

# Recreational Landscape Evolution Along the North Yucatan Coast

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Many of the sandy beaches that line the shores of Mexico have been transformed into recreational cultural landscapes. Most of this land use modification by tourism has occurred along the Pacific Coast, while the Gulf Coast has not reached a comparable level of touristic development. When a search for a government-backed East Coast resort (to counterbalance the Pacific resorts) was conducted in the late 1960s, the computer selected Cancún, on the Caribbean coast in Quintana Roo (Dunphy 1972). The beaches along the Gulf of Mexico coast were considered to be "physically unsuitable for major tourism development" Because of a combination of factors of climate, water quality, and beach quality (Banco de México 1968, as cited by Collins 1979).

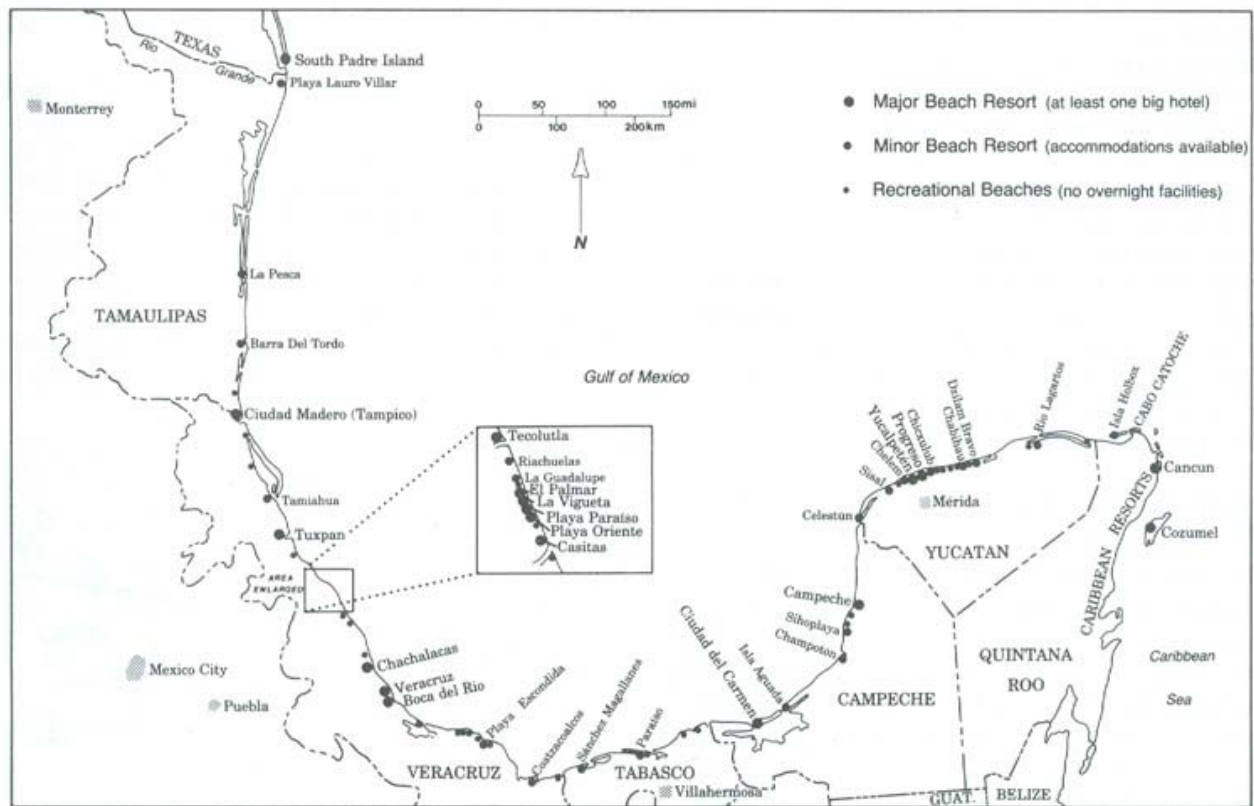


Fig. 1. Beach resorts and recreational beaches of the Mexican Gulf Coast (from field surveys by author).

