In 1811, a fur trader named George Sibley led a small team on a search for a storied salt mountain in the northern prairies of present-day Oklahoma. Sibley found the location in late June, although the salt did not mound; rather it formed a shimmering plain that stretched over dozens of snow-white miles. Bison peppered the expanse. On sandy hills rimming the salt plain, the team found shrubs, scantily waist high, that were loaded abundantly with small ripe plums. Sibley plucked these eagerly; they were, he said, “the most delicious plums I ever tasted.”

Small native plums can be found across much of North America. The most widespread species, *Prunus americana*, ranges from New England to the Rockies, and it has garnered common names fitting for this range: the American plum or, more generally, the wild plum. Taxonomists disagree on the number of native plum species, but the *Flora of North America* includes thirteen, nine of which inhabit the central part of the continent, west of the Mississippi (see pages 32 and 33 for a gallery). Sibley probably waxed about the Oklahoma plum (*Prunus gracilis*), given the early fruiting time and sandy habitat, but despite such arduous praise (“the most delicious”), native plums seldom appear on grocery shelves or beneath farmers market tents. That has not always been the case.

Luther Burbank, the famous horticultural polymath who began breeding plants at his home in Santa Rosa, California, in 1875, asserted that there were three important periods for plum cultivation: “the wild era,” “the backyard era,” and “the railroad era.” The disappearance of native plums occurred along this historic trajectory, at a collision between technology and taste.

**Selecting Plums from the “Wild Era”**

When Charles Sprague Sargent, the first director of the Arnold Arboretum, wrote about plums in his fourth volume of the *Silva of North America*, published 1892, he noted that the fruits of several native species were common in markets, particularly in inland cities like St. Louis, where foraged plums were sold both fresh and jellied. Pomologists in Iowa, Minnesota, Wisconsin, Texas, and elsewhere were also selecting cultivated varieties or cultivars [at the time referred to simply as varieties] with larger fruits, thinner skins, and freestone pits. “Selected varieties sometimes produce...”
excellent fruit,” Sargent wrote, “and have been largely cultivated, in the western states especially, for many years.”

While the Arboretum did not grow any native plum cultivars at the time, Sargent would have received insights about breeding and selection efforts from the pages of Garden and Forest, the horticultural magazine he began editing in 1888. In an article from 1891, Emmett Stull Goff, the first professor of horticulture at the University of Wisconsin, recounted a field trip to an orchard in southeastern Minnesota, along the banks of the Mississippi. The owner, Orville Lord, had gained regional acclaim for native plum cultivation, shipping fruits as far as New Jersey. Lord had introduced a cultivar of American plum that he named after a nearby creek, ‘Rollingstone.’ Goff compared the fruit of ‘Rollingstone’ favorably to ‘Green Gage,’ a popular cultivar of domestic plum (Prunus domestica), which, even today, occasionally appears in grocery bins. Fruits of ‘Rollingstone’ and ‘Green Gage’ were about the same size, Goff reported, and although the skin of ‘Rollingstone’ was thicker, he conceded that the native was nonetheless “delicious.”

