Indigenous Reciprocity

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Pies and Pronunciation

During the annual Thanksgiving celebration in the United States, friends and family around the country gather to enjoy pecan pie, among other delectables. The debate on how to pronounce this delicious treat will forever be ongoing. Some say that if you live below the Mason-Dixon line, you pronounce the dessert as puh-KHAN pie, but this is not necessarily true. In fact, one poll found that 45 percent of Southern residents say PEE-CAN pie, as do 70 percent of northerners.[1] How do you say it? Cast your vote on pronunciation here.

Pecans having a disagreement. Courtesy of Allison...

Whether you pronounce it PEE-CAN or puh-KHAN, the pecan has a history richer and more complex than its popularity as the basis for the Thanksgiving pie might suggest. As historian James McWilliams has argued, the pecan (*Carya illinoinensis*) has been an important food source for people in the Americas for thousands of years due to its high nutritional value and abundance. As he also points out, however, there has been a change in our relationship to the pecan in recent years: for most of history, humans relied on wild pecans for food, since wild pecan populations were unusually resilient and capable of maintaining themselves. In other words, humans adapted to the rhythms and life cycles of the pecan. Beginning in the late nineteenth century, however, pecan cultivation ramped up as humans began to seek to control pecan production and increase output. This trend has resulted in numerous potential threats to the pecan, including loss of genetic diversity and potential extinction. Even so, Indigenous botanists like Robin Wall Kimmerer have pointed to a solution. While the future of the pecan may appear grim, the answer to the problem of its possible disappearance lies within the deep history of its relationship with humans. If we could return to a more reciprocal, mutually beneficial relationship with pecans, both we and pecans could flourish.

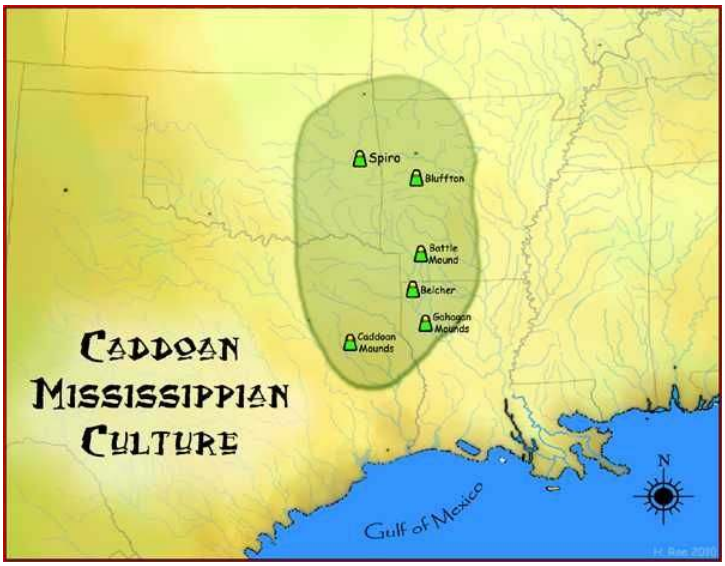
Pecan Pie at Thanksgiving

Native American Discovery and Use

Native Americans were the first to come into contact with the pecan, which they named *pakan*, some 30,000–12,000 years ago.[2] The pecan quickly became a popular foodstuff due to its abundance, resilience, and nutritious components, which included significant amounts of protein, fiber, and fat.[3] To forage pecans, gatherers would either wait for the nuts to fall or use sticks to shake them off.[4] Stone tools were used to crack open the shell. The nuts were also boiled and stored for later use as they lasted for long periods of time. The nut could be eaten in many different forms and various ways, including as a powder added to breads, meats, porridges, and even alcoholic beverages.

Cracked pecan shells

As an essential component of Native American diets, the pecan greatly influenced migration patterns due to its specific fruiting and masting patterns.[5] Nations like the Comanche, Caddo, and Kickapoo not only based their migration patterns on the desire to settle close to abundant pecan groves but also on the pecan's masting schedule.[6] The pecan had a propensity for alternate masting: depending on the year, some groves would fruit while others would not.[7] Due to the sheer abundance of nuts that the trees produced, however, Native American communities adjusted their migration patterns around the pecans' unusual schedule.[8] The pecan also became a staple in Native American trade, as different communities traveled with pecans to exchange for other valuable goods.[9] Indeed, there is evidence suggesting that Native Americans helped pecan trees spread and flourish since they carried pecans when they migrated and planted them in new locations. And so, even as pecans helped them, they helped the pecans. As Potawatami botanist Robin Wall Kimmerer has written about this relationship, "Our taking returns benefits to them in the circle of life making life, the chain of reciprocity."[10] While Indigenous relations with pecans and pecan trees were largely reciprocal, this relationship changed with the arrival of new groups to the Americas.