In spite of apparent adverse physical qualities, domestic demand for beach recreation opportunities has nonetheless transformed several segments of the Gulf Coast into distinctively recreational seaside landscapes. From the many recreation sites located between the Río Grande and Cabo Catoche, three distinct resort clusters can be identified (Figure 1). Two are located in the state of Veracruz--one is centered on the city of Veracruz and a second lines a 50-km stretch of coast between Tecolutla and Casitas [end p. 45] (Meyer-Arendt 1987b). A third Gulf Coast resort cluster, encompassing 25 percent of the total sites, occupies the barrier coast of northern Yucatan.

The distribution of these resort areas is largely a function of proximity to the urban areas that constitute their respective recreational hinterlands. An overlapping hierarchy of recreational hinterlands often precludes a simplistic explanation of location of coastal recreation development, and the resort cluster around Veracruz reflects both local beach demand and demand by residents of highland Mexico. The Tecolutla-Casitas strip represents the beach area closest to Mexico City, and the numerous small resort towns in that zone cater almost exclusively to residents of the capital city. Likewise, the north coast of Yucatan lies near the Yucatecan capital of Mérida. This area, the oldest coastal recreational development along Mexico's Atlantic Coast, is the focus of this study.

The development of beach resorts is, for the most part, a relatively recent phenomenon related to such factors as increased wealth, leisure time, mobility, and popularization of beach usage for both health and pleasure (Meyer-Arendt 1987a). Although wealthy Spanish ranchers of the lower Río Grande Valley were known to frequent beaches around Matamoros during the summer months as early as the 1780s (WPA 1986 [1940]), widespread beachfront recreational urbanization is largely a twentieth-century phenomenon. In nineteenth-century Veracruz, the upper classes abandoned the humid and disease-ridden Gulf Coast during summer months (Arreola 1980) and retreated to cooler, higher-elevation "hill stations" on the versant of the Sierra Madre Oriental. Beach recreation did not become important at Veracruz until the twentieth century; the first beach hotel (the Mocambo) was built in the early 1930s. In the absence of nearby mountains to escape to during hot summers, the sea breezes of nearby coasts attracted the wealthy, leisured classes. In time, 'mass followed class' as middle-income Mexicans increasingly became drawn to the seashore during vacation periods (Passariello 1983).

### ORIGINS OF BEACH RECREATION IN YUCATAN

Recreational usage of Yucatan beaches dates to the establishment of Progreso as Yucatan's port and its subsequent rail linkage with Mérida in 1881. Although the prime function of the railroad was the shipment of cargo (mainly the export of henequen), passenger service transported nineteenth century Merideños to the Progreso beaches (Frías 1985, pers. comm.). Most came as day users, but wealthier families began to build summer residences (*casas veraniegas*). It was reported that when a hurricane passed in August 1903, toppling trees and de-roofing houses, "many families" of summer residents prematurely returned to their Mérida homes (Frías and Frías 1984). By 1907, Progreso boasted three hotels and a large beachfront recreational complex, and the port city had established a reputation as a lively, popular vacation destination for Mérida residents (Ibid.).