Horticultural experimentation with native plums occurred for practical reasons. While domesticated plums had been imported from Europe, where plum consumption has occurred since Roman times, if not earlier, pests and diseases proved persistent obstacles for orchardists in the central United States. Black knot, the fungal disease that forms aptly named lumps on plum branches, was one of the chief problems, as was the plum curculio, a weevil that feeds on flowers and greening buds and eventually young fruit. Although the native species were not completely immune from these problems, they fared significantly better.
Orchardists in northeastern states had better luck with classic European cultivars, so interest in native cultivation remained primarily within the Mississippi watershed. Liberty Hyde Bailey, at Cornell University, listed 140 cultivars of native plums in his 1892 publication, *The Cultivated Native Plums and Cherries*, but it is clear that he had not grown many himself. Rather his curiosity had been aroused by the vexing taxonomy of the species. Taken as a whole, Bailey thought native plums represented a classic instance of “contemporary evolution,” given the high-degree of hybridization and morphological plasticity. His descriptive list of cultivars included fruit reviews, flowering times, and provenance narratives, but even this seemed to straddle a dual function: a horticultural guide for would-be orchardists, coupled with an attempt to systematically describe the range and variability of particular species. Cultivated varieties provided Bailey with useful taxonomic information because, according to his estimation, more than half were wild-collected favorites, imported directly from the hedgerow to the orchard. Significantly, none of the 45 cultivars of American plum on Bailey’s list originated from wild locations east of Illinois, despite a species range that extends all the way to New England. Most came from Minnesota, Wisconsin, Iowa, and occasionally Missouri. One of these wild selections was Lord’s ‘Rollingstone,’ which he first encountered in 1852, the same year he arrived in southern Minnesota and settled among mounded Mississippi bluffs. The original shrub was growing on the edge of a seasonal settlement used by the Mdewakanton—a subgroup of the Dakota—who may have intentionally selected and planted it near their encampment. Certainly, the Dakota have long valued native plums, both fresh and preserved, as have other tribes across the continent. Lord was instantly enamored with the large, sweet fruit, although he would not introduce ‘Rollingstone’ to market for about three decades, when his attention, in older age, shifted evermore towards horticulture.

In Minnesota City, Lord attempted to grow every cold-hard variety, reporting in 1903 that he was cultivating more than one hundred distinct selections. The most extensive trial, however, likely belonged to Jonathan Kerr, a
nurseryman in Denton, Maryland. Bailey spent a considerable amount of time at Kerr’s Eastern Shore Nurseries, researching varieties before he published his plum report. Unlike Lord, who primarily raised native plums for commercial fruit production and experimentation, Kerr intended to supply homeowners and orchards with plant material. In an 1895 catalog, Kerr announced that orchardists near Baltimore and Philadelphia had sold native plums for up to four times as much as the domestic plums. “They pay better,—the pay oftener, than any other tree fruit,” the catalog promised. The following year, Kerr reported that the nursery was growing more than 250 varieties. Over the next decade, that figure would double.

**Tracing Plums into Backyards and Orchards**

It might be careless to assume a proliferation of cultivar names implies a corresponding proliferation of cultivated acres. William Wight, a botanist for the U.S. Department of Agriculture, noted the cavalier nature of many of the horticultural selections. In a taxonomic report on the species, published in 1915, Wight estimated that more than 800 selections had been named, and some of these, he suggested, were “no better, doubtless in some cases not so good, as those found in a wild state.”

Even so, the native plum industry was far from mere nursery hucksterism. According to the U.S. Census of Agriculture—a report, established in 1840, tabulating everything from acres of barley to pounds of butter and fertilizer expenditures—plum production exploded throughout the central United States during the final decade of the nineteenth century. Iowa emerged as a leader, with more than 1.3 million plum trees under cultivation, almost five times the amount reported a decade before. Illinois and Missouri increased at similar rates, amounting to more than a half million trees for Illinois and three-quarters of a million for Missouri.

While the census did not delineate between species of plum, the authors noted that “Chickasaw and allied varieties” predominated in the “Mississippi Valley.” This assessment echoed recommendations at state horticultural society meetings throughout the region, where native cultivars were always the most praised and discussed. “Our natives are the only sure foundation for commercial plum orchards in Iowa,” an orchardist from Cedar Rapids, Iowa announced at one of these characteristic local meetings in 1896.

**Return to the Hedgerows**

While the U.S. Census of Agriculture traced the rise of the plum, it also recorded the subsequent bust. Almost a million fruit-bearing plums disappeared from Iowa over the first two decades of the twentieth century. Illinois production was halved over the same period, and Missouri plums also dwindled to almost half (see data, next page). If the rising number of cultivated names paralleled an explosion of cultivated acres, then the same trend seemingly held true as production of nursery stock dwindled. The catalog for Kerr’s Eastern Shore Nurseries listed only nine native cultivars in 1914, along with two hybrids that claimed native parentage, far from nearly two hundred selections previously advertised.