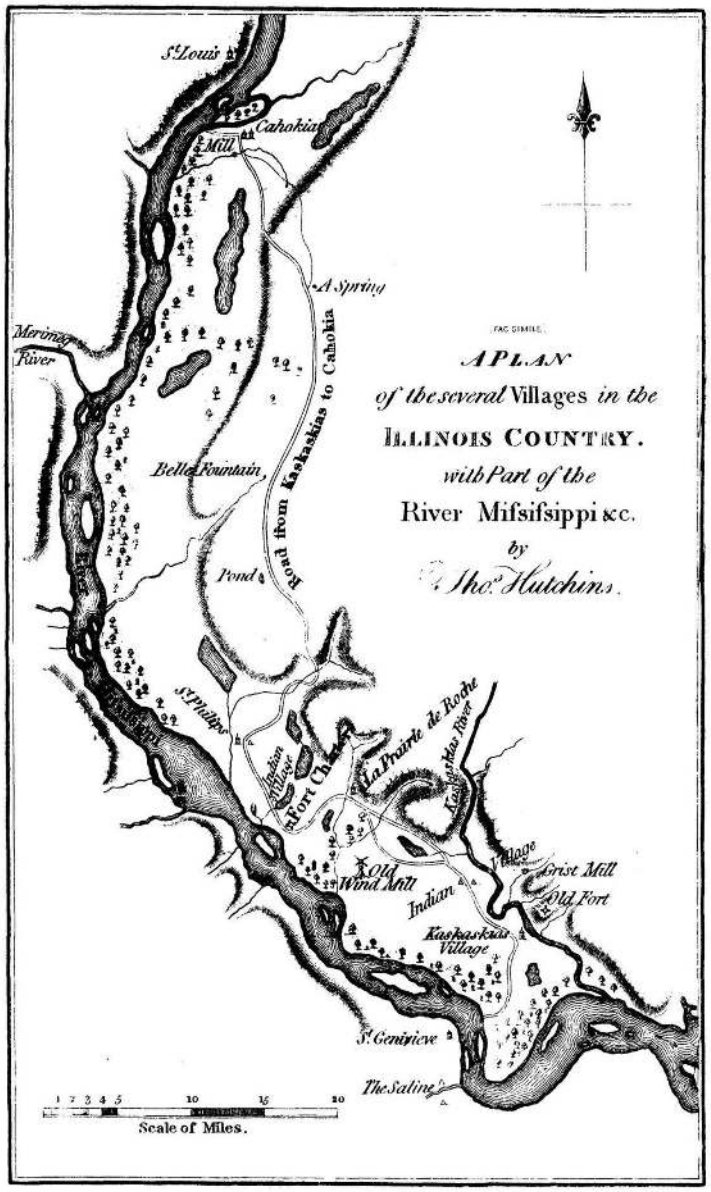
Caddoan Mississippian Culture Map

Early European Encounters

In 1533, Spanish explorers became the first Europeans to encounter the North American pecan. Álvar Núñez Cabeza de Vaca, an explorer who also became a captive of a Native American tribe, recounts being brought to an area southeast of what is now San Antonio, Texas, near the confluence of the Guadalupe and San Antonio Rivers. There, he reunited with his fellow Spaniards and discovered a stretch of land on which the fruit of the pecan tree was so abundant that they named it "the river of nuts."[11] Interestingly, though, since the pecan bears a striking similarity to the European walnut (they both belong to the family Juglandaceae), Europeans did not at first see a reason to cultivate a nut they thought they already enjoyed back home.[12]

