

Guide to Mexico Route 15, Nogales to Alamos[©]

By David Yetman

Alamos is an improbably lovely town nestled between a rugged, maverick, outlier mountain, the Sierra de Álamos, and the foothills of the Sierra Madre Occidental. Silver was discovered there in about 1680 and fabulous amounts of the precious metal were extracted over the next 250 years, making fortunes for a few families who remain prominent to this day. (The author Luis Alberto Urrea is one such descendent.) Álamos lies about 420 miles southeast of Tucson. The town has a population of about 10,000, the municipality of which it is the seat, about 25,000.

Nogales. Nogales, Sonora, is a city of nearly 400,000 people, by most estimates. The name means “walnuts” in Spanish. The most convenient border crossing is on Mariposa Boulevard to the west of the most populated part of the city. Visitors need not stop. Instead, the highway heads west and south, bypassing most of the city. From here the road travels through a rapidly developing (deteriorating) part of Nogales. Trucks are often lined up for a long distance, waiting to bring produce and assembled consumer goods into the United States. Along the highway, cut into hills of coarsely cemented rock and sand, you will see expanding shanty towns of newcomers, hoping to find jobs in the assembly plants but having nothing to live in. Because the maquiladoras pay no taxes, the government has no money to provide housing, water, electricity, sewerage and paving to these poor barrios. Gradually, over the years, the houses are improved and become permanent. Water and electricity eventually arrive.

If you watch the highway cuts you will notice that they consist of unconsolidated sediments which are easy to bulldoze but will not be stable for long. These are young soils, deposited during the last million years or so, laid down in the hillsides and valleys as the soils of adjacent mountains are worn down by wind and water. During heavy rains, landslides are a problem along this stretch/

After three miles or so the highway passes through a toll both and then through an inspection point. If your vehicle is greeted with a red light that says “Revisión” you will be inspected, probably not very thoroughly.

The area is congested with northbound trucks that face Mexican inspections here. Soon you notice that the highway is passing through a descending valley. Although the valley is frightfully overgrazed (notice the “slumping” or terraces on hills to the left caused by trampling on the hillsides) you can imagine how picturesque it was a hundred years ago. At that time Nogales was only a ranch; there was no border town. Then in the 1880s US interests (Southern Pacific) constructed a railroad to Guaymas, Sonora’s best port, to give better shipping access to the southwest United States. Nogales subsequently developed into a border city. Limited water availability is an ongoing problem.

The blue and white pipelines you may see on the left (east) are the water lines for the City of Nogales, which pumps water from this basin to more affluent Nogales residents. The valley residents are convinced that Nogales is sucking away their water. Some also maintain that the beneficiaries of the water line have not been poor Nogales residents, but rather new subdivisions promoted by powerful politicians.

The dominant tree you see in this, the valley of the Río de los Alisos (alisos=sycamores), is Emory oak (Quercus emoryi), which gives an edible acorn and yields excellent firewood. Mesquite is also quite common here, possibly a mark of continued overgrazing for many decades. These trees are on private ranches. Otherwise, they would long since have been cut down. Some Mexican blue oak (Quercus oblongifolia) grows here as well but is inferior firewood. As of the year 2000, more than half of Nogales, Sonora, homes cook with firewood or charcoal.

Kilometer 21. The place is called Kilometer 21 but is actually located at about Kilometer 14. You will stop here for Mexican tourist cards (visas). It takes but a few moments. You must present your passport or birth certificate as proof of US citizenship. There is no charge for the visa if you remain for seven days or less. Vehicles traveling beyond Sonora must also obtain a permit, a process that usually takes roughly a half hour. Pay toilets are available.

Behind the buildings to the southwest, amid all the trash, are nice specimens of the white-barked Sonoran cottonwood, the *güerigo* (*Populus monticola*), the northernmost specimens known, probably planted. Also, you will see some walnut trees. Numerous flycatchers dart up from the wires. Try not to look at all the trash. As you leave the inspection area you may pass gentlemen and ladies requesting donations to the Mexican Red Cross. These are possibly legitimate. Other collectors are scam artists.