Now, more than a century after the native plum boom, most selections have vanished from markets and from cultivation at large. The U.S. Department of Agriculture’s National Plant Germplasm System maintains repositories to conserve genetic diversity for future crop breeding. The plum collection is located in Davis, California and offers the most probable location to encounter an assortment of historic native plums. Yet compared to the number of named varieties offered for sale in Kerr’s 1896 nursery catalog, the diversity is slim. The collection includes thirteen accessions of American plum, a majority representing wild provenances. Of five with cultivar names, only ‘Wolf’ was included on Kerr’s list of more than 110 American plum selections, although another (‘Anderson’) was also a nineteenth-century selection. Both, incidentally, were wild-collected from Iowa.

My recent search for Orville Lord’s orchard in Minnesota City, Minnesota, turned up no fruit, except for several wild American plums growing near a boat launch about a mile away from his property. The center of his land is now
Midwestern Plum Cultivation

American plum production trends resemble a slow partner dance, as orchards in one region expand concurrently with reductions elsewhere. Native plums dominated cultivation in the Mississippi Valley—including states depicted here—at the dawn of the twentieth century, but as the national market for California hybrids grew, Midwestern production crashed. California growers eventually outcompeted themselves, creating an oversupply revealed with plummeting Depression-era fruit prices.1 In the late 1950s, demand for canned plums encouraged additional Michigan production, but as consumer taste shifted towards fresh fruit, swelling California cultivation was once again cited as critical competition.2 Data extracted from the U.S. Census of Agriculture represent the number of fruit-bearing plum trees reported from 1890, the first census to include plum data, through 1997. Subsequent reports have noted acreage rather than tree counts.

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*(D) signifies “withheld data”

...a small subdivision, and a separate orchard of his in the Mississippi bottomlands was flooded when the Army Corps of Engineers built a lock and dam in 1935.

Plums of the “Railroad Era”

The disappearance of native plum cultivars can be partly explained by matters of taste. Anyone who has foraged one of these plums will likely describe the astringency of the skin, even while savoring the sweetness of the flesh inside. This characteristic is generally true of all native species. Ulysses Hedrick, who joined Bailey at Cornell, wrote a 1911 monograph on plums. He noted that while the American plum had been introduced to Europe in the mid-eighteenth century, if not before, the species was always considered a flowering ornamental in European gardens, not an orchard plant. “The Old World plums are so superior, speaking generally, in size, appearance, and flavor, the qualities which appeal to those who eat plums, that the native varieties stand small chance for popular favor,” he wrote.20

Still, work of orchardists like Orville Lord might have continued in the central United States if not for technological innovations. In 1887, Lord imagined a native plum industry that could surpass the $2.5 million market for imported plums and prunes. “Does this sound visionary,” he exclaimed at a meeting of Minnesota horticulturists. “I may ask who would
have dared to predict, thirty years ago, the small fruit business of ... Chicago, Minneapolis or St. Paul. Then, a carload would have supplied the market of either place. Now, thousands of bushels are daily marketed in their season.”

Lord was optimistic about the voracious appetite of a booming city. Over the same thirty-year period, Chicago grew from a city of about three hundred thousand to a metropolis exceeding one million, but Lord missed the implications of the same appetite. If Chicagoans could each consume one quart of strawberries—berries that were not grown in the city, but rather, were grown in the hinterlands and shipped inward via rail—then the same transport innovations could undercut the need for locally grown native fruits. Over the decades that Lord cultivated increasing acres of native plums, railroads had connected the coasts. The first transcontinental passage occurred in 1869, and, in 1890, a California fruit shipper, Edwin Earl, devised a railcar suited for long coast-to-coast shipments. Along the way, pantries and iceboxes in Chicago and beyond became less beholden to horticultural limits for the region.