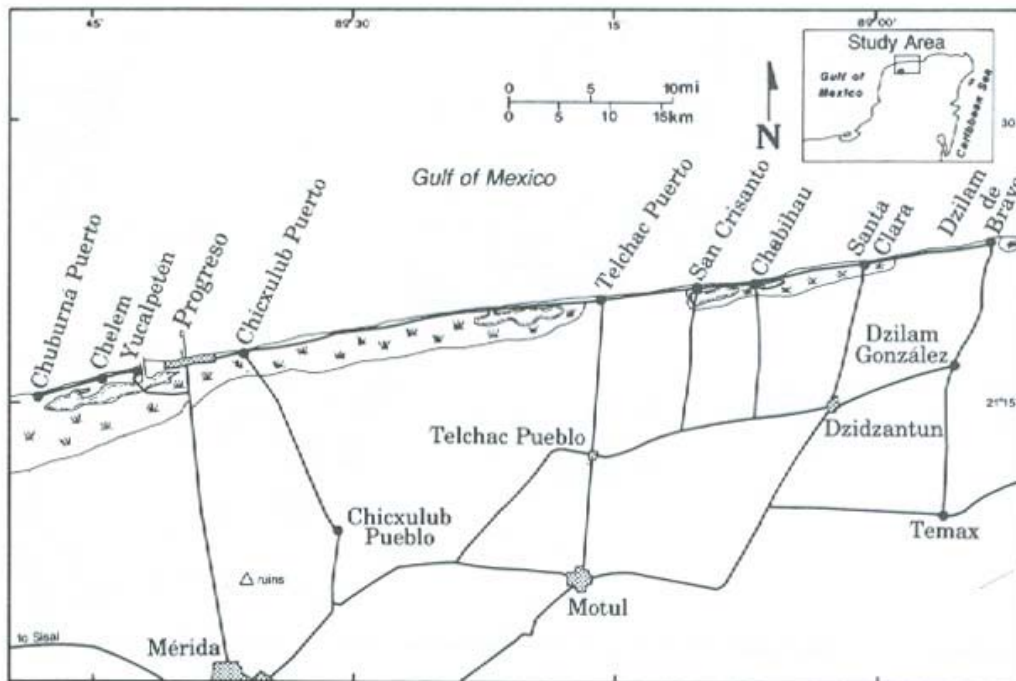


Fig. 2. Settlements along the North Yucatan Coast.

By 1928, the automobile age had come to Yucatan, and the Mérida-Progreso highway was paved. The shorefront of Progreso was recreationally improved by the construction of a *malecón*, or promenade, east (updrift) of the port facility, and restaurants and dance clubs soon lined the landscaped beachfront drive. Increasing numbers of summer homes were built along Progreso's shorefront, behind the malecón and along the beach toward the east. Tourism became an important tertiary component of Progreso's fishing and commerce based economy.

Although the only paved road during the 1930s and 1940s was the Mérida-Progreso highway, graded roads extended toward Chicxulub Puerto and Chelem (Figure 2). Unimproved sand roads ran eastward to Dzilam de Bravo and westward to Chuburná Puerto. Roadbeds crossing the extensive coastal lagoon system at various locations were also improved during this period, and many inland towns were provided with closer port access. This facilitation of access, coupled with growing

usage of motorized vehicles, expanded the potential for coastal recreation.

The 1945 *Enciclopedia Yucatanense* described Chicxulub and Telchac Puerto as "summer beaches" (*playas de veraneo*), and many of the small fishing and salt-producing settlements along the north coast between Progreso and Dzilam de Bravo were considered "recreation spots" (*lugares de recreo*) (Ferrer 1977 [1945]). The pattern of recreation use was primarily one of day use in 1945, although the trend of vacation home ownership was beginning to expand beyond Progreso, initially to [end p. 46] Chicxulub Puerto (Figuroa 1985, pers. comm.). Maps generated from 1948 aerial photographs show Progreso and Chicxulub being welded together by a ribbon of beach front housing (Figure 3).