The road continues its gradual descent of the valley for another twelve miles. To your right is the Sierra Cíbuta (Cíbuta in the Pima language means “top knot of quail”). To the west of the sierra lies an abandoned mine named *el real de arizónac* from which the state of Arizona gets its name. At one time there were pines on the mountain, but they have long since vanished.

Soon you encounter the first of many speed humps, called *topes*--a plague of Mexican highways--and will pass through the village of Cíbuta, which existed when the Spanish arrived. On the left side through the valley are *ejidos*, communally owned lands, generally parceled out to poor peasants. On the right side the property, much richer and better watered, is privately owned.

As the valley narrows you will pass through a canyon called Las Angustias (the narrows) and may see the waters of the Río Magdalena. This canyon seems to be a dividing line for some vegetation. Those with especially sharp eyes will spot an organ pipe cactus far up on the right as you leave the canyon. Others will have to wait another fifteen miles.

At Km 238 you will see a sign that says Rancho La Bellota. (Bellota =Emory oak.) At Km 222 you pass by Rancho los Alisos. At Km 221 you pass through La Mesa del Romero = Rosemary Mesa. At K 217 you pass Estación Cumeral=Hackberry Station. On your left in the distance, you may spot the Sierra Azul (Blue Range), one of Sonora’s highest peaks at slightly over 8000 feet. Farther south you pass several enormous greenhouses, these are tomato factories whose product is exported to the U.S. and Canada.

Ímuris. At Km 206 you arrive in Imuris (EE mu ris). This was the southernmost Pima Alta village, old when Father Kino passed through in about 1690; its name means “raven’s wings.” Pimas were related to present-day Tohono O’odham and Akimeli O’odham in Arizona. You climb a small hill to the mesa on which the town is situated. On your right are a couple of restaurants with good food. A short way beyond, to the east (left) a highway winds up through canyons and mountains to the mining town of Cananea and past a ruined Kino mission at Cocóspara. The dramatic, perhaps melodramatic, monument at the intersection marks the completion of the highway. Revolutionary art. At the bottom of the hill, you will cross a bridge over the arroyo Babasac (“cottonwood in the water” in the Opata language). Townspeople here claim that the *quesadilla* was invented by a woman from Jalisco who until around the year 2000 still ran her little restaurant, Doña María. It is on your right as you ascend the hill.

From here south nearly to Hermosillo was Ópata (OH pa ta) country (the boundary between them and the Seri Indians to the west was variable).

The Ópatas occupied much of central and eastern Sonora and left behind many place names. However, they accepted Spaniards with relatively few rebellions, (perhaps because they were beginning to experience raids from Apaches and thought a liaison with Spaniards would help deter them). They intermarried and were absorbed into the Spanish/Mestizo culture. The Ópata culture has been officially extinct for a century, although some villages still celebrate Ópata fiestas without understanding that they are Ópata in origin. (Cucurpe, thirty miles southeast of Magdalena de Kino, does this.).

As you drive up the hill leaving Ímuris, you will notice on the left a couple of places selling funeral monuments made of a local volcanic rock called *cantera*. They were originally owned by brothers who quarreled and were for years vicious competitors. As you continue up the hill you will see organ pipe cacti (*Stenocereus thurberi*) on the right side, growing along with many ocotillos (*Fouquieria splendens*) that enjoy limestones. To the left you will see the long Sierra de Madera (Wood Range) that reaches nearly 7000 feet.

Magdalena de Kino. The highway now descends slowly into the valley. If you pass through the toll station (comparatively clean toilets are available) you will bypass Magdalena de Kino but will have a brief glimpse at a superb forest of youthful saguaro cactus, a grove that continues for more than forty miles to the southeast. Imagine the number of saguaros sacrificed for the right-of way. A highway also heads southeast to Cucurpe on the Río San Miguel. On the way there in a steep canyon is a huge grove of native palms (*Brahea nitida*), only 50 miles south of the U.S. border.