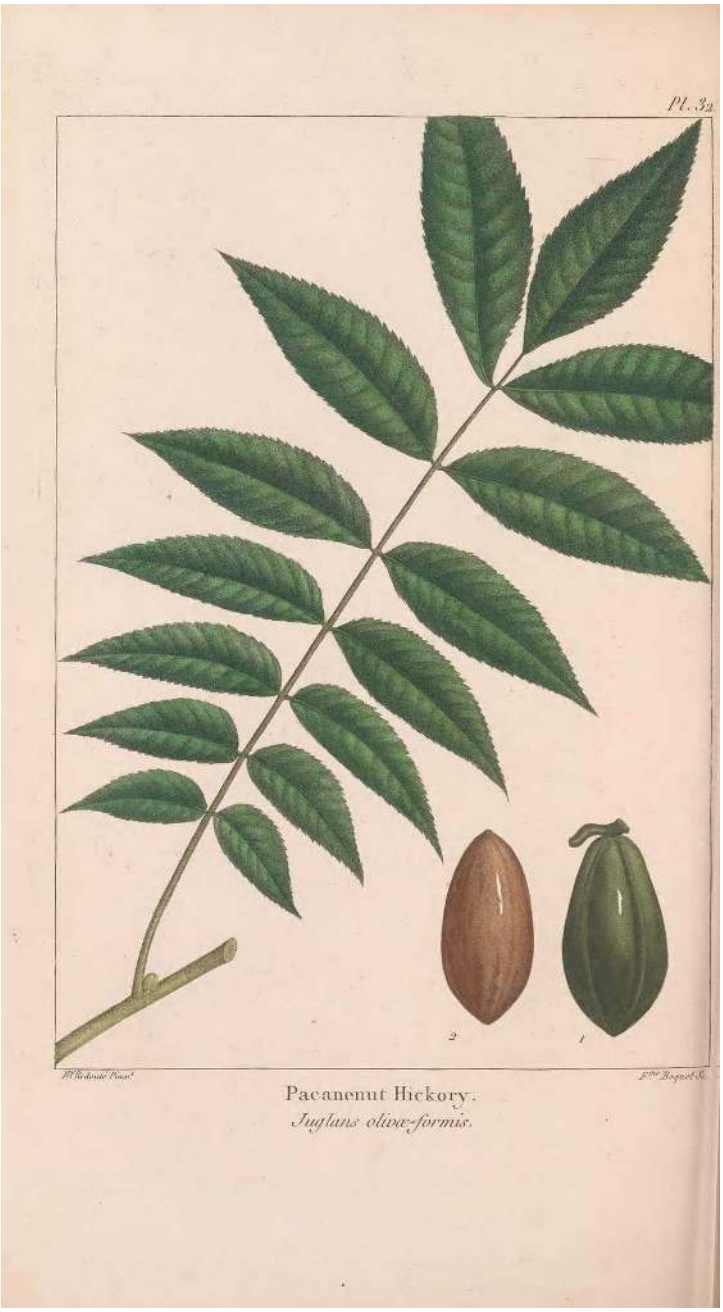
Map of Cabeza de Vaca Expedition

Moreover, Europeans' negative perception of the pecan, associated with Native American foraging methods, might have also contributed to its delayed recognition as a delicious nut worth cultivating.[13] In fact, it was not until the turn of the seventeenth century that a French Catholic missionary, Fr. Gabriel Marest, learned from the Native Americans of Illinois that the pecan was distinct from the walnut. Writing to his Jesuit community in Europe, he noted, "The pecans (it is thus that the fruit of one of the Nut-trees is called) have a better flavor than our nuts in France."[14]



Illustrated Map of Mississippi River and Kaskaskia...

Even though Europeans' initial acceptance of the pecan as a viable food crop may have been stunted by racial and ethnic bias, as well as contentment with the familiar walnut, this would change over time. By the nineteenth century, André Michaux, a botanist who in 1803 published one of the first books on the trees of North America, describes the favorable qualities of the pecan tree, saying that the nuts are "more delicately flavored than those of Europe" and "the fruit is much larger."[15] Not only does he affirm the nut's good qualities but also he asserts that the active cultivation of the pecan by way of grafting the tree would bring it "to a high degree of perfection… and no motive would discourage its propagation."[16]



