IN THE ARMS OF SAGUAROS
Iconography of the Giant Cactus

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EDITOR’S NOTE

In this carefully and thoroughly researched and curated contribution, William L. Bird helps us piece together and understand a key element of Southwestern identity, how the saguaro became a global icon. It is a story of discovery, cultural appropriation and erasure—including actions of the Desert Botanical Laboratory, marketing, economics, and a sense of wonder—and, ultimately as Larry shows us, one of connection. Each of these elements has positioned the saguaro for its current moment, a relatable symbol of the arid west. Tucked throughout these pages are facets of history, especially of a slew of twentieth-century Tucson characters, that figure prominently into the shaping of the identities of not just Tucson and Phoenix, but in many ways the arid Southwest as a whole. This work fills an important gap and helps link what are at times disparate pieces in the shaping of an arid land identity that has reverberated across the globe. This iconography continues to evolve, in step with our relationship to the giant cactus and the ways that connection is told.

Benjamin T. Wilder
April 2021
PREFACE: THE SOCIAL SAGUARO

In the Arms of Saguaro explores the historical development of saguaro cactus iconography from the botanical investigators of the nineteenth century to the leaders of the travel and tourism industry of the twentieth century. In this time the arms of the giant cactus came to symbolize the American Southwest to the world. In its guise as a welcoming metaphor, its outstretched arms appeared in travel literature often accompanied by freshly starched western wear, horseback rides, and swimming pools. The art direction of the saguaro’s active social life idealized an arboreal desert of mesquite trees and creosote scrub with distant mountain views. Whether pictured in a magazine, a theatrical film, or a postcard, audiences responded. They saw, they came, and kept coming. Transfixed, many built desert homes, framed by saguaro views, that provided contemplative space for creative writing, painting, and photography that rounded the promotional circle in deeply personal ways (Figures I and II) — reflecting what desert publicists described as the anthropomorphic moods of man (Figure III).

Saguaro iconography illuminated the trail of scientific discovery through the Sonoran Desert in the heyday of American botanical exploration. Those encountering saguaros for the first time typically drew up short and marked the moment. This was no less true after the railroad’s penetration of the Arizona territory for travelers who had become familiar with the desert giant through illustrated news and magazine features (Figure IV). Many who followed the railroad track and the irrigation ditch found little use for the wonders of botanical imagery outside of its application to crops. The packaging of Arizona as an agricultural paradise relegated the saguaro to a curiosity, if pictured at all. But what a curiosity. Botanists and amateur plant collectors alike built reputations on the study and acquisition of columnar specimens of the plant, furthering its fame as a fully armed and flowering wonder in the wild.

Highly imaginative and ever expansive, the saguaro’s iconic range grew from its ethnobotanical significance as the species around which life revolved in the Sonoran Desert (Figures V and VI). Alternately described as a vegetable standpipe, a chandelier, and a sentinel, the projection of the saguaro as relatable, flexible, and

durable—particularly its ability to withstand hardship—suggests how, in fits and starts, the saguaro grew its iconic range.

Though not the largest columnar cactus—the cardón of Mexico is taller—the saguaro became a beloved icon and meme for the American West. Yet, oddly enough, the pioneering hospitality industries of Phoenix and Tucson initially regarded it with indifference. In the 1920s, for example, Tucson’s Sunshine Climate Club launched a national advertising campaign to promote the city’s winter climate. The saguaro played a minor role in club booklets mailed to midwestern and eastern audiences that focused upon trees, lawns, impressive homes, and winter weather for golf. Later, when the Sunshine Climate Club reduced its commitment to paid advertising, it sent its own photo publicity to newspapers and magazines.

FIGURE III. Cactus ballet. 1950. Sarah Keil, director of the Tucson studio of the dance, demonstrates how the lonely sentinels of the desert take form from the moods of man. Photograph by Charles Herbert.
FIGURE IV. This Harper's woodcut illustrating "A tour through Arizona" is one example of the dissemination of saguaro cactus imagery dating to the mid-nineteenth century.
FIGURE V. Maricopa women gathering fruit from Saguaro cacti. 1907. In his pursuit of North American Indian portraiture, Edward Curtis pictured the saguaro fruit harvest. Photograph by Edward S. Curtis.

FIGURE VI. Qhatika women resting in Harvest Field—Qhatika. 1907. The pole leaning against the plant, right, was used to dislodge the fruit from the plants’ tall columns. Photograph by Edward S. Curtis.
The typical photo featured a young woman seated on the arm of a saguaro whose spines had been discreetly cut or padded for the purpose of the pose (Figure VII).

*In the Arms of Saguaro* explores the role of advertising and creative publicity in the pell-mell development of the American Southwest. As desert publicists went about building a regional identity, they discovered that there was nothing like cozying up to the saguaro cactus for human interest, wit, and appeal. They packaged an audience for a *social saguaro* whose outstretched arms gathered resources, beckoned visitors, and welcomed new residents to a compelling new land in which anyone might find her or himself in the picture (Figure VIII).

FIGURE VII. Photographer Ray Manley, with Howard Kinney, pose Jane McIntosh for a Tucson Sunshine Climate Club publicity photo. 1954. The photo’s caption sheet explains that poses known as “cactus gags,” became a staple of southern Arizona travel and tourism publicity: “Spines are removed to make gag shot possible.” In this case, the photographers padded the topmost rungs of the ladder.
FIGURE VIII. Advertisement, Sunshine Climate Club. 1952. Dreading cold, dark, days ahead?
Completing the picture, like the coupon, required little imagination. National Geographic.
22 feet in circumference,
60 feet, sometimes a
hundred feet, it has

collect correct

and read by hand

tacht of my journal

In the first run

produce from name
The geographical range of the saguaro cactus fans south from Phoenix, Arizona across the Gila River Valley into Sonora, Mexico. Its western range crosses the Colorado River, touching southern California (Figure 1.1; Britton and Rose 1919–1920: vol. 2, pp. 164–167; Dimmit 2000; Yetman 2007:51–58; Drezner 2014). In the realm of the imagination, the saguaro enjoys an infinite range (Francaviglia 1994; Towne 2000).

With the exception of *Rhipsalis*, an epiphytic cactus native to Africa, cacti are exclusively native to the Western Hemisphere (Griffiths and Thompson 1929:2). The published record of the saguaro began in the mid-1500s. The earliest published accounts of southwestern explorers rendered all cacti as fruity and strange. Francisco Vasquez de Coronado, Juan de Oñate, and Father Eusebio Francisco Kino, for example, drank the wine that Indians distilled from the fruit of “pitahaya” and “great thistle” (Winship 1896:516; MacDougal 1905c). The wine’s cactus source may have been a prickly pear, an organ pipe, or a saguaro, as each bears fruit. Little changed in the mid-eighteenth and early nineteenth-century accounts published by Don Antonio de Alcedo, Alexander de Humboldt, and Robert William Hale Hardy. Venegas (1759:82, 98, 100, 253, 324) and Alcedo (Thompson 1815:80) described the fruitful gathering of the pitahayas. Not until the 1820s did specific references to tall, saguaro-like columns appear in the published accounts of Humboldt (Black 1822:290–281) and Hardy (1829:212–213), who respectively noted “cylindrical cacti shooting up to extraordinary heights” and the tall poles that the Indians improvised to harvest their fruit.

Columnar *Cereus*, ball-shaped *Mammillaria*, and prickly pear *Opuntia* soon leapt from the pages of travelers’ descriptive accounts to hothouses in England and continental Europe (Miller 1768; de Candolle 1829; Pfeiffer 1843; Brown 1998:i–iv). The botanists at London’s Royal Botanical Gardens at Kew, for example, had long experience, if limited success, with large specimens collected in Mexico. In 1845 the garden acquired a large *biznaga* (barrel cactus) from San Luis Potosí. Collecting the cactus involved the logistical challenges of mule team cartage and a long ocean voyage from the port of Veracruz, the access point for
cactus specimens dominated by large barrels, impossible to move *cardones* and columnar specimens that would be seen long before encountering *sagueros* (Yetman et al. 2020:9). The public exhibition of the seven-foot, 700-pound barrel at Kew took on the proportion of a living legend. The cactus, however, soon died. A second and even larger barrel specimen received the following year topped out at nine feet and weighed one ton. It, too, enjoyed a brief exhibit life (Figure 1.2). A columnar *Cereus senilis* next appeared at the garden. Tall, unbranched *Cereus senilis* specimens collected in Mexico became popular garden attractions (Figure 1.3; Illustrated London News 1845, 1846, 1847; Hooker 1847:43, 1849:92–94; Allnutt 1877:48–54; Bean 1908:147–148; Torre 2017).

Encountering the *saguar o* cactus for the first time, desert travelers typically stopped. Traversing the Gila River Valley near the present-day city of Phoenix, Arizona, in 1824, the fur trader Frank Ohio Pattie (1962 [1831]:vol. 2, p. 193; MacDougal 1905a) recalled the moment:

A species of tree, which I had never seen before, here arrested my attention. It grows to a height of forty or fifty feet. The top is cone-shaped, and almost without foliage. The bark resembles that of the prickly pear; and the body is covered with thorns. I have seen some three feet in diameter at the root, and throwing up twelve distinctive shafts.

Approaching the same area from the south in 1830, Asa Bement Clarke (1852:94) and a traveling companion encountered a “gigantic cactus” with branches “springing from the sides” and “fruit more delicious than a fig.” Clarke observed “several specimens, whose branches six in number, grew regularly in the form of a chandelier.” Clarke’s characterization of the *saguaro* as a chandelier became a familiar metaphor among travelers who hid from the sun during the day and took advantage of the phases of the moon to light the way at night: “Their naked trunks seen by moonlight scattered over the ground reminded us of the monuments of the dead, and a friend remarked that it seemed as though we were passing a magnificent grave yard.”

The Gila River Valley became highly studied terrain in the era of the Mexican War. A reconnaissance survey made by Lieutenant William Hemsley Emory of the U.S. Topographical Engineers confirmed what many Americans wished to believe: that the valley offered the most direct and flattest route for a railroad to
California. It is hard to overstate the influence of Emory’s and other publications from this period that documented the valley’s natural resources, including the memoir of artist and U.S. Boundary Survey Commissioner John Russell Bartlett. The hard-scrabble work of survey botanists and artists who rendered what they saw in the field created a new and far-flung audience for the Sonoran Desert’s plant life (Kearney et al. 1942:5–7; McKelvey 1955:990–1018; Hine 1968).

Topographical engineers who multitasked as artists found ready employment in boundary survey parties. The description of new plant specimens encountered in the line of march ranked in importance just below the imperative of mapmaking. Like every West Point cadet, the leadership of the Topographical Engineers received rudimentary training in composition and drawing, tasks readily applied to describing field specimens (Tyler 1999:158; Kelsey 2007:37). Even before Emory began his journey from Fort Leavenworth to San Diego by way of the Gila River Valley, two artists assigned to him dropped out at St. Louis when they became sick. Reaching Santa Fe, Emory encountered artist John Mix Stanley, who joined the reconnaissance as a plant collector and sketch artist, in addition to his formal assignment as a topographical engineer (Clarke 1966; Hassrick and Besaw 2015). Field sketches of large saguaro specimens and natural features that could not be collected informed scientific description and classification as contributions to knowledge (Pope 2020).

Before departing for the west in 1846, Emory made the acquaintance of George Engelmann, a St. Louis physician compiling a herbarium of cactus specimens collected from the Texas and New Mexico territory by his friend and future medical partner Dr. George Wislizenus, whose travel account, like Emory’s, was published by the U.S. Senate in 1848 (Emory 1848c:155; Wislizenus 1848; McKelvey 1955:941–960).

Engelmann was one of a handful of American botanists who consulted a library of reference works to catalog plant specimens (Soule 1970; Shaw 1986). Botanists engaged in western study included Professor John Torrey of Princeton
and his former pupil, Professor Asa Gray of Harvard. Engelmann, Torrey, and Gray exchanged plant specimens. In 1847, Engelmann prepared instructions for plant collectors, though it is not known whether he communicated those instructions to Emory or perhaps to the collector Augustus Fendler, whom Engelmann and Gray recruited and who independently followed Emory to Santa Fe by some eight weeks in 1847. Engelmann (1848, 1849, 1986) stressed the importance of collecting flowers, fruit, and seeds and of pressing each specimen in paper for study and preservation in a herbarium (McKelvey 1955:1019–1030; Shaw 1982:1–70; Stieber and Lange 1986).

Emory later acknowledged that he halted his party’s botanical collecting before reaching Santa Fe, and none of it included cacti. “The infinite variety of cacti could not be brought home for analysis,” he explained, “and this department of the Flora must be left to the enterprise of some traveler, with greater means of transportation than we possessed” (Emory 1848c:54). Emory did have the illustrative services of Stanley, who drew cactus specimens, including the massive saguaros the party encountered in the Gila River Valley.

Returning east from San Diego, Emory took up correspondence with Torrey to ask him to classify the dried plant specimens collected by the party and, with help from Engelmann, the cactus field drawings worked into small oil paintings by Stanley. Torrey (1847) accepted Emory’s offer, including the services of an artist whom Torrey would engage, not to exceed $20, to draw up additional selected plant specimens at $2.50 per drawing. Torrey’s participation gave heft to Emory’s (1848c) published *Notes of a Military Reconnaissance*. Emory (1847) explained, “a very superficial determination [would] answer the purposes of the

FIGURE 1.3. Woodcut. 1847. The exhibition of a *Cereus senilis* from Real Del Monte at Kew anticipated the exhibition of columnar saguaro specimens in botanical gardens throughout Europe and the United States. Illustrated London News.
government better than the more elaborate ones of other botanists whose services I might be enabled at once to obtain.” Thus, Emory commenced a working relationship with Torrey, the leading American botanist, who became a clearinghouse for the classification of plants published in the expedition’s report, with a nod to Engelmann, the leading expert on cacti (Reveal 2010).

The publication by the U.S. Congress of Emory’s *Notes of a Military Reconnaissance* (1848c) and two volume *Report on the United States and Mexican Boundary Survey* (Emory 1857, 1859) exemplified the close coordination of lithographs and engravings with text, a recent development in publishing led by government reports (Seavey 1990).

Ideally, the picture production process worked this way: the artist, in this case Stanley, made a field sketch. At the conclusion of the trip, the artist worked the sketches into oil paintings (Bryant 1849; Hassrick and Besaw 2015). Stanley gave his paintings to Emory, who sent them to Engelmann for botanical identification. Engelmann consulted his herbarium of flowers and seeds. Engelmann identified each plant so pictured and returned the oils to Emory so named. Emory forwarded the paintings as a package to a contract lithographer or engraver in Washington, D.C., to produce stone lithographic or metal engraved plates capable of serially producing upwards of 10,000 fine prints for publication (U.S. Senate 1850; Metropolitan Museum of Art 2020). An example of each page-sized print would be sent to its original artist for approval pending publication.

At any point the production process might break down and, in the case of the saguaros, it did. The package of oil paintings sent to Engelmann did not include Stanley’s saguaro figure. Somehow it bypassed Engelmann and went straight to the lithographer. But Emory needed its botanical name. In the body of a letter to Engelmann, Emory (1848a) apologetically sketched a saguaro from memory (Figure 1.4).

From Emory’s crude outline and seeds and cactus fragments contributed by others, Engelmann (1848) named the saguaro *Cereus giganteus* (Emory 1848c:158). The new name distinguished the saguaro from the “pitaya,” “pitahaya,” or “petahaya,” a name previously applied to all columnar cacti. *Cereus giganteus* appeared for the first time in Emory’s *Notes*, including the caption for an impossibly large saguaro by lithographer C.D. Graham rendered from Stanley’s errant oil painting. It is not known if Stanley saw Graham’s lithograph before publication (Figure 1.5). Stanley’s original field sketches and paintings cannot be found today.
Upon the publication of *Notes*, botanists at London’s Kew Gardens duly noted Engelmann’s botanical identification of the saguaro. Reviewer William Jackson Hooker (1849:92–93) in the *Journal of Botany* stated, “Assuredly the most remarkable plants met with were the *Cacti*, and of them the most striking is called by Dr. Engelmann *Cereus giganteus*.” However striking, Hooker found fault with the figures’ lack of detail, which wanted for “botanical character.” Concurring with Hooker, Engelmann wrote Torrey that Stanley’s figures were beautifully rendered. But as botanical illustrations they were, in fact, useless. In the future, Engelmann (1848) would redouble his efforts to provide instructions for survey artists and plant collectors.

With the conclusion of the Mexican War, a new and much enlarged American survey party returned to document the Gila River Valley in detail. The Treaty of Guadalupe Hidalgo provided instructions for marking the border of the United States and Mexico in a rough line from San Diego to the Rio Grande River above El Paso del Norte, and then down the river to the Gulf of Mexico. To fulfill their mutual treaty obligations, each nation organized cooperative boundary survey parties to place stone pylons and markers in the field, confirmed by astronomical observation. The United States Congress created a Boundary Survey Commission administered by the Department of the Interior. John Russell Bartlett, a politically
connected Manhattan book dealer, amateur ethnologist, and artist led the new commission. The Bartlett party included John Bigelow, a surgeon who served as botanist; Augustus de Vandricourt, an artist and draftsman; George Thurber, a pharmacist by training who served as botanist, quartermaster and interpreter; and Henry Cheever Pratt, an artist and friend of Bartlett. Emory, unwilling to resign his military commission to work as a civilian in the Department of the Interior, joined the survey as chief astronomer (Werne 2007:48–49, 221–223).

The fieldwork of the Bartlett commission proceeded slowly. Bartlett was well on the way to producing an illustrated work about his travels when he wandered away from the boundary line into Mexico in search of supplies. When he became sick, he and his party debarked from Acapulco for San Diego (Werne 2007:116–177, 223). Emory assumed Bartlett’s responsibilities in 1851. Bartlett, after a stay in California, which included a roundtrip from San Diego to San Francisco and back, returned to the field in 1852. But wandered away Bartlett had, and Emory found himself the commission’s de facto leader. Bartlett’s recall followed an acrimonious debate in Congress about his placement of the survey’s initial starting point on the Rio Grande above El Paso. The Gadsden Purchase rendered the point moot. Emory became survey commissioner in 1854. He completed the survey establishing the boundary of the United States and Mexico in 1857 (James 1969; Werne 2007:193).

Emory (1857, 1859) brought the full weight of the U.S. Congress to bear upon the publication of the two-volume *Report on the United States and Mexican Boundary Survey*. Emory loaded it with lithographs, appendices of botanical and mineralogical specimens compiled by John Torrey, and a comprehensive cactus catalog, *Cactacae of the Boundary*, compiled by Engelmann (1859).

Cut out of the official record, Bartlett privately published a two-volume memoir in 1854 that took parting shots at Emory. No, Bartlett stated, Emory had not
been the first to describe a saguaro, as casual readers of his congressional report might believe. Ever the bibliophile, Bartlett (1854:vol. 2, pp. 191–193fn) cited the desert exploration accounts of Venegas (1759), Alcedo (Thompson 1815), Humboldt (Black 1822), Pattie (1962 [1831]), and Hardy (1829), who noted the plant and described the Indian fruit harvest.

Bartlett’s scientific men, notably botanist George Thurber, had seen the saguaro flower and fruit in season. Thurber collected saguaro seeds and distributed them for the asking (Engelmann 1854). As a consequence, saguaro seedlings grew in hothouses from Cambridge to Kew.

Engelmann acknowledged Thurber’s contributions in 1854, and folded them into his earlier description of the plant published in November 1852 based upon the reporting of Charles Christopher Parry, the cactus enthusiast and survey commission botanist closest to Emory. In April 1852, Emory wrote that he had sent Parry to explore the cacti in the region “passed over” in 1846–1847, with a copy of Engelmann’s questions “prepared for just such an opportunity, particularly to supplying the data required for a more complete description of the *Cereus giganteus*.” Emory immediately forwarded Parry’s field notes to Engelmann, urging

Engelmann to promptly publish an updated description of the giant cactus in “Silliman’s Journal or any other periodical you may select.” Emory (1852) continued, “I am desirous this should be done at the earliest possible moment to prevent being anticipated by others.” Based on Parry’s notes, Engelmann’s revised description of *Cereus giganteus* appeared just seven months later in the November 1852 issue of Benjamin Silliman’s *American Journal of Science and Arts*. Engelmann (1852, 1854) credited Parry, who “paid particular attention to the Cacti of that region, and made it an especial object carefully to examine the *Cereus giganteus*.” Engelmann later folded the same into his *Cactacae of the Boundary* appended to Emory’s *Report*.

Although the competitive saguaro field descriptions published by Engelmann and Bartlett included fruit, the German explorer Julius Froebel published the first picture of a saguaro fruit *harvest* in 1859 (Figure 1.6). Froebel traveled through the Santa Cruz River valley in the early 1850s and, though one can only speculate, knowledge of Froebel’s presence in the field—like Bartlett’s—may have contributed to the urgency of Emory’s communication to Engelmann regarding prompt publication of a complete saguaro description. Froebel’s
first-person account of the Pima Indian fruit harvest pictured a figure of indeterminate ethnicity using a pole to dislodge fruit from the plants’ columns. Froebel’s woodcut rendered the subtle detail of dried flowers and the mechanics of dislodging the ripened fruit with a pole. Foregrounded with the harvester, a saguaro with a curved arm showed fruit and flowers. Completing the plants’ life cycle from left to right, a partial, skeletal rib cage appeared to be tall enough to have provided the pole (Froebel 1859:508–509). Froebel deployed Engelmann’s *Cereus giganteus* nomenclature. But Froebel, a former newspaperman, took pains to note the distinction that the Indians drew between a “pitaya” (Bartlett had used both *Cereus giganteus* and “petahaya”) and a “saguarro.” Froebel (1859:498) explained, “I have obtained my information respecting the difference of these two species of cactus from a good authority—the chief of the Pimas—who told me decidedly that the cactus-shafts in that part were not Pitayas, but Saguarros.”