You will probably bypass Magdalena, but if you take the route through the town, you will pass a turnoff (north, right) to the old church at San Ignacio, where the Jesuits had their language institute. A few miles later you will enter Magdalena. In the mid-1970s it became known as Mafialena de Kilo instead of Magdalena de Kino because of its reputation as a distribution center for marijuana. Much of the town's affluence was attributable to profits from the weed. Father Kino, the famed Jesuit who founded many missions in Sonora and Arizona (including San Xavier del Bac near Tucson) died here. What is reported to be his skeleton was unearthed in the late 1960s and an ugly crypt on the plaza houses his bones. Pay toilets are available nearby. Magdalena somehow was named one of Mexico's *pueblos mágicos*, supposed magical towns. It is now a ranching center with a small amount of farming and a couple of *maquiladoras*. In the region garlic, persimmon, and chiles are raised to supplement alfalfa. You

may notice long *sartas* (strands) of chiles hanging from roadside stands as you drive by. They come from central Mexico.

Santa Ana. South of Magdalena the highway follows the Río Magdalena. As you approach Santa Ana (pronounced Santana) you can see river bottom fields that are slowly being eaten away by the meandering and broadening of the river channel. Many flowers are raised in the fall, for sale around el Día de Los Muertos (the Day of the Dead), Nov. 2. Ten miles south of Magdalena the highway dips briefly through Santa Ana. Here a highway splits off, heading west to Mexicali, Tijuana, and Baja California. We continue south. Forty miles or so to the southwest of Santa Ana is a hill whose sides are lined with rock walls. Trincheras is Sonora's best-known archaeological site. That will be a different trip. Beyond that is a cartel-infested region.

The first twenty-five miles south of Santa Ana are rather dull, the landscape a seemingly unending thin forest of mesquite trees and overgrazed pastures and several greenhouses. The tailings from a Canadian-owned gold mine at Estación Llano has become a landmark and growing. On a few irrigated fields alfalfa is raised, food for cows, not people. In fact, most medium-sized dams in Sonora (there are at least nine) benefit cows and their owners nearly exclusively. Yet Mexico is a major importer of corn and beans.

At roughly Km 134, some geologists believe the original Sonora is left behind and "new" Sonora entered. According to David Thayer, formerly of the Arizona-Sonora Desert Museum, the southern half of Sonora may have originally formed far to the northwest as a western extension of what is now Nevada or Southern California. During a period of great faulting, somewhere in Jurassic times, (202-141 million years ago) the whole section of continent was sheared off and moved southeastward 4 degrees to its present position. Others say that the entirety of Sonora south of here is a series of island arc accretions that over the eons came sailing in and crashed into the continent. Another theory has "Mexico" crashing in from the south as South America bounced off North America and left Mexico behind.

So now we are in "new" Sonora. After that point, a road heads west two kilometers to the railroad town of Benjamin Hill, named after a hero of the Mexican revolution (and member of the wealthy Salido family of Álamos). The town has many railroad hotels and used to offer a funky zoo. To the west are the low mountains, which are the last natural habitat of the Texas Masked Bobwhite, introduced a few decades ago into Buenos Aires National Wildlife Refuge. Fifteen miles or so south of the turnoff is a

military checkpoint. Soldiers check northbound vehicles supposedly for drugs and arms but take no interest in those that are southbound. As you descend the hill south of the checkpoint, look for new and different trees. Here you enter the portion of the Sonoran Desert that Forrest Shreve labeled the Plains of Sonora.

Among the new plants you will see are tree ocotillos (*Fouquieria macdougallii*) which may have delicate red blooms, *torote* (*Bursera fagaroides*) with a thick, yellowish trunk and scraggly branches, and *guayacán* (*Guaiacum coulteri*), a small tree with dark-green leaves. Around Km 100 you should be able to see all of these. Watch for Black vultures and Crested caracaras here as well. They often patrol the highways for dead and dying mammals. Where the vegetation has not been cleared, notice how rich it is. Elsewhere, imagine how it was.

After another 10 miles you will begin to see pastures that have been cleared and are full of grass. This is buffelgrass (*Cenchrus ciliare*), a grass imported from Africa. You will be seeing a lot of it, and we will be talking about it. You may see men working along the roadsides with large bags. They are collecting the seed from the buffelgrass. They follow maturing grass, running specially designed cutters through the high grass to harvest the seed heads, which they collect in bags and sell to buyers. Sometimes they earn about \$30 a day, quite good by Mexican standards, but they must also provide their own food and sleep where they may.