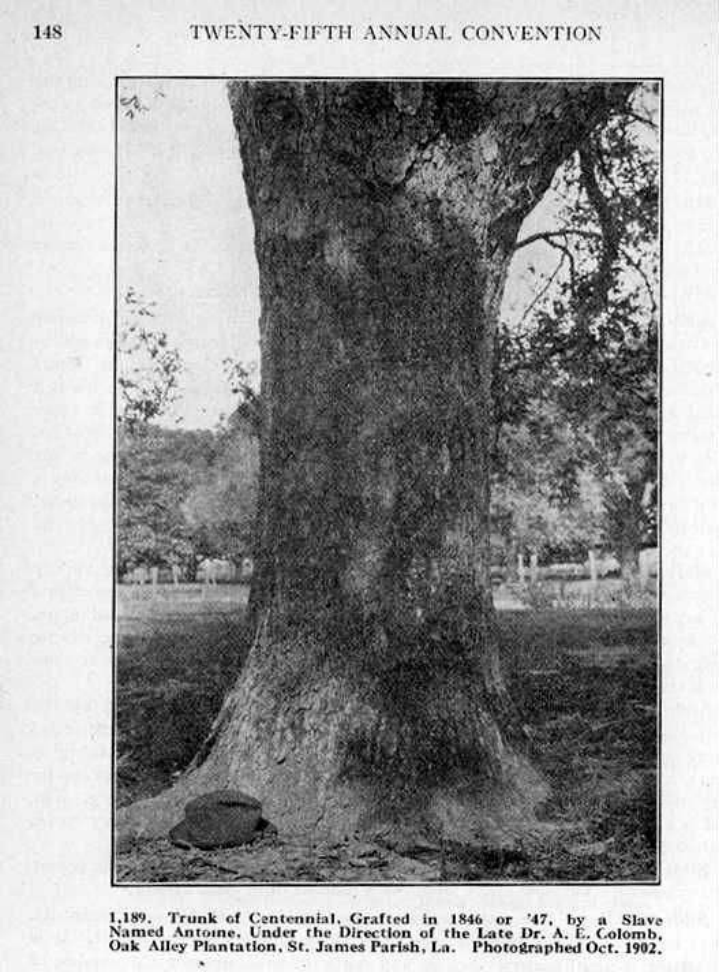
Pecan Illustration

Michaux proposed the active cultivation of new pecan varieties through the technique of grafting, which involves combining the stem, or scion, of one tree with the base, or rootstock, of another to generate a new tree cultivar.[17] Successful grafting of the pecan tree meant the creation of pecan varieties that would grow faster, bear fruit more frequently, and produce larger and more delicious nuts. Michaux's prophetic opinion reveals how the shift in the European relationship to the pecan was marked by more than the recognition of it being a good source of food; it was marked by an impulse to cultivate and improve the pecan, which Europeans saw as needing perfection.

Tree grafting

Reclaiming Enslaved Knowledge

Grafting the pecan was more difficult than Michaux expected. It wasn't until 1822 that South Carolinian Abner Landrum, a potter by trade, successfully grafted a pecan tree.[18] But despite this, no one built off his achievement until years later when a Louisiana landowner had an idea.[19] In St. James Parish, Louisiana, Dr. A. E. Colomb attempted to graft one pecan tree onto another, but he did not succeed.[20] Hoping someone else might have better luck, he gave some of his leftover scions to Télésphore J. Roman, the owner of the Oak Alley plantation on the Mississippi in Louisiana.[21] It was there, in 1846–1847, that Antoine, an enslaved Creole man and gardener, became the first person to cultivate an improved pecan variety, successfully grafting 16 trees of his new variety.[22]

