

Settlement and Ecology of New Spain's Northern Frontier

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As you read this overview, you may follow the course of settlement on the accompanying map on page 14.

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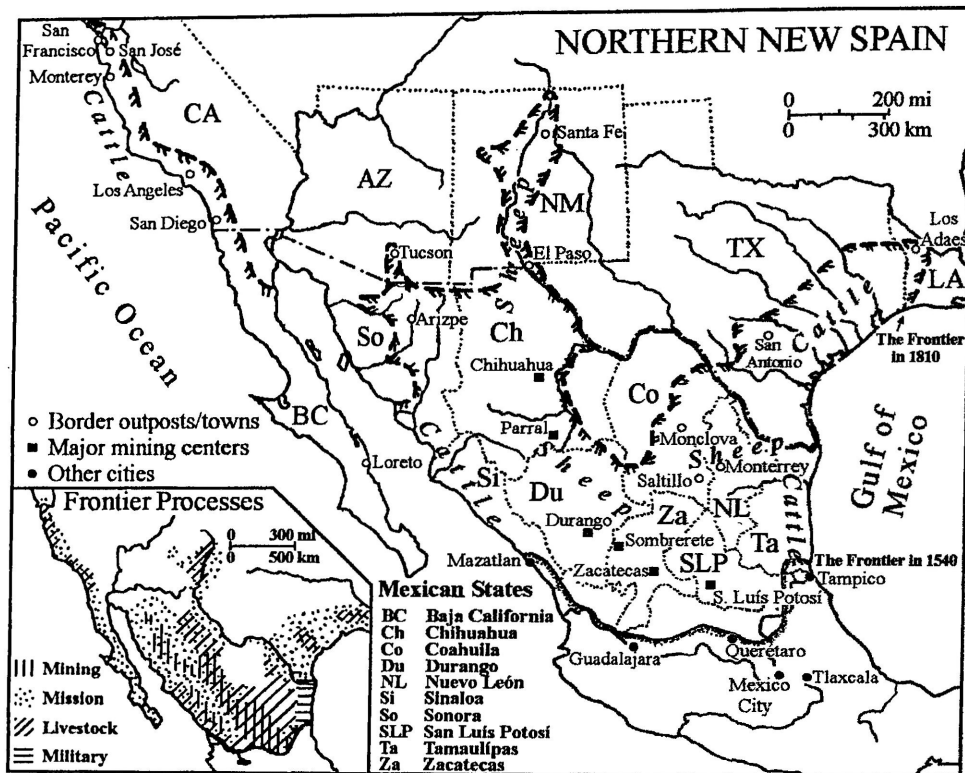
The Spanish colonial legacy in the U.S. borderlands varies from one region to another, despite the familiar interplay of missionaries, soldiers, and settlers in each expansion of New Spain's northern frontier. This reflects different time frames for colonization, shifting government priorities, surging or ebbing missionary zeal, and the initiative of the "movers" involved, some coming from Spain, others with deep roots in the New World. But equally important was the ecological experience of less prominent planners and the settlers themselves, most of whom came from defined staging areas, each with its own, distinctive historical trajectory.

In 1540, the year of Coronado's *entrada* into the Southwest, New Spain's frontier lay roughly north of a line drawn from Mazatlan on the Pacific Ocean, to Guadalajara and Querétaro, and from there to the Gulf of Mexico at Tampico. Four centuries later, that frontier had moved 600–2,300 km farther north, creating a variety of Hispanic-indigenous societies and regions. These not only maintained their distinctiveness with respect to later, Euro-American settlement, but differed fundamentally from the old colonial heartland, rooted in the populous, indigenous agricultural societies of central and southern Mexico. "Northern" New Spain was a vast region with highly diverse environments, very low to modest population densities, and only restricted areas with sedentary, native farmers. Land was plentiful, labor scarce, mining bonanzas possible, and water often in short supply. The frontier, moving northwards in fits and starts, was ever transformed organically, in a fluid compromise between incentives and possibilities, and between rural and urban components.