Notice that the highway runs parallel to a range at the far side of the plain. To the west a series of low ranges parallel it as well. In the far distance to the east another range is running parallel. This region is known as the parallel range and valley province, a product of the Basin and Range geological feature that sculpted landscapes in Western North America from 12 to 5 million years ago. The surface of the earth stretched and cracked, forming blocks. Blocks separated, then tilted, creating valleys between, which then ever so slowly filled up with eroded material worn away from the blocks. This type of geology continues for a hundred fifty miles to the east, complicated in many areas by volcanic activity, which rattled the region during the last 40 million years. The ranges to the west are largely covered by thousands of feet of sands and silt, called *sierras sepultadas*, buried ranges. Only the highest mountains manage to remain above the alluvial cover. Where you see mountains to the west, then, remember that the actual mountains are far larger than their buried appearance reveals.

Los Chinos, about K77 is named for a Sonora tree, *palo chino* (*Havardia mexicanum*). A jaguar was killed here in the 1960s and not forgotten. Note the long range to the east running parallel to the highway. On the other side of that range is the valley of the Río San Miguel, a reliable small stream on which Cucurpe is located. The area is rich in history and supports a few old, but small and picturesque towns.

At **El Oasis**, K67, look far to the east and see the distant rounded peak of the Sierra de Aconchi, the highest point in this portion of Sonora at slightly over 7000 feet. It has pine trees on its higher points and numerous tropical species on its lower slopes. Ten kilometers to the east of El Oasis is Carbó, a railroad town named after a military hero. A highway leads to the Río San Miguel and the bustling town of Rayón. Around Carbó organ pipe cacti yield especially large and juicy fruits in June and July. Locals harvest them and market them in Hermosillo, where they fetch good prices. This area has seen the most intensive study (and proliferation) of buffelgrass in Sonora. The initial results were so promising (up to 1000% increase in beef production) that most large ranches followed the lead by bulldozing the desert and planting the grass. A research center located at Carbó specialized in promoting buffelgrass. Some ranchers have found that it is more profitable to protect their organ pipe cacti and market the fruits.

South of K67 a series of granitic ranges appear to the west. As you approach K46 notice the dikes on the right emerging from the hills that resemble a Great Wall of China. These are places where very old volcanic activity split the granites and forced magma from the earth's mantle to the surface. The exterior rock, softer than the magma, has continued to erode while the harder magma (now granite) remains behind. The range is called Espinazo Prieto, the Great Dark Spine.

After K40 you enter a region of extraordinarily rich desert vegetation, at least that which has not been cleared. Among the various plants you will begin to see silvery-trunked morning glory trees (palo santo, *Ipomoea arborescens*) near the road, a tropical plant making its northernmost stand. The trees, thick at the base and quickly tapering, will probably be mostly leafless. If you are lucky, a few will have white flowers at the tips of the branches. In winter the tips of all the branches are covered with large white morning glory flowers. These trees are a morning glory gone overboard. The area where you see them generally demarks the point south of which frost is rare, for the trees do not tolerate frost. Agricultural projects to the south can be assured of the absence of frost. Throughout the Plains of Sonora large ironwood trees (*Olneya tesota*) are also common. A yellowish,

leafless, short tree with peeling bark is the *papelío* (*Jatropha cordata*), another tropical tree that reaches its northern limit near here.

The vegetation in this area is especially rich, quite probably benefiting from the granitic soils formed by the gradual disintegration of the Sierra Espinazo Prieto immediately to the west. The low forest covering the hills is distinct from the vegetation of the Sonoran Desert and is labeled *foothills thornscrub*. See if you can identify any of the trees there.

Notice the huge tracts of buffelgrass, and the invasions of the grass on the high hillsides. This is a scary phenomenon for many reasons, not the least of which is that the grass craves fire, a phenomenon unknown until the grass arrived. Note that many of the fence posts are concrete; wooden ones are charred. Note also that the wooden utility poles have metal shields around the base. What does this tell you?

As we near Hermosillo, note on the left side the vast plantations of grapes, mostly table grapes planted in recent years. At the toll station (sometimes clean toilets available) the pastures are heavily dominated by brittlebush (*Encelia farinosa*). It seems to have held its own against buffelgrass and gained some ground. When pastures were severely overgrazed, the brittlebush seems to have survived while the buffelgrass died. In the late spring, if winter rains have fallen, all these plants turn brilliant yellow. Imagine the landscape.