The publication of Emory’s and Bartlett’s accounts concluded the era of government-financed discovery and publication in which saguaros grew to towering proportions that stood apart (Figure 1.7; Emory 1848c:78–79). Becoming more dramatic with each picture, the frontispiece of Engelmann’s (1859:63) *Cactaceae of the Boundary*, for example, pictured two *Cereus giganteus* towering over the huddled figures of an Indian family on the banks of the Gila River (Figure 1.8). The picture is all the more puzzling inasmuch as Engelmann worked closely at St. Louis with Paulus Roetter, his hand-picked botanical illustrator for *Cactaceae of the Boundary*. Roetter painted the scene from a field sketch by Heinrich Balduin Mollhausen. Engraver James David Smillie made copies for publication (Trelease and Gray 1887:176).

As in the earlier case of the saguaro attributed to Stanley, perhaps it was simply an error of scale heightened by the shortening of the human figures posed with the plants. Or perhaps the verbal information that accompanied the field sketches likened the saguaro to a woody tree. At this late date, we can only speculate. The
original artworks of Stanley, Mollhausen, and Roetter have long been unavailable to compare with the published images. The original art was considered expendable and not even the plates were saved. Asa Gray, who went looking for Engelmann’s plates in the mid 1880s and could find none, concluded that they had been “mainly lost or destroyed” (Treese and Gray 1887). Though Gray’s concern was with the reproduction of what he plainly regarded as historical works, the loss of original art complicates any attempt to assign responsibility for the saguaro’s inflated dramatization as a discovery. Though Stanley was perfectly capable of romanticizing western landscapes and Indian subject matter (Truettner 1991; Hassrick and Besaw 2015), neither he, Mollhausen, nor Roetter appear to have ever reviewed the lithographs or engravings of their saguaros before publication.

The rendering of saguaros as monumental artworks was hardly problematic, as few people had seen them in the field. The visualization of the saguaro presented pictures as news from a relatively inaccessible land. Bartlett (1854:vol. 1, p. 416, vol. 2, pp. 188–193) described the “petahaya” as “the monster of the cactus family.” Framing his critique of Emory around anecdotal descriptions of flowering “petahayas,” Bartlett said nothing about Engelmann’s contribution of the plant’s botanical name. For his part, Emory (1853) privately complained that Bartlett had withheld plant specimens owed the government and was “a putrid carcass… to be avoided accordingly.”

Engelmann’s *Cereus giganteus* stood as the saguaro’s botanical name for nearly 50 years until 1908, when botanists Nathaniel Lord Britton and Joseph Nelson Rose changed it to *Carnegiea gigantea* to honor Andrew Carnegie, the founding patron of the Carnegie Institution’s Desert Laboratory at Tucson, Arizona. Carnegie, then visiting Tucson, was said to have been the disappointed subject of his associates’ pandering. Around the same time, the Pima-derived word *saguaro* displaced *petahaya* in everyday use. Displacing *suwarro, sabuaro, and sagarro*, *saguaro* became the preferred spelling (MacDougal 1905b; Washington Post 1909).

The saguaro fruit harvest became the focus of ethnobotanical study that built upon the descriptive method of Thurber and Bartlett and the narrative woodcut published by Froebel (McGee 1896; Castetter and Bell 1937; Felger and Moser 1974; Crosswhite 1980). Going forward, flowers and fruit rendered as disjoint parts contributed to the dominant perception of the saguaro’s smooth, out-of-season profile, very much like the drawing that Engelmann received from Emory,
who in all honesty could not remember if the plant had spines or not (Emory 1848a, 1848b).

Though Emory wrote Bartlett out of the official record, Bartlett the artist had the last word in rendering an emotionally satisfying southwestern landscape dominated by the saguaro, very different from the towering plants that humbled the figures in Emory’s published works (Bartlett 1854:vol. 1, p. 416). In the waning days of Bartlett’s administration as Survey Boundary Commissioner, he took to the hills above Tucson to sketch and paint. Bartlett’s pen-and-ink wash pictured the members of his party at rest among the saguaros on the present-day Sentinel Peak (Figure 1.9). The relaxed, social setting of people in the company of plants would become increasingly familiar to collectors, health seekers, and boosters in the years to come.
The transplantation of the saguaro cactus followed the railroad. After the arrival of the Southern Pacific from the west at Tucson in 1880, the first columnar saguaros left their native habitat for California. With the completion of the railroad to the east, transplanted saguaros became perennial features at the nation’s world’s fairs. Hobbyists tested the limits of saguaro transplantation on a grand scale. Only gradually did cactus collectors yield to conservation concerns that curtailed the more rapacious aspects of collecting.

Built on the colonial model, the organized extraction and distribution of prime specimens from Mexico and the Arizona territory percolated through American, British, and European culture. The largest specimens fell to those with the means to maintain a greenhouse. Hobbyists with windowsills settled for more manageable succulents, including the saguaro seedlings advertised in mail order catalogs illustrated with the pictures of the mature plants first published by Emory, Bartlett, and Froebel.

The dig was on. The Southern Pacific’s Charles Crocker created the earliest transplanted saguaro display of its kind, the Arizona Garden, at the Hotel Del Monte on California’s Monterey Peninsula. Designed by landscape architect Rudolph Ulrich, the Arizona Garden smoothed the desert’s sharp edges with the formal conventions of European garden design practiced in Ulrich’s native Germany. Ulrich emigrated to the United States in 1868 and worked in Cincinnati before moving to the San Francisco Bay area in the late 1870s. Ulrich’s landscape work came to the attention of Crocker, who gave him the use of a locomotive and several boxcars for a succulent collecting trip. The party included a crew of eight men and six teams of horses. An otherwise unattainable exercise in conspicuous transplantation, the Arizona Garden debuted at the Hotel Del Monte in 1882. The garden featured columnar saguaros (without arms), barrels, prickly pears, agaves, and a decidedly non-Arizonan arrangement of palms in an ellipse of rockwork beds and paths (Figure 2.1). The garden won popular acclaim for the hotel, passenger traffic for the railroad, and cactus garden clients for Ulrich, including Crocker’s Southern Pacific partner, Leland Stanford (Olmstead 1891;
The popularity of cactus collecting increased proportionately as access to the Sonoran Desert receded as a logistical problem. Cacti from Arizona and Mexico joined succulents from windowsills to greenhouses. William C.G. Ludford noted, “The cottager, who can only devote a small space to them in his window, may, and often does, grow them to greater perfection than his richer neighbours, who have greenhouses, stoves, and every convenience” (Newton 1961; Rowley 1997:196–199). Newly organized cactus clubs published newsletters and journals and held public exhibitions of members’ collections (Newton 1961, 1964). The literature of collecting and display freely traded in saguaro iconography despite the unlikely prospect of growing a seedling to flowering maturity.

Botanist Lewis Castle, formerly of London’s Royal Gardens at Kew, carefully explained that saguaros could only be grown from seed and not cuttings, as was the case with the jointed stems and pads of other cacti. Surprisingly though, saguaros were not rare, as George Thurber had distributed the saguaro seeds he
collected as a member of the Bartlett survey party of the 1850s. Gardeners had propagated the seedlings ever since, including Thurber, who grew them in his Cambridge, Massachusetts, greenhouse. While most subjects in horticulture had been “thoroughly exhausted,” Castle (1884: preface, 44–45) explained, “no treatise in the English language has hitherto been solely devoted to the large, peculiar, and interesting family of Cactaceous plants which long held a prominent position in popular estimation.” Castle reprinted Julius Froebel’s “saguaro trees” as a frontispiece, coupling the emerging hobby to the iconography of the fruit harvest (Gray 1854:302–305; Rowley 1997:200).

William Watson, an Assistant Curator at Kew, took a dim view of the mature saguaros that illustrated cactus collecting guides. In Cactus Culture for Amateurs, Watson (1889:76–77) cautioned, “Judging by the slowness of growth, the prospect of seeing full-size specimens of this species in English gardens is a very remote one, unless full-grown stems are imported, and this is hardly possible.” Watson pictured a saguaro flower and left it at that.

Philadelphia nurseryman Albert Blanc declared his company exclusively for “cheap cacti” (A. Blanc and Company 1886). Pitching cactus collecting as a democratic hobby for all, Blanc’s illustrated sales catalogs provided useful hints on cactus care, intimating that cacti thrived on the warmth of the sun, well-drained soil and benign neglect (Figure 2.2). Blanc’s price sheet offered Cereus giganteus, “King of the cactus family.” Blanc (1893) noted that “small plants of this make
Blanc’s saguaro prices depended “much on the beauty of the subjects,” beginning at 6 inches for $1.50, to six feet for $50. Blanc claimed to be “the originators of the *Cactus Craze* in the United States, and have the finest collection in existence.” Blanc continued, “Cacti have much to recommend them to lovers of the curious and the beautiful...they are easily grown, so easily in fact that anyone who can only devote a small space to them in his window may grow them successfully” (A. Blanc and Company 1886). Blanc offered “Our Great One Dollar Collection of Rare Cacti,” an assortment of 10 pot-size plants chosen from a list of 20 specimens (each with a Latin name) based upon availability. Blanc attributed the bump in sales of “miniature cacti” to the “magnificent exhibit” at New Orleans’ World’s Industrial and Cotton Centennial Exposition (A. Blanc and Company 1886; Rowley 1997:272–274).

Dr. Richard E. Kunze, a Phoenix physician, backed into the cactus mail order business. The Salt River Valley land that Kunze bought at Phoenix could not sustain the fruit orchard that he had planned, so he took up cactus instead. A German emigrant with botanical interests after George Engelmann, Kunze’s cactus nursery became an international source of supply. Kunze did not so much grow the plants as gather them on spec. Transplanted to a holding bed, if they did not sell, they would be larger the following year. Kunze’s clients included William Hertrich, curator of the Huntington Desert Garden at San Marino, California (Hertrich 1949; Lyons 1969, 2007:8–9; Hondagneu-Sotelo 2014; Lynch 2014). Kunze’s equally remunerative clients included the United States National Museum at Washington, D.C., the Royal Botanical Gardens of England (Kew Gardens), the Royal Botanical Museum and Garden of Berlin, Germany, and the Imperial Botanical Garden of St. Petersburg, Russia. Kunze offered small, round *mamillaria*, among the least expensive plants at $0.15 per plant, to the saguaro, the most expensive, ranging from six to eight inches high for $0.50 to 15 feet high for $150.00 (Arizona Republic 1903, 1904; Kunze 1909; Munk 1912; Middleton 1914).
Cactus collecting became a competitive sport among amateur hobbyists with the means to personally gather specimens in the wild. The collecting craze swept America, England, and continental Europe. Taking stock of the collecting phenomenon in 1901, the *London Magazine*’s H.J. Shepstone (1901) stated that the largest collection in England belonged to the Swanley Nurseries of the Messrs. Cannell, noting the recent uptick in the importation of “large specimens” by “wealthy individuals interested in these strange plants last year.” The [English] *Gardners' Chronicle* pictured the impressive conservatory of Charles Darrah of Holly Point, Heaton Mersey, who displayed transplanted examples of *Cereus giganteus*, the largest at eight feet, six inches. Cacti that George Engelmann had named for William Emory and George Wislizeni completed the arrangement (Figure 2.3; *Gardeners' Chronicle* 1901). Darrah bequeathed his collection to the city of Manchester with the condition that the city build a greenhouse in which to display it. The city-built greenhouse complex opened in 1908. The display featured 167 *Cereus* species and extensive rockwork organized into five zones. The city’s new “cactus house” gave “impetus to the private cultivation of the simpler growths of the Cactus” (Journal of Horticulture and Home Farmer 1907). Yet, by the 1930s, the city of Manchester had closed in on the park, the collection was transferred to another park, and the glasshouses demolished (Hughes and Mottram 2006). What remains of Darrah’s collection is under the care of the Manchester Branch of the British Cactus and Succulent Society at Wythenshawe Park just south of the city (British Cactus and Succulent Society 2011).

If additional evidence was needed of the hold that cacti had upon the imagination of the English gardener, one need look no further than F.A. Walton, a Birmingham jeweler who left his family’s gold and silver business to take up collecting. In 1899, Walton traveled from Liverpool to St. Louis to tour the public garden of the late Henry Shaw and visit with members of the city’s famed cactus society. From St. Louis, Walton traveled to San Bernardino, California, where he arranged an outing of several days duration to gather plants in the desert with a fellow collector and a helper with a wagon and mule team. Cautioned to not begin filling the wagon until the return trip, Walton ignored that advice and began excavating what he described as a hedgehog cactus weighing several hundred pounds. His guide objected to the inordinate heft of the specimen. Walton persevered and arranged transportation for his exotic find to his English greenhouse. Returning east from California on the Southern Pacific, Walton stopped at Tucson, where
he saw newly transplanted *Cereus giganteus* on the campus of the University of Arizona. Making several excursions to the mountains surrounding Tucson, Walton succeeded in pushing over a 30-foot saguaro—to measure it. From Tucson, Walton traveled to Mexico, Texas, and New Orleans, then steamed to Liverpool by way of New York. Leaving Tucson, Walton did not mention saguaros, perhaps because they were neither rare nor unknown in the collections of his rivals. Walton seemed happy with the largest hedgehog he had ever seen, certainly the largest in England. In 1898, Walton published a journal of the National Cactus and Succulent Society, a repository of information and contact with collectors in the field. Never winning a broad subscribing readership, the journal in which Walton described his adventures folded after only two years. A journal of cactus collecting, cultivation, and display did not reemerge in Britain until the early 1930s (Walton 1899:288–296; Rowley 1966, 1995; Trennert 1988; Parker 1989).

Cactus clubs in America began as local affairs that overlapped with regional botanical and horticultural societies. New York's Torrey Botanical Club, for example, whose leadership included club president George Thurber, met at the Columbia College Herbarium. The club's focus was the botany of New York State and the as yet undeveloped environs of New York City (Barnhart 1918; Mickulas 2007:36–40).

The Baltimore Cactus Society published a journal and staged annual public exhibitions of members’ collections (Figure 2.4). Formally organized in 1889 and novel enough to attract the attention of the press, the club’s announcement of the arrival of two *Cereus gigantea* to a member’s collection in 1890 caused a stir. The *Baltimore Sun* (1890) reported that one of the saguaros was two feet high and 10 inches thick, the other about four feet high and one foot in diameter, “the largest of the kind in the city.” The *Baltimore Sun* (1889) noted that “It has only been in the past few years that popular attention has turned to the cultivation of cactaceous plants, but interest is now widespread, and few window gardens or green-houses are considered complete without a collection.” In 1892, the society held what it promoted as the first “cactus exhibition” in America. Staged at Raines Hall, an event space rented from the bricklayers union, the exhibit featured 700 varieties totaling 5,000 plants. A reporter described the centerpiece of the show as “a specimen of the king cactus from Arizona. It looks like the stump of a telegraph pole painted green. It is supposed to be about 100 years old. In this time it has reached the height of seven feet and weighs 380 pounds” ([Washington]
Evening Star 1893; Ryan 1991). *Harper’s Bazaar* (1894) rendered the exhibit as a social event inset with woodcuts of the “Giant Cactus” of the Gila River (Figure 2.5). John A. Becker, society president and purported owner of one of the finest cactus collections in the United States, was said to be negotiating with the
FIGURE 2.5. Woodcut. 1893. The first exhibition of the Baltimore Cactus Society in 1892 presented 5,000 specimens from members’ collections, including a seven-foot saguaro. The following year, Harper’s Bazaar (1893) rendered the exhibition as a social event picturing society members poring over their display. A collage of smaller woodcuts encircled the scene picturing saguaros, organ pipes, and agaves in the wild, with members’ flowering barrels, mammillaria, and a night-blooming cereus, each plant and scene identified and keyed by number.
Mexican Secretaría de Fomento (Secretary of Development) for its cactus display at the World’s Columbian Exposition in Chicago (New York Tribune 1894). The Mexican display consisted of densely packed agaves, barrels, and small saguaros in a rock-strewn, linear sand pile. The garden contributed to the festive atmosphere in which business was conducted at the fair (Figure 2.6; Yeager 1977). It is now presumed that Becker was unsuccessful in his bid.

The Baltimore Cactus Society maintained a public garden display in the city’s Carroll Park. Begun as a seasonal experiment, society members leant plants for the summer and retrieved them in the fall. Park Superintendent Charles L. Seybold, a cactus society member who lived in the park’s Mount Clare mansion, created and watched over the display, which featured rockwork parterres radiating from a central saguaro. Seybold covered and uncovered the display to protect it from rain. The society’s journal lauded the arrangement citing, “the healthfulness of Carroll Park as a summer resort for cactus” (Figure 2.7; Baltimore Cactus Journal 1894a, 1894b). Seasonal cactus landscapes included Brooklyn, New York’s Prospect Park (Figure 2.8; New York Tribune 1900).

World’s fairs existed to dramatize the introduction of new things, ideas, and the ultimate in display techniques. From London’s Crystal Palace in 1851 to
Chicago’s World’s Columbian Exposition in 1893, fairs showcased horticulture and botanical displays in stand-alone, glassed-in exhibit halls. Small cactus specimens appeared at London in 1851, and at the United States’ first world’s fair, the Philadelphia Centennial of 1876. There a comprehensive index of the woods of America featured cross-sectioned, two-foot long wood samples showing grain and bark. The samples included *Cereus giganteus*, *Cereus thurberi*, and *Opuntia arborescens*. The U.S. Department of Agriculture collated and prepared the specimens contributed by regional specialists (Vasey 1884:383–386, 398). Dr. Edward Palmer contributed wood samples representing Arizona, southern California, and Southern Utah. Palmer traveled widely and collected in the American Southwest and Mexico, carefully documenting the specimens he sent to the Smithsonian Institution and the U.S. Department of Agriculture (McVaugh 1956). Elsewhere the Centennial’s Horticultural Building displayed specimens contributed by individuals and growers identified only as “cactus” (United States Centennial Commission 1876:79).

There was never an American world’s fair without a saguaro, even if it debuted at the Philadelphia Centennial as a specimen in a wood index. The saguaro’s
first appearance—as a columnar plant—came at the World’s Industrial and Cotton Centennial Exposition at New Orleans in 1884–1885, the first fair after the Southern Pacific’s penetration of the Sonoran Desert. The fair’s Horticultural Hall featured an “immense cactus, twenty feet high, from Arizona” (Perkins 1885:79–80). It is not known what became of the plant at the fair’s conclusion.

As ultimate displays, world’s fairs advanced the professional interests of landscape design. The carefully cultivated appearance of fairgrounds complemented exhibit buildings and became public parks at the fairs’ conclusion. The preparation of a fairgrounds involved moving trees and shrubs, draining swamps, and creating water features that left the impression of a natural occurrence. And then there were the saguaros.

The landscape firm of Frederick Law Olmsted designed the World’s Columbian Exposition of 1893 fairgrounds. The firm hired Rudolph Ulrich of Arizona Garden fame as the fair’s landscape superintendent (Maloney 2012:64–68; Olmsted 1891). The Southern Pacific contributed a complimentary railroad pass for a flatcar carrying 17 saguaros and a boxcar for barrel, prickly pear, cholla, ocotillo, and agave specimens collected within 25 miles of Tucson. The idea of outfitting the Arizona territorial building at the fair with saguaros originated with William Reid, a Tucson theater owner and World’s Fair Commissioner for Pima County.
Reid took to the task as a natural showman. “Millions of Americans and foreigners have read descriptions of these extraordinary plants and have probably seen cuts or photographs of them,” Reid explained, “but only those who have visited the southern territories have any clear idea of what they are really like” (Arizona Silver Belt 1893a). Moreover, saguaros would instill among fairgoers a favorable impression of southern Arizona’s mild climate. Though the landscaping of the fairgrounds began more than a year in advance of the opening to allow new trees and shrubs to settle in, the cactus shipment had to wait until early spring to keep it from freezing. The saguaros were the last to arrive and be placed at the fair. Though Reid had watched over the collection of the plants in Tucson, he could not attend to their placement at Chicago. The most impressive saguaros with

FIGURE 2.9. This photograph documenting the monumental architecture of the Horticulture Building at the World’s Columbian Exposition, Chicago, captured an equally monumental saguaro at the left of the frame. 1893.
arms—a new development in the annals of cactus transplantation—ended up outside the fair’s Horticultural Hall (Maloney 2012:73). Others ended up at the Pennsylvania building (Campbell 1892; Arizona Weekly Citizen 1893a, 1893b, 1893c, 1893d, 1893e; Bailey 1893; Hilpert 1983). Saguars loomed over the heads of visitors, extending beyond the frame of cyanotypes and stereoviews of the fairgrounds (Figures 2.9–2.12).

Six of Reid’s specimens made it to the forecourt of the Arizona territorial building shared with New Mexico and Oklahoma (Figure 2.14). In part, Reid’s intent had been to impress fairgoers with the clarity of the climate which had produced such plants. One territorial visitor, however, opposed the use of the cactus as a symbol, as it sent the opposite message. By installing saguaros at the fair the territory had lost an opportunity to erect “a statue of Abundance, with a horn of plenty in each hand, instead of the withered

FIGURE 2.10. Cactus display tucked into a grassy corner outside the Horticulture Building, World’s Columbian Exposition, Chicago. 1893.

FIGURE 2.11. A columnar saguaro encircled with an arrangement of small agaves. Horticulture Building, World’s Columbian Exposition, Chicago. 1893.
and forbidding cactus stock erected to indicate, we presume, the poverty of Arizona’s soil” (Arizona Silver Belt 1893b). The territory would be more properly promoted as an agricultural paradise under irrigation, not a desert.

The tension of cactus-or-not coursed beneath the highly competitive claims of primacy advanced by the boosters of Tucson and Phoenix. The latter envisioned a latticework of irrigation that bore fruit and alfalfa. An early set-aside of park land in Phoenix, the Papago Saguaro National Monument, quickly devolved from the wilderness it might have been. Postcards of the park’s most popular geological formation, the Hole in the Rock, show the saguaro forest yielding to the irrigated features of a public park (Figures 2.14 and 2.15). Tucson boosters, fortified by the community of Desert Laboratory and university botanists, envisioned a ring of saguaro parks that withstood the pressure of further development. But in Tucson’s case the parks were hardly assured (Burtner 2011:23, 155–157).