The first move to the interior was driven by the search for mineral wealth, beginning with Coronado's abortive attempt to find gold and large populations of Indians in Arizona and New Mexico. Led by Basques and assisted by guides, the prospectors were more tenacious, moving through "unexplored" territory. The silver was discovered in 1548, quickly drawing miners and merchants, and indigenous and African to generate unprecedented capital. Most mines were located in a few decades, but several attracted

advanced mining technologies and repeated reinvestment. Adjacent to agricultural land, these grew into a chain of distinctive mining cities, graced by impressive architecture, stretching northwestward from Zacatecas (1549) and San Luis Potosí (1591) to Durango (1563), Parral (1631), and Chihuahua City (1718). In 1554, Zacatecas already had 1,300 Spanish miners, soon complemented by 800 African slaves and 1,500 Indians, mostly wage-labor. Even smaller mining camps demanded a steady supply of grains and meat-on-the-hoof, providing an impetus for land grants and growing rural properties in adjacent areas. Whereas mining camps in the western Sierras soon disappeared, those on the more productive piedmonts drew in government and church administration, as well as permanent settlement. The mining centers contributed significantly to the early formation of the mixed-race classes that became the demographic hallmark of northern New Spain. By the late-18th century, most people there were part Spanish, part Native American, and part African. This was a new society, with decidedly multicultural roots.

The second dynamic was that of the missionary orders, dedicated to conversion of the indigenous peoples, in contrast to the "secular" clergy, which ministered to multi-ethnic communities in urban parishes. When the Franciscan order lagged in its response to initial expansion of the mining frontier, the Jesuits created a new field of missionary activity far ahead of the military frontier, in the northwest. Culturally sensitive, they established and administered a successful network of mission pueblos in the northern Sierra Madre, Sonora, and Baja California. Part of the credit for the enlightened practices must go to the limited preconceptions of influential Eusebio Kino and other Jesuits from the Italian and Austrian Alps. The Franciscans, emulating the Jesuits in New Mexico during the 1600s, fared poorly, and their subsequent missionizing in Texas and Alta California was done hand in hand with the military. Unlike the Jesuits, the Franciscans regimented their indigenous congregations, attempting to acculturate and transform them into farmers on the Spanish colonial model. The mission frontier was ephemeral, as miners, ranchers, or settlers inevitably followed the clergy, competing for the



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same resources. They disrupted the social structure of indigenous peoples and introduced new epidemic diseases that decimated the Indians in repeated outbreaks. Eventually the declining missions were turned over to secular clergy and integrated into existing town parishes.

A third type of frontier emerged in northeastern Mexico, with a mix of spontaneous settlement and government sponsorship. In southern Coahuila, a few stockraisers established ranches in the 1570s to supply food, with the manual labor of African slaves, for the various mining camps in the semiarid interior. When the warring "Chichimecs" agreed to settle in return for steady provisioning, the government induced 400 families of Tlaxcalan Indians from central Mexico to settle around San Luís Potosí, Somborere, and Saltillo in 1591, to serve as role models for the newly sedentarized Chichimecs. As Spanish allies in the conquest of Mexico City, the Tlaxcalans had special privileges that allowed them to form autonomous communities in the north. Here they introduced irrigation, farming, and orchards of Spanish fruit trees, creating garden oases that soon had to resist Spanish usurpation through constant litigation. Proverbial for their industry and probity, the Tlaxcalans of Saltillo expanded to found over a dozen daughter settlements in Coahuila and Nuevo León, 1598–1733, while maintaining their identity through ethnic endogamy. In great demand for their craftsmanship, Tlaxcalans also played a critical role on the frontier as weavers, shoemakers, wheelwrights, and even stone masons, build-

ing the 18th-century cathedrals of San Luís Potosí, Zacatecas, Chihuahua, and Saltillo.

The Nuevo León colony was different again. The king appointed Luís de Carbajal governor in 1579, but he and his 300 henchmen turned to slave-hunting among the indigenous peoples of the northwest, to sell to the mines. Executed in 1590, he left a disreputable colony mired in bitter warfare with the Indians. A fresh start was made with a new, enterprising governor in 1626, Martín de Zavala, born to a Spanish miner at Zacatecas. Zavala brought in 150 Spanish settlers and decided to promote the lush winter pastures of the region, where grasses were not dormant due to hard frosts and winter drought as in central Mexico. Beginning in 1633, a long-distance migration system was set in motion. Each autumn, up to 15 major treks, often accompanied by a hundred shepherds and personnel, headed 800 km north to Nuevo León, returning to central Mexico after the spring lambing season. The magnates who owned these great flocks, numbering a

million sheep in 1715, were rewarded with liberal land grants, so that they could use assigned pasturage. This gave the colony an economic base and reduced grazing pressures in central Mexico, where both irrigation farming and the wool industry were expanding. Eventually, resident stockmen in Nuevo León also acquired sheep, in large numbers, in part moving them between winter pastures in the tropical lowlands and summer grazing in the mountain valleys. But this "vertical" migration and its "horizontal" counterpart from central Mexico were curtailed by the settlement of Tamaulipas. Local stockraisers then switched to non-migratory goats, putting greater pressures on Nuevo León's pasturage by 1800.