The monumental sign just beyond the toll station is the symbol of a Yaqui Deer Dancer, the state symbol of Sonora.

A new bypass allows southbound travelers to avoid Hermosillo and its congestion. Good idea. It passes through some fine desert vegetation.

Hermosillo (If you must.) Skip this if you are taking the bypass. As you enter the outskirts of Hermosillo, you may see a lake in the distance. Don't be deceived. It is quite shallow. In fact, the dam on the Río Sonora was constructed in the 1940s against the advice of engineers, who warned that it would soon silt up. They were right. Its promoter, however, was the governor of Sonora, Abelardo Rodríguez, former president of the republic. He was majority owner of Hermosillo's cement plant that would provide the cement for the huge dam. So, it was built, as were many other large buildings, using his cement, during his administration. The dam also provided flood control for some prime real estate downstream, which he and his cronies bought cheaply and sold at great profit. This real estate is now developed. Good business.

But there is more. Seventy miles east of Hermosillo once lay the charming Opata Indian village of Batuc. Its natives wove hats and baskets from palm, raised livestock and gathered vegetables from their fields and gardens. In the early 1960s the Mexican government decided to construct a dam on the Río Yaqui in Sonora. The waters of the dam, it turned out, would extend as far upstream as the Río Moctezuma, a Yaqui tributary, and flood the town of Batuc. The residents, promised compensation and better land, were subsequently relocated and the town was flooded. The waters did not completely bury the graceful village church or its cemetery, however, and today both can be seen rising out of the lake's waters, or, during the recent drought, rising from a barren plain.

The residents of Batuc were relocated to the Río Sonora upstream from Hermosillo to a new village named San Francisco de Batuc. They received no compensation and poor land. In the early 1990s engineers discovered that Lake Rodríguez, which you see, had silted up badly and its capacity had dropped drastically, so much, in fact, that heavy flooding upstream would rush right over the spillway and inundate the expensive real estate once protected from floods by the dam. Many important people had developed land in the floodplain and would have their lands damaged by floods. These included the Sonoran government whose huge building complex lies in the flood plain.

Something had to be done. The solution was a check or coffer dam upstream big enough to hold major floods. It was finished in 1993. Unfortunately, the waters from the new dam, El Molinito, flooded out a village, whose residents had to be relocated. Guess which village? San Francisco de Batuc, of course. In 1997 concerns for the safety and adequacy of El Molinito Dam were widely being expressed.

Hermosillo is the state capital of Sonora, population around 600,000. It was named for a general who fought bravely against Spain in Mexico's war of independence. It occupies a site (Pitic) used off and on by Seri Indians long before Spaniards established a town. Its climate is somewhat warmer than that of Phoenix. Rainfall is like that of Tucson.

After a few stoplights, you will see a sign indicating Guaymas to the left. This is a valuable bypass. The road passes beneath the dam on the Río Sonora, and a couple of miles later veers to the right (southwest). A mile or so later (there are road signs) you want to turn left to get back on the highway to Guaymas.

If you choose to wander through Hermosillo, you can easily lose a half hour. The University of Sonora, the College of Sonora, and all government offices are in Hermosillo. If you drive through the city, you will pass by all

of them. It is also a commercial center for Sonora's huge ranching industry. The large trees planted along the boulevard are *yucatecos* (Indian laurel figs). Please note the presence of U.S.- franchised businesses--Domino's Pizza, Blockbuster Video, Carl's Jr., Baskin-Robbins., Costco, and so on

Hermosillo to Guaymas. This eighty-mile stretch passes through vast plains bordered by volcanic mountain ranges. The first large range, about thirty miles south of Hermosillo, is the Sierra Libre. It lies to the east of the highway. As the road approaches the range, note the sudden appearance of dozens of trees resembling dark lollipops. These are the endemic *jito* (*Forchhammeria watsonii*), a relative of the caper. These resilient trees tolerate heat well and provide fine shade. The Sierra Libre, on the east side of the highway, is formed from volcanic ash and mudflows from between 23 and 20 million years ago. The range is deeply dissected, and many of its canyons have permanent water or springs and rich tropical vegetation. It was here that Seris and the Pima Bajos called Sibúpapas holed up between 1750 and 1769 to avoid military conquest by Spaniards after they had become hardened raiders (in response to Spaniards stealing their land). Though never defeated, they were harassed by Spanish troops for two years until they finally abandoned the range. Some settled near Hermosillo for a while. Others maintained their nomadic, raiding lifestyle elsewhere.