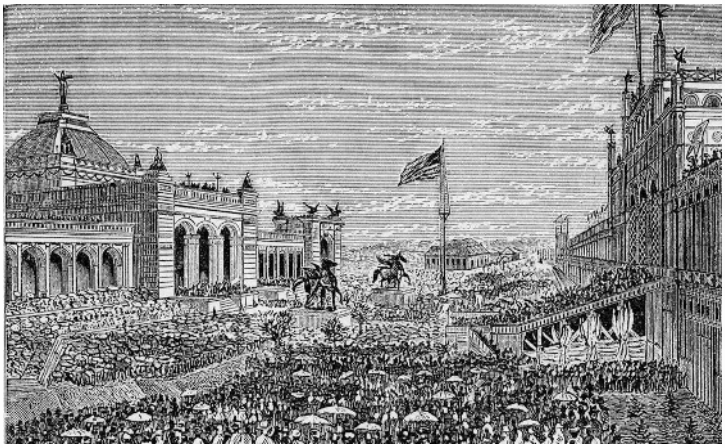


A photo of one of Antoine's pecan trees

According to Katy Morlas Shannon, the author of *Antoine of Oak Alley*, the records from Oak Alley Plantation indicate that Antoine was four years old when he, his mother, father, and brother became property of the Roman family.[23] His mother, Zaire, spun cloth, and his father, Zephyr, occupied the most important position on the plantation: overseeing the production of sugar.[24] Because "Zephyr held this elite role on the Roman Plantation," Antoine grew up in the house his father built with the complicated knowledge that "he was enslaved, and he was also the son of a great man."[25] Antoine cultivated his father's spirit of greatness as he matured, learning to cooperate with the land while tending his family's garden behind their slave quarters.[26] We cannot know for sure whether Antoine was intentionally trained for his special skill.[27] But we do know that neither Colomb nor Roman—social elites and talented gardeners in their own right—had the capacity to perform Antoine's craft.[28] They relied on his knowledge and labor, and they profited from his success, but they gave him no credit.[29] The sales records reveal that the fruit of the new variety was worth $50–$75 a barrel,[30] but, as historian Tiya Miles writes, Antoine "received no glory or pay for his botanical feat."[31] Sadly, Antoine found himself in a world in which profit was king and the exploitation of enslaved labor and knowledge was common. The pecan he had learned to cultivate would soon face the consequences of the same capitalistic system.

Living quarters for the enslaved at Oak Alley...

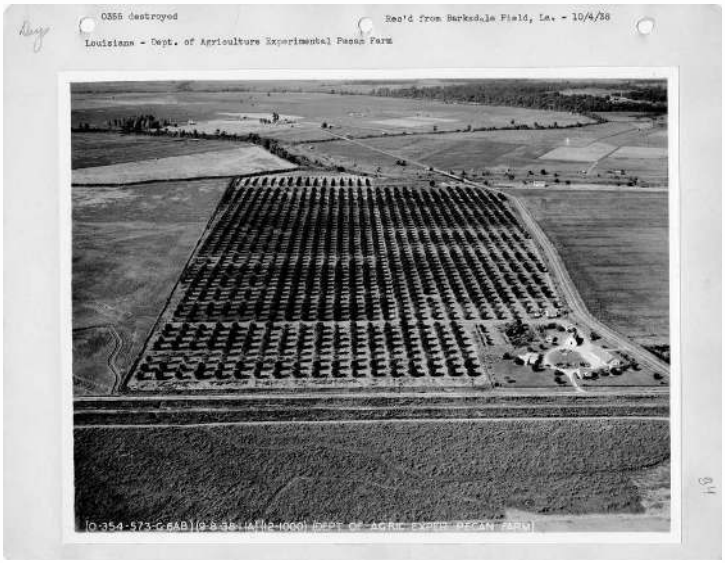
After Télésphore Roman's death in 1848, care of Oak Alley fell to his wife, Celina.[32] In 1859, determined to save his family's estate from his mother's mismanagement, Henry Roman received official ownership.[33] Due to the political and financial strain the plantation experienced throughout the Civil War, Henry was then forced to sell the property to John Armstrong, who foolishly decided to cut down most of Antoine's pecan trees in an effort to bolster sugarcane production.[34] Antoine's pecan variety managed not only to survive, however, but also to gain national recognition for its superior quality. In 1870, Oak Alley had a new owner, Humbert Bonzano, who was so impressed by the quality of Antoine's pecan trees that he decided to exhibit the pecans at the Centennial Exposition in Philadelphia.[35] Rewarded with high praise from the judges, Bonzano named the pecan "Centennial."[36] Antoine's variety remains among those enjoyed today, and his success in grafting the first improved pecan variety formed a foundation for the ongoing cultivation of the commercialized pecan.



Centennial Exposition in Philadelphia, 1876

Pecan as Commodity

Between the nineteenth and twentieth centuries, pecan grafting allowed the nut to be grown in a more purposeful and organized fashion, transforming it from a “native nut” to a commercialized commodity.[37] The knowledge of and ability to graft pecans transformed the nut into a burgeoning business as many landowners realized how easy and profitable it was to grow it.[38]



US Department of Agriculture's Experimental Peca...

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The popularization of this lucrative business opportunity is apparent in the many pamphlets and guides the landowners produced. The pamphlets instructed the reader, assumed to be a beginner-grower, on how to grow and tend to a pecan grove and how to ensure successful profit from it, including when and where they should grow their pecan groves, what tools they needed, how to fight off insects and diseases, and more.[39]

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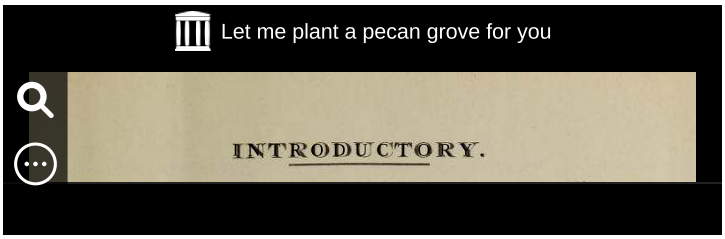