Fairgoers who encountered saguaros might be excused for believing that they grew throughout the Southwest. The Southern Pacific Railroad selectively decorated passenger stations with prime specimens. In the year of the World’s Columbian Exposition, for example, press accounts noted the carloads of Arizona cacti destined for the Southern Pacific’s Los Angeles Arcade Depot passenger station (Los Angeles Times 1893). A photograph of the station’s cactus garden
pictures no less than 16 columnar saguaros (Figure 2.16). To the east, the railroad installed a saguaro as the focal point of its San Antonio, Texas, station, hundreds of miles before—or after—passengers became acquainted with the plants in Arizona (Figure 2.17).

The Southern Pacific continued to test the limits of transplantation well into the early 1900s. In 1915, for example, the railroad provided saguaros for the garden of the California state building at San Francisco’s Pacific Panama International Exposition (Figure 2.18; San Francisco Examiner 1915; Raymond 1915:182–183). By this time it was widely understood that the saguaro could sustain itself through a fair season. Rather than convey ideas about the poverty of Arizona’s soil, cactus displays promoted California’s climate, in which it was said
that anything could grow. A tall-tale postcard playfully confirmed the sentiment: “Things grow large in California” (Figure 2.19).

The transplantation of saguaros anticipated a highly imaginative commercial climate in which anything could be sold by putting a cactus on it. But the railroad’s transplanted saguaros did not last. At the Hotel Del Monte in Monterrey, the home of the largest and most well-documented cactus garden in the west, postcards pictured the circular braces that propped up the saguaros, and later, the plants’ complete absence (Figures 2.20 and 2.21). The box-like brace propping up
Chapter Two: Cactus Displays

FIGURE 2.16 (ABOVE LEFT). Cactus garden. 1893. Southern Pacific Railroad Arcade Depot, Los Angeles, California.

FIGURE 2.17 (LEFT). Giant cactus with brace. 1907. Southern Pacific Railroad Depot, San Antonio, Texas. The sender wrote, “The cactus was brought here from New Mexico [territory] and is as you see a giant.”

Tall tale postcard. 1913. Tall tale postcards playfully exaggerated the proportions of locally produced potatoes, tomatoes, corn, fruit, fish, and game—and a saguaro promoting the fecundity of California’s oddly productive climate.
the Southern Pacific’s San Antonio, Texas, saguaro portended the plant’s doom and eventual removal.

Merely because the plants did not last did not mean that their persistent imagery failed to take hold as a symbol, particularly in and of the Southwest. Rather the opposite. As late as 2018, a Texas Monthly reader complained that the saguaro had worked its way into the Lone Star state’s pop culture lexicon, even appearing on a map (Courtney 2018). Critics seeking to define a Southwest without it wrote off the saguaro’s pervasive imagery as “hackneyed” (Byrkit 1992:342).
At the Hotel Del Monte’s Arizona Garden on California’s Monterey Peninsula, the Southern Pacific Railroad fell back upon hybrid rose beds and a hedge-row maze topped with topiary figures. Out on the craggy Pacific coast, a windswept cypress on a high cliff overlooking the ocean became the peninsula’s most memorably photogenic tree (Farmer 2013:xvii–xix; Los Angeles Times 2013).

From the Pacific Ocean in April 1934, the officers of the U.S.S. Arizona requested cactus specimens for their ship’s newly remodeled lounges. The Tucson Chamber of Commerce engaged University of Arizona ecologist Andrew Alexander Nichol to assemble a collection for the ship. Nichol, a young assistant professor then compiling a monograph on Arizona flora, went by the initials A.A. (Mitich 1996). Nichol’s seagoing display featured “symmetrical clumps” of purple Santa Rita prickly pears, an organ pipe, and two four-foot saguaros. Nichol did not know how the plants might fare. He volunteered only that some had “sufficient adaptability” to live (Arizona Republic 1934a; Mitich 1996).
Later that month, University of Arizona president Homer LeRoy Shantz announced that Nichol and the university would lead the design and installation of “two immense cactus gardens” at the Chicago Century of Progress adjacent to the Arizona State building (Arizona Republic 1934b; Casa Grande Dispatch 1934). Scaled back in the intervening weeks from a 4,000 square foot proposal that might rival even the university’s own campus cactus garden, to a more easily accomplished display, the exhibit that Nichol eventually installed at Chicago featured symmetrical clumps of hedgehogs, barrels, chollas, ocotillos, prickly pears, and large armed saguaros. Inside the Arizona exhibit proper, a fenced-off floor area continued the display of the state’s native flora under a copper ceiling with a close arrangement of ocotillos and saguaros courtesy of the Southern Pacific Railroad’s partner, the Rock Island Railroad (Figures 2.22 and 2.23). With allowances for limited botanical knowledge, or perhaps because of it, the eye-catching display confirmed the saguaro’s iconographic range without objection or complaint.
At the turn of the twentieth century, saguaros found new audiences in favorable climates and conservatories as living botanical trophies—attractions that closed the loop-trail of scientific investigation with a powerful public display. Enthusiasm for new knowledge gained from collections of all kinds extended from world's fairs to the endowment of museums, zoos, and botanical gardens. Saguaros in and around the World's Columbian Exposition at Chicago in 1893 prefigured their curation in the new monumental glass and steel conservatories erected in Pittsburgh, St. Louis and New York (Lemmon 1962:11, 46, 138, 168; Koppe1kamm 1981; Grove 2005; Dunkak 2007; Mickulas 2007:109–115, 137–143).

At the conclusion of the 1893 Chicago fair, over 6,000 cactus plants traveled to Pittsburgh as the leading collection of the Phipps Conservatory opened to the public in December of that year (New York Tribune 1893). Endowed by steel baron Henry Phipps, partner of Andrew Carnegie, the conservatory soon augmented its cactus display with purchases from Philadelphia’s Albert Blanc, then disposing of his collection, said to be one of the most complete in the country. A separate cactus house at Phipps designed by New York’s Lord and Burnham opened in 1902. The installation featured raised beds with natural rockwork and informal paths of “undulated” design for cactus and kindred plants (Pittsburgh Post-Gazette 1902). A newspaper reporter noted that Conservatory Director J. Guy McCandless “determined that Pittsburgh shall not be behind other cities in the matter of cacti any more than in that of any other conservatory plants” (Pittsburgh Post-Gazette 1902). The photographic record of the conservatory’s new building pictures columnar saguaros, suggesting that the armed saguaro specimen seen on the fairgrounds at Chicago had since died or did not move to Pittsburgh with the other specimens (Figure 3.1). Phipps officials rejected exhibiting the plants outdoors during the summer in the Monongahela Valley, “on account of the smoky atmosphere, as a clear, dry air is necessary to cacti” (Pittsburgh Post-Gazette 1902).

St. Louis philanthropist Henry Shaw acquired the herbarium of his late friend and mentor George Engelmann. The Missouri Botanical Garden that Shaw
endowed continued after his death in 1898 as a leader in botanical research and Victorian display values. Popularly known as “Shaw’s Garden,” period photographs show potted cacti displayed outdoors in metal-edge parterres, labeled and arranged by type. Two columnar saguaros flank the garden’s gated portico inspired by the formal conventions of English garden design that Shaw experienced at Chatsworth House and at London’s Kew Gardens, whose groundskeeper he soon hired. Shaw’s outdoor saguaro displays occupied the garden’s laborers who moved the plants in and out of the safety of their winter greenhouses for the summer (Figures 3.2 and 3.3). A Shaw photographer documented the receipt of an 11-foot flowering saguaro in 1914. The open crate shows the saguaro cushioned with creosote branches (Figure 3.4). Officials placed the saguaro indoors in the center of the garden’s Yucca dome (Dimmock 1890; New York Evangelist 1873; White 1896; St. Louis Post-Dispatch 1914; Styles 2012).

As in the cases of Phipps and Shaw, a conservatory dependent upon public support could not fail to dramatize the largest and most curious plant of its
kind. Yet like the earliest transplanted saguaros that failed, their appearance as curated specimens begged the question of what was actually being displayed. A saguaro could cheat death and bloom for years in the worst climactic conditions, in or out of the ground. The same was not true for other cactus specimens (Rose 1911–1916).

In 1899, the New York Botanical Garden, whose leadership came from the city’s Torrey Botanical Club led by George Thurber and Nathaniel Lord Britton, embarked on the construction of a new series of connected steel and glass hothouses. The largest, a domed structure, displayed palm trees. Four glassed-in environments extending from the sides held arid plants, two for cacti, and two for yuccas and agaves. Garden director Britton filled three of them with small specimens exhibited at the recent Paris Exposition purchased from cactus collector M.C. Simon of Saint-Ouen. That left the fourth for the exclusive display of the cacti of the desert Southwest (American Gardening 1900; Harper’s Weekly 1902; New York Times 1921).
Britton had ambitions for the garden as a leader among competitive cultural attractions in New York City (Britton 1896). Britton dispatched botanist and First Assistant Daniel Trembly MacDougal to the Southwest to collect cactus specimens specifically for the new building. Bringing MacDougal under his wing as construction began, Britton (1899) confided, “of course we will have a leaning toward rare things.”

MacDougal traveled with crates of camera equipment with which to document the plants *in situ* before and during their removal. On MacDougal’s collecting trip to Tucson and Sonora, Mexico, in February 1902, he famously excavated a 25-year old, 13 ½-foot saguaro specimen for the new cactus house (American Gardening 1902; Harper’s Weekly 1902; MacDougal 1902; Boom 1996). In this particular instance, an unidentified man in a pith helmet poses with a saguaro undergoing excavation exposing the topmost portion of its taproot. The extraction required six men to steady the plant, dig out its supporting taproot, and lower the specimen into a custom-made crate cushioned with creosote branches (Figure 3.5; American Gardening 1902; MacDougal 1902).

**FIGURE 3.3.** Hand-tinted postcard picturing potted *Cereus* cactus specimens at Shaw’s Garden, St. Louis, Missouri. Printed in Germany, published by the St. Louis News Company. Postmarked 1908.
It is hard to overstate the impact of the display of ostensibly living saguaros upon the garden-going public. First, there was the tracery of the conservatory’s light and glass; and then the overwhelming effect of the plants. “Sometimes the mountain comes to Mahomet” [sic], one New York reporter enthused. “We of the East cannot all of us go to the arid regions of Arizona to see the giant Cacti which flourish there, but we can go to the Cactus house of the New York Botanical Garden.” The “strange plants…are a center of much curious attention from visitors to the Garden” (American Gardening 1902).

Dead or alive, in or out of the ground, MacDougal’s saguaros put up a good front and bloomed regardless. University of Nebraska students and their professor to whom MacDougal sent a saguaro arm observed the unusual flowering phenomenon first hand. The flowers on the tip of the sawed-off arm blossomed in Nebraska for two consecutive years (Pool 1916). MacDougal did not attempt to transplant mature saguaros with arms as seen at the Chicago world’s fair. The plant’s arms appeared around the age of 30 years old when its water-absorbing height and girth would have complicated removal.
The hole in the desert, however, did not go unnoticed. *Youth's Companion* (1902) reported that the Arizona territorial legislature had named the saguaro as the territory’s flower and sarcastically quipped, “that it will not be many years before it will be necessary to make a new choice,” for alfalfa under irrigation now covered the saguaro’s native habitat. Believing irrigation to be a habitat, others consigned the saguaro to the rocks, the rills and the sun-bleached hills unavailable to irrigation (*Youth's Companion* 1902). One critic took issue. H. Tullsen (1902) decried the recent complaint in the *New York Sun* about the irrigation of the “arid wastes of Arizona” and its consequent effect on the *Cereus giganteus*. He took the *Sun* to task, claiming that the plant’s habitat was not in the valley, but the rocky hillsides “where water cannot be got” (Tullsen 1902).

MacDougal took a similar defensive position. Addressing criticism that his collecting denuded the desert, MacDougal maintained that most of the saguaro population grew on hillsides inaccessible to predation, both man-made and natural. Yet Sonora and Tucson never experienced the kind of irrigation that MacDougal foretold in his defense. The saguaro he collected came from neither an inaccessible nor a rocky hillside, as the picture of his find clearly shows. MacDougal stated that the Tucson saguaro came from a “comparative small area of the region capable of irrigation.” He might have added that like his specimens loaded at Torres, the plants came from tableland within easy reach of the railroad (American Gardening 1902).

Sagueros played a symbolic role as living specimens in the endowment of botanical and climate studies. The board members of the New York Botanical Garden supported MacDougal’s expeditions to collect display specimens for their newest conservatory. Garden board member and philanthropist Andrew Carnegie went on to endow the Desert Laboratory in Tucson. The laboratory’s research program gathered data about how plants adapt to aridity. After a two-month search for a suitable laboratory location during February and March 1903, the newly organized Carnegie Institution settled upon Tumamoc Hill, a mountain.
site adjacent to Tucson. The search provided a second opportunity in as many years for MacDougal to collect cacti throughout the borderlands of the Sonoran Desert. The principal investigators included MacDougal and botanist Frederick Vernon Coville, an authority on Death Valley. Coville administered the laboratory from the Carnegie Institution’s Washington, D.C., headquarters in concert with MacDougal, who in the first years of the laboratory fulfilled his obligations as director from his office at the New York Botanical Garden (Wilder 1967; McGinnies 1981:56–58; Craig 2005:1–9).

Conducting their site search, MacDougal and Coville weighed access to transportation, communication, and abiding botanical interest, ruling out areas expected to undergo irrigation including Phoenix’s Salt River Valley (Rogers 1899; Coville and MacDougal 1903). Collecting cacti, MacDougal did not repeat his previous year’s success. The specimens he crated at Torres, Sonora, “were almost

FIGURE 3.6. A mule-drawn load of MacDougal’s cacti collected for the New York Botanical Garden and crated in Torres, Sonora, 1902. MacDougal discovered that the collection had been damaged in transit upon arrival in New York.
all ruined” upon receipt in New York, including a small Cereus (Figure 3.6). Even his shipment from Tucson arrived with an “injured” specimen. He thought that he could salvage some of them to pose for photographs in the Carnegie report announcing the laboratory. Instead, the announcement fell back upon the landscape photographs that MacDougal made, pointing up the hit-or-miss travel of cacti and other botanical specimens even at this late date (MacDougal 1903a).

Though it is hard to imagine where the Carnegie Institution might have more profitably located a laboratory for desert study, the contribution of the Tucson Chamber of Commerce proved decisive. The Chamber offered a semi-remote, 40-acre, tract of “stone land” on Tumamoc Hill above the Santa Cruz River, not far from that painted by John Russell Bartlett in 1852 (Figure 3.7; Wilcox and Larson 1979). The Chamber provided the site; the blasting of a road to a buildable mesa; light, power and telephone lines; and a rudimentary water line and a pump. The land had recently become available when sold for delinquent taxes (Coville 1903; Jaynes 1903; Sykes 1944:268–284).
The Carnegie Institution set up shop under the immediate direction of William Austin Cannon, the Desert Laboratory’s first resident investigator. Cannon busied himself locating the boundaries of the cactus-filled tract on Tumamoc Hill. Cannon oversaw the construction of a sturdy stone building with a wooden roof that still houses the active laboratory today (Figure 3.8). The finished laboratory featured a library, work and office spaces, and a darkroom that turned out a stream of professionally produced photo publicity. During construction, Cannon documented the desert vegetation with photographs sent to newspapers and journals. The photos could also be made into slides for use on the illustrated lecture circuit (MacDougal 1903b). A photograph taken by Cannon documenting the property in February 1903 shows a saguaro fruit picking pole found on the site, presumably left for the season. Cannon repurposed the crook-topped pole as a corner boundary marker and took its picture (Figure 3.9).

By November 1903, Cannon (1903) had explored “the summit of our mountain,” alerting MacDougal to the existence of “an old Indian village ruin…Pottery and instruments for grinding (all broken of course) are rather plentiful. Much of it is in the Laboratory domain. In the course of events I shall photograph this for the Laboratory.” It is not known if he returned to document the scene with
his camera or not. The subject failed to appear in his subsequent correspondence. Ironically, that very month MacDougal published the illustrated announcement of the Carnegie Institution’s Desert Laboratory program at Tucson. In an effort to showcase the site’s historical, cultural and botanical assets, MacDougal excerpted ethnologist William McGee’s descriptive account of Tohono O’odham Indian life at the base of Tumamoc Hill (Coville and MacDougal 1903). It was left to a later generation of ethnologists to investigate the significance of Tumamoc’s visible trail systems, rockwork walls, petroglyphs, and sherds (Ferg 1979; Hartmann and Hartmann 1979; Masse 1979; Wilcox and Larson 1979; Downum et al. 2009; Wilder and O’Meara 2015).

Siting the building among the saguaros was of great importance to MacDougal. At the outset of construction he cautioned Cannon, “The preservation of the plants saves the building from the look of barreness [sic] seen around so many
places. Every plant on the mountain ought to be regarded as if had been placed there for some special purpose and should not be destroyed without good cause” (Figure 3.10; MacDougal 1903c). Botanists working in the new building needed not travel to pursue research on light, soil, water, or the process of transpiration that accounted for the saguaro’s accordion-like expansion and contraction (Figure 3.11). Botanists publicized their research with photographs processed at the laboratory and pictured in the Carnegie Institution’s annual reports. The Institution also invested in displays and exhibits highlighting its research. MacDougal, for example, created an exhibit for the 1915 Panama Pacific International Exposition at San Francisco. He had recently moved from Tucson to take up residence at the Institution’s Coastal Laboratory at Carmel, California. MacDougal explained that the exhibit would be graphic, novel, and unique, advertising Tucson as an educational and scientific center (Arizona Daily Star 1914b).
ABOVE. FIGURE 3.11. Botanist Effie Southworth Spalding measuring the folds of a saguaro, Desert Laboratory. 1909. Spalding’s engaging work portrait has since become a touchstone in the history of science. But in its first use as an illustration in her “The Water-Balance of Succulent Plants” coauthored with Daniel T. MacDougal, 1910, it showed only her hand.

LEFT. FIGURE 3.12. Dendrograph recording growth and changes in volume of young saguaro, Desert Laboratory. 1925.
The name Desert Laboratory changed to Laboratory for Plant Physiology in 1923, reflecting the expansive nature of its programs and MacDougal’s new interests at Carmel. But the focus of the laboratory’s most-pictured work remained the saguaro, the subject of experiments in water measurement with a dendrograph bracketing the plant in photographs (Figure 3.12; MacDougal 1925).

Near the end of its administrative existence the Desert Laboratory mounted a traveling exhibit of native plants for display at the Carnegie Institution’s headquarters in Washington, D.C. Overseen by laboratory director Forrest Shreeve, the exhibit, entitled “Types of Plants in the Sonoran Desert,” featured a map flanked by a columnar saguaro, a boojum tree, agaves, and other specimens in galvanized containers (Figure 3.13; Arizona Daily Star 1936; Carnegie Institution 1937; Shreeve 1937). In 1922, the Desert Laboratory’s Godfrey Sykes named the curious, upside-down, carrot-shaped plant a “boojum”—an allusion to Lewis Carroll’s *The Hunting of the Snark* (Humphries 1974:31). The protagonist of Carroll’s (1876:24, 30, 33) poem describes a “a dreamy delirious fight” in which the sight of a “boojum”—should it appear—would cause his life to “softly and suddenly vanish away” (Carroll 1876:24, 30, 33).
In the display culture of gardens, fairs, zoos, and museums that valued rare things there would be no vanishing away. The sentiment that the desert had value anticipated the ecological sensibility of writers John C. Van Dyke, Mary Austin, William Carr, Joseph Wood Krutch, and more recently, Edward Abbey, Lawrence Clark Powell, Gary Paul Nabhan, and Tom Miller. Once the spot for explorations documented with specimens, artwork, and photographs, Tumamoc Hill came full circle as a jumping-off point for new knowledge that piqued hearts and curious minds.

Perhaps it was not surprising when individuals—learning what they could from literature, photographs, and displays—experienced the Sonoran Desert firsthand, they championed it as an “arboreal desert.” Such was the experience of William Temple Hornaday, who coined the phrase on holiday in Tucson in 1907. Hornaday, the director of the New York Zoological Garden (the Bronx Zoo) came to Tucson at the invitation of MacDougal, to hunt bighorn sheep in Mexico’s Pinacate region. A zoo director, Hornaday had a modern understanding of publicity. Only recently had Hornaday exhibited a Congolese pygmy, Ota Benga, with an orangutan at the zoo. The presentation of a human being and
an orangutan in a cage with a label like any other—first in a cage, then on the grounds—shattered zoo attendance records. Facing mounting criticism in the press, Hornaday ended the sad show in September 1906 just short of three weeks into its run (Bradford 1992:176–190; Dehler 2013:96–98).

Arriving at Tucson in November 1907, Hornaday enthused about the unanticipated verdant quality of his desert surroundings. Hornaday talked up the area as an “arboreal desert” and “botanical garden.” He later devoted chapters to each in a memoir of his hunt entitled *Camp-Fires on Desert and Lava* (Hornaday 1908).