The Sierra Libre merges into the smaller Sierra Santa Úrsula towards the south. At Los Arrieros (The Mule Drivers), marked by a gasoline station, a neat little chapel, and several questionable restaurants, a highway turns west toward the coast, where it passes through Miocene lava flows and parallels the coast of the Gulf of California. The mountain range to the west and southwest is Sierra El Aguaje, a botanist's paradise, very rough, teeming with palms, springs, and strange plants. It is about the same age as the Sierra Libre and drops precipitously into the Gulf of California (the Sea of Cortés).

South of Los Arrieros, the large hill just east of the highway is called El Huérfano (The Orphan). In the 1850s a Seri (a Pima raised as a Seri) named Coyote Iguana kidnapped Lola Casanova, a girl from a prominent Guaymas family and took her as his wife. A decade or so later, he offered her a chance to return to Guaymas, but she chose to stay with him and the Seris. Some say it was because she preferred the Seris' nomadic style to that of the upper-class Mexicans.

Before arriving at Guaymas or the turnoff to San Carlos, the freeway heads southeast, to the left. A toll station is about a mile after the turnoff.

In the 1950s San Carlos was a magnificent small bay or cove, uninhabited except for a few fishermen's shacks. Today it has dozens of hotels and resorts and a population of more than 10,000. The Sonoran government under the leadership of then Governor Edward Bours dredged Sonora's finest mangrove swamp to make way for a dolphin arena. The enterprise appears to have failed, but investors still find San Carlos a lucrative site.

The highway bypasses Guaymas, founded because it is located on the best deep-water port on the northern half of the Gulf of California. It is named for a band of Seris who claimed it as the southern boundary of their territory.

Southeast of the toll station the highway passes through massive lava flows. Notice the massive columnar cacti growing on the hillsides. They are called cardón or *sahueso* (*Pachycereus pringlei*) and are even larger than saguaros. About 15 miles farther south, the freeway passes through a small area that concentrates columnar cacti. It is the only place where saguaros, cardón sahuesos, etchos (*Pachycereus pecten-aboriginum*), organ pipes, and sinitas (*Pachycereus schottii*) grow together. Remarkable.

About 20 miles south of Guaymas the highway passes an *aduana*, or place to acquire the vehicle importation permit. Many vehicles stop here to obtain importation permits. Others obtained their permits in Nogales. Boring.

Now the highway passes through Yaqui country. To the left is a long alluvial and coastal plain, reaching to the rugged Sierra Bacatete, the traditional mountains of the Yaquis. To the right you will begin to see irrigated fields. For the most part these are leased from Yaquis by non-Yaquis. Note the many etcho cacti on the right-hand side as we drive southeast. On the mountainsides of the Sierra Bacatete are saguaros.

Spaniards never fully conquered Yaquis but managed to "reduce" them to eight towns, all of which still exist. Today, only Pótam and Tórim are thoroughly Yaqui, though Vícam, through which we pass, is heavily so. . Ethnographer Edward Spicer wrote a now-celebrated book about Pótam.

About 20,000 Yaquis remain in Sonora, many of them bilingual. The single most significant variable in the history of the state of Sonora is the ongoing attempts by outsiders to conquer Yaquis and seize their lands. Yaquis were persecuted for many decades, especially from 1740 through 1930 and numerous wars took place as the Yaquis continued to defend their lands from seizures by commercial interestrs. During the 1930s President Lázaro Cárdenas established a large tract (though only a fraction of their traditional lands) that came to be known as Yaqui Traditional Lands, the

only such tract--similar to a reservation-- in Mexico. Non-Yaquis may not own lands within this area, but they lease farmland instead.