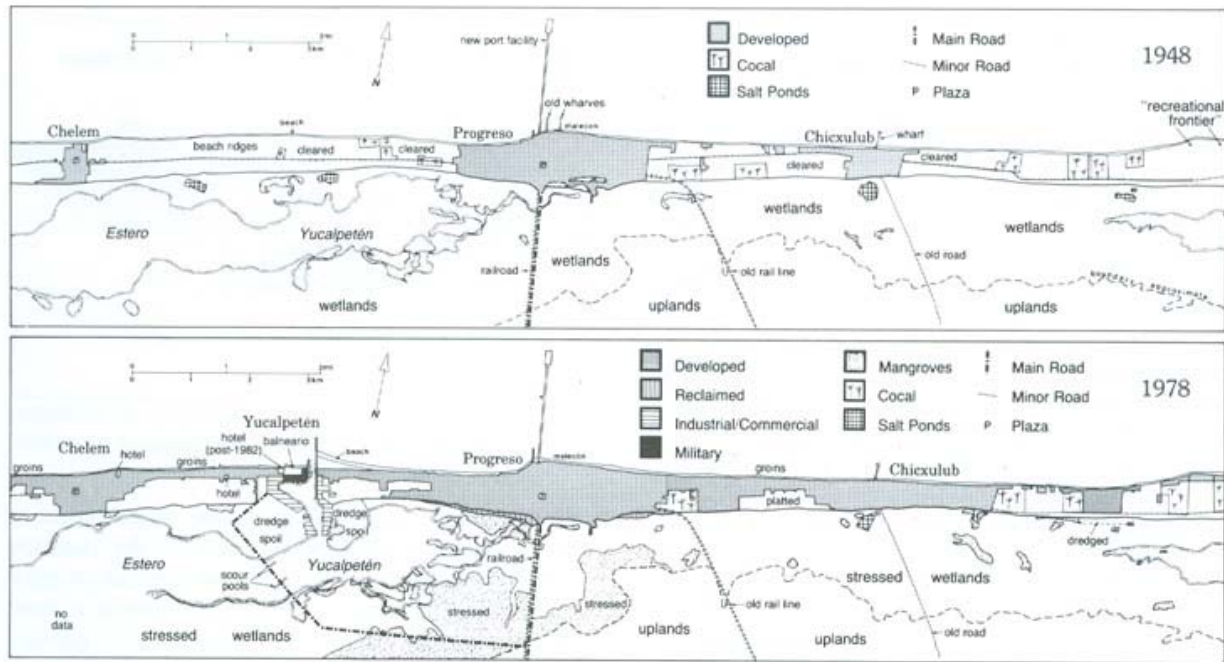


Fig. 3. Progreso and vicinity, 1948 and 1978 (bases from aerial photographs provided by Compania Mexicana Aerofoto, S.A.)

Farther east, isolated summer homes were colonizing the coconut plantations (*cocales*) and barren beach ridges. If Progreso can be regarded as the core area of beach recreation, this latter zone represents a recreational frontier, in which summer homes are built in advance of the availability of services. Farther east, similar patterns of recreational expansion outward from settlement nodes were also noted. Puerto Telchac, San Crisanto, and Chabihau in 1945 were small but growing loci of recreational development, characterized by small *balnearios* (establishments catering to bathers, with changing quarters, a restaurant, and usually a bar) and a sprinkling of summer homes. Mérida (with a 1945 population of almost 100,000) provided the majority of recreationists to the north coast, but smaller, more distant beaches such as Telchac Puerto (and nearby Miramar Beach) also drew from closer, secondary urban centers such as Motul (1945 population: 5,450) and Temax (1945 population: 2,900) (Martínez 1977 [1945]).

The Progreso vicinity remained most popular for summer home construction throughout the 1940s because of availability of utilities and easy access from Mérida. After Progreso's beachfront filled in with summer homes during the 1950s (and real estate values rose), Chicxulub became the primary locus of recreational growth (Fernández 1985, pers. comm.). A secondary direction of expansion, during the 1950s, was westward toward Chelem. Initial recreational development took place in the village proper as summer homes, restaurants, and small hotels were built. By the 1960s, however, summer homes began to line the previously empty coastal stretch between Progreso and Chelem. Most of the empty lands between north coast settlements were cooperatively owned *ejido* land, but the local *ejidos*, recognizing an easy source of revenue, began (illegally) subdividing their holdings for sale to seasonal residents.

Chuburná currently marks the western extent of the contiguous north coast recreational landscape. Day use tourism dates to the initial provision of services (approximately 1960), but being more distant from Mérida, Chuburná was slower to experience the recreational land use transformations that characterized Chicxulub or Chelem in the 1960s. The *ejido* at Chuburná sold its first beachfront lots in 1971, although not until 1975 were the first summer homes built (Castro 1985, pers. comm.).

## **HUMAN MODIFICATION OF THE RECREATIONAL BEACHFRONT**

The sandy barrier coastline of northern Yucatan has been historically subjected to slight shoreline erosion, both as a result of normal wave action and also by human interference with longshore sediment drift processes. The Progreso waterfront, for example, has experienced much local erosion as a result of port construction. The first human [ end p. 47] responses to shore erosion, however, were efforts to improve the beaches for recreationists. In 1964, a series of rock -and-timber groins (*espolones* or *escolleras*), designed by government engineers, was installed along the Progreso shorefront (Fernández 1985, pers. comm.). The *espolones* proved to be successful in trapping sand and widening the beach fronting the malecón.