The Desert Laboratory’s Godfrey Sykes would have published a personal account of the hunt himself, but demurred to the more prominent Hornaday’s literary ambitions. As a youth, Sykes (1944:55, 163, 272), inspired by the “flamboyant literature current at the time which purported to be descriptive of the Great West,” had worked his way to Arizona from his native England. Sykes recalled that at the turn of the century American scientific bodies became “Arizona conscious,” sending “platoons” of investigators like his companions MacDougal, Cowville, Cannon, and others, “to look the country over and make examinations and reports.” Sykes judged Hornaday no differently, regarding Hornaday’s description of the “Arboreal Desert” with detached amusement. As Sykes (1944:272) put it, “The giant cacti, the wide-branching ocatillas [sic], the untouchable chollas, and other large-scale xerophytic vegetables so impressed him that he declared that no other term would adequately describe this kind of scenery.”
In his memoir, Hornaday celebrated the apparent fact that the saguaro had no commercial value. Likened to “a sort of green-vegetable stand-pipe,” Hornaday wrote, “the saguaro seems to serve only two important functions—to entertain and cheer the desert traveler, and to furnish high places for the nests of woodpeckers.” There was nothing about the desert that Hornaday did not endorse. MacDougal introduced Hornaday to cactus candy made from the barrel cactus in Tucson and Phoenix. Hornaday (1908:214, 218–219) “ransacked the city for candy-stores,” finding two pounds to take home, endorsing it as “the most delicious product of the South-west, not even excepting the preserved figs of California.” With the successful publication of Camp-Fires and in subsequent conversations with friends, including President Theodore Roosevelt, Hornaday’s trip to the arboreal desert never ended (Hornaday 1908:28, 35–42; McGinnies 1981:56–58; Broyles 1987; Dehler 2013:101–103).

The arboreal desert struck a chord with writers and publicists who used it to distinguish the Sonoran Desert from others. The popularity of cactus gardens now included, of all places, Arizona. Private gardens became public educational institutions, led by the dedication in 1929 of the Boyce Thompson Southwestern
Arboretum with a symbolic armed saguaro fronting the entrance of an experimental hothouse (Figure 3.14) and the founding of the Arizona Cactus and Native Flora Society at Phoenix in 1934 and its development of the Desert Botanical Garden at Papago Park in 1936–1939 (Figure 3.15; Arizona Daily Star 1929a; Boyce Thompson Southwestern Arboretum 1930; Arizona Republic 1937; Blanc 2000; Lee 2019:86–90).

Early on, the changing appearance of the Territorial Capitol grounds in Phoenix displayed the contradictions of native versus non-native plants. Before the construction of the capitol began in the late 1900s, landscape designer George Hough Smith opted for non-native Russian mulberries, Carolina poplars, elms, mountain ash, pepper, weeping willow, eucalyptus, orange, lemon, olive, and varieties of dates and palms (Arizona Republic 1890; Carman 2001:7–8). A reporter noted that the land “was most of it covered with mesquite and other desert growths, though part of it was covered with alfalfa” (Arizona Republic 1909). An Englishman who had lived in the territory for many years, Smith introduced the “depressed lawn” to his Phoenix clients, that is, a lawn sustained by flooding. The sunken lawn became a feature of Smith’s Capitol plan in 1890 (Arizona Republic 1890). By 1899, however, a corner of the capitol tract featured some thirty varieties of cacti, “the most interesting corner of the capitol grounds,” an exception to deciduous trees, plants and grasses (Arizona Republic 1899). The discovery surprised and pleased the reporter who noted, “As unsightly as these plants appear on the desert they become interesting and beautiful when transplanted and skillfully arranged by the experienced gardener.” The reporter attributed the effect to Smith.

The first-time Capitol visitor might wonder where he had landed. The Honorable Frank E. Guernsey, the former congressman from Maine and member of the House Committee on Territories who had been instrumental in helping to enact statehood for Arizona, visited for the first time in 1919. Guernsey found

the capital’s landscaping at odds with the desert conditions that he had expected to find. He did not anticipate green fields, much less such a “solidly built” city. The only cacti Guernsey saw were around the Capitol (Figures 3.16 and 3.17; Arizona Republic 1919).

At the University of Arizona, the campus cactus garden arranged by Professor James W. Toumey, botanist at the Arizona Experimental Station, became known as “a desert in an oasis” (Thornber 1906). The university surrounded the garden’s heart-shaped outline with deciduous trees and Smith-type depressed lawns. One of the first accounts of Toumey’s cactus garden, published in 1906, described the saguaro as “easily the most striking plant...perhaps the best known to the visitor, so far as it is possible for one to become acquainted with plants through literature” (Figure 3.18; Thornber 1906). After Toumey’s departure for Yale in 1899 the university’s College of Agriculture oversaw the display. The college had recently begun experimenting with the trench cultivation of cactus pads for use as cattle fodder. Desert rabbits and rodents frustrated the experiment by destroying the most edible plants (Agricultural Experiment Station 1908). Beyond the ethnographic

documentation of the annual saguaro fruit harvest and the use of the plant’s dried ribs in fence and roof construction, further study of the saguaro did not involve its investigation as a crop.

Increasingly the documentation of saguaros went from east to west. In 1904 Daniel MacDougal wrote from the New York Botanical Garden to Professor Robert L. Forbes, the Dean of the University of Arizona’s Agricultural College. “The *Cereus giganteus* which I procured near Tucson two years ago are coming into bloom for the third time,” MacDougal wrote, “and the plants are showing every evidence of being thoroughly suited in our glass house” (MacDougal 1904). In reply, Forbes thanked MacDougal for the photos picturing the saguaros displayed in the botanical garden’s new conservatory. “It is interesting to me to observe that your giant cacti are coming into bloom at the present time,” Forbes wrote. “Yesterday I observed them just beginning to bloom here. It looks as though these fellows were creatures of habit and went by the clock regardless of surrounding conditions” (Figure 3.19; Forbes 1904).

The New York saguaros continued blooming. Writing about the saguaro’s desert habitat in 1908, Nathaniel Lord Britton and J.N. Rose noted, “Travelers through these regions are always impressed by its very unusual form, and many thousands of people have become familiar with it since three plants were brought to the New York Botanical Garden by Dr. MacDougal in the spring of 1902, where they have since been successfully maintained, flowering every year in late spring and early summer.” It now appeared that in giving the plant its botanical name, the late George Engelmann had erred in drawing the *Cereus* genus too broadly. It required a genus of its own. Britton and Rose publicly announced by publication that they had renamed it, *Carnegiea gigantea*, in honor of garden and Desert Laboratory patron Andrew Carnegie. Britton and Rose took pains to explain Engelmann’s thinking in placing the saguaro in the *Cereus* genus. They argued that it belonged in a genus all its own, that henceforth would be named for Carnegie (Britton and Rose 1908; Washington Post 1909). In 1990, the Carnegie Institution *Newsletter*
added that “Mr. Carnegie happened to visit the Desert Laboratory in 1909 and only then learned of the grandeur of the honor intended” (Bowers 1990; Craig 2005). According to the folklore surrounding Carnegie’s brief laboratory visit in 1909, he dismissed the honor (Crosswhite 1980:6; Yetman 2007:51–58). Neither photographs nor contemporary press accounts documenting Carnegie’s visit to Tumamoc Hill can be found today.

The name stuck, confirmed in Britton and Rose’s (1919–1920) monumental work, *The Cactaceae*, published in four volumes with color plates beginning in 1919. The noted English botanical illustrator Mary Emily Eaton rendered the artwork for the plates, which featured a flowering saguaro that Eaton rendered from life at the New York Botanical Garden during her residence there in 1912. An unpublished note penciled on the top margin of the art states that MacDougal collected the specimen in 1903. This would have been during MacDougal’s second trip to the Southwest while scouting locations for the Desert Laboratory, a memorable experience broken by damaged specimens upon his return. Perhaps this one had survived and flowered for Eaton to represent the best and most beautiful of its kind (Figure 3.20; Britton and Rose 1919–1920: vol. 1, p. 3, 1920, vol. 2, pp. 164–167; Angell 2003).

Providing visual information about context and setting, the earliest saguaro images from the Sonoran Desert focused upon the most dramatic, the tallest, the largest and, like Eaton’s, easily passed through the eye of botanical significance to the most striking and eye-catching. Never subject to the economics of horticulture with the status of a crop, the saguaro took its place in the economy of travel and leisure with the status of a symbol.

The arrival of photography as a tool for gathering information about the sustainability of botanical life in the desert yielded to the promotion of living in the desert. This had been anticipated by Britton and MacDougal and company, who framed laboratory research as carefully as the desert and its unique plants. The geography of rare things became the fodder of countless illustrated newspaper reports, magazine features and picture postcards, all of which recommended themselves to the promoters of passenger railroads and leisure travel. In these images the arboreal desert was not something one rode through; rather a destination that enveloped and sustained one’s curious nature.
The iconography of botanical discovery did not automatically convey to the promotion of travel and tourism in the Southwest. Railroad passengers at Tucson might find postcards picturing an unusually formed saguaro with drooping arms, a result of severe heat events over the one 100-year-plus life of the plant (Figures 4.1–4.4). “Here is a strange plant that grows on the desert,” wrote one correspondent. “There is [sic] a lot of them to be seen from the train.” Not all passengers warmed to the sight. An eastern reporter taking a transcontinental trip to California in 1883, for example, dismissed cacti as “the reptile of the vegetable world” (Blake 1883:83; Trennert 1988; Hyde 1990:209, n63).

That same year, Tucson merchant Sam Hughes created a small poster for the newly organized Arizona Pioneers Historical Society. Hughes’ poster pictured a saguaro and reptiles—a Gila monster and a horned lizard. In the distance he placed the ridgelines of two hills, visible from his Main Street home. Placing the saguaro at the center of the composition around which everything revolved anticipated the social saguaro of barbecues, bathing suits, and swimming pools that came to be favored by the city’s mid-twentieth century boosters (Figure 4.5). This landscape owed a debt to the curation of the desert with locally transplanted saguaros and the importation of non-native plants and trees. For at the same time that Hughes created his poster, he and his neighbors—notably, the other Hughes—L.C. Hughes—were well on the way in experiments with sunken lawns sewn with Bermuda grass and trees placed at the railroad station, the gateway to the city featured in promotional pamphlets, brochures and postcards (Figure 4.6; Arizona Daily Star 1908; Lockwood 1932:330).

Railroad passengers at Los Angeles and San Antonio saw transplanted saguaros at their respective stations (Duncan 1929). But not Tucson’s. A postcard of the Southern Pacific Tucson depot about 1915 pictures saguaros some distance away in a park. It is not clear if they are recent transplants or incongruent cutouts on a sunken lawn, tipped-in for effect (Figure 4.7; Meikle 2015:65).

With its trees, lawns, and cactus-at-a-remove, the landscaping of the Tucson station reflected the arboreal tension underlying the pictures that promoted
FIGURE 4.1. Postcard. Giant Cactus. Published before 1907, postmarked Phoenix 1909. The sender of this card wrote, “Here is a strange plant that grows on the desert. There is [sic] a lot of them to be seen from the train.” Many businesses, cities, and regions claimed this most unusually formed saguaro. Repeatedly photographed during the first decade of the twentieth century, the actual location of the plant is unknown.


Arizona to the outside world. The territory was open for development. But what did development look like and talk about? For many the answer came in pictures of extractive industries, such as mining and logging, the peripheral vision of an open range, and agriculture under irrigation. From hilltop to valley, development had nothing to do with turning the saguaro into a fixture of regional identity, yet there it was.

The tendency to understate—cactus is here, but—permeated the era’s land sales propaganda. A review of immigration literature published between 1863 and 1900 reveals few mentions of cacti (Mowry 1864:160–161; Hodge 1877:242–248; Hinton 1878:342–343). Authors frequently failed to acknowledge it at all
(Mowry 1863; McCormick 1865; Blake 1870; Farish 1889a, 1889b). The guides for immigrants published by the Arizona territorial legislature shared the ambivalence of railroad publications in which cacti figured as low-lying casualties of irrigation (Black 1890:58; Southern Pacific Company Passenger Department 1900:29, 31).

Nevertheless, by the mid-1910s a baseline of accessible photographs joined the lithographs and engravings of botanical discovery in picturing the Sonoran Desert. First-person encounters with saguaros by photographers led to second-person familiarity with the plant through the publication of popular stereoviews and penny postcards (Sandweiss 2006; Rowe 1997:106–108).

Tucson photographer Henry A. Buehman exemplified the itinerant desert traveler who maintained an active interest in landscape photography after settling into studio work. Buehman arrived in Tucson in 1874, six years before the railroad, qualifying him as a bona fide member of Sam Hughes’ society of pioneers.
Buehman augmented his income working as a dentist while employed at the Rigorio brothers’ Photographic Parlor. Buying out the brothers in 1876, Buehman changed the business’ name to the Buehman Studio and advertised himself as a “landscape and general photographer.” He became well known for the quality and finish of his studio portrait work, especially babies. He built a two-story downtown block, an investment that housed his studio on the second floor, with a slanted glass wall to capture northern sunlight. An exterior sign advertised his line of stereograph “Arizona Views” that documented native flora, including the cacti staged in his studio (Figure 4.8). Among his civic accomplishments Buehman


held office as Pima County assessor and often took his camera along on property inspections to photograph the “beauty spots” he encountered (Figure 4.9). He served two terms as major from 1895–1899. Buehman’s downtown studio block also housed the offices of the *Arizona Daily Citizen*. Buehman implicitly understood the importance of location in establishing a studio not only for the repeat customers he kept supplied with portraits, cabinet cards, and cartes des visites, but for the close proximity to the newspaper editors he supplied with photographs to boost southern Arizona. Buehman’s son Albert continued the business. His son Remick briefly assumed part ownership in 1949 before selling the studio to new owners who declared bankruptcy in 1950 (Arizona Daily Star 1880; Daniels 1968; Evans 1981; Spude 1989; Cooper 1995).

Photographer Carleton E. Watkins came about his Arizona views quite differently. He established a studio in San Francisco and traveled to build an inventory of large-format negatives for “mammoth prints” and stereoviews printed upon his return. Watkins set the standard for picturing the Southern Pacific right-of-way in descriptive passenger guides, brochures, and trackside photo portfolios of the kind that the railroad published well into the twentieth century. He arrived at Tucson shortly after the opening of the line from Los Angeles in the spring of 1880. A friend of Collis P. Huntington, Watkins traveled in a repurposed
caboose coupled to a flat car carrying the horse-drawn wagon that he used as a field darkroom—an important consideration for processing the large wet-plate negatives he favored. Even with this elaborate set-up, he rued the complications of desert travel, especially its unrelieved dust. His “Arizona Views” featured San Xavier Mission, Casa Grande ruins, Tombstone mining camps, and desert plant life (Figure 4.10; Palmquist 1987:353–390; Green 2018).

The saguaro played a singular role as a foil in stereoviews documenting developments in irrigation. Stereoviews foregrounded saguaros like the columnar standout in a view of the Salt River Valley (also published as a lantern slide), and in another notable example, an alfalfa field in which all but the largest saguaros had been bladed (Figures 4.11 and 4.12).

Despite its contribution to the establishment of the Desert Laboratory in 1903, the publicity of the Tucson Chamber of Commerce spoke for a certain “it’s
here, but” ambivalence about native botany. Founded in 1896 as the Tucson Grocer’s Association, the organization changed its name to its present title in 1898 to reflect a broader business constituency. In 1905, the organization formed a committee lead by J.M. Ormsby, a Western Union manager, and Emanuel Drachman, a theater owner, to combat false advertising in the city. That year Ormsby, the chairman of the Chamber’s “subscription committee,” raised a fund of several thousand dollars dedicated to the outward promotion of Tucson (Arizona Daily Star 1905, 1906; Kimmelman 1987). What appears to have been the beginning of an on-and-off ad campaign revolved around the 1904 publication of a chamber booklet entitled “Health Wealth Golden Opportunities” and national magazine advertisements soliciting interest in it (Figure 4.13; Tucson Chamber of Commerce 1904). The ads appeared infrequently over the next seven years in a diverse assortment of publications including the Southern Pacific Railroad’s *Sunset* and *The
Plant World, edited by the Desert Laboratory’s Volney M. Spalding (Figure 4.14; Tucson Chamber of Commerce 1908; Tucson Daily Citizen 1911; Arizona Daily Star 1912a, 1912b, 1914a, 1915a, 1915b).

In the looming national emergency of the First World War, Tucson Chamber of Commerce Chamber secretary Ray B. Leach announced a postcard campaign conceived to promote its picture booklet. Instead of ads placed in magazines, postcards picturing Tucson and its environs would invite correspondence with the Chamber, and by return mail, its picture booklet. The campaign’s justification lay in the closing of passenger ticket agencies that had freely displayed chamber literature. To compensate for the loss, Leach turned to Tucson’s Red Cross Canteen. There, Red Cross workers would distribute complimentary photogravure postcards of Tucson scenes to troops as they passed through the city, or studied at the University of Arizona. Their postcards would be collected, sorted, and mailed to friends back home. Printed by the Albertype Company of Brooklyn, New York, the cards pictured Tucson homes, its business district, country club, Carnegie Library, YMCA, San Xavier del Bac Mission and the rippling waters of Sabino Canyon (Figure 4.15). With the exception of San Xavier and Sabino Canyon, the photographs might have been taken anywhere. But that was the point (Arizona Daily Star 1918a, 1918b, 1918c). By September 1918, the Red Cross had distributed 75,000 packets of 15 cards apiece featuring scenes imprinted with the Chamber’s offer of a free booklet prepared by the photographers and writers...
of the Sunset Magazine Homeseekers' Bureau (Figure 4.16; Arizona Daily Star 1918d:6; Maulsby and Chamber of Commerce 1911[?]; Wilson 1913[?]).

Distributed to servicemen with smokes and drinks, the postcards credited R. Rasmessen, a prominent chamber board member and downtown curio store
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owner who happened to be Tucson’s most prolific postcard publisher. Born in Sweden in 1875, Rasmessen emigrated to Chicago with his parents at the age of nine. He moved to Tucson at 18 for his health and purchased a half-share in a downtown curio shop from Samuel F. Baumann, the son of a local Indian trader. Rasmessen soon bought out Baumann and took sole possession of the store in 1905. The civic-minded Rasmessen served on the University of Arizona Board of Regents and contributed his publishing expertise to the Chamber’s postcard campaign. Like his predecessor Henry Buehman, Rasmessen became the Mayor of Tucson and served two terms. In 1921, the first year of Rasmessen’s administration, the Chamber of Commerce distributed 30,000 Rasmessen postcards before ordering 10,000 more. Each invited the public to write for Tucson literature with the Chamber’s new tag line: Climate, Copper, Cotton, Cattle (Arizona Daily Star 1921).

The Rasmessen Curio Store became a leading distributor of cultural treasures led by Navajo blankets, Pima and Hopi baskets, and ceramics and the hand-colored Albertype photogravure postcards and booklets that contributed to the building of southern Arizona’s southwestern identity (Figure 4.17; Cooper 1989; Rowe 2006, 2010; Dittemore 2013; Frontz and Tackenburg 2014).
In their earliest days as business partners, Baumann and Rasmessen counted the Apache chief Geronimo among their customers. Late in life on a tour of New England, Geronimo sold a multicolored hair rope for $37.00 to an impressionable visitor who wondered aloud at the number of scalps the chief had taken. Geronimo excused himself and returned with the hair. The visitor could hardly believe his good fortune. Through his interpreter Geronimo later explained that the hair rope could be purchased for $1.50 at Baumann and Rasmessen (Arizona Daily Star 1901).
Rasmessen’s functioned as a distribution point for monochrome and hand-colored postcards that pictured the plant life around Tucson without the editorial blinders of its Chamber of Commerce, whose postcard choices limited desert scenes (Figure 4.18; Rasmessen n.d. [1910?]). Unlike the customers perusing Rasmessen’s postcard stock, the consumer of Tucson Chamber of Commerce literature had to look very carefully to spy a saguaro. Chamber brochures offset the desert giant—when it appeared at all—with an alternate something—a fir tree, a prospector, a pick axe—extractive symbols deployed in Arizona’s state seal. The iterations of the Arizona territorial seal used in the years between 1864 and statehood in 1912 pictured the San Francisco Peaks of Flagstaff, foregrounded with a deer, coniferous trees, and an oddly out of place saguaro for good measure (Figure 4.19). The Arizona state seal adopted in 1912 does not picture cacti (Figure 4.20; Caldwell 1962:14–16; Department of State 2019).

The cover of a Tucson Chamber of Commerce brochure entitled, “The Sunshine Center of America,”
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FIGURE 4.20. Great Seal of the State of Arizona. 1912. The iconography of the state seal adopted in 1911 includes a mountain range with the sun rising behind the peaks, a storage reservoir, and a dam, below which are irrigated fields and orchards with cattle grazing to the right. To the left, a mountainside with a quartz mill, a miner with a pick and a shovel. Above, the motto Ditat Deus, “God enriches.” Arizona was admitted to the Union in 1912.
FIGURE 4.21. Brochure with envelope, “Tucson the sunshine center of America rings you a welcome.” Tucson Chamber of Commerce, 1930. This brochure unfolds to reveal thumbnail photogravure scenes around Tucson and Pima County. The accompanying envelope is imprinted with line drawings picturing the University of Arizona, mountain scenery, and San Xavier del Bac Mission.

The Brochure featured San Xavier del Bac Mission (Figure 4.21). The open brochure presented, “Scenes around Tucson,” a panel of thumbnail photogravures that pictured two saguaros (Figure 4.22). Widened to the entirety of Pima County, the following panel pictured none.

An uptick in the saguaro’s quasi-official relevance occurred in 1922 when the Tucson Sunshine Climate Club (SCC) organized to advertise the city’s winter climate. But even among the city’s most ardent tourism boosters the saguaro’s value was not immediately apparent. The saguaro played a limited role in the

Begun with the broadcast distribution of photogravure postcards and brochures, the marketing of southern Arizona as a tourist destination took on the sophisticated techniques of what the advertising trade described as “community advertising.” A national survey of community-based advertising undertaken at the height of the leisure boom in 1924 noted the campaigns of southern California’s All-Year Club; the Atlantic City Hotel Men’s Association; the Salt Lake City Chamber of Commerce; the Denver, Colorado Publicity Bureau; the cities of El Paso, Texas, Phoenix and Tucson, Arizona; and the states of Maine and Florida (Evening Star 1924). These campaigns targeted specific audiences with small ads placed in Sunday newspaper travel sections and the backs of quality magazines to collect the names and addresses of well-heeled travel prospects. A subtle letter keyed the coupons to the publications in which they appeared, allowing advertising specialists to tabulate the return on each ad by publication, an important factor when managing the expectations of clients who questioned the value of their own advertising. Each individual who filled out a coupon with a name and address received an illustrated booklet by return mail.