Southeast of Vícam about twenty miles we descend gently into the valley of the Río Yaqui, Sonora's largest river. Thereabouts a new freeway bypasses the congested urban area near Ciudad Obregón. The agricultural center of Sonora and the wheat capital of Mexico. In Ciudad Obregón is located CIMMYT, the institution founded by Norman Borlaug in the 1940s to develop more productive varieties of wheat. He did so, with enormous success. Although corn is mentioned in the acronym and is the basic grain of Mexico, Borlaug focused on wheat, the grain of European civilization.

When the bypass rejoins the highway southeast of Ciudad Obregón we travel through an increasingly commercialized landscape. Once unbroken thornscrub, the area is increasingly home to chicken and pig farms and hothouses, mostly for raising tomatoes. Just before the toll booth the highway passes a nondescript arroyo (Arroyo Cocoraque) that traditionally separated Yaqui territory from that of the Mayos. (Here is a good place to purchase artisan stools and chiltepinas from roadside vendors.) The arroyo is considered by many to be the southern limit of the Sonoran Desert. Others, including ecologists from the Arizona-Sonora Desert Museum mark the boundary as around Guaymas. Just to the southeast of the freeway on the arroyo lies the small Mayo town of Etchohuaquila ("Skinny etcho cactus"). Fernando Valenzuela, who pitched for years for the Los Angeles Dodgers was a Mayo from here. His screwball baffled National League batters for several years.

The Arroyo Cocoraque is also the traditional boundary between Yaqui and Mayo lands.

Once through the tollbooth, we pass through mostly flat country. Notice the increasing numbers of cacti, at least on uncleared land, and imagine how difficult it must have been to travel across this scrubby terrain before roads were constructed.

Navojoa is the major, nondescript agricultural city on the Río Mayo, also a large stream, though only one-third the size of the Río Yaqui. Mayos once occupied numerous hamlets that the Spaniards called *rancherías*. Mayos also resisted Spanish expansion, but without the unified numbers that characterized Yaqui resistance. And they viewed Spanish forces as being an opportunity to defeat their traditional enemies, the Yaquis. Navojoa is mostly Mestizo, but to the south are several strongly Mayo towns.

At the southeastern end of Navojoa we turn due east and the final sixty kilometers of our trip. Don't be discouraged by the ugliness of the first ten miles or so. Once the coastal flats and the grimy, crowded cities are behind

us, the landscape begins to change. Roughly twenty miles from Navojoa we are clearly in a different vegetation regime. Notice how the trees become taller and different as the hills become steeper. The highway winds through the hills. As we pass through the hamlet of Minas Nuevas, we catch a glimpse of Álamos, another ten kilometers down the highway. If we are fortunate we will see the spectacular pink flowers of the *amapa* (*Handroanthus impetigenosus*) or even the yellow amapa (*H. crysantha*), the glories of the tropical deciduous forest.

Our itinerary may take us on an alternate route to Álamos. The highway continues southeast through fields of industrial agriculture, the owners made wealthy by cheap Mayo labor. Past the tollbooth you can see the great Sierra de Álamos on the left. A lower mesa appears on the left--the volcanic flow called Mesa Masiaca (Masiacacahui--centipede hill in Mayo). On it grow what are apparently the southernmost saguaros, emerging from the great lava boulders on the hillside. Many of these boulders have a high iron content and ring like a bell when struck by a heavy metal object. Delightful.

The turnoff to Masiaca passes through a Mayo village called Jopopaco (*Jopo* is a tropical leguminous tree [*Piscidia mollis*]. *-Paco* means "out there, or" on the plain," so Jopopaco means "Jopo out there." The road winds through the Masiaca Indigenous Community. It consists of a dozen traditional Mayo villages and has its own governing structure. The lands are communally owned, meaning that parcels may be used or even granted, but not owned. Inholdings of the best land are in the hands of non-Mayos. Masiaca is the seat of the *comunidad*. It has the traditional church and the annual festival of San Miguel, the patron saint, is held in November.

From Masiaca the roadway passes through Yocogigua ("where the jaguar ate") another Mayo town, then through a series of small, mostly abandoned settlements, curving around the southeast side of the Sierra de Álamos (*Nojmecahui* in Mayo) to arrive in Álamos.