

An important chapter in Mexico's forest history is told through the life of Miguel Angel de Quevedo, Mexico's tireless conservation crusader and a contemporary of American conservation leader Gifford Pinchot. A professionally trained engineer who took up forestry issues after observing forest and watershed devastation across his country's varied landscapes, Quevedo influenced many aspects of society and earned the nickname "Apostle of the Tree." His efforts coincided with tumultuous political events and seesawing efforts at economic and constitutional reform.

"IT IS TO PRESERVE LIFE, TO WORK FOR THE TREES"

*THE STEWARD OF MEXICO'S FORESTS,
MIGUEL ANGEL DE QUEVEDO, 1862–1946*

The life of Miguel Angel de Quevedo opens a window to a critical chapter in the forest history of Mexico. A civil engineer by training, Quevedo came to recognize the important role of forest cover in Mexico's economic life as well as its environmental wellbeing. Throughout his lengthy career, he

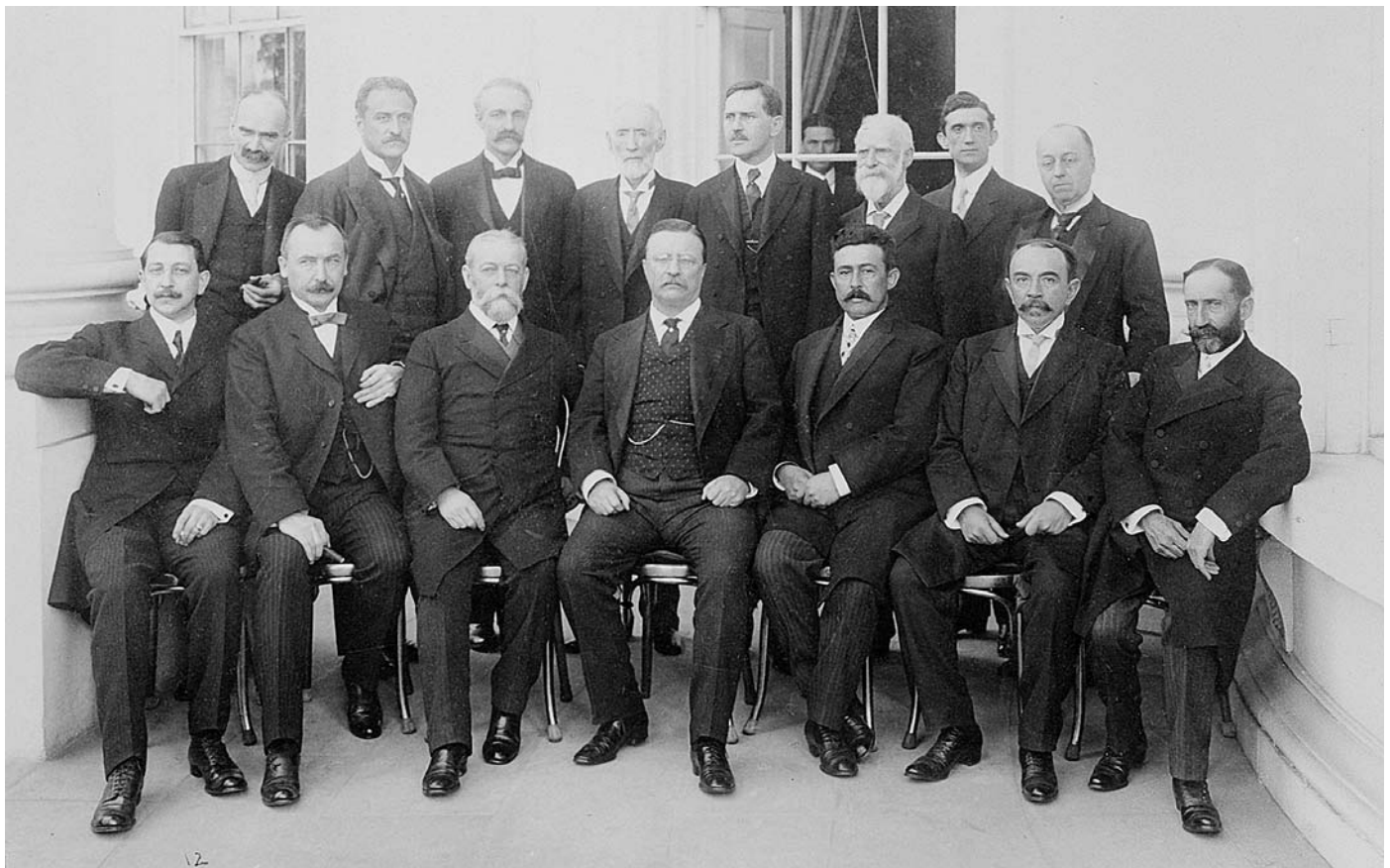
remained an unyielding and dedicated believer in the need to plant trees and understanding the functions of forests for the benefit of his countrymen. Between 1900 and 1940, he established the nation's first forestry school, helped create its first national parks, headed its first autonomous forestry department, started a museum of flora and fauna, and turned his own property into a national tree nursery. His accomplishments rival those of his American counterpart and contemporary Gifford Pinchot, with

one notable difference: Quevedo worked in the midst of Mexico's revolutionary chaos.

THE NINETEENTH CENTURY IN MEXICO

During the last three decades of the 1800s, Mexico achieved stability through dictatorial rule and liberal European-style development. This stability, however, had not been easily won. The

BY EMILY WAKILD



COURTESY OF LIBRARY AND ARCHIVES CANADA (C-016966)

Attendees of the North American Conference on the Conservation of Natural Resources gather after a luncheon hosted by President Theodore Roosevelt. Gifford Pinchot is standing third from left, President Roosevelt is seated at center, and Miguel Quevedo is seated at the far right.

years following Mexico's independence from Spain in 1821 were characterized by European entanglements and splintered domestic aspirations. Divisions between states' rights supporters and proponents of strong executive powers in Mexico prevented the adoption of a cohesive constitution; meanwhile, proposals were made to retain a European monarch, although no European royalty accepted the offer.

From 1824 to 1864, the country changed presidents forty-five times and squandered resources, most of all its own territory. Following the Mexican-American War (1846–1848), a humiliating loss for the militarily and economically superior Mexicans, Mexico sold half its territory (what is now the states of Texas, New Mexico, Arizona, and California, as well as parts of Colorado, Nevada, and Utah) to the United States for \$15 million.

After the war, with its landholdings halved and its national treasury depleted, Mexico quickly sank into internal armed conflict. Liberals desired a secular state of small landholders and the abolition of separate court systems for the military and Catholic Church contingents. Conservatives believed Mexico needed to retain and restore many aspects of the colonial structure, with special considerations for the role of the Church. Liberal interests succeeded in producing the federalist Constitution of 1857, which set out to remove the vestiges of corporate privileges from the colonial period and to create a liberal and productive society. Among other things, the Constitution laid the groundwork for dissolving the two largest landholding groups, the Catholic Church and indigenous populations,¹ and in doing so, triggered the onset of *La Reforma*, the War of the Reform.