The Sunshine Climate Club’s campaign subsumed the anecdotal promotion work of the Tucson Chamber of Commerce. The two groups enjoyed an interlocking leadership. The SCC’s sole function was to fund national advertising directed to the leisure traveler while skirting the political issues that preoccupied the Chamber of Commerce (Arizona Daily Star 1933, 1946; Tucson Daily Citizen 1960). Tucson’s political economy revolved around the operations of miners, farmers, small businessmen, respiratory victims seeking dry desert air, and World War I veterans. Many staked claims on the saguaro-studded land west of the city that later became Tucson Mountain Park (Ascarza 2010; Negri 2010:6).

Officials began to weigh the necessity of a tourism campaign when the population of Phoenix passed Tucson in 1922 during Mayor Rasmessen’s first year in office. On the SCC’s thirtieth anniversary in 1952, Roy Drachman, Emanuel Drachman’s son, who became SCC president in the late 1930s, recalled that Chamber officials sought the counsel of the H.K. McCann advertising agency of Los Angeles. A pioneering firm in the community advertising field, McCann advised Tucson officials to advertise the naturally occurring benefits of “sunshine and scenery” (Arizona Daily Star 1952).

The initial series of Sunshine Climate Club advertisements began with the all-important coupon that offered an illustrated booklet picturing Tucson’s natural
features, hotels, and guest ranches. The ads ran in the *New York Times*, *Outlook*, *National Geographic*, *Literary Digest*, and other up-market magazines in the fall and winter of 1922. The headline of the first implored, “Unlock the Best That’s in You.” In successive weeks the copy unspooled as a conversation among friends. “Spring Days Now! Come to Tucson,” “Are You Paying the Price of Health—And not Getting It?”, “Golf on New Year’s Day,” and the clincher, “Must Hearts Break for Want of Sunshine?” (Figure 4.23; Sunshine Climate Club 1922a, 1922b, 1922c, 1922d, 1922e).

The conversation broke with the tearing of a coupon and resumed with an illustrated booklet entitled, “Man-Building in the Sunshine Climate” (Figures 4.24 and 4.25).

Tucson’s community advertising campaign attracted the attention of the Phoenix Chamber of Commerce, which had recently organized the Phoenix-Arizona Club for similar effect. In naming their club, its leaders specifically rejected references to the Salt River Valley for its untoward association with salt. The group soon met with Tucson auto dealer and SCC President Monte Mansfield, who explained the sunny premise of the Tucson campaign and the intricacies of the coupon. In short order the Phoenix-Arizona Club hired McCann to roll out a comparable community advertising campaign headlined, “Where Winter Never Comes” (Figure 4.26; Arizona Republic 1924a, 1924b, 1924c; Phoenix-Arizona Club 1924a, 1924b).

As the common creation of H.K. McCann, the Tucson and Phoenix campaigns developed what have since become the familiar tropes of travel and leisure iconography: golf, swimming, horseback rides, and

**FIGURE 4.23.** Advertisement. “Must hearts break for want of sunshine?” Tucson Sunshine Climate Club, 1922 (Sunshine Climate Club 1922:44).
families a world apart. Like the large-format Phoenix booklet, the smaller Tucson booklet pictured exceptional homes as the norm, nodding to the saguaro forest when away from lush lawns, gardens, and deciduous trees. More so than the publications of the Phoenix group, Tucson's pictured saguaros, but after the foreword, in which a well-dressed woman posed for a saguaro moment, said little about them. After all, the booklet's purpose lay in dramatizing the amenities of a city.

Had its leadership thought about it, the Sunshine Climate Club might have published Buehman's pictures of the beauty spots in the saguaro forest east and west of the city. Enjoying success through the late 1920s measured in an increasing rate of reader response quantified by McCann, local support for the campaign faltered in the deepening depression of the early 1930s. Not until the 1940s did the saguaro come into its own as a free-standing symbol, unencumbered by the indifferent editorial direction of postcards, travel, and tourism booklets that consigned its appearance to the margins of the metropolis.
If the frame of advertising consigned the desert’s natural features to the margins of pamphlets and brochures—the framing of desert views for homes, parks, and gardens anticipated the saguaro’s iconic status. From the picture window to the cactus forest, there wasn’t one person or event that shaped a counter-narrative in the headlong rush of development—with the possible exceptions of novelist Harold Bell Wright, who set the standard for a desert home landscaped with native plants, and University of Arizona president Homer LeRoy Shantz, who purchased the saguaro forest that Wright and others suggested be set aside and protected as a national monument (Shantz 1937; Martin 1960:150, 160, 236–237; Burtner 2011:34–35, 46–53; National Park Service 2016). Wright’s success in framing the desert for domestic consumption—and Shantz’s campaign to conserve it—elevated the saguaro’s habitat from the shadows of non-native trees and sunken lawns.

Novelist and Hollywood screenwriter Harold Bell Wright moved to Tucson for his health in 1915. With more resources and more intimate acquaintanceship with the desert than the average tubercular, Wright set up a serviceable outdoor camp for himself with two cooks in the Catalina foothills. Dressed in white, he chose to live outdoors at a desk of his own design with a shroud for writing in direct sunlight. He famously told about his convalescence in a 1924 *American Magazine* article entitled, “Why I Did Not Die” (Wright 1924; Arizona Daily Star 1968; Langdon 1975; Grubb 1984:19–25, 260–261, 271).

Wright purchased land for a home on a low mesa in the desert east of Tucson. Dominated by creosote, ocotillos, chollas, and saguaros, the area had been written off by local residents as distant and unattractive. Wright purchased 80 acres, constructed a Pueblo revival house with a detached writing studio and a garden of transplanted yuccas, barrels, prickly pears, and saguaros (Figure 5.1). Wright selectively deployed the plants along his electrically illuminated driveway leading to the mesa. Like the Desert Laboratory’s Daniel T. MacDougal, Wright cautioned his construction crew to leave existing vegetation unharmed. When completed, Wright’s home offered a view of the Rincon Mountains to the east and the Santa Catalinas to the north in sight of his first camp. Wright enthused
about the mountain ranges visible from the mesa. “Where else in Arizona or
the world could I find a site for this home of mine with eleven such ranges of
mountains in the plainest view and in sight of the country I love best?” (Tucson
Daily Citizen 1922)

Wright’s investment set off a land scramble initiated by Tucson’s winter visi-
tors, many of whom like Wright had come west for their health. Tucson realtor
Herbert Drachman noted that “the beautiful desert flora that surrounded the
Wright home for miles in every direction opened the eyes not only of Tucson
people, but those visitors fortunate enough to see it” (Tucson Daily Citizen 1929).
Of course it had been there all along. What changed was the introduction of
a palatial home and the careful curation of plants that left the appearance of a
natural effect.

A conservationist for whom the desert had become personal, Wright devised
a comparable landscaping plan for the Desert Sanatorium that broke ground on
a 160-acre tract west of his estate in 1924. Wright joined the sanatorium’s first
board of directors. A sequence of photographs taken after the period of Wright’s
greatest activity in landscaping his estate documents the excavation of large sa-
guaros from his property by the sanatorium grounds crew (Figures 5.2–5.4).
ABOVE, FIGURE 5.2. Desert Sanatorium buildings and grounds crew members pose with a padded saguaro ready for excavation from the estate of author Harold Bell Wright. 1927. The mattress pad protects both the excavators and the plant’s spines: once broken, spines cannot grow back.

FIGURE 5.3. Desert Sanatorium buildings and grounds crew preparing to load a padded saguaro from the Wright estate for planting on the Desert Sanatorium grounds. 1927.

FIGURE 5.4. Desert Sanatorium buildings and grounds crew with loaded saguaro. 1927.
The Desert Sanatorium enjoyed substantial local support, drawing top medical professionals to the promising new field of heliotherapy for the treatment of tuberculosis and chronic lung disease. Opened in 1926, a campus of charming casitas in the Pueblo revival style designed by architect Henry O. Jastaad featured sun-drenched patios and a Native American themed food service, the Zuni Dining Room (Durbin 1965; Tucson Historic Preservation Foundation 2012:12). The restaurant’s picture window took full advantage of Wright’s landscaping plan (Figures 5.5 and 5.6). Rutger Porter, the nephew of Wright’s New York publisher, carried out the plan after his recuperation from a bout with pneumonia (Figure 5.7). Porter massed saguaros, prickly pears, and barrels at the sanatorium entrance and along the driveway into the property, creating a pleasing effect where there had been none (Figures 5.8 and 5.9). Porter went on to become a professional landscape designer and to found a cactus nursery. As the city of Tucson grew and enveloped his home and business, the nursery became today’s Tucson Botanical Gardens (Brown 1975; Tucson Botanical Gardens 2020).

By the mid-1920s a trip to see the Desert Sanatorium or Wright’s home might include a visit to the impressive stand of saguaros at the base of the Rincon Mountains some seventeen miles east of Tucson. Though one can only speculate about its discovery, Harold Bell Wright had come under its spell and showed the tract to University of Arizona entomologist Charles T. Vorhies shortly after Vorhies joined the university’s College of Agriculture in 1915 (Burtner 2011:34).
A visit to the saguaro-filled tract, locally known as the Tanque Verde Cactus Forest, became something of a right of initiation among the university’s leading academic figures, most notably botanist Homer LeRoy Shantz, who became the President of the University of Arizona in 1928. Shantz thus joined the individuals who not only had become aware of the stand of massive saguaros but increasingly protective of it as the finest of its kind.

Born on a Michigan farm in 1876, Shantz attended Colorado College and received a PhD degree from the University of Nebraska in 1905. After a brief stint teaching biology and botany, he joined the U.S. Department of Agriculture’s Bureau of Plant Industry specializing in the study of arid lands and grasses. He signed on to the Smithsonian African Expedition of 1919–1920 arranged for former President Theodore Roosevelt. Shantz visited Africa a second time in 1923–1924. Adept at field photography, Shantz returned from Africa with some 5,000 negatives documenting plant geography. From his position as a federal plant pathologist, Shantz joined the faculty of the University of Illinois Department of
Botany in 1926 and from there became the President of the University of Arizona. From 1928 to 1936, Shantz lead the university through the depression with a round of pay cuts, a policy that included the university’s academic departments and his own salary. Through it all Shantz remained a popular and respected figure on campus. With federal assistance he pursued a modest building program, made improvements to the campus’ physical plant, completed the football stadium and expanded the campus cactus garden (University of Arizona Library Special Collections 1942, 2020a; Geographical Review 1959).
Shantz availed himself of every opportunity to visit the Tanque Verde Cactus Forest, posing for photographs with its massive saguaros for the first time in 1929. R.B. Streets, professor of plant pathology in the Department of Botany, took the photo (Figure 5.10). Shantz soon made the acquaintance of Tucson realtor and eastside resident John Elles Harrison. Shantz purchased the Tanque Verde tract with University monies augmented by privately donated funds that Harrison solicited in the name of the University Cactus Forest Association. Not without irony, Harold Bell Wright declined Harrison’s solicitation to participate in the new association (Wright 1930; Arizona Daily Star 1957; Burtner 2011:42).

Most of what we know about the stand of saguaros that inspired the purchase of the Tanque Verde tract comes from Shantz’s photographs, which focused upon the tract’s most massive specimens. Shantz documented the area in nine visits from 1929 to 1935,
often taking advantage of long holiday weekends to make the day trip from Tucson, sometimes in the company of the visiting botanists that he entertained. The remarkably dense arrangement of the saguaros held his attention and was a subject to which he often returned (Figures 5.11–5.13; Shantz 1937).

More to the point of Shantz’s daily attention, the University of Arizona campus cactus garden enjoyed a new and greater prominence in the lives of students, faculty, and the public at large. With Shantz’s installation as president, workers set to transplanting saguaros, barrels, ocotillos, and prickly pears on the east side of the Old Main building, the first to be built by the university. The territorial-style stone and wood frame structure with a wrap-around porch housed university offices and classroom space. Professor James W. Toumey established a cactus garden northeast of the building in 1891. The following year, the cactus garden moved to the building’s west front, where it grew from 1892 to 1929. The move incorporated
cacti left over from the local dig that supplied the saguaros for the 1893 Chicago World’s Columbian Exposition. The plants were placed on the west front of Old Main in the center of the heart-shaped drive leading to and from the university’s main gate (Rowley 1984). By 1920, the arrangement included a fountain. At the time of Shantz’s arrival in 1928–1929, the garden featured native flowering queen-of-the-night plants (Figure 5.14). Under Shantz’s administration a new and more ambitious cactus garden was created on the east front of Old Main in a 50-foot-wide trench extending some 1,000 feet to the university gymnasium (Ball 1987:28, 179, 220). An aerial view postcard postmarked in 1943 pictures the garden from Old Main to the gymnasium, with the two buildings circled by the sender, a Navy ensign who identified them as classroom and dormitory space, respectively (Figure 5.15). Landscaped with rocks and boulders, the trench functioned as a water collecting arroyo. The below-grade paths and shoulder-high boulders created an environmental showcase for the plants of the Sonoran Desert (Figures 5.16 and 5.17). Near the gymnasium end of the display, an island-like break that crossed the trench at grade level encircled a “Mexican Garden” of boojum trees (Figure 5.18).

President Shantz’s second successor, Professor Alfred Atkinson, found little use for the university cactus garden, or for that matter cacti of any kind. President from 1936 to 1945, Atkinson, according to his official university biography, was notably “short on sentimentality” (University of Arizona Library Special Collections 2020b). In the practical manner of finding a reason to remove the garden, its upkeep was allowed to slip in proportion to Atkinson’s complaint that it cost too much to maintain—an issue that Shantz never faced, even when taking a self-imposed salary cut in the depths of the Depression. Post Shantz, Atkinson’s vision for the campus revolved around landscaped lawns with vistas of new buildings, not a 1,000-foot environmental rockwork and cactus-filled trench along the east axis of Old Main. Atkinson concurred with Old Main’s condemnation as a campus eyesore in 1938 with feigned regret, not unlike the cactus garden, the victim
of deferred maintenance. In the war emergency following Pearl Harbor the U.S. Navy, in desperate need of classroom space, restored Old Main and returned it to service in 1943–1944 (Tucson Daily Citizen 1938, 1944; University of Arizona Library Special Collections 2020a).

Atkinson’s interest in campus greenscape betrayed the cactus-or-not tensions displayed in Arizona’s travel literature and state seal. A proposal made by the campus grounds committee that Atkinson tasked with figuring out the cactus conundrum recommended doing away with the plants entirely. Seeking an alternative for the west side of Old Main, for example, his committee proposed installing a large lily pool in front of the Physics-Chemistry building. The inground pool would be flush with the lawn. Its maintenance would be minimal (Atkinson 1939; University Campus Committee 1939; Streets and Finch 1940).

Lily Starkweather, co-chairman of the Statewide Beautification Program of the Arizona Federation of Gardens, was having none of it. In February 1939,
she telephoned Atkinson and followed up with a note protesting the proposed destruction of “our native cacti and desert growth that has been planted on the campus” (Starkweather 1939). Perhaps to better meet the challenge, she and other members of the Tucson Garden Club organized the Tucson Desert Garden Club on the heels of Atkinson’s campus committee’s stated conclusion that the cactus garden “was not less expensive to maintain than a grass-shrub-tree” landscape. In what would become a familiar litany of complaint justifying the cactus garden’s removal, the committee stated that the irrigation of cacti allowed grass and weeds to germinate; the constant replacement of the cactus plants that died or became unsightly was more trouble than it was worth; and smaller and rarer cactus specimens planted in the garden were routinely stolen. Lastly, Atkinson’s campus committee tendered its justification for the garden’s removal with the disingenuous statement that the completion of the road to Saguaro National Monument “made it unnecessary to maintain a separate cactus garden for our students and the public” (University Campus Committee 1939).

The issue of campus cactus-or-not stalled through the Second World War, when the university’s priorities lay elsewhere. Revisiting the issue in late 1945,
Atkinson wrote to Starkweather reprising the shortcomings of maintaining a cactus garden: lack of labor and outright theft. Starkweather, addressing her continuing concerns up the chain of command to Governor Sidney P. Osborn, suggested that the University clean up its moribund garden and secure smaller cactus specimens in a hothouse. Keeping up the pressure, Starkweather noted that the cactus garden “could be the center attraction, instead of an eyesore on our otherwise attractive campus” (Atkinson 1945; Starkweather 1945, 1946).

Among enthusiasts of the compositional frame of cactus specimens and gardens, Charles and Lucile Herbert built their desert home with a picture window that looked out on a massive chandelier-type saguaro. The Herberts moved to Tucson to open the Western Ways Features Service in 1939. Charles Herbert had recently retired as a *March of Time* cinematographer. Lucile Herbert, a photographer in her own right, contributed many of the feature stories published by their news publicity service that simply became known as Western Ways (Figures 5.19 and 5.20). The Herberts’ oft-repeated dictum to their stable of contract photographers and freelance writers: “Photographs must accompany articles” (Keatley 1949; Balestrero 1972; Jenkins 2016:1–14).
FIGURE 5.17. Cactus garden arroyo east of Main building, University of Arizona. April 1931. Photograph by Homer Shantz.

Described in perennial syndicated features as “The View with a Room,” the Herbergs’ living room window framed the most carefully curated saguaro moment in Arizona (Figure 5.21). As Herbert (n.d. [1940?]) explained to Sunshine Climate Club president Roy Drachman, who welcomed them with open arms, “Our picture window is going to be one made by a photographer instead of a builder who only deals in the mechanics of four sides of a window.” A carpenter tacked up a temporary window frame conforming to a viewfinder to test the sightlines. Lucile Herbert stood on a wooden box approximating the level of the finished room floor to confirm the view (Hall n.d. [1940?]; Herbert n.d. [1941?]; Winsor n.d. [1962?]; Jenkins 2016:9–10).

Though siting a home with a scenic view was not new, in the Herbergs’ understanding of what was important, the saguaro was the critical element. Over the years they amortized the cost of their home’s construction with illustrated articles
about it, syndicating feature stories picturing the “view” as late as 1947 (Figure 5.22; Detroit News Pictorial 1947).

For those with unlimited resources to create a view from scratch, the transplantation of saguaros once beyond the means of even the most zealous botanical collector yielded to the diesel-powered crane. In 1948, a landmark in the history of cactus transplantation culminated with the relocation of the last of three massive saguaros to heiress Louise N. Grace’s Catalina foothills home, Eleven Arches. The placement of the largest of the mattress-clad specimens at Eleven Arches became the subject of Western Ways magazine, newspaper features, and a short subject film later recut for NBC Television (Figures 5.23–5.25; National Geographic 1953; Desert Magazine 1960; Jenkins 2016:19–22).

Louise Grace was the daughter of the late, two-term mayor of New York, William R. Grace, who founded the W.R. Grace trading, investment, and shipping company. Used to doing things in a big way, she lined the living room of Eleven Arches with the monochromatic floor-to-ceiling murals of desert wildlife and
cacti that she painted. Grace exhibited the murals at Rockefeller Center before installing them in her Tucson home. Artist Cleve Gray helped complete their installation at Eleven Arches, painting in outlined forms and other unfinished areas under her direction (Figure 5.26; New York Times 1937; New York Daily News 1954; Weber 1998).

Reaction to the story of the saguaros’ removal to the grassy forecourt of Grace’s foothills mansion came from as far away as England (Arizona Daily Star 1948). Despite the extensive precautions taken for the protection of the plants, the limits of saguaro transplantation had been reached. Within a matter of years the plants died in place. Arguably they died the moment the crane lifted each one of them out of the ground. The film documenting the excavation of the last and largest of the saguaros shows its tap root breaking as the crane lifts the plant. Today it is known among film historians as “the cactus snuff film” (Jenkins 2016:xv–xvi).
The advertising agency partnership of Ernest Cabat and Norval Gill (Tucson Historic Preservation Foundation 2020) interpreted the saguaro as a free-standing artwork. Their Tucson-based Cabat-Gill Advertising favored the frame technique in graphic designs for a long list of desert hospitality clients whose brochures folded the viewer’s attention right into the subject at hand. Their saguaro logo exemplified the technique. The logo pictured an artist who held a framed saguaro picture at arm’s length, comparing it to the full-sized plant, itself in a frame (Figure 5.27). The firm’s artwork deployed window and picture frames to similar effect. For Tucson’s Lazy K Bar Guest Ranch, for example, Cabat-Gill created brochures whose largest graphic element was the picture window in the ranch’s main lounge. Pictured in successive brochures over the years, the room’s furnishings changed along with the ranch’s owners. But the saguaro in the window never did (Figures 5.28–5.30).
Dressing faux windows with a certain Sonoran timelessness, the Mural Room restaurant in Tucson’s El Presidio Hotel showcased the Shantz stand at Saguaro National Monument with backlit color transparencies recessed in the dining room’s walls (Figure 5.31). Continuing the window theme on the menu cover, Catbat-Gill framed a saguaro in the spirit of the agency’s familiar logo (Figure 5.32).

As William Temple Hornaday had foreseen, a commercial use for the saguaro cactus failed to materialize beyond its ribs’ use as a traditional fencing and roofing material. Yet Hornaday and others did not anticipate the ribs’ use as a decorative element, much less the cottage industry of rib crafters who furnished the lamps, picture frames, and desert dioramas that carried the wood and the likeness of the plant far from its native habitat.

Increasingly saguaro ribs became a signature decorative element in roadside décor, like the Cactus Bar in Salome, Arizona. Varnished saguaro ribs graced the bar’s walls from floor to ceiling. Two saguaro arms attached to the wall above the bar cradled an impressive souvenir rib cage (Figure 5.33).
Chapter Five: Framing Up

Dream House Located with Camera Eye

CHARLES W. HERBERT, of Tucson (above left), special correspondent of The Detroit News, many of whose photographs have appeared in this magazine with the credit line, "Western Views," built his home with a camera in more ways than one. The first part of the house he envisioned was the picture window. Herbert discovered a view in the rear of his camera. He nailed together a wooden frame in the proportions of an 8 by 10 picture. He placed it in the spot where he found the very scene his camera had shown him. He called the contractor and told him: "Build my house around this.