By the early 1900s, pecan growers started turning the pecan and pecan groves themselves into commodities. For example, The Oak Ridge Pecan Company sent brochures to landowners asking them to “invest” in Oak Ridge’s pecan groves, describing how theirs would yield the most profit for the investor.[40] The brochures followed a similar layout, first describing the pecan and its use, then providing a description of the land being sold and the price per footage. Companies weren’t alone in profiting from the pecan: individual pecan growers were also selling their pecan-growing knowledge and abilities to the public. For instance, grower C.A. Yancey sold the pecan trees he grew and would travel to another grower’s land to plant a tree for them.[41] The brochures and catalogs from individual growers are quite interesting, as they contrast their abilities with those of pecan-growing corporations, trying to persuade landowners to invest in their pecan-growing abilities. Typically, testimonials appear at the ends of the brochures, acting as an additional push to convince the reader that certain growers are truly the best.[42] These brochures are significant because they mark the beginning of the commercialization of the pecan tree and its fruit, as landowners are either advertising and selling pecan trees and plots or are selling their pecan-growing expertise to other planters.

Industrialization, Overproduction, and Resistance


Women Working in a Pecan Factory. Photo by Russ...

The increased number of pecan orchards cultivating improved varieties and the establishment of the pecan as a money-making venture meant that interest in the pecan extended not only to farmers but also to businessmen.[43] In San Antonio during the 1920s and ’30s, for example, Julius Seligmann’s Southern Pecan Shelling Company became a highly lucrative business, accounting for more than three-quarters of the nation’s unshelled pecan purchases.[44] Since mechanical advancement did not follow as quickly as pecan growth, Seligmann’s factories relied on laborers to shell the pecans by hand. This dependence on laborers to shell pecans was not a problem for his business until the country was hit by the Great Depression. Seligmann took advantage of his Mexican-American work force, cutting wages by 20 percent and reducing weekly earnings to about $2 per week ($60 today), while netting $500,000[45] (an estimated $15 million today) for himself.[46]

In response to this injustice, the laborers, led by union organizer Emma Tenayuca, started the Pecan Shellers' Strike of 1938, a three-month protest that gained international coverage.[47] The strike eventually led to the federal government enacting the Fair Labor Standards Act, which resulted in pecan factory workers earning double or even triple what they did before.[48] The tragic irony, however, was that, in response to the new law, companies reduced the number of laborers and invested in pecan shelling machinery. The law enacted to protect laborers resulted in the loss of 10,000 jobs in pecan factories over the next 10 years, and the Pecan Workers Union #172, which led the shellers' strike, was disbanded in 1948.[49] Despite leading the charge in labor rights, the laborers of pecan factories became "the only major group of workers displaced as a direct result" of the Fair Labor Standards Act.[50]

Emma Tenayuca leading fellow workers

The treatment of laborers in pecan factories is not dissimilar to the treatment of pecan trees cultivated on orchard lands. While women and men, seated equidistant from each other on an assembly line, were valued only according to their level of production, the pecan, homogenized in perfectly planted rows, was valued only for its coveted produce. Even though this period of high productivity and agricultural advancement may be seen as a feat of human cultivation, it is also marked by the fraught relationship between humans and the natural world. The ongoing genetic homogenization of the pecan within a capitalistic paradigm threatened the very source of the pecan's power to adapt and survive: genetic diversity. As time went on, the narrowing gene pool and reduced naturally occurring varieties of the pecan posed significant challenges for farmers and the pecan itself.[51]