The conservative clergy, military, and landowners fought the liberals, but the latter prevailed and in 1861 elected Benito Juárez as president of Mexico.² The Juárez government believed that redistributing land would create a nation of yeoman farmers and productive citizens. The policy provoked a conservative backlash that turned into full civil war. The conservatives received aid from French troops dispatched by Napoleon III, set up a parallel government that controlled central Mexico, and installed the Austrian emperor's brother, Maximilian, as the ruler of Mexico in 1864. When Juárez and the liberal troops defeated the conservative forces three years later, Juárez was returned to power. He remained president until his death in 1872. He was ultimately succeeded by Porfirio Díaz, whose dictatorship lasted from 1876 to 1911.

Although the liberals intended to promote small, productive agriculturalists, their policies did just the opposite. The liberal government embraced material progress and the exploitation of natural resources, throwing open the land to large capitalist interests. Under Díaz's policies, environmental degradation accelerated as control of industry and land was consolidated. The former indigenous and Church lands went to capitalists and investors, many of them foreign. By 1910, three hundred families controlled half of Mexico's land; seventeen people controlled twenty percent of the country. Exactly how native lands were privatized is not yet well understood, but the ecological effects were widespread.³ Large plantations and single-crop industries, particularly henequen (used for rope) on the Yucatán peninsula, soon enslaved thousands of Mexicans in all but name. Lands were overgrazed, leaving them at risk of soil erosion. National projects such as



The Plaza Constitución in Mexico City around 1927. This photograph shows how urbanized the city was at the time Miguel Quevedo was campaigning for tree planting in cities.

railroads and mines were pursued at the expense of local populations and dramatically altered the environment. Workers clearcut forests to provide timber for industry, but the expected sustained economic development never came.

Violence, destruction, disintegration, and conflict over not just the political landscape but also the physical one characterized every decade after independence. It is no wonder that to a civil engineer like Miguel Angel de Quevedo, rational scientific solutions to societal problems held enormous appeal. The land had become a victim of the vicious social conflicts, and Mexico's natural resources were depleted. The time was ripe to effect a change in policy and attitude toward the environment.

BUILDING A CAREER ON PROGRESS

Miguel Angel de Quevedo had been born in Guadalajara in 1862 at the height of *La Reforma*. The son of a wealthy family, he had opportunity for education despite the political turmoil enveloping his country. His mother died when he was young, and in 1880, after his father died, Quevedo and his younger brother went to Paris to live with their uncle. After considering the priesthood, he instead followed the calling of his older brother and pursued engineering.⁴ He studied mathematics at the Institute Polytechnique in Paris and later graduated from the prestigious École Nationale des Ponts et Chaussées as a civil engineer. In addition to classroom training, he learned scientific theory from scientists like Louis Pasteur and received practical advice from Paul Laroche, a French engineer working on the Suez Canal. In France at that time, as one historian has noted, "the environmental services of forests were clearly recognized. The link between deforestation and flooding was well accepted, and foresters, engineers, agronomists, and scientists considered forests a vital part of the nation's

infrastructure, too important to be left in the hands of backward mountain peasant communities."⁵

Quevedo returned home to Mexico in 1888 and quickly found an outlet for his newly acquired engineering skills. The Díaz presidency was a prosperous time, particularly for those with scientific leanings, investment capital, and faith in order and progress. The government used the liberal reform of property rights laws to attain political stability and economic expansion.⁶ Financed largely by foreign investment, Díaz engaged scientific experts and engineers to spur development and promote modernization of the Mexican infrastructure. Díaz believed that structural changes must come first; only then could democratic political reforms follow.

Advisers and government officials, known collectively as *Los Científicos* (The Scientists), oversaw the civil works. Railroad engineers, land surveyors, and urban economists strived to remake the country into a model of refined liberal society. They emulated European cultural and scientific achievements by laying thousands of miles of railroad tracks, erecting modern buildings, and conducting a national land survey. New theaters, opera houses, and green spaces appeared in Mexico City.⁷

The reforms under Díaz's dictatorship gave Quevedo an opportunity to develop his career and philosophy. He spent his first years of professional work developing drainage systems, designing railroads, and supervising harbor construction—activities that taught him about the hydrologic role of forest cover. Quevedo witnessed the destructive effects of erosion caused by a lack of vegetation and became convinced that forests were crucial to a stable society. The careful conservation and reforestation of Mexico's woods, he concluded, could solve numerous other environmental problems by improving watersheds, providing clean air, and preventing urban diseases.⁸



MILTON K. LOCKWOOD COLLECTION, FOREST HISTORY SOCIETY PHOTO COLLECTION

Chapultepec Park in Mexico City, around 1927. Chapultepec is a forested urban park in the center of the city dating to the Aztec era. Some of Miguel Quevedo's work centered on the construction and preservation of urban forests and parks at the time this photo was taken.

Quevedo's next professional experience, working on Mexico City's Grand Drainage Project, solidified in his mind the importance of reforestation. Mexico City had originally been built on a small island in the middle of a complex of lakes, high on the central plateau of the country. As the city grew and the water was drained, the lakes shrank, but the city was nevertheless subject to annual flooding. A sophisticated drainage network was needed to help bring the city up to modern standards.

To address the problem, the Díaz government constructed a permanent drainage system for the valley surrounding Mexico City. Quevedo's education and sensibilities dovetailed perfectly with European standards and Díaz's goals. The project supervisor, who was also the secretary of the treasury, hired Quevedo as an auxiliary engineer. No project before or since—neither the early Aztec dikes that divided the lakes nor Enrico Martínez's open canal through the mountains in 1697—approached the ambitions and aspirations of the Grand Drainage Project.