For 20 years, Herbert had been traveling the globe making lantern slides for motion picture companies. He got fed up on travel. Deciding to settle down, he selected southern Arizona as the general area. Tramping the southern part of the Catalina Mountains near Tucson, he found a site. A reflex camera showed him here to erect the house. His yard became an outdoor studio for his pictures.

Herbert washes the picture window with a view like an 8x10 photograph around which he built his whole house.

John Hicks, former Dekester, moved to Tucson and carved a turkey gone-crazy prank. Some of the carvings were made in Herbert's own yard.

A stone-lined hose leads to the house that was located and built out with the help of a camera lens and the principles of pictorial photography. Herbert's fruit yard has carvings and other artistic objects made by Dekester and by John Hicks. The mountains beyond and the desert landscape were selected as backdrops for picture features of the southwestern desert country. The animal shots were made elsewhere, close to, but not around, this house.

A picture may be five school teachers and their vacation activities called for a shot of girls on horseback and relaxing in the sun. The shot The photographer chose his own yard and area in front of picture window.
FROM TOP LEFT, FIGURE 5.23. Crane with mattress-wrapped saguaro ready to be transplanted to the home of Louise Grace, Tucson, Arizona. 1939. Photograph by Charles Herbert.

FIGURE 5.24. Workmen wrapping saguaro in mattress pads.

FIGURE 5.25. Saguaro viewed through arch at Grace’s home, Eleven Arches.

FIGURE 5.26. Louise Grace’s desert mural installed in the living room at Eleven Arches. 1939. Photograph by Maynard Parker.
FIGURE 5.27. Photo offset negative, Cabat-Gill Advertising Agency company logo.
FIGURE 5.28. Brochure detail. Lazy K Bar Ranch monochrome living room with picture window frames a saguaro view.

FIGURE 5.29. Brochure detail. Lazy K Bar Ranch living room (blue drapes) with picture window.
“Cactus” Herb Wood, a Pennsylvania stone mason, retreated to Tucson in 1931 after a years-long recuperation from a back injury. He purchased a rock-strewn lot where he built a house of stone. With little money left after its completion, Wood improvised furniture from saguaro and cholla wood. Wood’s creations attracted requests from friends and acquaintances. His wife christened the furniture, “Cacticraft.” They opened a roadside stand with a workshop on the side (Arizona Highways 1946; Family Circle n.d. [1947?]; Holiday 1947a). Wood stockpiled an impressive collection of saguaro ribs with which to work (Figure 5.34).

Many rib crafters became quite adept at plumbing the taproots of the dried plants for ever-widening widths of saguaro wood with which to work. William F. Bucher, a Washington, D.C., cabinetmaker, compiled a collection of tree photographs framed with the wood so pictured (Figure 5.35). Bucher’s collection entitled, “Our Trees and Their Woods,” attracted the attention of the U.S. Forest Service, from whom Bucher obtained photos, and officials of the Smithsonian...
FIGURE 5.31. El Presidio Institution, who exhibited his exquisitely framed collection of 59 tree photographs. The collection featured the “Giant Cactus,” “Cholla,” “Mesquite,” and “Monterey Cypress.” The goal, Bucher stated, was to display the “beauty and utility of trees.” The Forest Service contributed a photo of the world’s largest saguaro at Saguaro National Monument. The ribs for the frame were as remarkable for their width as the beauty of their natural finish. Bucher started the collection in 1915 and placed it on loan for a long term exhibition at the United States National Museum in 1932 (Watkins 1911; Bucher n.d. [1932?]; United States National Museum 1933:88).

The cactus craft of the Guy Wellington Knauff family both capitalized upon and furthered saguaro iconography in miniature desert dioramas. Merchandised as a decorative souvenir for the home, each diorama rendered a three-dimensional saguaro moment under glass framed with saguaro ribs.

Charles Herbert and camera followed Knauff and his family into the desert to document the production process that began with a rib harvest. Herbert
photographed the final stages of production in his backyard saguaro rib *ramada*, where he posed the Knauff’s painting Santa Catalina mountain backdrops on concave cardboard shells brought to life with natural grasses and tiny clay saguaros wrapped around wire frames (Figure 5.36). The forced perspective of the road receding into the Catalinas rendered a pleasing facsimile of the Sonoran Desert (Figure 5.37). The Knauff’s dioramas achieved their effect despite the fact that all but one family member was color blind. The Knauffs sold their dioramas to department stores and gift shops under the name of the Landscape View Company. At the time of Guy Knauff’s death in 1947, the family had completed its 50,000th diorama. In 1956, his widow, Mary A. Knauff, sold the company to Homecrafters of Tucson, which employed the physically disabled. In the course of Mary Knauff’s life, she, her husband, and family oversaw the creation of 80,000 desert dioramas that hung on walls in homes from Maine to California and beyond (Arizona Daily Star 1947, 1956; Tucson Daily Citizen 1947a; Rydell n.d. [1951?]).

To appreciate the take-off point of the saguaro’s iconic legacy, one need only drive a short distance from Tucson to Saguaro National Park, in reality two parks

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**FIGURE 5.32.** Menu cover, El Presidio Hotel Mural Room.
that bookend the city to the east and west. To the west, over Gates Pass, lies Old Tucson, the western theme park cum stage set built for the 1939 theatrical film “Arizona,” and just beyond that, the state-of-the-art environmental exhibits of the Arizona-Sonora Desert Museum that began as a modest trailside museum in 1952. On the east end of town Harold Bell Wright’s home still stands on the mesa much as he left it. After the Second World War, the surrounding acreage was subdivided into Harold Bell Wright Estates. The Zuni Dining Room at the Desert Sanatorium was enveloped by the sprawling Tucson Medical Center. Modest decorative elements from the Zuni Dining Room may be seen today in the hospital’s art-filled halls. The dining room’s wooden beams live on above the drop ceiling of the outpatient pharmacy.

The march of development cashiered the view from the lounge of the Lazy K Bar Guest Ranch. The saguaro pictured in successive versions of the ranch’s brochures passed long before the building did in 2019. In a similar instance of now-you-see-it, now-you-don’t, the chandelier saguaro around which Charles and Lucile Herbert framed their living room window toppled over and died in 1995. The Herberths’ saguaro rib *ramada*, the setting for feature news and photo
stories including the Knauff’s, fell into disrepair and scattered to the winds. Only the concrete footings remain.

On the campus of the University of Arizona, a token cactus garden surrounded by a greenscape with vistas of buildings is all that’s left of the era in which cactus-or-not was a question and the framing of life with saguaros was an ongoing project. Leaving office in 1945, university president Alfred Atkinson’s vision of a cactus-free campus had largely failed. Yet the pressures of development remained. With the construction of a new student union building in the early 1950s, the cactus garden in front of it—in the trench on the east side of Old Main—became a lawn. The easternmost portion of the arroyo remained for the time being (Figure 5.38). In 1952, a wanton act of vandalism cut down three of the garden’s largest saguaros and uprooted other specimens (Figure 5.39). The perpetrator or perpetrators were never found (Tucson Daily Citizen 1952; Rowley 1984). In later years, university officials reduced the garden’s footprint to its present configuration as an island across from the university’s administration building. In 1980, University President John Shaeffer dedicated the garden to the memory of author and naturalist Joseph Wood Krutch.

FIGURE 5.38 (LEFT). Copy photograph. Campus cactus garden arroyo east of Main building, University of Arizona, Tucson, ca. 1937.

From the flatlands of Phoenix to the foothills of Tucson, travel and tourism literature struggled with the saguaro’s symbolic place. Hard to ignore among the attractions of a transcontinental picture portfolio, saguaros approached graphic parity with the orange groves of Phoenix’s Valley of the Sun. But questions remained. Should the saguaro be on the spine of a brochure, opening to show its majestic self—or lurk behind the fold of a fruit-bearing orange tree in an irrigated field? Less a problem for photography than the plastic arts of commercial illustration, the saguaro temporized slightly off-center on the covers’ edge (Figures 6.1 and 6.2).

Railroad passenger and guest ranch advertising popularized the idea that the desert was not just something to ride through, but a worthy destination to ride to. Each had an interest in deploying saguaros with which members of the traveling public could become comfortable, wrap up in, and even sleep with—ideas reinforced with graphic business stationery and room décor (Figures 6.3 and 6.4).

Competing for east-west passenger traffic, the Santa Fe and the Southern Pacific railroads opted for native botany in resort settings. Published figures for railroad publicity became available for analysis in the advertising trade press of the early 1920s. In terms of graphic excellence the advertising output of the Santa Fe and its concessionaire Fred Harvey Company dwarfed that of the Southern Pacific. The Santa Fe enjoyed long experience in merchandising the Grand Canyon and packaged Indian Detours. For its part the Southern Pacific focused upon California destinations like the Hotel Del Monte (Hungerford 1923; Leininger 1923; Thomas 1978; d’Emilio and Campbell 1991; Howard and Pardue 1996, 2016; Zenga 2001; Orsi 2005:145, 159–160).

The liberty taken by the Santa Fe in picturing saguaros on the periphery of its operations in northern Arizona suggests how the cactus spawned a commercial range well beyond its native habitat. In one example, a Santa Fe brochure deployed a saguaro that to the knowing eye appeared as an anomaly in the mesas and purple shadows of the railroad’s New Mexican palette. Beneath the saguaro’s towering arms, vacationers relax in lounge chairs on a lawn. Others ride horseback...
Unlike the Santa Fe, whose passenger line ran through Flagstaff, the Southern Pacific (SP) cut through the saguaro-laden Gila River Valley acquired by the Gadsden Purchase. Yet SP passenger advertising came late to the exploitation the saguaro, as there was little need for it. The railroad’s ticket structure promoted

in the distance (Figure 6.5; Weigle 1992; Snead 2002).

through-train service rather than stopovers in Arizona—with the notable exception of “motor side trips” from Phoenix to Roosevelt Dam along the unpaved construction road marketed as the Apache Trail (Figure 6.6). SP booklets did picture saguaros as one of the many attractions on its transcontinental routes operated with the Rock Island Railroad and the SP’s premiere train, the Sunset Limited (Figures 6.7 and 6.8; Ingram 1927, 1929; Southern Pacific Lines 1928; Zimmerman 1985; Runte 1991). Not until the late 1920s does it appear that SP and Rock Island passenger advertising directed attention to Arizona hotels and guest ranches as a matter of policy (Figure 6.9).

In 1939, the Phoenix Junior Chamber of Commerce commissioned a prototype for city street lights cast in the accordion-fold form of a mature, fully armed saguaro (Figure 6.10). The fluted column and two arms of the steel structure, each holding a streetlamp, was the brainchild of Arizona Republic cartoonist Reg
Manning, who sketched the design in an apparent effort to overcome his city’s half-lit indifference to the plant. An opinion survey conducted by the Jaycees confirmed the public’s desire for improved street lighting, but not Manning’s
saguaro design, on which opinion was evenly divided. Immortalized by Farm Security Administration photographer Russell Lee, Manning’s saguaro street light developed a following if only among the Jaycees, who moved it whenever they relocated their office about the city. Never giving up on the idea of a cactus-themed streetscape, Manning suggested that barrel cactus replicas be outfitted with lamps to illuminate pedestrian crossings on busy street corners and at the airport landing strip (Figure 6.10; Manning 1939; Arizona Republic 1940, 1948; Fuller 1960; Unger 1964).

Manning’s lighthearted proposals suggest how staging and manipulation of the desert habitat could be accomplished with clever art, illustration, and photomontage. One of the period’s more noteworthy examples of the photomontage technique included a booklet that described the construction of the Colorado River Aqueduct (Figure 6.11). Published by the Metropolitan Water District of


Southern California, the booklet was part of a regional public education campaign that deployed newspapers, magazines, films, and exhibits to win and maintain political support for the aqueduct (Los Angeles Times 1931; San Bernadino County Sun 1931). Entitled, “Water for Thirteen Cities,” the booklet linked saguaros and downtown Los Angeles in a photomontage. The water district prepared the booklet for distribution at the 1935 San Diego Panama Pacific International Exposition. There the water district’s exhibit featured an operating diorama of the aqueduct. On cue, the diorama flooded with water, dramatizing the pumping of the Colorado River from an intake dam then under construction at Parker, Arizona. The water raced through open conduits and closed tunnels to southern California cities concluding at coastal Los Angeles (Los Angeles Times 1935). The photograph of the two stately saguaros on the booklet’s title page received equal graphic treatment in the airbrushed montage that seamlessly connected the desert with a bird’s-eye view of downtown Los Angeles. The photomontage of saguaros, elevated passenger trains, tall buildings, cars, trucks, and pedestrians might have seemed odd at first. For one, it did not present the saguaros as found objects in an alfalfa field or on the margins of an orange grove. Rather, as stately symbols of southern California’s salvation and future water supply. Though no one complained about the saguaro’s symbolic appropriation across state lines, the water was another matter (Starr 1993).

The tipping-in and pasting-up of saguaro montages became something of an art in the brochures and booklets issued by the travel and tourism boosters of southern Arizona. The Phoenix Chamber of Commerce, for example, took liberties with a saguaro

photographically rendered as a signboard for the cover of its 1947 accommodations guide. A model seated on a horse burdened with sporting goods posed with a saguaro pasted up with wayfinding arrows for golf, tennis, riding, sun bathing, swimming, and loafing (Figure 6.12). An alternate version moved the arrows around on the plant with a different model and sporting goods astride the same horse (Figure 6.13). Apparently no saguaros were harmed in posting the arrows, given the apparent skill of the art director that may have led some to believe that the cactus had been posed in such a way.

The wholesale photo manipulation of a Tucson golf course suggested that the saguaro’s commercial range was becoming as expansive as its accordion folds. In
1950, the Sunshine Climate Club returned to national advertising, dusting off its keyed coupon campaign with McCann-Erickson. Building its pitch around winter golf, the SCC’s first ad pictured the greens of Tucson Country Club. Though the greens were real, a photomontage of tipped-in saguaros erased the golf course’s oak and mesquite trees—a paste-up trick explained in a newspaper report for the benefit of club members who may have wondered what had happened (Arizona Daily Star 1950). The tipped-in saguaros modeled a desert golf course that was understood to be everywhere and nowhere at the same time (Figure 6.14).

Sunshine Climate Club booklet covers no longer pictured the homes of Tucson’s residential district, nor did they discuss the therapeutic aspects of “man-building” per se—rather, leisure and relaxation in ranchy saguaroland that softened appearances and elevated expectations. A new crop of complimentary booklets for the SCC’s keyed coupon campaign credited photographer Esther Henderson and others. Subsequent editions credited Henderson and her husband, Chuck Abbott, the photographer whom the SCC’s Roy Drachman retained for guest ranch publicity.
The Herbersts’ Western Ways Feature Service became an important incubator of commercial photography. Ray Manley, a young photographer from Cottonwood, Arizona, came to Charles Herbert’s attention in the pages of *Arizona Highways*. Invited to Tucson, Manley joined Western Ways, living in the Herbersts’ guest house and taking over Abbott’s guest ranch photo chores (Henry 1993). Western Ways maintained files on some fifty guest ranches, which kept Manley busy posing the guests (Figure 6.15; Western Ways 1949).

It was Manley who perfected the classic ranch color composition for widely published postcards and commercial brochures. With allowances for an occasional horseback ride through the saguaro-dotted hills, there were but two scenic variations: by day, the
swimming pool; by night, the campfire floodlit behind conveniently placed rocks (Figures 6.16 and 6.17).

It was through the postcard, the brochure, newspaper, and weekly illustrated magazines that the liberties taken in staging saguaros captured the imagination as a western symbol. By the early 1960s, there was little question that the saguaro symbolized a free, open, and welcoming land, and, if one were lucky enough, the leisure time in which to enjoy it (Stern and Stern 1993). The frenetic action of Chuck Jones’ Road Runner cartoons come to mind, as do the pulp fiction novels inspired by John Ford’s genre-defining western films that linked the mesa and the stagecoach (Figure 6.18). Further colonizing the Four Corners area, a popular paint-by-number desert subject pictured saguaros near the Navajo Nation’s seat of


government and capital at Window Rock, Arizona. (Figure 6.19).

It appears that the celebration of the fiftieth anniversary of Arizona statehood in 1962, in which the saguaro played a leading symbolic role, secured its place on the American roadside. In 1961, the Arizona State Legislature authorized the creation of a commission to celebrate the state’s semicentennial golden anniversary in 1962, and its territorial centennial in 1963. Failing to establish an advertising budget, the creation of an official commemorative seal was left to Audrie Morris, an artist in the telephone directory department at Mountain
States Telephone and Telegraph Company. Morris’ seal artwork graced the annual telephone book (Arizona Republic 1961; Arizona Daily Star 1962; Arizona Daily Sun 1962; Avery 1962). The design passed over mining and agriculture iconography for the visual vocabulary of the out-of-doors represented by the Grand Canyon, the cactus forest, and a saguaro flower (Figure 6.20). Similarly left to the talents of its artists and illustrators, the Arizona Highway Department published a special double issue of *Arizona Highways* and placed a gold saguaro on the cover of the state’s official road map. Accompanied by figurative examples of the state’s sparkling mineral wealth gleaming all around it on the ground, the gold saguaro appeared as if it too had just sprung from the ground fully formed and ready for exploitation (Figure 6.21).

A case can be made for the proliferation of roadside saguaro imagery in the United States inspired by Arizona’s state semicentennial and territorial centennial celebration. Though the evidence is anecdotal, in 1963, for example, the debut of a monumental neon saguaro sign in the northern suburbs of Boston, Massachusetts,
FIGURE 6.20. Postcard. Hello! From Arizona. Arizona Development Board Phoenix, Arizona, 1962. The art direction of a special seal to commemorate the state’s semi-centennial and territorial centennial jettisoned the extractive imagery of the state seal for renderings of the state bird (a cactus wren), flower (a saguaro), and the Grand Canyon.
anchored a western-themed steak house and helped it maintain a loyal following (Figure 6.22; Boston Globe 1964; Miller 1988; Seelye 2013). The saguaro signs closest to the plant’s native habitat took the least liberties with it. The neon sign for the Traveler’s Motel in Yuma, Arizona, for example, made an accurate showing, as did the Cactus Motel on Colfax Avenue’s motel row in Denver, Colorado (Figures 6.23 and 6.24). The anthropomorphically playful neon saguaro of the El Rancho Motel in High Springs, Florida, waved a Mexican hat (Figure 6.25). A singular example of the habitat of the absurd could be seen in the roadside mashup of a saguaro, a sleeping Mexican, and an Indian arrow directing attention to the Las Vegas Motel in Eatontown, New Jersey (Figure 6.26).

One of the more meaningful and long-lived examples of the saguaro’s semicentennial–centennial era sign art may be seen today at the Westland Shopping Center in Richmond, Virginia (Figure 6.27). Essentially a sheet metal box on a riser at the edge of a parking lot, the saguaro-shaped neon sign dates to the construction of the shopping center in 1963. The land was then far west of Richmond, hence the shopping center’s name. As one writer explained, “The Westland Shopping Center has a sign in the shape of a cactus because at the time, they were way out west” (Brissman 2019). Rendering the familiar plant’s arms and folds in detail, the saguaro beckons to shoppers and motorists passing in the moment.


OPPOSITE PAGE, FIGURE 6.27. Westland Shopping Center saguaro sign, Richmond, Virginia. 2010. Photograph by Dean Jeffrey.
In the world of advertising and popular promotion defined by social media, the saguaro is having a moment. From the fashion runways of Milan to the California music scene, the saguaro projects strength, durability, and fun—infused with the ethos of inviolable conservation. Individuals who share saguaro memes and the plant’s right-sized props are captured. Whether in a Fifth Avenue holiday window display or an event expressly staged for taking selfies, the saguaro is having its moment.

Long before the advent of social media, the saguaro’s ability to arrest attention was exploited by feature photography as an alternative to paid advertising. In the late 1930s, the most successful of viral photographic images pictured cactus “sun-suits” cut from the growth tips of unfortunate saguaros. Devised to catch the reader off guard—to stop and stare, not unlike the earliest desert travelers who first encountered the plant—became the fulltime function of the cactus gag photograph. The cactus gag erased the distance between the individual and the plant. The first gag was wearing parts of the saguaro. The second was posing on the arm of a saguaro. The most curious plants sought for poses counted among the oldest specimens in and about Saguaro National Monument. Becoming a photographic genre peculiar to southwestern travel and tourism, the cactus gag played out against the cactus scare of the early 1940s caused by the death of large, droop-armed specimens that called into question the saguaro forest’s capacity to reproduce itself.

The saguaro’s emergence as a social meme dates to the ascendant cactus gags of the early 1940s. *Holiday* (1947b) magazine, for example, stated that the saguaro had “been as important and effective to Arizona as the orange grove to Florida” in creating a “synthetic west.” *Holiday’s* editors praised the photographers who posed models standing, sitting, and leaning on saguaros. *Holiday* (1974b) concluded that the pose had become so much a part of popular culture that “the pioneer publicity man who devised the idea of posing a bathing-suited model perched on a spiny saguaro deserves a statue hewn in cheesecake.”
Though no statues were forthcoming, the leading candidates for commemoration included Tucson’s Charles Herbert and Roy Drachman. As the leader of the Sunshine Climate Club, Drachman knew well that its members reluctantly spent money on national advertising, despite the success of the campaign for which the club had been organized in the early 1920s (Arizona Daily Star 1929b). The situation had hardly improved by 1947 (Tucson Daily Citizen 1947b). Over the years, the club’s Los Angeles-based advertising agency H.K. McCann (later McCann-Erickson) had gone to great lengths to prepare cost analyses to build a case for unending investment in advertising. Instead, Drachman and Herbert looked to viral photographs—though they did not use the word *viral*—to win the attention of newspaper and magazine editors without the further expense of an advertising agency.