Pecan orchard being irrigated

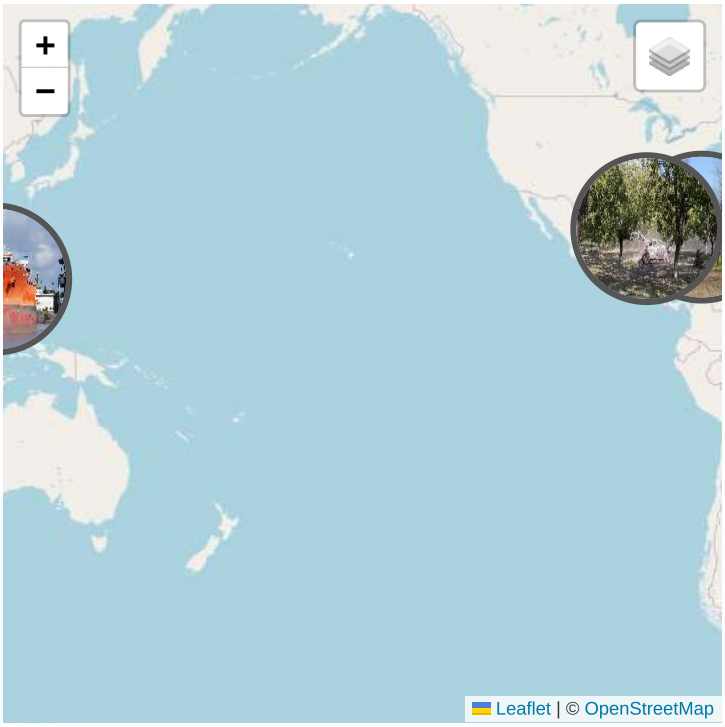
Monoculture: Trade, Economic Growth, and Decreased Genetic

Diversity

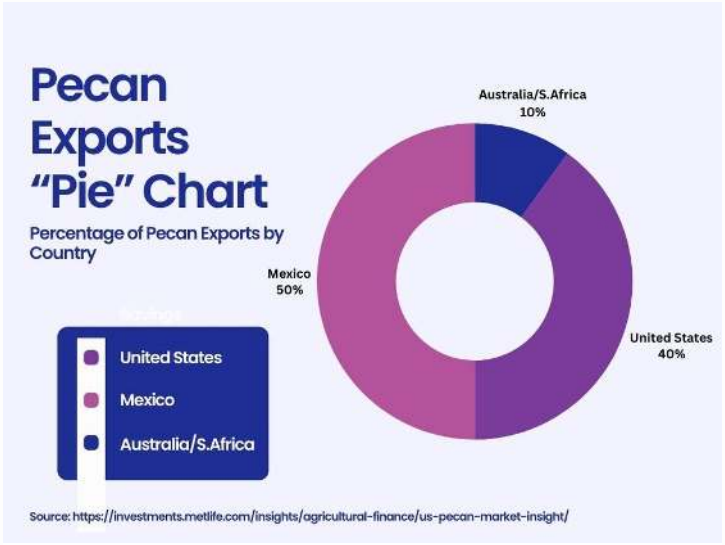
Industrialization of the pecan by way of monoculture (prioritizing uniform rows, cheap land, and low labor costs) led to an astronomical increase in pecan production. Since pecans were yielding more than Americans could consume, the United States had to figure out what to do with all these nuts. This resulted in the creation of new uses for pecans. From cereals to breads to candies, chefs concocted new ways to incorporate pecans into their desserts and foods. And so the pecan pie emerges as a staple in the American South—especially in New Orleans—during the 1930s, becoming the most popular new use for pecans by the 1950s. As the number of pecans increased over the years, the dessert became a nationwide classic.[52] Nevertheless, even as creative solutions to pecan overproduction may have facilitated new ways of enjoying the pecan, by the 1990s, U. S. consumers reached their limit for pecan consumption, and cereal brands were switching from pecans as their nut of choice to walnuts, leaving farmers with the same problem: too many nuts.

Candy maker preparing pecans

Farmers began searching the globe for consumers and tried to enter the European market, but there was no place for the pecan since European farmers produced walnuts, which European consumers preferred. It was not until 2006 that American farmers found a significant new buyer at a trade show: Chinese representatives tasted an American pecan and decided they wanted cultivated pecans. In 2008, because of a global walnut shortage, the Chinese purchased 53 million pounds of pecans.[53] This new demand for pecans allowed American growers to sell their abundant pecan yield. The largest pecan exports come from farms in East Texas and Georgia, from which the pecans are shipped to Hong Kong, China. Today, China is one of America's top pecan buyers.



Yet American farmers are again in potential trouble, as China is cultivating its own pecan orchards, and Mexico is starting to dominate the global pecan market. Cultivation of the pecan tree in both countries is draining demand for U.S.-grown pecans. Since 2005, Mexico has claimed the top spot globally in exporting pecans, producing 50 percent of the global pecan output; the United States produces 40 percent.[54] Mexico's pecan production is at an all-time high due to the country's consistently warmer weather and lower labor and land costs compared to the U.S. With extensive acreage available for pecan orchards, Mexico is cultivating the pecan in abundant masses, while American farmers are struggling financially to keep up.