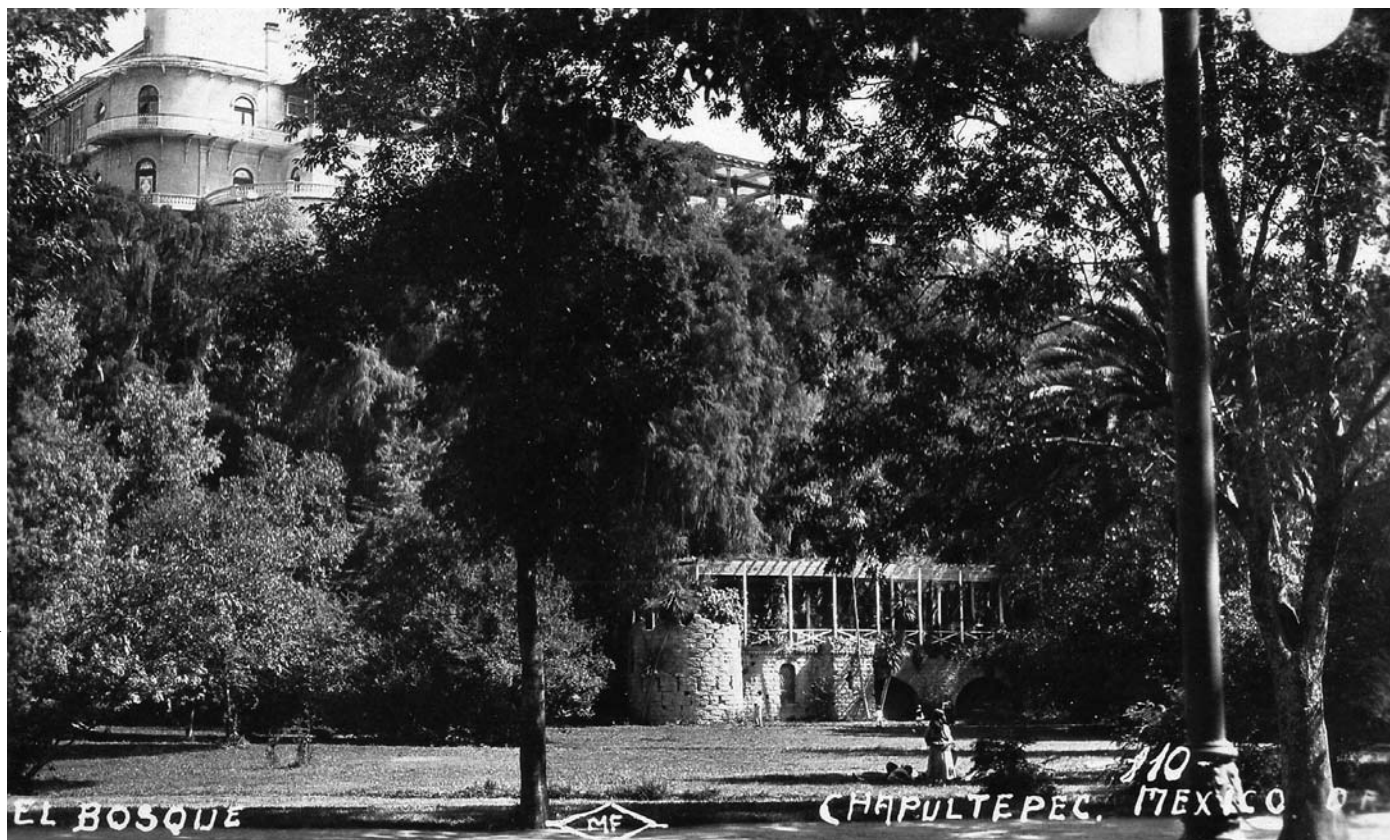
Initiated in 1886, the project would create a system of dikes and holding tanks for excess water, erect barriers for overflow, and provide general drainage. The undertaking included a thirty-mile canal with four aqueducts and bridges, a six-mile tunnel of brick and Portland cement, and a one-and-a-half-mile cut through mountainous terrain.⁹ The project used 22 million bricks, 25,000 cubic meters of mortar, and 1.5 million meters of lumber. Moreover, it was the single largest project undertaken by the Díaz government and one of the earliest reclamation projects in the Western Hemisphere. Taking fifteen years to complete and using up one-third of the national treasury, it was the culminating effort of the Díaz regime to control nature around the capital city, legitimize the rule of Díaz, and reinforce the need for a powerful governmental apparatus rooted in scientific management.¹⁰ Yet even this colossal effort could not halt erosion or end seasonal

flooding of the capital. A few short months after concluding the project in 1901, pestilent waters again coursed through the city's streets and avenues.

Quevedo worked on the project only a short time. He was nearly killed when he was thrown from a pushcart while supervising the drainage works and was assigned elsewhere after he recovered.¹¹ Nonetheless, his brief involvement profoundly shaped his views: if the greatest efforts of the federal government and trained engineers could not redirect the valley's floodwaters, he concluded, perhaps the soil needed to be held in place with the roots of trees. Quevedo henceforth turned his efforts to planting trees.

His next major assignment carried him to the port city of Veracruz, on the Gulf of Mexico, toward the end of 1889. He was the first engineer in Mexico specifically trained in marine works, so he oversaw the construction of a large dike at the entrance to the harbor. While there he met Adolfin Carraray Cevallos, whom he married in 1892. In Veracruz, he concluded that the region's disastrous floods "were, to a large extent, the result of indiscriminate exploitation of coastal forests." Quevedo applied this hypothesis to the rest of the country, which was experiencing widespread soil erosion as farmers cleared forests to plant crops.¹²

Revitalizing Veracruz lay in the future, however, as did most of Quevedo's work in forest conservation. In the 1890s, Quevedo continued his engineering work by creating the infrastructure necessary for modern industry. Working for various private enterprises, he designed a railroad route that traversed the city from north to south and developed earthquake-resistant cigar factories and hydroelectric power for textile production.¹³ But his interest in forestry continued, and when Quevedo attended the First International Congress on Public Hygiene and Urban Problems in Paris in 1901, he absorbed European ideas on urban forestry.



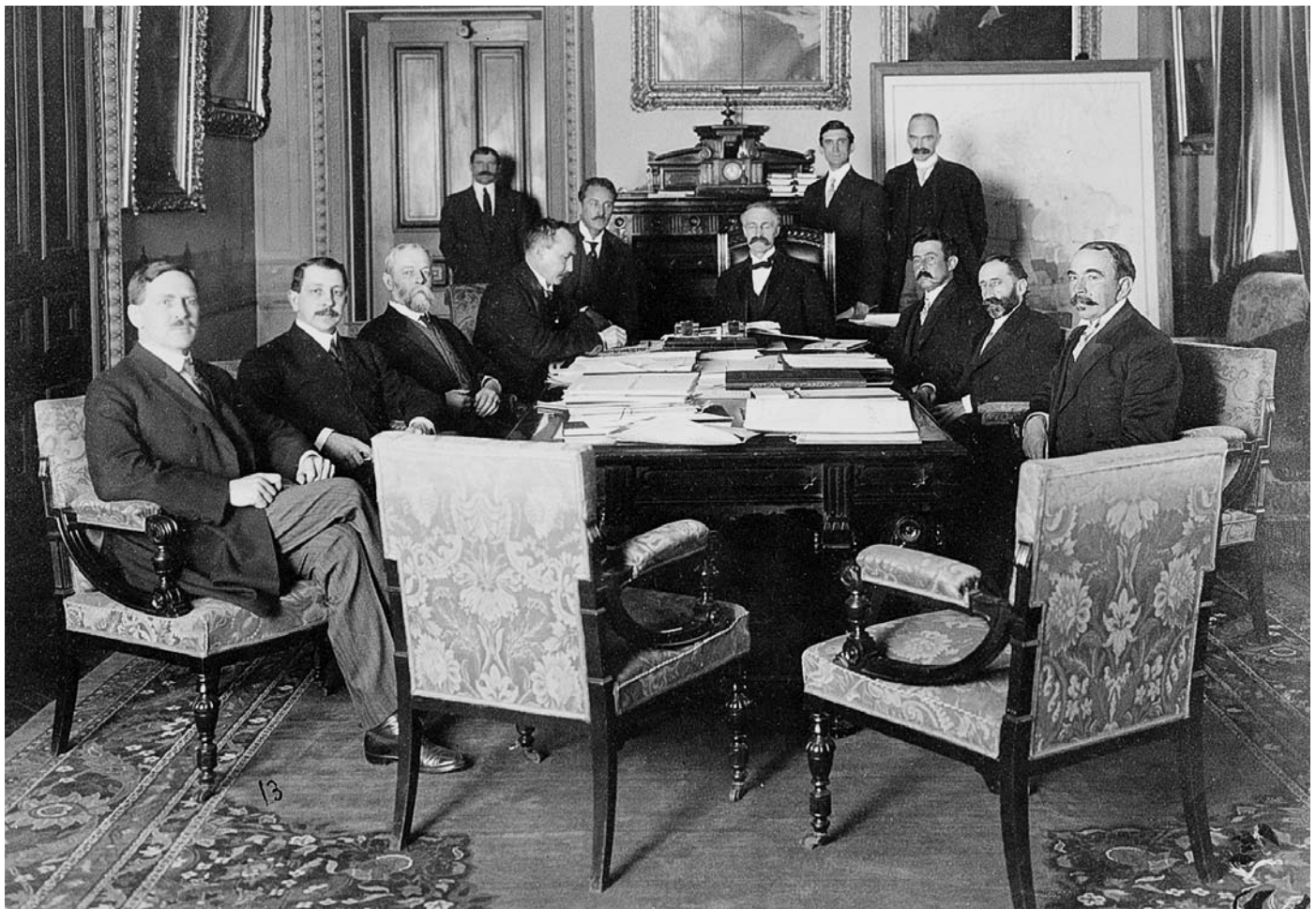
El Bosque ("The Forest") in the Chapultepec in Mexico City, around 1927. This forested urban park has served as the home of national leaders since the 14th century. Miguel Quevedo argued that parks like this one were vital for maintaining the health of city residents.