To keep Tucson in the news during the national defense emergency of the early 1940s—and Herbert in pictures, Drachman conceived the first in a series of publicity stunts staged for the cameras. Drachman built a nighttime bonfire at San Xavier del Bac Mission and invited Native Americans to toss artifacts bearing purported Nazi swastikas into the blaze. Never mind that the Indian symbol

of friendship was not a swastika, or that Drachman had arranged with an artist to dummy-up fabrics and cardboard boxes as artworks for the stunt. Newspaper reports of the Indians’ denunciation of Hitler appeared across the country with a Tucson byline. Photographs of the bonfire, however, did not. Before the ink had dried on the press clippings, a controversy started among tribal leaders about faux Nazi symbolism (Atlanta Constitution 1940; Boston Globe 1940; Hartford Courant 1940; Los Angeles Times 1940; Washington Post 1940; Drachman 1980:59–60).

Drachman and Herbert quickly moved on to the next stunt, a woman’s “sun-suit” made of cactus. Inspired by Herbert’s experience as a publicity photographer in Florida, the so-called “cactus sun-suit” involved cutting the growth tips of two saguaro arms hollowed into the bowl-size cups of a woman’s bathing suit. A skirt of prickly pear pads suspended from a belt-like wire completed the ensemble. Unlike the bonfire, photographs of the cactus sun-suit lit up the press wires.

University of Arizona coed Merri Ciocetti modeled the outfit in the desert. Between March 1940 and April 1941, photographs of Ciocetti’s “sun suit of Arizona cactus” appeared in some 300 newspapers across the nation, most often with the caption, “Touch Me Not.” The photo’s notoriety culminated in a full-page Life magazine feature with new photographs and the original Ciocetti picture credited to photographer Robert Burns, a Tucson newspaperman whom Drachman had retained for Climate Club publicity (Figure 7.2). A strip of three photographs including a second cactus sun-suit modeled by Mary Thorbecke was credited to Herbert (Chicago Daily Tribune 1940; San Bernardino Sun 1940; Life 1941).

The staging of Ms. Thorbecke’s sun-suit featured the narrative props that Herbert used to illustrate a story: a camera on a tripod and a Stetson-wearing “cowboy photographer” later identified as Chuck Abbott, the Climate Club’s newest guest ranch photographer (Western Ways n.d. [1939?]; Flick 1998). Drachman modeled a shiny rodeo parade shirt while attending to the thorny details of Ms. Thorbecke’s skirt and cups (Figures 7.2 and 7.3).

Life (1941) played the story for laughs, captioning Drachman’s adjustment of the cups “artfully shaped by nature for this purpose…made safe for Mary” by Roy. But it was the third photo at the bottom of the page, an outtake from the previous year’s shoot with Merri Ciocetti, that anticipated the spineless future of the cactus gag. Life (1941) explained: “The top of the barrel cactus…has been
sawed off and fitted with a smooth board so that Merri will not be riddled with prickles” (Figure 7.4).

As a viral confection the cactus sun-suit was admittedly novel. Yet even Drachman might have admitted that as a proposition it simply didn’t work; in fact, it was off-putting. The Chicago Tribune, one of the first newspapers to run...
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the photo in the spring of 1940, appears to have contributed the headline, “Touch Me Not.” Appearing in 300 newspapers didn’t make it any better. As Life (1941) explained, “the publicity hasn’t brought many tourists to Tucson, but it makes the people of Tucson feel fine.” Whether that was true or not, what the Ciocetti photograph did do was confirm the power of self-generated photo publicity for a generation of Sunshine Climate Club leaders. Photos, mostly cactus gags, could run concurrently with paid advertising if and when the club chose to return to it.

The Second World War forestalled the club’s admixture of photo publicity with paid advertising. McCann’s proposed copy themes soothed jangled wartime nerves, while the persistent image of Merri Ciocetti circulated in and out of the pockets of soldiers, including a German prisoner of war. The caption of the captured clipping cited the cactus sun-suit as an example of Americans’ “utter lack of taste.” The writer misidentified the setting as Florida, a mistake sure to have raised the ire of Corporal Roy Drachman had he found out about it on his stateside army base (Arizona Daily Star 1945).

Drachman’s emphasis upon photo publicity might have been a boon to Tucson’s photographers. In Chuck Abbott, however, they saw a competitor. At Drachman’s behest, Abbott had relocated from Palm Springs just in time, as it turned out, to appear in Life. The Stetson-wearing Abbott had built a following at Palm Springs’ Desert Inn as a trailside cook and photographer, conducting horseback rides and barbeques, photographing the resort’s guests at leisure. Their pictures appeared by wire service in their hometown newspapers in the dead of winter with a byline from sunny Palm Springs. Expected to do the same for Tucson’s guest ranches, Abbott’s residence as a photographer proceeded under Drachman’s directive of “less but better use of advertising” (Desert Sun 1936; Arizona Daily Star 1940a, 1940b).

Tucson’s photographers were not impressed. They deputized photographer Esther Henderson to talk the situation over with Drachman. Henderson had taken up photography in New York City in the early 1930s after a successful career as professional dancer. Settling in Tucson with her father in 1936, she opened a portrait studio. Henderson noted a decline in new business that she attributed to Abbott’s guest ranch portraits. Confronting Drachman, she exclaimed, “What the hell is he? A cook or a photographer?” (Richards and Bell 2005:13). She later came to terms with Abbott. They went on a Sunday picnic with their cameras. Within a year they married. Henderson continued her portrait work and joined
Abbott in landscape photography. Her work was among the first published in the newly revamped *Arizona Highways* under editor Raymond Carlson (Arizona Daily Star 1941; Pyle 1942; Cooper 1973; Drachman 1980:58–59; Henderson 1987; Richards and Bell 2005). After the war, the Henderson-Abbotts opened the “Photocenter,” a full-service retail camera shop. The store merged the couple’s interests in a 20 × 60 foot outdoor studio with “western atmosphere.” In a nod to Abbott’s former life as a cook, the store’s prop patio featured a chuck wagon and several species of cacti for “character background” portraits. The props including the saguaro were real (Tucson Daily Citizen 1947c). The Cabat-Gill advertising agency designed the store’s logo, a bird on a saguaro singing, “Tops in photography” (Figure 7.5).

Like the Herberts and the Henderson-Abbotts, many others contributed to the region’s postwar tourist economy. Between 1950 and 1960, tourism and

manufacturing overtook mining and agriculture as Arizona’s leading industries (Casaday 1950; Shirer 1954; Arrington 1969; Klein 1993). By now the saguaro’s role as a symbol was well-understood—and it is not far off the mark to suggest that its iconography occupied a manufacturing category of its own, led by cactus gags of all kinds from Hollywood to San Marino (Figures 7.6 and 7.7; Year ‘Round Club of Southern California 1957).

But all was not well in saguaroland. The apparent decline of the cactus forest in and around Saguaro National Monument could be measured in photographs taken over time (Hastings and Turner 1965; Cohn 2003; Turner et al. 2003:168–191; Webb et al. 2007; Ahnmark and Swann 2008). Not until the 1960s did botanists realize that the saguaro forest admired by Wright, Shantz, and others was in fact
a remarkable nineteenth-century bumper crop that matured in the late 1930s—and was slowly returning to normal by dying off. The forest’s largest and oldest saguaros began to be disfigured by black spots—bacterial necrosis—the natural conclusion of the plants’ life cycle that botanists misread as a disease (McAuliffe 1996; Burtner 2011:133–139).

The saguaro forest’s apparent decline led to hand-wringing among the publicists who had burnished their creative reputations in furthering the plant’s iconography. “Their trademark is tumbling down,” one feature writer explained. Even the saguaros “used as background for a beautiful smiling girl, are already rotted inside, the only evidence being the holes which appear in the arms and body of the cactus” (Western Ways n.d. [1941?]). For many, the loss was personal. The Herberts, for example, wondered if the saguaro around which they had framed the view-with-a-room would die before its time. The Herberts helped sound the alarm, dramatizing cactus disease with a steady stream of illustrated news features about the botanists who sought to find a cure.

FIGURE 7.8. Cactus disease control. Pulling down a saguaro with a wire attached to a tractor, Saguaro National Monument, 1941.
The diagnosis of black spot as a disease and the ensuing panic about it reflected the saguaro’s iconic status—and upon whose remediation reputations awaited to be made. The errant diagnosis led to a moth believed to be responsible for the tissue-rot that weakened the plants. The cure would destroy spotted plants for the protection of those not yet afflicted. Botanists roped off a test section at the edge of Saguaro National Monument. Park rangers pulled down spotted saguaros with a cable and tractor, cut their trunks and arms into pieces, doused them with insecticide and buried them. Park officials judged the destruction of the plants to be too expensive (Figures 7.8 and 7.9; Western Ways n.d. [1942?]). Experiments with topical remediation ensued. The visualization of end-of-life cactus care pictured university botanists who had published theses on the so-called disease tending to the stumps of amputated arms from ladders and daubing bleach solution while seated in the arms of the plant for feature news photographs (Figure 7.10; Lightle 1947; Boyle 1948; Western Ways 1956; Herbert 1960).
Today’s botanists chalk up the lapse in propagation that so alarmed the botanists of the early 1940s to the saguaro forest’s natural life cycle. The saguaro was indeed reproducing itself—not drifting toward extinction hastened by bacterial necrosis. Spotty seasonal rainfall and winter freezes had tempered growing conditions since the bumper crop of the nineteenth century (Young 1968; Cohn 2003; Turner et al. 2003:276). This was particularly true for the necrosis that visited the aging plants after a severe winter freeze in 1937. Black-spot was not a disease and certainly not spread by moths. Rather, the spots indicated the destruction of plant tissue hastened by a freeze of several days’ duration that caused the plants’ arms to droop, sometimes touching ground (Steenbergh 1969; Steenbergh and Lowe 1977).
Such was the legacy of the nineteenth-century bumper crop upon whose arms the photo publicity of the mid-twentieth century literally sat (Figure 7.11). Sunshine Climate Club photos pictured bathing suit models sitting, standing and leaning on the arms of saguaros, instilling the club’s fun-in-the-sun sales message with a welcoming proposition that broached no distance between visitor and plant.

At the Climate Club’s office on Tucson’s Miracle Mile, a new generation of boosters took up the campaign. A caption sheet for a now lost photograph explained, “The walls are papered with newspaper and magazine clippings of gag photos of Arizona cacti” (Figure 7.12; Western Ways n.d. [1950?]).

The promulgation of club leaders’ desert fantasies relied as much upon the ubiquity of droop-armed saguaros as the cultivation of high school fashion models that appealed to the nation’s photo editors—along with photos of the city’s annual rodeo, horseback rides, and the desert’s flowering beauty spots. The saguaro pose led them all (Figure 7.13).
The organization of the “Sunshiners Modeling Club” in 1948 formalized recruitment and training. Retitled the “Sunshine Modeling Club” in 1949, a core group of 30 to 35 young women from Tucson High School made themselves available for publicity, news features, and advertising programs. The qualifications for club membership included “poise, personality, courtesy, willingness to learn, work, and cooperate with others” (Chambers n.d. [1955?]). The Sunshine Climate Club cleared all assignments through the school counselor. Photographers paid models at commercial rates, with all monies turned over to the school for fashion and beauty supplies used in the program. All models working on assignments were chaperoned. The Sunshine Model Club became an active part of the school’s vocational training program, recruiting members with an annual competition that
combined the elements of a high school cheerleading program with that of a beauty pageant. In 1954, for example, some 200 young women tried out for one of the 15 places in the ongoing group of 30 models. A panel of judges including the faculty advisor, placed each contestant in the desired size range, from 10 to 14. The daily newspaper listed each winning contestant’s name and size. The seven-member panel of judges, made up mostly of the photographers who would be taking the pictures, included Western Ways’ Peter Balestrero and Ray Manley (Figures 7.14–7.16; Western Ways 1954). Miss Margaret Booher of the school’s Home Economics Department, who preferred “Home Making Department,” became
the club’s first faculty advisor, followed in 1955 by Miss Mildred Bready, the school’s typing instructor (Chambers n.d. [1955?]).

Tucson’s “model high school” received its own press coverage in national magazines. Reporters took note of the “girl pool” of “especially selected, carefully trained high school youngsters who perform a novel civic duty…usually in bathing suits.” Photographers made choices for assignments by scrutinizing the 8 × 10 bathing suit photographs kept on file in the Sunshine Climate Club office or by visiting a model club meeting (Sturgis n.d. [1954?]; Riddell n.d. [1960?]).

To view pictures of individuals sitting and standing on the drooping arms of the legacy plants was to ask for the suspension of disbelief. The unwitting may have overlooked the absence of spines and still found the photographs remarkable. The witting may have turned away knowing the loads of attention that hastened the plants’ demise. Yet the photographs are still doing their job—causing viewers to stop to stare at their cheesy composition and jaw-dropping aplomb—breathtaking, for all the wrong reasons.

Whether clipped, padded, or tipped-in, the saguaro became the lubricant of a distinctly modern Southwest into which anyone might climb. Ruth Egermayer, the wife of the park superintendent of Saguaro National Monument, posed as a park visitor for Arizona Highways with a droop-armed saguaro, one of the oldest and most unusually formed specimens in the park (Figure 7.17). The photo of her leaning into the plant appeared on the cover of the park’s 10-cent trail guide, inviting visitors: Come here. Come closer. See this thing (Figure 7.18).

The saguaros that sacrificed tips and spines for gag photography represent the closing of an era of environmental ambivalence at the dawn of a greater appreciation of the fragility of nature’s sharpest curves. The padding of spines was a moment in the saguaro’s arc from humanly relatable publicity object to the inviolable symbol of conservation and community it is today.

This then was the foundation upon which today’s saguaro moment may be weighed and considered. No longer asked to suspend disbelief, we believe models wearing blouses, skirts, and shirts picturing saguaros; a wooly cable-knit mask topped with flowers; or the out-sized art at a music festival. We stop and wonder at the revival of interest in the postwar silkscreen fabrics of artist Harwood Steiger (Figure 7.19), museum exhibitions featuring the Hollywood style of Roy Rogers and Dale Evans (Figure 7.20), and the rhinestone suits of tailor Nudie Cohn (Figure 7.21; Holly 2001; Nudie 2004; DeVillemarette 2018).
Saguaro likenesses populate clothing ranging from playful one-off designer statements to designs with mass market apparel. Representing the former, a woman models a saguaro skirt in the streets of Milan before a Prada fashion show (Figure 7.22); the latter, a London apparel maker markets a white patterned shirt whose saguaro print recalls the one that William Emory drew for George Engelmann in 1848 (Figure 7.23).

Noting the various iterations of the cactus phenomenon from earrings to T-shirts to A-line skirts, one observer of contemporary fashion notes that “the
cactus has officially transcended the windowsills of Kinfolk subscribers and become a statement-making look worth working into your wardrobe” (Moran 2016). While many apparel designs deploy subtle variations on the saguaro, one Chicago-based designer, Mady Berry, fully exploited the dimensional possibilities of the mature plant. Inspired by a trip to Arizona, Berry created a cable-knit saguaro sweater with bulky accordion folds, articulated arms and a columnar flower-topped headcover with eye holes (Figure 7.24). Part of Berry’s saguaro-themed lineup entitled, “Sand Doesn’t Have to Be Bland,” her project featured a second piece reminiscent of the cactus sun-suit of the early 1940s—a “desert guide”
entitled “Siren,” featuring a pleated conical bra embedded with glass eyes. In an interview in *Paper*, Berry (Moran 2016) explained, “Each look [in my collection] has a set of glass eyes where they 'see' from. I thought it would be appropriate and a bit cheeky if the Siren saw from her breasts” (Figure 7.25). The immediate
inspiration for the piece came from the cactus dress her mother owned in college (Moran 2016).

Saguaro iconography accompanies plants in homes, retail spaces, and Instagrammable events. One observer declared cactus to be “the new pineapple,” noting its graphic expression in homewares and paper goods products, “accessories both stylish and affordable…used to personalize a space” (Trendbible 2019). Another, noting the prevalence of actual cacti and images of cacti “sprouting in all corners of our culture,” declared the cactus to be “the pop-up plant of our desolate age.” The availability of small specimens for the home was “a welcome change from the ubiquity of the saguaro” (Cocozza 2017).

Though few contemporary observers of the phenomenon seemed aware of the history of collecting or its iconography, Patrick Sisson, writing in Curbed took the long view. Quoting a 1935 New York Times feature article by L.H. Robbins, Sisson (2018) noted that cacti had “played a big part in the human history of the romantic southwest” (Robbins 1935:SM11). Sisson (2018) concluded that the
“commodification of cactuses, and their slow expansion into our homes and retail spaces, is just the latest adaptation by these rugged plants to a harsh environment. These plants aren’t just Instagram fodder; they’re spiny survivors.”

The staging of saguaro moments inspired by the prop patios and guest ranches of yore include the boxy saguaros created for the grounds of the 2019 Coachella Music Festival (Figure 7.26). A private event during the festival staged by Instagram at the Pond Estate in Palm Springs became the social media platform’s “first-ever branded house experience.” The cactus-themed event offered “an Instagrammable mecca of eye-popping color” directed to the attention of “influencers, artists, and content creators” (Manifold 2019). Created by artist D’ana Nunez, the event set the stage for “photo moments.” The camera-ready estate featured a pond, an island landscaped with a saguaro propped up with a brace, and other succulents and palms. The amenities brought in for the event included a curtained entrance with branded “Desert Chill” drapes that opened to the lawn, a firepit.

FIGURE 7.27. Pond Estate, Instagram Desert Chill party, Palm Springs, California, 2019. Photograph by Manifold.
and a small bridge to the island. “Each were surrounded by real cacti and neon graphic elements intermixed to infuse a surreal element into real life scenery” (Figure 7.27; Manifold 2019; Hoffman 2019; Weinberg 2019).

The saguaro’s far-flung imagery has salable uses much as it always has. The 2016 holiday windows of New York’s Bergdorf Goodman featured a dreamy interpretation of the arboreal desert (Figure 7.28). Store display director David Hoey set the stage. Hoey explained, “The windows are like delirious remakes of classic giant dioramas seen in a natural history museum” (Minton 2016; Silver 2016). The saguaro had its moment in the store’s lead window. Entitled “The Hitch Hiker,” the window featured a stylish mannikin sidesaddle on a Lewis Carroll rabbit brought up short in a dreamy saguaro forest.
AFTERWORD
THE SAGUARO MOMENT

After the first renderings of the Sonoran Desert in woodcuts and engravings, the saguaro’s appearance in unexpected places from the Pacific coast to the nation’s world’s fairs shaped ideas about the plant as a western symbol. Championed by some and derided by others, the saguaro became an uncertain symbol even in its own habitat. Growing an imaginative and far-flung range with a robust tourist trade, its welcoming arms took on an iconic significance by framing the desert for social engagement and leisurely consumption.

Saguaro iconography is nothing if not an expression of a human relationship with a plant that has historically sustained one’s curious nature. Looking back upon people posing with the plant in snapshots, pictures, and postcards, we can see ourselves.

We measure ourselves.

We express ourselves.

We take stock and care.

In the moment, we touch.

FIGURE 8.2. Photograph of Carrie Stouch of Gary, Indiana posing with a saguaro in Sabino Canyon, 1937.

FIGURE 8.3. Photograph of man posing with a cristate saguaro, ca. 1937.
FIGURE 8.4. Photograph of man posing with a saguaro. February 9, 1940.

FIGURE 8.5. Photograph of woman posing with a saguaro. Written on the reverse: “These cactus are thick all over these hills and this is as pretty as I’ve seen. Every one has a different shape. I’ll get some more cactus pictures. They are nice scenery.” Ca. 1942.

FIGURE 8.6. Wooden painted photo album cover, Snaps, ca. 1954.
FIGURE 8.8. Photograph of man in jacket touching a saguaro, ca. 1919.


FIGURE 8.9. Photograph of woman touching the tip of a scarred saguaro arm, 1945.
FIGURE 8.10. Copper embossed scrapbook cover, ca. 1970.
ACKNOWLEDGMENTS

I wish to thank the following individuals whose special knowledge and collections informed my study of saguaro iconography. At the Smithsonian Institution Libraries, Jim Roan, Katrina Brown, Lilla Vekerdy, Erin Rushing, Robin Everly, and Alexandra Alvis entertained my many requests for scans of their books and prints. At the National Museum of American History, Helena Wright, Joan Boudreau, Shari Stout, and Sarah Oakman generously made materials available, as did Kenneth Wurdack and Alice Tangerini, Department of Botany, National Museum of Natural History, who pointed me to the saguaro specimen sheets of the National Herbarium.

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One of the pleasures of a project that spans past and present are the personal reminiscences shared along the way, especially cued by primary source material. Russell True of the White Stallion Ranch shared his parents’ colorful collection of travel and tourism literature, while Carol Moore described riding the horses pictured in several examples within. Jan Flickenger Whittemore shared her reminiscence about her young career as a Tucson Sunshine Climate Club model. Judi and Bud Busche opened their home to inspect the picture window framed by the photographers Charles and Lucile Herbert. Carolyn Manley Robinson shared her father’s early Tucson photographs and stories. Bill Peachey and Bill Thornton acquainted me firsthand with the pleasures of the Ironwood Forest National Monument. Loreli Panico described her research on the history of the cactus sunsuit. Christine Murphey invited me to see the saguaro photographs at her parents’ real estate office. Cecilia Hunter of St. Philips in the Hills generously shared church historical records about the framing of its foothills window. Douglas C. Towne shared his pioneering interpretive study of the traveling saguaro. Carl H. Abbott graciously allowed me to publish his father’s photograph of Edith Hamlin and Maynard Dixon. Dean Jeffrey and James Stave generously allowed me to publish their respective saguaro roadside and street photographs. Mady Berry kindly shared photos of her contemporary fiber art. Wyatt McSpaden, Imp Kid, Claire Hoffman, and D’ana Nunez shared their contemporary photographs further documenting the saguaro moment. I am deeply indebted to Ron and Marcia Spark for their thoughtful reminiscences and cool hunter eyes.