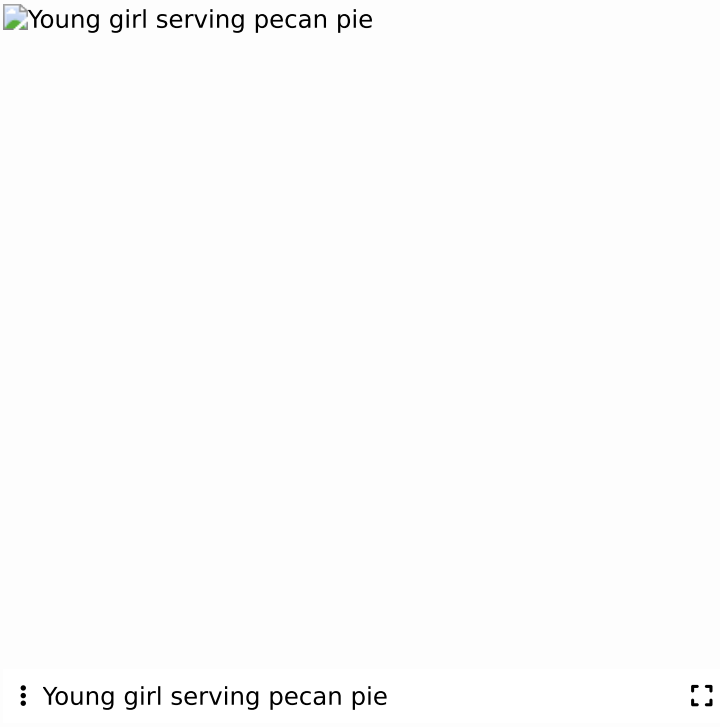


Graph of 2023 pecan exports by country. Made by...

The overcultivation of the pecan has led to other serious consequences. Because of monoculture, diversity among the trees in pecan orchards has decreased, leaving the pecan susceptible to diseases. As chemicals in pesticides and disease control become more potent, pecan trees and pests are becoming more resistant to the chemicals. For example, in Texas, Oleander (yellow) aphids are infesting and destroying cultivated pecan trees in orchards.[55] While yellow aphids are not a threat to wild pecan trees because the trees have natural inhabitants like mesh-web weaver spiders that defend the trees by eating the yellow aphids, cultivated trees do not house spiders and other natural defenders due to the pesticides, making the trees more susceptible to yellow aphids.[56] This dilemma leaves farmers with two choices: buy a more expensive pesticide that the tree or pests have not grown resistant to or watch their trees die. There is also a possibility that one day, pesticides will not work on cultivated pecans. Either way, farmers lose money, and consumers lose their nuts.

Oleander yellow aphids

Wisdom of the Pecan



Even as pecans have become a global crop and commodity, and an increasingly endangered one, it's important to remember that this was not always the case. While we could tell one story about pecans—a story of recent exploitation and domination—going back to earlier histories of pecan-human interaction reveal other types of relationships. As Kimmerer has written, we need to remember reciprocal relationships between Indigenous peoples and pecans; she argues that returning to those relationships could save both people and pecans from threats of extinction. One sentence sums up Kimmerer's main point best: "All flourishing is mutual."[57] At one level, these words refer to the masting patterns of pecan trees and the hypothesis that mast fruiting helps pecan trees ensure their reproduction by overwhelming the ecosystem with nuts. There are so many nuts produced at the same time that they cannot all be eaten by predators (whether human or nonhuman). At another level, however, the phrase refers to the general principle of acting in concert with other beings to ensure everyone's survival. As Kimmerer explains, "If one tree fruits, they all fruit— there are no soloists. Not one tree in a grove, but the whole grove; not one grove in the forest, but every grove; across the country and across the state. The trees act not as individuals, but somehow as a collective. Exactly how they do this, we don't yet know. But what we see is the power of unity. What happens to one happens to us all."[58] While Kimmerer is writing about pecans, she is also writing about Indigenous peoples, whom she explicitly calls on to act together to preserve their rights and cultural heritage, including their relationships with plants like the pecan tree, whose reproductive habits they adapted to rather than trying to control. Kimmerer thus asks them, and all her readers, to think not just about our own interests but of everyone's—to find ways for all to flourish at the same time, together. As is the case with the delicious pecan pie, the sweeter things in life can only exist and be enjoyed when we come together as one.

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