He heard from many delegates that in healthy cities, gardens or public parks comprised at least fifteen percent of the land. Convinced, he returned home and began his pursuit of planting forests to improve the urban environment.

In 1901, Quevedo took a job with the Mexico City public works department and began envisioning how to turn the capital of his country into a hygienic model city. Based on his training and experience, the connection between trees and clean air and healthy cities seemed logical.¹⁴ With his tree-planting campaign, Quevedo quickly engineered a change in the urban landscape, from less than two percent tree cover to more than sixteen percent by 1910.¹⁵ He also accomplished some social engineering in the process: recreational parks dispersed through a variety of neighborhoods rehabilitated deviant citizens by exposing them to nature. Quevedo further believed that kindergartens, or *jardines de niños*, prepared small children for proper citizenship and advocated that all schools have gardens or plazas with vegetation because children needed fresh air and room to play. Quevedo later reflected on the spectacle of the city's children, who had once played in unsightly alleys and now amused themselves among the greenery at school and near their homes: "Their physical conditions improved by playing in the neighborhood parks free of obstructions and shaded by beautiful tress where they could breathe, at last, pure air."¹⁶ For his efforts, newspaper mogul Felix Fulgencio Palavicini dubbed him "Apostle of the Tree." The nickname perhaps further motivated Quevedo to pursue forest conservation. It was certainly appropriate, given his mystical view of forestry. On more than one occasion he proclaimed, "Forestry—it is to me as a religion."¹⁷

Quevedo's crusade attracted other people who shared his passion. In December 1901, Quevedo and a group of scientists formed the *Junta Central de Bosques*, a forestry board that would lobby on behalf of forests. The *Junta* was the first forestry organization in Mexico dedicated to forestry conservation and reforestation. The group chose Quevedo as its president, and he served in this capacity until the group was disbanded during the Mexican Revolution a few years later. In conjunction with his work with the *Junta*, Quevedo established Mexico's first forestry school in 1908. He staffed it with French professors because of the lack of Mexican foresters. Located in a part of southern Mexico City known as Santa Fe, the school was open for six years and had thirty-two students when revolutionary upheaval caused it to close in 1914.

When Quevedo established a second forestry school in the 1930s, he again based its rigid and militaristic structure for training the next generation of forestry engineers on his own school experience in France. In the 1930s, to prepare a corps of engineers for forestry work within three semesters at the new forestry school, he based the curriculum on the motto "honor, decorum, and discipline." More than anything, Quevedo believed that young engineers should have their "forest spirit" fostered by careful education and technical experience. Only when the younger generation understood the myriad benefits provided by trees could they undertake a vocation of such importance.¹⁸ Equating foresters to doctors—both, he argued, were responsible for the health and wellbeing of humanity—Quevedo sought to encourage young people to enter the profession for the greater benefit of Mexican society and economy.¹⁹



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At Gifford Pinchot's urging, President Roosevelt invited representatives from Canada and Mexico to the North American Conservation Conference to "consider mutual interests involved in the conservation of natural resources." Miguel Quevedo is second from right, and Gifford Pinchot is seated at center.

Perhaps because his wife was from Veracruz, Quevedo had strong ties to the port city and continued thinking about its problems after leaving there in the early 1890s. Veracruz was then known as the unhealthiest city in the world. Its surrounding swamps were breeding grounds for mosquitoes carrying yellow fever and malaria. Quevedo learned at a 1907 conference in Berlin that European scientists advised creating forest zones around cities and using forests to drain swamps. After Quevedo toured some of these works in Europe, he believed he had found the solution for Veracruz. Upon his return to Mexico, he convinced the government that draining Veracruz's swamplands by planting trees would create artificial dunes and result in a cleaner and healthier city.²⁰ Quevedo secured funding to administer the project. In ten years' time, a tree nursery created atop an artificial dune produced seven million trees, including species introduced to Mexico for the first time.²¹ Veracruz soon returned to being a bustling—and hygienic—port city.

In February 1909, Quevedo attended the North American Conference on Conservation of National Resources in Washington, D.C., at the personal invitation of Gifford Pinchot—a man with a strikingly similar personal background and career trajectory. The conference represented an important attempt at international collaboration for resource management on the North American continent. The United States, Canada, and

Mexico agreed on international standards for forestry and signed an accord emphasizing cooperation as the means to the three nations' future prosperity.²² Back home, Quevedo continued to promote the diverse benefits of forests and recommended to the government conservation approaches that were neither strictly utilitarian nor preservationist. He advised protecting forests of high biological diversity on national lands and acquiring critical private lands to reforest and administer. He wanted to regulate cutting on private lands and provide seeds and instructions for reforestation. The Díaz government followed many of Quevedo's recommendations by establishing the first forest reserve, in the state of Hidalgo, and creating a protected forest zone around Mexico City to help prevent flooding and erosion.²³ But the achievements of the forestation programs, forest preservation organizations, and international collaboration proved ephemeral when revolutionary turmoil again broke out across Mexico.