Armoring of the recreational shorefront intensified following the opening of the safe harbor (*puerto de abrigo*) at Yucalpeten in 1968. Although the storm-protected safe harbor has provided a suitable base for the Progreso fishing fleet, a naval base, and a growing seafood processing industry, the dredging of a channel through the barrier island has led to many negative environmental consequences, including accelerated shoreline erosion down-drift of the jettied entrance. In response to the high rates of erosion (the 1978 map indicates retreat of more than 30 m immediately west of the jetties since 1968), widespread unauthorized *espolón* construction began. The groins, extending from the jetties to past Chelem, were not properly engineered, unlike the earlier groin field at Progreso. Beachfront lot owners individually made decisions to build *espolones*, and although construction permits were legally required, these were not obtained. Approximately 75 percent of the vacation home properties west of the Yucalpeten jetties currently encroach to within the 25-m wide federal beach easement (de la Cruz 1985, pers. comm.), and many seasonal landowners perceive groins as a means of saving their property. However, groin construction has increased local down-drift erosion and, between 1968 and 1985, the leading edge of *espolón* construction has slowly shifted westward. During a 1984 aerial survey, 178 *espolones* were noted along the 8.8 km stretch from Yucalpeten to Chuburná Puerto, an average of one every 50 m. Their concentration is highest between the jetties and Chelem. As a consequence of the groin construction, the attractiveness (and widths) of the beaches diminished. In the early 1980s, Chuburná officials formally complained that groin construction had accelerated shoreline erosion within their jurisdiction, and by April 1985 the ban on *espolón* construction became actively enforced (Villet 1987, pers. comm.). Several groins have been removed from the Chuburná ejido beachfront during the past several years.

## **THE PRESENT -DAY RECREATIONAL LANDSCAPE**

The process of recreational landscape development has consisted of three stages: (1) primary recreation nodes became established where access arteries from the mainland reached pre-existing coastal settlements' (2) an initial pattern of day use recreation became followed by second home construction at and adjacent to these nodes, and (3) the vacation home landscape expanded outward from the primary nodes, both by means of contiguous lateral expansion as well as "hopscoching" to nearby pre-existing settlements, which became transformed into secondary recreational nodes. Urban infilling between the nodes followed. Although these stages can be seen along the entire north coast, they are best exemplified in greater Progreso. From a core area in Progreso, originally sited at the railroad terminus in the 1880s, secondary recreational nodes became established at Chicxulub, Chelem, Yucalpetén, and Chuburná. Subsequent beachfront infilling has created one contiguous urban area (see Fig. 3), and recreational frontiers are found at both flanks of this recreational urbanization.

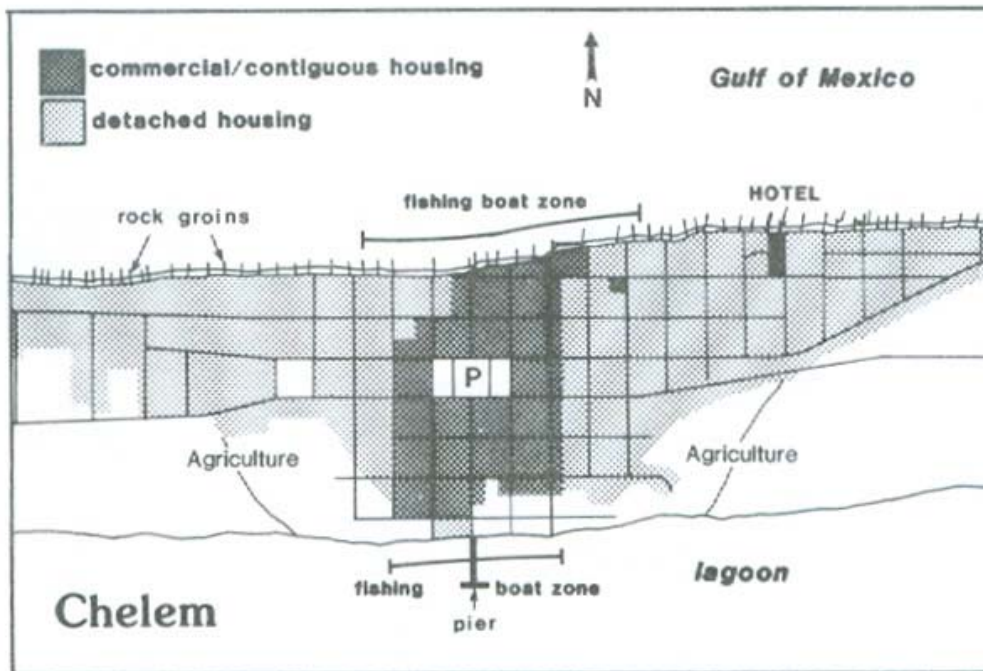


Fig. 4. Urban morphology of Chelem (map schematized from oblique aerial photographs taken by author, January 1984).