Although seasonally exploited by great flocks of sheep, Tamaulipas (Nuevo Santander) remained hostile Indian country until 1748. That year, José Escandón, a Spanish officer already notorious for crushing indigenous resistance, began the largest and most methodical colonization project ever. An unprecedented 10,000 colonists permanently settled 24 new town-sites in 20 years. Most of the prime land was granted in freehold to communities of small farmers, mainly landless people from Nuevo León and San Luís Potosí. Each of the initial families settling these grid-plan towns received approximately 600 ha of arable land and 10,500 ha of pasture for livestock. This generosity was in sharp contrast to previous practice in northern New Spain, where land had been almost exclusively granted to the elite. Indeed, in Coahuila most land

had been consolidated into a single hacienda, the largest of the hemisphere, by 1800. It also contrasted with the mission frontier, especially as controlled by the Franciscans, where the congregated Indians were share-croppers and little better than serfs.

Tamaulipas was the only "military frontier." As an agent of government, the military facilitated the processes of frontier colonization particular to a time and place. Until the 1700s, defense or offense were managed by local militias and relatively small detachments of regular troops. The later, Bourbon presidios became an instrument of settlement in their own right, but within the larger fabrics outlined above. Common soldiers stationed in such fortified precincts were drawn from the ethno-economic underclass, and practiced local farming and stockraising, acquiring families that lived directly adjacent. Most presidios exposed to serious attack were small and had little lasting impact, but larger ones contributed their own *barrios* in the consolidation of new urban nuclei. More than anything, the presidios—too few, too small, and rarely proactive—exemplified the degree to which hostile indigenous peoples continued to control vast stretches of country and constrained frontier expansion.

Turning to Spanish settlement efforts north of the contemporary border, the first such enterprise was led by Juan de Oñate, the son of a Basque conquistador. The mines of Zacatecas and Durango provided both the necessary capital and some 500 colonists for the 1598 *entrada* into New Mexico. The disappointed settlers soon deserted, leaving Oñate to impose a harsh regime on the Pueblo Indians, paralleled by Franciscan regimentation of their communities. The Puebloans were irrigation farmers, but the Spaniards appear to have organized larger water-supply systems and eventually left a legacy of rules for water allocation. The 7,000 head of mixed livestock driven up the Río Grande by Oñate had economic impact beyond the settlers and the Puebloan communities. By the late 1600s, the Navajo had become sheep-raisers and wool weavers, while the horse began to revolutionize hunting and warfare on the Great Plains. Of the introduced plants, only wheat, melons, and grapes acquired importance. Cultural repression led to a bloody revolt in 1680 that destroyed the colony. With the reconquest in 1692–96 came new settlers (114 families from central Mexico) and livestock. Recovery of the sheep population was slow, but in the 1790s, 15,000 head were driven yearly to the mines of Chihuahua and Durango, 80,000 in 1835; numbers varied sharply according to weather and Indian hostilities. A census of 240,000 sheep in 1827 shows that exports were based on a small breeding stock. While the sedentary Indian population of New Mexico remained stable, near 10,000, non-Indian numbers increased rapidly from 4,000 in 1744 to 45,000 in 1840, suggesting

substantial indigenous absorption into a new provincial society.