REVOLUTIONARY INTERRUPTION AND RENEWAL

There are many reasons why the Díaz dictatorship ended in upheaval, but most historians agree that inequities in wealth and power played a crucial role. Problems associated with uneven progress and the vast disparity in incomes had slowly festered for three decades. In his memoirs, Quevedo provided his own

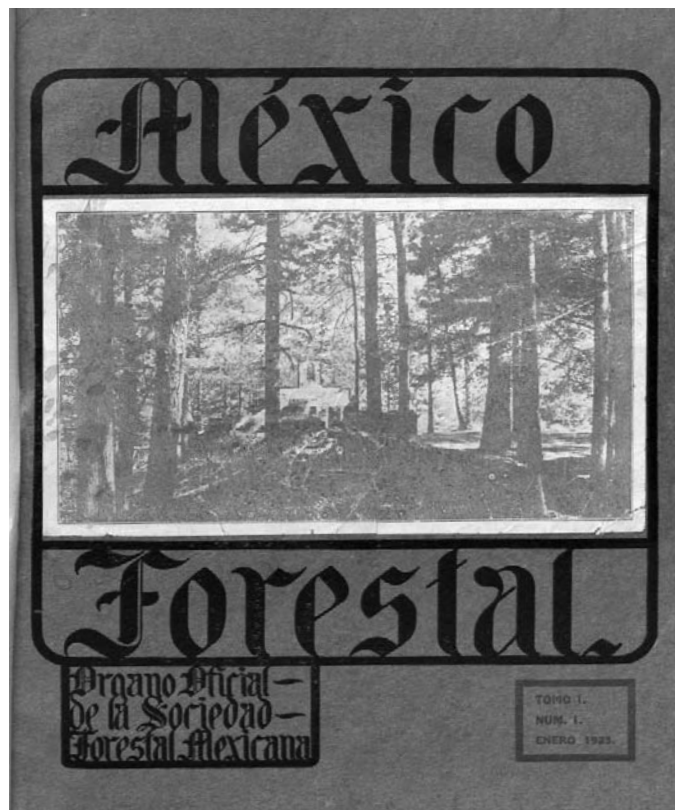
explanation while revealing some of the prejudices typical of elite society: "The country was out of balance. The upper classes that made up the government of President Díaz had all the character of an aristocratic group dominating the dirty and poor masses."²⁴

In November 1910, Francisco Madero, an agronomist trained at the University of California-Berkeley and a large northern landowner with paternalistic sympathy for farm laborers, led an uprising against Díaz, who had refused to let Madero run against him in a presidential election. Madero and his forces quickly forced the dictator into exile. He became the provisional president and set about instituting domestic reform, but the widespread support for change deteriorated into a decade-long bloody fight between populist armies over which leader and what ideas should shape Mexico. With more than a million fatalities, the armed insurrection, which even spilled into the United States, brought the most sustained, violent, and radical revolution ever on the North American continent.

Despite the revolutionary chaos, during his fifteen-month tenure President Madero supported Quevedo's forestry and conservation work, including the health initiatives and the idea of creating a tropical forest reserve in the territory of Quintana Roo on the Yucatán peninsula. But then Victoriano Huerta, a former government surveyor, overthrew Madero and conspired in his murder in February 1913.²⁵ Quevedo's relationship with the new president exemplified the abrupt political shifts during the revolution. When Huerta briefly took control of much of the country, he proved hostile toward Quevedo and his work. Huerta transplanted trees from the city's green areas onto his own property and sought to turn a forested former monastery in southwestern Mexico City into a casino. When Quevedo learned that his name was on an assassination list, he closed the nation's first forestry school and went into voluntary exile, traveling to Europe to learn more about urban parks.²⁶

Quevedo returned from exile after Huerta's assassination in 1917. Soon after, the death of his wife from Spanish fever left him devastated. He traveled to Veracruz and to his dismay found that the occupying armies had destroyed the extensive tree stands he had created and that peasants had cut trees and branches for cooking fuel.²⁷ Disappointed but not discouraged, Quevedo held out hope that the new administration would reinstitute his earlier programs.

The new government of Venustiano Carranza backed his policies. Carranza's government received approval for the Constitution of 1917, which included concessions for labor, education, and natural resources. The most relevant section for natural resources, Article 27, called for a national economy based on the managed use of natural resources along with provisions for land reform.²⁸ That same year, Quevedo persuaded Carranza to establish the nation's first national park. Named *Desierto de los Leones* (Desert of the Lions) and located on the southwest edge of Mexico City, the park encompassed a former Carmelite monastery set among forested hills. Containing nearly four thousand acres of pine and fir trees, the area had long been a cool and refreshing forest oasis for the urban residents. Although circumstances were improving for forest protection, the political chaos was not over. Two more presidential administrations ended in assassination, and alliances continued to shift and realign. But after a decade of fighting, armed revolt became less problematic in the 1920s.



The first issue of *México Forestal*, the forestry journal established by the Mexican Forestry Society under Miguel Quevedo's leadership, appeared in January 1925.

Working to make up for lost time, Quevedo inserted forestry provisions into many aspects of the revolutionary government. In 1924, he helped create the Mexican Forestry Society, a reincarnation of the earlier *Junta*, which began publishing a forestry journal, *México Forestal*. The society retained Quevedo as the acting or honorary president until his death in 1946 and at his request adopted the motto "Es preservar la vida trabajar por el árbol" ("It is to preserve life, to work for the trees.") By 1926, the society had successfully lobbied Congress to approve the most far-reaching piece of legislation ever written for forests in Mexico. The Forestry Law of 1926 authorized the creation of national forest zones, promised national parks, and pledged the creation of a forest service and the reestablishment of the forestry school along with multiple nurseries. The law also regulated private forestry activities by requiring property owners to submit use plans. It signaled action, but its emphasis on punitive measures rather than on prevention, coupled with the reality of a bankrupt and war-ravaged nation, made fulfillment difficult.²⁹

Under Quevedo's leadership the Forestry Society established Arbor Day as a national holiday for educational purposes. The annual celebrations, which involved schoolchildren and soldiers in planting trees, sometimes lasted a week and took place all over the country.³⁰ In 1932, at festivities held in Chapultepec Park, outside the presidential residence, students pledged to "defend the tree, conserving and promoting our forestry resources." In subsequent celebrations participants sang the *Hymn of the Tree*. Even the U.S. embassy got involved, symbolically planting a seedling from a tree at George Washington's Mount Vernon.³¹ Quevedo's role in these celebrations was not always direct, but



MILTON K. LOCKWOOD COLLECTION, FOREST HISTORY SOCIETY PHOTO COLLECTION

Logging operations in southern Mexico in the 1920s. Milton K. Lockwood, from whose collection most of the photos illustrating this article are drawn, was an American forester who toured the Mexican states of Oaxaca and Chiapas in the 1920s.

he certainly popularized the idea of forest conservation among educated urbanites and to create the cultural and physical space necessary for public tributes to trees.

THE IDEALIST BECOMES A BUREAUCRAT

If in the 1920s Quevedo wielded significant power behind the scenes to spread his conservation ethic, in the 1930s he participated directly in governance to ensure its continuance. New opportunities for resource management arose with constitutional changes and reform laws that gave the government a firm political foundation. A national political party was created whose first six-year plan for development promised strategic and comprehensive vision.³² General Lázaro Cárdenas handily won the 1934 presidential election as the *Partido Nacional Revolucionario* (National Revolutionary Party) candidate. A successful general in the revolution, Cárdenas invited Quevedo to head the new independent Department of Forestry, Fish, and Game.³³ Now seventy-two years old, Quevedo repeatedly turned down the assignment until convinced that the president was serious about conservation. Quevedo assumed the directorship and quickly found himself in a cabinet-level position with many new tasks. Building on Article 27 and the Forestry Law, the Cárdenas government's six-year plan called for unprecedented government intervention in the management of national resources. Promising the creation of national parks, nurseries, and educational services, the six-year plan and the new department were just the instruments Quevedo needed to make his efforts national in scale.