Early in the project I benefited from a conversation with Peggy Larson of Tucson’s Arizona Sonora Desert Museum about the history of the museum’s founding and the shaping of its public displays in the 1950s. As if a bookend near my project’s completion, I benefited from a conversation with performance artist Kimi Eisele, whose Standing with Saguaros is a compelling model of public art, at one with the spirit of the early cultural and botanical champions of the Sonoran Desert.
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WLB

Tucson, Arizona
FIGURE CREDITS

FRONTISPIECE

Preface: The Social Saguaro

Figure I. Photoengraving, Joseph Wood Krutch, Voice of the Desert, 1954. Photograph by Ray Manley with the permission of Carolyn Manley Robinson.

Figure II. Copy photograph, Maynard Dixon and Edith Hamlin, Tucson, Arizona, 1942. Photograph by Charles Abbott with the permission of Carl H. Abbott.

Figure III. Photograph, Cactus ballet. Photograph by Charles Herbert. Charles and Lucile Herbert: Western Ways Features Manuscript and Photograph Collection, MS 1255, box 2 Photo Negatives Group B, MS 125 and “The Cactus Ballet,” MS 1255, box 10, f 90, Arizona Historical Society, Tucson.

Figure IV. Woodcut, cover of Harper’s New Monthly Magazine 29 (October 1864), from the author’s collection.

Figure V. Edward S. Curtis, photograph, Maricopa women, 1907, Library of Congress, accessed November 8, 2020. https://www.loc.gov/item/90710181/

Figure VI. Edward S. Curtis, photograph, Qahatika women, 1907, Library of Congress, accessed November 8, 2020. https://www.loc.gov/item/96502068/

Figure VII. Copy photograph, Charles W. Herbert, 1949, courtesy of Carolyn Manley Robinson.

Figure VIII. Advertisement, Tucson Sunshine Climate Club. National Geographic, 1952, from the author’s collection.

CHAPTER ONE: CACTUS WORDS AND PICTURES

Figure 1.1. Range of the saguaro. Map by Paul Mirocha. Saguaro distribution based on Yetman et al. (2020).

Figure 1.2. Woodcut, “Monster Cactus” at the Royal Botanic Gardens, Kew, in Illustrated London News (October 17, 1846), p. 246, from the author’s collection.

Figure 1.3. Woodcut, Kew Cactus from Real Del Monte—(Cereus Senilis), in Illustrated London News (July 17, 1847), p. 48, from the author’s collection.

Figure 1.4. Letter page, William H. Emory to George Engelmann, January 14, 1848, George Engelmann Papers, collection 1 RG 4/1/5/1, Missouri Botanical Garden, St. Louis.
Figure 1.5. Lithograph, *Cereus giganteus*, in W.H. Emory, *Notes* (1848) pp. 72–73, Smithsonian Institution Libraries, Washington, D.C.

Figure 1.6. Lithograph, *Chain of Natural Spires on the Gila*, in W.H. Emory, *Notes* (1848) pp. 78–79, Smithsonian Institution Libraries, Washington, D.C.


Figure 1.9. John Russell Bartlett, *Tucson, Arizona, from the eastern flanks of Sentinel Peak in the Tucson Mountains. Looking northeast across the Santa Cruz River Valley*, July 17–18, 1852, pencil, sepia and wash, 12.7 × 18.3 inches, 1852.07.17, John Carter Brown Library, Providence.

CHAPTER TWO: CACTUS DISPLAYS


Figure 2.2. Woodcut, advertisement, A. Blanc & Co., “Rare Cacti,” in *Century* (March 1889, unpaginated), from the author’s collection.

Figure 2.3. Photoengraving, “Cactus-House, Holly Point, Heaton Mersey,” in *Gardeners’ Chronicle* (March 9, 1901), after p. 164, UMass Amherst Library, Amherst.

Figure 2.4. Woodcut, cover of *Baltimore Cactus Journal* 1, no. 1, (July 1894, cover), David M. Rubenstein Rare Book and Manuscript Library, Duke University, Durham.

Figure 2.5. Woodcut, *The Cactus Club of Baltimore*, in *Harper’s Bazaar* (February 24, 1894) p. 148), HathiTrust, Harvard University, Cambridge.

Figure 2.6. Photoengraving, Mexican cactus display mounted by the Secretary of Development, Horticulture Hall, World’s Columbian Exposition, Chicago, 1893, from the author’s collection.

Figure 2.7. Photoengraving, *Cactus bed at Carroll Park, Baltimore, 1894*, in *Baltimore Cactus Journal* 1, no. 2 (August 1894), p. 15, from the author’s collection.


Figure 2.9. Photograph, Saguaro with arms, Horticultural Hall, World’s Columbian Exposition, Chicago, 1893, WCE/CDA-V/59, Special Collections and Preservation Division, Chicago Public Library, Chicago.
Figure 2.10. Cyanotype, Cactus display outside Horticultural Hall, World’s Columbian Exposition, Chicago, 1893, from the author’s collection.

Figure 2.11. Cyanotype, Columnar saguaro, World’s Columbian Exposition, Chicago, 1893, from the author’s collection.

Figure 2.12. Stereoview, The great cactus, Horticultural Building, World’s Fair, Chicago, 1893, from the author’s collection.

Figure 2.13. C.D. Arnold, photograph, World’s Columbian Exposition, Territorial Building, World’s Columbian Exposition Photographs by C.D. Arnold, digital file # 198902.02_043-141.2.14, Ryerson and Burnham Archives, The Art Institute of Chicago, Chicago.

Figure 2.14. Postcard, “Hole in Rock, near Phoenix, Arizona,” published by Central News Co., Phoenix, Arizona, 1922, from the author’s collection.

Figure 2.15. Postcard, “Hole in the Rock, Papago, near Phoenix, Arizona [with water],” Curt Teich & Co., Chicago, Herz Post Cards, San Diego, Calif., 1936, from the author’s collection.

Figure 2.16. Realphoto postcard, “Giant Cactus S.P. Depot L.A.,” 1893, National Herbarium, National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Figure 2.17. Postcard, “Greetings from San Antonio, Tex. Giant cactus, Southern Pacific Depot,” Joske Bros., San Antonio, Texas–Germany, postmarked 1907, from the author’s collection.

Figure 2.18. Realphoto postcard, “California Building, Panama Pacific International Exposition,” San Francisco, 1915, from the author’s collection.


Figure 2.20. Postcard, “The Arizona Cactus Garden, Hotel Del Monte, Monterey Co., California,” 1901–1907, from the author’s collection.


Figure 2.22. Copy photograph, Arizona State building, Century of Progress, Chicago 1933–1934, Kaufman & Fabray, Fa106pa, Sharlot Hall Museum, Prescott.

Figure 2.23. Copy photograph, Arizona State building interior exhibit display, Century of Progress, Chicago 1933–1934, Kaufman & Fabray. Fa-004P ID 3520, Sharlot Hall Museum, Prescott.
CHAPTER THREE: THE ARBOREAL DESERT

Figure 3.1. Photograph, Cactus House, Phipps Conservatory, Pittsburgh, April 14, 1903, RU 000221, J. Horace McFarland Company Collection, Archives of American Gardens, Smithsonian Institution, Washington, D.C.

Figure 3.2. Photograph, Shaw’s Garden main gate with columnar saguaros, 1897, PHO 1983-0384, Missouri Botanical Garden, St. Louis.

Figure 3.3. Postcard, “Shaw’s Garden, St. Louis, Mo.,” Dresden–Leipsig–Berlin made in Germany, published by the St. Louis News Company, St. Louis, Mo., postmarked 1908, from the author’s collection.

Figure 3.4. Photograph, Shaw’s garden saguaro in open crate with creosote bush, 1914, GPN 1982-0520, Missouri Botanical Garden, St. Louis.

Figure 3.5. Photograph, *Cereus giganteus*, about 25 years old, 13 ½ feet high, near Tucson, Arizona, in *American Gardening* (May 17, 1902), p. 319.

Figure 3.6. Photograph, load of boxed cacti, Torres, Sonora, scrapbook, Daniel Trembly MacDougal collection, MS 452, box 45, #FZ, Arizona Historical Society, Tucson.

Figure 3.7. Copy photograph, Santa Catalina mountains from east of Desert Laboratory, April 13, 1914, folder Tumamoc Hill Views, Desert Laboratory Collection, Desert Laboratory on Tumamoc Hill, Tucson.

Figure 3.8. Postcard, “Desert Botanical Laboratory, Tucson, Arizona,” published by Benham Co., Los Angeles, ca. 1912, from the author’s collection.

Figure 3.9. Copy photograph on scrapbook page, fruit harvest pole used as a corner boundary marker, Desert Laboratory, MS 452, box 45, #M, Arizona Historical Society, Tucson.

Figure 3.10. Photograph, saguaro next to Desert Laboratory building, MS 452, B34, F474, #A1-31, Arizona Historical Society, Tucson.

Figure 3.11. Photograph, Mrs. E.S. Spalding measuring a saguaro, 1909, MS 452, box 34, folder 458, img 8875, Arizona Historical Society, Tucson.


Figure 3.15. Postcard, “Administration Building, Desert Botanical Garden in Papago Park, Tempe, Arizona,” Curteich-Chicago distributed by Lollesgard Specialty Co., Tucson and Phoenix, Az, 1950, from the author’s collection.

Figure 3.16. Realphoto postcard, “Capitol Grounds, Phoenix, Ariz.,” ca. 1925, from the author’s collection.

Figure 3.17. Realphoto postcard, Capitol Grounds, Phoenix, Arizona, 1912, from the author’s collection.

Figure 3.18. Postcard, “Main Building-University of Arizona Tucson, Ariz.,” annotated, “This is the cactus garden in front,” R. Rasmesson, hand-colored, postmarked 1909, from the author’s collection.


Figure 3.20. Mary Emily Eaton, pen and ink watercolor, *Carnegia gigantea*, 1912. National Museum of Natural History, Smithsonian Institution, Washington, D.C.

CHAPTER FOUR: ON THE MARGINS

Figure 4.1. Postcard, “Giant Cactus,” annotated, “Here is a strange plant that grows on the desert. There is [sic] a lot of them to be seen from the train,” PC 98 B14 cactus 69900, Arizona Historical Society, Tucson.

Figure 4.2. Postcard, “Giant Cactus, Salt River Valley, Phoenix, Ariz.,” Albertype Co., Brooklyn, N.Y., R.L. Balke, Indian Trader, Phoenix, Ariz., ca. 1908, from the author’s collection.

Figure 4.3. Postcard, “Giant Cactus Kingman, Ariz.,” Albertype Co., Brooklyn, N.Y., published for Hotel Beale, Kingman, Ariz., ca. 1907, from the author’s collection.

Figure 4.4. Postcard, “Giant Cacti of the Plains,” Thayer Publishing Co., Denver, Colo., ca. 1910, from the author’s collection.
Figure 4.5. Poster, “Jan’y 31, 1884, The Beginning of the Society of Arizona Pioneers, by Sam Hughes,” pen and ink watercolor, Arizona Historical Society, Tucson.

Figure 4.6. Photogravure, “Trees and lawns greet you on arrival—Southern Pacifi c Station, Tucson Sunshine Climate Club booklet, 1922–1924, from the author’s collection.

Figure 4.7. Postcard, “S.P. Grounds and Depot, Tucson, Ariz.,” published by Curt Teich Co., annotated, 1915, from the author’s collection.

Figure 4.8. Stereoview, Buehman cactus still life in studio, “Arizona Bouquet Cactus and Spanish Bayonet,” from the author’s collection.

Figure 4.9. Copy photograph, Sagueros, Buehman Studios BN 204958, Henry and Albert Buehman Memorial Collection, Buehman-Subjects-Cactus-Saguaro, Arizona Historical Society, Tucson.

Figure 4.10. Stereoview, Carleton Watkins, Cereus giganteus in blossom. Arizona, ca. 1875. History Room, California State Library, Sacramento. https://csl.primo.exlibrisgroup.com/permalink/01CSL_INST/hbrh2d/alma990015613060205115

Figure 4.11. Glass plate positive lantern slide, The Effects of Irrigation on Arizona Desert Giant, Salt River Valley, Keystone View Company #209, from the author’s collection.

Figure 4.12. Stereoview, “Giant cacti of the desert in alfalfa field made production by irrigation, Arizona, Keystone View Company, from the author’s collection.

Figure 4.13. Brochure cover, Health Wealth Golden Opportunities, Tucson Chamber of Commerce, ca. 1906, from the author’s collection.

Figure 4.14. Advertisement, Tucson Chamber of Commerce, “Tucson is the Metropolis of Arizona” Plant World, June 1911. Desert Laboratory Collection, Desert Laboratory on Tumamoc Hill, Tucson.


Figure 4.16. Booklet, Tucson, Arizona, In the Residence District, ca. 1911, from the author’s collection.


Figure 4.19. Territorial seal with saguaro and deer, Tubac State Historic Park and Museum, Tubac.

Figure 4.20. Great Seal of the State of Arizona, 1912, Arizona Capitol Museum, Phoenix.

Figure 4.21. Brochure with envelope, Tucson Arizona, Tucson Chamber of Commerce, 1930, from the author’s collection.

Figure 4.22. Photoengraving, Scenes Around Tucson, Tucson Chamber of Commerce, 1930, from the author’s collection.

Figure 4.23. Advertisement, Sunshine Climate Club, Must Hearts Break, in Literary Digest (December 22, 1922), p. 42, from the author’s collection.

Figure 4.24. Booklet cover, Tucson – Arizona Man-Building in the Sunshine State, Tucson Sunshine Climate Club, 1922–1924, from the author’s collection.

Figure 4.25. Booklet foreword, Tucson – Arizona Man-Building in the Sunshine State, Tucson Sunshine Climate Club, 1922–1924, from the author’s collection.

Figure 4.26. Booklet cover, Phoenix Arizona Where Winter Never Comes, 1924, from the author’s collection.

CHAPTER FIVE: FRAMING UP

Figure 5.1. Copy photograph, Harold Bell Wright home landscaped courtyard, ca. 1922, Tucson Medical Center Archive, Tucson.

Figure 5.2. Copy photograph, grounds crew posing with wrapped saguaro, 1927, Tucson Medical Center Archive, Tucson.

Figure 5.3. Copy photograph, grounds crew preparing to load wrapped saguaro, 1927, Tucson Medical Center Archive, Tucson.

Figure 5.4. Copy photograph, grounds crew with loaded saguaro, 1927, Tucson Medical Center Archive, Tucson.

Figure 5.5. Realphoto postcard, Zuni Dining Room exterior, Desert Sanatorium, Tucson, 1930, from the author’s collection.

Figure 5.6. Photoengraving, Zuni Dining Room, Desert Sanatorium, Tucson, 1928, Tucson Medical Center Archive, Tucson.

Figure 5.7. Copy photograph, Rutger Porter and Harold Bell Wright, 1927, Tucson Medical Center Archive, Tucson.

Figure 5.8. Copy photograph, entrance to Desert Sanatorium, Tucson Medical Center Archive, Tucson.
Figure 5.9. Postcard, *Main Entrance, The Desert Sanatorium, Tucson, Arizona*, ca. 1928, Tucson Medical Center Archive, Tucson.

Figure 5.10. R.B. Streets, photograph, Homer Shantz, February 22, 1930, neg. AA-6-1930, MS 481, box 50, Homer Shantz Negative Collection, University of Arizona Special Collections, accessed November 8, 2020, http://uair.library.arizona.edu/item/285817

Figure 5.11. Homer Shantz, photograph, chandelier-type saguaro, February 22, 1931, B-7-1931, MS 481, box 51, Homer Shantz Negative Collection. University of Arizona Special Collections, accessed November 8, 2020, http://uair.library.arizona.edu/item/285990

Figure 5.12. Homer Shantz, photograph, saguaro stand, February 20, 1933, A-2-1933, MS 481, box 53, Homer Shantz Negative Collection. University of Arizona Special Collections, accessed November 8, 2020, http://uair.library.arizona.edu/item/286478

Figure 5.13. Homer Shantz, photograph, watermelon saguaro, waiting car, September 22, 1935, T-1-1935, MS 481, box 55, Homer Shantz Negative Collection, University of Arizona Special Collections, Tucson.

Figure 5.14. Homer Shantz, photograph, Queen of the Night in bloom, cactus garden west of Main building, June 15, 1932, X-12-1932, MS 481, box 53, Homer Shantz Negative Collection, University of Arizona Special Collections, accessed November 8, 2020, http://uair.library.arizona.edu/item/286348

Figure 5.15. Postcard, “Aerial View, University of Arizona, Tucson, Ariz.,” photograph by Ben Gross, Tucson, Arizona, Eagle Post Card View Co., Inc., New York, postmarked 1943, from the author’s collection.

Figure 5.16. R.B. Streets, photograph, workers in cactus garden arroyo east of Main building, ca. 1929, folder 2: gardens - cactus gardens photographs, N-10,039, University of Arizona Special Collections, Tucson.

Figure 5.17. Homer Shantz, photograph, cactus garden arroyo east of Main building, April 1931, I-10-1931, Homer Shantz Negative Collection, MS 481, box 51, University of Arizona Special Collections, Tucson.

Figure 5.18. Homer Shantz, photograph, Boojum trees, Mexican garden, azu_shantz_19320707_z_3_m Homer Shantz Negative Collection, MS 481 Box 53, University of Arizona Special Collections, accessed November 8, 2020, http://uair.library.arizona.edu/item/286364
Figure 5.19. Copy photograph, Charles Herbert with Western Ways staff, MS 1255, box 3, folder 31A Activity–Offices, Arizona Historical Society, Tucson.

Figure 5.20. Copy photograph, Lillian Herbert with magazines, MS 1255, box 3, folder 37 Activity–Publications, Arizona Historical Society, Tucson.

Figure 5.21. Color transparency by Charles Herbert, Tucson Home with Picture Window, ca. 1947, MS 1255, Neg. Group C, B3, Arizona Historical Society, Tucson.


Figure 5.23. Photograph, moving giant cactus, final digging, 1939, MS 1255, Negative Group B, B2, Arizona Historical Society, Tucson.

Figure 5.24. Photograph, moving giant cactus, putting mattress, 1939, MS 1255, Negative Group B, B2, Arizona Historical Society, Tucson.

Figure 5.25. Photograph, moving giant cactus, arches view, 1939, MS 1255, Negative Group B, B2, Arizona Historical Society, Tucson.

Figure 5.26. Photograph by Maynard Parker, living room mural installation, Eleven Arches, 1939, Maynard Parker Collection, Huntington Library, accessed November 8, 2020, http://hdl.huntlib.org/cdm/compoundobject/collection/p15150coll5/id/16384/rec/8

Figure 5.27. Photo offset negative, Cabat-Gill Advertising Company, logo, Cabot-Gill Collection, Tucson Historic Preservation Foundation, Tucson.

Figure 5.28. Brochure, Lazy K Bar, living room b/w, with picture window framing a saguaro view, Cabot-Gill Collection, Tucson Historic Preservation Foundation, Tucson.

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Figure 5.30. Brochure, Lazy K Bar, living room pink walls, with picture window framing a saguaro view, courtesy of Russell True.

Figure 5.31. Photograph, Mural Room dining room, El Presidio Hotel, B3F28, box 3, MS 1255, Western Ways. Arizona Historical Society, Tucson.

Figure 5.32. Menu cover, El Presidio Hotel Mural Room, Cabot-Gill Collection, Historic Preservation Foundation, Tucson.

Figure 5.33. Postcard, “Cactus Bar, Salome Van’s, Salome, Arizona,” Frasher Fotos, ca. 1939, from the author’s collection.
**Figure 5.34.** Realphoto postcard, Herb Wood Cacticraft Cactus Furniture, Tucson, Arizona, ca. 1947, from the author’s collection.

**Figure 5.35.** Photograph mounted in saguaro rib frame. Photograph by U.S. Forest Service, ca. 1930. Frame by William Bucher, 1932. NMAH AG 124450.06 cat. 50, 19, National Museum of American History, Smithsonian Institution, Washington, D.C.

**Figure 5.36.** Color transparency by Charles Herbert, desert dioramas, MS 1255, Photo negatives, group C, B3, Arizona Historical Society, Tucson.

**Figure 5.37.** Completed Knauff saguaro diorama under glass, from the author’s collection.

**Figure 5.38.** Copy photograph, campus cactus garden arroyo east of Main building, ca. 1937, folder 2: gardens-cactus gardens photographs, N-7385, University of Arizona Special Collections, Tucson.

**Figure 5.39.** Copy photograph, man inspecting vandalized saguaros, campus cactus garden, 1952, folder 2: gardens-cactus gardens photographs, 4264-6, University of Arizona Special Collections, Tucson.

**CHAPTER SIX: LIBERTIES TAKEN**

**Figure 6.1.** Brochure cover, Mesa, Arizona, In Arizona’s Valley of the Sun, ca. 1940, from the author’s collection.

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**Figure 6.4.** Realphoto postcard, “Saguaro Lake Ranch, Mesa, Arizona,” postmarked 1945, from the author’s collection.

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Figure 7.3. Photograph, Mary Thorbecke and Roy Drachman, 1941. Photograph by Charles Herbert. MS 1255 Negative Group B, B2, Cactus Gags, Proof A., Arizona Historical Society, Tucson.

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Figure 7.27. Photograph, Desert Chill party, Instagram, Palm Springs, 2019 Manifold and D’ana Nunez https://www.wearemanifold.com/work/instagram-at-coachella-desert-chill/

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Figure 8.10. Photo album cover, copper embossed, ca. 1970, from the author’s collection.

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Proceedings of the Desert Laboratory on Tumamoc Hill, University of Arizona

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