Colonial Texas, like New Mexico, began as a mission frontier in 1690, buoyed by reformed Franciscan zeal and triggered by government fears of French encroachment, following the demise of La Salle's 1685–87 colony on the Texas coast. Spanish mission stations in east Texas after 1690 were ephemeral, but a presidio population of 500 had evolved at Los Adaes (western Louisiana, 1721–73), before it was unwisely abandoned. South Texas was drawn into the Escandón colony after 1748, with river-front farms on the Río Grande north bank, and mainly sheep raising on land grants that eventually reached to the Nueces River. But most important was San Antonio, a presidio colony since 1718, the focus of mission pueblos since 1730, and a Canary Islander town in 1731. The presidio settlement, drawn largely from northern Coahuila, numbered 200 by 1726, soon augmented by 25 civilian families and 56 "islanders." The Indian mission population peaked near 1,500 in the 1750s, but then declined due to poor health, lagging recruitment, and intermarriage in the multi-ethnic town. About 1810, there were some 800 sedentary Indians and 7,000 non-Indian residents in Texas. An experienced "islander" canal-builder, with a legal background, laid out the first part of the irrigation system and its water rules, but a limited water supply slowed San Antonio's growth. Both the missions and townspeople engaged in extensive cattle raising, with stock driven to Louisiana markets by 1770. Although feral cattle and horses replaced the declining bison, there may have been 100,000 semi-controlled cattle and 40,000 horses in central Texas by 1806. San Antonio remained the most influential Hispanic borderland town, even after large-scale Anglo settlement began to transform the Texas landscape in the 1820s.

The mission frontier in Alta California systematically targeted the coast from San Diego to San Francisco Bay in 1769–76, driven by missionary zeal and government concern about Russian activities in Alaska. The growing number of Franciscan mission pueblos was anchored in a handful of strategic presidios and eventually towns. But the California Indians had no experience with agriculture, and the missions faltered until 150 settlers were introduced from Sonora in 1774 and presidio soldiers provided much needed labor. By 1810, after crops had been adjusted to the different climates and small-scale irrigation had been effected in the south, production of wheat, maize, and beans by 20,000 sedentarized Indians and 2,300 non-Indians was substantial. Cattle-raising became important, its products exported in the form of hides and tallow, the missions owning 140,000 head in 1834, with 130,000 sheep and 15,000 horses and mules (compared with a California livestock count of 6.1 million in 1890). Horses were in fact slaugh-

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tered to preserve pasture. Economically, the missions dominated Alta California until their dissolution in 1834–36. That opened up 3.2 million ha of prime land, the Mexican government soon awarding 700 land grants, including first settlement in the Central Valley.

Borderland settlement in the Spanish colonial era was primarily directed by the missionaries, with indigenous peoples providing most of the muscle everywhere except in Texas. But the surprisingly small numbers of settlers, derived from northern New Spain, were critical for the diversity of skills and experience they contributed. The first borderland colony, in New Mexico, failed. The resettlement of New Mexico after 1694, as well as the permanent settlement of Texas (1718) and California (1769), drew on 150 to 200 years of “frontier” experience by the missionaries, and by soldiers and colonists who had already acquired a new indigenous status in el Norte. In a colonial world stifled by ethnic and economic rigidity, the “frontier” allowed social mobility based on merit and, in the borderlands, increasing access to farm plots.

Agriculture became an eclectic mix of European and American crops, tried and tested. Colonial planting was mainly in irrigated fields, which did not lead to soil erosion. Population densities in the American borderlands around 1810 averaged less than 0.24 persons per square kilometer (0.54 persons in the Mexican border states), qualifying

both areas as “wilderness” by the U.S. Census definition of 1890. But by 1890, densities rose to 3.13 in the U.S. border states, compared with only 1.45 in the Mexican equivalents. In fact, deforestation was well-advanced in Anglo-Texas a generation before the forests of northern Mexico were tapped for railroad ties.

That prime Spanish introduction—livestock—allowed settlement and survival where labor was extremely scarce, and generated capital through export to distant markets. The ecological suitability of cattle to the tropical lowlands of Old Mexico was projected into the 19th-century cattle industries of Texas and California, while the more meager pastures of dry, interior Mexico favored sheep, the animal that enhanced the quality of Puebloan and Navajo life, and allowed New Mexico to prosper. The politically correct axiom that colonial livestock devastated the environments of northern New Spain is contradicted by the evidence “in the field.” In 1890, grazing pressures in California were 3 times higher, in New Mexico 5 times, and in Texas over 10 times higher than in late Spanish colonial times (determined by comparing the numbers of “large” and “small” stock and the numbers of hectares settled or utilized). Combined with barbed-wire fencing and non-mobile stock-raising since the 1880s, it was these later grazing pressures that first provoked range deterioration.

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