Over the next six years, Quevedo worked to establish the reputation of his department and to fulfill its charge. The

Department of Forestry, Fish, and Game made significant improvements even though it received less than half of the requested funding. A small cadre of workers created forty national parks to protect various national treasures and strategic resources. They planted two million trees in the Valley of Mexico and another four million throughout the country. The department established tree nurseries across the country, adding almost three hundred new tree nurseries in six years and over four thousand tree nurseries in conjunction with public schools.³⁴ Quevedo turned former bars and casinos in Chapultepec Park into the Museum for Flora and Fauna, and he solicited samples of trees and plants from around the country to display in the refurbished buildings.³⁵ More than seven thousand people, including the U.S. ambassador to Mexico, were said to have visited the museum daily when it first opened. To further his commitment to education while attempting to infuse the public with his forest conservation spirit, Quevedo gave public lectures on Thursdays.³⁶

These efforts significantly increased the amount of forest cover in Mexico as well as public awareness of forestry issues, but political obstacles to Quevedo's work remained. The conservation campaign of the 1930s coincided—and clashed—with another important national project, land reform. Many Mexicans had fought in the revolution because of the inequalities they had endured during the Díaz dictatorship, and now they wanted rewards for their service and loyalty. The Cárdenas government redistributed land taken from foreign owners and domestically held large holdings by creating communally held plots known as *ejidos*. Cárdenas redistributed nearly twice as much arable land to peasants than all his predecessors combined, and more than two million people received more than thirty million hectares by 1945. Nearly ten thousand

people a month gained access to land.³⁷ This earned Cárdenas the reputation as “a president of the people.”

Cárdenas’s reputation rested on the successful creation of a one-party state with a strong corporatist structure. He opened membership of the once-elitist party of military and political leaders to peasants, union members and leaders, and public employees. Doing so enabled him to control large and disparate segments of the population. One author has termed this “regimented empowerment,” meaning that Cárdenas used the state bureaucracy to curry favor with the masses and virtually eliminate rival parties.³⁸

Quevedo’s clashes with the Cárdenas government over land use ultimately led to the former’s removal. Emphasis on forests and forest protection quickly proved discordant with a revolutionary government that based its legitimacy on increasing agricultural production. Quevedo’s “environmental protectionist attitude toward forest conservation” put him at odds with the government.³⁹ Cárdenas was all too willing to embrace short-term economic gains at the expense of long-term natural resource planning in order to consolidate the peasants into his powerbase. Longtime forest dwellers (*campesinos*) were offended by Quevedo’s predilection for European techniques and dismissive attitude toward traditional Mexican practices. Agriculturalists accused Quevedo of limiting their possibilities for expansion by prohibiting the conversion of forests to cropland. His desire to protect temperate forests in the central part of the country, which had the densest population, increased the competition for those resources among many different social groups. The clashes revealed the complex nature of determining and establishing natural resources management in even the most stable political times.

The elite, educated class from which Quevedo came no longer determined the economic or social course the country would take. Instead, a corporatist state that included rural peasants, urban workers, and trained bureaucrats made the political and economic decisions. Cárdenas’s land reform policies were not mutually exclusive of Quevedo’s work, but toward the end of his presidential administration, they became increasingly incompatible. Although Quevedo served ably, his respect for the citizens, particularly lower-class Mexicans, turned to deep disdain toward the end of his life. He believed the public had a lot to learn about conservation. His faith in science and belief that government must be swift, strict, and strong in enforcing conservation laws made him an enemy of many state governors and agriculturalists and did not fit into the populism of Cárdenas’s politics. To shore up his position, Quevedo made allies with the national army and sought its help in enforcement.⁴⁰ Not surprisingly, many peasants objected to the strict antilogging policies of his department and appealed to the president, citing their critical need for forest products.⁴¹ Quevedo had no sympathy for such pleas. Although Quevedo had unwavering support from his own social class and from the foresters he had trained, his popularity with the populace soon reached its nadir. In a newspaper article on the front page of a major Mexican daily, *El Excelsior*, Quevedo was said to have called for the death penalty for people who cut down trees; the writer predicted the countryside would witness a massacre if such a policy actually existed.⁴²

As Quevedo lost favor in public opinion, the president faced hard choices. Forests were not the only resource that required attention. In the spring of 1938, Cárdenas settled a labor dispute

by nationalizing all petroleum reserves in a high-profile move, but the national treasury suffered severely. The rapid accumulation of complaints against Quevedo from peasants, recipients of land reform parcels, and various state governors caused Cárdenas to rethink the political utility of a man who had worked for the dictatorship and publicly denounced the revolutionary government’s main constituency.⁴³ When Quevedo said that if the first forestry law in 1909 had not been disregarded, there would be less need for restrictive measures in the 1930s, it was more than the president would tolerate.⁴⁴ In early 1940, President Cárdenas decided the country could no longer politically or economically afford the Department of Forestry, Fish, and Game. Shocked, Quevedo felt betrayed that the president had not solicited his opinion on the matter. Nonetheless, the department was folded into the Department of the Agriculture.

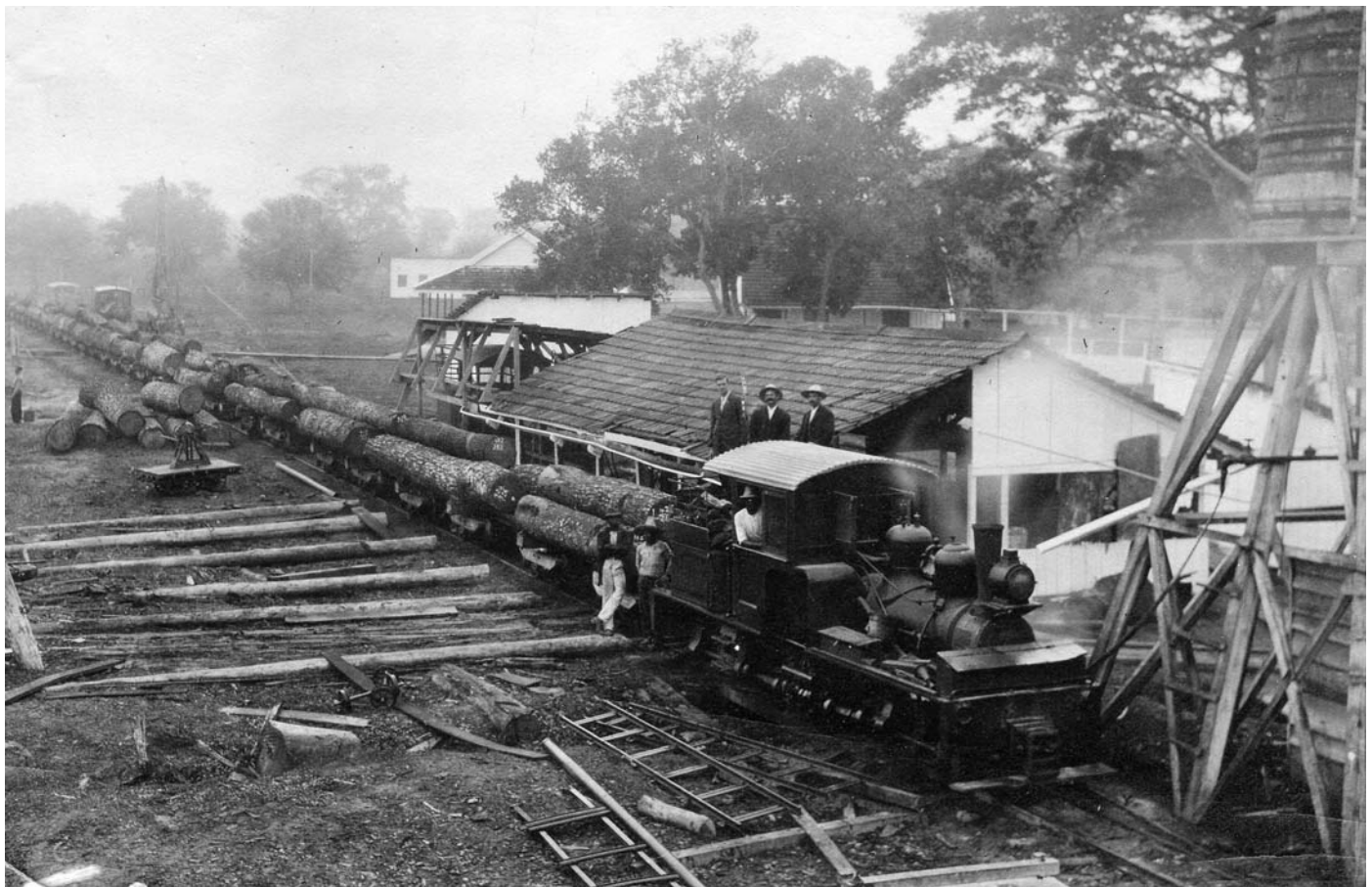
In December 1940, the nation embarked on a new path under a new president, Manuel Ávila Camacho, who favored industrialization and development at the expense of rational natural resources management. Quevedo quietly stepped out of the public arena, making only a few appearances to receive several lifetime achievement awards. He spent his last years in the tree nurseries and parks that he loved, still involved in the Forestry Society and convinced that the work of Mexican forestry was not over; indeed, it had barely begun. Quevedo died of bronchial pneumonia at his home on July 15, 1946.⁴⁵