Luther Burbank alluded to these innovations when he posited the “railroad era” as the ultimate stage for plum production. “The railroad became a factor in plum improvement by bringing millions of plum-hungry easterners within reach—by affording quick and economical shipping facilities where there had been no

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shipping facilities before,” Burbank quipped to editors of his multi-volume biography, published in 1914.22 Garden and Forest recorded this rail-powered influence, announcing in 1895 that classic cultivars of domesticated European plum had arrived in New York on rail shipments from California, along with peaches, pears, and grapes. “Forty-four car-loads of California fruits were sold here in five days of last week,” the magazine reported.23

As the final achievement of the “railroad era,” Burbank—an alchemical breeder, dubbed a horticultural “wizard” in his own time24—developed large thick-skinned plum hybrids that were easier to ship across country. Ironically, he used native species to impart that thicker skin, along with disease resistance, but otherwise, the flavor and appearance most strongly resembles the other parents: the Japanese plum (Prunus salicina) and the apricot plum (Prunus simonii).25 Burbank’s hybrids—most famously ‘Santa Rosa’—still dominate the American plum industry and have been the parents of other successful and widespread cultivars.26

Another Era for the Native Plum

Recent attempts to introduce native plums into the market have centered on beach plum (Prunus maritima), a species that hems the sandy coastline of New England, growing on shifting dunes, alongside American beachgrass (Ammophila breviligulata). The James R. Jewett Prize was established at the Arnold Arboretum for research on the species in 1940, and although the award waned after little more than a decade, it was reinstated in 1997 when researchers at Cornell University launched a concerted commercialization project.27

Richard Uva, who instigated the Cornell research under the direction of Professor Thomas Whitlow, now grows three acres of beach plums on his cut-flower nursery, Seaberry Farms, in Federalsburg, Maryland. He estimates that twenty-two acres of beach plum are currently under production between sixteen growers in Massachusetts, Maryland, New Jersey, and Long Island. This is not enough to meet the growing commercial demand, especially among distillers, brewers, and winemakers. Growers have also found a market among chefs, especially in tourist beach towns, where the plums are a stamp of local credibility for the menu. Jam and jelly productions remains a relatively small scale.

For other plum species, production and research has yet to return, although interest in indigenous ingredients has swelled more generally in recent years. Part of this interest...
could be attributed to work by organizations like Slow Food, which, in 1996, launched a program known as the International Ark of Taste, designed to protect and preserve distinctive regional foods that are threatened with gastronomic extinction. Beach plums are listed among more than two hundred imperiled products in the United States, as are other oft-overlooked native foods like shagbark hickory nuts (Carya ovata), groundnut tubers (Apios americana), and tangy staghorn sumac fruits (Rhus thypina).

Whether interest in native plums will be rekindled as part of this larger trend is yet to be seen. But during the historic boom of native plum cultivation, Abraham Dennis, an orchardist in Cedar Rapids, Iowa, became particularly inspired by the long history of plum cultivation among Native American communities in the region. He suggested there was almost a moral imperative to perpetuate the process. “It is not alone our duty to rescue these fruits from their wild state and reawaken by culture these higher qualities given them by similar efforts by ancient horticulturists,” Dennis said at a horticultural meeting in 1897. “But,” he continued, “we must transmit them to future horticulturists more perfect fruits than we found them—new qualities added—worthy of the advanced and scientific age it is our privilege to live in.”

Now, well over a century later, Dennis’s challenge resonates, enticing foragers and horticulturists back to the hedgerows and thickets to reclaim plums from the wild at last.

Jonathan Damery is a former Curatorial Assistant and Curatorial Fellow at the Arnold Arboretum, and holds an MFA in creative writing from the University of Minnesota. His current book-length nonfiction project explores environmental history in the tallgrass prairie region, with grant support from the Minnesota State Arts Board in 2017.
Plum taxonomy has long perplexed botanists, including Bailey. “Native plums constitute probably the hardest [black] knot in American pomology,” he wrote. “The group is one of the most inextricably confused of any one of equal extent in our whole flora.” More recently, Joseph Rohrer, writing about Prunus for the Flora of North America, described the “particularly troublesome” delineation of plum species. “Surely,” he wrote, “as more molecular and genetic data are analyzed and, more importantly, correlated with morphological data, circumscription will be redrawn and the number of North American plum species further reduced.”