Chelem currently typifies a traditional fishing village that is now transformed into a beach resort town (Figure 4). Urbanization has extended the settlement both to the east and west, primarily along the shoreline. The original core of the village can be distinguished by contiguous housing, while the newer, recreational development consists predominantly of detached single-family housing. The fishing function of the village remains amidst the recreational overlay, and both the Gulf and the lagoon are actively fished. Tourism has created a larger local market for freshly caught fish, as attested to by numerous seafood restaurants. Physically, the Chelem shoreline has been much modified by espolones, which appear to have accelerated beachfront deterioration. In 1985, a *chikin-ik* (a strong, sustained west wind) associated with Hurricane Juan caused considerable destruction of waterfront property.

#### FUTURE LANDSCAPE CHANGES

The municipio of Progreso (from Chuburná to Chicxulub) currently contains more than 4,000 summer homes, 14 hotels (with 236 units), 3 balnearios, [end p. 48] and 24 restaurants (Castillo 1982). Beyond Chicxulub, a few hundred more summer homes, several balnearios, and a few hotels extend as far as Dzilam de Bravo. Recent intensification of recreational land use may be ushering in a new era of tourism. Completion in 1982 of a government-owned resort hotel adjacent to the Yucalpetén balneario introduced first-rate facilities to the north coast. In 1984 the first condominium complex was built close to the recreational frontier zone east of Chicxulub, and in 1986 construction began on a major resort hotel adjacent to the Progreso Yacht Club in Yucalpetén. West of Chuburná, a former hacienda has been sub-divided and condominium development is planned.

Intensification of recreational land use may result as a consequence of expansion of the recreational hinterland to beyond Mérida. The Chuburná sub-division is being advertised in Mexico City, and envoys from the Secretaría de Desarrollo y Turismo are being sent to the United States, the Soviet Union, and Europe to promote coastal tourism in Yucatan. The government has made tentative plans for an Isla Chelem project, in which multi-family housing totalling 2,000 dwelling units plus 4,000 residential villas will front on two large artificial lakes. The idea of the project is to copy retirement communities in Florida and Arizona and attract U. S. retirees and winter visitors. A wetlands reclamation construction project, representing an initial phase of the proposed development, was underway in early 1987. And despite a highly eroded, highly armored, and aesthetically degraded shoreline at some of the older beachfront developments (e.g., Chelem), trends indicate a continuation of the resort evolution process described earlier. It is likely that contiguous development of the recreational landscape will soon characterize the entire north Yucatan coast.

## CONCLUSIONS

Although the Mexican Gulf Coast has attracted few international tourists and, until recently, large-scale resort development projects have been conspicuously absent, much of the Gulf littoral has been transformed into a recreational landscape as a result of domestic (i.e., national) tourism. The north Yucatan coast, only 34 km from the center of Mérida, is a resort landscape that developed in response to local demand for beach recreation, in spite of less than ideal physical conditions. Since 1881, the north coast has experienced steady recreational development in the form of day use infrastructure and second home construction as both increasing numbers and a greater segment of society have become drawn to the seashore. The government-planned resort of Cancún (340 km east of Merida) has not detracted from the growth patterns outlined for the north coast, largely because it appeals to a higher-income, more international clientele. The north coast of Yucatan is more representative of a recreational landscape shaped by domestic tourism, the pattern dominant along Mexico's Gulf Coast.

## ACKNOWLEDGMENTS

This material is partially based upon work supported by the National Science Foundation under Grant No. SES-8507500. Any opinions, findings, and conclusions or recommendations expressed are those of the author and do not necessarily reflect the views of the National Science Foundation. Previous fieldwork in 1984 was supported by the Robert C. West Graduate Student Fellowship Fund of the Louisiana State University Department of Geography and Anthropology. Many thanks are extended to Michele D. Meyer- Arendt for the cartographic illustrations accompanying this paper.

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