LEARNING FROM THE LEGACY

Miguel de Quevedo had dedicated his life to preserving the forests of Mexico. He believed that the true wealth of his homeland was its varied temperate and tropical trees, not in the agricultural lands so valued by revolutionaries. His commitments to promoting environmental planning and education took place against the backdrop of a radically changing society. Quevedo used his scientific training and employment by the Díaz dictatorship to develop ideas about conservation. After the long, violent decade of revolutionary change that followed Díaz’s fall, Quevedo found a place in the new political agenda and continued on his crusade. Nearly every activity that involved forest conservation in Mexico during the first three decades of the twentieth century had some connection to Quevedo. He published prolifically and made numerous public speeches, and his admirers, particularly in the National Forestry School, revered him as a patriarch.

The consistency of his message over his long career transcended numerous dictatorships and revolutions. Despite many obstacles, Quevedo remained remarkably constant and energetic, centering on his near-sentimental dedication to trees. He promoted ideas about forest conservation and rational land management, injecting these issues into the national government’s agenda time and again. He worked to protect and restore forests and to develop the public’s appreciation for them, believing that trees would give stability and security to a nation investing in the future. In the end, consistent adherence to his message may have been his political undoing, as the times passed him by and his conservation crusade fell out of favor.

His achievements—designing parks, protecting forests, organizing celebrations, fostering discussions, establishing federal authority, and stimulating awareness of the role of trees in the environment—were certainly as radical in Mexico as any of the



MILTON K. LOCKWOOD COLLECTION, FOREST HISTORY SOCIETY PHOTO COLLECTION

Workers pose at a milling operation in southern Mexico in the 1920s. One of the obstacles Miguel Quevedo had to overcome in his conservation campaign was that of indiscriminate and often illegal logging.

other social reforms of the revolution. Quevedo's work for forestry conservation was nothing less than remarkable, but his pioneering work has little recognition. His name remains in the national consciousness largely because of a subway stop and an avenue named for him in the capital, not because his legacy is well known. Unlike Gifford Pinchot, his fellow conservation crusader, there is no national forest or state park that bears Quevedo's name, nor is his home the site of any institute that furthers the causes for which he stood. Unlike those of his American counterpart, Quevedo's efforts did not lead to federal land management, nor did he spark a lasting national conservation movement or widespread public interest in natural resources.

But there is still a lot to learn from Quevedo's efforts. His argument that the connections between human health and forests—that if trees were not revered, cities lost their habitability—transformed the national landscape. His vision of a Mexico where citizens had access to green oases and the government protected the nation's natural heritage has champions among many sectors of today's society, yet deforestation remains a pressing nationwide problem. Mexico's annual loss of forest cover is nearly equal that of the forty national parks created by Quevedo. The federal government has made only modest progress in checking forest exploitation in the decades since his death and has done little to enforce laws that would reduce illegal logging or change development policies that lead to overharvesting and forest destruction by marginalized populations—all problems that date back to the Díaz presidency. If the government hopes to address the issue

of deforestation today, it would be well served by recalling the forest conservation crusade led by Mexico's "Apostle of the Tree." It was a life best summed up by American tropical forestry pioneer Tom Gill: "Engineer by profession, conservationist by temperament and conviction, he remained essentially the crusader throughout a long and richly productive life."⁴⁶ □

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ENDNOTES

1. Spanish colonial law gave Indians the right to communal land and forests. Although on the surface the policy seems benevolent, the law enabled the colonial government to extract tribute.
2. Juárez was Latin America's first indigenous president.
3. Emilio H. Kourí, "Interpreting the Expropriation of Indian Pueblo Lands in Porfirian Mexico: The Unexamined Legacies of Andrés Molina Enriquez." *Hispanic American Historical Review* 82(1) (2002): 69–117.
4. Miguel Angel de Quevedo, *Relato de mi vida* (Mexico, 1942), 4.
5. Dan Klooster, "Campesinos and Mexican Forest Policy during the Twentieth Century," *Latin American Research Review*, 38(2) (2003): 99–100.