As it stands, Flora of North America recognizes thirteen species of native plums, outlined below.

**Prunus americana** (American plum): The most widespread species, with a range stretching from New England to the Rocky Mountains. According to Hedrick, about 260 cultivars were derived from this species during the historic plum boom.

**Prunus angustifolia** (Chickasaw plum): A distinctive southern species, ranging from Virginia to eastern New Mexico and south through Florida and other Gulf states. In 1911, Ulysses Hedrick counted about twenty horticultural selections of this species.

**Prunus geniculata** (scrub plum): A federally endangered species found on sandy hills in central Florida. Fruits develop early compared to other species, from March to May.

**Prunus gracilis** (Oklahoma plum): A small suckering species, no more than 1.5 m (4.9 ft) tall, which grows in dry, sandy locations. No significant horticultural varieties have been named, although Frank Waugh of the Vermont Agricultural Experimentation Station reported, in 1901, that the “fruit is sometimes gathered and sold in local markets.”

**Prunus hortulana** (hortulan or wild goose plum): Distribution for this species centers on Missouri and Illinois, with scattered pockets through southern Ohio and possible introductions in the Virginias. In older literature, this species was divided into two groups—wild goose and miner plums—which collectively resulted in about thirty-six named selections, according to Hedrick, although Kerr advertised more than fifty.

**Prunus maritima** (beach plum): A denizen of the sandy coastline between Maine and Delaware. In 1911, Hedrick counted only two cultivars (‘Bassett’ and ‘Beta’). The num-
her climbed by at least another dozen in the 1950s, through work funded by the Jewett Award, and most recently, Rutgers released a cultivar named ‘Jersey Gem.’

**Prunus mexicana (Mexican or bigtree plum):** The largest of native species, forming a tree up to 12 m (39 ft) tall. It ranges from northeastern Mexico to northern Illinois, east to Kentucky and Alabama.

**Prunus murrayana (Murray’s plum):** A suckering shrub known only from scattered populations near dry streams and canyon beds in southwestern Texas.

**Prunus nigra (Canada plum):** A northern species that grows around the Great Lakes, ranging east to Massachusetts. It offered hardy characteristics for orchardists in Minnesota and Wisconsin, who, according to Hedrick, named about forty cultivars.

**Prunus rivularis (creek or hog plum):** A widespread species that has come to encompass a larger-statured taxon, *Prunus munsoniana*. The primary distribution is located between Texas and Missouri, with scattered populations to southern Ohio. At least sixty horticultural selections were made of this species by 1911, particularly among southern orchardists.

**Prunus subcordata (Sierra, Klamath, or Pacific plum):** Found in California and Oregon, this is the only plum native west of the Rocky Mountains. Hedrick did not count the number of cultivars derived from this species, but he quoted Luther Burbank, who described certain selections with fruit as “sweet as honey.”

**Prunus texana (peachbush or Texas wild peach):** Long considered a peach rather than a true plum, this fuzzy-fruited species has a small range stretching from central Texas to the Gulf coast. DNA sequencing has revealed that subgeneric classification of *Prunus* is more complicated than the five-parted system that formerly partitioned plums and peaches into separate subgenera. While other native peach-like species occur throughout the southwest, recent work places *P. texana* clearly within the plums.

**Prunus umbellata (hog, flatwoods, or Allegheny plum):** A shrub or tree, growing to 6 m (19.7 ft) in height, this species ranges between North Carolina and eastern Texas. Traditionally a northern population in Michigan and the Allegheny Mountains was treated as a separate species, *P. alleghaniensis*, but the taxa have more recently been grouped.
Endnotes, Native Plums


6 See Goff, above.


8 Ibid.


17 Ibid, 606.


19 See Kerr, 1896, above.

20 See Hedrick, above.


22 See Whitson and Williams, above.


25 See Whitson and Williams, above.


29 See Bailey, above.


31 See Hedrick, above.