6. For an assessment of how liberal changes affected forest policy, see Herman W. Konrad, "Tropical Forest Policy and Practice During the Mexican Porfiriato, 1876–1910," in *Changing Tropical Forests: Historical Perspectives on Today's Challenges in Central and South America*, Harold K. Steen and Richard P. Tucker, eds. (Durham: Forest History Society, 1992).
7. William Beezley, *Judas at the Jockey Club*, 2nd. ed. (Nebraska: University of Nebraska Press, 2004). Their philosophy was rooted in the positivist thought of Auguste Comte, who believed societies progressed along a predictable trajectory, steadily evolving from prehistoric to medieval and finally to modern. See also Claudia Agostoni, *Monuments of Progress: Modernization and Public Health in Mexico City, 1876–1910* (Calgary: University of Calgary Press, 2003); Paul Garner, *Porfirio Díaz: Profiles in Power* (Great Britain: Pearson Education, 2001); and Charles Hale, *The Transformation of Liberalism in Late Nineteenth-Century Mexico* (Princeton: Princeton University Press, 1989).
8. Gilberto Serrato, "Algunos antecedentes acerca de la campaña de protección forestal en México y breve relato de las actividades desarrolladas por la Sociedad Forestal México, C.L." *México Forestal* 17 (July–December 1939): 62–66.
9. Jonathan Kandell, *La Capital: The Biography of Mexico City* (New York: Random House, 1988), 371.
10. Emily Wakild, "Naturalizing Modernity: Urban Parks, Public Gardens and Drainage Projects in Porfirian Mexico City," *Mexican Studies / Estudios Mexicanos* 23(1) (Winter 2007), 101–123.
11. Quevedo, *Relato de mi vida*, 11. Also see: *Report on the Valley Drainage Works and Sanitation Works of Mexico City, November 1, 1896* (Mexico City: Junta Directiva del desagüe y saneamiento, 1896); and Manuel Perló Cohen *El paradigma Porfiriano: Historia del Desagüe del Valle de México* (México: Instituto de Investigaciones Sociales, Miguel Ángel Porrua, 1999).
12. Marvin D. Crocker, "Forest Policy in Post-Revolutionary Mexico: 1917–1943," in *History of Sustained-Yield Forestry: A Symposium*, edited by Harold K. Steen (Santa Cruz, Calif.: Forest History Society, 1984), 360.
13. Quevedo, *Relato de mi vida*, 28.
14. Miguel Ángel de Quevedo, *Espacios libres y reservas forestales de las ciudades: su adaptación a jardines, parques, y lugares de juego: Aplicación a la Ciudad de México* (México: Gomar y Busson, 1911).
15. Lane Simonian, *Defending the Land of the Jaguar: A History of Conservation in Mexico* (Austin: University of Texas Press, 1994), 72–73.
16. Quevedo, *Relato de mi vida*, 36; and Wakild, "Naturalizing Modernity," 118.
17. Tom Gill, "Miguel de Quevedo (1862–1946)," *Journal of Forestry* 45 (February 1947): 126.
18. "Plan de estudios en vigor para la escuela de guardería forestal y de caza y pesca," *Boletín del Departamento Forestal y de Caza y Pesca*, 1 (February–April 1936): 214–16.
19. Miguel Ángel de Quevedo, "Alocución del jefe del Departamento Forestal y De Caza y Pesca, Ingeniero Miguel A. De Quevedo, al iniciarse las primeras clases en el Instituto De Enseñanza Forestal y De Caza y Pesca, El 6 De Mayo De 1936," *Boletín del Departamento Forestal y de Caza y Pesca*, 1 (May–August 1936): 211–14.
20. Simonian, *Defending the Land of the Jaguar*, 75.
21. Julio Riquelme Inda, "En Memoria XXII Aniversario del fallecimiento del Sr. Ing. Miguel Ángel de Quevedo," *México Forestal* 32 (July–August 1968): 65.
22. Gifford Pinchot, *Breaking New Ground*, commemorative ed. (Washington, D.C.: Island Press, 1998), 361–66.
23. Simonian, *Defending the Land of the Jaguar*, 75–78.
24. Quevedo, *Relato de mi vida*, 47.
25. Perhaps in premonition of the repression to come, Quevedo planted trees to honor the fallen heroes Madero and Pino Suarez. Quevedo, *Relato de mi vida*, 49.
26. Simonian, *Defending the Land of the Jaguar*, 78. Hoping to encourage a different type of recreation, this former monastery is the same area that later became the first national park.
27. Occupying armies included both sides of the civil war—the Constitutionalists and the Conventionals—as well as the U.S. Army, which occupied the port in 1914.
28. For Quevedo's opinion on Article 27 and its contribution to future forestry legislation, see Quevedo, "Proyecto de Plan Sexenal 1934–40 en lo relativo a la protección forestal del territorio," *Boletín del Departamento Forestal y de Caza y Pesca*, 1 (September–October 1935): 5–29.
29. Christopher Boyer, "Conservation by Fiat," in *Environment of Greater Mexico*, edited by Eric Van Young, forthcoming; and Klooster, "Campesinos and Mexican Forest Policy," 100.
30. For one of many examples, see Lorenzo Magaña, March 4, 1938: Archivo General de la Nación (hereafter AGN), Presidential Collection, Lázaro Cárdenas del Río (hereafter LCR) box 103 file 135.2/179.
31. "Asistieron delegados de varias instituciones y los centros educativos" *El Excelsior* (Mexico City), February 19, 1932.
32. Gilberto Bosques, *The National Revolutionary Party of Mexico and the Six-Year Plan* (Mexico: National Revolutionary Party, 1937), 29.
33. Cárdenas proposed to his wife in an orchard and later relocated the presidential residence to an estate known as *Los Pinos* ("The Pines"), the equivalent of the Mexican White House. See Emily Wakild, "National Concern for Natural Resources: Planning Mexico's National Parks," American Society of Environmental History/National Council Public History Annual Conference, Victoria, British Columbia, March 31–April 4, 2004. In 1946, the National Revolutionary Party changed its name to the *Partido Revolucionario Institucional*, its current name.
34. Simonian, *Defending the Land of the Jaguar*, 90–92.
35. "Interesante exposición en el museo de flora y fauna," *Protección a la Naturaleza*, 3 (September 1938), 6.
36. Quevedo, *Relato de mi vida*, 69–72.
37. Dana Markiewicz, *The Mexican Revolution and the Limits of Agrarian Reform, 1915–1946* (Boulder: Lynne Rienner Publishers, 1993), 15; and Arturo Warman, *El campo mexicano en el siglo XX* (México: Fondo de Cultura Económica, 2001), 66. For a brief but useful analysis of the Cárdenas era, see Alan Knight, "Cardenismo: Juggernaut or Jalopy," *Journal of Latin American Studies* 26 (1994): 73–107. By comparison, by 1940 only 654,597 hectares of land had been set aside for national parks.
38. Christopher Boyer, *Becoming Campesinos: Politics, Identity, and Agrarian Struggle in Postrevolutionary Michoacán, 1920–1935* (Stanford: Stanford University Press, 2003), 15, 225. This structure proved solid; Cárdenas's political party underwent two name changes but retained its grip on power, selecting the president for the next seventy-six years.
39. Klooster, "Campesinos and Mexican Forest Policy," 100.
40. For one example, see Pedro Rochin Segovia, March 6, 1939: AGN, Secretary of Agriculture and Hydraulic Resources Collection (Secretaría de Agricultura y Recursos Hidráulicos) Forestry Policies (Política Forestal), box 1462, file 21/3671 volume 1.
41. Miguel Morales, February 18, 1939: AGN, LCR box 1121, file 702.1/2.
42. "No cesa aun la tala de arboles en los bosques," *El Excelsior*, February 12, 1935.
43. Firso Espinosa, Guadalupe Rosas and Salomé Romero, March 14, 1939: AGN, LCR box 561, file 502/12.
44. Miguel Ángel de Quevedo, complaints from *campesinos* about forest conservation, October 18, 1938: AGN, LCR box 593, file 508.1/463.
45. Obituary, *New York Times*, July 16, 1946, p. 23.
46. Gill, "Miguel de Quevedo (1862–1946)," 126.